Laura McPherson
A Grammar of Tommo So

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Laura McPherson

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For Ramata Ouologuem

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Abbreviations

1	1st person	LOG	Logophoric
2	2nd person	MP	Mediopassive
3	3rd person	NAA	Prohibitive dummy verb
ADV	Adverb	NEG	Negative
AGT	Agentive	NF	Non-final
AN	Frozen *an-* prefix	NOM	Nominal
ASSOC	Associative	OBJ	Object
CAUS	Causative	OBL	Oblique
COP	Copula	OPT	Optative
DD	Discourse definite	PFV	Perfective
DEF	Definite	PFV.L	Defocalized perfective
DIM	Diminutive	PL	Plural
DIST	Distal	POSS	Possessive
EMPH	Emphatic	PPL	Participle
EXIST	Existential	PRO	Pronoun
EXP	Experiential	PROH	Prohibitive
FACT	Factitive	PROX	Proximal
FOC	Focus	PST	Past
FR	French	Q	Question
GER1	Gerundive (-ílé)	QUOT	Quotative
GER2	Gerundive (-íyé)	RECIP	Reciprocal
HORT	Hortative	RED	Reduplicant
HUM	Human	REL	Relative
IMPER	Imperative	REV	Reversive
IMPF	Imperfective	SG	Singular
INF	Infinitive	TOP	Topic
		⇒	Intonational lengthening
		↑	Question intonation

Chapter 1
Introduction

1.1 Dogon languages

The Dogon language family comprises approximately twenty languages spoken on the plains and mountains in the eastern part of Mali's Région de Mopti, with small crossover into neighboring Burkina Faso. The position of Dogon within the larger Niger-Congo macro-family has been the subject of much debate. In particular, the past 70 years have seen it classified as Voltaic (Baumann and Westermann 1948, Bertho 1953, Manessey 1981), Mande (Holas 1951, Delafosse 1952), and Gur (Westermann and Bryan 1952 and Greenberg 1963); however, the current hypothesis (Blench 2005) is that the Dogon family should form its own branch of Niger-Congo. The lack of detailed grammatical descriptions of the Dogon languages has no doubt exacerbated this situation.

At present, the internal classification of the language family also remains to be determined – another consequence of the lack of description. The Dogon Language Project was founded by Dr. Jeffrey Heath of the University of Michigan in an attempt to fill this gap. Since 2004, Dr. Heath and other members of the project including myself have worked to create in-depth grammars of all Dogon languages. In addition, project members have also produced a comparative lexicon of over 8000 entries, which facilitates preliminary grouping of the languages in terms of lexical similarity.[1] As the project and technology progress, we aim to make these data as maximally available as possible for researchers interested in the Dogon language family.

1.1.1 Geographic distribution of the Dogon languages

In the absence of internal genetic classifications, we can group the Dogon languages based on their geographic distribution in so-called Dogon Country.

Northeast	Toro Tegu	(Heath, in preparation;a)
	Bankan Tey	(Heath, in preparation;b)
	Ben Tey	(Heath, in preparation;c)
	Jamsay	(Heath 2008)

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[1] At the time of writing, the comparative lexicon and all of the unpublished grammar manuscripts listed below are available on our project website at www.dogonlanguages.org.

North central	Nanga	(Heath, in preparation;d)
	Yanda Dom	(Heath, in preparation;e)
	Tebul Ure	(Heath, in preparation;f)
	Ana	(Heath, in preparation;g)
Northwest	Najamba-Kindige (AKA Bondu So)	(Heath, in preparation;h)
	Tiranige Diga (AKA Duleri)	(Heath, in preparation;i)
Central plateau	Tommo So	(current volume)
	Donno So	(Kervran and Prost 1986)
	Bunoge (AKA Korandabo)	(Heath, in preparation;j)
	Dogulu Dom	(Cansler, in preparation)
West-central	Mombo	(Prokhorov, in preparation;a)
	Ampari	(Prokhorov, in preparation;b)
Eastern cliffs	Toro So	(Calame-Griaule 1968; Moran, in preparation)
South-central	Tengu-Kan	(Heath, in preparation;k)
	Togo-Kan	(Heath, in preparation;l)
Southwest	Tomo-Kan	(Dyachkov, in preparation)

One may notice that many of the language names appear to be bipartite or compound in structure. This is because most Dogon language names are made up of the name of the ethnicity or location followed by a word meaning 'language' (*Kan, So, Dom, Tey, Diga*, etc.). There is a certain redundancy in saying "the Tommo So language", but these are the naming conventions based on previous work and on speakers' own preferences, and hence we follow suit.

The references given after each language indicate grammatical descriptions, either published or in progress. Some languages, such as Toro So, represent dialect clusters which may end up being split into multiple languages, pending further investigation.

The list above should not be understood as representing genetic similarity. For example, despite the fact that Tommo So and Dogulu Dom are both spoken in the central areas of Dogon country, the preliminary results of our current fieldwork suggest that Tommo So bears a closer relation in terms of its grammar and lexicon to Najamba or Donno So, while Dogulu Dom bears a closer relation to Mombo and Ampari.

1.2 Tommo So

Tommo So (*Tɔmmɔ Sɔ́ɔ́*, literally 'Tommo language') is a Central Dogon language spoken on the plateau between Douentza and Bandiagara by an estimated 40,000–

Figure 1: Main Tommo communes on the Bandiagara escarpment

60,000 people (Hochstetler et al. 2004). This makes it the second-most populous language, the most populous being Jamsay with 130,000 speakers according to the same survey. It is considered by the Dogon people to be one of the traditional core Dogon languages. An indication of this is the fact that most songs are sung in Tommo So regardless of what language the singers themselves speak (Hochstetler et al. 2004). The communes[2] of Ningari, Mory, Tédié, Dè, Ondogu, Kani Goguna and Kéndié constitute the heart of Tommo territory; each of these communes has a market whose lingua franca is Tommo So. Figure 1 shows a close-up of the Tommo area. This grammar is based on the northernmost Tédié dialect, which according to recent surveying is considered by Tommo speakers to be the purest and most eloquent form of the language (Hochstetler, p.c.). In terms of neighboring languages, Tommo So is bordered to the northwest by Najamba-Kindige, to the east by Nanga and Jamsay, to the west by Tiranige Diga (known in Tommo So as *Dùlɔ̀ Sɔ́ɔ́*), and to the south by Donno So and Dogulu Dom.

Based on the available description of Donno So (personal fieldnotes, Kervran and Prost 1986, Farquharson, field notes), this language seems to be Tommo So's closest relative. Donno So is spoken in and around the major market town of Bandiagara, and this geographic location makes it a prominent language in the

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2 Mali is divided into *régions*, which are subdivided into *cercles*, and finally into *communes*. Communes tend to be made up of several villages, each of which has a traditional chief. Thus, most of my work was done in the village of Tongo-Tongo, part of the commune of Tédié, in the circle of Douentza and the region of Mopti.

area. Until recently, Tommo So was not listed as a separate language in the Ethnologue (Lewis 2009), simply due to the fact that Donno So was documented earlier by Catholic missionaries (Kervran and Prost 1986) and the two languages were deemed close enough to be considered dialects. While it is true that some dialects of 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 Toro So, with the nominal domain closely resembling Tommo So and the verbal domain closely resembling Toro So.

1.3 Environment

Tommo villages are all situated on the plateau of a rocky inselberg[3] mountain known as the Bandiagara Escarpment, located between Douentza and Bandiagara; none can be reached by paved roads. The rocky paths are most easily navigable by motorcycle or on foot, though a well-built 4×4 can get onto the plateau via the gravel roads at 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 shea fruit (*Vitellaria paradoxa*), wild grapes (*Lannea microcarpia*), and *zaba* (*Saba senegalensis*) are also harvested at various points throughout the year.

Aside from farming, Tommo people also do a small amount of herding, mainly 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 rock dassies, as well as many species of insects, birds, and reptiles, still thrive.

In the dry season, there are few ponds or other natural bodies of water; wells and pumps provide water to most villages in the region. Given this arid climate, 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.

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3 Inselbergs, literally "island mountains", are small isolated mountains that rise abruptly from level surroundings.

Figure 2: A pile of newly chiseled stone bricks in Tongo-Tongo, Mali

The Dogon people are famous for their mud brick architecture, and Tommo villages are no exception. In the commune of Tédié, stone bricks are hammered and chiseled into shape from huge boulders (see Figure 2). Once the walls of a house have been constructed out of these stone bricks and the roof from tree trunks and branches, the whole structure is plastered with mud brick. Houses are clustered close together in villages, which are surrounded by the residents' fields.

1.4 Culture

The traditional religion of the Dogon people was animist, though this has been rapidly disappearing with the arrival of Islam and Christianity in the area. In the village I worked in, most people identify as Muslim and attend one of the area's mosques on religious holidays. However, some older people maintain animist traditions and the village still contains a mud fetish; as an outsider, it is hard to know how deeply these animist traditions run.

The family structure is patriarchal, and men will often have more than one wife. Families typically live in compounds with small houses and granaries opening onto an inner courtyard, where domestic animals like goats and chickens may be kept.

In addition to Islamic holidays like Ramadan and Eid al-Adha (known locally as Tabaski), the village celebrates traditional Dogon festivals. One of the biggest festivals of the year is Ondom Piri, wherein a series of dances take place over several days. People compose songs for these dances to point out the wrongdoings of community members in the previous year as a way of social policing.

1.5 Language use and vitality

My experience in Mali suggests that Tommo So is not immediately threatened. Children in villages still learn it as their first language and use it almost exclusively until they are school-aged, when they begin to learn French. Even then, the usage of French is limited to the classroom or to interactions with foreigners such as myself. Bilingualism in another Dogon language, typically Jamsay or Najamba, is not uncommon but is by no means universal. Men in particular may also speak Fulfulde, with this language typically acquired through herding experience. People who have spent time in other parts of Mali may also speak Bambara, the lingua franca of the country and the language of most radio broadcasting.

1.6 Tommo So sources

1.6.1 Previous work

To my knowledge, the only scholarly work published on the grammar of Tommo So is *Dogon* (1995), written by Vladimir Plungian for LINCOM's Languages of the World series. While providing a good introduction to the language, the sketch is brief and the author does not mark tone, a key grammatical feature of all Dogon languages. Further, his work is based on the dialect spoken around Ningari, which differs slightly from the dialect discussed here (see Chapter 22). Several articles have appeared over the last fifty 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 *Eléments de Terminologie Dogon* (1984) based on Tommo So, and several other articles provide limited wordlists (Arnaud 1921, Barth 1912, Bertho 1953, DNFLA/DRLP 1981, Galtier 1993, Ongoiba 1988).

1.6.2 Current fieldwork

The data in this grammar are from work with speakers from the commune of Tédié (specifically the 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. Most elicited data were provided by two speakers, a young woman from Tongo-Tongo (Ramata Ouologuèm) and a young man from Anji (Issa Toloba). Elicited data were supplemented by naturalistic data from recorded texts. Audio recordings were made using a Zoom H4 digital recorder and analyzed using Praat (Boersma and Weenink 2011). Video recordings were made using a Sony HDR-CX190 digital HD camcorder. In addition to notebooks, data were stored in Microsoft Word, Excel, and Filemaker Pro.

Chapter 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 17 consonants and 7 vowels, for which length and nasalization are contrastive. ATR, backness, and height harmony is present in stems and to a lesser extent between stems and derivational affixes; almost all inflectional affixes are outside the domain of harmony. An interesting feature of Tommo So harmony is that it is variable, and the rates of harmony correlate with morphological distance from the stem. For further discussion, see section 3.5.

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 /ʤ/ is written 'j', tap /ɾ/ as 'r', and /j/ as 'y', while long vowels are written as two consecutive vowels ('aa' rather than /aː/). Nasalization is marked with a superscript n {v^n} 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 H[igh] and L[ow], marked {v́} and {v̀}, respectively. It also has two contour tones, <LH> rising ({v̌} or {v̀v́}) and <HL> falling ({v̂} or {v́v̀}), 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 H, L and toneless, with the latter constrained to clitics and certain suffixes (McPherson 2011).

Native Tommo So stems all have one of two melodies: /H/ or /LH/, but loanwords have introduced /HL/ and /LHL/ tone melodies into the lexicon. /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 4.

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 3.4.6.

Vowel hiatus is pervasive in the morphophonology. Many suffixes are vowel-initial, and most stems are vowel-final. When these two vowels come together, the final vowel of the stem deletes:

(1)   *káná-ee → kán-ee*   'doing (non-final)'

See section 3.7.4.

A final phonological effect to note is that like other Dogon languages such as Jamsay (Heath 2008: section 3.5.3), 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 3.6.

2.1.4 Key tonal changes

Grammatical tone is very prevalent 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 stem in canonical and synthetic compounds
Second stem in pseudogenitive compounds
Verb stem before negative suffixes

Overlaid all H
Singular affirmative imperative of most verbs
Inalienably possessed nouns (1–2 moras) with a pronominal possessor
Verbal stem in gerundive compounds
Certain nominalized verbs

Overlaid HL
Perfective and negative relative participles
Possessed kinship terms (3+ moras) with a pronominal possessor
Verb stems in the imperfective affirmative

Overlaid LH
Certain nominalized verbs

For more on grammatical tone, see section 4.4–5.

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: /H/ or /LH/ with the L on the first syllable or mora (on monosyllabic verbs). In the rare monomoraic verbs, /LH/ surfaces as simply [L] in the absence of a second mora. Depending on the inflection, the 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 /LH/, voiceless obstruent- and vowel-initial stems taking /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:

(2)   [stem- (derivational suffix(es))] – aspect/negation – subject marking

This final subject marking is achieved through the addition of the following subject suffixes:

(3)   1sg   *-m*   1pl   *-y*
      2sg   *-w*   2pl   *-y*
      3sg   3pl   (-N)

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

Verbal inflection is marked in two ways: by discrete inflectional suffixes and by stem-level tone overlays; they typically cannot be divorced one from the other. For the full treatment of aspect and verbal inflection, see Chapter 12.

2.2.1 Aspect

There are two affirmative perfective forms for each verb, one of which carries the suffix *-aa* and the other of which carries one of three allomorphs [-i, -e, -ɛ]; I abbreviate this latter form as the E-perfective. The choice of allomorph is largely predictable by stem length and vowel harmony, with stems with three or more moras always taking the allomorph [-i], but some stems are lexically listed for one allomorph or the other. See section 12.4.

The two perfective forms differ in their tonal contours as well. The *-aa* form has no effect on the lexical tone of the stem. 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 {L}). If it is focused and reduplicated, it takes {HL} with a L-toned initial reduplicant.

The choice of which perfective form to use is dependent on focus and relativization. The E-perfective is used in relative clauses and usually when there is a nonverbal focused element in the phrase, and the AA-perfective is used elsewhere. A reduplicated form the E-perfective is used when the verb itself is focused.

The imperfective is used for the habitual and the future, and it takes the suffix *-dɛ̀* (*-dìɲ* for 3pl). In this form, the verb takes a {HL} overlay with H on the first mora.

The progressive is made up of a participle and an auxiliary verb, either 'have' =*sɛ* or 'be' =*wɔ*. In my consultants' speech, there is no discernible difference between the two forms. In the dialect described by 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 comes with no grammatical tone overlay. Because of this, I typically use the progressive 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 /-lV/, with the vocalism of 'V' depending on the aspect of the inflected verb. In all negative forms, the stem takes a {L} overlay. The distinctions seen in the affirmative perfective are collapsed into one negative form. Here, the negative takes the suffix *-lí* (*-nní* for 3pl.), suffixed onto the verb stem. For the imperfective, the habitual/future negative takes the suffix *-éélè* (*-énnè* for 3pl). The negative progressive merely inflects the auxiliary, which we will come to in a more detailed discussion of auxiliary and modal verbs (see Chapter 13).

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 *-ɲ̀*. The imperative stem variably takes either a {H} overlay or no overlay. 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 [-gî̞ŋ] 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 *-mɔ́*, while the plural (you all and I) is *-mɔ́-ǹ*. 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 *-ndɛ*, transitive *-irɛ*, reversive *-ilɛ*, mediopassive *-iyɛ*, and causative *-mɔ*. When more than one suffix is present, they surface in roughly this order. As mentioned in section 2.1.1 above, one of the most interesting aspects of Tommo So morphophonology is the variable application of vowel harmony in these derivational suffixes. For more on verbal derivation, see Chapter 11.

2.4 Noun phrase (NP)

The NP can be maximally made up of the following constituents, in order:

(4) a. possessor NP and/or pronoun possessor
     b. noun stem
     c. adjective(s)
     d. (numeral)
     e. possessive pronoun
     f. demonstrative, definite
     g. plural particle
     h. (numeral)
     i. 'all'

There is some variation in the placement of the numeral, shown by its double listing in parentheses above. For a discussion of what licenses this variation, see section 7.3. An example of a fairly complex NP is given below:

(5) *yàà-nàᴸ*   *ɛ̀sú=gɛ*   *jàndùlùᴸ gɛ̀mᴸ=gɛ=mbe tàandú-go*
     female-HUM.SG pretty=DEF donkey   black=DEF=PL three-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 do not interact tonally at all. Nonpronominal NP possessors cause tone lowering on the following noun. Tommo So makes an inalienable/alienable distinction in possession, which is evident both from differing domains of grammatical tone and the use of different possessive pronouns for each type of possession. Inalienable nouns consist of kinship terms and practically nothing else. For more on the NP, see Chapter 7.

2.5 Case marking and PPs

The object can be optionally marked for case with the enclitic =ǹ. Human objects, both direct and indirect, are obligatorily case marked if only one human object is present; if two are present, the first of the two objects may be bare. For more discussion, see section 13.1.6. Subjects are not case-marked.

Tommo So also has postpositions, which are grammatically enclitics: oblique =nɛ meaning 'in', 'on' and occasionally 'for'; associative =le meaning 'with' or 'and'; locative =baa meaning 'at'; possessive =mɔ meaning 'for' or 'belonging to'. Indirect objects like benefactives may be marked with postpositions. The distinction between 'in' and 'on' is made by both context and the choice of copula. More complex spatial relations are made by adding a postposition (typically =nɛ or =baa) after a body part word such as ónnu 'back' or gíré 'face', which is then used in a genitive construction with object of reference for location. For example, to say that the child is behind the chair, one would say 'the child is at the chair's back'. See Chapter 10 for more on 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. Temporal adverbials such as yògó 'tomorrow' are generally clause-initial, followed by the full-NP subject (if there is one), indirect object or direct object (variable order), 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 (6).

(6) a. *Mòòmíyó mí=ǹ   támbá-gú=sɛ.*
         scorpion 1SG.PRO=OBJ strike-PPL=have
         'The scorpion is striking me.'

     b. *Mí   áí^H=ǹ   màŋgóró ób-aa=be-m.*
         1SG.PRO friend=OBJ   mango   give-PFV=be.PST-1SG
         'I gave my friend a mango.'

c. *Yògó   bɔ̀gɔ̀ᴸ èsú   úwɔ   ébὲ-dὲ-m.*
   tomorrow dress pretty 2SG.POSS buy-IMPF-1SG
   'Tomorrow I will buy you a pretty dress.'

d. *É   émmé=le   Tɔ̀mmɔ̀ᴸ Sɔ̀ɔ́   sɔ́ɔ̀-dὲ-y.*
   2PL.PRO 1PL.PRO=ASSOC Tommo speech speak-IMPF-2PL
   '*You* speak with us in Tommo So.'

Note that in example (6b), the independent pronoun *mí* is acting as a possessor, not as a subject.

2.7 Relative clauses

In relative clauses, the relative participle is devoid of subject inflection. In Jamsay, it is treated nominally, evident from the fact that it agrees with the head noun in nominal features like animacy, but this marking is very limited in Tommo So as a whole and is not present on the relative participle. Relative clauses are typically head-internal, and the head takes the all {L} overlay typical of other modifiers. The subject of the relative participle, if pronominal, is expressed by an independent pronoun before 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 non-head constituents. If the head of the relative clause is a possessor plus possessed noun combination, tone lowering does not take effect; that is, possessives are impervious to tone lowering beyond what is already imposed by the possessor.

(7) a. *Aràmátá nàà ᴸ gὲmᴸ mí   sέm-ὲ=gε*
      Ramata   cow   black 1SG.PRO slaughter-PFV.REL=DEF

      yúú   ńmɔ   tέmέ-gú=be.
      millet 1SG.POSS eat-PPL=be.PST

      'Ramata's black cow that I slaughtered used to eat my millet.'

   b. *Àn-nàᴸ   sɔ̀ɔ́   sɔ̀ɔ̀-gùᴸ   mí   sὲᴸ   nɔ́*
      man-HUM.SG speech speak-PPL 1SG.PRO have this

      mí   báá ᴴ íg-go=wɔ.
      1SG.PRO father know-ADV=be

      'This man I am speaking to knows my father.'

2.8 Interclausal syntax

There are a number of ways to combine clauses. I have schematically listed a few of the more common ways below to be discussed in greater depth in Chapters 17–19.

(8)   Structure   Typical function

   a.   Chaining
      ...verb suffixed with *-ee*   Same subject VPs, imperfective
      ...verb suffixed with *-aa*   Same subject VPs, perfective

   b.   Conditionals
      [...inflected verb]=*yo*   If (when)...

   c.   Adverbials
      [...participle]   Temporal, by... (while...)
      [...bare verb stem]=*nɛ*   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.)
      [...infinitive]   Complement (with 'want', 'be afraid', 'forget to', etc.)

   f.   Purposive
      [...participle]   Purposive (with 'go', 'come', 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 (8a) would be:

(9)   *Pédu=gɛ   píy-aa   kúú=gɛ   jìjìb-ì.*
     sheep=DEF   cry-PFV   head=DEF   shake-PFV.L
     'The sheep cried and shook its head.'

Chapter 3
Segmental phonology

This chapter deals exclusively with segmental phonology: phoneme inventory, syllable structure, phonotactics, vowel harmony, and phonological rules. For a description of tonal phonology, see the next chapter. All minimal pairs, frequency counts, and phonotactic generalizations are based on a lexical corpus of 8930 entries. Further data on vowel harmony (section 3.5) are drawn from field notes.

3.1 Consonants

3.1.1 Consonant phoneme inventory

Seventeen consonant sounds can be considered phonemic in Tommo So based on their appearance in regular (non-ideophonic) lexical items and their involvement in minimal pairs; these are summarized in the following chart. With the exception of [h], all other phonemes are native to Tommo So. Here and throughout the grammar, Tommo So will be written in a practical orthography inspired by the standard orthographies of local languages like Bambara but differing in a few regards (i.e. the use of superscript rather than plain 'n' to mark nasalization). In the chart below, IPA is given in brackets following the letter of the practical orthography where the two differ:

(10)   *Tommo So consonant inventory*

	Bilabial	Alveolar	Alveolo-palatal	Palatal	Velar	Glottal
Plosive	p b	t d			k g	
Nasal	m	n		ɲ	ŋ	
Fricative		s				h
Affricate			j [ʥ]			
Approximant	w			y [j]		
Tap		r [ɾ]				
Lateral approximant		l				

3.1.2 Exceptional sounds

In addition to the phonemes listed above, there are a few consonant sounds that are not in variation with (allophones of) any phoneme. However, they are found in such a limited range of examples that I choose not to consider them part of the phoneme inventory. The first of these is the voiced alveolopalatal fricative [ʑ], which is attested only in the word *ʑìmààgú* '*Sarcostema viminale* (plant species)'. While this sound

would help fill out the alveolo-palatal place of articulation, otherwise represented only by the affricate /ʥ/, it is difficult to argue for the phonemic status of a sound based on one rather obscure example alone. For this reason, I leave [ʑ] out of the phoneme chart pending further data.

Similarly, ideophones (see Chapter 8) often contain consonants that are not part of the regular phoneme inventory, a common phenomenon cross-linguistically. One such sound found in ideophones but not in regular lexical items is glottal stop [ʔ] (practical orthography [']), as in *ku' ku' ku'* (sound of two women pounding millet). Another example is the voiceless alveolo-palatal affricate [tɕ] (practical orthography [c]), found in ideophones like *cákàm-cákàm* (noisy chewing). Given that neither consonant is found in regular vocabulary, I do not consider them to be phonemes of the language.

3.1.3 Gemination

Consonant length is phonemic, but in native words, only sonorants are geminate. At first glance, this seems puzzling from a typological perspective, particularly the presence of typologically rare geminate glides and not typologically common geminate stops. However, this phenomenon arises from the fact that the only permissible coda consonants in Tommo So are sonorants; an intervocalic geminate stop would result in an ill-formed syllable.

The distribution of sonorant geminates is further restricted in stems to nasals and one instance of geminate /ww/. Geminates [ll] and [yy] can arise from the morphophonology, but geminate [rr] is not attested (in native words). The geminate velar nasal /ŋŋ/ is also not attested, despite the presence of other geminate nasals. The following minimal or near-minimal pairs demonstrate the length distinction in consonants. Where gemination is the result of a morphophonological rule, I include the base form.

(11) a. *dὲnέ*   'spend the day'   *dὲnnέ*   'look for'
      b. *dàmá*   'taboo'   *dàmmá*   'type of hoe'
      c. *gὶɲέ*   'beg'   *gὶŋŋέ*   'intersperse'
      d. *úwɔ*   'yours'   *túwwɔ́*   'nine'
      e. *dùyɔ́*   'insult'   *dùyyɔ́*   'carry' < *dùy-íyɔ́*
      f. *yὲlὲ*   'he came'   *yέllὲ*   'he'll come' < *yέlὲ-dὲ*

The geminate approximants [ll] and [yy] derive from vowel syncope, and in the case of [ll], subsequent regressive assimilation of /d/ to [l]. See section 3.6.2 for further discussion of this rule.

The phonemic status of geminate /ww/ is tenuous at best. In addition to the fact that it is attested in only one word, *túwwɔ́* 'nine', singleton /w/ in this context (u_ɔ)

is only attested in the 2sg possessive pronoun *úwɔ*, itself historically derived from the independent pronoun *ú* and a possessive clitic *=mɔ*. It is unsurprising that /w/ in this context would be rare, given the perceptual difficulties involved in hearing a labial glide between two round vowels. It is possible that *túwwɔ́* 'nine' was historically a singleton that strengthened to a geminate in order to remain distinct from its neighboring vowels. This tentative explanation is bolstered by the form of the numeral 'nine' in other Dogon languages, such as Jamsay *lá:rúwà* (Heath 2008) and Najamba *twây* (Heath, in preparation;h), each of which contain a singleton /w/.

In (11c), a minimal pair is given with singleton and geminate /ɲ/, but in fact only the geminate surfaces as a nasal stop. Intervocalic singleton /ɲ/ in Tommo So has weakened into a nasalized palatal sonorant [yⁿ], with words like *gìɲɛ́* 'beg' pronounced as [gìyⁿɛ́]. This development has parallels in the diachrony of other Dogon languages, such as Jamsay, where singleton *m* became the phoneme /wⁿ/ while historical geminate *mm* has become a singleton /m/. Thus we see cognates like Jamsay *nàmá* and Tommo So *nɔ̀mmɔ́* 'Dogon water god', where a geminate in Tommo So corresponds to a singleton in Jamsay, and pairs like Jamsay *nàwⁿá* and Tommo So *nàmá* 'meat', where a Tommo So singleton nasal stop corresponds with a Jamsay nasalized approximant. In Tommo So, the same shift is taking place at the palatal place of articulation, but degemination has not yet occurred, and as such we have no evidence for treating [yⁿ] as anything but an allophone of the palatal nasal. See section 3.1.4.9 for more on /ɲ/.

Though native Tommo So words do not allow geminate obstruents, for the phonotactic reasons pointed out above, we do find such geminates in loanwords, particularly from Fulfulde. Examples include *sɔ́bbɔ̀* 'dry sowing' or *ɛ́ddè* 'widow's four month period of mourning'. However, these geminates are relatively rare. See section 3.4 on phonotactics for token numbers in the lexicon.

3.1.4 Minimal pairs

The following subsections address each phoneme in detail, showing allophonic variation where applicable and providing minimal and near minimal pairs with similar phonemes to illustrate their phonemic status.

3.1.4.1 /p/

Voiceless stops /p, t, k/ are all unaspirated in Tommo So, with an average VOT (voice onset time) of around 20ms. Since the Dogon languages lack a labiodental fricative /f/, it is characteristic of Dogon speech to replace all initial /f/ in loanwords with /p/. Thus, the Fulani people are referred to as *púlɔ̀*, and a French loanword like *fête* 'party' will often be pronounced *pɛ́du*. Due to the fact that voiceless stops only occur

in word-initial position, medial /f/ will typically co-vary with /b/ in this position rather than /p/, as in *màlfá ~ màlbá* 'gun'. See section 3.4 for more on phonotactic restrictions.

The following pairs show that voicing is contrastive for labial stops (/p/ vs. /b/), that place of articulation is contrastive for voiceless stops (/p/ vs. /t, k/) and that nasality is contrastive for labial stops (/p/ vs. /m/).

(12) Minimal pairs for /p/ vs...

/b/	*pílu*	'white'	*bílu*	'ladder'
/t/	*pɛ́ɛ́ⁿ*	'harden'	*tɛ́ɛ́ⁿ*	'hobble'
/k/	*pɛ́dɛ̂*	'gin (cotton)'	*kɛ́dɛ̂*	'cut'
/m/	*pàndé*	'widowhood'	*màndé*	'Mande'

3.1.4.2 /b/

The last subsection showed that /b/, fully voiced in Tommo So, often stands in for a word-medial /f/ in loanwords. It is also stands in for /v/ in French loanwords like *avion* 'airplane', yielding Tommo So pronunciation *àbíɔ̀ⁿ*. Native /b/ undergoes no allophonic variation.

Voicing, nasality, place, and sonorancy are all contrastive for voiced stops.

(13) Minimal pairs for /b/ vs...

/p/	*bílu*	'ladder'	*pílu*	'white'
/m/	*bɔ̀ɔ̀ndɔ́*	'pamper'	*mɔ̀ɔ̀ndɔ́*	'stock up'
/d/	*bàbá*	'respect'	*bàdá*	'heal'
/g/	*bòó*	'call'	*gòó*	'go out'
/w/	*jàbá*	'replaster'	*jàwá*	'branch out'

3.1.4.3 /t/

Like /p/, voiceless alveolar /t/ is also unaspirated. The following minimal pairs demonstrate the phonemic status of the voiceless alveolar stop with regards to voiced alveolar stops, nasal alveolar stops, voiceless stops at other places of articulation, and finally frication, showing that /t/ contrasts with /s/.

(14) Minimal pairs for /t/ vs...

/d/	*tèbɛ̂*	'cross pole'	*dèbɛ̂*	'get stuck'
/n/	*táá*	'shoot'	*náá*	'mother'
/p/	*tɛ́ɛ́ⁿ*	'hobble'	*pɛ́ɛ́ⁿ*	'harden'
/k/	*tɛ́mɛ̂*	'eat (meat)'	*kɛ́mɛ̂*	'pinch'
/s/	*tɛ́mɛ̂*	'eat (meat)'	*sɛ́mɛ̂*	'slaughter'

3.1.4.4 /d/

Before high front /i/, /d/ becomes slightly affricated. While this means that its pronunciation approaches that of /ɟ/, the two sounds remain distinct, as indicated by the presence of minimal pairs. Likewise, /g/ and /d/ also contrast before /i/, showing that the palatalized allophones of each are not close enough to result in neutralization. See section 3.1.4.6 for a discussion of /g/'s allophonic behavior.

The following pairs show that /d/ is contrastive for voicing with /t/, for nasality with /n/, and for place of articulation with /b/ and /g/.

(15)		Minimal pairs for /d/ vs...			
	/t/	*dɛ̀bɛ́*	'get stuck'	*tɛ̀bɛ́*	'cross pole'
	/n/	*dàá*	'kill'	*nàá*	'forget'
	/b/	*bàdá*	'heal'	*bàbá*	'respect'
	/ɟ/	*dìŋɛ̂*	'tie'	*jìŋɛ̂*	'approach'
	/g/	*dìnɛ́*	'(sb's) turn'	*gìnɛ́*	'house'

3.1.4.5 /k/

The phoneme /k/, also unaspirated, has the allophone [c] (IPA palatal stop, not orthographic affricate) before high front /i/, but this allophony is purely distributional and does not form the basis of any morphophonological alternations; the underlying sequence /ki/ always surfaces as [ci], but this sequence is never created on the surface from morphological operations. We find the same contrasts in terms of voicing and place of articulation that we did for the other voiceless stops, but the contrast for nasality is less clear-cut. This is due to the fact that in native stems, /ŋ/ cannot occur in word-initial position, the only position in which /k/ can appear. One near-minimal pair (differing in tone) is offered here using the Arabic loanword *jákà* 'Islamic tithe' (from Arabic *zakat*, borrowed via Fulfulde). However, since /k/ contrasts with /g/ and /g/ contrasts with /ŋ/, it seems safe to say that /k/ also contrasts with /ŋ/.

(16)		Minimal pairs for /k/ vs...			
	/g/	*kìyé*	'bone'	*gìyé*	'thorn'
	/ŋ/	*jákà*	'Islamic tithe'	*jàŋá*	'put (on a stand)'
	/p/	*kɛ́dɛ̂*	'cut'	*pɛ́dɛ̂*	'gin (cotton)'
	/t/	*kɛ̂mɛ̂*	'pinch'	*tɛ̂mɛ̂*	'eat (meat)'

3.1.4.6 /g/

There are four allophones of the voiced velar stop /g/. These are: [ɟ] before /i/, [gʷ] before round vowels, [ɣ] in the contexts /a_a/ and /ɔ_ɔ/, and [g] elsewhere.

Like /k/, /g/ will also become palatalized before /i/, which makes it difficult for non-native ears to distinguish it from /j/. There are no minimal pairs in the data set for /g/ and /j/ before /i/, which suggests neutralization in this context, but the fact that speakers correct me if I pronounce a word with the wrong phoneme (/g/ for /j/ or /j/ for /g/) shows that it is not true neutralization. Before /i/, /g/ surfaces as a mildly affricated [ɟ], while /j/ continues to surface as [ʥ]. This area would reward phonetic analysis. Though /g/ does not palatalize before the other front vowels /e/ and /ɛ/, there are still no minimal pairs contrasting /g/ and /j/ in this context.

Before a round vowel, the voiced velar stop has a rounded allomorph, yielding pronunciations like [gʷu], [gʷo], and [gʷɔ]. Why this rounding is not present or audible on the voiceless velar stop is not clear.

Finally, /g/ lenites to [ɣ] in some metrical contexts when flanked by two /a/ vowels or two /ɔ/ vowels. For a discussion of this lenition, see section 3.6.3.

The minimal pairs below show that /g/'s voicing, orality, and place are phonemic.

(17) Minimal pairs for /g/ vs...

/k/	*gìyé*	'thorn'	*kìyé*	'bone'
/ŋ/	*pégɛ́*	'button'	*pɛ́ŋɛ̂*	'knot'
/b/	*gòó*	'go out'	*bòó*	'call'
/d/	*gɔ̀ɔ́*	'dance'	*dɔ̀ɔ́*	'arrive'
/j/	*gɔ̀mbɔ́*	'open wide'	*jɔ̀mbɔ́*	'peck at'

3.1.4.7 /m/

/m/ is represented by a single allophone [m], though it can assimilate in place of articulation to a following stop; see section 3.7.2. The minimal pairs below demonstrate its phonemic status with regards to nasality, place of articulation, and continuancy. I have given minimal pairs for both singleton /m/ vs. /ɲ/ and geminate /mm/ vs. /ɲɲ/, since the former are further differentiated by the fact that /ɲ/ surfaces as a nasalized approximant. Further, /m/ is only contrastive with /ŋ/ in intervocalic position due to phonotactic restrictions on the velar nasal.

(18) a. Minimal pairs for /m/ vs...

/b/	*mɔ̀ɔ̀ndɔ́*	'stock up'	*bɔ̀ɔ̀ndɔ́*	'pamper'
/w/	*ámá*	'in-law'	*áwá*	'catch'
/n/	*máá*	'dry'	*náá*	'mother'
/ɲ/	*dìmɛ̂*	'tamp down'	*dìɲɛ̂*	'prop up'
/ŋ/	*ámá*	'in-law'	*áŋá*	'mouth'

b. Minimal pairs for /mm/ vs...

/ɲɲ/	*ímmɛ̂*	'inflate'	*íŋɲɛ̂*	'lift (a heavy rock)'

3.1.4.8 /n/

Like /m/, the surface form /n/ does not undergo allophonic variation. The following minimal pairs show the phonemic status of nasality and place of articulation for /n/. The minimal pair with /ɲ/ shows the contrast in word-initial position, a rare position for palatal /ɲ/. The two also contrast intervocalically, as in *dìnɛ̂* '(sb's) turn' and *dìɲɛ̂* 'prop up'.

(19)   Minimal pairs for /n/ vs...

/d/	*nàá*	'forget'	*dàá*	'kill'
/m/	*náá*	'mother'	*máá*	'dry'
/ɲ/	*năm*	'sun'	*ɲăm*	'fire'
/ŋ/	*káná*	'do'	*káŋá*	'discuss'

3.1.4.9 /ɲ/

As discussed in section 3.1.3, /ɲ/ has the allophone [yⁿ] (IPA [ỹ]) when the nasal is an intervocalic singleton. This variant may also be used in word-final position, though it is in free-variation with the nasal stop. The minimal pairs below contrast /ɲ/ with a voiced oral affricate, nasal stops at other places of articulation, as well as with the non-nasalized palatal sonorant /y/.

(20)   Minimal pairs for /ɲ/ vs...

/j/	*ɲăm*	'fire'	*jăm*	'caste of leatherworkers'
/m/	*íŋɲɛ̂*	'lift'	*ímmɛ̂*	'inflate'
/n/	*ɲăm*	'fire'	*năm*	'sun'
/ŋ/	*dìɲɛ̂*	'burn'	*dìŋɛ̂*	'tie'
/y/	*ɲám*	'difficult'	*yám*	'wasted, broken'
	[kúyⁿɔ́]	'squirrel'	*kúyɔ́*	'first'

The minimal pair *ɲăm* 'fire' and *jăm* 'caste of leatherworkers' is in fact the only minimal pair for /ɲ/ and /j/ since /j/ never occurs intervocalically or word-finally in native words.

3.1.4.10 /ŋ/

Before /i/, the velar nasal /ŋ/ is produced at a place of articulation intermediate between velar and palatal. Thus, the nasal in *níŋ-íyɛ̂* 'be afraid' is not a canonical velar nasal and approaches /ɲ/ in its pronunciation, but we know the underlying form given other forms of the verb such as *níŋɛ̂-ndɛ̂* 'scare' with the factitive suffix.

Since the velar nasal cannot appear in word-initial or word-final position, all minimal pairs reflect word-medial contrasts for nasality and place of articulation. See section 3.4 for more on phonotactics.

(21) Minimal pairs for /ŋ/ vs...
    /g/ *péŋέ* 'knot'   *pégέ* 'button'
    /m/ *áŋá* 'mouth'   *ámá* 'in-law'
    /n/ *káŋá* 'discuss'   *káná* 'do'
    /ɲ/ *dìŋɛ̂* 'tie'   *dìɲɛ̂* 'prop up'

3.1.4.11 /s/

Before /i/, the alveolar /s/ has an optional allophone [ɕ], an alveolo-palatal fricative. For example, the verb *síɾɛ̂* 'cook' can be pronounced [ɕíɾɛ̂], but in careful speech, [síɾɛ̂] is also possible. The following minimal pairs show that /s/ contrasts with /t/ in continuancy and with /h/ in place of articulation.

(22) Minimal pairs for /s/ vs...
    /t/ *sárá* 'pay'   *tárá* 'stick on'
    /h/ *sárá* 'pay'   *hárá* 'be forbidden'

3.1.4.12 /h/

The voiceless glottal fricative /h/ is not a native phoneme, but it has been well integrated into the system of phonemic contrasts due to a large number of loanwords from Fulfulde (often originally of Arabic origin). It also occurs in exclamations like [ɔ̀hɔ́ɔ̀ⁿ] 'yes; I see' and ideophones like [hèéé], an expressive adverbial referring to extreme height. The following minimal pairs contrast /h/ with null to show that word-initial glottal frication is phonemic, as well as with /s/ to show that place of articulation is phonemic.

(23) Minimal pairs for /h/ vs...
    Ø   *hárá* 'be forbidden'   *árá* 'suck'
    /s/ *hárá* 'be forbidden'   *sárá* 'pay'

3.1.4.13 /j/

The place of articulation of the affricate written /j/ in the practical orthography is alveolo-palatal (IPA /dʑ/), like the voiced affricate in Japanese *jibun* 'self', rather than the English-like post-alveolar affricate (IPA /dʒ/). Though, as section 3.1.4.6 discussed, there are no minimal pairs between /g/ and /j/ before /i/, plenty of minimal pairs are to be found in other environments and the contrast before /i/ does not seem to be fully neutralized. /j/ itself undergoes no allophonic variation.

  The pairs below show that /j/ contrasts with /g/ in contexts other than before /i/, /d/ in all contexts (/i/ given here), and with the palatal sonorant /y/.

(24) Minimal pairs for /ɟ/ vs...
/g/	*jàmbá*	'chip off'	*gàmbá*	'reduce'
/d/	*jìŋɛ́*	'approach'	*dìŋɛ́*	'tie'
/y/	*jàbá*	'replaster'	*yàbá*	'agree'

3.1.4.14 /w/

The phoneme /w/ is a labio-velar approximant, like English /w/, and it does not show allophonic variation. The following minimal pairs show the phonemic status of continuancy, nasality, and backness for /w/.

(25) Minimal pairs for /w/ vs...
/b/	*dàwá*	'cover up'	*dàbá*	'hoe'
/m/	*áwá*	'catch'	*ámá*	'in-law'
/y/	*wììré*	'set out to dry'	*yììré*	'snake'

3.1.4.15 /y/

The palatal glide /y/ becomes nasalized [yⁿ] after a nasal vowel. This would result in its neutralization with intervocalic or word-final singleton /ɲ/, which also surfaces as [yⁿ], though the opportunities for this neutralization are rare. The most common situation in which /y/-nasalization arises is in the formation of deverbal nouns from a monosyllabic verb stem with a nasal vowel, where the second half of the verb's vowel is replaced with [y]. Thus, we see *bóy* 'name' from *bòó* 'call', but *tɔ̌ⁿyⁿ* 'writing' from *tɔ́ɔ̀ⁿ* 'write'. The underlying status of the final [yⁿ] as /y/ is clear when we compare it with pairs like *bóy-bòó*. However, certain monosyllabic nouns that are not related to verbs also end in [yⁿ], and in this case it is not clear whether they should be derived from an underlying /VVⁿy/ sequence or a /Vɲ/ sequence, since the [yⁿ] allophone of /ɲ/ would nasalize the preceding vowel.

Take, for example, *tɛ̌yⁿ* 'worries', where the nasalization marked at the end is realized across the whole syllable. In this case, the more likely underlying form is /tɛ̌ɲ/, with a final palatal nasal, since the underlying form /tèéⁿy/ would contain a [+ATR] nasal vowel /eeⁿ/ that is not part of the vowel inventory (see section 3.2.2). However, it is also possible that this is historically a deverbal noun from a stem *téɛ́ⁿ*, where the noun has undergone a change to [+ATR], an attested change in such noun-verb pairs as *bàá* 'beat (drum)' and *bǒy* 'tom-tom' (see section 13.1.5). In stems like *dɛ́yⁿ* 'different', the situation is even more complicated in that /ɛ́ɛ́ⁿ/ is a licit nasalized vowel, so the space of possibilities for the underlying form is even greater.

Since there is, to my knowledge, no way of distinguishing an underlying /VVⁿy/ sequence from a /Vɲ/ sequence in the absence of morphological information such a noun-verb pair, I will remain neutral on the position, writing such words as *téyⁿ* and *dɛ́yⁿ*, which reflects their surface pronunciation. Note that this confusion can only

arise from words with long vowels (or monosyllabic words with a [yⁿ] coda, which would cause vowel shortening), since nasality is only contrastive on long vowels in Tommo So. That is, words like [kúⁿyⁿɔ́ⁿ] 'squirrel' are unambiguously *kúɲɔ*, since there are no short nasal vowels in the language that could nasalize /y/.

The following minimal pairs show that /y/ contrasts in nasality and continuancy with /ɲ/ in both initial and medial positions (where /ɲ/ has the allophone [yⁿ]), in backness with /w/, and in continuancy and place with /j/.

(26) Minimal pairs for /y/ vs...
/ɲ/	*yám*	'wasted'	*ɲám*	'difficult'
	kúyɔ́	'first'	[kúyⁿɔ́]	'squirrel'
/w/	*yììré*	'snake'	*wììré*	'set out to dry'
/j/	*yúú*	'millet'	*júú*	'comrade'

3.1.4.16 /r/

Tommo So /r/ (practical orthography) is pronounced as an alveolar tap (IPA [ɾ]). This pronunciation is remarkably consistent; it has no other rhotic allophones. However, due to a process of rhotic dissimilation, /r/ may alternate with [l]. See section 3.7.6 for further discussion.

The following minimal pairs show that continuancy, nasality, and rhoticity are contrastive for /r/. Since liquids cannot appear word-initially, /r/ is only contrastive in non-initial positions.

(27) Minimal pairs for /r/ vs...
/d/	*jàrá*	'knock down'	*jàdá*	'to calculate'
/n/	*gìrɛ́*	'watch over'	*gìnɛ́*	'house'
/l/	*sárá*	'pay'	*sálá*	'bad'

3.1.4.17 /l/

The phoneme /l/ is a lateral alveolar approximant with only this single allophone. The following minimal pairs show /l/ contrasting for rhoticity, continuancy, and nasality. Like /r/, it cannot appear in word-initial position, and hence all minimal pairs show /l/ word-medially.

(28) Minimal pairs for /l/ vs...
/r/	*sálá*	'bad'	*sárá*	'pay'
/d/	*gùlɔ́*	'vomit'	*gùdɔ́*	'pluck'
/n/	*dɔ̀lɔ́*	'ransom'	*dɔ̀nɔ́*	'sell'

3.2 Vowels

3.2.1 Vowel inventory

Tommo So has seven short vowel phonemes, each of which has an equivalent long vowel. In the practical orthography, long vowels are written as two consecutive vowels (/aa/ for IPA /a:/) since there are no contrasts between long vowels a sequence of two like vowels. Nasalization is also contrastive, though all phonemically nasalized vowels are long; in addition, only the three lowest vowels, /a/ and the [-ATR] mid vowels, have nasalized equivalents. This brings the total number of vowel phonemes up to seventeen, the same number as the consonants.

(29) | Short oral | Long oral | Nasalized |
|---|---|---|
| u | uu | |
| o | oo | |
| ɔ | ɔɔ | ɔɔ^{n} |
| a | aa | aa^{n} |
| ɛ | ɛɛ | ɛɛ^{n} |
| e | ee | |
| i | ii | |

{e, o} and {ɛ, ɔ} form harmonic sets, to be discussed further in the treatment of vowel harmony in section 3.5.

Long vowels in every stem position are of approximately equal length, averaging around 138ms, a little over double the average length of short vowels, 67ms. These measurements were made based on running speech. In utterance-final position, long vowels are shortened slightly; see section 3.4.4. There is no length distinction in monosyllabic words, due to minimality requirements (section 3.3.2).

3.2.2 Nasal vowels

I asserted above that the seven vowel system that exists in oral vowels collapses into a three vowel system in nasal vowels. We do additionally find a couple cases of high nasalized vowels, but they are restricted to ideophones, like the following:

(30) a.   *kìì^{n}-káá^{n}*   'whooping cough'

   b.   *búú^{n}-ni*   'thick (expressive adverbial)'

In addition, the nasalized vowel /ii^{n}/ surfaces in one derived verb *píí^{n}-y^{n}ɛ́* 'get old'. However, this is synonymous with the word *pɛ́ɛ́^{n}* and could be seen as an irregular derivation in which the diphthong created by vowel hiatus resolution is leveled into a long high vowel (cf. expected *pɛ̂-í^{n}y^{n}ɛ̂*); see section 3.7.3 for more on vowel hiatus with high vowel suffixes.

Given the restricted distribution of these two nasalized vowels, I do not treat them as phonemic. However, it should be noted that all nasalized vowels are extremely rare compared with their oral counterparts. This is especially true for the low vowel /aa^n/, whose phonemic status is based on a single regular lexical item *páá^n* 'dry up', which forms no true minimal pairs with oral /aa/. The other two nasal vowels, /ɔɔ^n/ and /ɛɛ^n/, appear in just five and three non-ideophonic native stems, respectively. These are all listed below:

(31)   a.   <u>Stems with /ɔɔ^n/</u>
          dɔ́ɔ́^{n}   'gutter spout'
          jɔ̀ɔ́^{n}   'draw'
          pɔ̀ɔ́^{n}   'fonio'
          sɔ́ɔ́^{n}   'douse (fire)'
          tɔ́ɔ́^{n}   'fill up'

       b.   <u>Stems with /ɛɛ^n/</u>
          ɛ́ɛ́^{n}   'tighten; marry; tough'
          pɛ̂ɛ́^{n}   'get old'
          tɛ̂ɛ́^{n}   'hobble (a donkey)'

As we can see, all nasal vowels are peripheral phonemes in Tommo So, but I take the appearance in at least one regular lexical item as the criterion for determining phonemic status. Given this, we are left with a three-way contrast in nasal vowels, between /aa^n/, /ɔɔ^n/, and /ɛɛ^n/.

3.2.3 The status of [ə]

In addition to these vowel phonemes, metrically and morphologically conditioned vowel reduction can lead to the creation of schwa [ə] (with a pronunciation closer to high central [ɨ]). For example, in certain trisyllabic verb roots, the medial (second syllable) vowel is pronounced in normal speech with a schwa, as in [ádə́bá] 'think'. When asked to pronounce the word slowly, younger speakers offer [ádúbá], but I am told that an older speaker would have said [ádábá]. It appears that what began as a system of vowel reduction has resulted in the restructuring of the UR, with [ə] taken to be an allophone of /i/ or /u/.

This system is challenging in a number of ways. First, not all trisyllabic verbs have undergone this restructuring. *Ádúbá* 'think' has, but consultants give similar verbs like *ábárá* 'spread out' with three /a/ vowels. Second, the system appears to be morphologically constrained in that nouns are much less susceptible to this reduction than verbs. Trisyllabic nominal and adjectival stems like *ságárá* 'young' or *àdàlá* 'half ripe' do not undergo as much second syllable reduction and as a result do not show the same medial vowel restructuring. It is not clear what drives

this asymmetry. Its effects are even felt in deverbal nouns, where a middle-aged consultant gives *ádúbá* for 'think' but both *àdùbú* and *àdàbú* as possible pronunciations of the cognate nominal 'thought (n.)'. Note that in general, [u]-final trisyllabic nouns are more susceptible to vowel reduction than trisyllabic nouns with the same vowel quality in every syllable, as though a final non-high vowel serves to protect a medial one.

This vowel reduction and restructuring probably greatly contributed to large number of /i/-initial suffixes, which delete the final vowel of the stem in vowel hiatus. See section 3.7.3 for further discussion.

The fact that phonetic [ə] would be reinterpreted as a phonologically high vowel is not surprising, given both the susceptibility of high vowels to consonant effects in the language and the fact that [u] is the default epenthetic vowel. It appears that high vowels are perceived by speakers as being somehow less firm than the non-high vowels, and hence a non-phonemic pronunciation like [ə] can be more easily attributed to high vowels than non-high vowels.

In light of these facts, I treat [ə] as an allophone of /u/ and /i/ and not as a phoneme in and of itself. Nonetheless, much remains to be explained as to why it is so much more pervasive in the verbal system than in the nominal system and why certain verbs have undergone the high vowel reinterpretation while others have been resistant.

3.2.4 Vowel formants

The graph in (32) plots the seven oral vowels with their values of the first and second formant (F1 and F2) in hertz, averaged across the analysis of several words, each repeated three times.

(32)   *Tommo So vowel inventory with formant values*[4]

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4 u: /túú, kúú, búdú/. o: /yògó, òbéélè, tòndòó, póó, óbó, wó/. ɔ: /tɔ́ndɔ̂m, úwɔ=mbe, bɔ̀gɔ́/. a: /àgá, yàbá, yáá/. ɛ: /ɛ́nɛ́, ígɛ́, dɛ́gɛ́, íbɛ́, ɛ́bɛ́/. e: /òbéélè, ìsé, négu, yàà=bé/. i: /íí, íbɛ́, ìsé/.

We can see that the mid and high vowels are much closer to one another than they are to the low vowel /a/. There may be additional factors helping speakers to distinguish the ATR (advanced tongue root) feature on mid vowels other than simply F1 and F2, but these factors are not audible to my non-native ears.

3.2.5 Minimal pairs

Since Tommo So is a language with strict vowel harmony requirements (section 3.5), minimal pairs for polysyllabic words will almost uniformly have vowel contrasts in multiple positions. For example, we find pairs like *àná* 'rain' and *ènɛ́* 'goat', but **ànɛ́* or **èná*. A minimal pair is, by definition, two words that differ in only a single segment or feature value, but in Tommo So, a change in the feature value of one vowel is copied onto all other vowels in the word. Since this is only a difference in a single parameter, in this sense *àná* and *ènɛ́* are a minimal pair, differing only in vowel quality (/a/ vs. /ɛ/). However, for clarity in the following subsections, I try and present stems with only a single vowel. Monosyllabic C-final stems (with final epenthetic [u], section 3.4.6) are the best location to find such minimal pairs, since they typically only involve one stem vowel. Epenthetic [u] is never used as a place of contrast in the minimal pairs that follow. Minimal pairs contrasting long and short vowels are given only in section 3.2.5.8–3.2.5.14 on long vowels, and minimal pairs contrasting nasal and oral vowels are given only in section 3.2.5.15–3.2.5.17 on nasal vowels.

3.2.5.1 /u/
The vowel /u/ is a high back rounded vowel. In second syllable position in words like *táŋúndá* 'transfer', it has the realization [ə]; see section 3.2.3. The following minimal pairs show that /u/ contrasts in backness (and correlating rounding) with /i/, and in height with /o/ and /ɔ/.

(33)   Minimal pairs for /u/ vs...
         /i/ *kúdu*   'handle'   *kídu*   'seed residue'
         /o/ *kúló*   'hair'   *kóló*   'raw'
         /ɔ/ *kúnnɔ́* 'farming huts'   *kɔ́nnɔ́* 'curved'

3.2.5.2 /o/
The vowel /o/ is a mid back rounded vowel. It is additionally specified as being [+ATR]. It contrasts in backness (and rounding) with /e/, in height with /u/ and /a/, and in ATR value with /ɔ/.

(34)   Minimal pairs for /o/ vs...
      /e/ *sólu* 'cream of millet'   *sélu* 'last bit of liquid'
      /u/ *kóló* 'raw'   *kúló* 'hair'
      /a/ *tólu* 'pig'   *tálu* 'egg'
      /ɔ/ *púló* 'unweave'   *púlɔ́* 'Fulani'

3.2.5.3 /ɔ/

The vowel /ɔ/ is a back mid rounded vowel with a [-ATR] specification. It contrasts with /ɛ/ in backness (and rounding), /u/ and /a/ in height, and /o/ in ATR.

(35)   Minimal pairs for /ɔ/ vs...
      /ɛ/ *dɔ̀gú* 'quiver'   *dɛ̀gú* 'poverty'
      /u/ *kúnnɔ́* 'farming huts' *kɔ́nnɔ́* 'curved'
      /a/ *dɔ̀gú* 'quiver'   *dàgú* 'small'
      /o/ *dúgɔ́* 'necklace'   *dúgó* 'poison'

3.2.5.4 /a/

The vowel /a/ is a low central unrounded vowel. It can sometimes be reduced to extra-short [a̱], as in [kádá̱ná] 'oldest man in the village', but the pronunciation of this reduced vowel is lower than that of [ə], the allophone of /u/ and /i/. Given that it is neither front nor back, I contrast it in the following pairs with both front mid /ɛ/ and back mid /ɔ/.

(36)   Minimal pairs for /a/ vs...
      /ɛ/ *dàgú* 'small'   *dɛ̀gú* 'poverty'
      /ɔ/ *dàgú* 'small'   *dɔ̀gú* 'quiver'

3.2.5.5 /ɛ/

The vowel /ɛ/ is a front mid unrounded vowel, specified as [-ATR]. It contrasts with /ɔ/ in backness (and rounding), with /i/ and /a/ in height, and with /e/ in ATR.

(37)   Minimal pairs for /ɛ/ vs...
      /ɔ/ *dɛ̀gú* 'poverty' *dɔ̀gú* 'quiver'
      /i/ *kɛ́dɛ̂* 'cut'   *kídɛ̂* 'thing'
      /a/ *dɛ̀gú* 'poverty' *dàgú* 'small'
      /e/ *bɛ̀lú* 'animal'   *bèlú* 'grass'

3.2.5.6 /e/

The vowel /e/ is a front mid unrounded vowel with a [+ATR] specification. It contrasts with /o/ in backness (and rounding), with /i/ and /a/ in height, and with /ɛ/ in ATR.

(38)   Minimal pairs for /e/ vs...
/o/	*sélu*	'last bit of water'	*sólu*	'cream of millet'
/i/	*pédé*	'shell'	*pídé*	'spray'
/a/	*bàré*	'meeting'	*bàrá*	'help'
/ɛ/	*bèlú*	'grass'	*bɛ̀lú*	'animal'

3.2.5.7 /i/

The vowel /i/ is a high front unrounded vowel. It has the allophone [ə] in the metrically weak second syllable position in verbs like *téŋíndɛ̂* [téŋə́ndɛ́] 'turn on lights'. In addition, slightly lower /i/ ([i̞]) has been found even in first syllable position in words such as *bìl-áa* 'became'. This could be due to the following low vowel, since words like *bílu* 'ladder' do not show this same lowering effect. More data are required to properly sort out the phonetic realization of /i/. It contrasts in backness (and rounding) with /u/ and in height with /e/ and /ɛ/.

(39)   Minimal pairs for /i/ vs...
/u/	*kídu*	'seed residue'	*kúdu*	'handle'
/e/	*pídé*	'spray'	*pédé*	'shell'
/ɛ/	*kídɛ̂*	'thing'	*kɛ́dɛ̂*	'cut'

3.2.5.8 /uu/

Unlike short /u/, long /uu/ never reduces to schwa. All long vowels have a half-long allophone in utterance final position, rare in naturalistic speech; see section 3.4.4. /uu/ is contrastive with /ii/ in backness (and rounding), with /oo/ and /ɔɔ/ in height, and with /u/ in length.

(40)   Minimal pairs for /uu/ vs...
/ii/	*dúú*	'below'	*díí*	'water'
/oo/	*yúú*	'millet'	*yóó*	'enter'
/ɔɔ/	*túúrɔ́*	'spit lightly'	*tɔ́ɔ́rɔ́*	'let do'
/u/	*kúúló*	'harvest corn'	*kúló*	'hair'

3.2.5.9 /oo/

The long vowel /oo/ is contrastive with /ee/ in backness (and rounding), with /uu/ and /aa/ in height, with /ɔɔ/ in ATR, and with /o/ in length.

(41)   Minimal pairs for /oo/ vs...
    /ee/   *dòó*   'millet type'   *dèé*   'know'
    /uu/   *yóó*   'enter'   *yúú*   'millet'
    /aa/   *bòó*   'call'   *bàá*   'beat (drum)'
    /ɔɔ/   *dòó*   'millet type'   *dɔ́ɔ́*   'arrive'
    /o/   *wòòló*   'kola nut'   *wòló*   'cave in'

3.2.5.10 /ɔɔ/
The long vowel /ɔɔ/ is contrastive with /ɛɛ/ in backness (and rounding), with /uu/ and /aa/ in height, with /oo/ in ATR, and with /ɔ/ in length.

(42)   Minimal pairs or /ɔɔ/ vs...
    /ɛɛ/   *sɔ́ɔ́*   'speak'   *sɛ́ɛ́*   'beer residue'
    /uu/   *tɔ́ɔ́rɔ́*   'let do'   *túúrɔ́*   'spit lightly'
    /aa/   *dɔ́ɔ́*   'arrive'   *dàá*   'kill'
    /oo/   *sɔ̀ɔ́*   'speech'   *sòó*   'sweat'
    /ɔ/   *bɔ́ɔ́ndu*   'pampered'   *bɔ́ndu*   'marrow'

3.2.5.11 /aa/
The long vowel /aa/ contrasts in height with both /ɔɔ/ and /ɛɛ/, and in length with /a/.

(43)   Minimal pairs for /aa/ vs...
    /ɔɔ/   *sáá*   'wild grape'   *sɔ́ɔ́*   'to speak'
    /ɛɛ/   *sáá*   'wild grape'   *sɛ́ɛ́*   'beer residue'
    /a/   *sàdáá*   'bird'   *sàdá*   'garden'

3.2.5.12 /ɛɛ/
The long vowel /ɛɛ/ contrasts with /ɔɔ/ in backness (and rounding), with /ii/ and /aa/ in height, with /ee/ in ATR, and with /ɛ/ in length.

(44)   Minimal pairs for /ɛɛ/ vs...
    /ɔɔ/   *sɛ́ɛ́*   'beer residue'   *sɔ́ɔ́*   'to speak'
    /ii/   *pɛ́ɛ́ndɛ́*   'line up'   *pííndé*   'close'
    /aa/   *sɛ́ɛ́*   'beer residue'   *sáá*   'wild grape'
    /ee/   *nɛ́ɛ́*   'now'   *néé*   'two'
    /ɛ/   *pɛ́ɛ́ndɛ́*   'line up'   *pɛ́ndɛ́*   'sores'

3.2.5.13 /ee/

The long vowel /ee/ contrasts with /oo/ in backness (and rounding), /ii/ and /aa/ in height, /εε/ in ATR, and /e/ in length.

(45)   Minimal pairs for /ee/ vs...
/oo/	*dèé*	'know'	*dòó*	'millet type'
/ii/	*déé*	'Papa!'	*díí*	'water'
/aa/	*néé*	'two'	*náá*	'mother'
/εε/	*néé*	'two'	*nɛ́ɛ̂*	'now'
/e/	*tééndé*	'align'	*téndé*	'witness'

3.2.5.14 /ii/

The long vowel /ii/ is not subject to allophonic variation, unlike its short counterpart. It contrasts with /uu/ in backness (and rounding), with /ee/ in height, and with /i/ in length.

(46)   Minimal pairs for /ii/ vs...
/uu/	*díí*	'water'	*dúú*	'below'
/ee/	*díí*	'water'	*déé*	'Papa!'
/i/	*kíílé*	'pull off'	*kílé*	'extra hard'

3.2.5.15 /ɔɔ^n/

The nasal vowel /ɔɔ^n/ contrasts with /εε^n/ in backness (and rounding), /aa^n/ in height, and /ɔɔ/ in nasality.

(47)   Minimal pairs for /ɔɔ^n/ vs...
/εε^n/	*pɔ́ɔ́^{n}*	'bridge'	*pɛ́ɛ́^{n}*	'get old'
/aa^n/	*pɔ́ɔ́^{n}*	'bridge'	*páá^n*	'dry up'
/ɔɔ/	*sɔ́ɔ́^{n}*	'extinguish'	*sɔ́ɔ́*	'speak'

3.2.5.16 /aa^n/

The nasal vowel /aa^n/ is vanishingly rare, as noted above in section 3.2.2. The only regular (i.e. native and non-ideophonic) lexical item containing it is *páá^n* 'dry up'. The following minimal or near-minimal pairs show that /aa^n/ contrasts with /εε^n/ and /ɔɔ^n/ in height and with /aa/ in nasality.

(48)   Minimal pairs for /aa^n/ vs...
/εε^n/	*páá^n*	'dry up'	*pɛ́ɛ́^{n}*	'get old'
/ɔɔ^n/	*páá^n*	'dry up'	*pɔ́ɔ́^{n}*	'bridge'
/aa/	*páá^n*	'dry up'	*báá*	'father'

3.2.5.17 /εεⁿ/

The nasal vowel /εεⁿ/ contrasts in backness (and rounding) with /ɔɔⁿ/, in height with /aaⁿ/, and in nasality with /εε/.

(49) <u>Minimal pairs for /εεⁿ/ vs...</u>
/ɔɔⁿ/ *pɛ́ɛ́ⁿ* 'get old' *pɔ́ɔ́ⁿ* 'bridge'
/aaⁿ/ *pɛ́ɛ́ⁿ* 'get old' *pááⁿ* 'dry up'
/εε/ *pɛ́ɛ́ⁿ* 'get old' *pɛ́ɛ́* 'squash'

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), N, NCV, NCV: 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:

(50) a. V *ɛ̀.nɛ́* 'goat'
b. CV *gì.nɛ́* 'house'
c. V: *íí* 'child'
d. CV: *nàá* 'cow'
e. VR *ém* 'milk'
f. CVR *nǎm* 'sun'
g. CVC *sɔ́b.bɔ̀* 'dry sowing'
h. N *ɲ́.yɛ́* 'eat'
i. NCV *à.ndá* 'udder'
j. NCV: *gà.mbáá* 'some'
k. CVV *dɔ̀ɛ̀* 'he arrived'

Of these, CVC and N are the rarest, since non-sonorant geminates are rare, present only in loanwords, and syllabic nasals are found at the beginning of only a handful of words (syllabic /m/ 3 stems, syllabic /n/ 5 stems, syllabic /ɲ/ 4 stems). CVR syllables occur almost exclusively in monosyllabic stems, but these often surface as disyllabic with an epenthetic [u] following the sonorant (yielding CV.CV); see section 3.4.6 for more on epenthesis.

CVV syllables in which the two V slots are not of the same quality are not legal in native stems, though they can be created by inflection. They most commonly arise in the defocalized perfective, which is marked with a suffix *-e ~ -ɛ* or *-i*. Vowel hiatus following a short vowel is resolved by deleting the stem-final vowel (*dɔ̀nɔ̀-ɛ̀ → dɔ̀n-ɛ̀*

'sold'), but with a long vowel, only the second half of the vowel is deleted (*dɔ̀ɔ̀-ɛ̀ →*
dɔ̀-ɛ̀ 'arrived'), meaning that vowel hiatus remains on the surface. These two vowels
are pronounced as one syllable, with the two vowels generally forming a diphthong.
For instance, in *dɔ̀-ɛ̀* 'he arrived', /ɔ/ shortens to almost a mid back glide [dɔ̯̀ɛ̀]. Vowel
hiatus can also arise from the addition of high-vowel suffixes; see section 3.7.3.

Vowel hiatus across syllable boundaries (V.V) is very rare in Tommo So and does
not occur underlyingly. However, medial V syllables can be created when the transi-
tive suffix is added to a verb whose final syllable is /w/-initial. The change proceeds
as follows:

(51)   /gàwá + irɛ/ → |gàwírɔ́| → [gàúrɔ́]   'entrust (sth) to (sb)'

We know that the root is underlyingly /gàwá/ due to the existence of a mediopassive
verb sharing the same stem *gàwá-íyɛ́* 'guard (sth) for (sb)'. The [wi] syllable created
by vowel hiatus with a high-vowel suffix is realized on the surface as [u]. Other verbs
share this surface [a.u] pattern, with a medial [u] syllable, but without the support of
another verb pointing to its underlying form. Nonetheless, they are all of the form
[(C)aurɔ], and so it seems likely that, underlyingly, they are derived from this same
sequence. Other than these derived [u], I know of no medial V syllables.

There is some question as to the treatment of NC clusters in words such as *jàŋgá*
'study'. In word-initial position, we find only syllabic nasals followed by a stop,
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:

(52)   *ɲ́.yɛ̀-dɛ̀-m*
       eat-IMPF-1SG
       'I eat'

In the imperfective aspect, the verb stem has a {HL} tone melody, with H on the
first mora only. In this case, the H is assigned to /ɲ/, showing its moraic nature.
Word-final nasals also add a mora, as evidenced by the fact that CVN syllables are
able to carry a contour tone, as in *nǎm* 'sun', *yǐm* 'death', etc.

It is less clear whether *jàŋgá* 'study' should be syllabified as /jàn.gá/ with a
coda nasal or as /jà.ŋgá/ with a prenasalized stop. Evidence differentiating the two
analyses is hard to come by. First, we could ask whether the CVN syllable in a
CVNCV word is able to carry a contour tone, which would indicate its bimoraic
nature. In fact, we do not find any contour tones on these syllables, but Tommo So
disallows rising tones on non-final syllables (see section 4.1.1), and falling tones
are not present in native stems; thus, the lack of contour tones here may be indepen-
dent of syllable structure. We could also look to grammatical tone overlays that are

sensitive to mora count. For example, in inalienable possession with a pronominal possessor, the possessed noun will receive a {H} overlay if it is two moras or less and a {HL} overlay otherwise. We could look, then, to see how a CVNCV word treated in this possessive paradigm. The only inalienable noun of this shape is *nínju* 'maternal uncle', which receives a {H} overlay, suggesting a bimoraic weight. Once again, though, this example is confounded by the fact that the final [u] is epenthetic and hence not part of the underlying structure. Interestingly, then, this means that the grammatical tone overlay is assigned based on the *underlying* number of moras, not the surface number, assuming that an epenthetic vowel would contribute a mora. For more on grammatical tone, see section 4.4–4.5. The one piece of evidence that points towards a prenasalized stop analysis (syllable shape NCV, the analysis pursued here) is that we find long vowels occurring before a nasal stop cluster in a word, as in *dùù-ndó* 'put down' or *nííndέ* 'tongue'. Since Tommo So disallows super-heavy syllables (syllables with more than two moras), we can deduce that the nasal in this case does not add a mora. The asymmetry between initial nasal stop clusters and medial clusters, wherein the initial nasals are tone bearing and syllabic while the medial ones are not, can be explained by a constraint against falling sonority word onsets: a nasal is more sonorous than a stop, so the sonority decreases as one moves into the syllable. This is tolerated word-medially but not in word-initial position, and instead those clusters are broken up into two syllables.

3.3.2 Word minimality requirement

Like many languages, Tommo So imposes a bimoraic word minimum. Thus, we find words like *díí* 'water' and *kúú* 'head', but no monomoraic equivalent (*dí, *kú). The bimoraic size allows all stems to carry the language's lexical tonal melodies, /H/ and /LH/; a monomoraic stem could not host the /LH/ melody.

Nearly all stems meet the minimality requirement, except for three exceptional verb stems: *gὲ* 'say', *yὲ* 'see', and *jὲ* 'take'. In most inflections, suffixes can be added to bring the stem up to word size, but in forms like the defocalized perfective, we may see subminimal words like *g-ì* '(s)he said' from *gὲ* 'say'.

Note that we can use this measure of minimality to distinguish independent words from clitics, which are generally monomoraic. See section 3.8 for further discussion.

3.3.3 Stem lengths

All known stems are between one and three syllables in length, with monosyllabic stems being almost exceptionlessly bimoraic (either a long vowel or a sonorant coda for surface monosyllabic stems); the exceptions are listed in section 3.3.2 above. Trisyllabic stems are rarer than their mono- and disyllabic counterparts. Below are examples of stems of different lengths:

(53)	a.	Monosyllabic	(1 mora)	*gè*	'say'
				yè	'see'
	b.	Monosyllabic	(2 moras)	*nǎm*	'sun'
				sɔ́ɔ́	'speak'
	c.	Disyllabic	(2 moras)	*ìsé*	'dog'
				dàmá	'taboo'
	d.	Disyllabic	(3 moras)	*dámmá*	'village'
				gèèdé	'thin cotton thread'
	e.	Disyllabic	(4 moras)	*gààlúú*	'last year'
				tànnàá	'cane'
	f.	Trisyllabic	(3 moras)	*kágádá*	'sear'
				bùgùdɔ́	'chubby'
	g.	Trisyllabic	(4 moras)	*dénnélé*	'circle'
				mòòmíyó	'scorpion'

Section 3.3.1 above brought up the case of underlyingly C-final stems that surface with a final epenthetic [u], in that case *nínju* 'maternal uncle'. It seems that cases such as these should be considered an underlying monosyllabic stem with two moras, based on evidence from the tonal system, even though it surfaces as disyllabic with the addition of the epenthetic vowel. For further discussion of vowel epenthesis, see section 3.4.6.

3.3.4 "Crypto-compounds"

Most, if not all, long words (four syllables or more) 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 compounds are like English *cranberry*, where *cran-* is a bound root, only in the case of Tommo So crypto-compounds, both alleged roots are bound roots.

Crypto-compounds often have a prosodically-marked juncture, generally but not always split into two trochees [óŏ-óŏ]. They typically exhibit one of two tonal patterns characteristic of compounds: either the first "root" receives a {L} overlay replacing its lexical tone or the second "root" does. These parallel canonical compounds and pseudo-genitive compounds, respectively, treated in Chapter 6. Nonetheless, some common crypto-compounds like /bándáŋ-kálá/ 'courtyard' show that they can be all /H/ as well.

Apart from prosodic cues and overall length, there are segmental cues that these words should be treated as compounds, opaque though they may be. Turning again to 'courtyard', the crypto-compound status of the word is made clear by the word-internal sequence /ŋk/. The phonotactics prohibits voiceless plosives stem-internally

(see section 3.4.1.2), so this series of consonants must be licensed by some sort of prosodic juncture.

Below is a list of features that may distinguish crypto-compounds from single stems:

(54) a. *Tone pattern* of either [σσ-ὸὸ] or [ὸὸ-σσ], the unmarked tones generally being /H/ or /LH/, the two lexical tonal melodies.
Ex. *èŋèlè-gèèndɛ́* 'aloe'
dúrúm-bàànà 'amber'

      b. *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-kúmɔ́* 'centipede'

      c. *Word-internal voiceless plosive*, or other phonotactic violations.
Ex. bándáŋ-kálá 'courtyard'

The vast majority of crypto-compounds are found in the names of plants and animals, and it seems likely that the crypto-compounds were at one point transparent. In fact, we find certain bound roots repeating in multiple crypto-compounds, though they lack any synchronic meaning of their own. For example, the bound root *èndè* seen in 'centipede' in (54b) above is also found in human names, like *èndè-kìndíyé* and in other insect names like *èndè-kɛ̌w* 'ant'. This suggests that it may have at one point carried its own meaning.

In addition to full crypto-compounds, composed of two bound roots, half opaque compounds also exist in the lexicon. These parallel English compounds like *cranberry* in that half of the compound (in the English case, *berry*) is a free root with identifiable meaning, but it combines with another root unable to stand on its own. The same phonological cues listed in (54) also apply to half-opaque compounds, which tend to be more common and are frequently found in everyday vocabulary. The following gives examples with bound roots (glossed as '?') in both initial and final position in the compound:

(55) a. *sànà*[L]   *èmmɛ́*
         ?   sorghum
        'maize'

      b. *ànù*[L]   *tɔ̀dú*
         leg   ?
        'calf'

Sometimes the same bound root can be used in many different compounds, which can help to pinpoint the original meaning of the bound root. This is the case with *tàbà*, found in compounds like *tàbà*[L] *dánná* 'large, flat boulder' (cf. *dánná* 'outside')

or *tàbà^L kámbé* 'cooking coarsely crushed grain between hot stones' (cf. *kámbá* 'cook coarsely crushed grain between hot stones'), suggesting that the original root *taba* might have had a meaning related to 'stone'. Nonetheless, other compounds like *tàbà^L dìì^L kùndú* 'gourd for carrying water' (cf. *díí kúndó* 'put water') obscure this sense.

3.4 Phonotactics

Sections 3.1 and 3.2 introduced the reader to the individual 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-initial restrictions
In word-initial position, the liquids /r/ and /l/ are not allowed. This restriction is stronger for /r/ in that loanwords with initial /r/ tend to be repaired by epenthesis, which is not true for /l/. Unlike in final position, however, the epenthetic vowel in initial position is a copy of the following vowel, as in:

(56) a. *Ramata* (female name) → *aràmátá*
      b. *réunion* 'meeting' → *ɛrɛ́núyón*

For more on vowel epenthesis, see section 3.4.6. Only one /r/-initial word is left unrepaired, and that is the ideophone *rék*, an intensifier for the number 'one'.

    The liquid /l/ never occurs in word-initial position in native stems, but its presence in the onset of loanwords is usually left unrepaired. Thus, for French *lettre* 'letter', we see Tommo So *lɛ̂ɛtɛ̀rɛ̀*. However, if a loanword is sufficiently native-looking, it may be further assimilated into the native vocabulary by replacing /l/ with /n/. Consider first *lɛ̂ɛtɛ̀rɛ̀* 'letter'. This word is non-native in a number of ways. First, it begins with a liquid. Second, it contains a voiceless stop /t/ word-internally. Third, it has a {HL} tone pattern instead of either {H} or {LH}, the only native tonal melodies on lexical stems. All of these phonological cues tell the speaker that this word is not part of the native lexicon. In a word like *làmbá* 'lamp' (from French *lampe*), on the other hand, everything but the onset looks native, and it forms a minimal pair with native words like *dàmbá* 'push'. In cases like these, it seems that some speakers bring the stem into the native lexicon, which then forces a repair of the liquid onset, yielding a pronunciation *nàmbá*. Note that Tommo So enclitics may begin with /l/; these are not barred because the restriction is on word-initial position.

There is also a phonotactic restriction against the velar nasal /ŋ/ in word-initial position. This includes both onset /ŋ/ as well as syllabic /ŋ/ followed by /g/. The strength of this restriction may be dialectal. In Plungian's (1995) grammatical sketch of southern Tommo So, he gives the word *ŋŋgulo* 'get up'. In the Tédié dialect of Tommo So, the dialect under study in this grammar, 'get up' is pronounced as V-initial *úŋgúló*.

3.4.1.2 Stem-internal restrictions

This section discusses constraints on individual consonants stem-internally rather than word-internally, since the category of words contains crypto-compounds and other derived forms that may have looser phonotactics than stems. There are three such restrictions in Tommo So: 1) Voiceless obstruents, especially stops, cannot occur stem-internally, 2) the alveolo-palatal affricate /j/ cannot occur intervocalically, and 3) /h/ cannot occur stem- or word-medially.

Turning first to the ban on voiceless obstruents, we find this to be exceptionless in native stems when it comes to the voiceless stops /p, t, k/ and to be a strong tendency when it comes to the voiceless fricative /s/. Stem-internal /s/ occurs in only four native roots: *ĕs* 'pretty, clean', *ìsé* 'dog', *ísé* 'empty', and *ŭs* 'slim'. Root-final /s/ is always followed by epenthetic [u]. From the two /s/-final roots, we can derive other words with medial /s/ like *ésέ* 'be clean, be clear', *èsὲ-ndú* 'soap', *úsí-nd-íyέ* 'become slim', etc. It is interesting to note that all cases of word-medial /s/ are in V-initial roots where /s/ is the only consonant. There is most likely a diachronic explanation for this, but the question will remain unanswered until we have a thorough reconstruction of Proto-Dogon.

Loanwords have introduced exceptions to this ban on voiceless obstruents. For example, loans from Arabic via Fulfulde such as *jákà* 'Islamic tithe, *zakat*' display a voiceless velar stop /k/ stem-medially. Nonetheless, such loanwords will often show variable pronunciation. For example, a French loanword like *fête* 'party' will often be pronounced as [pέdu], even though a speaker who is more familiar with French may correct this to [pέtu] or even [fέtu]. The amount of variation depends on the stem and on the speaker.

The constraint against stem-medial /j/ is more specifically a ban on intervocalic /j/. There is no restriction on stem-medial /j/ following a homorganic nasal /ɲ/, as indicated by words such as *kɔ̀ɲjɔ́* 'millet beer', *nɨ́ɲju* 'maternal uncle', or *ὲɲjέ* 'chicken'. Nevertheless, the only intervocalic /j/ that we find are in loanwords like *híjì* 'pilgrimage to Mecca, *hajj*' or *fájìrì* 'pre-dawn Muslim prayer, *fajr*'. These phonotactic violations are never repaired by Tommo So speakers.

By and large, the consonant /h/ can only occur word-initially. There are around thirty words with initial /h/, and only two with /h/ in word-medial position. Both of these come from Arabic, *àlàháálí* 'situation' (<*al-ħal*), and *súbàhànàlà* 'my God!' (<*subhan'Allah*). It is interesting to note that many Arabic words borrowed with the

definite article *al-* are borrowed into Tommo So with an initial L-toned sequence *àlà*, followed by the rest of the word with H tone. This fits the word into a crypto-compound frame, licensing the word-medial /h/ with a prosodic juncture. Other Arabic "crypto-compounds" include *àlà-mésá* 'Thursday' (*<al-khamīs*) and *àlà-mújù* 'muezzin' (*<al-mu'ađđin*); see section 3.3.4 for more on crypto-compounds.

3.4.1.3 Word-final restrictions

Though stems may end with an obstruent, words cannot. To repair this violation, the vowel [u] is epenthesized.

(57) a. *kĕd* 'large awl' → *kèdú*

  b. *ɔ́g* 'hot, fast' → *ɔ́gu*

This epenthetic [u] does not bring a tone of its own, and it remains tonally under-specified on the surface unless a contour tone on the stem is resyllabified, as seen in (57a). Sonorant codas are only optionally repaired by epenthesis, yielding varia-tion between forms like *píl* and *pílu* for 'white'; see section 3.4.6.

There are even differences between sonorants when it comes to permissibility in coda position. The semivowels /y/ and /w/ are completely well-formed codas and are never followed by an epenthetic vowel. The same can be said of /ɲ/, since in coda position it surfaces as [yⁿ], a nasalized semivowel. Of the more purely consonantal sonorants, /m/ shows the least amount of epenthesis repair. Next are the sonorants /l/ and /n/, which impressionistically show about equal proportions repaired and unrepaired. /r/ is usually repaired with epenthesis, possibly due to the obligatory release of the tap, and /ŋ/ is always repaired.

Looking more closely at underlying coda /ŋ/, we find some interesting behavior. Once again, the Tédié dialect of Tommo So differs from that described in Plungian (1995) in not allowing the velar nasal in coda position. Plungian, for example, gives 'sun' as *naŋ*, but in the Tédié dialect, we see *năm*. Similarly, the copula clitic/object marker is given as *ŋ* in Plungian's description but is closer to *=ǹ* in the dialect under study here. The list goes on, with Plungian's final /ŋ/ correlating with final /m/ or final /ɲ/ in my data. The choice between /m/ and /ɲ/, however, is not arbitrary. Nominal /ŋ/ becomes /m/ in Tédié Tommo So while verbal /ŋ/ becomes /ɲ/. A particularly striking example of this is that in Plungian's dialect, the infinitival suffix and the 3pl subject suffix in the affirmative imperfective are homophonous: *-diŋ*. In Tédié Tommo So, these split into the more nominal infinitive *-dìm* and the verbal inflectional *-dìɲ*. How this split occurred is not clear, but it is clear that the direc-tionality of the change is from /ŋ/ to /m/ or /ɲ/, since not all Tédié /m/-final words surface with /ŋ/ in Plungian's dialect (ex. 'children' in both dialects is *úlûm*).

Some nouns in Tommo So have retained an underlying final /ŋ/, namely those nouns corresponding to verbs with intervocalic /ŋ/ like *díŋu* 'knot' and *dìŋɛ́* 'tie (knot)'. In all of these cases, the stem-final velar nasal is obligatorily followed by epenthetic [u].

3.4.2 Constraints on vowel quality

Generally, all vowels may occur in any position in the word, so long as the whole the word obeys Tommo So's rules of vowel harmony (see section 3.5). However, there is one phonotactic restriction independent of harmony, and that is that final underlying stem vowels must be non-high. In verbs, this is particularly strict, since all stems must end in a vowel. Thus, we find stems like *píyé* 'cry' or *úŋgúló* 'get up', but none like **píyí* or **úŋgúlú* and no C-final stems like **úŋgúl*. The rule is looser for nouns, ignoring high vowels in monosyllabic nouns like *díí* 'water' or *kúú* 'head' and vowels in final closed syllables like *púrúgu* 'dusty', with epenthetic [u]. Loanwords, like *híjì* 'pilgrimage to Mecca, *hajj*', are not subject to this restriction. For more on vowel patterns, see section 3.5.1.

3.4.3 Constraints on nasalized vowels

In native Tommo So stems, nasal vowels only occur in monosyllabic stems; they must be the only vowel. A monosyllabic verb stem may take derivational morphology, as in *jɔ́ɔ́ⁿ* 'decorate' and *jɔ̀ⁿ-íyⁿɛ́* 'be decorated', in which case the nasalization spreads, but these extra nasal vowels are not underlying. Similarly, intervocalic /ɲ/ nasalizes the vowels on either side, as in *gìɲɛ́* 'beg' [gìⁿyⁿɛ́ⁿ], but these nasalized vowels are not present at an underlying level. Loanwords from French have introduced nasal vowels in polysyllabic stems, as in *lìlɔ́ɔ̀ⁿ* 'nylon', but due to major differences in vowel harmony, tone patterns, and other phonotactics, loanwords are clearly identifiable to native speakers and are not subject to the same phonotactic restrictions as native stems.

3.4.4 Constraints on vowel length

Both long and short vowels are allowed in the initial syllable of a polysyllabic word, as indicated by the minimal pair *kɔ́l-íyɔ́* 'pour water on the body' and *kɔ́ɔ́l-íyɔ́* 'skim off by hand (i.e. seeds from a papaya)', both carrying the mediopassive suffix. The length contrast in this position is true of all vowel qualities.

Final long vowels are more restricted, with a clear asymmetry between final long /aa/ and the other final long vowels, wherein /aa/ is much more widespread. Final

/ɛɛ/ in polysyllabic words is only attested in ideophones like *sɛ́rɛ́dɛ́ɛ́-ni* 'straight-nosed', but never in normal vocabulary. Final /ee/ is similarly restricted in the lexicon, but we find it in one vocative *dèréé* 'big brother!'. It also regularly arises in inflection, since the non-final imperfective chain verb form takes the suffix *-ee*, as in *kán-ee* 'do (non-final)'. Final /ii/ is rather common on the surface, but it is derived from an epenthetic [u] fronted by the diminutive suffix *-ý*. Thus, the diminutive form of *dùmbú* 'short' is *dùmbì-ý* [dùmbĭí]. Whether or not there are any underlying final /ii/ is not clear, but given the restriction on high vowels in stem-final position, it seems unlikely. There is one instance of final long /uu/, and that is *dùrùú* 'Ceiba tree'. Two words contain a final long /ɔɔ/, *ííyɔ̀ɔ́* 'this year' and *sàlàmbɔ́ɔ́* 'alms'; the unusual vowel sequences of both set them apart from regular stems. Only one case of final /oo/ is attested, and that is the common word *tòndòó* 'water jar'.

In contrast to all of these other vowels, final long /aa/ is relatively common. We even find minimal pairs like *sàdá* 'garden' and *sàdáá* 'bird'. Pronounced in isolation, the difference between a final long and short vowel is hard to perceive, as there appears to be a rule reducing a long vowel to a half long vowel in utterance-final position. However, the structure of the language conspires so as to avoid this configuration in all but the rarest of cases. As an SOV language, typically only verbs will be in utterance-final position, and nearly all finite verb forms end in a short vowel. The one exception is the imperative singular of monosyllabic verbs, where we do see this shortening; an imperative like *nɔ́ɔ́* 'drink!' will be pronounced as half-long [nɔ́ˑ]. The fieldworker, collecting words in isolation, is exposed to an unnaturally high number of nouns in utterance final position, but on a day to day basis for native speakers, final long vowels will generally be in phrase-medial position, where their length contrast is clearly audible.

We have seen long vowels in the first syllable and the last syllable of polysyllabic stems, but stem-medially, they are unattested in native words. We find many trisyllabic words like *ságárá* 'young' but none like **ságáárá*. This could be related to the metrical structure of the language, where the second syllable is weak. However, disyllabic words can have a long vowel in the second syllable, so this restriction could only be operative in longer words. For more on metrical structure, see section 3.6. Many medial long vowels have been introduced in loanword vocabulary, like *àtínɛ́ɛ́rɛ́* 'Monday' (<Arabic *al-ithnayn*) or *músɔ̀ɔ̀rɔ̀* 'head scarf' (<French *mouchoir*). Long vowels *word*-medially are not uncommon, arising either from verbal inflection (*kàn-éélè* 'will not do') or from compound words (*sìràà*^{L} *bàrà-ý* 'snuff box').

Initial long vowels in onsetless syllables are very rare in polysyllabic stems. The only examples in the lexicon all have alternative explanations. First, there is the verb *ááŋ-íyɛ̂* 'cross arms', but there may be lengthening of the vowel in the context /_ŋ-íyɛ́/, with the mediopassive suffix; more data are needed to determine whether this is a productive phonological rule and I will not discuss it here. The next set of potential initial long vowels all contain the vowel /ii/ followed by a palatal consonant, as in *ììyɛ̂* 'moon', *ííyé* 'today', or *ííɲɛ̂* '(wound) stop bleeding'. The most likely

explanation in this case is a lengthening of /i/ before palatal consonants. The only non-derived initial long vowel in my data is a plant name, *àògúlu* (*Diospyros mespiliformis*), but this could be a crypto-compound, judging by the harmonic break between the L-toned *àò* and the H-toned *gúlu*. Taking these facts together, we can posit a phonotactic constraint against long vowels in initial onsetless syllables.

3.4.5 Consonant clusters

3.4.5.1 Initial CC
Initial CC clusters are only found in loanwords, and even there they are rare. Consider the following:

(58) dw (2) *dwáòṇè* 'customs officer' (<French *douane*)
      pw (1) *pwέέntu* 'nail' (<French *pointe*)
      tr (2) *trìkó* 'undershirt' (<French *tricot*)

The number in parentheses after the cluster indicates how many instances of that cluster are attested in the lexicon. As we can see, the numbers are very low, and the fact that these clusters are left unrepaired may suggest that they are not fully adapted loanwords.

In native stems, the only potential initial CC cluster is NC, but as discussed in section 3.3.1, the nasal is treated as its own syllable nucleus, hence breaking up the cluster into two syllables. Examples of this include:

(59) a. *ǹ.dέ* 'person'
      b. *m̀.bέ* 'like'
      c. *ɲ́.jέ* 'what'

3.4.5.2 Medial geminated CC
Section 3.1.3 discussed licit geminates in native Tommo So stems, all of which are sonorants. However, other geminates have entered the language through loanwords, reduplication, ideophones, affixation, and vowel syncope. The list below gives frequencies for all geminates in the language. Geminate nasals, particularly /nn/ and /mm/, are extremely common, and the frequency of each has been given as 50+. Geminate velar nasals are unattested.

(60) pp (4) *pìp~píyè* 'it (the door) is closed' (reduplicated)
      bb (2) *sɔ́bbɔ̀* 'sowing seeds in a pit with manure'
      ss (0) –
      tt (1) *páttì* 'absolutely not'
      dd (3) *nóddìnè* 'call to prayer'
      kk (8) *tákkà* 'pulmonary disease in livestock where lungs collapse'
      gg (2) *úggúnnɔ́* 'dust' (derived from *úgu gùnnɔ̀ᴸ* 'slave of the air')

jj	(1)	*híjju ~ híjì*	'pilgrimage to Mecca (<Ar. *hajj*)'
yy	(9)	*kùlòy-yém*	'sixth' (ordinal suffix *-yém*)
ww	(1)	*túwwɔ́*	'nine'
rr	(1)	*sárrì*	'misfortune' (alternate pronunciation *sárdì*)
ll	(38)	*yɛ́llɛ̀*	'(s)he will come' (from *yɛ́lɛ̀-dɛ̀*)
mm	(50+)	*dámmá*	'village'
nn	(50+)	*tènné*	'well'
ɲɲ	(23)	*jèɲɲé*	'pick up'
ŋŋ	(0)	–	

3.4.5.3 Medial non-geminate CC

The chart in (60) summarizes the medial CC sequences in Tommo So. C_1 are along the side and C_2 along the top. The diagonal are the geminates, whose frequencies are repeated from the last subsection. Extremely frequent /mm/ and /nn/ as well as homorganic nasal plus voiced stop clusters have been blacked out, indicating that they are extremely frequent in Tommo So. Unattested sequences are grayed out. Other attested CC clusters show the number of times that cluster is attested in the lexicon.

(61) *Tommo So medial CC clusters*

	p	t	k	s	h	b	d	g	j	y	w	m	n	ŋ	ɲ	l	r
p	4		1										1				
t		1															
k		1	8										3				
s	2	1	1							1	1						
h																	
b						2											
d							3										
g								2									
j									1								
y		2	1	2		2		4+		9		1	20		1	2+	1
w		1	2	3				1+	1		1		6			1	
m	1	7	5	2		■	5	8+				■	16		2		
n		10		1			■						■			1	
ŋ			12					■									
ɲ									■						23		
l			2	1		3	1+	2			1	4	3+			38	
r	2	2	7	4			8	6	1			2	3+				1

The first generalization we can draw is that voiced obstruents are never the initial member of a non-geminate CC cluster. In fact, in almost every case, the initial member is a sonorant (bottom half of the chart). /h/ is never found in clusters. The distribution of /ŋ/ in clusters is also highly constrained. In initial position, it can only precede homorganic stops, /g/ (very commonly since this obeys native phonotactics) and /k/. The velar nasal never occurs as the second member of a CC. The palatal nasal, on the other hand, can only occur as the second member of a CC (except in the case of /ɲj/), with the consonants /y/ and /m/. Both sequences arise solely from ideophonic reduplication.

A few of the cells contain a number followed by the plus sign. These indicate clusters that can arise from affixation or phonological rules, whose numbers in the lexicon are only a small portion of possible cases. For example, the cluster /ld/ contains a plus sign, because it can arise from vowel syncope in verbal inflection. The same holds for /ln/ and /rn/ clusters; see section 3.6.2 for a discussion of this rule. /yg/, /wg/, and /mg/ also contain plus signs, because /y/, /w/ and /m/ are possible codas for adjectives that may then be followed by the adverbial suffix -*go*. Likewise, the cluster /yl/ contains a plus sign because it can arise from the negation of an adjective with the suffix -*lɛ́*. Clusters with whose second member is /n/ are common in ideophones with the adverbial suffix -*ni*. Many of these same ideophones are reduplicated, which gives rise to medial clusters as well. The following list gives examples of all the medial CCs listed in the chart above.

(62)	pk	(1)	*kúp~kúp*	'machete' (<French *coupe-coupe*)
	pn	(1)	*pɛ́p~pɛ́p-ni*	'very full'
	kt	(1)	*ték~ték-ni*	'dripping'
	kn	(3)	*gík-ni*	'(stop) abruptly'
	sp	(2)	*pàspɔ̂r*	'passport' (<French *passeport*)
	st	(1)	*pístòlè*	'pistol' (<French *pistolet*)
	sk	(1)	*ɛ̀skàlìyɛ̂*	'external stairway' (<French *escalier*)
	sy	(1)	*kòŋkàsyɔ̂ɔ̀ⁿ*	'convocation' (<French *convocation*)
	sw	(1)	*ràswár*	'razor' (<French *razoir*)
	yt	(2)	*táy~táy*	'completely finished'
	yk	(1)	*kɔ́y~kɔ́y*	'worn out'
	ys	(2)	*sáy~sáy*	'very clear'
	yb	(2)	*háybɛ̂*	'be responsible for' (<Fulfulde *hayb-*)
	yg	(4+)	*káy-go*	'better'
	ym	(1)	*máy~máy-ni*	'reluctantly'
	yn	(20)	*sáy-ni*	'a lot'
	yɲ	(1)	*ɲáy~ɲáy*	'very stiff'
	yl	(2+)	*kày-lɛ́*	'not better'
	yr	(1)	*Kɔ́yrá jìmᴸ*	'disease treated in the village of Koira Beiri'
	wt	(1)	*táw~táw*	'very white'

wk	(2)	*kéw~kéw*	'very cold'
ws	(3)	*háwsá*	'Hausa'
wg	(1+)	*săw-go*	'clever'
wj	(1)	*jáw~jáw*	'very hot'
wn	(6)	*pùyăw-ni*	'pouring out a lot'
wl	(1)	*dáwlà*	'beloved' (unknown origin)
mp	(1)	*jèmbè^L àm-pónnó*	'bag made from four goatskins'
mt	(7)	*nìmtí*	'couscous pot' (<Bambara *nintin*)
mk	(5)	*kírím~kírím*	'very black'
ms	(2)	*jàmsăy*	'Jamsay (Dogon group)'
mb	(50+)	*jàmbá*	'chip off'
md	(5)	*dém~dém*	'very straight'
mg	(8+)	*dúm-go*	'piled up'
mn	(16)	*jàm-ná*	'leatherworker'
mɲ	(2)	*ànà^L ɲĕm~ɲèm*	'drizzle'
nt	(10)	*àn-tólu*	'hunt'
ns	(1)	*àn-sáárá*	'white person'
nl	(1)	*jùnlăy-ni*	'overloaded'
ŋk	(12)	*àŋ-kòmmó*	'handful (of food)'
lk	(2)	*wálkà*	'drinking trough' (unknown origin)
ls	(1)	*sél~sél~sél*	'very hot'
lb	(3)	*kέlbὲ*	'eggplant' (unknown origin)
ld	(1+)	*kál-dὲ*	'(s)he will lie'
lg	(2)	*jɔ́l-gé*	'row of plants'
lw	(1)	*álwà*	'locally produced soft candy'
lm	(4)	*ílmέ*	'stutter'
ln	(3+)	*àn-tól-nέ*	'hunter'
rp	(2)	*dárpòy*	'sword' (unknown origin)
rt	(2)	*màrtó*	'hammer' (<French *marteau*)
rk	(7)	*bárkὲ*	'thanks! (polite refusal)' (<Arabic *barka*)
rs	(4)	*sàrsám*	'sergeant' (<French *sergent*)
rd	(8)	*kàrdándè*	'identificaton' (<French *carte d'ìdentité*)
rg	(6)	*árgállà*	'boubou' (unknown origin)
rj	(1)	*kùrjà~kùrjá*	'skin disease'
rm	(2)	*sàndàrmá*	'police officer' (<French *gendarme*)
rn	(3+)	*gír-nέ*	'shepherd'

3.4.5.4 Medial CCC

If medial CC clusters are rare, then medial CCC clusters are practically non-existent, as these clusters are usually broken up by epenthesis. However, the lexicon contains three French loanwords with unrepaired CCC clusters. These are as follows:

(63) a. *àŋgró*   'wholesale'   (<French *en gros*)

   b. *kɔmplɛ̂*   'outfit'   (<French *complet*)

   c. *sɛ̀mplɛ̂ks*   'type of rifle'   (<French inscription on the weapon *cinq plus*)

Note that in every case, the cluster consists of a homorganic nasal plus voiced stop combination followed by a liquid, which can be decomposed into an acceptable CC cluster (/ŋg/, /mp/) and another consonant.

3.4.5.5 Final CC
Like medial CCC clusters, final CC clusters are extremely rare. There are only four known cases in the lexicon:

(64) a. *ááks*   'hard red candies'   (<*Axe*)

   b. *sɛ̀mplɛ̂ks*   'modern rifle'   (<French inscription on the rifle *cinq plus*)

   c. *mɛ̂tr*   'meter'   (<French *mètre*)

   d. *pɔ̂mp*   'water pump'   (<French *pompe*)

Most of the time, these final clusters will be repaired with epenthetic vowels, such as *mɛ̂turu* for *mɛ̂tr*, but occasionally speakers will pronounce the cluster with no repair.

3.4.6 [u] ~ Ø alternations

In earlier sections, I have made reference to the process of final [u] epenthesis, which takes place to repair illicit codas. However, these same facts could be consistent with an analysis in which an underlying final /u/ undergoes apocope (word-final deletion) under certain circumstances. I will describe the facts below before giving arguments for each analysis.

There are a great many words in Tommo So that end in a vowel [u] that do not fit into the stem's harmony schema. Among these are *pílu* 'white', *gòdú* 'body', *bɔ́ndu* 'bone marrow', *yámu* 'waste', or *kèdú* 'chisel'. There are also words whose only vowels are /u/, like *dùŋgùlú* 'piece', where the final [u] does not stand out as disharmonic, but where it also does not obey the ban on final high vowels. We find that the [u] is optional after sonorant codas, leading to alternations like *pílu* ~ *píl* 'white', or *yámu* ~ *yám* 'waste'. Looking at this behavior, we could conclude that all of the above words are underlyingly C-final and undergo epenthesis to repair the coda, unless the coda is permissible, as is the case for the sonorants. Alternatively, we could say that all of the above words are underlyingly /u/-final, but that this vowel can delete if and only if it leaves a well-formed coda. These two alternative hypotheses are captured by the following rules:

(65) a. *Epenthesis*
          Ø → [u] / [-sonorant] __
          Ø → [u] / [+sonorant] __ (optional)

      b. *Apocope*
          [u] → Ø / [+sonorant] __ (optional)

I will present arguments in the following domains in favor of an epenthesis analysis, as schematized in (65a): vowel fronting, vowel harmony, sound symbolism, loanwords, and tonal underspecification. A counter-argument in favor of the apocope analysis, (65b), can be found in the domain of place assimilation for supposedly /m/-final stems.

First, there is the issue of vowel fronting. Before the diminutive suffix *-ý*, final [u] fronts to [i]:

(66) a. *kèdú*   →   *kèdì-ý*
          'chisel'   'little chisel'

      b. *dùŋgùlú*   →   *dùŋgùlì-ý*
          'piece'   'little piece'

Other vowels also have a tendency to front before *-ý*, but it seems to be an optional process, with variation between pronunciations like [kɔ̀rɔ̀ý] and [kɔ̀rɛ̀ý] for *kɔ̀rɔ̀-ý* 'little calabash, cup'. In contrast, final [u] never surfaces as anything but [i] before the diminutive. This asymmetry is explained if we assume that the [u] is not part of the underlying representation; the /ɔ/ in *kɔ̀rɔ̀-ý* is subject to competing pressures, namely, the phonological need to surface with its underlying value and the articulatory tendency to assimilate in backness with the following glide. These pressures result in a variable or even non-categorical pronunciation, with the surface vowel sometimes falling somewhere between true [ɔ] and true [ɛ]. For [u], on the other hand, there is no pressure to correspond with the underlying form, since there is no underlying form of the vowel. Hence, it is able to surface consistently with the fronted vowel [i].

The system of vowel harmony also suggests that these final [u] vowels are epenthetic. Tommo So has three harmony processes, height harmony, backness harmony and ATR harmony, and, ignoring words with final [u], these processes are basically exceptionless on native stems. Treating final [u] as an underlying vowel would require a major class of exceptions to the process of backness harmony, namely that stems are harmonic *except for* final [u]. On the other hand, if we treat [u] as epenthetic, it can be added to a stem after the rules of harmony have applied, allowing vowel harmony to remain at its core an exceptionless process.

Another interesting piece of evidence that final [u] may be epenthetic comes from sound symbolism. Though not a widespread phenomenon in Tommo So, there are number of word pairs in which a difference in vowel quality indicates a difference in some physical dimension. For example, *kɛ́bɛ́rɛ́* means 'small and flat', while changing to vowel to /a/ yields *kábárá* 'flat (and slightly larger)'. These vowel changes seem to be operative on all vowels in the stem. If the stem is [u]-final, we find that the final [u] does not participate in the vowel change:

(67) a. *gìrè^L kúmúŋju* 'blinking' (cf. *gìré* 'eye')

     b. *gìrè^L kɛ́mɛ́ŋju* 'continuous blinking'

In (67b), the final [u] remains, while the other two vowels have undergone a shift from /u/ to /ɛ/ to symbolize the difference between normal blinking and rapid, continuous blinking. If final [u] were underlying, we would expect it to undergo this vowel change as well.

Finally, we find [u] acting as a final epenthetic vowel in loanwords. While medial clusters are sometimes broken up with harmonic vowels, as in the bolded /a/ in *táábàlu* from French *table* 'table', we repeatedly find [u] in final position, as in:

(68) a. *júùju* 'judge' (<French *juge*)

     b. *púúru* 'oven' (<French *four*)

     c. *sáágu* 'burlap' (<French *sac*)

Examples like these show that [u] is taken to be a natural epenthetic vowel in the language; if it can apply in loanwords, it can also apply in native stems. Note that occasionally loanwords undergo harmonic epenthesis, as in *lɛ́ɛ̀tɛ̀rɛ̀* 'letter', from French *lettre*, or *síkɔ̀rɔ̀* 'sugar', from French *sucre*, but these words were likely borrowed into Tommo So via another local language like Fulfulde or Bambara whose rules of epenthesis may differ.

A final piece of evidence that final [u] is epenthetic comes from tone. Tommo So stems are obligatorily specified for either the tonal melody /H/ or /LH/. Every vowel ends up specified for either L or H tone, with the common exception of final [u]. This vowel, like clitics and certain suffixes, can actually surface as underspecified for tone, in which case it gets its F0 value via interpolation between surrounding specified points. If the stem has a /LH/ melody that would underlyingly be a rising tone, as in /kěd/ 'chisel', this contour tone may be redistributed on the surface with [u] hosting the H tone, as in the surface form *kèdú*. Like vowel harmony, the system of tonal specification can be taken to be exceptionless if we assume that it applies to stems before the epenthetic vowel is added. For more on tonal underspecification, see section 4.2.

The preceding arguments have all been in favor of the (65a) analysis in which the final [u] is epenthetic. There is, however, at least one argument that there is a distinction between /u/-final stems and C-final stems. Consider the two seemingly /m/-final stems, *năm* 'sun' and *yĭm* 'death'. The latter is related to the verbal stem *yímɛ̂* 'die', while 'sun' has no verbal counterpart. There is an apparent asymmetry between the two nouns, wherein both *yìmú* and *yĭm* are attested for 'death' but only *năm* for 'sun'. Furthermore, when followed by the definite clitic *=gɛ*, the /m/ of 'sun' assimilates in place of articulation while the /m/ of 'death' is protected by [u]:

(69) a. *năm=gɛ → năŋ=gɛ* 'the sun'

  b. *yĭm=gɛ → yìmú=gɛ* 'the death' or 'the dead person'

If both are /m/-final stems, why would epenthesis take place in one case and not in the other? This example seems to suggest an underlying difference between true /m/-final stems like *năm* and true /u/-final stems like *yìmú*.

However, given the wealth of evidence for epenthesis and only the isolated case in (69) suggesting an underlying vowel, it seems prudent to consider the system overall as one of epenthesis rather than apocope. The assimilation problem may have its roots other phenomena, such as the desire of a noun to resemble its verbal counterpart (*yĭm* 'death' wants to retain the /m/, present in the verb *yímɛ̂* 'die') or the possibility that *năm* is underlyingly *năŋ*, as found in the dialect of Plungian (1995). More data are required to fully solve this mystery. Here, however, I will pursue the analysis that final [u] is epenthetic, since the scales of evidence tip heavily in this direction.

3.5 Vowel harmony

The vowel harmony system in Tommo So is very complex and restrictive, particularly in stems, where we find three separate harmony processes: height harmony, backness harmony, and ATR harmony. In verbal derivational suffixes, typically only the latter two are active, and even then only gradiently. In the subsections that follow, I will first go step by step through stem harmony, showing the permissible vowel sequences and the constraints that rule out all others. I then turn to verbal derivational suffixes, where we find a correlation between the rate at which harmony applies and the morphological distance of the suffix from the stem. By and large, there is only limited harmony in nominal suffixes and nearly no harmony in verbal inflection.

The feature specifications I assume for Tommo So vowels are as follows:

(70)   Tommo So vowel features

	[high]	[low]	[back]	[front]	[ATR]
/i/	+	-	-	+	0
/e/	-	-	-	+	+
/ɛ/	-	-	-	+	-
/a/	-	+	-	-	0
/ɔ/	-	-	+	-	-
/o/	-	-	+	-	+
/u/	+	-	+	-	0

High vowels and /a/ are underspecified for ATR.

3.5.1 Stems

Stem vowel patterns can be summarized by the following constraints:

(71)   a.   *Height harmony*
             Stem vowels agree in height. [+/- high], [+/- low]

       b.   *Backness harmony*
             Stem vowels agree in backness. [+/- back], [+/- front]

       c.   *ATR harmony*
             Stem vowels agree in ATR value. [+/- ATR]

       d.   *Constraint on final vowel*
             Stem-final vowels (V#, not VC#) must be non-high.

Constraints (a–c) are not in conflict with one another and on their own would lead to a system in which stems have but a single vowel quality in every position. However, such a system is curtailed by the presence of constraint (d), which rules out V-final stems with only high vowels. In these cases, we find a mid vowel (obeying backness harmony) in final position instead; this repair vowel can never be low, as this would require a change in both features [high] and [low].

In addition to the violations of the harmony processes introduced because of constraint (d), we also find high vowels in the metrically weak second syllable position, particularly in verbs. These also violate height harmony but not backness harmony.

For ease of presentation, I will treat initial, medial, and final syllables separately. The discussion that follows refers only to native, non-derived stems, since loanwords are not subject to harmony and disharmonic sequences can arise in derivation, particularly from vowel hiatus with high vowel suffixes (section 3.7.3).

3.5.1.1 Initial syllable

All seven vowels can occur in the initial syllable of a stem. This assertion is true of both nouns and verbs in polysyllabic words, but only of nouns in monosyllabic words, where faithfulness to the quality of the initial vowel is more important than ending in a non-high vowel. This is summarized below:

(72)   *Permissible vowels in initial syllable position*

Stem length	Noun	Verb	
Monosyllabic	i, e, ɛ, a, ɔ, o, u	e, ɛ, a, ɔ, o	*i, *u
Polysyllabic	i, e, ɛ, a, ɔ, o, u	i, e, ɛ, a, ɔ, o, u	

Examples of monosyllabic stems are given here; disyllabic stems will be given in the following subsections to simultaneously illustrate medial or final syllables. Recall that all vowels in monosyllabic stems are long to satisfy the word minimality requirement (section 3.3.2).

(73)

	Noun		Verb	
/i/	*díí*	'water'	–	
/e/	*ém*	'milk'	*séé*	'trim hair'
/ɛ/	*bɛ̀ɛ̂*	'beard'	*yɛ̀*	'see'
/a/	*náá*	'mother'	*dàá*	'kill'
/ɔ/	*gɔ́ɔ́*	'dance (n.)'	*sɔ́ɔ́*	'speak'
/o/	*sòó*	'sweat'	*gòó*	'go out'
/u/	*kúú*	'head'	–	

The ability of the initial syllable to host all seven vowels makes it a privileged position, and I argue that it is the harmony trigger for every other vowel in the stem. Given the strict harmony requirements, we can predict with almost absolute certainty what vowels the rest of the stem will contain based on the initial syllable alone. What we seemingly cannot predict is the ATR value of the following mid vowel if the initial vowel is high. Unless the high vowels themselves manifest ATR in a subphonemic way, the underlying representation must contain the mid vowel with its ATR value or the high vowel itself must be vacuously specified for the ATR feature, even though it has no effect on the pronunciation.

3.5.1.2 Medial syllables

Medial syllables are defined based on their surface position for the purposes of harmony. This means that in an underlying disyllabic C-final root, like *púrúg* 'dusty', the syllable /rúg/ is treated as medial because on the surface, the form is *púrúgu* with an epenthetic [u]. The reason for this distinction is that vowels in C-final syllables, even if it is the last syllable in the stem, are not subject to the requirement that the vowel be non-high; a truly stem-final vowel (V#) is subject to this constraint.

   Left-to-right harmony triggered by the initial syllable heavily restricts the distribution of medial vowels. However, we continue to see all seven vowel qualities attested in this position. Consider the following chart, which lays out all two vowel sequences arising from the combination of the initial syllable (down the side) and the medial syllable (across the top). Cells in black are widely attested; cells in gray are unattested. The cells containing 'n/v' or 'num' will be commented upon below.

(74)   *Initial syllable and medial syllable vowel sequences*

	i	e	ɛ	a	ɔ	o	u
i	⬛		n/v				
e	n/v	⬛					
ɛ	n/v		⬛				
a	num			⬛			n/v
ɔ					⬛		n/v
o						⬛	n/v
u					n/v		⬛

The first thing we notice is that sequences of identical vowels (the diagonal) are widely attested. This follows directly from the combination of the three harmonic constraints given in (71) above. In addition, however, we find a few cases of non-high vowels followed by a high vowel of the same backness (/ɛ-i/, /e-i/, /u-ɔ/, /u-o/, /a-u/, /a-i/). For the front vowels, we find these sequences in both nouns and verbs ('n/v'), but the cases are limited and their origins unclear. Take, for example, the following noun-verb pair:

(75)   *sɛ́gírɛ́* 'coincide'   *sɛ́gíru* 'the act of coinciding'

These two words contain the sequence /ɛ-i/, but at the same time, the final syllable of the verb is /rɛ/, consistent with a final transitive suffix *-irɛ*. There is no synchronic indication that these stems are derived (ex. no underived counterpart **sɛ́gɛ́*), but it still raises questions about whether these are true underlying vowel patterns or whether there is a morphological explanation for the violation of height harmony. However, given the presence of medial /u/ in contexts that could not be derived

(ex. before the syllable /bá/), it seems likely that some of these attested medial front vowels are also part of the underlying representation.

The sequences /a-i/ and /a-u/ are both attested, the former only in one numeral ('num') *gágìrà* 'eight' and the latter in a small number of both nouns and verbs. The fact that /a/ is a central vowel means that neither /i/ nor /u/ perfectly harmonizes in backness. Instead, the choice between /i/ and /u/ seems to be governed by the surrounding consonants. If a rounded consonant (in all attested cases, /b/) is adjacent to the medial vowel, as in *ádúbá* 'think' or *yàbúrá* '(God) bring about', it surfaces as /u/; otherwise, it surfaces as /i/.

Back vowel sequences /o-u/ and /ɔ-u/ are found in both nouns and verbs. For nouns, we find words like *jòbúr* 'sauce' and *sɔ́gúr* 'noise', while for verbs we find examples like *tógúló* 'chew on' and *bɔ̀gúrɔ́* 'turn over earth (for planting peanuts)'.

Finally, height-disharmonic sequences of front vowels followed by mid vowels are attested only with [-ATR] mid vowels, yielding the sequences /i-ɛ/ and /u-ɔ/. Both sequences are found in nouns and verbs but are more common in nouns. For each sequence, there is only one verbal example, both containing what appears to be a lexicalized causative /mɔ/: *kílɛ́mɔ́* 'play', *súnɔ́mɔ́* 'love'.

While we find all of these sequences with high vowels that violate height harmony, they are significantly less common than the fully harmonic sequences. None of these sequences is attested more than five or six times in the lexicon, and in most cases, we can determine their diachronic origins in either vowel reduction and reinterpretation or in lexicalized derivation. Backness harmony and ATR harmony remain exceptionless and can be characterized by the following rules:

(76) V → [αATR] / [αATR]C_1 ____

'A vowel takes on the ATR value of the preceding vowel.'

ATR is, to my knowledge, only realized in mid vowels, and so this rule is vacuous for high and low vowels, though specifying a high vowel in the first syllable for ATR allows it to trigger the ATR value of a following mid vowel. The rule for backness harmony may be expressed in the same way:

(77) V → $\begin{bmatrix} \text{αback} \\ \text{αfront} \end{bmatrix}$ / $\begin{bmatrix} \text{αback} \\ \text{αfront} \end{bmatrix}$ C_1 ____

'A vowel takes on the backness and frontness value of the preceding vowel.'

Back vowels are [+back, -front], front vowels [-back, +front], and central /a/ [-back, -front]. If the central vowel /a/ is the trigger, and if height harmony does not make the following vowel also into low central /a/, then both front and back vowels violate this rule equally. This is the case where the decision of which vowel to use is left to the consonantal material surrounding the vowel, as in the /a-i/ and /a-u/ sequences above, where /i/ differs from /a/ in being [+front] and /u/ differs from /a/ in being [+back].

Finally, the height harmony rule must be worded in such a way as to leave high vowels transparent to height harmony.

(78) $\text{V[-high]} \rightarrow \begin{bmatrix} \alpha\text{high} \\ \alpha\text{low} \end{bmatrix} / \begin{bmatrix} \alpha\text{high} \\ \alpha\text{low} \end{bmatrix} C_1 \underline{\quad\quad}$

'A non-high vowel takes on the high and low value of the preceding vowel.'

To understand this rule, we must make explicit the height features of Tommo So vowels. These are as follows:

(79) /i, u/ $\begin{bmatrix} +\text{high} \\ -\text{low} \end{bmatrix}$

/e, o, ε, ɔ/ $\begin{bmatrix} -\text{high} \\ -\text{low} \end{bmatrix}$

/a/ $\begin{bmatrix} -\text{high} \\ +\text{low} \end{bmatrix}$

The rule in (78) designates all [-high] vowels as targets of the height harmony rule. This means that /i, u/ in medial position are not subject to height harmony, the correct result given the distribution of vowels seen in (74). Any non-high vowel in medial position will, by a combination of height harmony, backness harmony, and ATR harmony, take on the same vowel quality as that found in the initial syllable. Consider a hypothetical form like *bɛbab*. Height harmony will target the non-high vowel /a/, changing its low value to [-low] to match the mid vowel in the initial syllable. Backness harmony will ensure that central /a/ ([-back, -front]) will become [+front], and ATR harmony will ensure that it gets the specification [-ATR]. This results in the form *bɛbɛb*, which perfectly obeys the harmony system of the language:

(80) UR /bɛbab/

Trigger: Initial syllable /ɛ/ $\begin{bmatrix} +\text{front} \\ -\text{back} \\ -\text{high} \\ -\text{low} \\ -\text{ATR} \end{bmatrix}$

Target: Medial syllable /a/ $\begin{bmatrix} -\text{front} \\ -\text{back} \\ -\text{high} \\ +\text{low} \\ 0\text{ATR} \end{bmatrix}$

Height harmony: $\begin{bmatrix} -\text{high} \\ +\text{low} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{high} \\ -\text{low} \end{bmatrix}$

Backness harmony: $\begin{bmatrix} \text{-front} \\ \text{-back} \end{bmatrix} \rightarrow \begin{bmatrix} \text{+front} \\ \text{-back} \end{bmatrix}$

ATR harmony: [0ATR] → [-ATR]

SR [bɛbɛb(u)]

An underlying form like *bɛbub*, on the other hand, has /ɛ/ as the trigger and /u/ as the target, but as a [+high] vowel, /u/ is not the target of height harmony. It will harmonize in backness, and vacuously harmonize for ATR, but the vowel will remain disharmonically high. Note that even though high vowels are not targets of harmony in medial position, they are still triggers in initial position. Thus, a hypothetical form *bibob* will only be able to surface as *bibib*, since the initial syllable contains a high front vowel that targets the medial non-high vowel /o/, causing it to become high and front.

There is some question as to how to treat medial mid vowels following an initial high vowel in words like *tùŋɔ́lɔ́* 'cripple'. We could attempt to formulate the harmony rules to ignore mid vowels after high vowels in height harmony, but given the fact that there are so few stems of this sort, I treat them as lexical exceptions instead.

The fifteen possible two vowel sequences are illustrated below; epenthetic vowels are given in parentheses:

(81)

	Noun (or numeral)		Verb	
/i-i/	*bìlím*	'manure'	*bìrídé*	'scatter'
/i-ɛ/	*gínjɛ́lɛ́*	'(rooster's) crest'	*kílɛ́mɔ́*	'play'
/e-e/	*mémél(u)*	'curving'	*tégédé*	'retain grains while pouring off liquid'
/e-i/	*yégír(u)*	'act of arming'	*némílé*	'roll (dough)'
/ɛ-ɛ/	*pègélé*	'mountain'	*kɛ́bɛ́dɛ́*	'poke'
/ɛ-i/	*sɛ́gír(u)*	'act of coinciding'	*sɛ́gírɛ́*	'coincide'
/a-a/	*pàgálá*	'bone disease'	*kágádá*	'sear'
/a-i/	*gágìrà*	'eight'	–	
/a-u/	*àdùb(ú)*	'thought'	*ádúbá*	'think'
/ɔ-ɔ/	*jɔ̀lɔ̀gɔ́*	'bellows holder'	*bɔ̀gɔ́lɔ́*	'fuss'
/ɔ-u/	*sɔ̀lùmɔ́*	'sand'	*sɔ́gúrɔ́*	'creak'
/o-o/	*dónnóló*	'ball'	*bògóló*	'bellow'
/o-u/	*kònùgó*	'conical roof'	*tógúló*	'chew'
/u-u/	*púrúg(u)*	'dusty'	*úŋúló*	'get up'
/u-ɔ/	*tùŋɔ́lɔ́*	'cripple'	*súnɔ́mɔ́*	'love'

3.5.1.3 Final syllables
The seven-way vowel contrast we saw in initial and medial syllables is reduced to a five-way contrast in final vowels, with a ban on final high vowels. As noted in section 3.5.1.2, this refers only to vowels in absolute stem-final position (V#), not

the vowel in a final closed syllable (VC#). The following chart lays out the permissible two vowel sequences that arise with final vowels. It addresses both initial-final sequences (as in disyllabic stems) as well as medial-final sequences (in longer stems). These are nearly identical, with the exception of the high-low sequences /i-a/ and /u-a/ that are only found in medial-final sequences, marked in the chart below with M (for "medial"). Initial/medial syllables are listed down the side and final syllables across the top.

(82)   *Initial/medial syllable and final syllable vowel sequences*

	i	e	ɛ	a	ɔ	o	u
i		■	■	M			
e		■					
ɛ			■				
a				■			
ɔ					■		
o							
u				M	■	■	

This chart resembles the one in (74) except that here initial/medial high vowels /i/ and /u/ can only be followed by non-high vowels. That is, height harmony in the final syllable is trumped by a constraint against final high vowels. A word like *yúbúdɔ́* 'froth' may like to surface as [yúbúdu], based on height harmony triggered by the initial high vowel, but the constraint against final high vowels lowers final /u/ to /ɔ/. As mentioned above, initial /u/ must be vacuously specified for [-ATR] so that the final mid vowel can receive an ATR specification harmonic with the initial syllable.

We know that it must be the vowel of the initial syllable triggering harmony in the final syllable as opposed to simply the preceding vowel since we find stems like *ádúbá* 'think', not *ádúbɔ́*, where the final vowel attempts to harmonize with the preceding /u/ and is reduced to a mid vowel since it cannot be high. Thus, we need to reformulate our notation for the harmony rules as follows:

(83) $V \rightarrow [\alpha F] \; / \; \#(C)[\alpha F]C_1(VC)_0 \underline{\quad}$

This rule stipulates that a target vowel will take on the feature values of a trigger vowel in the initial syllable when that target vowel is separated from it by at least one consonant (C_1) and zero or more other syllables. Put informally, it does not matter how many syllables separates a vowel from the initial vowel – it is always the initial vowel that is the trigger for vowel harmony. In theory, there could be a

six-syllable stem with the vowel pattern /ɛ-i-i-i-i-ɛ/, where all medial high vowels are ignored by height harmony (always triggered by the initial /ɛ/), but in the final syllable, the vowel harmonizes distantly with the /ɛ/ in the initial syllable to satisfy the constraint on final high vowels. However, given that the longest stems we find have only three vowels, there is never the opportunity for more than one height-disharmonic vowel to occur between two fully harmonic vowels.

/i-a/ and /u-a/ are only possible when the high vowel is in a medial syllable. If the high vowel were in the initial syllable, it would be the trigger of harmony, and the final vowel could only surface as mid. Further, /i-a/ and /u-a/ are permissible sequences only when the initial syllable contains /a/, triggering a low vowel in the final syllable.

Examples of the nine permissible initial/medial-final sequences are given below, this time separating medial-final from initial-final sequences rather than nouns from verbs:

(84)

	Initial-final			Medial-final	
/i-e/	*píyé*	'cry'		*némílé*	'roll (dough)'
/i-ɛ/	*gìnɛ̂*	'house'		*kɛ́mɨ́njɛ̂*	'colostrum'
/i-a/	–			*gágìrà*	'eight'
/e-e/	*télé*	'speed'		*tégédé*	'retain grains while pouring off liquid'
/ɛ-ɛ/	*ɛ̀nɛ̂*	'goat'		*kɛ́bɛ́dɛ̂*	'poke'
/a-a/	*ámbá*	'god'		*àdàlá*	'half-ripe'
/ɔ-ɔ/	*kɔ̀rɔ́*	'calabash'		*bɔ̀gɔ́lɔ́*	'fuss'
/o-o/	*tòndòó*	'water jar'		*bògóló*	'bellow'
/u-a/	–			*ádúbá*	'think'
/u-ɔ/	*nùmɔ́*	'hand'		*túgúdɔ́*	'crumple'
/u-o/	*púyó*	'flower'		*úŋgúló*	'get up'

In the initial-final pairs, the first vowel listed on the side (ex. /u/ in /u-o/) is the harmony trigger. In medial-final pairs, this vowel has no bearing on the final vowel; rather, the realization of both is controlled by the vowel of the initial syllable.

Since verb stems may not end in a consonant, it follows from the rules of vowel harmony that they will always end in a non-high vowel, as discussed in section 3.4.2.

3.5.1.4 Disharmonic stems
The vast majority of native stems obey the rules of vowel harmony as presented above. Nonetheless, there are a few exceptions, including a small class of /a-e/ nouns and adjectives like *kálé* 'limit' and *wàgé* 'distant'. It is not clear what the origins of these words are, but I treat them as lexical exceptions outside the harmony system.

3.5.2 Harmony in verbal derivational suffixes

3.5.2.1 Introduction
Tommo So has five derivational suffixes on verbs, which always appear in the following order:

(85)　Stem　*-ndɛ*　　*-ilɛ*　　*-irɛ*　　*-iyɛ*　　　*-mɔ*
　　　　　　　Factive　Reversive　Transitive　Mediopassive　Causative

This order does more than align the affixes with regards to one another and the stem. It also directly correlates with the probability of harmony for a given suffix. That is, as we move to more outer morphological levels, we find that the rate of each of the three harmony process decreases. The three kinds of harmony do not work in lockstep. Rather, each harmony process may decrease at a different rate, yielding rather complicated results which will be discussed below.

　　Harmony levels decreasing means that variation is introduced into the system; whereas harmony will be operative in every stem, it will only optionally apply in a given instance of a suffix. If a suffix is less likely to harmonize, this means that a higher percentage of instances will fail to show vowel harmony effects. For example, consider the stem plus mediopassive suffix combination /gòró-iyɛ/ 'put a hat (on oneself)'. The harmonizing pronunciation of this verb is [gòríyó], with vowel hiatus resolution deleting the final /o/ of the stem. On any given day, a speaker may offer this pronunciation and insist upon it as the only possible form. If asked again at a later date in time, however, the speaker may give the response [gòríyé] with ATR harmony in effect but no backness harmony. On days where speakers use this variety, they prime themselves, as it were, and [gòríyó] is then out of the question, despite having been offered as the one and only pronunciation before.

　　When I say that this is in terms of morphological distance, I mean that it does not matter whether there are any suffixes in a given utterance before, for example, the mediopassive. 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 like the transitive or reversive.

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

3.5.2.2 Idealized suffix behavior
Beginning with the factive, we see that the general pattern for this suffix is for it to take a copy of the verb's final vowel, indicating that all three harmony rules are at play. I treat the underlying form as *-ndɛ*, since this is what surfaces in a small number of disharmonic cases to be discussed below. 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:

(86) a. *jáá*   *jàà-ndá*
         meal   meal-FACT
         'meal'   'cook'

      b. *gòó*   *gòò-ndó*
         go.out   go.out-FACT
         'go out' 'take out'

      c. *dùmɔ́*   *dùmɔ́-ndɔ́*
         be.done   be.done-FACT
         'be done' 'finish'

In each case, the vowel of the factitive is a copy of the stem-final vowel, but we need not consider the stem-final vowel the trigger, so long as the verb stem has its vowel qualities set before the factitive is added. Consider *dùmɔ́-ndɔ́*. If this whole form underwent harmony at the same time, the medial vowel /ɔ/ would be raised to /u/ by height harmony. However, if only *dùmɔ́* is first subject to harmony, then the final syllable will take a non-high vowel, preserved when the suffix is added.

The transitive, reversive, and mediopassive form a natural class when it comes to their phonological form and their idealized harmony behavior, though we see the class splitting when it comes to actual rates of harmony. I argue that the vowel of the transitive, reversive, and mediopassive is also underlyingly /ɛ/, based on the fact that this is the vowel that surfaces after stems with /a/, which has no bearing on ATR. The underlying /ɛ/ of the suffix harmonizes for both backness and ATR with initial vowel of the preceding verb stem, but height harmony is no longer in play. For example:

(87) a. *góró*   *gòr-íyó*
         hat   hat-MP
         'hat'   'put a hat (on oneself)'

      b. *séɛ́*   *sɛ́-írɛ́*
         adorn   adorn-TR
         'adorn'   'adorn (sb)'
         '(bound stem)'

      c. *yàmbá*   *yàmb-ílɛ́*   (*yàmb-ílá*)
         cover   cover-REV
         'cover'   'uncover'

Many stems to which these suffixes are added are bound stems, such as the stem in (87b).

The causative appears to be outside of the bounds of all harmony rules:

(88) a. *káná*   *káná-mɔ́*
          do   do-CAUS
          'do'   'make do'

      b. *ɛ́bɛ́*   *ɛ́bɛ́-mɔ́*
          buy   buy-CAUS
          'buy'   'make buy'

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

3.5.2.3 Actual suffix behavior

In the absence of any optionality or variability, the behavior of the verbal derivational suffixes would be as described in the last section. However, we find that in actual speech, the pronunciation of the suffixes is variable, within speaker and within stem, meaning that the same speaker will vary the pronunciation of a suffix on any given stem. To gauge harmony levels, I looked at the rates of harmony for stem+suffix combinations in a corpus of 2193 examples drawn from my lexicon, field notes, and texts. The results are summarized in the following table:

(89) *Harmony rate by morphological level*

		Height	%	Backness	%	ATR	%
1.	Stem	151/155	97.4	470/478	98.3	262/262	100
2.	Factitive	57/67	85.1	95/96	99	80/80	100
3.	Reversive	12/61	19.7	40/44	90.9	43/43	100
4.	Transitive	0/15	0	38/58	65.5	31/31	100
5.	MP	0/169	0	107/243	44	231/231	100
6.	Causative	0/42	0	13/71	18.3	0/43	0

As we can see from this table, all three harmony processes drop off as we move to outer layers of the morphology, though the rate of dropping off is not the same for each process.

Let us go through each suffix, beginning with the factitive. This suffix is supposedly characterized by full vowel copy from the stem, the result of all three harmony rules; it is the only suffix to consistently undergo height harmony, which it does 85% of the time. Disharmonic sequences like *jàà-ndɛ́* 'cook' or *dàà-ndɛ́* 'put down' were found. The one back disharmonic token in the data set was *jɔ̀bɔ́-ndɛ́* 'make run', for which a harmonic equivalent *jɔ̀bɔ́-ndɔ́* was also attested. ATR harmony is exceptionless for this suffix.

Next, we turn to the reversive *-ilɛ*. Like the factitive, ATR harmony is exception-less, but we see decreased rates of backness and height harmony as compared with the factitive. For height harmony, the difference is dramatic: 19.7% compared with 85% in the last suffix. Most of the forms that showed height harmony had other unusual phonological elements to them. One example is *màná-lá* 'unseal', where the initial /i/ of the suffix is missing. Backness harmony also drops, but only to 90.9%. Examples of disharmonic tokens include *kúy-ílé* 'unroll' (from *kúyó* 'roll up'), and others where the reversive identity of the suffix is less clear, like *úm-ílɛ́* 'resuscitate' (cf. *úmɔ́* 'be alive'); for more on semantically opaque derivational suffixes, see section 11.2.2.

By the time the transitive is reached, height harmony has ceased altogether. That is, every /a/ stem with a transitive suffix has a mid vowel in that suffix (e.g. *tág-írɛ́* 'put shoes on sb.') rather than a low vowel (**tág-írá*). Backness harmony still holds in a small majority of cases, but plenty of disharmonic examples can be found, such as *ɔ́g-írɛ́* 'heat up' (which varies with harmonic *ɔ́g-írɔ́*). ATR harmony is exceptionless.

With the transitive, we also find two cases of backness disharmony with front stems, which is strange since the suffix is underlyingly front. In these cases, the suffix surfaces with its back allomorph, seemingly untriggered. The two examples in question are *jíb-író* 'put a skirt on (sb)' and *téér-íló* 'give a hand to (sb)', with rhotic dissimilation. Though no clear solution to this problem exists, one possibility is that the disharmonic forms were offered as imperatives. This is following evidence from the mediopassive, where a small number of disharmonic front stems were found in the imperative, possibly a reflex of the imperative historically carrying the 2sg *-w* suffix that would cause the vowel to become back. This area requires further investigation.

The mediopassive, like the transitive, never harmonizes for height; the vowel is invariably mid (since high vowels are disallowed in stem-final position). For the first time, too, we see the rate of backness harmony drop below 50%. Let us consider reasons for this discrepancy in harmony. While morphological distance does seem to be a major motivation for the low rates of harmony in the mediopassive, phonetics appears to play at least some role as well. The form of the suffix is *-iyɛ*, and else-where in the language, /y/ has shown fronting effects, particularly on preceding vowels. For example, the diminutive suffix *-ý* can front the vowel preceding it, yield-ing forms like [kɔ̀rɛ̀ý] 'little calabash' from the stem *kɔ̀rɔ́* 'calabash'. To see whether /y/ can have a fronting effect on following vowels, we can look at stems with back vowels and an intervocalic /y/, that is, *uyO* stems, wherein *O* represents either /o/ or /ɔ/. Comparing harmonic *uyO* stems to disharmonic *uyE* stems in terms of token numbers in the lexicon, we find sixty-seven harmonic stems and twenty-three dishar-monic, yielding a harmony rate of about 74%. If harmony in the mediopassive suffix were entirely dependent on the phonetics of /y/, we would expect the same harmony

rate as seen in stems, 74%. Instead, the rate is 44%, leaving the morphology, or morphological distance, to account for the 30% gap between the two.

Like the transitive, there are two disharmonic cases with front stems. These are *díí ńd-íyɔ́* 'take a bath!' and *tág-íyɔ́* 'put on [your] shoes', both imperative forms in my field notes. As I mentioned above, a diachronic explanation could account for this unusual disharmony. ATR harmony is still exceptionless.

Finally, the causative is strikingly different from any of the previous suffixes, showing almost no harmony at all. Both height harmony and ATR harmony are unattested. The former is unsurprising, since the previous two suffixes also completely lack height harmony, but ATR is striking in that all other suffixes had exceptionless ATR harmony. The only harmony process that seems to hold is backness harmony in a small percentage of cases. Interestingly, most of these cases involve semantically exceptional uses of the causative, namely the causative as passive (see section 11.4). For example, we find *yè-mɛ̂* 'be seen' (rather than 'make see') and *bèlɛ̂-mɛ̂* 'be found' (rather than 'make find'), both of which include the idiosyncratic passive usage of the causative. Given the idiosyncratic semantics of these forms, it is perhaps unsurprising that they also contain idiosyncratic phonological properties.

In addition to the unexpected harmonizing forms of the causative, there are one or two cases in which the causative surfaces as [-mɛ] for no apparent reason. For example, we find the pronunciation [ɔ́ɲɲ-íyɔ́-mɛ̂] '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 [mɛ]. An imperative explanation cannot account for this case, since the effect there is a backing one, and this case contains unexpected fronting. It remains unclear what conditions changes like this.

3.5.3 Harmony in verbal inflectional suffixes

By and large, inflectional suffixes do not harmonize with the stem. Nonetheless, there is one suffix that does harmonize for ATR alone, and that is the defocalized perfective suffix *-e ~ -ɛ* (or *-i*). The following summarizes the harmonizing behavior of different inflectional suffixes:

(90)   *Harmony*   *No harmony*
        Defocalized   Habitual *-dè*
        perfective *-e*   Neg. Imperfective *-éélè*
                          Impv. chain form *-ee*
                          Participial *-gú*
                          Participial *-nú*
                          Neg. imperative *-gú*
                          Neg. perfective *-lí*
                          Perfective *-aa*

Of all these suffixes, only the defocalized perfective harmonizes, and it only harmonizes for ATR. Consider the following examples, wherein the defocalized perfective is glossed as PFV.L for 'perfective L', the characteristic tonal pattern of these forms:

(91)   a.   *dɔ̀-ɛ̀-m*   (from *dɔ̀ɔ̀-ɛ̀-m*)
            arrive-PFV.L-1SG
            'I arrived'

       b.   *bò-è-m*   (from *bòò-è-m*)
            call-PFV.L-1SG
            'I called'

Here we see that the suffix *-e* harmonizes for ATR with the stem vowels, but not for backness. I designate the suffix vowel as being [+ATR] since this is the form that surfaces on stems with the vowel /a/, as in *bàlá* 'sweep' and *bàl-è* 'swept'.

It is not clear why this suffix harmonizes for ATR while suffixes like the imperfective chain form *-ee* do not.

3.5.4 Harmony in nominal derivational suffixes

Generally speaking, nouns have much more isolating morphology than verbs, resulting in fewer suffixes. Most suffixes that we find are suffixes that derive nouns from verbs, none of which participate in any of the harmony processes:

(92)   *-ínɛ́*   Agentive   *dá-ínɛ́*   'killer' (from *dàá* 'kill')
       -dim   Infinitive   *káná-dim*   'to do' (from *káná* 'do')
       -ílé   Gerundive   *dánn-íy-ílé* 'to sit' (from *dànn-íyɛ́* 'sit')
       -íyé   Gerundive   *ɛ̀mm-íyé*   'strength' (from *ɛ́mmɛ́* 'be powerful')

For more on deverbal derivation, see Chapter 5.

3.5.5 Harmony in nominal inflectional suffixes

As the previous section indicated, 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 plural suffixes *-nɛ* and *-m*, clearly related to the agentive suffix in (92). Underspecified for tone (see section 4.2), these suffixes participate in limited backness harmony with the stem. They even participate in limited height harmony (*-na* after /a/), but both processes apply only sporadically, with some stems participating and other stems not:

(93) a.   *àn-ná*   *ságárá-nɛ*
           male-HUM.SG   young-HUM.SG
           'man'   'able-bodied man'

      b.   *kúm-nɔ*   *sɔ́lɔ́gɔ̀-nɛ*
           unmarried-HUM.SG   Bozo-HUM.SG
           'unmarried person'   'Bozo person'

In the examples in (93), the first stem shows harmony while the second with the same vowel quality does not. I have seen no examples of ATR harmony with the human suffixes. There are also stems for which harmony is variable, such as underlying /ɔ̀gɔ̌-nɛ/ 'chief', which varies in pronunciation between *ɔ̀gɔ̀-nɔ́* and *ɔ̀gɔ̀-nɛ́*.

Since the human singular and plural suffixes are not very productive, it seems likely that they have been lexicalized with their stems, with some combinations lexically harmonizing and others not.

3.6 Metrical structure

Unlike the metrical system of a language like English, where there is a clear rhythmic pattern of stressed and unstressed syllables, Tommo So's metrical structure is rather vaporous. However, certain phonological rules suggest a stem-initial strong-weak trochee [ó̆ŏ]. This trochaic pattern does not continue throughout longer words – there is no sense of undulating rhythm as in a typical stress language. There is only evidence for this single foot, which comes from the following:

1.   Vowel reduction to a high vowel or schwa in σ_2 position [(C)VCV̱]
2.   Post-sonorant syncope [(C)VRV̱]
3.   /g/ spirantization [(C)VgV]

I will discuss each in turn below.

3.6.1 Vowel reduction

In section 3.2.3, I discussed the status of the reduced vowel schwa in the language, suggesting that it is an allophone of reinterpreted high vowels in second syllable position. This issue also arose in section 3.5.1, where we came across trisyllabic stems where the vowel in the second syllable was a high vowel, not a prototypical harmonic pattern. I argue that these medial high vowels arise from the metrical system of Tommo So, where the second syllable, particularly in longer words (3+ syllables), is a metrically weak position. It receives less emphasis than the syllables around it, and hence this position is prone to vowel reduction.

The evidence that this change is metrical comes from the fact that there is never reduction in other syllables. That is, *sɔ́gɔ́rɔ́* (often pronounced [sɔ́gɔ́rɔ́]) would never see a pronunciation like [sə́gɔ́rɔ́] or [sɔ́gɔ́rə́], etc. Even if these vowels were in medial position, as in inflected *sɔ́gɔ́rɔ́-gú* 'creaking', no weakening is ever found in syllables other than the second syllable.

3.6.2 Vowel syncope

Vowel reduction taken one step further becomes vowel syncope, and this also occurs in second syllable position. The rule in Tommo So is specifically **post-sonorant syncope,** a process that applies only in verbs and their verbal nouns. This process targets any vowel in the position $(C_1)VC_2\_C_3$, wherein C_2 is a coronal sonorant /l, r, n/ and C_3 is a coronal stop /t, d, n/ in a suffix or auxiliary verb. The list in (94) summarizes the necessary conditions for post-sonorant syncope:

(94) *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 /l, r, n/.
       c.   It is followed by a coronal stop /t, d, n/ in a suffix or auxiliary verb.

This can be restated in simplified rule notation as:

(95) $V \rightarrow \emptyset \ / \ \#(C)V \begin{bmatrix} +\text{coronal} \\ +\text{sonorant} \end{bmatrix} \_\# \begin{bmatrix} +\text{coronal} \\ +\text{stop} \end{bmatrix}$

The pound sign in this rule indicates a morphological boundary. Elements triggering this syncope are the imperfective *-dɛ̀*, experiential perfect auxiliary *tíyɛ̂*, infinitival *-dim*, and deverbal agentive *-ínɛ̂*. The last case is a bit tricky, since the agentive does not begin with a coronal sonorant itself. However, after vowel hiatus resolution has taken place, only a single vowel remains before this coronal sonorant, and it is this vowel that is targeted for syncope. Given this, perhaps the rule above would be better formulated with the # sign either preceding the target vowel or following it.
       Examples of post-sonorant syncope include:

(96)   a.   *kánà-dɛ̀* → [kándɛ̀]
             do-IMPF
             's/he will do'

       b.   *wòlù^L wál-ínɛ̂* → [wòlù^L wálnɛ́]
             farming   farm-AGT.SG
             'farmer'

c. *káná-dim* → [kándim]
do-INF
'to do'

d. *kúú* *èrè^L* *tíy-aa=wɔ-m* → [kúú èr tíaaɔm]
head braid EXP-PFV=be-1SG
'I have braided (a head) [before]'

We know that the initial pound sign in the rule formulation is necessary, given a form like *gɔ́rɔlɔ̀-dɛ̀* 'he will snore'. Here, a coronal sonorant /l/ is in the third syllable, followed by a suffix triggering syncope, yet the following /ɔ/ is not syncopated. The necessity of the second pound sign is harder to motivate. Trisyllabic stems are rare in Tommo So, and tautomorphemic sequences of a coronal sonorant in C2 position and a coronal stop in C3 position are avoided.[5] Thus, the existence of the pound sign in the rule formulation is a description of where the rule applies given the stem inventory in the language; its omission would predict surface forms like *káldá* from underlying /káládá/.

It is possible that the irregular imperfective form *yɛ́llɛ̀* of the verb *yɛ̀lɛ́* 'come' arose from this post-sonorant syncope, followed by regressive assimilation of /d/ to /l/, as in:

(97) *yɛ́lɛ̀-dɛ̀* → |yɛ́ldɛ̀| → [yɛ́llɛ̀]

Note that all three forms, *yɛ́lɛ̀-dɛ̀*, *yɛ́l-dɛ̀*, and *yɛ́llɛ̀*, are acceptable forms today and show that these verb stems with coronal sonorants do indeed have an underlying vowel to be syncopated. The existence of this vowel is also corroborated by its presence before non-coronal-initial suffixes, like *yɛ̀lɛ́-mɔ́* 'make come', with the causative, which cannot surface as **yɛ̌l-mɔ́*. We also know that the coronal sonorant preceding the vowel is a necessary condition for syncope to take place, since stems like *jɔ̀bɔ́* 'run' followed by a coronal stop-initial suffix do not undergo syncope (**jɔ̌b-dim* 'to run').

While vowel syncope occurs between any coronal sonorant followed by a coronal stop in the suffix, it also occurs before suffixes with /l/ if and only if the coronal sonorant in question is also /l/. For example, the deverbal nominalizer *-ílé* following a stem whose last consonant is also /l/ will trigger syncope of the suffix-initial vowel (after vowel hiatus resolution), as in *kálá* 'lie' and *kál-lé* 'lying' (/kálá-ílé/ → |kál-ílé| → [kállé]). This syncope does not take place if, say, the final consonant is /n/, *káná* 'do' **kán-lé*. Similarly, /i/ will delete between a stem consonant /y/ and the /y/ of the mediopassive *-iyɛ* or nominalizer *-íyé*, yielding the pronunciation [yéyyé] 'sleep' from *yéy-íyɛ́* (mediopassive) and nominalized form [yèyyé] from *yèy-íyé* (nominalizer).

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5 Geminate nasal stops are found, in words like *gúlɔ́nnɔ́* 'post-partum quarantine', but syncope is most likely blocked here for the independent reason that /lnn/ is phonotactically illegal.

3.6.3 /g/ spirantization

A final effect of the metrical structure is /g/ spirantization. Velar /g/ weakens to [ɣ] between low back vowels and mid back [-ATR] vowels when it is the onset of the second syllable in a stem, as first noted in section 3.1.4.6. This lenition is only in the context of [a__a] or [ɔ__ɔ]. The context [o__o] does not trigger lenition, and we cannot be sure of the contexts [a__ɔ] or [ɔ__a] due to vowel harmony ruling out these sequences of vowels. We can thus write the rule as follows:

(98) $g \rightarrow \gamma$ / $\left\{ \begin{array}{l} a \text{—} a \\ ɔ \text{—} ɔ \end{array} \right\}$

For example, *àgá* → [àɣá] 'morning', *ɔ̀gɔ̌* → [ɔ̀ɣɔ́] 'chief, king', but *yògó* → [yò**g**ó] 'tomorrow' and *bògó* → [bò**g**ó] '(dog) bark'. It seems that something about the advanced tongue root position blocks /g/ spirantization.

This lenition is sensitive to the internal structure of a word. In morphologically complex words such as compounds or reduplicated forms, the /g/ will only lenite when acting as the onset of the second syllable *within a stem*. Thus, we see forms [tà~táɣá] 'joking', but [sádágá] 'alms'. Similarly, we see spirantization blocked in a derived second syllable like [gà~gálá] 'inheritance' but not in a monomorphemic verb [gàɣálá] 'whet (knife)'. This indicates that the alignment of the trochaic foot is sensitive to stem structure and not to word structure.

3.7 Other phonological rules

3.7.1 Nasalization

Nasal stops /m, n, ɲ, ŋ/ cause nasalization of the preceding vowel. This can be schematized as follows:

(99) $V \rightarrow V^n$ / __[+nasal]

The level of nasalization found in these allophonically nasalized vowels is similar to that found in phonemically nasalized vowels, which raises the possibility of neutralization. For example, the negative perfective forms of *sɔ́ɔ́* 'speak' and *sɔ́ɔ́ⁿ* 'extinguish' would both be realized as roughly [sɔ̀ɔ̀ⁿnní] the 3pl portmanteau suffix *-nní*. Since there are so few stems with phonemically nasal vowels, such neutralizations are rare, and where they occur, context can serve to disambiguate.

The allomorph of the palatal nasal [yⁿ], however, nasalizes both the preceding and following vowels. I do not mark this in broad transcription so as to differentiate between phonemic nasal vowels and those phonetically nasalized due to [yⁿ]. In narrow transcription, we would see [kúⁿyⁿɔ́ⁿ] 'squirrel' for *kúɲɔ́* or [gìⁿyⁿɛ́ⁿ] 'beg' for *gìɲɛ́*. Nonetheless, this nasalization is constrained by word boundaries. Consider the following benediction:

(100) *Àmbà^L   kìndám   é=ǹ   óbó.*
god   long.life   2PL.PRO=OBJ   give.IMPER

'May God grant you long life.'

In word-final position, the object marker *=ǹ* is realized as [yⁿ]. This nasalizes the preceding vowel, yielding [éⁿỹⁿ] 'you (pl. obj.)', but the initial vowel of the imperative *óbó* 'give' remains oral.

If a monosyllabic nasalized stem has the mediopassive suffix *-iyɛ* added to it, 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 *péɛ́ⁿ* meaning 'old' has the slightly idiosyncratic medio-passive verb form [p-ííⁿyⁿɛ́ⁿ] 'to age', and derived forms such as [p-ííⁿyⁿ-ááⁿ-dè] 'aged', with nasalization spreading all the way until the /d/.

3.7.2 Nasal place assimilation

Anticipatory nasal place assimilation is widespread in the language, wherein a nasal stop will assimilate to the place of articulation of the following consonant. This is captured by the following rule:

(101) $\begin{bmatrix} +\text{consonantal} \\ +\text{nasal} \end{bmatrix} \rightarrow [\alpha\text{place}]/\underline{\quad}\begin{bmatrix} +\text{consonantal} \\ \alpha\text{place} \end{bmatrix}$

Nasal assimilation is common across any morpheme boundary. This could be between a stem and a suffix (102a), two stems in a compound (102b), or even two words across a word boundary (102c):

(102) a. *kúm-nɔ*   [kúnnɔ]
unmarried-HUM.SG
'unmarried'

   b. *gàlèm^L   tómmó*   [gàlèn^L tómmó]
bile   basket
'gall bladder'

   c. *Gìrèý   mí=ǹ   bò-áa=wɔ.*   [mîm bòáaɔ]
sleep   1SG.PRO=OBJ   call-PFV=be
'I'm sleepy.' (Literally 'sleep has called me')

At word boundaries, /m/ and the object clitic *=ǹ* undergo assimilation most often. Other stem-final nasals tend to be protected by vowel epenthesis. Compare:

(103)　a.　*bán=gɛ*　　　[bánugɛ]
　　　　　red=DEF
　　　　　'the red one'

　　　b.　*gɛ́m=gɛ*　　　[gɛ́ŋgɛ]
　　　　　black=DEF
　　　　　'the black one'

One possible explanation for this asymmetry is that since /m/ is the best coda nasal, it requires no epenthesis to create a well-formed word. If we assume that epenthesis takes place before the addition of clitics, then the alveolar nasal of *bán* 'red' will be protected by an epenthetic vowel buffer before the definite *=gɛ*, while the /m/ of *gɛ́m* 'black' remains unprotected and subject to assimilation.

3.7.3 Pre-suffixal vowel raising, or, vowel hiatus resolution

Throughout this chapter, I have made special reference to vowel hiatus with high-vowel suffixes. In Heath (2008), this is referred to as "pre-suffixal vowel raising", in which certain derivational suffixes cause the preceding stem vowel to raise (and front) to /i/. There is some question in Tommo So as to whether this should be treated as a morphophonological rule in this vain, or whether the /i/ on the surface should be treated as part of the suffix, with the stem-final vowel deleting to resolve vowel hiatus. I have settled on the latter analysis, though I present both below. All suffixes in question begin with a coronal-initial consonant.

　　　If we were to take this a morphophonological rule, we could write it as follows:

(104)　*Pre-suffixal vowel raising*
　　　　V → [i] / ___ -[Coronal]V　　(derivational suffixes only)

For example, a verb stem *dèɲɛ́* 'get bogged down' followed by the reversive suffix *-lɛ* would surface as *dèɲí-lɛ́* 'get un-bogged down', with the stem-final vowel changed to /i/.

　　　However, I interpret this as a case of vowel hiatus resolution when a vowel-initial suffix is added to a stem. That is, *dèɲílɛ́* would instead be the result of *dèɲɛ́-ílɛ́*. There is a certain redundancy in this analysis in that *all* coronal-initial derivational suffixes cause this vowel change and specifying every one as /i/-initial renders this pattern coincidental. Nonetheless, I believe this coincidence can be explained by diachrony. It seems likely that these suffixes were originally consonant-initial. Over time, vowel reduction took place, perhaps particularly strongly before coronal consonants. It is a well-known phenomenon that coronal or apical consonants tend to cause some co-articulatory fronting and raising on preceding vowels (cf. Brazilian Portuguese, Barbosa and Albano 2004), and so this [ə] before coronal-initial suffixes probably had a pronunciation closer to [ɪ]. Over time, what began as a phonetic shift

was phonologized as a vowel change before coronal-initial suffixes, which was later extended to monosyllabic and trisyllabic stems as well. It is hard to say whether speakers treat the /i/ as part of the stem or part of the suffix, but since vowel hiatus resolution is already independently needed for other suffixes (defocalized perfective, perfective and imperfective chaining suffixes, etc.), Occam's Razor suggests pre-suffixal vowel raising should be nixed in favor of a vowel hiatus analysis. Note that the data are consistent with both.

The /i/-initial suffixes are as follows:

(105) a. Mediopassive *-iyɛ* *tɛ̂mb-íyɛ̂* 'jostle'
      b. Transitive *-irɛ* *tɛ̂mb-írɛ̂* 'knock together'
      c. Reversive *-ilɛ* *gɔ̀ŋ-íl̃ɔ́* 'un-enclose'
      d. Agentive *-inɛ* *gɔ́ŋ-ínɛ̂* 'encloser'
      e. Nominalizer *-ile* *gɔ́ŋ-íĺé* 'enclosing'
      f. Nominalizer *-iye* *gɔ̀ŋ-íyé* 'enclosing'

If the suffix follows a long vowel, only the second half of the vowel deletes before /i/. For example, the agentive noun of *sɔ́ɔ́* 'speak' is *sɔ́-ínɛ̂*, not **s-ínɛ̂*. This is the same pattern seen with all hiatus resolution, discussed in the next subsection. Further, if a suffix is stacked on top of another one, the outer suffix will condition the deletion of the preceding suffix's vowel as well, as in *tɛ̂mb-íy-íĺé* 'jostling'.

3.7.4 Vowel hiatus

The last subsection looked at vowel hiatus specifically in the context of /i/-initial suffixes, interpreted in Jamsay (Heath 2008) to be consonant-initial suffixes that trigger the raising of the preceding vowel. This subsection extends the discussion to other contexts in which two vowels come together.

Vowel hiatus is always tolerated across word boundaries, as in *ìnù^L ɛ̀sú* 'pretty teeth (teeth sticking out slightly)' or *ɔ̀dɔ̂^L ònnú* 'throat'. In affixed forms, however, a V-initial suffix will replace the vowel that precedes it, but the suffix is only able to replace one vocalic mora. The result of this restriction is that the exact vowel hiatus configuration that is avoided when a V-initial suffix is added to a short vowel can be created when such a suffix is added to a long vowel. For example:

(106) a. *óbó-aa* → [óbaa]
          give-PFV
          'gave'

      b. *bòó-aa* → [bòáa]
          call-PFV
          'called'

Derived vowel hiatus such as this is typically pronounced more like a diphthong, with one of the vowels reducing to a glide-like duration, as in [bǫ̀áa]. One reason why hiatus is tolerated in the case of monosyllabic stems may be that completely replacing the vowel would result in rampant neutralization. For example, we would no longer be able to tell the difference between *bôó* 'call', *bàá* 'beat (a drum)' or *bὲέ* 'shave a beard'. This is not the case for polysyllabic stems; thanks to strict vowel harmony, almost all stem vowels are predictable based off of the first vowel of the stem (see section 3.5.1). The only distinction that could be lost is ATR (*núyɔ́* 'sing' → *núy-aa* 'sang', *túyó* 'send' → *túy-aa* 'sent'), but I know of no verbal minimal pairs for ATR where the distinction is made only in the final syllable.

3.7.5 Pre-palatal vowel fronting

Before palatals /y, ɲ/, /u/ is often fronted to [i] or [ü] (IPA [y]). If the sequence in question is /uy/ within a stem, as in /núyɔ́/ 'sing' or /kúyɔ́/ 'first', then the /uy/ often merges simply to front-rounded [ü]; The glide is lost and the words are pronounced [nǚɔ́] and [kǚέ], respectively, with the final /ɔ/ also optionally fronting (as shown in 'first'). In rapid speech, this /u/ fronting is nearly exceptionless, though it may not apply in careful speech. All words with /uy/ sequences are subject to this process.

An epenthetic [u] at the end of a word before a palatal in the next word will be pronounced as [i]; that is, in contrast with underlying /u/ in words like *núyɔ́*, there is no faithfulness to the feature [round] since the vowel is not part of the underlying representation. For instance, *tínu ɲàm^L* → [tíni ɲàm^L] 'firewood'.

Finally, as I discussed in section 3.4.6, vowels tend to front before the diminutive suffix *-ý*. See that section for further details.

3.7.6 Derhoticization

Tommo So forbids the sequence of two rhotic /r/ surrounding a vowel (/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. Such sequences only arise from the addition of the transitive suffix *-irɛ*. The data in (107) demonstrate the two repairs:

(107)   a.   *gòró-írέ* → [gòr-íló]   Change the second /r/ to [l]
            hat-TR
            'put a hat (on someone else)'

      b.   *párá-írέ* → [pállá]   Change /rr/ cluster to [ll]
            snap-TR
            'snap [a string]'

The process in (107a) appears to be more productive than that of (107b), since we see other examples like *téér-íyé* 'take the hand of a child' and *téér-ílé* 'give somebody the child's hand'. Nevertheless, these three words are the only known examples of derhoticization in the language. The environment in which the process takes place (a stem with final /r/ that can also take the transitive suffix) is very rare, and hence it is difficult to determine derhoticization's level of productivity.

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 this grammar, I will abide by the following criteria for differentiating a clitic from a word:

(108) *Clitic*   *Word*
      No underlying tone   Has underlying tone
      Often monomoraic   Must be at least bimoraic
      Cannot be focused   Can be focused
      Cannot be said in isolation   Can be said in isolation

According to this definition, the determiner, the plural particle, many auxiliaries, and all postpositions are clitics. The criterion that clitics be toneless is not without exceptions; the object/copula clitic is L-toned *=ǹ*.

By and large, all clitics in Tommo So are enclitics. The one questionable area is pronouns, which are subminimal (except for 1pl *émmé*), but which carry their own tone (H), can be focused, and can be said in isolation. Since these would be the only proclitics, and since they do not follow the same criteria for clitichood as enclitics, I will treat them as words, albeit their own class of subminimal words.

Chapter 4
Tone

This chapter addresses all aspects of tone in Tommo So (phonological, phonetic, grammatical). In addition to creating lexical contrasts, tone also plays an important role in the grammar, with an intricate system of replacive overlays triggered by morphosyntactic position. Tommo So, like the other Dogon languages, has two underlying tonemes H and L. In addition, I argue that it allows surface underspecification of tone, with certain syllables carrying no phonemic tone at all (Ø) on the surface.

4.1 Lexical tone

This section addresses issues of the tone bearing unit (TBU), tonotactics, and the distribution of tones in lexical items (lexical tone patterns). Statistics on tone patterns are drawn from a corpus of 3436 stems found in my lexical database; this number represents tokens of stems, not types, as certain stems may be repeated more than once with different glosses.

In terms of lexical tone, all stems are fully specified for tone, so every syllable must carry at least a L or H tone. Like Jamsay (Heath 2008), Tommo So has a restriction against lexically /L/ stems, so every stem, be it nominal, verbal, or adjectival, must have at least one H tone (and at most one H tone stretch). As I will show below, non-verbal stems have many more options for lexical tone than verbal stems do, where the melody is largely predictable based on the initial segment of the stem.

4.1.1 The tone bearing unit and contour tone distribution

The distribution of the level tones H and L and of the contour tones HL and LH in Tommo So points to the mora as the TBU. On light syllables (mainly V, CV, N), we find only single tones H and L:

(109) a. *V*
        L: *ènɛ́*   'goat'
        H: *ɛ́bɛ̂*   'buy'

    b. *CV*
        L: *gìnɛ̂*   'house'
        H: *kúló*   'hair'

    c. *N*
        L: *m̀bɛ̂*   'want'
        H: *ɲ́jɛ̂*   'what'

In standard theory, these light syllables all have a single mora.

We never find contour tones (HL or LH) on a light syllable. Instead, contour tones are confined to heavy syllables, defined as having either a VV or VR (where R is a sonorant coda) rime. I will discuss CVC syllables where C is not a sonorant below. Looking first at monosyllabic words, we find both rising and falling tones on both syllable types, though only rising is a native tone pattern (see section 4.1.2 below):

(110) a. *CVV*
           LH: *nàá* 'cow'
           HL: *súù* 'colonial coin'

       b. *CVR*
           LH: *gɛ̌m*   'agama lizard'
           HL: *dwâw* 'special prayers'

When we turn to polysyllabic words, we find a further restriction, namely that rising tones (but not falling tones) are confined to the final syllable of the word. From a typological standpoint, this is unsurprising. Rising tones take the most articulatory effort and require the most time to be realized, and typically, the final syllable of a word is subject to final lengthening, making it the optimal location for a difficult tone. This is precisely what Zhang (2004) found in his crosslinguistic survey of contour tone distribution. What is interesting about Tommo So is that it requires reference both to the mora as the TBU, to account for the fact that contour tones are not found on light syllables, and to the privileged position of final syllable, the only location we find rising tones. Falling tones, by contrast, can be found on non-final heavy syllables.

On final heavy syllables, we find both rising and falling tones:

(111) a. *...CVV*
           LH: *tòndòó* 'water jar'
           HL: *pùgɔ́ɔ̀ⁿ* 'cheap nickel alloy'

       b. *...CVR*
           LH: *nìmɛ̌m*   'right now'
           HL: *húkûm* 'tent'

By contrast, only falling tones are found on non-final heavy syllables, but even in this case, only when they are CVV. This would fall in line with Zhang's theory of contour tone distribution by syllable length (rather than abstract weight), since we can presume that a final heavy syllable is longer than a non-final heavy syllable, but that a non-final CVV will still be longer than a non-final CVR. Examples of non-final falls include:

(112) *sáàdà* 'carrion (haram to eat)'
       pɛ́ɛ̀rɛ̀ 'small earthenware bowl'

Rising tones are ungrammatical in this context. As we will see in section 4.3 below, this restriction can create alternations: the final rising tone on a stem will be leveled if any suffixes are added, making it word-internal.

4.1.2 Lexical tone in nouns, numerals, and adjectives

With the distribution of level and contour tones in mind, we can now turn to lexical tone patterns in the language. Tommo So has a rather restricted system of lexical tone. Specifically, the only two native lexical tone melodies are /H/ and /LH/; /HL/ and /LHL/ are found only in loanword vocabulary. /HLH/ is banned outright. This suggests that the following constraint is at play in the grammar:

(113)   <u>One H stretch</u>
        Lexical items in Tommo So contain exactly one H tone stretch.

Lexical items cannot contain less than one H tone stretch, evidenced by the fact that lexically /L/ stems are barred. Nor can they contain more than one H tone stretch, indicated by the fact that a /...HLH.../ sequence is banned.

In this section, I group together all non-verbal stems, since their tonal behavior is the same. In native stems, this H tone stretch must be **right-aligned**. That is, the H tone stretch always begins at the right edge. There is no evidence, however, for automatic association. That is, the lexical melody /LH/ does not automatically map from right-to-left, yielding L.H, L.L.H, L.L.L.H, etc. Instead, the extent of the H tone stretch is lexically listed. Let us consider a CVCVCV trisyllabic stem. The H stretch may extend all the way to the left edge of the stem, in which case it is all /H/: CʹCʹCʹ. It may extend only two syllables, yielding CʹCʹCʹ. Or, it may be confined to only the final syllable, as in CʹCʹCʹ. All possibilities are attested. Once heavy syllables are considered as well, the space of possible tonal instantiations becomes even larger, and still, most of the tonotactically legal possibilities are attested at least once.

Despite being lexically contrastive, tone does not carry a high functional load in this regard. I have only found a small handful of tonal minimal pairs in the language, including:

(114)   /H/   /LH/
        a. *náá*   'mother'   *nàá*   'cow'
        b. *ííyé*   'today'   *ììyé*   'honey'
        c. *ííyɛ̂*   'grave'   *ììyɛ̂*   'moon'
        d. *ísé*   'empty'   *ìsé*   'dog'
        e. *dámmá*   'village'   *dàmmá*   'hoe'
        f. *dúmbu*   'raised threshold' *dùmbú*   'short'

Tonal minimal pairs are unattested for verbal stems, where lexical tone is largely predictable; see section 4.1.3 below.

In the following subsections, I lay out all of the logical possibilities for tonal realizations of all lexical melodies on mono- (section 4.1.2.1), di- (section 4.1.2.2),

and trisyllabic (section 4.1.2.3) noun stems. As I mentioned in section 3.3.3, Tommo So has no clear unsegmentable stems with more than three syllables.

4.1.2.1 Monosyllabic nouns

On monosyllabic stems, we find three melodies, /H/, /LH/, and /HL/ (nearly all from loanwords). Due to the word minimality constraint (section 3.3.2), all monosyllabic non-verbal stems have at least two moras, and hence both level and contour tones are tonotactically legal. Given native phonotactics, the vast majority of monosyllabic stems (240/263, or 91%) are either CVV or CVC (with a sonorant coda). In fact, these are the only attested stem shapes for stems carrying /LH/ and /HL/. Due to the presence of loanwords, as well as V-initial stems, /H/ stems have more varied shapes. The lack of V-initial stems in other tonal classes appears to be an accidental gap.

The following gives examples of all possible tone patterns on all monosyllabic stem shapes. The number in parentheses after the tone pattern indicates how many stems in the corpus follow that pattern:

(115) a. <u>CVV stems</u>
       H (92)   *náá*   'mother'
                kúú   'head'
       LH (23) *nàá*   'cow'
                sɔ̀ɔ́   'speech'
       HL (1)   *súù*   'colonial coin (<French *sou*)'

    b. <u>CVC stems</u>
       H (86)   *gɛ́m*   'black'
                bóy   'name'
       LH (36) *gɛ̌m*   'agama lizard'
                bǎy   'day'
       HL (2)   *wâw*   'type of butchery cut'
                kâr   'coach bus'

Additional stem shapes that are attested only for /H/ are given with examples below:

(116) a. CCVC (1)   *dwáw*   'spells (<Arabic *du'a'* 'prayer')'
    b. CVCC (3)   *dóŋk*   'therefore (<French *donc*)'
    c. VC (1)   *ém*   'milk'
    d. VV (17)   *ɛ́ɛ́ⁿ*   'tight'
    e. VVCC (1)   *ááks*   'hard red candies (<brand name *Axe*)'

With the exceptions of (116c–d), all other stem shapes are attested only in loanwords.

Note that there are many stems in the language that I analyze as being underlyingly monosyllabic but which appear on the surface as disyllabic due to the presence of an epenthetic vowel. I will discuss the tone patterns on these stems in section 4.2.3 on underspecification.

4.1.2.2 Disyllabic nouns

Disyllabic nouns are far more common (982 compared to 263 for monosyllabic stems), and since they have two syllables, there are many more possible stem shapes as we combine different sorts of light and heavy syllables. (117) lists all native syllable shapes:

(117) | Light | Heavy |
| --- | --- |
| V | VV |
| CV | CVV |
| NCV | VC[+son] |
| N | CVC[+son] |
| | NCVV |

In native stems, CCV(V) syllables (which are wholly made up of prenasalized stops, see section 3.3.1) are not attested in word-initial position, and onsetless (and nasal) syllables are not allowed in word medial position. Looking at all phonotactically legal combinations of syllable types, we find:

(118) a. Light-Light   b. Light-Heavy
           V.CV   V.CVV
           CV.CV   CV.CVV
           V.CCV   N.CVV
           CV.CCV   *V.CCVV
           N.CV   CV.CCVV
                                     V.CVC
                                     CV.CVC
                                     (N.CVC)

       c. Heavy-Heavy   d. Heavy-Light
           *VV.CVV   VV.CV
           CVV.CVV   CVV.CV
           VC.CVV   VC.CV
           CVC.CVV   CVC.CV
           *VV.CVC   VV.CCV
           CVV.CVC   CVV.CCV
           VC.CVC
           CVC.CVC
           *VV.CCVV
           *CVV.CCVV

All stem shapes are attested except for those marked with an asterisk. However, given the low numbers of some of these stem shapes in the lexicon, there are many accidental gaps in terms of each tone pattern on a given shape. Speaking generally, /H/, /LH/, /HL/ and /LHL/ are all attested on disyllabic stems. Due to tonotactics, /LH/ is typically realized as L on the first syllable and H on the second, though when this second syllable is heavy, it may instead be realized as a rise (i.e. the

right-aligned H stretch is only one mora). /HL/ words may be realized as H.L, HL.L, or H.HL, with falling tones only possible on heavy syllables. /LHL/ is uniformly realized as L.HL, and all such examples come from French.

In listing examples, I will go through each of the four combinations of light and heavy laid out in (118), showing how the different melodies can be realized on that configuration.

First, Light-Light stems offer the least room for variation in terms of tonal realization, since each syllable consists of only one TBU. If the obligatory H tone stretch extends for two moras, then the whole stem is realized as /H/: ɔ́.mɔ́ 'porridge', á.mbá 'god', kú.ló 'hair', bé.ndé 'protrusion, knot', ɲ́.jɛ́ 'what', etc. When the H tone covers only one mora, we get the pattern L.H: ɛ̀.nɛ́ 'goat', à.ndá 'udder', gì.nɛ́ 'house', bà.ɲjá 'bowl', ǹ.dɛ́ 'person', etc. These are the only two native patterns on Light-Light words. In addition, we find a few cases of /HL/ from loanwords; with only two moras, the realization is obligatorily H.L: á.sè 'Saturday', ɛ́d.dè 'widow's four month seclusion period', bí.dè 'sleight of hand', kú.mbɔ̀ 'curiosity', etc. I know of no /HL/ words of the shape N.CV.

With Heavy-Light stems (118d), the tonotactics still restricts the possible realization of tonal melodies. Though the initial syllable is heavy and could in principle host a contour tone, rising tones are banned in this position, and so the only possible realization for a right-aligned H stretch that does not extend to the beginning of the word (yielding a /H/ stem) is to confine it to the final syllable. /HL/, on the other hand, can be realized as HL.L or HH.L. The following lays out the possible realizations of Heavy-Light stems, focusing on multi-tone melodies (/LH/, /HL/) where syllable shape makes a difference:

(119)   a.   <u>HH.H</u>
        VV.CV (2)   *ííyé*   'today'
        CVV.CV (19) *bóóló* 'thread'
        Also attested: VC.CV (3), VV.CCV (1), CVV.CCV (3), CVC.CV (37)

     b.   <u>LL.H</u>
        VV.CV (5)   *ììyé*   'honey'
        CVV.CV (36) *bùùdó* 'track'
        VC.CV (6)   *èlmé*   'conversation'
        CVC.CV (35) *dàmmá* 'hoe'
        VV.CCV (0)
        CVV.CCV (2) *nààndá* 'left'

     c.   <u>HL.L</u>
        VV.CV (3)   *ɔ́ɔ̀lɔ̀*   'yellow'
        CVV.CV (24) *búùsɛ̀* 'animal pulmonary disease'
        VC.CV (0)
        CVC.CV (0)
        VV.CCV (0)
        CVV.CCV (1) *pîîndè* 'dye for decorating livestock'

d. <u>HH.L</u>
VV.CV (0)
CVV.CV (8)   *káásà*   'wool'
VC.CV (2)   *álwà*   'locally-made candy'
CVC.CV (19)   *gárgè*   'night quarters in the bush'
VV.CCV (0)
CVV.CCV (0)

Comparing the /HL/ realizations in (119c) and (d), we find that the preferred way to realize the melody over the stem shape CVV.CV is to have the H on the first mora only, creating a falling tone. We also can see the generalization pointed out in section 4.1.1 that falling tones are not realized on non-final CVC syllables, despite them consisting of two moras.

There are six attested stem shapes in the Light-Heavy category (118b), and it is here that we see both the introduction of the tri-tone melody /LHL/ and variable realizations of /LH/, with the H stretch either consisting of one or two right-aligned moras. Examples of each realization are given below, again glossing over the simpler case of all /H/ words in the interest of space:

(120)   a.   <u>H.HH</u>
V.CVV (0)
N.CVV (2)   *ńnáá*   'mother!' (vocative)
CV.CVV (7)   *síráá*   'snuff'
Also attested: CV.CVC (15), V.CVC (6)

     b.   <u>L.HH</u>
V.CVV (5)   *àbáá*   'thunder'
CV.CVV (16)   *bàŋáá*   'slave'
N.CVV (0)
V.CVC (0)
CV.CVC (8)   *bìlím*   'manure'
CV.CCVV (0)

     c.   <u>L.LH</u>
V.CVV (0)
CV.CVV (1)   *sàdàá*   'bird'
N.CVV (0)
V.CVC (7)   *àŋǎy*   'amount'
CV.CVC (7)   *dìgěm*   'evening conversation'
CV.CCVV (5)   *tòndòó*   'water jar'

    d.   <u>H.LL</u>
       V.CVV (0)
       CV.CVV (3)   *járàà*   'riddle'
       N.CVV (0)
       V.CVC (2)   *álàn*   'Sunday'
       CV.CVC (20)   *sóròn*   'wooden flute'
       CV.CCVV (1)   *pántɔ̀ɔ̀*   'having light-colored spots'

    e.   <u>H.HL</u>
       V.CVV (0)
       CV.CVV (0)
       N.CVV (0)
       V.CVC (1)   *úlûm*   'children'
       CV.CVC (3)   *húkûm*   'tent'
       CV.CCVV (0)

    f.   <u>L.HL</u>
       V.CVV (1)   *àbî̂ᵑ*   'airplane (<French *avion*)'
       CV.CVV (5)   *bàtóô*   'boat (<French *bateau*)'

Unattested /LHL/ stem shapes have been omitted in the interest of space. Comparing (120d) and (e), we can see that H.HL appears to be the dispreferred realization of /HL/. Further, most of the final rises in the lexicon appear to be the result of crystallized morphology. For example, the word *àŋǎy* 'manner' (and all other V.CVC examples, all of which end with *y*) is consistent with a historical form containing the diminutive suffix *-ý*, which induces tone lowering on the stem; see section 5.1.6.

    Finally, Heavy-Heavy stems are the most varied in shape and allow the most varied tonal realizations: native stems can be HH.HH, LL.HH, or LL.LH; with the addition of /HL/ and /LHL/, we also find HL.LL, HH.LL, HH.HL, and LL.HL. That being said, Heavy-Heavy stems are a lot less frequent in the lexicon, leading to a greater possibility of accidental gaps.

(121) a.   <u>HH.HH</u>
       CVV.CVV (1)   *báánáá*   'portrait'
       CVC.CVC (5)   *nónnóm*   'flexible branch'
       Other shapes unattested

    b.   <u>LL.HH</u>
       CVV.CVV (0)
       VC.CVV (0)
       CVC.CVV (0)
       CVV.CVC (1)   *kɛ̀ɛ̀súm*   'eighty' (historically *kɛ̀ɛ̀lɛ̀ᴸ súm*)
       VC.CVC (0)
       CVC.CVC (3)   *pɔ̀mtɛ́r*   'potato (<French *pomme de terre*)'

  c. <u>LL.LH</u>
    CVV.CVV (0)
    VC.CVV (2)   *ɔ̀ŋɲɔ̀ɔ́ⁿ*   'mortar ax'
    CVC.CVV (6)   *bɔ̀nnàá*   'whip'
    CVV.CVC (0)
    VC.CVC (0)
    CVC.CVC (2)   *jàmsǎy*   'Jamsay (Dogon group)'

  d. <u>HL.LL</u>
    CVV.CVC (1)   *dáàmòl*   'animal liver disease'
    Other shapes unattested

  e. <u>HH.LL</u>
    CVV.CVV (1)   *táálàà*   'Fulbe basket holder'
    VC.CVV (0)
    CVC.CVV (1)   *támmàà*   'silver coin (hair ornaments)'
    CVV.CVC (4)   *kɛ́ɛ́bàm*   'malaria'
    VC.CVC (0)
    CVC.CVC (11) *báygàl*   'modern rifle'

  f. <u>HH.HL</u>
    VV.CVV (1)   *ííyɔ́ɔ̀*   'this year'
    Other shapes unattested

Here we see that of the realizations of /HL/, HH.LL is by far the commonest. However, to my non-native ears, it seems to me that the exact tonal realization of the /HL/ melody is not consistent and may not actually be contrastive; that is, what is important to speakers is simply that the melody falls, not where in the stem that fall takes place. Since all of these /HL/ words are loanwords, mostly from Fulfulde, the exact realization may depend to a large extent on how fluent the speaker is in Fulfulde or how much they have nativized the word. Since /HL/ is not a native melody, there is not a clear native target for that tone melody, and hence it may vary quite a bit in speech.

4.1.2.3 Trisyllabic nouns

With three syllables, the range of possible stem shapes becomes substantially wider, and to discuss each in detail would require many more pages than space allows. Instead, I focus the discussion here on the ways stem shape and tonal realization interact, looking in particular at the possible realizations of the H tone stretch.

    There is little to say about words in which the H tone stretch extends to the left edge. No matter what the sequence of light and heavy syllables, these words surface as all H. Some examples include:

(122) a. Light-Light-Light
bɔ́gɔ́lɔ́ 'chatter'
ánígé 'friend'

b. Heavy-Light-Light
dénnélé 'circle'
sɛ́mmɛ̂lɛ̂ 'rags'

c. Light-Heavy-Light (very rare)
gúlɔ́nnɔ́ 'post-partum quarantine'

d. Light-Light-Heavy (rare)
káráŋgáá 'vestibule'
íníyám 'bogolan dye'

When the H stretch does not extend to the left edge, there are three possible tonal realizations from a syllabic point of view: L.H.H (through the second syllable), L.L.H (only the last syllable), L.L.LH (only the last mora). For the last realization, the final syllable must be heavy; otherwise, these realizations are attested on many different stem types. L.L.H is by far the most common realization, with 120 instances in the database, followed by L.H.H with 18, and only 3 of L.L.LH. Examples are given below:

(123) a. Light-Light-Light
L.H.H kògódó 'shell'
pèréndɛ̂ 'hot pepper'
L.L.H àdàlá 'half ripe'
kòròŋgó 'chicken pox'

b. Heavy-Light-Light
L.H.H bònníyó 'swimming'
pààlíyé 'flat kneading stick'
L.L.H nòmmòló 'low ground'
dènnùgó 'conical winnowing van'

c. Light-Heavy-Light (very rare)
L.H.H (unattested)
L.L.H gòlònnó 'stream'
sìlààmɛ̂ 'community gathered on a holy day'

d. Light-Light-Heavy (rare)
L.H.H (unattested)
L.L.H kàmbàráá 'millet stem leaves'
gùrùmbáá 'pigeon'
L.L.LH ǹjàrǐ 'urine'
ùsùlǎm 'modern incense'

Given the rarity of trisyllabic stems with a final heavy syllable, the relative lack of final rising tones may be partially an accidental gap. I have no instances in the data of a trisyllabic word with two heavy syllables. Looking at (123b), we find that both examples end in the sequence *iye/iyo*. These may be cases of lexicalized gerundive suffixes (*-íyé*, see section 5.2.1.2), the first with vowel harmony shifting the vowel from /e/ to [o]. This suffix imposes a {LH} overlay which maps from left-to-right, yielding L.H(.H...) sequences like the ones seen here. Thus, it may be that there are no lexical stems of this shape carrying a L.H.H tonal realization.

Since /HL/ words are all typically loanwords, we find fewer of them, making it more difficult to generalize about the realization of this bitonal melody. Further, as I mentioned above, my experience is that speakers are not entirely consistent in the way they realize this tone pattern, so the following forms should be taken with a grain of salt. That being said, the realizations H.H.L, H.L.L, and HL.L.L are attested in my lexicon, though there is only a small number of the last. Note that a falling tone is phonotactically legal in medial and final positions as well, provided the syllable is heavy, but this is never attested. Examples are given below:

(124) a. <u>Light-Light-Light</u>
        H.H.L   *gúdíyà*   'baggy pants'
                  párálà   'woven cloth'
        H.L.L   *bálàlà*   'large modern grain sack'
                  gágìrà   'eight'

   b. <u>Heavy-Light-Light</u>
        H.H.L   *dɔ́llɔ́ŋkè*   'kind of robe'
                  sááríyè   'cotton hat'
        H.L.L   *séékùjè*   'itinerant holy man'
                  gárgàdà   'bracelet maker'
        HL.L.L   *láàsàrà*   'late afternoon Muslim prayer'
                  lɛ́ɛ̀tɛ̀rɛ̀   'letter'

   c. <u>Light-Heavy-Light</u>   (rare)
        H.H.L   *álárbà*   'Wednesday'
        H.L.L   *hólààrè*   'awareness'
                  músɔ̀ɔ̀rɔ̀   'woman's head scarf'

   d. <u>Light-Light-Heavy</u>   (rare)
        H.H.L   *káráwàl*   'milk bucket'
                  ílúwàl   'parasol'
        H.L.L   *bánàwàl*   'milk bucket'
                  álùwàl   'wooden tablet'

   e. <u>Heavy-Heavy-Light</u>   (very rare)
        H.H.L   *árgállà*   'kind of robe'
        H.L.L   *túúdèègò*   'word uttered to nullify a curse'
                  árkìllè   'mosquito net'

The forms in (124d) are a good illustration of nearly identical words transcribed with different tone patterns. Though this could be due to true lexicalization with these two tone patterns, it is equally probably that all forms vary in where the shift from H to L takes place. The crucial thing for speakers is to pronounce these words with a general /HL/ pattern, which mimics the initial stress of the Fulfulde language (from which these words were borrowed).

Finally, most words with /LHL/ are trisyllabic. Both L.H.L and L.L.HL are attested. Since there are only 13 stems with /LHL/ tone, I give them all here:

(125) L.H.L   L.L.HL

kàrdándè   'ID card'   kɔ̀ŋkàsyɔ́ɔ̀ⁿ   'meeting'
           (<*carte d'identité*)   (<*convocation*)

gòráánà   'Koran'   pàndàlɔ̂n   'pants'
                                                (<*pantalon*)

sàgóósì   'modern travel bag'   kɔ̀màndâw   'commander'
tàláátà   'Thursday'   (<*commandant*)

àmínà   'amen'   dìsùgóò   'head cloth'
                                  kèlèlɔ́ɔ̀ⁿ   'bugle'
                                  yètènáâ ⁿ   'lieutenant'
                                  àlàmâm   'imam'

The form *kèlèlɔ́ɔ̀ⁿ* might be better understood not as a stem but as a compound consisting of native Tommo So *kélé* 'horn' plus the French-derived adjective *lɔ́ɔ̀ⁿ* (from *long*), but since this adjective is never used on its own elsewhere in the language, I treat it synchronically as a single word.

4.1.3 Lexical tone in verbs

The preceding section covered lexical categories wherein tone is unpredictable and could potentially be lexically contrastive, as the minimal pairs in (114) demonstrated. Verbs work differently in Tommo So. Most of the time, the lexical tone of the verb stem is predictable based on the verb's initial segment: if it is a voiceless obstruent or a vowel, the verb belongs to the /H/ class. If it is a voiced obstruent, it belongs to the /LH/ class. Verbs that begin with sonorants are less predictable, but for the most part, /m/- and /w/-initial verbs take /LH/ and /y/- and /n/-initial verbs take /H/. This predictability is in line with research on depressor consonants, where voiced obstruents and variably sonorants tend to induce L tones. See Bradshaw (1999) for an overview of consonant-tone interactions.

From a functional perspective, predictable tone in verbs is probably useful to learners: The lexical tone of a verb is so often overwritten by grammatically-controlled melodies that they would not have many opportunities to hear the lexical tone in the first place.

4.1.3.1 /H/ class verbs

Vowel-initial verbs exceptionlessly belong to the /H/ class, regardless of their length:

(126) a. <u>Monosyllabic verbs</u>
    ɛ́ɛ́ⁿ   'marry'

    b. <u>Disyllabic verbs</u>
    óbó   'give'
    áwá   'catch'
    ɛ́gɛ́   'hear'

    c. <u>Trisyllabic verbs</u>
    ádúbá   'think'
    ádárá   'bury (dead)'
    úŋgúló   'get up'

The stem *ɛ́ɛ́ⁿ* is the only example of a monosyllabic V-initial verb in my data.

It is also exceptionless that stems beginning with voiceless obstruents (/p, t, k, s, h/) take /H/ tone. Where possible in the following table, I have given an example of stems beginning with each of these consonants for each stem length.

(127) a. <u>Monosyllabic verbs</u>
    pááⁿ   'dry up'
    tɔ́ɔ́   'spit'
    káá   'shave'
    sɔ́ɔ́   'speak'

    b. <u>Disyllabic verbs</u>
    píyé   'cry'
    tálá   'lay (egg)'
    káná   'do'
    sɛ́mɛ́   'slaughter'
    hááná   'be normal'

    c. <u>Trisyllabic verbs</u>
    púgúdó   'massage lightly'
    tógúló   'chew meat'
    kúmúɲjó   'blink'
    ságárá   'lay sticks across (in construction)'

Since /h/ is not a native Tommo So phoneme, verb stems beginning with the sound are rare.

Verbs beginning with these two classes of sounds are not the only verbs that take /H/ tone; we also find verbs that have initial sonorants, typically /y/ and /n/. Verbs do not start with /ɲ, ŋ, l, r/ in Tommo So, and verbs that start with /m/ and /w/ universally take /LH/. Examples of these /H/ verbs include:

(128) a. <u>Monosyllabic verbs</u>
   yóó 'enter'
   nɔ́ɔ́ 'sew'

  b. <u>Disyllabic verbs</u>
   yáwá 'shun'
   nánná 'chase'

  c. <u>Trisyllabic verbs</u>
   yégéré 'get ready'
   nígídé 'rub lightly'

Though verbs beginning with /y/ and /n/ typically belong to the /H/ class, some verbs are lexically listed with /LH/ tone. For example, the *y*-initial verb *yàmá* 'be ruined' forms a tonal near minimal pair with the first verb in (128b), while the verb *nùmbó* 'fall' shows that *n*-initial verbs can also fall in the /LH/ class.

   Similarly, we see two /H/ verbs that begin with the voiced obstruent /j/, violating the otherwise universal pattern described in the introduction to this section. These are:

(129) a. *jímɛ́* 'be sick'

  b. *jɛ́ɛ́lɛ́* 'bring'

The verb stem in (129b) is irregular in many of the Dogon languages.

4.1.3.2 /LH/ class verbs

The /LH/ class is populated by verbs beginning with voiced obstruents, as well as the labial sonorants /m/ and /w/. The only two exceptions to this pattern were given in (129) above. In addition, we find many verbs beginning with the sonorants /n/ and /y/ that take /LH/ instead of /H/, as was shown above. Unlike in non-verbal stems, the tone break from L to H always occurs after the first syllable (i.e. association is predictable).

   The voiced obstruents found at the beginning of verbs are /b, d, g, j/. Examples of verbs beginning in each segment are given below:

(130) a. <u>Monosyllabic verbs</u>
   bòó 'call'
   dàá 'kill'
   gòó 'go out'
   jàá 'take'

  b. <u>Disyllabic verbs</u>
   bòdó 'put aside'
   dàgá 'be good'
   gìyé 'harvest'
   jɔ̀bɔ́ 'run'

c. Trisyllabic verbs
 bɔ̀góló 'bellow'
 dòmmúló 'shave around the edges'
 gɔ̀rɔ́lɔ́ 'snore'
 jìgílé 'spin'

As we can see, in trisyllabic verbs, /LH/ is realized as L.H.H and never as L.L.H.

 Examples with initial sonorants /n, y, m, w/ are as follows. For *y-* and *n*-initial verbs, I give a similar member of the /H/ class for comparison:

(131) a. Monosyllabic verbs
   nàá 'forget'   (vs. *nɔ́ɔ́* 'drink')
   yàá 'go'   (vs. *yóó* 'enter')
   màá 'give shape to'
   wɛ̀ɛ́ 'winnow'

  b. Disyllabic verbs
   nàlá 'give birth' (vs. *nágá* 'slap')
   yùbɔ́ 'spill'   (vs. *yímɛ́* 'die')
   mùló 'plug'
   wìdé 'wiggle'

  c. Trisyllabic verbs
   yàmíɲɛ́ 'rub soap between hands' (vs. *yúrúmɔ́* 'pity')
   mùgúló 'muddy water'
   wànáná 'spread fingers'

There are no trisyllabic verb stems beginning in /n/ that belong to the /LH/ class.

4.1.3.3 Sub-minimal /L/ verbs

All of the monosyllabic verbs listed above had two moras, allowing them to carry both the /H/ and /LH/ lexical melodies. Recall from section 3.3.2 that this is the lexical minimum in Tommo So. Nevertheless, we find three verb stems that consist of only a single mora. All of these belong to the /LH/ class, but only the L portion can be realized:

(132) a. *gɛ̀* 'say'

  b. *jɛ̀* 'take, marry'

  c. *yɛ̀* 'see'

It is unclear whether it is meaningful that all subminimal verbs have the vowel /ɛ/ and belong to the /LH/ class, or whether this is simply a coincidence. Given the small number of forms, it could easily be the latter.

4.2 Tonal underspecification

The last section showed every syllable in a stem carrying either H or L tone. While this is true of lexical stems (nouns, verbs, etc.), the same is not necessarily true for functional elements like postpositions or certain suffixes. These syllables may actually surface without a phonological specification for tone. They receive their surface pitch (F0) through interpolation from surrounding tones. In the transcription system used in this grammar, underspecified vowels are left unmarked.

The following elements tend to be underspecified for tone in Tommo So:

(133)   a.   Postpositions (oblique, possessive, locative, comparative, similarity; see Chapter 10)

        b.   Definite

        c.   Plural

        d.   Some quasi-verbs ('be', 'have', etc.; see section 13.2)

        e.   Human suffixes (see section 5.1.1)

        f.   Some verbal inflectional suffixes (perfective *-aa*, non-final imperfective *-ee*, imperfective *-dɛ* in relative clauses, etc.; see Chapter 12)

        g.   Epenthetic vowels (see section 3.4.6)

The categories in (133a–d) are clitics, those in (e–f) suffixes, and those in (g) arguably harder to separate from the stem they are attached to.

In order to discuss the phonetic realization of the underspecified (AKA null or Ø) tone, I will first provide a basic description of how tone in general is realized phonetically in Tommo So. In the next section (section 4.3), we will see further evidence for tonal underspecification, showing that certain tone rules can only apply when one of the syllables involved is underspecified.

4.2.1 Phonetic realization of tone

There are three main topics to discuss in the phonetic realization of tone. The first is the basic realization of pitch on H-toned and L-toned syllables. The second is the phenomenon of declination, a gradual lowering of pitch throughout an utterance. The third is downdrift, wherein a H tone is realized at nearly the same level as L after a HL sequence earlier in the phrase.

4.2.1.1 Phonetic realization of H and L

Broadly speaking, we see an asymmetry in the realizations of H and L in Tommo So. H-toned syllables tend to hit their target pitch near the beginning of the vowel then remain level throughout the syllable. This is shown in the following pitch tracks:

(134) a. /màŋgóró/ 'mango' LHH

b. /ɔ́mɔ́/ 'porridge' HH

In both cases, the H tone target is reached very close to the beginning of its syllable, and the F0 value remains level throughout the stretch of H tones (two syllables, in both cases). This is true both when the H is preceded by a L tone (134a) and when it begins the phrase (134b). The slight dip at the beginning of this pitch track is due to the glottal attack on the vowel.

L tones, on the other hand, are more sluggish in reaching their targets. If they are at the beginning of a word, as seen in (134a), they begin L and the syllable maintains this steady pitch. If they follow a H tone, however, the target is not typically reached until the end of the syllable:

(135) a. /támòrò/ 'date' HLL

b. /nùmɔ́ nɛ̀mɛ̀-lí/ 'it didn't lick a hand' LH LLH

In (135a), we see that the F0 drops steadily through the first L-toned syllable to reach its target, then the second L-toned syllable remains level. The example in (135b) shows the same phenomenon but across a word boundary. Note that the level pitch across a LH sequence in the first word is due to downdrift, which will be discussed in section 4.2.1.3.

We will see that the difference between L and Ø lies in the fact that while a sequence of Ls will reach a target after the first syllable, a sequence of null syllables will not. This will be shown in section 4.2.2.2 below.

4.2.1.2 Declination

Declination is a common phonetic phenomenon in which the phonetic backdrop for tonal realization slopes gently downward across an utterance. The result of this sloping is that a H tone at the beginning of a phrase will be higher than a H tone near the end of a phrase. In addition to general lowering pitch, declination also compresses the pitch range, so the space between H and L will be wider at the beginning of a phrase than at the end.

The following pitch track illustrates declination in action. The two nearly parallel lines sloping down show the guidelines for declination. We can see that H tones near the beginning, in words like *Dúmásá* 'Douentza' are higher than those near the end in a word like *díyè-go* 'a lot':

(136)   Declination in Tommo So

[àràmàtà Dúmásá=baa][jáŋgú jàŋgá-dέ=gɛ][ìsέ wó=mɔ][díὲ-gò bógò-dὲ]
'Ramata who studies in Douentza, her dog barks a lot.'

Declination is a very common phenomenon, occurring even in non-tonal languages like English (Gussenhoven 2004).

4.2.1.3 Downdrift

Downdrift is a more specific phonological effect found in Tommo So and some other African tone languages. Also known as "automatic downstep", it refers to the situation where the second H in a HLH sequence is significantly lower than the first. Effectively, the H ceiling is reset, so any subsequent H tones in the phrase are at the same level or lower. In Tommo So, this lowering effect is extreme; the second H is usually at exactly the same pitch level as the preceding L tone.

One example of this phenomenon could be seen in (135b) above, though the necessary H tone preceding the LH sequence was cut out of the pitch track (full sentence: *ìsé=gɛ nùmɔ́ nɛ̀mɛ̀-lí* 'the dog didn't like a hand'). In fact, in this particular sentence, downdrift occurs twice: once in the phrase *ìsé=gɛ nùmɔ́* (LHØ **LH**) and once in the phrase *nùmɔ́ nɛ̀mɛ̀-lí* (LH **LLH**). The effect of the second downdrift can also be seen in (135b), where the tone of -*lí* is significantly lower than the H tone on the second syllable of *nùmɔ́*. The following shows a pitch track for the full sentence:

(137) *Ìsé=gɛ nùmɔ́ nɛ̀mɛ̀-lí* 'The dog did not lick a hand.'

The lines beneath each tonal target show the extreme lowering of H after each intervening L.

While declination is bounded by the utterance, downdrift appears to be bounded by the phonological phrase in Tommo So. At a phonological phrase boundary (indicated by a vertical dotted line on the pitch track), the H ceiling is reset, undoing any previous downdrift. This could be seen in the pitch track in (136) above. For example, the second phonological phrase contains the words *jáŋgu jàŋgá-dɛ=gɛ* 'who studies', which fulfills the requirements for downdrift. Predictably, the second H is much lower than the first. However, after the phrase boundary, H tones are higher again, such as the very H tone on the noun *ìsé* in the following phonological phrase.

4.2.2 Phonetic realization of Ø: interpolation

With this basic introduction to the phonetic realization of tone in Tommo So, we can begin to see the motivation for treating Ø syllables as different from either H or L. The original observation I had leading me to this analysis is that the tone of underspecified elements appears to vary on the surface; a definite clitic =*gɛ* sometimes sounded H, sometimes sounded L, and sometimes sounded like none of the phonemic tonal categories at all. Close investigation of pitch tracks revealed that the tonal

realization of these syllables is entirely dependent upon tonal context, with Ø filled in on the surface via interpolation from surrounding tonal targets.

Note that this is unlike many tonal systems reported in African languages, where we get phonological spreading of the preceding tone onto a toneless syllable. This phenomenon involves only the tone preceding the underspecified syllable and results in a surface form that is fully phonologically specified. The same is not the case for Tommo So. Here, the pitch contour found on underspecified syllables is not necessarily the same as any phonological tone, since it is simply a straight path from a preceding target to a following one. If these two targets are identical (both H, both L), interpolation will be level and the underspecified syllable will look like it too carries H or L. If the context is H__L, interpolation is downwards and the resulting pitch contour does not look like a phonemic tone. Curiously, rising interpolation in a context like L__H is never seen; the null tone is realized as if in the context L__L in this case.

One further note is necessary, and that is that in some contexts, an underspecified syllable interpolates not to the following phonological tone but to a putative L⁻ boundary tone which I argue marks the end of a phonological phrase. I will show examples of this phenomenon below.

I will give a few pitch tracks in the following subsections showing how underspecified syllables are realized. For a more detailed discussion, see McPherson (2011).

4.2.2.1 Single syllable

I do not have space here to motivate underspecification on every element listed in (133). I use the definite =gɛ as an illustration for the most part and refer the reader to McPherson (2011) and recordings of texts made available online for further data.

Consider first the definite in three contexts: H__L, H__H, and L__L:

(138) Ø in the contexts H__L (a), H__H (b), and L__L (c).

a. SO: [ɛ́ɛ́ⁿ = gɛ bàláá][yém jɛ́ɛ̀lìì]   'she swept up the ashes and brought them like that'

b. EO: gòrò bá<u>nú</u>=g<u>ɛ</u> dúùndìèⁿ   'they put down the red hat'

c. RO: [èlèkèlè][mí témè-<u>lì</u>=g<u>ɛ</u>][gìnè-ý=nɛ yɔ̂] 'the peanuts I didn't eat are in the house'

We can see that in the symmetrical contexts (138b–c), interpolation is rather smooth and level between the identical tones.[6] In (138a), the pitch change between H and L happens in a basically straight line on the underspecified syllable. Such an abrupt fall on a single mora is not phonologically possible in the language, since otherwise falling tones are only possible on heavy syllables.

I mentioned above that interpolation cannot cross a phonological phrase boundary; instead, when an underspecified syllable is followed by such a boundary, it always

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6 The second H in the sequence H__H is quite a bit lower than the first, due partially to its position at the end of the sentence where we get final lowering and partially because the H is the beginning of a falling tone, which further pulls down the pitch.

interpolates to L. This is demonstrated by the following series of pitch tracks, contrasting Ø, H, and L before such a phrase boundary, shown in the pitch tracks by a vertical dotted line. The L⁻ near the bottom of this line indicates a L⁻ boundary tone, which serves as the endpoint of interpolation:

(139)   Ø, H, and L before a phonological phrase boundary

a. RO: [ɛ̀nɛ̀ íí=gɛ][wó náá=gɛ][jɔ́bɔ̀-dɛ̀]   'the little goat's mother will run'

b. RO: [bé nínɛ́][yɛ́llɛ̀]   'their aunt will come'

c. RO: [ɲɛ́ɛ́ɲɛ̀][úrúgù ínnɛ̀]   'the beggar doesn't know how to pray'

The pitch track in (139a) shows two instances of an underspecified syllable preceding a phrase boundary; in both cases, the interpolation is downward rather than flat between two Hs. This is particularly visible in the second case; in the first, the H on the right of the boundary tone is much lower than the preceding one anyway, for reasons that are unclear. Note that specified tones, shown in (139b–c), are not affected by the phrase boundary – H remains H and L reaches its L target by the end of the syllable.

4.2.2.2 Multiple syllables

The preceding section showed interpolation happening on a single underspecified syllable. When more than one underspecified syllable come together, interpolation is even more clearly visible. Consider this stretch of three clitics, the definite, the plural, and the oblique postposition:

(140)   *Gìnɛ́=gɛ=mbe=nɛ bɛ̀lɛ́-m-aa=wɔ-ɛ̀ⁿ*

We see that after the H peak on *gìnέ*, the pitch interpolates downward across all three underspecified syllables until it reaches the L target on the verb. Here it is especially clear that none of the underspecified syllables carries a phonemic tone, either H or L; each carries a piece of a long interpolation between a preceding H and a following L.

4.2.3 Underspecification and epenthetic vowels

One of the pieces of evidence I gave in section 3.4.6 for final [u] being epenthetic is the fact that it can be surface underspecified for tone; for regular stem vowels, this is not possible. On the surface, we only see tonally underspecified [u] after a H tone in the stem. For example:

(141) a. <u>Underlyingly monosyllabic stems</u>
        níɲ   'uncle'   [níɲju]
        péd   'sheep'   [pédu]
        bán   'red'   [bánu]
        gέl   'millet harvest' [gέlu]

      b. <u>Underlyingly disyllabic stems</u>
        έlél   'sweet'   [έlélu]
        wágád 'time'   [wágádu]
        mòbíl   'car'   [mòbílu]
        gìngír   'guitar'   [gìngíru]

      c. <u>Underlyingly trisyllabic stems</u>
        údúbúr 'man-made apiary' [údúbúru]
        àlùgáál 'Islamic judge'   [àlùgáálu]

All of the underlying stems listed on the left surface with one more syllable, and the [u] of this last syllable is underspecified for tone, meaning that this vowel is realized following the rules laid out in section 4.2.2. Theoretically, this would mean a potential three-way surface contrast between H.H, H.L, and H.Ø in a stem, which would be spelled out as follows:

(142) a. <u>Phrase-finally</u>
        [– –] H.H *pélé*   'applause'
        [– ＿] H.L *pállà* 'woven cloth'
        [– \] H.Ø *pílu*   'white'

      b. <u>Before H</u>
        [– – –] H.H *pélé έg-aa=wɔ* 'he heard applause'
        [– ＿ ＿] H.L *pállà έb-aa=wɔ* 'he bought woven cloth'
        [– – –] H.Ø *pílu έb-aa=wɔ* 'he bought a white (one)'

c.   Before L
[– – _]   H.H   *pélé ègè-lí*   'he did not heard applause'
[– _ _]   H.L   *pállà èbè-lí*   'he did not buy woven cloth'
[– \ _ _]   H.Ø   *pílu èbè-lí*   'he did not buy a white (one)'

I do not have recordings of these examples, but from my understanding of the phonetic rules of tone, these are (broadly) the expected surface forms, ignoring declination. I leave precise phonetic modeling to future work.

Interestingly, we find many /LH/ stems with a specified H-toned [u] following an all L stem. I take these to be stems with underlying rising tones that are resyllabified when a toneless vowel is added. This allows the surface form to obey the ban on word-internal rising tones. For example:

(143)   a.   Underlyingly monosyllabic stems
yĭm   'death'   [yìmú]
dĭg   'joint'   [dìgú]

b.   Underlying disyllabic stems
dòŋjŭl   'modern necklace'   [dòŋjùlú]
gìrĕm   'blindness'   [gìrèmú]

As we will see below in section 4.3.2, this process of tone shift can create surface alternations, showing that it is not simply a property of the lexicon.

4.3 Phonological tone rules

Tommo So does not have many traditional phonological tone rules, like spreading, downstep, etc., found in other African languages. This gap is probably due in large part to the complex system of replacive tone, which I will discuss in section 4.4–4.5. However, there are two productive tone rules in the language: tonal absorption (section 4.3.1) and the related phenomenon of tone shift (section 4.3.2).

4.3.1 Tonal absorption

The previous sections have referenced a restriction in Tommo So against non-final rising tones. All stems obey this ban, but when suffixes are added, a stem-final rising tone can find itself in the middle of word. When the suffix is specified for H tone, the H portion of the rise can be absorbed into it. This "tonal absorption" rule is very common in African languages (Hyman and Schuh 1974). The configuration for tonal absorption can arise when derivational suffixes are added to monosyllabic verb stems of the /LH/ class. For example:

(144) a. /dàá-gú/ 'killing' → [dààgú]

      b. /nɔ̌ɔ́-mɔ́/ 'make drink' → [nɔ̀ɔ̀mɔ́]

By merging the H of the rising tone and the H of the suffix, the constraint against non-final rising tones is satisfied. I know of no suffixes with a specified L tone to test what would happen to a rising tone before a L.

4.3.2 Tone shift

A phenomenon related to tonal absorption is tone shift, which can take place when the syllable following the contour tone is underspecified. In this case, the H tone portion of the rise shifts from its original syllable to the following underspecified syllable. This results in both resolving the forbidden word-internal contour tone and in specifying a previously underspecified syllable with H tone. We saw this already with epenthetic vowels in section 4.2.3.

    Tone shift is most striking when the syllable with the underlying rising tone is too light to host it. This is the case with demonstrative determiners, /nɔ̌/ 'this' and /nǐ/ 'that', which are lexically specified with a rising tone despite having only a single mora. When no underspecified syllable follows, allowing tone shift, these determiners are realized as simply H ([nɔ́], [ní]) or as a truncated rise with slight lengthening of the vowel ([nɔ̌ˑ], [níˑ]. However, when they are followed by the plural clitic, which is underspecified for tone, the H tone portion shifts onto that syllable:

(145) /nɔ̌=mbe/ → [nɔ̀=mbé] 'these'

If the rising-toned syllable preceding an underspecified clitic is heavy (i.e. has enough moras to host the contour), then the contour tone is not resyllabified, since the word boundary falls before the clitic; the clitic is not part of the same word as the preceding stem, so the stem-final rising tone is still treated as word final. Thus, we can contrast (145) with (146):

(146) /nàá=mbe/ → [nàá=mbe] 'cows'

Nonetheless, there are underspecified elements that do fall within the domain of the word: suffixes and epenthetic vowels. When these elements are added after an underlying rising tone, it is resyllabified even if the syllable has enough moras to host it.

    To review section 4.2.3, many stems end underlyingly in a consonant but surface with a final [u]. When the underlying stem has a /H/ melody, the [u] is underspecified: /péd/ 'sheep' → [pédu], /kágád/ 'seared' → [kágádu], etc. However, we also find cases that look on the surface like the stem is L-toned and the epenthetic vowel is H-toned. These, I argue, are the result of tone shift. For example:

(147) a. /pɔ̌r/ 'castrated' → [pɔ̀rú]

b. /yǐm/ 'death' → [yìmú]

c. /jòbǔr/ 'sauce' → [jòbùrú]

On the surface, only the epenthetic vowel (underlyingly toneless) carries H tone. Since stems obligatorily carry at least one H tone, we can assume that the final syllable of these stems underlyingly carries a rising tone that resyllabifies through the process of tone shift.

In the case of epenthetic vowels, we never see the underlying form of the stem to be sure that it does indeed carry a rising tone. The situation is different for stems that can carry an underspecified suffix. A good illustration is the rising-toned stem *yàá* 'female'. When this stem takes the human singular suffix (underspecified for tone), we find the pronunciation [yàa-ná] 'woman', with the H portion of the stem shifted onto the suffix. I have left the second mora of the stem underspecified for tone, since it is not clear that phonological L spreads to fill in the gap left by the H. If we look at the following pitch track, it appears that the second half the vowel in *yàa-ná* may actually show some upward interpolation:

(148) [yàaná=gɛ jɛ̀ŋɛ́-nɛ yé=sɛ̀] 'the woman has a great-grandchild'

[yàa-ná = gɛ][jɛ̀ŋɛ́-nɛ ye-sɛ]

In this pitch track, the suffix -*na* is clearly H-toned, and the beginning of the stem /yàá/ has clear L tone. The stretch between these two, however, appears to be underspecified, suggesting that when the H tone shift to the suffix, it leaves an underspecified mora behind to be filled in by the interpolation. More recordings of the

construction /v̀v́-Cv/ will be required to see if this derived underspecification is consistent.

We find one other interesting case of tone shift with the human suffixes involving contour tones on light syllables. With certain stems, we see an alternation wherein the unsuffixed stem has a LH tone pattern with H on the final syllable, while the suffixed stem carries all L with H on the suffix. This, I argue, is the result of an underlying rising tone on a light syllable. When there is a following underspecified syllable, this tone crowding can be resolved by shifting the H tone onto that syllable. When this is not an option, the rising tone is simplified to H. The stems that work this way are listed below:

(149)

Gloss	Related stem	Singular	Plural
'Dogon'	*dɔ̀gɔ́*	*dɔ̀gɔ̀-nɔ́*	*dɔ̀gɔ̀-ḿ*
'chief/Hogon'	*ɔ̀gɔ́*	*ɔ̀gɔ̀-nɔ́*	*ɔ̀gɔ̀-ḿ*
'slave'	*gùnnɔ́*	*gùnnɔ̀-nɔ́*	*gùnnɔ̀-ḿ*
'visitor'	*yòùŋjú*	*yòùŋjù-nɛ́*	*yòùŋjù-ḿ*
'orphan'	*àbìyɛ́*	*àbìyɛ̀-nɛ́*	*àbìyɛ̀-ḿ*
'leper'	*dùmbú*	*dùmbù-nɛ́*	*dùmbù-ḿ*
'person'	*ǹdɛ́*		*ǹdɛ̀-ḿ*

The related stem can often be used as an adjective or as a noun denoting the abstract state of being the person described when the suffixes are added.

These forms show the importance of looking at all forms of a noun in determining its underlying form. If we had only unsuffixed forms, we might assume that a noun like *gùnnɔ́* 'slavery' would have the same underlying tonal melody as *kùmbó* 'great-grandchild' (L.H). When looking at suffixed forms, however, we find L.L.H *gùnnɔ̀-nɔ́* 'slave' but L.H.∅ *kùmbó-ne* 'great-grandchild'.

There is one curious inconsistency with suffixed forms and tone shift. When the infinitive suffix *-dìm* or the imperfective suffix *-dɛ* (in the relative clause) is added to a monosyllabic rising verb stem, no tone shift takes place. Thus, from *bòó-dìm* 'to call' we see [bòó-dim] (not [bòo-dím]), and from *gɔ̀ɔ́-dɛ* 'that he dances' we see [gɔ̀ɔ́-dɛ] (not [gɔ̀ɔ-dɛ́]). It could be that tone shift (as opposed to tonal absorption) is a property of noun stems and not verb stems, though how this is encoded in a grammar that bans non-final rising tones even among verb stems is not clear. Another possibility would be to treat the infinitive and imperfective as clitic auxiliaries rather than suffixes. However, since I have never seen them separated from the verb stem by even so much as a subject pronoun, I consider them suffixes that idiosyncratically do not cause tone shift.

4.4 Verbal grammatical tone

The most unique and fascinating aspect of Dogon tone is the complex system of **replacive tone** or **tonal overlays**. In certain morphosyntactic contexts, a word or stem can have its tone completely replaced by a grammatically-controlled overlay,

indicated in this grammar by curly brackets (e.g. {L}, {H}, etc.). Overlays are found on both verbs and in the NP, but on verbs, they are triggered by the inflectional morphology, while in the NP, they are triggered by syntactic structure and the relations between words. This section focuses on overlays in the verbal domain.

The main characteristic of verbal grammatical tone is that it always takes place on the verb stem itself and is always triggered by inflectional properties (tense, aspect, negation, mood, etc.). There are no tonal interactions between the verb and any of its arguments. We also find differences in tonal overlays between main clauses and relative clauses. The following table summarizes the tonal overlays found on Tommo So inflected verbs; see Chapter 12 for detailed discussion of verb conjugation:

(150)

		Main clause	Relative clause
Imperfective	Affirmative	{HL}	–
	Negative	{L}	{L}
Perfective	Affirmative	–	N/A
	Negative	{L}	N/A
Defocalized perfective	Affirmative	{L}	{HL}
	Negative	{L}	{HL}
Focused perfective	Affirmative	{HL}	N/A
	Negative	{HL}	N/A
Experiential perfect	Affirmative	{L}	{L}
	Negative	{L}	{L}
Imperative	Affirmative	{H} ~ –	N/A
	Negative	{L}	N/A
Hortative	Affirmative	{H} ~ –	N/A
	Negative	{L}	N/A

I leave out those conjugations and forms with no tonal overlays (e.g. progressive, infinitive, etc.). N/A means that the form is not found in the paradigm, while '–' means that there is no overlay associated with that inflectional category and the stem retains lexical tone. Note that these are the overlays for the stems themselves. Inflectional suffixes may carry their own tone, making the tonal pattern of the whole word different than that of the stem overlay. For example, while the negative imperfective overlay is {L}, the whole word surfaces with LHL, since the suffix is *-éélè*:

(151)   /káná-éélè/ 'will not do' → [kàn-éélè]

In this grammar, I do not mark the tone overlays on verb stems in the same way as I do with NP grammatical tone, since these tone changes can be seen as a property of the inflectional category indicated in the interlinear gloss. Thus, if a verb has a suffix -*éélè* (glossed NEG.IMPF), it is clear that the stem tone will be overwritten with {L}.

An observation we can make is that with the exception of the negative de-focalized perfective in relative clauses, all other negative verb forms take a {L} over-lay. Comparing main clauses and relative clauses, we can see that the only places they differ are in the imperfective affirmative, where the main clause employs a {HL} overlay and the relative clause no overlay, and in the defocalized perfective where both affirmative and negative forms take {HL} in relative clauses.

Overall, given this large number of overlays in the verbal paradigm, it becomes clear why the system of lexical tone contrasts in verbs is undeveloped.

The following table replaces the overlays with real examples of conjugated stems, *jɔ̀bɔ́* 'run' from the /LH/ class and *káná* 'do' from the /H/ class. The two classes are included to show how the overlays neutralize lexical tone contrasts.

(152)

		Main clause		Relative clause	
Imperfective	Affirmative	*jɔ́bɔ̀-dɛ̀*	*kánà-dɛ̀*	*jɔ̀bɔ́-dɛ*	*káná-dɛ*
	Negative	*jɔ̀b-éélè*	*kàn-éélè*	*jɔ̀b-éélè*	*kàn-éélè*
Perfective	Affirmative	*jɔ̀b-áa=wɔ*	*kán-aa=wɔ*	N/A	
	Negative	*jɔ̀bɔ̀-lí*	*kànà-lí*	N/A	
Defocalized perfective	Affirmative	*jɔ̀b-ɛ̀*	*kàn-ì*	*jɔ̀b-ɛ̀*	*kàn-ì*
	Negative	*jɔ̀bɔ̀-lí*	*kànà-lí*	*jɔ̀bɔ̀-lí*	*kànà-lí*
Focused perfective	Affirmative	*jɔ̀~jɔ́b-ɛ̀*	*kà~kán-ì*	N/A	
	Negative	*jɔ̀~jɔ́bɔ̀-lì*	*kà~kánà-lì*	N/A	
Experiential perfect	Affirmative	*jɔ̀bɔ̀ tíy-aa=wɔ*	*kànà tíy-aa=wɔ*	*jɔ̀bɔ̀ tíy-áá-dɛ̀*	*kànà tíy-áá-dɛ̀*
	Negative	*jɔ̀bɔ̀ tìyɛ̀-lí*	*kànà tìyɛ̀-lí*	*jɔ̀bɔ̀ tíyɛ̀-lì*	*kànà tíyɛ̀-lì*
Imperative	Affirmative	*jɔ́bɔ́ ~ jɔ̀bɔ́*	*káná*	N/A	
	Negative	*jɔ̀bɔ̀-gú*	*kànà-gú*	N/A	
Hortative	Affirmative	*jɔ́bɔ́-mɔ́ ~ jɔ̀bɔ́-mɔ́*	*káná-mɔ́*	N/A	
	Negative	*jɔ̀bɔ̀-mɔ̀-gú*	*kànà-mɔ̀-gú*	N/A	

In the imperative and the hortative, we find variation for the /LH/ verb between the lexical tone and the {H} overlay. For the corresponding /H/ verb, these two forms would be identical. For more examples of tonal overlays in verb conjugation, see Chapter 12 on verbal inflection.

We also find tonal overlays involved in deverbal derivation. These are summarized in the following table:

(153) Grammatical overlays in deverbal derivation

Construction	Overlay	Example
Gerundive1	{H}	*jɔ̀b-îlé*
Gerundive2	{LH}	*jɔ̀b-íyé*
Agentive	{H}	*jɔ̀b-înɛ̂*

Here we see that a {LH} overlay is possible, though it is very rare in the language. The example given above is consistent with a {L} overlay and a H-toned suffix, but when we get longer verbs like *ádúbá* 'think', the overlay becomes clear: *àdúb-íyé* 'thinking'. In every case, the L tone is only on the first syllable.

There are no tritonal ({LHL} or {HLH}) overlays in the language.

4.5 Grammatical tone in the NP

While tonal overlays in the VP are confined to the verb stem and triggered by morphological factors, NP tonal overlays may affect multiple words and are triggered by relations between words in the phrase. We find this nominal **tonosyntax** (syntactically-conditioned tone) in nominal compounds, between nouns and following modifiers, and in possession. This section first summarizes the productive tonal changes found when adjectives, demonstratives, and relative clauses (non-possessive modifiers) are added to the noun in section 4.5.1. In section 4.5.2, I summarize the tonal changes found in possession, then describe the tonal results when both possessive and non-possessive modifiers target the noun. The discussion in this chapter is schematic; for each tonal process, a cross reference is given to the pertinent sections of Chapter 7 (on the NP) or Chapter 16 (on relative clauses) where specific examples are given.

4.5.1 Unpossessed NPs

The following gives the usual linear order for Tommo So unpossessed NPs:

(154)   Noun Adj* Num Relative Def/Dem Pl 'all'

The * on the category Adjective indicates that more than one may be present. The determiner category is bifurcated into definite determiners and demonstrative determiners, which cannot co-exist in Tommo So. Relative clauses are listed between

Numeral and Determiner, but as Chapter 16 lays out, they are internally-headed in the Dogon languages, and the maximal string Noun-Adj-Num finds itself internal to the clause; that is, some non-head constituents (e.g. the subject in an object relative) may linearly precede the head, while others and the relative participle follow it. Determiners and other late NP elements associated with the head of the relative clause follow the participle. See Chapter 16 for further discussion.

We can divide the elements in (154) into **controllers**, those elements that impose a tonal overlay on preceding words, and **non-controllers**, those that do not interact tonally. The controllers are adjectives, relative clauses, and demonstrative (but not definite) determiners; all other elements are non-controllers.

4.5.1.1 Controllers: adjectives, demonstratives, relative clauses

The tonal overlay imposed by all controllers to the right of the noun is {L}. In the absence of a possessor, all elements in (154) to the left of the controller will receive a {L} overlay. For adjectives, this can be schematized as follows:

(155)   *Tonosyntax of adjectives*

Noun^L Adjective

Noun^L Adjective^L Adjective

The superscript L indicates a word-level {L} overlay. Both nouns and adjectives to the left of an adjective receive this overlay. For more on the tonal effects of adjectives, see section 7.2.1.

Relative clauses are more complicated in their structure, but the tone lowering (reduction of lexical tone to {L}) effects are the same on the head noun. Any head elements internal to the relative clause receive a {L} overlay. Schematically, we can summarize relative clause tonosyntax as follows:

(156)   *Tonosyntax of relative clauses*

    a. <u>Subject relative</u>
        Subject^L (Object) (Adjunct) Verb DET

    b. <u>Object relative</u>
        Subject Object^L (Adjunct) Verb DET

    c. <u>Adjunct relative</u>
        Subject (Object) Adjunct^L Verb DET

No matter what the grammatical role of the head of the relative clause, it always receives a {L} overlay. For examples and further discussion, see section 16.2.

Demonstratives look like adjectives, in that they impose a {L} overlay on the noun and any other modifiers intervening between the noun and the demonstrative. This includes a numeral, which is itself a non-controller:

(157)   *Tonosyntax of demonstratives*
      Noun^L Demonstrative
      Noun^L Adjective^L Demonstrative
      Noun^L Numeral^L Demonstrative
      Noun^L Adjective^L Numeral^L Demonstrative

For specific examples of demonstratives, see section 7.4.

4.5.1.2 Non-controllers: numerals, definite, plural, 'all'

Non-controllers in the NP are numerals, the definite determiner, the plural clitic, and the universal quantifier 'all'. These elements have no tonal interaction with preceding words, though numerals themselves may be targeted by controllers like the demonstrative, schematized above. For numerals, see section 7.3; for the definite, see section 7.4; for the plural and the universal quantifier, see section 7.5.

4.5.2 Possessed NPs

The only tonal overlay involved in right-to-left tone control from modifiers is {L}. In possession, we see two other overlays added to the mix: {H} and {HL}. Which of these three overlays is applied depends on alienability, whether the possessor is pronominal or non-pronominal, and the prosodic weight of the possessed noun. For more details on possessive structures, see section 7.6.

4.5.2.1 Non-pronominal possessors

Both alienable and inalienable[7] non-pronominal possessors immediately precede the possessed noun and impose a {L} overlay on it. This can be schematized as follows:

(158)   *Non-pronominal possessive tonosyntax*
    a.   <u>Alienable</u>
        Possessor Noun^L

    b.   <u>Inalienable</u>
        Possessor Noun^L

See section 7.6.1.1 for alienable possessive examples and section 7.6.2.1 for inalienable examples.

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[7] In the Dogon language family, kinship terms are treated as inalienable, and all other nouns are treated as alienable.

4.5.2.2 Pronominal possessors

The distinction between alienable and inalienable possession becomes evident when we look at pronominal possession. Alienable possessive pronouns take the possessive form (section 5.3.2), which typically follow the possessed noun, while inalienable possessive pronouns are simply independent pronouns that precede the possessed noun. When alienable possessive pronouns follow the possessed noun, they have no tonal effect. Rarely, however, they precede the possessed noun, in which case they impose a {L} overlay:

(159)   *Alienable pronominal possessive tonosyntax*
        Noun Possessor -or-
        Possessor Noun^L

For examples of each kind, see section 7.6.1.4.

In contrast, inalienable pronominal possessors always precede the possessed noun and impose either a {H} or {HL} tonal overlay. Which overlay is applied depends on the prosodic weight of the possessed noun. If it has 1–2 moras, the {H} overlay is applied. If it has three or more moras, then {HL} is applied, with the change from H to L happening after the first mora (automatic mapping). This means that a HL tone pattern can be found on the first two moras, suggesting that it is not the case that shorter nouns take {H} because they do not have room for {HL}. The choice has simply been grammaticalized. This is schematized as follows:

(160)   *Inalienable pronominal possessive tonosyntax*
        Possessor Noun^H (when the noun has 1–2 moras)
        Possessor Noun^{HL} (when the noun has 3+ moras)

See section 7.6.2.3 for more.

4.5.3 Possessed NPs with other modifiers

If both a possessor and a right-to-left modifier surround a noun, whose tonal overlay will win? More concretely, in a scenario like Poss N Adj, where both the adjective and the possessor can apply tonal overlays, which controller wins the competition? The answer is that it depends on the alienability of possessor and on the modifier in question. Looking at non-pronominal possessors, there are no discernible differences between alienable and inalienable possession. However, when we add other modifiers to the possessed noun, a difference emerges. In every case, the scope of the possessor's tonal overlay is much wider for alienable possession than for inalienable possession, suggesting that it is higher in the syntactic structure.[8] Based on evidence

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8 Readers familiar with constraint-based grammars such as Optimality Theory may see the issue of which controllers wins as a constraint ranking problem, and indeed, this is the analytical approach I take in McPherson (in preparation). I refer interested readers to this work for a full analysis, including tableaux.

like this, I argue that a controller is only able to control the tone of words that it **c-commands.**

When I refer to notions of syntactic structure and c-command, the following is a simple schematization of the structure I assume:

(161) <u>Tree structure for Tommo So NPs</u>

The category labels and the number of levels in the tree are largely irrelevant to the discussion at hand. This tree is simply intended to show the **hierarchical relationships** between elements of the NP (in this tree, DP). I take the alienable possessor to be part of a PossP higher in the tree, while the inalienable possessor is in the specifier of NP, very low in the tree. Any theory of syntax encoding such hierarchical relationships should be able to equally well account for the data.

4.5.3.1 Alienable possession

We can schematize the behavior of alienable non-pronominal possession with other modifiers as follows:

(162) *Alienable **non-pronominal** possession with other modifiers*
      Possessor Noun^L Adjective^L
      Possessor Noun^L Numeral^L
      Possessor Noun^L Definite
      Possessor Noun^L Demonstrative
      [Possessor Noun^L] Relative clause...

Specific examples are given in section 7.6.1.2.

I showed above that alienable pronominal possessors can either precede or follow the possessed noun, and that when they precede, they impose a {L} overlay just like a non-pronominal possessor. What we find, however, is that though the overlay may be the same, the scope is not. That is, a pronominal possessor is unable to control the tone of even an adjective following a possessed noun.

More commonly, alienable pronominal possessors follow the possessed noun and do not impose tonal overlays. When they intervene between a noun and a controller (e.g. Noun Poss Adj or Noun Poss Dem), they retain lexical tone without blocking control on the noun; once again, we have clear evidence of non-adjacent control in these cases.

The behavior of alienable pronominal possessors with other modifiers can be schematized as follows:

(163) *Alienable **pronominal** possessive tonosyntax with modifiers*
    a.   <u>Preceding</u>
        Possessor Noun^L Adjective
        Possessor Noun^L Numeral
        Possessor Noun^L Definite

    b.   <u>Following</u>
        Noun Adjective^L Possessor ~ Noun^L Possessor Adjective
        Noun Numeral Possessor ~ Noun Possessor Numeral
        Noun^L Possessor Dem ~ Noun Possessor Dem^L
        Noun^L Relative Possessor ~ Noun^L Possessor Relative

For further discussion and examples, see section 7.6.1.5.

4.5.3.2 Inalienable possession

The tonal scope of inalienable possessors is much narrower than that of alienable possessors. In fact, inalienable possessors are only able to affect the tone of the noun. This is shown for non-pronominal possessors below:

(164) *Inalienable **non-pronominal** possessive tonosyntax with modifiers*
    Possessor N^L Adjective
    Possessor N^L Numeral
    Possessor N^L Definite
    Possessor N^L Demonstrative
    [Possessor N^L] Relative clause...

For examples, see section 7.6.2.2.

With non-pronominal possessors, we have no evidence as to whether it is the possessor or the other modifier imposing the {L} overlay. With pronominal possessors, however, which independently impose {H(L)}, we find that this tonal overlay is dominated by the {L} overlay of other modifiers:

(165) *Inalienable **pronominal** possessive tonosyntax with modifiers*
    Possessor Noun^L Adjective
    Possessor Noun$^{H(L)}$ Numeral
    Possessor Noun$^{H(L)}$ Definite
    Possessor Noun^L Demonstrative

For examples of these configurations, see section 7.6.2.4.

With relative clauses, things are more complicated, since tonal outputs are variable. For further discussion, see section 16.7.1.4.

Chapter 5
Nominal, pronominal, and adjectival morphology

This chapter deals with the morphology of individual nouns, pronouns, adjectives, and numerals. For treatment of how nouns combine with modifiers, see Chapter 7. For adjectival predication, see section 13.4.1.

5.1 Nominal morphology

This section treats the morphology of noun stems; I will defer the treatment of nominal compounds to Chapter 6 and the morphosyntax of possessive constructions to Chapter 7. The nominal morphology of Tommo So is limited as compared to its verbal morphology. Nevertheless, we find traces of a human/non-human system marked by suffixes as well as lexicalized reduplication, a diminutive suffix *-ý*, and a frozen *a(N)-* prefix whose meaning has become obscured. Nominalization of adjectives and verbs will be discussed separately in section 5.2.

5.1.1 Human suffixes

Most simple nouns have very little morphology; plurality and definiteness are marked with clitics, briefly introduced in section 3.8. However, there is a small class of nouns denoting humans that makes a singular/plural distinction with affixes. These suffixes were first introduced in section 3.5.5 on vowel harmony and section 4.2 on underspecification of tone, but I review them here:

(166)   Human singular   *-nɛ*
        Human plural   *-m*

For the phonology of these suffixes, specifically with regards to vowel harmony, see section 3.5.5.

Human suffixes are most often found on ethnonyms and caste denotations. They are closely related to the agentive suffixes, *-ínɛ́* and *-ím*, which I discuss in section 5.2.1.1 and section 5.2.2.2. The following examples illustrate the use of human suffixes on ethnicity and caste names:

(167) | Singular | Plural | Gloss |
|---|---|---|
| a. | *bámbàrà-nɛ* | *bámbàrà-m* | Bambara person(s) |
| b. | *bɔ̀bɔ̀ɔ́-nɔ̀* | *bɔ̀bɔ̀ɔ́-m̀* | Bobo person(s)[9] |
| c. | *írí-nɛ* | *írí-m* | blacksmith caste on the plateau |
| d. | *jɛ́mmɛ̀-nɛ* | *jɛ́mmɛ̀-m* | blacksmith caste on the plains |
| e. | *sɛ́gɛ́-nɛ* | *sɛ́gɛ́-m* | caste of carpenters and griots |
| f. | *sɔ́lɔ́gɔ̀-nɛ* | *sɔ́lɔ́gɔ̀-m* | Bozo person(s) |
| g. | *tɔ́mmɔ́-nɛ* | *tɔ́mmɔ́-m* | Tommo person(s) |

Other general human nouns that do not fall into the above categories include the following:

(168) | Singular | Plural | Gloss |
|---|---|---|
| a. | *yàà^L púnɔ́-nɔ* | *yàà^L púnɔ́-m* | menstruating woman (women) |
| b. | *gùnnɔ̀-nɔ́* | *gùnnɔ̀-m̋* | slave(s) |
| c. | *ɔ́lɔ́-nɔ* | *ɔ́lɔ́-m* | noble person(s) |
| d. | *ságárá-nɛ* | *ságárá-m* | able-bodied man (men) |
| e. | *túgóm-nɛ* | *túgóm(-m)* | pregnant woman (women) |

The examples in (168d–e) show human suffixes added to the adjectives 'young' and 'heavy', respectively. These two cases have idiosyncratic interpretations, and such suffixation is not productive.

The plural suffix *-m* is often followed by the generic plural clitic *=mbe*. When this happens, the suffix is absorbed into the clitic, rendering it inaudible. For example, *dɔ̀gɔ́-m=mbe* 'Dogon people' is pronounced [dɔ̀ɣɔ́mbe], with only a single labial nasal. Nonetheless, the presence of the *-m* suffix can sometimes be deduced by tonal pattern, as in the following tonal minimal pair:

(169) a. *mí*   *tírɛ́^H=mbe*
       1SG.PRO   grand.person=PL
       'my grandparents'

       b. *mí*   *tírɛ̀-m^HL=mbe*
       1SG.PRO   grand.person-HUM.PL=PL
       'my grandchildren'

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9 The fact that the suffix takes L tone suggests that the underlying stem contains a LHL "bell-shaped" tone, which is exceedingly rare in Tommo So. The only instances of it are found on CVVN syllables, such as 'Bobo people' or an ideophonic adverb *bɛ̀ɛ́m̀* meaning 'newborn'. The reader will notice, then, that these words contain a word-internal rising tone, which is almost uniformly barred in the language. I treat it is an exception.

In (169a), the stem *tírɛ́* without any suffix refers to grandparents, and since it is only two moras, it takes the {H} overlay characteristic of inalienable pronominal possession. In (169b), the same stem is suffixed, in which case it takes the meaning 'grandchild'. In the presence of the plural clitic *=mbe*, the plural suffix *-m* is segmentally inaudible, but since its presence adds a mora, 'grandchildren' takes a {HL} tonal overlay. For a schematic overview of tonal overlays in possession, see section 4.5.2. For further discussion of the tonal realization of human nouns, see section 4.3.2.

However, if the plural clitic is separated from the noun stem by intervening elements (adjectives, determiners, possessive pronouns), then the human plural suffix is once again audible. For example, compare (170a) to (170b):

(170) a. *yàá-m=mbe*   [yàámbe]
           female-HUM.PL=PL
           'women'

       b. *yàà-m^L*   *kómmó=gɛ=mbe*
           female-HUM.PL   skinny=DEF=PL
           'the skinny women'

I am aware of one case of idiosyncratic plural suffix dropping. In the usual greeting sequence, the family will typically be referred to as *àná úwɔ=mbe* 'your men'. Here, the usual plural form *àná-m* is ungrammatical. For more on greeting sequences, see section 21.6.

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. Let us consider 'woman' and 'man':

(171) a. *yàa-ná* 'woman' *yàá-m* 'women' (stem *yàá*)
       b. *àn-ná* 'man'   *àná-m* 'men'   (stem *àná*)

First, we see that the human singular suffix is completely harmonic, [-na] rather than [-nɛ]. The other irregularity is that the final vowel of 'man' syncopates between the /n/ of the stem and the /n/ of the singular suffix. Recall from section 4.3.2 that tonal underspecification is derived on the second half of the stem in 'woman' due to the fact that the H of the rising tone is shifted onto the suffix to avoid a word-internal contour tone.

A limited number of adjectives modifying human nouns may also carry human suffixes. If the adjective carries a human suffix, 'man' and 'woman' can either retain their suffixes or be unsuffixed in the singular. In the plural, the suffix is obligatory:

(172) | Gloss | Singular | Plural |
|---|---|---|
| 'unmarried woman' | *yàà(-nà)^L kúm-nɔ* | *yàà-m^L kúm=mbe* |
| 'old woman' | *yàà(-nà)^L pὲὲ̀-nέ* | *yàà-m^L pέ-m* |

For compound nouns in which 'man' or 'woman' may be unsuffixed, see section 6.1.1.6.

The word for 'child' is the most irregular noun in the language. In the singular, it is unsuffixed *íí*, but the plural has the suppletive form *úlûm*. This final /m/ presumably has its origins in the human plural suffix, but since we never see a stand-alone form *úlú*, I will not parse it out as a suffix.

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

(173) | Gloss | Singular | Plural |
|---|---|---|
| 'boy' | *àn-nà-ý* | *ànà^L úlûm* |
| 'girl' | *ìyà-ý* | *yàà^L úlûm* |

'Boy' is simply the diminutive form of 'man'; for a discussion of the diminutive, see section 5.1.6. The plural form 'boys', however, behaves exactly as a compound of unsuffixed *àná* 'man' and the irregular plural *úlûm* 'children'. 'Girl' is more irregular. It does not pattern like 'boy' in being a diminutive of suffixed 'woman' (**yàà-nà-ý*), nor is it simply a diminutive of unsuffixed *yàá* 'female' (**yàà-ý*). Rather, it appears to be made of a merger of *ìì^L yàá* 'female child' with the vowel of *yàá* shortening before the diminutive *-ý* to avoid a super-heavy syllable. *íí* 'child' is also reduced to the point of forming a single stem with *yàá*. The plural 'girls' patterns like 'boys' in being a compound of *yàá* 'female' and *úlûm* 'children'.

Finally, *ǹdέ* 'person' does not take the singular human suffix in its regular use, but it does take the plural, as in *ǹdὲ-ḿ tàà̀ndú-gó* 'three people'. One compound shows an irregular form of 'person':

(174)   *àmbà^L   ńdὲ^{HL}-nɛ*
        God   person-HUM.SG
        'friend of God'

Here, not only does 'person' have {HL} tone instead of lexical /LH/, but it also is suffixed even in the singular. The {HL} overlay in this context is not systematic, and it is not clear what is driving its use; it seems to be the same overlay that we see in terms like *yàà-nà^L dágì^{HL}-nɛ* 'junior wife', where the typically /LH/ adjective *dàgú* 'small' is suffixed and takes a {HL} overlay.

These human nouns ('man', 'woman', 'child') 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 the fact that other human nouns are possessed inalienably. For example, we see *íí ḿmɔ* 'my child' with the postposed alienable

possessor *ḿmɔ* rather than *⋆mí íí^H* with the preposed inalienable possessive pronoun *mí*. We already saw this irregularity in action in the phrase 'your men' above, which took the alienable pronominal possessor *úwɔ* for 'your' rather than preposed inalienable possessor *ú*.

5.1.3 Human suffixes on kinship terms

Unlike other human nouns, the number of kinship terms that take the human suffixes is small. (175) lists all of the known forms that invariably take suffixes:

(175)		Gloss	Singular	Plural
	a.	'close cousin' (maternal)'	*nà-í-nɛ*	*nàà^L úlûm*
	b.	'close cousin (paternal)'	*bà-í-nɛ*	*bàà^L úlûm*
	c.	'sister's child'	*sà-í-nɛ*	*sàà^L úlûm*
	d.	'grandchild'	*tíré-nɛ*	*tíré-m* Cf. *tíré* 'grandparent'
	e.	'great-grandchild'	*jéŋê-nɛ*	*jéŋê-m* Cf. *jéŋê* 'great-grandparent'
	f.	'great-great-grandchild'	*kùmbó-nɛ*	*kùmbó-m* Cf. *kùmbó* 'great-great-grandparent'
	g.	'senior wife'	*yàà-nà^L díyè-nɛ*	*yàà-nà^L díyè-m*
	h.	'junior wife'	*yàà-nà^L dágì-nɛ*	*yàà-nà^L dágì-m*

In (175d–f), the addition of the suffix to the stem creates the reciprocal child member of grandparent-grandchild pairs; the unsuffixed forms listed below each (e.g. 'cf. *tíré*') are the older member of the pair. However, the suffixed *tíré-nɛ* form is not always used for 'grandchild'. In the example sentence 'I have a grandchild,' a consultant gives me *tìrè^L íí yé=sè-m*, where *tìrè^L íí* is a compound with *tíré* 'grandparent' and *íí* 'child'. I am told that *tíré-nɛ* in this case is possible, but dispreferred. Also, grandparents may refer to their grandchildren as simply *tíré* instead of *tíré-nɛ*, though the opposite is not true; grandchildren will not refer to their grandparents as *tíré-nɛ* instead of *tíré*.

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 highly irregular instance, only the possessed form is suffixed:

(176)	Gloss	Unpossessed	Possessed
	'cross-cousin'	*tíŋɛ̂*	*tíì-nè*

Here, one would say, *tɔ́ŋɛ́ yɛ́=sɛ̀-m* 'I have a cross-cousin', but *mí tîi-nɛ̀ᴴᴸ yɛ́llɛ̀* 'my cross-cousin will come'.

It should be noted that while the term for paternal aunt *nìnɛ́* contains the string /nɛ́/, this is not segmentable as the singular suffix; the plural is not **nì-ḿ*, but simply *nìnɛ́* with the plural clitic *=mbe*.

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 *kídɛ́* '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 *máànu* rather than *kídɛ́*. For instance:

(177) a. *Máànu   gìnɛ̀ᴸ=nɛ   yà-à=bé-m.*
           so.and.so   house=OBL   go-PFV=be.PST-1SG
           'I went to so-and-so's house.'

       b. *Mòtòᴸ   nɔ́   máànu=mɔ=ǹ.*
           moto   this   so-and-so=POSS=COP
           'This moto is so-and-so's.'

5.1.5 Nominal reduplication

Reduplication in Tommo So nouns is widespread, but it is lexicalized. It does not carry any meaning. Nominal reduplication always involves an initial reduplicant, either CV- or full stem in free variation. The tone of the initial reduplicant is usually L, especially if it is a full stem reduplicant (178a). If it is a CV reduplicant and the initial syllable of the stem is H-toned, the reduplicant may also be variably H or L-toned (178b).[10]

(178) a. *kà~kàlú ~ kàlù~kàlú*   'lie'
           tò~tòló ~ tòlò~tòló   'hole'

       b. *tò~tóŋó ~ tó~tóŋó ~ tòŋò~tóŋó*   (village name)
           kà~káru ~ ká~káru ~ káru~kàrù   'wings'

---

10 Here and elsewhere in the grammar, reduplicants will be affixed to their stem using the tilde ~, in conformity with the Leipzig Glossing Conventions.

In (178b), the final variant shows a tone pattern consistent with possession, wherein it is the initial copy that has lexical tone and the second that is tone lowered.

Often H-toned CV reduplicants such as *kí~kíndé* 'soul' do not have a full stem 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 voiceless stop /k/, that indicate that the word must be (or have been) morphologically complex. For more on phonotactics, see section 3.4.

In some cases, a reduplicated noun stem is also acceptable unreduplicated with no change in meaning (e.g. *tò~tòló ~ tòló* 'hole'), but in other cases, the bare stem is ungrammatical (*kà~kàlú ~ *kàlú* 'lie'). This too seems to be lexicalized.

Another less common reduplication pattern takes the form *STEM~mà(à)~STEM*, with variable length of the joining *~ma~*. This is most often seen in plant and animal names, though a few instances are seen in other domains. (179) lists all such words present in the data:

(179) a. *bégu~mà~bégu*   'hiccup'

b. *áy yògù~mà~yògù^L*   '*Pupalia lappacea* (plant species)'

c. *jígu~mà~jígu*   'wind scorpion'

d. *óru~mà~óru*   'darkling beetle' or 'blister beetle'

e. *sɛ́y~mà~sɛ́y*   '*Kraussella amabile* (grasshopper species)'

f. *pɛ́ru~mà~pɛ́ru*   '*Pseudosphingonotus canariensis* (grasshopper)'

g. *dɔ́ru~mà~dɔ́ru*   '*Hieroglyphus daganensis* (grasshopper)'

h. *tógu~mà~tógu*   'praying mantis'

i. *púgu~mà~púgu*   'powderpost beetle (*bostrichidae*)' or
'millet head-miner'

In (179b), the reduplicated portion is possessed by *áy* 'mouse' and thus receives a {L} overlay. For those stems that show their lexical tone, we see that in every case the stems on either side of the *-mà-* are H-toned. It is not clear whether the absence of {LH} stems is significant or just a gap in the data.

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 *íí*. True compounds of this type are widely attested in tree-seed relations or if a piece of equipment has a large part and a small part; see

section 6.1.1.5. In the case of the diminutive, though, it is not a compound; we can deduce this from the fact that diminutives are pluralized using the regular plural clitic *=mbe* rather than by replacing *-ý* with the suppletive plural form of 'child' *úlûm*. Compare (180a) and (b).

(180)   a.   *ɛ̀njɛ̀ᴸ íí* 'chick'   *ɛ̀njɛ̀ᴸ úlûm* 'chicks'
             pèdùᴸ íí 'lamb'   *pèdùᴸ úlûm* 'lambs'

        b.   *kɔ̀rɔ̀-ý* 'little calabash'   *kɔ̀rɔ̀-ý=mbe*   ''little calabashes'
             dùgɔ̀-ý 'bead'   *dùgɔ̀-ý=mbe*   'beads'

The forms in (180a) are true compounds, with singular *íí* 'child' becoming *úlûm* in the plural. The diminutives in (180b) retain the suffix *-ý* in both the singular and the plural.

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:

(181)   a.   /tòndòò-ý/ → [tòndǒy]   'little water jar'
        b.   /tànnàà-ý/ → [tànnǎy]   'little stick'

The final vowel of the stem optionally fronts before the palatal *-ý*. This process is exceptionless if the vowel is epenthetic [u] (182a) and variable for underlying vowels (182b–c):

(182)   a.   *pòlú*   'knife'   [pòlì-ý]   'little knife'
        b.   *tòndòó*   'water jar'   [tòndè-ý] ~ [tòndò-ý]   'little water jar'
        c.   *kɔ̀rɔ́*   'calabash'   [kɔ̀rɛ̀-ý] ~ [kɔ̀rɔ̀-ý]   'little calabash'

For more on pre-palatal fronting, see section 3.7.5.

5.1.7 Frozen initial *à(N)-* in nouns

A few nouns in Tommo So have a frozen prefix *à(N)-* (with an optional nasal), which is no longer productive in the language. This sequence is segmentable as a prefix based on phonotactic cues: it can be followed by a voiceless stop, otherwise forbidden stem-internally, and it forms a separate harmonic domain from the stem (e.g. /a-o/ sequences never occur stem-internally). Often these words can be traced to another verb or noun, though in the case of some, their origins have been lost with time.

(183)   Gloss   Noun   Related stem
   a.   'hunt (n.)'   *àn-tólu*   *táálá*   'hunt'
   b.   'residue left from the first   *àn-tóŋgó*   *tóŋgó*   'repound'
          winnowing of millet spikes'
   c.   'handful of food'   *àŋ-kòmmó*   *kómmó*   'contract'
   d.   'traditions'   *à-témbu*   *témbɛ̂* 'find'
   e.   'tiny splinter-like chaff of   *à-sógó*   –
          young millet grains'

While in some cases (183a–b), the semantic connection is clear, in cases like (c) it takes more of an imagination to see how 'contract, shrivel' could lead to a squeezed handful of food. In (183d), we could imagine that customs or traditions are things we find, left from the ancestors. There is no clear origin of the prefixed noun in (183e).

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*. Originally, the term is from the Arabic plural *an-naṣaaraa* 'Nazarenes', where the *an-* at the beginning is derived from the definite prefix *al-*.

It is difficult to ascertain what the original semantics of this prefix would have been. In every case, the prefixed form could be seen as an object of the verb ('hunt some hunting', 'repound some residual millet spikes', 'find the traditions?'), but the vast majority of such object-verb pairs in the language do not involve this prefix. See section 13.1.5 for more on cognate nominals.

5.2 Nominalization

Most overt nominal morphology in Tommo So comes from nominalization of both adjectives and verbs. For deverbal derivation, a series of suffixes is used, while de-adjectival derivation uses prefixing reduplication.

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 agentive nominals, which are derived using suffixes related to the human suffixes seen in section 5.1.1, before turning to gerundives and infinitives.

Further, there are a large number of noun-verb pairs where the two forms are clearly cognate, but wherein the direction of derivation (noun → verb or verb →

noun) is not clear given the lack of overt, systematic morphology. I will defer the treatment of these noun-verb pairs to Chapter 13.

5.2.1.1 Agentive nominals

Agentive nominals are clearly morphologically related to the human suffixes discussed in section 5.1.1. At first glance, it looks as though agentive nominals are formed by adding the human suffixes to the verb stem, which changes its final vowel to /i/. However, as discussed in section 3.7.3, we could equally analyze this /i/ as belonging to the suffix itself. It is the latter approach that I will take here, for the sake of consistency with verbal derivational suffixes (discussed in Chapter 11). The table in (184) contrasts regular human suffixes with the deverbal agentive suffixes:

(184) | | Singular | Plural |
|---|---|---|
| Human | *-nɛ* | *-m* |
| Agentive | *-ínɛ́* | *-ím* |

Recall that when these V-initial suffixes are added to a stem ending in a vowel, the stem's final vowel deletes to resolve vowel hiatus; see section 3.7.3–4.

Agentive nominals also receive a {H} tone overlay. It is not possible to deduce whether the agentive suffixes are underlyingly H-toned, as shown in (184), or whether the surface H is a result of the tonal overlay.

Examples of agentive nominals include the following:

(185) | Singular | Plural | Gloss | Verb stem | |
|---|---|---|---|---|
| *jáŋ-ínɛ́* | *jáŋ-ím* | 'student(s)' | *jàŋgá* | 'study' |
| *sɔ́-ínɛ́* | *sɔ́-ím* | 'speaker(s)' | *sɔ́ɔ́* | 'speak' |
| *gɔ́-ínɛ́* | *gɔ́-ím* | 'dancer(s)' | *gɔ̀ɔ́* | 'dance' |
| *kál-nɛ́* | *kál-ím* | 'liar(s)' | *kálá* | 'lie' |

The last form shows post-sonorant syncope, discussed in section 3.6.2. The plural form is often accompanied by the labial assimilation of /i/ to [u], leaving the final form closer to the pronunciation [jáŋgúm]. This assimilation is typically blocked in the case of monosyllabic verb stems, where the diphthong retains the front vowel [i] (**sɔ́-úm*).

For a discussion of compound agentive nouns, see section 6.2.1.

5.2.1.2 Gerundive nominals

Gerundive nominalizations refer to the action of the verb itself rather than an agent, object or some other argument. In Tommo So, there are two such suffixes, *-īlé* and *-íyé*, first introduced in section 3.7.3. In the case of *-íyé*, the tone pattern of the

derived form is {LH}, which automatically maps from left to right, whereas with *-ílé*, it is all {H}. Once again, given these overlays, it is not clear whether the suffix is independently H-toned or whether it receives H as part of the grammatical overlay. The following examples demonstrate the phonological form of the two suffixes:

(186)   a.   *jɔ̀bɔ́*   'run'   *jɔ́b-ílé*   'act of running'
             bɛ̀ndɛ́   'hit'   *bɛ́nd-ílé*   'act of hitting'
             yàá   'go'   *yá-ílé*   'act of going'
             píré   'catch'   *pír-ílé*   'act of catching'
             yɛ̀lɛ́   'come'   *yél-ílé*   'act of coming'

        b.   *jɔ̀bɔ́*   'run'   *jɔ̀b-íyé*   'act of running'
             bɛ̀ndɛ́   'hit'   *bɛ̀nd-íyé*   'act of hitting'
             píré   'catch'   *pìr-íyé*   'act of catching'
             yɛ̀lɛ́   'come'   *yɛ̀l-íyé*   'act of coming'

By and large, these two forms can be used interchangeably, and I gloss them simply at GER1 (for *-ílé*) and GER2 (for *-íyé*). For example, consultants tell me that the following two sentences are identical in meaning:

(187)   a.   *Jɔ̀bù^L*   *jɔ́b-ílé^H*   *wómɔ*   *síyɛ́=ǹ.*
           run.NOM   run-GER1   3SG.POSS   good=COP
           'His running is good.'

        b.   *Jɔ̀bù^L*   *jɔ̀b-íyé^H*   *wómɔ*   *síyɛ́=ǹ.*
           run.NOM   run-GER2   3SG.POSS   good=COP
           'His running is good.'

Here, the gerundive nominals are compounded with the cognate nominal *jóbu* 'run (n.)'; I will discuss the argument structure of the gerundive more fully below.

    Though productively formed gerundives can take either suffix with no difference in meaning, a glance at the lexicon reveals that more *-íyé* forms are lexicalized as concrete nouns. Consider the following forms:

(188)   a.   *sààn-íyé*   'mistake'   *sáán-íyɛ́*   'make a mistake'
        b.   *sàd-íyé*   'mistake'   *sádá*   'make a mistake'
        c.   *sàŋg-íyé*   'criticism'   *sáŋgá*   'criticize'
        d.   *sɔ̀mm-íyé*   'honor (n.)'   *sɔ́mmɔ́*   'honor (sb)'
        e.   *ànà^L gàm-íyé*   'thunder'   *àná gàmá*   'thunder (v.)'
                                                          (Literally 'rain scolds')
        f.   *ɛ̀mm-íyé*   'strength'   *ɛ́mmɛ́*   'be able to'

This suggests that *-íyé* may have more concrete or definite semantics than *-ílé*. However, when it comes to times of the day, *-ílé* is the suffix that is more likely to be lexicalized. For example:

(189)   a.   *yàá-m*   *bɔ̀nnɔ̀*ᴸ   *yà-ìlè*ᴸ
             female-HUM.PL   pounding.area   go-GER1
             'early morning (until 10 am)' (Lit. when women go to pound)

        b.   *bàà*ᴸ   *kúr-ílé*ᴴ
             day   thicken-GER1
             'twilight' (Lit. thickening of the day)

        c.   *ɛ̀ɲjɛ̀*ᴸ   *kɔ́m-ílé*ᴴ
             chicken   crow-GER1
             'just before daybreak' (Lit. when the chickens crow)

        d.   *[kìndɛ̀ tɛ̀gù]*ᴸ   *kúnd-ílé*ᴴ
             lunch   put-GER1
             'long mid-day break for lunch'

        e.   *[kìndɛ̀ tɛ̀gù]*ᴸ   *ɔ́l-ílé*ᴴ
             lunch   be.dark-GER1
             '11am–12pm'

Some of the examples above, like (189c), can also be said with the other gerundive suffix *-íyé*, but others, like (189b), cannot. The other examples have not been checked with consultants for variation.

In short, close examination of corpus data will be necessary to fully differentiate between the uses of the two suffixes.

In the majority of cases, these suffixes have no effect on the vowels of the stem (except for the deletion of the stem-final vowel). In two cases, however, we find an ATR change of /a/ to [o] with the addition of *-ílé: nàá* 'forget' but *nó-ílé* 'act of forgetting'; *nábá* 'carve' but *nób-ílé* 'act of carving'. This vowel change appears to be lexicalized. For ATR changes in cognate nouns, see section 13.1.5.

Gerundive nominals retain their argument structure; they can incorporate a subject, an object (if transitive), and even an adjunct. The subject is expressed as a possessor. For example:

(190)   a.   *Rámátá*   *jɔ̀b-ìlè*ᴸ   *ɛ̀sù-lɛ̂.*
             Ramata   run-GER1   pretty-NEG
             'Ramata's running isn't pretty.'

        b.   *Bɛ̀nd-íyé*   *ḿmɔ*   *síyɛ́=lɛ.*
             hit-GER2   1SG.POSS   good=NEG.COP
             'My hitting isn't good.'

When the subject is non-pronominal, it is placed in front of the gerundive nominal, which undergoes tone lowering (190a). If the subject is pronominal, it surfaces as a post-posed possessor, which has no effect on the tone of the gerundive nominal (190b). It appears, however, that certain combinations of gerund and subject sound better than others for consultants. For example, a consultant rejected the use of the 1sg subject in (190a), but accepted the 3sg. As indicated in (190b), it is possible for the subject to be 1sg in some cases, so what it is that makes one case good and another marginal for speakers has yet to be determined. For more on possession, see section 7.6.

An object of the verb can either surface as a possessor (creating ambiguity with a subject) or as a compound-initial, with the gerundive nominal as the compound-final. An example of the latter can be found in (187) above, where the object *jóbu* 'run (n.)' takes the {L} overlay characteristic of compound-initial elements while the following gerundive *jɔ̀b-íyé* or *jɔ́b-ílé* retains its tone. An example of the object as a possessor is as follows:

(191) *Íí   bɛ̀nd-ìlɛ̀ᴸ   síyɛ́=lɛ.*
      child   hit-GER1   good=NEG.COP
      'Hitting a child isn't good.'

Interestingly, consultants report that replacing *-ílé* with *-íyé* in the example above renders it ambiguous between 'the child's hitting isn't good' and 'hitting a child isn't good', with the interpretation more heavily skewed towards the former. It could be that the *-íyé* is used more preferentially with subjects than objects, but more data will be required to test this hypothesis.

Consultants rejected using both a subject and an object with a gerundive nominal. Instead, a headless relative construction was used:

(192) *Úlûm=mbe   jàndúlu   bɛ̀ndɛ́-dɛ   síyɛ́=lɛ.*
      children=PL   donkey   hit-IMPF.REL   good=NEG.COP
      'Children hitting donkeys isn't good.'

For more on relative clause construction, see Chapter 16.

Unlike the subject and object, adjuncts like temporal adverbs or locatives do not interact tonally with the gerundive nominal. For example:

(193) a.   *Àgá   jɔ́b-ílé   síyɛ́=ɲ̀.*
         morning   run-GER1   good=COP
         'Running in the morning is good.'

      b.   *Gìnɛ̀-ý=nɛ   bɛ̀nd-íyé   síyɛ́=lɛ.*
         house-DIM=OBL   hit-GER2   good=NEG.COP
         'Hitting in the house isn't good.'

5.2.1.3 *-igo* or *-ige* derivation

A finite number of deverbal nouns have been derived using the suffix *-ígé*, which, following backness harmony, can also surface as *-ígó*. Like the gerundive suffixes, the resulting form is all {H}. However, these suffixes differ in that they are not productive. The attested forms containing this suffix are listed below:

(194) a. *bíy-ígé*   'being'   *bìyɛ̂*   'be, remain'

  b. *túmm-ígó*   'east'   *túmmó*   '(sun) rise'

  c. *númb-ígó*   'west'   *númbó*   'fall, (sun) set'

  d. *jɔ́l-gé*   'row of plants'   *jɔ̀lɔ́*   'plant (beans, sesame)'

  e. *jób-ígó*   'running'   *jɔ̀bɔ́*   'run'

(194d) displays post-sonorant syncope as discussed in section section 3.6.2, but idiosyncratically here before a velar stop.

5.2.1.4 Infinitives

The final deverbal noun to discuss is the infinitive. Out of all of the deverbal nouns, the infinitive remains the most verbal, in that it is able to take an object without forming either a compound or a possessive construction. It is productively formed with the addition of a suffix *-dim* (underspecified for tone), historically derived from the 3pl subject form of the imperfective suffix. In the dialect of Tommo So described by Plungian (1995), both the infinitive suffix and the 3pl imperfective suffix are *-diŋ*, but following the usual changes in Tédié Tommo So discussed in section 3.4.1.3, the verbal imperfective suffix becomes *-diŋ* and the nominal infinitive suffix becomes *-dim*.

Like imperfective verbs in nominalized clauses (the probable diachronic origin of the infinitive), the verb stem in the infinitive retains both its lexical vowels and its lexical tones. For example:

(195) a. *yàá-dìm*   'to go'   *yàá*   'go'

  b. *jɔ̀bɔ́-dìm*   'to run'   *jɔ̀bɔ́*   'run'

  c. *káná-dìm*   'to do'   *káná*   'do'

Infinitives are commonly used as complements of the quasi-verb *m̀bɛ̂* 'like' or 'want':

(196) *Tò~Tóŋó*   *yàá-dìm*   *m̀bɛ̂-go=wɔ-m.*
    village.name   go-INF   want-ADV=be-1SG
    'I want to go to Tongo-Tongo.'

The object of an infinitive can be added with no tonal changes:

(197) *Íí   bèndɛ́-dim   síyɛ́=lɛ.*
        child   hit-INF   good=NEG.COP
        'It is not good to hit a child.'

The infinitive is not able to take a subject. This could be explained if the suffix *-dim* still retains some latent 3pl subject semantics.

5.2.2 Deadjectival derivation

We find two morphological processes involving adjectives in Tommo So. The first, nominalization, involves reduplication rather than suffixation. The other derivational process involving adjectives begins by deriving an adjective from a noun (e.g. 'hair' → 'hairy') and then a human noun from the resulting adjective (e.g. 'hairy' → 'hairy person'). Unlike simple nominalization of adjectives, this "characteristic" derivation is achieved through suffixation of the agentive suffixes.

5.2.2.1 Reduplicative derivation

Adjectives are nominalized by reduplication, either with an initial CV, CVCV (foot), or full stem reduplicant. For most stems, this amounts to a full stem copy, but the distinction can be seen in trisyllabic stems like (198e) below. The initial reduplicant is L-toned, and the tone of the adjective stem is overwritten with {LH}:

(198)   Gloss   Noun   Adjective
        a.   'thickness'   *kù~kùnɔ́*   *kúnɔ́*
                           kùnɔ̀~kùnɔ́

        b.   'width'   *wà~wànnú*   *wánnu*
                           wànnù~wànnú

        c.   'length'   *pà~pàlá*   *pàlá*
                           pàlà~pàlá

        d.   'redness'   *bà~bànú*   *bánu*
                           bànù~bànú

        e.   'flatness'   *kà~kàbàrá*   *kábárá*
                           kàbà~kàbàrá
                           kàbàrà~kàbàrá

This system of derivation is fully productive for both suffixed and unsuffixed adjectives (see section 5.5).

5.2.2.2 Characteristic derivation *(-gú)*

Characteristic derivation begins by deriving an adjective from a noun using the suffix *-gú*. Added to a noun X, it derives an adjective with roughly the meaning "possessing X" or "who has X". This is accompanied by tone lowering on the stem. For instance:

(199) a. *kùlò-gú*   'hairy'   from *kúló*   'hair'
        b. *bɔ̀ŋgɔ̀-gú*   'who has a navel'   from *bɔ̀ŋgɔ́*   'navel'

This characteristic suffix does not appear to be productive, since offered forms like **nùmɔ̀-gú* 'who has a hand' (from *nùmɔ́* 'hand') were rejected by consultants.

    Once these characteristic adjectives are in place, human nouns can be derived from them by the addition of the agentive suffixes discussed in section 5.2.1.1. We can tell that these are the agentive suffixes rather than the regular human suffixes since the vowel of the *-gú* suffix is replaced with [i]. Unlike agentives, however, no {H} overlay occurs in this case:

(200) a. *gìyè-g-ínɛ́*   'one who is hungry'   cf. *gíyɛ́* 'hunger'
        b. *sèmbè-g-ínɛ́*   'authority'   cf. *sɛ́mbɛ́* 'power'
        c. *tà-tàgà-g-ínɛ́*   'joker'   cf. *tà-tágá* 'joke'
        d. *dèg(ù)-g-ínɛ́*[11]   'poor person'   cf. *dègú* 'poverty'

Note that these nominalized forms can be used as the second element in a left-headed nominal compound[12] to describe a noun, as in:

(201) a. *pèdù^L gòlòŋŋù-g-ínɛ́*   'lazy sheep'
        b. *ǹdɛ̀^L jìm-g-ínɛ́*   'sick person'

In (201a), we see an animal combined with a supposedly human noun. It is possible that these suffixes refer to animacy rather than being human, but I have been able to find no other instances of these suffixes being used on non-human animate nouns are.

    On inanimate, non-human nouns, or on animate but non-human nouns, *-gú* alone is used:

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11 The pronunciation varies between syncopated [dèggínɛ́] and [dègínɛ́], the latter of which could be seen either as a degeminated form of the former or a case where the human suffix simply is added to 'poverty' to derive the human nominal.

12 See Chapter 6 for a discussion of the similarities between the two constructions.

(202) a. *kɔ̀rɔ̀ᴸ bɔ̀ŋgɔ̀-gú*   'calabash with hard elongated stem'
                                        cf. *bɔ̀ŋgɔ́* 'bellybutton'

        b. *pèdùᴸ kɛ̀lɛ̀-gú (-ínɛ́)*   'horned sheep'

In (202b), the agentive suffix may optionally be used.

    In some cases, the adjectival *-gú* form may be used alone as a noun. This could contain a null N head, or it could be the case that *-gú* forms may be either nouns or adjectives.

(203) *kìnù-gú* 'critter'
                cf. *kínu* 'nose'

Consultants report that this form is also acceptable with the agentive suffix (*kìnù-g-ínɛ́*).

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 *=mɔ*, but at other times these have fused and evolved, and thus I uniformly treat possessive pronouns as a separate unsegmentable class. The chart below summarizes these forms.

(204)   Independent   Possessive   Suffixal
        1sg   *mí*   * m̋mɔ*   *-m*
        2sg   *ú*   *úwɔ*   *-w*
        3sg   *wó*   *wómɔ*   *-Ø*
        1pl   *émmé*   *émmɛ*   *-y*
        2pl   *é*   *éwɔ*   *-y*
        3pl   *bé*   *bémɛ*   *(varies by AN category)*

For reflexive, reciprocal, and logophoric pronouns, see Chapter 20 on anaphora.

5.3.1 Independent pronouns

The independent pronoun is used to mark pronominal subjects in relative and other subordinated clauses (in the absence of a subject suffix) (205a), in independent clauses where the subject is focalized (optionally in conjunction with the subject suffix on the verb) (205b), preverbally as the theme or goal with the object case marker *=ǹ* (205c), with most postpositions except the oblique *=nɛ* and locative *=baa*

(which take the possessive pronoun) (205d), and prenominally as the inalienable pronominal possessor (205e).

(205) a. *nàà^L gɛ̀m^L mí   sɛ́m-ɛ̀=gɛ*
      cow   black 1SG.PRO slaughter-PFV.REL=DEF

      'the black cow that I slaughtered'

      kùgɔ̀lù^L wó   mɔ́ɔ̀nd-ì
      stem   3SG.PRO gather-PFV.REL

      'stems that she gathered'   [23.5:9]

    b. *Mí   yà-éélè-m,   ú   yáà-dɛ̀-w.*
      1SG.PRO go-NEG.IMPF-1SG 2SG.PRO go-IMPF-2SG

      '*I* won't go, *you'll* go.'

      Émmé   yà-è.
      1PL.PRO go-PFV.L

      'It is *us* who went.'

    c. *Màŋgóró wó=ǹ   óbò-dìn.*
      mango   3SG.PRO=OBJ give-IMPF.3PL

      'They will give her a mango.'

      Dìì^L nɔ̌y   sáy-ni   bé=ǹ   ɔ́ŋɲ-ìyɔ̀-m-ì.
      water drink.NOM much-ADV 3PL.PRO=OBJ tire-MP-CAUS-PFV.L

      'They were very bothered by thirst.'   [Animals and the well]

    d. *Ú=le   mí=le   émmé   túmɔ́-go yáà-dɛ̀-y.*
      2SG.PRO=ASSOC 1SG.PRO=ASSOC 1PL.PRO one-ADV go-IMPF-1PL

      'You and me, we'll go together.'

      ǹdɛ̀mɔ́   wó=le   pád-aa   dámmá yà-è=ǹ=wa.
      LOG.SG.PRO 3SG.PRO=ASSOC leave-PFV village go-PFV.L=OBJ=QUOT

      '[She said] "I left [him] here with her and went to the village".'   [23.5:20]

    e. *Bé   nínɛ́^H yɛ́llè.*
      3PL.PRO aunt   come.IMPF
      'Their aunt will come.'

      íí=gɛ=le   wó   báá=gɛ=le
      child=DEF=ASSOC 3SG.PRO father=DEF=ASSOC
      'the child and his father'

Notice that the independent pronouns are subminimal, being monomoraic, but that unlike most 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 decomposed into the bare pronoun and an enclitic with a possessive meaning somewhat like "for" (e.g. *wómɔ* 'for him', *pédu=mɔ* 'for the sheep'), which I will discuss further in section 10.1.4. I leave the possessive pronouns unsegmented, since in many forms, the possessive pronoun is not what one would expect based on the independent pronoun and *=mɔ*. The following chart, including the noun 'cow' possessed by each pronoun, highlights these differences:

(206) <u>Actual pronoun</u>   <u>Expected combination</u>

1sg	*nàá ḿmɔ*	**mí=mɔ*	'my cow'
2sg	*nàá úwɔ*	**ú=mɔ*	'your cow'
3sg	*nàá wómɔ*	*wó=mɔ* (same)	'his cow'
1pl	*nàá émmɛ*	**émmé=mɔ*	'our cow'
2pl	*nàá éwɔ*	**é=mɔ*	'your cow'
3pl	*nàá bémɛ*	**bé=mɔ*	'their cow'

The 3sg is the only form where the expected combination is the attested form. In the 1sg and 1pl, the pronoun is reduced, from *mí* to simple *ḿ* in the singular and from *émmé* to *ém* in the plural. In both the 2sg and 2pl, *=mɔ* weakens to *=wɔ*. In the 1pl and 3pl, we see unexpected backness harmony, with *=mɔ* surfacing as [mɛ].

The possessive pronouns are used before the oblique postposition *=nɛ* in some dative constructions (207a), the locative postposition *=baa* to mean 'one's home' (207b), and postnominally as the possessor of non-kinship (alienable) nouns (207c).

(207) a. *Ḿmɔ=nɛ   sŏm   ɛ̀b-ɛ̀=yó,   m̀bɛ́-go=wɔ-m*
           1SG.POSS=OBL horse buy-PFV.L=if, love-ADV=be-1SG
           'If he buys me a horse, I will love him.'

       b. *Wóm(ɔ)=baa   yáà-dɛ̀.*
           3SG.POSS=LOC go-IMPF
           'She is going home [Lit. to her place (cf. French *chez elle*)].'

       c. *Ìsé wómɔ   díyɛ̀-go bógò-dɛ̀.*
           dog 3SG.POSS big-ADV bark-IMPF
           'His dog barks a lot.'

In (207b), the vowel in the [mɔ] 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 (tense-aspect-negation) suffixes on the inflected verb:

(208) a. *yà-éélè-w*
       go-NEG.IMPF-2SG
       'you won't go'

    b. *ɲyɛ̀-dɛ̀-y*
       eat-IMPF-1/2PL
       'we/you all will eat'

As noted in the chart above, the 3pl suffix fuses with the various TAN suffixes, making it impossible to cite a single form of the suffix. The table in (209) summarizes these combinations:

(209) *Portmanteau 3pl forms of TAN suffixes*

AN Category	Suffix	3pl Suffix	Example
Habitual	*-dɛ̀*	*-dìŋ*	*ɔ́g-ìrɔ̀-dìŋ* 'they will heat'
Imperfective negative	*-éélè*	*-ɛ́nnɛ̀*	*ɔ́g-ìr-ɛ́nnɛ̀* 'they won't heat'
Perfective negative	*-lí*	*-nní*	*ɔ́g-ìrɔ̀-nní* 'they didn't heat'
Perfective	*-Ø*	*-ɛ̀^{n}*	*ɔ́g-ìrì-ɛ̀^{n}* 'they heated'

The same suffix listed for the perfective is also used with the auxiliaries *wɔ*, *be* and *sɛ*:

(210) a. *Díí   ɔ́g-ír-aa=bi-ɛ̀^{n}*.
       water   heat-TR-PFV=be.PST-3PL
       'They had heated water.'

    b. *Díí   ɔ́g-írɔ́-gu=sɛ-ɛ̀^{n}*.
       water   heat-TR-PPL=have-3PL
       'They are heating water.'

    c. *Díí   ɔ́g-ír-aa= wɔ-ɛ̀^{n}*.
       water   heat-TR-PFV=be-3PL
       'They heated water.'

Notice that this suffix changes the vowel of past auxiliary *be* to [i]. The only systematic aspect of the 3pl suffixes is that they always contain a nasal element. Otherwise, the vowel changes are not predictable. In the imperfective, /ɛ/ is changed to [i]; in the imperfect negative, /e/ is changed to [ɛ].

    Subject suffixes are conspicuously absent in embedded clauses, including relative clauses. In these cases, the subject is marked with an independent pronoun, shown above. For more on relative clauses, see Chapter 16.

5.4 Definites and demonstratives

5.4.1 Definite determiner *=gɛ*

Tommo So has one definite marker *=gɛ* (sometimes pronounced [gɔ], depending upon speaker, dialect, and segmental context), which cliticizes to the end of the NP

it modifies. Linearly, it is positioned between any modifiers (adjectives, numerals, or relative clauses) and the plural clitic. As discussed in section 4.2, it is underspecified for tone, receiving its pitch by interpolation between specified tonal points on either side. It likewise has no effect on the tone of the preceding words.

(211) a. *Jàndùlù^L gɛ́m=gɛ   kɛ́m bándáŋkálá=nɛ=kɔ́-ɛ̀^{n}.*
       donkey   black=DEF all courtyard=OBL=be.PROX-3PL
       'All of the black donkeys are in the courtyard.'

   b. *Bóóló=gɛ   párá-gú=sɛ.*
      thread=DEF snap-PPL=have
      'The thread is snapping.'

   c. *Àn-ná=gɛ   dàgí=ǹ.*
      man-HUM.SG=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 coexist (cf. 'the dog of the woman'). For instance:

(212) a. *yàa-ná=gɛ   [sɔ̀w   yàà]^L=gɛ*
       woman-HUM.SG=DEF [cloth woman]=DEF
       'the woman's blanket'

   b. *ɛ̀nɛ̀^{L} íí=gɛ   wó   náá^H=gɛ*
      goat child=DEF 3SG.PRO mother=DEF
      'The baby goat's mother will run.'

   c. *ìsé   wómɔ=gɛ*
      dog 3SG.POSS=DEF
      'Her dog barks a lot.'

Indefinite nouns are unmarked.

5.4.2 Deictic demonstratives

Tommo So makes a three-way deictic distinction of *nɔ̌* ([nɔ́]) 'this (by the speaker', *kó* or *wó* 'that (by the listener)', and *nǐ* ([ní]) 'that (by neither)'. All of these demonstratives can be used as determiners or pronouns. They may not co-occur with the definite article *=gɛ*. For deictic adverbs, see Chapter 10.

5.4.2.1 Demonstrative determiners

Unlike the definite determiner, all four (counting *kó* and *wó* separately) demonstrative determiners 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.

As discussed in section 4.3.2, /nɔ̌/ and /nǐ/ carry an underlying rising tone on a single mora, something which is prohibited on the surface. When used in the singular, the tone varies between an amputated rise (with some lengthening of the vowel) and simply H on a short vowel.

(213)   a.   [ìì nǐˑ] ~ [ìì ní]   'that child'

   b.   [gìnɛ̀ nɔ̌ˑ] ~ [gìnɛ̀ nɔ́]   'this house'

When followed by a toneless enclitic like the plural =*mbe*, this rising tone gets resyllabified:

(214)   a.   *nàà^L nɔ̀=mbé*   'these cows'

   b.   *ùlùm^L nɔ̀=mbé*   'these children'

   c.   *èɲjɛ̀^L nì=mbé*   'those chickens'

The H component of the rise docks on the toneless enclitic =*mbe*, simplifying the tone of the demonstrative to L.

The fact that demonstratives have only a single mora 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.) As with pronouns, there is no clear evidence to say whether the demonstratives are clitics or simply subminimal words.

Examples of the deictic demonstratives *nɔ̌* and *nǐ* in context include:

(215)   a.   *Kìdɛ̀^L   nɔ́   yábìlɛ̀-dɛ̀   g-àà.*
         thing this reply-IMPF say-PFV
         'They say this thing (pointing at the roof) will echo.'
                                             [Pre-song conversation]

   b.   *èɲjɛ̀^L   nǐ   mí=ǹ   óbó.*
         chicken that 1SG.PRO=OBJ give.IMPER
         'Give me that chicken.'

The demonstratives *kó* or *wó* refer to something close to the listener ('that [by you]').

(216) a. *Sɔ̀w^L kó/wó ɛ̀sú-go=wɔ.*
       garment that   pretty-ADV=be
       'That garment [by you] is pretty.'

   b. *Tòndòò^L kó/wó mí=ǹ   óbó.*
      water.jar that   1SG.PRO=OBJ give.IMPER
      'Give me that water jar [by you].'

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

5.4.2.2 Demonstrative pronouns

All of the demonstrative determiners may also be used as pronouns. In the case of /nɔ̌/ 'this' and /nǐ/ 'that (by neither)', the vowel lengthens when used as a demonstrative, thereby meeting the word minimum:

(217) *nɔ̀ɔ́* 'this (thing)'
      nìí 'that (thing)'

There is no lengthening in the plural, only the reassignment of H to the plural clitic. *Kó* and *wó* also do not lengthen. Note that while *kó* and *wó* can be used interchangeably as determiners, they diverge as pronouns. In this context, their probable origins as inanimate and animate become clear. For instance, while one can say either *àn-nà̀^{L} kó* or *àn-nà̀^{L} wó* to mean 'that man', only *wó* can be used as a pronoun referring to people. Similarly, while one can say either *sɔ̀w^L kó* or *sɔ̀w^L wó* to mean 'that clothing', only *kó* can be used a pronoun referring back to it. For something abstract (an idea or a topic of conversation), either can be used.

    The following are examples of demonstrative pronouns in running speech:

(218) a. *Nɔ̀ɔ́   íí   ǹdɛ́mmɔ=gɛ   mìyè^L=gɛ=lɛ=má=wa.*
       this child LOG.SG.POSS=DEF voice=DEF=NEG.COP=or?=QUOT
       '[She asked] is this not my child's voice?'   [23.5:32]

   b. *Nì=mbé dáà=lé... dáà=lè gɛ́-dìɲ.*
      that=PL *daa le*   daa le   say-IMPF.3PL
      'Those [people are] *daa le*... they say *daa le*.'   [23.2:30]

All textual uses of *kó* and *wó* can be considered discourse definite and will be discussed in the next subsection.

5.4.3 Discourse definites

As I alluded to above, *kó* and *wó* have a second important use as discourse definites (DD), both as determiners and 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'.

(219) a. *ú bàbè^L kó/wó* 'that same uncle of yours'
       b. *gàndà^L kó/wó* 'that same place'

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

(220) a. *Kó   èlèlú=be.*
           that.DD delicious=be.PST
           'That (very thing) was delicious.'

       b. *Jàmáá kέm bòy^L, kìlèmɔ́ bày^L kέm kó   bàá-dim.*
           public all drum festival day all   that.DD beat-INF
           'A public drum, they would beat that on the festival days.'
                                                    [Animals and the well]

Occasionally, *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:

(221) a. *Yǎà-nà^L kó=ǹ   kò^L bǎy kɔ̀nɔ́*
           female-HUM.SG that.DD=OBJ that.DD day there.DD
           àw-ì-ὲ^n=wa.
           catch-PFV.L-3PL=QUOT
           'It is said they caught that woman there that day.'   [23.5:37]

       b. *Kó   wàgàdù^L kέm púlɔ̀-m   yὲlὲ-nní.*
           that.DD time   all Fulbe-HUM.PL come-NEG.PFV.3PL
           'At that time, no Fulbe had come.'   [23.2:116]

Both tonal patterns are illustrated by (221a); (221b) shows only the possessive tone pattern. For more on demonstrative adverbs, see Chapter 10.

5.4.4 Presentatives ('here's…')

In the Tédié dialect of Tommo So, presentatives are derived from the demonstrative pronoun *nɔ́ɔ́* with the copula =*ǹ*, literally translating to something like 'X is this'.

(222) a. *Díí nɔ́ɔ́=ɲ̀.*
   water this=COP
   'Here's (some) water.'

  b. *Mí náá^H nɔ́ɔ́=ɲ̀.*
   1SG.PRO 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:

(223) a. *Yɛ̀lɛ́-gú nɔ́ɔ́=ɲ̀.*
   come-PPL this=COP
   'Here he comes.'

  b. *Gɔ́ɔ́ gɔ̀ɔ̀-gú nɔ́ɔ́=ɲ̀.*
   dance dance-PPL this=COP
   'There he dances.'

In this usage, *nɔ́ɔ́* can also come preverbally, interchangeable with *kó*, presumably in subject position. When this happens, the imperfective form of the verb is used:

(224) *Nɔ́ɔ́/kó yɛ́lɛ̀-dɛ̀.*
   this/this.DD come-IMPF
   'Here he comes.'

  In the Sarédina dialect of Tommo So, there is a special presentative form *ŋ̀gú*, cognate with Jamsay *nùkɔ̌y* and Ben Tey *ŋ́gòy*. Used phrase-finally, it takes the form [ŋ̀gɔ́ɔ̀], most likely a blend of /ŋ̀gú=wɔ/.

(225) a. *Díí ŋ̀gɔ́ɔ̀.*
   water here's
   'Here's (some) water.'

  b. *Yɛ̀lɛ́-gú ŋ̀gɔ́ɔ̀.*
   come-PPL here's
   'Here he comes.'

Pre-verbally, it retains the form *ŋ̀gú*, though it cannot be used with all VPs:

(226) a. *ŋ̀gú   yèlê-gú=sɛ.*
          here's come-PPL=have
          'Here he comes.'

      -but-

      b. **ŋ̀gú   gɔ̀ɔ̀-gú=sɛ.*
          here's dance-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 answer this question.

5.5 Adjectives

Simple adjectives behave much like nouns in Tommo So. Unlike some Dogon languages (e.g. Jamsay or Najamba), 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:

(227) a. *yàà-nà^L*   *ɛ̀sú=gɛ*
          woman-HUM.SG pretty=DEF
          'the pretty woman'

      b. *jàndùlù^L gɛ́m   ḿmɔ=mbe*
          donkey   black 1SG.POSS=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 -*go* when used as a predicate before quasi-verb =*wɔ* (and its derivatives); see section 13.2.2.1 for the conjugation of this quasi-verb. For instance:

(228) a. *Mòòmíyó=gɛ   ɔ́g-go=wɔ.*
          scorpion=DEF fast-ADV=be
          'The scorpion is fast.'

b. *Yàa-ná=gɛ   ɛ̀sú-go=wɔ.*
    female-HUM.SG=DEF pretty-ADV=be
    'The woman is pretty.'

c. *Gìnɛ́=gɛ   nɛ́mɛ́-go=be.*
    house=DEF dirty-ADV=be.PST
    'The house was dirty.'

I gloss *-go* as an adverbial suffix, since it is the suffix used to derive adverbs from adjectives, as in:

(229) a. *Ìsé=gɛ   díyɛ̀-go bógò-dè.*
          dog=DEF big-ADV bark-IMPF
          'The dog barks a lot.'

b. *tów pàdá-lú-go   yímɛ́*
    seed leave-NEG.PFV-ADV die
    'die without leaving descendants'

Often these suffixed adjectival forms alternate with the unsuffixed adjectival stem plus the copula *=ǹ* (discussed further in section 13.2.1):

(230) a. *nɛ́mɛ́-go=wɔ ~ nɛ́mɛ́=ǹ*   'is dirty'
     b. *ságárá-go=wɔ ~ ságárá=ǹ* 'is young'
     c. *dàgú-go=wɔ ~ dàgí=ǹ*   'is small'

My consultants tell me that there is a slightly different nuance when using the suffix *-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 the dialect he studied, [ge]): "There is also the postposition *ge*, 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. Nonetheless, it is true that the suffix is not used in the comparative in Tommo So either; see Chapter 14 for further discussion.

    Similarly, the negative alternates between the suffixed form plus *òndú* (the suppletive negative of *=wɔ*), a negative suffix *-lɛ́*, and the negative copular clitic *=lɛ*. With the negative suffix, the tone of the adjective becomes L while with the clitic, it retains its lexical tone.

(231) a. *póó-go òndú ~ pòò-lɛ́ ~ póó=lɛ*   'is not fat'
       b. *ùsú-go òndú ~ ùsù-lɛ́ ~ ùsú=lɛ*   'is not slender'
       c. *dàgú-go òndú ~ dàgù-lɛ́ ~ dàgú=lɛ* 'is not small'

5.5.2 Unsuffixed adjectives

The unsuffixed adjectives are all underlyingly disyllabic with an optional epenthetic [u] at the end. To form a predicative construction, *=wɔ* is placed directly after the adjective. Tonally, these adjectives are all {H} when used as modifiers and {LH} when predicative:

(232) a. *Díí=gɛ   yègèlú=wɔ.* (cf. *dìì^L yégélu* 'cold water')
           water=DEF cold=be
           'The water is cold.'

       b. *Nèmbúru àmăm=wɔ.* (cf. *nèmbùrù^L ámám* 'sour lemon')
           lemon   sour=be
           'Lemons are sour.'

The negative is formed with the negative quasi-verb *sɛ̀-lɛ́* 'does not have':

(233) a. *Díí=gɛ   yègèlú sɛ̀-lɛ́.*
           water=DEF cold   have-NEG
           'The water isn't cold.'

       b. *Nèmbúru àmăm sɛ̀-lɛ́.*
           lemon   sour   have-NEG
           'Lemons aren't sour.'

This suggests that these adjectives may actually be nominal in form, and that they create a compound with the head noun when acting as a modifier. It is possible that the all {H} overlay as a modifier is related to the {H} overlay on verb stems when they form gerundive compounds (see section 6.2.3).

(234) lists all such modifiers, shown with modifier tone:

(234) a. *kálálu*   'cold'
       b. *yégélu*   'cool; slow'
       c. *ɛ́lɛ́lu*   '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. *ɛ́dɛ́du* 'bland'
i. *sáŋám* 'foul (smelling)'
j. *kɛ́ŋɛ́m* 'smelling of urine'
k. *yágáru* 'rough'
l. *túgóm* 'heavy; important'

(234c–j) all pertain to tastes or smells and all exhibit what appears to be historical final -VC reduplication; this lends further support to the analysis in which the final [u] is epenthesized. A possible derivation would be:

(235)	Root	Reduplicated	Surface form
a.	*pél*	*pél-él*	*pél-él-u*
b.	*sáŋ*	*sáŋ-áŋ*	*sáŋ-ám*

In (235b), we see the usual change of final /ŋ/ to [m], resulting in a base-reduplicant mismatch; see section 3.4.1.3 for a discussion of final /ŋ/. Final -VC reduplication is not seen elsewhere in the language, and (234k–i) present exceptions to this rule. Still, these forms confirm to the phonological (C)VCVC form of unsuffixed adjectives.

While typically unsuffixed, these adjectives may also 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-go=wɔ* 'it is delicious', with the {LH} form usually used in predicative constructions. The suffix is also commonly used in the past, though here too it is optional: *èlèlú(-go)=be* 'it was delicious'.

5.5.3 Distributive reduplication

Adjectival stems can be reduplicated to create a distributive sense. The form of reduplication is full stem, with the second copy undergoing tone lowering (x~x̀^{L}). For example:

(236) a. *Gìnɛ̀^{L} èsú~èsù^L néé-go=sɛ-m.*
house pretty~pretty two-ADV=have-1SG
'I have two very pretty houses.'

b. *Ànà-m^L gàbú~gàbù^L néé-go   y-àà=bé-m.*
male-HUM.PL tall~tall   two-ADV see-PFV=be.PST-1SG
'I saw two very tall men.'

c. *Jàà^L ɛ́lɛ́lu~ɛ̀lɛ̀lù^L néé-go ɲ̀y-ɛ̀-m.*
   meal sweet~sweet two-ADV eat-PFV.L-1SG
   'I ate two good meals.'

In each case, the meaning of the adjectives is distributed over the number of objects or people indicated; a numeral is obligatory in this construction. As the examples above illustrate, this distributive reduplication is possible with both suffixed (236a–b) and unsuffixed (236c) adjectives.

5.6 Verbs as modifiers

In many cases where English or French would use an adjective to describe something, Tommo So speakers use participles or intransitive verbs. As such, the number of morphological adjectives is rather small. Often these verbs are participles in the perfective form ending in *-áá-dɛ̀*, which looks essentially like the perfective suffixed with the imperfective (see Chapter 12 for further discussion). As modifiers, these could be viewed as relative clauses, since like relative clauses, these participial modifiers induce tone lowering.

(237) a. *Jùgù^L gàl-áá-dɛ̀ Bàmàkó yà-à=bé-m.*
       week pass-PFV-IMPF.REL Bamako go-PFV=be.PST-1SG
       'Last week I went to Bamako.'

   b. *Yàà-nà^L píy^n-áá^n-dɛ̀ y-àà=bé-m.*
      female-HUM.SG age-PFV-IMPF.REL see.PFV=be.PST-1SG
      'I saw an elderly woman.'

The 3sg imperfective suffix *-dɛ* is used when the modifying verb is intransitive, with the modified noun as the logical subject. If the modifying verb is transitive, on the other hand, the suffix *-dim* is used, homophonous with the infinitive. This is probably interpreted as a generic 3pl form, but since the verb is being used nominally as a modifier, it takes the form *-dim* instead of *-diɲ*. To illustrate this, compare the following:

(238) a. *Pédu sɛ́mɛ̀-dìɲ.*
       sheep slaughter-IMPF.3PL
       'They will slaughter a sheep.'

   b. *Pèdù^L sɛ́m-áá-dìm y-àà=bé-m.*
      sheep slaughter-PFV-IMPF.3PL.REL see-PFV=be.PST-1SG
      'I saw a slaughtered sheep.'

As predicates, the perfective form of the intransitive verb is used:

(239) a. *Màŋgóró=gɛ íl-aa=wɔ.*
mango=DEF ripen-PFV=be
'The mango is ripe [Lit. has ripened].'

  b. *Pédu=gɛ dɔŋ-áa=wɔ.*
sheep=DEF weaken-PFV=be
'The sheep is weak [Lit. has weakened].'

For further discussion of participles, see Chapter 16 on relativization. For the linear order of participles in the NP, see section 7.2.5.

5.7 Numerals

5.7.1 Cardinal numbers

While cardinal numbers may modify nouns, only the numeral *túmɔ́* 'one' induces tone lowering.

5.7.1.1 'One', 'same (one)'

The number 'one' has three forms: *tíí* (used when counting), *túru* (used in larger numbers like 11 or 51), and finally *túmɔ́*, which functions as an adjective.

  Túru is relatively rare. It is not used to modify nouns as the other cardinal numbers do; the form *túmɔ́* fulfills this need. Rather, it appears combined with other numerals in numbers such as 'eleven', 'twenty-one', etc.

(240) a. *pélu-go túru-go sígɛ́*
'eleven [Lit. one greater than ten]'

  b. *pɛ̀ɛ̀-néé túru-go sígɛ́*
'twenty-one [Lit. one greater than twenty]'

In these constructions, *túru* displays the *-go* suffix, commonly found on numerals. It also appears in some compounds like *bɛ̀-tùrù^L pɔ̀nnú* '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 *túru* more productively (Heath 2008).

  Túmɔ́, on the other hand, behaves exactly as an adjective, inducing tone lowering on the noun it modifies. It can mean simply 'one' or also a more emphatic 'sole, single':

(241) a. *gìnὲ^L túmɔ́* 'one house'

b. *ànà-gùdù^L túmɔ́* 'one year'

c. *Dὲlὲ^L*   *túmɔ́ yé=sὲ-m^L*.
older.brother one   EXIST=have-1SG
'I have one single older brother.'

Several words are derived from *túmɔ́*. One is the reciprocal pronoun *túmɔ̀m*, discussed in section 20.2. Another is the adverb *túmɔ́-go* 'together (as one)':

(242) *Ú=le*   *mí=le*   *émmé*   *túmɔ́-go*
2SG.PRO=ASSOC 1SG.PRO=ASSOC 1PL.PRO one-ADV

gɔ́ɔ́   *gɔ́ɔ̀-dὲ-y*.
dance dance-IMPF-1PL

'You and me, we dance together.'

Finally, *túmɔ́* 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:

(243) 2   *néé*   (some speakers say [néy])
3   *tààndú*
4   *nǎy*
5   *ǹnɔ́*
6   *kúlóy*
7   *sɔ́y*
8   *gágìrà*
9   *túwwɔ́*
10 *pɛ́lu*

When used to modify nouns, these numerals usually (though not obligatorily) take the suffix *-go* seen with the adjectives above:

(244) a. *Màŋgóró néé(-go)*   *mí=ǹ*   *ób-aa=be*.
mango   two(-ADV) 1SG.PRO=OBJ give-PFV=be.PST
'He gave me two mangoes.'

b. *Jàndúlu tàràndú(-go) bándáŋkálá=nɛ=kɔ́-ὲⁿ*.
donkey three(-ADV) courtyard=OBL=be.PROX-3PL
'Three donkeys are in the courtyard.'

There is no tonal interaction between numerals and the preceding noun.

In constructions with 'have', numerals '2' through '10' obligatorily take the suffix *-go*:

(245) *Jɛ̀ŋɛ̀ᴸ*   *úlûm*   *néé-go=sɛ-m.*
         great-grandparent children two-ADV=have-1SG
         'I have two great-grandchildren.'

After a numeral suffixed with *-go*, the existential particle *yé=* is not possible; see section 13.3. In this context, it is not possible to say **néé=sɛ-m* or **néé yé=sɛ-m*. As with the suffixed adjectives above, it is possible that these numerals are modifying the verb 'have' and not the NP 'great-grandchildren', and as such, an adverbial suffix is necessary.

5.7.1.3 Decimal multiples (10, 20,…) and their combinations (22, 67, …)

The decimal numbers are listed in (260).

(246) 20 *pɛ̀ɛ̀-néé*
         30 *pɛ́-tàandù / pɛ́-ràandù*
         40 *pɛ́-này*
         50 *pɛ́-ǹnɔ̀*
         60 *pɛ̀lù kúlóy*
         70 *pɛ̀-sɔ́y*
         80 *pɛ̀-gágìrà*
         90 *pɛ̀-túwwɔ́*

The decimal multiple is formed with a derivative of 'ten' (usually *pɛ-*) followed by the multiplier. As we can see, there is some variation in the form of this derivative, with one instance of long *pɛɛ-* and one of full *pɛlu*. The pronunciation of 'thirty' also varies between [pɛ́tàandù] and [pɛ́ràandù].

The tonology of the decimal numbers looks like 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. This is the only known case of tonal polarity in the language.

In addition to the forms listed above, 'eighty' and 'ninety' also have archaic suppletive terms *kɛ̀ɛ̀-súm* and *kɛ̀ɛ̀-súm=le kɛ̀ɛ̀lɛ̀ pɛ́lu*, respectively. These are based on an older base-8 number system with *kɛ̀ɛ̀-* derived from *kɛ̀ɛ̀lɛ́* 'cowry, money'. These days, *súm* has been re-interpreted as 'hundred', given the current base 10 system.

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':

(247)   a.   *pὲὲ-néé néé(-go) sígé*   'twenty-two'
        b.   *pèlù kúlóy ǹnɔ̀(-go) sígé*   'sixty-five'

The addition of these cardinal numbers does not affect the tone of the decimal multiple.

Interestingly, when a large composite numeral like this is used in 'have' constructions, *-go* is optional:

(248)   *Gìnɛ́   pὲὲ-néé gágìrà-go   sígɛ́(-go)=sɛ-m.*
        house ten-two eight-ADV more(-Adv)=have-1SG
        'I have 28 houses.'

Compare this to (245) above, where *-go* is obligatory.

5.7.1.4 Large numerals (100, 1000, …) 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); while this is visible with the numeral '80', evidence for the system has been lost at the cardinal level of '8'.

'100' can be expressed in the old base-8 system by '80 + 20' *kὲὲ-súm=le pὲὲ-néé*. Recently, this has been replaced by *témèndrè* or *témèndè*, a Fulfulde loanword. It is this word *témèndè* that is used when counting up the hundreds, e.g. *témèndè néé* '200'. The older system can also be used, with *súm* standing in for '100'. This yields forms like *súm néé* for '200'.

'1000' is expressed by *kὲὲlὲ-mùŋjó*, which according Plungian (1995), used to mean '800'.

'10,000' and beyond are expressed by *mùŋjó* followed by the number of thousands (10, 12, etc.) with L-tone, e.g. *mùŋjó pèlù^L* '10,000'.

'Million' and 'billion' are French loans, roughly *mìlìyɔ́^{n}* and *mìlìyár* 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 the associative clitic *=le*. For instance:

(249)   a.   *témèndè=le   pέ-ǹnɔ̀ nǎy-go   sígɛ́*
             hundred=ASSOC ten-five four-ADV more
             '154'

b. *kɛ̀ɛ̀lɛ̀-mùŋjó=le   tɛ́mɛ̀ndɛ̀ nǎy pɛ̀ɛ̀-néé gágìrà sígɛ́*
thousand=ASSOC hundred four ten-two eight   more
'1,428'

In (249a), *=le* comes after *tɛ́mɛ̀ndɛ̀* '100', the largest number involved, whereas in (249b), it follows *kɛ̀ɛ̀lɛ̀-mùŋjó* '1000', and there is no repetition of the associative postposition from there on out. The pattern is that if these large numerals are in turn modified by another cardinal number (as in 200 instead of 100, or 3000 instead of 1000), the associative clitic *=le* is not used. It can then be used after the next largest non-composite numeral. For example:

(250) a. *mùŋjó tààndú pɛ́-nnɔ̀*   **mùŋjó tàándú=le*
1000   3   10-5
'3,050'

b. *mùŋjú   tàándú tɛ́mɛ̀ndrɛ̀=le   nǎy*
thousand three   hundred=ASSOC four
'3,104'

In (250b), we see that the associative particle is used after '100' rather than '3000', since the larger number is complex.

All such large numerals can be used as modifiers, with or without *-go*, and do not induce tone lowering.

(251) *Jàndúlu tɛ́mɛ̀ndɛ̀=le pɛ́-nnɔ̀ sígɛ́(-go) bándáŋkálá=nɛ kɔ́-ɛ̀ⁿ.*
donkey 100=ASSOC 10-5   more   courtyard=OBL be.PROX-3PL
'There are 150 donkeys in the courtyard.'

The numeral may also directly precede the verb.

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

(252) a. '5 francs'   *búúdù*
b. '10 francs'   *búúdù néé*
c. '25 francs'   *bù-ǹnɔ́*
d. '50 francs'   *búúdù pɛ́lu*

e.	'100 francs'	*búúdù pὲὲ-néé*
f.	'200 francs'	*búúdù pέ-này*
g.	'250 francs'	*búúdù pέ-ǹnɔ̀*
h.	'500 francs'	*(búúdù) témὲndrὲ*
i.	'1000 francs'	*témὲndrὲ néé*

There is no tonal interaction between *búúdù* and the multiple, except for the irregular form for '25 francs' in (252c).

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 with no other morphology. Each copy of the stem retains its lexical tone. The form *túmɔ́~túmɔ́* 'one-by-one' can also mean 'each' or 'every'.

(253) a. *gìnέ   túmɔ́~túmɔ́ kέm*
    house one~one   all
    'each house'

b. *Bé   kέm màŋgóró néé~néé óbó.*
    3PL.PRO all   mango   two~two give.IMPER
    'Give them two mangoes each.'

Unlike its unreduplicated counterpart, *túmɔ́~túmɔ́* does not force tone lowering on the preceding noun.

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:

(254) a. *Dèlè^L   túmɔ́ dògò sὲ-lέ-m.*
    older.brother one   but   have-NEG-1SG
    'I have but one older brother.'

b. *Màŋgóró néé-go   dògò dɔ̀nɔ̀-lí-m.*
    mango   two-ADV but   sell-NEG.PFV-1SG
    'I sold but two mangoes.'

For other uses of *dògò*, see section 21.3.2.

5.7.2 Ordinal adjectives

Ordinals, unlike cardinal numerals (with the exception of *túmɔ́* 'one'), are true adjectives, and thus induce tone lowering on the preceding noun. For a discussion of the interrogative ordinal *àŋgì-yém* 'how many-eth?', see Chapter 15.

5.7.2.1 Ordinal formation (*-yém* suffix)

Ordinal adjectives are formed by adding the H-toned suffix *-yém* to the numeral, which then undergoes tone lowering. The examples in (255) illustrate the ordinal numerals 2–10. 'First' is irregular and is presented in the next subsection.

(255) a. *nèy-yém*   'second'
      b. *tàǎndì-yém*   'third'
      c. *nǎy-yém*   'fourth'
      d. *ǹnɔ̀y-yém / ǹnù-yém* 'fifth'
      e. *kùlòy-yém*   'sixth'
      f. *sɔ̀y-yém*   'seventh'
      g. *gàgìrà-yém*   'eighth'
      h. *tùwwɔ̀-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' (255d).

The suffix *-yém* can be added to large numbers as well, with the whole composite numeral dropping its tone:

(256) a. *pèè-nèy-yém*   'twentieth'
      b. *pèlù-gò nèè-gò sìgè-yém*   'twelfth'
      c. *tèmèndrè-yém*   'hundredth'
      d. *tèmèndrè=lè pèè-nèè-yém*   'hundred and twentieth'

The fact that it can dominate a whole phrase including a postposition in (256d) suggests that it could be a clitic, though it would be the only enclitic with H tone that interacts tonally with its host.

5.7.2.2 'First' and 'last'

'First' and 'last' are irregular. The word for 'first' is *kúyɔ́* (or alternate pronunciation [kúyɛ́]), which induces tone lowering on the modified noun:

(257) a. *ànà^L kúyɔ́* 'first rains'
      b. *ìyὲ^L kúyɔ́* 'January [Lit. first month]'

kúyɔ́ can be used adverbially with suffix *-go* to mean 'at first'. An alternate adverb is *tɔ̀lú=nɛ* 'in the beginning'.

'Last' is expressed with *dùmɔ̀-ndɔ́* or *dùmɔ́*, both of which can also be nouns meaning 'end' or 'last place'.

(258) a. *ànù^L sày^L dùmɔ̀-ndɔ́* 'pinky toe [Lit. last toe]'

   b. *nùyɔ̀^L dùmɔ́*   'last song'

These modifiers derive from the verbs *dùmɔ́* 'be finished' and *dùmɔ́-ndɔ́* 'finish (transitive)', derived from the former with the factitive suffix.

5.7.3 Fractions and portions

The 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': *kàb-ìlú* (from *káb-ílɛ́* 'to divide or share') and *tàŋà^L túmɔ́* 'one side/part'. For things that are generally divided into piles (e.g. peanuts), the word for 'pile', *dúm*, is then used.

Alternatively, the quantifier 'some' or 'several' *gàmbáá* can be used. This quantifier behaves as an adjective and induces tone lowering.

(259) *ɛ̀nɛ̀^L gàmbáá=mbe ḿmɔ=mbe.*
   goat some=PL   1SG.POSS=COP.PL
   'Some [but not all] of these goats are mine.'

The one exact fraction, 'half', has been borrowed from Fulfulde. This term is *pɛ́jɛ̀* (<*feccere*). For instance:

(260) a. *Jáá=gɛ   pɛ́jɛ̀ kán-ee mí=ǹ   óbó.*
       meal=DEF half do-NF 1SG.PRO=OBJ give.IMPER
       'Give me half of the meal [Lit. halve the meal and give it to me]'

   b. *gìnɛ́   úwɔ=nɛ   ǹdɛ̀-m^L   wɔ́=gɛ̀=mbe*
       house 2SG.POSS=OBL person-HUM.PL be.REL=DEF=PL

       pɛ́cɛ̀   kɛ́m   áw-ee   dɔ̀~dɔ́nɔ̀-dìɲ.
       half   all   catch-NF   RED~sell-IMPF.3PL
       'they would catch half of the people who were in your
       house and <u>sell</u> them'   [23.2:98]

Other fractions can be expressed by adding a numeral after 'half', as in *pɛ́jɛ̀ tààndú-go* '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 entirely of nominal roots (e.g. English "carrot cake"), and synthetic compounds, 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 $[\grave{x}^L \; x]$ and $[x \; \grave{x}^L]$, wherein the grave accent and superscripted L indicate 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.

Most compounds are right-headed, cross-linguistically the most common kind of compound (falsely claimed to be universal by Williams 1981), but a small number of potentially left-headed compounds are also attested.

6.1.1 Canonical compound [$\grave{x}^L$ x]

The most common type of root compound in Tommo So shows tone lowering on all non-final elements, with only the last retaining its lexical tone. Because these are the most common, I call them "canonical compounds". The head noun (i.e. the logical referent) is most often on the right (section 6.1.1.1), though it may be on the left as well (section 6.1.1.2) or even external and null (section 6.1.1.3).

6.1.1.1 Right-headed canonical compounds
When the head noun is on the right, the first element in the compound generally describes this noun in some way (type, ethnicity, etc.). For example:

(261) a. *nèm^L táá*
           salt   door
           'slab of salt'

       b. *màgà^L èmmɛ́*
           Mecca sorghum
           'sorghum type'

The compound in (261a) refers to a type of door or slab, namely, one made of salt (the initial element). In (261b), the compound refers to a type of sorghum, namely, one associated in some way with Mecca because it came from the east.

The two stems in a compound may also stand in a whole-part relationship, with the head noun referring to some part of the object denoted by the initial noun:

(262) a. *kùùlù^L núyɔ́*
           waterlily leaf
           'waterlily leaf'

       b. *màlfà^L tìbè-ý*
           gun   stone-DIM
           'small stone used as a bullet'

In (262a), the head noun *núyɔ́* 'leaf' is a part of the initial noun *kùùlú* 'water lily'. Similarly, in (262b), the head noun *tìbè-ý* 'pebble' is characterized by the initial noun as belonging in some way to a gun.

6.1.1.2 Left-headed canonical compounds
Though the majority of compounds are right-headed, we find a few examples of what seem to be left-headed compounds in the language:

(263) a. *gòrò^L bèèré*
           hat   beret
           'beret'

       b. *bòmbòm^L yòògú*
           candy   sap
           'chewing gum'

       c. *pɔ̀nnù^L àn-déŋgé*
           pants   pant.kind
           'short baggy pants'

Here, the right-hand stem appears to elaborate on the left-hand stem, which could conceivably be the head ("What kind of pants? *An-denge* pants.") Such examples seem particularly abundant in the semantic domains of food and clothing, but 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 *jùlɔ̀m^L góró* 'wide-brimmed straw hat'.

6.1.1.3 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. In these compounds, neither of the overt stems is the semantic head. One way to account for these data would be to posit a phonologically empty null head that carries the attested semantics, or we could simply lexicalize these compounds with a semantics that is not the sum of its parts.

In these cases, the overall meaning of the compound refers to the state of being the person or thing indicated by the overt stems. For example:

(264)   a.   *gùlɔ̀nnɔ̀^L*   *náá*
            quarantine mother
            'state of being in post-partum quarantine'

       b.   *hɔ̀ɔ̀làl^L* *bàŋáá*
            trust   owner
            'trustworthiness'

Neither example refers specifically to the person indicated by the overt stems; (264a) does not refer to the mother herself, and (264b) does not refer to a person who is trustworthy. Rather, both refer abstractly to the state of being said persons. Switching the tone from canonical [x̀^L x] to pseudo-genitive [x x̀^L] gives the endocentric (internally-headed) reading:

(265)   a.   *gúlɔ́nnɔ́*   *nàà^L*
            quarantine mother
            'a mother in post-partum quarantine'

       b.   *hɔ́ɔ̀làl* *bàŋàà^L*
            trust   owner
            'a trustworthy person'

Now the same sequence of stems with a different tone pattern creates an endocentric compound. In (265a), 'mother' is the head; in (265b), 'owner'. Comparing (264) with (265), we can posit that the examples in (264) have an abstract null head meaning roughly 'state'.

6.1.1.4 Complex canonical compounds

Canonical compounds may be more complex than two stems; they may have a structure in which the head noun on the right is modified not by a single stem but by another canonical compound. Consider the following:

(266) a. *màlbá* + *dúmmɔ́* → *màlbà^L dúmmɔ́*
        gun   butt   gun   butt
        'rifle butt'

     b. *màlbà^L dúmmɔ́* + *pógúru* → *màlbà^L dùmmɔ̀^{L} pógúru*
        gun   butt   belt   gun   butt   belt
        'leather surrounding the butt-end of a rifle'

(266a) shows a regular canonical compound made up of two stems, 'gun' and 'butt'. In (266b), this whole compound stands in as the modifier of 'belt', the head of the larger compound. Though the largest CCs in the lexical corpus are made up of three stems, it seems plausible to me that this may be in fact be a case of recursive syntactic compounding, where we could add another noun stem like 'house' to indicate the place where leather surrounding the butt-end of a rifle is stored, etc. More data are needed to verify this hypothesis.

    The complex non-head portion may also be a N+Adj construction, as in:

(267) *ànà-m^L*   *pɛ̀ɛ̂-m^L*   *tànnàá*
      male-HUM.PL old-HUM.PL staff
      'kind of staff used by old men'   (cf. *ànà-m^L pɛ̀ɛ̂-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 in its distribution, especially 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*).

6.1.1.5 Compounds with *íí* 'child' and *náá* 'mother'

There are many canonical compounds with *íí* 'child' as the final element. The meaning of these compounds can be transparent, meaning the young or child of the initial element:

(268) a. *ɛ̀njɛ̀^{L}*   *íí*   (pl. *ɛ̀njɛ̀^{L} úlûm*)
        chicken child
        'chick'

     b. *kɔ̀rɔ̀bɔ̀rɔ̀^{L} íí*   (pl. *kɔ̀rɔ̀bɔ̀rɔ̀^{L} úlûm*)
        Songhay child
        'young Songhay'

     c. *nàà^L íí*   (pl. *nàà úlûm*)
        cow   child
        'calf'

It is from this function that the diminutive is derived (see section 5.1.6), but the examples in (268) are distinguished from being diminutives given that the plural takes the suppletive form *úlûm* 'children' rather than simply adding the plural clitic *=mbe* like we saw in (180).

When compounded with plant names, 'child' takes the meaning of 'fruit' or 'seed':

(269) a. *tìmɛ̀*[L] *íí*
           tree   child
           'fruit (general)'

       b. *sìm*[L]   *íí*
           doum.palm child
           'doum palm fruit'

       c. *ɛ̀lɛ̀-kɛ̀lɛ̀*[L] *íí*
           peanut   child
           'peanut [nut]'

       d. *gàw*[L] *íí*
           onion child
           'onion bulb'

Many fruit names, such as *màŋgóró* 'mango' and *kàmbé* 'zaban', already imply the fruit, so *íí* is optional in these cases.

Sometimes, compounds with 'child' can be used to refer to a smaller part of a whole:

(270) a. *dàmmà*[L] *íí*
           hoe   child
           'blade of a hoe'

       b. *kèŋɟìgè*[L] *íí*
           pick.ax   child
           'pick-ax blade'

       c. *sèmbèy*[L]   *íí*
           cotton.spinning.stick child
           'small earthenware whorl that turns on cotton-spinning stick'

       d. *tàà*[L] *íí*
           door 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:

(271)   a.   *kúy / kù-íí* 'pestle'
             kù-náá   'mortar'

        b.   *nùmí*   'small handheld grindstone'
             nùm^L náá 'wide flat grindstone'

In both cases, the *íí* has fused with the stem, to the extent that 'mortar', in one token, appears as *kùy^L náá*, with mother added after child, in the compound 'mortar carver' *kùy^L nàà^L náb-ínέ*.

    A final interesting case of a compound with *íí* includes the possessive clitic *=mɔ*:

(272)   *bàà^L=mɔ̀^{L} íí*
        father=POSS child
        'legitimate child [Lit. child of a father]'

Because possession is only marked tonally, and tone is disrupted in a compound, it appears that the possessive clitic *=mɔ* can be added to make this relationship clear.

6.1.1.6 Compounds with *àná* 'man' or *yàá* 'woman'

Noun stems *àná* 'man' and *yàá* 'woman' take on the adjectival meaning of 'male' and 'female' when used compound-finally without their human morphology. They retain their lexical tone, and the initial noun is tone lowered.

(273)   a.   *èɲjὲ^L àná*
             chicken male
             'rooster'

        b.   *ὲnὲ^L yàá*
             goat female
             'nanny-goat'

        c.   *pèdù^L àná*
             sheep male
             'ram'

Once again, these compounds appear left-headed, since, for example, in (273c), the compound refers to a kind of sheep rather than a kind of man.

Whereas animal compounds with 'child' take the suppletive plural form *úlûm* generally reserved for humans, 'male' and 'female' for animals do not take the human suffixes seen in section 5.1.1.

(274) a. *Ànà-**m**^{L}*   *mí*   *y-έ=gε=mbe*   *yé=yà-ì-ὲ^{nL}*.
            male-HUM.PL 1SG.PRO see-PFV.REL=DEF=PL EXIST=go-PFV.L-3PL
            'The men that I saw left.'

     b. *Nàà^L* *ànà^L* *mí*   *y-έ=gὲ=mbe*   *yé=yà-ì-ὲ^{nL}*.
            cow   male 1SG.PRO see-PFV.REL=DEF=PL EXIST=go-PFV.L-3PL
            'The bulls that I saw left.'

When used with plant names, *àná* means 'sterile', as in *yùù^L àná* 'sterile millet stalk', since it does not bear fruit.

     'Male' and 'female' can be used figuratively as well. For instance, *àná* 'male' typically refers to a larger version of whatever noun it follows:

(275) a. *yéŋélé*   *yèŋèlè^L àná*
            'housefly'   'blowfly'

     b. *mínnέ gìrù^L* *gìrù^L àná*
            earth dike   dike male
            'dike-ridge' 'large dike-ridge fortified with logs'

     c. *wélu*   *wèlù^L àná*
            'nerve' 'tendon'

Yàá 'female' used figuratively is more abstract. Consider the following three examples:

(276) a. *bòy^L*   *yàá*
            tom.tom female
            'small cylindrical tom-tom'

     b. *sɔ̀w^L* *yàá*
            cloth female
            'blanket'

     c. *sèw^L* *yàá*
            ax   female
            'any ax whose handle is fitted into a sleeve on the back of the blade'

(276a) shows the female diminutive counterpart of the superlative male usage seen above *bòy^L àná*, a larger drum. (276b), however, does not refer to a smaller cloth than simply *sɔ́w*. Rather, my consultants explain to me that a blanket is called *sɔ̀w^L*

yàá because you marry a woman to keep you warm at night, as does a blanket. Finally, (276c) *sèw^L yàá* may allude to female anatomy, much like the male and female ends of certain electrical cables in English.

The terms *àná* and *yàá* are also used compound-initially in place of the suffixed forms of 'man' and 'woman'. For instance:

(277) a. *ànà^L pàndé* (pl. *ànà^L pàndé-m*)   ⋆*àn-nà^L pàndé*
           'widower'   (cf. *yàà^L pàndé* 'widow')

      b. *yàà^L dénnu*   ⋆*yàà-nà^L dénnu*
           'courtship [Lit. seeking a woman]'

      c. *yàà^L sáá-na* (pl. *yàà^L sáá-m*)   ⋆*yàà-nà^L sáá-na*
           'oldest woman in the village'

      d. *ànà^L bìrú*   ⋆*àn-nà^L bìrú*
           'man's engagement' (cf. *yàà^L bìrú* 'woman's engagement')

We may be tempted to say that these forms are unsuffixed due to the fact that inflectional morphology is not allowed in compounds, but example (267) above shows that on rare occasions, such morphology can indeed surface inside of a compound.

6.1.1.7 Compounds with *gùnnɔ́* and *náá*, 'fake' and 'authentic'

Especially in the realm of natural species, compounding *gùnnɔ́* '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 *gùnnɔ́* in final position:

(278) a. *pɔ̀lìì^L*   *gùnnɔ́*
           sesame slave
           'fake sesame (*Sesamum alatum*)'

      b. *gùlùŋnù^L gùnnɔ́*
           (plant species, inedible)

      c. *ày^L yògù~mà~yògù^L gùnnɔ́*
           (plant species)

The true species indicated by the initial name (*pɔ̀líí, gúlúŋnú, áy yògù-mà-yògù*) can be compounded with *náá* (literally 'mother') to emphasize its authenticity:

(279) a. *pɔ̀lìì^L náá*   'true sesame'
       b. *gùlùŋŋù^L náá*   (edible plant sp.)
       c. *ày^L yògù-mà-yògù^L náá*   '*Pupalea lappacea*'

Used as an adjective, *náá* can also mean 'upright' or 'normal', as in *ǹdɛ̀^L náá* 'an upstanding person', so it is probable that this is the use the compound form is derived from.

6.1.2 Pseudo-genitive compounds [x x̀^L]

6.1.2.1 Overview
Another kind of compound in Tommo So looks tonally identical to possessive constructions, and for this reason, I call them "pseudo-genitive compounds". Unlike in canonical 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 involved entail that the head is always L-toned. For example:

(280) a. *nùmɔ́ bààgòl^L*
           arm   amulet
           'protective amulet worn on the arm'

       b. *bɔ̀nnɔ́   sàdàà^L*
           pounding.area bird
           'kingfisher'

       c. *níyɛ́ bàŋjà-y^L*
           oil   bowl-DIM
           'small bowl for oil'

       d. *pɛ̀gélɛ́   sɛ̀lù^L*
           mountain grave
           'tomb in the mountains'

       e. *sáá   sòlù^L*
           wild.grape cream
           'cream of millet flavored with wild grape'

       f. *kóyrá jìm^L*
           Koira disease
           'disease involving thick saliva (treated in Koira Beri)'

6.1.2.2 Tonal variation between pseudo-genitive and canonical compounds

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

(281) <u>Pseudo-genitive</u>   <u>Canonical</u>

  òlú nàà^L 'wild cow' (buffalo)   *òlù^L nàá* 'wild cow' (buffalo)

  òlú ìsè^L   'wild dog' (jackal)   *òlù^L pédu* 'wild sheep' (duiker)

  òlú jàndùlù^L 'wild donkey' (antelope) *òlù^L gámmá* 'wild cat' (sand cat)

In all of these names of wild animals, the compound-initial stem is *òlú* 'bush, field', but the tonal pattern of the compound is lexicalized as either pseudo-genitive or canonical. In the case of 'buffalo', the pronunciation is variable.

6.1.2.3 Complex pseudo-genitive compounds

Just as canonical compounds can 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:

(282) a. **[[N Mod] N]**

   [[ǹdɛ́ kɛ́m] ǹdɛ̀^L]

   person all person

   'most beloved person' (literally 'everybody's person')

  b. **[[N N^L] N]**

   [[sáŋá   dèmbèlè^L] kàŋŋàà^L]

   space.under.granary platform granary

   'granary built on a raised platform' (cf. *sáŋá dèmbèlè^L* 'granary platform')

  c. **[N [N.L N.L]]**

   [ámbá [sìràà^L bàrà-y^L]]

   God snuff box-DIM

   'kneecap' (literally 'God's snuff box') (cf. *sìràà^L bàrà-ý* 'snuff box')

  d. **[[S] N]**

   [[náá sê-m] pɔ̀nnù^L]

   mother have-1SG pants

   'type of pants' (literally 'I-have-a-mother's pants')

In (282a), the modifier is a N+Quantifier construction, 'all people' or 'everyone'. 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 (282b), the modifier is itself a pseudo-genitive compound. This is a recursive structure like that seen for canonical compounds above. In (282c), the modifier is simplex but the head is complex, a canonical compound, now completely tone lowered by the modifying "possessor". Finally, in (282d), we see that an inflected phrase can be the modifier. This is the most striking, since it is typologically unusual for compounds to contain regular inflectional morphology.

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

6.1.2.4 Unusual pseudo-genitives

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

(283) ɔ̀lì-ɲ́   nàà ^{L}
       fresh-DIM cow
       'calf'

ɔ̀lì-ɲ́ 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 ɔ̀lì-ɲ́, we get ɔ̀lì-ɲ́ nàà ^{L}. It is probable that ɔ̀lì-ɲ́ in this case is a headless N+Adj phrase. In no other instance have I found ɔ̀lì-ɲ́ acting nominally or an adjective acting as a possessor.

6.2 Synthetic compounds

Synthetic compounds are compounds in which one of the noun stems is derived from a verbal stem. In Tommo So, this verbal stem is typically on the right, though this does not necessarily mean that it is the head of the compound. Morphologically, the verb stem may be either bare (zero derived) or a deverbal noun with overt morphology. 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 "X for Y-ing" reading. These are typically left-headed. The only attested tone pattern in synthetic compounds is [x̀ ^{L} x], the canonical compound tone pattern.

6.2.1 Agentive compounds

Chapter 5 discussed the derivation of deverbal agentive nouns. These deverbal nouns are usually compounded with the object of the verb, or occasionally even

with an adverb or an inflected verb. Consider first agentive compounds whose first member is the direct object of the verb:

(284) a. *gàlà^L kúnd-ínɛ́^{H}*
           indigo put-AGT.SG
           'cloth dyer'

      b. *kùù^L ɛ́r-ínɛ́^{H}*
           head braid-AGT.SG
           'braider'

      c. *ǹdɛ̀^{L} dá-ínɛ́^{H}*
           person kill-AGT.SG
           'murderer'

      d. *nùyɔ̀^{L} núy-ínɛ́^{H}*
           song   sing-AGT.SG
           'singer'

The direct object may either be the cognate nominal of the verb (284d) or another logical object (284a–c).

As we saw before for the other compound types, 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:

(285) *[[nàm^L dènù^L]   bìrɛ̀^{L}] bír-ínɛ́^{H}*
        day   day.spending work   work-AGT.SG
        'day laborer'

Here, compound *nàm^L dénu* 'spending the day' combines with the noun *bírɛ́* 'work' to form a recursive canonical compound *nàm^L dènù^L bírɛ́* '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 *bír-ínɛ́^{H}* 'worker'.

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

(286) *gìrè^L tóó-nɛ́^{H}*
        ahead be.in-AGT.SG
        'winner'

In (286), the initial element, while still nominal (meaning 'front'), is generally used in the adverbial construction *gíré=nɛ*, as in *wó gíré=nɛ tóò* 'he is in the lead'. The

verb from which the agentive is derived is also a quasi-verb, explaining the irregularity of the agentive noun in this case (the suffix is simply -*nɛ́* instead of -*ínɛ́*). In the compound, the postposition is dropped.

6.2.2 Compounds with final verbal noun; "[u] compounds"

A large class of compounds uses the cognate nominal to a verb as the rightmost stem. This cognate nominal may be derived using the morphology discussed in Chapter 5, or more commonly, the noun involved is one of the non-derived [u] cognate nouns discussed in section 13.1.5, which receive their name based on the epenthetic [u] found at the end of the stem. Many of these compounds have idiosyncratic meanings. Though they can refer directly to the action of the verb (287a–b), these compounds often refer to the instrument with which is the action is accomplished (287c), the place where it takes place (287d), or a person or thing that does the action (287e).

(287) a. *gìnàgà*^{L} *wòlú*
       rainy.season farming
       'rainy season farming'   (<*wàlá* 'farm')

       b. *gìrè*^{L} *bímmílu*
       eye   drunkenness
       'dizziness'   (<*bìmmíl-íyé* 'be drunk')

       c. *ìnù*^{L} *bùbú*
       tooth brushing
       'chewstick (used to brush teeth)'   (<*bùbɔ́* 'brush')

       d. *jàà*^{L} *sìrú*
       meal preparation
       'kitchen'   (<*sírɛ́* 'cook')

       e. *ǹdɛ̀*^{L} *kɛ̀rú*
       person biting
       'stiletto fly larva'   (<*kɛ́rɛ́* 'bite')

When the compound contains a deverbal noun derived using the morphology discussed in the last chapter, the meaning is usually more transparent, with the deverbal noun acting as head:

(288) *òlù*^{L} *bíy-ígé*
       bush be-NOM
       'strange behavior'   (<*bìyɛ́* 'be')

6.2.3 Gerundive compounds

Gerundive compounds seem to be more productive than final "u" compounds, 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 {H} overlay. The element on the left is almost always the object of the verb, and the meaning of the compound always refers to the action itself.

(289) a. *bɔ̀dɔ̀ᴸ bɔ́dɔ́ᴴ*
excrement defecate
'act of defecating' (cf. *bɔ́dɔ́ bɔ̀dɔ́* 'defecate')

b. *kùù ᴸ júŋgó ᴴ*
head bob
'act of bobbing one's head' (cf. *kúú jùŋgó* 'bob head')

c. *òdù ᴸ óbó ᴴ*
road give
'permission' (cf. *òdú óbó* 'give permission')

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:

(290) a. *bùndò ᴸ dáá ᴴ*
hit   kill
'the act of killing a rival in the bush [Lit. 'hitting and killing']'

b. *ɛ̀lù ᴸ góó ᴴ*
favor leave
'being sick of someone'

The compound in (290b) comes from an expression like the following:

(291) *Wó   ɛ̀lú   ḿmɔ=nɛ   gò-áa=wɔ.*
3SG.PRO favor 1SG.POSS=OBL leave-PFV=be
'I'm sick of him.'

The noun *ɛ̀lú* meaning roughly 'favor' is possessed, and this NP is followed by the oblique postposition =*nɛ*. In the compound, both the possessor and the postposition are lost, leaving *ɛ̀lú* used on its own.

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

(292) *yàà^L=mɔ̀^L*   *náá^H*
       yesterday=POSS forget
       'ingratitude [Lit. forgetting that of yesterday]'

Here, the possessive clitic forms a headless possessor phrase, which makes it clear that what is being forgotten is not yesterday itself, but what occurred yesterday. As we have seen in section 6.1.1.5 and section 6.2.1, the inclusion of the possessive clitic is not uncommon; other more truly postpositional clitics like locatives and associatives may be excluded, but the possessive clitic is allowed to remain.

6.2.4 Purposive compounds

There are two different forms of purposive compounds (what Heath 2008 calls 'oil for rubbing' "instrumental compounds", pgs. 214–219) in Tommo So. The first looks morphologically identical to "[u] compounds" seen in section 6.2.2. The second takes the *-dim* infinitive as the second element. In both constructions, the head is on the left.

(293) a. *dìì^L*   *nɔ̌y*
           water drinking
           'drinking water'

           tòmmò^L *yùù^L*   *dùyyú*[13]
           basket   millet carrying
           'basket for carrying millet'

       b. *dìì^L*   *nɔ̀ɔ́-dim*
           water drink-INF
           'drinking water'

           dìì^L   *ǹd-íyɛ́-dim*
           water bathe-MP-INF
           'water for bathing'

           Sɔ̀ɔ̀^L   *sɔ́ɔ́-dim*   *mí=ǹ*   *tágá.*
           speech speak-INF 1SG.PRO=OBJ tell.IMPER
           'Tell me what I should say [Lit. 'tell me the speech to speak'].'

The deverbal noun forms in (293a) appear to be lexicalized, while the infinitive forms are wholly productive.

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13 This co-varies with a possessive-type compound *yùù^L dùyyú tòmmò^L*.

Note that the tone of the object noun is the only thing distinguishing a purposive compound from a nominalized phrase:

(294)   a.   *Dù^L nɔ́ɔ́-dim   síyɛ́=ɲ̀.*
             water drink-INF good=COP
             'Water for drinking is good.'

        b.   *Díí   nɔ̀ɔ́-dim   síyɛ́= ɲ̀.*
             water drink-INF good=COP
             '(The act of) drinking water is good.'

In the purposive compound in (294a), *díí* 'water' undergoes tone lowering. In (294b), the object of the infinitive retains its lexical tone.

6.2.5 Other synthetic compounds

In this subsection, I address several interesting synthetic compound constructions that do not fit into the earlier section. First, let us consider compounds that contain stem *dìŋɛ́*, a stem that appears limited to idiomatic expressions meaning 'what one wants'. Its verbal nature is suggested by (295a), where the phrase *wó díŋɛ̀* 'what he wants' take the form of a headless relative clause: the subject is expressed with an independent pronoun and the verbal element takes a {HL} overlay. See Chapter 16 for more on relative clause formation. In (295b), this stem is used in a compound followed by the possessive postposition *=mɔ*:

(295)   a.   *Wó   díŋɛ̀   wó=ɲ̀   pádà-dɛ̀-m.*
             3SG.PRO what.one.wants.REL 3SG.PRO=OBJ leave-IMPF-1SG
             'I let him do what he wants.'

        b.   *dìŋɛ̀^{L}=mɔ̀^{L} sɔ̀ɔ́*
             what.one.wants=POSS speech
             'irrelevant or out-of-context speech'

        c.   *dìŋɛ̀^{L}=mɔ̀^{L} bír-ínɛ́^{H}*
             what.one.wants=POSS work-AGT.SG
             'poorly behaved person who does things without being told to do them'

A synonym for *dìŋɛ̀^{L}=mɔ̀^{L} bír-ínɛ́* reveals another strange construction:

(296)   *tɔ̀ɔ́rɔ̀-nnì^L bír-ínɛ́^{H}*
        let.do-NEG.PFV.3PL   work-AGT.SG

        '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 compounds, but we find it in these agentive compounds. We even see agentive compounds where the initial member is an inflected verb but not a nominalized relative participle, as in:

(297) a. * Àɲjù^L gò-àà^L yɛ́l-ínɛ́^{H}*
         Anji   leave-PFV come-AGT.SG
         'one who left Anji and came (here)'   [23.3:1]

  b. *Gìnɛ̀^{L} nɔ́   nàmà^L tɛ̀m-àà^L yéy-íy-ínɛ́=gɛ=mɔ=ɲ̀.*
       house this meat   eat-PFV sleep-MP-AGT.SG=DEF=POSS=COP
       'This house belongs to the guy who ate meat and fell asleep.'

The non-final elements are a VP wherein the verb takes the *-aa* suffix characteristic of the perfective non-final member of a verb chain (see Chapter 18). It forms such a chain with the stem of the agentive, and everything but the agentive undergoes tone lowering. This form appears to be productive.

It is possible that these constructions are not true compounds, but instead simply co-opt the phonological form of a compound. This would keep us from having to admit to productive inflection inside of a compound noun.

6.3 Adjectival compounds

There is one kind of adjectival compound in Tommo So, and that is the bahuvrihi ("blackbeard") type compound. These compounds generally consist of a noun retaining its lexical tones followed by an adjective or numeral with a {HL} overlay: [x x̂^{HL}]. The tone break on the {HL} overlay comes after the first mora. Unlike traditional bahuvrihi compounds, which are nominal, these bahuvrihi compounds function exactly like simple adjectives: they follow the noun they modify, inducing tone lowering.

(298) a. *ǹdɛ̀^{L} áŋá   wɛ̂y^{HL}*
         person mouth light
         'gossipy person'

  b. *àn-nà-y^L dɔ́lɔ́   póò^{HL}*
       male-HUM.SG-DIM testicle fat
       'boy with large testicles'

  c. *ǹdɛ̀^{L} bɔ̀dɔ̀káy kábàrà^{HL}*
       person butt   flat
       'flat-butted person'

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

(299) *àn-nà^L*   *[[pɔ̀nnù^L súm] yɔ́rù^HL]*
       male-HUM.SG pants   cord quick
       '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, *dúlɔ́ pálà^HL* 'long-tail' 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^L dúlɔ́ pálà^HL*.

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.

Though I treat bahuvrihis here as compounds, they are clearly related in form to possessive relative clauses. In a possessive relative clause (X whose Y...), the possessor (head of the relative clause) is tone lowered and the possessed element retains lexical tone. The relative participle always takes a {HL} overlay. Here, we can see that the adjective is acting as the relative participle, and so it takes that {HL} tone overlay. Thus, an example like *sàdàà^L dúlɔ́ pálà^HL* could be translated just as easily as 'a bird whose tail is long' as it could 'a long-tailed bird'.

Chapter 7
Noun phrase structure

This chapter treats the combination of nouns and other modifying elements in the NP. It discusses issues of linear order (section 7.1), adjectival modifiers (section 7.2), numeral quantifiers (section 7.3), determiners (section 7.4), other quantifiers (section 7.5), and possession (section 7.6). For object marking, see section 13.1.6. While Chapter 5 addressed the morphology involved in many of these elements, this chapter focuses on their actual use in NPs. For more in-depth discussion of tonal changes arising in NPs, see Chapter 4.

7.1 Organization of NP constituents

7.1.1 Linear order

Chapter 2 briefly introduced the linear order of NP constituents; (300) expands it, with the addition of the rare prenominal demonstrative *kó* discussed in section 5.4.3. The following represents the maximal linear order if all possible NP elements were present:

(300) a. One of the following:
> a_1 Prenominal demonstrative *kó* (very rare)
> a_2 Possessor (either nonpronominal with optional possessive particle
>   *=mɔ* or inalienable possessive pronoun)
>   b. Noun
>   c. **Adjective**
>   d. **Postnominal possessive pronoun**
>   e. **Cardinal numeral**
>   f. **Relative clause**
>   g. One of the following:
> g_1 Demonstrative
> g_2 Definite
>   h. Plural clitic
>   i. **Cardinal number**
>   j. 'All' or 'each'

The two elements listed in (300a) never occur together, since the limited number of cases in which *kó* is used prenominally 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: (301a) *kó*, (301b) a non-pronominal possessor
(either alienable or inalienable), and (301c) an inalienable pronominal possessor.

(301) a. *Kó   wàgàdù^L kɛ̂m púlɔ̀-m   yɛ̀lɛ̀-nní.*
           that.DD time   all   Fulbe-HUM.PL come-NEG.PFV.3PL
           'At that time, no Fulbe had come.'   [23.2:116]

       b. *Àràmátá [sɔ̀w yàà]^L=gɛ gìnɛ̀-ý=nɛ=yɔ̂.*
           Ramata   blanket=DEF   house-DIM=OBL=be.DIST
           'Ramata's blanket is in the house.'

       c. *Mí   bábé^H yɛ̂lɛ̀-dè.*
           1SG.PRO uncle   come-IMPF
           'My uncle will come.'

As we can see, all prenominal modifiers induce tone changes on the following noun.
See section 4.5 for more details.

The next four elements (300c–f) are bolded, because their order is variable with
regard to the numeral and the possessive pronouns. There are two levels of variation
for the numeral. First, the order of adjectives and numerals can be inverted under
certain circumstances (see section 7.1.2 on adjective-numeral inversion); this varia-
tion is common to many Dogon languages. Additionally, the numeral may also
follow the determiners and the plural clitic in Tommo So, a word order variation
not seen in other languages in the family. See section 7.3 for further discussion.

Second, the alienable possessive pronoun can be placed in several positions: to
the right of the noun, preceding any adjectives or numerals (302a), after any adjec-
tives or numerals but before relative participle (302b), after the relative participle
(302c), or even in rare cases to the left of the noun (302d). Consider the following:

(302) a. N Poss Adj Rel Def
           jàndùlù^L ḿmɔ   gɛ̀m^L mànd-áá-dɛ̀=gɛ
           donkey   1SG.POSS black be.lost-PFV-IMPF.REL=DEF
           'my black donkey that got lost'

       b. N Adj Poss Rel Def
           jàndùlù^L gɛ̀m^L ḿmɔ   mànd-áá-dɛ̀=gɛ
           donkey   black 1SG.POSS be.lost-PFV-IMPF.REL=DEF

       c. N Adj Rel Poss Def
           jàndùlù^L gɛ̀m^L mànd-áá-dɛ̀   ḿmɔ=gɛ
           donkey   black be.lost-PFV-IMPF 1SG.POSS=DEF

       d. Poss N Adj Rel Def
           ḿmɔ   jàndùlù^L gɛ̀m^L mànd-áá-dɛ̀=gɛ
           1SG.POSS donkey   black be.lost-PFV-IMPF=DEF

Consultants tell me that all of these orders mean the same thing, but subtle differences may emerge from a detailed study of corpus data. The order in (302b) is the base order that is usually offered first. For more on the alienable pronominal possessor, see section 7.6.1.4.

Demonstratives and the definite follow the postnominal possessor (303a–b), and the plural clitic follows after that (303c–d):

(303)   a.   *Nàà^L pílu ḿmɔ=gɛ   jɔ́bɔ̀-dɛ̀.*
            cow   white 1SG.POSS=DEF run-IMPF
            'My white cow will run.'

        b.   *Íí   wómɔ=gɛ   núyɔ́-gú=sɛ.*
            child 3SG.POSS=DEF sing-PPL=have
            'Her child is singing.'   [23.5:29]

        c.   *Nàà^L nɔ̀=mbé y-àà=bé-m.*
            cow   this=PL see-PFV=be.PST-1SG
            'I saw these cows.'

        d.   *Yàá-m=gɛ=mbe   [tìrè yàà-m]^L=gɛ=mbe   yɛ́llì̀n.*
            female-HUM.PL=DEF=PL [grandmother-HUM.PL]=DEF=PL come.IMPF.3PL
            'The women's grandmothers will come.'

7.1.2 Adjective-Numeral inversion

In addition to the variable positioning of the numeral (either before or after the determiner and plural clitic), 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. For instance:

(304)   a.   *jàndùlù^L pílu tààndú-go*   [Adj-Num]
            donkey   white three-ADV
            'three white donkeys'

             ⋆jàndùlù^L tààndù-gò^L pílu   ⋆[Num-Adj]

        b.   *Sáná jàndùlù^L pìlù^L tààndú-go*   [Poss Adj-Num]
            Sana donkey   white three-ADV
            'Sana's three white donkeys'

             Sáná jàndùlù^L tààndù-gò^L pìlù^L   [Poss Num-Adj]

    c.   *jàndùlù^L pìlù^L tàāndù-gò^L nɔ̀=mbé*   [Adj-Num Dem]
          donkey   white three-ADV this=PL
          'these three white donkeys'

          jàndùlù^L tàāndù-gò^L pìlù^L nɔ̀=mbé   [Num-Adj Dem]

    d.   *jàndùlù^L pìlù^L tàāndù-gò^L mí*   [Adj-Num Rel Def]
          donkey   white three-ADV 1SG.PRO

          bɛ́nd-ɛ̀=gɛ=mbe
          hit-PFV.REL=DEF=PL
          'the three white donkeys that I hit'

          jàndùlù^L tàāndù-gò^L pìlù^L mí bɛ́nd-ɛ̀=gɛ=mbe   [Num-Adj Rel Def]

In all of these examples, the numeral could also be outside of the determiners, where it would not participate in any of the tonal changes associated with possession or modification. The inverted order in (304a) is starred, since it is rejected by some consultants, but at least one accepts this order as well; it is possible that this particular speaker has constructed a grammar in which the order of the numeral and adjective are free in all positions.

    This reordering is not unique to Tommo So. It also occurs in other Dogon languages like Jamsay and Yorno-So (Jeffrey Heath, p.c.). It seems that under certain conditions like definiteness, the numeral is allowed to become syntactically an adjective. This is seen especially when there are two adjectives plus a numeral involved. In the presence of something licensing the inversion (e.g. the definite), all six orders are possible:

(305) a.   *gàmmà^L pìlù^L ɛ̀sú   ǹnɔ́-go=gɛ=mbe*   [white pretty 5]
          cat   white pretty five-ADV=DEF=PL
          'five pretty white cats'

    b.   *gàmmà^L ǹnɔ̀-gò^L ɛ̀sù^L pílu=gɛ=mbe*   [5 pretty white]

    c.   *gàmmà^L pìlù^L ǹnɔ̀-gò^L ɛ̀sú=gɛ=mbe*   [white 5 pretty]

    d.   *gàmmà^L ɛ̀sù^L ǹnɔ̀-gò^L pílu=gɛ=mbe*   [pretty 5 white]

    e.   *gàmmà^L ǹnɔ̀-gò^L pìlù^L ɛ̀sú=gɛ=mbe*   [5 white pretty]

    f.   *gàmmà^L ɛ̀sù^L pílu ǹnɔ́-go=gɛ=mbe*   [pretty white 5]

Again, consultants report no change in meaning dependent on the order, but in-depth study of this phenomenon may help elucidate what semantic factors contribute to these re-orderings.

    Larger composite numbers are also able to undergo inversion, showing that the process is not sensitive to phonological weight:

(306) *gàmmà^L pὲὲ-nὲὲ^L ǹnɔ̀-gò^L   sìgὲ^L gέm=gɛ=mbe*
       cat   ten-two   five-ADV   more   black=DEF=PL
       '25 black cats'

The whole numeral *pὲὲ-néé ǹnɔ́-go sígέ* '25' undergoes tone lowering caused by the adjective.

7.1.3 Detachability

When an NP is the clause-internal head of a relative clause, the elements of the NP split up around the relative participle. We can divide the NP constituents into those preceding the relative participle and those following it. (307) presents each category in order.

(307) | **Preceding** | **Following** |
       |---|---|
       | Prenominal possessor | (Postnominal possessor) |
       | Noun | (Numeral) |
       | Adjective | Definite or Demonstrative |
       | (Postnominal possessor) | Plural |
       | (Numeral) | (Numeral) |
       | | 'Each' or 'all' |

Of the elements that follow the noun, the only fixed orders are that the adjective precedes the relative participle and that the determiners, plural, and the later universal quantifiers follow it. As we saw in (302) above, the postnominal possessor can either precede or follow the relative participle, as can the numeral. There is no reported change in meaning if the numeral is before the relative participle (308a) or between it and the determiners (308b), but if it follows the determiners (308c), a partitive meaning is reported by at least some speakers:

(308) a. *jàndùlù^L ḿmɔ   tààndù-gò^L mànd-áá-dὲ=gɛ=mbe*
           donkey   1SG.POSS   three-ADV   get.lost-PFV-IMPF=DEF=PL
           'my three donkeys that got lost'

       b. *jàndùlù^L ḿmɔ   mànd-áá-dɛ   tààndú-go=gɛ=mbe*
           donkey   1SG.POSS   get.lost-PFV-IMPF three-ADV=DEF=PL
           'my three donkeys that got lost'

       c. *jàndùlù^L ḿmɔ   mànd-áá-dɛ=gɛ=mbe   tààndú-go*
           donkey   1SG.POSS   get.lost-PFV-IMPF=DEF=PL three-ADV
           'three of my donkeys that got lost'

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 *kɛ́m*, though numerals, possessive phrases with postposition *=mɔ*, relative clauses, 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.

For examples of free-standing demonstratives, see section 5.4.2.2.

The universal quantifier *kɛ́m* can stand alone with no difference in pronunciation.

(309) a. *Ø kɛ́m wó=ǹ bàr-ìy-ì-ɛ̀ⁿ.*
             all 3SG.PRO=OBJ help-MP-PFV.L-3PL
             'All [of the people] helped him.'   [23.2:144]

       b. *Ø kɛ́m ǹy-ɛ̀-m.*
             all eat-PFV.L-1SG
             'I ate everything.'

The demonstratives and 'all' are the most debatable examples of headless NPs, since they could be seen as pronoun in their own right.

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:

(310) a. *Ø néé(-go) mí=ǹ óbó.*
             two(-ADV) 1SG.PRO=OBJ give.IMPER
             'Give me two [things].'

       b. *Yàá-m jóó-ni be~be-ɛ̀ⁿ, mɛ̀*
             female-HUM.PL many-ADV RED~be.PST-3PL but

             Ø tàǎndú-go dògò yɛ̀lɛ̀-nní.
             three-ADV only come-PFV.NEG.3PL

             'There were a lot of women, but only three [women] came.'

Possessives are commonly used without a head noun, translating as '[that thing] for X'. In this usage, the possessive clitic *=mɔ* 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:

(311) a. *Ḿmɔ=gɛ úwɔ=gɛ=diyɛ káy.*
             1SG.POSS=DEF 2SG.POSS=DEF=than better
             'Mine [that for me] is better than yours [that for you].'

b. *[Dɛ̀ŋɛ̀nɛ̀-Dúú=mɔ=gɛ]   Kàndà-Tùgéɛ́ru, nǐ Kàndày-Tóru.*
Dɛŋɛnɛ-Duu=POSS=DEF Kanda-Tugeeru, that Kanday-Toru

'Kanda-Tugeeru was for Dɛŋɛnɛ-Duu, this is Kanday-Toru.'   [23.1:4]

Adjectives, either simple or bahuvrihi compounds, can be used without a head noun:

(312) a. *Ø [dúlɔ́ pálà^{HL}] y-àà=bé-m.*
           tail   long   see-PFV=be.PST-1SG
        'I saw a long-tailed [one].'

b. *Gòrò^L bánu=gɛ dùù-nd-ì-ɛ̀^{n}*
hat   red=DEF bottom-FACT-PFV.L-3PL

Ø gɛ́m=gɛ   dùù-nd-ì-ɛ̀^{n}.
   black=DEF bottom-FACT.PFV.L-3PL

'They put down <u>the red hat</u>, they put down <u>the black [one]</u>.'   [23.2:23]

For examples of headless relative clauses, see Chapter 16.

7.2 Noun plus adjective

7.2.1 Tone changes

Adjectives impose a {L} overlay on preceding nouns and adjectives. For example:

(313) *jàndùlù^L kómmó*   (cf. /jàndúlu/)
       donkey   skinny
       'skinny donkey'

This tonal change is able to neutralize the lexical tone contrast between nouns, such as between *nàá* 'cow' and *náá* 'mother':

(314) *nàà^L kómmó*
       cow/mother skinny
       'skinny cow/mother'

We can see here that the noun to the left of the adjective receives a {L} overlay, indicated both in the tone transcription itself (all grave accents representing L tone) and by the superscript L, which shows that the tone has grammatical origins. If a noun is followed by more than one adjective, only the final adjective retains its lexical tone. All other words receive a {L} overlay:

(315) a. *jàndùlù^L pìlù^L èsú*   (cf. /jàndúl/, /píl/)
        donkey   white pretty
        'pretty white donkey'

    b. *gìnè^L kàndà^L gɛ́m*   (cf. /gìnɛ́/, /kàndá/)
        house new   black
        'new black house'

For a schematic overview, see section 4.5.1.

7.2.2 Multiple adjectives

More than one adjective can be combined after a noun, and when this happens, only the final adjective has its lexical tone. That is, the final adjective induces tone lowering on both the noun and the non-final adjective(s).

(316) *jàndùlù^L kàndà^L pílu*
        donkey   new   white
        'new white donkey'

The ordering of adjectives remains an open question. For the most part, speakers accept any order of adjectives, leading me to believe that adjectives are freely ordered. However, occasionally, a speaker will have a judgment on this matter; for example, the order *kàndà^L pílu* 'new white' in (316) above is judged to be better than *pìlù^L kàndá* 'white new', though both orders have been offered.

7.2.3 Ordinal numerals

As section 5.7.2 discussed, ordinal numerals are syntactically adjectives, hence their inclusion in this subsection. They behave exactly like regular adjectives with regards to tone lowering, but they are ordered after any other adjectives (in the linear position of a numeral):

(317) *Gìnè^L pìlù^L tàǎndì-yém údɔ̀-dɛ̀-m.*
        house white three-ORD   build-IMPF-1SG
        'I will build a third new white house.'

7.2.4 'some'

Similarly, *gàmbáá* 'some' or 'several' in Tommo So is semantically a quantifier but morphosyntactically an adjective. It induces tone lowering on a noun, like an adjective but unlike a cardinal numeral:

(318)   a.   *ɛ̀nɛ̀ᴸ gàmbááá*
            goat some
            'several/some goats'

   b.   *gìnɛ̀ᴸ   gàmbááá*
            house some
            'several/some houses'

Linearly, it occurs before determiners, unlike the universal quantifier 'all':

(319)   *Sùkɔ̀rɔ̀ᴸ gàmbááá=gɛ=mbe nɛ́mɛ̂-g-íy-aa=wɔ-ɛ̀ⁿ.*
        sugar   some=DEF=PL   dirty-CHAR-MP-PFV=be-3PL
        'Some of the sugar got dirty.'

   Like other adjectives or quantifiers, 'some' can be used in a headless NP:

(320)   a.   *Ø gàmbááá òlú   yà-ì-ɛ̀ⁿ,   Ø gàmbááá kɔ́-ɛ̀ⁿ.*
              some   field go-PFV.L-3PL   some   be.PROX-3PL
            'Some [people] went to the fields, and some stayed here.'

   b.   *ínɛ́=gɛ=mbe   kɛ́m Ø gàmbááá múɲj-ìlɔ̀-dìɲ,*
            iron=DEF=PL all   some   break-REV-IMPF.3PL

        Ø gàmbááá bànjá=gɛ=mbe=le   kɛ́m jɔ́gɔ̀=bi-ɛ̀ⁿ.
            some   bowl=DEF=PL=ASSOC all   break.IMPF=be.PST-3PL

        'and some [people] would break all of the blades, some people used to
        break all of the bowls.'   [23.4:24]

In some textual examples, *gàmbááá* takes instead the form *gàmbéé*:

(321)   a.   *Kŏm   bɛ̀lɛ̀-mᴸ   bɔ̀rɔ̀gɔ́=gɛ=baa   dàlìrìᴸ*
            Koum person.from-HUM.PL valley=DEF=LOC good.things

        gàmbéé bé   bɛ̀l-áá-dɛ̀=gɛ   wó=ɲ̀.
            some   3PL.PRO find-PFV-IMPF.REL=DEF 3SG.PRO=COP

        'So it was that the people from [Saoura] Koum found some (=most) of
        the good things in the valley.'   [23.3:88]

   b.   *ǹdɛ̀ᴸ   gàmbéé gò-ì-ɛ̀ⁿ=yó,*
            person some   go.out-PFV.L-3PL=if

        yàa-ná=gɛ   sád-áá-dɛ̀=wa...
            female-HUM.SG=DEF err-PFV-IMPF=QUOT

        'Some people said the woman was guilty...'   [Poisoned flour]

Consultants report no difference in meaning between *gàmbááá* and *gàmbéé*.

7.2.5 Participles

The morphological form of participial modifiers was presented in section 5.6. This section focuses on their linear order in the NP.

Though they closely resemble relative clauses in their form, participles can sometimes appear before an adjective. The relative ordering of an adjective and a participle depends on the meanings involved. Consider:

(322) a. *màŋgòrò^L ìl-àà-dɛ̀^{L}*   *bánu=gɛ > bànù^L íl-áá-dɛ*
           mango   ripen-PFV-IMPF red=DEF
           'the ripe red mango'

      b. *àn-nà^L*   *pàlà^L yím-áá-dɛ̀=gɛ > yìm-àà-dɛ̀^{L} pàlá*
           male-HUM.SG tall   die-PFV-IMPF.REL=DEF
           'the tall dead man'

In (322a), it is logical that the adjective 'red' follow the participle 'ripe', since we are dealing with a mango that has ripened and is subsequently red, rather than a red mango that has ripened. In (322b), on the other hand, the adjective precedes the participle since it is a tall man who is dead rather than a dead man who is tall. In each case, the opposite order is grammatical but semantically inferior to the preferred order.

7.3 Noun plus numeral

Numerals have no tonal effect on preceding material, be that a single noun (323a) or a N Adj combination where the adjective has already applied its {L} overlay on the noun (323b):

(323) a. *gámmá néé-go*
           cat   two-ADV
           'two cats'

      b. *gàmmà^L gɛ́m   néé-go*
           cat   black two-ADV
           'two black cats'

In both cases, the presence of the numeral does not alter the tone patterns of what precedes it. However, the numeral 'one' **is** a controller. *Túmɔ́* 'one' acts tonally like an adjective, imposing a {L} overlay:

(324) *gàmmà^L túmɔ́*
     cat   one
     'one cat'

The same is true in Jamsay (Heath 2008: 183).

    In addition to undergoing adjective-numeral inversion (section 7.1.2), 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 (325a–b). However, if they precede the demonstrative, they are tone lowered (325c). While some consultants say that both orders mean the same thing, others report that putting the numeral after determiners gives a partitive meaning. Both glosses are listed below:

(325) a. *Jàndùlù^L gɛ́m ḿmɔ=mbe tàà ndú-go bándánkálá=nɛ kɔ́-ɛ̀^n*
          donkey black 1SG.POSS=PL three-ADV courtyard=OBL be.PROX-3PL

          'Three of my black donkeys are in the courtyard.'
          'My three black donkeys are in the courtyard.'

    b. *Tàgà^L nɔ̀=mbé ǹnɔ́-go ɛ̀sú-go=wɔ-ɛ̀^n*
          shoe this=PL five-ADV pretty-ADV=be-3PL

          'Five of these shoes are pretty.'
          'These five shoes are pretty.'

    c. *Tàgà^L ǹnɔ̀-gò^L nɔ̀=mbé ɛ̀sú-go=wɔ-ɛ̀^n.*
          shoe five-ADV this=PL pretty-ADV=be-3PL
          'These five shoes are pretty.'

The numeral can also either precede or follow a post-nominal alienable possessive pronoun, with no reported change in meaning:

(326) a. *jàndúlu ḿmɔ tàà ndú-go=gɛ=mbe*
          donkey 1SG.POSS three-ADV=DEF=PL
          'my three donkeys'

    b. *jàndúlu tàà ndú-go ḿmɔ=gɛ=mbe*
          donkey three-ADV 1SG.POSS=DEF=PL
          'my three donkeys'

Interestingly, the order Poss-Num is possible in the absence of the plural marker, but not the order Num-Poss, which (326b) indicates is a possible order in the presence of the plural:

(327) a. *jàndúlu ḿmɔ tàà ndú-go*
   donkey 1SG.POSS three-ADV
   'my three donkeys'

   b. **jàndúlu tàà ndú-go ḿmɔ*

Whether this is related to the phenomenon of adjective-numeral inversion or not is unclear.

7.4 Noun plus determiner

Demonstratives (but not the definite marker, (330)) also induce tone lowering on the preceding words of the NP, including any adjectives:

(328) a. *jàndùlù^L nɔ́*
   donkey this
   'this donkey'

   b. *gìnɛ̀^{L} kàndà^L ní*
   house new that
   'that new house'

   c. *gàmmà^L nèè-gò^L nɔ̀=mbé*
   cat two-ADV this=PL
   'these two cats'

In (328c), it is clear that a controller need not be adjacent to every word it controls; the numeral 'two' would otherwise have no tonal effect on the noun (see section 7.3), and so it is unambiguously the demonstrative applying a {L} overlay to both the numeral and the noun. Note also that the demonstrative in this example is not tone lowered – its L tone is due to tone shift, with its original H tone surfacing on the plural; see section 4.3.2.

   Note that determiners always come outside of the relative participle; when they follow the relative clause, they impose a {L} overlay on the relative participle alone:

(329) *Sáná jàndùlù^L òlú=baa bènd-ɛ̀^{L} nɔ́*
   Sana donkey field=LOC hit-PFV.REL this
   'this donkey that Sana hit in the fields'

Here, the head of the relative clause 'donkey' is tone lowered due to regular tono-syntactic processes in relative clauses (see section 16.2). With the addition of a demonstrative after the relative clause, the only additional tonal change is the {L}

overlay on the verb. The subject and adjunct phrases in the relative clause retain their lexical tone. Descriptively, we can say that only the verbal participle in the relative clause participates in NP tonosyntax; only it receives a {L} overlay from the demonstrative, while other non-head elements in a relative clause do not interact at all.

Unlike the demonstratives, the definite determiner *=gɛ* is not a tone controller. Contrast the examples in (328) with the following:

(330)   a.   *jàndúlu=gɛ*
            donkey=DEF
            'the donkey'

     b.   *gìnɛ̀ᴸ   kàndá=gɛ*
            house new=DEF
            'the new house'

     c.   *gámmá néé-go=gɛ=mbe*
            cat   two-ADV=DEF=PL
            'the two cats'

A single noun (330a) retains its tone before the definite; a N Adj combination (330b) has the usual {L} on the noun, with the definite playing no role; a noun and numeral (330c) both retain lexical tone when followed by the definite.

7.5 Noun plus quantifier

7.5.1 Plural

The plural clitic *=mbe* directly follows the determiner slot in terms of linear order. It has no tonal effect on preceding elements and is itself underspecified for tone (section 4.2):

(331)   a.   *jàndúlu=mbe*
            donkey=PL
            'donkey's

     b.   *gàmmàᴸ gɛ́m=mbe*
            cat   black=PL
            'black cats'

     c.   *dámmá tààndú-go=gɛ=mbe*
            village   three-ADV=DEF=PL
            'the three villages'

7.5.2 'all'

The universal quantifier *kέm* '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 also has no tonal effect on preceding words:

(332)   a.   *jàndúlu=gɛ=mbe   kέm*
          donkey=DEF=PL   all
          'all of the donkeys'

       b.   *gàmmà^L mí   y-ὲ^L nɔ̀=mbé   kέm*
          cat   1SG.PRO   see-PFV.REL   this=PL   all
          'all of these cats that I saw'

       c.   *yàá-m   kέm*
          female-HUM.PL   all
          'all women'

The quantifier *kέm* can often translate as both 'all' and 'every'.

7.5.3 'each'

The distributive 'each' is more complicated. Morphologically, it is a reduplicated form of *túmɔ́* 'one'. It forces tone lowering on an immediately preceding noun (333a) or noun and adjective (333b), but if it follows any determiners, then it does not have the power to tone lower (333c–d).

(333)   a.   *Gìnὲ^L túmɔ́~túmɔ́   kέm   bándáŋkálá   yé=sὲ^L.*
          house   RED~one   all   courtyard   EXIST=have
          'Each house has a courtyard.'

       b.   *Gìnὲ^L kàndà^L túmɔ́~túmɔ́   kέm   ɲέŋὲὲrὲ   yé=sὲ^L.*
          house   new   RED~one   all   WC   EXIST-have
          'Each new house has a bathroom.'

       c.   *Gìnέ   tàʔàndú-go=gɛ=mbe   túmɔ́~túmɔ́   kέm   ɲέŋὲὲrὲ*
          house   three-ADV=DEF=PL   RED~one   all   WC

          bémɛ=le=wɔ-ὲ^n.
          3PL.POSS=ASSOC=be-3PL

          'Each of the three houses has a bathroom.'

d. *Gìnὲ^L nɔ̀=mbé túmɔ́~túmɔ́ kɛ́m ɲέŋὲ̀rὲ yé=sὲ^L.*
house this=PL RED~one all WC EXIST=have
'Each of these houses has a bathroom.'

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, following the determiners, in which case it has no tonal interaction. Note that in every case, the distributive quantifier comes bundled together with the universal quantifier *kɛ́m* 'all'. For those cases where there is not an overt determiner, if we want to assume that the distributive quantifier is acting as an adjective, then it and the universal quantifier must be separable. That is, though they are immediately juxtaposed on the surface, they do not function as a unit syntactically. I have no evidence in the data either confirming or disproving this.

7.6 Possession

Possession in Tommo So divides nouns into two classes: kinship and other relationship terms, and everything else. The kinship terms are treated as **inalienable** with regards to possession, while everything else is treated as **alienable**. By and large, these constructions 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. See section 4.5 for a schematization of tone and possession.

7.6.1 Alienable possession

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

7.6.1.1 Non-pronominal NP possessor

When the possessor is non-pronominal, it comes directly before the possessed noun. The possessor retains its lexical tone and induces tone lowering (a {L} overlay) on the possessed noun:

(334) a. *Sáná gìnὲ^L*
Sana house
'Sana's house (cf. *gìnɛ́*)'

    b.   *Àrámátá ìsè^L*
        Ramata dog
        'Ramata's dog (cf. *ìsé*)'

The possessor may be a complex NP in and of itself, containing modifiers, determiners, or any other NP elements. The tonal effects on the possessed noun are the same, and the tonology of the possessor NP is exactly as it would be as a non-possessive NP. For example:

(335)   *[yàà-nà^L èsú=gɛ]   jàndùlù^L=gɛ*
        female-HUM.SG pretty=DEF donkey=DEF
        'the pretty woman's black donkey'

The possessive NP *yàà-nà^L èsú=gɛ* 'the pretty woman' shows the usual tone lowering effects of the adjective on the noun and the usual non-interaction between the definite determiner and the preceding material.

7.6.1.2 Treatment of modifiers following the possessed noun

A schematization of the tonal interactions between alienable non-pronominal possessors and other modifiers was given in section 4.5.3. Here, we find specific examples.

    In short, we can say that the possessor's tonal control extends through adjectives and numerals preceding the determiner, but no further. Examples with adjectives are in (336a–b), while examples contrasting numerals before and after determiners are in (336c–d), respectively.

(336) a. *yàa-ná=gɛ   gìnè^L dìyè^L*
            female-HUM.SG=DEF house big
            'the woman's big house'

      b. *Sáná jàndùlù^L kàndà^L pìlù^L*
          Sana donkey new   white
          'Sana's new white donkey'

      c. *àn-ná=gɛ   yàà-m^L tààndù-gò^L=gɛ=mbe*
          male-HUM.SG=DEF female-HUM.PL three-ADV=DEF=PL
          'the man's three wives'

      d. *[yàà-nà^L èsú=gɛ]   jàndùlù^L gèm^L=gɛ   tààndú-go*
          female-HUM.SG pretty=DEF donkey black=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:

(337)   *àn-ná=gɛ*   *yàà-m^L*   *này-gò^L*   *túmɔ̂~túmɔ̂*   *kɛ́m*
        male-HUM.SG=DEF female-HUM.PL four-ADV   RED~one   all
        'each of the man's four wives'

This follows directly if we assume the numeral precedes the null determiner level while the distributive 'each' follows it.

The tone of demonstratives is never lowered when modifying a possessed noun:

(338)   a.   *Àràmátá kɔ̀rɔ̀^L   nɔ́*
             Ramata   calabash this
             'this calabash of Ramata's'

        b.   *ɛ́ndɛ̂ sòm^L   ní*
             ɛndɛ horse   that
             'that horse of ɛndɛ's'

The tonal interactions between a possessive NP and a relative clause are complex and will be treated in section 16.7.

7.6.1.3 Non-pronominal possessor with genitive clitic *=mɔ*

Typically in Tommo So, the possessor is immediately juxtaposed with the possessed noun without the use of any genitive particle, but in some cases, particularly with older speakers, the clitic *=mɔ* is used, cliticized to the end of the possessor. The tone of such constructions is not consistent. At times, the possessed noun undergoes tone lowering (339a), just as it would in the absence of the clitic, and at other times, it retains its lexical tone (339b):

(339)   a.   *Mɔ́ɔ́lu=mɔ   jàw^L*   [23.1:1]
             Mori=POSS fight
             'the Mori war'

        b.   *Bèɲjù-ámbìɛm=mɔ   úndɔ̂=gɛ*   [23.2:80]
             Benju-Ambiɛm=POSS ash=DEF
             'Benju-Ambiɛm's ashes'

This variation is found only in older people's speech. Younger consultants asked to repeat these textual examples always use the tone-lowered form of the possessed noun. What we might be seeing with older speakers is a stage in the change from a Jamsay-like possessive system, with obligatory use of the genitive clitic and no tonal changes, to the current system with direct juxtaposition of the possessor and possessed noun with obligatory tone lowering. For a treatment of Jamsay possession, see Heath (2008: 234–243).

For headless possessive constructions, see section 7.1.4.

7.6.1.4 Pronominal possession

The possessive pronouns seen in Chapter 5, repeated below, are typically used postnominally in alienable possessive constructions.

(340) Singular Plural
       1 ŋ́mɔ   émmɛ
       2 úwɔ   éwɔ
       3 wómɔ   bémɛ

These possessors do not induce tone lowering on the preceding noun:

(341) a. *mìnnɛ̂ wómɔ*
           field   3SG.POSS
           'his/her field'

       b. *bóy   úwɔ*
           name   2SG.POSS
           '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 (the pronouns take their independent forms and the possessive clitic surfaces as *=mɔ*). This is in the presence of *túmáá* 'only', in expressions with the meaning 'for X alone'. This was first reported in Plungian (1995) and is confirmed by the speakers of Tédié:

(342) a. *tàgá ú   túmáá=mɔ*
           shoe 2SG.PRO alone=POSS
           'shoes for you alone'

       b. *gìnɛ̂   émmé   túmáá=mɔ*
           house 1PL.PRO alone=POSS
           'a house for us alone'

While the post-posed construction is the most common, seen in texts and offered first in elicitation, one speaker also offers a pre-posed construction, in which the possessive pronoun precedes the possessed noun and imposes tone lowering. Like adjective-numeral conversion, this pre-posing of the possessor is only possible in the presence of a definite article.

(343) *wómɔ   gìnɛ̀ᴸ=gɛ   *wómɔ gìnɛ̀*
       3SG.POSS house=DEF
       'his house'

In texts, the pronominal alienable possessor is almost always post-posed.

(344) a. *Yàa-ná=gɛ   bóy   wómɔ   Jɛ́nɛ́bá*
           female-HUM.SG=DEF name 3SG.POSS Dieneba

           gɛ́-dìŋ,   quoi.
           say-IMPF.3PL what.FR

           'Her name was Dieneba.'   [Poisoned flour]

       b. *Bón   mí,   dámmá ḿmɔ=gɛ   Dúndé quoi.*
           well.Fr 1SG.PRO village 1SG.POSS=DEF Dunde what.Fr
           'Well, my village is Dunde.'   [Poisoned flour]

The one textual example I have found of a pronominal possessor placed before the possessed noun is the following:

(345) *Bémɛ   bòyᴸ nɔ́ nɛɛ ɲ́jɛ́ bòyᴸ=ɲ̀?*
       3PL.POSS drum this now what drum=COP
       'This drum of theirs [yours], what kind of drum is it?'   [Animals and well]

In this case, the tone lowering on the noun is ambiguous between the preceding possessor and the following demonstrative. A larger corpus of texts will be needed to determine the proportions of each type of construction.

7.6.1.5 Pronominal possession with modifiers

The tonal interactions between pronominal possessors and other modifiers depend on whether the possessor precedes the possessed noun or follows it. When it precedes the possessed noun, it imposes {L} on the noun but not on any following modifiers, in contrast to non-pronominal possessors:

(346) a. *ḿmɔ   jàndùlùᴸ pílu*
           1SG.POSS donkey   white
           'my white donkey'

b. *ḿmɔ jàndùlù^L tàǎndú-go*
1SG.POSS donkey three-ADV
'my three donkeys'

In (346a), the {L} overlay could come from either the adjective or from the possessor, but in (346b), only the possessor could be responsible since numerals do not interact tonally. Once again we see that the possessor itself does not undergo tone control (i.e. in (346a), the possessor is not {L} before the adjective). Because preposed alienable pronominal possessors are rare, I do not have much data on the ways in which they interact with other modifiers. It is unclear why the scope of the alienable pronominal possessor is smaller than that of the non-pronominal possessor.

Much more common are postposed possessors, which do not interact tonally with the possessed noun. Typically, they follow any adjectives modifying the possessed noun (347a), but they can also intervene. In this case, the adjective's tone control hops over the possessor to control the noun, while the possessor retains lexical tone (347b):

(347) a. *jàndùlù^L gɛ́m ḿmɔ=gɛ*
donkey black 1SG.POSS=DEF
'my black donkey'

b. *jàndùlù^L ḿmɔ gɛ́m=gɛ*
donkey 1SG.POSS black=DEF
'=(a)'

This is yet another example of the fact that a controller need not be linearly adjacent to the word it controls. The same is true for the pronominal possessor in a relative clause. It can either remain in situ with the head of the relative clause, or it can follow the relative participle. In neither position does the possessor lose its lexical tones:

(348) a. *jàndùlù^L ḿmɔ mànd-áá-dɛ̀=gɛ*
donkey 1SG.POSS be.lost-PFV-IMPF.REL=DEF
'my donkey that got lost'

b. *jàndùlù^L mànd-áá-dɛ̀ ḿmɔ =gɛ*
donkey be.lost-PFV-IMPF.REL 1SG.POSS=DEF
'=(a)'

With the demonstrative we see variation between two tonal patterns. The first looks like what we have seen with adjectives: though the possessive pronoun intervenes between the demonstrative and the possessed noun it modifies, the usual {L} overlay

from the demonstrative is still applied, skipping over the possessor (349a). However, we see another pattern too, wherein the possessed noun and the possessor retain lexical tone and the demonstrative itself receives a {L} overlay:

(349) a. *jàndùlù^L ḿmɔ   nɔ́*
           donkey   1SG.POSS this
           'this donkey of mine'

       b. *jàndúlu ḿmɔ   nɔ̀^{L}*
           donkey 1SG.POSS this
           '=(a)'

I do not have a large enough corpus of data to determine the relative frequencies of these two patterns, but impressionistically, they are both widely attested, perhaps 40% for (349a) and 60% for (349b).

7.6.2 Inalienable possession

Kinship terms and some other human nouns pattern differently with regard to possession. When the possessor is non-pronominal, there is no clearly discernible difference between alienable and inalienable possession until modifiers are added, but pronominal possession differs from alienable constructions in that the independent pronoun series is used rather than the possessive pronouns.

The human terms 'wife/woman', 'man', and 'child' are not possessed inalienably. Similarly, all agentive nouns, though human, are treated as alienable. The few inalienable human terms that are not kinship terms include *áńígé* 'friend', *áí-nɛ* 'friend', and variably *kɔ̀nní-nɛ́* 'enemy', which can also take alienable possession. Some kinship terms are also able to variably take alienable possession, including *bàbé* 'paternal uncle (younger than father)' and even *náá* 'mother'. This may be a way for speakers to endear themselves to the family member, since a consultant reports that one context in which one would use alienable *náá ḿmɔ* 'my mother' is if one had fought with the mother and was going to ask forgiveness (cf. English "mother of mine").

7.6.2.1 Non-pronominal possession
The linear order of inalienable possession with a non-pronominal possessor is identical to alienable possession. The possessor immediately precedes the possessed noun and induces tone lowering.

(350) a. *Sáná bàbè*^{L}
           Sana uncle
           'Sana's uncle'

       b. *púlɔ̀-nɔ*   *nàà*^{L}
           Fulani-HUM.SG mother
           'a Fulani's mother'

7.6.2.2 Non-pronominal possession with modifiers

The tonology of inalienable possessors with modifiers was discussed in section 4.5.3.2. The crucial observation is that the tone control of an inalienable possessor, which can only lower the possessed noun, does not extend as far as that of an alienable possessor. While an alienable possessor can control the tone of an adjective or numeral following the possessed noun, an inalienable possessor cannot:

(351) a. *Sáná sàà*^{L} *kómmó*
           Sana sister skinny
           'Sana's skinny sister'

       b. *Sáná sàà*^{L} *néé-go*
           Sana sister two-ADV
           'Sana's two sisters'

The fact that the possessor can control the tone of a modifier 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.

A demonstrative is also free of the possessor's tone control, but 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:

(352) *Sáná sàà*^{L} *nèè-gò*^{L} *nɔ̀=mbé*
       Sana sister two-ADV this=PL
       'these two sisters of Sana's'

7.6.2.3 Pronominal possession

When the possessor of an inalienable noun is pronominal, the independent pronouns are used, placed directly before the possessed noun. Tonologically, this construction

is the most complicated, with {H} applied to possessed nouns with 1–2 moras and {HL} applied to longer nouns. Some examples of inalienable pronominal possessors include:

(353) a. *bé*   *nínɛ́*[H]   (cf. *nìnɛ́*)
           3PL.PRO aunt
           'their aunt'

       b. *wó*   *náá*[H]   (cf. *náá*)
           3SG.PRO mother
           'her mother'

       c. *mí*   *[tírɛ̀ yàà-nà]*[HL]   (cf. *tìrɛ̀ yàa-ná*)
           1SG.PRO grandmother
           'my grandmother'

       d. *ú*   *ánìgè*[HL]   (cf. *ánígé*)
           2SG.PRO friend

As we can see, the {HL} overlay is realized as H on the first mora and L on all subsequent moras, even in the case of a compound (353c). This example also indicates that mora count is determined off of the entire compound rather than simply the first stem.

7.6.2.4 Pronominal possession with modifiers

If any tone lowering modifier is placed after the possessed noun, its {L} overlay takes precedence over the {H(L)} of the pronominal possessor. Like non-pronominal inalienable possessors, the pronouns cannot control the tone of any modifiers following the possessed noun:

(354) a. *bé*   *nìnɛ̀*[L] *kómmó*   (cf. (353a))
           3PL.PRO aunt   skinny
           'their skinny aunt'

       b. *ú*   *ànìgè*[L] *póó*   (cf. (353d))
           2SG.PRO friend   fat
           'your fat friend'

Numerals retain their tone after a possessed kinship term, even with the addition of the distributive 'each':

(355) a. *mí*   *[náá dìyè]^{HL}*   *tààndú-go*
       1SG.PRO aunt   three-ADV
       'my three aunts'

   b. *mí*   *nínjú^H kúlóy-go túmɔ́~túmɔ́*
       1SG.PRO uncle   six-ADV   RED~one
       'each of my six uncles'

With a demonstrative, we find the noun taking its {L} overlay rather than the {H(L)} of the possessor, just as we saw with adjectives:

(356) *mí*   *bàbè^L nɔ́*
      1SG.PRO uncle this
      'this uncle of mine'

For a schematization of pronominal possession with other modifiers, see section 4.5.3.2.

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 tonal changes are evaluated first in the embedded possessive construction (X's Y), with X causing whatever tonal changes to Y that it normally would. This phrase is then added as the possessor of Z, which similarly undergoes normal tonal changes:

(357) a. *[[mí   báá^H] gìnè^L]*
         1SG.PRO father house
         'my father's house'

   b. *[[Ànjú ɔ̀gɔ̀^L] gìnè^L]*
      Anji   chief house
      'the chief of Anji's house'

   c. *[[ìsé ḿmɔ]   bòy^L]*
      dog 1SG.POSS name
      'the name of my dog'

In (357a), the embedded possessor X is the inalienable pronominal possessor *mí*. This imposes a {H} overlay on its possessed noun Y, *báá* 'father'. This possessive phrase *mí báá^H* 'my father' then acts as the possessor to Z, the head of the larger

possessive phrase *gìnɛ́* 'house'. Because this is an alienable noun and because 'my father' is a non-pronominal possessor, *gìnɛ́* receives a {L} overlay.

In (357b), the embedded possessor *Ậɲjú* 'Anji' is non-pronominal, and hence it applies a {L} overlay to the embedded possessed noun *ɔ̀gɔ́* 'chief'. This phrase *Ậɲjú ɔ̀gɔ̀^L* 'Anji's chief' then acts as the nonpronominal possessor of *gìnɛ́* 'house', imposing another {L} overlay.

Finally, in (357c), the embedded possessor is a pronominal possessor for an alienable noun *ìsé* 'dog'. This means that the embedded possessor and possessed noun do not interact with each other tonally, but the whole embedded possessive phrase *ìsé ḿmɔ* 'my dog' acting as the non-pronominal possessor of *bóy* 'name' will impose a {L} overlay on this possessed noun.

Chapter 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 morpho-phonology, commonly containing reduplication, non-standard sounds, or unusual phonotactics. This chapter will address both of these classes of ideophones, along with a selection of interesting onomatopoetic words (e.g. 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 vowels in the word may be disharmonic; unusual consonants like /c/ (a voiceless alveolopalatal affricate) may be present; the tone pattern may diverge from the usual /H/ or /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. Unlike productive reduplication in nouns, adjectives, and verbs, initial CV reduplication is extremely rare, attested only once. Some adjectival intensifiers are reduplicated forms of the adjective with ~*mà*~ in the middle, a reduplication type discussed in section 5.1.5.

Full stem reduplication occurs on stems of all shapes and sizes. Examples of mono-, di-, and trisyllabic stems are given below:

(358) a. <u>Monosyllabic stems</u>

jáw~jáw adjectival intensifier for *ɔ́gu* 'hot'

tím~tím adjectival intensifier for *gém* 'black'

b. <u>Disyllabic stems</u>

kádá~kádá adjectival intensifier for *ɔ́gu* 'fast'[14]

ɲòŋò~ɲóŋó crawling on all fours (used with *yàá* 'go')

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14 Note that the same adjective *ɔ́gu* means both 'hot' and 'fast', but the choice of intensifier depends on the semantics, not on the morpheme.

c. <u>Trisyllabic stems</u>

gègélè~gègélè-ni   runty and weak (expressive adverbial)

nàgádèy~nàgádèy   expressive adverbial for a tall, skinny person walking

We can make a two observations about these reduplicated forms. First, the monosyllabic forms almost never have simply a long vowel as the coda. The one such example, *kúú~kúú-go*, an expressive adverbial meaning 'entering head first', is transparently derived from the noun *kúú* 'head'. All other monosyllabic verbs have coda consonants or at the very least are nasalized (e.g. *kɛ́ɛ́ⁿ~kɛ́ɛ́ⁿ* adjectival intensifier for *wɛ́ru* 'green'). This is unlike most monosyllabic non-ideophonic stems, where long vowels are more common. Second, while both adjectival intensifiers and expressive adverbials can be either mono- or disyllabic, 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 /i/ or /u/) and the second copy has a low vowel /a/:

(359)   *yùgú~yàgù-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 are almost never identical. Most commonly, the changes are in the vowels, with copies one and three identical and copy two having the low vowel /a/. An example of this is given in (360a). In other cases, the third copy may have a slightly different form, shown in (360b):

(360)   a.   *déé~dàà~déé*   expressive adverbial for 'face-to-face'

b.   *dàn~dàn~dăyⁿ* adjectival intensifier for *díyὲ* '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 grammar, it is relatively rare for ideophones. The only attested example is *kὲ~kɛ́w-ni* 'having small teeth without gaps'. The final CV reduplicated forms can either show lengthening of the final vowel or not:

(361)   a.   *pédédé*   adjectival intensifier for *yégélu* 'cold'

b.   *pɛ̂lɛ̂lɛ̂ɛ̂*   expressive adverbial for 'straight'

púdúdúú   adjectival intensifier for *wàgú* 'far'

ɲɛ́mɛ̀mɛ̀ɛ̀   expressive adverbial for 'a lot of identical small things'

The first expressive adverbial in (361b), *pɛ́lɛ́lɛ́ɛ́*, is clearly related to the verb *pɛ́lɛ́lɛ́* 'straighten'.

There are a couple of ideophones that look as though they have undergone final CV reduplication, but C$_2$ and C$_3$ do not match exactly. In both cases, C$_2$ is /r/ and C$_3$ is /d/. Since the examples in (362) show that C$_2$ and C$_3$ can both be /d/, it seems likely that these two deviant cases are the result of the dissimilation of the second /r/ into /d/. This is not a productive change in the language (recall from section 3.7.6 that rhotic dissimilation usually results in an /l/), but it could be a historical process fossilized in these ideophones. The two forms in question are the following:

(362)   *sɛ́rɛ́dɛ́ɛ́-ni*   expressive adverbial for 'straight-nosed'

       bɛ̀rɛ̀dɛ́ɛ́   adjectival intensifier for 'powdered' (used with intransitive
                 mìnɛ́ 'become powder')

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 5.1.6), but the tone pattern indicates that they are not (or are no longer) diminutive in nature.

(363)   *yùgùdíí-ni*   expressive adverbial for 'woolly'

       gògìlíí-ni   expressive adverbial for 'rickety (door)'

       súíí-ni   expressive adverbial for 'having small eyes'

A true diminutive would have a rising tone at the end, the result of a H-toned suffix *-ý* imposing tone lowering on the preceding stem (e.g. *dàgú* 'small' → *dàgì-ý*).

In a small handful of other cases, the stems are fully disharmonic, always in terms of backness and height harmony rather than ATR harmony. For example:

(364)   *pìlá-ni*   expressive adverbial for 'swoosh' (used with *gàlá* 'pass')

       púdɛ̀ɛ̀-ni   expressive adverbial for 'foaming'

       nùmbùràn-ní   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 [tɕ]) is attested in ideophones, such as *cákàm~cákàm*, an expressive adverbial for the sound of chewing loudly, or *cɔ̀rɔ̀y-ni*, an expressive adverbial combined with the verb *gòó* 'go out' to yield the meaning 'shoot out rapidly (e.g. 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 (e.g. donkey)'.

Phonotactics also differs in ideophones, particularly pertaining to acceptable coda consonants. While the nasal /ŋ/ is not typically used as a coda in the normal lexicon, it is frequently attested in coda position in ideophones. For example:

(365) *káŋ~káŋ-ni* adjectival intensifier for participle *jò-áa* 'full'

  kɔ́lɔ́ŋ~kɔ́lɔ́ŋ adjectival intensifier for *màá* 'dry'

  gáŋ~gáŋ 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:

(366) *rék* adjectival intensifier for *túmɔ́* 'one'

  gík-ni expressive adverbial used with *íŋ-íyɛ́* 'stop abruptly'

  ték~ték-ni expressive adverbial for 'falling one drop at a time'

In all cases, the unrepaired coda is /k/. In regular vocabulary, coda consonants would be repaired with vowel epenthesis; see section 3.4.6. Note also the unusual /r/ onset in adjectival intensifier *rék*; this is an unattested onset in the normal lexicon. Finally, we also see ideophones with medial voiceless stops, such as *cákàm~cákàm*, given above. This sequence is phonotactically illegal in non-ideophonic words.

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 the half with a non-L tone pattern in a reduplicated word, we find the following tone patterns:

(367) /H/   **jáw~jáw**   adjectival intensifier for *ɔ́gu* 'hot'

   /LH/   **jàgú~jàgù**   adjectival intensifier for *kóló* 'rare, bloody'

   /HL/   **púdɛ̀ɛ̀-ni**   expressive adverbial for 'foaming'

   /LHL/   **gègélè~gègélè-ni** expressive adverbial for 'runty'

Recall from section 4.1.2 that in the normal lexicon, only /H/ and /LH/ are found on native 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 or Ben Tey (Heath ms.). These ideophones are *wùû-ni*, an expressive adverbial used with the verb *úŋgúló* 'get up' to mean 'get up abruptly', and *bɛ̀ɛ̂m*, an adjectival intensifier for *ɔ̀lì-ý* 'fresh' to mean 'newborn'. The latter has the alternative form *bèmmɛ̂*. If there is a suffix, as in *wùû-ni*, the finally L tone is often pushed onto this suffix, yielding [wùú-nì].

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 (368a). If the initial copy has /LH/, then the second copy has /L/ (368b). If the first copy is /L/, the second is /H/ (368c). Finally, if the first copy is /LHL/, so is the second (368d):

(368) a. *kéw~kéw* adjectival intensifier for *yégélu* 'cold'

   b. *wàdá~wàdà* adjectival intensifier for *pílu* 'white'

   c. *ɲòŋò~ɲóŋó* 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 /LH/ initial copy is followed by an identical /LH/, as in *nùllí~nùllí-ni* 'walk with a permanent limp' and *bàmbú~bàmbú-go* 'staggering along like a drunk'. Similarly, one expressive adverbial derived from a verb *tɛ́mb-íyɛ́* 'feel' has the first copy /H/ and the second copy /L/: *tɛ́mbíyɛ́~tèmbìyɛ̀* 'walk along brushing against walls'. These are the only exceptions to the rules laid out before (368).

8.2 Adjectival intensifiers

8.2.1 Usage and morphology

The first class of ideophones I will discuss is adjectival intensifiers, which for the most part consist of a bound fully reduplicated stem (i.e. the stem has no meaning on its own). They generally function as adverbs, modifying an adjective, but morphologically they differ from the expressive adverbials to be discussed in the next

section. Since nouns can be modified by both verbal participles and adjectives, both of these modifiers can take intensifiers, but their behavior is slightly different, with participial intensifiers patterning more like expressive adverbials.

Intensifiers always follow attributive adjectives, which then take a {L} overlay; the modified noun is also tone lowered, though this can be construed as the work of the adjective and not the intensifier (see section 4.5):

(369) a. *nìyὲ^L gὲm^L síɲɛ́~síɲɛ́*
           oil   black INTENS
           'jet-black [thick] oil'

       b. *nàmà^L bànù^L dǎy^n~dày^n*
           meat   red   INTENS
           'very bloody (rare) meat'

Here and elsewhere, intensifiers will be glossed as INTENS.

If the adjective being intensified is 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 *wɔ* (370a–b). If it precedes the adjective, the adjective is outside of the tonal scope of the intensifier (which, like adjectives, extends leftward tone control). It retains its lexical tones and predicative morphology, whether suffixed or unsuffixed (370c–d).

(370) a. *Ònmmólu=gɛ   àmàm^L [tóróm~tóróm]-ni=wɔ.*
           tamarind=DEF sour   INTENS-ADV=be
           'Tamarind is very sour.'

       b. *Yàà-nà^L nǒ   ùsì-ỳ^L [kɛ́nu~kɛ́nu]-ni=wɔ.*
           female-HUM.SG this slim-DIM   INTENS-ADV=be
           'This woman is very slim.'

       c. *Díí=gɛ   pédédé-ni   yègèlú=wɔ.*
           water=DEF   INTENS-ADV   cold=be
           'The water is very cold.'

       d. *Nǎm=gɛ   [sél~sél]-ni   ɔ́gu-go=wɔ.*
           sun=DEF INTENS-ADV   hot-ADV=be
           'The sun is very hot.'

These intensifiers obligatorily carry the adverbial suffix *-ni*. The suffix *-go*, also an adverbial suffix, is considered ungrammatical (**tóróm~tóróm-go*).

If the modifier is not an adjective but a verbal participle, the situation is different. Consider first what a participial modifier looks like without an adjectival intensifier:

(371) *jìbù^L ɛ́nn-íy-áá-dɛ̀*
       skirt wet-MP-PFV-IMPF.REL
       'wet skirt'

As first noted in section 5.6, the participial modifier form takes the *-áá-dɛ̀* ending, an unusual combination of perfective morphology followed by the imperfective *-dɛ* suffix.

If an intensifier is added, there are two options. If it is added before the participle, the form of the participle remains the same (372a). The intensifier can also be added after the participle, in which case the *-dɛ* suffix on the participle is lost. Instead, it simply takes the *-aa* form, here toneless, which combines to make a chain verb construction with VP formed by the intensifier plus quasi-verb *=wɔ* (372b). Unlike an adjective with an intensifier, the participle does not undergo tone lowering. In these participial constructions, the whole modifying phrase acts like a relative clause:

(372) a. *Jìbù^L [jábu~jábu]-ni ɛ́nn-íy-áá-dɛ   mí=ǹ   óbó.*
           skirt   INTENS-ADV   be.wet-MP-PFV-IMPF 1SG.PRO=OBJ give.IMPER
           'Give me the very wet skirt (the skirt that is very wet).'

       b. *Jìbù^L ɛ́nn-íy-aa   [jábu-jábu]-ni=wɔ̂   mí=ǹ   óbó*
           skirt   wet-MP-PFV   INTENS-ADV=be.REL 1SG.PRO=OBJ give.IMPER
           'Give me the very wet skirt (the skirt that is very wet).'

In (372b), the *=wɔ* following the adverbial intensifier can also be replaced with *kán-ì*, the relative perfective form of *káná* 'do'. We will see this form below with expressive adverbials.

Predicated intransitive verbs (from which the modifying participles above are derived) also show this ordering variation, with the intensifier able to either precede or follow the verb. 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 (373a). If the intransitive verb precedes the modifier, then it takes the *-aa* chain form seen in modifier position (373b).

(373) a. *Súm=gɛ   [kám~kám]-ni ɛ́ⁿ-aa=wɔ.*
           rope=DEF INTENS-ADV   be.tight-PFV=be
           'The rope is very taut.'

b. *Bándáŋkálá=gɛ ɛ́s-aa [tál~tál]-ni=wɔ.*
courtyard=DEF be.clear-PFV 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 (i.e. not participles):

(374)

Gloss	Adjective	Intensifier
'big'	*gàá* (optional)	*dàn~dàn~dǎyⁿ*
'uncooked, red'	*bánu*	*dǎyⁿ~dàyⁿ*
'rare, bloody'	*kóló*	*jàgú~jàgù*
'hot'	*ɔ́gu*	*jáw~jáw*
'light'	*wɛ́y*	*jɛ́bu~jɛ́bu* or *kɛ́bu~kɛ́bu*
'fast'	*ɔ́gu*	*kádá~kádá*
'bitter'	*gálálu*	*kádu~kádu*
'hard'	*ɛ́ɛ́ⁿ*	*káyⁿ~káyⁿ*
'short'	*dùmbú*	*kɛ́du~kɛ́du*
'green'	*wɛ́ru*	*kɛ́ɛ́ⁿ~kɛ́ɛ́ⁿ*
'thin'	*ùsì-ý*	*kɛ́nu~kɛ́nu*
'cold'	*yégélu*	*kéw~kéw*
'black'	*gɛ́m*	*kírím~kírím*
'dry'	*màá*	*kɔ́lɔ́ŋ~kɔ́lɔ́ŋ*
'stiff'	*sándé*	*ɲáy~ɲáy*
'hot (water)'	*ɔ́gu*	*pálu~pálu*
'new'	*kàndá*	*pélé~pélé*
'unripe'	*kóló*	*péyⁿ~péyⁿ*
'soft'	*búru*	*pɔ́rɔ́~pɔ́rɔ́*
'long and thin'	*ùsì-ý*	*sébu~sébu*
'fast'	*ɔ́gu*	*sɛ́lɛ́w~sɛ́lɛ́w*
'hot (sun)'	*ɔ́gu*	*sél~sél*
'sour'	*ámám*	*tám~tám*
'white, bright'	*pílu*	*táw~táw*
'bland'	*ɛ́dɛ́du*	*tɛ́bu~tɛ́bu*
'black (dense)'	*gɛ́m*	*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. *ɔ́gu*, 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. Thus, we see that it is semantics rather than the morphological form of the adjective that determines which intensifier is used.

Reduplicated intensifiers modifying participles are shown below:

(375) | Gloss | Verb | Intensifier |
|---|---|---|
| 'tight' | $\hat{\varepsilon}\hat{\varepsilon}^n$ | gérém~gérém |
| 'wet' | ɛ́nn-íyɛ̂ | jábu~jábu |
| 'tight' | $\hat{\varepsilon}\hat{\varepsilon}^n$ | kám~kám |
| 'full' | jòó | káŋ~káŋ |
| 'clean' | ɛ́sɛ̂ | 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 (section 5.1.5). 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* (376c). This is the only instance I have seen of *~mà~* not surrounded by identical forms.

(376) a. *póó~mà~póó*
       'stocky'   (from *póó* 'fat')

       b. *pàlá~mà~pàlá*
       'very tall'   (from *pàlá* 'tall')

       c. *pàlà~mà~náy*
       'very tall'

Unreduplicated intensifiers for adjectives are listed below in (377a) and for participles of intransitive verbs in (377b):

(377) | | Gloss | Adjective | Intensifier |
|---|---|---|---|
| a. | 'newborn' | ɔ̀lì-ý | bɛ̀ɛ̂m or bɛ̀mmɛ̂ |
| | 'emaciated' | kómmó | kòéy^n ⇒ (prosodically lengthened) |
| | 'emaciated' | kómmó | nágádu |
| | 'fast' | ɔ́gu | píí |
| | 'one' | túmɔ́y | rék |

	Gloss	Verb	Intensifier
b.	'fine (powder)'	mìnɛ̂	bɛ̀rɛ̀dɛ́ɛ́
	'overloaded'	dùy-íyɔ́	gĭŋ~gàŋ~gĭm or gìŋgìlĭí
	'thick, bloated'	píír-íyé	gúndúm

The first intensifier for 'overloaded' does show retriplication, but morphologically related *gìŋgìlǐí* does not.

8.3 Expressive adverbials

The other main use of ideophones is as expressive adverbials. These adverbials typically modify an action verb, rather than an adjective or a descriptive intransitive verb, to describe its action in a precise way. A small class of expressive adverbials, however, are adjective-like descriptive predicates, followed by the quasi-verb =*wɔ*; 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, turning finally to adverbs derived from nouns and verbs. For further discussion of adverbs in general, see Chapter 10.

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*; the choice seems to be lexicalized, though preliminary data suggest that those forms with -*go* could also take -*ni*, but not vice versa. That is, -*go* is the more restricted suffix. Unlike more strictly adverbial expressive adverbs, they only modify the quasi-verb *wɔ* and never an action verb. It is this quasi-verb that they modify when acting as a predicate:

(378) a. *Pédu=gɛ* **yùgùdíí-ni=wɔ.**
           sheep=DEF woolly-ADV=be
           'The sheep is woolly.'

   b. *Íí=gɛ* **súíí-ni=wɔ.**
       child=DEF small.eyed-ADV=be
       'The child has small eyes.'

Some such adverbials have an associated noun they always describe. Take, for instance, the adverbial *ɲǎy-ni* which always refers to teeth. Without such reference, *ɲǎy-ni* has no meaning.

(379) **Ìnú** *wómɔ* **ɲǎy-ni**=*wɔ*.
tooth 3SG.POSS sticking.out-ADV=be
'He has front teeth that stick out.'

A relative clause construction is used to turn the adverbs into modifiers. The adverb is followed by either =*wɔ* or *kán-ì* 'did' (often pronounced [kànù]), and the modified noun, as head of the relative, undergoes tone lowering:

(380) a. *Pèdù^L yùgùdíí-ni kán-ì y-àà=bé-m.*
sheep wooly-ADV do-PFV.REL see-PFV=be.PST-1SG
'I saw a wooly sheep.'

b. *Ìnù^L ɲǎy-ni=wɔ̂ m̀bɛ́-lɛ̀-m.*
tooth sticking.out-ADV=be.REL like-NEG-1SG
'I don't like teeth that stick out.'

This is the same sort of construction seen when adjectival intensifiers are used as modifiers, but without an associated adjective or participle.

The following is a representative list of adjective-like expressive adverbials, grouped by phonological form:

(381) a. <u>CV- reduplication</u>
(ìnú) kɛ̀~kɛ́w-ni 'having small teeth without gaps'

b. <u>Full reduplication</u>
kɔ́y~kɔ́y-ni 'worn out, used'
gègélè~gègélè-ni 'runty and weak'
tín~tín-ni 'elongated, filled out (sack)'
sìdú~sìdù-go 'striped'

c. <u>Retriplication</u>
déé~dàà~déé-ni 'face-to-face'

d. <u>Long final vowel (polysyllabic)</u>
yùgùdíí-ni '(e.g. sheep) having abundant hairs'
súíí-ni 'having small eyes'
sɛ́rɛ́dɛ́ɛ́-ni 'straight-nosed'
(kínu) pɔ̀ríí-ni '(child's nose) pouring lots of snot'
púdɛ̀ɛ̀-ni 'foaming'
kùmìlǐí-ni '(eyes) half-open'
gògìlíí-ni '(door) rickety'
ɲɛ́mɛ̀mɛ̀ɛ̀ 'scattering everywhere'

e. <u>Monosyllabic</u>

(ìnú) kǐ-ni	'buck-toothed'
(ìnú) kón-ni	'buck-toothed'
(ìnú) ɲǎy-ni	'having upper front teeth protruding (when smiling)'
gěŋ-go	'tilted'
mɔ̌y-ni	'oily'
pǎy-ni	'(eyes) wide open'
búú^n-ni	'solidly built (like a donkey)'
kɔ̀y-ni	'(eyelids, knees) lacking flesh'

f. <u>Other</u>

(íí) mámbu-ni	'(tree) having many fruits'
jùŋgɔ̀y-ní	'(fruit, offspring) in clusters'
nùmbùràn-ní	'(cow, woman) fat'
yùgú~yàgù-ni	'(cow, woman) fat'
júrúm-ni	'withdrawn, sullen'
bɔ̀ɔ̀gú-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

Expressive adverbials are so-called because they function as adverbs to express the precise manner in which the action of the verb is carried out. These can also take the adverbial suffixes *-ni* or *-go*, the postposition *=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 *jɔ̀bɔ́* 'run'). Examples include:

(382) a. *gùmmú~gùmmù-ni yàá* '(person with big butt) lumber along clumsily'

b. *nùllí~nùllí-ni yàá* 'walk with a permanent limp'

c. *ɲònò~ɲóŋó yàá* 'crawl on all fours'

d. *yùmbɔ́~yùmbɔ̀-ni yàá* '(child) walk clumsily'

e. *yóndu~yóndu-ni yàá* 'walk slowly and stiffly (like a tall lanky person)'

f. *gàŋgálíyɛ́-go yàá* 'walk leaning to one side, then to another'

g. *dɔ̀ndú~dɔ̀ndù-ni yàá* 'walk with head bent down (when going downhill)'

h. *bàmbú~bàmbú-go yàá* 'stumble along like a drunk'

Example (382b) is probably derived from *yóŋóló* 'knee'. A synonym is *yòŋòlò^L sóm yàá* 'crawl' (lit. go [on] 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:

(383) a. <u>Reduplicated</u>

ték~ték-ni (*káná* 'do') 'fall one drip at a time'

pɛ́rɛ̂~pɛ́rɛ̂-ni (*bɛ̀lɛ̂* 'find') 'eke out a living'

wíílé~wíílé (*káná* 'do') 'flap in the breeze'

pɛ́r~pɛ́r-ni (*kááɗ-íyɛ̂* 'rip') 'tear into little pieces'

b. <u>Long final vowel</u>

sóródòò-ni (*káná* 'do') 'drip rapidly'

dúyááw-ni (*yóó* 'enter') 'dive down hard (into water)'

kɛ̀ɛ̀^{n}líí-ni (*píl-lé* 'open') 'open (door) a crack'

bùíí-ni (*gòó* 'go out') '(bullet, animal) shoot out'

c. <u>Monosyllabic</u>

gík-ni (*íŋ-íyɛ̂* 'stop') '(horse) stop abruptly'

wùû-ni (*úŋgúló* 'get up') 'get up abruptly'

póó-ni[15] (*píl-l-íyé* 'be open') 'be wide open'

pǎy-ni (*gɔ̀mbɔ́* 'open wide') 'open (eyes) wide'

sǎr-ni (*gòó* 'go out') 'stick way out'

séw-ni (*káná* 'do') 'be silent for a minute'

d. <u>Other</u>

ɛ̀mɛ̀y-ní (*káná* 'do') 'smile widely so that upper teeth show'

gèmbìlí-ni (*dànn-íyɛ̂* 'sit') 'perch on the edge of a chair'

pìlá-ni (*gàlá* 'pass') 'pass with a swoosh'

cɔ́rɔ̀y-ni (*gòó* 'go out') '(bullet, animal) shoot out'

kúrùm-ni (*dɛ̀mm-íyɛ̂* 'collapse') 'land with a thud'

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15 Probably derived from *póó* 'fat'.

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 *-go* suffix, the postposition *=le*, or nothing instead of the adverbial suffix *-ni*.

(384) *kúú~kúú-go* (*yóó* 'enter')   'dive headfirst (into water)'
       Derived from: *kúú* 'head'

       tòrú~tòrù=le   'in small groups'
       Derived from: *tòrú* 'group'

       dúm~dúm-go   'in small groups'
       Derived from: *dúm* 'pile'

       ɲòŋò~ɲóŋó (*yàá* 'go')   'crawl on all fours'
       Derived from: *yóŋóló* 'knee'?

       témbíyê~tèmbìyè (*yàá* 'go')   'walk along brushing up
       Derived from: *témb-íyê*   against the walls'
       '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, which fall into several domains: 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.

(385) | Animal | Tommo So | English |
       |--------|----------|---------|
       | sheep | *bàéɛ̂* | 'baa' |
       | goat | *bèéè* | |
       | | *mɛ̀ɛ̂ɛ̀* | |
       | laughing dove | *gù-gúróbù* | |
       | | *kù-kúrù-kúù* | |
       | dog (yelping) | *hăy^n-hăy^n* | |
       | dog (barking) | *wówó* | 'woof' |

donkey	*hɔ̀ⁿ-gí-hɔ̀ⁿ-gí*	'hee-haw'
little bird	*íí-íí-íí*	'tweet'
rooster	*kèŋgérè-kéè*	'cock-a-doodle doo'
cow	*mɔ̀ɔ̀ɔ̀*	'moo'
cat	*ɲáò*	'meow'
bullfrog	*ɔ́ɔ̀ⁿ-ɔ́ɔ̀ⁿ-ɔ́ɔ̀ⁿ*	'croak'
toad	*tə̰ɛ́ɛ́-tə̰ɛ́ɛ́*	'croak'
pigeon	*wùúù*	'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!':

(386) *cákàm~cákàm*   sound of someone smacking their mouth while chewing

   kòém~kòém   sound of someone eating something dry and powdery

   yògóbù~yògóbù sound of quick chewing, especially when monkeys chew

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 given below:

(387) *bùúⁿ* sound of a long, melodious fart

   péɛ́ⁿ sound of a fart one tries to keep in

   pɔ́r 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:

(388) *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:

(389) a. *gùrù~gùrù~gùrù*   sound of three people pounding in a mortar
           dùgù~dàgù~dùgù   sound of three people pounding in a mortar
           kú'~kú'~kú'~kú'   knocking sound of two people pounding together
           tém~tém   sound of one person pounding in a mortar
           tóm~tóm   sound of one person pounding in a mortar

      b. *káélá~káélá*   rattling sound
           ságáy~ságáy   rattling sound

      c. *kɛ́ɛ́^{n}~kàà^n~kɛ́ɛ́^{n}*   creaking sound

      d. *péé~péé*   sound of a whistle

      e. *pússs*   sound of a tire losing air
           póòw   sound of a tire popping

      f. *súyáw~súyáw*   crunching sound of someone walking in a field without looking

8.5 Sound symbolism

The last topic to address in this chapter is sound symbolism. In Tommo So, we find sets of words that are closely related in meaning, with differences in vowels generally indicating differences in scope or size. For example, consider the following pair:

(390) a. *kɛ́bɛ́rɛ́*   'small and flat'

      b. *kábárá*   'flat (and slightly larger)'

The low vowel /a/ indicates an increase in size over the form with /ɛ/.

    Vowel changes associated with sound symbolism target all of the underlying vowels in a stem, which means it can be used as a diagnostic for epenthesis. In the following pair, we see that the final [u] does not participate in the vowel change:

(391) a. *gìrè^L kúmúŋju*   'blinking'

      b. *gìrè^L kɛ́mɛ́ŋju*   'continuous blinking'

Only the first two stem vowels undergo the change from /u/ to /ɛ/. See section 3.4.6 for a discussion of sound symbolism and other diagnostic tests for vowel epenthesis.

    Verbal pairs are listed below:

(392) a. *gà̰ɲá*   'dig a small hole in sand (with one's hand)'
              gṵ̀ɲó   '(squirrel) dig up seeds buried in the dirt'

        b. *kímɛ́*   '(horse) neigh'
              kɔ́mɔ́   '(donkey) bray'

        c. *mà̰ɲá*   'toss, scatter (grain, sand) with the hand'
              mḭ̀ɲé   'toss, sprinkle (water) with the hand'

        d. *sémbé*   '(water) drip from wet clothes'
              sómbó   '(water) drip from trees (e.g. after a rain)'

Chapter 9
Coordination

This chapter focuses on how nominal constituents are combined. First I will discuss the conjunction ('and') of NPs, PPs, and adjectives, followed by a discussion of disjunction ('or') in the same categories. V and VP coordination will not be treated here, since this is achieved through verb serialization in Tommo So; see Chapter 18. For the behavior of coordinated phrases as the head of a relative clause, see section 16.6.2.

9.1 Conjunction

Elements are conjoined in Tommo So by placing the associative postposition *=le* after both conjuncts *X=le Y=le* 'X and Y'. This is the same postposition used in instrumental and comitative constructions; see section 10.1.1.

9.1.1 NP conjunction

In NP (and N) conjunction, *=le* is placed on each of the conjoined NPs:

(393)   a.   *ɛ̀ɲjɛ̂=le*   *jàndúlu=le*
            chicken=ASSOC   donkey=ASSOC
            'a chicken and a donkey'

       b.   *Sɔ̀ɔ̀-Dámmá=le*   *émmé=le*   *[bàà^L íí]=ǹ*   *de...*
            Sɔɔ-Damma=ASSOC   1PL.PRO=ASSOC   father child=COP   EMPH
            'Sɔɔ-Damma and us, we're paternal relatives...'   [23.3:69]

If there are more than two conjuncts, the associative is repeated after each one:

(394)   *Nɛ́ɛ́   Kàndà-Sɔ̀ɔ́-Yɛ̀lìm=le*   *ɛ̀ndɛ̀-Kìndíyé=le*
        now   Kanda-Sɔɔ-Yɛlim=ASSOC   Ɛndɛ-Kindiye=ASSOC

        Yà-Tɛ̀ɛ̀-Gòmbóló=le   *ɛ̀n-Tàándù-ìyǎy=le*
        Ya-Tɛɛ-lumpy.head=ASSOC   Ɛn-Taandu-girl=ASSOC

        nɔ̀=mbé kay báá ⇒ ˈtúmɔ́ ˈnáá   ˈtúmɔ́.
        this=Pl TOP father   one   mother one

        'Now, Kanda Sɔɔ Yɛlim, Ɛndɛ Kindiye, Ya Tɛɛ the Lumpy Head, and Ɛn Taandu the Girl, as for these, [they were all of] the same father and same mother.'   [23.3:43]

In this example, the associative postposition is repeated four times.

If the NPs to be coordinated are plural, marked with the plural clitic *=mbe*, the associative postposition is optional. The two clitics can be used together (395a–b), or the associative can be absent when conjoining either two (395c) or more (395d) elements:

(395) a. *ɛ̀nɛ́=gɛ=mbe=le   pédu=gɛ=mbe=le*
           goat=DEF=PL=ASSOC sheep=DEF=PL=ASSOC
           'the goats and the sheep'

     b. *wárá=mbe=le ⇒ màlbá=mbe=le ⇒ ɔ̀gɔ̀^L   búru=gɛ=mbe=le*
         spear=PL=ASSOC gun=PL=ASSOC   Hogon horn=DEF=PL=ASSOC
         'spears, guns, and Hogon horns'   [23.4:7]

     c. *ɛ̀ɲjɛ́=mbe   jàndúlu=mbe*
         chicken=PL donkey=PL
         'chickens and donkeys'

     d. *ɛ̀ɲjɛ́=mbe   jàndúlu=mbe pédu=mbe*
         chicken=PL donkey=PL   sheep=PL
         'chickens, donkeys and sheep'

Note that it is not possible to add the associative clitic to only one of the two conjuncts (**ɛ̀ɲjɛ́=mbe=le jàndúlu=mbe*).

The set of conjuncts can also be followed by the quantifier *kɛ́m* 'all', which depending on the number of conjuncts, translates to roughly 'both' or 'all':

(396) a. *Nìmɛ̌m kay nɛ́ɛ́   Mùgàà-tàŋá=le ⇒   Tó~tóŋó=le ⇒*
           now   TOP now Muga-Taŋa=ASSOC RED~Tongo=ASSOC

           kɛ́m Ámbá-kànù gìnɛ̀^L=nɛ   gò-áá-dɛ̀=ɲ̀.
           all Amba-Kanu house=OBL leave-PFV-IMPF=COP

           'As for now, now Mugaa-Taŋa and Tongo-Tongo, both came from
           the house of Amba-Kanu.'   [23.3:40]

     b. *ɛ̀nɛ́=gɛ=mbe ɛ̀ɲjɛ́=gɛ=mbe   pédu=gɛ=mbe àná*
         goat=DEF=PL chicken=DEF=PL sheep=DEF=PL rain

         gàmà^L   kɛ́m yìm-ì-ɛ̀^n.
         thunder all die-PFV.L-3PL

         'All of the goats, chickens, and sheep died in the flood.'

As we can see, the quantifier can either directly follow the conjuncts (396a) or be placed before the verb (396b).

There is no difference in Tommo So between NP conjunction and simple N conjunction. That is, an English expression with conjoined nouns in a single NP like 'I know Ramata's father and mother' gets expressed as 'Ramata's father and her mother', both as NPs:

(397) *Mí   Àrámátá bàà^L=le   wó   náá^L=le   íg-go=wɔ-m.*
        1SG.PRO Ramata   father=ASSOC 3SG.PRO mother=ASSOC know-ADV=be-1SG
        'I know Ramata's father and mother.'

The same is true when the conjoined nouns are in the possessor:

(398) a. *Ú=le   mí=le   [tírè yàà-nà]^{HL}=gɛ*
            2SG.PRO=ASSOC 1SG.PRO=ASSOC grandmother=DEF
            'Your and my grandmother'

        b. *Àrámátá=le   Sáná=le   gìnè^L=gɛ*
            Ramata=ASSOC   Sana=ASSOC   house=DEF
            'Ramata and Sana's house'

Even with pronouns conjoined in a possessor (398a), we have no reason to consider the pronouns as anything but their own NPs.

9.1.2 Ordering of the conjuncts

The order of the two NP conjuncts 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 (399a) come from the same speaker at different points in the same text, and we see that the 1pl and 3pl pronouns can come in either order. The two examples in (399b) 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:

(399) a. *Émmé=le   bé=le   kábíl-íy-aa…*
            1PL.PRO=ASSOC 3PL.PRO=ASSOC divide-MP-PFV…
            'Us and them, we split up…'   [23.2:55]

            Bé=le   émmé=le   báá   ˈtúmɔ́
            3PL.PRO=ASSOC 1PL.PRO=ASSOC father one

            ˈnáá   ˈtúmɔ̂=ɲ koy.
            mother one=COP EMPH

            'Them and us, we have the same father, same mother!'   [23.2:21]

b. *Émmé=le   Sɛ̀mmɛ̀lɛ̀-Tàŋá=le   náá   túmɔ́=ɲ̀,*
    1PL.PRO=ASSOC Sɛmmɛlɛ-Taŋa=ASSOC mother one=COP

    báá=gɛ   dɛ́y=ɲ̀.
    father=DEF different=COP

    'Us and Sɛmmɛlɛ-Taŋa, [our] mother is the same, the father is different.'

    Sɛ̀mmɛ̀lɛ̀-Tàŋá=le   émmé=le   náá=gɛ
    Sɛmmɛlɛ-Taŋa=ASSOC 1PL.PRO=ASSOC mother=DEF

    túmɔ́=ɲ̀ báá=gɛ   dɛ́y=ɲ̀.
    one=COP father=DEF different=COP

    '[For] Sɛmmɛlɛ-Taŋa and us, the mother is the same, the father is different.'   [23.3:54-55]

Below are further examples of variable order of both pronouns and non-pronominal NPs:

(400) a. *mí=le   ú=le*
           1SG.PRO=ASSOC 2SG.PRO=ASSOC
           'me and you'
           (also *ú=le mí=le*)

       b. *pédu=gɛ   kɛ́m=le   ɛ̀ŋjɛ̀ᴸ   tùmɔ̀-ý=le*
           sheep=DEF all=ASSOC chicken one-DIM=ASSOC
           'all the sheep and one chicken'
           (also *ɛ̀ŋjɛ̀ᴸ tùmɔ̀-ý=le pédu=gɛ kɛ́m=le*)

9.1.3 Conjunction of determiners

If we try to isolate the conjunction of determiners, it is again difficult to tell whether it is truly just the determiners that have been conjoined or two NPs. Consider:

(401) *tàgàᴸ nɔ̀=lé   nì=lé*
       shoe   this=ASSOC that=ASSOC
       'these and those shoes'

This example is ambiguous between the following two structures:

(402) a. *[tàgà nɔ̀]ₙₚ=lé [Ø nì]ₙₚ=lé*

       b. *tàgà [nɔ̀=lé nì=lé]*

In (402a), the first associative clitic is added after an NP containing the noun 'shoes' and the proximal demonstrative determiner. The second associative clitic follows an NP consisting of the distal demonstrative determiner and a null N head; this would leave us once again with NP conjunction. In (402b), on the other hand, it is truly the determiners that are conjoined, and together they modify the head noun. It is not clear how to distinguish between these two analyses.

9.1.4 PP conjunction

PPs can also be conjoined using the associative particle after each conjunct, as in:

(403) a. *Mìnì~míní=gɛ   sɔ̌w   ḿmɔ=nɛ=le   jáá*
           RED~ant=DEF clothing 1SG.POSS=OBL=ASSOC meal

           ḿmɔ=nɛ=le   yó-àà-dìɲ.
           1SG.PRO=OBL=ASSOC enter-PFV-IMPF.3PL

           'The ants got into my clothing and my meal.'

       b. *Àn-ná=gɛ   gìnɛ́   ḿmɔ   gìrè^L=nɛ=le*
           male-HUM.SG=DEF house 1SG.PRO front=OBL=ASSOC

           bándáŋkálá ḿmɔ=nɛ=le   gál-àà-dè.
           courtyard   1SG.PRO=OBL=ASSOC pass-PFV-IMPF

           'The man passed in front of my house and through my courtyard.'

In (403a), the sense of each PP is 'in', whereas in (403b) we see the conjunction of a compound PP 'front of' and a simple oblique PP 'in' (or in this case 'through').[16] Even if each NP takes the same postposition, as in (a), it must be repeated. I have seen no instances of a single postposition following a conjoined NP.

As with NP conjunction, there is seemingly no distinction between PP and P conjunction, with the latter expressed using a null noun head in the second conjunct:

(404) *Díí   tòndòó=gɛ=nɛ=le   dúú=gɛ=nɛ=le   tóò.*
        water water.jar=DEF=OBL=ASSOC beneath=DEF=OBL=ASSOC be.in
        'Water is in the water jar and under [it].'

The second conjunct contains the nominal phrase *dúú=gɛ* 'the underneath'. This is usually used in a possessive construction with the location in question, as in

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16 It is not clear why both of these example sentences use the "perfective imperfective" form of the verb, discussed in Chapter 12.

tòndòó=gɛ dùù^L=gɛ 'underneath the water jar'. Here we can assume that 'water jar' is expressed with a null head.

Regardless of whether or not this null head exists, the postpositional meaning itself is expressed by a nominal category, making this no different than regular NP coordination.

9.1.5 Conjunction of adverbs

Conjunction of temporal adverbs looks just like the conjunction of any other element; associative *=le* is placed after each conjunct:

(405) *Àgá=le   dìgɛ́=le   kɛ́m núyɔ́ núyɔ̀-dɛ̀-m.*
       morning=ASSOC evening=ASSOC all   song sing-IMPF-1SG
       'I sing every morning and every evening.'

Notice that *kɛ́m* 'all' need only be applied once after both conjuncts to have scope over both of them.

9.1.6 Conjunction of adjectival modifiers

The conjunction of adjectival modifiers depends on whether or not the adjectives in question refer to the same dimension (that is, are mutually exclusive) or not. For example, consider the following two forms:

(406) a. *gàmmà^L gɛ́m=le   píl=le=wɔ́=gɛ̀.*
           cat   black=ASSOC white=ASSOC=be.REL=DEF
           'the black and white cat'

       b. *yàà-nà^L pòò^L dùmbì-ý=gɛ*
           female-HUM.SG   fat   short-DIM=DEF
           'the short, fat woman'

In (406a), 'black' and 'white' cannot exist globally on a single cat; if a cat is black and white, it is understood to have some black portions and some white portions, but it neither a black cat nor a white cat. In this case, the two adjectival modifiers are each followed by the associative clitic *=le* and put into a relative clause construction ('the cat that is black and white'). If the two modifiers are not mutually exclusive, as in 'fat' and 'short' in (406b), both adjectives simply modify the noun ('the short, fat woman'); no special conjunction is required.

9.1.7 Conjunction of adjectival predicates

If the adjectives in question are predicates rather than modifiers, the two predicates are simply listed one after another with no change of tone and no associative clitic; both carry their usual quasi-verbs:

(407) a. *Gìnɛ́=gɛ*   *pílu-go=wɔ*   *ɛ̀sú-go=wɔ.*
        house=DEF   white-ADV=be   pretty-ADV=be
        'The house is white and pretty.'

     b. *Díí=gɛ*   *yɛ̀gɛ̀lú=wɔ*   *pɛ̀lɛ̀lú=wɔ.*
        water=DEF   cold=be   nice=be
        'The water is cold and nice.'

     c. *Pɔ́m=gɛ*   *bánu-go=wɔ*   *ɛ̀lɛ̀lú=wɔ.*
        apple=DEF   red-ADV=be   sweet=be
        'The apple is red and sweet.'

The sentence in (407a) shows the conjunction of two suffixed adjectival predicates, (407b) the conjunction of two unsuffixed adjectival predicates, and (407c) the conjunction of one suffixed and one unsuffixed adjectival predicate. I have no data determining whether conjoined NP predicates similarly require a repetition of the copula or other predicating quasi-verb.

9.1.8 Clause-level conjunction

Like adjectival predicate conjunction, simple clauses are often conjoined in texts by juxtaposition alone. The fact that I have never seen clauses conjoined with the associative postposition *=le* suggests that this is not a viable conjunction strategy at the clause level:

(408) a. *Sɛ̀mmɛ̀lɛ̀-Tàŋá yé=tòò^L*   *émmé*   *yé=tò-y^L.*
        Sɛmmɛlɛ-Taŋa EXIST=be.in   1PL.PRO EXIST=be.in-1PL
        'Sɛmmɛlɛ-Taŋa is in [it] and we are in [it].'   [23.3:64]

     b. *ɔ̀ɔ́, [Dɛ̀ŋɛ̀nɛ̀-Dúú=mɔ=gɛ]*   *Kàndà-Tùgɛ́ɛ́ru*,   *nìí*   *Kàndày-Tóru.*
        no Deŋene-Duu=POSS=DEF Kanda-Tugeeru,   that   Kanday-Toru
        'No, Kanda-Tugeeru was for Deŋene-Duu, this is Kanday-Toru.'   [23.1:4]

Note that this construction is typically only found for those sentences that use quasi-verbs or the copula (which may be omitted, as example (408b) shows). If the verb is a regular, conjugating verb, a serial construction tends to be used to link the two phrases. There is no separate serial verb form of quasi-verbs. For more on verb chaining, see Chapter 18.

9.2 Disjunction

The disjunctive clitic is *=ma*. Following Heath (2008), I gloss this particle as 'or?', since it doubles as an interrogative particle placed at the end of a clause (interrogation by omission). See section 15.2.1 for further discussion.

9.2.1 NP disjunction

Like the associative particle in conjunction, the disjunctive particle is placed after each NP disjunct:

(409) a. *Màŋgóró=gɛ=ma nàmá=gɛ=ma   ɲyɛ̀-dɛ̀-m.*
            mango=DEF=or? meat=DEF=or? eat-IMPF-1SG
            'I will eat either the mango or the meat.'

       b. *Mòòmíyó=ma jígu~mà~jígu=ma   y-ɛ̀=yó   píyɛ̀-dɛ̀.*
            scorpion=or? wind.scorpion=or? see-PFV=if cry-IMPF
            'He will cry if sees a scorpion or a wind scorpion (solifuge).'

       c. *Ḿmɔ=nɛ   líburu=ma kɔ̀mplɛ́=ma pòlú=ma jɛ́ɛ́lɛ̂.*
            1SG.POSS=OBL book=or? outfit=or? knife=or? bring.IMPER
            'Bring me a book, an outfit, or a knife.'

There is no difference between simple 'X or Y' and 'either X or Y' constructions.
    Like conjunction, there appears to be no way to carry out N disjunction separate from NP disjunction. Consider:

(410) *Ú   báá^H=ma ú   náá^H=ma   òdù^L óbó^H dɔ̀mm-íyɔ́.*
        2SG.PRO father=or? 2SG.PRO mother=or? road   give   wait-MP.IMPER
        'Wait for the permission of either your father or mother.'

In Tommo So, one must say 'your father or your mother', with the possessive pronoun repeated with each noun; disjunction at the noun level is not possible (**ú báá^H=ma náá^H=ma*).

9.2.2 Disjunction of determiners

Here, we have clearer evidence that determiner disjunction is actually NP disjunction, with demonstrative pronouns standing in for the noun phrases:

(411) *Dùgɔ̀-ý   ḿmɔ   nɔ̌ɔ́=ma nǐi=ma ɛ́bɛ́   yè-ndɛ́.*
        jewel-DIM 1SG.PRO this=or? that=or? buy.IMPER see-FACT.IMPER
        'Buy me either this or that jewelry.'

In this example, the demonstratives take their pronominal form with long vowels and full rising tones (see section 5.4.2.2). If they were being used as determiners, they would have shortened vowels and they would impose tone lowering on the noun. Instead, the NP 'my jewelry' is topicalized at the beginning of the sentence, and the disjoined demonstratives refer back to this topic.

9.2.3 Disjunction of PPs

PP disjunction places the clitic *=ma* after both disjuncts. This same form is used whether there are overt postpositions involved (412a) or whether the postpositions are null (412b):

(412) a. *Gìnè-ý=gɛ=nɛ=ma*   *dàlá=gɛ=nɛ=ma*   *ɲ́yɛ́-dìm m̀bɛ̀.*
        house-DIM=DEF=OBL=or? roof=DEF=OBL=or? eat-INF   like
        'She likes to eat either in the house or on the roof.'

      b. *Bàŋjàgàrá=ma   Kóró=ma ú   yàà-nú yáà-dɛ̀-y.*
        Bandiagara=or? Koro=or? 2SG.PRO go-PPL go-IMPF-1PL
        'We will go [along if] you are going to either Bandiagara or Koro.'

The verb *yàá* 'go' takes a bare PP as its goal.

9.2.4 Disjunction of adjectival modifiers

Once again, we see a distinction in the way adjectival disjunction is formed depending upon whether the adjectives involved are mutually exclusive or not. In the case of color, where something can be just one color at a time (in a single spot), the disjunctive clitic *=ma* is placed directly after each adjective; in this case, the construction looks less like a relative clause than in conjunction, lacking the quasi-verb participle *=wɔ* (413a). If the two adjectives are not mutually exclusive, each adjective must take the copula *=ǹ* before the disjunctive clitic (413b):

(413) a. *Pèdù^L pílu=ma   gɛ́m=ma   ɛ́b-ee   m̀bɛ̀-m.*
        sheep white=or? black=or? buy-NF want-1SG
        'I want to buy a white or a black sheep.'

      b. *Àn-nà^L ɔ̀gɔ̀-ý-nɛ=ǹ=ma*
        male-HUM.SG   chief-DIM-HUM.SG=COP=or?

        ɛ̀sú=ǹ=ma   ɛ̀^{n}-é   m̀bɛ̀, néé-go   kɛ́m=lɛ.
        pretty=COP=or? marry-NF want two-ADV all=NEG.COP

        'She wants to marry a man who is either rich or handsome, but not both.'

9.2.5 Clause-level disjunction

The same particle can also 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. In questions, we see the following:

(414) *Kɔmbɔ́ yáà-dìŋ=yo   nɛ̀ɛ̀, ɔ̀gɔ̀-nɔ́   ǹdɛ̀ᴸ   wó*
       war   go-IMPF.3PL.S=if now, chief-HUM.SG person 3SG.PRO

       ḿbɛ̀=ǹ   túyò-dɛ̀=ma   ǹdɛ̀-ḿ=gɛ   kɛ́m yáà-dɛ?
       like.REL=OBJ send-IMPF=or? person-HUM.PL=DEF all   go-IMPF

       'Now, if they [would] go to war, would the chief send [only] the people
       he liked or would everyone go?'   [23.2:100]

The disjunctive clitic *=ma* is placed only after the first clause.

Another form of clause level disjunction has been seen in elicitation. Like the example in (414), the disjunctive clitic follows only the first clause, but the form of the verb is always the defocalized perfect, even if the sentence is interpreted as future (415a) or imperative (415b–c):

(415) a. *Bàmàkó yà-ɛ̀-m=ma ⇒   nɔ̀nú bìy-ì-m.*
           Bamako go-PFV.L-1SG=or? here be-PFV.L-1SG
           'Either I will go to Bamako, or I will stay here.'

       b. *Jáá=gɛ   ǹy-ɛ̀-ẃ=ma ⇒   ùŋgùl-ì-w.*
           meal=DEF eat-PFV.L-2SG=or? get.up-PFV.L-2SG
           'Eat the meal or get up!'

       c. *Dɔ́ɔ́=gɛ   dɔ̀-ɛ̀-ẃ=ma ⇒   kúy=gɛ*
           pounding=DEF pound-PFV.L-2SG=or? pestle=DEF

           mí=ǹ   òb-ì-w.
           1SG.PRO=OBJ give-PFV.L-2SG

           'Pound the millet or give me the pestle!'

Examples (415b) and (415c) 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, and the imperative is not possible in these contexts (*úŋgúló, *óbó).

Chapter 10
Postpositions and adverbials

This chapter deals with two broad categories: postpositions (associative, locative, oblique, possessive, and purposive) and adverbials. The latter are organized by semantic domain, with a discussion of similarity, extent, evaluation, spatio-temporal, demonstrative, and other adverbs.

10.1 Postpositions

Tommo So has five main postpositions: the associative postposition =*le*, two locative postpositions =*nɛ* and =*baa*, the possessive =*mɔ*, and the purposive =*diyɛ*. Of the two locatives, the first, =*nɛ*, can be used more abstractly and also can take a dative meaning. To distinguish the two, I will gloss =*nɛ* as OBL (oblique) and =*baa* as LOC (locative).

Postpositions are enclitics in Tommo So, and as such, they lack their own specified tones. Recall from section 4.2 that underspecified elements of this type receive their F0 by interpolation between specified tones on either side. This underspecification is even true for the locative postposition =*baa*, which is unusual in that it is not subminimal.

With the low number of individual postpositions in Tommo So, each must cover a lot of semantic space. In what follows, I will give examples of all attested uses of each postposition. While there are often commonalities 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 the associative =*le* in its use as a conjunction 'and'. Its two main uses as a postposition are the instrumental and the comitative, both of which can be translated into English as 'with'.

10.1.1.1 Instrumental
As an instrumental, the postposition =*le* immediately follows the NP serving as the instrument:

(416)   a.   *Yùù^L   kàmbàráá=le   ú=ǹ   bɛ̂ndɛ̀-dɛ̀-m.*
             millet   leaf=ASSOC   2SG.PRO=OBJ   hit-IMPF-1SG
             'I will hit you with a millet stalk leaf.'

b. *Séydu   tàgá=gɛ=le   mòòmíyó dàà-gú=sɛ.*
   Seydou shoe=DEF=ASSOC scorpion kill-PPL=have
   'Seydou is killing a scorpion with the shoe.'

As (416b) shows, the instrumental postposition comes at the end of the NP, following any determiners.

Modes of transport are also marked with the instrumental postposition:

(417) a. *Mòbílu=le   yáà-dè-y.*
       car=ASSOC go-IMPF-1PL
       'We will go by car.'

       b. *Wògòtóró=le   yáà-dè-y.*
          donkey.cart=ASSOC go-IMPF-1PL
          'We will go by donkey cart.'

With the mediopassive verb *dùy-íyɔ́* 'load on one's head in order to carry' and the related transitive verb *dùù-rɔ́* 'load on someone else's head in order to carry', the head is treated as a means of transportation (the instrument of carrying), and thus takes *=le* rather than locative *=nɛ* (the location of loading):

(418) a. *Yúú   dáná=le   dùy-íyɔ́-gú=sɛ-m.*
       millet head=ASSOC load-MP-PPL=have-1SG
       'I am loading the millet on my head (in order to carry it).'

       b. *Yúú   dáná úwɔ=le   dùù-rɔ́-gú=sɛ-m.*
          millet head 2SG.POSS=ASSOC load-TR-PPL=have-1SG
          'I am loading the millet on your head (in order to carry it).'

This same postposition is used with the vehicle of communication, designating what language something is spoken in:

(419) *Émmé   Tɔ̀mmɔ̀ᴸ sɔ̀ɔ́=le   dìgĕm kàn-ì-y.*
       1PL.PRO Tommo speech=ASSOC chat   do-PFV.L-1PL
       'We chatted in Tommo So.'

What all of the uses above have in common is that the noun marked with the associative/instrumental postposition *=le* facilitates the action of the verb in some way.

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)':

(420) a. *Mí   ú=le   Tɔ̀mmɔ̀ᴸ sɔ̀ɔ́   sɔ́ɔ̀-dɛ̀-m.*
       1SG.PRO 2SG.PRO=ASSOC Tommo   speech speak-IMPF-1SG
       'I speak with you in Tommo So.'

    b. *Mí=le   Séydu=le   Bàmàkó y-àà=bé-y.*
       1SG.PRO=ASSOC Seydou=ASSOC Bamako go-PFV=be.PST-1PL
       'I went to Bamako with Seydou.'

Example (420a) shows only the non-subject marked with *=le*, and the verb agrees in the singular with the subject. This is a true comitative reading. (420b) is provided for comparison. Here, the associative postposition is used as a conjunction, placed after both 'me' and 'Seydou' and inducing plural agreement on the verb.

    Textual examples include:

(421) a. *Mí   yóò-dɛ̀   mí   yóò-dɛ̀=nɛ   ǹdɛ́   pɛ́-tàándù-go*
       1SG.PRO enter-IMPF 1SG.PRO enter-IMPF=OBL person ten-three-ADV

       dà-ì-ɛ̀ⁿ.   Àmbìlè-Kúŋjɔ́ bàà ᴸ=le   pɛ́-tàándù túru-go sígɛ́.
       kill.PFV.L-3PL Ambile-Kunjɔ father=**ASSOC** ten-three   one-ADV more

       'Because of [this] "It's <u>me</u> who will be [chief], it's <u>me</u> who will be [chief]," they killed thirty people. With Ambile-Kunjɔ's father, thirty-one.'
                                 [23.2:110–111]

    b. *wó   sáná=gɛ=mbe=le   wó*
       3SG.PRO older.brother=DEF=PL=**ASSOC** 3SG.PRO

       jáw-ìy-ì=gɛ   yɔ̀~yɔ̆w=gɛ.
       fight-MP-PFV.REL=DEF RED~mean.NOM=DEF

       '...she fought with her older brothers, she was mean.'   [23.3:34]

Somewhere between the instrumental and comitative meaning, we find examples like the following:

(422) *Nìŋɛ́ nɛ̆m=le   káná-gú=sɛ-m.*
     sauce salt=ASSOC make-PPL=have-1SG
     'I'm making sauce with salt.'

The salt is an addition to the greater whole of the sauce, but in a certain sense, it is also an object being used to make the sauce.

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:

(423) *Wó*   *mí=le*   *wòr-íy-ee*   *m̀bɛ́=lɛ.*
       3SG.PRO 1SG.PRO=ASSOC move.away-MP-NF want=NEG.COP
       'She doesn't want to move away (=distance herself) from me.'

The noun marked by *=le* provides a point of reference for the verb of motion.

Still farther afield, *=le* can be used to mark temporal clauses. This is seen when the word denoting the timeframe is a noun rather than an adverb ('time', 'era', 'week', etc.):

(424) a. *Wàkàdù^L gìnɛ̀-ý*   *mí*   *yó-ì=gɛ=le*
           time   house-DIM 1SG.PRO enter-PFV.REL=DEF=ASSOC

           Sámbà píy-ee   *tɔ́l-aa=be.*
           Samba cry-NF start.PFV=be.PST

           'When I entered the house, Samba had already started to cry.'

       b. *Jùgù^L nɔ̀=lé*   *Bàmàkó yáà-dɛ̀-m.*
           week this=ASSOC Bamako go-IMPF-1SG
           'This week I will go to Bamako.'

       c. *Bɛ̀ɲjù-ámbìɛ̀m wà
àrù^L ɔ̀gɔ́*   *tó=bè=le*   *kɛ́m,*
           Benju-Ambiem time   Hogon be.in=be.PST.REL=ASSOC all
           '...during the time when Benju-Ambiem was Hogon...'   [23.2:80]

       d. *Mɔ́ɔ́lu=mɔ=gɛ*   *tà-ì-ɛ́^{n}=gɛ=le*
           Mori=POSS=DEF shoot-PFV.L-3PL=DEF=ASSOC

           àn-sáárá   *yɛ̀l-áa=wɔ.*
           AN-white.person come-PFV=be
           'At [the time when] they started the Mori [war], the white people came.'
                                                                        [23.2:119]

In example (424d), the temporal expression 'when they started the Mori war' contains both a headless possessive construction referring to the war and a headless relative clause referring to the time of the war. The associative particle at the end makes it clear that the relative is referring to a timeframe. Note that other temporal expressions, like 'in the morning' or 'next year' do not take the associative. See section 10.2.7.1 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:

(425) a. *Ú*   *mómu=le*   *yàbíl-aa*   *yɛ̀l-éélè-w*   *g-ì-w.*
           2SG.PRO laugh=ASSOC respond-PFV come-NEG.IMPF-2SG say-PFV.L-2SG
           'Laughing, you replied that you won't come.'

b. *Séydu   kùù^L jím=le   ǹj-ìy-ì.*
   Seydou head sickness=ASSOC lie.down-MP-PFV.L
   'Seydou went to bed with a headache.'

Note that the example in (425a) can also be expressed in Tommo So by chaining the verb 'laugh' with 'respond'. For more on chaining, see Chapter 18. Both examples in (425) can be translated into English with 'with' ((425a) could be 'with a laugh').

10.1.1.4 *=le* as a question marker

In running speech, *=le* can also be used in a few set expressions to make sure the interlocutor is following. These include *èg-έ-w=le* and *έgὲ-dὲ-w=le* 'do you understand?' as well as *y-ě-w=le* 'you see?'. This looks like the associative postposition, but it could be some archaic form of the negative marker (which typically takes the form *lV*, depending upon the inflection). In all other cases, *=ma* is the question marker, and *=le* cannot be used (see section 15.2).

10.1.2 Locative *=baa*

The postposition *=baa* is phonologically different from the other postpositions in that it has a long vowel. It also seems to always be followed by a phrase boundary, meaning that it is never the location of interpolation between two H tones. In all cases, its surface pronunciation sounds either like a falling tone, due to interpolation from a preceding H to a L boundary tone, or like a L tone, when it interpolates between a preceding L and the L boundary tone. For more tonal realization of clitics, see section 4.2.

The basic meaning of *=baa* is 'in' or 'at'.

(426) a. *Gìnέ=baa=yɔ̂.*
           house=LOC=be.DIST
           'He is at home'

       b. *Bàmàkó=baa mòbílu kàlé sὲ-lέ.*
           Bamako=LOC car   limit have-NEG
           'There are lots of cars in Bamako.'

In most cases where one would put *=baa*, one could also put the oblique postposition *=nε*. They are more or less interchangeable. The following is a selection of textual examples:

(427) a. *Sɔ̀ɔ̀-Dámmá émmé gé-dè=gɛ nɛ̀ɛ̀ nɔ̀nɔ́*
　　　　 Sɔɔ-Damma 1PL.PRO say-IMPF.REL=DEF now here

　　　　 gò-áa Dɛ̀ŋɛ̀nɛ̂=baa dìmbɛ́-gú yém yà-è.
　　　　 leave.from-PFV Dɛŋɛnɛ=LOC follow-PPL like.that go-PFV.L

　　　　 'Now, [the person] we call Sɔɔ-Damma, he left here, and via Dɛŋɛnɛ,
　　　　 he went like that.' [23.3:73]

　　 b. *Dámmá wó y-àà, yàa-ná=gɛ wó*
　　　　 village 3SG.PRO go-PFV female-HUM.SG=DEF 3SG.PRO

　　　　 òlú=baa ɛ́ɛ́ⁿ kɛ́bɛ́-nú yà-è.
　　　　 field=LOC ash gather-PPL go-PFV.L

　　　　 'She [the co-wife] went to the village, and the woman
　　　　 [≠the co-wife] went to the field to gather soda ash
　　　　 (from burning millet stalks).' [23.5:2]

We will see more uses of *=baa* below when combined with nouns to form complex PPs.

10.1.3 Oblique *=nɛ*

Arguably the most common postposition in the language is *=nɛ*. 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 *=mɔ*.

10.1.3.1 Simple uses of *=nɛ*

As a locative, *=nɛ* can translate to many different English prepositions. Take, for instance, 'to' and 'from'. This directionality is typically encoded in the verb in Tommo So, letting *=nɛ* be a more generic locative.

(428) a. *Gìnɛ̀-ý=nɛ yóó-gú=sɛ-m.*
　　　　 house-DIM=OBL enter-PPL=have-1SG
　　　　 'I am entering the house.'

　　 b. *Gìnɛ̀-ý=nɛ gòò-gú=sɛ-m.*
　　　　 house-DIM=OBL exit-PPL=have-1SG
　　　　 'I am leaving the house.'

　　 c. *Ségú=nɛ yɛ̀l-ɛ̀-y.*
　　　　 Ségou=OBL come-PFV.L-1PL
　　　　 'We came to Ségou.' [23.2:3]

The postposition =nɛ on its own can act as a general locative. Depending on context, it can translate as either 'in', 'on', 'to', etc.

(429) a. *Jàndùlù^L gɛ́m bándáŋkálá=gɛ=nɛ=kɔ̂.*
donkey black courtyard=DEF=OBL=be.PROX
'There is a black donkey in the courtyard.'

     b. *Túŋgúru=nɛ dànn-ìy-ì-m.*
stool=OBL sit.down-MP-PFV.L-1SG
'I sat down on the stool.'

     c. *wó=wa ɛ́ɛ́ⁿ=gɛ=nɛ jɔ̀bɔ́ yóó=wa*
3SG.PRO=QUOT ash=DEF=OBL run.IMPER enter.IMPER=QUOT
'... she told him to run into the millet stalks.'   [23.5:8]

     d. *ɛ́ɛ́ⁿ=gɛ bàl-áa wó jɛ́ɛ́l-aa, ɛ́ɛ́ⁿ=gɛ*
ash=DEF sweep.up-PFV 3SG.PRO bring-PFV ash=DEF

        díí=nɛ kúnd-aa bé tég-ír-aa.
water=OBL put-PFV 3PL.PRO drip-TR-PFV

        '[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).'   [23.5:26]

It can also be used with place names, though it shares this duty with =baa:

(430) a. *Mî^L dèlè^L Àbíjàn=nɛ=wɔ́=gɛ̀*
1SG.PRO older.brother Abidjan=OBL=be.REL=DEF

        ííyé dìgè̀^L yɛ́llè̀.
today evening come.IMPF.3SG

        'My older brother who lives in Abidjan will come this evening.'

     b. *Àmɛ̀ríkí=nɛ tám-aa=be.*
America=OBL stay.long-PFV=be.PST
'He stayed a long time in America.'

     c. *Mɔ́ɔ́l=nɛ dànn-íy-aa...*
Mori=OBL sit.down-MP-PFV
'[We] sat down in Mori...'   [23.2:37]

Consultants appear to know that there is a slight difference between =nɛ and =baa in terms of their usage, though the difference is obviously subtle and hard to explain. One consultant suggested that the difference may have to do with immediacy or certainty, with =nɛ requiring that the speaker be sure of what he or she is saying or to be there him or herself; =baa to this consultant is more general. It will take a careful study of a large corpus of examples to work out the proper environments for the two locative particles.

If the location is marked with a demonstrative, younger speakers especially use the demonstrative adverbial *nɔ̀nú* 'here' rather than *nɔ̀=nɛ́*. The latter is attested only rarely in the speech of an older speaker and can be pronounced in a harmonic form *nɔ̀=nɔ́*:

(431) a. *sàdá=gɛ=nɛ* 'in the garden'

       b. *sàdà^L nɔ̀nú* 'in this garden'

See section 10.2.7.3 for more on demonstrative adverbs.

The postposition *=nɛ* can also be used to mean 'under':

(432) a. *Tìmɛ̂=gɛ=nɛ   nínníl-íyé.*
           tree=DEF=OBL rest-MP.IMPER
           'Rest under the tree.'

       b. *Mòòmíyó=gɛ   ɲ̀jó=gɛ=nɛ   mànd-áa=ỳ.*
           scorpion=DEF mat=DEF=OBL disappear-PFV=COP
           'The scorpion disappeared under the mat.'

In (432a), context and experience tells us that *tìmɛ̂=gɛ=nɛ* means 'under the tree', but the same sequence could also mean 'in the tree', given the right context.

Abstractly, the postposition *=nɛ* can be used as a subordinator meaning 'before'. Consider:

(433) *Nɔ̀nú mí   yɛ́llɛ̀=nɛ   Étas-Unis yáà-dɛ̀-m.*
       here 1SG.PRO come.IMPF.REL=OBL U.S.FR   go-IMPF-1SG
       'I am going to the US before coming here.'

For more on this kind of subordination, see section 18.6.1.

The same postposition is used in expressions of reason or cause, though this meaning is mainly covered by the postposition *=dìyɛ* (see section 10.1.5). For instance:

(434) a. *Sáná sàèbù^L=nɛ   kúú úwɔ   gàl-áa=wɔ.*
           Sana reason=OBL head 2SG.POSS pass-PFV=be
           'You are saved thanks to Sana (Lit. your head has passed thanks to Sana).'

       b. *Mí   yóò-dɛ̀   mí   yóò-dɛ̀=nɛ   ǹdɛ́*
           1SG.PRO enter-IMPF 1SG.PRO enter-IMPF=OBL person

           pɛ́-tààndù-go   dà-ì-ɛ̀ⁿ.
           ten-three-ADV kill.PFV.L-3PL

           'Because of [this] "It's <u>me</u> who will be [chief], it's <u>me</u> who will be [chief],"
           they killed thirty people.'   [23.2:110]

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 (429). 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:

(435) *Sàdáá   tìmɛ́   kùù^L=nɛ   dáà.*
       bird   tree   head=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 dàà^L* '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', all of which involve possessive constructions. Three different possessed nouns can be coupled with =*nɛ* to give the meaning of 'beside'. One is *dúú*, which can mean either 'underside, bottom' or in this case 'side'. The second is *táŋá* which translates directly to 'side'. Finally, the third is *gèŋgé*, found only in this expression:

(436) a.   *Dúú   ḿmɔ=nɛ   yɛ̀lɛ́   dànn-íyɛ̂.*
           beside   1SG.POSS=OBL   come.IMPER   sit-MP.IMPER
           'Come sit beside me.'

       b.   *Táŋá   ḿmɔ=nɛ   jáá   ɲ̀y-ɛ̀.*
           side   1SG.POSS=OBL   meal   eat-PFV.L
           'He ate next to me.'

       c.   *Nàà^L gɛ́m=gɛ   ɛ̀nɛ́=gɛ   gèŋgè^L=nɛ=wɔ.*
           cow   black=DEF   goat=DEF   beside=OBL=is
           'The black cow is next to the goat.'

The last expression has a more distinct meaning of 'side-by-side' than the first two, which are largely interchangeable with *bɛ̀rú-go=wɔ* 'nearby'.

10.1.3.4 'In front of/forwards' and 'behind/backwards'

The expression 'in front of', *gíré=nɛ* or *gíré=baa*, appears to be derived from *gìré* 'face' or 'eye', with a tone change of /LH/ to H. 'Behind' *ónnu=nɛ* or *ónnu=baa* is formed in the same way and means literally 'at the back of', but with a H tone on 'back' rather than the lexical /LH/ *ònnú*. While we could posit a {H} overlay for

adverbialized nouns, the pattern does not appear to be productive, and so this change is probably lexicalized. Here again, the two postpositions *=nɛ* and *=baa* 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):

(437) a. *Íí=gɛ   bǎy kɛ́m ónnu=baa   yáà-dɛ̀.*
           child=DEF day all   behind=LOC go-IMPF
           'The child always walks in back.'

      b. *Ú   báá^H gìrè^L=nɛ   sìgàrɛ́dí nɔ̀ɔ́   nàà-gú.*
           2SG.PRO father front=OBL cigarette drink NAA-PROH
           'Don't smoke cigarettes in front of your father.'

      c. *Mòòmíyó=gɛ   tòndòó   ònnù^L=baa jɔ̀b-áa   gàl-è.*
           scorpion=DEF water.jug behind=LOC run-PFV pass-PFV.L
           'The scorpion ran behind the water jar.'

The same expressions are used for the adverbs 'forwards' and 'backwards':

(438) a. *Gíré=baa   jáá.*
           front=LOC take.IMPER
           'Bring it forward.'

      b. *Mòtó=gɛ   ɲ́jɛ̂=dìyɛ ónnu=baa   yáà-dɛ̀?*
           moto=DEF what=for behind=LOC go-IMPF
           'Why is the motorcycle going backwards?'

In both of these expressions, *=nɛ* could be used in the place of *=baa*.

In addition to giving a spatial reading, the expressions can also give a temporal one. In the following example, *ónnu=baa* translates to 'after', behind somebody in time rather than in space:

(439) *Bèn-Sàndí ònnù^L=nɛ   ù-ùndɔ̀^L bál-ínɛ́=gɛ*
       Ben-Sandi behind=OBL a-ash   sweep-AGT.SG=DEF

       Bèɲjù-àànɔ́=ɲ̀,   kìdɛ̀-y,   Bèn-Dàmbàlá=ɲ̀.
       Benju-Aanɔ=COP thing-DIM Ben-Dambala=COP

       'The one who swept up the ashes after Ben-Sandi was Benju-Aanɔ, no, um, was Ben-Dambala.'   [23.2:69]

For more on temporal expressions, see section 10.2.7.1.

10.1.3.5 'Over/above' and 'under/below'

The expressions 'over' and 'under' or 'above' and 'below' 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', the latter of which was also used for 'next to' in section section 10.1.3.3 above. Like *gíré* 'front' and *ónnu* 'back', these may be used on their own (440a) or with a possessor (440b):

(440)　a.　*Kɔ̀rɔ́=gɛ　　　dáá=gɛ=baa　bɔ̀d-ì-m.*
　　　　　 calabash=DEF　top=DEF=LOC　put.away-PFV.L-1SG
　　　　　 'I put away the calabash up above.'

　　　b.　*ɛ́ŋɛ́lɛ́　tènné=gɛ　　dùù^L=gɛ=baa　　　bɔ̀gɔ́l-íyɛ́-gú=wɔ.*
　　　　　 frog　　well=DEF　bottom=DEF=LOC　make.noise-MP-PPL=be
　　　　　 'The frog is making noise at the bottom of the well.'

As these examples show, *dáá* and *dúú* are typically followed by a definite determiner.

　　Recall that 'under' is sometimes expressed simply with the oblique when the context already specifies the exact location (see section 10.1.3.1). However, in an example like the following:

(441)　*Díí　　tòndòó　　(dùù^L)=nɛ=wɔ.*
　　　　 water　water.jar　(bottom)=OBL=be
　　　　 'Water is in (under) the water jar.'

using only the oblique would mean that water is in the water jar, since that is the most natural locative reading with this noun (a container). In order to deviate from that standard meaning and give the reading of 'under', 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~mìnnɛ́* (or *mìnnɛ̀~mìnnɛ́* with full reduplication) 'middle'. This noun is possessed by whatever the middle in question belongs to. This can be a single noun, as in (442a), or conjoined nouns, as in (442b). 'Middle' is then followed by the oblique postposition *=nɛ*.

(442)　a.　*Yúú=gɛ　　　tìmɛ́=gɛ　mì~mìnnɛ̀^{L}=gɛ=nɛ　　　yììb-è-m.*
　　　　　 millet=DEF　tree=DEF　RED~middle=DEF=OBL　plant-PFV.L-1SG
　　　　　 'I planted millet between the trees.'

　　　b.　*Tènné=gɛ=le　　　gìnɛ́=gɛ=le　　　　mì~mìnnɛ̀=gɛ=nɛ*
　　　　　 well=DEF=ASSOC　house=DEF=ASSOC　RED~middle=DEF=OBL

　　　　　 góró　ḿmɔ　　　mànd-áa=ỳ.
　　　　　 hat　　1SG.POSS　get.lost-PFV.L=COP
　　　　　 'I lost my hat between the well and the house.'

In (442a), a consultant reports that *=nɛ* can be replaced by *=baa*, but that in this case, 'tree' would have to be plural.

The second expression is like the first, but instead of *mì~mìnnɛ́*, it uses *kɔ́lɔ́*, which translates literally to 'insides':

(443)   *Gámmá=gɛ* école=*gɛ=le*   *ɔ̀lú=gɛ=le*
        cat=DEF   school.FR=DEF=ASSOC field=DEF=ASSOC

        kɔ̀lɔ̀^{L}=nɛ   *kɔ̀nɔ́*   *tɛ̀mb-ɛ̀-m.*
        inside=OBL   there.LOG   find-PFV.L-1SG

        'I found the cat between school and the field.'

Here, the conjoined noun phrase 'the school and the field' acts as the possessor of *kɔ́lɔ́* 'between'.

The last expression contains no noun at all, but is only made up of a conjoined noun phrase coupled with the oblique postposition following the last location:

(444)   *Nɔnú=le*   *Dúmásá=le=nɛ*   *bàndí=mbe jóó-ni=wɔ-ɛ̀^{n}.*
        here=ASSOC   Douentza=ASSOC=OBL   bandit=PL   many-ADV=be-3PL

        'There are lots of bandits between here and Douentza.'

The 'between' expression is also used in contexts like 'from X to Y', such as:

(445)   *Mótí=le*   *Bàɲjàgàrá=le=nɛ*   *jɔ̀b-ì-ɛ̀^{n}.*
        Mopti=ASSOC   Bandiagara=ASSOC=OBL   run-PFV.L-3PL

        'They ran from Mopti to Bandiagara.'

It is easy to see how running from Mopti to Bandiagara also requires running between them.

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:

(446)   *Jɔ̀b-áa*   *hálè   Mótí   yà-ì-ɛ̀^{n}.*
        run-PFV   even   Mopti   go-PFV.L-3PL

        'They ran all the way to Mopti.'

This word *hálè* is also used to mean 'even', as in:

(447) a. *Wó   hálè Sèmmèlè-Tàŋá bèlè-m^L=gɛ=mɔ=nɛ*
        3SG.PRO even Sɛmmɛlɛ-Taŋa person.from-HUM.PL=DEF=POSS=OBL

        ɛ̀sɛ̀-lí   kòy,   yém   bǎy-nì...
        be.clear-NEG.PFV EMPH like.that until-ADV

        'It wasn't clear even to the people of Sɛmmɛlɛ Taŋa, not so much.'

                                                       [23.3:72]

     b. *Súgɔ́... ǹdɛ̀^L nàá yé=sɛ̀^L...   eee... hálè nàà,*
        sugɔ person cow EXIST=have uh   even cow

        nàá yé=sɛ̀^L,   ɛ̀nɛ́ yé=sɛ̀^L.
        cow EXIST=have goat EXIST=have

        'The *sugɔ*... [it was for] people who have cows... uh... even cows,
        who have cows, who have goats.'   [23.4:14]

We will see *hálè* again in the discussion of conditionals (section 17.2).

10.1.4 Possessive or benefactive *=mɔ*

In many cases, the postposition *=mɔ* is strictly possessive, but it has some other postpositional uses as well, such as a benefactive usage (possibly derived from possessor-raising) and a use in a locative.

     The postposition *=mɔ* is most common in alienable pronominal possessive constructions; see section 5.3.2 for a description of these possessors. Full-fledged non-pronominal possessives are rarely formed with the possessive *=mɔ* in Tommo So. As discussed in Chapter 7, there are a few examples in texts, such as *Mɔ́ɔ́lu=mɔ jáw* 'the Mori war' or *Tó-tóŋó=mɔ tìgɛ̀^L* 'the last name of Tongo-Tongo', but both of these examples were spoken by one elderly speaker. Nevertheless, headless possessives must be formed this with postposition, wherein it takes a meaning of 'for' or 'of'. For instance:

(448) a. *Nùyɔ̀^L nɔ́   pédu=gɛ=mɔ=ǹ.*
        leaf   this sheep=DEF=POSS=COP
        'These leaves are for the sheep.'

     b. *ɔ̀rɔ̀^L   níŋɛ́ wómɔ   Háwá=mɔ=gɛ=diyɛ   síyɛ̀=lɛ.*
        baobab sauce 3SG.POSS Hawa=POSS=DEF=than good=NEG.COP
        'Her *toh* is not better than Hawa's.'

The order of the definite and the possessive depends on the bracketing. In (448a), the bracketing is [for [the sheep]], whereas in (448b), it is essentially [the [Hawa's]].

10.1.4.1 *=mɔ* in locative constructions

A locative like the French *chez X* is formed by adding either the oblique or locative postposition after *=mɔ*:

(449)   a.   *Ámìru=gɛ=mɔ=nɛ*   *yà-à=bé-m.*
            chief=DEF=POSS=LOC go-PFV=be.PST-1SG
            'I went to the chief's [house].'

       b.   *Bé*   *[tírɛ̀ yàà-nà]*[HL] *úwɔ=baa*   *yéllɛ̀.*
            3PL.PRO grandmother   2SG.POSS=LOC come.IMPF
            'Their grandmother will come to your [house].'

The /ɔ/ of the postposition is syncopated in the context CVmV=*baa*, leaving 'his/her house' and 'their house' as *wóm=baa* and *bém=baa*, respectively. These forms may be related to the demonstrative adverbs *nìmbáà* 'other there' and *nɔ̀mbáà* 'here (general)'; see section 10.2.7.3.

10.1.4.2 *=mɔ* as a benefactive

=mɔ can also be used with a benefactive meaning, as in:

(450)   a.   *Ǹdɛ̀*[L]   *bɛ̀lú*   *sɛ̀-lɛ̀=mɔ*   *súgɔ́ gɔ̀-énnè.*
            person animal have-NEG.REL=POSS *sugɔ* dance-NEG.IMPF.3PL
            'They don't dance the *sugɔ* for people who don't have animals.' [23.4:40]

       b.   *Mòòmíyó=gɛ*   *ḿmɔ(=ǹ)*   *dà-è.*
            scorpion=DEF 1SG.POSS(=OBJ)   kill-PFV.L
            'He killed the scorpion for me.'

       c.   *Bɔ̀gɔ̀*[L]   *ɛ̀sú*   *úwɔ(=nɛ)*   *ɛ́bɛ̀-dɛ̀-m.*
            dress   pretty 2SG.POSS(=OBL) buy-IMPF-1SG
            'I will buy you a pretty dress.'

In (450b), the object clitic on the benefactive *ḿmɔ* is optional. In (450a), it is not possible (**ǹdɛ̀ bɛ̀lú sɛ̀-lɛ̀=mɔ=ǹ*). In (450c), the oblique postposition is used optionally intead of the object clitic.

   In a related sense, this postposition can also be used with a purposive meaning, overlapping semantically with *=diyɛ* (see the next sub-section):

(451)   *...dɛ̀mbɛ́-dim=gɛ=mɔ*   *bílu*   *sɛ̀-lɛ́.*
        build.roof-INF=DEF=POSS ladder have-NEG
        '[The house] had no ladder to build the roof.'   [23.3:8]

10.1.4.3 Other uses of *=mɔ*

We find the possessive clitic *=mɔ* in one other context: that of an experiencer or a perceiver, always in conjunction with the oblique postposition *=nɛ*:

(452)　*Tɔmmɔ́ᴸ sɔ̀ɔ́　ḿmɔ=nɛ　ɲám-go=wɔ.*
　　　Tommo　speech 1SG.POSS=OBL difficult-ADV=be
　　　'Tommo So is difficult for me.'

10.1.5 Purposive or causal *diyɛ*

The purposive or causal postposition is homophonous with the comparative (see Chapter 14). It is particularly unusual in that it is disyllabic, though in rapid speech it can be collapsed into [dɛ]. Still, it does not seem to have its own tone, and so for that reason, I treat it as a clitic.

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, though it also contains the possessive particle *=mɔ*:

(453)　a.　*Kɛ̀ɛ̀lɛ́　wómɔ=diyɛ　ɛ̀ⁿ-ɛ̀.*
　　　　　money 3SG.POSS=for marry-PFV.L
　　　　　'She married him for his money.'

　　　b.　*Ììyé=gɛ=mɔ=diyɛ　yɛ̀lɛ̀-nní.*
　　　　　honey=DEF=POSS=for come-NEG.PFV.3PL
　　　　　'They didn't come for the honey.'

Note that in the second sentence, the purposive *=diyɛ* is optional, forming *Ììyé=gɛ=mɔ yɛ̀lɛ̀-nní*.

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':

(454)　a.　*Àná=gɛ=diyɛ yò-ì-ɛ̀ⁿ.*
　　　　　rain=DEF=for enter-PFV.L-3PL
　　　　　'They went in because of the rain.'

　　　b.　*Ùgɔ́ɔ́=gɛ=diyɛ gìré jùŋgó-gú=wɔ.*
　　　　　heat=DEF=for eye bob-PPL=be
　　　　　'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":

(455) *Mí=ǹ*   *ámbá=diyɛ kɛ̀ɛ̀lɛ́   òb-ì-ɛ̀ⁿ.*
     1SG.PRO=OBJ god=for   money give-PFV.L-3PL
     'They gave me money in the name of God.'

For more on *=diyɛ* in interrogation ('what for?'), see section 15.2.3; in purposive clauses, see section 18.5.7.

   Notice that in all the examples above, the purposive *=diyɛ* follows the definite in a position that looks very much like a possessed noun. Its unusual phonological size could be explained if it were historically a full noun, though these origins are merely speculative.

10.2 Adverbs

Adverbs usually carry either the suffix *-ni* (sometimes pronounced [-nu], especially before *wɔ* 'be') or the suffix *-go*. These suffixes are also underspecified for tone and behave by the same rules as the human suffixes, discussed in section 4.2. The latter suffix appears to be the same as the one found on suffixed adjectives and numerals; see Chapter 5. Expressive adverbials, which were already discussed in section 8.3, may sometimes be unsuffixed. There is a possible connection between the adverbial suffix *-ni* and the future participial suffix *-nu*.

   Adverbs are used to modify both adjectives and verbs. Usually, they immediately precede the word they modify, though they can be separated by other adjunct phrases as well.

   For ease of presentation, I will split the discussion of adverbs up into semantically-related classes.

10.2.1 Similarity

Similarity is expressed in Tommo So using the toneless string [geni] or [gonu] placed after a noun or a nominalized clause. It is not entirely clear how to analyze this similarity string. One possibility is that it is a combination of the two adverbial suffixes *-go* and *-ni*. Another possibility is that it is a clitic unto itself. A third possibility is that it is treated as a possessed noun, since at times it seems to carry its own L tone. In the absence of clear evidence either way, I will treat it here as an adverbial clitic.

(456) a. *Gámmá=gonu bɔ́gɔ̀l-ìyɛ̀-dɛ̀.*
         cat=like   make.noise-MP-IMPF
         'He cries like a cat.'

b. *Mí=ǹ*   *yɛ̀-nd-áa*   *hálè [mí=ǹ*
     1SG.PRO=OBJ see-FACT-PFV even 1SG.PRO=OBJ

     bɛ̀ndɛ́-dɛ]=geni   *kán-ì.*
     hit-IMPF.REL=like   do-PFV.L

     'She looked at me as though she was going to hit me.'

As we saw with expressive adverbial predicates in section 8.3, the predicating verb can either be *kàn-ì* 'did' (here *kán-ì*) or *wɔ* 'be'. Curiously, even though *kàn-ì* itself is perfective, the suppletive past form *=be* 'was' of the quasi-verb *=wɔ* cannot be used (**hálè mí=ǹ bɛ̀ndɛ́-dɛ=geni=be*).

     The same clitic can also be fused with pronouns, both demonstrative and interrogative. The interrogative 'how' is *yàŋéni*, with the H portion of *yăŋ* 'how' surfacing on the first syllable of *geni*; this is evidence that they have formed a single word, since otherwise clitics do not cause de-contouring if the original host is a heavy syllable (see section 4.3.2). Examples of the interrogative will be given in section 15.2.5. The demonstrative adverb 'like this' or 'like that' is *nòŋgónu* (457a), which is less transparent in form. It is probably derived from the demonstrative *nɔ̆* with phonological changes such as harmony of /ɔ/ to /o/, unusual since the vowel change is in the stem. The presence of the nasal in *noŋ* could be related to the nasal in locative deictic adverbs like *nɔ̀mbáà* 'around here' or *nìmbáà* 'over there'. A similar form exists for a discourse definite similarity adverb, *kóŋgonu* 'like that (already mentioned)' (457b). In addition to the forms carrying *=gonu* or *=genu*, there is also a separate stem *yém*, which means simply 'like this' or 'like that' (457c):

(457) a. *Mòòmíyó=gɛ*   *mí=ǹ*   *nòŋgónu kɛ̀r-ɛ̀.*
       scorpion=DEF 1SG.PRO=OBJ like.this bite-PFV.L
       'The scorpion stung me like this.'

     b. *Yáá*   *gàmmà^L mí*   *y-ɛ̀^{L}*   *kóŋgoni=wɔ.*
       yesterday cat   1SG.PRO see-PFV.REL like.that=be
       'He looks like the cat I saw yesterday.'

     c. *...ǹdɛ́=gɛ*   *bɛ̀lú*   *nàà-nù^L=ǹ=yo*   *kɛ́m*
       person=DEF animal owner-HUM.SG=COP=if all

       yém   *júgɔ̀-mɔ̀-dɛ̀.*
       like.that know-CAUS-IMPF

       'If a person is an animal owner, it [the *sugo* dance] makes it known
       like that.'   [23.4:43]

The example in (457b) is interesting in that the discourse definite adverb appears to cause tone lowering on the preceding relative participle, just as a demonstrative

or discourse definite determiner would; see section 4.5 and Chapter 16 for further discussion.

Adding the adverbial suffix *-go* to *yém* derives the adverb 'in that case': *yém-go*, as in *yém-go yáà-dὲ-m* 'in that case, I'll go'. This is interesting, since *yém* is already an adverb, as shown by (457c).

A more expanded construction for similarity includes the noun *àŋǎy* 'manner' modified by a relative clause. The following example also shows that *=gonu* and *yém* can co-occur in the same phrase:

(458) *[Jàndúlu àŋày^L bìrέ-dɛ]=gonu   yém   bírὲ-dὲ.*
       donkey   manner work-IMPF.REL=like like.that 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, *àŋǎy* '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 clitic *=gonu*. The whole sentence could be translated literally as 'In the way that a donkey works, he works like that.' For more on relativization, see Chapter 16.

10.2.2 Extent

10.2.2.1 'A lot', 'very' *díyὲ-go, sáy-ni, jóó-ni*

Tommo So has three adverbs that translate to 'a lot' or 'very'. The first, *díyὲ-go*, typically modifies verbs and translates more closely to 'a lot'. It is derived from the adjective *díyὲ* 'big', and as such, it is not surprising that it takes *-go*, the suffix used in adjectival predicates (section 5.5.1), rather than *-ni*:

(459) a. *Àrámátá ìsὲ^L díyὲ-go   bògó-dɛ=gɛ...*
           Ramata   dog big-ADV bark-IMPF.REL=DEF
           'Ramata's dog that barks a lot...'

       b. *Mí=ǹ   díyὲ-go òb-ì-ὲⁿ.*
           1SG.PRO=OBJ big-ADV give-PFV.L-3PL
           'They gave me a lot.'

       c. *Músá sìgàrétí díyὲ-go nɔ́ɔ́-dὲ.*
           Mousa cigarette big-ADV 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 [sέy-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:

(460) a. *Nàm^L bánu=nɛ sáy-ni ɔ́g-go=wɔ.*
      sun   red=OBL very hot-ADV=be
      'It is very hot in the hot season.'

    b. *Gìnɛ́=gɛ   sáy-ni ɛ̀sú-go=wɔ.*
      house=DEF very   pretty-ADV=be
      'The house is very pretty.'

Recall that *-go* followed by the quasi-verb *wɔ* often contracts to [gwɔ].

    When *sáy-ni* modifies an adjectival modifier rather than a predicate, it causes no tonal changes on the adjective.

(461) a. *Gìnɛ̀^{L} sáy-ni ɛ̀sú   néé-go=sɛ-m.*
      house very   pretty two-ADV=have-1SG
      'I have two very pretty houses.'

    b. *Àn-nà^L sáy-ni gàbú y-àà=bé-m.*
      man-HUM.SG very   tall   see-PFV=be.PST-1SG
      'I saw a very tall man.'

    Finally, 'a lot' or 'many' is expressed by *jóó-ni* or simply *jóò* ⇒, with intonational final vowel lengthening. These forms are derived from the verb *jòó* 'be full'. This adverb can be used with nouns, verbs and adjectives, thus overlapping with the both of the forms previously given.

(462) a. *Jàndúlu jóò⇒ bándáŋkálá=nɛ=tóò.*
      donkey many courtyard=OBL=be.in
      'Lots of donkeys are in the courtyard.'

    b. *ǹdɛ̀-ḿ   jóó-ni Mɔ̀ɔ̀lù^L íbɛ̂   yáà-dìŋ.*
      person-HUM.PL many Mori   market go-IMPF.3PL
      'Many people go to the Mori market.'

    c. *Tɔ̀mmɔ̀^{L} sɔ̀ɔ́   sɔ́ɔ́-nú,   áí=mbe   jóó-ni bɛ́llɛ̀.*
      Tommo speech speak-PPL friend=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 sɛ̀-lɛ́*, which translates to 'it has no limit'. This expression was seen in example (426b) in section 10.1.2, *Bàmàkó=baa mòbílu kàlé sɛ̀-lɛ́* '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 *díyὲ-go* are possible:

(463) *Dìⁱᴸ   nɔ́   sáy-ni/díyὲ-go yὲgὲlú=wɔ.*
       water this very/a.lot   cold=be
       '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:

(464) a. *Mí   báá ᴴ pédu díyὲ-go/sáy-ni/jóó-ni sɛ́mὲ-dὲ.*
           1SG.PRO father sheep a.lot/very/many   slaughter-IMPF
           'My father slaughters a lot of sheep.'

       b. *Kà~kàá   díyὲ-go/sáy-ni/jóó-ni dà-à=bé-y*
           RED~locust   a.lot/very/many   kill-PFV=be.PST-1PL
           'We killed a lot of locusts.'

10.2.2.2 'A little' *gà̀lɛ̌y-ni, mὲɛ́-ni*

There are two adverbs meaning 'a little', *gà̀lɛ̌y-ni* and *mὲɛ́-ni*. The first literally breaks down as follows:

(465) *gàà-lὲ-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, *gà̀lɛ̌y-ni* can be replaced with *mὲɛ́-nì*, and vice versa:

(466) a. *Gà̀lɛ̌y-ni   ὲb-ὲ-m.*
           a.little-ADV buy-PFV.L-1SG
           'I bought a little bit.'

       b. *Íí=gɛ   mὲɛ́-nì   jímὲ-dὲ.*
           child=DEF   a.little-ADV be.sick-IMPF
           'The child is a little bit sick.'

Gà̀lɛ̌y can also be reduplicated, in which case the second copy is reduced to {L} tone. This form is most often used with a distributive sense, meaning "a little bit of this, a little bit of that", like the distributively reduplicated adjectives in section 5.5.3. For instance, if in (466a) the unreduplicated form were replaced by the reduplicated form, it would give a meaning of 'I bought a little bit (of a lot of things).' Similarly,

in (466b), replacing *mὲέ-ni* with *gààlɛ̌y-gààlὲy-ni* gives the meaning that the child is a little bit sick with a lot of ailments.

There is also a temporal adverb, *mὲέ-nì kán-ee* 'in a little bit', that includes *mὲέ-nì*. Here, *kán-ee* is a chained verb form of 'do' that can then be followed by another clause:

(467) a. *Mὲέ-nì   kán-ee   yέlὲ-dὲ*
           a.little-ADV do.NF   come-IMPF
           'He will come in a little bit.'

       b. *Mὲέ-ni   kán-ee   gɔ́ɔ́=gɛ   tɔ́lɔ̀-dὲ.*
           a.little-ADV do.NF   dance=DEF   start-IMPF
           'The dance is going to start soon.'

For more on verb chaining, see Chapter 18.

10.2.3 'Exactly', 'specifically'

In Tommo So, the same adverb *téé-ni* or *téé~téé-ni* is used to mean both 'exactly' (468a) and 'specifically' (468b). For instance:

(468) a. *Tέmέndrέ téé-ni=sɛ-m.*   (Also okay reduplicated)
           500.CFA   exact-ADV=have-1SG
           'I have exactly 500 CFA.'

           Ámíru=gɛ   mídí=le   téé~téé-ni   yὲl-ὲ.
           chief=DEF noon=ASSOC   RED~exact-ADV come-PFV.L
           'The chief came at exactly noon.'

       b. *Dàmmà^L nɔ́   téé~téé-ni   ǹj-íy-aa=be-m.*
           village   this RED~exact-ADV lie.down-MP-PFV-be.PST-1SG
           'I spent the night in precisely this village.'

           Íí   wómɔ=gɛ=ǹ   téé-ni   òb-ì.
           child 3SG.POSS=DEF=OBJ   exact-ADV   give-PFV.L
           'He gave it specifically to his child.'

When added to a locative adverb, *téé-ni* gives the emphatic meaning of 'right (here, there)'.

(469) a. *nɔ̀nɔ́ (téé~)téé-ni* 'right here'
       b. *yíbáà (téé~)téé-ni* 'right there'

For the formation of demonstrative adverbs, see section 10.7.2.3.

The Fulfulde loan *jáàtì* can also be used in the same place as *téé-ni*, as in *Ámíru=gɛ mídí=le jáàtì yɛ̀l-ɛ̀*. These adverbs can also modify the subject of a sentence to mean precisely that subject:

(470) a. *Ú   téé-ni/jáàtì   ámíru=gɛ=ɲ̀   yà-ée yɛ̀-ndɛ́.*
2SG.PRO exact-ADV/precisely chief=DEF=OBJ go-NF see-FACT.IMPER
'You yourself (exactly you) have to go see the chief.'

b. *Yàá-m=gɛ=mbe   bírɛ́   bémɛ=gɛ*
female-HUM.PL=DEF=PL work 3PL.POSS=DEF

téé-ni/jáàtì   sɔ̀wᴸ gɛ́mu=ɲ̀.
exact-Adv/precisely cloth 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, *páy*, 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:

(471) *Páy!   Nɔ̀ɔ́ wó=ɲ̀.*
exactly this 3SG.PRO=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:

(472) a. *Bìrɛ̀ᴸ síyɛ́   bírɛ̀-dɛ̀.*
work good work-IMPF
'He works well.' (Lit. he does good work)

b. *Yààᴸ   úlûm=gɛ=mbe   nùyɔ̀ᴸ síyɛ́   núyɔ̀-dìɲ.*
female children=DEF=PL song   good sing-IMPF.3PL
'The girls sing well.' (Lit. they sing a good song)

c. *Ànàᴸ   úlûm=gɛ=mbe   gɔ̀ɔ̀ᴸ   pàdíyɛ́ gɔ́ɔ̀-dìɲ.*
male children=DEF=PL dance bad   dance-IMPF.3PL
'The boys dance poorly.' (Lit. they dance a bad dance)

The adjective *síyɛ́* 'good' can also be made into an adverb *síyɛ́-go* 'well'; there is no equivalent for 'poorly'. If one wishes to express 'poorly' adverbially, a negative verb with 'well' must be used.

(473) a. *Tɔ̀mmɔ̀ᴸ Sɔ̀ɔ́   síyɛ́-go   sɔ́ɔ̀-dɛ̀-w.*
        Tommo speech good-ADV speak-IMPF-2SG
        'You speak Tommo So well.'

    b. *Yàa-ná   wómɔ=gɛ   français   síyɛ́-go   sɔ̀-ɛ́élè.*
        female-HUM.SG 3SG.POSS=DEF French.FR 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 *kìdɛ̀ᴸ 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 *hááná* 'be normal'. In the affirmative, these are used in the imperfective perfective form (474a), while the negative is the negative perfective:

(474) a. *Ǹdɛ̀ᴸ   díyɛ̀=gɛ wó   kúyɔ́ ɲ́yɛ́=ǹ   dág-àà-dɛ̀.*
        person big=DEF 3SG.PRO first eat=OBJ be.good-PFV-IMPF
        'It is appropriate that the oldest person eats first.'

    b. *Síí   úwɔ   yé=dògò   ǹdɛ̀ᴸ   yàgá ɛ́ɛ́ⁿ   hàànà-lí.*
        caste 2SG.POSS EXIST=but person other marry be.normal-NEG.PFV
        'It is 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':

(475) a. *Tájòrò   àná míyɛ̀-dɛ̀*
        certainly rain rain-IMPF
        'It will certainly rain.'

    b. *Tílày   kán-ìyɛ̀-dɛ̀.*
        surely do-MP-IMPF
        'It is sure to happen.'

    c.   *Tílày   ííyɔ́ɔ̀   mí   ɛ́ɛ̀ⁿ-dɛ̀-m.*
        surely this.year 1SG.PRO marry-IMPF-1SG
        'It is certain that I will get married this year.'

    d.   *Tílày   ḿmɔ=ɲ̀   gàndá ḿmɔ   yégèrè-dɛ̀-m.*
        duty 1SG.POSS=COP place 1SG.POSS protect-IMPF-1SG
        'It's my duty to protect my country.'

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 (475c) 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 is possible' in Tommo So.

(476) a.   *Yɛ̀lɛ́-dɛ=gɛ   bíyɛ̀-dɛ̀.*
          come-IMPF.REL=DEF be-IMPF
          'He might come.'

      b.   *Àná mìy-éélè=gɛ   bíyɛ̀-dɛ̀.*
          rain rain-NEG.IMPF.REL=DEF be-IMPF
          'It might not rain.'

Synonymous with (476a) is an expression that includes *ìŋɛ̀-lɛ́* meaning 'it is not standing.' It imparts a negative meaning to the other clause involved, like 'maybe it will not be the case that he will come.' This phrase can be either the first or second clause:

(477) *(Ìŋɛ̀-lɛ́)   pédu sɛ́mɛ́-gú=sɛ-ɛ̀ⁿ=gɛ (ìŋɛ̀-lɛ́).*
       (stand-NEG) sheep slaughter-PPL=have-3PL.REL=DEF
       'Maybe they are slaughtering a sheep (or maybe they are not).'

The *bíyɛ̀-dɛ̀* from above can also be combined with *ìŋɛ̀-lɛ́* to form the following:

(478) *Ámíru=gɛ Séváré=nɛ   yɛ́llɛ̀=gɛ   ìŋɛ̀-lɛ́=gɛ   bíyɛ̀-dɛ̀.*
       chief=DEF Sevare=OBL come.IMPF.REL=DEF stand-NEG=DEF be-IMPF
       'It's possible that the chief will come to Sevare (but maybe he won't).'

For more on *ìŋɛ́-lɛ́*, see section 18.8.3.

10.2.6 Manner

The suffix *-go* can be added to most adjectives of the suffixed class (see section 5.5.1) to derive equivalent adverbs:

(479) a. *ɛ́ɛ́ⁿ-go* 'loudly' (from *ɛ́ɛ́ⁿ* 'tough')

       b. *ɔ́lu-go* 'softly' (from *ɔ́lu* 'soft, moist')

       c. *ɔ́gu-go* 'quickly' (from *ɔ́gu* 'fast')

Most manner adverbs, however, are expressive adverbials. See Chapter 8 for further discussion.

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:

(480) a. *ííyé*   'today'

          wàgàdù^L nɔ̀=lé 'these days, at this time'

          nìmɛ̌m   'right now'

          yàgá   'again'

       b. *yáá*   'yesterday'

          ííyé bày^L tà!àndù-gò^L 'day before yesterday'

          kùyɔ́-(go)   'in the past, before'

          àníyɛ̂   'in the past, before'

       c. *yògó*   'tomorrow'

          yògò^L dɛ́nɛ̂   'day after tomorrow'

          bàà^L náy   'third day from today'

          yògó jùgù^L   'sixth day from today'

          yògò^L dɛ́nɛ́ jùgù^L 'seventh day from today'

       d. *ííyɔ́ɔ̀*   'this year'

          gàÀlú   'last year'

          báá góè 'next year'

       e. *jùgù^L nɔ̀=lé*   'this week (month *ììyɛ̀*)'

          jùgù^L gál-è=gɛ=le   'last week'

          jùgù^L yɛ́llɛ̀ jóó   'next week'

          jùgù^L yɛ̀lɛ́-dɛ=gɛ=le 'next week'

f. *yàgá*   'from now on'
   nàmbá   'up till now'
   ííyèlɛ̀   'again'

Temporal adverbs are most often pre-clausal, and morphologically speaking, they lack any of the usual suffixes. Often, they are nominal and followed by the post-position *=le*, but many are simply adverbial stems that do not require any further morphology. Note also that both types of compounds are attested here. For instance, 'day after tomorrow' is a canonical compound (*yògò^L dɛ́nɛ̂*), while 'sixth day from today' is a pseudo-genitive compound (*yògó jùgù^L*); see Chapter 6 for a discussion of compound types.

10.2.7.2 'First'

The adverb *kùyɔ́-go* meaning 'first' is built from the adjective *kúyɔ́* 'first'. It is not clear why the tone of the adverb is /LH/ while that of the adjective is /H/. The adverb typically comes in the immediately preverbal position:

(481) *Àgá   ùŋgùl-ì=yó   díí   kùyɔ́-go   ńdì-yɛ̀-dɛ̀.*
      morning get.up-PFV.L=if water first-ADV   bathe-MP-IMPF
      'He bathes first thing when he gets up.'

If more than one action is present in a sentence, the strategy is often different. Instead of using the adverb *kùyɔ́-go*, the first action has morphology on it indicating that it is completed before the second action takes place:

(482) *Bírɛ̂=gɛ   bìr-áa   j-ɛ̀-y=yó   jáá=gɛ   ɲyɛ̀-dɛ̀-y.*
      work=DEF   work-PFV   finish-PFV.L-1PL=if meal=DEF   eat-IMPF-1PL
      'We will finish work first and then eat.' (Lit. If we finish working, we will eat.)

Here, *jɛ̀* 'finish' chained with *bìrɛ́* 'work' gives the meaning that the work must occur first before the eating can take place.

10.2.7.3 Demonstrative adverbs

This section gives an introduction to adverbs derived from demonstratives. For more information on demonstratives themselves, see section 5.4.2.

The word for 'here' probably historically derived from *nɔ̌* 'this' plus the oblique postposition *=nɛ*. This combination has evolved into *nɔ̀nú* and *nɔ̀nɔ́*, the former looking like it carries the adverbial suffix *-ni* and the latter more closely resembling the postposition. 'There' has the equivalent *yè=nɛ̂*, 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 *nìmbáà*, patterning with the general (less specific) locative adverb *nɔ̀mbáà* 'around here'. However, older speakers do consider *nìmbáà* to be more general than *yè=nɛ́*, making it the counterpart of younger speakers' conceptions of *nɔ̀mbáà*. When the sense of 'there' is vague (more like 'over in that direction'), younger speakers use the term *yíbáà* instead.

(483) a. *Pédu   úwɔ   **nɔ̀nɔ́** ɔ̀ndú.*
            sheep 2SG.POSS here   be.NEG
            'Your sheep isn't here.'

    b. *...wó=lɛ   **yè=nɛ́** wó   síb-aa.*
            3SG.PRO=also there   3SG.PRO erect-PFV
            '...she also erected [a stone idol] there.'   [23.3:37]

    c. *Jàndúlu gágìrà-go **nìmbáà**=wɔ-ɛ̀ⁿ.*
            donkey   eight-ADV   there=be-3PL
            'Eight donkeys are over there.'

    d. *Jàndúlu gágìrà-go **yíbáà**   jɔ̀bɔ́-gú=sɛ-ɛ̀ⁿ.*
            donkey   eight-ADV   around.there run-PPL= have-3PL
            'Eight donkeys are running over that way.'

Nìmbáà, *nɔ̀mbáà*, 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.

10.2.7.4 Directions

The most common spatial adverbs like 'forwards' and 'backwards' are given earlier in this chapter, and demonstrative adverbs have just been discussed. Below are the cardinal directions:

(484) *kɔ́lɔ́lu*   'north'
       túmbálu   'south'
       túmm-úgó or *dúú*   'east'
       númb-úgó or *dáá*   'west'

There are two names for both 'east' and 'west'. The first refers to the sun: *túmm-úgó* is derived from the verb *túmmó* '(sun) rise' and *númb-úgó* is derived from the verb *nùmbó* '(sun) set'. Here, the *-úgó* suffix is the back harmonized form of the nominalizing suffix *-ígé* first discussed in section 5.2.1.3. 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. These terms probably derive from the layout of villages, with villages to the east being down on the plains and those to the west up on the hills, but given people's migrations, they lose their reference points very quickly. Jeffrey Heath (p.c.) reports varied usages of 'top' and 'bottom' with reference to cardinal directions in other Dogon languages.

The expressions 'left' and 'right' are adjectives derived from the cultural uses of each hand: left for the bathroom and right for eating. Thus, *nùmɔ̀ᴸ nààndá* 'left hand' gets its name from *nààndá* 'area at the edge of the village for defecating' and *nùmɔ̀ᴸ ɲyɛ̂* 'right hand' gets its name from the verb *ɲyɛ̂* '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 *táŋá* 'side'.

(485) a. *Tènné=gɛ=nɛ dɔ̀-ɛ̀-w=yó,   nùmɔ̀ᴸ ɲyɛ̂=baa dúl-íyó.*
    well=DEF=OBL arrive-PFV.L-2SG=if hand right=LOC turn-MP.IMPER
    'Turn right at the well.'

  b. *Gìnɛ̂ ḿmɔ   nùmɔ̀ᴸ nààndá=baa=wɔ.*
    house 1SG.POSS hand left=LOC=be
    'My house is on the left hand side.'

  c. *...nùmɔ̀ᴸ nààndá tàŋàᴸ=nɛ gìnɛ̂=kɔ=lɛ ⇒ ...*
    hand   left side=OBL house=be.PROX=NEG.COP
    '...on the left hand side, there's a house, right...'   [23.3:81]

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.

(486) a. *Dém-ni   Dúmásá yáà-dè-m.*
    straight-ADV Douentza go-IMPF-1SG
    'I am going directly to Douentza.'

  b. *Ɔ̀dùnáá=gɛ dém~dém-ni=wɔ.*
    road=DEF RED~straight-ADV=be
    'The road is very straight.'

  c. *Tànnàá=gɛ dém-ni=wɔ.*
    staff=DEF straight-ADV=be
    'The staff is straight.'

10.2.8.2 'Together', 'apart'

'Together' is expressed by the adverb *túmɔ́-go*, derived from *túmɔ́* 'one', as in:

(487) *Ú=le   mí=le   émmé   túmɔ́-go   gɔ́ɔ́   gɔ́ɔ̀-dὲ-y.*
       2SG.PRO=ASSOC 1SG.PRO=ASSOC 1PL.PRO one-ADV dance dance-IMPF-1SG
       'You and me, we dance together.'

'Apart', on the other hand, looks more like an expressive adverbial, *dɛ́ɲ~dɛ́ɲ*. It is derived from the adjective *dɛ́ɲ* 'different, distinct'. This can be used on its own or with the noun *táŋá* 'side':

(488) *Émmé   táŋá dɛ́ɲ~dɛ́ɲ   gɔ̀ɔ̀-gú=sɛ-y.*
       1PL.PRO side RED~apart dance-PPL=have-1PL
       'We dance separately.'

The addition of *táŋá* gives a reading like 'on separate sides'.

10.2.8.3 'Always', 'never'

The adverbs 'always' and 'never' can be expressed by the word *ábádá*, shared by many of the languages in the area, including Fulfulde and Bambara. Used with a negative verb or as an interjection, it means 'never', while used with an affirmative verb, it means 'always'.

(489) a. *Ábádá kàn-éélè-m.*
           never   do-NEG.IMPF-1SG
           'I will never do [it].'

       b. *Ábádá kánà-dὲ-m.*
           always do-IMPF-1SG
           '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 *kɛ́m* 'all' for emphasis:

(490) *Àsúú   kɛ́m jáá   ɲ́yὲ-dὲ-m.*
       always all   meal eat-IMPF-1SG
       'I always eat.'

In the following exchange from a text, there are two other negative intensifiers of *àsúú*:

(491) S: *Kándá kay nɛ́ɛ́ nánà àsúú.*
Kanda TOP now never never
'As for Kanda, [he will] never again [be chief].'

E: *Pɛ́s! Kándá ɔ̀gɔ́ yò-élè.*
never Kanda Hogon enter-NEG.IMPF
'Never! Kanda will never be Hogon.' [23.1:17–18]

In the first line, the combination *nánà àsúú* gives the reading of 'never again', while the ideophonic exclamation *pɛ́s* 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 *kɛ́m*, but the expressive adverbial *láy-ni* can be used for emphasis in its place:

(492) *Yàà^L jíbu ḿmɔ kɛ́m / láy-ni ɛ́nn-íy-aa=ỳ.*
female skirt 1SG.POSS all/entirely-ADV be.wet-MP-PFV=COP
'My skirt is all wet.'

Another strategy in use today is to repeat *kɛ́m* three times: *kɛ́m~kɛ́m~kɛ́m*. Consultants tell me that old speakers also use the expressive adverbial *sèlé~sèlè-ni*:

(493) *Kà~kàá=gɛ=mbe yúú=gɛ kɛ́m~kɛ́m~kɛ́m /*
RED~grasshopper=DEF=PL millet=DEF all-all-all /

sèlé~sèlè-ni tɛ́m-aa j-ì-ɛ̀^n.
RED~entirely-ADV eat-PFV finish-PFV.L-3PL

'The grasshoppers ate *all* the millet.'

In the negative, the reduplicated form *láy~láy-ni* can also be used to mean 'at all', as in (494a). In (494b), *pɛ́y* plays the same role. Both can be equally substituted into the affirmative phrases above.

(494) a. *Mí báá^H láy~láy-ni kìdɛ̀^L kámá sè-lɛ́.*
1SG.PRO father RED~at.all-ADV thing nothing have-NEG
'My father owns nothing at all.'

b. *Pɛ́y ɛ̀nn-ìyɛ̀-lí.*
at.all be.wet-MP-NEG.PFV
'[It] is not wet at all.'

The adverb *sèlé~sèlè-ni* can be used in (494a) as well, but it changes the meaning slightly. While (494a) with *láy~láy-ni* refers only to the present moment of the father having nothing, using *sèlé~sèlè-ni* implies that at one point he had something but that he no longer does.

Chapter 11
Verbal derivation

Tommo So has five verbal derivational suffixes, first introduced in section 3.5.2 on vowel harmony. In the order in which they appear after the verb, these are factitive *-ndɛ́*, reversive *-ílɛ́*, transitive *-írɛ́*, mediopassive *-íyɛ́*, and causative *-mɔ́*. Of these suffixes, the most productive is the causative, which can be added to any verb.

11.1 Factitive *-ndɛ́*

I have glossed the suffix *-ndɛ́* as the factitive to distinguish it from *-mɔ́*, 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 form requires adding the mediopassive suffix *-íyɛ́* after the factitive. For more on the mediopassive, see section 11.3.

11.1.1 Phonological form

Because the factitive suffix is typically subject to height harmony, in addition to backness and ATR harmony, it most often surfaces as a copy of the final vowel in the verb stem. The following lists the factitive's five surface allomorphs:

(495) | Allomorph | Example | | Underived stem | |
|---|---|---|---|---|
| *-ndɛ́* | *yɛ̀-ndɛ́* | 'look at' | *yɛ̀* | 'see' |
| *-ndé* | *dèè-ndé* | 'introduce' | *dèé* | 'know' |
| *-ndɔ́* | *dùmɔ́-ndɔ́* | 'finish' | *dùmɔ́* | 'be finished' |
| *-ndó* | *póó-ndó* | 'greet' | *póó* | 'greeting (n.)' |
| *-ndá* | *dàgá-ndá* | 'fix' | *dàgá* | 'be good' |

These examples show that the factitive suffix may attach to either a verb stem or a noun stem (as in 'greeting').

Notice also that in (495), there are no examples of a rather typical factitive use, that is, inchoatives. The reason for this is that inchoative examples are not very informative when illustrating the factitive's vowel harmony, due to the fact in this construction, the factitive is almost always followed by the mediopassive. As one of the *i*-initial suffixes, the mediopassive completely erases the preceding vowel on the factitive to resolve vowel hiatus, thus obscuring the vowel harmony that has taken place. However, given that we know the rules of harmony, we can reasonably reconstruct a stem /túgó-ndó/ from *túgó-nd-íyé* '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 /ŋ/. In this case, the vowel of the second syllable following the velar nasal is nearly always pronounced as a high vowel (or in rapid speech, as a schwa). For instance, we see *táŋú-ndá* 'transfer' (cf. *táŋá* 'side'?) and *téŋí-ndɛ̂* 'light (fire)' (cf. *téŋɛ̂* '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 3.6.

Like all derivational suffixes, the tone of the factitive is always H. I assume that this H is underlying, since there does not seem to be an active process of tone spreading in the language. See section 4.2 for a discussion of tonally underspecified suffixes.

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 5.5, Tommo So 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:

(496) *ámá-nd-íyɛ̂*   'become rancid or sour'   <*ámám* 'sour'

   bàná-nd-íyɛ̂   'become red'   <*bánu* 'red'

   bèrɛ̂-nd-íyɛ̂   'become close, approach'   <*bèrú* 'close'

   bùrú-nd-íyé   'become soft'   <*búru* 'soft'

   dàgí-nd-íyɛ̂   'become small'   <*dàgú* 'small'

   dùmbú-nd-íyé   'become short'   <*dùmbú* 'short'

   ɛ̂lɛ̂-nd-íyé   'become sweet/sharp'   <*ɛ́lɛ̂lu* 'sweet'

   ɛ̂mmí-nd-íyɛ̂   'become narrow'   <*ɛ̀mmú* 'narrow'

   ɛ̂sí-nd-íyɛ̂[17]   'become pretty'   <*ɛ̀sú* 'pretty'

   gàà-nd-íyɛ̂   'become large'   <*gàá* 'big'

   gàlá-nd-íyɛ̂   'become bitter'   <*gálálu* 'bitter'

   gèmɛ̂-nd-íyɛ̂   'become black'   <*gɛ́m* 'black'

   íré-nd-íyé   'become better'   <*íré* 'better'

   káí-nd-íyɛ̂   'become superior, improve'   <*kǎy* 'superior'

---

17 Without the mediopassive, this is nominalized to *ɛ̀sɛ̀-ndú* 'soap', with an epsilon in the second syllable.

kálá-nd-íyɛ́	'become cold'	<*kálálu* 'cold'
kɛ́ú-nd-íyɛ́	'become equal, balanced'	<*kɛ́w* 'equal'
màà-nd-íyɛ́	'become courageous'	<*màá* 'dry'
ɔ́rɔ́-nd-íyɛ́	'become smooth'	<*ɔ̀rɔ̌y* 'smooth'
pálá-nd-íyɛ́	'become long'	<*pàlá* 'long'
pílé-nd-íyé	'become white'	<*pílu* 'white'
póó-nd-íyé	'become bigger/fatter'	<*póó* 'fat'
síyɛ́-nd-íyɛ́	'become good'	<*síyɛ́* 'good'
síí-nd-íyé-mɔ́	'sharpen'	<*sìì-ni* 'sharp'
tóó-nd-íyé	'become deep'	<*tòó* 'deep'
túgó-nd-íyé	'become heavy'	<*túgóm* 'heavy'
úsí-nd-íyé	'become thin'	<*ùsú* 'slim'
wàgé-nd-íyé	'become distant'	<*wàgé* 'distant'
wɛ̀í-nd-íyɛ̂	'become light'	<*wɛ́y* 'light'
wɛ̀rɛ́-nd-íyɛ̂	'become green'	<*wɛ́ru* 'green'

There are phonological mismatches between the adjectival and verbal stem in some cases. First, the underlying tone of the adjectival stem is overwritten by the predictable tone of verb stems: {H} on deadjectival stems beginning with a voiceless consonant or vowel and {LH} otherwise; see section 4.1.3.

Second, many adjectives with a final epenthetic [u] instead have a copy of the stem-initial vowel in the second syllable. For example, *bánu* 'red' → *bàná-nd-íyɛ́* 'become red', *wɛ́ru* 'green' → *wɛ̀rɛ́-nd-íyɛ̂* 'become green'. It is clear that the underlying form (presence or absence of a stem-final vowel) is found in the adjective, not in the verb, since otherwise we would incorrectly expect **pàlú* 'long' from *pálá-nd-íyɛ̂* 'become long' rather than attested *pàlá*. However, not all adjectives follow this pattern. The verbal counterparts of *bùrú* 'soft', *dùmbú* 'short', *èsú* 'beautiful', *èmmú* 'narrow', and *ùsú* 'slim' retain the final high vowel, violating the constraint that verb stems must end in a non-high vowel.

I analyze this as indicating that certain adjectives have verb stem counterparts. For instance, *bánu* 'red' has a verb stem counterpart *bàná*, and the factitive is formed off of this base. For others, the inchoative verb is formed directly off of the adjective, inducing no change in the final vowel. In fact, we have support for this analysis, in that the verb stem *bàná* is attested in the metaphorical expression *kíndɛ́ bàná* 'get angry' (lit. 'liver become red').

The third and last phonological change is that the final reduplication seen in unsuffixed adjectives (see section 5.5.2) is undone in the verb. That is, *kálálu* 'cold' as an adjective 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. Trisyllabic verb stems are phonologically licit, so it is not clear why VC reduplication is undone, unless the verb stems were formed and lexicalized from the (reconstructed) root *kál itself before adjectives underwent reduplication.

The factitive suffix carries a 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 *-mɔ* after the factitive and mediopassive suffixes. For instance: *tóó-nd-íyé-mɔ́* 'deepen (sth.), make (sth.) become deep'; *kálá-nd-íyɛ́-mɔ́* 'cool (sth.), make (sth.) be cool'.

Not all factitive verbs derived from adjectives and adverbs obligatorily take the mediopassive to become an inchoative. The following is an example of a verb that exists only as a transitive factitive:

(497) *gèɲí-ndɛ́* 'tilt (sth.)' <*gɛ̌ŋ-go* 'tilted'

The inchoative equivalent **gèɲí-nd-íyɛ́* is unattested.

11.1.3 Factitives added to intransitive verbs

In addition to its use with adjectives, the factitive can also be added to intransitive verbs, where it functions as a causative. Unlike the causative suffix *-mɔ*, however, this construction is not productive; the factitive appears to be lexicalized in all of these verbs. The first set of verbs that follow this pattern look semantically like the inchoatives/factitive from the preceding section, only in this case, a bare intransitive stem takes the place of a derived inchoative:

(498) *ɛ́ɛ́ⁿ-ndɛ́* 'tighten' <*ɛ́ɛ́ⁿ* 'become tight'
     dàgá-ndá 'fix, make good' <*dàgá* 'become good'
     ílɛ́-ndɛ́ 'make (fruit) ripe' <*ílɛ́* 'become ripe'
     màŋú-ndá 'dry (sth.) out' <*màà ŋ-íyɛ́* 'become dry'
     mìnɛ́-ndɛ́ 'grind' <*mìnɛ́* 'be powdered'
     ɲɔ́ŋú-ndɔ́ 'make (sth.) rot' <*ɲɔ́ŋ-íyɔ́* 'become rotten'
     yɔ̀rɔ́-ndɔ́ 'slow (sb.) down' <*yɔ̀rɔ́* 'be slow'

Another common pattern we find is the factitive added to intransitive verbs of motion:

(499) *dɔ̀ɔ̀-ndɔ́*   'put (sth.) beside (sth.)'   <*dɔ̀ɔ́*   'arrive'

      gàlá-ndá   'make (sth.) pass'   <*gàlá*   'pass'

      gòò-ndó   'remove, take out'   <*gòó*   'go out'

      jìŋí-ndɛ́   'move (sth.) close to (sth.)'   <*jìŋɛ́*   'approach'

      súgó-ndó   'take (sth.) down'   <*súgó*   'come down'

      úló-ndó   'raise (sth.)'   <*úló*   'go up'

      úŋgúló-ndó   'make (sb.) get up'   <*úŋgúló*   'get up'

Recall that monosyllabic verbs with a rising tone simplify to all L before the factitive so as not to violate the constraint against word-medial contour tones; see section 4.3.1.

    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:

(500) *bàŋú-ndá*   'hide'   <*bààŋ-íyɛ́*   'be hidden'

      dàà-ndá   'set down, seat (sb)'   <*dáà*   'be seated (stative)'

      dèè-ndé   'introduce, teach'   <*dèé*   'know'

      dùmɔ́-ndɔ́   'finish (sth.)'   <*dùmɔ́*   'be done'

      íŋí-ndɛ́   'cause to stand,   <*íŋɛ̀*   'be standing (stative)'

      jímɛ́-ndɛ́   'hurt, injure (sb.)'   <*jǐmɛ́*   'hurt, be sick'

      jòò-ndó   'fill'   <*jòó*   'be full'

      kíbé-ndé   'bring (exactly the right amount of something)'   <*kíbé*   'be complete'

      nàlá-ndá   '(midwife) help (sb.) give birth'   <*nàlá*   'give birth'

      (gúlɔ́) tɔ́ɔ́-ndɔ́   'nauseate (sb.)'   <*tɔ́ɔ́*   'spit'

      níŋɛ́-ndɛ́   'scare'   <*níŋ-íyɛ̂*   'be afraid'

      píí-ndé   'shut (door)'   <*píyí   'be shut'

      táŋú-ndá   'transfer, contaminate'   <*táŋá*   'become contaminated'

      wàŋá-ndá   'bring to a boil'   <*wààŋ-íyɛ̂*   'be boiling'

      yɛ̀-ndɛ́   'watch'   <*yɛ̀*   'see'

    All of the derived verbs in the three preceding lists had attested surface forms without the factitive. I know of ten verbs that either have a tenuous relationship with another verb or no known relationship whatsoever. These are:

(501) *bèŋɛ́-ndɛ́* 'put two objects *<bèèŋ-íyé* 'be close together'
       close together'

   dɔ̀bɔ́-ndɔ́ 'entice, lure'   *<dɔ̀bɔ́* 'swindle'?

   dɔ̀bɔ́-ndɔ́ 'console'   *<dɔ̀bɔ́* 'joke'?

   dɔ̀ŋú-ndɔ́ 'make (pail) catch *<dɔ̀ŋɔ́* 'prop up'?
       dripping water'

   dùù-ndó 'put down'   *<dúú* 'bottom'?

   ságá-ndá 'show'   *<ságá* 'put (sth.) up on (sth.)'?

   kílɛ́-ndɛ́ 'tease (child)' *<kílɛ́-mɔ́* 'play'?

   (kɔ́ɛ́) dògó-ndó 'raise (child) to maturity'

   níí-ndɛ́ 'go with, accompany'

   síí-ndé 'brandish (stick), aim at'

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, as could be the case in *nííndɛ́* and *sííndɛ́*.

For denominal verbs derived with the factitive suffix, see section 11.6.

11.2 Reversive *-ílɛ́*

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 unusual to an English speaker. For example, rather than have a pair 'disappear/reappear', the Tommo equivalent of 'reappear' is the reversive, *bààŋ-íl-íyɛ́* 'become unhidden' (cf. *bààŋ-íyɛ́* 'be hidden').

Reversive verbs without a mediopassive suffix are usually transitive, but not always. In some cases, the transitive/intransitive pair is homophonous, and the valency is clarified by context (see section 11.5 on ambi-valent verbs). An example of this is *dèb-ílɛ́*, 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, *nà-ílɛ́* 'remember' (literally 'unforget') vs. *nà-ílɛ́-mɔ́* 'remind' (literally 'make unforget').

11.2.1 Phonological form

The underlying form of the suffix is *-ílɛ́*, though the final vowel is subject to backness and ATR harmony, in addition to rare cases of height harmony that changes the /ɛ/ to [a]. The five attested allomorphs are given below:

(502)

Allomorph	Example		Underived stem	
-*ílέ*	*dὲb-ílέ*	'get unstuck'	*dὲbέ*	'get stuck'
-*ílέ*	*dìd-ílέ*	'unprop'	*dìdé*	'prop up'
-*ílɔ́*	*tɔ́m-ílɔ́*	'unwind'	*tɔ́mɔ́*	'wind up'
-*íló*	*kób-íló*	'deshell'	*kóbu*	'shell (n.)'
-*(í)lá*	*màná-lá*	'unseal'	*màná*	'seal'

The low allomorph has the /i/ in parentheses, since it often surfaces as simply -*lá*. This allomorph is rare and was probably lexicalized at an earlier stage.

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 to begin with and may not lend themselves easily to a reversive meaning (for examples of trisyllabic roots, see section 3.3.3 and section 4.1.3). Rarely, the stem-final vowel syncopates, and even more rarely the onset of the preceding syllable and the /l/ of the reversive metathesize. Like the factitive, the reversive always carries H tone.

11.2.1.1 Treatment of the stem-final vowel

The /i/ of the suffix causes the verb stem's final vowel to delete to resolve the vowel hiatus (see section 3.7.3). For example:

(503)   a.   *dὲŋέ-ílέ → dὲŋ-ílέ*
             'scoop out (dirt that has accumulated in a hole)'
             (from *dὲŋέ* 'fill up a hole')

        b.   *kúyó-íló → kúy-íló*
             '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 where this /i/ is absent and the stem retains its regular final vowel. These are:

(504)   a.   *dìy^{n}έ-lέ* 'unprop'   (from *dìy^{n}έ* 'prop')
        b.   *màná-lá* 'unseal'   (from *màná* 'seal up (eg., mouth of jar)')
        c.   *téέ^n-lέ* 'unhobble'   (from *téέ^n* 'hobble (a donkey)')

It is possible that these are older, lexicalized verbs, which would explain the deviant behavior of their stem vowel. After all, as I argued in Chapter 3, the /i/ of these suffixes seems to be the result of a process of vowel reduction and reinterpretation,

which has become stronger over time. Thus, the probable origin of the reversive suffix is *-lɛ*, which we still see in these few forms. Nonetheless, younger speakers report sometimes saying [dìyⁿílɛ́], [mànílɛ́], and [tɛ́ⁿílɛ́], on analogy with most other reversive forms.

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 (505a–b), removing both the stem-final vowel and the /i/ of the suffix. If the final consonant in the stem is /r/, it will assimilate to the following /l/ (505b–c). This is also occasionally the case if the stem consonant is /y/ (505d–f). This, however, is not consistently the case, as example (503) above shows.

(505) a. *mùl-ló* 'unplug' (cf. *mùló* 'plug, stop up')
       b. *nɔ́l-lɔ́* 'unlock' (cf. *nɔ́rɔ́* 'lock')
       c. *gòl-ló* 'take off hat' (cf. *gòr-íyó* 'put on a hat')
       d. *dùl-lɔ́* 'unload' (cf. *dùy-íyɔ́* 'load up (eg., cart, head)')
       e. *mìl-lé* 'unflip' (cf. *mìy-ìré* 'flip upside down')
       f. *píl-lé* 'open (unclose)' (cf. *píyí-ndé* 'close (door)').

This syncope is most likely due to the fact that the vowel would have been in the weak second syllable position, discussed in section 3.6.

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 for which I have evidence are listed in (506), with their non-reversive counterparts if applicable:

(506) a. *nà-ílɛ́* 'remember' cf. *nàá* 'forget'
       b. *sáⁿ-ílɛ́* 'untwist, unravel' –
       c. *tɛ́ɛ́ⁿ-lɛ́* 'unhobble' cf. *tɛ́ɛ́ⁿ* 'hobble (a donkey)'

As noted before, (506c) is irregular, since the reversive suffix does not carry its usual /i/. Though I have no non-reversive counterpart, the example in (506b) looks very clearly like a reversive form. The Dogon language Ben Tey 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 11.2.2.

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. A complete list of such forms in which the

reversive is playing a clear role is given in (507). Where the reversive is derived from a noun, I have written (n.) after the stem in the comparative list.

(507)

Reversive		Non-reversive stem	
bààŋ-íl-íyέ	'reappear'	*bààŋ-íyέ*	'be hidden'
dàg-ílέ	'unlock (door)'	*dàgá*	'lock (door)'
dàŋ-íl-íyέ	'be taken off'	*dàŋ-íyέ*	'attach ornaments'
dὲb-ílέ	'come unstuck'	*dὲbέ*	'get bogged down'
dὲŋ-ílέ	'scoop out dirt (from hole)'	*dὲŋέ*	'fill up (hole)'
dìd-ílέ	'remove (a barrier) that sthg is up against'	*dìdé*	'prop up'
dìg-íl-íyέ	'be dismembered'	*dìg-íyέ*	'be linked'
dìŋ-ílέ	'untie'	*dìŋέ*	'tie'
dìyⁿέ-lέ	'unprop'	*dìyⁿέ*	'prop up'
dùl-lɔ́	'unload'	*dùy-yɔ́*	'load'
gɔ̀ŋ-ílɔ́	'unfence'	*gɔ̀ŋɔ́*	'fence in'
índ-ílέ	'untangle'	*índ-íyέ*	'be tangled'
ís-ílέ	'undo braids'	–	
jàŋ-ílέ	'take (sthg) down'	*jàŋá*	'put (sthg) on a stand to keep it off the ground'
jàŋ-ílέ	'thin out (millet)'	*jàŋ-íyέ*	'be close together'
kób-ílɔ́	'de-shell'	*kóbu* (n.)	'shell'
kɔ́mm-ílɔ́	'untie, unbind'	*kɔ́mmɔ́*	'tie up, bind'
kúmb-ílɔ́	'spread open (hand)'	*nùmɔ̀ᴸ* *kúmbó* (n.)	'fist'
kúy-ílέ	'remove animal hide (from drum)'	*kúyɔ́*	'cover (drum) with hide'
kúy-ílέ	'unroll (pant leg)'	*kúy-íyé*	'be rolled'
màná-lá	'unseal (jar)'	*màná*	'seal up (jar)'
mànd-íl-íyέ	'be recovered'	*màndá*	'be lost'
mὲnn-ílέ	'unfold'	*mὲnnέ*	'fold'
mùl-ló	'unplug (hole)'	*mùló*	'plug (hole)'
mùnn-ílɔ́	'unroll (mat)'	*mùnn-íyέ*	'roll up (mat)'

nɛ́g-ílɛ́	'remove (inserted object)'	*nɛ́g-írɛ́*	'insert (sth. into space between two objects)'
nɔ́l-lɔ́	'unlock (door)'	*nɔ́rɔ́*	'lock (door)'
nɔ́mm-íl-íyɛ́	'(mattress) spring back'	*nɔ́mmɔ́*	'(mattress) sag under weight'
núm-ílɔ́	'undress'	*núm-íyɔ́*	'dress oneself'
pánd-ílɛ́	'marry (a widow)'	*pàndé* (n.)	'widowhood'
pɛ́g-ílɛ́	'unbutton/unscrew'	*pɛ́gɛ́*	'button up/screw in'
pɔ́nn-ílɔ́	'ungird oneself'	*pɔ́nn-íyɔ́*	'gird oneself'
ság-íl-íyɛ́	'come unstuck (from a tree)'	*ságá*	'put (sth.) on (sth.)'
tɛ́mm-ílɛ́	'unfold, open (aloe leaf)'	*tɛ́mmɛ́*	'shut (mouth)'
tímm-ílɛ́	'take lid off'	*tímmɛ́*	'put lid on'
tɔ́b-ílɔ́	'unroll turban'	*tɔ́b-íyɔ́*	'put on turban'
tɔ́m-ílɔ́	'unwind'	*tɔ́mɔ́*	'wind up'
tóŋŋ-íló	'unbend (wire)'	*tóŋŋó*	'bend (wire)'
túd-ílɔ́	'retract one's curse'	–	
yàmb-ílɛ́	'uncover'	*yàmbá*	'cover'
yóóŋ-íló	'unhook'	*yóóŋ-íyé*	'get caught in tree'

I included the words *ís-ílé* 'undo braids', *túd-ílɔ́* 'retract one's curse', and *yóŋ-íló* 'unhook' even though they do not have underived counterparts, since the semantics of these verbs are very clearly reversive.

11.2.2 Opaque reversives

There are a handful of stems that look phonologically as though they include the reversive suffix, but they do not carry a reversive meaning. At times, with a stretch of the imagination, one could find a reversive-like meaning therewithin, but for others, the suffix simply seems to add a negative meaning, or no discernible meaning at all.

Take, for example, *áŋ-ílɛ́* 'separate, restrain (two fighters)'. This appears to be a denominal verb with the reversive suffix on *áŋá* 'mouth', which is used in many idiomatic phrases describing fighting or arguing. For instance:

(508)   *áŋá dàláŋj-íyɛ́*   'have a dispute'   (Lit. 'mouths miss one another')

       áŋá tómbó   'have a dispute'   (Lit. 'mouths jump')

       áŋá dènnɛ́   'provoke (sb)'   (Lit. 'look for mouth')

For more on denominal verbs, see section 11.6. There is no non-reversive equivalent of *áŋ-ílɛ́*. 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 or Yanda Dom, the two are homophonous. When the suffix *-ílɛ́* acts transitively, it often lends a causative meaning to the verb. Take, for instance:

(509) a. *màndá*   'be lost'
       b. *mànd-ílɛ́*   'make something be lost'

We would expect (509b) to mean 'be recovered', but instead the suffix seems to make a causative of the simple stem. However, there is a form *mànd-íl-íyɛ́* with the mediopassive suffix as well, which does mean 'be recovered'; the [-íl] in this case is reversive. In other words, we appear to have a lexical accident in which the transitive and reversive suffixes are homophonous in a few lexicalized cases, even though they are not in the language as a whole. Other examples of transitive-like reversives include:

(510) *bòndó*   'hole (n.)'   *bond-íló*   'make a hole'

       yàmá   'be ruined'   *yàm-ílɛ́*   'ruin'

       gàmb-íyɛ̂   'be lowered'   *gàmb-ílɛ́*   'distribute (to everyone in
                                                    a group)'

       kábá   '(large group) break up   *káb-ílɛ́*   'separate, divide'
                    into separate groups'

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:

(511) a. *jùmɔ́*   'sear (meat, to preserve it for a few days)'
           jùm-ílɔ́   'hold or place (e.g. chicken, squirrel) over fire
                        (to burn off feathers or hairs)'
       b. *kádá*   '(sb) collect (honey) from a beehive'
           kád-ílɛ́   'take off (the layer of food that has hardened)'
       c. *kúdɔ́*   'pierce hole (in wood)'
           kúd-ílɛ́   'knick or scratch with pointed object'

Other pairs have no discernible relationship, as in *péndé* 'be dislocated' and *pénd-ílé* 'squeeze out a little bit of milk'.

In one case, there is no unsuffixed counterpart, but another language, Ben Tey, shows evidence of such a form:

(512)   *gùmm-íló*   'cut (watermelon) in two'   cf. Ben Tey *gùmbó*

Whether this was originally derived as a transitive or as a reversive is not clear.

11.3 Transitive *-írɛ́* and mediopassive *-íyɛ́*

The transitive and mediopassive suffixes, though differing in their rates of harmony (section 3.5.2), often form semantic pairs of verbs. The suffixes are not fully productive, but I am told that younger speakers are starting to generalize their application to new stems, as they are with the reversive.

The transitive suffix denotes that the subject is doing the action denoted by the verb to someone else, while the mediopassive gives the meaning of doing something to oneself (o.s.), e.g. *pɔ́nn-írɔ́* 'put pants (on e.g., child)' vs. *pɔ́nn-íyɔ́* '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 member of the pair may be suffixed (e.g. an unmarked transitive and a suffixed mediopassive, or vice versa).

It would seem that logically, a stem could not simultaneously take both the transitive and the mediopassive, and indeed that is almost exceptionless. Nonetheless, one stem does appear to carry both: *só-ír-íyé* 'sweat', with its cognate nominal *sòó* 'sweat'. It appears that this was first derived with the transitive *só-író* then the mediopassive was added to this.[18] Another potential case is *gòg-író* 'hang (concave object like calabash) on a rock' and *gòg-ír-íyé* 'be hung'. However, there is no evidence for a stem **gògó*, so this case might be better interpreted as *gògóró* → *gògór-íyé* 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. Both carry a vowel /i/ that causes the deletion of the preceding vowel. Both harmonize for ATR and optionally for backness with the stem; /a/ stems almost always take the [-ATR] vowels in harmony. Height harmony is no longer operative in these suffixes (i.e. we never see allomorphs *-írá* or *-ílá*). The following examples illustrate the four allomorphs of the each suffix:

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18 What exactly the transitive meaning of 'sweat' could be is not clear.

(513) | Allomorph | Example | | | Underived stem | |
|---|---|---|---|---|---|
| a. | *-íyɛ́* | *pɛ́nd-íyɛ́* | 'get crowded' | *pɛ́ndɛ̂* | 'make tight' |
| | *-íyé* | *nígíd-íyé* | 'be mixed' | *nígídé* | 'mix' |
| | *-íyɔ́* | *ɲɔ́ŋ-íyɔ́* | 'be rotten' | *ɲŏm* | 'rotten (adj.)' |
| | *-íyó* | *tóŋɲ-íyó* | 'be crumpled' | *tóŋɲó* | 'crumple' |
| b. | *-íŕɛ́* | *tɛ́mb-íŕɛ́* | 'make sb. find' | *tɛ́mbɛ̂* | 'find' |
| | *-íŕé* | *wèdé-g-íŕé* | 'drive crazy' | *wèdé* | 'crazy (adj.)' |
| | *-íŕɔ́* | *ɔ́g-íŕɔ́* | 'heat (sth.)' | *ɔ́gu* | 'hot (adj.)' |
| | *-íŕó* | *yó-íŕó* | 'do spot sowing' | *yóó* | 'enter'? |

Recall that 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, [tóŋɲ-íyó] varies with [tóŋɲ-íyé], but we never see a back vowel after a front stem (*[wèdé-g-íŕó]), indicating that the underlying form of the suffixes is front. See section 3.5.2 for more discussion of vowel harmony on these suffixes.

Some mediopassive/transitive pairs have irregular phonological correspondences. These include:

(514) | a. | *kɔ́l-íyɛ́* | 'pour water (on o.s.)' | *kɔ́-íŕɛ́* | 'pour water (on sb.)' |
|---|---|---|---|---|
| b. | *dùy-yɔ́* | 'load (on one's head)' | *dùù-rɔ́* | 'load (on cart, another's head, etc.)' |
| c. | *gàw-íyɛ́* | 'watch over' | *gàú-rɔ́* | 'entrust to (sb.)' |

The alternation in (514a) is probably due to the language's dispreference for a sequence of two liquids. In (514b), we see the syncope of /i/ between two /y/, and in both (514b–c), a semivowel followed by /i/ is simply realized as [u]: *dùy-íŕɔ́* → [dùùrɔ́], *gàw-íŕɔ́* → [gàúrɔ́]. Note that the only stems that have semivowels as the last consonant are *uO* stems with /y/, and /ɛ/ and /a/ stems with /w/, and even these are rare.

11.3.2 Transitive/mediopassive pairs

There are a large number of stems that can take either suffix, forming transitive/ mediopassive pairs. Below is a representative list of such pairs:

(515) | Mediopassive | | Transitive | |
|---|---|---|---|
| *áŋj-íyɛ́* | 'be ashamed' | *áŋj-íŕɛ́* | 'shame (sb.)' |
| *dìg-íyɛ́* | 'be connected' | *dìg-íŕɛ́* | 'connect (things)' |
| *ǹd-íyɛ́* | 'bathe (o.s.)' | *ǹd-íŕɛ́* | 'bathe (sb.)' |

nɛ̂g-íyɛ̂	'slide (o.s.) in'	*nɛ̂g-írɛ̂*	'slide (sth.) in'
sɛ̂-íyɛ̂	'adorn (o.s.)'	*sɛ̂-írɛ̂*	'adorn (sb.)'
síŋŋ-íyɛ̂	'tie child to one's back'	*síŋŋ-írɛ̂*	'tie child to (sb.'s) back'
tág-íyɛ̂	'put on shoes'	*tág-írɛ̂*	'put shoes (on sb.)'
kɔ́nn-íyɛ̂	'be sharply bent'	*kɔ́nn-írɛ̂*	'bend sharply'
náw-íyɛ̂	'be put in'	*náú-rɔ́*	'put (sth.) in'
túŋ-íyɔ́	'kneel'	*túŋ-írɔ́*	'make (sb.) kneel'
ɔ́g-íyɔ́	'be heated'	*ɔ́g-írɔ́*	'heat (sth.)'

As can be seen, some stems with the mediopassive are more simply intransitive than mediopassive in a strict sense, such as *kɔ́nn-íyɛ̂* 'be sharply bent', since an object does not have the volition to do something to itself. In those pairs, the transitive suffix can be seen as acting like a causative on an otherwise intransitive verb. Other such examples include *dìmb-íyɛ̂* 'follow' vs. *dìmb-írɛ̂* 'make (sb.) follow' and *pɔ́-íyɛ̂* '(grain) ferment' vs. *pɔ́-írɛ̂* 'make (grain) ferment'.

While there are many mediopassive/transitive pairs of verbs in the language, these do not account for the majority of either mediopassive or transitive verbs. Below, I discuss verbs that do not form a neat pair, instead having either a non-derived counterpart or no counterpart at all.

11.3.3 Suffixed 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 plays this role. By "bare stem", I do not mean a verb root necessarily, but simply whatever material would precede the mediopassive suffix, which may be a bare verb root or may carry other derivational morphology like the reversive. The following is a list of all known cases of this kind:

(516)	*bàr-íyɛ̂*	'get bigger'	*bàrá*	'expand (herd)'[19]
	kán-íyɛ̂	'happen'	*káná*	'do'
	kíb-íyɛ̂	'(field) be cleared'	*kíbɛ́*	'clear (field)'[20]
	kígíl-íyé	'go back'	*kígílé*	'make (sb.) go back'
	(kíndɛ̂) kɛ̂d-íyɛ̂	'be frustrated'	*(kíndɛ̂) kɛ̂dɛ́*	'frustrate (sb.)'[21]
	kób-íl-íyó	'(bark) be removed'	*kób-íló*	'take off bark'

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19 Note that while these are historically related, now when saying 'make something bigger', speakers use the causative suffix, yielding *bàr-íyɛ̂-mɔ́*.

20 The bare stem *kíbɛ́* can also be used as the mediopassive. See section 11.5 for more on ambivalent verbs.

21 Literally 'cut (sb's) heart'

kúy-íyé	'be inside out'	*kúyó*	'turn inside out'
kɔ́mm-íl-íyɔ́	'(knot) come untied'	*kɔ́mm-ílɔ́*	'untie (knot)'
mènn-íl-íyɛ́	'(sth.) uncurl'	*mènn-ílɛ́*	'uncurl (sth.)'
mùgúl-íyé	'become muddy'	*mùgúló*	'(cart) muddy (water)'
mùnn-íyɛ́	'be bundled up'	*mùnnɔ́*	'bundle up'
mùr-íyó	'be submerged'	*mùró*	'submerge (sth.)'
nàl-íyɛ́	'be born'	*nàlá*	'give birth to'
nígíd-íyé	'be mixed'	*nígídé*	'mix'
péɛ́nd-íyɛ́	'spread (selves) out'	*péɛ́ndɛ́*	'spread out (objects)'
pár-íyɛ́	'put perfume on (o.s.)'	*párá*	'put perfume on (sb.)'
pélɛ́l-íyɛ́	'become straight'	*pélɛ́lɛ́*	'straighten (sth.)'
pénd-íyɛ́	'become crowded'	*péndɛ́*	'make tight, narrow'
píll-íyé	'(door) open'	*píllé*	'open (door)'
póg-íyó	'dodge (sth.)'	*pógó*	'knock to the side'
púy-íyɛ́	'(fruit) ripen'	*púyɔ́*	'make (fruit) ripen'
púgúd-íyó	'(sth.) crumble'	*púgúdó*	'crumble (sth.)'
púl-íyó	'(braids) come undone'	*púló*	'undo (braids)'
gàg-íyɛ́	'scrub (o.s.)'	*gàgá*	'scrub with a stone'
sáⁿ-íl-íyɛ́	'(rope) unravel'	*sáⁿ-ílɛ́*	'unravel (rope)'
sámb-íyɛ́	'rinse (o.s.)'	*sámbá*	'rinse (sb., sth.)'
tár-íyɛ́	'be stuck on'	*tárá*	'stick (sth.) on'
tígíd-íyé	'get wrinkled'	*tígídé*	'wrinkle (sth.)'
tímb-íyɛ́	'be stacked, doubled'	*tímbɛ́*	'double up, stack (sth.)'
tínd-íyé	'(tree) block road'	*tíndé*	'lay (sth.) across (road)'
tɔ́m-íyɔ́	'be coiled up'	*tɔ́mɔ́*	'coil (sth.) up'
tóŋŋ-íyó	'(rope) be jumbled up'	*tóŋŋó*	'crumple up (rope)'
wànán-íyɛ́	'(sth.) stretch out'	*wànáná*	'stretch out (sth.)'
yàmb-íyɛ́	'cover (o.s.)'	*yàmbá*	'cover (sth.)'
yègír-íyé	'get (o.s.) ready to go'	*yègíré*	'get (sb.) ready to go'
y-íyɛ́	'be seen'	*yɛ̀*	'see'
yùb-íyɔ́	'be spilled'	*yùbɔ́*	'spill'
yùm-íyɔ́	'(sth.) shake'	*yùmɔ́*	'shake (sth.)'

Some mediopassives seem to be semantically related to a bare stem, but not in the typical mediopassive/transitive relationship:

(517) *áw-íyɛ́*   'wrestle (sb.)'   *áwá*   'catch'
       ómb-íyɛ́   '(millet) lose its grains'   *ómbó*   'undress (o.s.)'
       pɛ́ndɛ́-g-íyɛ́ 'carry (stick) between arm   *pɛ́ndɛ̂* 'pin (sb.) against a wall'
                       and ribcage'
       síŋj-íyé   '(liquid) be absorbed'   *síŋjé* 'sniff (sth.) noisily'
       téél-íyé   '(water) become clear'   *téélé* 'skim off clean water
                                                                     from the top of
                                                                     a dirty well'
       tɛ́mm-íyɛ́   '(can) be crumpled'   *tɛ́mmɛ̂* 'shut (mouth)'
       tɔ́ɔ́d-íyɛ́   'squat'   *tɔ́ɔ́dɔ̂* 'step on'

The first four of these are more transparently related, while the latter three are too closely related to be coincidence but not closely related enough to suggest synchronic connections. The third example, *pɛ́ndɛ́-g-íyɛ́* 'carry (stick) between arm and ribcage', carries an opaque suffix -*g*. It is not clear what this suffix contributes.

11.3.4 Suffixed 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. This same situation with the transitive is extremely rare. I know of only one clear case where the counterpart of a suffixed transitive verb is a bare stem:

(518) *tɛ́mb-írɛ̂* 'make (sb.) find (sth.)'
       tɛ́mbɛ̂   'find (o.s.) in a situation'

Even here, the semantics are not exactly that of a mediopassive/transitive pair. Another possible case is *yó-író* 'do spot sowing during the first weeding' (see the following section), which could be a transitivized version of *yóó* 'enter', but speakers do not seem to make this synchronic connection.

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 suffix, but there is no evidence for the stem without *-íyɛ́*; that is, they contain bound roots. Below are all such cases, excluding those with the factitive suffix and denominal verbs, which will be discussed in section 11.6.

(519)   *áŋŋál-íyɛ́*   'walk with legs wide apart'

   bààg-íyɛ́-mɔ́   'cook (bony meat) rapidly with few condiments'

   kɔ́ɔ́l-íyɔ́   'scrape off'

   kúl-íyó   'mix together'

   mùy-yɔ́   '(shoulder) be dislocated'

   núll-íyɔ́   '(shoulder) get dislocated'

   píⁿ-íyɛ́   'get old'

   píɲj-íyé   '(water) gush out'

   píríg-íyé   '(wounded animal) flop around'

   póób-íyó   'whistle'

   púúŋ-íyɛ́   'tease (sb.) by keeping something away from him/her'

   púúb-íyó   'blow on (fire)'

   sáál-íyɛ́   'be thoroughly soaked'

   sáán-íyɛ́   'make a mistake'

   sóól-íyó   'grow up'

   tɔ́ɔ́l-íyɔ́   '(knife) be sharpened'

   túmmúl-íyó   'stalk (prey)'

   wèèr-íyé   'become accustomed to'

   wòr-íyó   'move away from'

   yàl-íyɛ́   'go for a stroll'

Many of these mediopassive verbs can be combined with the causative suffix to create a transitive version of verb. For instance, *píⁿ-íyɛ́-mɔ́* 'age (sb.)' or *mùy-yɔ́-mɔ́* 'make (shoulder) be dislocated'.

11.3.6 Transitive with no mediopassive counterpart

There are far fewer transitive verbs lacking a counterpart than mediopassives, due to the reasons listed in section 11.3.4. The other difficulty with the transitive is morphological segmentation. /yV/ is a very uncommon ending in stems, so when it appears,

especially in polysyllabic stems, its mediopassive role is evident. Not so for poly-syllabic stems ending in /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; if the stem had low vowels, a suffix would not harmonize for height, so we would be able to distinguish between /rV/ acting as a suffix and /rV/ as part of the stem. To take an example of an ambiguous form, upon first listening, 'get ready' sounds like *yég-íré*, but judging by the fact that the medio-passive can be added to the end, the correct parsing appears to be rather *yégíré* with weak second syllable vowel reduction. A similar case was discussed at the begin-ning of section 11.3.

The following verbs seem to have a transitive with no unsuffixed or medio-passive counterpart:

(520)   *bì-ìré*   'cover up (corpse with dirt)'
        káŋ-írê   '(hen) cluck while laying egg' (with object *tálu* 'egg')
        wì-ìré   'set out (clothes) to dry in the sun'
        yó-író   'do spot sowing during the first weeding'[22]

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 inchoa-tive verbs, however, are derived from the adjective with nothing but the medio-passive 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 *êlêlu*-type adjectives, section 5.5.2). I am aware of the following verbs:

(521)   *púrúg-íyé*   'become dusty'   <*púrúgu* 'dusty'
        pómbór-íyé   '(watermelon) become large   <*pómbóró* 'large and elongated'
                        and elongated'
        yàgár-íyê   'become rough, itchy'   <*yágáru* 'rough, itchy'
        yégél-íyé   'become cold'   <*yégélu* 'cold'
        mààŋ-íyê   'be dry'   <*màá* 'dry'

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22 Possibly related to *yóó* 'enter', as in 'make (the seeds) enter'.

It is interesting to note that *màá* '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 /ŋ/ 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 -*mɔ́*

The most productive derivational suffix is the causative suffix -*mɔ́*. Unlike the previous three suffixes, the causative only rarely harmonizes (for backness) and does not carry a vowel /i/ that erases the preceding vowel. The tone of this suffix is also H. For the behavior of the causative in vowel harmony, see section 3.5.2.

The causative is the only derivational suffix that can be applied recursively. For instance, to 'make [someone] make [someone] run', Tommo So allows *jɔ̀bɔ́-mɔ́-mɔ́* 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 *:

(522) a. <u>Monosyllabic</u>

**nɔ́ɔ́-mɔ́*	'give a drink to someone'	<*nɔ́ɔ́* 'drink'
**yóó-mɔ́*	'let (field) lie fallow'	<*yóó* 'enter'
dàá-mɔ́	'make kill'	<*dàá* 'kill'

b. <u>Disyllabic</u>

ɔ́dɔ́-mɔ́	'erode (tr.)'	<*ɔ́dɔ́* 'erode (intr.)'
**jàŋgá-mɔ́*	'teach'	<*jàŋgá* 'study'
sɛ́mɛ́-mɔ́	'make slaughter'	<*sɛ́mɛ́* 'slaughter'

c. <u>Underived trisyllabic</u>

gɔ̀rɔ́lɔ́-mɔ́	'make snore'	<*gɔ̀rɔ́lɔ́* 'snore'
ádúbá-mɔ́	'make think'	<*ádúbá* 'think'

d. <u>Derived trisyllabic</u>

wàày-íyɛ́-mɔ́	'bring to a boil'	<*wàày-íyɛ́* 'boil'
bàr-íyɛ́-mɔ́	'make (animal) put on weight'	<*bàr-íyɛ́* 'put on weight'
**nà-ílɛ́-mɔ́*	'remind'	<*nà-ílɛ́* 'remember'

e.   Derived quadrisyllabic+

síí-nd-íyé-mɔ́	'sharpen'		<*síí-ndí-yé* 'become sharp'
túgó-nd-íyé-mɔ́	'make heavy'		<*túgó-nd-íyé* 'become heavy'
ámá-nd-íyé-mɔ́	'make sour'		<*ámá-nd-íyé* 'become sour'

The causative suffix also has an irregular and unproductive use as a passive marker. I am aware of only three verbs of this type:

(523) *yὲ-mɛ̂ ~ yὲ-mɔ́*   'be seen' (not 'make see')   <*yὲ* 'see'

   tɛ́mbɛ̂-mɔ́   'be found' (not 'make find')   <*tɛ́mbɛ̂* 'find'

   bὲlɛ̂-mɛ̂   'be obtainable' (not 'make obtain') <*bὲlɛ̂* 'obtain'

The prevalence of backness harmony in these cases is much higher than in the causative cases, suggesting that the passive uses are lexicalized and possibly treated as one stem by speakers.

   Nonetheless, in the right context, these same verbs can be interpreted as causatives, as in:

(524) *Ú=ɲ̀*   *búúdù*   *úwɔ*   *tɛ́mbɛ̂-m-aa=wɔ-m.*
   2SG.PRO=OBJ   money   2SG.POSS   find-CAUS-PFV=be-1SG
   'I made you find your money.'

This could be said in a context in which a person has lost their money, and someone else points out where it was.

11.5 Ambi-valent 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, a handful verbs are ambi-valent – that is, the same form of the verb can be used both transitively and intransitively.

   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:

(525) *jɔ̀gɔ́*   'break' or 'be broken'

   kúndó 'put' or 'be put'

The following shows *jɔ̀gɔ́* used both transitively and intransitively:

(526) a. *Kɔ̀rɔ́=gɛ* *jɔ̀g-ɛ̀-m.*
calabash=DEF break-PFV.L-1SG
'I broke the calabash.'

b. *Kɔ̀rɔ́=gɛ* *jɔ̀g-áa=wɔ.*
calabash=DEF break.PFV=be
'The calabash broke.'

The other ambi-valent 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:

(527) *yéy-yé* 'sleep' *gìrè-ý yéy-yé* 'sleep a sleep'
ɲ́yɛ̂ 'eat' *jáá ɲ́yɛ̂* 'eat a meal'

For more verbs that can be used with or without objects, see the discussion of cognate nominals in section 13.1.5.

11.6 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 section 11.1.2 and section 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. For example, in a case like *pɔ́nnu* 'pants' and *pɔ́nn-íyɔ́* 'put pants on (o.s.)', there is no clear evidence that one form is more basic than the other. The absence of an underived verb stem suggests that the mediopassive is used to derive the verb from 'pants', but it is equally possible that this noun is derived from a bound verb stem *pɔ́nnɔ́* 'to pant'.

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), with the caveat that this distinction is very hard to pin down:

(528) a. <u>Factitive</u>
jàà-ndá 'cook' <*jáá* 'meal'
póó-ndó 'greet' <*póó* 'greeting'
yáá-ndá 'greet in the morning' <*yáá* 'morning greeting'

b. <u>Transitive</u>

tíg-írɛ̂	'call out the names of the ancestors'	<*tígɛ́* 'surname'
*nɛ̂mɛ̂-g-írɛ̂	'make dirty'	<*nɛ̂mɛ̂* 'trash'

c. <u>Mediopassive</u>

kúmb-íyó	'clench hand into a fist'	<*nùmɔ̀ᴸ kúmbó* 'fist'
pún-íyɔ́	'menstruate'	<*púnɔ́* 'menstruation'
sɛ́mmɛ́l-íyɛ̂	'become ragged'	<*sɛ́mmɛ́lɛ́* 'rags'
síd-íyé	'be lined'	<*sídu* 'line'
*síyí-g-íyé	'become fatty'	<*síyé* 'fat'
síl-íyɛ̂	'have an affair'	<*sílɛ́* 'affair'
úmmúg-íyó	'take a sip'	<*ùmmùgó* 'mouthful'
yùgúd-íyé	'become wooly'	<*yúgúdu* 'velvet'
*nɛ́mɛ̂-g-íyɛ̂	'become dirty'	<*nɛ̂mɛ̂* 'trash'

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 *tíg-írɛ̂* 'call out the names of the ancestors' from *tígɛ́* 'surname', which has no mediopassive equivalent.

The three 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 provides in-depth coverage of the inflectional system of Tommo So verbs. It is a complicated system that typically involves both tonal overlays and suffixation triggered by aspect, tense, negation, and even focus. I have tried to give as complete of a description as possible, though some tense+aspect combinations (e.g. future progressive) are very rare in everyday speech, and the data I have on them are sparse.

In section 12.1, I give a schematic overview of verbal inflection in the form of paradigms. In section 12.2–12.7, I address each of the main aspects: imperfective, perfective (four kinds) and progressive, giving their negative and affirmative forms in all tenses. In section 12.8, I readdress the issue of pronominal subject suffixes, first discussed in section 5.3. Finally, section 12.9 covers imperatives and hortatives.

For the inflection of quasi-verbs not used in regular verbal inflection as auxiliaries, see Chapter 13.

12.1 Overview of tense-aspect-negation (TAN) for regular verbs

Before delving into different inflectional 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 /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 perfective, imperfective, and progressive, but there are a few different kinds of perfectives and two varieties of the imperfective. 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 free of focus. The first I call the **focused** form, while the second is the **defocalized** form, and the third requires no separate appellation other than the name of the aspect. Additionally, there is an experiential perfect construction ("have done something [before]", French *avoir l'habitude de faire*) and a verb form that carries both perfective and imperfective morphology, but which is interpreted perfectively. This form seems to only be used in the present affirmative.

In the tables below, forms marked with an asterisk are hypothesized forms based on other verbs in the same paradigmatic slot.

(529) a. Monosyllabic paradigms

Indicative		{H} yóó 'enter'		{LH} gòó 'exit'	
Aspect	*Tense*	*Affirmative*	*Negative*	*Affirmative*	*Negative*
Imperfective	Pres/Fut	yóò-dè	yò-éélè	góó-dè	gò-éélè
	Past	yóò=be	yóó bè-lé	góò=be	gòó bè-lé
	Chain form	yó-ee	yòò-lú-go	gò-ée	gòò-lú-go
Imperfective (focused)	Pres/Fut	yò~yóò-dè	yò-éélè	gò~góò-dè	gò-éélè
Perfective (-aa)	Present	yó-aa=wɔ	yòò-lí	gò-áa=wɔ	gòò-lí
	Future	yó-ee bíyè-dè	yó-ee bìy-éélè	gò-ée bíyè-dè	gò-ée bìy-éélè
	Past	yó-aa=be	yòò-lí	gò-àà=bé	gòò-lí
	Chain form	yó-aa	yòò-lú-go	gò-áa	gòò-lú-go
Perfective (defocalized)	Present	yò-è	yòò-lí	gò-è	gòò-lí
	Future	yó-ee bíyè-dè	yó-ee bìy-éélè	gò-ée bíyè-dè	gò-ée bìy-éélè
	Past	yó-aa=be	yòò-lí	gò-àà=bé	gòò-lí
Perfective (focused)	Present	yò~yó-è	yò~yóò-lì	gò~gó-è	gò~góò-lì
Imperfective perfective	Present	yó-àà-dè	–	*gó-àà-dè	–
Experiential perfect	Present	yòy tíy-aa=wɔ	yòy tìyè-lí	gòy tíy-aa=wɔ	gòy tìyè-lí
	Future	yóò-dè-go bíyè-dè	yò-éélè-go bíyè-dè	góò-dè-go bíyè-dè	gò-éélè-go bíyè-dè
	Past	yòy tíy-aa=be	yòy tíy-aa=be-le	gòy tíy-aa=be	gòy tíy-aa=be-le
Progressive	Present	yóó-gú=sɛ yóó-gú=wɔ	yóó-gú sè-lé yóó-gú òndú	gòò-gú=sɛ gòò-gú=wɔ	gòò-gú sè-lé gòò-gú òndú
	Future	yóó-nú bíyè-dè	yóó-nú bìy-éélè	gòò-nú bíyè-dɛ	gòò-nú bìy-éélè
	Past	yóó-gú=be	yóó-gú=be-le	gòò-gú=be	gòò-gú=be-le
Imperative		yóó	yòò-gú yóó nàà-gú	góó gòó	gòò-gú gòó nàà-gú
Hortative		yóó-mɔ́	yòò-mɔ̀-gú	gòò-mɔ́	gòò-mɔ̀-gú

b. Disyllabic paradigms

Indicative		{H} ɛ́bɛ́ 'buy'		{LH} jɔ̀bɔ́ 'run'	
Aspect	*Tense*	*Affirmative*	*Negative*	*Affirmative*	*Negative*
Imperfective	Pres/Fut	ɛ́bɛ̀-dɛ̀	ɛ̀b-ɛ́ɛ́lɛ̀	jɔ́bɔ̀-dɛ̀	jɔ̀b-ɛ́ɛ́lɛ̀
	Past	ɛ́bɛ̀=be	ɛ́bɛ́ bɛ̀-lɛ́	jɔ́bɔ̀=be	jɔ̀bɔ́ bɛ̀-lɛ́
	Chain form	ɛ́b-ee	ɛ̀bɛ́-lú-go	jɔ̀b-ée	*jɔ̀bɔ́-lú-go
Imperfective (focused)	Pres/Fut	ɛ̀~'ɛ́bɛ̀-dɛ̀	ɛ̀b-ɛ́ɛ́lɛ̀	jɔ̀~jɔ́bɔ̀-dɛ̀	*jɔ̀b-ɛ́ɛ́lɛ̀
Perfective (-aa)	Present	ɛ́b-aa=wɔ	ɛ̀bɛ̀-lí	jɔ́b-áa=wɔ	jɔ̀bɔ̀-lí
	Future	ɛ́b-ee bíyɛ̀-dɛ̀[23]	ɛ́b-ee bìyɛ̀-ɛ́ɛ́lɛ̀	jɔ̀b-áa bíyɛ̀-dɛ̀	*jɔ̀b-ée bìyɛ̀-ɛ́ɛ́lɛ̀
	Past	ɛ́b-aa=be	ɛ̀bɛ̀-lí	jɔ̀b-áa=be	jɔ̀bɔ̀-lí
	Chain form	ɛ́b-aa	ɛ̀bɛ́-lú-go	jɔ̀b-áa	jɔ̀bɔ́-lú-go
Perfective (defocalized)	Present	ɛ̀b-ɛ̀	ɛ̀bɛ̀-lí	jɔ̀b-ɛ̀	jɔ̀bɔ̀-lí
	Future	*ɛ́b-ee bíyɛ̀-dɛ̀	*ɛ́b-ee bìyɛ̀-ɛ́ɛ́lɛ̀	*jɔ̀b-ée bíyɛ̀-dɛ̀	*jɔ̀b-ée bìyɛ̀-ɛ́ɛ́lɛ̀
	Past	*ɛ́b-aa=be	*ɛ̀bɛ̀-lí	*jɔ̀b-áa=be	*jɔ̀bɔ̀-lí
Perfective (focused)	Present	ɛ̀~ɛ́b-ɛ̀	*ɛ̀~ɛ́bɛ̀-lì	jɔ̀~jɔ́b-ɛ̀	*jɔ̀~jɔ́bɔ̀-lì
Imperfective perfective	Present	*ɛ́b-àà-dɛ̀	–	*jɔ́b-àà-dɛ̀	–
Experiential perfect	Present	ɛ̀bɛ̀ tíy-aa=wɔ	ɛ̀bɛ̀ tìyɛ̀-lí	jɔ̀bɔ̀ tíy-aa=wɔ	jɔ̀bɔ̀ tìyɛ̀-lí
	Future	*ɛ́bɛ̀-dɛ̀-go bíyɛ̀-dɛ̀	*ɛ̀b-ɛ́ɛ́lɛ̀-go bíyɛ̀-dɛ̀	*jɔ́bɔ̀-dɛ̀-go bíyɛ̀-dɛ̀	*jɔ̀b-ɛ́ɛ́lɛ̀-go bíyɛ̀-dɛ̀
	Past	*ɛ̀bɛ̀ tíy-aa=be	*ɛ̀bɛ̀ tíy-aa=be-le	*jɔ̀bɔ̀ tíy-aa=be	*jɔ̀bɔ̀ tíy-aa=be-le
Progressive	Present	ɛ́bɛ́-gú=sɛ ɛ́bɛ́-gú=wɔ	ɛ́bɛ́-gú sɛ̀-lɛ́ ɛ́bɛ́-gu òndú	jɔ̀bɔ́-gú=sɛ jɔ̀bɔ́-gú=wɔ	jɔ̀bɔ́-gú sɛ̀-lɛ́ jɔ̀bɔ́-gú òndú
	Future	ɛ́bɛ́-nú bíyɛ̀-dɛ̀	ɛ́bɛ́-nu bìyɛ̀-ɛ́ɛ́lɛ̀	jɔ̀bɔ́-nú bíyɛ̀-dɛ	jɔ̀bɔ́-nú bìyɛ̀-ɛ́ɛ́lɛ̀
	Past	ɛ́bɛ́-gú=be	ɛ́bɛ́-gú bɛ̀-lɛ́	jɔ̀bɔ́-gú=be	jɔ̀bɔ́-gú bɛ̀-lɛ́
Imperative		ɛ́bɛ́	ɛ̀bɛ̀-gú ɛ́bɛ́ nàà-gú	jɔ́bɔ́ jɔ̀bɔ́	jɔ̀bɔ̀-gú jɔ̀bɔ́ nàà-gú
Hortative		ɛ́bɛ́-mɔ́	ɛ̀bɛ̀-mɔ̀-gú	jɔ̀bɔ́-mɔ́	jɔ̀gɔ̀-mɔ̀-gú

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23 Has a sense of 'maybe'.

c. Trisyllabic paradigms

Indicative		{H} kílɛ́mɔ́ 'play'		{LH} gɔ̀rɔ́lɔ́ 'snore'	
Aspect	*Tense*	*Affirmative*	*Negative*	*Affirmative*	*Negative*
Imperfective	Pres/Fut	kílɛ̀mɔ̀-dɛ̀	kìlɛm-ɛ́ɛ́lɛ̀	gɔ́rɔ̀lɔ̀-dɛ̀	gɔ̀rɔ́l-ɛ́ɛ́lɛ̀
	Past	kílɛmɔ̀=be	kílɛ́mɔ́ bɛ̀-lé	gɔ́rɔ̀lɔ̀=be	gɔ̀rɔ́lɔ́ be-le
	Chain form	kílɛ́m-ee	*kìlɛ́mɔ́-lú-go	gɔ̀rɔ́l-ee	gɔ̀rɔ́lɔ́-lu-go
Imperfective (focused)	Pres/Fut	kì~kílɛ̀mɔ̀-dɛ̀	*kìlɛm-ɛ́ɛ́lɛ̀	gɔ̀~gɔ́rɔ̀lɔ̀-dɛ̀	*gɔ̀rɔ̀l-ɛ́ɛ́lɛ̀
Perfective (-aa)	Present	kílɛ́m-aa=wɔ	kìlɛmɔ̀-lí	gɔ̀rɔ́l-aa=wɔ	gɔ̀rɔ̀lɔ̀-lí
	Future	kílɛ́m-ee bíyɛ̀-dɛ̀	*kílɛ́m-ee bìy-ɛ́ɛ́lɛ̀	gɔ̀rɔ́l-ee bíyɛ̀-dɛ̀	*gɔ̀rɔ́l-ee bìy-ɛ́ɛ́lɛ̀
	Past	kílɛ́m-aa=be	kìlɛmɔ̀-lí	gɔ̀rɔ́l-aa=be	gɔ̀rɔ̀lɔ̀-lí
	Chain form	kílɛ́m-aa	*kìlɛ́mɔ́-lú-go	gɔ̀rɔ́l-aa	*gɔ̀rɔ́lɔ́-lu-go
Perfective (defocalized)	Present	kìlɛm-ì	kìlɛmɔ̀-lí	gɔ̀rɔl-ì	gɔ̀rɔ̀lɔ̀-lí
	Future	*kílɛ́m-ee bíyɛ̀-dɛ̀	*kílɛ́m-ee bìy-ɛ́ɛ́lɛ̀	*gɔ̀rɔ́l-ée bíyɛ̀-dɛ̀	*gɔ̀rɔ́l-ée bìy-ɛ́ɛ́lɛ̀
	Past	*kílɛ́m-aa=be	*kìlɛmɔ̀-lí	*gɔ̀rɔ́l-aa=be	*gɔ̀rɔ̀lɔ̀-lí
Perfective (focused)	Present	kì~kílɛm-ì	*kì-kílɛ̀mɔ̀-lì	gɔ̀~gɔ́rɔl-ì	*gɔ̀-gɔ́rɔ̀lɔ̀-lì
Imperfective perfective	Present	*kílɛm-àà-dɛ̀	–	*bɔ́gɔl-àà-dɛ̀	
Experiential perfect	Present	kìlɛmù tíy-aa=wɔ	kìlɛmù tìyɛ̀-lí	bɔ̀gɔ̀lù tíy-aa=wɔ	bɔ̀gɔ̀lù tìyɛ̀-lí
	Future	*kílɛ̀mɔ̀-dɛ̀-go bíyɛ̀-dɛ̀	*kìlɛm-ɛ́ɛ́lɛ̀-go bíyɛ̀-dɛ̀	*gɔ́rɔ̀lɔ̀-dɛ̀-go bíyɛ̀-dɛ̀	*gɔ̀rɔ̀l-ɛ́ɛ́lɛ̀-go bíyɛ̀-dɛ̀
	Past	*kìlɛmù tíy-aa=be	*kìlɛmù tíy-aa=be-le	*bɔ̀gɔ̀lù tíy-aa=be	*bɔ̀gɔ̀lù tíy-aa=be-le
Progressive	Present	kílɛ́mɔ́-gú=sɛ kílɛ́mɔ́-gú=wɔ	kílɛ́mɔ́-gú sɛ̀-lɛ́ kílɛ́mɔ́-gú òndú	gɔ̀rɔ́lɔ́-gú=sɛ gɔ̀rɔ́lɔ́-gú=wɔ	gɔ̀rɔ́lɔ́-gú sɛ̀-lɛ́ gɔ̀rɔ́lɔ́-gú òndú
	Future	kílɛ́mɔ́-nú bíyɛ̀-dɛ̀	*kílɛ́mɔ́-nú bìy-ɛ́ɛ́lɛ̀	gɔ̀rɔ́lɔ́-nú bíyɛ̀-dɛ̀	*gɔ̀rɔ́lɔ́-nú bìy-ɛ́ɛ́lɛ̀
	Past	kílɛ́mɔ́-gú=sɛ=be kílɛ́mɔ́-gú=be	*kílɛ́mɔ́-gú=be-le	gɔ̀rɔ́lɔ́-gú=sɛ=be gɔ̀rɔ́lɔ́-gú=be	*gɔ̀rɔ́lɔ́-gú=be-le
Imperative		kílɛ́mɔ́	kìlɛmɔ̀-gú kílɛ́mɔ́ nàà-gú	gɔ́rɔ́lɔ́ gɔ̀rɔ́lɔ́	gɔ̀rɔ̀lɔ̀-gú gɔ̀rɔ́lɔ́ nàà-gú
Hortative		kílɛ́mɔ́-mɔ́	*kìlɛ̀mɔ̀-mɔ̀-gú	gɔ̀rɔ́lɔ́-mɔ́	*gɔ̀rɔ̀lɔ̀-mɔ̀-gú

12.2 Imperfective

The first aspect I will address is the imperfective, which denotes that the action expressed by the verb is not yet completed. The present and future are homophonous, with the present interpretation expressing a habitual meaning (the action is not complete in the sense that it happens iteratively); the progressive (section 12.7) is used for ongoing actions. There is also a past imperfective and an imperfective non-final chaining form.

12.2.1 Present/future imperfect

12.2.1.1 Affirmative

The form of the affirmative present/future imperfective involves a tonal overlay and suffixation. The verb's tone is overwritten with a {HL} melody, with the H on the first mora and L subsequently. The suffix is *-dὲ*, though the suffix need not carry its own L tone if the overlay extends to it as well. We can schematize this form as follows:

(530)   Affirmative present/future imperfective
        Verb:{HL}-*dὲ*

For example:

(531)   a.   Monosyllabic
             gòó 'exit'   *góò-dὲ*   's/he exits/will exit'
             yóó 'enter'   *yóò-dὲ*   's/he enters/will enter'

        b.   Disyllabic
             έbέ   'buy'   *έbὲ-dὲ*   's/he buys/will buy'
             jɔ̀bɔ́   'run'   *jɔ́bɔ̀-dὲ*   's/he runs/will run'
             jàà-ndá   'cook'   *jáà-ndà-dὲ*   's/he cooks/will cook'

        c.   Trisyllabic
             kílέmɔ́   'play'   *kílὲmɔ̀-dὲ*   's/he plays/will play'
             gɔ̀rɔ́lɔ́   'snore'   *gɔ́rɔ̀lɔ̀-dὲ*   's/he snores/will snore'

Note that the exact phonetic realization of the {HL} overlay is reminiscent of under-specification 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:

(532) a. [bɛ́ndɛ̀-dìɲ] 'they will hit'

| b | ɛ | n | d | ɛ | d | i | ɲ |

b. [pɔ́nn-ìyɛ̀-dìɲ] 'they will put on pants'

| p | ɔ | ɲɲ | iyɛ | d | i | ɲ |

In both cases, the line representing the F0 (fundamental frequency) starts high in the first syllable, then gradually slopes downwards to the end. The extra-high suffix at the end of *pɔ́nn-ìyɔ̀-dìɲ* is not audible as such.

Recall also from section 3.6.2 that in certain disyllabic verbs with a coronal sonorant (especially /n/ and /l/) as the onset of the second syllable, the stem-final vowel will delete. In the case of at least one /l/ verb, *yèlέ* 'come', the /d/ of *-dὲ* assimilates to the /l/:

(533) a. *kάnά* 'do' *kάn-dὲ* 's/he does/will do'

     b. *yèlέ* 'come' *yέl-lὲ* 's/he comes/will come'

This deletion is optional, however, and the forms *kάnà-dὲ* and *yέlὲ-dὲ* may also be used; an example of the former is below in (534b). The /d/ assimilation is also exceptional, and other /l/ verbs like *kάlά* 'lie' show only variable /d/ assimilation; some speakers accept *kάllὲ* while others maintain that it must be *kάl-dὲ*.

When used in the present, the imperfective gives a habitual sense, while the progressive is used for actions taking place at the time of speaking. For example:

(534) a. *Tɔ̌mmɔ̀ᴸ Sɔ̌ɔ́ sɔ́ɔ̀-dὲ-m.*
      Tommo speech speak-IMPF-1SG
      'I speak Tommo So.'

     b. *Yâa-ná wó [ígὲ yàà-nà]ᴴᴸ=mɔ=nɛ bìrὲᴸ*
      woman-HUM.SG 3SG.PRO co-wife=POSS=OBL work

      pàdíέ=ǹ bírὲ-dὲ=wa, nòŋgónu yém kìdé kánà-dὲ=wa.
      bad=OBJ work-IMPF=QUOT like.that 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.' [23.5:38]

In historical narratives, this form can also be used as a past habitual, as shown in the following example, 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 imperfective form are bolded:

(535) *Dámmá jàw-íy-aa kɔ̀mbɔ́=gε **yââ-dìɲ**=yo kὲmᴸ,*
     village fight-MP-PFV war=DEF go-IMPF.3PL=if all

     áúr-íy-í-έⁿ=yo, yà-í-έⁿ=yo²⁴
     agree-MP-PFV.L-3PL=if go-PFV.L-3PL=if

     ǹdɛ̌-m=gε=ǹ mòmb-íy-ee
     person-HUM.PL=DEF=OBJ get.together-MP-NF

     ***sáà-dìɲ**, ǹdɛ̌-m=gε=ǹ **dáà-dìɲ**.*
     destroy-IMPF.3PL person-HUM.PL=DEF=OBJ kill-IMPF.3PL

     'if a village fought and went to war, once they had agreed and gone, they would get together and destroy people, they would kill people.' [23.2:102]

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24 It is unclear why the tone is not L on this and the previous perfective verb.

Even though this passage is talking about the past, the speaker uses a less marked form of the verb, namely the present/future imperfective. The form *-dìɲ* is a portmanteau of the affirmative present/future imperfective and the 3pl agreement.

Notice that in two consecutive phrases, the speaker can switch from the present/future imperfective form to the past imperfective form, all the while referring to the same timeframe:

(536)   *...íné=gɛ=mbe   kɛ́m   gàmbáá   múɲj-ìlɔ̀-dìɲ,*
        ...iron=DEF=PL   all   some   break-REV-IMPF.3PL

        gàmbáá   bànjá=gɛ=mbe=le   kɛ́m   jɔ́gɔ̀=bì-ɛ̀ⁿ
        some   bowl=DEF=PL=ASSOC   all   break.IMPF=be.PST-3PL

        '...and some [people] would break all of the blades, some people would
        break all of the bowls.'   [23.4:24]

It is quite likely that the past imperfective form gives a much stronger flavor of the statement being in the past, perhaps translating more exactly to "used to". In any case, the context makes it clear that the whole action is placed in the past.

Most commonly, this verb form is used for the future. Consider the following elicited and textual examples:

(537)   a.   *Yògó   bɔ̀gɔ̀ᴸ èsú   mí   júúᴴ=mɔ   ɛ́bɛ̀-dɛ̀-m.*
             tomorrow dress pretty 1SG.PRO friend=POSS buy-IMPF-1SG
             'Tomorrow, I will buy a pretty dress for my friend.'

        b.   *Nɛ́ɛ̂ gay íí=gɛ   jɔ̀b-áa   yò-è=yó   ɲăm kúndò-dɛ̀ g-àà.*
             now TOP child=DEF run-PFV enter-PFV.L=if fire put-IMPF say-PFV
             'Now, once the child had run into [there], she said she would
             light the fire.'   [23.5:10]

As these examples show, the same form can be used both in main clauses (537a) as well as in embedded or quotative clauses (537b). The example in (537b) is also set in the past, but the intention of the quotative is to do something in the future relative to the time of speaking.

For discussion of the present/future imperfective in relative clauses, see Chapter 16.

12.2.1.2 Negative

The negative present/future imperfective uses the suffix *-éélè* in place of *-dɛ̀*. along with a {L} overlay on the stem. This can be schematized as follows:

(538)   Negative present/future imperfect
        Verb:{L}, *-éélè*

This suffix appears to be historically made up of the non-final imperfective suffix *-ee* followed by an instantiation of the negative suffix *-lV*. Though we could analyze it synchronically this way, we would then need to stipulate that the suffix can be used on the main verb of a clause, but only when followed by the negative. I will argue that while this may be the historical origin of the negative imperfective, it is currently viewed by speakers as a single suffix *-éélè*.

The vowel length of this suffix is slightly problematic. It is realized at an intermediary length between that of a typical short vowel and a typical long vowel. This, I argue, is due to the fact that long vowels word-internally are dispreferred by Tommo So phonotactics. The reduction in length is not typically neutralizing – the vowel usually surfaces as longer than a phonological short vowel – but it is still not realized as long as it would be in the first or last syllable of a word. See section 3.4.4 for further discussion of phonotactic constraints on vowel length.

The {L} overlay on the stem is an idealization of the tonal realization. At times, the pronunciation sounds just like this, but at others, it is as though the stem receives {H}, with the suffix L. 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 morphophonemic tone: the {L} overlay.

Below, I have provided examples of each stem length and tone in the negative present/future imperfective:

(539)   a.   Monosyllabic
             gòó   'exit'   *gò-éélè*   's/he doesn't exit/will not exit'
             yóó   'enter'   *yò-éélè*   's/he does/will not enter'

        b.   Disyllabic
             ébɛ́   'buy'   *èb-éélè*   's/he does/will not buy'
             jɔ̀bɔ́   'run'   *jɔ̀b-éélè*   's/he does/will not run'
             jàà-ndá 'cook'   *jàà-nd-éélè*   's/he does/will not cook'

        c.   Trisyllabic
             kílɛ́mɔ́   'play'   *kìlɛ̀m-éélè*   's/he does/will not play'
             gɔ̀rɔ́lɔ́   'snore' *gɔ̀rɔ̀l-éélè*   's/he does/will not snore'

Note that when inflection creates vowel hiatus on a monosyllabic stem, only the second half of the vowel is affected; 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:

(540) [gɔ̀-énnè] 'they will not dance'

This spectrogram is drawn from a recording of (541b) below. Note that *-énnè*, with a short vowel due to the closed syllable, is the 3pl allomorph of *-éélè*.

The range of meanings of the negative present/future imperfective is exactly the equivalent of the affirmative. It can mark a habitual meaning in the present (541a), in the past in narratives (541b), or it can mark a negative future (541c):

(541) a. *Mí*　　　*báá^H*　　*nàmá*　*tɛ̀m-éélè.*
　　　　　1SG.PRO　father　meat　eat-NEG.IMPF
　　　　　'My father doesn't eat meat.'

　　　b. *Ǹdɛ̀^L*　*bɛ̀lú*　*sɛ̀-lɛ̀=mɔ=ǹ*　　　　*súgɔ́*　*gɔ̀-énnè.*
　　　　　person　animal　have-NEG=POSS=OBJ　sugɔ　dance-NEG.IMPF.3PL
　　　　　'They would not dance the *sugɔ* for those who did not have animals.'
　　　　　　　　　　　　　　　　　　　　　　　　　　　　[23.4:41]

　　　c. *Nǎm*　*gòò-lí=yo,*　　　　*mí=ǹ*　　　*ɛ̀lɛ̀-nd-ìy-éélè.*
　　　　　sun　go.out-NEG.PFV=if　1SG.PRO=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 (594) below.

12.2.2 Past imperfective

12.2.2.1 Affirmative

The past imperfective 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 imperfective. The form of the past imperfective is similar to that of the present; the stem portion remains identical ({HL} tone overlay), but instead of the suffix *-dè*, the past auxiliary clitic *=be* 'was' is added:

(542)   Affirmative past imperfective
         Verb{HL}=*be*

The clitic =*be* is underlyingly toneless, but it always surfaces as all L in the context of the past imperfective, because the verb is nearly always final and so the tone on the clitic interpolates between the L of the {HL} overlay and the final L⁻ boundary tone. See section 4.2 for the mechanics of interpolation.

The table below gives examples of the past imperfective for all verb lengths:

(543)   a.   Monosyllabic
               gòó   'exit'   *góò=be*   's/he used to exit'
               yóó   'enter'   *yóò=be*   's/he used to enter'

         b.   Disyllabic
               ɛ́bɛ́   'buy'   *ɛ́bɛ̀=be*   's/he used to buy'
               jɔ̀bɔ́   'run'   *jɔ́bɔ̀=be*   's/he used to run'
               jàà-ndá   'cook'   *jáà-ndà=be*   's/he used to cook'

         c.   Trisyllabic
               kílɛ́mɔ́   'play'   *kílɛ̀mɔ̀=be*   's/he used to play'
               gɔ̀rɔ́lɔ́   'snore'   *gɔ́rɔ̀lɔ̀=be*   's/he used to snore'

One may ask what the motivation is for treating -*dɛ̀* as a suffix and =*be* as a clitic. The reason behind this distinction is that while -*dɛ̀* can only attach to verbs (in the imperfective and the "perfective imperfective"), =*be* can be used after nearly any category (noun, verb, adverb, etc.). It has an independence that the suffix -*dɛ̀* does not. It itself can be inflected for negation (as we will see), while negation completely replaces -*dɛ̀*. 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. However, for tonal evidence that =*be* could sometimes be treated as a suffix, see section 12.3.1.2.

The past imperfective imparts two different meanings. The first I introduced in section 12.2.1.2 above, in example (536), where this form gives the meaning of a past habitual like 'used to' or 'was doing'. Other examples include:

(544)   a.   *Wó=lɛ*   *yém*   *kánà=bi-ɛ̀ⁿ*.
               3SG.PRO=also   like.that   do.IMPF=be.PST-3PL
               'They also used to do [things] like that.'   [23.4:37]

         b.   *Ècole^L*   *tààndì-yém*   *kánà=be*.
               school.FR   three-ORD   do.IMPF=be.PST
               'He was in the 3rd year of school.'   [Poisoned flour]

In texts, this usage is not as common; the present/future form of the imperfective is generally used instead, since the context of the narrative imparts the past timeframe already.

The other use of the past imperfective is in what I call "past future" constructions like 'was going to'. For instance:

(545) a. *Bàmàkó yáà=be-m*   *mὲ, búúdù sὲ-lέ-go=be-m.*
      Bamako go.IMPF=be.PST-1SG but money have-NEG-ADV=be.PST-1SG
      'I was going to go to Bamako, but I didn't have any money.'

      b. *Émmé*   *bàlá=bé=gὲ*
         1PL.PRO   sweep.up.IMPF.REL=be.PST.REL=DEF

         wìd-íy-aa   *Bὲŋjù-àànɔ́*   *bàl-è.*
         return-MP-PFV   Benju-Aanɔ   sweep.up-PFV.L

         'What we were going to sweep up, Benju-Aanɔ came back and swept up.'
                                               [23.2:76]

The example in (545b) is in a headless relative clause, in which case the tone of the verb is lexical rather than replaced with {HL} (see Chapter 16 for further explanation). This example simply serves to illustrate the semantics of the past imperfective.

Just as in English, the past form of the imperfective is not nearly as common as the present or future form.

12.2.2.2 Negative
Data on the negative past imperfective are sparse, but the data I do have suggest the following schema:

(546) <u>Negative past imperfective</u>
      Verb=*be-le*

In other words, the verb stem retains its lexical tone and is followed by the negated past auxiliary *=be-le* (sometimes *=bὲ-lé* or *=be-li*). This schema would be realized as follows:

(547) a. <u>Monosyllabic</u>
         gòó 'exit'   *gòó=be-le* 's/he did not used to exit'
         yóó 'enter'   *yóó=be-le* 's/he did not used to enter'

      b. <u>Disyllabic</u>
         έbέ   'buy'   *έbέ=be-le*   's/he did not used to buy'
         jɔ̀bɔ́   'run'   *jɔ̀bɔ́=be-le*   's/he did not used to run'
         jàà-ndá 'cook'   *jàà-ndá=be-le* 's/he did not used to cook'

c. Trisyllabic
    kílɛ́mɔ́ 'play' *kílɛ́mɔ́=be-le* 's/he did not used to play'
    gɔ̀rɔ́lɔ́ 'snore' *gɔ̀rɔ́lɔ́=be-le* 's/he did not used to snore'

The only textual example of which I am aware for the negative past imperfective is the following:

(548) *...fóó hálè jímɛ̀=be* *jìmɛ́=be-li* *kɛ́m=nɛ*
       until even be.sick.IMPF=be.PST be.sick.NEG.IMPF=be.PST-NEG all=OBL

       'whether he had been sick or not...'

       nɛɛ kay... bóy=gɛ fàrànī wó=ǹ dà-è gɛ́-dìn̦.
       now TOP... name=DEF flour 3SG.PRO=OBJ kill-PFV.L say-IMPF.3PL

       'well, they'll say the fritters killed him.' [Poisoned flour]

The past imperfective is shown both in the affirmative and the negative in this example: 'he had been sick/was sick' and 'he had not been sick/was not sick'. In the affirmative, we see the {HL} overlay, which is absent in the negative.

12.2.3 Focused imperfective

Section 15.1.4 covers the uses of the focused imperfective, but I will briefly summarize the form of the verb here. It takes the present/future imperfective as its base, but has in addition an initial CV reduplicant. This is schematized below:

(549) Affirmative focused present/future imperfect
       RED(CV)~Verb{HL}-*dɛ̀*

If the verb is V-initial, a glottal stop is inserted between the reduplicant and the stem, as in [ɛ̀'ɛ́bɛ̀-dɛ̀] from *ɛ́bɛ́* 'buy'. Note that the reduplicant is always L-toned. In the interest of space, I will not give a table of examples for the focused imperfective here. The form is wholly calculable from the table in (531) through the addition of the initial reduplicant.

There are no distinct past or negative forms for the focused imperfective.

12.3 Perfective (non-focused)

In contrast with the imperfective, which indicates that the action of the verb has yet to be completed, the perfective indicates that the action is done. The perfective is more complicated than the imperfective 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. In the interest of organization, I will address only plain (non-focused) perfectives in this section. Three short sections, section 12.4, section 12.5, and section 12.6, will cover defocalized perfectives, imperfective perfectives, and experiential perfects, respectively.

Since the forms of the negative do not change depending on the tense (with the exception of the future perfective), I will instead address the affirmative forms of all tenses first in section 12.3.1 followed by the negative in section 12.3.2.

12.3.1 Affirmative

All affirmative perfective forms are built off of the same base, which is the perfective chaining form. (For the use of this form in verb chains, see Chapter 18.) This perfective base is formed by adding the suffix *-aa* to the verb stem, which retains its lexical tone. This can be schematized as follows:

(550)   Affirmative perfect base
        Verb *-aa*

All tense information is given through auxiliaries. Arguably, all (non-focused) perfectives 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 4.2. Everything up to the *-aa* takes lexical tone, then interpolation takes over from the final H (of either /H/ or /LH/) to the following tone or the end of the clause. However, if the verb is /LH/ and mono- or disyllabic, then the H portion is assigned to the beginning of the suffix, serving as the starting point for its interpolation. This tone assignment is illustrated by the following examples. Note the different behavior of *-aa* in /H/ and /LH/ verbs of one to two syllables:

(551)   a.   Monosyllabic
             gòó   'exit'   *gò-áa*   'exited'
             yóó   'enter'   *yó-aa*   'entered'

        b.   Disyllabic
             ɛ́bɛ̂   'buy'   *ɛ́b-aa*   'bought'
             jɔ̀bɔ́   'run'   *jɔ̀b-áa*   'ran'
             jàà-ndá 'cook'   *jàà-nd-áa* 'cooked'

c. Trisyllabic

| kílémɔ́ | 'play' | kílém-aa | 'played' |
| gɔ̀rɔ́lɔ́ | 'snore' | gɔ̀rɔ́l-aa | 'snored' |

In a trisyllabic verb like gɔ̀rɔ́lɔ́, there is enough room on the stem to host both the L and H tone, so the suffix can surface as fully underspecified.

12.3.1.1 Present

Present tense is indicated in the plain perfective by adding the quasi-verb =wɔ 'be' as an auxiliary. Like =be, its suppletive past form seen in the past imperfective, =wɔ is tonally underspecified, creating a string of underspecified elements in the present perfective.

The present perfective 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:

(552) a. Mɔ́ɔ́lu=mɔ=gɛ   tà-ì-ɛ́^{n}=gɛ=le[25]
         Mori=POSS=DEF   shoot-PFV.L-3PL=DEF=ASSOC

         àn-sáárá   yɛ̀l-áa=wɔ.
         AN-white.person come-PFV=be

         'At [the time when] they started the Mori [war], the white people came.'

                                                                         [23.2:119]

b. ǹdɛ̌-m=mbe=gɛ   dàg-áa=wɔ   g-ì-ɛ́^{n}=wa.
   person-HUM.PL=PL=DEF   be.good-PFV=be   say-PFV.L-3PL=QUOT
   'The people said it is good.'   [23.6:12]

The first case shows another example of the present tense used in narratives to refer to past time frames. In this example, the arrival of the white people still had relevancy to the moment being spoken about (when the war began). The example in (552b) illustrates the most common usage for the present perfective: intransitive verbs used predicatively in situations where we would be likely to use an adjective. Outside these two cases (immediate relevancy, as in (552a), or intransitive descriptive verb, as in (552b)), the present perfective is rare, especially in texts (which tend to have a past time reference).

In everyday conversation, the present perfective does come up in situations like:

(553) a. Mí=ǹ   ɛ́g-aa=wɔ-w?
         1SG.PRO=OBJ   hear-PFV=be-2SG
         'Did you hear me?'

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25 It is not clear why the tone of the perfective is LH here.

b. *Nìmɛ̌m   ɲ́y-aa=wɔ-m.*
just.now   eat-PFV=be-1SG
'I've just now eaten.'

In cases like this, it gives a reading of immediate past.

This form is also commonly used with verbs like 'get up' to give a stative meaning of standing:

(554) *Úŋgúl-aa=wɔ-m.*
get.up-PFV=be-1SG
'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 perfective include:

(555) a. *Díí=gɛ   wàày-íy-aa=wɔ.*
water=DEF   boil-MP-PFV=be
'The water is boiled (=has boiled).'

b. *Màŋgóró=gɛ   íl-aa=wɔ.*
mango=DEF   ripen-PFV=be
'The mango is ripe (=has ripened).'

Note that in these cases, *=wɔ* can be replaced by an allomorph of the copula clitic *=ỳ*. For more on this copular form, see section 13.2.

While the clitic *=wɔ* is morphologically there in the present perfective, in most fast speech, it gets completely absorbed by the preceding *-aa* and only the subject suffix is audible. Thus, the examples in (553) would come out sounding more like [ɛ́gaaw] and [ɲ́yaam]. In careful speech or with emphasis, the *=wɔ* is audible, as it is in the text quoted in (552), but most often it is lost. I predict that new generations may mis-parse the present perfective as being simply the *-aa* chain form with subject suffixes, rather than carrying the auxiliary *=wɔ*.

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 perfective. This is formed exactly like the present perfective, but in the place of *=wɔ*, 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

/LH/ stems get distributed between the present /wɔ/ and the past /be/. While with =*wɔ*, the L and H get assigned to the stem itself, as in [yà-á=wɔ] '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 [yà-à=bé] 's/he had gone/went'.[26] This seems to only be the general case for the irregular monomoraic verbs *yè* 'se' and *gè* 'say', whose stems seem to only carry a L tone anyway. Nonetheless, *yàá* 'go' is a /LH/ verb, and yet in the past perfect it ends up homophonous with 'see'. Both forms are pronounced [yààbé]. Why the H does not surface on =*wɔ* 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.

Once again, in narratives, the past perfective is less common, with past verb chaining forms and the defocalized perfective taking precedence. Nonetheless, when something in the text is of a past timeframe relative to the action, the past perfective 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 because it would be too hot. The past perfective forms are bolded.

(556) *Yém*   *wó*   *g-àà,*   *nàmà*^L *úndu=nɛ*   *tóò=gɛ=mbe*
       like.that   3SG.PRO   say-PFV   meat   forest=OBL   be.in.REL=DEF=PL

       jàd-áa   *gàndà*^L *kó*   **nà-á=bi-ɛ̀**ⁿ,   *jàd-áa*
       reflect-PFV   place   that.DD   forget-PFV=be.PST-3PL   reflect-PFV

       bé   *yè-nd-áa,*   *wàlláy*   *sɔ̀ɔ́=gɛ*   *mùlú-go=wɔ.*
       3PL.PRO   see-FACT-PFV   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.'   [23.6:16]

       Mómbu=gɛ   **g-àà=bí-ɛ̀**ⁿ**=wa**   *dògò*   *dàgà-lú=wa.*
       meeting=DEF   say-PFV=be.PST-3PL=QUOT   but   be.good-NEG.PFV=QUOT

       'They had spoken [at] the meeting, but [they said] [what they said]
       was not good.'   [23.6:17]

In the first long sentence, 'they had forgotten' is in the past perfective because it refers back in the text to an earlier meeting, the same time frame referred to by the second use of the past perfective in the second sentence 'they had said'.

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26 The suffix is shown as a short vowel here, since the form surfaces with the same length as a regular long *aa*, not as a triple vowel *a-aa*.

The past perfective is commonly offered in elicitation as the translation of a basic past tense (in French, coincidentally, the present perfect). For instance:

(557) a. *Ámíru=gɛ   dámmá=gɛ=nɛ   sɔ̀ɔ́   sɔ́ɔ́-gú   ɛ́g-aa=be-m.*
           chief=DEF village=DEF=OBL speech speak-PPL hear-PFV=be.PST-1SG
           'I heard (*j'ai entendu*) the chief speaking in the village.'

       b. *Mí=le   Séydu=le   Bàmàkó   yà-à=bé-y.*
           1SG.PRO=ASSOC Seydou=ASSOC Bamako go-PFV=be.PST-1PL
           'Seydou and I went to Bamako.'

It would seem that the past perfective 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 preterite).

12.3.1.3 Future
Examples elicited from consultants on the conjugation of the future perfective indicate that it is formed using the imperfective chaining suffix *-ee* followed by the future of 'be' *bíyɛ̀-dɛ̀*, as shown in the conjugation chart at the beginning of this chapter. I have never heard anyone actually using this form, however, and so it is not clear to what extent it is actually used.

12.3.1.4 Temporally unmarked
It is worth mentioning that a common strategy for expressing the past or perfective in texts is to simply use the perfective chain form (the *-aa* form that serves as the base for all focus-neutral perfective 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:

(558) a. *Nɛ́ɛ́   kay Màndé gò-áa   Ségú gò-áa   Màndé yà-à*
           now TOP Mande leave-PFV Ségou leave-PFV Mande go-PFV
           'Now, [we] left Mande, left Ségou, went to Mande...'

           Màndé gò-áa   Bàmàkó yèl-áa.
           Mande leave-PFV Bamako come-PFV
           'left Mande, [and] went to Bamako.'

           Yèl-áa.   Émmé   dɔgɔ̌-m   Bàmàkó yèl-áa.
           come-PFV 1PL.PRO Dogon-HUM.PL Bamako come-PFV
           '[We] came. We Dogons came to Bamako.'   [23.2:12–13]

b. *ɛ́ɛ́ⁿ=gɛ*   *bàl-áa*   *wó*   *jɛ́ɛ́l-aa,*   *ɛ́ɛ́ⁿ=gɛ*
    ash=DEF   sweep.up-PFV   3SG.PRO   bring-PFV   ash=DEF

    díí=nɛ   *kúnd-aa*   *bé*   *tég-ír-aa.*
    water=OBL   put-PF   3PL.PRO   drip-TR-PFV

    '[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.)'

                                                           [23.5:26]

Note that in both of these cases, the use of the bare perfective as the "main verb" of the sentence comes after using several other bare perfective participles in chain verb constructions. It seems that the speaker can choose to end a sentence with an unfinished chain (intonationally, the utterance has ended) if they will pick it back up in the following sentences. This sort of construction is also attested at least once in elicitation:

(559)   *Bírɛ́*   *bìr-áa*   *hálè*   *mí*   *ɔ́ŋŋ-íy-aa.*
        work   work-PFV   until   1SG.PRO   get.tired-MP-PFV
        'I worked until I got tired.'

Here, since the 1sg 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 perfectives are distinguished in the affirmative, this distinction is generally collapsed in the negative. The negative perfective form takes the suffix *-lí*, and the verb's lexical tone is overwritten with {L}. This can be schematized as follows:

(560)   <u>Negative perfect</u>
       Verb{L}-*lí*

The following chart demonstrates the formation of the negative perfective for all verb types:

(561)   a.   <u>Monosyllabic</u>
           gòó   'exit'   *gòò-lí*   'did not exit'
           yóó   'enter'   *yòò-lí*   'did not enter'

b.   <u>Disyllabic</u>
   ébɛ́   'buy'   *èbɛ̀-lí*   'did not buy'
   jɔ̀bɔ́   'run'   *jɔ̀bɔ̀-lí*   'did not run'
   jàà-ndá 'cook'   *jàà-ndà-lí* 'did not cook'

c.   <u>Trisyllabic</u>
   kílɛ́mɔ́   'play'   *kìlɛ̀mɔ̀-lí*   'did not play'
   gɔ̀rɔ́lɔ́   'snore'   *gɔ̀rɔ̀lɔ̀-lí*   'did not snore'

Whenever an action is perfective, so long as it is not in the future, the negative usually takes this form, though a negated form of the past perfective 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 perfective form is used in the affirmative because the arrival of the white people still had relevancy to the present situation (see the discussion around (552) above). Speaking of the same timeframe but a different location ("here", rather than Mali in general), we see the negative perfective used:

(562) E: *Mɔ́ɔ́lu=mɔ=gɛ*   *tà-ì-ɛ́ⁿ=gɛ=le*
           Mori=POSS=DEF   shoot-PFV.L-3PL=DEF=ASSOC

           àn-sáárá   *yɛ̀l-áa=wɔ.*
           AN-white.person   come-PFV=be

           'At [the time when] they started the Mori [war], the white people came.'

       S: *M̀báà*   *dɔ̀ɔ̀-lí.*
           here   arrive-NEG.PFV
           'They didn't make it here.'   [23.2:119–120]

Another example showing that the negative perfective is indeed the negative counterpart of the present perfective comes from negated intransitive verbs of description. For instance, consider the following exchange, wherein *dàg-áa=wɔ* 'it is good' stands in opposition to *dàgà-lí* 'it is not good' (pronounced [dàgàlú] before the /w/ of the quotative *=wa*).

(563) *ǹdɛ̌-m=mbe=gɛ*   *dàg-áa=wɔ*   *g-ì-ɛ̀ⁿ=wa.*
       person-HUM.PL=PL=DEF   be.good-PFV=be   say-PFV.L-3PL=QUOT
       'The people said it is good.'

       Tààmáá   *ǹdɛ́m=mɔ=nɛ*   *dàgà-lú=wa*   *de.*
       thought   LOG.SG.PRO=POSS=OBL   be.good-NEG.PFV=QUOT   EMPH
       '[Hare said], "In my opinion, it's not good!"'   [23.6:13]

Because the past perfective is not commonly used in texts, it is harder to find clear cases where the negative perfective stands as a clear counterpart to it. Nevertheless, the *-lí* form is common in narratives, regardless of its interpretation (present or past). For example:

(564) *à*   *ǹdɛ́mɔ́*   *nɔ̀nú* *pád-aa*   *òlú*   *yà-à*
     ah   LOG.SG.PRO   here   leave-PFV   field   go-PFV

      dùl-íy-aa   *tɛ̀mbɛ̀-lí=ǹ=wa.*
      return-MP-PFV   find-NEG.PFV-1SG=OBJ=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]".'   [23.5:23]

Consultants usually offer the negative perfective as the negative counterpart of the past perfective in elicitation, especially when the verb is an action verb. When it is a descriptive intransitive verb, a negated form of the past perfective is also available. Compare (565a) and (b) below:

(565) a. *Yáá*   *nɔ̀gɔ̀m-ìyɛ̀-lí-m.*
        yesterday   be.sad-MP-NEG.PFV-1SG
        'I wasn't sad yesterday.'

      b. *Yáá*   *nɔ́gɔ́m-íy-aa=be-li-m.*
        yesterday   be.sad-MP-PFV=be.PST-NEG-1SG
        'I wasn't sad yesterday.'

In (565b), the form is exactly like the affirmative past perfective, but it is the auxiliary *=be* that is inflected for negation with *-li*, in this case tonally underspecified. It is possible that this form exists for 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 perfective 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.

    There is no form for the negative future perfective. Just the bare negative imperfective can be used, since a negative of a perfective logically means that the action was not completed. Thus, *yìm-éélè* can mean either 'he will not die' or 'he will not have died/be dead'.

12.4 Defocalized perfective

The defocalized perfective is used when some other element in the sentence takes focus, thus de-emphasizing the verb. There is no tense distinction; it can be used in the place of both the present perfective and the past perfective. There is also no unique negative form of the defocalized perfective. In these cases, the regular *-lí* suffixed perfective form is used.

12.4.1 Phonological form

The defocalized perfective suffix has three allomorphs: [-e], [-ɛ], and [-i]. I will discuss the conditions for each allomorph below. In terms of tone, this verb form carries what seems to be a {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 {LH}, with the H on the last mora, while third person subjects take {HL}. If the subject is 3sg, the H is only on the first mora, while if it is 3pl, it extends to the last mora. This is exemplified below with the trisyllabic verb *ádúbá* 'think':

(566) 1sg *àdùb-í-m* 1pl *àdùb-í-y*
       2sg *àdùb-í-w* 2pl *àdùb-í-y*
       3sg *ádùb-ì*   3pl *ádúb-í-ɛ̀ⁿ*

Most often in texts and with other speakers, however, the verb can be said to have no other tone but {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, the choice must be memorized. We can make the following generalizations: All stems with three or more moras, or a derivational suffix, take the allomorph [-i]. Among shorter stems, if the final vowel of the stem is a [-ATR] mid vowel, then the [-ATR] mid vowel allomorph [-ɛ] is used; If the final vowel of the stem is a [+ATR], or /a/, then the allomorph [-e] is used. A handful of shorter verbs unpredictably take the allomorph [-i]. These tend to have the stem vowels /o/ and /a/, though this is not always the case.

The following rules schematize the main patterns of allomorph selection:

(567)   Defocalized perfect
       a. Stems with three or more moras
           Verb{L}-*i*

       b. Stems with two or fewer moras and [-ATR] final vowel
           Verb{L}-*ɛ*

       c. Stems with two or fewer moras and [+ATR] final vowel or /a/
           Verb{L}-*e*

       d. Exceptional cases of stems with two or fewer moras
           Verb{L}-*i*

Here and elsewhere I am writing the defocalized perfective as having a {L} overlay, since this appears to be the most common form across speakers. Accordingly, I gloss

this perfective as PFV.L "perfective L" to distinguish it from the bare perfective *-aa* suffix. Note, however, that tonal variation does exist, and where possible, I point it out. Thus, the L in the gloss should be taken to abstractly stand for this verb form and not as an exceptionless generalization about the verb's tone.

The schema in (567a) pertains to stems with three or more moras. Note that all derived stems automatically fall into this category. Some examples include:

(568) a. <u>Underived stems</u>
        ádúbá 'think'   *àdùb-ì* 'thought'
        úŋgúló 'get up'   *ùŋgùl-ì* 'got up'
        nɔ́ɔ́lɔ́ 'mix'   *nɔ̀ɔ̀l-ì* 'mixed'

     b. <u>Derived stems</u>
        gòò-ndó 'take out'   *gòò-nd-ì* 'took out'
        sɛ́mɛ́-mɔ́ 'make slaughter' *sɛ̀mɛ̀-m-ì* 'made slaughter'

I can think of one bimoraic derived stem, *yɛ̀-mɛ́* 'be seen', which still surfaces with the allomorph [-i]: *yɛ̀-m-ì*.

The schema in (567b) deals with shorter stems (mostly bimoraic, but the occasional monomoraic stem) that end in a [-ATR] vowel. The vast majority of these take the [-ATR] allomorph of the defocalized perfective:

(569) a. <u>Monosyllabic</u>
        sɔ́ɔ́ 'speak'   *sɔ̀-ɛ̀* 'spoke'
        dɔ̀ɔ́ 'arrive' *dɔ̀-ɛ̀* 'arrived'
        yɛ̀   'see'   *y-ɛ̀* 'saw'

     b. <u>Disyllabic</u>
        jɔ̀bɔ́ 'run'   *jɔ̀b-ɛ̀* 'ran'
        ɛ́gɛ́ 'hear'   *ɛ̀g-ɛ̀* 'heard'
        núyɔ́ 'sing'   *nùy-ɛ̀* 'sang'

These examples show that while the defocalized perfective harmonizes for [ATR], it does not harmonize for backness (disharmonic *jɔ̀b-ɛ̀*, *nùy-ɛ̀*, etc.). In running speech, we do sometimes see back versions of the defocalized perfective suffixes, but typically these are induced by the segmental context (for example [jɔ̀b-ɔ̀-m] 'I ran', with rounding and backing of the suffix due to the following /m/).

The schema in (567c) deals with shorter stems ending in [+ATR] vowels or /a/. Both of these classes usually take the allomorph [-e]:

(570) a. <u>Monosyllabic [+ATR] stems</u>
        gòó 'exit'   *gò-è* 'exited'
        bòó 'call'   *bò-è* 'called'

b. <u>Monosyllabic /a/ stems</u>
  yàá 'go' *yà-è* 'went'
  dàá 'kill' *dà-è* 'killed'
  káá 'shave' *kà-è* 'shaved'

c. <u>Disyllabic [+ATR] stems</u>
  mòmó 'laugh' *mòm-è* 'laughed'
  gùló 'dig' *gùl-è* 'dug'
  póŋgó 'bump' *pòŋ-è* 'bumped'

d. <u>Disyllabic /a/ stems</u>
  áwá 'catch' *àw-è* 'caught'
  bàrá 'help' *bàr-è* 'helped'
  pádá 'leave' *pàd-è* 'left'

In one case, a disyllabic /a/ verb seems to take [-ɛ] as its defocalized perfective suffix, standing as a counterexample to these rules. This verb is *nágá* 'hone', with defocalized perfect form *nàg-è* 'honed'.

The most common idiosyncratic [-i] verbs are given below. Note these are not cases of within-word variation: the same stem will **always** take the same allomorph of the suffix:

(571) a. <u>[+ATR] stems</u>
    óbó 'give' *òb-ì* 'gave'
    kúndó 'put' *kùnd-ì* 'put'
    bòdó 'put aside' *bòd-ì* 'put aside'

  b. <u>[-ATR] stems</u>
    gè 'say' *g-ì* 'said'

  c. <u>/a/ stems</u>
    káná 'do' *kàn-ì* 'did'

12.4.2 Usage

The canonical use of the defocalized perfective is when another element in the sentence is focused, de-emphasizing the verb. This could be with contrastive focus as in (572a), in a question as in (572b), or in response to a question as in (572c).

(572) a. *Mí=ǹ*   *yà-è.*
    1SG.PRO=FOC go-PFV.L
    'It's me who went.'

b. *Yàgú=nɛ*   *ɛ̀b-ɛ̀-w=ma?*
   where=OBL   buy-PFV.L-2SG=or?
   'Where did you buy it?'

c. *Íbɛ́=nɛ*   *ɛ̀b-ɛ̀-m.*
   market=OBL   buy-PFV.L-1SG
   'I bought it at the market.'

The unsuffixed perfective also appears to be the unmarked perfective in texts, even if there are no recognizably focused elements, as these examples show:

(573) a. *Kɔ̀nɔ́*   *yà-à,*   *kɔ̀mbɔ́=gɛ* *tà-ì-ɛ̀^{n},*   *ɔ̀gɔ̀^{L}*
        there.DD   go-PFV   war=DEF   shoot-PFV.L-3PL   Hogon

        ɛ́ndɛ́   *yém*   *yò-è.*
        Ende   like.that   enter-PFV.L

        'They went there, they made war... and it was like that that Ende
        the Hogon became chief.'   [23.1:16]

    b. *...íí*   *wómɔ=gɛ*   *wó=le*   *pád-aa*   *dámmá* *yà-è.*
        child   3SG.POSS=DEF   3SG.PRO=ASSOC   leave-PFV   village   go-PFV.L
        '...[the woman] left her child with her and went to the village.'   [23.5:1]

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.

12.5 Imperfective perfective

Throughout this grammar, I have made reference to a perfective-imperfective form (so named because the stem carries a sequences of suffixed -PFV-IMPF). Aspectually, it is perfective, but it carries imperfective morphology. It is unclear how to properly analyze such a form, and to my knowledge, no parallels exist in other Dogon languages.

The imperfective perfective only appears in present tense; I have no special past or future forms that mirror it. Similarly, there is no special corresponding negative form. The same negative perfective seen in the preceding subsections is used.

To form the imperfective perfective, the stem is first suffixed with *-aa*, the perfective chain suffix first discussed in section 12.3. Added to this is the imperfective suffix *-dɛ*. The whole verb takes the {HL} overlay characteristic of imperfective affirmative verbs. This is schematized below:

(574)   Imperfective perfective
        Verb{HL}-*àà-dὲ*

Some examples include:

(575)   a.   Monosyllabic
             gòó   'exit'   *gó-àà-dὲ*   'exited'
             yóó   'enter'   *yó-àà-dὲ*   'entered'

        b.   Disyllabic
             ὲbέ   'buy'   *ὲb-àà-dὲ*   'bought'
             jɔ̀bɔ́   'run'   *jɔ́b-àà-dὲ*   'ran'
             jàà-ndá   'cook'   *jáà-nd-àà-dὲ*   'cooked'

        c.   Trisyllabic
             kílέmɔ́   'play'   *kílὲm-àà-dὲ*   'played'
             gɔ̀rɔ́lɔ́   'snore'   *gɔ́rɔ̀l-àà-dὲ*   'snored'

This verb form appears far more often as the verb in a relative clause than it does in main clauses, but we do still find main clause examples in texts. For example:

(576)   a.   *Kóntáká...*   *bὲlὲ-mᴸ=gε*   *bé*   *pánd-ìl-àà-dìɲ.*
             Kontaka...   person.from-HUM.PL=DEF   3PL.PRO   widow-REF-PFV-IMPF.3PL
             'The people from Kontaka, they de-widowed [her].'   [23.3:52]

        b.   *Yém*   *kán-àà-dὲ=yo,*   *súgɔ́=gε...*   *gɔ́ɔ̀-dìɲ*   *tíí=gε*
             like.that   do-PFV-IMPF=if   *sugɔ*=DEF   dance-IMPF.3PL   one=DEF

             ὲnὲᴸ   *gír-ínέ*   *kùyɔ́-go*   *gɔ́ɔ̀-dὲ.*   *ὲnὲᴸ*   *gír-ínέ=gε.*
             goat   herd-AGT.SG   first-ADV   dance-IMPF   goat   herd-AGT.SG=DEF

             'Once it had been done like that, they would dance the *sugɔ*,
             the first (number one), the goat herder[s] would dance first.
             The goat herder[s].'   [23.4:15]

        c.   *ɔ̀gɔ́*   *nàmᴸ*   *tégé=ɲ̀,*   *ɔ̀gɔ́*   *nàmᴸ*   *tégé*
             Hogon   sun   shining=COP   Hogon   sun   shining

             g-àà,   *bémε*   *yém*   *tɔ́ⁿ-àà-dìɲ.*
             say-PFV   3PL.POSS   like.that   write-PFV-IMPF.3PL

             '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.'   [23.2:126]

It is not clear what the imperfective perfective adds to these sentences that a simple defocalized perfective or other form would not.

More often, we find this form in relative or nominalized clauses. These could be intransitive verbs being used as modifiers (*àn-nà^L yím-áá-dὲ=gɛ* 'the dead man', *dìì^L wàŋ-íy-áá-dὲ* 'boiled water', etc.), or more expansive nominalized clauses, like these found in texts:

(577) a. *Mὲὲr^L*   *gìnɛ́*   *úd-áá-dìm=gɛ=nɛ*   *wó*
     mayor   house   build-PFV-IMPF.REL.3PL=DEF=OBL   3SG.PRO

     sáná^H=gɛ=mbe=le   *wó*
     older.brother=DEF=PL=ASSOC   3SG.PRO

     jáw-ìy-ì=gɛ   *yɔ̀~yɔ̌w=gɛ.*
     fight-MP-PFV.REL=DEF   RED~mean=DEF

     '[By where] they built the mayor's office, she fought with
     her older brothers, she was mean.'   [23.3:34]

   b. *Ìì^L*   *kùyɔ̀^{L}*   *wó*   *nàl-áá-dὲ=gɛ*
     child   first   3SG.PRO   give.birth-PFV-IMPF.REL=DEF

     ámíru=mbe   *gìnὲ^L*   *ǹdὲ^L=ɲ̀.*
     chief=PL   house   person=COP

     'The first child she gave birth to was one of the chief's people.'   [23.3:19]

In relative clauses, the verb stem retains its lexical tone (again characteristic of imperfective forms) and the suffixes have H and L tone, respectively.

     More data will be required to tease out the meaning contributed by this unusual verb form.

12.6 Experiential perfect

The last perfective 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 *tíyɛ́*, inflected for perfective aspect and for tense.

     We see a curious pattern in what form the verb stem takes before the auxiliary. Monosyllabic verbs look like their nominalized "u" form (see section 13.1.5), with a glide /y/ replacing the second half of the long vowel; disyllabic verbs use the lexical form of the stem; trisyllabic verbs look like monosyllabic verbs, using their "u" form (final vowel deleted and replaced with an epenthetic [u]). What all the stems have in common, however, is a complete {L} tone overlay. The following schematizes the form of the uninflected experiential perfect:

(578) a. <u>Monosyllabic stems</u>
Verb[y]{L} *tíyɛ́*

b. <u>Disyllabic stems</u>
Verb{L} *tíyɛ́*

c. <u>Trisyllabic stems</u>
Verb[u]{L} *tíyɛ́*

Thus, we see forms like the following:

(579) a. <u>Monosyllabic</u>
yóó 'enter' *yòy tíyɛ̂* 'have entered before'
yàá 'go' *yày tíyɛ̂* 'have gone before'
gòó 'leave' *gòy tíyɛ̂* 'have left before'

b. <u>Disyllabic</u>
ɛ́bɛ́ 'buy' *ɛ̀bɛ̀ tíyɛ̂* 'have bought before'
jɔ̀bɔ́ 'run' *jɔ̀bɔ̀ tíyɛ̂* 'have run before'
yèlɛ́ 'come' *yèlɛ̀ tíyɛ̂* 'have come before'

c. <u>Trisyllabic</u>
ádúbá 'think' *àdùbù tíyɛ̂* 'have thought before'
kílɛ́mɔ́ 'play' *kìlɛ̀mù tíyɛ̂* 'have played before'

In the affirmative present, the auxiliary is inflected for the present perfective. I have marked both the verb stem and the auxiliary with EXP for "experiential":

(580) a. *Nàá sɛ̀mɛ̀ tíy-aa=wɔ-m.*
cow slaughter.EXP EXP-PFV=be-1SG
'I have slaughtered a cow before.'

b. *Jóbu jɔ̀bɔ̀ tíy-aa=wɔ-m.*
run.NOM run.EXP EXP-PFV=be-1SG
'I have run before.'

c. *Kìlɛ̀mɔ́ kìlɛ̀mù tíy-aa=wɔ-m.*
play.NOM play.EXP EXP-PFV=be-1SG
'I have had fun before.'

These examples show that it is not the whole VP that is L-toned before the auxiliary, *tíyɛ́*, only the verb stem. Objects, either concrete (580a) or cognate (580b–c), retain their lexical tones.

If the experiential perfect is situated in a past timeframe, then the auxiliary is inflected for the past perfective:

(581) *Mí*   *[tírɛ̀ yàà-nà]^HL*   *sénu*   *sɛ̀nɛ̀*   *tíy-aa=be*
       1SG.PRO   grandmother   pray.NOM   pray.EXP   EXP-PFV=be.PST
       'My grandmother had prayed before (=used to pray).'

In the negative, the auxiliary verb is inflected for the negative perfective:

(582) a. *Tó~Tóŋó*   *yày*   *tìyɛ̀-lí-m.*
           Tongo-Tongo   go.EXP   EXP-NEG.PFV-1SG
           'I have never been to Tongo-Tongo.'

       b. *Gɔ́ɔ́*   *gɔ̀y*   *tìyɛ̀-lí*
           dance.NOM   dance.EXP   EXP-NEG.PFV
           'He has never danced before.'

Future experiential perfect data is rare and semantically cumbersome, but a consultant offered the following two options in elicitation:

(583) a. *Bàmàkó*   *yày*   *tìyɛ̀-lí-m*   *mɛ,*   *[báá góè]*   *yáà-dɛ̀-m.*
           Bamako   go.EXP   EXP-NEG.PFV-1SG   but   next.year   go-IMPF-1SG
           'I have never been to Bamako before, but next year I will have gone
           (=I will go).'

       b. *Bàmàkó*   *yày*   *tìyɛ̀-lí-m*   *mɛ,*
           Bamako   go.EXP   EXP-NEG.PFV-1SG   but

           [báá góè]   *yáà-dɛ̀-m-go*   *bíyɛ̀-dɛ̀-m.*
           next.year   go-IMPF-1SG-ADV   be-IMPF-1SG
           'I have never been to Bamako before, but next year I will have gone
           (=I might have gone).'

In (583a), the expected future experiential perfect is a simple imperfective verb, *yáà-dɛ̀-m*, indicating that the speaker is sure that he or she will go. In the second, a more complex structure is used, indicating that the speaker will be in the state of having gone, what I consider to be a more specific future experiential perfect. However, examples like this are rare, and it is not clear to what extent other speakers would share the same judgments of this consultant.

12.7 Progressive

The last major aspectual category 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.[27] The progressive is one of the inflections where the underlying tone of the stem is visible. The formulation of the progressive participle is schematized below:

(584) a. <u>Past/present progressive participle</u>
           Verb-*gú*

       b. <u>Future progressive participle</u>
           Verb-*nú*

Tense and other inflection is carried on an auxiliary verb, either *=sɛ* 'have' or *=wɔ* 'be'. Plungian (1995) reported a semantic difference between the two auxiliary verbs, with *=sɛ* being used iteratively and *=wɔ* 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:

(585) a. <u>Monosyllabic</u>
           gòó   'exit'   *gòó-gú*   'exiting'
           yóó   'enter'   *yóó-gú*   'entering'

       b. <u>Disyllabic</u>
           ɛ́bɛ́   'buy'   *ɛ́bɛ́-gú*   'buying'
           jɔ̀bɔ́   'run'   *jɔ̀bɔ́-gú*   'running'
           jàà-ndá   'cook'   *jàà-ndá-gú*   'cooking'

       c. <u>Trisyllabic</u>
           kílɛ́mɔ́   'play'   *kílɛ́mɔ́-gú*   'playing'
           gɔ̀rɔ́lɔ́   'snore'   *gɔ̀rɔ́lɔ́-gú*   'snoring'

Before delving into the different tenses of the progressive, we must first address the phonetic realization of the participle. First, at the end of a clause, /H/ stems experience a good deal of declination across the verb. This is shown by the pitch track in (586a). /LH/ verbs will often tend to sound on the surface like 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 (586b).

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27 It is possible that these two participial suffixes *-gú* and *-nú* are related to the adverbial suffixes *-go* and *-ni*, though the synchronic link seems to be broken for speakers.

(586) a. [póób-íyó-gú=sɛ] 'she is whistling'

poobiyo
0.31569161

b. [púnɔ́ yèŋgɛ́-gú=sɛ] 'she is sifting flour'

puno_yengeguse
0.386247166

As we can see, there is a greater downward slope across the participle in (586a) than in (586b). The perturbations are due to consonant effects. For more on the phonetic realization of tone, see section 4.2.

The other phonetic points to note involve the suffix itself. First, before the /s/ of the auxiliary =sɛ 'have', the /u/ of the suffix is sometimes voiceless. Second, the /g/ is sometimes lenited or lost in rapid speech, resulting in a suffix that sounds more like a plain [-ú]. If we look at the spectrogram of (586a), we can see that there is no full stop where the /g/ is expected to be:

(587) [póób-íyó-gú=sɛ] 'she is whistling'

In this spectrogram, I have put a gamma in parenthesis where we expect the /g/, since there does seem to be some frication here; that is, there is not a clean transition from the /o/ of the stem to the /u/ of the suffix.

12.7.1 Present

12.7.1.1 Affirmative

The affirmative present progressive is formed with either =sɛ 'have' or =wɔ 'be' as the auxiliary. As we saw in section 12.3.1.1, =wɔ is inherently toneless, but the tonal analysis of =sɛ 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 propensity of /s/ to raise the F0 immediately following it, thus serving as a sort of consonantal H starting point for interpolation. I will pursue this latter analysis and write =sɛ as toneless.

My consultants tell me that there is no difference in meaning between the use of =sɛ or =wɔ for the auxiliary. This can be confirmed by looking at the following example from a text, where the first instance of the progressive takes =wɔ and the second =sɛ. The first instance is non-final, and as such, the auxiliary =wɔ is made into a participle with the suffix -gú, meaning that the subject is marked not by a suffix but by an independent pronoun. For more on the use of -gú in linking clauses, see section 18.9.

(588) *Yém   wó   g-àà,   yàa-ná=gɛ   jáá sírè-dɛ̀   g-àà*
       like.that 3SG.PRO say-PFV   woman-HUM.SG=DEF meal cook-IMPF say-PFV

       *ɛ̀ɛ̀ⁿL wó   tég-ír-áá-dɛ̀=gɛ   núyɔ́=gɛ   **núyɔ́-gú wó***
       ash   3SG.PRO drip-TR-PFV-IMPF.REL=DEF song=DEF   sing-PPL 3SG.PRO

       ***wɔ́-gú** wó   kééŋ-íy-aa   íí   wómɔ=gɛ   **núyɔ́-gú=sɛ**.*
       be-PPL   3SG.PRO listen-MP-PFV child 3SG.POSS=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.'   [23.5:29]

Here, the timeframe of the narrative is past, but both progressives are in the present. Both the =wɔ progressive and =sɛ 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 =sɛ and =wɔ for auxiliaries in the progressive. For example:

(589) a. *Jáŋgu   jàŋgá-gú=sɛ-m/wɔ-m.*
           studies   study-PPL=have-1SG/be-1SG
           'I am studying'

      b. *Mí   ánìgè^{HL}   nɔ̀nú   jáá   ɲ́yɛ̂-gú=sɛ/wɔ.*

b. *Mí   ánìgè[HL]   nɔ̀nú   jáá   ɲ́yɛ̂-gú=sɛ/wɔ.*
    1SG.PRO   friend   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:

(590) *Mí   póó-nd-íyɛ̂-dɛ=gɛ   jáá   sáy-ni   ɲ́yɛ̂-gú=sɛ-m.*
       1SG.PRO   fat-FACT-MP-IMPF.REL=DEF   meal   much-ADV   eat-PPL=have-1SG
       '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:

(591) *Éὲ   wó   kay   ǹdὲ^L   ɔ̀gɔ́   yó-è   kɛ̂m*
       yes   3SG.PRO   TOP   person   Hogon   enter-PFV.REL   all

      Áŋju=nɛ   sù~súg-ù   ǹj-íyó-gú
       Aŋji=OBL   RED~go.down-PFV.FOC   lie.down-MP-PPL

      bé   wɔ́-gú, ǹj-íyó-gú   bé   wɔ́-gú...
       3PL.PRO   be-PPL   lie.down-MP-PPL   3PL.PRO   be-PPL

      'Yes, as for him, every person who entered the Hogon came down to Anji, they [were] sleeping there, they [were] sleeping there...'   [23.2:71]

Again, the timeframe here is the past, but it was a repeated event that anyone becoming Hogon (chief) would go and stay in the town of Anji. This was not one single progressive event, but an iterative occurrence. For another example of the progressive used as an iterative, see (594) 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 *Nìmĕm yèlé-gú=sɛ-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.

12.7.1.2 Negative

The negative present progressive is formed by negating the auxiliary verb. The negative forms of *=sɛ* and *=wɔ* are given below:

(592) *sɛ* 'have' *sὲ-lέ* 'not have'
       wɔ '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, *sὲ-lέ* is the commoner. Nonetheless, for the progressive, they can be used interchangeably:

(593) *Mí*   *ánìgè^{HL}* *nɔ̀nú* *jáá* *ɲyɛ́-gú* *sὲ-lέ/òndú.*
       1SG.PRO   friend   here   meal   eat-PPL   have-NEG/be.NEG
       'My friend is not eating here.'

Notice that in the negative, I no longer write the auxiliaries as clitics. This is because they now have enough phonological material to meet the word minimality constraint and can stand on their own; they also have their own tone. While in the affirmative, there is no reported difference between *=sɛ* and *=wɔ* as auxiliary in the iterative construction, a difference emerges in the negative. Only *sὲ-lέ* can be used for the negative iterative, conforming to Plungian's (1995) observation that *=sɛ* is used in this capacity. The pertinent example is the following:

(594) *Wó*   *ɛ́^n-ɛ̀=nɛ*   *ḿmɔ=nɛ*
       3SG.PRO   marry-PFV.REL=OBL   1SG.POSS=OBL

       yèlé-gú   *sὲ-lέ.*   **yèlé-gú òndú*
       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.

12.7.2 Past

12.7.2.1 Affirmative

In the past progressive, the auxiliary verbs *=sɛ* or *=wɔ* are inflected for the past tense, forming *sɛ=be* for the former and simply *=be* or reduplicated *=be~be* for the latter. The past progressive is used to talk about an ongoing event which was in the

process of being carried out in the past. It often serves as the backdrop to some other event which interrupts it. For instance:

(595) a. *Jáŋgu   jàŋgá-gú=sɛ=be-m.*
         studies   study-PPL=have=be.PST-1SG
         'I was studying.'

    b. *Jáŋgu   jàŋgá-gú=(be~)be-m.*
         studies   study-PPL=(RED~)be.PST-1SG.
         '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:

(596) *Jáŋgu   jàŋgá-gú   mí   wɔ́-gú   mí   ánìgè^{HL}   yɛ̀l-ɛ̀.*
         studies   study-PPL   1SG.PRO   be-PPL   1SG.PRO   friend   come-PFV.L
         '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 (*jáŋgu jàŋgá-gú **mí wɔ́-gú***) with no tense indicated. For more on the use of participles in clause subordination, see section 18.9.

    As expected, the past progressive can also be used as a past iterative. The following example demonstrates this form:

(597) *ɔ̀gɔ́   dìnɛ̀^{L}=gɛ=le   yɛ̀ɛ̀...* [est-ce que]   *ǹdɛ̌-m*
         Hogon   era=DEF=ASSOC   umm Q.FR   person-HUM.PL

    sègú   sɛ́gɛ́-gú=bi-ɛ̀^n?
    taxes   pay-PPL=be.PST-3PL

    'In the time of the Hogons, umm... did people pay taxes?'   [23.2:82]

The verb form *sɛ́gɛ́-gú=bi-ɛ̀^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.

12.7.2.2 Negative
All examples I have of the negative past use 'be' instead of 'have'. For example:

(598) a. *Gɔ́ɔ́   gɔ̀ɔ̀-gú=be-le-m.*
         dance   dance-PPL=be.PST-NEG-1SG
         'I was not dancing.'

b. *Sɔ́ɔ́*   *sɔ́ɔ́-gú=be-le-m.*
   speech   speak-PPL=be.PST-NEG-1SG
   'I was not talking.'

12.7.3 Future

12.7.3.1 Affirmative

The auxiliary options condense in the future progressive. Here, the future form of *=wɔ*, *bíyὲ-dὲ*, is the only option. *Síyὲ-dὲ* 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:

(599) *Ííyé*   *dìgὲ^L*   *nàm^L*   *yὲl-ὲ-w=yó*   *jáŋgu*   *jàŋgá-nú*   *bíyὲ-dὲ-m.*
      today   evening   sun   come-PFV.L-2SG=if   studies   study-PPL   be-IMPF-1SG
      '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. Even 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 *kɛ́bɛ́* '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:

(600) *ɛ́ɛ́^n=gɛ*   **kɛ́bɛ́-nú**   *yà-à,*   *wó*   **kɛ́bɛ́-gú**
      ash=DEF   gather-PPL   go-PFV   3SG.PRO   gather-PPL

      wó   **kɛ́bɛ́-gú**   *sáy-nì*   *gàà-nd-ìy-ì.*
      3SG.PRO   gather-PPL   a.lot-ADV   big-FACT-MP-PFV.L

      'She went to gather ash, and as she gathered and gathered, it [the pile of millet stalks] became very big.'   [23.4:3]

An elicited example of the future progressive in subordinated clauses is as follows:

(601) *Jáŋgu*   *jàŋgá-nú*   *mí*   *wɔ́-nú*   *tɛ́mbὲ-dὲ-w.*
      studies   study-PPL   1SG.PRO   be-PPL   find-IMPF-2SG
      'You will find me studying.'

Once again, the participial suffix *-nú* is used in place of *-gú*. For more on these participial suffixes in subordination, see section 18.9.

12.7.3.2 Negative

To form the negative future progressive, consultants offer two options. Either, the plain negative imperfective can be used or the future form of 'be' can be negated after a future participle. One speaker's judgment is that the plain negative imperfective (602a) is much better:

(602) a. *Jáŋgu   jàŋg-éélè.*
           studies   study-NEG.IMPF
           'He will not be studying.'

     b. *Jáŋgu   jàŋgá-nú   bìy-éélè-m.*
           studies   study-PPL   be-NEG.IMPF-1SG
           'I will not be studying.'

12.8 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:

(603) <u>Subject agreement suffixes</u>
       1sg   *-m*   1pl   *-y*
       2sg   *-w*   2pl   *-y*
       3sg   –   3pl   (N)

The first and second person suffixes are straightforward, and the 3sg is unmarked. The 3pl requires the most explanation. I have marked it simply as N for "nasal", since this is the commonality that holds between all 3pl 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 (section 12.8.1), followed by a discussion of the 3pl (section 12.8.2), followed finally by a discussion of the phonetic interactions between subject and aspect marking (section 12.8.3).

12.8.1 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:

(604) a. 1sg Verb-*mi* → Verb-*m*

b. 2sg Verb-*u* → Verb-*w*

c. 1pl Verb-*emme* → Verb-*e?* → Verb-*y*

d. 2pl Verb-*e* → Verb-*y*

The 1pl is the least clear of the cases, but it is possible that it derives from some historical concatenation of the 2pl *é* plus the 1sg *mí* (*é-mí), and that it is the common root of the 2pl that gives rise to the identical subject marking in the 1pl and 2pl.

There is no discernible connection between the 3pl independent pronoun *bé* and the nasality imposed by the 3pl suffix.

12.8.2 3pl suffix marking

While other subject suffixes are either unmarked or clearly segmentable from aspect marking, the same is not true for the 3pl. 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:

(605)

	AN suffix	3pl AN suffix
Impf	*-dɛ̀*	*-dìɲ*
Neg.Impf	*-éélè*	*-énnè*
Neg.PFV	*-lí*	*-nní*
PerfL	*-E, -i*	*-ì-ɛ̀^{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:

(606) a. *Nɔ̌ɔ kày kó   wàgàdù^L kɛ́m púlɔ̌-m   yèlè-nní.*
this TOP this.DD time   all Fulani-HUM.PL come-NEG.PFV.3PL
'As for this, at that time, the Fulbe hadn't come.'   [23.2:116]

b. *Ǹdɛ̀^{L} bɛ̀lú   sɛ́-lè=mɔ=ǹ   súgɔ́ gɔ̀-énnè.*
person animal have-NEG.REL=POSS=OBJ sugɔ dance-NEG.PFV.3PL
'They would not dance the *sugɔ* for those who did not have animals.'
                                                             [23.4:40]

The *-dìɲ* affirmative imperfective ending is extremely common, and may be related to the infinitive suffix *-dim*. See section 5.2.1.4 for discussion. An example of the 3pl affirmative imperfective is as follows:

(607) *Éè   ságárá-m   kɛ́m yáà-dìn.*
      yes youth-HUM.PL   all   go-IMPF.3PL
      'Yes, all the young men would go.'   [23.2:104]

In the case of the defocalized perfective (PFV.L), there is more segmentability, since we see -$\grave{\varepsilon}^n$, a clear 3pl suffix on quasi-verbs (see below). However, the form is still unusual in that it is obligatorily preceded by the [-i] allomorph of the defocalized perfective suffix, regardless of the stem. For example, while the usual final vowel in the defocalized perfective for *bàrá* 'help' is /e/ (*bàr-è*), in the following example with the 3pl, we can see that it becomes /i/:

(608) *Kɛ́m   wó=ǹ   bàr-ì-$\grave{\varepsilon}^n$.*
      all   3SG.PRO=OBJ   help-PFV.L-3PL
      'Everyone helped him.'   [23.2:144]

Many aspects require the use of auxiliary verbs, as we have already seen. The following table summarizes how auxiliary verbs are inflected for the 3pl:

(609)   Base form   3pl form
      'be'   *wɔ*   *wɔ-$\grave{\varepsilon}^n$*
      'was'   *be*   *bi-$\grave{\varepsilon}^n$*
      'have'   *sɛ*   *sɛ-$\grave{\varepsilon}^n$*

Here again, /e/ becomes [i] before the 3pl suffix -$\grave{\varepsilon}^n$. /ɔ/ and /ɛ/ are not affected.

The negative auxiliaries follow a similar pattern, with a few peculiarities. The forms are summarized below:

(610)   Base form   3pl form
      be.Neg   *òndú*   *òndí-$\grave{\varepsilon}^n$*
      be.PFV.Neg   *be-le*   *be-nne*
      have.Neg   *sɛ̀-lɛ́*   *sɛ̀-nnɛ́*

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 3pl suffix or simply a phonetic effect of fronting). The negatives of 'be' and 'have' follow the pattern of /-lV/ → /-nnV/.

12.8.3 Phonetic interaction between aspect and subject marking

Apart from the 3pl, 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.

12.8.3.1 1sg -*m*

The 1sg suffix -*m* often causes a preceding front vowel (e.g. /i/ in the negative perfect suffix /-lí/) to become [u] under the influence of the /m/'s labialization. Thus, a negative perfective form like /kànà-lí-m/ 'I did not do' will often be pronounced [kànàlúm] in rapid speech.

12.8.3.2 2sg -*w*

Like 1sg /-m/, 2sg /-w/ also causes a preceding front vowel to become back, 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 /e-w/ and /ɛ-w/ are also affected. That is, in the imperfective, the sequence /-dɛ̀-w/ will often be pronounced [dɔ̀w] and forms like /be-w/ 'you were' are often pronounced [bow]. The general rule of backing is as follows:

(611) V   →   [+back] / ___ -w
       [-back]

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.

12.8.3.3 1pl and 2pl -*y*

Just as /-w/ had a backing effect, so does /-y/ tend to have a fronting effect. This can be seen most clearly on the quasi-verb auxiliary =*wɔ*. With the 1pl or 2pl suffix, this tends to be pronounced [wɛy]. This is the same phonetic effect seen with the diminutive suffix, discussed in section 3.7.5 and section 5.1.6.

12.9 Imperatives and hortatives

The last subject to touch upon is mood. So far, all of the forms given have been in the indicative moods. The other moods in Tommo So are the related set of imperative, hortative, and optative. Forms that would be in the subjunctive mood in other languages tend to be nominalized forms in Tommo So; see Chapters 16 on relativization and 18 on complement clauses.

12.9.1 Imperative

12.9.1.1 Affirmative

The base form of the affirmative imperative is the unsuffixed stem with either a {H} overlay or lexical tone. At times, this sounds like {HL}, but I believe this to be an intonational effect related to its position at the end of a sentence.

The imperative base is used alone in the singular. Thus, we can schematize the affirmative singular imperative as follows:

(612)   Affirmative singular imperative
        Verb({H})

The following table gives the imperative form of all verb types:

(613)   a.   Monosyllabic
             gòó   'exit'   *góó ~ gòó*   'exit!'
             yóó   'enter'   *yóó*   'enter!'

        b.   Disyllabic
             ɛ́bɛ́   'buy'   *ɛ́bɛ́*   'buy!'
             jɔ̀bɔ́   'run'   *jɔ́bɔ́ ~ jɔ̀bɔ́*   'run!'
             jàà-ndá   'cook'   *jáá-ndá ~ jàà-ndá*   'cook!'

        c.   Trisyllabic
             kílɛ́mɔ́   'play'   *kílɛ́mɔ́*   'play!'
             gɔ̀rɔ́lɔ́   'snore'   *gɔ́rɔ́lɔ́ ~ gɔ̀rɔ́lɔ́*   'snore!'

To form the plural imperative, the suffix *-ɲ̀* is added; everything else remains the same. For instance, the plural imperative of *ɛ́bɛ́* 'buy' is *ɛ́bɛ́-ɲ̀* and of *gɔ̀rɔ́lɔ́* 'snore' it is *gɔ́rɔ́lɔ́-ɲ̀*.

Textual examples of the imperative include the following:

(614)   a.   *Kándá*   *ɔ̀gɔ́*   *yò-éélè=nɛ*   *wó=wa*
             Kanda   Hogon   enter-NEG.IMPF=OBL   3SG.PRO=QUOT

             ɔ̀gɔ́=gɛ   *ǹdɛ̀ᴸ*   *yàgá=ɲ̀*   *óbó*   *g-ì.*
             Hogon=DEF   person   other=OBJ   give.IMPER   say-PFV.L

             '[He said] Kanda would not be chief, he said give the Hogon-ship
             to someone else.'   [23.2:134]

        b.   *Wó=wa*   *sŏm*   *kó=yɛ̀llɛ̀ᴸ=gɛ*
             3SG.PRO=QUOT   horse   EXIST=come.IMPF.REL=DEF

             jɔ̀bɔ́   *yóó=wa...*
             run.IMPER   enter.IMPER=QUOT

             '[She said] a horse is coming, run [and] enter!'   [23.5:11]

In the second example, we see that two imperatives can be put side-by-side with no separate chaining form.

12.9.1.2 Negative

There are two forms of the negative imperative. In the first, what I call the "simple negative imperative", the stem has a {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:

(615) Simple negative singular imperative
       Verb{L}-*gú*

This form is exemplified below for all verb types:

(616) a. Monosyllabic
           gòó 'exit'   *gòò-gú* 'don't exit!'
           yóó 'enter' *yòò-gú* 'don't enter!'

       b. Disyllabic
           ɛ́bɛ́   'buy'   *ɛ̀bɛ̀-gú*   'don't buy!'
           jɔ̀bɔ́   'run'   *jɔ̀bɔ̀-gú*   'don't run!'
           jàà-ndá 'cook' *jàà-ndà-gú* 'don't cook!'

       c. Trisyllabic
           kílémɔ́ 'play'   *kìlèmɔ̀-gú* 'don't play!'
           gòrɔ́lɔ́ 'snore' *gòrɔ̀lɔ̀-gú* 'don't snore!'

As in the affirmative imperative, the negative plural imperative is formed by adding the suffix -*ɲ̀*, which has the effect of fronting the vowel in -*gú* to [i]. For example:

(617) a. *yòò-gú* 'don't enter (sg)!' *yòò-gí-ɲ̀* 'don't enter (pl)!'
       b. *kànà-gú* 'don't do (sg)!'   *kànà-gí-ɲ̀* '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 bare verb stem followed with a form *nàà-gú*. This may look like it should mean 'don't forget' (*nàá* '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:

(618) a. *Kìlèmɔ́   káná   nàà-gú!*
music   make   NAA-PROH
'Don't make music!'

b. *Kìlèmɔ́   kànà-gú!*
music   make-PROH
'Don't make music!'

Consultants report that of the two forms, (618a) is a little bit stronger. I have glossed this simply as NAA with the prohibitive suffix on it, since this *nàà* seems to carry no other meaning.

The plural of this form is as expected: *-ɲ̀* is added at the end, making the negative imperative complex *nàà-gí-ɲ̀*.

12.9.2 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.

12.9.2.1 Affirmative

The affirmative hortative adds the suffix *-mɔ́* to the affirmative singular imperative base, usually with the {H} overlay. This is schematized below:

(619) Affirmative singular hortative
Verb{H}-*mɔ́*

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 *-ɲ̀* from the imperatives is used to this end:

(620) Affirmative plural hortative
Verb{H}-*mɔ́-ɲ̀*

The following examples illustrate the use of the affirmative hortative:

(621) a. *Kìdè^L kó hákílé ǹdèmbé=mε yèl-ὲ=wà, bé*
thing that.DD mind LOG.PL.PRO=POSS come-PFV.L=QUOT 3PL.PRO

dánn-ìy-ì=gε yàa-ná óbó-mɔ́=wa.
sit-MP-PFV.REL=DEF woman-HUM.SG give-HORT=QUOT

'[They said] that thing (idea) came into their minds, [when] they sat
down, let's give [him] a wife.' [23.6:3]

b. *Íbê̂ yáá-mɔ́-ɲ̀!*
market go-HORT-PL
'Let's (all) go to the market!'

It is not clear in (621a) 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).

A seemingly crystallized use of the hortative is in greetings. Consider the
following:

(622) A: *Dɛ́nɛ́-mɔ́!*
spend.day-HORT
'Good evening!'

B: *Àwɔ́ɔ̀, ú dὲn-áa.*
indeed 2SG.PRO spend.day-PFV
'Indeed, have you made it through the day?'

A: *Dὲn-áa.*
spend.day-PFV
'I have [spent/made it through the day].'

If the person initiating the greeting comes upon a group of people, the plural form
dɛ́nɛ́-mɔ́-ɲ̀ 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.

12.9.2.2 Negative
The negative hortative is formed in the same way as the negative imperative, that is,
with the suffix *-gú* in the singular and *-gí-ɲ̀* in the plural.

(623) a. *Yàà-mɔ̀-gú.*
           go-HORT-PROH
           'Let's not go.'

       b. *Tɔmmɔ̀ᴸ sɔ̀ɔ́ sɔ̀ɔ́-mɔ̀-gí-ǹ*
           Tommo   speech   speak-HORT-PROH-PL
           'Let's not speak Tommo So.'

12.9.3 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...".

12.9.3.1 Affirmative

The optative looks almost identical to the singular imperative, except that the verb stem always carries its lexical tones. 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 (624a), with the optative verb form at the end, but it may also directly precede the verb (624b):

(624) a. *Ámbá   ììᴸ   nòlú=le   é=ǹ   ɛ́mmɛ́-mɔ́.*
           God   child   birthing=ASSOC   2PL.PRO=OBJ   be.able-CAUS
           'May God make you (pl.) able to have children.'

       b. *ɛ́ɛ́ⁿ=gɛ   Ámbá   dàgá-ndá.*
           marriage=DEF   God   be.good-FACT
           'May God make this marriage good.'

For more common blessings, see section 21.7.

It is also possible to have optatives that do not include God, as in:

(625) *Ú   náâᴴ   ú=ǹ   nàá!*
       2SG.PRO   mother   2SG.PRO=OBJ   forget
       'May your mother forget you!'

12.9.3.2 Negative

The negative optative looks just like the negative imperative. For example:

(626) a. *Ámbá   dàgà-ndà-gú*
           God   be.good-FACT-PROH
           'May God not make it good.'

       b. *Ámbá   ú=ǹ   dàà-gú.*
           God   2SG.PRO=OBJ   kill-PROH
           'May God not kill you.'

Chapter 13
VP and predicate structure

This chapter deals with the content and organization of verb phrases (VPs) and predicates in Tommo So, including the behavior and positioning of other clause constituents like subjects and temporal adverbs not traditionally considered to be part of the VP proper. The outline of the chapter is as follows: section 13.1 continues the discussion of regular verbs from the last chapter, addressing valency, VP structure, lexicalized subject+verb combinations, cognate nominals, and object marking. In section 13.2, I turn my attention to so-called "quasi-verbs" (Heath 2008), subminimal "verblets" expressing meanings like 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 particles *yé=* and *kó=*, 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, specifically regarding ambi-valent verbs (section 11.5). Here, I extend that discussion to all verbs. 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 (see section 13.1.5). One may argue, then, that the traditional division into intransitive, transitive, and ditransitive is not supported by Tommo So, and that we should posit an additional valency type "cognate object verbs", which fall somewhere between intransitive and transitive on the traditional spectrum.

13.1.1.1 Intransitive verbs
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 *dànn-íyɛ́* 'sit down', *úŋgúló* 'stand up', and *ǹj-íyó* '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 *dànn-íyɛ́* and *ǹj-íyó*, or adding a factitive in the case of *úŋgúló*). Some common motion verbs include *yàá* 'go', *gòó* 'go out', *dɔ̀ɔ́* 'arrive', and *yɛ̀lɛ́* 'come'.

These motion verbs often appear to take a direct object when a specific location (destination or source) is added, since these locations do not require any postpositions. For instance:

(627) *Ségu gò-áa   Màndé yà-à   Màndé gò-áa   Bàmàkó yèl-áa.*
       Segou leave-PFV Mande go-PFV Mande leave-PFV Bamako come-PFV
       '[We] left Segou, went to Mande, left Mande, and came to Bamako.'   [23.2:12]

These locations may actually be complements, making these verbs transitive, but they may also be unmarked PP adjuncts, since when replaced by pronouns, these locations take adverbial pronouns such as *nìmbáà* 'there' rather than true object pronouns like *wó* or *kó*.

Other cases are trickier. Consider the following:

(628) a.   *àn-tólu   yàá*
            AN-communal.hunting go
            'go on a communal hunt'

       b.   *òděy   yàá*
            walking go
            'walk'

       c.   *bóy   gòó*
            name   leave
            'be renowned'

In these cases, the noun paired with verb is not a destination, a bare PP. It could conceivably be in (628a), but not in (628b), where the noun indicates a mode of movement, nor in (628c), where the noun actually seems to indicate a subject for the verb. The fact that it is not a subject is clear from examples like the following:

(629) *Àn-nà^L   nɔ́   bóy   gò-áa=wɔ.*
       man-HUM.SG   this name leave-PFV=be
       'This man is famous.'

'This man' is the subject of the sentence, not 'name'. From examples like this one, I conclude that the verbs in (628) are compound verbs, though the question of how nouns are incorporated into the structure will remain for now unanswered.

In addition to intransitive verbs of stance and motion, Tommo So has a large vocabulary of descriptive intransitive verbs that are used like English adjectives, such as *ílɛ́* 'be/become ripe' or *dùmɔ́* '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 perfective to describe things:

(630) *Tàgá=gɛ   púrúg-íy-aa=wɔ.*
       shoe=DEF become.dusty-MP-PFV=be
       'The shoe is dusty.'

13.1.1.2 Transitive verbs

Transitive verbs with a subject and one object include the usual suspects, such as verbs of hitting and cutting like *kɛ́dɛ́* 'cut' or *dùmbɔ́* 'punch', verbs of perception like *yɛ̀* 'see', *yɛ̀-ndɛ́* 'look at', or *ɛ́gɛ́* 'hear', and verbs involving direct contact with an object, like *bìɲjé* 'pull' or *jèŋné* 'pick up'. The object can either be bare or take the object clitic *=ɲ̀*, depending on conditions of animacy and focus (see section 13.1.6 and section 15.1).

Some verbs can be either intransitive or transitive with no overt morphological change. These **ambi-valent** verbs were discussed in section 11.5. Examples of these sorts of verbs include *jɔ̀gɔ́* 'break (something)' or 'be broken' and *kúndó* 'put (something, somewhere)' or 'be put (somewhere)'. Generally, if the same stem can be used in both a transitive and an intransitive verb, this must be achieved through derivational suffixes of the sort discussed in Chapter 11.

13.1.1.3 Ditransitive verbs

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 (631a) is a ditransitive sentence and (631b) a transitive sentence with an indirect object:

(631) a. *ɔ̀gɔ́=gɛ...   ǹdɛ̀ᴸ   yàgá=ɲ̀   óbó= wa.*
           Hogon=DEF person other=OBJ give.IMPER=QUOT
           'They said give the chiefdom to someone else.'   [23.1:12]

     b. *Ǹdɛ̀ᴸ   bɛ̀lú   sɛ́-lɛ̀=mɔ=ɲ̀   súgɔ́ gɔ̀-énnè.*
           person animal have-NEG.REL=POSS=OBJ sugɔ dance-NEG.IMPF.3PL
           'They would not dance the *sugɔ* for those who did not have animals.'
                                                                    [23.4:41]

In (631a), neither of the two objects *ɔ̀gɔ́* 'Hogon/chiefdom' or *ǹdɛ̀ᴸ yàgá* 'other person' take a postposition; the latter takes the object clitic because it is human. In (631b), on the other hand, *gɔ̀ɔ́* 'dance' is a transitive verb, and so only one object can be direct/unmarked, in this case a kind of dance *súgɔ́*. The (would-be) benefactor of this dance, *ǹdɛ̀ᴸ bɛ̀lú sɛ́-lɛ̀* 'a person who does not have animals', must therefore take

the postposition *=mɔ* for it to be licensed in the sentence; it is still human, though, and thus must take the object marker *=ǹ* as well.

The causative suffix *-mɔ́* 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:

(632) a. *Pédu sɛ́m-aa=be.*
            sheep slaughter-PFV=be.PST
            'He slaughtered a sheep.'   (Transitive)

        b. *Mí=ǹ   pédu sɛ́mɛ̂-mɔ́-gú=sɛ.*
           1SG.PRO=OBJ sheep slaughter-CAUS-PPL=have
           'He is making me slaughter a sheep.'   (Ditransitive)

The order of the original object and the former subject (now object of the causative) is free. Consultants also accepted the order *pédu mí=ǹ* in (632b). If the original object of the pre-causativized verb is human, then it too can take an object marker:

(633) *Ú=ǹ   wó=ǹ   bɛ́ndɛ̀-mɔ̀-dɛ̀-m.*
      2SG.PRO=OBJ 3SG.PRO=OBJ hit-CAUS-IMPF-1SG
      'I will make you hit him.'

In this example, both objects of the causative are marked with the object marker. While the order of the two objects could be reversed in example (632b), since context makes clear that it is the sheep being slaughtered, the order of the two pronouns in (633) is fixed, with the original object of 'hit' closer to the verb. Reversal of the two pronouns results in the sentence 'I will make him hit you'.

Since object marking typically combines with just human objects, and since ditransitive verbs tend not to have human objects as theme, it is difficult to locate examples in which the theme of a ditransitive verb is object marked. See section 13.1.6 for more on object marking.

13.1.2 Verb phrase and clause structure

Basic clause structure in Tommo So is given below, with elements of the verb phrase (VP) bolded:

(634) a. Temporal adverbs

        b. Subject

        c. **Objects (direct and indirect)**

        d. Other adverbs and PP adjuncts

        e. **Verb**

As we can see, objects may be separated from the verb by adverbs or PP adjuncts, but temporal adverbs in particular tend to occur clause-initially, before the subject.

In relative and other subordinate clauses, where the verb lacks subject inflection, we see the following order of elements:

(635)   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 if the subject is pronominal; if a non-pronominal subject is present, the subject pronoun is optional (see section 16.3.1).

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:

(636)	Subject	Verb	Gloss
a.	With *àná* 'rain'		
	àná	*mìyɛ́*	'be raining'
	àná	*dìmɛ́*	'thunder rumble' (cf. 'tamp down')
	àná	*páárá*	'rain lightly'
	ànàᴸ sɔ́lu	*sɔ́lɔ́*	'drizzle'
	àná	*úló*	'cloudy weather end (in October)' (cf. 'go up, rise')
b.	With *báá* 'air, day (in compounds), season'		
	báá	*dɔ̀ɔ́*	'rainy season approach' (cf. 'arrive')
	báá	*ɛ́sɛ́*	'be early in the morning' (cf. 'be clear')
	báá	*gòó*	'spend whole wet season' (cf. 'go out')
	báá	*yáá*	'spend the night' (cf. *yàá* 'go'?)
	báá	*kúró*	'be twilight' (cf. 'be thick')
c.	With *năm* 'sun'		
	năm	*bàná*	'be hot season' (cf. 'be red')
	năm	*túmmó*	'(day) break'
	năm	*gòó*	
	năm	*nùmbó*	
	năm	*dànná*	'be very hot' (cf. 'burn')

Other expressions of emotion or mental state also take idiomatic subjects, typically a body part. For example, most expressions of emotion[28] involve the liver *kíndɛ̂* as subject (637a), and certain physical states are expressed with *gìré* 'eyes' as the subject (637b):

(637)   <u>Subject</u>   <u>Verb</u>   <u>Gloss</u>

a.   With *kíndɛ̂* 'liver'

    kíndɛ̂   *bàná*   'get angry' (cf. 'be red')

    kíndɛ̂   *kɛ̂d-íyɛ̂*   'be frustrated' (cf. *kɛ́dɛ̂* 'cut')

    kíndɛ̂   *kágá*   'be devastated' (cf. 'sear')

b.   With *gìré* 'eyes'

    gìré   *bìmmíl-íyé*   'be dizzy' (cf. 'turn')

    gìré   *gòó*   'be free, have free time' (cf. 'go out')

    gìré   *púl-íyó*   'start making good money'

                                     (cf. 'fray, unravel')

    gìré   *wìgíl-íyé*   'be dizzy' (cf. 'wave around')

In these expressions with body parts, the logical subject is expressed as a possessor of the body part, as in:

(638)   *Gìré*   *wómɔ*   *púl-íy-aa=wɔ*.
        eye   3SG.POSS   fray-MP-PFV=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:

(639)   *Mí=ǹ*   *gìré*   *góò-dὲ*.
        1SG.PRO=OBJ   eye   go.out-IMPF
        'I am free.'

It is not clear how to analyze the structure of such a construction.

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

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28 For a discussion of emotion expressions in the Dogon languages, see McPherson and Prokhorov (2011).

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:

(640) *díí ǹd-íyɛ́* 'bathe' *díí* 'water'

The verb *ǹd-íyɛ́* has no meaning without its fixed object *díí* 'water'. This is not to say that they must always be adjacent, as the following example (repeated from Chapter 10) shows:

(641) Àgá   ùŋgùl-ì=yó   díí   kùyɔ́-go   ńd-ìyɛ̀-dɛ̀.
       morning   get.up-PFV.L=if water first-ADV   bathe-MP-IMPF
       'He bathes first thing when he gets up in the morning.'

Here, the adverb *kùyɔ́-go* 'first' intervenes between the object and the verb. This combination is the most extreme example of a fixed object. Verbs that can be used either on their own or with one particular object will be given in (643).

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' (642a) and emotional expressions with *kíndɛ̂* 'liver' (642b).

(642)   Object   Verb   Gloss
       a. With *àgá* 'morning'
           àgá   *dàmbá*   '(herder) get up early' (cf. 'push')

       b. With *kíndɛ̂* 'liver'
           kíndɛ̂   *ɛ́lɛ̂-nd-íyɛ̂-mɔ́* 'make happy' (cf. 'sweeten')
           kíndɛ̂   *kɛ́dɛ̂*   'frustrate' (cf. 'cut')
           kíndɛ̂   *yàm-îlɛ̂*   'disappoint' (cf. 'ruin')

       c. With *gìrè-ý* 'sleep'
           gìrè-ý   *jùŋgó*   'doze' (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 (unlike in 'bathe' above), 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 with non-cognate nominals:

(643) a. *kínu úmbó*   'blow nose'
       b. *kúú ɛ́rɛ́*   'braid (Lit. 'braid head')'
       c. *mìnnɛ̂ kíbɛ̂*   'clear field'
       d. *nùmɔ́ ááŋ-íyɛ̂*   'cross arms'
       e. *ɲɔ́m níyɛ̂*   'emit an odor'
       f. *sóŋgó sɔ̀mɔ́*   'make fence of branches'
       g. *tálu káŋ-írɛ̂*   '(hen) squawk while laying egg' (cf. *tálu* 'egg')

What all of these expressions have in common is that the verb is typically not used with nouns other than the one given. These are like the first example, *díí ǹd-íyɛ̂*, only not quite as strong, since most of the 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 of this sort are 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. For example:

(644) a. *(Gɔ́ɔ́)   gɔ́ɔ̀-dɛ̀-m.*
           dance   dance-IMPF-1SG
           'I will dance.'

       b. *(Nínnu)   nínnɛ̂-gú=sɛ.*
           breath   breathe-PPL=have
           'He is breathing.'

In (644a), the cognate nominal *gɔ́ɔ́* 'dance' is optional though preferred, as is *nínnu* 'breath' in (644b).

The most interesting feature of cognate nominals is not so much their presence or their use but their morphological form. What makes these nominals different from the deverbal nouns discussed in section 5.2 is that there is no clear derivational morphology involved; it is not even clear whether the noun or the verb should

be considered the base in most pairs. The majority of this subsection focuses on the formation of cognate nominals; for a description of their use, see section 13.1.5.5.

Note that not all related noun-verb pairs are used together in an O+V construction. For example, the verb ɛ́ɛ́ⁿ 'marry' has the related noun ɛ́ɛ́ⁿ 'marriage', but the expression 'marry a marriage' is unattested. In the following sub-sections, I will focus on those nouns that are typically paired with their cognate verb, as gɔ́ɔ́ 'dance' and nínnu 'breath' are above.

13.1.5.1 Phonological resemblance between noun and verb

Instead of derivational morphology, there are instead systematic phonological correspondences between the verbs and the nouns, which divide into three classes based on noun form: identical noun, C-final nouns, and [+ATR] nouns. Identical nouns have the same segmental make-up as the verb, including the verb stem's final vowel, while C-final nouns lack this vowel; due to phonotactic restrictions on final consonants, these nouns typically surface with a final epenthetic [u] (see section 3.4.6). In the examples in (647), gɔ́ɔ́ 'dance' is an identical noun, while nínnu 'breath' is a C-final noun. [+ATR] nouns can be considered a sub-class of C-final nouns wherein the noun has [+ATR] vowels while the corresponding verb's vowels are [-ATR]. I will discuss each type below.

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 mid-vowel 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:

(645)

	Noun	Verb	Gloss
a.	/H/		
	dɔ́ɔ́	dɔ̀ɔ́	'pound (some pounding)'
	dɔ́ɔ́ⁿ	tɔ́ɔ́ⁿ	'write (some writing)'
	gɔ́ɔ́	gɔ̀ɔ́	'dance (a dance)'
b.	/LH/		
	sɔ̀ɔ́	sɔ́ɔ́	'speak (speech)'
	bɛ̀ɛ́	bɛ̀ɛ́	'shave (beard)'

There is a voicing mismatch in the initial segment of 'writing' vs. 'write', but this change is not systematic and otherwise these noun-verb pairs are segmentally identical. As we can see, they may be tonally distinct. Recall from section 4.1.3 that the verb's tone is always predictable, and hence it is the tone of the noun that must be lexically listed.

Many disyllabic verb stems have segmentally identical cognate nominals, including the following:

(646)   <u>Noun</u>   <u>Verb</u>   <u>Gloss</u>

   a.   /H/

bírέ	bìrέ	'work (work)'
bɔ́dɔ́	bɔ̀dɔ́	'defecate (a defecation)'
dɔ́bɔ́	dɔ̀bɔ́	'crack a joke'
dúgó	dùgó	'cast spells'
gíyé	gìyé	'harvest (the harvest)'
gíyⁿέ	gìyⁿέ	'fart (a fart)'
góró	gòró	'put on a hat'
gúlɔ́	gùlɔ́	'vomit (a vomit)'
gúyⁿɔ́	gùyⁿɔ́	'commit a theft'
ílmέ	ílmέ	'stutter (a stutter)'
jáŋgá	jàŋgá	'build a shed'
káŋá	káŋá	'have a discussion'
kέrέ	kέrέ	'enclose in a wall'
kíbέ	kíbέ	'clear a new field'
kíídέ	kíídέ	'have a discussion'
kógó	kógó	'enclose a courtyard'
mómó	mòmó	'carry out second weeding'
núyɔ́	núyɔ́	'sing a song'
pélé	pélé	'clap hands'
púyó	púyó	'discolor due to moisture'
tómbó	tómbó	'take a jump'
túyɔ́	túyɔ́	'pile up millet spikes'
wóló	wòló	'build a simple animal pen'

   b.   /LH/

bèrέ	bèrέ	'get pregnant'
dùyɔ́	dùyɔ́	'insult'
èlmé	élmé	'tell story'
kògó	kógó	'(snake) shed its skin'
pàmbá	pámbá	'compete (a competition)'
pìyé	píyé	'cry (a cry)'
sìyé	síyé	'ululate'

There is no clear pattern by which we could predict a noun's tone based on that of the verb.

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 *kɔ̀ɔ̀lɔ́ kɔ́ɔ́l-íyɔ́* 'scrape off hair from animal hide using a blade', *ɲ̀jó ɲ̀j-íyó* 'lie down', or *síĺɛ́ síl-íyɛ́* 'have an out-of-wedlock sexual relationship', among others. Here, the underlying form of the verb stem could be said to be preserved by the cognate noun. It is not clear whether we should treat cases like this as verbs derived from noun stems, but the semantics suggest that this is not always the case. For instance, in the pair *ɲ̀jó ɲ̀j-íyó*, the noun *ɲ̀jó* means 'mat', better thought of as a tool for lying down than the base stem for a derived verb 'lie down'. See section 11.6 for more on denominal derivation.

We find the same phonological correspondence for trisyllabic stems. Note that here we not only have variation between /H/ and /LH/, but within /LH/, we have variation in how the melody is mapped in the noun. The change from L to H always occurs after the first syllable for the verb:

(647)

		Noun	Verb	Gloss
a.		/H/		
		bɔ́gɔ́lɔ́	bɔ̀gɔ́lɔ́	'shout (a shout)'
		gɔ́rɔ́lɔ́	gɔ̀rɔ́lɔ́	'(slaughtered animal) make rasping noise'
		kɛ́mɪ́ɲɛ́	kɛ́mɪ́ɲɛ́	'cook colostrum (to make a cheese)'
		tóŋóló	tóŋóló	'make a hubbub'
b.		LHH		
		(pòòb-íyó	póób-íyó	'whistle (a whistle)')
c.		LLH		
		bògòló	bògóló	'(billy-goat in rut) bellow (a bellow)'
		(kìlèmɔ́	kílɛ́mɔ́	'play (some playing)')
		(òdùgíyé	ódúgíyé	'cough (a cough)')
		tɔ̀gìrɔ́	tɔ́gírɔ́	'oversow'

The forms in parentheses look as though they contain verbal derivational morphology in both the noun and verb.

By far the largest class of cognate nominals is C-final nouns. In these nominals, the final vowel of the verb stem is lost and in its place often stands an epenthetic toneless [u], which may acquire tone if the H portion of a /LH/ melody is shifted onto it (see section 4.2.3). For monosyllabic verb stems, the second half of the long vowel is deleted and replaced with a semi-vowel /y/ making the noun C-final. Like segmentally identical nouns, C-final nouns may diverge tonally from the related verb stem.

First, let us look at monosyllabic verb stems and their C-final cognate nouns:

(648) <u>Noun</u> <u>Verb</u> <u>Gloss</u>

    a. /H/

       téy^n *téέ^n* 'hobble'

       máy *màá* 'shape pottery'

    b. /LH/

       nǒy *nɔ́ɔ́* 'sew (some sewing)'

       tǒy^n *tɔ́ɔ́^{n}* 'write (some writing)'

In addition to these cognate noun-verb pairs, other related noun-verb pairs that are not used in combination include *bóy* 'name' vs. *bòó* 'call' and *wéy* 'light' vs. *wὲέ* 'make light', where the related non-verbal form is an adjective.

Disyllabic C-final nouns (with the epenthetic vowel adding a syllable) are the most prevalent, since disyllabic verb stems are the most prevalent.

(649) <u>Noun</u> <u>Verb</u> <u>Gloss</u>

    a. */H/*

       mómu *mòmó* 'laugh (a laugh)'

       dáánu *dààná* 'thicken'

       dámmu *dàmmá* '(milk) form a film'

       díŋu *dìŋɛ̂* 'tie a knot'

       ém(u) *émé* 'milk (a cow)'

       jáŋgu *jàŋgá* 'study'

       mélu *mèlé* 'whisper'

       nínnu *nínnɛ̂* 'breathe (a breath)'

       sélu *sélé* 'extract a little liquid (from a nearly dry water jar)'

       sɛ́nu *sɛ́nɛ̂* 'pray (a prayer)'

       tálu *tálá* 'lay an egg'

       tínu *tínɛ̂* 'chop wood'

       tɔ́ɔ́ru *tɔ́ɔ́rɔ́* 'give an instruction'

    b. */LH/*

       yìmú~yĭm *yímɛ̂* 'die (a death)'

       jàdú *jàdá* 'do a calculation'

       jègú *jègɛ̂* '(woman) dress up'

       kààrú *káárá* 'clear throat'

       kàrú *kárá* 'scarify'

       kɔ̀lú *kɔ́lɔ́* 'say something false'

       sìdú *sídé* 'draw lines by hand'

In the case of *ém(u)* 'milk', the [u] is in parentheses since it is not normally pro-
nounced (/m/ being the best-formed coda in the language); 'death' works similarly
in (649b). 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 *kɔ̀lú kɔ́lɔ́* 'say something false'. See section 8.5 for more
on sound symbolism. We also have a few cases wherein the verb stem but not the
nominal stem carries the mediopassive suffix. These examples are summarized below:

(650) *àùrú* *áúr-íyɛ̂* 'come to an agreement'
       jáw *jàw-íyɛ̂* 'have a fight'
       pɔ̀nnú *pɔ́nn-íyɛ̂* 'put on pants'
       tímu *tím-íyɛ̂* 'bow and pray'

We will see some cases in section 13.1.5.3 where the derivational suffix on the verb is
present on the nominal as well.

    We find only a small number of trisyllabic C-final nouns. There are not many tri-
syllabic stems in the language, and it seems that most of them tend to have segmen-
tally identical cognate nominals. Nonetheless, we do find the following examples:

(651)   <u>Noun</u>   <u>Verb</u>   <u>Gloss</u>
       a. */H/*
           sɔ́gúru *sɔ́gɔ́rɔ́* 'make noise'
           wéwîlu *wɛ̀wílɛ̂* 'cook in a pot (with a little oil)'

       b. *LLH*
           àdùbú *ádúbá* 'think (a thought)'
           sèlèmú *sélémɔ́* 'ask (a question)'

The first example is interesting in that the verb, while it does undergo some second
syllable weakening, is still identified as having an /ɔ/ as the second vowel. The
noun, on the other hand, takes /u/. Perhaps speakers harmonize the middle vowel
with the final vowel, though if the final [u] on *sɔ́gúru* is epenthetic, this would be
unexpected. The other cases show a high vowel in second syllable position in both
the noun and the verb.

    A sub-class of C-final nouns involves a vowel change on the noun from a [-ATR]
vowel (or /a/) to a [+ATR] one. Cases where this vowel change applies represent a
smaller proportion of the lexicon than C-final nouns with no vowel changes, but
since a vowel change is only visible in less than half of the vowels, this may bring
the proportions closer to equal. That is, when the verb already has a [+ATR] vowel,
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. In the following list, stems
are grouped by underlying vowel and are listed in order of stem length:

(652)   <u>Noun</u>   <u>Verb</u>   <u>Gloss</u>

    a. /a/

       bòrú   *bàrá*   'make an increase'

       wòlú   *wàlá*   'farm, cultivate'

       sóŋju   *sáŋjá*   '(merchant) do business'

       yólu   *yàl-íyɛ́* 'take a stroll'

       bóóru   *bàú-rɔ́* 'make a request'

       gómbílu *gàmb-íl-íyɛ́* 'divide into subgroups'

    b. /ɛ/

       débu   *dɛ̀bɛ́*   'attack'

       jébu   *jɛ̀bɛ́*   'utter a curse'

       sègú   *sɛ́gɛ́*   'pay tax'

    c. /ɔ/

       tów   *tɔ́ɔ́*   'slash earth for planting'

       jóy^n   *jɔ̀ɔ́^{n}*   'draw a drawing'

       dónu   *dɔ̀nɔ́*   'sell'

       jóbu   *jɔ̀bɔ́*   'run a race'

       jóŋu   *jɔ̀ŋɔ́*   'perform a healing'

       tògú   *tɔ́gɔ́*   'cut abscess to let out pus'

We can see here that underlying /ɔ/ and /a/ in verb stems neutralize to [o] in their corresponding nouns. In the last two examples of /a/ stems, we see more 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 (652c) shows a case where a monosyllabic verb stem has the second half of its vowel replaced by /w/ (*tɔ́ɔ́* → [tów]) instead of /y/. This choice seems to be lexicalized and not a property of vowel-changing nouns, since the next item on the list uses /y/ as expected (*jɔ̀ɔ́^{n}* → [jóy^n]).

A small number of cognate nominals do not fall into either class; that is, they are not segmentally identical with the verb, nor are they C-final, with or without vowel changes. Typically, these fall into one of two classes: a) the noun has a disharmonic vowel pattern /a-e/, and harmony is repaired in the verb stem, or b) the noun has a long final vowel that is repaired in the verb. Examples of this kind include:

(653) a. *bàré*   *bàrá*   'call a traditional meeting'

         kálé   *kál-íyɛ́* '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. It is interesting to note in the second example in (653a) that the presence of a [+ATR] /e/ in the noun does not trigger [+ATR] vowel harmony in the verb. Another example showing this pattern is *pàndé* 'widowhood' and the reversive *pánd-ílɛ́* 'marry a widow (de-widow sb)'.

13.1.5.2 Predictability of noun class membership

The preceding subsection laid out the phonological patterns that distinguish cognate nominals in Tommo So, but is there any way of predicting which class a verb's cognate noun will belong to? There are in fact no hard and fast rules that can predict class membership with absolute certainty. Nonetheless, close examination of the lexicon (a sample 396 noun-verb pairs) shows the following statistically significant trends:

1. Related nouns representing the instrument of a verb rather than the theme are more likely to be C-final with a vowel change to [+ATR].
2. Verbs beginning in voiceless stops or vowels are more likely to have a related noun belonging to the segmentally identical class.
3. Stems with /a/ are significantly less likely to belong to the segmentally identical class.

There is no a priori reason for any of these tendencies and it is not clear to what extent speakers are aware of these patterns.

13.1.5.3 Morphologically complex cognate nominals

The cognate nominals given in the last section are basically monomorphemic. 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:

(654) a. *áŋ-úlu áŋ-ílɛ́*   'intervene'   (reversive?)

       b. *sèlù-mú sélé-mɔ́*   'ask a question'   (causative?)

       c. *yò-ìrú yó-író*   'do spot sowing'   (transitive?)

       d. *póó-ndu póó-ndó*   'greet (a greeting)' (factitive)

There is a pattern to these verbs, namely that in most cases, the derivational suffix on the verb seems lexicalized, lacking semantic compositionality (654a–c). It is no surprise, then, that these are the verbs whose suffixes appear in the cognate nominal. However, there are many cases where a related noun is not strictly speaking a cognate nominal (not used in a set phrase with the verb) but it contains transparent derivational morphology. For example:

(655)

	Noun	Gloss	Verb	Gloss
a.	*póg-íru*	'belt'	*pág-írɛ́*	'fasten'
b.	*ìŋɛ̀-ndɛ́*	'dimensions'	*íŋɛ́-ndɛ́*	'make (sb) stand'
c.	*dàgà-ndú*	'agreement'	*dàgá-ndá*	'fix'
d.	*tímb-íy*	'counsel'	*tímb-íyɛ́*	'advise (sb)'

We find the transitive, factitive, and mediopassive suffixes in these nouns, suggesting that the verb serves as the base for nouns.

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 *-ílé* or *-íyé* (see section 5.2.1.2); 2) the cognate nominal is diminutive, carrying the *-ý* suffix (see section 5.1.6); 3) the cognate nominal undergoes the unusual X~ma~X reduplication pattern (see section 5.1.5); or 4) the cognate nominal carries the frozen prefix *a(N)-* (see section 5.1.7). Examples of each type are provided in (656) below:

(656)

a. Deverbal derivational suffix

nìg-íyé	*nígé*	'count'
góŋj-ílé	*gàŋjá*	'(bird) scratch'
nób-ílé	*nábá*	'carve'

b. Diminutive suffix

dàŋà-ý	*dàŋá*	'spot sow in moist areas'
tùmmɔ̀-ý	*túmmɔ́*	'make a mound'

c. X-ma-X reduplication

bégu-mà-bégu	*bègé*	'have the hiccups'

d. Frozen *a(N)-* prefix

àn-tólu	*táálá*	'go on collective hunt'

Both the deverbal nominalizers and the diminutive suffix impose their own tone patterns on the noun stem. The suffix *-ílé* imposes all {H}, *-íyé* imposes {LH}, and *-ý* imposes {L}. Notice also that both of the examples with *-ílé* show the vowel change phenomenon discussed above, as does the form *àn-tólu* from the verb *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 /a–e/ nominal stems, regular C-final nouns, vowel changing C-final nouns, etc.). They are grouped together by type below. The pseudo-genitive compound is marked with an asterisk (*):

(657) a. <u>Segmentally identical cognate nominals</u>

àŋà^L	sɔ̀ɔ́/sɔ̌y	sɔ́ɔ́	'utter spells'
mouth	speech		
nàm-dènù^L	bírɛ̂	bìrɛ́	'do day labor'
day.labor	work		
nìnnù^L	gɔ́rɔ́lɔ́	gɔ̀rɔ́lɔ́	'snore'
breath	snore		
*yúú	ɔ̀mɔ̀^L	ɔ́mɔ́	'cook millet porridge'
millet	porridge		

b. <u>Disharmonic nominal stems</u>

tàbà^L	kámbé	kámbá	'cook ground millet between two hot stones'
?	?		

c. <u>Regular C-final nominals</u>

àgà^L	wègú	wègɛ́	'spend entire morning'
morning	half.day		
dìgɛ̀^L	gíru	gìrɛ́	'take animals to pasture in the evening'
evening	herding		
ìyɛ̀^L	síŋju	síŋjɛ́	'sob'
tear	sobbing		
mɔ̀ɔ̀sì^L	kàrú	kárá	'cut a long scarification on the cheekbone'
Mossi	scarification		
nùmɔ̀^L	kólu	kóló	'snap fingers'
hand	snapping		
yàŋà^L	yélu	yèlé	'have a dream'
night	dreaming		
yìmù^L	póó-ndu	póó-ndó	'give death condolences'
death	greetings		

d. <u>Vowel-changing C-final nominals</u>

[ànà^L màà^L]	tów	tɔ́ɔ́	'do anticipatory planting after an early rain'
[rain dry]	sowing		
nàm-dènù^L	wòlú	wàlá	'do day labor farming'
day.labor	farming		

There is one unusual compound case, *àŋà~mà~kà~kàá káá* 'yawn', that involves reduplication of the head noun (*kà~kàá*) and the lexicalized linking particle *~mà~* between the head and *áŋá* 'mouth'.

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:

(658)   a.   *kà~kàlù^L*   *gɛ́m*   *kálá*
RED~lie   black   lie
'tell an outright lie'

   b.   *sɔ̀ɔ̀^{L}*   *bóŋú-ndu*   *sɔ́ɔ́*
speech   hide-FACT.NOM   speak
'speak secret words'

   c.   *bìrɛ̀^{L}*   *pàdíyɛ́*   *bìrɛ́*
work   bad   work
'do bad work'

While the first two have an idiomatic flavor to them, the last example in (658c) is clearly compositional.

13.1.5.5 Grammatical status of the cognate nominal

The preceding subsections have shown how cognate nominals are formed with relation to their verb stems. 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 serves as a default. For example, we have seen in (631b) that the verb *gɔ̀ɔ́* 'dance' can take a concrete object, like the kind of dance the *súgɔ́*. If a specific dance type like this is not used, then the cognate nominal *gɔ́ɔ́* takes its place; the verb will almost never stand on its own. Similarly, the cognate nominal cannot co-exist with a more specific object. From this, we know that the cognate nominal does fill the verb's argument position. In order to combine a cognate nominal and a more specific object, a compound noun must be created, as in the following:

(659)   a.   **súgɔ́*   *gɔ́ɔ́*   *gɔ́ɔ̀-dὲ-y.*
sugɔ   dance   dance-IMPF-1PL
'We will dance the *sugɔ* dance.'

   b.   *sùgɔ̀^{L}*   *gɔ́ɔ́*   *gɔ́ɔ̀-dὲ-y.*
sugɔ   dance   dance-IMPF-1PL
'We will dance the *sugɔ* dance.'

The sentence in (659a) is ungrammatical, because both *sugɔ* and 'dance' retain their lexical tones. In (659b), *sugɔ* undergoes tone lowering as it forms a compound with the cognate nominal *gɔ́ɔ́* 'dance'. This combination is grammatical. For more on compound noun formation, see Chapter 6.

Many of the cognate object + verb pairs above would be intransitive verbs in English. The object is always used with the verb in Tommo So. For example:

(660) a. *ɲ̀jó   ɲ́j-ìyò-dɛ̀-m.*
       mat   lie.down-MP-IMPF-1SG
       'I am going to lie down.'

   b. *Ìsé=gɛ   kòòdóó   kóódó-gú=sɛ=be.*
       dog=DEF   howling   howl-PPL=have =be.PST
       'The dog was howling.'

In the case of imperatives, the cognate object nominal may be omitted, as in *gɔ́ɔ́!* 'dance!' or *sɔ́ɔ́!* 'speak!' rather than *gɔ́ɔ́ gɔ́ɔ́* 'dance (a dance)!' or *sɔ̀ɔ̀ sɔ́ɔ́!* 'speak (a speech)!', though these too are grammatical.

13.1.6 Object marking

The preceding subsections have discussed valency and cognate objects of verbs. This section turns to how objects are marked are the VP.

Tommo So has one case marker, a L-toned palatal nasal clitic denoting that the noun in question is functioning as an object of the verb. If this object is direct (i.e. carries no postposition), it is usually either the **theme** or the **goal** of the verb. Other theta roles require postpositions to be added in the VP, though as the example in (634) above showed, object markers can be added to indirect objects as well after the postposition.

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. Here again, we see the Tédié dialect with a palatal nasal /ɲ/ while the dialect studied by Plungian (1995) uses a velar nasal /ŋ/.

Note that the object marker is also used as the copula, discussed in section 13.2, and as a focus marker even on non-objects, as discussed in section 15.1.

In terms of linear order, the object marker comes after the determiner and plural clitics, but before the universal quantifier *kέm*. It itself is L-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 when they are direct objects – essentially, human objects:

(661) a. *Séydu   mí=ǹ   jáá   ɲyὲ-mὲ-dὲ.*   (*mí)
Seydou   1SG.PRO=OBJ   meal   eat-CAUS-IMPF
'Seydou makes me eat [a meal].'

b. *Mí   náá^H=ǹ   ádúbá-gú=sε-m.*   (*mí náá)
1SG.PRO   mother=OBJ   think-PPL=have-1SG
'I am thinking about my mother.'

c. *Àràmátá=ǹ   bɔ̀^{n}bɔ́^{n} óbò-dὲ-m.*   (*Àràmátá)
Ramata=OBJ   candy   give-IMPF-1SG
'I will give Ramata candy.'

d. *Ú=ǹ   bέndὲ-dὲ-y.*   (*ú)
2SG.PRO=OBJ   hit-IMPF-1PL
'We will hit you.'

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. The examples in (662) recreate Plungian's data within the format used here, verified by my consultants:

(662) a. *Sáná(=ǹ)   Kàndá=ǹ   tágá.*
Sana=OBJ   Kanda=OBJ   show.IMPER
'Show Sana to Kanda.'

b. **Sáná=ǹ Kàndá tágá.*

c. **Sáná Kàndá tágá.*

On nouns other than kinship terms and proper names, the use of the object marker generally indicates focus, though this semantic difference is often not particularly salient.

(663) a. *[ὲnὲ^L náá]   íí   wómɔ(=ǹ)   bòò-gú=sε.*
goat   mother   child   3SG.POSS=OBJ   call-PPL=have
'The mother goat calls her baby.'

b. *Mí   ùlùm^L nɔ̀=mbé(=ǹ)   bὲnd-áa=be-m.*
1SG.PRO   children   this=PL=OBJ   hit-PFV=be.PST-1SG
'I hit these children.'

c. *Nàà^L pílu(=ǹ)   sέmὲ-dὲ-m.*
cow   white=OBJ   slaughter-IMPF-1SG
'I will slaughter a white cow.'

For more uses of the object marker in focus, see Chapter 15.

13.2 Copula, quasi-verbs and statives

This section deals with verbal elements that do not take the form of or follow the inflection patterns of standard verbs. I will first treat the copula in section 13.2.1, dealing only with its combination with nouns; I address adjectival predicates separately in section 13.4. I then turn to the various existential and locative quasi-verbs, a series of subminimal clitics, in section 13.2.2. In section 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 13.2.2.

13.2.1.1 Affirmative copula

The most common form of the copula is the 3sg, which takes the form =ǹ, identical to the object marker. It is added at the end of the NP after the determiner and plural marking but before any clause-final discourse 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 =ŋ̀. C-final stems obligatorily carry an epenthetic [u] before the copula, which is fronted to [i] due to the effects of the palatal.

(664) a. *Sɛ̀mmɛ̀lɛ̀-Tàŋá=le*   *émmé=le*   *náá=gɛ*
           Sɛmmlɛ-Taŋa=ASSOC   1PL.PRO=ASSOC   mother=DEF

           túmɔ́=ǹ,   *báá=gɛ*   *dɛ́y=ǹ.*
           one=COP   father=DEF   different=COP

           'Sɛmmɛlɛ-Taŋa and us, the mother is the same, the father is different.'

                                                                   [23.3:55]

       b. *Wó*   *kày*   *ɔ̀gɔ̀ᴸ*   *kɔ̀mbɔ́=ǹ.*
           3SG.PRO   TOP   Hogon   war=COP
           'That now, that was the war of the Hogons.'   [23.2:107]

       c. *Gɛ̀mí=ǹ.*
           agama.lizard=COP
           'It's an agama lizard.'

The same form of the copula can even be used for persons other than the 3sg in the presence of an overt pronoun, as in:

(665) a. *Mí   jàŋgù^L jáŋ-ínɛ́=ɲ̀.*
           1SG.PRO   studies   study-AGT.SG=COP
           'I am a student.'

       b. *Ú   mí   ánìgè^{HL}=ɲ̀.*
           2SG.PRO   1SG.PRO   friend=COP
           'You are my friend.'

       c. *Ànà-m^L nɔ̀=mbé   púlɔ̀-m=mbe=ɲ̀.*
           male-HUM.PL   this=PL   Fulani-HUM.PL=PL=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=ɲ̀* would mean 's/he is my friend'.

Alternatively, the copula can be conjugated specifically for other persons, which I summarize in the following table:

(666) 1sg   =m̀   1pl   =ỳ
       2sg   =ẁ   2pl   =ỳ
       3sg   =ɲ̀   3pl   =ɲ̀

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 =ɲ̀. They are distinguished by the fact that the 3pl 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:

(667) a. *Ú   gèmí=ẁ*
           2SG.PRO   agama.lizard=2SG.COP
           'You are an agama lizard.'

       b. *Émmé   kɛ́m   nɔ̀nú   jàŋgù^L jáŋ-ím=mbe=ỳ.*
           1PL.PRO   all   here   studies   study-AGT.PL=PL=1PL.COP
           'We are all students here.'

       c. *Bé   Kòìgé   sàà^L ùlùm^L=mbe=ɲ̀.*
           3PL.PRO   Koige   sister   children=PL=COP
           'They are Koige's matrilinear children.'   [23.3:46]

In simple expressions like 'It's me!' or 'It's you!', the 3sg (basic) clitic is added to the relevant pronoun, yielding *mí=ǹ* or *ú=ǹ*, respectively. In texts, this formation with the 3sg 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:

(668) a. *Wó   yàà nɛ́ɛ́, Tó~tóŋó=mɔ   tígɛ́=gɛ   wó=ǹ.*
           3SG.PRO TOP now Tongo~Tongo=POSS surname=DEF 3SG.PRO=COP
           'That now, that is Tongo-Tongo [village]'s last name.'   [23.3:14]

   b. *Émmé=ǹ   gàá   m̀bɛ̂=gɛ=diyɛ   gòrò^L   bánu=gɛ*
       1PL.PRO=OBJ   a.lot   love.REL=DEF=for hat   red=DEF

       émmé   bɛ́l-ɛ̀=gɛ   wó=ǹ.
       1PL.PRO   find-PFV.REL=DEF   3SG.PRO=COP

       'It was because he [our father] loved us very much that
       we got the red hat.'   [23.2:34]

For the use of the copula in questions, see section 15.2.

Finally, we find what I analyze as an allomorph of the copula, *=y*, occurring in the simple perfective form of some verbs. In this function, it takes the place of the auxiliary verb *=wɔ*. For example:

(669) a. *Sáná   jàndùlù^L   mànd-áa=y.*
           Sana   donkey   get.lost-PFV=COP
           'Sana's donkey got lost.'

   b. *Mí   báá^H   yím-aa=y.*
       1SG.PRO   father die-PFV=COP
       'My father died.'

I have not been able to discern any meaning differences between this and a form with the auxiliary *=wɔ*.

13.2.1.2 Negative copula

The negative equivalent of *=ǹ* is *=lɛ*. This is nearly homophonous with a negative suffix on adjectives, but this latter is H-toned and causes tone lowering on the stem, while the negative copula clitic is toneless and does not cause any tonal change on the preceding stem. See section 5.5 for a discussion of adjectival negation. Adjectival predicates will be addressed in this chapter in section 13.4.1.

This negative clitic is conjugated for subject agreement in the same way as the affirmative clitic, except that the third person subjects are null and the agreement suffixes are toneless:

(670) 1sg =*lɛ-m* 1pl =*lɛ-y*
       2sg =*lɛ-w* 2pl =*lɛ-y*
       3sg =*lɛ*   3pl =*lɛ*

Once again, the 3sg and 3pl have the same form (null) and they are differentiated in context by the fact that the 3pl follows the plural clitic:

(671) *gɛ̆m=lɛ*   vs. *gɛ̆m=mbe=lɛ*
       'He is not an agama lizard'   'They are not agama lizards.'

The following are examples of the negative clitic after nouns and pronouns:

(672) a. *Dɔ̀gɔ̀-nɔ́=lɛ-m.*
           Dogon-HUM.SG=NEG.COP-1SG
           'I am not Dogon.'

       b. *Émmé   dɔ̀gɔ̀-ḿ=mbe=lɛ-y.*
           1PL.PRO   Dogon-HUM.PL=PL=NEG.COP-1PL
           'We are not Dogons.'

       c. *Nɔ̀ɔ́=lɛ.*
           this=NEG.COP
           'It's not this.'

Textual examples include:

(673) a. *Nɔ̀ɔ́   íí   ǹdɛ́m=mɔ=gɛ   mìyɛ̀ᴸ=gɛ=lɛ=ma=wa.*
           this   child LOG.SG.PRO=POSS=DEF   voice=DEF=NEG.COP=or?=QUOT
           '[She asked] is this not my child's voice?'   [23.5:32]

       b. *Kàndà-Nɛ̆m=lɛ.*
           Kanda-Nɛm=NEG.COP
           'Wasn't it Kanda-Nɛm?'   [23.3:84]

The example in (673a) shows how discourse particles follow the copula.

13.2.2 Existential and locative quasi-verbs and particles

Tommo So has a complex set of existential and locative quasi-verbs, which I define as subminimal verbs that typically cliticize to the preceding word and do not follow

regular inflection. Unlike in Jamsay (Heath 2008), these quasi-verbs are not sensitive to animacy. Rather, they tend to encode pragmatic information such as certainty and spatial orientation. The main existential and locative quasi-verbs are as follows, all given in the affirmative present:

(674) a. *wɔ* 'be, be in'

b. *yɔ̂* 'be, be in' (not present, but certain)

c. *kɔ̂* 'be, be in' (present, can attest to it)

d. *tóɔ̀* 'be in(side)'

I will address each in turn.

13.2.2.1 *wɔ*

The first quasi-verb, *=wɔ*, is the most general. We have already seen it as an auxiliary verb in the present perfective and in the progressive (see Chapter 12), as well as in adjectival predication, first introduced in section 5.5 and discussed more in-depth later in this chapter (section 13.4). It can be existential ("there is"), a locative quasi-verb ("be (somewhere)"), or simply a copula-like quasi-verb used to predicate adverbs and adjectives. For more on this last use, see section 13.4.

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:

(675) a. *Ɔ̀lù^L pédu=gɛ nìmbáà=wɔ.*
field sheep=DEF over.there=be
'The antelope is over there.'

b. *Bándáŋkálá=gɛ=nɛ bɛ̀lú=mbe jóó-nì=wɔ-ɛ̀ⁿ.*
courtyard=DEF=OBL animal=PL many-ADV=be-3PL
'There are a lot of animals in the courtyard.'

The existential use of the quasi-verb *=wɔ* is essentially the same as its locative quasi-verb use, because a PP phrase is always obligatory with *=wɔ*. Thus, to say simply 'there is an antelope' without specifying a location, *=wɔ* cannot be used (**ɔ̀lù^L pédu=wɔ*), while other quasi-verbs can. One hypothesis as to why this could be is that the other quasi-verbs tend to encode more specifics of location (proximal, distal), while *=wɔ* is neutral in this regard.

The following examples show *=wɔ* as a locative quasi-verb with a range of PPs. Note that these PPs do not have to be strictly locative themselves, as shown in (676c–d) with the associative clitic.

(676) a. *Íí   ǹdɛ́m=mɔ   yàbáá=wɔ=ma=wa.*
child   LOG.SG.PRO=POSS   where=be=or?=QUOT
'[She asked] where is my child?'   [23.5:18]

b. *Òlù^L pédu   gìnɛ́   ònnù^L=nɛ=wɔ.*
bush   sheep   house   back=OBL=be
'A deer is behind the house.'

c. *Yàa-ná,   wó   íí   wómɔ=gɛ=le*
female-HUM.SG   3SG.PRO   child   3SG.POSS=DEF=ASSOC

wó   [ígè yàà-nà]^{HL} ìì^L=gɛ=le=wɔ.
3SG.PRO   co-wife   child=DEF=ASSOC=be

'[The] woman, she was (is) with her child and the child of her co-wife.'
                                                                [23.5:5]

d. *kìdɛ́   kɛ́m   yàá-m=le=wɔ-ɛ̀^{n},   kìdɛ́   kɛ́m*
thing   all   female-HUM.PL=ASSOC=be-3PL   thing   all

líí-m=le=wɔ-ɛ̀^{n}
children-HUM.PL=ASSOC=be-3PL

'...they [the animals] were all with wives, they were all with children.'
                                                                [23.6:1]

In section 12.7.2.2, we saw that the negative form of *=wɔ* is a suppletive form *òndú*. Both *=wɔ* and *òndú* inflect normally for subject agreement, with both taking the suffix *-ɛ̀^{n}* for the 3pl, as in:

(677) *Òlù^L pédu=mbe   nɔ̀nú   ondí-ɛ̀^{n}.*
bush   sheep=PL   here   be.NEG-3PL
'There are no deer here.'

The final vowel of *òndú* becomes [i] before the 3pl suffix.

In the past, the form of *=wɔ* is suppletive *=be*, which can sometimes be reduplicated (*be~be*). Speakers alternate as to whether the 3pl form of *be* is [bi-ɛ̀^{n}] or [be-ɛ̀^{n}]. It seems that as a copular quasi-verb, [be-ɛ̀^{n}] is the preferred form, but as an auxiliary, [bi-ɛ̀^{n}] is preferred, as suggested by these two consecutive entries from elicitation:

(678) a. *Yáá   dìgè^L ɔ̀m^L pàdíyɛ́=mbe   gìnè-ý*
yesterday   evening   mosquito   bad=PL   house-DIM

ḿmɔ=nɛ   yé=be~be-ɛ̀^{n}.
1SG.POSS=OBL   EXIST=RED~be.PST-3PL

'Last night, there were bad mosquitoes in my house.'

b. *Ú=ǹ*   *kɛ́r-aa=bi-ɛ̀ⁿ?*
2SG.PRO=OBJ   bite-PFV=be.PST-3PL
'Did they bite you?'

The exact behavior of the vowel seems to vary by speaker.

The past negative takes the suffix *-lí* (sometimes *-le*, perhaps particularly as an auxiliary), or *-nne* in the 3pl. Tonally, there is some variation between treating the suffix as H-toned and the quasi-verb as L and treating the whole complex as toneless.

(679) a. *Bǎy=gɛ,*   *mómbu=gɛ*   *bày^L=gɛ*   *jɔ̀mɔ́*   *be~be-li.*
     day=DEF   meeting=DEF   day=DEF   hare   RED~be.PST-NEG
     '[That] day, the day of the meeting, Hare wasn't there.'   [23.6:5]

b. *Jùgù^L gál-è=gɛ=le*   *bé*   *Àmèríku=baa*   *be-nne.*
     week   pass-PFV.REL=DEF=ASSOC   3PL.PRO   America=LOC   be.PST-NEG.3PL
     'They were not in America last week.'

In the future, *=wɔ* becomes the regularly inflected verb *bìyɛ́*, resulting in forms like:

(680) a. *Yɔ̀gó*   *Dúmásá=baa*   *bíyɛ̀-dɛ̀-m.*
     tomorrow   Douentza=LOC   be-IMPF-1SG
     'Tomorrow I will be in Douentza.'

b. *Yɔ̀gó*   *Dúmásá=baa*   *bìy-éélè.*
     tomorrow   Douentza=LOC   be-NEG.IMPF
     'Tomorrow s/he will not be in Douentza.'

13.2.2.2 *kɔ̂*

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. It has the same range of uses as *=wɔ*, except for the copular use, but the restriction is that the speaker must be present in the situation he or she is describing; that is, it has a proximal sense built into it. Standing in America, one could not use *=kɔ̂* 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 *=kɔ̂*. For instance:

(681) a. *Íbɛ́=nɛ*   *èlèkèlè^L*   *tìrú=kɔ̂.*
     market=OBL   peanut   pile=be.PROX
     'There are piles of peanuts at the market.'

b. *Òlù^L*   *pédu=gɛ*   *nɔ̀nú=kɔ̂.*
     bush   sheep=DEF   here=be.PROX
     'The deer is here.'

In (681a), the speaker must be at the market to make the statement using =kɔ̂. In (681b), by using the proximal deictic adverb 'here', the only correct quasi-verb is =kɔ̂; =wɔ and =yɔ̂ are not possible.

Phonetically, the vowel of =kɔ̂ is slightly longer than a regular short vowel in order to host the falling tone. This results in a pronunciation like [kɔ̂ˑ]. It is clear that this is a prolongation rather than phrase-final shortening (section 3.4.4), since the cliticization of the past clitic =be to the quasi-verb yields [kɔ́bè], not [kɔ̂ɔbe].

In the negative, the distinction between =wɔ and =kɔ̂ is collapsed, and the same form òndú is used. Compare (681b) to the following:

(682) Òlù^L   pédu=gɛ   nɔ̀nú   òndú.
       bush   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.

In the past, either kɔ́=bè (with the falling tone redistributed onto the past clitic) or simply (be~)be can be used. This is shown in the following:

(683) a. Òlù^L   pédu=gɛ   nɔ̀nú   kɔ́=bè.
           field   sheep=DEF   here   be.PROX=be.PST
           'The antelope was here.'

       b. Òlù^L   pédu=gɛ   nɔ̀nú   yé=bè^L.
           field   sheep=DEF   here   EXIST=be.PST
           (=a)

Consultants report no difference in meaning. The form in (683b) additionally carries the existential particle before the quasi-verb; see section 13.3 below.

Like the present negative, there is no difference between the past negative of =kɔ̂ and that of =wɔ. Both are be-li.

Unlike =wɔ, the quasi-verb =kɔ̂ can be used without a PP, as in:

(684) Mí=kɔ̂-m.
       1SG.PRO=be.PROX-1SG
       'I'm here.'

This could be due to the fact that it has some locative information (namely, a proximal sense) already built into it.

13.2.2.3 yɔ̂

The uses of =yɔ̂ are the same as =kɔ̂ (locative and existential), but the pragmatic situation differs. Consultants report to me that one must be sure of the statement to

use =yɔ̂, but that physical proximity is not required. For example, one can make the statement in (681a) above using =yɔ̂ even when not at the market so long as one is sure that there are peanut piles there (e.g. they are always there, someone has been to the market and reported that they are, etc.). Since =kɔ̂ is used for nearby locations, =yɔ̂ in contrast takes on a more distal (but equally certain) meaning. For instance:

(685) Òlùᴸ pédu nìmbáà=yɔ̂.
       bush sheep over.there=be.DIST
       'The antelope is over there (and I'm sure of it).'

In contrast, if =wɔ were used in the place of =yɔ̂, the certainty of the statement would be diminished. However, just how certain a speaker has to be to use =yɔ̂ is not clear, considering that its use is grammatical embedded beneath 'not know':

(686) Òlùᴸ pédu=gɛ nìmbáà=yɔ́=mà ínnè-m.
       bush sheep=DEF over.there=be.DIST=or? know.NEG-1SG
       'I don't know if the antelope is over there.'

The more general =wɔ is also grammatical in this case. The key aspect distinguishing =yɔ̂ from =kɔ̂ seems to be spatial relations.

    The past form of =yɔ̂ is completely collapsed with that of =wɔ; there is no form *yɔ́=bè, corresponding to kɔ́=bè for the proximal quasi-verb. Consider the following exchange:

(687) S: Est-ce que émmɛ=baa kó=yɔ̂?
           Q.FR 1PL.POSS=LOC that.DD=be.DIST
           'Does that exist where we are?'

       E: Émmɛ=baa yé=bèᴸ. Pà~pád-ì-ɛ̀ⁿ.
           1PL.POSS=LOC EXIST=be.PST RED~leave-PFV.FOC-3PL
           'It was where we are. They <u>abandoned</u> [it].'   [23.4:25-26]

The form yé=bèᴸ is used, with the existential particle (section 13.3) paired with the general past quasi-verb =be.

    Like =kɔ̂, =yɔ̂ can be used existentially without a PP. This can have an idiomatic reading, as in yɔ́=mà? 'is he alive?' literally 'is he [there]?'.

13.2.2.4 tóô

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. The quasi-verb tóô refers specifically to something being inside of something else, whether that be physically or metaphorically. Notice that unlike the other

quasi-verbs, its vowel is generally long. In the affirmative, *tóò* is usually propped up by the existential proclitic *yé=* or *kó=*, which will be treated in depth in section 13.3. In the relative clause in (688c), however, this is not necessary. Examples include:

(688)   a.   *Tòndòó=gɛ=nɛ*   *díí*   *yé=tòò^L*.
              water.jar=DEF=OBL   water   EXIT=be.in
              'There is water in the water jar.'

        b.   *Nɛ́ɛ́*   *kày*   *Sɛ̀mmɛ̀lɛ̀-Tàŋá*   *yé=tòò^L*   *émmé*   *yé=tòò^L-y*.
              now   TOP   Sɛmmɛlɛ-Taŋa   EXIST=be.in   1PL.PRO   EXIST=be.in-1PL
              'Now, there is Sɛmmɛlɛ-Taŋa and us in [that group].'   [23.3:64]

        c.   *úndu=nɛ*   *nàmà^L*   *tóò=mbe=lɛ*   *dóm*
              forest=OBL   meat   be.in.REL=PL=NEG.COP   seat

              bílɛ̀-dɛ̀=ma=wa.
              be.possible-IMPF=or?=QUOT

              '[I] ask if the animals who are not in the forest can sit
              [in that heat].'   [23.6:15]

The example in (688a) is a canonical usage referring to water being physically in a container. In (688b), *tóò* is used figuratively to refer to two villages (Sɛmmɛlɛ-Taŋa and Tongo-Tongo, here, 'us') being part of a mutual lineage; both are "in" that lineage, and hence *tóò* can be used. In (688c), *tóò* is in a relative clause 'animals (meat) that are in the forest'. Here again *tóò* is used literally as a locative.

The other locative verbs collapse to *òndú* in the negative, but not *tóò*. This quasi-verb inflects for the negative by adding the suffix -*lɛ́*, which overwrites the stem with {L}. For instance:

(689)   *Nɛ́ɛ́*   *sàw...*   *Sɔ̀ɔ̀-Dámmá*   *tòò-lɛ́*   koy.
         now   Saw   Sɔɔ-Damma   be.in-NEG   EMPH
         'Now, Saw... Sɔɔ-Damma (village name) is not a part of that!'   [23.3:65]

This example continues the discussion of who is and is not in the lineage of the village of Tongo-Tongo.

Also unlike the other locative quasi-verbs, which collapse to =*be* in the past, *tóò* inflects for the past by cliticizing =*be* to its stem, yielding:

(690)   a.   *Nɛ́ɛ́*   *Bènjù-ámbîɛm*   *wàà rù^L*   *ɔ̀gɔ́*   *tóò=be=le*   *kɛ́m*,
              now   Benju-Ambiem   time   Hogon   be.in.REL=be.PST=ASSOC   all
              'Now, during the time when Benju-Ambiem was Hogon...'   [23.2:80]

b. *Tòndòó=gɛ=nɛ*   *gùŋjú*   *yé=tòò^L=be.*
     water.jar=DEF=OBL   toad   EXIST=be.in=be.PST
     'There was a toad in the water jar.'

This fact suggests that on the scale of verbality, *tóò* may be a bit higher than at least =*wɔ* and =*yɔ̂*, perhaps putting it closer to a stative. Further evidence that *tóò* is more verbal than the others is that it can be inflected as an agentive noun, albeit irregularly:

(691)   *gìrè^L*   *tóó-nɛ́*
       front   be.in-AGT.SG
       'winner'

Usually, the agentive suffix carries a vowel /i/, but not with *tóò*. Even though it is more verb-like, it is still not a regular verb.

The past negative is formed by inflecting =*be* for negation (*be-li*).

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 three most common of these are *dáà* 'be seated' (possibly related to *dànn-íyɛ̂* 'sit down'), *íŋɛ̀* 'be standing' (related to *íŋɛ̂-ndɛ́* 'stop, stand (sthg) up'), and *dábà* 'be lying down' (related to *dààb-íyɛ̂* 'lie down').

These three 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 {HL} overlay. Subject suffixes are added directly with no auxiliary verbs. This form is schematized as follows:

(692)   <u>Affirmative present stative</u>
       CV(Red:L)~Verb{HL}

When the subject suffix adds a semi-vowel coda, a long stem vowel will shorten to avoid a superheavy syllable. Present paradigms for all three stative verbs are given below:

(693)   a.   Affirmative present of *dáà*

1sg	*dà~dáà-m*	1pl	*dà~dâ-y*
2sg	*dà~dâ-w*	2pl	*dà~dâ-y*
3sg	*dà~dáà*	3pl	*dà~dá-ɛ̀^{n}*

b. Affirmative present of *íŋὲ*

1sg	*ì~'íŋὲ-m*	1pl	*ì~'íŋὲ-y*
2sg	*ì~'íŋὲ-w*	2pl	*ì~'íŋὲ-y*
3sg	*ì~'íŋὲ*	3pl	*ì~'íŋὲ-ὲⁿ*

c. Affirmative present of *dábà*

1sg	*dà~dábà-m*	1pl	*dà~dábà-y*
2sg	*dà~dábà-w*	2pl	*dà~dábà-y*
3sg	*dà~dábà*	3pl	*dà~dábà-ὲⁿ*

The apostrophe in the forms in (693b) represents a glottal stop.

These stative verbs are used in the present to describe the current state of something. For instance:

(694) a. *Jùgù^L* *gál-è=gὲ=le*   *mí*   *báá^H* *mòbìlù^L=gὲ*
week   pass-PFV.REL=DEF=ASSOC   1SG.PRO   father   car=DEF

sòlùmɔ́=gὲ=nὲ   *dὲb-áa=be.*   *Nὲɛ́*   *móbílu=gὲ*   *ì~'íŋὲ.*
sand=DEF=OBL   get.stuck-PFV=be.PST   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. *Ámìru=gὲ*   *dà~dáà.*
chief=DEF   RED~be.seated
'The chief is seated.'

In place of reduplication, these stative verbs can also be propped up by the existential particles *kó=* and *yé=*. For examples and discussion, see section 13.3.

The negative takes a H-toned harmonic version of the *-lV* suffix seen in regular negative inflection, and the stem takes a {L} overlay:

(695) a. *dàà-lá*   's/he is not sitting'
     b. *ìŋὲ-lὲ́*   's/he is not standing'
     c. *dàbà-lá*   's/he is not lying down'

In the 3pl, the suffix becomes *-nnὲ́*, regardless of the stem vowel. In the case of *dáà*, the second half of the long vowel becomes [ɛ] before this suffix:

(696) a. *dàὲ-nnὲ́*   'they are not sitting'
     b. *ìŋὲ-nnὲ́*   'they are not standing'
     c. *dàbà-nnὲ́*   'they are not lying down'

In the past, the clitic =*be* is added after the stative stem, and this clitic is then inflected for subject and negation.

(697) a. *ǹjó=gɛ=nɛ*   *dà~dábà=be-m.*
     mat=DEF=OBL   RED~be.lying.down=be.PST-1SG
     'I was lying on the mat.'

     b. *Gìnè-ý=nɛ*   *wàgàdù^L*   *mí*   *yó-è=gɛ=le*
     house-DIM=OBL   time   1SG.PRO   enter-PFV.REL=DEF=ASSOC

     ɔgɔ̀-nɔ́=gɛ   *dà-dáà=be.*
     chief-HUM.SG=DEF   RED~be.seated=be.PST

     'When I went into the house, the chief was sitting down.'

     c. *Kɔ̀nɔ́*   *dáà=b-àà*   *Dèŋènè-Dáá=nɛ*   *wɔ́-gú*
     there.DD   seated=be.PST-PFV   Dɛŋɛnɛ-Daa=OBL   be-PPL

     Dèŋènè-Dáá   *ìyày^L,*   *yàà-nà^L*   *j-ɛ̀.*
     Dɛŋɛnɛ-Daa   girl   female-HUM.SG   marry-PFV.L

     '[Having] settled there, being in Dɛŋɛnɛ-Daa, he married a girl,
     a woman from Dɛŋɛnɛ-Daa.'   [23.3:75]

Example (697c) is interesting in a number of ways. First, *dáà* in this case is being used metaphorically to mean 'settled'. Second, it lacks its initial reduplicant. Third, we see here the only example of which I am aware of the past clitic =*be* taking the perfective suffix -*aa*. I have confirmed this interpretation of the data with consultants.

     Texts show that the stative stems can form participles with the suffix -*gú*. Here, the tone is no longer {HL} but instead follows the regular tone rules of verbs, with *dáà* 'be seated' and *dábà* 'be lying down' taking /LH/ due to their initial voiced stops and *íŋɛ́* taking /H/. It is likely that the {HL} form seen in the present is the result of grammatical overlays 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 15.1.4). Examples of participial statives include:

(698) a. *Nìmbáà*   *íŋɛ́-gú*   *mí=le*   *sɔ̀ɔ́*   *sɔ́-aa=be.*
     over.there   stand-PPL   1SG.PRO=ASSOC   speech   speak-PFV=be.PST
     'He spoke to me while standing over there.'

     b. *Nɛ́ɛ́...*   *yàa-ná*   *sɛ̀-lɛ́* ⇒   *yém*   *dàà-gú...*
     now...   female-HUM.SG   have-NEG   like.that   sit-PPL

     wɔ́-gú   *nɛ́ɛ́*   *gìnɛ́=gɛ*   *wó*   *úd-ɛ̀=gɛ.*
     be-PPL   now   house=DEF   3SG.PRO   build-PFV.REL=DEF

     'Now, he had no wife... being settled (seated) like that, being there now,
     he built a house.'   [23.3:6]

Here again, 'sitting' is being used figuratively to mean 'settled'.

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 imperfective of =wɔ 'be'.

First, the verb *bìlɛ́* 'become' is morphologically regular, following the same rules of inflection laid out in the last chapter. However, the object of 'become' (what it is that the subject becomes) is left unmarked, even if it is a human noun. Consider the following short passage highlighting the use of 'become':

(699) a. *Àmàdú   y-àà=bé-w   ííyé?   Yàa-ná   **bìl-áa=wɔ**.*
           Amadou   see-PFV=be.PST-2SG   today   female-HUM.SG   become-PFV=be
           'Did you see Amadou today? He turned into a woman.'

      b. *Ííyé   dìgɛ̀ᴸ   nàmᴸ hákɩ̀lɛ̀ káná.   Kó   dògò*
          today   evening   sun   care   do.IMPER   that.DD   but

          *ú=lɛ   yàa-ná   **bílɛ̀-dɛ̀-w**.*
          2SG.PRO=also   female-HUM.SG   become-IMPF-2SG

          'Watch out tonight, otherwise you will also become a woman.'

      c. *Wó   ánìgɛ̀ᴴᴸ? Wó   gay   yàa-ná   **bìlɛ̀-lí**.*
          3SG.PRO friend   3SG.PRO TOP   female-HUM.SG   become-NEG.PFV
          'His friend? As for him, he didn't turn into a woman.'

These three lines show three different inflections (present perfective, future imperfective, and negative perfective), all regular. It is ungrammatical to mark *yàa-ná* with the object clitic *=ǹ*.

This verb involves a change of state. On the opposite end is *bìyɛ́* 'remain', which involves a consistency of being. We have already seen this verb as the future form of =wɔ (see examples (680), (599), etc.). The fact that this is its own verb stem and not just an inflection of =wɔ comes from the fact that it can take derivational suffixes (as in *bìyɛ́-mɔ́* 'make someone remain'), which most theories of morphology would rule out if *bìyɛ́* were an inflected form. More importantly, it can itself be inflected for tenses and aspects other than the future imperfect.

(700) a. *Íí   wó   tùmáá bìy-ée   m̀bɛ́=lɛ.*
          child 3SG.PRO   alone   stay-NF   want=NEG.COP
          'The child doesn't want to stay by himself.'

      b. *Gìnɛ̀-ý=baa   bìy-áa=wɔ.*
          house-DIM=LOC   remain-PFV=be
          'She stayed at home.'

Nonetheless, it is still closely related to the quasi-verb, judging by the Tommo So translation offered for the following phrase:

(701)   *Gìnè-ý=baa=be-m.*
        house-DIM=LOC=be.PST-1SG
        'I stayed home.'

Rather than using a past inflected form of the stem *bìyɛ̂*, the speaker reverts to the use of the past clitic *=be*.

13.2.3.3 Irregular verbs

There are two more verbs that are highly irregular in Tommo So. These are *m̀bɛ̂* 'like, love' (and interrelated stem *námá* 'want') and *íí* '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 Chapter 18.

First, *m̀bɛ̂*. In the present, this verbal stem behaves morphologically as a suffixed adjective, taking the adverbial suffix *-go* and predicating with the quasi-verb *=wɔ*. For example:

(702)   *Ú=ǹ*   *m̀bɛ̂-go=wɔ-m.*
        2SG.PRO=OBJ   like-ADV=be-1SG
        'I love/like you.'

The negative present also follows the pattern of adjectives, taking the negative copula (instead of the suffix) *=lɛ*. Thus, the negative equivalent of (702) is *Ú=ǹ m̀bɛ̂=lɛ-m* 'I don't love/like you.' Part of the irregularity of this verb is that in the affirmative, the same stem *m̀bɛ̂* can also be used to mean 'want', but in the negative, either *m̀bɛ̂=lɛ* or *nàmà-lɛ̂* (this time with the suffix) can be used to mean 'don't want'. The affirmative equivalent *námá-go* is vanishingly rare. In the past, the present form (*m̀bɛ̂* if affirmative and *m̀bɛ̂-lɛ̂* if negative, the copula converted into a H-toned suffix) is suffixed with *-go* and then combined with the past quasi-verb *=be*:

(703) a. *Kùyɛ̂   jáá   m̀bɛ́-lɛ̂-go=be-m   mɛ   nìmɛ̌m   m̀bɛ̂-go=wɔ-m.*
            before meal want-NEG-ADV=be.PST-1SG but right.now want-ADV=be-1SG
            'Before, I didn't want to eat, but now I do.'

      b. *Kùyɛ̂   jáá   m̀bɛ̂-go=be-m   mɛ   nìmɛ̌m   m̀bɛ̂=lɛ-m.*
            before meal want-ADV=be.PST-1SG but right.now want-NEG.COP-1SG
            'Before I wanted to eat, but now I don't (anymore).'

There is no separate future form; present forms fill this role.

The verb 'know' is even more irregular. Its stem form appears to be either *íí* or *íg*, though with the irregularity across the paradigm, it would be difficult to decide upon a single base. Like *m̀bɛ́* 'like', it generally takes the suffix *-go*, and in the present tense, this /g/ is geminated, exactly as we see in [ɔ́ggwɔ] 'it's hot' from underlying *ɔ́gu-go=wɔ*. It is this fact that suggests that the stem has a /g/ in its underlying form. Examples of 'know' in the present tense include:

(704) a. *Àn-nà^L*   *nɔ́=ǹ*   *íg-go=wɔ-m.*
   male-HUM.SG this=OBJ know-ADV=be-1SG
   'I know this man.'

  b. *Ú*   *íg-go=wɔ*   *Séydu=mbe=ǹ* *ú*   *ánìgè^{HL}=mbe=ǹ.*
   2SG.PRO know-ADV=be Seydou=PL=OBJ 2SG.PRO friend=PL=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 *íí*.

(705) *Bàmàkó* *íí-go=be-m.*
  Bamako know.PST-ADV=be.PST-1SG
  'I used to know Bamako.'

We find further irregularity in the negative. The negative base for all tenses is *ínnɛ*, which looks as though it contained the suffix *-lɛ* at one point in its history before it assimilated. What is causing the nasality is unclear, given the affirmative forms.

(706) a. *Ú=ǹ*   *ínnɛ-m.*
   2SG.PRO=OBJ know.NEG-1SG
   'I don't know you.'

  b. *Àná-m=mbe*   *jàà^L* *síré^H* *ínnɛ-ɛ̀^{n}*
   male-HUM.PL=PL meal cook know.NEG-3PL
   'Men don't know how to cook.'

  c. *ɔ̀gɔ̀-nɔ́=gɛ*   *wó=ǹ=ma*   *ínnɛ-go=be-m.*
   chief-HUM.SG=DEF 3SG.PRO=COP=or? know.NEG-ADV=be.PST-1SG
   'I didn't know that he was the chief'

13.3 Existential particles *yé=* and *kó=*

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). Tommo So diverges from the other languages in that a second such particle, *kó=*, is also attested. These particles are used especially before quasi-verbs like *sɛ* 'have'

and *tóò* 'be in' when there is no focused constituent in the clause – it is 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. This would be consistent with the fact the particle can never be placed on a verb that carries focus itself.

The difference between the two particles is again one of proximity. *Kó=* can only be used if one is close to the scene described, and *yé=* is used otherwise. To my knowledge, Tommo So is the only Dogon language displaying such a system.

The existential particles are most often seen with *sɛ* 'have' and *tóò* 'be in', as the following examples show:

(707) a. *Ígɛ́*   *yé=sɛ̀^{L}-m.*
           husband   EXIST=have-1SG
           'I have a husband.'

           Ígɛ́   *kó=sɛ̀^{L}-m.*
           husband   EXIST=have-1SG

           'I have a husband (and he is close to me right now).'

       b. *Tòndòó=gɛ=nɛ*   *gámmá*   *yé=tòò^L.*
           water.jar=DEF=OBL   cat   EXIST=be.in
           'There is a cat in the water jar.'

           Tòndòó=gɛ=nɛ   *gámmá*   *kó=tòò^L.*
           water.jar=DEF=OBL   cat   EXIST=be.in

           'There is a cat in the water jar (I know because I'm looking at it right now).'

These examples also demonstrate the {L} tone overlay put on verbs following the existential particle. Compare this with the question, *Tòndòó=gɛ=nɛ ŋ́jɛ́=ǹ tóò?* 'What is in the water jar?' 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 markers are also absent in negative clauses. For example, contrast (708a) with (708b) below, two consecutive sentences from a text comparing the lineage of different villages:

(708) a. *Nɛ́ɛ̂*   *kay*   *Sɛ̀mmɛ̀lɛ̀-Tàŋá*   *yé=tòò^L*   *émmé*   *yé=tòò^L-y.*
           now   TOP   Sɛmmɛlɛ-Taŋa   EXIST=be.in   1PL.PRO   EXIST=be.in-1PL
           'Now, there is Sɛmmɛlɛ-Taŋa and us.'

       b. *Nɛ́ɛ̂*   *sàw...*   *Sɔ̀ɔ̀-Dámmá*   *tòò-lɛ̂*   *kòy.*
           now   Saw   Sɔɔ-Damma   be.in-NEG   EMPH
           'Now, Saw... Sɔɔ-Damma is not a part of that!'   [23.3:64–65]

In this example, the lack of the existential particle on the negation could be seen to tie in with focus on the village name *Sɔɔ-Damma*. For more on the quasi-verb 'have', see section 13.5.

The existential particle is also usually absent when there is an adverb (or a numeral with the adverbial *-go* suffix) present. For example:

(709) a. *Mí*   *báá^H*   *nìŋè^L*   *mí=ǹ*   *ɲyὲ-m-ì=gὲ*
         1SG.PRO   father   sauce   1SG.PRO=OBJ   eat-CAUS-PFV.REL=DEF

         ísu   *kàlé*   *sὲ-lὲ-go*   *(yé=)tóò$^{(L)}$=be.*
         fish   limit   have-NEG-ADV   (EXIST=)be.in=be.PST

         'The sauce my father made me eat had too many fish in it.'

     b. *Nùmɔ́*   *néé-go=sɛ-m.*   *(*yé=)*
        arm   two-ADV=have-1SG
        'I have two arms.'

In (709a), the existential particle is grammatical but not obligatory. In (709b), it is ungrammatical. Consultants report that it can only be used with inanimate objects in this case, not body parts. Thus, the near equivalent of (709b) below is grammatical with and without the existential particle:

(710) *Gìnɛ́*   *néé-go*   *(yé=)sɛ$^{(L)}$-m.*
      house   two-ADV   (EXIST=)have-1SG
      'I have two houses.'

The particles are typically not used in object relative clauses, though we do see them used in subject relatives. Compare (711a) and (711b):

(711) a. *Àn-ná=gɛ*   *mòtò^L*   *sɛ́=gὲ*   *mí*
         male-HUM.SG=DEF   moto   have.REL=DEF   1SG.PRO

         báá^H=mɔ-go=be.
         father=POSS-ADV=be.PST

         'The moto that the man has used to belong to my father.'

     b. *Súgɔ́... ǹdὲ^L*   *nàá*   *yé=sὲ^L...*
        sugɔ   person   cow   EXIST=have.REL
        'The *sugɔ*... [it was for] people who have cows...'   [23.4:14]

While we may think that in subject relatives the existential is obligatory, other examples show that this is not the case:

(712) *Nɛ́ɛ̂*   *súgɔ́=gɛ*   *nɛ̂ɛ̀...*   *yìmú*   *kɛ́m=nɛ*
now   *sugɔ*=DEF   now   death   all=OBL

kánà-dìŋ=ma ⇒ ...   *ma*   *ǹdɛ̀^L*   *bɛ̀lú*   *sɛ̂=mɔ̀=ǹ.*
do-IMPF.3PL=or?   or?   person   animal   have.REL=POSS=OBJ

'Now, the *sugɔ* dance, would they do it for any death or... or was it [just] for people who had animals?'   [23.4:11]

Here, *ǹdɛ̀^L bɛ̀lú sɛ̂* 'people who have animals' is also a subject relative, but no existential particle is required.

Of the quasi-verbs, only *tóò* 'be in' takes the existential particle in the present tense. The past quasi-verb *=be* often takes such a particle, but never its present tense counterparts. Consider the following exchange, repeated from (687):

(713) S: Est-ce que   *émmɛ=baa*   *kó=yɔ̂?*
Q.FR   1PL.POSS=LOC   that.DD=be

'Does (did) that exist where we are?'

E: *Émmɛ=baa*   *yé=bè^L.*   *Pà-pád-ì-ɛ̀^n.*
1PL.POSS=LOC   EXIST=be.PST   RED~leave-PFV.FOC-3PL

'It was (used to be) where we are. They <u>abandoned</u> [it].'   [23.4:25–26]

The *kó* in S's question should not be confused with the existential particle *kó*, which causes tone lowering on the following quasi-verb. Here, it is a discourse definite pronoun referring back to some funeral practices mentioned just prior to the question. E's response uses a past tense quasi-verb, which takes the existential particle *yé=*. After this initial verb, the verb 'leave' in the next clause is overtly focused. It is possible that the existential particle in the first clause is being used to focus the tense change (present to past).

In Tommo So, the existential particle can be used before regular verbs as well. We see this in texts, with examples like:

(714) *Wó-*   *wárá*   *nàà-m^L=gɛ*   *yànn-áa*
3SG.PRO   spear   master-HUM.PL=DEF   go.around-PFV

gò-ì-ɛ̀^n=yo   *màlbá*   *nàà-m^L*   *yé=yòò-dìŋ^L.*
leave-PFV.L-3PL=if   gun   master-HUM.PL   EXIST=enter-IMPF.3PL

'When he-, he... the spear masters had made their rounds and left, [then] the gun masters would enter.'   [23.4:20]

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:

(715) a. *Context: You are in the house, and your child outside calls you and says that someone hit him.*
 Mí=ǹ   *yé=bɛ̀nd-ɛ̀^{L}.*
 1SG.PRO=OBJ   EXIST=hit-PFV.L
 'He hit me.'

 b. *Context: Someone leaves a meal for you, then asks later if you've eaten it.*
 Jáâ=gɛ   *yé=ǹy-ɛ̀-m^L.*
 meal=DEF   EXIST=eat-PFV.L-1SG
 'I ate the meal.'

 c. *Context: Someone asks you where your motorcycle is.*
 Pɛ̀gɛ́lɛ́=gɛ   *dùù^L=nɛ*   *kó=pàd-è-m^L.*
 mountain=DEF   bottom=OBL   EXIST=leave-PFV.L-1SG

 'I left it at the bottom of the mountain (and I'm not far from the mountain).'

In examples (715a) and (715c), 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 (715b), on the other hand, the sentence is in response to a yes-no 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. Interestingly, consultants report that the particle *kó=* in (715a) cannot be used in the past (as shown here) but it could be used in the future. In (715b), it can never be used. Example (715c) shows us that there is not an overall restriction on using *kó=* in the past, so it is not clear what is controlling the restrictions reported for (715a–b).

 In one case, I have even found the existential particle *yé=* on a conjunction, though consultants report that this is optional:

(716) *Síí*   *úwɔ*   *(kó=, yé=)dògò ǹdɛ̀^{L}*   *yàgà^L ɛ́ɛ́^{nH}*   *hàànà-lí.*
 caste 2SG.POSS EXIST=but   person other   marry be.normal-NEG.PFV
 '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, respectively. 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 (section 5.5). 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 *=wɔ*. On affirmative predicates, all tense/aspect inflection, along with subject agreement, is realized on the quasi-verb. For negative predicates, either the negative form of *=wɔ* can be used (*òndú*) or the adjective can take the negative suffix *-lɛ́*, For example:

(717) a.   *Pàlá-go=wɔ-m.*
              tall-ADV=be-1SG
              'I'm tall.'

   b.   *Pàlá-go   òndú-m   ~   pàlà-lɛ́-m.*
              tall-ADV   be.NEG-1SG   tall-NEG-1SG
              'I am not tall.'

Another option in the present is to use the copula clitic *=ǹ* 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 (666) are used. For instance:

(718) a.   *Gɛ́mi=ǹ.*
              black=COP
              'It's black.'

   b.   *Díyɛ̀=m̀.*
              big=1SG.COP
              'I'm big.'

   c.   *Màá=ẁ.*
              dry=2SG.COP
              '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 (718a) is *gɛ́m-go=be* 'it was black'.

   As a negative predicate, the usual form involves the stem taking a {L} overlay and a H-toned negative suffix *-lɛ́*. I argue that this is a suffix, rather than a clitic, 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:

(719) pàlà-lɛ́-m   ~   pàlá=lɛ-m
      tall-NEG-1SG   tall=NEG.COP-1SG
      'I am not tall.'

In the 3pl, the suffix is instead -(ɛ̀)nnɛ́, which variably replaces the final vowel of the stem: pàl-ɛ̀nnɛ́ ~ pàlà-nnɛ́ 'they are not tall'.

Unsuffixed adjectives are so-called because they do not take the adverbial suffix -go when used predicatively. The quasi-verb =wɔ is added directly after the stem, and like the suffixed adjectives, it is this quasi-verb that is inflected. For example:

(720) Síyó=gɛ   tùgŏm=wɔ.
      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' sɛ̀-lɛ́ is used instead. Thus, the opposite of tùgŏm=wɔ is tùgŏm sɛ̀-lɛ́.

The adjectives remain unsuffixed in the past, with =be added to the bare adjective, as in:

(721) Jáá=gɛ   ɛ̀lɛ̀lú=be.
      meal=DEF   delicious=be.PST
      'The meal was delicious.'

Again, the negative must include sɛ 'have', and it is this that is inflected for the past:

(722) ɛ̀lɛ̀lú   sɛ=be-li.
      sweet   have=be.PST-NEG
      'It was not delicious.'

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-toned adjective (cf. L-toned in Jamsay (Heath 2008: 432). For example:

(723) *Nὲὲ... émmé dágù^{HL} bé gáà^{HL}, y-ὲ-w lὲ...*
now 1PL.PRO small 3PL.PRO big see-PFV.L-2SG Q
'Now... we're small, they're big, you see.' [23.2:22]

The lack of subject agreement on the adjectives is reminiscent of subject focus in verbs (see section 15.1.1).

13.4.2 Adverbial predicates

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 *=wɔ* is added and inflected as necessary. For example, consider the following paradigm for the adverbial predicate 'be many':.

(724) | Present affirmative | Present negative |
a. *jóó-ni=wɔ* *jóó-ni òndú*

| Past affirmative | Past negative |
b. *jóó-ni=(be~)be* *jóó-ni=be-li.*

These quasi-verbs then are inflected for subject agreement.

13.5 Possessive predicates

The last kind of predicate to discuss is the possessive predicate. This may consist of the quasi-verb *=sɛ* 'have' or the copula after the possessive particle *=mɔ*.

13.5.1 Quasi-verb *sɛ* '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 *=sɛ*. In the future as an auxiliary, 'have' takes on a form *síyὲ-dὲ* 'will have', parallel to the future form of *=wɔ* 'be' (*bíyὲ-dὲ*). As a predicate, however, it is usually replaced with the imperfective form of the verb *bὲlέ* 'obtain'. In the negative, 'have' takes the suffix *-lɛ* and the tone of the complex *sɛ-lɛ* varies between being toneless *sɛ-lɛ* and being LH *sὲ-lέ*.

The following chart summarizes the conjugation of *sɛ* 'have':

(725)   Affirmative   Negative
       Present   *sɛ*   *sɛ-lɛ* (or *sɛ̀-lɛ́*)
       Past   *sɛ=be*   *sɛ=be-li*
       Future   *bɛ́lɛ̀-dɛ̀*   *bɛ̀l-éélè*

The use of 'obtain' in the future is logical, since if one will have something in the future that one does not already have, then one must at some point obtain it.

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=*:

(726) *Nàá   yé=sɛ̀-m^L.*
       cow   EXIST=have-1SG
       'I have a cow.'

In the negative, this is not necessary.

(727) *Gìnɛ̂=gɛ   wó   úd-ɛ̀=gɛ,   bílu=gɛ*
       house=DEF   3SG.PRO   build-PFV.REL=DEF   ladder=DEF

       sɛ̀-lɛ́   dɛ̀mbɛ̂-dim=gɛ=mɔ   bílu   sɛ̀-lɛ́.
       have-NEG   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.'   [23.3:8]

In this quote, the timeframe of the narrative is past, but form of the verb 'have' is present, which is common in narratives (see section 12.2).

Examples of past (728a) and future (728b) possessives are as follows:

(728) a. *Gìnɛ̂   yé=sɛ̀^{L}=be-m.*
           house   EXIST=have=be.PST-1SG
           'I had a house.'

       b. *Nòŋgónu   bìy-ì=yó   bírɛ̂   bɛ̀l-éélè.*
           like.that   be-PFV.L=if   work   obtain-NEG.IMPF
           'If he keeps up like that, he won't have a job.'

13.5.2 Possessive predicates with *=mɔ* and the copula

We have seen the possessive clitic *=mɔ* in section 10.1.4 in constructions meaning 'for'. This construction can also be interpreted as 'belongs to', as in:

(729) a. *Mòtó=gɛ*   *ḿmɔ=ɲ̀.*
       moto=DEF   1SG.POSS=COP
       'The motorcycle belongs to me.'

     b. *Gìnɛ́=gɛ*   *mí*   *délé^H=mɔ=ɲ̀.*
       house=DEF   1SG.PRO   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
Comparatives

This chapter addresses how objects are compared in Tommo So. It begins in section 14.1 with a discussion of asymmetrical comparatives, using the comparative clitic =*diyɛ* '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 similarity clitic =*gonu*, though expressions with *kɛ́gu* 'equal' and *dɔ̀ɔ́* '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 =*diyɛ* 'than'

Adjectival comparatives are formed by putting the postposition =*diyɛ* after the comparandum (what the subject or object is being compared to), followed by the bare adjective. This is an unusual predicate construction. As addressed in section 5.5 and section 13.4, when stating that 'X is *adjective*', the adjective must typically either take -*go* plus a quasi-verb or the copula =*ǹ*; here, the stem is bare in the 3sg and takes normal subject marking for other persons:

(730) a. *Pédu=gɛ*   *ɛ̀nɛ́=gɛ=diyɛ*   *ɛ̀sú.*
           sheep=DEF   goat=DEF=than   pretty
           'The sheep is prettier than the goat.'

       b. ...*àŋá*   *ḿmɔ=diyɛ*   *gàá...*
           mouth   1SG.POSS=than   big
           '[It's] bigger than my mouth.' (Expression to excuse oneself when talking disrespectfully about elders, from [25.3:52].)

       c. *Mí*   *ú=diyɛ*   *gàbú-m.*
           1SG.PRO   2SG.PRO=than   tall-1SG
           'I am taller than you.'

       d. *Bé*   *mí=diyɛ*   *póó-ɛ̀^{n}.*
           3PL.PRO   1SG.PRO=than   fat-3PL
           'They are fatter than me.'

The examples in (730c–d) are also grammatical without the independent subject pronouns *mí* and *bé*, respectively. It is not clear what, if any, relation this =*diyɛ* has to the causal or purposive postposition described in Chapter 10. It could also be related to the adjective *díyɛ̀* 'big', which bears a semantic relation to the notion of 'more than'.

In the negative, the adjective takes the negative suffix -*lɛ́*, followed by the subject agreement suffixes, typical of negative adjectival predicates:

(731) a. *Ú=dìyɛ   pòò-lɛ́-m.*
            2SG.PRO=than   fat-NEG-1SG
            'I am not fatter than you.'

    b. *Sŏm=diyɛ   ɔ̀gì-lɛ́.*
            horse=than   fast-NEG
            'She is not faster than a horse.'

The data are inconclusive as to whether the negative suffix can be replaced with the negative clitic. One consultant rejected the clitic on the example in (731a) but accepted it if the adjective were instead 'small' (*ú=diyɛ dàgí=lɛ* 'I am not smaller than you').

In the past, the form of the adjectival predicate is the same as any non-comparative adjectival predicate: the past auxiliary =*be* is used after the adverbial suffix -*go*; this suffix is used even on typically unsuffixed adjectives (those adjectives that do not take -*go* in the present), though this is not obligatory:

(732) a. *Wàgàdù^L   gààlĕy   émmé=be=le   ú=diyɛ*
            time   small   1PL.PRO=be.PST=ASSOC   2SG.PRO=than

            póó-go=be-m.
            fat-ADV=be.PST-1SG
            'When we were little, I was fatter than you.'

    b. *Màŋgóró=gɛ   sáá=gɛ=diyɛ   èlèlú(-go)=be.*
            mango=DEF   wild.grape=DEF=than   sweet(-ADV)=be.PST
            '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:

(733) *Ú=diyɛ   pòò-lɛ́-go=be-m.*
       2SG.PRO=than   fat-NEG-ADV=be.PST-1SG
       '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 =*diyɛ*, but what follows depends on the sentence. If the comparandum is a pronoun, then the object that follows is a noun modified by the comparative adjective in a normal noun+adjective combination:

(734) *Ú=diyɛ*   *ànìgè^L*   *síyɛ́*   *m̀bɛ̀-m.*
       2SG.PRO=than   friend   good   want-1SG
       'I need a better friend than you.'

If, on the other hand, the noun is already mentioned in the comparandum, as *yàà^L jíbu* 'skirt' is below, then only the adjective follows *=diyɛ* as a headless NP; there is no need to repeat the noun:

(735) a. *Yàà^L*   *jìbù^L*   *mí=ǹ*   *ú*
         female   skirt   1SG.PRO=OBJ   2SG.PRO

         ób-ì=gɛ=diyɛ   *Ø*   *ɛ̀sú*   *mí=ǹ*   *ób-aa=wɔ.*
         give-PFV.REL=DEF=than   pretty   1SG.PRO=OBJ   give-PFV=be
         'He gave me a prettier skirt than the one you gave me.'

     b. *Jàà^L*   *ú*   *sír-ɛ̀=gɛ=diyɛ*   *Ø*   *síyɛ́*   *ɲ́y-aa=be-m.*
         meal   2SG.PRO   prepare-PFV.REL=DEF=than   good   eat-PFV=be.PST-1SG
         'I ate a better meal than the one you prepared.'

It is also possible to use a headless relative initially as the comparandum and place the overt noun with the adjective that follows, as in *Ú sírɛ̀=gɛ=diyɛ jàà^L síyɛ́ ɲ́y-aa=be-m*. Simply repeating the noun in both the comparandum and what follows is avoided as awkward, though it is not strictly ungrammatical.

     If the things being compared are different (rather than 'meal' or 'skirt' in both NPs), then a relative clause construction is used:

(736) a. *Bɛ̀lù^L*   *gɔ́ɛ́^{n}=diyɛ*   *gáà*   *y-àà=bé.*
         animal   elephant=than   big.REL   see-PFV=be.PST
         'He saw an animal bigger than an elephant.'

     b. *Àn-nà^L*   *pɛ̀gélɛ́=diyɛ*   *gábì(=ǹ)*   *ɛ́^{n}-àà-dɛ̀.*
         male-HUM.SG   mountain=than   tall.REL(=OBJ)   marry-PFV-IMPF
         'She married a man taller than a mountain.'

Here, the phrase 'bigger than an elephant' or 'taller than a mountain' is used to describe the objects 'animal' and 'man'. For more on relativization, see Chapter 16.

14.1.2 Verbal predicate with *diyɛ* 'than'

The clitic *=diyɛ* can also be used with a verbal predicate, with the optional addition of the adverb *sígɛ́* or *sígɛ́-go* 'more, better' after it. As with the adjectival predicates above, *=diyɛ* comes immediately after the comparandum, and typically *sígɛ́* follows immediately thereafter:

(737) a. *Ú=diyɛ*   *(sígɛ́)*   *jáá*   *ɲ̀yɛ̀-dɛ̀-m.*
       2SG.PRO=than   (more)   meal   eat-IMPF-1SG
       'I eat more than you.'

     b. *Mí*   *báá^H*   *mí=ɲ̀*   *wó*
       1SG.PRO   father   1SG.PRO=OBJ   3SG.PRO

       bɛ̂nd-ɛ̀ =diyɛ   *sígɛ́-go*   *mí*   *nâì-nɛ̀^{HL}*   *bɛ̀nd-áa=wɔ.*
       hit-PFV.REL=than   more-ADV   1SG.PRO   sibling-HUM.SG   hit-PFV=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 5.7.1.3. We can assume that even when the adverb *sígɛ́* is omitted that the comparandum logically modifies a null adverb rather than the verb itself. The adverb *gàá* 'a lot' can also be used in the place of *sígɛ́*.

     In one instance, the comparandum is postposed after the verb, perhaps as a sort of heavy NP shift:

(738) *ɔ̀mɔ́*   *ḿmɔ*   *gàá*   *ɛ́bɛ̀-dɛ̀,*   *mí*   *ánìgɛ̀^{HL}=mɔ=diyɛ.*
       present   1SG.POSS   a.lot   buy-IMP   1SG.PRO   friend=POSS=than
       'He buys more presents for me than for my friend.'

Here too, though, the postposed clause is grammatical clause-initially: *Mí ánìgɛ̀^{HL}=mɔ=diyɛ ɔ̀mɔ́ ḿmɔ gàá ɛ́bɛ̀-dɛ̀.*

14.1.3 'Be better than' *íré*

A specific adjective *íré* 'better' can be used in general comparisons like the following:

(739) *Ú=diyɛ*   *íré=m̀.*
       2SG.PRO=than   better=1SG.COP
       'I am better than you.'

Here the adjective takes the 1sg copula, but it can also be a suffixed adjective with a quasi-verb (*íré-go=wɔ-m*).

     If there is a more concrete sense to 'good', such as good food, then *síyɛ́* is the preferred adjective:

(740) a. *ɛ̀nɛ̀^{L}*   *nàmá*   *nàà^L*   *nàmá=diyɛ*   *síyɛ́=ɲ̀.*
       goat   meat   cow   meat=than   good=COP
       'Goat meat is better than beef.'

b. *ɔ̀rɔ̀ᴸ*   *nìŋɛ́*   *wómɔ*   *Háwá=mɔ=gɛ=diyɛ*   *síyɛ́=lɛ.*
    baobab   sauce   3SG.POSS   Hawa=POSS=DEF=than   good=NEG.COP
    'Her *toh* is not better than Hawa's.'

Note that *íré* can be used in these contexts as well, but consultants tend to prefer it suffixed with a quasi-verb rather than with a copula.

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 being surpassed) is marked with object case and *=diyɛ* is not used. The quality in which one has surpassed another is a noun or nominalized verb marked with the oblique postposition *=nɛ*. When the quality is an adjective, the nominalized form of the adjective is derived via reduplication (see section 5.2.2.1):

(741) a. *Ì~ìŋɛ̀ndɛ́=nɛ*   *mí=ǹ*   *gàl-áa=wɔ.*
    RED~height=OBL   1SG.PRO=OBJ   surpass-PFV=be
    'She has surpassed me in height.'

    b. *Úlûm=gɛ*   *sà~sǎw=nɛ*   *émmé=ǹ*   *gàl-áa=wɔ-ɛ̀ⁿ.*
    children=DEF   RED~intelligence=OBL   1PL.PRO=OBJ   surpass-PFV=be-3PL
    'The children have surpassed us in intelligence.'

    c. *Ú*   *náî-nɛ̀ᴴᴸ(=ǹ)*   *màŋgòròᴸ*
    2SG.PRO   brother-HUM.SG(=OBJ)   mango

    kɛ̂bɛ́ᴴ=gɛ=nɛ   *gàl-áa=wɔ-m.*
    pick=DEF=OBL   surpass-PFV=be-1SG

    '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 *=diyɛ*. 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 {L} overlay, probably due to intonational de-emphasis. If the adjectival predicate is focused, this surfaces as {HL}, as in (744) below. Note that these {L} overlays are reminiscent of defocalized verbs discussed in section 12.4. Since there is

no subject agreement, independent pronouns are necessary to indicate pronominal subjects:

(742) a. *Mí   gàá   pòò^L*.
    1SG.PRO a.lot   fat
    'I am the fattest.'

    b. *Wó   gàá   sɛ́mbɛ̂=sɛ*.
    3SG.PRO a.lot   force=have
    'He is the strongest.'

    c. *Màŋgòrò^L   nɔ́   gàá   ɛ̀lɛ̀lù^L*.
    mango   this a.lot   sweet
    'This mango is the sweetest.'

    d. *Mí   gàá   síyɛ́-go   núyɔ̀-dɛ̀*.
    1SG.PRO big   good-ADV   sing-IMPF
    'I sing the best.'

It is also possible to leave out the *gàá* and simply have the subject and predicate:

(743) *Mí   dàgù^L*.
    1SG.PRO   small
    'I'm the smallest.'

In this use, it is identical to when the subject is focused, discussed in section 15.1.1. The same phrase in (743) also means 'It is me who is small'.

When the adjectival predicate is focused, there is still no subject marking, but the adjective takes a {HL} overlay instead of the usual {L}:

(744) *Mí   gàà-lɛ́,   mí   dágù^{HL}*.
    1SG.PRO   big-NEG 1SG.PRO   small
    'I'm not the <u>biggest</u>, I'm the <u>smallest</u>.'

Note that unlike in verb focus, the predicate is not reduplicated.

To denote the superlative member of a larger group, the oblique particle is used after the group (often with quantifier *kɛ́m* 'all'), as in *Yàá-m=gɛ kɛ́m=nɛ wó gàá pòò^{HL}* '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:

(745) a. *Mòòmìyò^L   pàdíyɛ̂=gɛ   y-àà=bé-m*.
    scorpion   bad=DEF   see-PFV=be.PST-1SG
    'I saw the ugliest scorpion.'

b. *Dámmá   kɛ́m=nɛ   àn-nàᴸ   póó=gɛ=ǹ̀   ɛ́ⁿ-àà-dɛ̀.*
   village   all=OBL   man-HUM.SG   fat=DEF=OBJ   marry-PFV-IMPF
   '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 *=gonu* '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. For a discussion of the form of this clitic, see section 10.2.1. The predicate adjective in these constructions takes normal predicate morphology; that is, it takes the adjectival suffix *-go* along with a quasi-verb auxiliary (*=wɔ* if in the present, *=be* if in the past). This quasi-verb is then inflected for subject agreement.

(746) a. *Ìyǎy=gɛ   àn-nà-ý=gɛ=gonu   gàbú-go=wɔ.*
         girl=DEF   male-HUM.SG-DIM=DEF=like   tall-ADV=be
         'The girl is as tall as the boy.'

      b. *Wó   náá^H=gonu   ɛ̀sú-go=wɔ.*
         3SG.PRO   mother=like   pretty-ADV=be
         'She is as pretty as her mother.'

      c. *Mí   báá^H=gonu   mòŋjù-lɛ́-m.*
         1SG.PRO   father=like   ugly-NEG-1SG
         'I am not as ugly as my father.'

Note that this is exactly the same construction as the similarity construction in section 10.2.1, except that in this case, the noun that takes the 'like' clitic 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.

14.2.2 'Be equal to' *kɛ́gu*

The predicate *kɛ́gu* '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 3pl -$\grave{\varepsilon}^n$, which fronts final epenthetic vowel to [i]; it does not seem to inflect for other persons:

(747)   a.   *Mí=le   ú=le   kɛ́gi-ɛ̀^{n}.*
             1SG.PRO=ASSOC   2SG.PRO=ASSOC   equal-3PL
             'I am as tall as you.' (Lit. you and me are equal)

      b.   *Kɔ̀rɔ́=gɛ=mbe   pà~pàlá   kɛ́gi-ɛ̀^{n}.*
             calabash=DEF=PL   RED~long   equal-3PL
             'The calabashes are the same length.'

      c.   *Wà~wànnú=le   pà~pàlá=le   kɛ́m kɛ́gi-ɛ̀^{n}.*
             RED~wide=ASSOC   RED~long=ASSOC   all equal-3PL
             'It is as long as it is wide.' (Lit. the length and width are equal)

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. It is interesting to see the conjoined phrase 'me and you' taking 3pl agreement; the usual agreement is 1pl (as seen in section 9.1). The same is true even if the 1pl independent pronoun is used in subject position:

(748)   *Émmé   néé-go   kɛ́gi-ɛ̀^{n}.*
         1PL.PRO   two-ADV   equal-3PL
         'Us two are equal.'

14.2.3 'Attain' *dɔ̀ɔ́*

The transition from equivalence to superiority was expressed by *gàlá*. Here, the opposite transition, from either inferiority or superiority to equivalence, is expressed by *dɔ̀ɔ́* 'arrive', or in this case, 'attain'.

(749)   a.   *Wó   náá^H ɛ̀sù~ɛ̀sù^L=gɛ=nɛ   dɔ̀-áa=wɔ.*
             3SG.PRO   mother   RED~pretty=DEF=OBL   arrive-PFV=be
             'She has attained her mother's beauty.'

      b.   *Bày^L yààná=ma   íí   úwɔ   ìŋɛ̀ndɛ́   úwɔ   dɔ́ɔ́-dɛ̀.*
             day   when=or?   child   2SG.POSS   height   2SG.POSS   arrive-IMPF
             'Someday your son will reach your height.'

      c.   *Tàráá=gɛ   ìŋɛ̀ndɛ́   wómɔ   yàrá=ɲ̀   dɔ̀ɔ̀-lí.*
             hyena=DEF   size   3SG.POSS   lion=OBJ   arrive-NEG.PFV
             'Hyenas, they don't reach the same size as lions.'

Note the three different strategies for the object of *dɔ́ɔ́*: In (749a), the object is a possessed nominal quality marked by the oblique postposition. In (749b), the object is again a possessed nominal quality, but after the possessive pronoun, the oblique postposition is optional. In (749c), the quality (size) is the subject of *dɔ́ɔ́* 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', but this would be unusual, since headless possessives seem to always take the postposition *=mɔ* (section 10.1.4).

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*). 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' X=*mɔ sɔ̀ɔ̀^{L}=lɛ*, with *sɔ́ɔ́* 'speech' taking possessive tone lowering:

(750) a. *Pédu   ɛ́bɛ́-dìm   kɛ̀ɛ̀lɛ́   sɛ̀-lɛ́-m,   sákò*
          sheep   buy-INF   money   have-NEG-1SG   a.fortiori

          nàá=mɔ   sɔ̀ɔ̀^{L}=lɛ.
          cow=POSS   speech=NEG.COP

          'I don't even have enough money to buy a sheep, much less a cow.'

       b. *Mòbílu   ḿmɔ   ɛ́bu   bè-élè-m,   sákò*
          car   1SG.POSS   buy.NOM   can-NEG.IMPF-1SG   a.fortiori

          úwɔ   sɔ̀ɔ̀^{L}=lɛ.
          2SG.POSS   speech=NEG.COP

          'I can't buy a car for myself, much less for you.'

When the a fortiori conclusion is another verb, it is in nominalized form:

(751) a. *Òdèy^L yǎy   bè-élè-m,   sákò   gɔ́ɔ́   sɔ̀ɔ̀^{L}=lɛ.*
          walk   go.NOM can-NEG.IMPF-1SG.S a.fortiori dance speech=NEG.COP
          'I can't even walk, so a fortiori I can't dance.'

       b. *Úŋgúlu   bè-élè-m,   sákò   wòlú*
          get.up.NOM can-NEG.IMPF-1SG a.fortiori farming

          wàlá-dim   sɔ̀ɔ̀^{L}=lɛ.
          farm-INF   speech=NEG.COP

          'I can't even get up, much less farm.'

In (751b), the infinitive is optional. Simply nominalized *wòlú* can stand on its own as the possessor of 'speech'.

Chapter 15
Focalization and interrogation

This chapter looks at focus, be that in the form of overt focus marking in statements (section 15.1) or interrogatives (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

Tommo So has a number of strategies for indicating focus. Morphological strategies include the following: The focalized element can be marked with the clitic =ǹ, the same object marker seen in section 13.1.6, but which can be used on the subject in some environments; if the verb is focalized, it can be reduplicated. Movement/ omission strategies include the following: 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; non-focused elements can be omitted. I will cover each of these strategies in detail in the sections that follow.

In addition to strategies involving the focalized element itself, the presence of focus in a clause can also be indirectly reflected by the form of the verb. First, when the subject is focused, the verb fails to take pronominal subject agreement. Second, regardless of what (non-verbal) element is focused, a perfective verb will take the special defocalized perfective form (section 12.4); the *-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 melodic overlays. This intonational de-emphasis is the probable origin of the defocalized perfective's {L} melody as well. Finally, the existential particles *yé=* and *kó=* that often come especially before defective verbs like *tóò* 'be in' and *sɛ* 'have' are absent in the presence of a focalized constituent. For instance:

(752) a. *Mí   báá^H mòtó=sɛ.*
           1SG.PRO   father   moto=have
           'It's <u>my father</u> who has a moto.'

     -but-

           Mí   báá^H mòtó   yé=sè^L.
           1SG.PRO   father   moto   EXIST=have
           'My father has a motorcycle.'

    b. *Màlbá=ǹ   tóò.*
         gun=OBJ be.in
         'There is <u>a gun</u> [in the water jar].'

  -but-

        Tòndòó=gɛ=nɛ   màlbá   yé=tòò^L.
        water.jar=DEF=OBL gun   EXIST=be.in
        'There is a gun in the water jar.'

In the focused version of (752b), the subject takes a focus marker, which helps the focus interpretation, but in the pair of sentences in (752a), the only difference is the presence or absence of the existential particle. For more on the existential particle, see section 13.3.

    The following subsections address focus strategies for the following elements: subjects (section 15.1.1), objects (section 15.1.2), postpositional phrases and adverbs (section 15.1.3), and finally VPs and verbs (section 15.1.4).

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 3sg and the verb is not in the affirmative perfective (where different verb forms are used for defocalized and regular verbs), 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:

(753) *Mí=ǹ   yà-è.*
       1SG.PRO=OBJ go-PFV.L
       'It's <u>me</u> who went.'

However, data from my consultants suggests that not just any subject can be marked in this way. Specifically, only subjects of **unaccusative** verbs can be thus marked, and even in this context, the object marker is optional:

(754) a. *Émmé   núyɔ̀-dɛ̀.*   **émmé=ǹ*
         1PL.PRO sing-IMPF
         'It's <u>we</u> who will sing.'

    b. *Úlûm=gɛ,*   *tás=gɛ*   *bé*   *mɔ́gɔ̀-dɛ̀.*   **bé=ɲ̀*
        children=DEF   plate=DEF   3PL.PRO   wash-IMPF
        'The children, it's <u>they</u> who wash the plates.'

    c. *Émmé(=ɲ̀)*   *yɛ́lɛ̀-dɛ̀.*
        1PL.PRO(=OBJ)   come-IMPF
        'It is us who will come.'

    d. *Mí(=ɲ̀)*   *dɔ́ɔ̀-dɛ̀.*
        1SG.PRO(=OBJ)   arrive-IMPF
        'It is me who will arrive.'

An example on a non-pronominal subject was seen on the subject of the quasi-verb *tóò* 'be in' in example (752b) above. Unfortunately, forms involving more canonical unaccusative verbs like 'die' or 'fall' are unattested in my notes.

Example (754b) above shows another subject focus strategy, namely a cleft. The non-pronominal subject (here *úlûm=gɛ* 'the children') is clause-initial, then a resumptive pronoun *bé* 'they' is placed immediately before the verb.

A resumptive pronoun is only necessary in a cleft construction. In normal subject focus, like the sentences below, such a pronoun is not necessary:

(755) a. *Yàá-m=gɛ=mbe*   *mí=ɲ̀*   *sɛ̀mɛ̀-m-ì.*
        female-HUM.PL=DEF=PL   1SG.PRO=OBJ   slaughter-CAUS-PFV.L
        'It's <u>the women</u> who made me slaughter (a sheep).'

    b. *Mí*   *nááᴴ*   *nàmá*   *tɛ̀m-éélè.*
        1SG.PRO   mother   meat   eat-NEG.IMPF
        'It's <u>my mother</u> who doesn't eat meat.'

Subject focus in (755a) is evident by the lack of 3pl subject marking on the verb. The sentence in (755b) with a 3sg subject is ambiguous as to whether or not it is focalized, since 3sg subject marking is null to begin with.

Interestingly, when the subject is focalized, a nonpronominal **object** will often take the object marker, even though it is not the focalized constituent.

(756) a. *Ìsé=gɛ*   *ɛ̀nɛ́=gɛ=ɲ̀*   *dà-è.*
        dog=DEF   goat=DEF=OBJ   kill-PFV.L
        'It's <u>the dog</u> that killed the goat.'
        (or: *ɛ̀nɛ́=gɛ=ɲ̀ ìsé=gɛ dà-è*)

    b. *Yììrè ᴸ*   *gɛ́m*   *íí=gɛ=ɲ̀*   *kɛ̀r-ɛ̀.*
        snake   black   child=DEF=OBJ   bite-PFV.L
        'It was <u>a cobra</u> that bit the child.'
        (or: *íí=gɛ=ɲ̀ yììrè ᴸ gɛ́m kɛ̀r-ɛ̀*)

It is possible that =ǹ must be added to the object because otherwise, neither the subject nor the object would be marked (the verb under subject focus lacking subject agreement). However, this object marking is not necessary in the absence of focus, even with a 3sg subject that has null agreement, so it is clear that speakers are able to disambiguate thematic roles even without an object marker. A larger corpus of data is needed to determine the precise use of the object marker in these cases.

Specific cleft constructions involving a headless relative clause are also attested. All three of following are possible responses to the question "Who here doesn't pray?":

(757) a. *Mí   náá^H   sɛ̀n-éélè=gɛ.*
         1SG.PRO   mother   pray-NEG.IMPF.REL=DEF
         '[It's] <u>my mother</u> who doesn't pray.' (Lit. my mother [is the one] who doesn't pray.)

    b. *Sɛ̀n-éélè=gɛ   mí   náá^H=ǹ.*
       pray-NEG.IMPF.REL=DEF   1SG.PRO   mother=COP
       (Lit. [the one] who doesn't pray is my mother.)

    c. *Mí   náá^H   sɛ̀n-éélè.*
       1SG.PRO   mother   pray-NEG.IMPF
       (Lit. <u>my mother</u> doesn't pray.)

When the headless relative is in clause-final position, as in (757a), no copula is used; the addition of the copula after *mí náá^L* in this case is marginal at best. Contrast this with (757b), where the copula must be used after 'my mother'. Finally, (757c) shows a basic sentence that context and possibly intonation distinguish as having subject focus.

If a focused subject is pronominal, we also see a strategy that seems like the exact opposite of that seen in (755) above. In (758) below, the verb retains its subject agreement and in addition an independent pronoun is used for emphasis. For instance:

(758) *Wó   Dúmásá   yà-éélè,   mí   Dúmásá   yáà-dè-m.*
      3SG.PRO Douentza go-NEG.IMPF, 1SG.PRO Douentza go-IMPF-1SG
      '<u>She's</u> not going to Douentza, <u>I'm</u> going to Douentza.'

In this case, it is the double subject marking that puts focus on the subject.

Another common way of showing focus, not just on subjects but on any constituent, is to omit everything but the focalized element and the verb. This way it is clear what information is important. This strategy is especially common in response to questions. For instance, in response to the question

(759) *Ú* *náá^H=ǹ* *àn-nà^L* *nɔ́=ǹ* *á* *òb-ì?*
   2SG.PRO mother=OBJ male-HUM.SG this=OBJ who give-PFV.L
   'Who gave your mother to this man?'

it is unnatural to put *mí náá=ǹ* in the response, though it can optionally be included in pronominal form (*wó=ǹ* 'her'). Consultants report that the best response is, for example, *Mí níŋjú^H òb-ì* 'my uncle gave [her to him]', where of the non-verbal constituents in the question, only the response to the wh-question word 'who' is included.

15.1.2 Object focus

Object focus is a trickier subject, because the use of the object clitic on an object does not unambiguously indicate focus. Even in non-focalized clauses, **pronominal** objects must always carry it (see section 13.1.6), making it hard to distinguish focalized from non-focalized objects except from the context or the verb form. In non-focalized clauses, if the object is non-pronominal (and non-human), object marking is optional. Consider the following sentences with focus:

(760) a. *Ìsé=gɛ=ǹ* *bɛ́nd-ɛ̀=be-m,* *gámmá=gɛ=lɛ.*
     dog=DEF=OBJ hit-PFV.L=be.PST-1SG cat=DEF=NEG.COP
     'It's <u>the dog</u> I was going to hit, not the cat.'

  b. *Nɔ̀ɔ́=ǹ* *téé-ni* *ɛ́b-ee* *m̀bɛ̀-m.*
    this=OBJ exactly buy-NF want-1SG
    'It's <u>this</u> 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 *Mí=ǹ jɛ́-dɛ̀*, the reading is ambiguous between 'it's <u>me</u> he will marry' (focalized) and 'he will marry me' (unfocalized); in terms of morphological form, only context would distinguish them, since the pronoun *mí* obligatorily takes an object marker. Nonetheless, there may be subtle prosodic cues, such as the intonational de-emphasis of the verb, that could help speakers identify focus.

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:

(761) *Kɔ̀rɔ́=gɛ=le*   *tòndòó=gɛ=le=ǹ*   *jɔ̀g-ɛ̀.*
   calabash=DEF=ASSOC water.jar=DEF=ASSOC=OBJ break-PFV.L
   'He broke <u>the calabash and the water jar</u>.'

A goal or benefective in a ditransitive clause generally takes the object marker even in the absence of focus, because such objects tend to be human. Context and verb form are required to distinguish when these thematic roles are focused. Direct object themes in ditransitive constructions, on the other hand, do not obligatorily take the object marker, and so the presence of this clitic can serve to unambiguously indicate focus:

(762) a. *Mí*   *ánìgè^{HL}=ǹ*   *jíbu=ǹ*   *òb-ì-m.*
         1SG.PRO   friend=OBJ   skirt=OBJ   give-PFV.L-1SG
         'I gave my friend <u>a wrap skirt</u>.'

     b. *Mí*   *náá^{H}=ǹ*   *téé-ni*   *àn-nà^{L}*   *nɔ́=ǹ*   *òb-ì.*
         1SG.PRO   mother=OBJ   exactly   male-HUM.SG   this=OBJ   give-PFV.L
         'He gave this man <u>my mother</u>.'

Given the variable word order of direct and indirect objects, examples like (762b) could be ambiguous between 'he gave this man my mother' and 'he gave my mother this man'; context serves to disambiguate. In the same example, because the direct object is human, it could independently take an object marker, even when unfocused. In this case, the adverb *téé-ni* 'exactly' can be placed after it to emphasize the focused reading.

According to one consultant, it sounds unnatural to put an object marker on a definite inanimate object – either only the definite marker or only the object marker can be used, but not together:

(763) *Mòtó=gɛ/mòtó=ǹ/*mòtó=gɛ=ǹ ...*   *bòd-ì.*
       moto=DEF/moto=OBJ/moto=DEF=OBJ   put.aside-PFV.L
       'He left the moto...'

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 object marker co-occurring, as in the following two sentences, wherein the different hats stand for the different chiefdoms:

(764) *Nὲὲ... Dὲŋὲnέ bὲlὲ-m^{L}=gɛ*   *bé*   *gòrò^{L}*   *gέm=gɛ=ǹ*
       now   Dɛŋɛnɛ   one.from-HUM.PL=DEF   3PL.PRO   hat   lack=DEF=OBJ
       jὲŋŋ-ì-ὲ^{n}.
       pick.up-PFV.L-3PL
       'Now, the people from Dɛŋɛnɛ... they picked up <u>the black hat</u>.'

       Émmé   *gòrò^{L}*   *bánu=gɛ=ǹ*   *jὲŋŋ-è-y.*
       1PL.PRO   hat   red=DEF=OBJ   pick.up-PFV.L-1PL
       'We picked up <u>the red hat</u>.'   [23.2:25–26]

Again, 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 object marker following the associative postposition. A dative/benefactive PP can also take this marker:

(765)   *Yìbù*[L]   *nɔ́*   *úwɔ=ɲ̀*   *ɛ̀b-ɛ̀-m*
      skirt   this   2SG.POSS=OBJ   buy-PFV.L-1SG
      'It's <u>for you</u> that I bought this skirt.'

Note that the dative/benefactive is expressed using the possessive pronoun (see section 10.1.4).

Locative PPs, on the other hand, cannot take =*ɲ̀*. 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:

(766)   a.   *Búúdù=gɛ*   *tòndòó=gɛ=nɛ*   *bàŋà-nd-ì.*
         money=DEF   water.jar=DEF=OBJ   hide-FACT-PFV.L
         'It's <u>in the water jar</u> that he hid the money.'

      b.   *Mòtó=gɛ*   *pègélɛ́=gɛ*   *dùù*[L]*=gɛ=baa*   *pàd-è.*
         moto=DEF   mountain=DEF   bottom=DEF=LOC   leave-PFV.L
         'He left the moto <u>at the bottom of the hill</u>.'

      c.   *Bírɛ́*   *òlú=baa*   *bírɛ̀-dɛ̀-m.*
         work   field=LOC   work-IMPF-1SG
         'It's <u>in the field</u> that I will work.'

(766b) is exactly the same form as an object focus sentence 'he left <u>the moto</u> at the bottom of the hill'. Without context, it is impossible to tell which constituent is focalized. However, for those speakers who can put an object marker on a definite inanimate noun, the presence of =*ɲ̀* after *mòtó=gɛ* would unambiguously mark focus on the object. Note that if a PP is unfocused, it can either be preverbal or clause-initial, so this preverbal position is also not an unambiguous marker of focus. In (766c), elicited in response to a wh-question "where will you work?", the locative PP actually intervenes between the cognate nominal and the verb. In a non-focalized sentence, this would typically not be the case.

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 (767a), but other word orders are also possible. This preverbal position is also the one typically used when the instrumental object is questioned ('with what') and hence focused; see section 15.2.3. In non-focalized sentences like (767b), the preverbal position is usually filled by the direct object:

(767) a. *Mòòmíyó=gɛ(=ǹ)*   *tàgá=le*   *dà-è.*
           scorpion=DEF=OBJ   shoe=ASSOC   kill-PFV.L
           'He killed the scorpion <u>with a shoe</u>.'
           (or: *tàgá=le mòòmíyó=gɛ(=ǹ) dà-è*)

  b. *Séydu*   *mí=ǹ*   *tàgá=le*   *mòòmíyó*   *dàà-mɔ́-gú=sɛ.*
           Seydou   1SG.PRO=OBJ   shoe=ASSOC   scorpion   kill-CAUS-PPL=have
           'Seydou is making me kill the scorpion with a shoe.'

The data are not conclusive as to how well word order is able to disambiguate focused from unfocused PPs.

15.1.4 Verb and VP focus

Verb focus is clearly audible, since it is indicated by reduplication, at least for affirmative verbs. For instance:

(768) a. *Pédu=gɛ=mbe*   *sɛ̀~sɛ́mɛ̀-m-ì-ɛ^n.*
           sheep=DEF=PL   RED~slaughter-CAUS-PFV.FOC-3PL
           'They made [me] <u>slaughter</u> the sheep.'

  b. *...ǹdɛ̀-m^L*   *wɔ́=gɛ̀=mbe*   *pɛ́cɛ̀ kɛ́m áw-ee*   *dɔ̀~dɔ́nɔ̀-dìɲ.*
           person-HUM.PL   be.REL=DEF=PL   half all   catch-NF   RED~sell-IMPF.3PL
           '...they would catch half of the people who were there and <u>sell</u> them.'
           [23.2:98]

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~pád-è-m* 'I <u>left</u> it (and that's that)'. Notice that while the defocalized perfective verb form takes a {L} overlay, the focused perfective takes {HL} with an initial L reduplicant. The imperfective also takes {HL}, but it is not clear whether this ought to be treated as a distinct tonal overlay from the usual {HL} in the imperfective.

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-dɛ̀-m* or simply *Yáà-dɛ̀-m* 'I'm

going'. The negative is not reduplicated in this context (*yà~yà-éélè-m 'I'm <u>not</u> <u>going</u>'). Here, context must distinguish a focused negative verb from a non-focused one. However, in the following context, a reduplicated negative was accepted:

(769) Q: *Yàà-gú=sɛ-w=ma,*   *yèlɛ́-gú=sɛ-w?*
           go-PPL=have-2SG=or?   come-PPL=have-2SG
           'Are you going or are you coming?'

    A: *Yà~yà-éélè-m,*   *yɛ̀~yèlɛ́-gú=sɛ-m.*
           RED~go-NEG.IMPF-1SG   RED~come-PPL=have-1SG
           'I'm not <u>going</u>, I'm <u>coming</u>.'

In this context, a consultant offered reduplicated forms both of the negative imperfective and of the progressive. It is not clear why the reduplicated form was not accepted in the other context.

    Note that it is only possible to reduplicate when the verb itself is focalized. If the whole VP is focused, then there is no special marking. For instance, in response to 'What did he do with the moto?', we see:

(770) *Pɛ̀gɛ́lɛ́=gɛ*   *dùùᴸ=nɛ*   *pàd-è. (*pà~pád-è)*
       hill=DEF   bottom=OBL   leave-PFV.L
       'He left [it] at the bottom of the hill.'

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 perfective can be used.

15.2 Interrogatives

Focalization and interrogation use similar strategies in many languages, and a focalized element often corresponds to the response to a wh-question. The same holds for Tommo So. This section covers both polar yes-no questions and wh-questions, along with embedded interrogatives. It should be noted that in Tommo So, wh-expressions are left *in situ*.

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 ↑. If the

clause ends in a vowel, the rising intonation also has a tendency to lengthen this vowel:

(771) a. *Ú*   *ɲj-ìyò-dɛ̀-w*↑
           2SG.PRO   lie.down-MP-IMPF-2SG
           'Are you going to bed?'

       b. *Ííyé*   *[dìgɛ̀ᴸ   nàmᴸ]   yɛ́llɛ̀*↑
           today   evening   sun   come.IMPF
           'Will he come this evening?'

The following is a pitch track of (771a), showing the sharp rise at the end of the verb:

(772)   *Ú ɲj-ìyò-dɛ̀-w*↑

Another strategy is to place the question/disjunctive clitic *=ma* at the end of a sentence, which literally means 'or'. This is a logical particle to use, since a yes/no question essentially asks if the statement is true *or* is it not true; it is questioning by omission ('is it true or...?'). With the question particle, rising intonation is optional, since the particle already indicates that the utterance is a question. As before, I gloss *=ma* as 'or?' indicating its double status as a disjunction and question marker:

(773) a. *ɲj-ìyò-dɛ̀-w=ma (*↑*)*
           lie.down-MP-IMPF-2SG=or?
           'Are you going to bed?'

       b. *Ííyé*   *[dìgɛ̀ᴸ   nàmᴸ]   yɛ̂llɛ̀=ma.*
           today   evening   sun   come.IMPF=or?
           'Will he come this evening?'

The tone of the question particle *=ma* is typically underspecified for tone, 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 quotation and is thus followed by the quotative particle *=wa*. In this case, the question particle takes H tone. One hypothesis is that the intonational H tone cannot dock on the quotative particle at the end of the sentence, since this would place interrogation on the speech act rather than the quoted material (as in 'Did Hare ask, is that good?'). 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:

(774) a. *Hɔⁿ=wa   jɔ̀mɔ́   kó=nɛ   dàg-áa=wɔ=má=wa.*
huh=QUOT   hare   that.DD=OBL   be.good-PFV=be=or?=QUOT
'Huh, Hare asked, "Is that good?"'   [23.6:11]

   b. *À=mbé   ségu=ma=wa.*
who=PL   be.more=or?=QUOT
'[They asked] who are more numerous?'   [23.2:124]

In (774a), there appears to be a phrase boundary after 'be', since *wɔ* interpolates to L before the F0 rises again on the question particle *=ma*, here H-toned [má] (see section 4.2 for more on tonal interpolation). In (774b), the interpolation is straight down from *ségu*.

Often the second logical possibility in a 'this or that' question is omitted after the particle *=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 (indicated by ⇒)

(775) a. *Kɔ̀mbɔ́   yáà-dìⁿ=yó,   ɔ̀gɔ̀-nɔ́   [ǹdɛ̀ᴸ   wó*
war   go-IMPF.3PL=if   Hogon-HUM.SG   person   3SG.PRO

   ḿbɛ̂]=ɲ̀   túyò-dɛ̀=ma,   ǹdɛ̌-m=gɛ   kɛ́m   yáà-dɛ̀.
like.REL=OBJ   send-IMPF=or?   person-HUM.PL=DEF   all   go-IMPF
'If they go to war, does the Hogon send only people he wants, or is it <u>everyone</u> who goes?'   [23.2:100]

   b. *Dúmásá   yáà-dɛ̀-w=ma⇒,   nɔ̀nú   bíyɛ̀-dɛ̀-w.*
Douentza   go-IMPF-2SG=or?   here   be-IMPF-2SG
'Are you going to Douentza, or are you going to stay here?'

15.2.2 *ǎ* 'who?'

'Who' is expressed by /ǎ/, which, like the demonstratives /nǒ/ and /nǐ/, has an underlying rising tone but not enough surface moras to host it. Thus, on its own, it generally has a H tone *á* 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 (776a) 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 (776a) or in situ (776b):

(776) a. *Yàa-ná=gɛ*   *yállà*   *wó=ǹ*   *sǒm*
         woman-HUM.SG=DEF   wonder   3SG.PRO=OBJ   horse

         yèlé-dɛ=gɛ   *jɔ̀bɔ́*   *yóó*   *àá*   *g-ì=ma=wa.*
         come-IMPF.REL=DEF   run.IMPER   enter.IMPER   who   say-PFV.L=or?=QUOT

         'The woman asked who said that a horse is coming, run and enter
         [the stalks].'   [23.5:33]

      b. *Á*   *ú=ǹ*   *bɛ̀nd-ɛ̀.*
         who   2SG.PRO=OBJ   hit-PFV.L
         'Who hit you?'

As we can see in (776a), the question particle *=ma* may be combined with wh-word. The pre-sentential question word *yállà*, which gives an air of wondering, is discussed further in section 21.3.1.

When used as an object, /ǎ/ obligatorily takes the object marker:

(777) *Ú*   *nínjú*[H]   *á=ǹ*   *àn-nà*[L]   *nɔ́=ǹ*   *òb-ì.*
      2SG.PRO   uncle   who=OBJ   male-HUM.SG   this=OBJ   give-PFV.L
      '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:

(778) a. *Ú*   *à=mbé=ǹ*   *y-ɛ̀-w.*
         2SG.PRO   who=PL=OBJ   see-PFV.L-2SG
         'Who all did you see?'

      b. *À=mbé*   *gɔ́ɔ́=gɛ=nɛ*   *yèl-ɛ̀.*
         who=PL   dance=DEF=OBL   come-PFV.L
         'Who all came to the dance?'

Note in (778b) that although the interrogative subject is morphologically plural, it takes singular agreement on the verb. This is most likely due to the fact that since 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': *ǹdɛ̀ˡ á* (lit. 'who person'):

(779) *Ǹdɛ̀ˡ   á   yɛ́llɛ̀=ma   ínnɛ-m.*
      person   who   come.IMPF=or?   NEG.know-1SG
      'I don't know who will come.'

This construction shows /ǎ/ behaving like the demonstratives; it may be used alone as an interrogative pronoun, or it may be used adnominally as a modifier, inducing tone lowering. Even the independent pronoun /ǎ/ we could analyze as a headless modifier.

As a predicate, /ǎ/ simply takes the copula *=ǹ*, regardless of the person of the subject:

(780) a.   *Àn-nà̀ˡ   nɔ́   ǎ=ǹ.*
            male-HUM.SG   this   who=COP
            'Who is this man?'

       b.   *Ú   ǎ=ǹ.*
            2SG.PRO   who=COP
            'Who are you?'

Like any pronoun, /ǎ/ can be used as the object of postpositions with no change in the phonology:

(781) a.   *Jáá=gɛ   àá=mɔ=ǹ   sìr-ɛ̀.*
            meal=DEF   who=POSS=OBJ   cook-PFV.L
            'Who did she cook the meal for?'

       b.   *Íí=gɛ   àà=díyɛ   pìy-è.*
            child=DEF   who=for   cry-PFV.L
            'Because of whom did the child cry?'

There is a curious tonal asymmetry in these examples, whereby the rising tone of /ǎ/ pushes its H tone onto the clitic in (781b) but not in (781a). In both, the vowel is lengthened and would have enough time to realize the rise. It is not clear what is driving this asymmetry.

On human words, rather than specific *yàgú* 'which' (see section 15.2.7), /ǎ/ can be used adnominally, which causes tone lowering:

(782)   *Ìyǎy=gɛ*   *àn-nàᴸ*   *á=ǹ*   *ɛ́ɛ̀ⁿ-dɛ̀?*
        girl=DEF   male-HUM.SG   who=OBJ   marry-IMPF
        'Which man will the girl marry?'

This is most likely a specific version of the general question *ǹdɛ̀ᴸ ǎ* from (779) above.

15.2.3 *ɲ́jɛ́* 'what?', 'why?', 'when?'

The word *ɲ́jɛ́* in Tommo So, with an initial syllabic nasal, has a base meaning of 'what', though it can combine with other words to form complex wh-expressions translating as 'why' or when'.

15.2.3.1 'What?'

When used as a pronoun meaning 'what', the behavior of *ɲ́jɛ́* is largely parallel to that of /ǎ/ 'who'. As a subject, it takes no extra marking:

(783)   *ɲ́jɛ́*   *íí=gɛ=ǹ*   *kɛ̀r-ɛ̀.*
        what   child=DEF=OBJ   bit-PFV.L
        'What bit the child?'

Unlike 'who', however, 'what' does not require an object marker when it is an object, though it may optionally take one. Remember that /ǎ/ 'who' requires one since it is specifically a human interrogative pronoun (see section 13.1.6 for rules about the use of the object marker). Since *ɲ́jɛ́* is not human, the presence of the object marker is not obligatory, though it is possible. For example:

(784)   a. *Ííyé*   *[dìgɛ̀ᴸ*   *nàmᴸ]*   *ɲ́jɛ́=ǹ*   *ɲ̀y-ɛ̀-w=ma↑.*
            today   evening   sun   what=OBJ   eat-PFV.L-2SG=or?
            'What did you eat this evening?'

      b. *ɲ́jɛ́*   *g-ì-w↑.*
            what   say-PFV.L-2SG
            'What did you say?'

In (784a), there is an object marker, but in (784b) 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:

(785) *Íí=gɛ*   *ɲ́jɛ́=mbe=ɲ̀*   *jɔ̀g-ɛ̀.*
       child=DEF   what=PL=OBJ   break-PFV.L
       'What all did the child break?'

Alternatively, this pluralized interrogative may be repeated as well, which emphasizes the expectation that several different kinds of objects will appear in the response:

(786) *Gĕm*   *kɔ̀lɔ̌ᴸ=nɛ*   *nɛ̀ɛ̀*   *èè... kìdɛ̀ᴸ* *ɲ́jɛ́=mbe* *ɲ́jɛ́=mbe* *háàn-àà-dɛ̀.*
       funeral inside=OBL   now uh   thing what=PL what=PL be.right-PFV-IMPF
       'Now, in funerals, what sorts of things were normally done?'   [23.4:1]

By repeating *ɲ́jɛ́=mbe*, the person asking the question indicates that he expects there to be different kinds of things that were done, not just multiple instances of a single thing. This is similar to the reduplicated distributed use of adjectives discussed in section 5.5.3.

As a predicate, *ɲ́jɛ́* takes the copula. The subject precedes it:

(787) *Nɔ̌ɔ́*   *ɲ́jɛ́=ɲ̀.*
       this   what=COP
       'What is this?'

Like /ǎ/, *ɲ́jɛ́* can also be the object of postpositions. For instance, with the instrumental, we get the meaning 'with what':

(788) *Àn-ná=gɛ*   *yàrá=gɛ=ɲ̀*   *ɲ́jɛ́=le*   *dà-è*
       male-HUM.SG=DEF   lion=DEF=OBJ   what=ASSOC   kill-PFV.L
       'What did the man kill the lion with?'

To form an expression like 'what thing', in which *ɲ́jɛ́* is used adnominally, *ɲ́jɛ́* can form a pseudo-genitive compound with the modified noun and impose {L} tone on it:

(789) *ɲ́jɛ́*   *bìrɛ̀ᴸ=ɲ̀*   *bírɛ̀-dɛ̀-w?*
       what   work=OBJ   work-IMPF-2SG
       'What are you working on?'

For more on possessive constructions, see section 7.6.

15.2.3.2 'Why?'

With the purposive postposition *=diyɛ*, we derive the interrogative 'why', or more literally, 'for what':

(790) *ɲ́jɛ́=diyɛ*   *píyè-dɛ̀-w↑*.
         what=for   cry-IMPF-2SG
         'Why are you crying?'

In this same position, a consultant offered the alternative *ɲ́jɛ́ g-àà* as the same meaning:

(791) *ɲ́jɛ́*   *g-àà*   *píyè-dɛ̀-w↑*.
         what   say-PFV   cry-IMPF-2SG
         'Why are you crying?'

The most likely origin of this *g-àà*, as indicated in the interlinear gloss, is the perfective of *gɛ̀* 'say'. With this origin, it would give the expression a literal translation like 'saying what'. We see 'say' used in other non-literal expressions, like *yém wó g-àà* '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.

   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, *ɲ́jɛ́* simply takes the copula, resulting in an expression like '[It] is what?':

(792) *ɲ́jɛ́=ɲ̀=ma*,   *yállà*   *nǎm=wa ⇒*   *ííyé*   *nìmɛ̌m*   *wó*   *tùmáá*
         what=COP=or?   wonder   sun=QUOT   today   now   3SG.PRO   only

         gò-ìlɛ̀ᴸ   *wó*   *gòò-dɛ̀ᴸ*   *nɔ́,*   *ǹdɛ̀mbé*   *yɛ̀-dɛ̀ᴸ*   *nɔ́...*
         go.out-NOM   3SG.PRO   go.out-IMPF.REL   this   LOG.PL.PRO   see-IMPF   this

         'Why is that? Well, [even] these days, what we see when the sun
         goes out by himself...'   [23.6:14]

15.2.3.3 'When?'

As we saw at the end of section 15.2.3.1, *ɲ́jɛ́* can be used to modify a noun. When this noun is a temporal expression like *wágádu* 'time', we get the wh-expression 'when'. This is typically used with the associative postposition *=le*, which, as described in section 10.1.1.3, can mark temporal expressions. The examples below demonstrate that the same expression can be used for both past and future timeframes:

(793) a.   *ńjέ*   *wàgàdù^L=le*   *púlɔ̌-m=le*   *dɔ̀gɔ̌-m=le*
         what   time=ASSOC   Fulbe-HUM.PL=ASSOC   Dogon-HUM.PL=ASSOC

         jàw-ìy-ì-ɛ̀ⁿ.
         fight-MP-PFV.L-3PL

         'When did the Fulbe and the Dogons fight?'

     b.   *ńjέ*   *wàgàdù^L=le*   *jáá=gɛ*   *yέllὲ.*
         what   time=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^L ńjέ*, where *ńjέ* is a post-nominal modifier rather than a possessor (in a pseudo-genitive compound).

(794)   *Wàgàdù^L*   *ńjέ=le*   *íbέ*   *yáá-dὲ-w.*
       time   what=ASSOC   market   go-IMPF-2SG

       'What time are you going to the market?'

There seems to be no semantic difference between the possessive construction and the modifier construction. However, it does seem to vary by speaker; one of my consultants would consistently offer *ńjέ wàgàdù^L*, while another would consistently offer *wàgàdù^L ńjέ*.

15.2.4 *yàbáá, yàgú=nɛ* 'where?'

There are two expressions that translate to 'where' in Tommo So: *yàbáá* and *yàgú=nɛ*. The latter uses the general interrogative *yàgú*, discussed in section 15.2.7, with the oblique postposition. The former is probably related to the locative postposition *=baa*, possibly derived from **yàgú=baa*.

Just as the oblique and locative postpositions can be used interchangeably (see Chapter 10), so too can the two locative interrogatives:

(795) a.   *Ú*   *sáá^H*   *yàbáá*   (or *yàgú=nɛ*)=*wɔ.*
         2SG.PRO   sister   where   (which=OBL)=be

         'Where is your sister?'

     b.   *Àn-ná=gɛ*   *mòtó=gɛ*   *yàbáá* (or *yàgú=nɛ*)   *pàd-è.*
         male-HUM.SG=DEF   moto=DEF   where (which=OBL)   leave-PFV.L

         'Where did the man leave the motorcycle?'

Only in limited cases can *yàbáá* be used with the copula instead of the existential locative *=wɔ*. 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 loca-
tion 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=ǹ* '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=wɔ* '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 all instances of adverbial 'where' in my texts:

(796) a. *Íí   ǹdɛ́mmɔ   yàbáá=wɔ=ma=wa.*
          child   LOG.PRO.POSS   where=be=or?=QUOT
          '[She asked] where is my child?'   [23.5:18]

     b. *Yàbáá   bé=ǹ   jà-ì-ɛ̀ⁿ?*
          where   3PL.PRO=OBJ take-PFV.L-3PL
          'Where did they take them?'   [Poisoned flour]

In one speaker's opinion, *yàbáá* is less specific than *yàgú*, which suggests there
being a precise location in the reply.

15.2.5 *yǎŋ(geni)* 'how?'

The basic interrogative word for 'how' is the adverb *yàŋgéni* which appears to
contain the similarity postposition *=geni* (or *=gonu*) discussed in section 10.2.1 and
section 14.2 coupled with the stem *yǎŋ* 'how'. Given the fact that the rising tone of
yǎŋ has redistributed, *geni* here cannot synchronically be a clitic (since they do not
cause tonal redistribution from heavy syllables, section 4.3.2). Thus, I take it that
yàŋgéni is synchronically unsegmentable.

This adverb can be used directly before the verb in question:

(797) a. *ɔ̀gɔ́   nɛ̀ɛ̀   ǹdɛ́   sàd-è=yó   nɛ̀ɛ̀   yàŋgéni   áwà-dìⁿ?*
          Hogon   now   person miss-PFV.L=if now   how   catch-IMPF.3PL
          '[In the] Hogon-dom, now, if a person missed [a payment],
          how would they catch [him]?'   [23.2:94]

     b. *Yállà   íí=gɛ=nɛ   néɛ́   yàŋgéni   kàn-ì.*
          wonder   child=DEF=OBL   now   how   do-PFV.L
          'What happened to the child?'   [23.5:22]

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:

(798) a. *Yàŋgéni   kán-aa   gìnɛ̀ᴸ   kàndá   úwɔ   ùd-ɛ̀-w.*
how   do-PFV house   new   2SG.POSS build-PFV.L-2SG
'How did you build your new house?'

   b. *Yàŋgéni   kán-ee   dàlá=gɛ   yégèrè-dɛ̀-y.*
how   do-NF   roof=DEF repair-IMPF-1PL
'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 (798a) is perfective, since the main verb is perfective, whereas it is imperfective in (798b) because the action has yet to take place. For more on verb chaining, see section 18.1.

    The stem *yăŋ* can also be used on its own. This is common in the set expression *Bóy úwɔ yăŋ g-ì-ɛ̀ⁿ* 'what is your name' (Lit. how did they say your name). This *yăŋ* can also be used with contentless *káná*:

(799) *yăŋ   kán-aa   bàr-ì-ɛ̀ⁿ,   yà-ée   táá=wa,   yà-ée*
how   do-PFV help-PFV.L-3PL go-NF shoot.IMPER=QUOT   go-NF

   táá=gɛ   yà-à...
shoot.IMPER=DEF go-PFV

   '[they told them] how they helped [them], [how the man from Bandiagara said] "go make war", [and that they, his men] went to make war...'   [23.2:149]

This seems to be most common before *gɛ̀* 'say', and its direct application to other verbs (without *káná* as a buffer) seems limited. Notice that both of these verbs conveniently begin with a velar stop, which may protect the otherwise illicit final-/ŋ/ from becoming [m]. For more on word-final phonotactics, see section 3.4.1.3

    The phrase *yàŋgéni káná* may be nominalized to form a modifier *yàŋgènìᴸ kánu* 'what kind'. For instance:

(800) *Mòtòᴸ   yàŋgènìᴸ   kánu   ɛ́bɛ̀-dɛ̀=ma   ínnɛ-m.*
moto   how   do.NOM   buy-IMPF=or?   know.NEG-1SG
'I don't know what kind of motorcycle he will buy.'

The L tone on 'how' suggests that it forms a compound with nominalized *kánu*.

15.2.6 *àŋgé* 'how much', 'how many'

The basic stem for 'how much' or 'how many' is *àŋgé*. I will gloss it consistently as 'how much', even though it can be used for both quantity and degree.

Used as a predicate, it simply takes the copula:

(801)   a.   *Ú*   *[náà ùlùm]^{HL}*   *àŋgé=ǹ̀.*
             2SG.PRO   siblings   how.much=COP
             'How many siblings do you have?' (Lit. how many are your siblings)

       b.   *Àŋgé=ǹ̀.*
             how.much=COP
             'How much is [it]?'

It can also take the adverbial suffix *-go* often seen on numerals. Like numerals, *àŋgé-go* has no effect on the tone of the preceding word:

(802)   a.   *Ú*   *báá^{H}*   *ú=ǹ̀*   *kúbɔ́*   *àŋgé-go*   *bɛ́ndɛ̀-dɛ̀.*
             2SG.PRO   father   2SG.PRO=OBJ   time   how.much-ADV   hit-IMPF
             'How many times will your father hit you?'

       b.   *Yàa-ná=gɛ*   *jíbu*   *àŋgé-go*   *dɔ̂n-dɛ̀.*
             female-HUM.SG=DEF   wrap.skirt   how.much-ADV   sell-IMPF
             'How many wrap skirts will the woman sell?'

We know that the interrogative is modifying 'skirt' ('how many skirts') and not 'sell' ('how much selling') since the response to this question denotes the exact number of skirts (e.g. 'three skirts').

Instead of *-go*, *àŋgé* can be followed by the adverb *bɛ̀ɛ́-nì*, which translates roughly to 'about' or 'worth'. Consultants tell me it translates to French *ça vaut* 'it equals, it is worth':

(803)   a.   *Súgɔ́rɔ́*   *àŋgé*   *bɛ̀ɛ́-nì*   *ɛ̀b-ɛ̀.*
             sugar   how.much   worth-ADV   buy-PFV.L
             'How much sugar did she buy?'

       b.   *Pédu*   *ḿmɔ=mbe*   *àŋgé*   *bɛ̀ɛ́-nì*   *yìm-ì-ɛ̀ⁿ,*
             sheep   1SG.POSS=PL   how.many   worth-ADV   die-PFV.L-3PL
             ànà^{L} ɔ́lu=gɛ=nɛ.
             rain   wet=DEF=OBL
             'How many of my sheep died in the flood?'

Again, the response to a question like (803b) will be a specific number, such as 'six sheep'.

Like numerals, the interrogative *àŋgé* can be used distributively by reduplicating it. That is, when asking how much it is for each of several objects, one could ask *àŋgé~àŋgé=ǹ*, corresponding to local French *'c'est combien combien?'*.

Speakers are inconsistent on how to form the ordinal interrogative 'how many-th?' Recall that to form ordinal adjectives, the suffix *-yém* was added to the numeral, which then took all L tone (see section 5.7.2). This pattern is possible with *àŋgé* as well, forming, *àŋgì-yém*, with the final /e/ becoming [i]. Another possibility offered by a different speaker was *àŋgémí*, as in the following:

(804) *Ì^L* *àŋgémí=gɛ* *Bàmàkó* *yà-è.*
     child how.manyth=DEF Bamako go-PFV.L
     'Which son (the how many-th son) went to Bamako?'

Note that ordinals control tone lowering on the preceding noun.

15.2.7 *yàgú* 'which (one)?'

The non-human adnominal interrogative is *yàgú* 'which (one)', which can either be used absolutely with a null noun or as a modifier of an overt noun. Placed after the noun it modifies (on which is controls tone lowering), it creates the expression 'which X'.

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:

(805) *Bé* *yàgú* *sàà^L* *ùlùm^L*, *bé* *Kóígé* *sàà^L* *ùlùm^L*?
     3PL.PRO which sister children 3PL.PRO Koige sister children
     'They [are] matrilinear children of which [place], they [are] matrilinear
     children of Koige?'   [23.3:45]

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 *ńjɛ̂* 'what' is more common in Tommo So, even as a modifier.

The following are elicited examples of *yàgú* as a modifier:

(806) a. *Màŋgòrò^L* *yàgú* *ńy-ee* *m̀bɛ̀-w.*
        mango which eat-NF want-2SG
        'Which mango do you want to eat?'

b.　*Nàà^L*　*yàgú*　*nál-àà-dè.*
 　　cow　which　give.birth-PFV-IMPF
 　　'Which cow gave birth?'

c.　*Òdù^L*　*yàgú*　*dímb-ìyè-dè-y,*　　　*Tééⁿ*　*yàá-dim.*
 　　road　which　follow-MP-IMPF-1PL　Tédié　go-INF
 　　'Which road will we take to go to Tédié?'

The example in (806c) is also grammatical with the object marker after *yàgú*.

　　If the expected answer is plural, *yàgú=mbe* 'which ones' can be used:

(807)　*Jàndùlù^L*　*yàgú=mbe*　*m̀bɛ̀-w?*
 　　　donkey　　which=PL　　like-2SG
 　　　'Which donkeys do you like?'

15.2.8 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 *=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 defocalized form. Consider the following examples:

(808)　a.　'if' – Polar interrogative
 　　　　Bàmàkó=nɛ　　*síyɛ́-go*　　*yɛ̀l-áa=wɔ-ɛ̀ⁿ=ma*　　　*ínnɛ.*
 　　　　Bamako=OBL　good-ADV　come-PFV=be-3PL=or?　know.NEG
 　　　　'He doesn't know if they got to Bamako all right.'

b.　'what'
 　　　　ɲ́jɛ́=ɲ̀　　*ɲ́yɛ̀-dè-y=ma*　　*ínnɛ-m.*
 　　　　what=OBL　eat-IMPF-1PL=or?　know.NEG-1SG
 　　　　'I don't know what we are going to eat.'

c.　'who'
 　　　　Ǹdɛ̀^L　*á*　　*yɛ́llɛ̀=ma*　　*ínnɛ-m.*
 　　　　person　who　come.IMPF=or?　know.NEG-1SG
 　　　　'I don't know who will come.'

d. <u>'when'</u>

ɲ́jɛ̂	*wàgàdù^L=le*	*mí*	*ánìgè^{HL}=mbe*	*yɛ́llɪ̀n=ma*
what	time=ASSOC	1SG.PRO	friend=PL	come.IMPF.3PL=or?

ínnɛ-m.
know.NEG-1SG

'I don't know when my friends are coming.'

e. <u>'how'</u>

Yàŋéni	*kán-aa*	*kɛ̀ɛ̀lɛ́=gɛ*	*bɛ̀l-ì-ɛ̀^{n}=ma*	*ínnɛ-m.*
how	do-PFV	money=DEF	find-PFV.L-3PL=or?	know.NEG-1SG

'I don't know how they earned the money.'

f. <u>'how many'</u>

Mí	*níɲjú^H*	*nàá*	*àŋgé-gó*	*dɔ̀n-ɛ̀=ma*	*ínnɛ-m.*
1SG.PRO	uncle	cow	how.much-ADV	sell-PFV.L=or?	know.NEG-1SG

'I don't know how many cows my uncle sold.'

g. 'what kind'

Mòtò^L	*yàŋgènì^L*	*kánu*	*ɛ́bɛ̀-dɛ̀=ma*	*ínnɛ̀-m.*
moto	how	do.NOM	buy-IMPF=or?	know.NEG-1SG

'I don't know what kind of motorcycle he will buy.' (repeated from (802))

h. <u>'why'</u>

ɲ́jɛ̂=diyɛ	*íí=gɛ*	*èkɔ́l=gɛ*	*pàd-è=ma*	*ínnɛ-m.*
what=for	child=DEF	school=DEF	leave-PFV.L=or?	know.NEG-1SG

'I don't know why the child left school.'

i. 'where'

Mòtó	*ŕ́mɔ*	*yàgú=nɛ*	*pàd-è-m=ma*	*ínnɛ-m.*
moto	1SG.POSS	which=OBL	leave-PFV.L-1SG=or?	know.NEG-1SG

'I don't know where I left my motorcycle.'

In addition to embedded interrogatives of the form in (808), a relative construction is also possible, in which case the object of *ínnɛ* is no longer the full proposition, but rather the head of the relative clause, be that overt (809a) or null (809b). For instance:

(809) a.

Yàá-m=gɛ	*gàndà^L*	*gɔ́ɔ́*	*bé*	*gɔ̀ɔ́-dɛ*
female-HUM.PL=DEF	place	dance	3PL.PRO	dance-IMPF.REL

ínnɛ-m.
know.NEG-1SG

'I don't know (the place) where the women will dance'

b. *Émmé* *ɲ́yɛ̂-dɛ* *ínnɛ-m.*
 1PL.PRO eat-IMPF.REL know.NEG-1SG
 'I don't know [what it is that] we will eat.'

For non-interrogative complements of 'know', see Chapter 18.

The verb *ínnɛ* 'not know' is not the only verb that can take embedded interrogatives. Among others, 'forget' is also possible:

(810) *Kɛ̀ɛ̀lɛ́=gɛ* *mí=ɲ̀* *ób-aa=be=ma* *nà-è-m.*
   money=DEF 1SG.PRO=OBJ give-PFV=be.PST=or? forget-PFV.L-1SG
   'I forgot whether he gave me the money.'

Chapter 16
Relativization and clause nominalization

This chapter covers relative clauses and nominalized clauses in Tommo So. I use these expressions more or less interchangeably, as their morphological form is identical. Hence, a headless relative clause may be considered a nominalized clause, depending upon its context. These clauses are very common in Tommo So, and they are interesting in that they are head-internal, with tone marking on the internal head. This shows that grammatical tone marking in Tommo So does not need to be clause-peripheral, as it has been with possession and other modifiers (section 4.5). 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 section 16.3, I turn to a discussion of the verbal participle (the verb of the relative clause, with reduced verbal morphology), 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: subject relatives in section 16.5, object relatives in section 16.6, possessive relatives (with both the possessor as head and the possessed noun as head) in section 16.7, and PP relatives in section 16.8. Finally, section 16.9 briefly addresses a few cases of recursive relative clauses and section 16.10 addresses relative clauses with adverbial uses.

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 an indication of syntactic movement. Fronting of the head noun is also possible, perhaps under the influence of French, but it is by no means obligatory, and it is just as possible to move objects to a position before a subject head.

The head of the relative clause is marked with an all {L} tone overlay, identical to the overlay imposed by adjectives. If the head of the relative contains a possessor, the possessed noun undergoes tone lowering, but non-pronominal possessors remain tonally free. Speakers vary as to whether pronominal possessors undergo tone lowering. 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 {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**, i.e. the verb in the relative clause, is very similar to the verb forms found in sentences with focus (where the verb is defocalized). If in perfective aspect, it can only take the defocalized perfective form, and it never takes the subject agreement suffixes; pronominal agreement is obligatorily marked with an independent pronoun, which is typically 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 16.3.

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. It is not clear if there is some specific element in the relative clause (e.g. the participle) that controls this overlay or whether it is a more abstract structural 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 Chapters 4 and 7:

(811) 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 N+Adj construction as the head of the relative, the noun would already have been lowered because it is followed by an adjective. In this case, there is no empirical evidence as to which element (adjective or relative clause) is responsible for the tone lowering. However, the fact that in a N+Num construction, which would have only 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:

(812)

	Main clause	Relative head
a.	*jàndúlu*	*jàndùlù^L mí bénd-ɛ̀=gɛ*
	'donkey'	'the donkey I hit'
b.	*jàndùlù^L pílu*	*jàndùlù^L pìlù^L mí béndɛ̀=gɛ*
	'white donkey'	'the white donkey I hit'
c.	*jàndúlu tààndú-go*	*jàndùlù^L tààndù-gò^L mí béndɛ̀=gɛ=mbe*
	'three donkeys'	'the three donkeys that I hit'
d.	*jàndùlù^L pílu tààndú-go*	*jàndùlù^L pìlù^L tààndù-gò^L mí béndɛ̀=gɛ=mbe*
	'three white donkeys'	'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, it undergoes tone lowering, but its non-pronominal possessor is impervious to tone lowering and always retains its lexical tone; speakers vary as to whether pronominal possessors retain their lexical tone or fall under the scope of the relative's tone lowering. In main clauses, a pronominal alienable possessor follows the possessed noun and does not interact tonally. In the head of a relative clause, the pronominal possessor still retains its lexical tone, 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 is not audibly distinct from that imposed by the relative clause:

(813)   a.   Possessor *Noun^L*

      b.   Pronoun Noun^L ~ Pronoun^L Noun^L

      c.   Noun^L PossPro

      d.   Possessor *Noun^L Adjective^L*

      e.   Possessor *Noun^L Numeral^L*

Many of the tone patterns are identical between main clauses and relative clauses, particularly with regards to non-pronominal possessors. However, (813d–e) diverge when the possessor is inalienable. Consider first (813d). 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 the adjective is controlled by the relative

clause, which pays no attention to the alienability of the possession. The same is true for (813e). 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 expressed with an independent pronoun that immediately precedes the main verb in the relative clause. For example:

(814) a. *Kɔmbɔ́   yáà-dìɲ=yo   nὲὲ,   ɔgɔ̀-nɔ́   ǹdὲᴸ*
           war   go-IMPF.3PL=if   now,   Hogon-HUM.SG   person

           wó   ḿbέ=ǹ   túyò-dὲ=ma
           3SG.PRO   like.REL=OBJ   send-IMPF=or?

           ǹdὲ-ḿ=gɛ   kέm   yáà-dɛ.
           person-HUM.PL=DEF   all   go-IMPF

           'Now, if they [would] go to war, would the Hogon send [only]
           the people he liked or would <u>everyone</u> go?'   [23.2:100]

       b. *Ǹdὲᴸ   ú   yέ-dὲ=gɛ   kέm   jì~jímὲ-dìɲ.*
           person   2SG.PRO   see-IMPF.REL=DEF   all   RED~be.sick-IMPF.3PL
           'Every one of the people you see is sick.'

If the verb takes an auxiliary, as in the progressive, the pronoun can either precede the progressive participle or it can be placed immediately before the auxiliary:

(815) *Àn-nàᴸ   sɔ̀ɔ́   (mí)   sɔ́ɔ-gú   (mí)*
       male-HUM.SG   speech   (1SG.PRO)   speak-PPL   (1SG.PRO)

       sɛ́=gɛ̀   dámmá   àmìrì̀ᴸ=ǹ.
       have.REL=DEF   village   chief=COP

       'The man to whom I am speaking is the village chief.'

The position before the auxiliary is preferred, since this is the inflected verb, 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 relative clauses, a non-pronominal subject like *mí báá^H* 'my father' can be put in the first position, before the progressive participle, but it is ungrammatical before the auxiliary. These facts suggest that the independent pronoun might be a proclitic on the main verb (here, the auxiliary), though it can also cliticize to the verb complex as a whole (the whole progressive construction).

In a subject relative clause, a resumptive pronoun is typically omitted on the verb:

(816) a. *ɔ̀gɔ̀^L*   *kùyɔ̀^L*   *yòó-dɛ=gɛ*   *Bèɲì-Yúú*   *gɛ́=bi-ɛ̀^n*.
       Hogon   first   enter-IMPF.REL=DEF   Benji-Yuu   say=be.PST-3PL
       'The person Hogon to enter they called Benji-Yuu.'   [23.2:57]

   b. *Bèn-Dàmàlá*   *ùndɔ̀^L=gɛ*   *ǹdɛ̀^L*   *bàlá-dɛ=gɛ*
      Ben-Damala   ash=DEF   person   sweep.up.-IMPF.REL=DEF

      nèy-yé=gɛ   *émmé*   *bálà=bè*.
      2-ORD=DEF   1PL.PRO   sweep.up.IMPF=be.PST

      'The second person who swept up the ashes of Ben-Damala was us.'
                                                                   [23.2:75]

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, but this too is optional, as (817b) shows:

(817) a. *àn-sáárá*   *wó*   *yél-ɛ̀=gɛ*   *gòrò^L*
       AN-white.person   3SG.PRO   come-PFV.REL=DEF   hat

       bánu=gɛ   *ǹdɛ̀mɔ́=gɛ*   *dògò*   *yàgá*   *òndú*   *g-ì*.
       red=DEF   LOG.SG.PRO=DEF   but   other   be.NEG   say-PFV.L

       '[The time when] the white people came, they said "there is no red hat but us".'[29]   [23.2:49]

   b. *Bènjù-àànɔ*   *bàl-è*.   *Bènjù-àànɔ*
      Benju-Aanɔ   sweep.up-PFV.L   Benju-Aanɔ

      bál-è=gɛ   *gàl-áa...*
      sweep.up-PFV.REL=DEF   pass-PFV

      'Benju-Aanɔ swept [them] up. [That which] Benju-Aanɔ swept up passed...'   [23.2:77–78]

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29 That is to say, they are the only chiefs.

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 3sg. 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:

(818)   *Káá... émmé   bááᴴ=gɛ   émmé=ǹ   gàá   m̀bɛ̀.*
        but   1PL.PRO   father=DEF   1PL.PRO=OBJ   a.lot   love
        'But... our father loved us very much.'

        Nɛ́ɛ̂... émmé=ǹ   gàá   m̀bɛ̂=gɛ=diyɛ   gòròᴸ
        now   1PL.PRO=OBJ   a.lot   love.REL=DEF=for   hat

        bánu=gɛ   émmé   bɛ́l-ɛ̀=gɛ   wó=ǹ.
        red=DEF   1PL.PRO   find-PFV.REL=DEF   3SG.PRO=COP

        'Now... because of [the fact that he] loved us very much, it was
        [such the case that] we got the red hat.'   [23.2:33–34]

The first sentence introduces the subject *émmé bááᴴ* 'our father'. Then, in the next sentence, the subject of the first headless relative clause *émmé=ǹ gàá m̀bɛ̂=gɛ* (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 3pl. That is, while the marking of every other person and number is a discrete suffix added to the verb, the 3pl is often a portmanteau form. Even in those cases where it seems segmentable, i.e. when it takes the verb takes the suffix *-ɛ̀ⁿ*, this suffix still causes phonological changes on the verb. Perhaps this subject-verb fusion results in the 3pl subject marking being inextricable even in relative clauses. However, there is another factor contributing to the 3pl marking 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:

(819) a. *Gɛ̆m   kɔ̀lɔ̂ᴸ=nɛ.   Kìdɛ̀ᴸ   káná=bì-ɛ̀ⁿ.*
            funeral   inside=OBL   thing   **do.IMPF=be.PST.REL-3PL**
            'In funerals. The thing[s] [we] used to do (or the things that
            were done).'   [23.4:2]

      b. *ɛ́ɛ́ⁿ=gɛ   tégé-gú   íí=gɛ=ǹ   ɛ́ɛ́ⁿ=gɛ*
            ash=DEF   drip-PPL   child=DEF=OBJ   ash=DEF
            kɔ̀lɔ̂ᴸ=nɛ   núyɔ́   núyɔ̀-dɛ̀,   ì̀ᴸ   dá-í-ɛ̀ⁿ=gɛ.
            inside=OBL   song   sing-IMPF   child   **kill-PFV.REL-3PL=DEF**
            'As the ash was dripping, the child [started to] sing [from] inside
            the ashes, the child that was killed.'   [23.5:27]

The passive reading is particularly clear in (819b), since in the story, it is one woman who kills the child, not a group of people that would take 3pl marking.

In summary:

1. Non-3sg pronominal subjects must be marked with an independent pronoun.
2. These pronouns typically procliticize to the verb (participle).
3. Subject relatives do not take a resumptive 3sg pronoun before the participle.
4. Other (non-head) 3sg subjects are only optionally marked with a pronoun.
5. In pseudo-passive constructions, the participle can take 3pl subject agreement.

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 perfective. Where main verbs can take several different perfective forms, in relative clauses, this is usually condensed to just the defocalized perfective. This could be the result of the head of the relative clause taking default focus, which results in the verb being defocalized and hence incompatible with the *-aa* perfective forms. However, even when we try and put focus on the participle, the perfective form remains the same (focused reduplication of the sort seen in section 15.1.4 is not possible in relative clauses):

(820) $\grave{A}$n-n$\grave{a}^L$ ánu=le   mí   támb-è=gɛ
    male-HUM.SG   foot=ASSOC   1SG.PRO   kick-PFV.REL=DEF

    wómɔ=nɛ   gì̀n-áa=be-m,   àn-nà^L
    3SG.POSS=OBL   beg-PFV=be.PST-1SG   male-HUM.SG

    mí   bɛ́nd-ɛ̀=gɛ=lɛ.
    1SG.PRO   hit-PFV.REL=DEF=NEG.COP

    'I apologized to the man I <u>kicked</u>, not the man I <u>hit</u>.'

It is not possible to reduplicate the participle (**tà~támb-è*), in contrast to the focus strategy of main clauses:

(821) Wó=ǹ   bɛ̀ndɛ̀-lí-m,   wó=ǹ   tà~támb-è-m.
    3SG.PRO=OBJ   hit-NEG.PFV-1SG   3SG.PRO=OBJ   RED~kick-PFV-1SG

    'I didn't <u>hit</u> him, I <u>kicked</u> him.'

Besides the perfective, 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 Imperfective

The present/future form of the affirmative imperfective is segmentally identical to its form in main clauses, with the suffix *-dɛ* added to the stem. However, while in main

clauses this verb form takes a {HL} tone overlay, in relative clauses the verb stem retains its lexical tone. This can be schematized as follows:

(822)   Relative present/future affirmative imperfective participle
        Verb-*dɛ*

The suffix is underspecified for tone. The following table compares imperfective verb forms in relative and main clauses:

(823)   <u>Relative</u>   <u>Main</u>
        a. *yóó-dɛ*   '(that) enter'   *yóô-dè*   '(will) enter'
        b. *jɔ̀bɔ́-dɛ*   '(that) run'   *jɔ́bɔ̀-dè*   '(will) run'
        c. *káná-dɛ*   '(that) do'   *kánà-dè*   '(will) do'

The one exception seems to be those L-toned subminimal verbs *yè* 'see' and *gɛ̀* 'say'. In relative participles, these verbs take H tone instead of lexical L, yielding *yɛ̂-dɛ* and *gɛ̂-dɛ* 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 12.2.1.2.

If the past imperfective is rare in main clauses, it is even rarer in relative clauses. Nonetheless, in those examples we see, the verb stem retains its lexical tone, just as it does in the present/future imperfective. For example:

(824)   *Nàmà*^L   *mí*   *témɛ̂=be=gɛ*   *ɲɔ́m-go=be.*
        meat   1SG.PRO   eat.IMPF.REL=be.PST=DEF   rotten-ADV=be.PST
        'The meat that I was going to eat was rotten.'

See also (819a) for a textual example. We will need more data to confirm the form of the past imperfective.

16.3.2.2 Perfective
As indicated above, most of the verbal differences between main clauses and relative clauses are seen in the perfective, most notably in the total absence of *-aa* perfectives (except for *-áá-dè* imperfective perfectives, which are attested). Just as the use of the defocalized L perfective (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 perfective relative participle is identical to a perfective main verb, but rather than taking all {L} tonally, it appears to take a {HL} overlay, in which the H is only specified on the first mora. Note that this is precisely the tone pattern used by some speakers for 3sg forms of the defocalized perfective (see section 12.4), suggesting that at one stage, the relative clause did not have a special

overlay. Further evidence for this hypothesis comes from those cases where the relative participle carries 3pl agreement. In this case, the {HL} overlay is assigned such that the H extends up to the L tone of the suffix *-ɛ̀ⁿ*, the same tone pattern found on 3pl defocalized perfectives in main clauses. See example (821) above.

We can summarize the form of the perfect as follows:

(825) Relative present affirmative perfective participle
Verb{HL},*-E/-i*

For more on the segmental formation of these perfective verbs, see section 12.4.

In the negative, the form of verb is once again segmentally the same as in main clauses, but it differs tonally, taking a {HL} overlay with the H on the first mora. This is schematized as follows:

(826) Relative present affirmative perfective participle
Verb{HL}*-lì*

The following forms illustrate the tonal differences between main clause negative perfectives and those found in relative clauses:

(827)   Relative   Main
a. *yóò-lì*   '(that) didn't enter'   *yòò-lí*   'didn't enter'
b. *jɔ́bɔ̀-lì*   '(that) didn't run'   *jɔ̀bɔ̀-lí*   'didn't run'
c. *kánà-lì*   '(that) didn't do'   *kànà-lí*   'didn't do'

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 *-áá-dɛ̀* perfective form with the lexical tone of the auxiliary *tíyɛ̂*, as in:

(828) *Nàà^L*   *mí*   *yɛ̀*   *tíy-áá-dɛ̀=gɛ=mbe*
cow   1SG.PRO   see.EXP   EXP-PFV-IMPF.REL=DEF=PL

kɛ̀lɛ̀^L   *póó*   *yé=sɛ̀^L-ɛ̀ⁿ*.
horn   fat   EXIST=have-3PL

'The cows that I've seen have big horns.'

Recall from section 12.6 that in main clauses, the verb form would be *yɛ̀ tíy-aa=wɔ*, with the *-aa* underspecified and the imperfective suffix *-dɛ* replaced with the quasi-verb auxiliary *=wɔ*.

The negative form of the experiential perfect is actually identical to that found in main clauses. The auxiliary *tíyɛ̂* is in the past perfective, but unlike non-experiential past perfectives, which take {HL} in relative clauses, the experiential takes its normal {L} overlay before a H-toned suffix:

(829) *Íí=gɛ*   *kìdɛ̀ᴸ*   *wó*   *ɲ̀yɛ̀*
      child=DEF   thing   3SG.PRO   eat.EXP

      tìyɛ̀-lí=gɛ=mbe   *níŋ-íy-aa=wɔ.*
      EXP-NEG.PFV.REL=DEF=PL   fear-MP-PFV=be

      'The child is afraid of things that he hasn't eaten.'

For more on the experiential perfective, see section 12.6.

16.3.2.4 Progressive

Example (815) 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 12.7.

16.3.3 Quasi-verbs as relative participle

When a {HL} overlay is applied to quasi-verbs, it tends to leave the quasi-verb H and a following clitic L, since most quasi-verbs are subminimal and could not host the whole contour. If the quasi-verb is negated, as in *bé-lì* in (830c) below, the whole contour can remain on the participle.

(830) a. *gìnɛ́*   *úwɔ=nɛ*   *ǹdɛ̀-mᴸ*   *wɔ́=gɛ̀=mbe*
           house   2SG.POSS=OBL   person-HUM.PL   be.REL=DEF=PL

           pɛ́cɛ̀   *kɛ́m*   *áw-ee*   *dɔ̀~dɔ́nɔ̀-dìŋ.*
           half   all   catch-NF   RED~sell-IMPF.3PL

           'They catch half of the people who were in your house and sell them.'

                                                           [23.2:98]

      b. *Sàbé*   *jàd-áa*   *ǹdɛ́mbe*   *yɛ̀-nd-áa*
           because   reflect-PFV   LOG.PL.PRO   see-FACT-PFV

           kɔ̀mmɔ́=nɛ   *nàmàᴸ*   *tóò=mbe=yo*   *dògò*   *úndu=nɛ*
           cave=OBL   meat   be.in.REL=PL=if   but   forest=OBL

           nàmàᴸ   *tóò=mbe=ǹ*   *bìl-éélè=wa.*
           meat   be.in.REL=PL=OBJ   be.possible-NEG.IMPF=QUOT

           '[They said] because we thought it over, we saw that aside from the animals who are in caves, the animals who are in the forest will not be able to stand it.'   [23.6:22]

c. *Àn-nà^L*   *bàré=gɛ=nɛ*   *bé-lì=gɛ*
male-HUM.SG   meeting=DEF=OBL   be.PST-NEG.REL=DEF

Mɔ́ɔ́l   *àmìrù^L=gɛ*   *wó=ǹ.*
Mori   chief=DEF   3SG.PRO=COP

'The man who wasn't at the meeting, it was the chief of Mori.'

16.3.4 Relative participles based on adjectival predicates

Dedicated relative participles based on adjectival predicates are rare. If the construction is a possessor relative clause ('the X whose Y is Adj'), a bahuvrihi construction is used; see section 6.3. If it is a subject relative ('the X who is Adj'), a simple N+Adj construction is used ('the Adj X'). The contexts in which I have been able to find relative adjectival predicates are with adjectival coordination (831a) and with adjectival predicates in the past tense (831b–c). For example:

(831)   a.   *Gàmmà^L*   *gɛ́m=le*   *pílu=le*   *wɔ́=gɛ̀*   *y-àà=bé-m.*
         cat   black=ASSOC   white=ASSOC   be.REL=DEF   see-PFV=be.PST-1SG
         'I saw a black and white cat.'

      b.   *Àn-nà^L*   *póó-go=bé=gɛ̀=ǹ*   *y-àà=bé-w?*
         man-HUM.SG   fat-ADV=be.PST=DEF=OBJ   see-PFV=be.PST-2SG
         'Did you see the man who used to be fat?'

      c.   *Sɔ̀w^L*   *wómɔ*   *pílu-go=bé=gɛ̀=mbe*   *mɔ̀g-áa=be-m.*
         clothes   3SG.POSS   white-ADV=be.PST.REL=DEF=PL   wash-PFV=be.PST-1SG
         'I washed his clothes that used to be white.'

Since the quasi-verb in the adjectival predicate is the relative participle, these forms look no different than any other relative clause with a quasi-verb participle.

16.3.5 Relative participles with verb chaining

Just like main clauses, relative clauses can contain verb chains. Section 18.1 goes in depth on verb chaining in Tommo So, but in brief, the non-final verb is marked with either the *-aa* if perfective and *-ee* if imperfective. The final verb takes its usual relative TAN marking.

     Non-final verbs in a relative participle take the same marking. This is one strategy for making a coordinated relative clause with a shared head. For example:

(832) *Nàà^L êb-aa   dámmá=gɛ=nɛ   mí   jééllɛ=gɛ   píli=ǹ.*
cow   buy-PFV   village=DEF=OBL   1SG.PRO   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 perfective and thus takes -*aa*. The final verb, 'bring', takes the regular participial imperfective form. If the buying were imperfective ('that I will buy'), it would take the form *êb-ee*.

If the meanings of the two relative clauses are unrelated, as in 'the dog that the children found and that I hate', with different subjects for the verbs and no logical connection between them, two relative clauses must be formed:

(833) *Ìsè^L   úlûm=gɛ   òlú=baa   témb-ɛ̀=gɛ,   ìsè^L*
dog   children=DEF   field=LOC   find-PFV.REL=DEF   dog

mí   ḿbɛ̀=lɛ=gɛ   ɔ̀gɔ̀-nɔ́=gɛ
1SG.PRO   like.REL=NEG.COP=DEF   chief-HUM.SG=DEF

ɛ̀ɲjɛ̀^L=gɛ   dá-è=gɛ   wó=ǹ.
chicken=DEF   kill-PFV.REL=DEF   3SG.PRO=COP

'The dog that the children found in the fields and that I hate, it is he who killed the chief's chicken.'

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. When the head of the relative clause is null, context disambiguates the intended meaning and grammatical role of the head.

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' or 'One who…'
As head of a relative clause, the generic term 'person' *ǹdɛ́* is optional. It may be present (834a) or it may be null (834b):

(834) a. *Ǹdɛ̀ᴸ* *ɔ̀rɔ̀ᴸ* *jáá* *ǹy-éélè=gɛ* *dɔ̀gɔ̀-nɔ́=lɛ.*
person baobab meal eat-NEG.IMPF.REL=DEF Dogon-HUM.SG=NEG.COP
'A person who doesn't eat *toh* is not a Dogon.'

b. *Nàá* *úwɔ=gɛ* Ø *wó* *gúyⁿ-ɛ̀=gɛ*
cow 2SG.POSS=DEF 3SG.PRO steal-PFV.REL

wó=ǹ *yé=pìì-nd-ì-ɛ̀ⁿᴸ.*
3SG.PRO=OBJ EXIST=close-FACT-PFV.L-3PL
'They locked up the one who stole your cow.'

Notice that in (834a) where the subject head of the relative is overt, a resumptive 3sg pronoun is actually ungrammatical. In (834b), on the other hand, *wó* is needed to mark the subject in the relative clause. If overt *ǹdɛ́* were present, the *wó* would not be possible.

If a pronoun is the intended head of a relative clause, a structural head *ǹdɛ́* 'person' takes the {L} overlay characteristic of the head. It is unclear whether this is due to grammatical restrictions such that pronouns themselves cannot be head of the relative clause.

(835) *Émmé* *(ǹdɛ̀ᴸ)* *nɔ̀nú* *wɔ́=gɛ̀=mbe* *ATT=ǹ* *wèt-è.*
1PL.PRO (person) here be=DEF=PL ATT=OBJ vote-PFV.L
'We [the people] who are here voted for ATT.'[30]

This example also shows an interesting loan from French, *wèté* 'vote', which has been imported into the native inflectional system despite its utterly foreign phonology.

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 (836a).

(836) a. *(Kìdɛ̀ᴸ)* *ú* *ínnɛ̀=gɛ* *ú=ǹ*
thing 2SG.PRO know.NEG.REL=DEF 2SG.PRO=COP

bàrmá-mɔ́ *nàà-gú.*
injure-CAUS NAA-PROH
'Don't let yourself get hurt by what you don't know.'

---

30 ATT [atete], which stands for Amadou Toumani Toure, had been the president of Mali since 2002 until he was deposed by a military coup in March 2012.

b. *Ø émmé gɛ́-dɛ=gɛ Màndɛ̀ᴸ gó-îm*
    1PL.PRO say-IMPF.REL=DEF Mande leave-AGT.PL

Màndé yɛ̀l-ɛ̀-y.
Mande come-PFV.L-1PL

'[what/that which] we say is that [we], those who left Mande,
came to Mande.' [23.2:11]

16.4.2 'Time'

The generic word *wágádu* '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:

(837) a. *Mí ánìgè^{HL}=mbe wàgàdù^ᴸ nɔ̀nú mí*
      1SG.PRO friend=PL time here 1SG.PRO

bé-lì=gɛ=le yɛ̀l-ì-ɛ̀^n.
be.PST-NEG.REL=DEF=ASSOC com-PFV.L-3PL

'My friends came when I wasn't here.'

b. *Mɔ́ɔ́lu=mɔ=gɛ Ø tà-ì-ɛ́^n=gɛ=le³¹*
      Mori=POSS=DEF shoot-PFV.REL-3PL=DEF=ASSOC

àn-sáárá yɛ̀l-áa=wɔ.
AN-white.person come-PFV=be

'At [the time when] they started the Mori [war], the white
people had come.' [23.2:119]

The example in (837a) with an overt head is provided to show that the structure is
exactly the same as the example in (837b) 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. Often, though, the headless relative clause is
simply a nominalized clause, and if an external head could be identified, it would
be something abstract like 'the fact'. Consider the following:

---

31 It is not clear why the tone of the perfective is LH here.

(838) a. *Nɛ́ɛ̂... émmé=ǹ   gàá   ḿbɛ̂=gɛ=diyɛ   gòrò^L*
          now 1PL.PRO=OBJ a.lot love.REL=DEF=for hat

                bánu=gɛ   émmé   bɛ́l-ɛ̀=gɛ   wó=ǹ.
                red=DEF 1PL.PRO find-PFV.REL=DEF 3SG.PRO=COP

                'Now... [the fact] that we got the red hat was because of the
                fact that our father loved us very much.'   [23.2:34]

    b. *Nɔ̀ɔ́   pínníyaa bé=ǹ   pàd-éélè=gɛ   bé*
        this   after   3PL.PRO=OBJ leave-NEG.IMPF.REL=DEF 3PL.PRO

                júg-ɔ̀=gɛ   ǹdɛ̀mbé... íyɛ̀lɛ̀ Bànjàgàrá yà-ì-ɛ̀ⁿ.
                know-PFV.REL=DEF LOG.PL.PRO again Bandiagara go-PFV.L-3PL

                'After that, [when] they$_i$ realized [the fact] that [they] wouldn't leave
                them [i.e. that they couldn't fight them], (coughs), they$_i$ went to
                Bandiagara again.'   [23.2:145]

Both examples contain two headless relative clauses, both of which could be seen as having a null head translating roughly to 'the fact'; 'because of [the fact] that our father loved us very much'; '[the fact] that we got the red hat'. In (838b), the first relative clause seems to carry this 'fact' null head ('[the fact] that they wouldn't leave them'), but the second is less clear. It rather seems to be used as simply a non-final clause, chaining with the next clause 'they went to Bandiagara'. I will discuss this relative usage in the next sub-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 example in (838b) above, for example, seems to contain a second headless relative clause, though it functions as a main clause. The headless relative clause *bé júg-ɔ̀=gɛ* '[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 so 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 (839) below; further, when a relative clause has a null temporal head, it usually takes the associative clitic *=le*, as we saw in section 16.4.2 above. Here, there is no associative clitic. In this section, I describe how these headless relative clauses are used, leaving analysis to future work.

    Other examples where the headless relative clause is followed by an inflected verb or copula include the following:

(839) a. *Bon,   òlù^L nàmá kɛ́m bé   móòmb-ìy-ì=gɛ   bé*
   well.FR bush meat all 3PL.PRO assemble-MP-PFV.REL=DEF 3PL.PRO

   dánn-ìy-ì=gɛ,   kìdɛ́   kɛ́m
   sit-MP-PFV.REL=DEF   thing   all

   yàá-m=le=wɔ-ɛ̀ⁿ,   kìdɛ́   kɛ́m
   female-HUM.PL=ASSOC=be-3PL   thing   all

   líí-m=le=wɔ-ɛ̀ⁿ.
   children-HUM.PL=ASSOC=be-3PL

   'Well, all of the wild animals got together and sat down; they
   were all with wives, they were all with children.'   [23.6:1]

  b. *Gìnɛ́=gɛ   wó   úd-ɛ̀=gɛ,   bílu=gɛ*
   house=DEF   3SG.PRO   build-PFV.REL=DEF   ladder=DEF

   sɛ̀-lɛ́   dɛ̀mbɛ́-dim=gɛ=mɔ   bílu   sɛ̀-lɛ́.
   have-NEG   build.roof-INF=DEF=POSS   ladder   have-NEG

   'He built the house, [but] he did not have a ladder, he did not
   have a ladder to build the roof.'   [23.3:8]

In (839a), the utterance begins with two headless relative clauses strung together with no discernible relative meaning. They are followed by an inflected clause. Similarly, in (839b), the headless relative '[that] he built his house' is followed by an inflected clause 'he did not have a ladder'. In sum, the relative clauses seem to be used to string clauses together.

However, this analysis runs into problems when we consider examples like the following:

(840) a. *Yém   bé   tɔ́ⁿ-ɛ̀=gɛ   kɔ̀mbɔ́=gɛ*
   like.that   3PL.PRO   write-PFV.REL=DEF   war=DEF

   yém   bé   tá-è=gɛ.
   like.that   3PL.PRO   shoot-PFV.REL=DEF

   'They wrote like, they made war like that.'   [23.2:127]

  b. *Mɛ̀ɛ̀r^L   gìnɛ́   úd-áá-dìm(=gɛ=nɛ)*
   mayor   house   build-PFV-IMPF.3PL.REL=DEF=OBL

   wó   sáná^H=gɛ=mbe=le   wó
   3SG.PRO   older.brother=DEF=PL=ASSOC   3SG.PRO

   jáw-ìy-ì=gɛ   yɔ̀~yɔ̌w=gɛ.
   fight-MP-PFV.REL=DEF   RED~mean=DEF

   '[By where] they built the mayor's office, she fought with her
   older brothers, she was mean.'   [23.3:34]

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 12.3.1.4 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 (840b) 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 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. When a pronoun is the head of a relative clause, it often appears with the noun 'person'; it is this noun (if present) that is tone lowered, not the pronoun itself.

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 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:

(841) a. *ɔ̀gɔ̀^{L} kùyɔ̀^{L} yóó-dɛ=gɛ* *Bɛ̀ŋjì-Yúú gɛ́=bi-ɛ̀^{n}.*
Hogon   first   enter-IMPF.REL=DEF   Benji-Yuu   say=be.PST-3PL
'The first person to enter the Hogon, they called Benjiyuu.'   [23.2:57]

b. *Ìyày^L núyɔ́ núyɔ̀-lì=gɛ*   *tílày   gɔ́ɔ́   gɔ́ɔ̀-dɛ̀.*
girl   song   sing-NEG.PFV.REL=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 (842a) or locative (b):

(842) a. *Yáá   dìgɛ̀^{L} nàm^L àn-nà^L núyɔ́*
        yesterday   evening   sun   male-HUM.SG   song

        núy-ɛ̀=gɛ   hɔ̀lɔ̀-lí-m.
        sing-PFV.REL=DEF   trust-NEG.PFV-1SG

        'I don't trust the man who sang last night.'

    b. *Nìmbáà   yàà-nà^L ìŋɛ̀^{L} ní   mí*
        over.there   female-HUM.SG   stand.REL   that   1SG.PRO

        báá^H íg-go=wɔ.
        father   know-ADV=be

        'The woman standing over there knows my father.'

A few notes on (842b): 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 given here 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. See section 13.2.3.1 for more on stative verbs. Finally, this stative verb also takes a {L} overlay because it is followed by a demonstrative *ní* 'that', which has the effect of lowering the tone of the participle. The adverb is not affected.

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:

(843) a. *Kìlèmɛ́   ǹdɛ̀^{L} yà-éélè=gɛ=mbe   gìnɛ̀-ý=gɛ*
        party   person   go-NEG.IMPF.REL=DEF=PL   house-DIM=DEF

        bé   dɔ́mm-ìyɛ̀-dɛ̀.
        3PL.PRO   watch-MP-IMPF

        'It is the <u>people who are not going to the party</u> who will watch the house.'

    b. *Nàmá=gɛ   yàà-nà^L tɛ́m-ɛ̀=gɛ   bɛ̀rɛ́*
        meat=DEF   female-HUM.SG   eat-PFV.REL=DEF   stomach

        wómɔ   jímɛ́-gú=sɛ.
        3SG.POSS   be.sick-PPL=have

        'The woman who ate the meat, her stomach is sick.'

In (843a), the bare adjunct 'party' precedes the subject head. Note that the main clause following the relative 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. In (843b), the direct object of the relative participle precedes the subject head. In both cases, consultants first offered versions in which the subject head was clause-initial, though they had no trouble switching the order. They do not report any differences in meaning between the two orders, so it is not clear in what contexts one would use each order.

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, once after each head. Both relative clauses take the usual form of a subject relative, i.e. the head is clause-initial and tone lowered:

(844) *Émmé   dámmá=gɛ=nɛ   yàà-m^L   ìsé*
       1PL.PRO   village=DEF=OBL   female-HUM.PL   dog

       témé-dɛ=gɛ=mbe   ànà-m^L   ìsé
       eat-IMPF.REL=DEF=PL   male-HUM.PL   dog

       témé-dɛ=gɛ=mbe   m̀bɛ=lɛ-y.
       eat-IMPF.REL=DEF=PL   like-NEG.COP-1PL

       'We in the village, we don't like men and women who eat dog.'

No conjunction is required between the two clauses, though it is possible to use the associative clitic =*le* on each of relative clauses.

 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.

(845) *Émmé   dámmá=gɛ=nɛ   yàá-m=le   àná-m=le*
       1PL.PRO   village=DEF=OBL   female-HUM.SG=ASSOC   male-HUM.SG=ASSOC

       ìsé   témé-dɛ=gɛ=mbe   m̀bɛ=lɛ-y.
       dog   eat-IMPF.REL=DEF=PL   like-NEG.COP-1PL

       'We in the village, we don't like women and men who eat dog.'

Some speakers do not accept this strategy.

 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:

(846) *Àná-m=gɛ=le   yàá-m=gɛ=le*
       male-HUM.PL=DEF=ASSOC   female-HUM.PL=DEF=ASSOC

       (bé)   jáw-ìy-ì=gɛ   sɔ̀ɔ́   sɔ̀-énnè.
       (3PL.PRO)   fight-MP-PFV.REL=DEF   speech   speak-NEG.IMPF.3PL

       'The men and women who fought no longer speak.'

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; the action is understood to be reciprocal. In these cases, all consultants agree on this form.

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 18):

(847) a. *Ǹdɛ̀ᴸ   kíyé   jùmb-ée   kɛ̀b-éélè=gɛ=mbe   m̀bɛ́=lɛ̀=m.*
           person bone throw-NF pick.up-NEG.IMPF.REL=DEF=PL like=NEG.COP-1SG
           'I don't like people who throw bones and don't pick [them] up.'

       b. *Yàà-nàᴸ   Àmbìlèᴸ Sáná=ǹ   ɛ́ⁿ-aa   Bàmàkó*
           female-HUM.SG   Ambile   Sana=OBJ marry-PFV   Bamako

           yàà-gú=wɔ́   y-àà=bé-m.
           go-PPL=be.REL   see-PFV=be.PST-1SG
           'I saw the woman who married Sana from Ambile and is
           going to Bamako.'

       c. *Àn-nàᴸ   fɛ́tu=gɛ=nɛ   bɛ̀lú=mbe   sɛ́m-ee*
           man-HUM.SG   party=DEF=OBL animal=PL   slaughter-NF

           sîmbɛ̂-dɛ=gɛ=ǹ   íg-go=wɔ-m.
           grill-IMPF.REL=DEF=OBJ   know-ADV=be-1SG
           'I know the man who slaughters sheep and grills them for parties.'

In this case, the two verbs form a single chained VP, rather than each taking their own relative clause with or without repetition of the shared head (e.g. *ǹdɛ̀ᴸ kíyé jùmbɔ́-dɛ=gɛ=mbe (ǹdɛ̀ᴸ) kɛ̀b-éélè=gɛ=mbe*...). This is unsurprising since the two verbs come together to form a single complex sequence of actions.

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 (846) where a coordinated NP head must be understood jointly, the use of a 3pl pronoun can strengthen this reading.

Another thing to be noted about subject relatives is the relative prevalence of the *-áá-dè* verb form when compared to object relatives. This is especially true with intransitive verbs used like modifiers, as in:

(848) a. *àn-nà*^L   *yím-áá-dè*   (also okay with *yím-ɛ̀*)
           male-HUM.SG   die-PFV-IMPF.REL
           'dead man (a man who has died)'

       b. *màŋgòrò*^L   *íl-áá-dè*
           mango   ripen-PFV-IMPF.REL
           'ripe mango (a mango that has ripened)'

It is not a requirement that the relative participle in these cases be intransitive. This *-áá-dè* form is also acceptable on transitive verbs:

(849) *àn-nà*^L   *jàndúlu=gɛ*   *bɛ̀nd-áá-dɛ̀=gɛ*
       male-HUM.SG   donkey=DEF   hit-PFV-IMPF=DEF
       'the man who hit the donkey'

For more on this imperfective perfective form, see section 12.5.

16.6 Object relatives

Object relatives involve the object of the relative participle acting as the head of the relative clause. In these constructions, when the subject is non-pronominal, the head-internal nature of Tommo So relative clauses becomes clear, since the unmarked position for the object head is between the subject and the relative participle.

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 pro-nominal, this is marked with an independent pronoun typically directly before the verb, leaving the object in initial position again. For example:

(850) a. *Ànà-m*^L   *mí*   *yɛ̂-lì=gɛ=mbe*   *yàbáà yà-ì-ɛ̀*ⁿ*?*
           man-HUM.PL 1SG.PRO see-NEG.PFV.REL=DEF=PL where go-PFV.L-3PL
           'Where did the men go that I didn't see?'

b. *Nàà^L nàmbá ú émè-lì kó m̀bè-m.*
cow yet 2SG.PRO milk-NEG.PFV that.DD want-1SG
'I want a cow that you haven't milked yet.'

In (850a), 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. Similarly, in (850b), the adverb *nàmbá* can be moved to the front of the clause, but the order given above is the first one offered.

When a non-pronominal subject is introduced, however, the object head normally follows it.

(851) *Íí=gɛ mí=ǹ màŋgòrò^L ób-ì=gɛ*
child=DEF 1SG.PRO=OBJ mango give-PFV.REL=DEF

kɛ́m yé=ǹy-ɛ̀-m.
all EXIST=eat-PFV.L-1SG
'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, if there is a subject, an object, and an adverb in an object relative, all six orders are possible:

(852) a. Adv S O (Pro) V
yògó Sáná nàà^L (wó) sɛ́mɛ́-dɛ
tomorrow Sana cow (3SG.PRO) slaughter-IMPF.REL
'the cow that Sana will slaughter tomorrow'

b. Adv O S (Pro) V
yògó nàà^L Sáná (wó) sɛ́mɛ́-dɛ

c. S O Adv (Pro) V
Sáná nàà^L yògó (wó) sɛ́mɛ́-dɛ

d. S Adv O (Pro) V
Sáná yògó nàà^L (wó) sɛ́mɛ́-dɛ

e. O Adv S (Pro) V
nàà^L yògó Sáná (wó) sɛ́mɛ́-dɛ

f. O S Adv (Pro) V
nàà^L Sáná yògó (wó) sɛ́mɛ́-dɛ

g. *Pro Adv O S V
*Wó yògó nàà^L Sáná sɛ́mɛ́-dɛ

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 of a relative clause

Like coordinated subject NPs, a relative clause with coordinated object NPs as head will require the repetition of the relative clause after each of the conjuncts:

(853) *Tàsà^L*   *mí*   *ɛ́b-ɛ̀=gɛ=mbe*   *kɔ̀rɔ̀^{L}*
       bowl   1SG.PRO   buy-PFV.REL=DEF=PL   calabash

       mí   *ɛ́b-ɛ̀=gɛ=mbe*   *kɛ́m*   *jɔ̀g-áa=ỳ.*
       1SG.PRO   buy-PFV.REL=DEF=PL   all   break-PFV=COP

       'The bowls and the calabashes that I bought all broke.'

A consultant rejected a form with a coordinated NP as head, but this judgment will need to be checked with other speakers.

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 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. For example:

(854) a. *Mí*   *bábé^H*   *yέllὲ.*
       1SG.PRO   uncle   come.IMPF
       'My uncle will come.'

     b. *Mí*   *bábé^H*   *Bàmàkó*   *wɔ́=gὲ*   *yέllὲ.*
       1SG.PRO   uncle   Bamako   be.REL=DEF   come.IMPF
       'My uncle who lives in Bamako will come.'

16.7.1.1 Non-pronominal alienable possession

Recall from section 7.6 that non-pronominal alienable possession in Tommo So involves the direct juxtaposition of the possessor and the possessed noun (in that order) with a {L} tone overlay on the possessed noun. The possessor retains its lexical tone. Contrast this with the {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:

(855) *Arámátá*   *ìsὲ^L*   *díyε-go*   *bɔ̀gó-dε=gε...*
       Ramata   dog   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 (section 4.5.3.1). Like the demonstrative situation, we do not know whether it is the possessor or the relative clause that is controlling the {L} overlay on the possessed noun.

     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:

(856) a. *Sáná*   *jàndùlù^L*   *tààndù-gò^L* ~   *tààndú-go*
       Sana   donkey   three-ADV   three-ADV
       'Sana's three donkeys'

     b. *Sáná*   *jàndùlù^L*   *tààndù-gò^L*   *mí*   *bέnd-ὲ=gε=mbe*
       Sana   donkey   three-ADV   1SG.PRO   hit-PFV.REL=DEF=PL
       'Sana's three donkeys that I hit'

The fact that the relative clause controls the tone of the numeral suggests that perhaps it is also responsible for the tone of the possessed noun; further evidence for this analysis comes from inalienable pronominal possession, discussed in section 16.7.1.4.

Recall that adjectives are always controlled by both the possessor and a relative clause, and thus shed no light on the issue of whether the possessor or the relative clause is responsible for tone lowering:

(857) a. *Sáná   jàndùlù^L pìlù^L*
           Sana   donkey   white
           'Sana's white donkey'

       b. *Sáná   jàndùlù^L pìlù^L mí   bɛ́nd-ɛ̀=gɛ*
           Sana   donkey   white   1SG.PRO   hit-PFV.REL=DEF
           'Sana's white donkey that I hit'

In both (857a) and (857b), 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:

(858) a. *yàa-ná=gɛ*   *jàndùlù^L mí   bɛ́nd-ɛ̀=gɛ*
           female-HUM.SG=DEF   donkey   1SG.PRO   hit-PFV.REL=DEF
           'the woman's donkey that I hit'

       b. *yàá-m=gɛ=mbe*   *kɛ́m   jàndùlù^L mí   bɛ́nd-ɛ̀=gɛ=mbe*
           female-HUM.PL=DEF=PL   all   donkey   1SG.PRO   hit-PFV.REL=DEF=PL
           'all of the women's 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:

(859) [Possessor *Possessed^L* (*Adjective^L* Numeral^L)]

16.7.1.2 Pronominal alienable possession

While non-pronominal alienable possession affects the tone of the possessed noun, the same is typically not true for pronominal alienable possession. In section 7.6.1.4, we saw that pronominal possessors that are made up of the independent pronoun fused with some version of the possessive particle *mɔ* are placed after the possessed noun. The two do not interact tonally. 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 {L} by the relative clause. Interestingly, the pronoun retains its lexical tone:

(860) a. *jàndúlu   ḿmɔ*
           donkey   1SG.POSS
           'my donkey'

       b. *jàndùlù^L   ḿmɔ   wó   bɛ́nd-ɛ̀=gɛ*
           donkey   1SG.POSS   3SG.PRO   hit-PFV.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. It can optionally be placed after the relative participle (*jàndùlù^L wó bɛ́nd-ɛ̀ ḿmɔ=gɛ*), where it is still tonally free. 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:

(861) *Jàndùlù^L   pìlù^L   ḿmɔ   wó   bɛ́nd-ɛ̀=gɛ   yím-aa=ỳ.*
       donkey   white   1SG.POSS   3SG.PRO   hit-PFV.REL=DEF   die-PFV=COP
       'My white donkey that he hit died.'

Curiously, the possessive pronoun may also be separated from the possessed head noun by another clause-internal element, like the subject:

(862) *Jàndùlù^L   àn-ná=gɛ   émmɛ   (wó)*
       donkey   male-HUM.SG=DEF   1PL.PRO   (3SG.PRO)

       bɛ̀nd-ɛ̀^L   nɔ́   nàmbá   bírɛ́   bìrú   bè-élè.
       hit-PFV.REL   this   yet   work   work.NOM   be.able-NEG.IMPF

       'This donkey of ours that the man hit still can't work.'

The possessed noun head 'donkey' takes {L} tone, as does the participle due to the effect of the following demonstrative. Other elements (possessor, the subject) retain their lexical tone.

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 {L} overlay. This situation remains the same when acting as the head of a relative clause:

(863) a. *Sáná [nàà dìyὲ]^L*
       Sana aunt
       'Sana's aunt (older sister of mother, lit. big mother)'

   b. *Sáná [nàà dìyὲ]^L   mí   bέnd-ὲ=gε*
       Sana aunt   1SG.PRO   hit-PFV.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:

(864) a. *Sáná   [nàà dìyὲ]^L   kómmó   kúlóy-go*
       Sana   aunt   skinny   six-ADV
       'Sana's six skinny aunts'

   b. *Sáná   [nàà dìyὲ]^L   kòmmò^L   kùlòy-gò^L   nɔ̀nú*
       Sana   aunt   skinny   six-ADV   here

       yέl-ὲ=gε=mbe   sáy-ni   núyɔ́   íg-go=wɔ-ὲ^n.
       come-PFV.REL=DEF=PL   much-ADV   song   know-ADV=be-3PL

       'Sana's six skinny aunts who came here know how to sing well.'

The tone lowering results with the relative clause are the same – the possessor has its lexical tone, the possessed noun has L tone (either from the possessor or the relative clause), and the relative clause is able to affect the tone of any elements that remain free from the possessor's control.

16.7.1.4 Pronominal inalienable possession

While in all other cases of possession the possessor either controls a {L} overlay or has no effect, in pronominal inalienable possession, the tone overlays are either {H} or {HL}, distinct from the {L} overlay of the relative clause. This makes this construction a good test to see whether the relative participle or the possessor controls the tone of the possessed noun. Unfortunately, the data are inconsistent, with speakers varying. In one output form, the possessor + possessed noun form a **tonosyntactic island**; that is, the possessor retains its lexical tone and the possessed noun takes the possessor's {H(L)} overlay, unaffected by the relative clause. In another, both the possessor and the possessed noun undergo tone lowering from the relative clause. Finally, the third option is half-way in between: the possessor retains lexical tone, but the possessed noun takes the relative clause's {L} overlay. This variation is even found within speakers. Compare the following:

(865) a. *mí   báá^H*
        1SG.PRO   father
        'my father'

        mí   báá^H   nàmá   tɛ́mɛ̀-lì=gɛ
        1SG.PRO   father   meat   eat-NEG.PFV.REL=DEF
        'my father who doesn't eat meat'

    b. *émmé   nínjú^H*
        1PL.PRO   uncle
        'our uncle'

        èmmè^L   nìnjù^L   Bàmàkó   yá-è=gɛ
        1PL.PRO   uncle   Bamako   go-PFV.REL=DEF
        'our uncle who went to Bamako'

    c. *émmé   nínjú^H*
        1PL.PRO   uncle
        'our uncle'

        émmé   nìnjù^L   Bàmàkó   yá-è=gɛ
        1PL.PRO   uncle   Bamako   go-PFV.REL=DEF
        'our uncle who went to Bamako'

This last form looks like the behavior of a possessed noun followed by an adjective:

(866) *émmé   nìnjù^L   kómmó*
      1PL.PRO   uncle   skinny
      'our skinny uncle'

(869) summarizes the tonal behavior of pronominal inalienable possessed-type relatives. In the cases with other modifiers, the possessed noun invariably takes {L}, but the possessor may vary:

(867) Poss^L Noun^L ~ Poss *Noun^H(L)* ~ Poss *Noun^L*
      Poss^(L) Noun^L Adj^L
      Poss^(L) Noun^L Num^L
      Poss^(L) Noun^L Adj^L Num^L

16.7.2 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 {L} tone, but this then disrupts the tonal

associations between it and the possessed noun. Normally, the latter would take {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 still typically precedes its possessed noun, which takes lexical tone instead of the {L} possessive overlay. In its place, the possessor takes the {L} overlay imposed by the relative clause. For example:

(868) a. *yàa-ná=gɛ*   *ìì^L*
        female-HUM.SG=DEF   child
        'woman's child'

      b. *yàà-nà^L*   *íí*   *jáŋgu*   *jàŋgá-gú=sɛ́=gɛ̀*
        female-HUM.SG   child   studies   study-PPL=have.REL=DEF
        'the woman whose child is studying'

In (868a), the possessor *yàa-ná=gɛ* 'the woman' has lexical tone and the possessed noun *íí* 'child' undergoes tone lowering. This situation is reversed in the relative clause in (868b). In these constructions, the possessed noun (here, 'child') may optionally take a resumptive possessive pronoun, yielding *íí wómɔ* 'her child'. Interestingly, this possessed noun can actually be moved before the possessor, breaking up the linear order required of possession. When this occurs, the possessive pronoun is obligatory:

(869) *íí*   *wómɔ*   *yàà-nà^L*   *jáŋgu*   *jàŋgá-gú=sɛ́=gɛ̀*
     child   3SG.POSS   female-HUM.SG   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.

     If the possessed noun carries any modifiers, the usual tonal changes found in NPs take place, as in:

(870) *yàà-nà^L*   *jàndùlù^L kómmó mìnnɛ́ ḿmɔ*   *yám-ìl-ì=gɛ*
     female-HUM.SG donkey   skinny   field   1SG.POSS   ruin-TR-PFV.REL=DEL
     'the woman whose skinny donkey ruined my field'

The N+Adj pair constituting the possessed noun shows the normal pattern of tone lowering on the noun due to the adjective.

16.7.2.2 Pronominal alienable possession

If the possessor in a possessor-type relative is a pronoun, a head noun *ǹdɛ́* 'person' must be inserted. The pronoun retains its regular tones, while *ǹdɛ́* undergoes tone lowering:

(871) *Émmé*   *ǹdɛ̀ᴸ*   *úlûm*   *yím-áá-dɛ̀=gɛ=mbe*
     1PL.PRO   person   children   die-PFV-IMPF=DEF=PL
     'we whose children have died'

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:

(872) a. *àn-ná=gɛ*   *bàà ᴸ*
         male-HUM.SG=DEF   father
         'the man's father'

      b. *àn-nà ᴸ*   *gààlúú*   *(wó)*   *báá ᴴ*   *yím-ɛ̀=gɛ*
         male-HUM.SG   last.year   (3SG.PRO)   father   die-PFV.REL=DEF
         'the man whose father died last year'

      c. *gààlúú*   *★(wó)*   *báá ᴴ*   *àn-nà ᴸ*   *yím-ɛ̀=gɛ*
         last.year   3SG.PRO   father   male-HUM.SG   die-PFV.REL=DEF
         'the man whose father died last year'

Note that in (872b), 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.

16.7.2.4 Pronominal inalienable possession

Like we saw for pronominal alienable possession, a pronoun cannot be head of a relative clause; a light noun *ǹdɛ́* 'person' is necessary to fill this structural position. However, unlike in pronominal alienable possession, the possessive pronoun must be repeated with the possessed noun:

(873) a. *ú   ǹdɛ̀^L (ú)   ígɛ́^(H) yà-áá-dɛ̀=gɛ*
      2SG.PRO person (2SG.PRO) husband go-PFV-IMPF.REL=DEF
      'you whose husband has left'

     b. *é   ǹdɛ̀^L (é)   náá^(H) jáŋgu jàŋgá-mɛ̂-dɛ=gɛ=mbe*
      2PL.PRO person (2PL.PRO) mother studies study-CAUS-IMPF.REL=DEF=PL
      'you (pl.) whose mothers are teachers'

In these cases, we see two independent pronouns. It is not clear whether both function as possessors or not. It would appear that the {H} overlay is only applied when the second pronoun is present, though because these two nouns are independently H-toned, we have no clear evidence.

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 *=mɔ*. 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 *=mɔ*. The regular main clause is shown in (874a), the relative clause in (b):

(874) a. *Mí   ánìgè^{HL}=mɔ bɔ̀gɔ́ ɛ̀b-ɛ̀-m.*
      1SG.PRO friend=POSS dress buy-PFV.L-1SG
      'I bought my friend a dress.'

     b. *Mì^L   ànìgè^L bɔ̀gɔ́ mí   ɛ̂b-ɛ̀=gɛ   núyɔ́ núyɔ̀-dɛ̀.*
      1SG.PRO friend dress 1SG.PRO buy-PFV.REL=DEF song sing-IMPF
      'My friend for whom I bought a dress will sing.'

In (874b), the possessive clitic is deleted and the possessed head is entirely tone lowered.

    Let us now turn to more common postpositional cases. Recall that the instrumental is formed by adding the associative clitic *=le* after the instrument (875a). When the instrument is head of a relative clause, this associative disappears (875b):

(875) a. *Dàmmá=le mìnnɛ́ ḿmɔ   wòlú   wálà-dɛ̀-m.*
      hoe=ASSOC field 1SG.POSS farming farm-IMPF-1SG
      'I farm my fields with a hoe.'

b. *Dàmmà^L* *mìnnɛ́* *ḿmɔ* *mí* *wàlá-dɛ=gɛ*
   hoe field 1SG.POSS 1SG.PRO farm-IMPF.REL=DEF

   jùgù^L *gál-è=gɛ=le* *yé=mùŋj-ɛ̀^L*.
   week pass-PFV.REL=DEF=ASSOC EXIST=break-PFV.L

   'The hoe that I farm my fields with broke last week.'

In the head of the relative clause, the noun takes the usual {L} overlay and though the postposition is deleted, the meaning is still understood.

Locative postpositions behave the same way:

(876) a. *Tòndòó=gɛ=nɛ* *díí* *kúndò-dɛ̀-m.*
   water.jar=DEF=OBL water put-IMPF-1SG
   'I put water in the water jar.'

b. *Tòndòò^L* *díí* *mí* *kúndó-dɛ=gɛ* *bònd-áa=ỳ.*
   water.jar water 1SG.PRO put-IMPF.REL=DEF have.hole-PFV=COP
   'The water jar I put water in has a hole in it.'

Once again, the oblique postposition *=nɛ* is deleted in the relative clause. Note that non-head constituents inside the relative clause can retain their postpositions:

(877) *Ììyè^L* *Níŋálu=nɛ* *yà-ée* *mí* *tɛ́mbɛ́-dɛ=gɛ* *sáy-ni* *ɛ̀lɛ̀lú=wɔ.*
   honey Niŋari=OBL go-NF 1SG.PRO find-IMPF.REL=DEF much-ADV sweet=be
   'The honey that I go to Niŋari to find is very sweet.'

The reason postpositions are deleted from the head of the relative clause could be related to 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:

(878) a. *Ìyǎy=gɛ* *àn-ná=ǹ* *ɔ̀mɔ́* *kán-aa=be.*
   girl=DEF male-HUM.SG=OBJ present do-PFV=be.PST
   'The girl gave the man a present.'

b. *Ìyǎy=gɛ* *àn-nà̀^L* *ɔ̀mɔ́* *(wó)*
   girl=DEF male-HUM.SG present (3SG.PRO)

   kán-ì=gɛ *mí* *báá^H=ǹ* *íg-go=wɔ.*
   do-PFV.REL=DEF 1SG.PRO father=OBJ know-ADV=be

   'The man to whom the girl gave a present knows my father.'

In (878a), the object marker on 'man' is obligatory. In (878b), 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 example in (879a) has a possessor-type relative as the outermost relative clause, with an object relative embedded inside. In (879b), both relatives are subject relatives:

(879) a. *àn-nà^L*   *nàá*   *wómɔ*   *yùù^L*   *mí*
            male-HUM.SG   cow   3SG.POSS   millet   1SG.PRO

            tɔ́-ɛ̀=gɛ   *tɛ́m-ɛ̀=gɛ*
            plant-PFV.REL=DEF   eat-PFV.REL=DEF

            'the man whose cow ate the millet that I planted…'

       b. *àn-nà^L*   *ìsè^L*   *ɛ̀njɛ́*   *ḿmɔ=gɛ=mbe*
            male-HUM.SG   dog   chicken   1SG.POSS=DEF=PL

            áw-ɛ̀=gɛ   *dá-ɛ̀=gɛ*
            catch-PFV.REL=DEF   kill-PFV.REL=DEF

            'the man who killed the dog that caught my chickens…'

       c. *ìsè^L*   *ɛ̀njɛ́*   *ḿmɔ=gɛ=mbe*   *áw-ɛ̀=gɛ*
            dog   chicken   1SG.POSS=DEF=PL   catch-PFV.REL=DEF

            àn-nà^L   *dá-ɛ̀=gɛ*
            male-HUM.SG   kill-PFV.REL=DEF

            'the man who killed the dog that caught my chickens…'

In (879a), the higher relative clause has the word order SOV, but the O itself is a relative clause; this means that the participle of the embedded relative clause *tɔ́-ɛ̀=gɛ* 'planted' immediately precedes the participle of the higher relative clause *tɛ́m-ɛ̀=gɛ* 'ate'. The situation is similar in (879b); the SOV word order results in both subject relative heads adjacent and both participles adjacent. My consultant changed his mind after offering this expression, saying that the word order in (879c), OSV, is easier to understand.

16.10 Relative clauses with adverbial meanings

This section briefly outlines some common relative clause types that are used with adverbial meanings, be they temporal or locative.

16.10.1 'When'

Relative clauses meaning roughly 'when' can take many heads, depending on the exact time referenced. The general 'when' construction has the head *wákádu* (also pronounced *wágádu* or *wááru*) '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:

(880) a. *(Wàkàdù^L)* *ḿmɔ=nɛ* *wó*
  time 1SG.POSS=OBL 3SG.PRO

  yɛ̂l-ɛ̀=gɛ=le *jáá* *síŕɛ́-gú=be-m.*
  come-PFV.REL=DEF=ASSOC meal cook-PPL=be.PST-1SG

  'When he arrived at my house, I was cooking.'

  b. *Mí* *ánìgè^{HL}=mbe* *wàgàdù^L* *nɔ̀nú* *mí*
  1SG.PRO friend=PL time here 1SG.PRO

  bé-lì=gɛ=le *yɛ̀l-ì-ɛ̀^{n}.*
  be.PST-NEG.REL=DEF=ASSOC come-PFV.L-3PL

  'My friends came when I wasn't here.'

In (880b), 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':

(881) a. *Àná=gɛ* *bày^L míy-ɛ̀=gɛ* *sáy-ni* *kìlèmɔ́ kílɛ́m-aa=be-y.*
  rain=DEF day rain-PFV.REL=DEF much-ADV party party-PFV=be.PST-1PL

  'We partied a lot on the day that the rain came.'

  b. *Ànàgùdù^L* *kà-kàá=gɛ=mbe* *yúú=gɛ*
  year RED~locust=DEF=PL millet=DEF

  tɛ̂m-ɛ̀=gɛ *émmé=nɛ* *sáy-ni* *ɔ́g-go=be.*
  eat-PFV.REL=DEF 1PL.PRO=OBL much-ADV hot-ADV=be.PST

  'The year that the locusts come was very trying for us.'

See section 16.4 for further discussion of 'time' relatives.

16.10.2 'Where'

A locative adverbial clause can be formed by using a head like 'place' in a relative clause. For example:

(882) *Yáá   hálè   ódu=gɛ   gàndà^L jáw   jáw-áá-dɛ̀=gɛ=nɛ.*
go.IMPER   until   road=DEF   place   splitx   split-PFV-IMPF.REL=DEF=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 conditional one given in section 17.2.

As with 'when' relative clauses, more specific locations like 'village' or 'country' could replace the general 'place' as head of the relative clause.

Chapter 17
Conditional constructions

This chapter treats all manners of conditional or hypothetical clauses. Though conditional clauses are themselves subordinate clauses, the focus of Chapter 18, I treat them separately here due to their cohesive semantics; for non-conditional uses of morphologically conditional forms, see section 18.2. In this chapter, section 17.1 deals with canonical hypothetical conditional constructions translating to English 'if' that use the clause-final particle =*yo*. Section 17.2 addresses 'even if' conditionals. Section 17.3 discusses 'whether or not' conditionals with two opposing conditions, while section 17.4 concludes with counterfactual conditionals.

17.1 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. For examples of non-hypothetical (i.e. certain) uses of =*yo*, see section 18.2.

17.1.1 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 underspecified suffix, leaving the conditional particle at the tail of end of downward interpolation). However, speakers may employ a H% boundary tone at the end of a clause to mark that the utterance is not yet finished; this is similar to what we find on non-final verbs in a verb chain, discussed in section 18.1. When such a boundary tone is present, 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 (883a) below for an example with a H particle. Note that this realization, presumably with the H-boundary tone, is much rarer than 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.

17.1.2 Form of the verb in hypothetical constructions

17.1.2.1 Antecedent verb: perfective

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 3pl, there are cases where the verb does not seem strictly L-toned. Instead, the 3pl suffix $-\grave{\varepsilon}^n$ 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 3pl suffix is actually $-\acute{\varepsilon}^n$, 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 rise is not audible.

The negative perfective, however, also can deviate from its usual main clause tonal realization. Instead of taking its regular {L} melody, it sometimes opts for a {HL} melody like that found in relative clauses. There is some variation, however, and the verb may also take its usual {L} melody before the H-toned suffix *-lí*.

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 perfective verbs in the antecedent followed by imperfective verbs in the consequent:

(883) a. *ɔ̀gɔ́ nɛ̀ɛ̀ ǹdɛ́ sàd-è=yó nɛ̀ɛ̀ yàŋgéni áwà-dìŋ?*
Hogon now person miss-PFV.L=if now how catch-IMPF.3PL
'[In the] Hogon-dom, now, if a person missed [a payment],
how would they catch [him]?' [23.2:93]

b. *Nǎm gò-è=yo, kèlì-ý=gɛ=mbe máàŋ-ìyɛ̀-dìŋ.*
sun go.out-PFV.L=if road-DIM=DEF=PL be.dry-MP-IMPF.3PL
'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 perfective are given below. Note that in these cases, the construction could also be translated as 'unless'.

(884) a. *Nǎm gòò-lí=yo,   mí=ǹ   ὲlὲ-nd-ìy-éélè.*
        sun   go.out-NEG.PFV=if 1SG.PRO=OBJ sweet-FACT-MP-NEG.IMPF

    'If the sun does not come out, I won't be happy.'
    (or 'unless the sun comes out')

  b. *Ḿmɔ=nε   sǒm   έbὲ-lì=yo,   wó=ǹ   náà-dὲ-m.*
      1SG.POSS=OBL horse buy-NEG.PFV=if 3SG.PRO=OBJ forget-IMPF-1SG

    'If he doesn't buy me a horse, I will forget him.'
    (or 'unless he buys me a horse')

  c. *Ámíru=gε=mbe nɔ̀nú òndì-έⁿ=yo,   ὲnέ sέmu*
      chief=DEF=PL   here be.NEG-3PL=if, goat slaughter.NOM

    bὲ-élè-y.
    can-NEG.IMPF-1PL

    'If the chiefs aren't here, we can't slaughter a goat.'
    (or 'unless the chiefs are here')

In (884a), we see the regular main clause tone pattern on the negative perfective verb, with a {L} overlay on the stem before the suffix. In (884b), the same verb form takes a {HL} overlay, possibly characteristic of subordinated clauses.

17.1.2.2 Antecedent verb: imperfective

Though rarer, we do find examples of imperfective verbs in the antecedent clause. In all examples of which I am aware, the imperfective verb gives a habitual reading in the antecedent clause, in contrast to the single instance reading given by the perfective verb. An imperfective in the antecedent is always followed by an imperfective in the consequent. In all such examples, the tone of the particle is underspecified and interpolates to L:

(885) a. *Àrámátá nàmá tὲm-éélè=yo   kὲm^L yímè-dè.*
        Ramata   meat eat-NEG.IMPF=if all   die-IMPF
        'If Ramata doesn't eat meat, she'll die.'

  b. *Kɔ̀mbɔ́ yáà-dìn̄=yo   nὲὲ, ɔ̀gɔ̀-nɔ́   ǹdὲ^L*
      war   go-IMPF.3PL=if now Hogon-HUM.SG person

    wó   ḿbέ=ǹ   túyò-dὲ=ma
    3SG.PRO like.REL=OBJ send-IMPF=or?

    ǹdὲ̌-m=gε   kέm yáà-dε.
    person-HUM.PL=DEF all   go-IMPF

    'Now, if they [would] go to war, would the Hogon send [only] the people he liked or would everyone go?'   [23.2:100]

The imperfective 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 imperfective is used in narratives where a past timeframe is clear.

17.1.3 Post-particle *kɛ̀m^L* 'all'

Example (885a) above shows the first case we have seen where the conditional particle *=yo* is followed by *kɛ̀m^L* 'all'. Although the usual universal quantifier typically has a H tone, when used after the conditional particle *kɛ̀m^L* 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 *kɛ̀m^L* before a putative 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 (885a) 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 takes on more of a 'when' interpretation, while a less certain statement will get an 'if' interpretation. For example:

(886) a. *Dámmá=gɛ=nɛ   wó   gò-ɛ̀=yo   kɛ̀m^L kìlɛ̀mɔ́ kílɛ̀mɔ̀-dɛ̀-y.*
village=DEF=OBL 3SG.PRO leave-PFV.L=if all   party celebrate-IMPF-1PL

'As soon as he leaves the village, we will party.'
'If only he left the village, we would party.'

b. * Íí   ḿmɔ   jáŋgu   dùmɔ̀-nd-ì=yó   kɛ̀m^L,*
child 1SG.POSS studies finish-FACT-PFV.L=if all

sàlìyɔ̀^L kán-nɛ́-go   bíyɛ̀-dɛ̀.
law   do-AGT.SG-ADV   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 temporal and the conditional interpretations.

In the next section, we will see that *kɛ̀m^L* can be used on its own in 'whether or not' clauses. In section 17.4, we will see another post-particle clitic, *=lɛ*, in 'even if' constructions.

17.1.4 'If' on non-verbal predicates

All of the examples that we have seen so far involve the particle =*yo* after a verbal predicate, either perfective or imperfective. In addition, =*yo* can be added directly to a noun or an adjective with no overt copula. For example:

(887) a. *Bé   ségu=yo   yà-èè   táá=wa.*
           3PL.PRO numerous=if go-NF shoot.IMPER=QUOT
           '[They said], if they are more numerous, [then] go make war.'   [23.2:140]

       b. *Nɛ́ɛ́   kày... dɔ̀gɔ̌-m...   ɔ̀ɔ̀... dìgὲ^L năm...*
           now TOP Dogon-HUM.PL uh   evening sun

           kádá-na=yo ⇒   *Nìŋàlù^L íbɛ́=ǹ^{32}...   Nìŋàlù^L*
           oldest.man-HUM.SG=if Ningari market=COP Ningari

           íbɛ́=ǹ   dìgὲ^L năm dìgὲ^L năm
           market=COP evening sun   evening sun

           tígì-rὲ-dìŋ...   kádá-na=ǹ.
           call.names-TR-IMPF.3PL oldest.man-HUM.SG=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.'   [23.4:5]

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 (887b), =*yo* is added after a noun *kádá-na* '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.

17.2 '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 =*lɛ*, which could be either the clitic meaning 'also' (see section 21.2.1) or the negative copula (see section 13.2.1.2); alternatively, it could be homophonous with these but have its own independent meaning. In the absence of any concrete evidence one way or the other, I will gloss it here as 'also'. It is underspecified for tone, but interpolates to L.

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32 Here the object marker is being used in place of a locative.

Second, the conditional particle itself generally takes H tone and has a lengthened vowel. At other times, however, the conditional clitic takes L and 'also' takes H in a sort of tonal polarity. I have not been able to find any triggering factors for either pattern. Finally, the antecedent clause may optionally be preceded by the word *hálè*, borrowed from Fulfulde and meaning something akin to 'even'.

Examples of 'even if' constructions include the following:

(888)   a.   *Hálè Bàmàkó yà-è-m=yóó=lɛ   mòtò^L*
             even Bamako go-PFV.L-1SG-if=also moto

             nòŋgònù^L kánu   bɛ̀l-éélè-m.
             like.that   do.NOM find-NEG.IMPF-1SG

             'Even if I go to Bamako, I won't find a motorcycle like that.'

        b.   *Bé   ségu=yóó=lɛ,   Nám-Tínɛ̀=gɛ   Bànjàgàrá*
             3PL.PRO numerous=if=also Nam-Tinɛ=DEF Bandiagara

             bɛ̀ɛ̀-nɛ̀^L-go=be.
             person.from-HUM.SG-ADV=be.PST

             'Even if [they] were more numerous, Nam-Tinɛ (the chief) was
             from Bandiagara.'   [23.2:139]

The verb in the antecedent may also be negative in 'even if' constructions, as in:

(889)   a.   *Hálè ḿmɔ=nɛ   sòm^L tùmɔ̀-ý*
             even 1SG.POSS=OBL horse one-DIM

             ɛ̀bɛ̀-lí=yóó=lɛ,   m̀bɛ́-go=wɔ-m.
             buy-NEG.PFV=if=also love-ADV=be-1SG

             'Even if he didn't buy me one horse, I would love him.'

        b.   *Hálè íbɛ́   yà-éélè-y=yòò=lɛ́,   màŋgóró ɛ́bu   bɛ́ɛ̀-dɛ̀-y*
             even market go-NEG.IMPF-1PL=if=also mango   buy.NOM can-IMPF-1PL

             'Even if we don't go to the market, we will be able to buy mangoes.'

Since the consequent in (889b) is speaking about a future event relative to the antecedent, the antecedent too contains an imperfective verb.

17.3   'Whether or not' conditionals

While the last two sections dealt with conditionals involving the conditional particle *=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 Y, 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 =*yo* is not used, but *kèm^L* 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.

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 *kèm^L* after the second:

(890) a. *Nàmá=gɛ=ǹ   tɛ̀m-ɛ̀-w   nŭm=gɛ*
          meat=DEF=OBJ eat-PFV.L-2SG   bean=DEF

         ǹy-ɛ̀-w   kèm^L, émmé   ɔ̀rɔ̀^{L} nìŋɛ́=gɛ   ńyɛ̀-dɛ̀-y.
         eat-PFV.L-2SG   all   1PL.PRO   baobab sauce=DEF eat-IMPF-1PL

         'Whether you eat beans or whether you eat meat, we will eat *toh*.'

    b. *Gìnɛ̀^{L} kàndá ùd-ɔ̀-m   ùdɔ̀-lí-m   kèm^L,*
        house new   build-PFV.L-1SG. build-NEG.PFV-1SG all

         mí   náá^H=le   bíyɛ̀-dɛ̀-m.
         1SG.PRO mother=ASSOC remain-IMPF-1SG

         '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 (890a), 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 pairing with the verb *tɛ́mɛ́* and *nŭm* 'beans' obligatorily pairing with the more general verb *ńyɛ́*. In (890b), 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 perfective verbs are more common, imperfectives are not impossible:

(891) *Àná míyɛ̀-dɛ̀   mìy-éélè   kèm^L, òlú   yáà-dìŋ.*
       rain fall-IMPF fall-NEG.IMPF all   field go-IMPF.3PL
       'Whether it rains or not, we go to the fields.'

In this example, the antecedent is allowed to be imperfective 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 imperfective non-final chain form ending in *-ee*, while the second is in the negative chain form ending in the suffix *-ndú*. 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 *kɛm* 'all' at the end. Instead, it transitions from the non-final form of 'do' into the consequent clause. Consider the following:

(892) a. *Ú   yím-ee yìmɛ́-ndú   ú   kán-ee*
           2SG.PRO die-NF die-NEG.PPL 2SG.PRO do-NF

           dámmá=gɛ=nɛ   kìdɛ̀ᴸ sáŋ-íyɛ́-dɛ̀   òndú.
           village=DEF=OBL thing change-MP-IMPF.REL be.NEG

           'Whether you live or you die, nothing changes in the village.'

      b. *Wó   yɛ̀l-ée   yɛ̀lɛ́-ndú   wó   kán-ee kìdɛ̀ᴸ*
           3SG.PRO come-NF come-NEG.PPL 3SG.PRO do-NF thing

           mí=ɲ̀   kán-dɛ   òndú.
           1SG.PRO=OBJ do-IMPF.REL be.NEG

           'It doesn't matter to me whether he comes or not.'

In this construction, the affirmative 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.

17.4 Counterfactual conditional

Counterfactual conditionals are always in the perfective, 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 *=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 affirmative, it is expressed with the past perfective form of the verb used in main clauses. The consequent is in the past imperfective:

(893) a. *Kà~kàá=gɛ=mbe   ííyɔ́ɔ̀   yɛ̀lɛ́-lú-go=bi-ɛ̀ⁿ=yo,*
           RED~locust=DEF=PL this.year come-NEG-ADV=be.PST-3Pl=if

           jáá   sáy-nì   ɲ́yɛ̀=be-y
           meal much-ADV eat.IMPF=be.PST-1PL

           'If the locusts hadn't come this year, we would have eaten a lot.'

b. *Mí* *báá^H* *yìmɛ̂-lú-go=be=yo*,
   1SG.PRO father die-NEG-ADV=be.PST=if

   díyɛ̀-nɛ=gɛ *mí-go* *bíyɛ̀=be-le*.
   big-HUM.SG=DEF 1SG.PRO-ADV be.IMPF=be.PST-NEG

   'If my father hadn't died, I wouldn't be chief.'

c. *Àníyɛ̂* *mí=ǹ* *tág-aa=be-w=yo*, *yɛ́lɛ̀=be-m*.
   before 1SG.PRO=OBJ tell-PFV=be.PST-2SG=if come.IMPF=be.PST-1SG
   'If you had told me before, I would have come.'

It is not possible to put the negative past perfective in the conditional clause (**yím-aa=be-le=yo*), 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 (893b) above.

Chapter 18
Clause chaining and subordination

This chapter covers the ways in which clauses may be joined together, either through conjunction or subordination. The first section, section 18.1, addresses verb chaining and serialization, which may be at the sub-clause level (just the V or VP) or may be used as a strategy to chain clauses together. The same morphology is also found in some complement clauses. In section 18.2, I turn to non-conditional uses of conditional morphology in clause chaining. Sections 18.3–18.10 focus on different morphological forms the subordinate clause can take. Each of these sections is divided up into subsections highlighting the different subordinating verbs in the main clause that trigger the subordinate morphology in question.

Conditionals and quotative subordinate clauses are each treated in their own chapters, due to their uniform semantics and somewhat diversified structures. For conditionals, see Chapter 17; for quotative constructions, see Chapter 19.

18.1 Verb chaining

Tommo So makes great use of verb chaining, in which two (or more) verbal events are strung together with no overt subordinating morpheme. The events involved often come together to form a coherent whole (i.e. the actions are related), in which case they typically involve at least one consistent argument shared by all verbs in the chain; this argument is not necessarily the subject. In other cases, the verbs involved are not as tightly bound together, and the morphology of verb chaining is simply used to conjoin or subordinate clauses.

This section deals with all aspects of verb, VP, and clause chaining. In section 18.1.1, I cover the morphological form of non-final verbs in verb chains. Section 18.1.2 addresses the treatment of arguments (subjects and objects) in verb chains. In section 18.1.3, I present closely knit verb combinations involved in V or VP chaining, while in section 18.1.4, I briefly point out some adverbs that look as though they are morphologically non-final verbs in a verb chain. Section 18.1.5 discusses various subordinating verbs that trigger non-final verbal morphology on the verb of the complement clause. Finally, section 18.1.6 addresses subordinating verbs that invariably take the imperfective non-final verb form in their subordinate clause.

18.1.1 Morphological form of non-final verbs

The AN (aspect-negation) inflection on non-final verbs in a direct verb chain is very limited. These non-final verbs appear to exhibit only a two-by-two contrast of perfective/imperfective 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.

18.1.1.1 Affirmative

Most commonly, the non-final verb is affirmative. This verb can be either perfective or imperfective. If the non-final verb is in the imperfective, it carries a suffix *-ee* that causes the preceding vowel to delete; I gloss this as NF for "non-final", with the imperfectivity implied. If the non-final verb is perfective, the suffix is *-aa*, which I gloss as simply PFV, since it is the form used with quasi-verbs in non-focalized perfectives as well (see section 12.3). Though both suffixes are given as toneless, they almost always surface with H tone. I take this to be the effect of a H% boundary tone indicating continuation. Thus, interpolation is always from a preceding H tone in the verb stem to this boundary tone, yielding a level H on the suffix. For similar tonal behavior in conditional clauses, see section 17.1.

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 mono-syllabic {LH} verb whose stem vowel is *identical* to the vowel of the chaining suffix (generally /a/ stems with the *-aa* suffix) with a rising tone, speakers pronounce these as L-toned. Subminimal verb roots like *gὲ* 'say' also are generally pronounced L. Examples of this sort include:

(894) a. *yàá* → *yà-à(à)* 'having gone'

      b. *gὲ* → *g-àà* 'having said'

Additionally, though I have written the perfective chain form of 'go' as *yà-àà*, the vowel has the same length as the perfective chain form of 'say' *g-àà*; that is, the vowel is shortened to avoid a super-heavy syllable.

Both the non-final and final verb can be in the imperfective (895a), both can be in the perfective (895b), or there can be a mismatch wherein the non-final verb is perfective and the final imperfective (895c). 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 imperfective and the final one perfective) is not possible, since the order of verbs in a chain verb construction represents temporal linearity; speakers reject attempts to make it otherwise.[33]

(895) a. *Bíku=gɛ*   *gòò-nd-ée*   *ú=ǹ*   *óbò-dὲ-m.*
          pen=DEF   go.out-FACT-NF   2SG.PRO=OBJ   give-IMPF-1SG
          'I will take out the pen and give it to you.'

      b. *Bíku=gɛ*   *gòò-nd-áa*   *ú=ǹ*   *òb-ì-m.*
          pen=DEF   go.out-FACT-PFV   2SG.PRO=OBJ   give-PFV.L-1SG
          'I took out the pen and gave it to you.'

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33 However, a few verbs take complement clauses that are always marked with imperfective *-ee*, even when the verb of the main clause is perfective. These clauses are discussed in section 18.1.6.

c. *Bíku=gɛ   gòò-nd-áa   ú=ǹ   óbò-dɛ̀-m*
    pen=DEF   go.out-FACT-PFV   2SG.PRO=OBJ   give-IMPF-1SG
    'I have taken out the pen and will give it to you.'

Verb chains can also be nominalized, typically by making the final verb into an infinitive. In this case, the non-final member of the chain is in the imperfective.

(896) a. *Tàráá=gɛ=mbe=le   jɔ̀b-ée   màndá-dìm ɲám-go=wɔ.*
          hyena=DEF=PL=ASSOC   run-NF   escape-INF difficult-ADV=be
          'It is difficult to run away from hyenas.'

     b. *Díí=gɛ=mbe   mìnnɛ́=gɛ=nɛ   kár-ee kúndó-dìm=gɛ sáy-ni   síyɛ̂=ǹ.*
         water=DEF=PL   field=DEF=OBL   dig-NF put-INF=DEF   much-ADV good=COP
         'Irrigating the fields is very important.'

I have no textual examples of true nominalizations of chained verbs of the sort seen in Jamsay (Heath 2008: 521).

18.1.1.2 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:

(897) *Yàa-ná=gɛ=ǹ   dùg-áa   dàà-lí.*
       female-HUM.SG=DEF=OBJ   poison-PFV   kill-NEG.PFV
       'He didn't poison the woman.'

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. Speakers rejected a reading in which the negation belonged only to the final verb ('he poisoned her, but he didn't kill her').

It is rare, but not impossible, that the non-final verb is negated but not the main verb. In these cases, the non-final verb takes an adverbial form with the suffix *-go*. Again, the aspect division is between perfective and imperfective, but the morphologically imperfective negative non-final verb form very rare; my only documented cases of it are elicited.

The negative perfective non-final verb resembles regular negative perfectives (see section 12.3.2), but with slight differences. First, the suffix is *-lú* not *-lí* (though the backness of suffixes is always flexible). Second, the verb stem takes a {LH} overlay instead of a {L} overlay, with the tone mapped automatically from left to right, leaving only the first syllable L. Finally, to make it adverbial, the suffix *-go* is added.

The form of the negative perfective non-final member of a verb chain is schematized below:

(898)   <u>Negative perfective non-final verb</u>
        Verb{LH}-*lú-go*

A natural translation in English of negative non-final verb would be "without X-ing". Examples of *-lú* negative non-final verbs include:

(899)   *tèmɛ́-lú-go*   'without eating'
        jɔ̀bɔ́-lú-go   'without running'
        nɔ̀ɔ̀-lú-go   'without drinking'

The monosyllabic verb stem is simply L, with the rising tone simplifying before the H-toned suffix.

   This form can also be used in the imperfective (see (901a) below), where it varies with a strictly imperfective form, which uses the suffix *-ndú* instead of *-lú*. It is otherwise identical.

(900)   *tèmɛ́-ndú-go*   'without eating'
        jɔ̀bɔ́-ndú-go   'without running'
        nɔ̀ɔ̀-ndú-go   'without drinking'

In terms of usage of these two forms, consultants report that both can be used interchangeably in imperfective cases. In the perfective, however, only the *-lú* form can be used. For example:

(901)   a.   *Jóbu   jɔ̀bɔ́-lú-go   támà-dɛ̀-m.*
             run   run-NEG.PFV-ADV   persist-IMPF-1SG
             'I will persist without running (colloquially 'I will keep not running').'

        -or-

             Jóbu   jɔ̀bɔ́-ndú-go   támà-dɛ̀-m.
             run   run-NEG.PPL-ADV   persist-IMPF-1SG

        b.   *Jóbu   jɔ̀bɔ́-lú-go   tám-aa=be-m.*
             run   run-NEG.PFV-ADV   persist-PFV=be.PST-1SG
             'I persisted in not running.'

        -but-

             *Jóbu jɔ̀bɔ́-ndú-go tám-aa=be-m.

In the examples above, I gloss the *-ndú* suffix as NEG.PPL for "negative participle".

Textual examples include:

(902) a. *Donc   kò^L   băy   nàmí=ǹ   yàa-ná*
        thus.FR   that.DD   day   sun=OBJ   female-HUM.SG

        òbó-lú-go   kó=gɛ   sɔ̀-ɛ̀...
        give-NEG.PFV-ADV   that.DD=DEF   speak-PFV.L

        'So on that day they spoke without giving the sun a wife...'   [23.6:25]

    b. *jɔ̀mɔ́   wárá   pɛ̀-sɔ́y   bé   dùr-áa*
        hare   spear   10-7   3PL.PRO   heave-PFV

        yìmɛ́-lú-go   yém=wa.
        die-NEG.PFV-ADV   like.that=QUOT

        'A hare was there like that, having had 70 spears thrown at him
        without dying.'   [Chasing the world]

A similar construction with these negative adverbial forms was seen in Chapter 17 on conditionals.

18.1.2 Treatment of arguments

18.1.2.1 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 often (but not obligatorily) shared between final and non-final verbs, the subject marking on the final verb can serve to indicate the subject of all preceding non-final verbs, which can be many in number when multiple clauses are strung together using verb chaining morphology:

(903) *Ûnh Ségú=nɛ   úŋgúl-aa...   nɛ́ɛ̂   kay   Bùgùní*
       uh   Ségou=OBL   get.up-PFV   now   TOP   Buguni

      yɛ̀l-áa...   Bùgùní   gò-áa...   Màndé   yɛ̀l-ɛ̀-y.
      come-PFV   Buguni   leave-PFV   Mande   come-PFV.L-1PL

      'Uh, [we] got up, and now, [we] came to Buguni, [we] left
      Buguni... [and] we came to Mande'   [23.2:9–11]

If the final verb in the sentence carries verb morphology associated with the non-final verb in a chain, then the subject can either be left unmarked, with context to disambiguate (904a), or it can be marked with an independent pronoun (904b):

(904) a. *...Màndé   gò-áa   Bàmàkó   yɛ̀l-áa.*
         Mande   leave-PFV   Bamako   come-PFV

        '...[we] left Mande, [and] went to Bamako.'   [23.2:12]

b. *Gòrò^L*   *gɛ́m=gɛ*   *bé*   *dùù-nd-áa.*
  hat   black=DEF 3PL.PRO bottom-FACT-PFV
  'They put down the black hat.'   [23.2:24]

If the subject is not shared between the members of a verb chain, it is again necessary to mark the subject using independent pronouns for both verbs:

(905) *Jáá=gɛ*   *ú*   *sír-aa*   *(mí)*   *yé=ɲ̀y-ɛ̀-m^L.*
       meal=DEF 2SG.PRO prepare-PFV (1SG.PRO) EXIST=eat-PFV.L-1SG
       'You prepared the meal and I ate [it].'

The independent pronoun before the final verb is optional, since the final inflected verb can take subject agreement. Its presence indicates subject focus ('You prepared the meal [but] I ate it'). See section 15.1.1 for more on subject focus.

18.1.2.2 Non-pronominal arguments

As mentioned at the beginning of this section, 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, either subject or object. Subjects (906a), objects (906b), or adjuncts (906c) can intervene between the two verbs, as in:

(906) a. *ɔ̀rɔ̀^L*   *jáá=gɛ*   *Fántá*   *sír-áa*   *Háwá*   *yé=ɲ̀y-ɛ̀^L.*
          baobab meal=DEF Fanta cook-PFV Hawa EXIST=eat-PFV.L
          'Fanta cooked the toh and Hawa ate [it].'

      b. *Pédu=gɛ*   *píy-aa*   *kúú=gɛ*   *ɲ̀jìb-ì.*
          sheep=DEF cry-PFV head=DEF shake-PFV.L
          'The sheep cried and shook its head.'

      c. *Kɔ̀nɔ́*   *úŋgúl-aa*   *Àɲú*   *yà-è.*
          there.DD get.up-PFV Aɲi go-PFV.L
          'He got up from there and went to Aɲi.'   [23.3:9]

In these examples, the two members of the chain are understood as separate but consecutive actions, rather than different aspects of the same 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 arguments. The idiomatic verb chain acts as one compound verb, taking one object before both verbs. If something intervenes, they are interpreted as separate events. Compare (907a) and (b) below:

(907) a. *Yàa-ná=gɛ*   *íí*   *wómɔ*   *nàl-áa*   *dà-è.*
female-HUM.SG=DEF   child   3SG.POSS   birth-PFV   kill-PFV.L
'The woman miscarried her baby.'

     b. *Yàa-ná=gɛ*   *íí*   *wómɔ*   *nàl-áa*   *pédu*   *dà-è.*
female-HUM.SG=DEF   child   3SG.POSS   birth-PFV   sheep   kill-PFV.L
'The woman had a baby then slaughtered a sheep.'

     c. *Yàa-ná=gɛ*   *íí*   *wómɔ*   *nàl-áa*   *ɔ́ginɛ*   *dà-è*
female-HUM.SG=DEF   child   3SG.POSS   birth-PFV   quickly   kill-PFV.L
'The woman had her baby and quickly killed it.'

In (907a), the combination of 'give birth' and 'kill' with one object (child) means 'miscarry'; in (907b), 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. Even if there is not another object but instead an adverb added, as in (907c), the idiomatic reading of the verb chain is still lost. The example in (907c) cannot mean that the woman quickly miscarried the baby. For more examples of these tightly chained verbs, see section 18.1.3.

18.1.3 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 related verb chains here.

18.1.3.1 *yɛ̀-ndɛ́* 'look at'
Tommo So has a large vocabulary of idiomatic verb chains with *yɛ̀-ndɛ́* '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:

(908) *Nùmɔ́ wómɔ=nɛ*   *tóò=gɛ*   *gùɲ-áa*   *yɛ̀-nd-áa=be-m.*
hand 3SG.POSS=OBL   be.in.REL=DEF   steal-PFV   see-FACT-PFV=be.PST-1SG
'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:

(909) a. <u>In final position</u>   <u>Gloss</u>   <u>Literal translation</u>

ádúbá yὲ-ndέ   'reflect on'   'think and look at'

dὲgέ yὲ-ndέ   'taste (by licking)'   'lick and look at'

dùl-íyó yὲ-ndέ   'turn around and look at'   (same)

gὲ yὲ-ndέ   'say again'   'say and look at'

gὲὲg-íyέ yὲ-ndέ   'strain to look at'   (initial verb only attested
                                                     in chain)

gὲwé yὲ-ndέ   'watch stealthily'   (initial verb only attested
                                                     in chain)

nέmέ yὲ-ndέ   'taste, try'   'taste and look at'

sɔ́ɔ́ yὲ-ndέ   'say again'   'speak and look at'

wɔ̀mm-íyέ yὲ-ndέ   'stretch on tiptoes   (initial verb only attested
                       to look at'   in chain)

   b. <u>In initial position</u>   <u>Gloss</u>   <u>Literal translation</u>

yὲ-ndέ dàgá-ndá   'examine'   'look at and fix'

yὲ-ndέ sɔ́ɔ́   'tell fortune'   'look at and speak'

In many of these examples, where *yὲ-ndέ* does not literally mean 'look at', it takes on a meaning like 'try'.

18.1.3.2 *bìŋjé* '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 *bìŋjé* 'pull':

(910) <u>Tommo So</u>   <u>Gloss</u>   <u>Literal translation</u>

bìŋjé ɛ́ɛ́^{n}-ndέ   'tighten (knot, rope)'   'pull and make tight'

bìŋjé gòò-ndó   'pull out'   'pull and take out'

bìŋjé jέɛ́lɛ́   'pull towards self'   'pull and bring'

bìŋjé káád-íyέ   'rip off'   'pull and tear'

bìŋjé kúyέ   'pick/pull off'   'pull and pick'

bìŋjé nállá   'break off (small branch)' 'pull and break off'

bìŋjé pállá   'pull off (head of   'pull and snap'
                        seared chicken)'

Common to all of these is *bìŋjé* '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 *bìŋjé* is the final member.

18.1.3.3 *sɛ* 'have'

We saw with *bìŋjé* 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 *sɛ* 'have'. This also shows that quasi-verbs can participate in verb chaining, at least as the final member:

(911)	Tommo So	Gloss	Literal translation
	síŋŋ-íyɛ́=sɛ	'have tied on back'	'tie on back and have'
	ámmúg-íyɛ́=sɛ	'hold on hip'	'place on hip and have'
	jèŋné=sɛ	'hold'	'pick up and have'
	dɔ̀ŋɔ́=sɛ	'hold up (sthg dangling)'	'prop up and have'
	ɛ́mmɛ́g-íyé=sɛ	'hold pressed between legs'	'press between legs and have'
	tíndíg-íyé=sɛ	'hold on hold'	'place on head and have'

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 changes according to the manner in which the result is reached.

18.1.3.4 *mɔ̀ɔ̀ndɔ́* or *mɔ̀ɔ̀mb-íyɛ́* 'assemble, do together'

A chain verb construction in which the non-final member is either the verb *mɔ̀ɔ̀ndɔ́* or *mɔ̀ɔ̀mb-íyɛ́*, near-synonyms meaning 'get together, assemble', contributes the meaning that the action denoted by the final verb is done together as a group. For example:

(912) a. *Mɔ̀ɔ̀nd-áa   bìrɛ́-gú=sɛ-y.*
           assemble-PFV   work-PPL=have-1PL
           'We are working together.'

    b. *Mɔ̀ɔ̀mb-íy-aa   núyɔ́-gú=sɛ-y.*
           assemble-MP-PFV   sing-PPL=have-1PL
           'We are singing together'

Though in these examples the cognate nominals *bírɛ́* 'work' and *núyɔ́* 'song' are absent, consultants report that it is acceptable to include them as well (i.e. *Mɔ̀ɔ̀nd-áa bírɛ́ bìrɛ̂-gú=sɛ-y*).

18.1.3.5 *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. Examples include:

(913)	Tommo So	Gloss	Translation
	pɔ́rɔ́ dàá	'strangle to death'	'strangle and kill'
	nàlá dàá	'miscarry'	'give birth and kill'
	dúgó nɔ́ɔ̀-mɔ́ dàá	'poison (to death)'	'make drink poison and kill'

18.1.4 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 (914a–b), while for others, this connection has been lost (914c).

(914)	a.	*jàb-íy-aa*	'side by side'	>	*jàbá*	'put next to'
	b.	*kán-íy-ee*	'after'	>	*kán-íyɛ̂*	'be done'
	c.	*pìnníy-ee*	'later'	??		

At least (914c) can be put into the perfective non-final form, as the following textual example shows:

(915)   *Nɔ̀ɔ́*   *pínníy-aa*   *bé=ǹ*   *pàd-éélè=gɛ*
      this   after-PFV   3PL.PRO=OBJ   leave-NEG.IMPF.REL=DEF

      bé   *júg-ɛ̀=gɛ....*
      3PL.PRO   recognize-PFV.REL=DEF

      'After that, [when] they_i realized that [they] wouldn't leave them
      [i.e. that they couldn't fight them]...'   [23.2:145]

It is not clear to me why the tone of the adverb 'later' is /LH/ in (914c), but pronounced with more predictable verbal tone in (915).

Some other expressions are clearly decomposable into verbs, but take on a lexicalized meaning as an adverb. Examples of this sort include:

(916) a. *kán-aa j-ée* 'later on' lit. 'having finished doing'
b. *yém g-àà* 'then' lit. 'having said like that'
c. *tàmá-lú-go* 'soon' lit. 'without persisting'
d. *pád-aa* 'after' lit. 'leaving'

18.1.5 Clause subordination with non-final verbs

This section addresses specific constructions involving non-final verb morphology on the verb of a subordinated clause. These constructions range from temporal subordination (section 18.1.5.1 on 'until') to the complements of verbs like 'be afraid' (section 18.1.5.4) or the perfective form of 'be able to' (section 18.1.5.8).

18.1.5.1 '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 saw in the last 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 non-final verb forms, as in:

(917) a. *Bírɛ̂   bìr-áa   hálè   mí   ɔ́ŋŋ-íy-aa.*
work   work-PFV   until   1SG.PRO   get.tired-MP-PFV
'I worked until I got tired.'

b. *Díí   nɔ̀ɔ̀-ndú-go   hálè   wó   ɔ́ŋŋ-íy-ee.*
water   drink-NEG.PPL-ADV   until   3SG.PRO   get.tired-MP-NF
'He's going to resist drinking water until he tires himself out.'

In both examples, all verbs in the sentence are in their non-final form, be that affirmative or negative, perfective or imperfective.

Sometimes, however, the clause with *hálè* (the final clause), does contain an inflected verb:

(918) a. *Àn-ná=gɛ   mìnné   wómɔ   wàl-áa   hálè*
male-HUM.SG=DEF   field   3SG.POSS   farm-PFV   until

nùmɔ̂   wómɔ   ìlìyé   gò-è.
hand   3SG.POSS   blood   go.out-PFV.L

'The man worked his fields until his hands bled.'

b. *Bírɛ́*   *bìr-ée*   *hálè*   *kὲὲlɛ́*   *díyὲ-go*   *mí*   *bὲl-ì.*
work   work-NF   until   money   big-ADV   1SG.PRO   find-PFV.L
'I will work until I find (=make) a lot of money.'

In example (918a), 'farm' is in the perfective chaining form, but the final verb of the sentence 'go out' is conjugated. Example (918b) shows that although the final verb may conjugate for tense/aspect, it does not take the subject agreement suffixes; the 1sg subject is marked with the independent pronoun *mí* before the verb rather than with the subject suffix *-m*.

It will take more examples to know what is standard for this construction.

18.1.5.2 'As soon as'

Another temporal subordinate clause can be formed using verb chains, namely 'as soon as' clauses. In this construction, the verb in the subordinate clause takes non-final verb morphology and is followed by the universal quantifier *kɛ́m* 'all'. If the main clause is perfective, then the non-final verb in the subordinated clause is perfective; if the main clause is imperfective, so too is the non-final verb in the subordinated clause:

(919) a. *Ɛ́mmé*   *yὲl-áa*   *kɛ́m*   *àná=gɛ*   *tɔ̀l-ὲ.*
1PL.PRO   come-PFV   all   rain=DEF   start-PFV
'It started to rain as soon as we arrived.'

b. *Fàntá*   *dànn-íy-ee*   *kɛ́m*   *yéy-yὲ-dὲ.*
Fanta   sit-MP-NF   all   sleep-MP-IMPF
'As soon as Fanta sits down, she falls asleep.'

In (919a), the verb 'come' in the subordinate clause takes the *-aa* suffix because the whole action described is already completed. In (919b), 'sit' takes the *-ee* suffix because the action is habitual and hence imperfective.

This form of the 'as soon as' clause is parallel to one form of the 'after' clause, discussed in the next subsection. Two other forms of 'as soon as' clauses are possible, one which nominalizes the subordinate clause (section 18.5.8) and one which employs conditional morphology (section 18.2).

18.1.5.3 'After'

The form of 'after' clauses involves a double verb chain, in which the logical verb of the subordinated clause is chained with the verb *jὲ* 'take', which in this case is used like 'finish'; *jὲ* then takes non-final verb morphology to link it to the main clause.

The logical verb of the subordinated clause is always put into the perfective chain form with the suffix *-aa*, while the aspect of the auxiliary *jè* depends on the aspect of the main verb. If the verb in the main clause is perfective, *jè* too is perfective (920a); if it is imperfective, *jè* is also imperfective (920b).

(920) a. *Jáá   mí   ɲy-aa   j-àà,   òlú=baa   bírɛ́   bìr-áa=be-m.*
           meal   1SG.PRO   eat-PFV   take-PFV   field=LOC   work   work-PFV=be.PST-1SG
           'I worked in the fields after eating.'

     b. *Jáá   mí   ɲy-aa   j-èè,   òlú   yáà-dɛ̀-m.*
           meal   1SG.PRO   eat-PFV   take-NF   field   go-IMPF-1SG
           'I'm going to the fields after eating.'

For *jè* 'finish' as the final verb in the verb chain, see section 18.1.5.7. For another construction meaning 'after', in which the subordinate clause is nominalized and followed by the postposition *=nɛ*, see section 18.6.2.

18.1.5.4 *níŋ-íyɛ́* 'be afraid that'

For complement clauses of *níŋ-íyɛ́* 'be afraid', we may distinguish between those clauses in which the subject is co-indexed with the subject of the main clause ('be afraid to do (sth)') and those in which it is not ('be afraid that (sb) do (sth)'). To form the latter, the complement clause involves the quotative verb *gè* 'say' with a yes-no question embedded underneath it; this *gè* then takes non-final verb morphology, and *níŋ-íyɛ́* 'be afraid' is inflected as the final verb in the main clause. Consider the following examples:

(921) a. *Wó=ǹ   bɛ́ndɛ̀-dɛ̀-m(=ma)   g-àà   níŋ-íy-aa=wɔ.*
           3SG.PRO=OBJ   hit-IMPF-1SG(=or?)   say-PFV   be.afraid-MP-PFV=be
           'He is afraid that I will hit him.'

     b. *Dámmá=gɛ   ǹdɛ̀-m^L=gɛ   àná*
           village=DEF   person-HUM.PL=DEF   rain

        yɛ̀l-éélè(=ma)   g-àà   níŋ-íy-aa=wɔ-ɛ̀^{n}.
           come-NEG.IMPF(=or?)   say-PFV   be.afraid-MP-PFV=be-3PL

        'The villagers are afraid that the rains won't come.'

We see that the quotative complement of *gè* is optionally marked with the question particle *=ma*. This *gè* then is put in the perfective chain form which links it to the main clause verb *níŋ-íyɛ́* 'be afraid'.

Note that it is also possible to leave out *gὲ* when the question particle is present:

(922) *Mí=ǹ* *bɛ́ndὲ-dὲ=ma* *níŋ-íy-aa=wɔ-m.*
1SG.PRO=OBJ hit-IMPF=or? be.afraid-MP-PFV=be-1SG
'I am afraid that he will hit me.'

Consultants tell me that *gὲ* lends a sense like 'believe', as in, 'Believing he would hit me, I was afraid'. For more on quotative complements, see Chapter 19.

18.1.5.5 *gὲ=sɛ* 'think that'

Another unusual complement clause containing *gὲ* 'say' translates to 'think that'. The complement of *gὲ* is the clause that is thought of, and as a complement of *gὲ*, it need not take any sort of complementizer. *Gὲ* is then put in the perfective chain form, which is followed by the main clause verb *=sɛ* 'have'. It is also possible to consider this to be *gὲ* taking the auxiliary *=sɛ* instead of *=wɔ*; with this change of auxiliary comes a change of meaning from 'saying' to 'thinking'. A piece of evidence in favor of the auxiliary story is that the tonal behavior of *=sɛ* following *g-àà* is what we see with *=be* 'was' following *y-àà* 'saw' – it appears that the auxiliary cliticizes to this perfective form and the H tone from the verb stem is shifted onto it. Nonetheless, it is not a logical necessity that *=sɛ* be an auxiliary to cliticize, so the question remains open as to how best to interpret this construction.

The following examples illustrate the form in question:

(923) a. *Yɛ́llὲ* *g-àà=sɛ́-m.*
come.IMPF say-PFV=have-1SG
'I think that he's coming.'

b. *Émmé* *ú* *áí^H=ǹ* *g-àà=sɛ́=be-y.*
1PL.PRO 2SG.PRO friend=COP say-PFV=have=be.PST-1PL
'We thought that she's your friend.'

c. *Mí* *úwaa* *yὲl-áa* *g-àà=sɛ́=be-m.*
1SG.PRO 2SG.QUOT come-PFV say-PFV=have=be.PST-1SG
'I thought that you had come.'

d. *Ḿmwaa* *wó=ǹ* *jàmb-áa=be* *g-àà=sɛ́.*
1SG.QUOT 3SG.PRO=OBJ betray-PFV=be.PST say-PFV=have
'He thinks that I betrayed him.'

When the subject of the complement clause is overt, it takes the quotative particle, just as we would expect of a subject embedded under 'say' (see section 19.2.3).

One consultant also offers a construction wherein 'say' is chained with *mììlɛ́* to mean 'think'. Note that this is the verb seen in section 18.5.3 to mean 'doubt', offered by another consultant.

(924) *Ǹdɛ̌-m=gɛ*   *émmaa*   *kɛ̀ɛ̀lɛ́*   *yé=sɛ̀-y^L*
       person-HUM.PL=DEF   1PL.QUOT   money   EXIST=have-1PL

       g-èè   *míìlɛ̀-dìɲ.*
       say-NF   think-IMPF.3PL

       'The people will think that we are rich.'

Data from more speakers are required to reach a consensus on whether *mììlɛ́* should translate as 'think' or 'doubt' or both.

18.1.5.6 *bàrá* 'help'

Though *bàrá* 'help' may also take gerundive compounds as its complement (section 18.4.6), most commonly the verb of the complement simply forms a verb chain with main clause *bàrá*:

(925) a. *Nàá=gɛ*   *mí=ǹ*   *kómm-aa*   *bàr-áa=wɔ.*
          cow=DEF   1SG.PRO=OBJ   attach-PFV   help-PFV=be
          'He helped me tie up the cow.'

      b. *Ámádu*   *ú=ǹ*   *gìnɛ́*   *úwɔ*   *úd-aa*   *bàr-áa=wɔ.*
          Amadou   2SG.PRO=OBJ   house   2SG.POSS   build-PFV   help-PFV=be
          'Amadou helped you build your house.'

      c. *Mí*   *báá^H*   *mí=ǹ*   *ígɛ́*   *dɛ̀nn-ée*   *bàr-éélè.*
          1SG.PRO   father   1SG.PRO=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 (925a–b) or imperfective (925c), 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 (925c)).

18.1.5.7 *jɛ̀* 'finish'

To express that one finishes an action, the action in question is chained together with the subminimal verb *jɛ̀* 'take'. This final verb is then inflected for whatever aspect is required of the whole phrase:

(926) a. *Mí   jáá   ɲy-aa   j-ɛ̀-m.*
　　　　1SG.PRO meal   eat-PFV   take-PFV.L-1SG
　　　　'I have finished eating.'

　　　b. *Mí   jáá   ɲy-aa   j-àà=bé-m.*
　　　　1SG.PRO meal   eat-PFV   take-PFV=be.PST-1SG
　　　　'I had finished eating.'

　　　c. *Mí   gíré   úwɔ=nɛ   jáá   ɲy-ee   jɛ́-dɛ̀-m.*
　　　　1SG.PRO front 2SG.POSS=OBL meat   eat-NF   take-IMPF-1SG
　　　　'I will finish eating before you.'

Once again, we see the non-final verb inflecting for aspect (perfective or imperfective) as the main verb requires.

　　　For the opposite frame, 'begin', see section 18.9.4.

18.1.5.8 *bɛ̀lɛ́* 'was able to'

The verb expressing 'be able to' is irregular, with different stems depending on aspect. The stem form for the perfective of 'be able to' is *bɛ̀lɛ́*, homophonous with 'find'. Non-perfective ability constructions take [-u] morphology on the verb of the subordinate clause; see section 18.10.6. Perfective *bɛ̀lɛ́*, however, takes complement clauses with non-final verb morphology, as in the following:

(927) a. *Tímɛ̂=gɛ dà-á   bɛ̀lɛ̀-lí.*
　　　　tree=DEF   kill-PFV be.able-NEG.PFV
　　　　'He could not cut down the tree.'

　　　b. *Yáá   ú=ɲ̀   yɛ̀-ndɛ́-nú   yɛ̀l-áa   bɛ̀lɛ̀-lí-m.*
　　　　yesterday 2SG.PRO=OBJ see-FACT-PPL   come-PFV   be.able-NEG.PFV-1SG
　　　　'I could not come to see you yesterday.'

　　　c. *Gìnɛ̂ úd-aa   bɛ̀l-áa=be.*
　　　　house build-PFV be.able-PFV=be.PST
　　　　'He was able to build a house.'

Examples (927a–b) show the perfective negative 'was not able to' while example (927c) shows the perfective affirmative 'was able to'; the same chain verb construction is used for both.

18.1.6 *-ee* complements

Many verbs always take the imperfective non-final suffix *-ee* on the verb of the complement clause, regardless of whether the verb in the main clause is perfective

or imperfective. Because this is an unusual pattern with regards to regular verb chaining, I treat it here in its own section.

The expressions that can take -*ee* complements are *m̀bɛ̂* 'want', *níŋ-íyɛ́* 'be afraid of', *dàgá* 'be good' (used in an expression meaning 'should'), *tílày* 'be necessary that', and occasionally *tɔ́lɔ́* 'begin'.

18.1.6.1 *m̀bɛ̂* 'want'

As discussed further in section 18.3.2, the form of the complement clause of the verb *m̀bɛ̂* 'like/want' depends on the tense-aspect specifications as well as the semantic interpretation ('like' vs. 'want'). For infinitival complements, see section 18.3.2; for gerundive complements, see section 18.4.2. Of all complement types, the most common for *m̀bɛ̂* 'want' is one in which the verb is marked with a suffix -*ee*. This is seen on arguably the most common aspectual use of 'want', the present imperfective:

(928) a. *Kìndíyé=nɛ   dànn-íy-ee   m̀bɛ̂-go=wɔ-m.*
          shade=OBL   sit-MP-NF   want-ADV=be-1SG
          'I want to sit in the shade.'

   b. *Núyɔ   ú   núy-ee   m̀bɛ̂-go=wɔ-m.*
       song   2SG.PRO   sing-NF   want-ADV=be-1SG
       'I want you to sing.'

   c. *Mí   yɛ̀l-ée   m̀bɛ̂-go=wɔ-ɛ̀^{n}.*
       1SG.PRO   come-NF   want-ADV=be-3PL
       'They want me to come.'

As the examples above indicate, the subjects in the main clause and complement clause can either be the same (928a) or different (928b–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 18.1.2.

The -*ee* complement clause can also be used in the imperfective negative:

(929) a. *Yɛ̀-nd-ée   nàmà-lɛ̂-m.*
          see-FACT-NF   want-NEG-1SG
          'I don't want to watch.'

   b. *Yà-ée   m̀bɛ̂=lɛ-m.*
       go-NF   want=NEG.COP-1SG
       'I don't want to go.'

In the past negative, infinitival complements and *-ee* complements are interchangeable, as shown by the following examples:

(930) a. *Wó*   *gɔ́ɔ́*   *gɔ̀-ée/gɔ̀ɔ́-dim*   *m̀bɛ́-lɛ́-go=be.*
          3SG.PRO   dance   dance/dance-INF   want-NEG-ADV=be.PST
          'She didn't want to dance.'

       b. *Wó*   *yɛ̀-nd-ée/yɛ̀-ndɛ́-dim*   *nàmà-lɛ́-go=be.*
          3SG.PRO   see-FACT-NF/see-FACT-INF   want-NEG-ADV=be.PST
          'She didn't want to watch.'

As these examples show, this is true for both morphological forms of the past negative, *m̀bɛ́-lɛ́* and *nàmà-lɛ́*, which are themselves interchangeable.

18.1.6.2 *níŋ-íyɛ́* 'be afraid to'

The complement of 'be afraid to' constructions, in which the subject of the main clause is the same as the subject of the complement clause, can either take the *-ee* suffix or be in the infinitive (section 18.3.1). Examples of the *-ee* suffix include:

(931) a. *Dúú*   *ḿmɔ=nɛ*   *dɔ̀-ée/dɔ̀ɔ́-dim*   *níŋ-íy-aa=wɔ.*
          side   1SG.POSS=OBL   arrive-NF/arrive-INF   be.afraid-MP-PFV=be
          'He is afraid to get close to me.'

       b. *Tɔmmɔ̀ᴸ*   *Sɔ̀ɔ́*   *sɔ̀-ee/sɔ́ɔ́-dim*   *nìŋ-ìyɛ̀-lí-m.*
          Tommo   speech   speak-NF/speak-INF   be.afraid-MP-NEG.PFV-1SG
          'I am not afraid to speak Tommo So.'

One consultant, however, does not like an *-ee* complement with the verb 'be afraid'. For him, it is better to use either the infinitive or the deverbal noun with the suffix *-ílé*. In (931b), then, he prefers the structure *Tɔmmɔ̀ᴸ Sɔ̀ɔ́ sɔ̀-ìlèᴸ nìŋ-ìyɛ̀-lí-m* with the deverbal noun forming a pseudo-genitive compound with its object.

18.1.6.3 *dàgá* 'be good' ('should', 'must', 'have to')

The verb *dàgá* 'be good' is used with *-ee* suffixed verbs to form a construction translating to 'should', 'must', or 'have to'. The subject of the embedded clause is expressed as an object of *dàgá*, marked with the object clitic:

(932) a. *Núyɔ́*   *nùy-èèᴸ*   *ú=ǹ*   *dàg-áa=wɔ.*
          song   sing-NF   2SG.PRO=OBJ   be.good-PFV=be
          'You should sing.'

b. *ɔ̀rɔ̀ᴸ* *jáá* *(sɛ́mbɛ́=le)* *ɲ́y-ee* *ú=ɲ̀* *dàgà-lí.*
baobab meal force=ASSOC eat-NF 2SG.PRO=OBJ be.good-NEG.PFV
'You don't have to eat *toh.*'

Examples using this construction all show some sort of idiosyncrasy, making it hard to generalize. In (932a), the verb suffixed with *-ee* takes an unexpected {L} overlay; we will see more of this below. In (932b), the adverbial phrase *sɛ́mbɛ́=le* may be optionally added. This appears to add a stronger sense of obligation (though in this case negated).

Another strange construction using *dàgá* is attested. Consider the following:

(933) a. *ɔ̀gɔ̀-nɔ́=gɛ=ɲ̀* *mí* *pòò-nd-èèᴸ*
Hogon-HUM.SG=DEF=OBJ 1SG.PRO greet-FACT-NF

hálè *wó* *dàg-è.*
even 3SG.PRO be.good-PFV.L
'I should greet the chief.'

b. *Bɛ̀lú=mbe* *ɲ̀yɛ̀lɛ́* *ú* *òb-èèᴸ* *hálè* *wó* *dàg-è.*
animal=PL food 2SG.PRO give-NF even 3SG.PRO be.good-PFV.L
'You have to give food to the animals.'

In these constructions, the verb in the complement clause, marked with *-ee*, takes {L} tone. The main clause looks as though it is in the defocalized perfective, translating to something like 'until it is good'. This construction was offered on more than one occasion, always with this same main clause.

18.1.6.4 *tɔ́lɔ́* 'start'
Though the complement of *tɔ́lɔ́* 'start' is usually marked with the participial suffix *-nu* (section 18.9.4), it occasionally takes an *-ee* complement as well:

(934) *Wàkàdùᴸ* *gìnè-ý* *mí* *yó-è=gɛ=le*
time house-DIM 1SG.PRO enter-PFV.REL=DEF=ASSOC

Sámbá *píy-ee* *tɔ́l-aa=be.*
Samba cry-NF begin-PFV=be.PST
'When I entered the house, Samba had already started to cry.'

This is the only example I have of this complement clause type. A larger corpus of texts will be needed to see how common this form is.

18.2 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 perfective verbs, even when the context is imperfective, 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:

(935) *Dámmá   jàw-íy-aa   kɔ̀mbɔ́=gɛ   yáà-dìɲ=yo   kɛ̀m^L,*
village   fight-MP-PFV   war=DEF   go-IMPF.3PL=if   all

àùr-ìy-ì-ɛ́ⁿ=yo,   yà-ì-ɛ́ⁿ=yó   ǹdɛ̌-m=gɛ=ǹ
agree-MP-PFV.L-3PL=if   go-PFV.L-3PL=if   person-HUM.PL=DEF=OBJ

mòmb-íy-ee   sáà-dìɲ,   ǹdɛ̌-m=gɛ=ǹ   dáà-dìɲ.
get.together-MP-NF   destroy-IMPF.3PL   person-HUM.PL=DEF=OBJ   kill-IMPF.3PL

'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.'

[23.2:102]

Both the initial antecedent, 'if they went to war', and the final consequent(s), 'they would destroy, they would kill people', are in the imperfective, 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 perfective. 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, in addition to clauses with non-final verbs followed by *kɛ̂m* (section 18.1.5.2) and nominalized clauses (section 18.5.8), I was offered conditional clauses as well:

(936) a. *Jàndúlu=gɛ=ǹ   dèŋ-è-w=yó   kɛ̀m^L,   ú=ǹ   támbà-dὲ.*
donkey=DEF=OBJ   touch-PFV.L-2SG=if   all   2SG.PRO=OBJ   kick-IMPF
'As soon as you touch the donkey, he will kick you.'

b. *Ámbílé   dɔ̀-ὲ-y=yó   kɛ̀m^L,   ɲ̀yὲlɛ̂   ɲ́yὲ-dὲ-y.*
Ambile   arrive-PFV.L-1PL=if   all   food   eat-IMPF-1PL
'As soon as we arrive in Ambile, we will eat.'

Here, the exact emphasized time 'as soon as' is indicated with the addition of *kèm^L*, 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 perfective verb forms in the antecedent, as in (936), where given the future verb in the consequent we would expect a future verb in the antecedent as well.

18.3 Infinitival complements

Many verbs take complement clauses in which the verb is in the infinitive. This construction is typically used when it is just the VP and specifically the action of the verb that acts as the complement of the main clause, rather than a full phrasal complement. Verbs that take this construction include *nàá* 'forget', *m̀bɛ́* 'want', *níŋ-íyɛ́* '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 in each subsection.

18.3.1 *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 nominal, and hence it can be taken as the object by the verb just as any 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.

(937) a. *Ú=ǹ*　　　*sárá-dim*　*nà-è-m.*
　　　　2SG.PRO=OBJ　pay-INF　forget-PFV.L-1SG
　　　　'I forgot to pay you.'

　　b. *Ú=ǹ*　　　*sárá-dim*　*nà-éélè-m.*
　　　　2SG.PRO=OBJ　pay-INF　forget-NEG.IMPF-1SG
　　　　'I won't forget to pay you.'

When the VP is the object of the verb 'forget', as it is in these examples, another construction is also possible, in which the VP forms a nominal compound; this is addressed in section 18.4.1.

In the imperative, we find yet another nominalized form of the verb: a deverbal noun with the *-ílé* suffix (section 5.2.1.2). I will illustrate this construction here, since 'forget' is the only potentially clause-complementizing verb I have seen taking deverbal *-ílé* nouns as complement:

(938) *Fílm=gɛ   yɛ̂-nd-ílé=gɛ   nàá   nàà-gú.*
   film.FR=DEF   see-FACT-GER=DEF   forget   NAA-PROH
   'Don't forget to watch the film!'

Interestingly, a deverbal noun formed with the suffix *-íyé* (section 5.2.1.2) is not possible in this same context.

   When 'forget' takes a phrasal complement, then that phrase is marked by a *=gɛ* complementizer; see section 18.7.1.

18.3.2 *m̀bɛ́* '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/aspect 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:

1. Past negative (*m̀bɛ́-lɛ́-go=be* or *nàmà-lɛ́-go=be*)
2. Present affirmative of 'like' (*m̀bɛ́-go=wɔ*)
3. Present or future negative (*nàmà-lɛ́*)

Recall from section 13.2.3.3. 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 (2) I specify 'like', since this same morphological form *m̀bɛ́-go=wɔ* can also mean 'want', in which case it does not take the infinitive as a complement. 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:

(939) a. *Wó   m̀mɔ=nɛ   yɛlɛ́-dim   m̀bɛ́-lɛ́-go=be.*
     3SG.PRO   1SG.POSS=OBL   come-INF   want-NEG-ADV=be.PST
     'She didn't want to come to my house.'

   b. *Wó   gòó-dìm   nàmà-lɛ́-go=be.*
       3SG.PRO go.out-INF   want-NEG-ADV=be.PST
       'She didn't want to go out.'

The system is complicated by the fact that this is not the only complement type possible for the past negative. Equally possible are compound VP constructions, shown in section 18.4.2.

    Next, we find the infinitive used as the complement of 'like' but not of 'want', even though these two verbs are morphologically identical; the semantic interpretation depends on the shape of the complement clause, and with the infinitive, *m̀bɛ́-go=wɔ* is interpreted as 'like'.

(940) *Mí   kìlèmɔ́   kééŋ-íyé-dìm   m̀bɛ́-go=wɔ-m.*
       1SG.PRO music   listen-MP-INF   like-ADV=be-1SG
       'I like listening (*want to listen) to music.'

In this case too we see that the infinitive can co-vary with a deverbal compound. See section 18.4.2 for a discussion.

    Finally, the infinitive can be used in the imperfective negative, but at least for some speakers, the translation is more easily read as being future than being present. Consider the following:

(941) a. *Yɛ̀-ndɛ́-dìm   nàmà-lɛ́-m.*
         see-FACT-INF   want-NEG-1SG
         'I will not want to look.'
         *I do not want to look

     b. *Yògó=mɔ   ádúbá-dìm   nàmà-lɛ́-m.*
         tomorrow=POSS think-INF   want-NEG-1SG
         'Tomorrow, I will not want to think.'

Other speakers, however, reject the negative grammaticality judgment, saying that the infinitival construction is fine for either the future or the present.

    For more discussion of 'want/like', see section 18.1.6.1 and 18.4.2.

18.3.3 *níŋ-íyɛ́* 'be afraid to'

We first saw *níŋ-íyɛ́* in section 18.1.5.4, where it formed a verb chain with the verb of the complement clause. In this case, the subject was typically different between the two clauses, yielding a reading like 'be afraid that (sb) do (sth)'. When the verb of the complement clause is in the infinitive, the subject is shared between the two clauses, and the reading of the expression is one of 'be afraid to do (sth)'.

Examples of 'be afraid to' with an infinitival complement are illustrated below:

(942) a. *Dúú   ḿmɔ=nɛ   dɔ̀ɔ́-dim   níŋ-íy-aa=wɔ.*
        side   1SG.POSS=OBL   arrive-INF   fear-MP-PFV=be
        'He is afraid to come close to me.'

       b. *Tɔmmɔ́ᴸ   Sɔ̀ɔ́   sɔ́ɔ́-dim   nìŋ-ìyè-lí-m.*
          Tommo   speech   speak-INF   fear-MP-NEG.PFV-1SG
          'I am not afraid to speak Tommo So.'

Both examples in (942) can also be constructed using a non-final -*ee* complement; see example (931) in section 18.1.6.2.

18.3.4 *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 before the main verb. This is shown in the following examples:

(943) a. *Àná-m=mbe   jàà̀ᴸ   síré̂ᴴ   jèŋné-dim*
        man-HUM.PL=PL   meal   cook   pick.up-INF

        bé=ǹ   dàg-áa=be.
        3PL.PRO=OBJ   be.good-PFV=be.PST
        'Men should have learned how to cook.'

       b. *Mòbílu   ɛ́bɛ́-dim   ú=ǹ   dàg-áa=wɔ.*
          car   buy-INF   2SG.PRO=OBJ   be.good-PFV=be
          'You should buy a car.'

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 18.1.6.3.

18.3.5 *pádá* 'cease'

Another construction that can take an infinitive as its complement is a construction with *pádá* 'leave' or 'cease' meaning 'stop doing (something)'. I have only one example where the complement verb is in the infinitive – attempts to elicit others were rejected

by consultants. It is not clear to me what restrictions there are on the types of verbs that can take the infinite form. The attested example is as follows:

(944) *Kééŋ-íyé-dìm   yé=pàd-è-m^L*.
       listen-MP-INF   EXIST=cease-PFV.L-1SG
       'I stopped listening.'

In place of the infinitive, deverbal compounds seem to be the preferred morphological form for the complement verb. This construction is treated in section 18.4.3.

18.3.6 *yàbá* 'accept'

In one instance, the verb *yàbá* 'accept' takes an infinitival complement. As I will show in section 18.5.6, it typically takes a nominalized clause complement, but in the case where the subject of the main verb and the embedded verb are the same, it appears that the infinitive is possible:

(945) *Ámíru=gɛ   mí=le   yὲl-ée   bírɛ́   bìrɛ́-dìm   yàb-áa=wɔ*.
       chief=DEF   1SG.PRO=ASSOC   come-NF   work   work-INF   agree-PFV=be
       'The chief agreed to come work with me.'

18.4 Complements with a gerundive compound

The last section showed one kind of complement clause in a nominal form: the infinitive. This section treats those verbs that can take deverbal compounds as their complement. Recall from section 6.2.3 that deverbal (or gerundive) compounds are those right-headed compounds in which the verbal head takes a {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 (943a) above. *Jàà^L sírɛ̂^H* 'meal cooking' shows *jáá* 'meal' with {L} tone as the non-head and *sírɛ̂* 'cook' with {H}.

Many of the matrix verbs we saw in section 18.3 can also take a compound complement. These verbs are *nàá* 'forget', *m̀bɛ̂* 'want', and *pádá* 'cease', discussed in section 18.4.1, section 18.4.2, and section 18.4.3, respectively. In addition, section 18.4.4 discusses 'prevent', which can either be a causativized form of 'cease', *pádá-mɔ́*, or the verb *kɛ́dɛ̂*, which literally means 'cut'. Section 18.4.5 discusses a construction meaning 'be possible (that)' and finally section 18.4.6 discusses *bàrá* 'help'.

18.4.1 *nàá* 'forget'

We saw in section 18.3.1 above that *nàá* 'forget' in the "forget to" rather than the "forget that" construction may take an infinitive as its complement. The complement can also be a deverbal compound. Consider the following:

(946) a. *Ôlù^L yáá^H nà-ì-è^n.*
field go forget-PFV.L-3PL
'They forgot to go to the fields.'

b. *Sùkɔ̀rɔ̀^{L} ɛ́bɛ́^{H} nà-è-m.*
sugar buy forget-PFV.L-1SG
'I forgot to buy sugar.'

If the object of the verb is pronominal, this kind of compound cannot be formed. Instead, the pronoun is expressed as a possessor of the H-toned verb stem:

(947) *Sárá^H úwɔ nà-è-m.*
pay 2SG.POSS forget-PFV.L-1SG
'I forgot to pay you.'

This example corresponds to example (937) above with an infinitival complement.

18.4.2 *m̀bɛ̂* 'want'

In a small number of cases, we find the past negative form of the verb 'want' taking a gerundive complement instead of an infinitive. These are:

(948) a. *Jɔ̀bù^L jɔ́bɔ́^{H} m̀bɛ̂-lɛ̂-go=be.*
running run want-NEG-ADV=be.PST
'He didn't want to run.'

b. *Bàmàkò^L yáá^H m̀bɛ̂-lɛ̂-go=be-m.*
Bamako go want-NEG-ADV=be.PST-1SG
'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 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 18.3.2.

18.4.3 *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:

(949) a. *Néé   nàmà^L   tɛ́mɛ́^H   pád-aa=wɔ.*
now   meat   eat   cease-PFV=be
'He has stopped eating meat (for now).'

b. *Sìgàrèdì^L   nɔ́ɔ́^H   pàd-éélè-m.*
cigarette   drink   cease-NEG.IMPF-1SG
'I will not stop smoking cigarettes.'

c. *(Nùyɔ̀^L)   núyɔ́^H   pádà-dè̀-m.*
song   sing   cease-IMPF-1SG
'I am going to stop singing.'

In (949a), the distinction between 'for now' and 'for forever' is controlled by which adverb meaning 'now' is used. *Néé* imparts the temporary meaning, whereas *nìmě̀m*, typically meaning 'just now', implies that though he has just now stopped eating meat, his intention is to stop eating meat forever.

(949c) 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 *núyɔ́* 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:

(950) *Íí=gɛ   íru   pàdà-lí   nàmbá.*
child=DEF   breast   cease-NEG.PFV   yet
'The child has not yet been weaned (lit. quit the breast).'

Here, *íru* 'breast' stands in for the implied action of nursing. Thus, if *núyɔ́* 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 18.3.5.

18.4.4 *pádá-mɔ́* 'prevent'

When the verb *pádá* 'cease' is causativized, it is used to mean '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. The complement is also optionally followed by a possessive pronoun co-referent with the subject of the complement. For example:

(951) a. *Mí=ǹ*   *sìgàrèdì^L*   *nɔ́ɔ́^H*   *(ḿmɔ)*   *pàdà-m-ì.*
           1SG.PRO=OBJ   cigarette   drink   (1SG.POSS)   cease-CAUS-PFV.L
           'He prevented me from smoking cigarettes.'

       b. *Mí=ǹ*   *yàà-nà^L*   *jɛ́^L*   *(ḿmɔ)*   *pàdà-m-ì.*
           1SG.PRO=OBJ   female-HUM.SG   take   (1SG.PRO)   cease-CAUS-PFV.L
           'He prevented me from marrying (a woman).'

The optionality of the possessive pronoun is understandable even in English if we translate (951a) literally, to illustrate, as 'He made me cease (my) smoking cigarettes.'

In place of *pádá-mɔ́*, we also find the verb *kɛ́dɛ̂* '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-mɔ́*, with the exception that *kɛ́dɛ̂* 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=ǹ* 'me' in the examples in (951) is most likely due to the morphological causative on *pádá-mɔ́*. We will see this object marking return in the final 'prevent' strategy below. The following gives an example of *kɛ́dɛ̂* 'cut' used like 'prevent':

(952) *Àná=gɛ*   *Dùmàsà^L*   *yáá^H*   *ḿmɔ*   *kɛ́d-aa=wɔ.*
       rain=DEF   Douentza   go   1SG.POSS   cut-PFV=be
       'The rain prevented me from going to Douentza.'

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:

(953) a. *Năm=gɛ*   *yúú=gɛ*   *mí=ǹ*   *wàlà-m-éélè.*
           sun=DEF   millet=DEF   1SG.PRO=OBJ   farm-CAUS-NEG.IMPF
           'The sun prevented me from farming millet.'

       b. *ɛ̀nɛ́=gɛ=mbe*   *bɔ̀gɔ̀lɔ̀^L=gɛ*   *Ámádu*   *yèy-yè-m-éélè.*
           goat=DEF=PL   bellow=DEF   Amadou   sleep-MP-CAUS-NEG.IMPF
           'The goats' bellowing kept Amadou from sleeping.'

Since the morphological causative is present, object marking on the embedded subject is once again required if that subject is pronominal (as in (953a)). Notice that there is no object marking on proper nouns in this context. For more on causatives, see section 11.4.

18.4.5 *bɛ́ɛ̀-dɛ̀* 'it is possible that'

Another construction that takes a gerundive complement is a construction meaning 'it is possible that'. The imperfective inflected verb *bɛ́ɛ̀-dɛ̀* is also used to mean 'be able to' (see section 18.10.6), 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 *bɛ́ɛ̀-dɛ̀* is inflected for the logical subject of the embedded verb and what follows (the equivalent of the English complement clause) is a gerundive compound. For example:

(954) a. *Bɛ́ɛ̀-dɛ̀*   *ɛ̀ɲjɛ̀ᴸ*   *sɛ́mɛ̂ᴴ*.
           be.able-IMPF   chicken   slaughter.
           'It is possible that he is slaughtering a chicken.'

   b. *Bɛ́ɛ̀-dɛ̀-w*   *kɔ̀ɲjɔ̀ᴸ*   *dɔ́nɔ́ᴴ*.
       be.able-IMPF-2SG   millet.beer   sell
       'It is possible that you sell millet beer.'

Notice that the distinction between the progressive and the present habitual is neutralized in this construction.

While the verb *bɛ́ɛ̀-dɛ̀* is found in 'can' or 'be able to' constructions, these never employ a gerundive complement nor do they have this structure wherein *bɛ́ɛ̀-dɛ̀* precedes the action that is possible. Both of these mark out 'it is possible' phrases as being an entirely different construction from ability constructions.

18.4.6 *bàrá* 'help'

I have one example of the complement of *bàrá* 'help' in the gerundive compound form. This compound is not directly followed by the main clause verb, however; instead it is linked to it with the oblique postposition *=nɛ*, as illustrated below:

(955) *Kɛ̀ɛ̀lɛ́* *bɛ̀l-ɛ̀-m=yó*   *ú=ɲ̀*   *gìnɛ̀ᴸ* *sáráᴴ=nɛ* *bárà-dɛ̀-m*.
       money   find-PFV.L-1SG=if   2SG.PRO=OBJ   house   rent=OBL   help-IMPF-1SG
       '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 18.1.5.6.

18.5 Nominalized subordinate clauses

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 clause can be inflected. Though I call these nominalized clause complements, they are identical in form to headless 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 *=gɛ* complementizer, discussed in section 18.7, where the subject can be marked. See Chapter 16 for more on relative and nominalized clauses.

The verbs that take this form of the complement clause are *àmbà bòó* 'hope' (literally 'call god'), *èlèlú=wɔ* 'be happy that' (with the subject marked as an object, literally, 'be sweet to X'), *mììlê* 'doubt that', *kǎy-go=wɔ* 'be important that', *ì~íŋè* 'be necessary that' (literally 'be standing'), *yàbá* 'accept that' or 'consent to', and a construction indicating causation.

18.5.1 *àmbà bòó* 'hope that'

There are two constructions in Tommo So meaning 'I hope that', one of which is *àmbà bòó*. (The other, *àdùbú X=mɔ=nɛ*, literally 'in X's thought', is a PP and not a clause in and of itself, so it is not discussed here.) 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 part of a nominal compound. A similar phenomenon is seen in blessings, which are treated in section 21.7. It appears that *ámbá* 'god' is being used almost adverbially or as a particle rather than as a true argument, and it is not clear to what extent speakers decompose the expression *àmbà bòó* when using it to mean 'hope'.

One consultant offered the forms in this subsection, while another consultant (from the next village over) rejected them. It is not clear what to make of these differences of opinion. More data from other speakers will be required to answer this question.

As we will see with many of the verbs below, the relative clause complement follows the matrix verb *bòó* in these constructions. Examples include the following:

(956) a. *Àmbà^L*   *bò-é-m*   *ènè^L*   *àsúú*
　　　god　　call-PFV.L-1SG　goat　always

　　　pìyè=bè^L   *nɔ́*　*ú*   *sɛ́m-ɛ̀=gɛ.*
　　　cry.IMPF.REL=be.PST　this　2SG.PRO　slaughter-PFV.REL=DEF

　　　'I wish that you'd slaughter that goat that cries all the time.'

　　b. *Àmbà^L*   *bò-é-w*   *mí*   *yɛ̂l-ɛ̀=gɛ.*
　　　god　　call-PFV.L-2SG　1SG.PRO　come-PFV.REL=DEF
　　　'You wish that I'd come.'

　　c. *Àmbà^L*   *bò-é-m*   *ú*   *yɛ̀l-éélè=gɛ.*
　　　god　　call-PFV.L-1SG.S　2SG.PRO　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 *bòó* is placed in the perfective even when the interpretation of the hoping is imperfective. Second, this perfective form is segmentally the defocalized perfect, but it takes {LH} tone rather than all {L}. It is possible that there is a 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. However, all of these data come from one speaker who is more likely in general to give the defocalized perfective {LH} or {HL} tone (depending on the subject; see section 12.4). 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.

18.5.2 *ɛ̀lɛ̀lú=wɔ* 'be happy that'

The expression *ɛ̀lɛ̀lú=wɔ* literally means 'it is sweet'. When preceded by a noun or pronoun marked with the object marker =*ǹ*, 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^L êlêlu* or 'sweet liver'; there is no dedicated adjective meaning 'happy'.

　　　Like 'hope that', the complement clause of 'be happy that' may follow it, putting the inflected verb in the middle of the sentence:

(957) a. *Mí=ǹ*   *ɛ̀lɛ̀lú=wɔ*   *bé*   *yéy-yé-gú*   *sɛ́=gɛ.*
　　　1SG.PRO=OBJ　sweet=be　3PL.PRO　sleep-MP-PPL　have.REL=DEF
　　　'I am happy that they are asleep.'

　　b. *Ú=ǹ*   *ɛ̀lɛ̀l-lɛ́*   *úwɔ=nɛ*   *mí*   *yɛ̆llɛ=gɛ.*
　　　2SG.PRO=OBJ　happy-NEG　2SG.POSS=OBL　1SG.PRO　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 =wɔ is in a neutral 3sg 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 =diyɛ. This more explicitly states that the happiness in the main clause is the result of the complement clause. The two forms are interchangeable:

(958) a. *Bé*   *yéy-yé-gú*   *sɛ́=gɛ=diyɛ*   *mí=ɲ̀*   *èlèlú=wɔ.*
           3PL.PRO sleep-MP-PPL have.REL=DEF=than 1SG.PRO=OBJ sweet=be
           'I am happy that they are asleep.'

       b. *Gɔ́ɔ́*   *ú*   *gɔ̀ɔ́-dɛ=gɛ=diyɛ*   *mí=ɲ̀*   *èlèlú=wɔ.*
           dance 2SG.PRO dance-IMPF.REL=DEF=than 1SG.PRO=OBJ sweet=be
           'I am happy that you are dancing.'

For more on complement clauses marked with postpositions, see section 18.6.

18.5.3 *mììlɛ́* 'doubt that'

As with 'hope', there is some debate between consultants as to whether or not the verb *mììlɛ́* means 'doubt'. The same consultant who gave me *àmbà bòó* 'hope' gave me *mììlɛ́* 'doubt', and the same consultant who rejected one rejected both. It could be that the consultant who offered both of these forms had difficulty translating from French, but given that I have only one opinion on each side, I am hesitant to reject these data. In the absence of further opinions, I urge the reader to treat these data with caution.

Mììlɛ́ tends to take nominalized clause complements, but unlike the two preceding expressions, they are typically pre-verbal; my data include 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 *mììlɛ́*.

Examples of nominalized clause complements with *mììlɛ́* are illustrated below:

(959) a. *Mí=ɲ̀*   *ú*   *ḿbɛ̀=gɛ*   *míìlè-dɛ̀-m.*
           1SG.PRO=OBJ 2SG.PRO love.REL=DEF doubt-IMPF-1SG
           'I doubt that you love me.'

       b. *Búúdù* *ú*   *sɛ́=gɛ*   *míìlè-dɛ̀-y.*
           money 2SG.PRO have.REL=DEF doubt-IMPF-1PL
           'We doubt that you have money.'

Being pre-verbal with no particle like =*diyɛ*, the nominalized clause is very clearly the object of the verb *mììlɛ́*.

18.5.4 *kǎy-go=wɔ* and *màá-go=wɔ* '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 'better' or '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:

(960) a. *Wó   màá-go=wɔ   tàgá ḿmɔ   wó   jɛ́ɛ̀l-ì.*
         3SG.PRO hard-ADV=be shoe 1SG.POSS 3SG.PRO bring-PFV.REL
         'It is important that he bring my shoes.'

    b. *Kǎy-go=wɔ   gɔ́ɔ́   wómɔ=baa   mí   yàá-dɛ=gɛ.*
        important-ADV=be dance 3SG.POSS=LOC 1SG.PRO go-IMPF.REL=DEF
        'It is important that I go to his dance.'

    c. *Ḿmɔ=nɛ   kǎy-go=wɔ   mí*
        1SG.POSS=OBL important-ADV=be 1SG.PRO

        náá^H=ǹ   ú   bòó-dɛ=gɛ.
        mother=OBJ   2SG.PRO call-IMPF.REL=DEF
        'It is important to me that you call my mother.'

First, we see a slight difference in complement structure between (960a) and (b–c). The verb in the complement in (960a) is in the perfective, while those in (960b–c) are imperfective. Also, the independent pronoun *wó* occurs before *màá-go=wɔ* in (960a), while the predicate adjective has a null subject in (960b–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 (960c) 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 =*nɛ*. This is in contrast to 'be happy that', where the experiencer of the happiness was an independent pronoun marked with the object clitic.

   It is also possible to have the complement clause precede the main clause, as in the following:

(961) *Ú   yɛ̌llɛ=gɛ   kǎy-go=wɔ.*
       2SG.PRO come.IMPF.REL=DEF important-ADV=be
       'It is important that you come.'

As with *mììlé* 'doubt' but unlike with *ɛ̀lɛ̀lú=wɔ* 'be happy that', when the bare relative clause precedes the main clause, no particle *=diyɛ* is necessary.

18.5.5 *ì~íŋɛ̀* 'be necessary that'

There are at least two expressions in Tommo So that mean 'it is necessary that'. The one discussed here is *ì~íŋɛ̀* (sometimes *yé=ìŋɛ̀ᴸ*), literally a stative verb meaning 'it is standing', which takes a nominalized clause as its complement. The other, *tílày*, will be discussed in section 18.8.5. With *ì~íŋɛ̀*, the nominalized clause complement follows the main clause (962a), but this order is reversed with *yé=ìŋɛ̀* (962b). It is not clear whether these orders are fixed.

(962) a. *Ì~íŋɛ̀*   *úlûm=gɛ*   *jáŋgu*   *díyɛ̀-go*   *bé*
           RED~stand   children=DEF   studies   big-ADV   3PL.PRO

           jàŋgá-dɛ=gɛ.
           study-IMPF.REL=DEF

           'It is necessary that the children study a lot.'

       b. *Úlûm=gɛ*   *jáŋgu*   *díyɛ̀-go*   *bé*
           children=DEF   studies   big-ADV   3PL.PRO

           jàŋgá-dɛ=gɛ   *yé=ìŋɛ̀ᴸ.*
           study-IMPF.REL=DEF   EXIST=stand

           '(=a)'

18.5.6 *yàbá* 'consent'

Yàbá 'consent' or 'agree' works much like *mììlé* 'doubt' in that the nominalized 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:

(963) a. *Mí*   *báááᴴ*   *Bàmàkó=baa*   *jáŋgu*   *émmé*
           1SG.PRO   father   Bamako=LOC   studies   1PL.PRO

           jàŋgá-dɛ=gɛ   *yàb-áa=wɔ.*
           study-IMPF.REL=DEF   agree-PFV=be

           'My father consented to us studying in Bamako.'

       b. *Mól-nɛ*   *báŋgàlu=gɛ*   *émmé*
           cleric-HUM.SG   wedding=DEF   1PL.PRO

           kán-dɛ=gɛ   *yàbà-lí.*
           do-IMPF.REL=DEF   agree-NEG.PFV

           'The cleric did not consent to our carrying out the wedding.'

c. *Ú*   *báá^H*   *mí*   *yèlέ-dɛ=gɛ*   *yàb-éélè.*
    2SG.PRO   father   1SG.PRO   come-IMPF.REL=DEF   accept-NEG.IMPF
    'Your father won't accept that I come.'

Nominalized clauses are not the only attested complement types for *yàbá*. Infinitival complements, introduced in section 18.3.6, are also possible.

18.5.7 'Because of'

The same nominalized form of the subordinate clause can be used to express a meaning of causation. That is, if the subordinated nominalized clause is X, the whole sentence takes on the meaning 'Y because of X'. 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:

(964) a. *Mí*   *póó-nd-íyó-dɛ=gɛ*   *jáá*   *sáy-ni*   *ɲ́yέ-gú=sɛ-m.*
           1SG.PRO   fat-FACT-MP-IMPF.REL=DEF   meal   much-ADV   eat-PPL=have-1SG
           'I am getting fat because I eat a lot.'

       b. *Íí=gɛ*   *píyé-gú=sέ=gɛ*   *wó*   *délé^H*
           child=DEF   cry-PPL=have.REL=DEF   3SG.PRO   brother

           wó=ǹ   *bènd-ὲ.*
           3SG.PRO=OBJ   hit-PFV.L
           '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 nominalized.

   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 18.8.4.

18.5.8 'As soon as'

The final subordinate construction employing nominalized clauses is a construction that translates to 'as soon as', synonymous with the chain construction seen in section 18.1.5.2 above. As mentioned there, 'as soon as' clauses seem to parallel each of the forms 'after' clauses can take, but with some differences, most noticeably that *kέm* 'all' is added after the clause. In the case of nominalized 'as soon as' clauses, they differ from 'after' clauses in the absence of a postposition following the nominalized clause; for nominalized 'after' clauses with a postposition, see section 18.6.2.

Examples of 'as soon as' clauses in which the subordinate clause is nominalized are as follows:

(965) a. *Émmé   dɔ́-ɛ̀=gɛ   kɛ́m   ǹj-ìy-ì-y.*
         1PL.PRO   arrive-PFV.REL=DEF   all   lie.down-MP-PFV.L-1PL
         'We went to bed as soon as we arrived'

     b. *Mí   y-ɛ́=gɛ̀   kɛ́m   ɛ́bɛ̀-dɛ̀-m=gɛ*
         1SG.PRO   see-PFV.REL=DEF   all   buy-IMPF-1SG=DEF

        ḿmɔ=nɛ   ɛ́s-aa=be.
        1SG.POSS=OBL   be.clear-PFV=be.PST

        'As soon as I saw it, I knew I was going to buy it.'

18.6 Postpositions

The subordinate clauses in this section resemble those in section 18.5 in that they are nominalized. However, the constructions discussed here additionally take a post-position (usually oblique *=nɛ*) after the nominalized clause. All such subordinate clauses, with the exception of 'as though' clauses with the similarity clitic *=gonu*, are temporal in nature, and hence are not tied to specific verbs as complement clauses. The temporal interpretation arises from the form and configuration of the subordinate clause.

18.6.1 'Before'

To subordinate a clause and give it the meaning 'before', the verb stem takes a suffix *-mɔ* (sometimes pronounced *-mɛ*), which is then followed by the oblique post-position *=nɛ*. It is unclear whether this suffix has any relation to the homophonous causative and hortative suffixes. Its status as a suffix and not as a clitic is confirmed by the fact that it can inflect for 3pl subject agreement, shown in example (967) below. The verb stem retains its lexical tone before the suffix.

Since the clause is subordinated, the verb does not take subject agreement (with the exception of the 3pl; cf. relative participles section 16.3.1). Instead, pronominal subjects must be marked with an independent pronoun before the verb (966b):

(966) a. *Àn-sáárá   yɛ̀lɛ́-mɔ=nɛ   ɔ̀gɔ́   pɛ̀lù^L   kúlóy*
         AN-white.person   come-before=OBL   Hogon   ten   six

        tààndú-go   sígɛ́=nɛ.
        three-ADV   more=OBL

        'Before [the] white people came, the Hogons [were] at [the number of] 63.'
                                                                    [23.1:43]

b. *Ú   núyɔ́   núyɔ́-mɔ=nɛ   díí   ńd-ìyɛ̀-dɛ̀-m.*
   2SG.PRO song   sing-before=OBL   water   bathe-MP-IMPF-1SG
   'Before you sing, I'm going to take a bath.'

When the subject is a general (non-specific) 3pl, however, the suffix inflects, becoming *-mi-ɛ̀ⁿ*. For instance:

(967) a. *Dàràgá   ńyɛ́-mi-ɛ̀ⁿ=nɛ   òlú=nɛ   bíŕɛ́   bírɛ̀-dìn.*
          lunch   eat-before-3PL=OBL   field=OBL   work   work-IMPF.3PL
          'Before eating lunch, they (=people) work in the fields.'

       b. *Díí   ǹd-íyɛ́-mi-ɛ̀ⁿ=nɛ   jáá   ńyɛ̀-dìn.*
          water   bathe-MP-before-3PL=OBL   meal   eat-IMPF.3PL
          'Before bathing, they will eat.'

Note that these examples do not refer to any specific groups; the use is like the general *on* in French. If specific people are implied, there is no subject agreement and instead the independent pronoun *bé* is used:

(968) *Dàràgá   bé   ńyɛ́-mɔ=nɛ   òlú=nɛ   bíŕɛ́   bírɛ̀-dìn.*
       lunch   3PL.PRO   eat-before=OBL   field=OBL   work   work-IMPF.3PL
       'Before eating lunch, they work in the fields.'

An alternative construction uses the imperfective suffix *-dɛ* on the subordinated verb instead of the suffix *-mɔ*. Consultants report that the two constructions are interchangeable.

(969) a. *Dàràgá   bé   ńyɛ́-dɛ=nɛ   òlú=baa   bíŕɛ́   bírɛ̀-dìn.*
          lunch   3PL.PRO   eat-IMPF.REL=OBL   field=LOC   word   work-IMPF.3PL
          'Before eating lunch, they will work in the fields.'

       b. *Nɔ̀nú   mí   yɛ̀lɛ́-dɛ=nɛ   Etas-Unis   yáà-dɛ̀-m.*
          here   1SG.PRO   come.IMPF.REL=OBL   United.States.FR   go-IMPF-1SG
          'Before coming here, I will go to the United States.'

18.6.2 'After'

The most common form of 'after' clauses involves a nominalized perfective clause, looking like a headless relative clause, which is in turn followed by the oblique postposition *=nɛ*. As discussed in section 18.5.8, these clauses are very similar to 'as soon as' clauses, which employ the universal quantifier *kɛ́m* 'all' in place of the oblique postposition *=nɛ*. The following examples illustrate nominalized 'after' clauses:

(970) a. *ɔ̀gɔ́   nàm^L   tégé   gál-è=nɛ   yàgá*
           Hogon   sun   shining pass-PFV.REL=OBL   other

           Dɛ̀ŋɛ̀nɛ́=mɔ   nɔ̀ɔ́   dògò   kɔ̀mbɔ́   ùŋgùlò-lí.
           Dɛŋɛnɛ=POSS   this   but   war   arise-NEG.PFV

           'After the noon time [for] the Hogon passed, except for [the
           war] for Dɛŋɛnɛ, no wars were started.'   [23.2:128]

       b. *Jáá   mí   ɲ́y-ɛ̀=nɛ   òlú=baa   bíɾɛ́*
           meal   1SG.PRO eat-PFV.REL=OBL   field=LOC   work

           bìr-áa=be-m.
           work-PFV=be.PST-1SG

           'I worked in the fields after eating.'

This construction can only be used when the verb in the main clause is in the
perfective.

Another form of 'after' clauses, in which the verb in the subordinate clause
takes non-final verb morphology, is discussed in section 18.1.5.3.

The same construction can also translate to 'since', as in:

(971) a. *Wó   ɛ́ⁿ-ɛ̀=nɛ   ḿmɔ=nɛ   yɛ̀lɛ́-gú=sɛ̀-lɛ́.*
           3SG.PRO marry-PFV.REL=OBL   1SG.POSS=OBL   come-PPL=have-NEG
           'Since she got married, she doesn't come over to my house anymore.'

       b. *Bé   yɛ́l-ɛ̀=nɛ   òlú   yàà-nní.*
           3PL.PRO come-PFV.REL=OBL   field go-NEG.PFV.3PL
           '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 the perfective form of
gòó 'go out' or *jɛ̀* 'take' and the final verb the imperfective form of *yɛ̀lɛ́* 'come'. It is
not clear why there is this switch from perfective to imperfective. This construction is
exemplified by the following:

(972) a. *Yáá   j-àà   yɛ̀lɛ́-dɛ=nɛ   yèy-yè-lí-m.*
           yesterday take-PFV come-IMPF.REL=OBL   sleep-MP-NEG.PFV-1SG
           'I have not slept since yesterday.'

       b. *Gààlúú   gò-áa   yɛ̀lɛ́-dɛ=nɛ   àná   òndú.*
           last.year go.out-PFV 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.

18.6.3 'From... to...'

One complex temporal subordinate clause translating to 'from... to...' involves both a chain verb construction and a nominalized clause with a postposition. The point of departure, the 'from' clause, takes non-final verbal morphology while the end point, the 'to' clause', takes the postposition. For example:

(973) a. *Wó*   *nàl-í-ɛ́ⁿ³⁴*   *j-àà*   *wó*
           3SG.PRO   give.birth-PFV.REL-3PL   take-PFV   3SG.PRO

   yímɛ̂-dɛ=nɛ   *sɛ́nu*   *sɛ̀nɛ̀*   *tìyɛ̀-lí.*
   die-IMPF.REL=OBL   prayer   pray.EXP   EXP-NEG.PFV

   'From the moment he was born until the moment he died, he never prayed.'

   b. *Úŋgúl-aa*   *mí*   *ɲj-íyó-dɛ=nɛ*   *jáá*
       get.up-PFV   1SG.PRO   lie.down-MP-IMPF.REL=OBL   meal

   ɲ̀yɛ̀-lí-m.
   eat-NEG.PFV-1SG

   '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 *j-àà* meaning 'finish' (derived from 'take') is used in the perfective chain form, preceded by a non-specific 3pl verb form representing a passive. In the second, the verb 'get up' is used without a linking auxiliary. The *jáá* in the second should not be confused with this linker; in this case, it is a noun meaning 'meal', which can be distinguished by its H tone.

18.6.4 'As though'

The last construction with a nominalized clause and a postposition involves the similarity clitic *=gonu*. When used after nominalized clauses, this clitic creates a clause with the meaning 'as though'. For example:

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34 It is not clear why the tone pattern of this perfective is LH.

(974) a. *Mí=ǹ   yὲ-nd-áa   kìdὲkámá mí=ǹ*
      1SG.PRO=OBJ see-FACT-PFV something 1SG.PRO=OBJ

      tágá-dɛ=gonu   kàn-ù.
      tell-IMPF.REL=like do-PFV.L

      'He looked at me as if he had something to tell me.'

   b. *Kὲnnέ wómɔ=nɛ   díí   tóó=gonu   sɔ̀ɔ̀=gɛ   sɔ̀ɔ̀-dὲ.*
      mouth 3SG.POSS=OBL water be.in.REL=like speech=DEF speak-IMPF
      'He speaks as though he has water in his mouth.'

For more on similarity constructions, see section 10.2.1.

18.7 *=gɛ* complementizer

This section discusses a construction that at first glance looks like the nominalized clauses seen in section 18.5, but that is set apart by the presence of subject agreement on the complement clause's verb. The similarity is that both the nominalized clauses and these clauses are followed by *=gɛ*, typically the definite article. Until now, we have only ever seen *=gɛ* 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 *=gɛ* 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 *=gɛ* complementizer. *nàá* 'forget' makes another appearance, followed by *yὲ* 'see that', *έgέ* 'hear that', and *íg-go=wɔ* 'know that'. Finally, we find another adjective-like main clause with the adjectival verb *έsέ* 'be clear that'.

18.7.1 *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 *=gɛ* complementizer. This can be used both when the subjects differ between the two clauses (975a) and when they are the same (975b):

(975) a. *Mí   náá^H   ííyé   gɔ́ɔ   gɔ̀ɔ̀-dɪ̀n=gɛ   nà-áa=y.*
          1SG.PRO mother today dance dance-IMPF.3PL=COMP forget-PFV=COP
          'My mother forgot that they are dancing today.'

     b. *Nàmá=gɛ   ɛ́b-aa=be-m=gɛ   nà-è-m.*
          meat=DEF buy-PFV=be.PST-1SG=COMP forget-PFV.L-1SG
          '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 (975a), the imperfective verb takes a {HL} overlay, which it would not receive were it in a nominalized or relativized clause. The perfective form in (975b) is not typically used in relative clauses, which prefer the defocalized perfective. The fact that both verbs take subject agreement cinches the case that these are not nominalized clauses like those seen in the last section.

    For uses of *nàá* in "forget to" constructions, see section 18.3.1 and section 18.4.1.

18.7.2 *yɛ̀* 'see that'

The verb *yɛ̀* '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 18.9.1. In this section, I present the other use of *yɛ̀* in "see that" constructions. Here, the complement clause takes the =*gɛ* complementizer.

(976) a. *Mòtó   bɛ̀l-áa=wɔ-w=gɛ   y-àá=wɔ-m.*
          moto   find-PFV=be-2SG=COMP   see-PFV=be-1SG
          'I saw that you got a motorcycle.'

     b. *Gɔ́ɔ   íg-go=wɔ-m=gɛ   y-àá=wɔ.*
          dance   know-ADV=be-1SG=COMP   see-PFV=be
          'He saw that I know how to dance.'

18.7.3 *ɛ́gɛ́* 'hear that'

ɛ́gɛ́ 'hear' patterns in the exact same way as *yɛ̀* 'see' in that the direct perception "hear (sb) do (sth)" takes a participial complement while indirect perception "hear that" takes a complement with the =*gɛ* complementizer. For example:

(977) a. *Ámíru=gɛ   dámmá=gɛ=nɛ   sɔ́ɔ*
          chief=DEF   village=DEF=OBL   speech

          sɔ́-aa=be=gɛ   ɛ́g-aa=be-m.
          speak-PFV=be.PST=COMP   hear-PFV=be.PST-1SG

          'I heard that the chief spoke in the village.'

b. *Ííyé*   *fɛ́tu=yɔ̂=gɛ*   *ɛ́g-aa=wɔ-y.*
today   party=be.DIST=COMP   hear-PFV=be-1PL
'We heard that there is a party today.'

For direct perception constructions with *ɛ́gɛ́*, see section 18.9.2.

18.7.4 *íg-go=wɔ* '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 *íg-go=wɔ* 'know', it takes no complementizer. This form is presented in section 18.8.1. When the complement clause precedes the verb, on the other hand, the *=gɛ* 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:

(978) a. *Dúmásá=nɛ*   *yɛ̀l-ɛ́élè-m=gɛ*   *íg-go=wɔ-w.*
Douentza=OBL   come-NEG.IMPF-1SG=COMP   know-ADV=be-2SG
'You know that I am not coming to Douentza.'

b. *Ámíru=gɛ*   *émmé*   *gɔ́ɔ́*   *yàà-lí-y=gɛ*   *íg-go=wɔ.*
chief=DEF   1PL.PRO   dance   go-NEG.PFV-1PL=COMP   know-ADV=be
'The chief knows that we did not go to the dance.'

c. *Ííyé*   *dìgè*^L   *nàm*^L *gɔ́ɔ́*   *gɔ́ɔ̀-dɛ̀-w=gɛ*   *íg-go=wɔ.*
today evening sun   dance dance-IMPF-2SG=COMP 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 *=gɛ* complementizer. In this construction, there is no difference between 'not know that' and 'not know if':

(979) *Jáá*   *wómɔ*   *ɲ́y-aa=be-m=ma*   *ínnɛ.*
meal   3SG.POSS   eat-PFV=be.PST-1SG=or?   know.NEG
'He doesn't know that/if I ate his food.'

This construction is an embedded interrogative, discussed in section 15.2.8.

18.7.5 *ɛ́sɛ́* 'be clear that'

The adjectival verb *ɛ́sɛ́* '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 *=nɛ*, which obligatorily takes the possessive form of pronouns if the participant is pronominal. The object X of *ɛ́sɛ́* '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:

(980)   a.   *Yògó*   *Tó~Tóŋó*   *yáà-dɛ̀-m=gɛ*
            tomorrow   Tongo-Tongo   go-IMPF-1SG=COMP

             ḿmɔ=nɛ   *ɛ́s-aa=wɔ.*
             1SG.POSS=OBL   be.clear-PFV=be

             'It is clear to me/I am sure that I will go to Tongo-Tongo tomorrow.'

   b.   *Ííyɔ́ɔ̀*   *yàa-ná*   *jɛ́-dɛ̀-w=gɛ*
             this.year   female-HUM.SG   take-IMPF-2SG=COMP

             ḿmɔ=nɛ   *ɛ́s-aa=wɔ.*
             1SG.POSS=OBL   be.clear-PFV=be

             'It is clear to me/I am sure that you will get married this year.'

   c.   *Ú*   *ánìgè* *ᴴᴸ*   *Mótì=nɛ*   *gò-áa=wɔ=gɛ*
             2SG.PRO   friend   Mopti=OBL   leave-PFV=be=COMP

             úwɔ=nɛ   *ɛ́s-aa=wɔ.*
             2SG.POSS=OBL   be.clear-PFV=be

             'It is clear to you/you are sure that your friend has left Mopti.'

When the main clause is negative, once again we see the *=gɛ* complementizer replaced with *=ma*:

(981)   a.   *Mí=ǹ*   *m̀bɛ́-go=wɔ-w=ma*   *ɛ̀sɛ̀-lí.*
             1SG.PRO=OBJ   love-ADV=be-2SG=or?   be.clear-NEG.PFV

             'It is not clear whether you love me.'

   b.   *Ú*   *yɛ́lɛ̀-dɛ̀-w=ma*   *ḿmɔ=nɛ*
             2SG.PRO   come-IMPF-2SG=or?   1SG.POSS=OBL

             ɛ̀sɛ́-lú-go=be.
             be.clear-NEG.PFV-ADV=be.PST

             'I was not sure whether or not you were coming.'

In (981a), we see an example where there is no experiencer in the main clause. Both examples in (981) can also translate as 'doubt': 'I doubt that you love me', 'I doubted that you would come'.

18.8 Complement with a null complementizer

The last section showed fully inflected complement clauses marked with comple-
mentizer *=gɛ*. 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 *mùlú-go=wɔ* 'it seems that', the unmarked complement clause pre-
cedes this main clause expression. With *ìŋè-lɛ̂* 'maybe' (literally 'it is not standing'),
this word is inserted as an adverb into what would be the complement clause but is
instead the syntactically main clause. Two causation clauses also appear in this list.
'Because of' shows an unmarked clause (the cause, in this case) preceded by either
kó=diyɛ '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.

18.8.1 *íg-go=wɔ* 'know that'

We have already seen, in section 18.7.4, that 'know that' can take a complement
clause with the *=gɛ* 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 *íg-go=wɔ*, in which case no complementizer is
used. For instance:

(982) a. *Ú*　　　　*íg-go=wɔ-w*　　　　*émmé*　　*ú*　　　*á012345ngè* ^{HL}*=mbe=ỳ.*
　　　　　 2SG.PRO　 know-ADV=be-2SG　 1PL.PRO　 2SG.PRO　 friend=PL=COP.1PL
　　　　　 'You know that we are your friends.'

　　　 b. *Íg-go=wɔ-m*　　　　*àn-ná*　　　　*ɛnɛ́*　　*wómɔ=mbe*
　　　　　 know-ADV=be-1SG　 male-HUM.SG　 goat　 3SG.POSS=PL

　　　　　 gɛ̀l-íyɛ́-gú=sɛ.
　　　　　 guard-MP-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 *=gɛ* complementizer cannot be sentence-final. All of the examples
that include the *=gɛ* complementizer in section 18.7 show the complement clause in
pre-verbal position, and now here where the two clauses are reversed, the comple-
mentizer disappears. However, the restriction on final complementizers cannot be
too strong, since the data do include one instance of a complement clause following
'know' where the complementizer is not deleted:

(983) *Wó*   *íg-go=wɔ*   *mí*   *dɔ̀-áa=wɔ-m=gɛ.*
      3SG.PRO   know-ADV=be   1SG.PRO   arrive-PFV=be-1SG=COMP
      'He knows that I have arrived.'

We see an interesting phenomenon of object marking the embedded pronominal subject in sentences like (983). The pattern appears to be that non-1pl pronominal subjects may be optionally (but preferably) marked with an object marker when the complement clause follows the main verb. The 1pl *émmé* may not be marked. The following six sentences lay out the pattern:

(984)   a.   *Ú*   *íg-go=wɔ-w*   *mí=ǹ*   *ú*   *áí^H=ǹ.*
          2SG.PRO   know-ADV=be-2SG   1SG.PRO=OBJ   2SG.PRO   friend=COP
          'You know that I am your friend.'

       b.   *Mí*   *íg-go=wɔ-m*   *ú(=ǹ)*   *mí*   *áí^H=ǹ.*
          1SG.PRO   know-ADV=be-1SG   2SG.PRO(=OBJ)   1SG.PRO   friend=COP
          'I know that you are my friend.'

       c.   *Mí*   *íg-go=wɔ-m*   *wó=ǹ*   *mí*   *áí^H=ǹ.*
          1SG.PRO   know-ADV=be-1SG   3SG.PRO=OBJ   1SG.PRO   friend=COP
          'I know that he is my friend.'

       d.   (See (982a))

       e.   *Mí*   *íg-go=wɔ-m*   *é=ǹ*   *mí*   *áí^H=mbe=ỳ.*
          1SG.PRO   know-ADV=be-1SG   2PL.PRO=OBJ   1SG.PRO   friend=PL=COP.2PL
          'I know that you guys are my friend.'

       f.   *Mí*   *íg-go=wɔ-m*   *bé=ǹ*   *mí*   *áí^H=mbe=ǹ.*
          1SG.PRO   know-ADV=be-1SG   3PL.PRO=OBJ   1SG.PRO   friend=PL=COP
          'I know that they are my friends.'

It is hard to imagine why the 1pl 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, so why not in this case? This is a question that requires further research.

18.8.2 *mùlú-go=wɔ* 'it seems that'

The argument given above that the *=gɛ* complementizer disappears in sentence-final position is further called into question by 'it seems that' constructions. Here, the main clause predicate *mùlú-go=wɔ* 'it seems that' is in sentence-final position, preceded by the complement clause, and still the complement clause is bare. Consider:

(985) a. *Gɔ́ɔ́*   *gɔ́ɔ̀-dìɲ*   *mùlú-go=wɔ.*
           dance   dance-IMPF.3PL   seem-ADV=be
           'It seems like they're dancing.'

       b. *Sɔ́ɔ́*   *díyɛ̀-go*   *sɔ́ɔ̀-dìɲ*   *ḿmɔ=nɛ*   *mùlú-go=wɔ.*
           speech   big-ADV   speak-IMPF.3PL   1SG.POSS=OBL   seem-ADV=be
           'It seems to me that they talk a lot.'

       c. *Gómbílu*   *úwɔ*   *ɲ̀yɛ̀-lí-w*   *mùlú-go=wɔ.*
           portion   2SG.POSS   eat-NEG.PFV-2SG   seem-ADV=be
           'It seems that you didn't eat your part.'

We can see in (985b) that the perceiver is marked with an oblique postposition, just like in 'be clear that' expressions (section 18.7.5) and 'be important that' expressions (section 18.5.4).

When eliciting examples with a negative matrix verb ('it does not seem'), consultants first offer a form where that negativity is expressed on the embedded verb (986a). If they are presented with a form where the matrix verb carries the negativity, they accept it (986b):

(986) a. *Ìsé=gɛ*   *wó=ɲ̀*   *kɛ̀rɛ̀-lí*   *mùlú-go=wɔ.*
           dog=DEF   3SG.PRO=OBJ   bite-NEG.PFV   seem-ADV=be
           'It does not seem like the dog bit him/it seems that the dog did
           not bite him.'

       b. *Ìsé=gɛ*   *wó=ɲ̀*   *kɛ́r-aa=be*   *mùlù-lɛ́.*
           dog=DEF   3SG.PRO=OBJ   bite-PFV=be.PST   seem-NEG
           'It does not seem like the dog bit him.'

18.8.3 *ìŋɛ̀-lɛ́* 'maybe'

The word for 'maybe', *ìŋɛ̀-lɛ́*, literally means 'it is not standing' (see section 13.2.3.1). 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 *ìŋɛ̀-lɛ́* sentence-initially, followed by a regular inflected phrase, much like the 'know that' expressions seen in section 18.8.1 above. For example:

(987) a. *Ìŋɛ̀-lɛ́*   *gíré=nɛ*   *jáá*   *ɲ́y-aa=wɔ=ma.*
           stand-NEG   front=OBL   meal   eat-PFV=be=or?
           'Maybe he already ate.'

b. *Ìŋè-lɛ́*   *yògó*   *Bàmàkó* *yáà-dè-m=ma*.
   stand-NEG   tomorrow Bamako   go-IMPF-1SG=or?
   'Maybe I will go to Bamako tomorrow.'

c. *Ìŋè-lɛ́*   *ííyé*   *Kàdííjá*   *yɛ́llè=ma*.
   stand-NEG   today Kadija   come.IMPF=or?
   'Maybe Kadija will come today.'

As these examples show, the clause following *ìŋè-lɛ́* 'maybe' is always marked with the question particle *=ma*. This makes sense both because the *=ma* can serve to mark uncertainty and because it could be functioning as the complementizer embedded under a negative verb.

However, it is harder to conceive of the uncertain clause as being the complement of *ìŋè-lɛ́* when *ìŋè-lɛ́* is embedded within it:

(988)   *Úlûm=gɛ=mbe*   *ìŋè-lɛ́*   *kìlèmɔ́*   *kílémɔ́-gú=sɛ-ɛ̀ⁿ=ma*.[35]
       children=DEF=PL   stand-NEG play   play-PPL=have-3PL=or?
       'Maybe the children are playing.'

Our theory of *ìŋè-lɛ́* as the main clause that takes an uncertain complement clause may be salvaged in (988) if we consider 'children' to have moved into a topic position, or if the position of 'maybe' is the result of slifting.

18.8.4 *kó=diyɛ* and *pàské* 'because'

Tommo So has two conjunctions meaning 'because', native *kó=diyɛ* ('because of that (DD)'), and French loanword *pàské* (from *parce que*). The two require different configurations of the two phrases involved. With *kó=diyɛ*, the cause must be listed first, followed by *kó=diyɛ* (where discourse definite *kó* makes reference to the previous clause), followed by the consequence in the subordinate clause. For instance:

(989) a. *Dèmm-íy-aa=ỳ*,   *kó=diyɛ*   *píyé-gú=sɛ*.
        fall-MP-PFV=COP, that.DD=than cry-PPL=have
        'He is crying because he fell down.'

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35 The phonetic realization of the sequence /sɛ-ɛ̀ⁿ ma/ is [sɛⁿmma], suggesting that at an underlying level, the nasalization of the 3pl /-ɛ̀ⁿ/ is marked by a nasal consonant; nasalized vowels do not produce nasal germination in this same way. Plungian (1995) marks the 3pl as /-ɛŋ/, 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 3pl, but perhaps there is still some psychological reality to a final nasal coda.

b. *Wó   délé^H   wó=ǹ   bènd-è,   kó=diyε   píyé-gú=sε.*
   3SG.PRO brother 3SG.PRO=OBJ hit-PFV.L that.DD=than cry-PPL=have
   'He is crying because his brother hit him.'

c. *Yàa-ná   wómɔ=gε   yìm-è,   kó=diyε*
   female-HUM.SG 3SG.POSS=DEF die-PFV.L that.DD=than

   dámmá=gε   yé=pàd-è^L.
   village=DEF EXIST=leave-PFV.L

   'He left the village because his wife died.'

The examples in (989b) contain two complete phrases strung together to show both the cause (falling down, brother hitting) and the consequence (crying). In (989c), the first phrase is the cause (wife dying) and the second the consequence (leaving the village).

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:

(990) a. *Tó~Tóŋó   yǎy   bè-élè-m,   pàské*
         Tongo-Tongo go.NOM   be.able-NEG.IMPF-1SG because

         ódu=gε   síyέ=lε.
         road=DEF   good=NEG.COP

         'I can't go to Tongo-Tongo because the roads are not good.'

b. *Mí   áí^H   ííyé   dìgè^L   nàm^L   gɔɔ́*
   1SG.PRO friend   today   evening   sun   dance

   yèl-éélè,   pàské   gìnè-ý=baa   bírέ   bírè-dè.
   come-NEG.IMPF   because 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 French exerted its influence on the language.

18.8.5 *tílày* 'necessary that'

A final construction in which a bare complement clause is used is with *tílày* 'certainly'. 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 Fulfulde. Examples include:

(991) a. *Tílày   Dúmásá   yáà-dè̀-m.*
           obligation Douentza   go-IMPF-1SG
           'It is obligatory that I go to Douentza.'

       b. *Tílày   àná   míyè̀-dè̀.*
           obligation rain   fall-IMPF
           'It is certainly going to rain.'

18.9 Participial complements

The last consistent pattern of subordinate clauses we find in the data are those clauses in which the verb is marked with a participial suffix, *-nú* or *-gú*. For this form, we find four verbs that consistently take a complement clause with the participial suffix, *yè̀* 'see', *ɛ́gɛ́* 'hear', and *témbê* 'find' (in direct perception constructions), potentially *tɔ́lɔ́* 'begin' (though the vowel never surfaces), as well as most purposive constructions with verbs of motion and subordinate clauses meaning 'while' or 'by'.

18.9.1 *yè̀* 'see'

We saw *yè̀* 'see' before in section 18.7.2. taking a *=gɛ* 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:

(992) a. *Ú   númbó-gú y-àà=bé-m.*
           2SG.PRO   fall-PPL   see-PFV=be.PST-1SG
           'I saw you fall.'

       b. *Úlûm=gɛ   gɔ́ɔ́   gɔ̀ɔ̀-gú   bé   wɔ́-gú   y-àà=bé-m.*
           children=DEF dance dance-PPL 3PL.PRO be-PPL see-PFV=be.PST-1SG
           '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 (992b), where the complement clause is in the progressive, two participial forms are present. The first, on *gɔ̀ɔ́* 'dance', is the progressive particle, which must take an auxiliary verb, in this case *=wɔ* '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 3pl subject must be marked before it with the independent 3pl pronoun *bé*.

18.9.2 *ɛ́gɛ́* 'hear'

The pattern for *ɛ́gɛ́* 'hear' is exactly identical to that of *yè* 'see'. Examples include:

(993) a. *Ámíru=gɛ*   *dámmá=gɛ=nɛ*   *sɔ̀ɔ̀*   *sɔ́ɔ́-gú*
         chief=DEF   village=DEF=OBL   speech   speak-PPL

         ɛ́g-aa=be-m.
         hear-PFV=be.PST-1SG

         'I heard the chief speak in the village.'

     b. *Íí=gɛ*   *bɔ̀gɔ́l-íyɔ́-gú*   *wɔ́-gú*   *ɛ́g-aa=be.*
         child=DEF   fuss-MP-PPL   be-PPL   hear-PFV=be.PST

         'He heard the child fussing.'

However, when you hear somebody say something, *gè* does not take the participial suffix. Instead, it is chained with *ɛ́gɛ́*.

(994) *Bàmàkó*   *dùl-íy-ee*   *yáà-dɛ̀-w*   *ú*
      Bamako   go.back-MP-NF   go-IMPF-2SG   2SG.PRO

      g-àà   *ɛ́g-aa=be-m.*
      say-PFV   hear-PFV=be.PST-1SG

      'I heard you say that you are going back to Bamako.'

For more on quotative constructions, see Chapter 19.

18.9.3 *tɛ́mbɛ́* 'find'

Like *yè* 'see' and *ɛ́gɛ́* 'hear', *tɛ́mbɛ́* '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:

(995) *Mòtó*   *ḿmɔ*   *gùyⁿɔ́-gú*   *ú*   *wɔ́-gú*   *ú=ɲ̀*   *tɛ̀mb-ɛ̀-m.*
      moto   1SG.POSS   steal-PPL   2SG.PRO   be-PPL   2SG.PRO=OBJ   find-PFV.L-1SG

      'I found you in the process of stealing my motorcycle.'

For indirect perception, see section 18.10.3.

18.9.4 *tɔ́lɔ́* 'begin'

The complement clause of the verb *tɔ́lɔ́* 'begin' is ambiguously marked. On the surface, it generally appears as though the verb stem with lexical tone 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. I assume this underlying form in the examples below:

(996) a. *Mí   Tɔ̀mmɔ̀ᴸ Sɔ̀ɔ́   jàŋgá-nú   tɔ́l-aa=wɔ-m*
           1SG.PRO   Tommo   speech   study-PPL   begin-PFV=be-1SG
           'I have started studying Tommo So.'

       b. *Píyé-nú   tɔ̀lɔ̀-lí,   nìmɛ̌m   kay.*
           cry-PPL   begin-NEG.PFV   just.now   TOP
           'As of right now, she has not yet begun to cry.'

       c. *Àná   mìyê-nú   tɔ́llɛ̀.*
           rain   fall-PPL   begin.IMPF
           'It will start to rain.'

For complements of 'begin' that take the suffix *-ee* see section 18.1.6.4.

18.9.5 '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 follow the main verb. In this construction, the participial suffix is restricted to *-nú*; *-gú* is not possible.

(997) a. *Bílu=gɛ=nɛ   wáàŋ-ìyɛ̀-dɛ̀,   dàlá=gɛ=nɛ   úló-nú.*
           ladder=DEF=OBL   put.up-MP-IMPF   roof=DEF=OBL   go.up-PPL
           'He will put up the ladder to go up on the roof.'

       b. *Ámíru=gɛ=le   sɔ̀ɔ́   sɔ́ɔ́-nú   yɛ̀l-ɛ̀-y.*
           chief=DEF=ASSOC   speak   speak-PPL   come-PFV.L-1PL
           'We have come to speak with the chief.'

       c. *Dámmá   wó   yà-à,   yàa-ná=gɛ*
           village   3SG.PRO   go-PFV   female-HUM.SG=DEF

           wó   òlú=baa   ɛ́ɛ́ⁿ   kɛ́bɛ́-nú   yà-è.
           3SG.PRO   field=LOC   ash   gather-PPL   go-PFV.L
           'She [the co-wife] went to the village, and the woman [≠the co-wife]
           went to the field to gather soda ash (from burning millet stalks).' [23.5:2]

In example (997a), 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, a gerundive compound complement (rare), and the use of *gὲ* 'say' to express intent. This latter is discussed in section 19.1.3. The one example I have of a gerundive purposive complement is as follows:

(998) *Ḿmɔ=nɛ*   *dì̀^{L}*   *nɔ́ɔ́^{H}*   *yὲl-ì-ὲ^n.*
       1SG.POSS=OBL   water   drink   come-PFV.L-3PL
       'They came to my house to drink water.'

Speakers confirmed that this means the same thing if the gerundive compound is replaced with the participial phrase *díí nɔ̀ɔ̀-nú*. It is not clear how widespread the gerundive complement form is.

18.9.6 Adverbial clauses with *-gú* or *-nú* participles

A common adverbial clause construction involves the verb in the subordinated clause 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 occurs.

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 12.7). 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.

Examples from the first, more restrictive speaker include:

(999) a. *Nɔnú* *yὲlɛ́-gú (*-nú)* *yììré*   *y-ààà=bé-m.*
        here   come-PPL   snake   see-PFV=be.PST-1SG
        'She saw a snake while coming here.'

    b. *Nɔnú* *yὲlɛ́-nú (*-gú)* *yììré*   *yέ-dὲ-m.*
        here   come-PPL   snake   see-IMPF-1SG
        'While coming here, I (often) see snakes.'

Compare this with examples from the less restrictive speaker:

(1000) a. *Tòŋò-Tóŋó   yàà-gú (*-nú) mòtó=nɛ   nùmb-ì-m.*
            Tongo-Tongo go-PPL   motorcycle=OBL fall-PFV.L-1SG
            'While going to Tongo-Tongo, I fell off the motorcycle.'

        b. *Wó   ígέ=ǹ   ádúbá-nú/-gú wàkàdù^L gàmbáá píyé píyè-dὲ.*
            3SG.PRO husband=OBJ think-PPL   time   some   cry cry-IMPF
            'While thinking about her husband, she cries sometimes.'

In (1000a), we still see a ban on using the suffix *-nú* when the main clause verb is perfective, but in (1000b), either *-nú* or *-gú* can be used with an imperfective verb.

Note that the division between *-gú* and *-nú* is one of aspect, not tense, as the following past imperfective shows:

(1001) *Díí   jàà-ndá-gú/-nú, líbúru ḿmɔ   jáŋgà=be-m.*
        water cook-FACT-PPL   book   1PL.POSS read.IMPF=be.PST.1SG
        'I was reading my book while heating up water.'

Because the aspect of the main clause is imperfective, 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 from 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 *=wɔ* which also bears the participial suffix *-gú* and in this case a H tone. An independent pronoun is placed before this auxiliary verb to mark the subject. For example:

(1002) a. *Píyé   píyé-gú wó   wɔ́-gú jáá=gɛ   ǹy-ὲ-m.*
            cry   cry-PPL 3SG.PRO be-PPL meal=DEF eat-PFV.L-1SG
            'I ate while he was crying.'

        b. *Bὲrɛ̂   wómɔ=le   bé   wɔ́-gú wó*
            stomach 3SG.POSS=ASSOC 3PL.PRO be-PPL 3SG.PRO

            báá^H   yím-áá-dὲ=gɛ   y-ὲ-w=le.
            father   die-PFV-IMPF.REL=DEF   see-PFV.L-2SG=Q
            '[When] they were pregnant with him, his father died,
            you see.'   [23.3:50]

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:

(1003) *Nɛ́ɛ̂...*   *yàa-ná*   *sɛ̀-lɛ̂* ⇒   *yém*   *dàà-gú...*
now...   female-HUM.SG   have-NEG   like.that   sit-PPL

        wɔ́-gú   *nɛ́ɛ̂*   *gìnɛ́=gɛ*   *wó*   *úd-ɔ̀=gɛ.*
        be-PPL   now   house=DEF   3SG.PRO   build-PFV.REL=DEF

        'Now, he had no wife... while being settled like that, he built a
        house.'   [23.3:6]

It is possible that the pause between the participle 'sitting' and the participial auxiliary indicates that they are not connected in the way that they would be with a different subject but that the speaker is simply stalling as he tries to remember the next part.

Like verb chain constructions, 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:

(1004)   E: *Wó*   *yò-è.*
           3SG.PRO   enter-PFV.L
           'He became [the Hogon] (lit. he entered).'

       S: *Yó-aa*   *wɔ́-gú*   *wó*   *wɔ̀-gù.*
           enter-PFV   be-PPL   3SG.PRO   be-PPL
           'He had already become [it].'   [23.1:9–10]

In the restatement by S, the main clause originally uttered is reformulated as a participial clause. In fact, the doubling of *wɔ́-gú* shows that one of them is serving as the auxiliary of '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)'. The final participle has L tone, though this may be simply an intonational effect.

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:

(1005)   a.   *Sɔ̀w^L*   *jíbu=gɛ*   *ɛ́bɛ́-gú*   *yàa-ná=gɛ*   *kìndɛ̀^L*
           cloth   skirt=DEF   buy-PPL   female-HUM.SG=DEF   heart

            ɛ̀lɛ̀-nd-ìyɛ̀-m-ì-m.
            happy-FACT-MP-CAUS-PFV.L-1SG
            'By buying the skirt, I made the woman happy.'

b. *Mí=ǹ*   *m̀bɛ̂=lɛ=ǹ*   *gɛ̀-gú*   *ú*
   1SG.PRO=OBJ love-NEG.COP=OBJ say-PPL 2SG.PRO

   kíndɛ́   *m̀mɔ*   *yàm-ìl-ì-w.*
   heart   1SG.POSS   ruin-TR-PFV.L-2SG

   '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; the differentiation is an artifact of English translation.

18.10 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 18.10.1 discusses the verb *gàá* 'be about to' (used for 'almost'), which appears to take a verb stem marked with an object marker *=ǹ* as its complement. Section 18.10.2 treats a past negative form of *m̀bɛ̂* 'want' (with suppletive stem *bè*), which places the verb of its complement clause into a bare stem form. Section 18.10.3 discusses complement clauses of the verb *tɛ́mbɛ̂* 'find', which involve the logical verb of the complement clause chained with a seemingly unsuffixed imperfective stem *kánà* preceded by an independent pronoun. Section 18.10.4 lays out a clear relative clause complement that this time has an overt head *àŋǎy* 'way', used in an expression meaning 'such that'. Section 18.10.5 describes durative verb iterations, where the subordinate clause consists of a triple iteration of a H-toned verb stem. Finally, section 18.10.6 discusses the complement clause of 'be able to', in which the verb takes a final *-u* or *-y*.

18.10.1 *gàá* 'be about to', 'almost'

Like *tɔ́lɔ́* '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 coronal 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 *=ǹ*, which assimilates in place to the initial consonant of the following verb. I will assume this analysis in the examples that follow:

(1006) a. *Sámbá píy-ee tɔ́lɛ́=ǹ̀ gáà-dɛ̀.*
Samba cry-NF start=OBJ almost-IMPF
'Samba has almost started to cry.'

  b. *Nàá=gɛ nùmbé=ǹ̀ gàà-gú wó wɔ́-gú y-àà=bé-m.*
cow=DEF fall=OBJ almost-PPL 3SG.PRO be-PPL see-PFV=be.PST-1SG
'I saw the cow about to fall.'

  c. *Nǎm túmmé=ǹ̀ gáà-dɛ̀.*
sun rise=OBJ almost-IMPF
'The sun is about to rise.'

18.10.2 *bè-lí* 'did not want'

A suppletive past negative form of the stem *m̀bɛ́* '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:

(1007) a. *Yɛ̀-ndɛ́ bè-lí-m.*
see-FACT want-NEG.PFV-1SG
'I didn't want to watch.'

  b. *Nǎm gòó bè-lí.*
sun go.out want-NEG.PFV
'The sun didn't want to come out.'

  c. *Wó ádúbá bè-lí.*
3SG.PRO think want-NEG.PFV
'She didn't want to think.'

18.10.3 *tɛ́mbɛ́* 'find that'

Unlike the other verbs of perception *yɛ̀* 'see' and *ɛ́gɛ́* 'hear', the more abstract *tɛ́mbɛ́* 'find' in indirect perception expressions ('find that') takes an unusual complement clause construction in which the logical verb is chained with *kóná* 'do'. This *kóná* appears to take the form of an affirmative imperfective stem with a {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:

(1008) a. *Mòtó m̀mɔ gùyⁿ-áa ú kánà tɛ̀mb-ɛ̀-m.*
moto 1SG.POSS steal-PFV 2SG.PRO do.IMPF find-PFV.L-1SG
'I found that you stole my motorcycle.'

   b.   *Úlûm=gɛ   tòndòó=gɛ   jɔ̀g-áa   bé   kánà   tɛ̀mb-ɛ̀-m.*
       children=DEF water.jar=DEF break-PFV 3PL.PRO do.IMPF find-PFV.L-1SG
       'I found that the children broke the water jar.'

Example (1008a) is the indirect perception equivalent of example (995) in section
18.9.3 above.

18.10.4 *àŋăy* '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 *àŋăy* '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:

(1009) a. *Kɛ̀ɛ̀lɛ́   mí=ǹ   óbò-dè   àŋày^L jáá mí   ɛ́bɛ́-dɛ.*
         money 1SG.PRO=OBJ give-IMPF way   meal 1SG.PRO buy-IMPF.REL
         'He will give me money so that I will [go] buy food.'

      b. *Àná-m=gɛ   gìnɛ́=gɛ   yégèrè-dìn   àŋày^L*
         male-HUM.PL=DEF house=DEF prepare-IMPF.3PL way

         dàlá=gɛ   wó   nùmb-éélè=gonu.
         roof=DEF 3SG.PRO fall-NEG.IMPF.REL=like

         'The men are repairing the house so that the roof doesn't fall down.'

      c. *Àŋày^L ú   yèy-y-éélè=gonu   ú=ǹ   bɛ́ndè-dɛ̀.*
         way   2SG.PRO sleep-MP-NEG.IMPF.REL=like 2SG.PRO=OBJ hit-IMPF
         'He will hit you so that you don't fall asleep.'

Example (1009a) shows that the similarity clitic *=gonu* is not always necessary. All of
these examples show different subjects in the main and complement clauses; more
data are required to test whether a same-subject construction is also possible.

18.10.5 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:

(1010) a. *Gɔ́ɔ̃ᴴ*   *ˈgɔ́ɔ̃ᴴ*   *ˈgɔ́ɔ̃ᴴ*   *yèlé-gú=sɛ-ɛ̀ⁿ.*
      dance   dance   dance   come-PPL=have-3PL
      'They are coming while dancing.'

     b. *Bɔ́gɔ́lɔ́ᴴ*   *ˈbɔ́gɔ́lɔ́ᴴ*   *ˈbɔ́gɔ́lɔ́ᴴ*   *yàà-gú=sɛ-ɛ̀ⁿ.*
      make.racket   make.racket   make.racket   go-PPL=have-3PL
      '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.

18.10.6 Complements of 'be able to' with [u]- or [y]-final verb

This section treats complements whose verbs take a final [u] if polysyllabic or [y] if monosyllabic. At first glance, these look like deverbal cognate nouns (see section 13.1.5), 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 [-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.

     The only verb I consistently find with this complement form is 'be able to', whose exact stem form is unclear due to a high degree of irregularity. At times, the stem appears to be monosyllabic, something like *bɛ̀ɛ́*, but the past reveals that it may be more like *bɛ̀lɛ́*, homophonous with the verb 'find'. The table below summarizes the main forms found in the data:

(1011)

	Affirmative	Negative
Imperfective	*bɛ́ɛ̀-dɛ̀*	*bɛ̀-élè / bɛ̀l-éélè*
Perfective	*bɛ̀l-áa=be*	*bɛ̀lɛ̀-lí*

As a modal verb, certain aspectual categories like progressive are not available. Likewise, imperatives and hortatives do not exist.

     Reminiscent of 'want' or 'like' discussed in section 18.3.2, it is the aspect of 'be able to' that determines what kind of complement it will take. In the perfective, the complement verb forms a verb chain with 'be able to', with the complement taking the suffix *-aa*. This construction was discussed in section 18.1.5.8. In the imperfective, both affirmative and negative, the [-u] construction is used. Consider the following examples:

(1012) a. *Bírɛ́   bìrú   bè-élè.*
         work   work.NOM   be.able-NEG.IMPF
         'She can't work.'

     b. *Mí   ánìgè*^{*HL*} *ú=ǹ   bàrú   bɛ́ɛ̀-dè.*
         1SG.PRO   friend   2SG.PRO=OBJ   help.NOM   be.able-IMPF
         'My friend can help you.'

     c. *Mí   jóbu   jɔ̀bú   bè-élè-m.*
         1SG.PRO   running   run.NOM   be.able-NEG.IMPF-1SG
         'I can't run.'

(1012a) and (c) highlight the fact that the [-u] form of the verb used in 'be able to' constructions is not the same as the deverbal noun. In (1012a), the cognate nominal of *bìrɛ́* 'work' is segmentally identical *bírɛ́* 'work'. In (1012c), the cognate nominal of *jɔ̀bɔ́* 'run' does end in [u] (arguably epenthetic), but its stem vowel is specified as [+ATR] and it takes {H} rather than lexical /LH/ tone.

It is possible that here too the [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 *gɔ́ɔ́ gɔ̌y bè-élè-m* 'I can't dance'), a problem for cognate nominals as well (see section 13.1.5). Also problematic both for the epenthetic vowel story and for the suffix story are verbs like *ń̩yɛ́* 'eat' that do not change form. For example:

(1013) *Jáá   ń̩yɛ́   bɛ́ɛ̀-dè-m.*
       meal   eat   be.able-IMPF-1SG
       '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. I have seen no other verbs that behave this way.

Chapter 19
Quotative constructions

This chapter focuses on quotative constructions, which involve a clause either embedded under a verb like *gὲ* 'say' or simply marked with a quotative particle *=wa*. There are a number of interesting phenomena that arise in quotative constructions, especially pertaining to the way arguments in the embedded clause are marked. Though quotative constructions do involve subordinate clauses, like those constructions in Chapter 18, I address them on their own here due to the varied structures that we find and the complexities of argument marking. In addition, my aim is to lay out all of the important features of quotative constructions in one place, since an understanding of these constructions is crucial to understanding texts.

19.1 *gὲ* 'say'

This section addresses the basic verb *gὲ* 'say' with both nominal (section 19.1.1) and phrasal (section 19.1.2) complements. Non-quotative uses of *gὲ*, in which this verb is used to express intention rather than quotation, are discussed in section 19.1.3.

19.1.1 *gὲ* 'say' with nominal complements

In its simplest use, *gὲ* 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:

(1014) *Bǎy   kɛ́m   kìdὲ^L síyɛ́   gɛ́-dὲ.*
        day   all   thing   good   say-IMPF
        'She always says something smart.'

Note that there are a lot of other verbs specific to different things being said, such as *kálá* 'tell a lie', *sɛ́nɛ́* 'pray, say prayers', *(tààlé) dàgá* 'say a proverb', etc. Similarly, *sɔ́ɔ́* 'speak, say' is also common in contexts with nominal complements. The result is that *gὲ* 'say' is relatively rare in these uses, though it is still attested.

   Gὲ is common in single word direct quote settings:

(1015) *Tíyáá...   Tíyáá...   Tíyáá   gɛ́-dìɲ.*
        tiyaa   tiyaa   tiyaa   say-IMPF.3PL
        '*Tiyaa... tiyaa...* they say *tiyaa*.'   [23.2:29]

This quote 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, one can employ a chain verb construction with *gὲ* as the non-final verb and *bòó* 'call' as the final, though using *gὲ* on its own is also possible:

(1016) a. *Frànsɛ́=gɛ*   *wó=ǹ*   "orge"   *g-èè*   *bóò-dὲ.*
           French=DEF   3SG.PRO=OBJ   barley   say-NF   call-IMPF
           'The French call it "barley".'

       b. * Émmé*   *Yà-tὲὲ-gòmbóló*   *gɛ́-dὲ-y,*   *Yà-tɛ́ɛ́.*
           1PL.PRO   Ya-Tɛɛ-lumpy.head   say-IMPF-1PL.S   Ya-Tɛɛ
           'We call [her] Ya-Tɛɛ the Lumpy Head, Ya-Tɛɛ.'   [23.3:25]

In (1016a), *wó* 'it' is the object of the final verb *bòó* while the French word *orge* 'barley' is the object of *gὲ*. For more on chain verb constructions, see section 18.1.

19.1.2 *gὲ* 'say' 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:

(1017) a. *Ííyé*   *dìgὲ^L*   *nàm^L*   *yɛ́llὲ-m.*
           today   evening   sun   come.IMPF-1SG
           'I will come this evening.'

       b. *[Ííyé*   *dìgὲ^L*   *nàm^L*   *yɛ́llὲ-m]*   *g-ì.*
           today   evening   sun   come.IMPF-1SG   say-PFV.L
           '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 possible with the generic verb *gὲ* '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.

(1018) a. *Dúmásá*   *yà-è-m.*
           Douentza   go-PFV.L-1SG
           'I went to Douentza.'

b. *Mí   Dúmásá   yà-è-m=gɛ   wó=ǹ   tágá.*
1SG.S   Douentza   go-PFV-1SG=COMP   3SG.PRO=OBJ   tell.IMPER
'Tell him that I went to Douentza.'

For more on the *=gɛ* complementizer, see section 18.7.

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. For example, in English a person may utter "I will come". Quoting this directly, we can say "He said, 'I will come.'" Quoting indirectly, the 1sg pronoun shifts to the 3sg, 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.) The same sentence we saw in (1017b) above can be made into an indirect quotation by adding the logophoric pronoun *ǹdèmɔ́*. In this case, the quotative complement optionally takes the object clitic *=ǹ*:

(1019) *[Ííyé   dìgὲ^L nàm^L ǹdὲmɔ́   yɛ́llὲ(=ǹ)]   g-ì.*
today   evening   sun   LOG.SG   come.IMPF(=OBJ)   say-PFV.L
'He$_i$ said he$_i$ will come this evening.'

Though I have analyzed this nasal as being the object marker, it could be analyzed as its own complementizer, perhaps a generic nasal *=N*. Because it always assimilates in place to the following verb (typically *gὲ* 'say'), it is difficult to determine its underlying form. The metalinguistic judgments of my consultants were not conclusive.

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 co-indexing 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 3sg verb. In this case, the subject of the embedded and main clauses can either be interpreted as being the same or different:

(1020) *[Ííyé   dìgὲ^L nàm^L yɛ́llὲ]   g-ì.*
today   evening   sun   come.IMPF   say-PFV.L
'He$_i$ said he$_{i/j}$ will come this evening.'

To make it clear that the embedded subject is different from the main clause subject in the case where they are both 3sg, an independent pronoun is used followed by the quotative particle *=wa*. This construction is typical of subjects embedded under quotation verbs (see section 19.2.3 below):

(1021)   *[Ííyé*   *dìgὲ^L*   *nàm^L*   *wó=wa*   *yέllὲ]*   *g-ì.*
        today   evening   sun   3SG.PRO=QUOT   come.IMPF   say-PFV.L
        'He$_i$ said he$_j$ will come this evening.'

In this example, I have bracketed the temporal adverb 'this evening' with the embedded clause, since speakers tell me this is the only possible interpretation (i.e. not 'he said this evening that he will come [at some point in the future]').

    Other examples of phrasal quotative complements include:

(1022)   a.   *Mí=ɲ̀*   *dáà-dὲ(=ɲ̀)*   *g-ì.*
             1SG.PRO=OBJ   kill-IMPF=OBJ   say-PFV.L
             'He said he's going to kill me'

        b.   *Yàrá=gɛ*   *mí=ɲ̀*   *dáà-dὲ*   *g-ì-ὲ^n.*
             lion=DEF   1SG.PRO=OBJ   kill-Impf   say-PFV.L-3PL
             'They said the lion is going to me.'

        c.   *Yàrá=gɛ*   *mí=ɲ̀*   *dáà-dὲ*   *g-ì-m.*
             lion=DEF   1SG.PRO=OBJ   kill-IMPF   say-PFV.L-1SG
             'I said the lion is going to kill me.'

        d.   *Wó*   *[ɔ̀gɔ́*   *yóò-dὲ]=ɲ̀*   *wó*   *g-àà...*
             3SG.PRO   Hogon   enter-IMPF=OBJ   3SG.PRO   say-PFV
             'He said he would become chief...'

19.1.3 Non-quotative uses of *gὲ* 'say'

At times, morphologically quotative complements seem to take on other semantics in narratives. For example, they may be used to express intention, as the example in (1037) below shows. 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 *g-àà* 'said' is less a literal saying (as this would clue the child in to his impending doom), but rather 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:

(1023)   a.   *Ú=ɲ̀*   *níŋὲ-ndὲ-dὲ-m*   *g-àà*   *bὲndὲ-lí-m.*
             2SG.PRO=OBJ   be.afraid-FACT-IMPF-1SG   say-PFV   hit-NEG.PFV-1SG
             'I didn't hit you to scare you.'

b. *Mòtó   ḿmɔ   bé   Tó~Tóŋó   yáà-dìŋ*
   moto   1SG.POSS 3PL.PRO Tongo-Tongo go-IMPF.3PL

   bé   g-àà   pàd-è-m.
   3PL.PRO   say-PFV   leave-PFV.L-1SG

   'I left my motorcycle so that they could go to Tongo-Tongo.'

In (1023a), the complement clause marked by *gɛ̀* '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 again, 'say' marks out the intention. In (1023b), 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.

19.2 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 *gɛ̀* 'say' to indicate that the preceding material is indeed a quotation. This use is discussed first in section 19.2.1. It can also be used to mark the addressee of a quotation (section 19.2.2) or the embedded subject in a quotative complement (section 19.2.3).

19.2.1 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 and the clause is simply marked with the quotative particle *=wa*; in fact, 'say' seems to be unable to co-occur with phrase-final *=wa*. Examples of indirect quotations expressed in this way include:

(1024) *Íí   ǹdɛ́mmɔ   yàbáá=wɔ=ma=wa.*
        child LOG.SG.POSS   where=be=or?=QUOT

        '[She asked] where is my child?'

        É   wó=ǹ   ǹdɛ̀mɔ́   wó=le   pád-aa
        eh   3SG.PRO=OBJ   LOG.SG.PRO 3SG.PRO=ASSOC leave-PFV

        dámmá   yà-è=ǹ=wa.
        village   go-PFV.L=OBJ=QUOT

        '[She said] "Eh! I left him here with her and went to the village".'

<div align="right">[23.5:19–20]</div>

In both examples, we can tell that the quote is indirect because of the use of the logophoric pronoun.

The quotative particle is common on quoted imperatives, such as:

(1025) a. *Ǹdɛ̀^{L}*   *yàgá=ɲ̀*   *óbó=wa.*
        person   other=OBJ   give.IMPER=QUOT
        'Give it to someone else [they said].'   [23.1:13]

    b. *Wó=wa*   *ɛ́ɛ́^{n}=gɛ=nɛ*   *jɔ̀bɔ́*   *yóó=wa...*
        3SG.PRO=QUOT   ash=DEF=OBL   run.IMPER   enter.IMPER=QUOT
        'She told him to run into the millet stalks (soon to become ashes)...'
                                                                  [23.5:8]

While the context usually makes the speaker of the quotation marked by =*wa* clear, it can sometimes be used generally without a specific referent, as in the following:

(1026) *Yàà-nà̀^{L}*   *wó=ɲ̀*   *kò̀^{L}*   *bǎy* *gàndà̀^{L}*
        female-HUM.SG   3SG.PRO=OBJ   that.DD   day   place

        kɔ̀nɔ́   *àw-ì-ɛ̀^{n}=wa.*
        there.DD   catch-PFV.L-3PL=QUOT

        '[They say] that on that day they caught that woman there [to find
        out what happened].'   [23.5:37]

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' makes it clear to listeners that the perspective of the narrative has changed, and it is no longer the child speaking but rather people in general.

It seems that =*wa* and *gɛ̀* '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, *gɛ̀* 'say' forms part of the actual quotation marked by =*wa*.

(1027) a. *Àà,* *ǹdɛ̀mbé*   *yàmmé*   *mómbu=gɛ*
        ah   LOG.PL.PRO   other.day   meeting=DEF

        g-áà=bi-ɛ̀^{n}=wa   *mɛ̀*   *jɔmɔ́=wa*
        say-PFV=be.PST-3PL=QUOT   but.FR   hare=QUOT

        nòŋgónu **g-ì=wa**   *de.*
        like.that   say-PFV.L=QUOT   EMPH

        '[They said], ah, they had met the other day, but Hare had said
        like that (that it wasn't good).'   [23.6:21]

b. *ǹdɛ̀-m=mbé=gɛ*   *dàg-áa=wɔ*   **g-ì-ɛ̀ⁿ=wa**.
person-HUM.PL=PL=DEF   be.good-PFV=be   say-PFV.L-3PL=QUOT
'The people said it is good.'   [23.6:12]

In (1027a), we see two instances of the quotative particle following the verb *gɛ̀* 'say'. In the first, it is likely that *gɛ̀* 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 *gɛ̀* is not being used to mark the quotation but rather forms part of the quotation itself. In the second instance of *gɛ̀* followed by *=wa* in (1027a), 'like that' refers to Hare's disapproval of the people's idea to give the sun a wife. Once again, if *gɛ̀* 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". In sum, we have nested quotations.

(1027b) looks at first glance to be a more convincing case of a quotative particle and the verb *gɛ̀* 'say' marking the same quotation. However, this once again depends upon us attributing *=wa* to the same speaker as the subject of *gɛ̀* '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 (1027b) 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 *gɛ̀* and *=wa* marking the same quotation, it seems better to put all of (1027b) 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:

(1028)   *Bɛ́=wa*   *bé*   *ségu*   *gɛ̀-lí=ma=wa*.
        3PL.PRO=QUOT   3PL.PRO   numerous   say-NEG.PFV=or?=QUOT
        '[He asked (them?)] "Didn't you say that you were more numerous?"'
                                              [23.2:147]

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 in the context of the text 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...').

Another thing to notice in this example is that though the logical subject of the embedded verb 'say' is the 3pl, the form of the verb is the 3sg. This lack of agreement is common in quotative constructions.

19.2.2 Addressee-marking *=wa*

Verbs other than *gὲ* 'say' that denote speech acts, such as *yàbílá* 'reply', *tágá* 'tell', etc., typically mark the addressee with the object marker *=ǹ*. For example:

(1029) a. *Ú*   *mí=ǹ*   *yàbíl-aa*   *nìmὲm^L*   *sàdám*
       2SG.PRO   1SG.PRO=OBJ   reply-PFV   now   right

       yέllὲ-w   *g-ì-w.*
       come.IMPF-2SG   say-PFV.L-2SG

       'You replied to me saying that you are coming just now.'

    b. *Mí*   *Dúmásá*   *yá-è-m=gε*   *wó=ǹ*   *tágá.*
       1SG.PRO   Douentza   go-PFV.L-1SG=DEF   3SG.PRO=OBJ   tell.IMPER
       'Tell him that I went to Douentza.'

For the addressee of the verb *gὲ*, however, this strategy is not an option. Instead, the addressee is marked with the quotative particle *=wa*. If the addressee is pronominal, we see either an amalgamation of the possessive form of the pronoun with a quotative particle or the independent pronoun with the quotative particle:

(1030)   1sg   *ḿm(w)aa*   1pl   *émmaa*
        2sg   *úwaa ~ ú=wa*   2pl   *é=wa*
        3sg   *wómaa ~ wó=wa*   3pl   *bé=wa*

If the possessive pronoun is being used, the /w/ of the quotative particle gets deleted and the /ɔ/ of the possessive portion merges with the /a/ of the quotative to derive a long vowel. This process is illustrated below for the 1sg:

(1031)   *ḿmɔ* + *wa* → *ḿmɔa* → *ḿmaa*

Note that this form is particularly common in the first person.

     I gloss these complexes as X.QUOT, where X stands for 1sg, 2sg, etc. For example:

(1032)   *Úwaa*   *ńjέ*   *g-ì?*
       2SG.QUOT   what   say-PFV.L
       'What did he say to you?'

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:

(1033) ...*jɔ̀mɔ́=wa* *wóò* *g-àà*...
    Hare=QUOT come! say-PFV
    '...[they] said to Hare, come here!'   [23.6:7]

In cases where the quotative clause is an imperative, it is not clear if the argument marked by *=wa* is the addressee or the embedded subject:

(1034) *wó=wa*   *ɛ́ɛ́ⁿ=gɛ=nɛ* *jɔ̀bɔ́*   *yóó=wa*
   3SG.PRO=QUOT ash=DEF=OBL run.IMPER enter.IMPER=QUOT
   'she told him to run into the millet stalks.'   [23.5:8]

Here, the sentence could either translate to an addressee-marked phrase 'she told him "run into the millet stalks!"' or a sentence with an embedded subject 'she said that he should run into the millet stalks'. It is not clear whether native speakers also sense this difference, and if so, which version was intended.

19.2.3 Embedded subjects marked with *=wa*

As the last example indicates, *=wa* can also be used to mark the subject of an embedded quotative clause. Other examples of this construction include:

(1035) a. *Tòò-lɛ́-go*   *bìl-áá=ỳ=yo,*   *wó=wa*
    be.in-NEG-ADV become-PFV=COP=if 3SG.PRO=QUOT

    díí=gɛ   *nɔ̀-éélè=wa.*
    water=DEF drink-NEG.IMPF=QUOT

    '[They said] that if he wasn't part of [the agreement], he
    wouldn't drink the water.'   [Animals and well]

  b. *Kándá* *ɔ̀gɔ́* *yò-éélè=nɛ*   *wó=wa*
    Kanda Hogon enter-NEG.IMPF=OBL 3SG.PRO=QUOT

    ɔ̀gɔ́=gɛ *ǹdɛ̀^L* *yàgá=ǹ* *óbó*   *g-ì.*
    Hogon=DEF person other=OBJ give.IMPER say-PFV.L

    '[They said] Kanda would not be chief, he (they) said that he
    must give the Hogon-ship to someone else.'   [23.2:134]

  c. *Émmaa* *ɔ̀gɔ̀-nɔ́=gɛ=le*   *sɔ̀ɔ́*
    1PL.QUOT Hogon-HUM.SG=DEF=ASSOC speech

    sɔ́ɔ̀-dè *g-ì.*
    speak-IMPF say-PFV.L

    'He said that we should speak with the chief.'

In (1035a), 'he' (referring to Hare) is the embedded subject of the clause 'he will not drink', and as such, the pronoun takes the quotative particle =*wa*. In (1035b), the embedded subject could be interpreted as an addressee, much like the example in (1034). Example (1035c) shows another example where the embedded verb takes 3sg agreement despite the logical subject being the 1pl.

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 story-teller 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:

(1036) *ɛ́ɛ́ⁿ=gɛ*   *wó*   *yábìl-ì=gɛ*   *yàà-nà^L*
       ash=DEF   3SG.PRO   answer-PFV.REL=DEF   female-HUM.SG

       ǹdɛ̀mɔ́   *ɔ́bɔ́^H=gɛ=wa*   *ǹdɛ̀mɔ́=**wa***   *sǒm*
       LOG.SG.PRO   step=DEF=QUOT   LOG.SG.PRO=QUOT   horse

       yɛ́lɛ̀-dɛ ⇒   *ɛ̀ɛ̀ⁿ^L*   *dúm=gɛ=nɛ*   *jɔ̀bɔ́*   *yóó*
       come-IMPF   ash   pile=DEF=OBL   run.IMPER   enter.IMPER

       wó   *g-àà*   *yó-aa*   *ǹdɛ̀mɔ́*   *kán-aa*
       3SG.PRO   say-PFV   enter-PFV   LOG.SG.PRO   do-PFV

       wó=wa   *ɲăm*   *tɔ́ⁿ-aa*   *kùnd-ù=wa,*
       3SG.PRO=QUOT   fire   strike-PFV   put-PFV.L=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:

(1037) *Nɛ́ɛ́ gày íí=gɛ*   *jɔ̀b-áa*   *yò-è=yó*   *ɲăm kúndò-dɛ̀ g-àà.*
       now TOP child=DEF run-PFV enter-PFV.L=if fire   put-IMPF say-PFV
       'Now, when the child runs into [there], she said she would light the
       fire.'   [23.5:10]

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 embedded subject of the imperative 'run and enter', since the child is quoting a command given to him by his stepmother. The final quotative particle is of the phrase-final variety, used to mark the preceding material as a quotation.

19.3 Jussive complement

Following Heath (2008), I use the term "jussive complement" to refer to imperatives or hortatives embedded under a verb like *gὲ* 'say'.

19.3.1 Embedded imperatives

Embedded imperatives are fairly common in texts, and they take the same morphological form as they would in a main clause; no complementizer is needed. The same is true for both imperatives embedded under *gὲ* 'say' as well as imperatives embedded under the quotative particle alone. Examples of affirmative imperatives under *gὲ* 'say' are as follows:

(1038) a. *Ḿmaa   yέlέ   g-ì-ὲⁿ.*
            1SG.QUOT   come.IMPER   see-PFV.L-3PL
            'They told me to come.'

      b. *Wó   nááᴴ   wó=wa   bándáŋkálá=gε*
            3SG.PRO   mother   3SG.PRO=QUOT   courtyard=DEF

              sέmbέ   g-ì.
            sweep.IMPER   say-PFV.L

              '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, or the intended subject of the imperative, is marked 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*:

(1039) *Ámbá   bé=ǹ   dɔmm-íyɔ́   g-àà   bò-áa=wɔ-ὲⁿ.*
        God   3PL.PRO=OBJ   protect-MP.IMPER   say-PFV   call-PFV=be-3PL
        'They begged God to protect them.'

Here, the imperative is embedded under *gὲ* '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 quotative marking and no embedding verb; for more on benedictions, see section 21.7.

    Affirmative imperatives embedded under the quotative particle are common in texts. For example:

(1040) a. *wó=wa*   *ɛ́ɛ́ⁿ=gɛ=nɛ*   *jɔ̀bɔ́*   *yóó=wa...*
              3SG.PRO=QUOT   ash=DEF=OBL   run.IMPER   enter.IMPER=QUOT
              'she told him to run into the millet stalks...'   [23.5:8]

        b. *ǹdɛ̌-m=gɛ=ǹ*   *bò-áa*   *wó*
              person-HUM.PL=DEF=OBJ   call-PFV   3SG.PRO

              yɛ́l-ɛ̀=gɛ,   *bé=wa*   *dànn-íyɛ́=wa.*
              come-PFV.REL=DEF   3PL.PRO=QUOT   sit-MP.IMPER=QUOT

              '[When] she had called the people and come [back], [she told]
              them to sit.'   [23.5:30]

The form of the embedded imperative is exactly the same as seen in (968) 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:

(1041) a. *Ú=wa*   *mòmó*   *nàà-gú*   *gì-m.*
              2SG.PRO=QUOT   laugh.IMPER   NAA-PROH   say-PFV.L-1SG
              'I told you not to laugh.'

        b. *Yàá-m=gɛ=mbe*   *ḿmaa*   *úndu=baa*
              female-HUM.PL=DEF=PL   1SG.QUOT   wilderness=LOC

              mí   *túmáá*   *yàà-gú*   *g-ì-ɛ̀ⁿ.*
              1SG.PRO   alone   go-PROH   say-PFV.L-3PL

              'The women told me not to go out to the bush alone.'

Recall from section 12.9.1.2 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 (1041b) and the latter in (1041a), 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*:

(1042) a. *Bàɲjàgàrá*   *bɛ̀ɛ̀-nɛ̀ᴸ=gɛ*   *sɔ̀-ìnɛ̀ᴸ=gɛ*
              Bandiagara   person.from-HUM.SG=DEF   speak-AGT.SG=DEF

              bílé~bílé   *tàà-gú=wa*   *koy.*
              RED~double.speak   shoot-PROH=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).'   [23.2:146]

b. *Wó   a-   haa díí=gɛ   nɔ̀-ɛ̀=yó   díí=gɛ*
   3SG.PRO ah- haa water=DEF   drink-PFV.L=if   water=DEF

   yùb-íyɛ́-mɔ́   nàà-gú=wa   de.
   spill-MP-CAUS   NAA-PROH=QUOT   EMPH

   'He said, when you drink the water, don't you dare let any water spill.'

   [Animals and the well]

A larger corpus of texts should reveal more examples of this sort.

Plural marking on the embedded imperative is optional and appears to be more marked. When eliciting plural imperatives, speakers always offer the singular first, only acknowledging that the plural is also possible when prompted:

(1043) *É=wa   yɛ́lɛ́(=ɲ̀)   g-ì-m.*
        2PL.PRO=QUOT   come.IMPER(=PL)   say-PFV.L-1SG
        'I told you (pl.) to come.'

We will see a similar situation with hortatives below.

19.3.2 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 *gɛ̀* 'say' or the quotative particle. Examples of affirmative hortatives include:

(1044) a. *Wó=wa   yàà-mɔ́   g-ì-w.*
           3SG.PRO=QUOT   go-HORT   say-PFV.L-2SG
           'You told him "Let's go!"'

        b. *Kìdɛ̀ᴸ   kó   hákílé   ǹdɛ̀mbé=mɔ   yɛ̀l-ɛ̀=wa,*
           thing   that.DD   mind   LOG.PL.PRO=POSS   come-PFV.L=QUOT

           bé   dánn-ìy-ì=gɛ   yàa-ná   óbó-mɔ́=wa.
           3PL.PRO   sit-MP-PFV.REL=DEL   female-HUM.SG   give-HORT=QUOT

           '[They said] that thing (idea) came into their minds, that they sat down and said let's give [him] a wife.'   [23.6:3]

Example (1044a) shows a hortative embedded under the verb *gɛ̀* 'say', while (1044b) shows that the same construction is possible with the quotative particle. What is interesting is that though the subject of the hortative in (1044b) is a large group of animals, the singular hortative is used. This lack of plural marking in the hortative is

mirrored by what we see with imperatives, where I have found no examples of plural marking in embedded clauses.

Negative hortatives are predictably also possible. Though my texts offer no examples of negative hortatives (either under *gὲ* or the quotative particle), elicited examples show this construction with *gὲ*:

(1045) a. *Ḿmaa   nɔ̀nú   jáá   ɟ̀yὲ-mɔ̀-gú   g-ì-ὲ^n.*
       1SG.QUOT here   meal   eat-HORT-PROH   say-PFV.L-3PL
       'They said to me, "Let's not eat here."'

    b. *Mí   báá^H ḿmwaa   nìmɛ̌m   yúú=gɛ=mbe*
       1SG.PRO father 1SG.QUOT just.now millet=DEF=PL

       gìyὲ-mɔ̀-gú   g-ì.
       harvest-HORT-PROH   say.PFV.L

       'My father said to me, "Let's not harvest the millet right now."'

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 *túmɔ̀m*, while section 20.3 covers the different configurations in which we find the logophoric pronouns *ǹdɛ̀mɔ́* (sg) and *ǹdɛ̀mbé* (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. 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 employs the same '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:

(1046) 1sg *kúú ɱ́mɔ*   1pl *kúú émmɛ*
        2sg *kúú úwɔ*   2pl *kúú éwɛ*
        3sg *kúú wómɔ*   3pl *kúú bémɛ*

I will call these forms "reflexive pronouns", even though morphologically (or perhaps diachronically) speaking they appear to be NPs. These pronouns can be placed into whatever frame required by the sentence and can take a host of post-positions depending on the context.

20.1.1.1 Direct object reflexives

Direct object reflexives, in which the subject and direct object of a verb are co-indexed, are formed by placing an object clitic =*ǹ* after the reflexive pronoun, which is placed in the regular pre-verbal object position:

(1047) a. *Pólu=le*   *kúú*   *ḿmɔ=ǹ*   *kɛ̀d-ɛ̀-m.*
         knife=ASSOC   head   1SG.POSS=OBJ   cut-PFV.L-1SG
         'I cut myself with a knife.'

     b. *Íí=gɛ*   *kì~kìndè^L*   *yɛ̀-ndú=gɛ=nɛ*   *kúú*
         child=DEF   RED~soul   see-FACT.NOM=DEF=OBL   head
         wómɔ=ǹ   *y-ɛ̀.*
         3SG.POSS=OBJ   see-PFV.L
         'The child saw himself in the mirror.'

This reflexive object can also be placed in an embedded clause, either co-indexed with the matrix subject or a subject internal to that clause, as in the following pair of sentences:

(1048) a. *Sáná pólu=le*   *kúú* *wómɔ=ǹ*   *kɛ̀d-ɛ̀*   *g-ì.*
         Sana knife=ASSOC head 3SG.POSS=OBJ cut-PFV.L say-PFV.L
         'Sana said that he cut himself (=Sana) with a knife.'

     b. *Sáná íí=gɛ*   *pólu=le*   *kúú* *wómɔ=ǹ*   *kɛ̀d-ɛ̀*   *g-ì.*
         Sana child=DEF knife=ASSOC head 3SG.POSS=OBJ cut-PFV.L say-PFV.L
         'Sana said that the child cut himself (≠Sana).'

From this we may conclude that the reflexive pronoun must be bound by whatever noun in the sentence precedes it (Sana in (1048a) and the child in (1048b)), but consultants tell me that *íí=gɛ* 'the child' is optional in (1048b), 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:

(1049) *Sáná pólu=le*   *kúú* *ǹdɛ́mmɔ=ǹ*   *kɛ̀d-ɛ̀=ǹ*   *g-ì.*
        Sana knife=ASSOC head LOG.SG.POSS=OBJ cut-PFV.L=OBJ say-PFV.L
        '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. Note that the quotative clause is marked by what seems to be the object marker; see section 19.1.2 for more on this construction.

     This same pattern is often seen in embedded quotative clauses. If a 'head' reflexive is used with regular (i.e. non-logophoric) possessive pronouns, it is ambiguous as to whether the reflexive refers to the matrix subject or to an embedded subject (1050a); if a regular object pronoun is used in place of a reflexive, it is even more ambiguous (i.e. could be either of the subjects or someone else) (1050b); it is

only when the 'head' reflexive is used with a logophoric possessive pronoun that it unambiguously refers to the matrix subject (1050c):

(1050) a. *Àn-ná=gɛ*   *ínnɛ*   *kúú* *wómɔ=ǹ*   *dáà-dɛ̀=ma.*
          male-HUM.SG=DEF know.NEG head 3SG.POSS=OBJ kill-IMPF=or?
          'The man$_i$ doesn't know whether or not he$_{i/j}$ will kill himself$_{i/j}$.'

   b. *Àn-ná=gɛ*   *ínnɛ*   *wó=ǹ*   *dáà-dɛ̀=ma.*
       male-HUM.SG=DEF know.NEG 3SG.PRO=OBJ kill-IMPF=or?
       'The man$_i$ doesn't know whether or not he$_{i/j}$ will kill him(self)$_{i/j/k}$.'

   c. *Àn-ná=gɛ*   *ínnɛ*   *kúú* *ǹdɛ́mmɔ=ǹ*   *dáà-dɛ̀=ma.*
       male-HUM.SG=DEF know.NEG head LOG.SG.POSS=OBJ kill-IMPF=or?
       'The man$_i$ doesn't know whether or not he$_i$ will kill himself$_i$.'

In (1050a), 'man' is optionally co-indexed with the null embedded subject 'he' and the reflexive 'himself'; 'he' and 'himself' may also be co-indexed with one another but not with the matrix subject. In (1050b), the 3sg object pronoun can refer to anyone, indicated by the fact that 'him(self)' can potentially be co-indexed with the matrix subject 'man', the embedded subject 'he' (either the man or someone else), or neither (the co-indexation *k*). The example in (1050c) is unambiguous, with the matrix subject 'man', the embedded subject 'he', and the reflexive 'himself' all sharing the index *i*; it is the logophoric pronoun that makes this interpretation possible. For more on logophorics, see section 20.3 below.

Some embedded clauses cannot contain reflexives. For example, the subject of the matrix verb 'hear' cannot be co-referent with a reflexive object pronoun in the embedded clause. An independent pronoun must be used instead:

(1051) *Wó=ǹ*   *sɔ́ɔ́-gú*   *bé*   *wɔ̀-gú*   *ɛ́g-aa=be.*
        3SG.PRO=OBJ speak-PPL 3PL.PRO be-PPL   hear-PFV=be.PST
        'She heard them taking about her.'
        (**kúú wómɔ=ǹ*)

We may also consider what happens in a ditransitive construction like a causative where two arguments refer to the same person. In this case, we have the causer (subject), the causee (object of causative, subject of non-causative), and the original object. If the causer (subject) and the original object are co-referent, either the reflexive pronoun or a regular pronoun can be used for the object:

(1052) a. *Kúú* *ḿmɔ=ǹ*   *wó=ǹ*   *bɛ̀ndɛ́-m-aa=be-m.*
          head 1SG.POSS=OBJ 3SG.PRO=OBJ hit-CAUS-PFV=be.PST-1SG
          'I made him hit me.'

b. *Mí=ǹ*   *wó=ǹ*   *bɛ̀ndɛ́-m-aa=be-m.*
1SG.PRO=OBJ   3SG.PRO=OBJ   hit-CAUS-PFV=be.PST-1SG
'=(a)'

In English, a reflexive pronoun would not be possible in the translation of (1052).

If it is the two objects of the causative that are co-referent, the original object must be reflexive:

(1053) a. *Kúú*   *wómɔ=ǹ*   *wó=ǹ*   *bɛ̀ndɛ́-m-aa=be-m.*
head   3SG.POSS=OBJ   3SG.PRO=OBJ   hit-CAUS-PFV=be.PST-1SG
'I made him hit himself.'
(**wó=ǹ wó=ǹ*)

b. *Kúú*   *ḿmɔ=ǹ*   *mí=ǹ*   *bɛ̀ndɛ́-m-aa=be*
head   1SG.POSS=OBJ   1SG.PRO=OBJ   hit-CAUS-PFV=be.PST
'He made me hit myself.'
(**mí=ǹ mí=ǹ*)

I have no examples where the causer and the causee are co-referent (i.e. 'I made myself hit him'), but I imagine the causee would take the reflexive form.

Tommo So avoids using reflexives in coordination. In translation for a sentence like "I cut myself and him", speakers prefer repeating the verb:

(1054) *Wó=ǹ*   *kɛ́d-aa=be-m,*   *kúú*   *ḿmɔ=ǹ*   *kɛ́d-aa=be-m.*
3SG.PRO=OBJ cut-PFV=be.PST-1SG head 1SG.POSS=OBJ cut-PFV=be.PST-1SG
'I cut him and myself.'

We see similar restrictions with reciprocals (example (1066) below).

20.1.1.2 Indirect object reflexives

While direct object reflexives take the object clitic *=ǹ*, indirect object reflexives take postpositions instead. Data on indirect reflexives is sparse and mixed, making it difficult to get a good impression of the way they work. In general, we can say that reflexives need not be morphologically marked as such when acting as the indirect object.

First, let us consider datives or benefactives. It appears that the usual way to express a reflexive dative or benefactive is to use the regular pronouns, rendering the sentence ambiguous:

(1055) a. *Sáná*   *sàbɛ̌y=gɛ*   *dúú*   *wómɔ=nɛ*   *tɛ̀mb-ɛ̀.*
Sana   amulet=DEF   bottom   3SG.POSS=OBL   find-PFV.L
'Sana found the amulet under himself.'

b. *Sɔ̀wL*   *kàndá*   *bémɛ*   *ɛ́b-aa=wɔ-ɛ̀ⁿ.*
    clothes   new   3PL.POSS   buy-PFV=be-3PL
    'They bought new clothes for them(selves).'

In (1055a), because the possessor of *dúú* is non-reflexive, the sentence is ambiguous as to whether the sense is reflexive or non-reflexive. The same is true for (1055b). The dative pronoun is non-reflexive, so *bémɛ* 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:

(1056) a. *Bémɛ*   *ɛ́b-àà-dìɲ.*
            3PL.POSS   buy-PFV-IMPF.3PL
            'They bought [it] for themselves.'

        b. *Kúú*   *bémɛ=mɔ=ɲ̀.*
            head   3PL.POSS=POSS=COP
            'It was for themselves.'

The second clarification looks like a canonical reflexive pronoun, but the first seems no better than the original ambiguous utterance. In the absence of further data, we cannot make any clear judgments about where the reflexive reading is coming from, but it may be from the form of the verb (the "imperfective perfective", seen most often in relative clauses; see section 12.5 for further discussion). I leave this as a question for future research.

When the pronoun is 1sg instead of 3pl, it obligatorily takes the object marker when functioning as a reflexive:

(1057) *MàŋgòròL*   *nɔ́*   *ḿmɔ=ɲ̀*   *ɛ́b-àà-dὲ-m.*
        mango   this   1SG.POSS=OBJ   buy-PFV-IMPF-1SG
        'I bought this mango for myself.'

Once again, the "imperfective perfective" form of the verb is used, though the defocalized perfective *ɛ̀b-ɛ̀-m* was also accepted. If the 1sg benefactive is not treated as reflexive, such as when the subject of the sentence is 3sg, then the object marker is optional:

(1058) *MàŋgòròL*   *nɔ́*   *ḿmɔ(=ɲ̀)*   *ɛ́b-àà-dὲ.*
        mango   this   1SG.POSS(=OBJ)   buy-PFV-IMPF
        'He bought this mango for me.'

This sentence is not reflexive and yet the imperfective perfective form is still used, showing that this verb form alone cannot account for the reflexivity in (1056a).

While we typically see non-reflexive possessive pronouns functioning as reflexive datives, it is possible to use the 'head' reflexives:

(1059) a. *Kúú   bémɛ   sɔ̀wᴸ   kàndá   ɛ́b-aa=wɔ-ɛ̀ⁿ.*
            head   3PL.POSS   cloth   new   buy-PFV=be-3PL
            'They bought themselves new clothes.'

   b. *Kúú   wómɔ=ǹ   lɛ́ɛ̀tɛ̀rɛ̀   tùy-ì.*
       head   3SG.POSS=OBJ   letter   send-PFV.L
       'He sent himself a letter.'

There are two interesting things to point out here. First, unlike the regular dative pronouns, the reflexive pronoun obligatorily comes before the object of the verb; it is ungrammatical in pre-verbal position. Second, these reflexive pronouns take no additional dative marking (i.e. no extra possessive clitic); the form of a direct object reflexive already contains the possessive pronoun after the noun 'head', and there is no change when the reflexive is used as an indirect object. This is in opposition with non-reflexive pronouns, which take the independent pronoun when used as a direct objet (e.g. *wó=ǹ* for the 3sg) but the possessive in the dative (e.g. *wómɔ(=ǹ)* in the dative).

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 varies as to whether or not it induces tone lowering. In (1060a), we see no tone lowering on the possessed noun *pédu* 'sheep', but in (1060b), we do see tone lowering on *ìsé* 'dog':

(1060) a. *Sáná   kúú   wómɔ   pédu=ǹ   dɔ̀n-ɛ̀.*
            Sana   head   3SG.POSS   sheep=OBJ   sell-PFV.L
            'Sana sold his own sheep.'

   b. *Kúú   wómɔ   ìsèᴸ   wó=ǹ   kɛ̀r-ɛ̀.*
       head   3SG.POSS   dog   3SG.PRO=OBJ   bite-PFV.L
       'His own dog bit him.'

Another interesting point to note in (1060a) 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 20.1.2 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 role of the subject and excludes any other possible help. The 'head' reflexive is also used to this end, coordinated with an independent subject pronoun even when the subject is expressed non-pronominally as well:

(1061) a. *Gíyé=gɛ*   *émmé=le*   *kúú*   *émmɛ=le*
            harvest=DEF   1PL.PRO=ASSOC   head   1PL.POSS=ASSOC

        émmé   *gíyè-dè.*
        1PL.PRO   harvest-IMPF

        'We are going to carry out the harvest ourselves.'

    b. *Úlûm=gɛ*   *tòndòó=gɛ*   *bé=le*   *kúú*
       children=DEF   water.jar=DEF   3PL.PRO=ASSOC   head

       bémɛ=le   *úló-ndu*   *bè-énnè.*
       3PL.POSS=ASSOC   rise-FACT.NOM   be.able-NEG.IMPF.3PL

       'The children are unable to lift up the water jar by themselves.'

    c. *Ámíru=gɛ*   *Dúmásá*   *íí*   *wómɔ=ǹ*   *tùyò-lí.*
       chief=DEF   Douentza   child   3SG.POSS=OBJ   send-NEG.PFV

       Wó=le   *kúú*   *wómɔ=le*   *wó*   *yà-è.*
       3SG.PRO=ASSOC   head   3SG.POSS=ASSOC   3SG.PRO   go-PFV.L

       '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 (1061a) and (c), 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, 3sg agreement is usually not marked on the verb, but unless the subject is focused, the independent pronoun *wó* does not appear before it. In (1061b), on the other hand, the subject is left unfocused, which we can see by the 3pl subject marking on the verb. Like we saw with the reflexive possessor in (1060) above, reflexives have a tendency to attract focus. For more on subject focus marking, see section 15.1.1.

Another way of showing the emphatic reflexive meaning is with the adverb *tùmáá* 'alone'. This form is discussed in section 20.1.2 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. Two kinds of traditionally reflexive constructions take adverbs. The first is reflexive possession. Above we saw that *kúú X=mɔ* '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 *tɔ̂ɛ̂ⁿ~tɔ̂ɛ̂ⁿ* 'exactly', 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:

(1062) a. *Sáná   wó   báá^H   tɔ̂ɛ̂ⁿ~tɔ̂ɛ̂ⁿ   bɛ̀nd-ɛ̀.*
　　　　 Sana   3SG.PRO   father   exactly   hit-PFV.L
　　　　 'Sana hit his own father.'

　　　 b. *Sáná   wó   báá^H=ǹ   téé-ni   bɛ̀nd-ɛ̀.*
　　　　 Sana   3SG.PRO   father=OBJ   precisely-ADV   hit-PFV.L
　　　　 'Sana hit his own father.'

　　　 c. *Mí=le   mí   ánìgè^HL=le   gìnɛ́   émmɛ*
　　　　 1SG.PRO=ASSOC   1SG.PRO   friend=ASSOC   house   1PL.POSS

　　　　 téé-ni   úd-áá-dɛ̀-y.
　　　　 precisely-ADV   build-PFV-IMPF-1PL

　　　　 'My friend and I built our very own house.'

Examples (1062a–b) show that on kinship terms, the adverbs *tɔ̂ɛ̂ⁿ~tɔ̂ɛ̂ⁿ* and *téé-ni* can be used interchangeably. Notice, however, that the former, shown in (1062a), blocks the human object taking the object clitic *=ǹ*; *téé-ni* 'precisely' does not have this blocking effect.

　　　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 *tùmáá* 'alone' after an independent pronoun indicating the subject:

(1063) a. *Dámmá=gɛ   ànà-m^L=gɛ   mí=ǹ*
　　　　 village=DEF   male-HUM.SG=DEF   1SG.PRO=OBJ

　　　　 bárà-dìn   g-ì-ɛ̀ⁿ   mɛ̀   gìnɛ́   ḿmɔ
　　　　 help-IMPF.3PL   say-PFV.L-3PL   but   house   1SG.POSS

　　　　 mí   tùmáá   ùd-ɛ̀-m.
　　　　 1SG.PRO   alone   build-PFV.L-1SG

　　　　 'The village men said that they would help me, but I built my house myself.'

b. *Mí   báá^H wó   tùmáá wòlú   wàl-ée   bè-élè.*
   1SG.PRO father 3SG.PRO alone farming farm-NF be.able-NEG.IMPF
   'My father is unable to farm his fields himself.'

Notice that this independent pronoun marked with *tùmáá* does not take the place of subject agreement on the verb; it is simply co-referent with the subject.

20.2 Reciprocals

Typically, reciprocals are expressed in Tommo So by the word *túmɔ̀m*, presumably derived at some level from the word for 'one' *túmɔ́*. Its unusual HL tone pattern could derive historically from *túmɔ́* with the L-toned object marked *=ǹ*, but this is simply speculation. The anaphor *túmɔ̀m* 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 *túmɔ̀m* is to treat the final /m/ as being the human plural suffix *-m*, thus making all reciprocals morphologically plural.

The reciprocal can be used when there is simply a morphologically plural subject (either pronominal or non-pronominal) or when there are conjoined subjects:

(1064) a. *Émmé   ódu=gɛ=nɛ   túmɔ̀m   y-ɛ̀-y.*
          1PL.PRO   road=DEF=OBL   RECIP   see-PFV.L-1PL
          'We saw each other on the road.'

     b. *Nìmɛ̌m   émmé   túmɔ̀m   nánn-íy-aa*
        just.now 1PL.PRO RECIP   chase-MP-PFV

        dímb-ɛ̀=gɛ   wó=ǹ.
        follow-PFV.REL=DEF   3SG.PRO=OBJ

        'Now it is such that we chase and follow each other.' [23.3:61]

     c. *Àná-m   pɛ́lu   túmɔ̀m   y-àà=bí-ɛ̀ⁿ.*
        male-HUM.PL   ten   RECIP   see-PFV=be.PST-3PL
        'Ten men saw each other.'

     d. *Sáná=le   Séydú=le   túmɔ̀m   y-àà=bí-ɛ̀ⁿ.*
        Sana=ASSOC   Seydou=ASSOC   RECIP   see-PFV=be.PST-3PL
        'Sana and Seydou saw each other.'

Curiously, none of these reciprocals take the object marker, despite functioning as the object. In the one case I have where the reciprocal refers to inanimate objects, it does take the object marker, in a seeming reversal of animacy requirements (animate objects usually take the object marker):

(1065) *Tásà=gɛ=mbe   túmɔ̀m=ị̀ǹ   gùŋgúló-gú=wɔ-ɛ̀ⁿ*.
        dish=DEF=PL   RECIP=OBJ   bump-PPL=be-3PL
        'The dishes are knocking into one another.'

Note the epenthetic vowel separating the stem-final consonant from the object marker. For more on object marking, see section 13.1.6.

When trying to create a coordinated construction including a reciprocal, speakers instead prefer to repeat the verb with each coordinand, just as they did with reflexives above:

(1066) *Bé   kɔ́nní-m^H=gɛ=mbe=ǹ   dà-á*
        3PL.PRO   enemy-HUM.PL=DEF=PL=OBJ   kill-PFV

        bé=lɛ   túmɔ̀m=ị̀ǹ   yé=dà-ì-ɛ̀^{nL}.
        3PL.PRO=also   RECIP=OBJ   EXIST=kill-PFV.L-3PL
        'They killed their enemies and each other.'

Here we do see object marking on an animate reciprocal.

It is also possible to use the reciprocal in indirect object constructions. In the following example, the reciprocal takes the associative clitic:

(1067) *Túmɔ̀m=le   áw-íy-aa=bi-ɛ̀ⁿ*.
        RECIP=ASSOC   wrestle-MP-PFV=be.PST-3PL
        'They wrestled with each other.'

My data include another example with the associative, but it is used in an unexpected way:

(1068) *Émmé   kɛ́m   túmɔ̀m   dùmbɔ́=le   jùmb-áa=be-y*.
        1PL.PRO   all   RECIP   stone=ASSOC   throw-PFV=be.PST-1PL
        'We all threw stones at one another.'

In this example, the reciprocal is the logical indirect object and the stones the logical direct object of throwing. Nonetheless, it is *dùmbɔ́* 'stone' that takes the associative clitic, not the reciprocal. Since this is the only example of its kind, it is difficult to make any generalizations from it. I leave this as an area of interest for future research.

Like the reflexive, the reciprocal can function as a possessor:

(1069) a. *Túmɔ̀m   kùùᴸ   ɛ́r-aa=bi-ɛ̀ⁿ*.
           RECIP   head   braid-PFV=be.PST-3PL
           'They braided each other's hair.'

b. *Dámmá=gɛ   ǹdɛ̀-m^L=gɛ   túmɔ̀m mìnnɛ̀^{L} wàl-ì-ɛ̀^{n}.*
village=DEF   person-HUM.PL=DEF   RECIP   field   farm-PFV.L-3PL
'The people of the village farmed each other's fields.'

The reciprocal induces tone lowering on the following possessed noun.

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.

The form of the logophoric pronouns (*ǹdɛ̀mɔ́* (logophoric singular) and *ǹdɛ̀mbé* (logophoric plural)) appears to be historically related to the word for person *ǹdɛ́*, presumably with a possessive clitic *=mɔ*. The vowel of *mɔ* has been syncopated diachronically before the plural clitic *mbe*; it does not seem to form part of the synchronic form of the plural. Since 'person' is underlyingly /ǹdɛ̌/, the tone on *ǹdɛ̀mɔ́* 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:

(1070) a. *Àn-ná=gɛ   dámmá   ǹdɛ̀mɔ́   gò-áa*
male-HUM.SG=DEF   village   LOG.SG.PRO   leave-PFV

yɛ̀l-áa=wɔ=ǹ   g-ì.
come-PFV=be=OBJ   say-PFV.L

'The man$_i$ said that he$_i$ came back to the village.'

b. *Sáná   ǹdɛ̀mɔ́   Séydú=ǹ   dáà-dɛ̀=ǹ   g-ì.*
Sana   LOG.SG.PRO   Seydou=OBJ   kill-IMPF=OBJ   say-PFV.L
'Sana$_i$ said that he$_i$ would kill Seydou.'

c. *É!   wó=ǹ   ǹdɛ̀mɔ́   wó=le   pád-aa*
eh   3SG.PRO=OBJ   LOG.SG.PRO   3SG.PRO=ASSOC   leave-PFV

dámmá   yà-è=ǹ=wa.
village   go-PFV.L=OBJ=QUOT

'[She said] "Eh! I left him here with her and went to the
village."'   [23.5:20]

In all cases, the embedded subject co-indexed with the main clause subject is shown with the logophoric pronoun *ǹdɛ̀mɔ́*. Note that the logophoric pronouns are never co-indexed with first or second person in the main clause, where deixis makes the reference clear. Example (1070c) 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:

(1071) a. *Sáná   Séydu=wa   ǹdɛ̀mɔ́=ǹ   dáà-dɛ̀=ǹ   g-ì.*
            Sana   Seydou=QUOT   LOG.SG.PRO=OBJ   kill-IMPF=OBJ   say-PFV.L
            'Sana_i said that Seydou would kill him_i.'

      b. *Nǎm=wa   yàa-ná   sɛ̀-lɛ́=wa,   wó*
            sun=QUOT   female-HUM.SG   have-NEG=QUOT   3SG.PRO

         tùmáá=ǹ,   wó   ǹdɛ̀mbé=ǹ   ɛ̀lɛ̀-nd-ìyɛ̀-lí=wa.
         only=COP   3SG.PRO   LOG.PL=OBJ   be.good-FACT-MP-NEG.PFV=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.' [23.6:2]

It is interesting to note that in (1071a) the logophoric pronoun is able to skip over the more immediate argument (Seydou) to co-index with its intended antecedent Sana. If it were meant to be co-indexed with Seydou, it would take the reflexive form, since both Seydou and this pronoun are in the same clause.

Co-indexation with the highest argument can be seen in other cases of doubly-embedded clauses. Consider:

(1072) *Sáná   úwaa   ǹdɛ̀mɔ́   nùmb-áa=wɔ   y-àà=bé   g-ì.*
        Sana   2SG.QUOT   LOG.SG   fall-PFV=be   see-PFV=be.PSG   say-PFV.L
        'Sana said that you saw that he_i fell.'

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 {H} or {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 *=mɔ*. This results in vowel syncope and a tone change in the logophoric singular, illustrated below:

(1073)   *ǹdɛ̀mɔ́ + mɔ → ǹdɛ́mmɔ*

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 preceding possessed noun.

The following examples show the logophoric pronoun used as an inalienable possessor:

(1074)   a.   *Sáná*   *ǹdɛ̀mɔ́*   *báá^H*   *wó*   *yàà-nà̀^{L}*
               Sana   LOG.SG.PRO   father   3SG.PRO   woman-HUM.SG

               nɛ̀y-yém   *j-à́á=wɔ*   *g-ì.*
               two-ORD   take-PFV=be   say-PFV.L

               'Sana$_i$ said that his$_i$ father took a second wife.'

         b.   *Sáná*   *ǹdɛ̀mɔ́=le*   *ǹdɛ̀mɔ́*   *áǹìgè^{HL}=le*
               Sana   LOG.SG=ASSOC   LOG.SG   friend=ASSOC

               Mótí   *yáà-dìɲ*   *g-ì.*
               Mopti   go-IMPF.3PL   say-PFV.L

               'Sana$_i$ said that he$_i$ and his$_i$ friend were going to Mopti.'

In (1074a), the possessed noun *báá* 'father' takes a {H} overlay because it is less than three moras in length. In (1074b), *àǹìgé* '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. For more on tone changes associated with inalienable pronominal possession, see section 4.5.

The examples below illustrate the logophoric pronoun's use as an alienable possessor:

(1075)   a.   *Sáná úwaɛ́*   *gìnɛ́*   *ǹdɛ́mmɔ=nɛ*   *yɛ̀l-áa=be*   *g-ì.*
               Sana 2SG.QUOT house LOG.SG.POSS=OBL come-PFV=be.PST say-PFV.L
               'Sana$_i$ said that you came to his$_i$ house.'

         b.   *Nɔ̀ɔ́*   *íí*   *ǹdɛ́mmɔ=gɛ*   *mìyɛ̀^{L}=gɛ=lɛ=ma=wa.*
               this   child   LOG.SG.POSS=DEF   voice=DEF=NEG.COP=or?=QUOT
               '[The woman$_i$ asked if] this is not her$_i$ child's voice?'   [23.5:32]

c. *Kìdὲ[L] kó hákílé ǹdὲmbé=mɔ yὲl-ὲ=wa...*
   thing that.DD mind LOG.PL=POSS come-PFV.L=QUOT
   'They[i] said that that thing (idea) came to their[i] mind...' [23.6:3]

What is interesting is that the example in (1075a) 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:

(1076) *Sáná úwaa gìnέ ǹdὲmbé=mɔ=nɛ*
        Sana 2SG.QUOT house LOG.PL.PRO=POSS=OBL

        yὲl-áa=be g-ì.
        come-PFV=be.PST say-PFV.L

        'Sana[i] said that you came to their[i] house.'

In this example, 'their' indicates Sana plus others.

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:

(1077) a. *Nàà[L] ǹdὲmɔ́ sέm-aa=be=gɛ*
            cow LOG.SG slaughter-PFV=be.PST=DEF

            pò~póó=gɛ yém bὲ-lí g-ì.
            RED~fat=DEF like.that be.PST-NEG say-PFV.L

            'He[i] said that the cow he[i] slaughtered was extremely fat.'

        b. *Dámmá ǹdὲ-m[L]=gɛ tàràà[L] dà-á*
           village person-HUM.PL=DEF hyena kill-PFV

           ǹdὲmɔ́ pád-è=gɛ y-àà=bí-ὲ[n] g-ì.
           LOG.SG.PRO leave-PFV.REL=DEF see-PFV=be.PST-3PL say-PFV.L

           'He[i] said that the villagers found the hyena he[i] had killed and left.'

Again, in both cases, the regular 3sg *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.

Chapter 21
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 order of decreasing perceived frequency. Different speakers may use different topicalizers to different extents; for instance, almost all of the cases of *nɛɛ* as topicalizer come from a single speaker, S. 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, despite the fact that subjects are not usually marked with an independent pronoun:

(1078) a. *Mɔ́ɔ́lu=mɔ*   *jàwᴸ*,   *wó=lɛ*   *Kándá*   *ɔ̀gɔ́*
            Mori=POSS   fight   3SG.PRO=also   Kanda   Hogon

            yò-éélè=gɛ   *jàwᴸ?*
            enter-NEG.IMPF.REL=DEF   fight

            'The Mori war, was that also a war about Kanda not becoming
            Hogon?'   [23.1:1]

b. *Dèŋènè-Dúú*   *bɛ̀ɛ̀-nɛ̀ᴸ=gɛ*,   *Kóíró,*   *Ànjú*
   Dɛŋɛnɛ-Duu   person.from-HUM.SG=DEF   Koiro   Anji

   ɔgɔ̀ᴸ   *gìnɛ̀ᴸ=nɛ*   *wó*   *gìŋ-ɛ̀.*
   Hogon   house=OBL   3SG.PRO   beg-PFV.L

   'The person from Dɛŋɛnɛ-Duu, Koiro, he [went and] begged at
   the chief of Anji's house.'   [23.2:141]

c. *Dámmá*   *wó*   *yà-à,*   *yàa-ná=gɛ,*   *wó*
   village   3SG.PRO   go-PFV   female-HUM.SG=DEF   3SG.PRO

   òlú=baa   *ɛ́ɛ́ⁿ*   *kɛ́bɛ́-nú*   *yà-è.*
   field=LOC   ash   gather-PPL   go-PFV.L

   'She [the co-wife] went to the village, and the woman, she went
   to the fields to gather soda ash (from burning millet stalks).'   [23.5:2]

In all of the examples above, we see bare subject topics followed by a resumptive pronoun (*Mɔ́ɔlu=mɔ jàwᴸ – wó, Kóíró – wó, yàa-ná=gɛ – wó*).

Overall, 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:

(1079) a. *Nɛ́ɛ́*   *súgɔ́=gɛ=nɛ*   *bɛ̀lùᴸ*   *gír-ínɛ́=gɛ,*
            now   sugɔ=DEF=OBL   animal   herd-AGT.SG=DEF

            íí   *wómɔ=gɛ*   *kɛ̀mmɛ̀ᴸ*   *póó=nɛ*   *ém*   *jòò-nd-ì=yo...*
            child   3SG.POSS=DEF   gourd   fat=OBL   milk   fill-FACT-PFV.L=if

            'Now, in the *sugɔ* (a kind of funeral dance), a goat herder,
            when his child had filled a big gourd with milk...'   [23.4:36]

        b. *Yàa-náᵢ=gɛ,*   *wóᵢ*   *[ígɛ̀ yàà-nàₖ]ᴴᴸ=gɛ*   *íí*
            female-HUM.SG=DEF   3SG.PRO   co-wife=DEF   child

            wómɔₖ=gɛ   *wóᵢ=le*   *pád-aa*   *dámmá*   *yà-è.*
            3SG.POSS=DEF   3SG.PRO=ASSOC   leave-PFV   village   go-PFV.L

            'The womanᵢ, herᵢ co-wifeₖ left herₖ child with herᵢ and went to
            [her] village.'   [23.5:1]

(1079a) shows an example with alienable possession (resulting in the resumptive pronoun being post-nominal), while (1079b) shows that the same is possible with inalienable possession (with a pre-nominal possessor). (1079b) also contains two women players and pronouns making reference to them, so I have co-indexed everything 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:

(1080) *Bèŋì-Yúú... nèmὲ^L ùndɔ̀^{L}=gɛ, Bèn-Sàndí bàl-è.*
　　　　 Beŋji-Yuu　 dirty　 ash=DEF　 Ben-Sandi　 sweep.up-PFV.L
　　　　 'Benji-Yuu's dirty ashes (Top), Ben-Sandi swept [them] up.'[36]　　　 [23.2:62]

Here, the object 'Benji-Yuu's dirty ashes' is moved before the subject 'Ben-Sandi'. No resumptive pronoun is found, though consultants accepted a form in which the resumptive pronoun *wó=ǹ* was placed before the verb.

21.1.2 *kay* or *gay*

The most common topic marker is a particle *kay* (sometimes pronounced *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 pre-sentential discourse marker *nɛ́ɛ́ 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:

(1081)　a.　*Émmé　 kay,　 dɔ̀gɔ̀-m　　　 kay... úŋgúló-gú*
　　　　　　 1SG.PRO　 TOP　 Dogon-HUM.PL　 TOP　 get.up-PPL

　　　　　　Màndé　 gò-áa　　 yὲl-ὲ-y.
　　　　　　 Mande　 leave-PFV　 come-PFV.L-1PL

　　　　　　'As for us, as for the Dogons, getting up, [we] left Mande and
　　　　　　come [here].'　　　　　　　　　　　　　　　　　　　 [23.2:1]

　　　　b.　*Wó　　 kay,　 súgɔ́=gɛ　 kay,　 ǹdɛ́=gɛ　　 bὲlú*
　　　　　　 3SG.PRO　 TOP　 sugɔ=DEF　 TOP　 person=DEF　 animal

　　　　　　nàà-nù^L=ǹ=yo　　　　　 kɛ́m　 yém　　 júgɔ̀-mɔ̀-dὲ.
　　　　　　 master-HUM.SG=Cop=if　 all　 like.that　 know-CAUS-IMPF

　　　　　　'As for that, as for the *sugɔ*, if a person was an animal owner,
　　　　　　[it] would let everyone know that.'　　　　　　　　　 [23.4:43]

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, the coordinated NP can either be directly followed by the topicalizer *kay* or a pronoun can intervene. This is shown by the optionality of *nɔ̀=mbé* 'these' in the example below:

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36 Meaning he succeeded him as Hogon.

(1082) *Néɛ́ Kàndà-sɔ̀ɔ́-yɛ̀lìm=le   èndɛ̀-kìndíyé=le*
now   Kanda-Sɔɔ-Yɛlim=ASSOC   Ɛndɛ-Kindiye=ASSOC

Yà-Tɛ̀ɛ̀-gòmbóló=le   èn-Tàǎndù-ìyǎy=le
Ya-Tɛɛ-lumpy.head=ASSOC Ɛn-Taandu-girl=ASSOC

(nɔ̀=mbé) kay báá ⇒ ᴵtúmɔ́ ᴵnáá   ᴵtúmɔ́.
this=PL   TOP father one   mother one

'Now, Kanda-Sɔɔ-Yɛlim, Ɛndɛ-Kindiye, Ya-Tɛɛ the Lumpy Head,
and Ɛn-Taandu the Girl, as for these, [they were all of] the same
father and same mother.'   [23.3:43]

Roles other than the subject may be topicalized. In the following examples, we see both objects (1083a) and locative PPs (1083b) topicalized:

(1083) a. *Éè. [Kándá=ǹ³⁷ kay] ɔ̀gɔ́   dàmá.*
yes Kanda=OBJ   TOP   Hogon taboo
'Yes. As for Kanda, [being] Hogon is a taboo [for him].'   [23.1:20]

   b. *Màndé gò-áa   émmé   yɛ̀lɛ́-gú,   Màndé=baa kay yɛ̀lɛ́-gú*
Mande leave-PFV 1PL.PRO come-PPL Mande=LOC TOP come-PPL
'Coming from Mande, coming from Mande, as it is...'   [23.2:2]

These two examples show that the topic marker follows any other clitics associated with the noun, be they object markers (a) or postpositions (b).

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:

(1084) a. *Wó   kay sàgàrà-nɛ̀ᴸ   dɔ̀ɔ́-dɛ   kɛ́m yáá-dè.*
3SG.PRO TOP youth-HUM.SG 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.'   [23.2:103]

   b. *Nɔ̀ɔ́ kay kó   wàgàdùᴸ kɛ́m púlɔ̀-m   yɛ̀lɛ̀-nní.*
this TOP this.DD time   all Fulani-HUM.PL come-NEG.PFV.3PL
'As for this (a war that was taking place), at that time, the
Fulbe hadn't come.'   [23.2:116]

In the examples above, both *wó* and *nɔ̀ɔ́* 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.

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37 The topicalizer *kay* can either immediately follow the noun or the object marker *=ǹ* can intervene.

21.1.3 *yàà*

Another topic marker found in texts is L-toned *yàà*. This is sometimes followed by another topic marker *nɛɛ*, which I will discuss in the next subsection. *Yàà* seems to have slightly different semantics than *kay*. Whereas *kay* was a general topic marker, *yàà* seems to add an emphatic or causal element to the noun it marks. Consider the following:

(1085) a. *Wó   yàà   nɛ́ɛ́,   Tó~Tóŋó=mɔ   tìgɛ̀ᴸ=gɛ   wó=ǹ.*
           3SG.PRO TOP now Tongo-Tongo=POSS surname=DEF 3SG.PRO=COP
           'As for that now, that is the name of Tongo-Tongo.'   [23.3:14]

       b. *Kánú³⁸   bàl-è-ḿ=gɛ   yàà   nɛ́ɛ́,*
           gold   sweep.up-PFV.L-1SG=DEF   TOP   now

          Bálá-Kànù=gɛ=ǹ   táŋú-nd-aa...
           Bala-Kanu=DEF=OBJ   transfer-FACT-PFV

          'Now, [saying] "I found gold", [she] transferred [that] to
          Bala-Kanu (a name).'   [23.3:60]

       c. *Nɛ́ɛ́   Kàndà-Nɛ̌m   wó   nàl-áa*
           now   Kanda-Nɛm   3SG.PRO   birth-PFV

          nàl-áá-dɛ̀=gɛ   yàà...   wó   yàà,   Kǒm
           birth-PFV-IMPF.REL=DEF   TOP   3SG.PRO   TOP   Koum

          bɛ̀lɛ̀-mᴸ   bɔ̀rɔ̀gɔ́=gɛ=baa   dàlìrìᴸ
           person.from-HUM.PL   valley=DEF=LOC   good.things

          gàmbéé   bé   bɛ̀l-áá-dɛ̀=gɛ   wó=ǹ.
           some   3PL.PRO   find.PFV-IMPF.REL=DEF   3SG.PRO=COP

          'Now, as for [when] Kanda-Nɛm 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.'   [23.3:88]

In (1085a), 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 *tógó-ò-tógó*, *bílu-ò-bílu* (*bílu* meaning 'ladder', *tógó* meaning 'pour', as in someone who is so generous that he cannot help himself getting up on the roof and pouring millet down to whoever asks). The pronoun *wó* in (1085b) refers back to this name-calling, and the topic marker lends the causal meaning 'because of that', or 'as for that'. In (1085c), 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 (1085d), 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.

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38 Younger speakers say [káŋí].

The topic marker *yàà* can also be a mere emphatic or contrastive marker, shown by the following exchange:

(1086) S. *Néɛ́*   *súgɔ́=gɛ*   *nɛ́ɛ̀...*   *yìmú*   *kɛ́m=nɛ*
        now   *sugɔ*=DEF   now   death   all=OBL

        kánà-dìŋ=má ⇒ ...   *ma*   *ǹdɛ̀ᴸ*   *bɛ̀lú*   *sɛ́=mɔ=ɲ̀.*
        do-IMPF.3PL=or?   or   person   animal   have.REL=POSS=OBJ

        'Now, the *sugɔ* dance, would they do it for any death or... or
        was it [just] for people who had animals?'

      E. *Ǹdɛ̀ᴸ*   *bɛ̀lú*   *sɛ́*   *yáá* ⇒ .
        person   animal   have.REL   TOP
        '[For] people with animals....'   [23.4:11–12]

The speaker S asks whether a particular funeral dance was danced for everyone or just people with animals, and E 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 respect to the other possibility.

21.1.4 *nɛɛ*

The last topic marker is *nɛɛ*, 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 pre-sentential expression *néɛ́ 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:

(1087) a. *ɔ̀gɔ́*   *nɛɛ,*   *ǹdɛ́*   *sàd-è=yó*   *nɛɛ,*   *yăŋ*   *áwà-dìŋ?*
        Hogon   now   person   miss-PFV.L=if   now   how   catch-IMPF.3PL

        '[In the] chiefdom, now, if a person missed [a payment], how
        would they catch [him]?'   [23.2:93]

      b. *Kɔmbɔ́*   *yáà-dìŋ=yo*   *nɛɛ,*   *ɔ̀gɔ̀-nɔ́*   *ǹdɛ̀ᴸ*
        war   go-IMPF.3SG=if   now,   Hogon-HUM.SG   person

        wó   *ḿbɛ́=ɲ̀*   *túyò-dɛ̀=ma*   *ǹdɛ̆-m=gɛ*   *kɛ́m yáà-dɛ.*
        3SG.PRO   like.REL=OBJ   send-IMP=or?   person-HUM.PL=DEF   all   go-IMPF

        'Now, if they [would] go to war, would the Hogon send [only]
        the people he wanted or would everyone go?'   [23.2:100]

In (1087a), we see *nɛɛ* 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 (1087b), 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 *nɛɛ*, as in:

(1088) a. *Gĕm   kɔ̀lɔ̀ᴸ=nɛ   nɛɛ,   èè...   kìdɛ̀ᴸ   ŋ́jɛ́=mbe*
            funeral   inside=OBL   now   uh   thing   what=PL

            ŋ́jɛ́=mbe   háàn-àà-dɛ̀.
            what=PL   be.right-PFV-IMPF

            'Speaking now of funerals, what sorts of things were normally done?'

            [23.4:1]

        b. *Nɛ́ɛ́   súgɔ́=gɛ   nɛɛ...   yìmú   kɛ́m=nɛ   kánà-dìŋ*
            now   *sugɔ*=DEF   now   death   all=OBL   do-IMPF.3PL

            mâ ⇒ ...   ma   ǹdɛ̀ᴸ   bèlú   sɛ́=mɔ=ǹ̀.
            or?   or   person   animal   have.REL=POSS=OBJ

            'Now, turning to the *sugɔ* dance, would they do it for any death or... or was it [just] for people who had animals?'   [23.4:11]

The topic in (1088a), *gĕm kɔ̀lɔ̀ᴸ=nɛ* 'in funerals', is a postpositional adjunct to the following phrase. In (1088b), *súgɔ́* is the object of the verb *káná* 'do'.

This is not to say that subjects cannot be topicalized with *nɛɛ*. We find such examples as well:

(1089) a. *Yà-Tɛ́ɛ́=gɛ   nɛɛ...   wó   nɛɛ...   íí*
            Ya-Tɛɛ=DEF   now   3SG.PRO   now   child

            bèl-áa=be=ma   bèlɛ̀-lí?
            find-PFV=be.PST=or?   find-NEG.PFV

            'Now, as for Ya-Tɛɛ... as for her... did she have a child or did she not?'   [23.3:28]

        b. *Sɔ̀ɔ̀-Dámmá   émmé   gɛ́-dɛ̀=gɛ   nɛɛ,   nɔ̀nɔ́*
            Sɔɔ-Damma   1PL.PRO   say-IMPF.REL=DEF   now   here

            gò-áa   Dèŋènɛ́=baa   dìmbɛ́-gú   yém   yà-è.
            leave-PFV   Dèŋènɛ=LOC   follow-PPL   like.that   go-PFV.L

            'Now, turning to [the person] we call Sɔɔ-Damma, [he] left here, and went like that, via Dèŋènɛ.'   [23.3:73]

The example in (1089a) shows the double topic construction of a full noun and a corresponding pronoun seen in section 21.1.2. The subject of (1089b) is a headless relative clause, with the null head being interpreted as 'person'.

21.2 'Also' and 'even'

This section describes two somewhat semantically related expressions, 'also' and 'even'. 'Also' is indicated by a clitic *=lɛ*, while 'even' is expressed by a pre-sentential word *hálè*. Though these are not pragmatic morphemes in a strict sense, I address them in this chapter since they require knowledge from all preceding chapters, from NP structure, to object marking, to constructions using *hálè* in conditionals.

21.2.1 *=lɛ* 'also'

Like most clitics, *=lɛ* is underspecified for tone. If it makes reference to a pronominal argument, an independent pronoun must be used to host it, as in:

(1090) a. *Mí   ánìgè^{HL} Dúmásá   yáà-dè,   mí=lɛ   yáà-dɛ-m.*
            1SG.PRO   friend   Douentza go-IMPF   1SG.PRO=also   go-IMPF-1SG
            'My friend is going to Douentza, and I'm going too.'

        b. *Émmé=lɛ   íyèlè   yènɛ́   gò-áa   yèl-áa*
            1PL.PRO=also   again   there   leave-PFV   come-PFV

            Kóndágá=nɛ   dànn-íy-aa...
            Kontaka=OBL   sit-MP-PFV

            'We too, [we] left there again and came and settled in Kontaka...'
                                                                        [23.2:51]

        c. *Dèŋènɛ́=mɔ   nɔ̀=lɛ́   wó=lɛ   wó=lɛ   ɔ̀gɔ̀^L   kɔ̀mbɔ́=ɲ̀.*
            Dɛŋɛnɛ=POSS   this=also 3SG.PRO=also 3SG.PRO=also Hogon   war=COP
            'That one for Dɛŋɛnɛ as well, that too, that too was a Hogon war.'
                                                                       [23.2:129]

A subject marked with *=lɛ* 'also' remains in situ.

This clitic can be added to adjuncts and PPs as well; 'also' follows any other clitics on the noun:

(1091) a. *Nɛ́ɛ́   kay   Dèŋènɛ́=mɔ=gɛ=lɛ   Kàndà-Túgɛru*
            now   TOP   Dɛŋɛnɛ=POSS=DEF=also   Kanda-Tugɛru

            ɔ̀gɔ́=gɛ   wó   yóò-dɛ̀=ɲ̀   g-ì...
            Hogon=DEF   3SG.PRO   enter-IMPF=OBJ   say-PFV.L

            'Now, for Dɛŋɛnɛ (that war) as well, Kanda-Tugɛru said, "I will become chief".'   [23.2:132]

b. *Kɔ̀rɔ́=le   jáá   sírɛ̀-dɛ̀-m,   bármá=le=lɛ*
   calabash=ASSOC   meal   cook-IMPF-1SG   pot=ASSOC=also

   jáá   sírɛ̀-dɛ̀-m.
   meal   cook-IMPF-1SG

   'I cook with a calabash and with a pot too.'

Example (1091a) can be interpreted in two ways. First, the *=mɔ* could be describing the village of Dɛŋɛnɛ, giving the phrase the meaning 'for the village of Dɛŋɛnɛ as well'. More likely, though, the phrase *Dɛ̀ŋɛ̀nɛ̂=mɔ* is a headless possessive phrase meaning 'that of Dɛŋɛnɛ', 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 Kanda-Tugɛru is the subject of the main clause.

For (1091b), when both nouns being discussed (X and also Y) are in the same sentence, consultants will generally first offer a conjoined construction with *kɛ́m* 'all' that allows both to be included in the same clause:

(1092)   *Kɔ̀rɔ́=le   bármá=le   kɛ́m   jáá   sírɛ̀-dɛ̀-m.*
        calabash=ASSOC   pot=ASSOC   all   meal   cook-IMPF-1SG
        '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 *=lɛ*, the example in (1091b) is their response.

Direct objects of the verb can also be marked with *=lɛ*. 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 *=ɲ̀*. This is illustrated by the following:

(1093)   a. *ɛ́lɛ́kɛ̀lɛ̀   dɔ́n-dɛ̀-m   mɛ   núm=lɛ   dɔ́n-dɛ̀-m.*
          peanuts   sell-IMPF-1SG   but   beans=also   sell-IMPF-1SG
          'I sell peanuts, but I also sell beans.'

     b. *Sáná=ɲ̀   nàmá   òb-ì-ẃ=yo,   mí=ɲ̀=lɛ   óbó.*
         Sana=OBJ   meat   give-PFV.L-2SG=if   1SG.PRO=OBJ=ASSOC   give.IMPER
         'If you give Sana meat, give some to me too!'

In (1093a), 'also' directly follows the direct object *núm* 'beans'. In (1093b), since the 1sg pronoun *mí* is human, it must be followed by the object clitic *=ɲ̀* when functioning as a direct object, and only then can the clitic *=lɛ* '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, giving it scope over the VP; the verb itself cannot be host to the clitic. For example:

(1094) a. *Yàa-ná=gɛ*   *jáá*   *sírɛ́-gú=sɛ,*
           female-HUM.SG=DEF   meal   cook-PPL=have

           bándáŋkálá=gɛ=lɛ   *sɛ́mbɛ́-gú=sɛ.*
           courtyard=DEF=also   cook-PPL=have

           'The woman cooks and also sweeps the courtyard.'

      b. *Mí*   *nâi-nɛ̀ᴴᴸ*   *jáŋgu*   *jàŋgá-gú=sɛ*
           1SG.PRO   sibling-HUM.SG   studies   study-PPL=have

           wòl=lɛ́   *wálà-dɛ̀.*
           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 syncope of the epenthetic vowel (or the lack of vowel epenthesis) in (1094b) on *wòlú* 'farming' and the subsequent shift of the H tone onto the clitic. From what I have seen, whenever a verb is the intended host of the clitic *=lɛ*, a cognate nominal of the verb must be present to host the clitic on the surface.

21.2.2 *hálè* 'even'

We have seen the word *hálè* before in section 18.1.5.1 with a temporal meaning 'until' and in section 17.2 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 *=lɛ*. Consider first noun constructions ('even X'):

(1095) a. *Hálè*   *ùlùmᴸ*   *gàà-lɛ̀-ý=gɛ=mbe=lɛ*   *òlú*   *yáà-dɨ̀n.*
           even   children   big-NEG-DIM=DEF=PL=also   field   go-IMPF.3PL
           'Even the little children go to the fields.'

      b. *Hálè*   *àná-m=gɛ=mbe=lɛ*   *tàráá*   *níŋ-ìyɛ̀-dɨ̀n.*
           even   male-HUM.PL=DEF=PL=also   hyena   be.afraid-MP-IMPF.3PL
           'Even the men are afraid of hyenas.'

In both examples here, the subject noun is marked with the clitic *=lε* '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:

(1096) a. *Hálè   ǹdě̌-m=gε=mbe=ǹ   pòò-ndò-lí.*
even   person-HUM.PL=DEF=PL=OBJ   greet-FACT-NEG.PFV
'She didn't even greet the people.'

b. *Hálè   díí   nɔ̌y   bè-élè.*
even   water   drink.NOM   be.able-NEG.IMPF
'He can't even drink water.'

c. *Hálè Mòtì^L íbɛ̂   yà-àà=bé-y   mε mòtò^L síyɛ́ bɛ̀lɛ̀-lí-y.*
even Mopti market go-PFV=be.PST-1PL but moto good find-NEG.PFV-1PL
'We even went to the market in Mopti, but we didn't find a good motorcycle.'

In these examples, the 'also' clitic does not appear.

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', or 'alas' that introduce the following sentence and flavor it slightly without adding much concrete meaning. They may also stand alone. The pre-sentential discourse markers to be discussed here are *yállà* 'maybe, wonder' (loan from Bambara, section 21.3.1), *kàà* or *káá*, *mè* and *dògò* 'but' (section 21.3.2), *sàbé* 'because' (section 21.3.3), *néɛ̂ (kay)* and *nìmɛ̌m* 'now', 'now then' (section 21.3.4), and a collection of French loans (*bon* 'well', *est-ce que* question marker, etc.) (section 21.3.5).

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 used somewhat like French *est-ce que*, but with more uncertainty. Examples include:

(1097) a. *Yállà   íí=gε=nε   néɛ̂   yàŋgénu kàn-ì.*
wonder   child=DEF=OBL   now   how   do-PFV.L
'[She wondered] what happened to the child?'   [23.5:22]

b. *Bé*   *sélúm-aa*   *yàa-ná=gɛ*   *yállà*
   3PL.PRO   ask-PFV   female-HUM.SG=DEF   wonder

   wó=ɲ̀   *sŏm*   *yèlɛ́-dɛ=gɛ*   *jɔ̀bɔ́*
   3SG.PRO=OBJ   horse   come-IMPF.REL=DEF   run.IMPER

   yóó   *àá*   *g-ì=ma=wa.*
   enter.IMPER   who   say-PFV.L=or?=QUOT

   'They asked and the woman asked [the child] who told him
   that a horse was coming, to run inside.'   [23.5:33]

In both (1097a) and (b), 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 about, 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:

(1098)   *ńjɛ́=ɲ̀=ma,*   *yállà*   *năm=wa ⇒*   *ííyé*   *nìmĕm*   *wó*
         what=COP=or?   wonder   sun=QUOT   today   now   3SG.PRO

         tùmáá   *gò-ìlè^L*   *wó*   *gòò-dɛ̀^L=nɔ́*
         only   go.out-NOM   3SG.PRO   go.out-IMPF.REL=this

         ǹdɛ̀mbé   *yɛ̀-dɛ̀^L=nɔ́,*
         LOG.PL.PRO   see-IMPF.REL=this

         'Why is that, [well], if even today we see the sun going out by himself
         [and that is already hot],'

         yàa-ná   *wó*   *j-èè,*   *íí*   *wó*
         female-HUM.SG   3SG.PRO   take-NF   child   3SG.PRO

         nál-ee,   *wó*   *wó*   *gò-ée*   *yàa-ná*
         birth-NF   3SG.PRO   3SG.PRO   go.out-NF   female-HUM.SG

         wó   *gò-ée*   *úlûm=mbe*   *gò-ée*   ***yállà***
         3SG.PRO   go.out-NF   children=PL   go.out-NF   wonder

         ḿmɔ   *ǹdɛ̀mɔ́*   *úndu=nɛ*   *nàmà^L*
         1SG.POSS   LOG.SG   forest=OBL   meat

         tóó=mbe=lɛ   *dóm*   *bílɛ̀-dɛ̀=má=wa.*
         be.in.REL=PL=NEG.COP   seat   be.possible-IMPF=or?=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].'

                                                                    [23.6:14–15]

The first stretch of text introduces the first *yállà* at what is meant to be the beginning of the sentence. Then many chained clauses follow, 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, mὲ, 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 use. The one example found is the following:

(1099) *Káá...* *émmé* *bááᴴ=gɛ* *émmé=ǹ* *gàá* *m̀bɛ̀.*
        but 1PL.PRO father=DEF 1PL.PRO=OBJ a.lot love
        'But... our father loved us very much.' [23.2:33]

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:

(1100) *Yɛ̀l-áa=be* *kàà* *tàmà-lí.*
        come.PFV=be.PST but stay-NEG.PFV
        'She came but she didn't stay very long.'

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 5.7.1.7 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:

(1101) a. *Mómbu=gɛ* *g-àà=bi-ɛ̀ⁿ=wa* *dògò* *dàgà-lú=wa.*
           meeting=DEF say-PFV=be.PST-3PL=QUOT but be.good-NEG.PFV=QUOT
           'They had spoken [at] the meeting, but [they said] [what they said] was not good.' [23.6:17]

      b. *Púlɔ̀-m=mbe* *ɔ̀ɔ̀ɔ̀...* *kɔ̀mbɔ́=ǹ* *koy,* *ɔ̀gɔ̀ᴸ*
           Fulani-HUM.PL=PL uh war=COP EMPH Hogon

           kɔ̀mbɔ́... *púlɔ̀-m=yɔ́-ɛ̀ⁿ* *dògò*
           war Fulani-HUM.PL=be.DIST-3PL but

           àn-sáárá *kɔ̀mbɔ̀ᴸ* *àn-sáárá* *yɛ̀lɛ̀-lí.*
           AN-white.person war AN-white.person come-NEG.PFV

           '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.' [23.2:117]

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 (1099) 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*):

(1102) *Ííyé*   *dìgè^L*   *nàm^L* *hákìlè* *káná.*   *Kó*   *dògò*
     today   evening   sun   care   do.IMPER   that.DD   but

     ú=lɛ   *yàa-ná*   *bílè-dɛ̀-w.*
     2SG.PRO=also   female-HUM.SG   become-IMPF-2SG

     'Watch out tonight, otherwise you will also become a woman.'

The most common conjunction meaning 'but' is a French loan *mɛ* (*mais*). This is particularly in use among younger speakers, who seem to seldom use either the native *dògò* or the Fulfulde *káá*. Examples include:

(1103) a. *Àà,* *ǹdɛ̀mbé*   *yàmmé*   *mómbu=gɛ*   *g-àà=bi-ɛ̀ⁿ=wa*
           ah   LOG.PL.PRO other.day meeting=DEF   say-PFV=be.PST-3PL=QUOT

           mɛ,   *jɔ̀mɔ́=wa*   *nòŋgónu*   *g-ì=wa=de.*
           but   hare=QUOT   like.that   say-PFV.L=QUOT=EMPH

           '[They said], ah, they had met the other day, but Hare had said
           like that (that it wasn't good).'   [23.6:21]

    b. *Àná* *mìy-áa=be*   *mɛ,*   *yúú*   *ìlè-lí.*
          rain   fall-PFV=be.PST   but   millet   ripen-NEG.PFV
          'It rained but the millet did not yield much.'

The comma after *mɛ* 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' (or as one speaker translates it, *nevertheless*, French *quand même*). It seems that it could be related to a word *sáábu* meaning 'reason'. The textual examples are as follows:

(1104) a. *Sàbé   jàd-áa   ǹdɛ̀mbé   yɛ̀-nd-áa*
because   reflect-PFV   LOG.PL.PRO   see-FACT-PFV

kɔ̀mmɔ́=nɛ   nàmà^L   tóó=mbe=yó   dògò   úndu=nɛ   nàmà^L
cave=OBL   meat   be.in.REL=PL=if   but   forest=OBL   meat

tóó=mbe=ǹ̀   bìl-éélè=wa.
be.in.REL=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.'   [23.6:22]

   b. *Sàbé   nǎm   wó   tùmáá   gò-ée   dànn-ìlè^L*
because   sun   3SG.PRO   alone   go.out-NF   burn-NOM

wó   dànnà-dɛ̀^L   nɔ́,   yàa-ná   wó
3SG.PRO   burn-IMPF.REL   this   female-HUM.SG   3SG.PRO

j-ì,   yàa-ná   wó   dánn-è,   íí
marry-PFV.L   female-HUM.SG   3SG.PRO   burn-PFV.L   child

wó   gó-è,   íí   wó   gó-è,
3SG.PRO   go.out-PFV.L   child   3SG.PRO   go.out-PFV.L

íí   wó   dánn-è,   wó   wó
child   3SG.PRO   burn-PFV.L   3SG.PRO   3SG.PRO

dánn-è,   ǹdɛ̀mbé   kɛ́m   yím-ee   dúmɔ̀-dìŋ=wa.
burn-PFV.L   LOG.PL.PRO   all   die-NF   finish-IMPF.3PL=QUOT

'Because they said that he alone comes out, (with) this burning of his, [when] he has married a woman, the woman would burn, [his] child would come out, [his] child would come out, [his] child would burn, he himself would burn, [they said because of this] all of us would end up dying.'   [23.6:24]

21.3.4 *nɛ́ɛ́ (kay)* and *nìmɛ̌m* 'now'

The two expressions *nɛ́ɛ́ (kay)* and *nìmɛ̌m* are extremely common pre-sententially in texts. These translate to a semantically bleached 'now' expression, as in English "Now, as I was saying..." rather than strictly temporal expression. Of the two, *nìmɛ̌m* has more of a temporal flavor, but either can be used with little semantic import to the following sentence. They are simply a stylistic feature of texts, used to introduce information.

Consider first *nɛ́ɛ́*, which can be used with or without the topicalizer *kay*. The following are three consecutive sentences in a text, each containing this 'now' expression:

(1105) *Éèyɔ́   wó   kay,   wó   jéŋŋ-è=gɛ*
        yes   3SG.PRO   TOP   3SG.PRO pick.up-PFV.REL=DEF

        nɛ́ɛ́   kay   úlûm   wómɔ=mbe=ǹ   ób-ù=lɛ=ma.
        now   TOP   children   3SG.POSS=PL=OBJ   give-PFV.REL=NEG.COP=or?

        'Yes, as for that, what she picked up, now, did she not give it to her children.'

        Nɛ́ɛ́   kay   Sɛmmɛ̀lɛ̀-Tàŋá   yé=tòò^L émmé   yé=tòò-y^L.
        now   TOP   Sɛmmɛlɛ-Taŋa   EXIST=be.in   1PL.PRO   EXIST=be.in-1PL

        'Now, there is Sɛmmɛlɛ-Taŋa and us.'

        Nɛ́ɛ́   sàw...   Sɔ̀ɔ̀-Dámmá^{39} tòò-lɛ́   koy.
        now   Saw...   Sɔɔ-Damma   be.in-NEG   EMPH

        'Now, Saw... Sɔɔ-Damma is not a part of that!'   [23.3:63–65]

This part of the text is describing an ancestral mother to many of the surrounding villages, who, as the story goes, 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 Sɛmmɛlɛ-Taŋa and us, Tongo-Tongo. If 'now' literally specified the current time, these three sentences would be terribly redundant. Instead, *nɛ́ɛ́ (kay)* seems to simply be a device speakers use to introduce sentences.

Younger speakers tend to pronounce the expression as *nɛ́ɛ́ gay*. For example:

(1106) *Nɛ́ɛ́   gay   íí=gɛ   jɔ̀b-áa   yò-è=yó   ɲăm   kúndò-dè   g-àà.*
        now   TOP   child=DEF   run-PFV   enter-PFV.L=if   fire   put-IMPF   say-PFV
        'Now, when the child runs into [there], she said she would light the fire.'
                                                                        [23.5:10]

This could be because they are treating the expression as a single word, in which case a word-medial voiceless stop would be banned.

The expression *nìmɛ̆m* 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, while *nɛɛ* cannot be, as in:

(1107) a.   *Nìmɛ̆m   yèlɛ́-gú=sɛ-m.*
             just.now   come-PPL=have-1SG
             'I'm just arriving now.'

        b.   **Nɛ́ɛ́ yèlɛ́-gú sɛ-m.*

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39 A neighborhood of Saoura Koum.

As a pre-sentential element, this temporal aspect is not so obvious, but it may potentially distinguish *nìmĕm* from *nɛ́ɛ̂ (kay)*:

(1108) a.

Nìmĕm...	*ɔ̀ɔ̀...*	*àn-sáárá*	*yɛ̀l-áa*
now	uh	AN-white.person	come-PFV

ɔ̀gɔ̀-m^L	*pádá-mu*	*bày^L=le*
Hogon-HUM.PL	leave-CAUS.NOM	day=ASSOC

'Now... uh... the white people came, at the time [they] made [us] abandon the Hogons.'[40]   [23.2:42]

b.

Jáàtì...	*donc*	*nìmĕm*	*kay*	*nɛ́ɛ̂*	*Mùgàà-Tàŋá=le* ⇒
exactly	thus.FR	now	TOP	now	Mugaa-Taŋa=ASSOC

Tó~Tóŋó=le ⇒	*kɛ́m*	*Ámbá-Kànù*	*gìnɛ̀^L=nɛ*	*gò-áá-dɛ̀=ɲ̀.*
RED~Tongo=ASSOC	all	Amba-Kanu	house=OBL	leave-PFV-IMPF=COP

'Exactly... so... as for now, now Mugaa-Taŋa and Tongo-Tongo, both came from the house of Amba-Kanu.'   [23.3:40]

In (1108a), the sentence is referring to a time already, and so the expression *nìmĕm* may be referring to that time. In (1108b), we see both of the 'now' elements in an unusual order (*nìmĕm kay nɛ́ɛ̂*), where *kay* seems to be topicalizing *nìmĕm* 'now', and which is then followed by another 'now' expression *nɛ́ɛ̂*. Nonetheless, the speaker is referring to two modern villages, Mugaa-Taŋa and Tongo-Tongo, so it is possible again that *nìmĕm* 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*:

(1109)

Nɛ́ɛ̂	*nìmĕm*	*kó*	*yàà*	*nàl-íy-aa*	*Kɛ̀ndónnó=baa*
now	now	that.DD	TOP	birth-MP-PFV	Kɛndonno=LOC

yá-ínɛ́	*yà-áá*	*nɔ̀nɔ́*	*wád-ínɛ́*	*wàd-áa.*
go-AGT.SG	go-PFV	here	stay-AGT.SG	stay-PFV

'Now then, with that, [a lot of kids] were born, and those that went to Kendonno went, and those that stayed here stayed.'   [23.3:47]

It is not clear in this case how much temporal meaning was intended by using *nìmĕm*.

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.

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40 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.

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':

(1110) a. Bon, *yàa-ná$_i$=gɛ*   *wó$_i$*   [*ígɛ̀ yàà-na$_j$*]^{HL}=gɛ
　　　　well.FR female-HUM.SG=DEF 3SG.PRO co-wife=DEF

　　　　íí   *wó$_j$mɔ=gɛ*   *wó$_i$=le*   *pád-aa*   *dámmá*   *yà-è.*
　　　　child 3SG.POSS=DEF 3SG.PRO=ASSOC leave-PFV village go-PFV.L

　　　　'Well, the woman$_i$, her$_i$ co-wife$_j$ left her$_j$ child with her$_i$ and
　　　　went to the village.'   [23.5:1]

     b. Bon, *òlù^L*   *nàmá*   *kɛ́m*   *bé*
　　　　well.FR field meat all 3PL.PRO

　　　　móòmb-ìy-ì=gɛ   *bé*   *dánn-ìy-ì=gɛ...*
　　　　assemble-MP-PFV.L.REL=DEF 3PL.PRO sit-MP-PFV.REL=DEF

　　　　'Well, all of the wild animals got together and sat down...'   [23.6:1]

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 as the speaker warms up.

     Another pre-sentential French loan that we see used by speakers who are fairly proficient in French is the sentence-initial question marker *est-ce que*, used for yes-no questions. For instance:

(1111) a. *ɔ̀gɔ́*   *dìnɛ̀^{L}=gɛ=le*   *yɛ̀ɛ̀...*   est-ce que *ǹdɛ̌-m*
　　　　Hogon era=DEF=ASSOC umm Q.Fr   person-HUM.PL

　　　　sègú   *sɛ́gɛ́-gú=bi-ɛ̀^{n}?*
　　　　taxes pay-PPL=be.PST-3PL

　　　　'In the time of the Hogons, umm... did people pay taxes?'   [23.2:82]

     b. Est-ce que *émmɛ=baa*   *kó=yɔ̂?*
　　　　Q.FR   1PL.POSS=LOC that.DD=be.DIST

　　　　'Did that exist where we are?'   [23.4:25]

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 Emphatics

Tommo So has two clause-final emphatic particles, *koy* and *de*. In addition, the exclamations *jáàtì* 'exactly' and *wàlláy* 'by God' can give an emphatic reading.

21.4.1 *koy*

The more general of the two emphatics is *koy*. It comes in clause-final position and serves to emphasize the preceding clause, like adding an exclamation mark in English. For instance:

(1112) a. *Bé=le   émmé=le   [báá   túmɔ́ náá   túmɔ́]=ǹ   koy.*
        3Pl.PRO=ASSOC 1PL.PRO=ASSOC father one   mother one=COP EMPH
        'Them and us, [we] are [of the] same father, same mother!'   [23.2:21]

   b. *Bòy^L   gàm~gàm^L dìyɛ̀^L nɔ̀=lé   yɛ́lɛ̀-dìn   koy.*
      tomtom drum.type big   this=ASSOC come-IMPF.3PL EMPH
      'They would come with this big drum!'   [23.2:96]

   c. *Nɛ́ɛ́ sàw... Sɔ̀ɔ̀-Dámmá tòò-lɛ́   koy.*
      now Saw   Sɔɔ-Damma be.in-NEG EMPH
      'Now, Saw... Sɔɔ-Damma is not a part of that!'   [23.3:65]

Like most particles, *koy* is underspecified for tone, but is typically realized as L or falling, since it comes in phrase-final position.

21.4.2 *de*

The distribution and function of *de* is nearly identical to *koy*, but speakers report that using *de* gives a more immediate or threatening tone to the phrase For example, if *koy* were replaced by *de* in (1112b) above, the listener would know that the big drum is coming now and that he or she ought to beware.

Nonetheless, the threatening tone is not overly strong, as the following examples show:

(1113) a. *Sɔ̀ɔ̀-Dámmá=le   émmé=le   bàà^L   íí=ǹ   de ⇒*
        Sɔɔ-Damma=ASSOC   1PL.PRO=ASSOC father child=COP EMPH
        'Sɔɔ-Damma and us, we are paternal relatives.'   [23.3:69]

   b. *Àn-sáárá   yèlɛ̀-lí   Púlɔ̀-m   yɔ́-ɛ̀ⁿ   de.*
      AN-white.person come-NEG.PFV Fulani-HUM.PL be.DIST-3PL EMPH
      'The white people hadn't come. There were Fulbe.'   [23.2:118]

When a quotation is to take an emphatic, the emphatic particle actually appears out-side of the quotative particle, even though the emphatic meaning belongs to the quotation and not the act of speaking:

(1114) a. *Wó=wa*   *sŏm*   *kó=yέllὲ=gε*
        3SG.PRO=QUOT   horse   EXIST=come.IMPF=DEF

        jɔ̀bɔ́   *yóó=wa*   *de.*
        run.IMPER   enter.IMPER=QUOT   EMPH

        '[She said] a horse is coming, run inside!'   [23.5:11]

    b. *Tàamáá*   *ǹdέmmɔ=nε*   *dàgà-lú=wa=de.*
        thought   LOG.SG.POSS=OBL   be.good-NEG.PFV=QUOT=EMPH
        '[Hare said], "In my opinion, it's not good!"'   [23.6:13]

21.4.3 *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:

(1115) *Jáàtì...*   *donc*   *nìmĕm*   *kay*   *nέέ*   *Mùgàà-Tàŋá=le* ⇒
        exactly   thus.FR   now   TOP   now   Mugaa-Taŋa=ASSOC

        Tó~Tóŋó=le ⇒   *kέm*   *Ámbá-Kànù*   *gìnὲ^L=nε*   *gò-áá-dὲ=ǹ.*
        Tongo-Tongo=ASSOC   all   Amba-Kanu   house=OBL   leave-PFV-IMPF=COP

        'Exactly... so... as for now, now Mugaa-Taŋa and Tongo-Tongo,
        both came from the house of Amba-Kanu.'   [23.3:40]

This is in opposition to Jamsay, where *jáàtì* can be used clause-finally as an emphatic (Heath 2008: 678).

21.4.4 *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:

(1116) *...jàd-áa*   *bé*   *yὲ-nd-áa,*   *wàlláy*   *sɔ̀ɔ́=gε*   *mùlú-go=wɔ.*
        reflect-PFV   3PL.PRO   see-FACT-PFV   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).'   [23.6:16]

21.5 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, *yɛ̀* 'see' and *ɛ́gɛ́* '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 perfective (which in this context retains lexical tones (*yɛ̀* with /LH/ and *ɛ́gɛ́* with /H/, instead of all {L}), the imperfective, and the so-called imperfective perfective (section 12.5). 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 /lV/) 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*). Alternatively, the negative copula *=lɛ* can be used.

First, let us look at examples with *yɛ̀* 'see':

(1117) a. *Nɛ̀ɛ̀...   émmé   dágù^HL   bé   gáà^HL,   y-ɛ̀-ẃ=le...*
            now   1PL.PRO small   3PL.PRO big   see-PFV.L-2SG=Q
            'Now, we're small, they're big, you see...'   [23.2:22]

        b. *Nɛ́ɛ́   kay   Mɔ́ɔ́lu=mɔ=gɛ   tá-ì-ɛ̀ⁿ=gɛ   y-ɛ̀-ẃ=le.*
            now   TOP   Mori=POSS=DEF   shoot-PFV.REL-3PL=DEF   see-PFV.L-2SG=Q
            'Now then, they fought the Mori war, you see.'   [23.2:131]

These examples are representative of all *yɛ̀* uptake checks found in the data; all of them are in the perfective.

This is in contrast to uptake checks with *ɛ́gɛ́* 'hear, understand', which can be used in all three of the aspects listed above. For example:

(1118) a. *Nì=mbé   dáà=lê...   dáà=lè   gɛ́-dìⁿ.   ɛ́g-ɛ́-w=le.*
            that=PL   daa le   daa le   say-IMPF.3PL   hear-PFV.L-2SG=Q

            'Those [people say] *daa le* (in response to their name)... they
            say *daa le*. Do you understand?'   [23.2:30–31]

        b. *ɔ̀gɔ́   pɛ̀lù^L   kúlóy   tààndú-go   sígɛ́,   ɛ́g-àà-dɛ̀-w=le.*
            Hogon   ten   six   three-ADV   more   hear-PFV-IMPF-2SG=Q
            'Sixty-three Hogons, do you understand?'   [23.2:50]

c. *Nɛ́ɛ́*   *Ámbá-Kànù=gɛ*   *wó*   *Ámbá-Kànù=gɛ*   *ɛ́gɛ̀-dɛ̀-w=le.*
now   Amba-Kanu=DEF   3SG.PRO   Amba-Kanu=DEF   hear-IMPF-2SG=Q
'Now, Amba-Kanu, that was Amba-Kanu, do you understand?'   [23.3:49]

In (1118a), we see *ɛ́gɛ́* in the perfective. In (1118b), it has the perfective base form suffixed with the imperfective, and in (1118c) it is the straight imperfective. The different aspects do not seem to cause any 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.

21.6 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.

The culture dictates who begins the greeting sequence. If you go visit someone at his or her house, you begin the greetings. If you see someone returning from somewhere (the fields, the market, the well), you greet them. If a stranger enters a village, the stranger must start the greetings. If someone is just up walking around the village and comes across another person seated somewhere, the person walking starts the greetings. Age and sex do not factor in; the decision of who starts greeting is purely situational.

21.6.1 Time of day greetings

There are two main time of day greetings, one used for the morning (up until around 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). A consultant suggests that this may be instead the causative, with the understanding being *ámbá ú=ǹ dènɛ́-m-aa=wɔ*, or 'God let you pass the day'.

The morning and evening greetings are given below:

(1119)   a.   *àgá yáá-mɔ*   *àgá yáá-mɔ-ǹ*
              'good morning (sg)'   'good morning (pl)'

         b.   *dènɛ́-mɔ*   *dènɛ́-mɔ-ǹ*
              'good evening (sg)'   'good evening (pl)'

In (1119a), 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 *-mɔ* sounds underspecified for tone in this case, giving it a slight falling intonation; the plural (when greeting two or more people) is formed like it is in a hortative, with a suffix *-ǹ*.

These greetings are first acknowledged by the interlocutor with the exclamation *àwɔ́ɔ̀*, 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 (1120a) and the evening in (1120b), assuming two males in the former and two females of child-bearing age in the latter:

(1120)   a.   A: *Àgá yáá-mɔ.*   'Good morning.'
              B: *Àwɔ́ɔ̀, ú ꜝyá-aa.*   'Indeed, did you spend the night?'
              A: *Yá-aa.*   'I spent the night.'
              B: *Àná úwɔ=mbe yá-aa.*   'Did your men spend the night?'
              A: *Yá-aa.*   'They spent the night.'

         b.   A: *Dènɛ́-mɔ.*   'Good evening.'
              B: *Àwɔ́ɔ̀, ú dèn-áa.*   'Indeed, did you spend the day?'
              A: *Dèn-áa.*   'I spent the day.'
              B: *Úlûm=gɛ dèn-áa.*   'Did the children spend the day?'
              A: *Dèn-áa.*   'They spent the day.'

Notice first in (1120a) that the question *ú ꜝyá-aa* 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 perfective chain forms. If the interlocutor were addressing multiple people, *é* (the 2pl pronoun) would be used in place of *ú*.

Less commonly, around noontime, the greeting *nǎm ꞌpóó* 'sun's greeting' may be used. This greeting would transition immediately into non-time specific questions of well-being.

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 úwɔ=mbe*). For women of child-bearing age, *úlûm=gɛ* 'the children' (or just *íí=gɛ* 'the child', if the interlocutor knows the woman has just one child) is used. Young girls are greeted with *ǹnáá=mbe* 'the mothers' and young boys with *àbáá=mbe* 'the fathers'. If greeting a stranger in the village, *ǹdɛ́ úwɔ=mbe* 'your people' is more typical. I am told that young girls tend to ask people this as well, regardless of age/sex. 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 21.6.3 below.

21.6.2 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 (see section 9.1). Common activity greetings are listed below (using the 2sg pronoun to illustrate, though the form would be the same substituting in the 2pl pronoun):

(1121)   a.   *ú=le bírɛ́=le*   'you and the work'

         b.   *ú=le òlú=le*   'you and the field' [úlê ŏllê]

         c.   *ú=le káádu=le*   'you and ??' (general greeting when the activity is not clear) [úlé káállê]

         d.   *ú=le díí=le*   'you and water'

         e.   *ú=le bɔ̀nnɔ́=le*   'you and pounding grain'

         f.   *ú=le jóbu=le*   'you and running'

         g.   *ú=le íbɛ́=le*   'you and the market'

The first, (1121a), is used when someone is working, be that construction work or cooking or any sort of general labor. (1121b) is used specifically when greeting somebody in the fields. (1121c) 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, and that it is never used at night. 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 word is used in this context; it seems to be a word restricted to these greetings, and it is not parsed separately. (1121d) is used when greeting someone either at the well or returning with water, while (1121e) is used to greet women pounding grain at the pounding site in the village (*bɔ̀nnɔ̀*). The expression in (1121f) 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. Finally, (1121g) is for someone at or returning from the market.

In addition to this associative structure, activity greetings can also be put into the construction *(activity) ⁱpóó*, wherein *póó* means 'greeting'. This greeting seems to be particularly common in giving thanks as opposed to starting greeting rituals, particularly *bírɛ̂ ⁱpóó* 'thanks for your work' and *dɔ́lu ⁱpóó* '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 *dɔ̀lùᴸ póó bàà-lí* 'don't worry about it'. Notice that in this case, the expression is put into a compound form (*dɔ̀lùᴸ póó*) where the first stem takes {L} tone (see section 6.1).

After activity greetings, the general greeting sequence begins.

21.6.3 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 jánnwὲ], a heavily reduced version of *é jám=nɛ=wɔ-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=nɛ=wɔ-w* 'are you in peace?'. The person responds, [jánnwὲ]. 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 jìm-éélè-y* 'you all are not sick?', to which a person may respond *yɔ̌w òndí-y* 'there is no evil (to us)' or *yɔ̌w òndú* 'there is no evil'. The following illustrates a typical greeting exchange in the morning, include the trade-off between the roles of greeter and interlocutor:

(1122) A: *Àgá yáá-mɔ.*   'Good morning!'
      B: *Àwɔ́ɔ̀, ú ⁱyá-aa.*   'Did you pass the night?'
      A: *Yá-aa.*   'I did.'
      B: *Àná úwɔ=mbe yá-aa.*   'Did your men pass the night?'

A:	*Yá-aa.*	'They did.'
B:	*É jánnwὲ.*	'Are you all in peace?'
A:	*Jánnwὲ.*	'We are.'
B:	*Àná úwɔ=mbe jánnwὲ.*	'Are your men in peace?'
A:	*Jánnwὲ.*	'They are.'
B:	*É jìm-éélè-y.*	'Are you all not sick?'
A:	*Yɔ̌w òndí-y.*	'We are not bad.'
B:	*Áà.*	'I see.'
A:	*É jánnwὲ.*	'Are you all well?'
B:	*Jánnwὲ.*	'We are.'
A:	*Úlûm=gɛ jánnwὲ.*	'Are the children well?'
B:	*Jánnwὲ.*	'They are.'
A:	*Áà.*	'I see.'

The expression *áà* marks the end of a person's greeting sequence, either indicating that the roles should be reversed or that the greeting is over. Others may use the expression *tààrɛ́* to this end. Often a greeting sequence will end in a benediction, which I will address in the next section.

21.6.4 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 jɛ́ɛ́lɛ̀] if one person or [ámbé jɛ́ɛ́lɛ̀] if multiple people. These seem to derive from *ámbá ú jéɛ́lɛ́* and *ámbá é jéɛ́lɛ́*, respectively, with vowel coalescence and fronting of /u/ to [i] in the case of the singular. *Ámbá* means 'God' and *jéɛ́lɛ́* '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. I am told this greeting is used in place of a specific activity greeting (coming from the market, coming from the well) if the person is older than you. If a person is highly respected, the vowel coalescence will not take place. In response, the person returning will say *àwɔ́ɔ̀* 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 jɛ́ɛ́lɛ̀], but this will soon be followed by an expression *gìnè-ý ꞌdɔ́ɔ̀*, 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 *bìsímílá* 'welcome' (from *bismillah* 'in the name of God'). (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-nd-íyɛ̂*, a command like French *courage!* that lacks a good translation in English. In my experience, this greeting is still widely used in more southern Tommo villages like Kansongho.

21.7 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:

(1123) a. *Jám=le   dɔ́ɔ́.*
          peace=ASSOC   arrive.IMPER
          'Arrive in peace!'

      b. *Jám=le   yɛ̂lɛ̂.*
          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 3sg imperative) phrase. This was first addressed in section 12.9.3. The following lists common benedictions, though there are surely many others for all manner of occasions:

(1124) a. *Ámbá   òdù-nàà^L   síyɛ̂   ú=ǹ   óbó.*
          god   road   good   2SG.PRO=OBJ   give.IMPER
          'May God give you a good road!'

      b. *Ámbá   dènù^L   síyɛ̂   óbó.*
          god   daytime good   give.IMPER
          'May God give you a good day!'

      c. *Ámbá   jám=nɛ   émmé=ǹ   dènɛ̂-mɔ́.*
          god   peace=OBL   1PL.PRO=OBJ   spend.day-CAUS.IMPER
          'May God let us spend the day in peace!'

d. *Ámbá*   *wómɔ=nɛ*   *yɔ̀rɔ́-ndɔ́.*
   god   3SG.POSS=OBL   soft-FACT.IMPER
   'May God be gentle with him!' (Condolence for the dead)

e. *Ámbá*   *éwɔ*   *wàgá-nd-íyɛ̂-mɔ́.*
   god   2PL.POSS   distant-FACT-MP-CAUS.IMPER
   'May God give you all long life!'

f. *Ámbá*   *wàgé*   *émmé=ǹ*   *táárá.*
   god   distance   1PL.PRO=OBJ   show.IMPER
   'May God show us 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 grammar, 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 /d ~ t ~ s/

According to Lee Hochstetler (p.c.), who recently carried out a survey of Tommo country, 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 /d ~ t ~ s/ is a case in point. In one word, intervocalic /d/ in the dialect of Tédié corresponds to Kansongho /t/ and Sarédina /s/. Consider:

(1125)	Gloss	Tédié	Sarédina	Kansongho	Proto-TS
	'wind'	*ódóró*	*ósóró*	*ótóró*	**ótóró*

This triplet suggests that the original consonant was the /t/ retained in the dialect of Kansongho, which spirantized in the Sarédina dialect and became 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 (1125). There is some suggestion that final and intervocalic /t/ underwent different processes. Compare the following to (1025) above:

(1126)	Gloss	Tédié	Sarédina	Kansongho	Proto-TS
	'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 proto-phoneme. The language Yanda-Dom has the word *ózú* for 'road' (Heath field notes), which could have devoiced in the dialect of Sarédina and de-fricated in the Tédié and Kansongho dialects.

We also know that original intervocalic (or stem-final, depending upon the status of the final vowel) /d/ is retained, since the word for 'year', *ànà-gúdu*, remains constant across the dialects. Thus, we have seen in this section that we need to reconstruct intervocalic *d, *t, *s, and possibly *z in Proto-Tommo So.

22.1.2 /d ~ j/

We saw above that *ànà-gúdu* 'year' is pronounced the same in all three dialects. Contrast this with the word for 'skin':

(1127)	Gloss	Tédié	Sarédina	Kansongho	Proto-Tommo
	'skin'	*gùdú*	*gùjú*	*gùdú*	**gùjú*

The Tédié dialect lacks intervocalic (or final) /j/ that is not part of the prenasalized stop series /ɲj/. Since we see a near identical stem in Sarédina with a /d/ (in *ànà-gúdú*), the more likely explanation is that intervocalic /j/ become /d/ in both Tédié and Kansongho, neutralizing this contrast.

22.1.3 /m ~ ŋ/

As we saw in section 3.4.1.3, the Tédié dialect of Tommo So has a restriction against word-final /ŋ/. The same does not hold for all other dialects, however. In particular, the dialect spoken in Kansongho has a great many final /ŋ/ in both stems and inflection. At least some of these seem to be underlying. Compare the following two triplets:

(1128)		Gloss	Tédié	Sarédina	Kansongho	Proto-TS
	a.	'sun'	*năm*	*năm*	*năŋ*	**năŋ*
	b.	'salt'	*nɛ̌m*	*nɛ̌m*	*nɛ̌m*	**nɛ̌m*

The examples in (1128a) 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 direction 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 *năŋ 'sun' and *nɛ̆m 'salt' for Proto-Tommo So. The same pattern as 'sun' holds for 'fire', giving us Proto-Tommo *năŋ corresponding to Tédié and Sarédina Tommo năm.

For velar/labial alternations in the morphology, see section 22.2.1.

22.1.4 Vowel correspondences

We see two main vowel-based alternations in the dialects. The first is that the stem pattern /uyɔ/ is completely fronted to /iyɛ/ in the Kansongho dialect. We find the following correspondences:

(1129)

Gloss	Tédié	Sarédina	Kansongho	Proto-TS
'song'	núyɔ́	núyɔ́	níyɛ́	*núyɔ́

This fronting is easy to imagine. Even in Tédié Tommo So, the pronunciation of 'song' is close to IP [nyɔ], with the /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 /kúyɔ́/ 'first' may be pronounced [kúyɛ́]. 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 /ɛ/ and /ɔ/. For instance, where Tédié and Sarédina say ísu for 'fish', it is pronounced more like [ísə] in the Kansongho dialect. Similarly, tímɛ́ 'tree' in Tédié and Sarédina is pronounced more like [tímə́] 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 of final weakening.

One marginal vowel change (along with a change in the place of the nasal) is seen in the adjective 'heavy':

(1130)

Gloss	Tédié	Sarédina	Kansongho
'heavy'	túgóm	túgóm	**tógóŋ**

In the Kansongho dialect of Tommo So, the initial /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 5.5.2) 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 /g/:

(1131)   tóg → tógóg → tógóŋ

This is speculative, though, and still would not explain other adjectives in this category like *yégélu* 'cold' that do not show a reduplicative pattern.

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:

(1132)		Gloss	Tédié	Sarédina	Kansongho
	a.	'bone'	***kìyé***	*kíyé*	*kíyé*
	b.	'blood'	*ìlǐyé*	*ìlǐyé*	***ílíyé***
	c.	'tooth'	*ìnú*	*ìnú*	***ínə***

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 Proto-Tommo So.

22.2 Morphological differences

22.2.1 /m/ vs. /ŋ/

The morphological differences found between the three dialects studied mostly boil down to one phonological correspondence: /ŋ/ vs. /m/. All *-m* suffixes in Tédié and Sarédina are realized as *-ŋ* in Kansongho. This includes the 1sg subject suffix and the human plural. Consider:

(1133)		Gloss	Tédié	Sarédina	Kansongho
	a.	'I go'	*yáà-dè-m*	*yáà-dè-m*	*yáà-dè-ŋ*
	b.	'men'	à*ná-m*	à*ná-m*	à*ná-ŋ*

We determined above that in lexical items, a contrast between original /ŋ/ and /m/ neutralized in the dialects of Tédié and Sarédina. However, reconstructing these suffixes in Tommo So as *-ŋ* seems unlikely to be correct, given the fact that they are /m/ across the majority of other Dogon languages. Thus it seems possible that all final /ŋ/ became /m/ in Tédié and Sarédina dialects, but morphological *-m* has become *-ŋ* in Kansongho. In fact, even the /ŋ/ 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 {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:

(1134) a. *yɛ̆l-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-ǹ* 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. For more on prohibitives, see section 12.9.1.2.

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:

(1135) | Gloss | Tédié | Sarédina | Kansongho |
|---|---|---|---|
| a. | 'donkey' | *jàndúlu* | *jàntúlu* | *dàŋ(j)úlu* |
| b. | 'bite' | *kɛ̂rɛ̂* | *kɛ̂rɛ̂* | *kɛ̂mɛ̂* |
| c. | 'pond' | *mùgó* | *mùgó* | *wàŋjú* |

Example (1135a) is more of a pronunciation difference than anything else. We see that the Sarédina dialect has retained /t/ after /n/ (rather than spirantizing it), while Tédié Tommo So only has voiced stops after nasals. The Kansongho pronunciation seems to have swapped the position of the /d/ and the /j/ (with the /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

23.1 Why people named Kanda cannot be Hogon

Recorded on August 13, 2008 in Tongo-Tongo
Speakers: Endekindiye Ouologuem (E), Sana Ouologuem (S), Chief Ende Ouologuem (C)

1. S: *Mɔ́ɔlu=mɔ jàw^L, wó=lɛ   Kándá ɔ̀gɔ́   yò-éélè=gɛ^41... jàw^L.*
   Mori=POSS fight 3SG.PRO=also Kanda Hogon enter-NEG.IMPF=DEF war
   'The Mori war, was that also a war about Kanda not becoming Hogon?'

2. E: *Kándá=gɛ.^42   Kàndà-Tùgɛ́ɛru.*
   Kanda=DEF   Kanda-Tugɛɛru
   'Kanda. Kanda-Tugɛɛru.'

3. S: *Kàndà-Tùgɛ́ɛru.*
   Kanda-Tugɛɛru.
   'Kanda-Tugɛɛru.'

4. E: *ɔ̀'ɔ́,   Dèŋènè-Dúú=mɔ=gɛ   Kàndà-Tùgɛ́ɛru, nǐ   Kàndày-Tóru.^43*
   no   Deŋenɛ-Duu=POSS=DEF Kanda-Tugɛɛru, that Kanday-Toru
   'No, Kanda-Tugeeru was for Deŋene-Duu, this is Kanday-Toru.'

5. S: *Kàndày-Tóru...*
   Kanday-Toru
   'Kanday-Toru...'

6. E/C: *Kàndày-Tóru...*
   Kanday-Toru
   'Kanday-Toru...'

7. E: *Éé, Kàndày-Tóru. Dímbu bɛ̀ɛ̀-nè^L   Kándáy-Tòrù.^44*
   yes Kanday-Toru Dimbu person.from-HUM.SG Kanday-Toru
   'Yes, Kanday-Toru. Kanday-Toru, the one from Dimbu.'

---

41 This whole clause is acting as a nominal possessor: "[That Kanda does not enter the chiefdom]'s war". See Chapter 16 on relative clauses.

42 Definite clitic on the proper name. The next name is specific as to which Kanda (a name traditionally reserved for the firstborn male).

43 Kanday appears to be a diminutive form of Kanda.

44 Here, the tone has reversed and is now in the possessive type compound tonal pattern. See Chapter 6 on compound formation.

8. S: *Wó*   *ɔ̀gɔ́*   *yóò-dɛ̀=ɲ̀*[45]   *wó*   *g-áà,*   *nɛ́ɛ́...*
     3SG.PRO   Hogon   enter-IMPF=OBJ   3SG.PRO   say-PFV   now
     'He said he would become chief, now...'

9. E: *Wó*   *yò-è.*
     3SG.PRO   enter-PFV.L
     'He became [it].'

10. S: *Yó-aa*   *wɔ́-gú*   *wó*   *wɔ̀-gù*[46].
     enter-PFV   be-PPL   3SG.PRO   be-PPL
     'He had already become [it].'

11. E: *Wó*   *yó-aa.*[47]
     3SG.PRO   enter-PFV
     'He became [it].'

12. *Kándá*   *ɔ̀gɔ́*   *yó-ee*   *dàg-éélè=nɛ*   *wóaa,*[48]
     Kanda   Hogon   enter-NF   be.good-NEG.IMPF=OBL   he.said
     ɔ̀gɔ́=gɛ...   *ǹdɛ̀*[L]   *yàgá=ɲ̀*   *óbó=wa.*
     Hogon=DEF   person   other=OBJ   give.IMPER=QUOT
     'After he [the people] said it would not be good if Kanda became Hogon,
     they said give the chiefdom to someone else.'

13. *Ǹdɛ̀*[L]   *yàgá=ɲ̀*   *óbó=wa.*
     person   other=OBJ   give.IMPER=QUOT
     'Give it to someone else [they said].'

14. *Dàmmà-Dáá=ɲ̀*   *óbó=wa.*
     Damma-Daa=OBJ   give.IMPER=QUOT
     'Give it to Damma-Daa.'

---

45 The *=ɲ̀* marks the clause "he enters the chiefdom" as the object of *g-àà* 'said'; see section 19.1.

46 Two present participles in a row. Lit. "having entered and being there."

47 Note that in speaking, the auxiliary [wɔ̀] is often dropped from the perfective. Whether this is because it phonetically absorbed by the preceding [a] or because in discourse the tense is deducible from context is not clear.

48 [wó=wa] "he said", more likely "they" meaning the people.

15. *Nέέ   ǹdὲ^L   jàŋùndù~jáŋúnd-úm=gɛ   Dàmmà-Dáá,   nέέ,*
     now   person   RED~rascal-AGT.PL=DEF   Damma-Daa   now

    yó-aa,   pád-áá-dὲ=gɛ   pád-írá=ǹ⁴⁹   dùm-áa=wɔ.
    enter-PFV   leave-PFV-IMPF.REL=DEF   leave-TR=OBJ   finish-PFV=be

    'Now, the rascals entered Damma-Daa, [and Kanday-Toru] finished by saying "leave be what has been left" (i.e. let the current chief be, don't start a war).'

16. *Kɔnɔ́   y-àà,   kɔ̀mbɔ́=gɛ   tà-ì-ὲⁿ,   ɔ̀gɔ̀-éndέ   yém   yò-è.*
     there.DD   go-PFV   war=DEF   shoot-PFV.L-3PL   Hogon-Ende   like.that   enter-PFV.L

    'They went there, they made war, and it was like that that Ende the Hogon became chief.'

17. S: *Kándá   kay   nέέ   nánà   àsúú.⁵⁰*
    Kanda   TOP   now   never   never

    'As for Kanda, [he will] never again [be chief].'

18. E: *Pέs!   Kándá   ɔ̀gɔ́   yò-éélè.*
    never   Kanda   Hogon   enter-NEG.IMPF

    'Never! Kanda will never be Hogon.'

19. *Gàndá   sà~sáà-dὲ.⁵¹*
    place   RED~empty.out-IMPF

    'They would empty the place out (i.e. destroy everything).'

20. S: *Éè.   Kándá=ǹ⁵²   kay   ɔ̀gɔ́   dàmá.⁵³*
    yes   Kanda=OBJ   TOP   Hogon   taboo

    'Yes. As for Kanda, [being] Hogon is a taboo.'

21. E: *Dàmá,   Kándá   ɔ̀gɔ́   yò-éélè.*
    taboo   Kanda   Hogon   enter-NEG.IMPF

    'A taboo, Kanda will not be chief.'

---

49 The transitive suffix *-írá* 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]'.

50 Both intensifiers for 'never', along with following *pέs*.

51 Note the reduplicated form of *sáá* 'to empty', or figuratively, 'to destroy'.

52 The topicalizer *kay* can either immediately follow the noun or the object marker *=ǹ* can intervene.

53 The copula is null here. Literaly "As for Kanda, the chiefdom taboo."

22. S: *Wó   yàà dɔ̀gɔ̌-m   láádàà=nɛ   kìdɛ̀ᴸ wɔ́=gɛ   wó=ɲ̀.*
       3SG.PRO TOP Dogon-HUM.PL   certainty=OBL thing be=DEF 3SG.PRO=COP
       'As for that, that is a thing that is certain for the Dogon.'

23.2 The arrival of the Dogons, clan wars, the arrival of the Fulani and French

Recorded on August 13, 2008 in Tongo-Tongo
Speakers: Endekindiye Ouologuem (E), Sana Ouologuem (S), and Chief Ende Ouolo-
guem (C)

1. E: *Émmé   kay,   dɔ̀gɔ̌-m   kay... úŋgúló-gú*
      1PL.PRO   TOP   Dogon-HUM.PL   TOP   get.up-PPL

   Màndé   gò-áa   yɛ̀l-ɛ̀-y.
   Mande   leave-PFV   come-PFV.L-1PL

   'As for us, as for the Dogons, getting up, [we] left Mande and came [here].'

2. *Màndé   gò-áa   émmé   yɛ̀lɛ́-gú,   Màndé=baa   kay*
   Mande   leave-PFV   1PL.PRO come-PPL   Mande=LOC   TOP

   yɛ̀lɛ́-gú   Ségú=nɛ   yɛ̀l-ɛ̀-y.
   come-PPL   Ségou=OBL   come-PFV.L-1PL

   'Coming from Mande, coming from Mande, as it is... we came to Ségou.'

3. S: *Ségú=nɛ   yɛ̀l-ɛ̀-y.*
      Ségou=OBL   come-PFV.L-1PL
      'We came to Ségou.'

4. E: *Ségú. Áà, Ségú=nɛ   yɛ̀l-áa...   àà... Ségú=nɛ   gó-   úŋgúl-aa...*
      Ségou uh, Ségou=OBL come-PFV uh   Ségou=OBL leave? get.up-PFV
      'Ségou. Uh... [we] came to Ségou... uh... [we] lef- got up from Ségou...'

5. *kìdɛ́... yàŋgéni kán-ù...*
   thing   how   do-PFV.L
   'Umm... what's it like...'

6. S: *Kánú.*
      Kanu
      'Kanu?'

7. E: *m̀ḿ?*
        'Hmm?'

8. S: *Kánú=ma...*
        Kanu=or?
        'Was it Kanu, or...?'

9. E: *Ûnh Ségú=nɛ   úŋgúl-aa...   nɛ́ɛ́   kay   Bùgùní   yɛ̀l-áa...*
        uh   Ségou=OBL   get.up-PFV   now   TOP   Buguni   come-PFV
        'Uh [we] got up from Ségou... now [we] came to Buguni...'

10.   *Bùgùní   gò-áa   Màndé ⇒   kí¹dɛ́ ⇒   Màndè*
        Buguni   leave-PFV   Mande   thing   Mande
        '[we] left Buguni, and... Mande.... umm... Mande...'

11.   *é-   émmé   gɛ́-dɛ=gɛ   Màndè^L*
        HES 1PL.PRO   say-IMPF.REL=DEF   Mande

        gó-ím...   Màndé   yɛ̀l-ɛ̀-y.
        leave-AGT.PL   Mande   come-PFV.L-1PL
        '[what] w- we say is that [we], those who left Mande, came to Mande.'

12.   *Nɛ́ɛ́   kay   Màndé   gò-áa   Ségú   gò-áa⁵⁴   Màndé*
        now   TOP   Mande   leave-PFV   Ségou   leave-PFV   Mande

        y-àà   Màndé   gò-áa   Bàmàkó   yɛ̀l-áa.
        go-PFV   Mande   leave-PFV   Bamako   come-PFV
        'Now, [we] left Mande, left Ségou, went to Mande, left Mande, [and] went to Bamako.'

13.   *Yɛ̀l-áa.   Émmé   dɔ̀gɔ̌-m   Bàmàkó   yɛ̀l-áa.*
        come-PFV   1PL.PRO   Dogon-HUM.PL   Bamako   come-PFV
        '[We] came. We Dogons came to Bamako.'

14.   *Nɛ́ɛ́   kay   Bàmàkó   gò-áa   nɛ́ɛ́   kay   Tɔ̀mmɔ̀^L*
        now   TOP   Bamako   leave-PFV   now   TOP   Tommo

        gìnɛ́=nɛ   yɛ̀l-áa,   yɛ̀lé-dim=gɛ.
        house=OBL   come-PFV   come-INF=DEF
        'Now, [we] left Bamako, now, [we] came to Tommo country, [for] coming [i.e., we would come].'

---

54 [séggɔ̣́áá]

15.   *Wó*   *kay*   *wó*   *kay*   *Bòmbù-Áru=baa*
         3SG.PRO   TOP   3SG.PRO   TOP   Bombu-Aru=LOC

         yèl-áa   *nɛ́ɛ̂...*   *ɔ̀gɔ́*   *gàmbíl-íy-aa.*
         come-PFV   now   Hogon   divide-MP-PFV

         '[Like] that, [like] that, [we] came to Bombu Aru, now... [we] split up the
         chiefdom.'

16. S: *ɔ̀gɔ́*   *gàmbíl-íy-aa.*
         Hogon   divide-MP-PFV
         '[We] split up the chiefdom.'

17. E: *ɔ̀gɔ́=gɛ*   *gàmbíl-íy-aa.*
         Hogon=DEF   divide-MP-PFV
         '[We] split up the chiefdom.'

18.   *Díyɛ́-m*   *Dɛ̀ŋɛ̀nɛ̂*   *bɛ̀lɛ̀-m^L=gɛ.*
         older.brother-HUM.PL   Dɛŋɛnɛ   one.from-HUM.PL=DEF
         'The older brothers [are] those from Dɛŋɛnɛ.'

19.   *Bé*   *gàmbíl-íy-aa*   *gòrò^L*   *gɛ́m*   *gòr-ìy-ì-ɛ̀^{n}.*
         3PL.PRO   divide-MP-PFV   hat   black   wear.hat-MP-PFV.L-3PL
         'They split [it] up [and] put on the <u>black hat</u>.'

20.   *Gòrò^L*   *gɛ́m.*
         hat   black
         '[The] black hat.'

21.   *Bé=le*   *émmé=le*   *[báá*   *túmɔ́*   *náá*   *túmɔ́]=ɲ̀*   *koy.*[55]
         3PL.PRO=ASSOC   1PL.PRO=ASSOC   father   one   mother   one=COP   EMPH
         'Them and us, [we] are [of the] same father, same mother!'

22.   *Nɛ̀ɛ̂...*   *émmé*   *dágù^{HL}*   *bé*   *gáà^{HL},*   *y-ɛ̀-w=le...*
         now   1PL.PRO   small   3PL.PRO   big   see-PFV.L-2SG=Q
         'Now... we're small, they're big, you see.'

---

55 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 *túmɔ́* inducing tone lowering on the noun it modifies, everything in the phrase is H tone with a smooth intonational declination across the whole phrase.

23. *Gòrò*^{L} *bánu=gɛ dúù-nd-ì-ɛ̀*^{n} *gɛ́m=gɛ dúù-nd-ì-ɛ̀*^{n}.
    hat red=DEF bottom-FACT-PFV.L-3PL black=DEF bottom-FACT-PFV.L-3PL
    'They put down <u>the red hat</u>, they put down <u>the black</u>.'

24. *Gòrò*^{L} *gɛ́m=gɛ bé dùù-nd-áa.*
    hat   black=DEF 3PL.PRO bottom-FACT-PFV
    'They put down the black hat.'

25. *Nɛ̀ɛ̀... Dɛ̀ŋɛ̀nɛ́ bɛ̀lɛ̀-m*^{L}*=gɛ bé*
    now   Dɛŋɛnɛ person.from-HUM.PL=DEF 3PL.PRO

    gòrò^L *gɛ́m=gɛ=ǹ jɛ̀ŋŋ-ì-ɛ̀*^{n}.
    hat   black=DEF=OBJ pick.up-PFV.L-3PL
    'Now, the people from Dɛŋɛnɛ... they picked up <u>the black hat</u>.'

26. *Émmé gòrò*^{L} *bánu=gɛ=ǹ jɛ̀ŋŋ-è-y.*
    1PL.PRO hat red=DEF=OBJ pick.up-PFV.L-1PL
    'We picked up <u>the red hat</u>.'

27. *Émmé gòrò*^{L} *bánu jéŋŋ-ím=gɛ tìgɛ́ émmɛ tíyáá*[56].
    1PL.PRO hat red pick.up-AGT.PL=DEF surname 1PL.POSS *tiyaa*
    'We who picked up the red hat, our surname [is] *tiyaa*.'

28. S: *Tíyáá=ỳ.*
    tiyaa=COP
    'It's *tiyaa*.'

29. E: *Tíyáá... Tíyáá... Tíyáá gɛ́-dìŋ.*
    tiyaa *tiyaa* *tiyaa* say-IMPF.3PL
    '*Tiyaa... tiyaa...* they say *tiyaa*.'

30. *Nì=mbé dáà-lé ⇒ ... dáà-lè gɛ́-dìŋ.*
    that=PL *daa-le*   *daa-le* say-IMPF.3PL
    'Those [people are] *daa le*... they say *daa le*.'

31. *ɛ́g-ɛ́-w=lɛ.*
    hear-PFV.L-2SG=NEG.COP
    'Do you understand?'

---

56 Pronounced [tígáá], but clarified as *tiyaa* later. In Tommo culture, if someone says a person's last name, they often respond with a set phrase. E is pointing out here that in response to their last name, they would say *tiyaa*.

32.   *Émmé*   *tíyáá*   *nàà-m^L=gɛ*   *émmé*   *dágù^{HL}*.
        1PL.PRO   tiyaa   master-HUM.PL=DEF   1PL.PRO   small
        'We, the masters of *tiyaa*, we [are the] small [ones].'

33.   *Káá...*   *émmé*   *bááʰ=gɛ*   *émmé=ǹ*   *gàá*   *m̀b-ɛ̀.*
        but   1PL.PRO   father=DEF   1PL.PRO=OBJ   a.lot   love-PFV.L
        'But... our father loved us very much.'

34.   *Nɛ́ɛ̂...*   *émmé=ǹ*   *gàá*   *m̀bɛ̂=gɛ=diyɛ*   *gòrò^L*
        now   1PL.PRO=OBJ   a.lot   love.REL=DEF=for   hat

        bánu=gɛ   *émmé*   *bɛ́l-ɛ̀=gɛ*   *wó=ǹ.*
        red=DEF   1PL.PRO   find-PFV.REL=DEF   3SG.PRO=COP

        'Now... because our father loved us very much, it was [such that]... we got
        the red hat.'

35.   *Bɛ̀l-áa...*   *nɛ́ɛ̂*   *kay* ⇒ *...*   *kábíl-íy-aa*   *Árɛ̂=nɛ*
        find-PFV   now   TOP   separate-MP-PFV   Arɛ=OBL

        dànn-íy-aa   *Árɛ̂=nɛ*   *úŋgúl-aa*
        sit.down-MP-PFV   Arɛ=OBL   get.up-PFV

        '[We] got [it and]... now... [we] separated, sat down in Arɛ, got up
        from Arɛ...'

36.   *nɛ́ɛ̂*   *kay*   *Ségú*   *yɛ̀l-áa*   *Óndôm=baa*   *dànn-íy-aa*
        now   TOP   Ségou   come-PFV   Ondom=LOC   sit.down-MP-PFV

        Óndôm   *gò-áa*   *Mɔ́ɔlu*   *yɛ̀l-áa*   *émmé*   *dánn-ìy-ì=gɛ.*
        Ondom   leave-PFV   Mori   come-PFV   1PL.PRO   sit.down-MP-PFV.REL=DEF

        'now we came to Ségou, sat down in Ondom... left Ondom, came to Mori,
        [where] we sat down.'

37.   *Mɔ́ɔl=nɛ*   *dànn-íy-aa...*   *Mɔ́ɔl=nɛ*   *dànn-íy-aa,*
        Mori=OBL   sit.down-MP-PFV   Mori=OBL   sit.down-MP-PFV

        Mɔ́ɔl=nɛ   *ɔ̀gɔ́*   *pɛ̀lù^L* *kúlóy,*   *ɔ̀gɔ́*   *pɛ̀lù^L* *kúlóy* *tààndú-go* *sígɛ́.*
        Mori=OBL   Hogon   ten   six   Hogon   ten   six   three-ADV   more

        '[We] sat down in Mori... [we] sat down in Mori, [there were] 60 Hogons,
        63 Hogons in Mori.'

38. S: *ɔ̀gɔ́*   *pɛ̀lù^L*   *kúlóy*   *tààndú-go*   *sígɛ́.*
        Hogon   ten   six   three-ADV   more
        '63 Hogons.'

39. E: *Tàǎndú-go   sígɛ́   Mɔ́ɔ́l=nε.*
    three-ADV   more   Mori=OBL
    '[sixty]-three in Mori.'

40. S: *Mɔ́ɔ́l=nε   yém   yò-ì-ɛ̀ⁿ.*
    Mori=OBL   like.that   enter-PFV.L-3PL
    'They entered Mori like that.'

41. E: *Yém   yó-aa   émmé   kábíl-íy-aa   nɔ̀=nɛ́   émmé   súg-aa.*
    like.that enter-PFV 1PL.PRO divide-MP-PFV this=OBL 1PL.PRO go.down-PFV
    '[They] entered like that, we split off and we came down here.'

42. *Nìmɛ̌m...   ɔ̀ɔ̀...   àn-sáárá   yèl-áa*
    now   uh   AN-white.person   come-PFV

    ɔ̀gɔ̀-mᴸ   pádá-mu   bày ᴸ=le.
    Hogon-HUM.PL   leave-CAUS.NOM   day=ASSOC

    'Now... uh... the white people came, at the time [they] made [us] abandon the Hogons.'[57]

43. *Àn-sáárá   yèlɛ̂-mɔ́=nε   ɔ̀gɔ́   pèlù ᴸ kúlóy tàǎndú-go sígɛ́=nε.*
    AN-white.person come-before=OBL Hogon ten   six   three-ADV more=OBL
    'Before [the] white people came, the Hogons [were] at [the number of] 63.'

44. *Nɛ́ɛ̂...   àn-sáárá   kɔ̀nɔ́   yèl-ɛ̀.*
    now   AN-white.person   there.DD   come-PFV.L
    'Now... the white people came upon that.'

45. *Yèl-áa   bé   ɔ̀gɔ́   bé   pádà-m-ì=gε   wó=ɲ̀.*
    come-PFV 3PL.PRO Hogon 3PL.PRO leave-CAUS-PFV.REL=DEF 3SG.PRO=COP
    '[They] came and they made [the people] abandon the Hogons.'

46. *Púlɔ̀-m=gε   ɔ̀gɔ̌-m   pádá-m-aa*
    Fulani-HUM.PL=DEF   Hogon-HUM.PL   leave-CAUS-PFV

    bɛ̀ɛ̀-nní=gε.
    be.able-NEG.PFV. REL=DEF

    'They couldn't make the Fulbe leave their Hogons.'

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57 Literally a possessive construction meaning "the day of making the Hogon leave". 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.

47. C: *Pádá-m-aa*   *bɛ̀ɛ̀-nní.*
    leave-CAUS-PFV   can-NEG.PFV
    'They couldn't make [them] abandon [them].'

48. E: *Púlɔ̀-m*   *ɔ̀gɔ́-m*   *bé*   *pádá-m-aa.*
    Fulani-HUM.PL   Hogon-HUM.PL   3PL.PRO   leave-CAUS-PFV
    'They [tried to] make the Fulbe leave their Hogons,'

49.   *Àn-sáárá*   *wó*   *yél-ɛ̀=gɛ*   *gòrò*[L]
    AN-white.person   3SG.PRO   come-PFV.REL=DEF   hat

    bánu=gɛ   *ǹdɛmɔ́=gɛ*   *dògò*   *yàgá*   *òndú*   *g-ì.*
    red=DEF   LOG.SG.PRO=DEF   but   other   be.NEG   say-PFV.L

    '[The time when] the white people came, they said "there is no red hat but us".'[58]

50.   *ɔ̀gɔ́*   *pɛ̀lù*[L] *kúlóy* *tààndú-go* *sígé,* *ɛ́g-àà-dɛ̀-w=lɛ.*
    Hogon   ten   six   three-ADV   more   understand-PFV-IMPF-2SG=NEG.COP
    '63 Hogons, do you understand.'

51.   *Émmé=lɛ*   *íyɛ̀lɛ̀* *yɛ̀nɛ́* *gò-áa*   *yɛ̀l-áa*   *Kóndágá=nɛ*   *dànn-íy-aa.*
    1PL.PRO=also   again   there   leave-PFV   come-PFV   Kontaka=OBL   sit-MP-PFV
    'We too, [we] left there again and came and settled in Kontaka,'

52.   *Kóndágá=nɛ*   *dànn-íy-aa*   *ɔ̀gɔ́*   *ǹdɛ́*   *sɔ́y-go*   *ɔ̀gɔ̀*[L]
    Kontaka=OBL   sit-MP-PFV   Hogon   person   seven-ADV   Hogon

    gèmbú   *sɔ́y-go*   *yò-ì-ɛ̀*[n].
    stacked   seven-ADV   enter-PFV.L-3PL

    '[we] settled in Kontaka, [and] the Hogon [chose] seven people, the [last] seven chiefs one after another entered (i.e. were chosen).'

53. S: *Kóntàkà=nɛ.*
    Kontaka=OBL
    'In Kontaka.'

54. E: *Kóndàgà=nɛ*   *dáá-gú.*
    Kontaka=OBL   be.sitting-PPL
    'Having settled in Kontaka.'

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58 That is to say, they are the only chiefs.

55.   Gèmbú sɔ́y-go   yó-aa   nɛ́ɛ́ íyɛ̀lɛ̀ émmé=le   bé=le
      stacked seven-ADV enter-PFV now again 1PL.PRO=ASSOC 3PL.PRO=ASSOC

      kábíl-íy-aa
      divide-MP-PFV

      'The last seven entered, now again us and them, we split up,'

56.   émmé   yɛ̀l-áa   Yɛ̀bɛ̀-Nàndá=nɛ   dànn-ìy-ì-y.
      1PL.PRO come-PFV Yɛbɛ-Naanda=OBL sit-MP-PFV.L-1PL
      'We came and settled in Yɛbɛ-Naanda.'

57.   Yɛ̀bɛ̀-Nàndá=nɛ   dànn-íy-aa   Yɛ̀bɛ̀-Nàndá=nɛ... dànn-íy-aa   ɔ̀gɔ̀^L
      Yɛbɛ-Naanda=OBL sit-MP-PFV Yɛbɛ-Naanda=OBL sit-MP-PFV Hogon

      kùyɔ̀^L yòó-dɛ=gɛ   Bɛ̀ɲì-Yúú gɛ́=bì-ɛ̀ⁿ.
      first   enter-IMPF.REL=DEF Benji-Yuu say.IMPF=be.PST-3PL

      '[We] settled in Yɛbɛ-Naanda, [we] settled in... Yɛbɛ-Naanda, the person
      Hogon to enter they called Benji-Yuu.'

58. S: Bɛ̀ɲì-Yúú.
        Beɲji-Yuu
        'Beɲji-Yuu.'

59. E: Éɛ̀   Bɛ̀ɲì-Yúú.
        yes   Beɲji-Yuu
        'Yes, Beɲji-Yuu.'

60.   Ɔ̀ndòm-Pírí=nɛ   émmé   núyɔ́-dɛ=gɛ.
      Ondom-Piri=OBL 1PL.PRO sing-IMPF.REL=DEF
      '[It is what] we sing at Ondom-Piri.'[59]

61.   Éɛ̀, Bén-Tíyáá yé   yúú   sɔ̀ɔ̀^L   wè   sɔ́ɔ̀.
      yes Ben-Tiyaa oh millet speech oh speak.IMPER
      'Yes, (song lyrics).'[60]

62.   Bɛ̀ɲì-Yúú... nɛ̀mɛ̀^L ùndɔ̀^L=gɛ Bɛ̀n-Sàndí bàl-è.
      Beɲji-Yuu   dirty   ash=DEF   Ben-Sandi sweep.up-PFV.L
      'Beɲji-Yuu's dirty ashes (Top), Ben-Sandi swept [them] up.'[61]

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59 Ondom Piri is a yearly festival at the beginning of hot season in which several dances take place over the span of several days.

60 I am told these lyrics translate to roughly 'Oh Bentiyaa, you have to talk about millet.'

61 Meaning he succeeded him as Hogon.

63.   *Áá Bèɲ-Jámbá bàl-è.*
        ah Beɲ-Jamba sweep.up-PFV.L
        'Ah, Beɲ-Jamba swept [them] up.'

64. S: *Bèɲ-Jámbá.*
        'Beɲ-Jamba.'

65. E: *Bèɲ-Jámbá. Bèɲ-Jámbá bàl-è.*
        Beɲ-Jamba Beɲ-Jamba sweep.up-PFV.L
        'Beɲ-Jamba. Beɲ-Jamba swept [them] up.'

66.   *Bèɲ-Jámbá úndɔ^{HL}=gɛ^{62} Bèn-Sàndí bàl-è.*
        Beɲ-Jamba ash=DEF Ben-Sandi sweep.up-PFV.L
        'As for Beɲ-Jamba's ashes, Ben-Sandi swept [them] up.'

67.   *Bóy wómɔ Sànà-ǹdɔ́-ɔ́gɔ́. Ámíru=mbe ǹdè^{L}=gɛ wó=ɲ̀.*
        name 3SG.POSS Sana-ndɔ-ɔgɔ chief=PL person=DEF 3SG.PRO=COP
        'His name [was] Sana-ndɔ-ɔgɔ. He was a person of the chief's [family].'

68.   *Bèn-Sàndí bàl-è.*
        Ben-Sandi sweep.up-PFV.L
        'Ben-Sandi swept [them] up.'

69.   *Bèn-Sàndí ⇒ ònnù^{L}=nɛ ù-ùndɔ̀^{L} bál-ínɛ́=gɛ^{63}*
        Ben-Sandi behind=OBL a-ash sweep-AGT.SG=DEF
        Bènjù-Àànɔ́=ɲ̀, kìdɛ̀-y, Bèn-Dàmàlá=ɲ̀.
        Benju-Aanɔ=COP thing-DIM Ben-Damala=COP
        'Ben-Sandi swept [them] up. The one who swept up the ashes after Ben-Sandi was Benju-Aanɔ, no, um, was Ben-Damala.'

70.   *Bèn-Dàmàlá.*
        'Ben-Damala.'

62 In this case, the possessive overlay is {HL} rather than {L}, something we see at times with older speakers.
63 [bálnɛ́=gɛ̀]

71.   *Éè   wó   kay   ǹdὲ^L   ɔ̀gɔ́   yó-è   kέm*
       yes   3SG.PRO TOP person Hogon enter-PFV.REL all

       Áɲú=nɛ   sù~súg-ù   ǹj-íyó-gú
       Aɲji=OBL RED~go.down-PFV.FOC lie.down-MP-PPL

       bé   wɔ́-gú,   ǹj-íyó-gú   bé   wɔ́-gù
       3PL.PRO be-PPL   lie.down-MP-PPL 3PL.PRO be-PPL

       'Yes, as for him, every person who entered the Hogon came down to Aɲju, they [were] sleeping there, they [were] sleeping there,'

72.   *Bὲn-Dàmàlá múrtà   wó   dένn-ὲ=gɛ   yὲlὲ-lí...*
       Ben-Damala rebellion 3SG.PRO look.for-PFV.REL=DEF come-NEG.PFV
       'Ben-Damala, he tried to rebel (i.e., to leave), he didn't come.'

73.   *ɔ̀gɔ̀-nɔ́   yὲlὲ-lí   g-àà   ǹdě-m*
       Hogon-HUM.SG   come-NEG.PFV say-PFV person-HUM.PL

       wó=ǹ   bé   dὲnné-gú   –   ây –   ǹdὲmɔ́
       3SG.PRO=OBJ 3PL.PRO look.for-PPL   hey LOG.SG.PRO

       gónju   dɔ́mmɔ̀=be=wa.
       scratching   wait.IMPF=be.PST=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.'[64]

74.   *Nέέ   dàmá   òndú=wa.   Bὲn-Dàmàlá=gɛ   wó=ǹ.*
       now   taboo   be.NEG=QUOT Ben-Damala=DEF 3SG.PRO=COP
       'Now, [he said] there is no taboo. That was Ben-Damala.'

75.   *Bὲn-Dàmàlá úndɔ̀^{HL}=gɛ   ǹdὲ^L   bàlá-dɛ=gɛ*
       Ben-Damala ash=DEF   person sweep.up-IMPF.REL=DEF

       nèy-yé=gɛ   émmé   bálà=be.
       two-ORD=DEF   1PL.PRO sweep.up.IMPF=be.PST

       'The the second person who swept up the ashes of Ben-Damala was us.'

76.   *Émmé   bàlá=be=gɛ   wìd-íy-aa*
       1PL.PRO sweep.up.IMPF=be.PST.REL=DEF return-MP-PFV

       Bὲɲjù-Àànɔ́   bàl-è.
       Beɲju-Aanɔ   sweep.up-PFV.L

       'What we were going to sweep up, Benju-Aanɔ came back and swept up.'

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64 If someone wants to give up their post, even now, they go to the fields and stay there.

77.   *Bèɲjù-Àànɔ́*   *bàl-è.*
        Beɲju-Aanɔ   sweep.up-PFV.L
        'Beɲju-Aanɔ swept [them] up.'

78.   *Bèɲjù-Àànɔ́*   *bál-è=gɛ*   *gàl-áa*   *nɛ́ɛ́*
        Beɲju-Aanɔ   sweep.up-PFV.REL=DEF   pass-PFV   now

        kay   *Bèɲjù-Àànɔ́=mɔ=gɛ*   *nɛ́ɛ́*   *kay*   *wìd-íy-aa*
        TOP   Beɲju-Aanɔ=POSS=DEF   now   TOP   return-MP-PFV

        émmé   *Bèɲjù-Ámbîɛm*[65]   *bàl-è.*
        1PL.PRO   Beɲju-Ambiɛm   sweep.up-PFV.L

        'What Beɲju-Aanɔ swept up passed, now Benju-Aanɔ's [ashes], now, afterwards, our Benju-Ambiem swept [them] up.'

79.   *Bèɲjù-Ámbîɛm.*
        'Benju Ambiem.'

80.   *Nɛ́ɛ́*   *Bèɲjù-Ámbìɛm*   *wààrù*^L   *ɔ̀gɔ́*   *tóò=be=le*
        now   Beɲju-Ambiɛm   time   Hogon   be.in.REL=be.PST=ASSOC

        kɛ́m,   *wàgé koy,*   *Bèɲjù-Ámbìɛm=mɔ*   *úndɔ́=gɛ*   *nɛ́ɛ́*
        all   far   EMPH   Benju-Ambiɛm=POSS   ash=DEF   now

        kay   *Àɲjú=nɛ*   *ɔ̀gɔ̀-Bádá*   *bàl-è.*
        TOP   Aɲji=OBL   Ɔgɔ-Bada   sweep.up-PFV.L

        'Now, during the time when Beɲju-Ambiɛm was Hogon, [it was] a long time ago! Benju Ambiem's ashes, now, Ɔgɔ-Bada swept [them] up in Anji.'

81.   *ɔ̀gɔ̀-Bádá.*   *ɔ̀gɔ̀-Bádá*   *bál-è=gɛ=mɔ=gɛ*
        Ɔgɔ-Bada   Ɔgɔ-Bada   sweep.up-PFV.REL=DEF=POSS=DEF

        nàmbá   *ùló-ndú-go=wɔ=gɛ*   *wó=ɲ̀.*
        not.yet   go.up-NEG.PPL-ADV=be=DEF   3SG.PRO=COP

        'Ɔgɔ-Bada. [That which] Ɔgɔ-Bada swept up has still not gone up [to Tongo-Tongo from Anji].'

82. S: *ɔ̀gɔ́*   *dìnè*^L*=gɛ=le*   *yèɛ̀...*   est-ce que   *ǹdɛ̌-m*
        Hogon   era=DEF=ASSOC   umm   Q.FR   person-HUM.PL

        sègú   *sɛ́gɛ́-gú=bi-ɛ̀*ⁿ*?*
        taxes   pay-PPL=be.PST-3PL

        'In the time of the Hogons, umm... did people pay taxes?'

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65 There seems to be no regular possessive tone overlays on a proper name.

83. E: *M̀m̀hḿ. ɔ̀gɔ́   dínὲ^{HL}=le...*
    mmhm   Hogon   era=ASSOC
    'Mmhmm. In the time of the Hogons...'

84. S: *éὲ...*
    'Yes...'

85. E: *ɔ̀gɔ̀^{L}   jàŋgú?*
    Hogon   fine
    '[The] Hogon fine?'

86. S: *éὲ.*
    'Yes.'

87. E: *Sɛ́gὲ-mɔ̀-dìɲ.*
    pay-CAUS-IMPF.3PL
    'They made [them] pay [it].'

88. S: *Est-ce que...*
    Q.FR
    'Did...'

89. E: *Wó   ɔ̀gɔ̀^{L}   gɔ̀ndɔ́   kay   wòlú   wàl-áa=bi-ὲ^{n}*
    3SG.PRO   Hogon   payment   TOP   farming   farm-PFV=be.PST-3PL
    kay   ɛ́g-àà-dὲ-w,   wó   ɔ̀gɔ̀-nɔ́=gɛ=mɔ=ɲ̀.
    TOP   hear-PFV-IMPF-2SG   3SG.PRO   Hogon-HUM.SG=DEF=POSS=COP
    'That, as for the Hogon payments, they farmed, do you understand, that
    was for the Hogon.'

90. *Wòlú –   mìnnɛ́   wómɔ   wálà-dìɲ.   Sègú=gɛ   wó=ɲ̀.*
    farming   field   3SG.POSS   farm-IMPF.3PL   taxes=DEF   3SG.PRO=COP
    'Farming – they farmed his field. That was the tax.'

91. *Bàà^{L}   gòó-dɛ   kɛ́m.   Yàè...   ǹdɛ́=gɛ   kɛ́m*
    year   leave-IMPF.REL   all   um   person=DEF   all
    mòmb-íy-ee   mìnnɛ́   wómɔ   wálà-dìɲ.
    get.together-MP.NF   field   3SG.POSS   farm-IMPF.3PL
    'Every year. Umm... everyone got together and farmed his field.'

92. *Éὲ...   mìnnɛ́   wómɔ   wàl-ì-ὲ^{n}=yó.*
    yes   field   3SG.POSS   farm-PFV.L-3PL=if
    'Yes... when they farmed his field.'

93. S: *ɔ̀gɔ́*   *nɛ̀ɛ̀*   *ǹdɛ́*   *sàd-è=yó*   *nɛ̀ɛ̀*   *yàŋéni*   *áwà-dìŋ?*
         Hogon   now   person   miss-PFV.L=if   now   how   catch-IMPF.3PL
         '[In the] chiefdom, now, if a person missed [a payment], how would they catch [him]?'

94. E: *Ǹdɛ́*   *sàd-è=yó*   *wó=ǹ*   *jàŋgú*   *dùù-r-ì-ɛ̀ⁿ=yo.*
         person   miss-PFV.L=if   3SG.PRO=OBJ   fine   carry-TR-PFV.L-3PL=if
         'If a person missed [a payment], they would burden [him] with a fine,'

95.   *yɛ̀l-áa*   *nɛ́ɛ́*   *kay*   *wó=ǹ*   *àw-ì-ɛ̀ⁿ=yo*
         come-PFV   now   TOP   3SG.PRO=OBJ   catch-PFV.L-3PL=if

    kɛ̀mᴸ   *káráŋgáá*   *àŋàᴸ*   *wómɔ=gɛ*   *mà~mánà-dìn.*
         all   vestibule   mouth   3SG.POSS=DEF   RED~seal-IMPF.3PL
         '[he would] come, now, if they caught him, they <u>would seal up</u> the door to his house.'

96.   *Bòyᴸ*   *gàm-gàmᴸ*   *dìyɛ̀ᴸ*   *nɔ̀=lé*   *yɛ́lɛ̀-dìn*   *koy.*
         tomtom   drum.type   big   this=ASSOC   come-IMPF.3PL   EMPH
         'They would come with this big drum!'

97.   *Gàm-gám=gɛ*   *bà-á*   *yɛl-ì-ɛ̀ⁿ=yó*   *bà-á*   *yɛl-ì-ɛ̀ⁿ=yó*
         drum.type=DEF   beat-PFV   come-PFV.L-3PL=if   beat-PFV   come-PFV.L-3PL=if
         'They came beating the big drum, they came beating the big drum,'

98.   *àŋàᴸ=wɔ̀=nɔ́*   *mán-ì-ɛ̀ⁿ=yó,*   *ónnu=baa*   *tɔ́gíl-aa*
         door=be.REL=this   seal-PFV.L-3PL=if   back=LOC   pierce-PFV

    gòò-nd-ì-ɛ̀ⁿ=yó   *gìnɛ̂*   *úwɔ=nɛ*   *ǹdɛ̀-mᴸ*
         leave-FACT-PFV.L-3PL=if   house   2SG.POSS=OBL   person-HUM.PL

    wɔ́=gɛ̀=mbe   *pɛ́cɛ̀*   *kɛ́m*   *áw-ee*   *dɔ̀~dɔ́nɔ̀-dìŋ.*
         be.REL=DEF=PL   half   all   catch-NF   RED~sell-IMPF.FOC.3PL
         'they would seal up the door that was there, pierce the back [of the house], take out [the people], they would catch half of the people who were in your house and <u>sell</u> them.'

99.   *Dɔ̀~dɔ́nɔ̀-dìŋ.*
         RED~see-IMPF.FOC.3PL
         'They would <u>sell</u> [them].'

100. S: *Kɔmbɔ́   yáà-dìɲ=yo   nὲὲ,   ɔ̀gɔ̀-nɔ́   ǹdὲ^L wó*
    war   go-IMPF.3PL=if   now,   Hogon-HUM.SG   person   3SG.PRO

    ḿbɛ́=ǹ   túyò-dὲ=ma   ǹdɛ̌-m=gɛ   kɛ́m   yáà-dε.
    want.REL=OBJ   send-IMPF=or   person-HUM.PL=DEF   all   go-IMPF

    'Now, if they [would] go to war, would the Hogon send [only] the people he wanted or would everyone go?'

101. E: *Bɛ́dɛ́   dìnɛ́-dε=geni,   ɔ̀^{n}hɔ̌^{n},   ɔ̀gɔ̀^{L} kɔ̀mbɔ́   yáà-dìɲ=yo,*
    big.road   take.turn-IMPF.REL=like   yes   Hogon   war   go-IMPF.3PL=if

    ɔ̀^{n}hɔ̌^{n},   ɔ̀gɔ̀^{L} kɔ̀mbɔ́   yáà-dìɲ   nɛ́ɛ́   kay
    yes   Hogon   war   go-IMPF.3PL   now   TOP

    'Like taking turns on a big road, yes, if they went to the Hogon war,'
    'yes, now they would go to war,'

102.   *Dámmá   jàw-íy-aa   kɔ̀mbɔ́=gɛ   yáà-dìɲ=yo   kὲm^L,*
    village   fight-MP-PFV   war=DEF   go-IMPF.3PL=if   all

    áúr-íy-í-έ^n=yo,   yà-í-έ^{n66}=yo
    agree-MP-PFV.L-3PL=if   go-PFV.L-3PL=if

    ǹdɛ̌-m=gɛ=ǹ   mòmb-íy-ee
    person-HUM.PL=DEF=OBJ   get.together-MP-NF

    sáà-dìɲ,   ǹdɛ̌-m=gɛ=ǹ   dáà-dìɲ.
    destroy-IMPF.3PL   person-HUM.PL=DEF=OBJ   kill-IMPF.3PL

    'if a village fought and went to war, they would agree and go, they would get together and destroy people, they would kill people.'

103. S: *Wó   kay   sàgàrà-nὲ^L dɔ̌ɔ́-dε   kɛ́m   yáà-dὲ.*
    3SG.PRO   TOP   youth-HUM.SG   arrive-IMPF.REL   all   go-IMPF

    'In that case, any young man that arrived [i.e. that could] would go.'

104. E: *Yáà-dὲ.   Éὲ   ságárá-m   kɛ́m   yáà-dìɲ.*
    go-IMPF   yes   youth-HUM.PL   all   go-IMPF.3PL

    'He would go. Yes, all the young men would go.'

105.   *Nɔ̌w=mbe   ɲ́y-àà-dìɲ=yo   yém   yáà-dìɲ.*
    medicine=PL   eat-PFV-IMPF.3PL=if   like.that   go-IMPF.3PL

    'They would take medicines, [and then] they would go like that.'

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66 It is unclear what the tone is doing on this and the previous perfective verb.

106.   *Yém*   *yàá-diŋ=gɛ*   *Mɔ́ɔ́lu=mɔ=gɛ,*   *Mɔ́ɔ́lu=mɔ=gɛ*
         like.that   go-IMPF.REL.3PL=DEF   Mori=POSS=DEF   Mori=POSS=DEF

         kɔ̀mbɔ́=gɛ   *tá-a*   *ǹdɛ́*   *pɛ́-tàành̀ù^L*   *dá-í-ɛ̀ⁿ.*

         war=DEF   shoot-PFV   person   ten-three   kill-PFV.L-3PL

         '[Those who] went like that for Mori, for Mori they started the war and killed thirty people.'

107. S: *Wó*   *kay*   *ɔ̀gɔ̀^L*   *kɔ̀mbɔ́=ǹ.*
         3SG.PRO   TOP   Hogon   war=COP

         'As for that, [that was] the Hogon war.'

108. E: *ɔ̀gɔ̀*   *kɔ̀mbɔ́*   *dìmbù^L.*   *Mɔ́ɔ́lu*   *ɔ̀gɔ̀^L*   *kɔ̀mbɔ̀^L...*
         Hogon   war   successor   Mori   Hogon   war

         'The successor [what followed] the Hogon war. The war for the chiefdom of Mori.'

109. S: *ɔ̀gɔ́=gɛ*   *mí*   *yóò-dɛ̀*   *mí*   *yóò-dɛ̀.*
         Hogon=DEF   1SG.PRO   enter-IMPF   1SG.PRO   enter-IMPF

         'It's <u>me</u> who will be chief, it's <u>me</u> who will be [chief].'

110. E: *Mí*   *yóò-dɛ̀*   *mí*   *yóò-dɛ̀=nɛ*   *ǹdɛ́*
         1SG.PRO   enter-IMPF   1SG.PRO   enter-IMPF=OBL   person

         pɛ́-tàành̀ù^L-go   *dà-ì-ɛ̀ⁿ.*

         ten-three-ADV   kill-PFV.L-3PL

         'Because of [this] "It's <u>me</u> who will be [chief], it's <u>me</u> who will be [chief]," they killed thirty people.'

111.   *Àmbìlè-Kúŋjɔ́*   *bàà^L=le*   *pɛ́-tàành̀ù^L*   *túru-go*   *ˈsígɛ́.*
         Ambile-Kunjɔ   father=ASSOC   ten-three   one-ADV   more

         'With Ambile-Kunjɔ's father, thirty-one.'

112.   *Yàa-ná=gɛ=le*   *pɛ́-tàành̀ù^L*   *néy-go*   *ˈsígɛ́.*
         female-HUM.SG=DEF=ASSOC   ten-three   two-ADV   more

         'With [his] wife, thirty-two.'

113.   *Kɔ̀nɔ́*   *tàŋà^L*   *wó=ǹ*   *dá-í-ɛ̀ⁿ.*   *Tàŋà^L*   *nìmbáà...*   *ɔ̀ɔ̀ɔ̀...*
         there.DD   side   3SG.PRO=OBJ   kill-PFV.L-3PL   side   over.there   uh

         '[They went] other there and killed her. On the other side... uh...'

114.   *Dàmmà-Dáá=nɛ*   *ǹdɛ́*   *néy.*   *Ǹdɛ́*   *néé*   *Nɛ̀mmɛ́=nɛ*   *ǹdɛ́*   *néy.*
         Damma-Daa=OBL   person   two   person   two   Nɛmmɛ=OBL   person   two

         'In Damma-Daa, two people. Two people, in Nɛmmɛ, two people.'

115.   *Bé=lɛ*   *ǹdɛ́*   *náy-go*   *yò-ì-ɛ̀ⁿ.*
    3PL.PRO=also   person   four-ADV   enter-PFV.L-3PL
    '[With] them as well, four [more] people entered [death].'

116. S: *Nɔ̌ɔ kày kó*   *wàgàdù^L kɛ́m púlɔ̀-m*   *yèlɛ̀-nní.*
    this TOP this.DD   time   all   Fulani-HUM.PL   come-NEG.PFV.3PL
    'As for this, at that time, the Fulbe hadn't come.'

117. E: *Púlɔ̀-m=mbe*   *ɔ̀ɔ̀ɔ̀...*   *kɔ̀mbɔ́=ǹ*   *koy,*   *ɔ̀gɔ̀^{L}*
    Fulani-HUM.PL=PL   uh   war=COP   EMPH   Hogon

    kɔ̀mbɔ́...   *púlɔ̀-m=yɔ́-ɛ̀ⁿ*   *dògò*   *àn-sáárá*
    war   Fulani-HUM.PL =be.DIST-3PL   but   AN-white.person

    kɔ̀mbɔ̀^{L}   *àn-sáárá*   *yèlɛ̀-lí.*
    war   AN-white.person   come-NEG.PFV

    '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.'

118. S: *Àn-sáárá*   *yèlɛ̀-lí.*   *Púlɔ̀-m*   *yɔ́-ɛ̀ⁿ*   *de.*
    AN-white.person   come-NEG.PFV   Fulani-HUM.PL   be.DIST-3PL   EMPH
    'The white people hadn't come. There were Fulbe.'

119. E: *Mɔ́ɔ́lu=mɔ=gɛ*   *tà-ì-ɛ́ⁿ=gɛ=le^{67}*   *àn-sáárá*
    Mori=POSS=DEF   shoot-PFV.L-3PL=DEF=ASSOC   AN-white.person

    yèl-áa=wɔ.
    come-PFV=be

    'At [the time when] they started the Mori [war], the white people came.'

120. S: *M̀báà*   *dɔ̌ɔ̀-lí.*
    here   arrive-NEG.PFV
    'They didn't make it here.'

121. E: *Nɔ̀mbáà*   *dɔ̌ɔ̀-lí.*
    here   arrive -NEG.PFV
    'They didn't make it here.'

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67 It is not clear why the tone of the perfective is LH here.

122.   *Bàŋjàŋgàrá=nɛ*   *yà-à*   *dɔ̀ɔ̀^{nL}*   *bé*
    Bandiagara=OBL   go-PFV   paper   3PL.PRO

    yáb-è=gɛ   *kɔ̀mbɔ́=gɛ*   *táà-dìⁿ*   *g-ì.*
    take-PFV.REL=DEF   war=DEF   shoot-IMPF.3PL   say-PFV.L

    'They went to Bandiagara, and the paper they took said they would make war.'

123.   *Tà~táà-dìⁿ*   *bé*   *g-àà.*
    RED~shoot-IMPF.FOC.3PL   3PL.PRO   say-PFV
    'They would <u>make war</u>, they said.'

124.   *M̀m̀hm̂*   *à=mbé*   *ségu=má=wa.*
    mmhm   who=PL   numerous=or?=QUOT
    'Mmhmm, [they asked] who are more numerous.'

125.   *Wó=mbe*   *ségu=yo*   *tà~táà-dìⁿ=yo*   *yà-ée*
    3SG.PRO=PL   numerous=if   RED~shoot-IMPF.FOC.3PL=if   go-NF

    táá=gɛ   *dɔ̀ɔ̀^{nL}* *bé*   *tɔ́-ɛ̀ⁿ=gɛ*   *dɔ́ɔ́ⁿ=gɛ=yɔ̂.*
    shoot.IMPER=DEF   paper 3PL.PRO write-PFV.REL=DEL   paper=DEF=be.DIST
    '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.'

126.   *ɔ̀gɔ́*   *nàm^L*   *tégé=ǹ,*   *ɔ̀gɔ́*   *nàm^L*   *tégé*   *g-àà,*
    Hogon   sun   shining=COP   Hogon   sun   shining   say-PFV

    bémɛ   *yém*   *tɔ́ⁿ-àà-dìⁿ.*
    3PL.POSS   like.that   write-PFV-IMPF.3PL
    '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.'

127.   *Yém*   *bé*   *tɔ́ⁿ-ɛ̀ =gɛ*   *kɔ̀mbɔ́=gɛ*
    like.that   3PL.PRO   write-PFV.REL=DEF   war=DEF

    yém   *bé*   *tá-è=gɛ.*
    like.that   3PL.PRO   shoot-PFV.REL=DEF
    'They wrote like, they made war like that.'

128.   *ɔ̀gɔ́*   *nàm^L*   *tégé*   *gál-è=nɛ*   *yàgá*
    Hogon   sun   shining   pass-PFV.REL=OBL   other

    Dèŋènɛ́=mɔ   *nɔ̀ɔ́*   *dògò*   *kɔ̀mbɔ́*   *ùŋgùlò-lí.*
    Dɛŋɛnɛ=POSS   this   but   war   arise-NEG.PFV
    'After the noon time [for] the Hogon passed, except for [the war] for Dɛŋɛnɛ, no wars were started.'

129. S: *Dèŋènɛ́=mɔ*   *nɔ̀=lɛ́*   *wó=lɛ*   *wó=lɛ*   *ɔ̀gɔ̀ᴸ*   *kɔ̀mbɔ́=ɲ̀.*
       Dɛŋɛnɛ=POSS this=also 3SG.PRO=also 3SG.PRO=also Hogon war=COP
       'That one for Dɛŋɛnɛ as well, that too, that too was a Hogon war.'

130. E: *ɔ̀gɔ̀ᴸ*   *kɔ̀mbɔ́,*   *wó=lɛ*   *Dèŋènɛ́=mɔ*   *nɔ̀ɔ́=lɛ*
       Hogon war   3SG.PRO=also Dɛŋɛnɛ=POSS this=also
       '[A] Hogon war, that too, that one for Dɛŋɛnɛ as well,'

131.   *nɛ́ɛ́*   *kay*   *Mɔ́ɔ́lu=mɔ=gɛ*   *tà-ì-ɛ̀ⁿ=gɛ,*   *y-ɛ̀-w=le,*
       now   TOP Mori=POSS=DEF shoot-PFV.L-3PL=DEF see-PFV.L-2SG=Q
       'Now, they had fought the Mori [war], you see,'

132.   *nɛ́ɛ́*   *kay*   *Dèŋènɛ́=mɔ=gɛ=lɛ*   *Kàndà-Túgɛ́ru*
       now   TOP Dɛŋɛnɛ=POSS=Def=also Kanda-Tugɛru

       ɔ̀gɔ́=gɛ   *wó*   *yóò-dɛ̀=ɲ̀*   *g-ì...*
       Hogon=DEF 3SG.PRO enter-IMPF=OBJ say-PFV.L

       'Now, for Dɛŋɛnɛ as well, Kanda-Tugɛru said, "I will become chief".'

133.   *àn-nàᴸ...*   *kìdɛ̀...* *Kóíré,* *Kándá* *ɔ̀gɔ́*   *yò-éélè*   *g-ì.*
       male-HUM.SG thing Koire, Kanda Hogon enter-NEG.IMPF say-PFV.L
       'The man... umm... Koire, he said Kanda would not be chief.'

134.   *Kándá*   *ɔ̀gɔ́*   *yò-éélè=nɛ*   *wó=wa*
       Kanda   Hogon   enter-NEG.IMPF=OBL 3SG.PRO=QUOT

       ɔ̀gɔ́=gɛ   *ǹdɛ̀ᴸ*   *yàgá=ɲ̀*   *óbó*   *g-ì.*
       Hogon=DEF   person other=OBJ give.IMPER say-PFV.L

       '[They said] Kanda would not be chief, he (they) said give the Hogon-ship
       to someone else.'

135.   *Ǹdèmɔ́*   *yóò-dɛ̀*   *g-ì.*
       LOG.SG.PRO enter-IMPF say-PFV.L
       'He$_i$ [Kanda] said he$_i$ would be [chief].'

136.   * M̀m̀hm̌ wó*   *yóò-dɛ̀=gɛ=nɛ*   *úŋgúl-aa*   *Bàɲàgàrá* *yà-ì-ɛ̀ⁿ.*
       mmhm 3SG.PRO enter-IMPF=DEF=OBL get.up-PFV Bandiagara go-PFV.L-3PL
       'Mmhm, because [he said] he would become [chief], they got up and went
       to Bandiagara.'

137.   *Yàbà-nní*   *Bàɲjàgàrá=nɛ*   *bé*   *yà-à.*
        agree-NEG.PFV.3PL   Bandiagara=OBL   3PL.PRO   go-PFV

        'They didn't accept [the fact that Kanda wanted to be chief], and they went to Bandiagara.'

138.   *Àn-sáárá*   *bé=ɲ̀*   *dɔ́ɔ̂ⁿ=gɛ*   *à=mbé*
        AN-white.person   3PL.PRO=OBJ   paper=DEF   who=PL

        ségu=ma=wa   *yém*   *wó*   *g-áà,*
        numerous=or?=QUOT   like.that   3SG.PRO   say-PFV

        Kàndà-Sómbò=mbe   *ǹdɛ̀mbé*   *ségu=wa.*
        Kanda-Sombo=PL   LOG.PL.PRO   numerous=QUOT

        'The white people, [their] paper asked like that who is more numerous, [and] [the people$_i$ of] Kanda-Sombo [said] they$_i$ are more numerous.'

139.   *Bé*   *ségu=yoo=lɛ,*   *Nám-Tínɛ̀=gɛ*   *Bàɲjàgàrá*
        3PL.PRO   numerous=if=also   Nam-Tinɛ=DEF   Bandiagara

        bɛ̀ɛ̀-nɛ̀^{L}-go=be.
        person.from-HUM.SG-ADV=be.PST

        'Even if [they] were more numerous, Nam-Tinɛ (the chief) was from Bandiagara.'

140.   *Bé*   *ségu=yo*   *yà-èè*   *táá=wa.*
        3PL.PRO   numerous=if   go-NF   shoot.IMPER=QUOT

        '[They said], if they are more numerous, [then] go make war.'

141.   *Yà-èè*   *táá=gɛ*   *bé*   *yɛl-áa,*   *Dɛ̀ŋɛnɛ̀-Dúú*
        go-NF   shoot.IMPER=DEF   3PL.PRO   come-PFV   Dɛŋɛnɛ-Duu

        bɛ̀ɛ̀-nɛ̀^{L}=gɛ   *Kóíró...*   *Àɲjú*   *ɔ̀gɔ̀^{L}=nɛ...*
        person.from-HUM.SG=DEF   Koiro   Aɲji   Hogon=OBL

        Àɲjú   *ɔ̀gɔ̀^{L}*   *gìnɛ̀^{L}=nɛ*   *wó-*   *wó*   *gíɲ-ɛ̀.*
        Aɲji   Hogon   house=OBL   3SG.PRO   3SG.PRO   beg-PFV.L

        '[Saying] go and make war, they came, Koiro, the person from Dɛŋɛnɛ-Duu, he- he came to beg [for warriors] at the chief of Anji, at the chief of Anji's house.'

142.   *Mɔ́ɔlu*   *ɔ̀gɔ̀^{L}*   *gìnɛ̀^{L}=nɛ*   *wó*   *gíɲ-ɛ̀.*
        Mori   Hogon   house=OBL   3SG.PRO   beg-PFV.L

        'He begged at the chief of Mori's house.'

143. Óndóm=nɛ   yà-à   wó   gín-ὲ.
      Ondom=OBL   go-PFV   3SG.PRO   beg-PFV.L
      'He went to Ondom and begged.'

144. Kɛ́m   wó=ǹ   bàr-ì-ὲⁿ.
      all   3SG.PRO=OBJ   help-PFV.L-3PL
      'Everyone helped him.'

145. Nɔ́ɔ́   pínníyaa   bé=ǹ   pàd-éélὲ=gɛ   bé
      this   after   3PL.PRO=OBJ   leave-NEG.IMPF.REL=DEF   3PL.PRO

      júg-ɔ̀=gɛ (coughs)   ǹdɛ̀mbé...   íyὲlὲ   Bàɲjàgàrá   yà-ì-ὲⁿ.
      know-PFV.REL=DEF   LOG.PL.PRO   again   Bandiagara   go-PFV.L-3PL

      'After that, [when] theyᵢ realized that [they] wouldn't leave them [i.e. that
      they couldn't fight them], [when] they realized that, (coughs), theyᵢ went to
      Bandiagara again.'

146. Bàɲjàgàrá   bὲὲ̀-nὲ̀ᴸ=gɛ   sɔ̀-ìnὲ̀ᴸ=gɛ
      Bandiagara   person.from=DEF   speak-AGT.SG=DEF

      bílé~bílé   tàà-gú=wa   koy.
      RED~double.speak   shoot-PROH=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).'

147. Bé=wa   bé   ségu   gὲ-lí=ma=wa.
      3PL.PRO=QUOT   3PL.PRO   numerous   say-NEG.PFV=or?=QUOT
      '[He asked] "Didn't you say that you were more numerous?"'

148. Bé   ség   g-ì ⇒   ííyé   yὲl-áa   ǹdɛ̌-m=gɛ
      3PL.PRO numerous say-PFV.L today   come-PFV   person-HUM.PL=DEF

      bàr-ì-ὲⁿ,
      help-PFV.L-3PL

      '[They] said they are more numerous, today [they] came [and said] the
      people helped them,'

149. yǎŋ   kán-aa   bàr-ì-ὲⁿ,   yà-éé   táá=wa,
      how   do-PFV   help-PFV.L-3PL   go-NF   shoot.IMPER=QUOT

      yà-éé   táá=gɛ   yà-à...   nɛ́ɛ́...
      go.NF   shoot.IMPER=DEF   go-PFV   now

      'how they helped [them], [the man from Bandiagara said] go make war,
      [they, his men] went to make war... now...'

150.   *wó*   *tá-ì-ὲⁿ=gɛ*   *wó=ɲ̀.*
         3SG.PRO   shoot-PFV.REL-3PL   3SG.PRO=COP
         'it was like that that they declared war.'

151.   *Wó*   *gál-è=nɛ*   *yàgá*   *kɔ̀mbɔ́*   *tàà-nní.*
         3SG.PRO   pass-PFV.REL=OBL   other   war   shoot-NEG.PFV.3PL
         'After that passed, they made no other war.'

23.3 Origin of Tongo-Tongo

Recorded on August 13, 2008 in Tongo-Tongo

   Speakers: Endekindiye Ouologuem (E), Sana Ouologuem (S), and Chief Ende Ouologuem (C)

1. E: * Àɲjùᴸ*   *gò-ààᴸ*   *yɛ́l-nέ=gɛ*[68]   *Ámbá-Kànù.*
        Aɲji   leave-PFV   come-AGT.SG=DEF   Amba-Kanu
        'The one who left Anji and came [here was] Amba-Kanu.'

2. S: *Ámbá-Kànù.*
        'Amba-Kanu.'

3. E: *Ámbá-Kànù.*
        'Amba-Kanu.'

4.   *Wó*   *nɔ̀nɔ́*   *wó*   *yɛ́l-ὲ=gɛ.*
        3SG.PRO   here   3SG.PRO   come-PFV.REL=DEF
        'He, he came here.'

5.   *Yὲl-áa*   *wó*   *tùmáá*   *Àmbà-Pàlá=nɛ*   *wó*   *dánn-ìy-ì=gɛ.*
        come-PFV   3SG.PRO   alone   Amba-Pala=OBL   3SG.PRO   sit-MP-PFV.REL=DEF
        '[He] came and he settled in Amba-Pala by himself.'

6.   *Nέέ...*   *yàa-ná*   *sὲ-lέ* ⇒   *yém*   *dàà-gú...*
        now...   female-HUM.SG   have-NEG   like.that   sit-PPL

        wɔ́-gú   *nέέ*   *gìnέ=gɛ*   *wó*   *úd-ɔ̀=gɛ.*
        be-PPL   now   house=DEF   3SG.PRO   build-PFV.REL=DEF

        'Now, he had no wife... being settled like that, being there now, he built a house.'

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[68] The result of pre-coronal syncope.

7.   *Gìnɛ́=gɛ*   *dὲmbɛ̂-dim=gɛ.*
        house=DEF   build.roof-INF=DEF
        'The covering of the house (i.e. he had to build a roof on the house).'

8.   *Gìnɛ́=gɛ*   *wó*   *úd-ɔ̀=gɛ,*   *bílu=gɛ*
        house=DEF   3SG.PRO   build-PFV.REL=DEF   ladder=DEF

        sὲ-lɛ̂   *dὲmbɛ̂-dim=gɛ=mɔ*   *bílu*   *sὲ-lɛ̂.*
        have-NEG   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.'

9.   *Kɔnɔ́*   *úŋgúl-aa*   *Ȁŋjú*   *yà-è.*
        there.DD   get.up-PFV   Aŋji   go-PFV.L
        'He got up from there and went to Anji.'

10.   *Ȁŋjú=nɛ*   *wó*   *yá-è=gɛ*   *bílu*   *wómɔ*
        Anji=OBL   3SG.PRO   go-PFV.REL=DEF   ladder   3SG.POSS

        jὲŋŋ-áa   *yὲl-áa.*
        pick.up-PFV   come-PFV

        '[When] he went to Anji, [he] picked up his ladder and came [back].'

11.   *Táb-ír-aa.*   *Bílu=gɛ*   *wó*   *táb-ìr-ì=gɛ.*
        touch-TR-PFV   ladder=DEF   3SG.PRO   touch-TR-PFV.REL=DEF
        '[He] put [it] up. He put up the ladder.'

12.   *Nɛ́ɛ̂...*   *gìnɛ́=gɛ*   *dὲmb-ὲ.*
        now   house=DEF   build.roof-PFV.L
        'Now... he built a roof [on] the house.'

13.   *Ȁŋjú*   *bὲlὲ-m^L=gɛ*   *gò-áa*   *wó=wa*
        Aŋji   person.from-HUM.PL=DEF   go.out-PFV   3SG.PRO=QUOT

        Tógó-ó-Tògò,   *Bílu-ó-Bìlù.*
        pour-o-pour   ladder-o-ladder

        'The people from Anji came out and called him Togo-o-Togo, Bilu-o-Bilu.'

14. S: *Wó*   *yàà*   *nɛ́ɛ̂*   *Tó~Tóŋó=mɔ*   *tìgὲ^L=gɛ*   *wó=ɲ̀.*
        3SG.PRO TOP now Tongo-Tongo=POSS   surname=DEF   3SG.PRO=COP
        'As for that now, that is the name of Tongo-Tongo.'

15. E: *Tógó-ó-Tògò,   Bílu-ó-Bìlù.*
pour-o-pour   ladder-o-ladder
'Togo-o-togo, Bilu-o-bilu.'

16. *Yém   wó   g-àà...   nɛ́ɛ́...   kɔ̀nɔ́   dáá-gú*
like.that 3SG.PRO   say-PFV   now   there.DD   sit-PPL

Kòìgé=nɛ   yàa-ná   dὲnn-ὲ.   Tàǎndù-Kìndíyé.
Koige=OBL   female-HUM.SG   look.for-PFV.L   Taandu-Kindiye

'Having said that... now... being settled there, [he] looked for a wife in Koige. Taandu-Kindiye (three shadows).'

17. *Tàǎndù-Kìndíyé.*
'Taandu-Kindiye.'

18. E: *Tàǎndù-Kìndíyé.   Tàǎndù-Kìndíyé=ǹ   wó   j-ɛ́=gὲ*
Taandu-Kindiye   Taandu-Kindiye=OBJ   3SG.PRO   marry-PFV.REL=DEF

nɔ̀nɔ́   dànn-íy-aa.
here   sit-MP-PFV

'Taandu-Kindiye. [When] he [had] married Taandu-Kindiye, he settled here.'

19. *Ì̀^{L} kùyɔ̀^{L} wó   nàl-áá-dὲ=gɛ*
child   first   3SG.PRO   birth-PFV-IMPF.REL=DEF

ámírù=mbe   gìnὲ^L ǹdὲ^L=ǹ.
chef=PL   house   person=COP

'The first child she gave birth to was one of the chief's people.'

20. *Kàndà-Sɔ̀ɔ́-Yὲlìm.*
'Kanda-Sɔɔ-Yɛlim (lit. Kanda I saw no speech).'

21. S: *Kàndà-Sɔ̀ɔ́-Yὲlìm.*
'Kanda-Sɔɔ-Yɛlim.'

22. E: *Éὲ. Bóy=gɛ   Àŋjú=nɛ   bé   j-àà,   Àŋjú*
yes name=DEF Aŋji=OBL 3PL.PRO   take-PFV   Anji

bὲlὲ^L-m   sɔ̀ɔ́   yὲ-nní=wa,   Kàndà-Sɔ̀ɔ́-Yὲlìm.
person.from-HUM.PL   speech see-NEG.PFV.3PL=QUOT   Kanda-Sɔɔ-Yɛlim.

'Yes. They took the name to Anji, the people from Anji [said that] they didn't see any words [in the name], [so] Kanda-Sɔɔ-Yɛlim.'

23. *Kàndà-Sɔ̀ɔ́-Yɛ̀lìm=gɛ*   *ùrɔ̀ᴸ=gɛ*   *ɛ̀ndɛ̀-Kìndíyé.*
    Kanda-Sɔɔ-Yɛlim=DEF   little.sibling=DEF   Ɛndɛ-Kindiye
    'Kanda-Sɔɔ-Yɛlim's younger sibling was Ɛndɛ-Kindiye.'

24. *ɛ̀ndɛ̀-kìndíyé*   *ùrɔ̀ᴸ=gɛ* –   *ɛ̀ndɛ̀-Kìndíyé=gɛ*   *ùrɔ̀ᴸ*   *Yà-Tɛ́ɛ́.*
    Ɛndɛ-Kindiye little.sibling=DEF   Ɛndɛ-Kindiye=DEF little.sibling Ya-Tɛɛ
    'Ɛndɛ-Kindiye's younger sibling – Ɛndɛ-Kindiye's younger sibling was Ya-Tɛɛ.'

25. *Émmé*   *Yà-Tɛ̀ɛ̀-gòmbóló*   *gɛ́-dɛ̀-y,*   *Yà-Tɛ́ɛ́.*
    1PL.PRO   Ya-Tɛɛ-lumpy.head   say-IMPF-1PL   Ya-Tɛɛ
    'We call [her] Ya-Tɛɛ the Lumpy Head, Ya-Tɛɛ.'

26. *Yà-Tɛ́ɛ́*   *úrɔ̀ᴴᴸ=gɛ*   *ɛ̀n-tààndú.*   *ɛ̀n-tààndù-ìyǎy.*
    Ya-Tɛɛ   little.sibling=DEF   Ɛn-Taandu   Ɛn-Taandu-girl
    'Ya-Tɛɛ's younger sibling was Ɛn-Taandu, Ɛn-Taandu the girl.'

27. *M̀m̀hm̂.*   *Wó=lɛ*   *wó=ɲ̀.*
    mmhmm   3SG.PRO=also   3SG.PRO=COP
    'Mmhmm, that was also that.'

28. S: *Yà-Tɛ́ɛ́=gɛ*   *nɛ̀ɛ̀... wó*   *nɛ̀ɛ̀... íí*   *bɛ̀l-áa=be=ma*   *bɛ̀lɛ̀-lí?*
    Ya-Tɛɛ=DEF now   3SG.PRO now   child   find-PFV=be.PST=or? find-NEG.PFV
    'Now, as for Ya-Tɛɛ... as for her... did she have a child or did she not?'

29. E: *Nánà*   *wó*   *gó-è=nɛ*   *àn-ná*   *ɛ̀ɛ̀ⁿ-lí.*
    never   3SG.PRO   go.out-PFV.REL=OBL   male-HUM.SG   marry-NEG.PFV
    'Never since she was born (lit. came out) did she marry a man.'

30. C: *Àn-ná*   *ɛ̀ɛ̀ⁿ-lí.*
    male-HUM.SG   marry-NEG.PFV
    'She never married a man.'

31. S: *Yà-Tɛ́ɛ́=gɛ.*
    Ya-Tɛɛ=DEF
    'Ya-Tɛɛ.'

32. E: *Yà-Tɛ́ɛ́=gɛ...*   *Yà-Tɛ̀ɛ̀-gòmbóló.*
    Ya-Tɛɛ=DEF   Ya-Tɛɛ-lumpy.head
    'Ya-Tɛɛ... Ya-Tɛɛ the Lumpy Head.'

33. | *Gìnέ* | *wómɔ=gɛ* | | *nìmɛ̌m* | *èè* | *mὲὲrᴸ* | *gìnέ* |
    |--------|-----------|--|---------|-----|--------|--------|
    | house | 3SG.POSS=DEF | | now | uh | mayor | house |

    úd-áá-dìm=gɛ=nɛ
    build-PFV-IMPF.REL.3PL=DEF=OBL

    'Her house, uh, [where] they have built the mayor's office now,'

34. | *Mὲὲrᴸ* | *gìnέ* | *úd-áá-dìm(=gɛ=nɛ)* | | *wó* |
    |---------|--------|---------------------|--|------|
    | mayor | house | build-PFV-IMPF.REL.3PL(=DEF=OBL) | | 3SG.PRO |

sáná^H=gɛ=mbe=le		*wó*	*jáw-ìy-ì=gɛ*
older.brother=DEF=PL=ASSOC		3SG.PRO	fight-MP-PFV.REL=DEF

    yɔ̀~yɔ̌w=gɛ.
    RED~mean.NOM=DEF

    '[By where] they built the mayor's office,[69] she fought with her older brothers, she was mean.'

35. | *Wó* | *jáw-ìy-ì=gɛ* | | *yènέ* | *yà-à* |
    |------|---------------|--|--------|-------|
    | 3SG.PRO | fight-MP-PFV.REL=DEF | | there.DD | go-PFV |

dànn-íy-aa	*gìnέ*	*wómɔ*	*wó*	*túmáá*	*úd-aa.*
sit-MP-PFV	house	3SG.POSS	3SG.PRO	alone	build-PFV

    'She fought [with them], went there, settled down, and built her house herself.'

36. | *Kɔ̀nɔ́* | *wɔ́-gú* | *àn-nàᴸ* | | *wó=ǹ* |
    |---------|---------|----------|--|--------|
    | there.DD | be-PPL | male-HUM.SG | | 3SG.PRO=OBJ |

dὲnnέ-dɛ		*kέm*	*m...*	*ámbá*	*wó=ǹ*
search.for-IMPF.REL		all	mm	god	3SG.PRO=OBJ

tɔ́ŋ-ɔ̀=nɛ,[70]		*àn-ná*		*ὲὲⁿ-lí.*
form-PFV.REL=OBL		male-HUM.SG		marry-NEG.PFV

    'Being there, any man who went to look for her, mm... since God made her, she never married a man.'

---

69 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.
70 Cf. *àmbà tɔŋɔ* 'destiny'.

37.　　*Kɔ̀nɔ́　　wɔ́-gú　　éé　nɛ́ɛ́　mm...　Àmbà^L　pàlá síb-áá-dìm...*
　　　　there.DD　be-PPL　uh　now　mm　god　　long　plant-PFV-IMPF.REL

　　　　àmbà^L　pàlá kó　síb-ee　wó=lɛ　　　ámbá wómɔ...　　ɔ̀ɔ̀ɔ̀...
　　　　god　　long that.DD plant-NF 3SG.PRO=also god　3SG.POSS　　uh

　　　　kìdɛ̀^L　dùù-ndú　　　ìbɛ̀^L　　ìì^L　　dùù-ndú=gɛ
　　　　thing　bottom-FACT.NOM　market　child　bottom-FACT.NOM=DEF

　　　　wó=lɛ　　　yènɛ́　　wó　　síb-aa.
　　　　3SG.PRO=also　there.DD　3SG.PRO　plant-PFV

　　　　'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.'

38.　　*Àn-ná=mɔ　　　　kó　　síb-ee　　wómɔ*
　　　　male-HUM.SG=POSS　that.DD　plant-NF　3SG.POSS

　　　　kó　　síb-ee　　kànà-m-énnè=wa.
　　　　that.DD　plant-N　do-CAUS-NEG.IMPF.3PL=QUOT

　　　　'[They] put up one for a man, [she] put up one for her, [the people said]
　　　　they could not allow that.'

39.　　*Wómɔ=gɛ　　　dàmb-áa　　ǹj-ír-áá-dìŋ=gɛ　　　　　wó=ǹ.*
　　　　3SG.POSS=DEF knock.over-PFV lie.down-TR-PFV-IMPF.3PL=DEF 3SG.PRO=COP
　　　　'[So] they knocked hers over (and made it lie down).'

40.　S:　*Jáàtì...　donc　　nìmɛ̌m　kay　nɛ́ɛ́　Mùgàà-Tàŋá=le ⇒*
　　　　exactly　thus.FR　now　　TOP　now　Mugaa-Taŋa=ASSOC

　　　　Tó~Tóŋó=le ⇒　　　kɛ́m Ámbá-Kànù gìnè̀^L=nɛ　gò-áá-dè=ǹ.
　　　　Tongo-Tongo=ASSOC　all　Amba-Kanu house=OBL leave-PFV-IMPF=COP

　　　　'Exactly... so... as for now, now Mugaa-Taŋa and Tongo-Tongo, both came
　　　　from the house of Amba-Kanu.'

41.　E/C:　*Kɛ́m.*
　　　　　all
　　　　　'Both (or everyone).'

42.　E:　*Nègè̀^L=lɛ́　　　bàmbà^L=lɛ́.*[71]
　　　　hidden=NEG.COP　secret=NEG.COP
　　　　'Nothing hidden, nothing blocked.'

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71 Idiomatic expression.

43. S: *Néέ   Kàndà-Sɔ́ɔ́-Yὲlìm=le   ὲndὲ-Kìndíyé=le*
    now   Kanda-Sɔɔ-Yεlim=Assoc   Εndε-Kindiye=ASSOC

    Yà-Tὲὲ-Gòmbóló=le   ὲn-Tààndù-ìyἄy=le   nɔ̀=mbé
    Ya-Tεε-lumpy.head=ASSOC   Εn-Taandu-girl=ASSOC   this=PL

    kay   báá⇒   ꞌtúmɔ́   ꞌnáá   ꞌtúmɔ́.
    TOP   father   one   mother   one

    'Now, Kanda-Sɔɔ-Yεlim, Εndε-Kindiye, Ya-Tεε the Lumpy Head, and Εn-Taandu the Girl, as for these, [they were all of] the same father and same mother.'

44. E/C: *Báá   ꞌtúmɔ́   ꞌnáá   ꞌtúmɔ́.*
    father   one   mother   one
    'Same father, same mother.'

45. S: *Bé   yàgú   sàà^L   ùlùm^L,   bé   Kóígé   sàà^L   ùlùm^L?*
    3PL.PRO   which   sister   children   3PL.PRO   Koige   sister   children
    'They [are] matrilinear children of which [place], they [are] matrilinear children of Koige?'

46. E/C: *Éé   bé   Kóígé   sàà^L   ùlùm^L=mbe=ɲ̀.*
    yes   3PL.PRO   Koige   sister   children=PL=COP
    'Yes, they are matrilinear children of Koige.'

47. S: *Néέ   nìmἔm   kó   yàà   nàl-íy-aa*
    now   now   that.DD   TOP   birth-MP-PFV

    Kὲndónnó=baa yá-ínέ   yà-à   nɔ̀nɔ́   wád-ínέ   wàd-áa.
    Kεndonno=Loc go-AGT.SG   go-PFV   here   stay-AGT.SG   stay-PFV

    'Now then, with that, [a lot of kids] were born, and those that went to Kendonno went, and those that stayed here stayed.'

48. E: *Wàd-áa.   Éé   nàl-íy-aa.*
    stay-PFV   yes   birth-MP-PFV
    '[They] stayed. Yes, [they] were born.'

49.   *Néέ   Ámbá-Kànù=gε   wó   Ámbá-Kànù=gε   έgὲ-dὲ-w=le.*
    now   Amba-Kanu=DEF   3SG.PRO   Amba-Kanu=DEF   hear-IMPF-2SG=Q
    'Now, Amba-Kanu, that [was] Amba-Kanu, do you understand?'

50. *Bèrɛ́* *wómɔ=le* *bé* *wɔ́-gú* *wó*
    stomach 3SG.POSS=ASSOC 3PL.PRO be-PPL 3SG.PRO

    báá^H *ᴵyím-áá-dɛ̀=gɛ* *y-ɛ̀-w=le.*
    father die-PFV-IMPF.REL=DEF see-PFV.L-2SG=Q

    '[When] they were pregnant with him, his father died, you see.'

51. *Bálá-Kànù*[72] *yím-áá-dɛ̀=gɛ* *y-ɛ̀-w=le.*
    Bala-Kanu die-PFV-IMPF.REL=DEF see-PFV.L-2SG=Q

    'Bala-Kanu died, you see.'

52. *Bèrɛ́* *wómɔ=le* *wɔ́-gú*[73] *Bálá-Kànù* *wó* *yím-aa...* *nɛ́ɛ́...*
    stomach 3SG.POSS=ASSOC be-PPL Bala-Kanu 3SG.PRO die-PFV now

    wó=ɲ̀... *pàndé,* *[áŋá* *m̀mɔ=diyɛ* *gàà]*[74],
    3SG.PRO=OBJ widowhood mouth 1SG.POSS=than big

    pàndé=gɛ *Sɛ̀mmɛ̀lɛ̀-Tàŋá=nɛ* *pánd-ìl-àà-dìɲ.*[75]
    widowhood=DEF Sɛmmɛlɛ-Taŋa=OBL widow-REV-PFV-IMPF.3PL

    'Being pregnant with him, Bala-Kanu died... now... it's bigger than my mouth, [but] they de-widowed (remarried) her in Sɛmmɛlɛ-Taŋa.'

53. *Kóntáká...* *bèlɛ̀-m^L=gɛ* *bé* *pánd-ìl-àà-dìɲ.*
    Kontaka... person.from-HUM.PL=DEF 3PL.PRO widow-REV-PFV-IMPF.3PL

    'The people from Kontaka, they de-widowed [her].'

54. *Pánd-íl-aa...* *émmé=ɲ̀...* *émmé=le*
    widow-REV-PFV 1PL.PRO=OBJ 1PL.PRO=ASSOC

    Sɛ̀mmɛ̀lɛ̀-Tàŋá=le *náá* *túmɔ́=ɲ̀,* *báá=gɛ* *dɛ́y=ɲ̀.*
    Sɛmmɛlɛ-Taŋa=ASSOC mother one=COP father=DEF different=COP

    '[They] de-widowed [her]... us... us and Sɛmmɛlɛ-Taŋa, [our] mother is the same, the father is different.'

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72 Really Báná-kànù, but the speaker is elderly and does not enunciate clearly.

73 [wɔ́g]

74 "It's bigger than my mouth." An expression used when speaking of elders with perceived disrespect.

75 Here, it is as if the tone pattern is that of the imperfective {HL}, but the verb is in the imperfective perfective form.

55. S: *Sèmmɛ̀lɛ̀-Tàŋá=le*   *émmé=le*   *náá=gɛ*
     Sɛmmɛlɛ-Taŋa=ASSOC   1PL.PRO=ASSOC   mother=DEF

     túmɔ́=ǹ   *báá=gɛ*   *dɛ́y=ǹ.*
     one=COP   father=DEF   different=COP

     '[For] Sɛmmɛlɛ Taŋa and us, the mother is the same, the father is different.'

56. E/C: *Báá=gɛ*   *dɛ́y=ǹ.*
      father=DEF   different=COP
      'The father is different.'

57. S: *Yàà^L*   *pàndè^L*   *úlûm.*
     female   widowed   children
     'Widow's children.'

58. E: *Nɛ́ɛ̂*   *yém*   *wɔ̀-gú*   *émmé*   *náá^H=gɛ*   *kìdɛ́=gɛ*   *wó*
     now   like.that   be-PPL   1PL.PRO   mother=DEF   thing=DEF   3SG.PRO

     jéŋŋ-è=gɛ   *ǹdɛ̀mɔ́*   *kánu*   *bàlè-ḿ[76]=wa.*
     pick.up-PFV.REL=DEF   LOG.SG.PRO   gold   sweep.up-PFV.L-1SG=QUOT

     'Now, being like that, our mother said she picked something up, that she found gold.'

59.   *ɛ́g-ɛ̂-w=le.[77]*
     hear-PFV.L-2SG=Q
     'Do you understand.'

60.   *Kánu*   *bàl-è-ḿ=gɛ*   *yàà*   *nɛ́ɛ̂*   *Bálá-Kànù=gɛ=ǹ*
     gold   sweep.up-PFV.L-1SG=DEF   TOP   now   Bala-Kanu=DEF=OBJ

     táŋú-nd-aa...
     transfer-FACT-PFV

     'Now, [saying] "I found gold", [she] transferred [that] to Bala-Kanu (a name).'

61.   *Nìmɛ̌m émmé*   *túmɔ̀m nánn-íy-aa*   *dímb-ɛ̀=gɛ*   *wó=ǹ.*
     now   1PL.PRO RECIP   chase-MP-PFV   follow-PFV.REL=DEF 3SG.PRO=COP

     'Now we chase each other and follow each other (i.e. because of Bala-Kanu, we are together, one after another).'

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76 This tone pattern could reflect an underlying H tone on the subject agreement suffix that surfaces when something follows it.

77 Why the perfective is H here is unclear.

62. S: *M̋ḿḿ wó   wó   jéŋŋ-è=gɛ   nɛ́ɛ́*
    mmm 3SG.PRO 3SG.PRO pick.up-PFV.REL=DEF now

    súgɔ́-nɔ=gɛ=ǹ...
    little.sibling-HUM.SG=DEF=OBJ

    'Mmm, [when] she [had] picked it up, now, to the little brother...'

63. E: *Éèyɔ́ wó   kay wó   jéŋŋ-è=gɛ*
    yes   3SG.PRO TOP 3SG.PRO pick.up-PFV.REL=DEF

    nɛ́ɛ́ kay úlûm   wómɔ=mbe=ǹ   ób-ù=lɛ=ma.
    now TOP children 3SG.POSS=PL=OBJ give-PFV.L=NEG.COP=or?

    'Yes, as for that, what she picked up, now, did she not give it to her children.'

64. *Nɛ́ɛ́   kay Sɛ̀mmɛ̀lɛ̀-Tàŋá yé=tòò^L   émmé   yé=tòò-y^L.*
    now TOP Sɛmmɛlɛ-Taŋa EXIST=be.in 1PL.PRO EXIST=be.in-1PL

    'Now, there is Sɛmmɛlɛ-Taŋa and us.'

65. *Nɛ́ɛ́   sàw... Sɔ̀ɔ̀-Dámmá   tòò-lɛ́   koy.*
    now Saw   Sɔɔ-Damma be.in-NEG Emph

    'Now, Saw... Sɔɔ-Damma is not a part of that!'

66. C: *Sɔ̀ɔ̀-Dámmá   tòò-lɛ́.*
    Sɔɔ-Damma be.in-NEG

    'Sɔɔ-Damma is not part of that.'

67. S: *ɔ́hɔ̀hɔ̀.*
    'Uh-huh, uh-huh.'

68. E: *Sɔ̀ɔ̀-Dámmá   tòò-lɛ̀.*
    Sɔɔ-Damma be.in-NEG

    'Sɔɔ-Damma is not part of that.'

69. *Sɔ̀ɔ̀-Dámmá=le   émmé=le   bàà^L   íí=ǹ   de ⇒*
    Sɔɔ-Damma=ASSOC 1PL.PRO=ASSOC father child=COP EMPH

    'Sɔɔ-Damma and us, we are paternal relatives.'

70. *Náá=gɛ   túmɔ́=lɛ.*
    mother=DEF one=NEG.COP

    'The mother is not the same.'

71. *Émmé=le*   *Sɛ̀mmɛ̀lɛ̀-Tàŋá=le*   *náá*   *túmɔ́=ǹ.*
1PL.PRO=ASSOC   Sɛmmɛlɛ-Taŋa=ASSOC   mother   one=COP
'Us and Sɛmmɛlɛ-Taŋa, [our] mother is the same.'

72. *Nòŋgóni...*   *wó*   *hálè*   *Sɛ̀mmɛ̀lɛ̀-Tàŋá*
like.that   3SG.PRO   even   Sɛmmɛlɛ-Taŋa

     bɛ̀lɛ̀-m^L=gɛ=mɔ=nɛ   *ɛ̀sɛ̀-lí*
person.from-HUM.PL=DEF=POSS-OBL   be.clear-NEG.PFV

     koy,   *yém*   *bǎy-ni...*
EMPH   like.that   until-ADV
'Like that... it wasn't clear even to the people of Sɛmmɛlɛ-Taŋa, not so much.'

73. S: *Sɔ̀ɔ̀-Dámmá*   *émmé*   *gé-dɛ̀=gɛ*   *nɛ̀ɛ̀*
Sɔɔ-Damma   1PL.PRO   say-IMPF.REL=DEF   now

     nɔ̀nɔ́   *gò-àà*   *Dɛ̀ŋɛ̀nɛ́=baa*   *dìmbɛ́-gú*   *yém*   *yà-è.*
here   leave.from-PFV   Dɛŋɛnɛ=LOC   follow-PPL   like.that   go-PFV.L
'Now, [what] we call Sɔɔ-Damma, [he] left here, and went like that, via Dɛŋɛnɛ.'

74. E: *Sɔ̀ɔ̀-Dámmá*   *Bárá-ɔ́rɔ̀*[78]*=nɛ*   *wó*   *úŋgùl-ì=gɛ*
Sɔɔ-Damma   Bara-Ɔrɔ=OBL   3SG.PRO   get.up-PFV.REL=DEF

     Dɛ̀ŋɛ̀nɛ̀-Dáá=nɛ   *yà-à*   *wò*[79]   *dánn-ìy-ì=gɛ.*
Dɛŋɛnɛ-Daa=OBL   go-PFV   3SG.PRO   sit-MP-PFV.REL=DEF
'Sɔɔ-Damma got up from Bara-Ɔrɔ, then went to Dɛŋɛnɛ-Daa, where he settled down.'

75. *Kɔ̀nɔ́*   *dáà=b-àà*[80]   *Dɛ̀ŋɛ̀nɛ̀-Dáá=nɛ*   *wɔ́-gú*
there.DD   seated=be-PFV   Dɛŋɛnɛ-Daa=OBL   be-PPL

     Dɛ̀ŋɛ̀nɛ̀-Dáá   *ìyày^L,*   *yàà-nà^L*   *j-ɛ̀.*
Dɛŋɛnɛ-Daa   girl   female-HUM.SG   marry-PFV.L
'[Having] settled there, being in Dɛŋɛnɛ-Daa, he married a girl, a woman from Dɛŋɛnɛ-Daa.'

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78 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.

79 The pronoun is unusually L-toned here.

80 Some sort of non-final chained form of the past quasi-verb *=be*.

76. *Yàa-ná=gɛ* *wó* *j-ɛ́=gɛ̀* *wó=lɛ* *yènɛ́*
    female-HUM.SG=DEF 3SG.PRO marry-PFV.REL=DEF 3SG.PRO=also there

    yà-à... *ɔ̀ɔ̀ɔ̀...* *Túmbɔ̀l* *bɛ̀ɛ̀-nɛ̀ᴸ* *kìdɛ́=ǹ* *tɛ̀mb-ɛ̀.*
    go-PFV uh Tumbɔl person.from-HUM.PL thing=OBJ found-PFV.L

    'He married the woman, [and] she also went there... uh... he found someone from Tumbɔl.'

77. *Mmm...* *sáà...* *sáá...*
    mmm Saa Saa
    'Hmm... Saa... Saa...'

78. C: *Sàà-Tɔ́ŋɔ́mɔ́.*
    Saa-Tɔŋɔmɔ
    'Saa-Tɔŋɔmɔ.'

79. E: *Sáà,* *Sàà-Tɔ́ŋɔ́mɔ́=gɛ...* *wó* *Sàà-Tɔ́ŋɔ́mɔ́=gɛ* *wó=lɛ=ma.*
    Saa Saa-Tɔŋɔmɔ=DEF 3SG.PRO Saa-Tɔŋɔmɔ=DEF 3SG.PRO=NEG.COP=or?
    'Saa, Saa-Tɔŋɔmɔ... Wasn't it Saa-Tɔŋɔmɔ.'

80. *Nìmɛ̌m* ⇒ *ám* ⇒ *kìdɛ́=mbe...*
    now um thing=PL
    'Now... umm... you know...'

81. *Nààbèlù-Bòró* *gìnɛ̀ᴸ=gɛ=nɛ* *dɔ̀ɔ́-dɛ-w*[81]*=yo* *nùmɔ̀ᴸ*
    Naabelu-Boro house=DEF=OBL arrive-IMPF-2SG=if hand

    nààndá *tàŋà̀ᴸ=nɛ* *gìnɛ́=kɔ̀=lɛ* ⇒ *dùmbɔ̀ᴸ* *kùnnùᴸ*
    left side=OBL house=be.PROX=NEG.COP stone big.piece

    táb-íyɛ́-dim=kɔ̀=lɛ ⇒ *éè* *gìnɛ́=gɛ* *wó=ǹ.*
    touch-MP-INF=be.PROX=NEG.COP yes house=DEF 3SG.PRO=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.'

82. *Wó* *kɔ̀nɔ́* *yà-à* *Sáá=gɛ* *gìnɛ̀ᴸ=nɛ* *wó* *dánn-ìy-ì=gɛ.*
    3SG.PRO there.DD go-PFV Saa=DEF house=OBL 3SG.PRO sit-MP-PFV.L=DEF
    'He (the man from Sɔɔ-Damma) went there and settled at Saa's house.'

---

81 The tone pattern here is like that in relative clauses rather than main clauses.

83.   *Néέ   Dὲŋὲnὲ-Dáá=nε   yàa-ná   wó*
now Dεŋεnε-Daa=OBL female-HUM.SG 3SG.PRO

já-è=gε   ìì^L   kùyɔ̀^L nàlá-dim=gε...   kìdὲ... â.
take-PFV.REL=DEF child first give.birth-IMPF.REL.3PL=DEF thing uh
'Now, he brought a wife to Dεŋεnε-Daa, [and] the first child they had
was... um... ah.'

84. C: *Kàndà-Nĕm=lε.*
Kanda-Nεm=NEG.COP
'Wasn't it Kanda-Nεm?'

85. E: *Kàndà-Nĕm.*
'Kanda-Nεm.'

86. C: *Kàndà-Nĕm.*
'Kanda-Nεm.'

87. E: *Éé   Kàndà-Nĕm nàl-è...*
yes Kanda-Nεm birth-PFV.L
'Yes, [she] gave birth to Kanda-Nεm.'

88.   *Néέ   Kàndà-Nĕm wó   nàl-áa*
now Kanda-Nεm 3SG.PRO give.birth-PFV

nàl-áá-dὲ=gε   yàà... wó   yàà Kŏm
birth-PFV-IMPF.REL=DEF TOP 3SG.PRO TOP Koum

bὲlὲ-m^L   bɔ̀rɔ̀gɔ́=gε=baa   dàlìrì^L
person.from-HUM.PL valley=DEF=LOC good.things

gàmbéé bé   bὲl-áá-dὲ=gε   wó=ǹ.
some 3PL.PRO find-PFV-IMPF.REL=DEF 3SG.PRO=COP
'Now, as for [when] Kanda-Nεm 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.'

89. C: *Kŏm   mὲg-áa   bé   sέ=gὲ   wó=ǹ.*
Koum boss.around-PFV 3PL.PRO have.REL=DEF 3SG.PRO=COP
'They [the people of Kanda-Nεm] bothered [the people] from Saoura-Koum.'

90. S: *M̀mhm̂.*
'Mmhmm.'

23.4 Dogon funerals in the old days

Recorded on August 13, 2008 in Tongo-Tongo

    Speakers: Endekindiye Ouologuem (E), Sana Ouologuem (S), and Chief Ende Ouologuem (C)

1. S: *Gɛ̌m   kɔ̀lɔ̀^{L}=nɛ   nɛ̀ɛ̀   èè... kìdɛ̀^{L} ɲjɛ́=mbe ɲjɛ́=mbe háàn-àà-dɛ̀.*
    funeral inside=OBL now uh   thing what=PL what=PL be.right-PFV-IMPF
    'Now, in funerals, what sorts of things were normally done?'

2. E: *Gɛ̌m   kɔ̀lɔ̀^{L}=nɛ.   Kìdɛ̀^{L} káná=b-i-ɛ̀^{n}.*
    funeral inside=OBL   thing do.IMPF=be.PST.REL-3PL
    'In funerals. The thing[s] [we] used to do.'

3. *Gɛ̌m   kɔ̀lɔ̀^{L}=nɛ.   Bǎy=gɛ   dɛ̀nn-ì-ɛ̀^{n}=yo   ìsǎy ɛ̀nn-ì-ɛ̀^{n}=yo...*
    funeral inside=OBL day=DEF search-PFV.L-3PL=if grain wet-PFV.L-3PL=if
    'In funerals. They would set a date and wet the grain...'

4. *m̀ḿ...   ìsǎy   ɛ́nn-ì-ɛ̀^{n}=yo,   ìsǎy=gɛ...   uhh...*
    mm   grain wet-PFV.L-3PL=if grain=DEF uh

    nàm-ì-ɛ̀^{n}=yo,   kɔ̀ɲjɔ́ àl-ì-ɛ̀^{n}=yo,   kɔ̀njɔ́=gɛ   gò-è=yó,
    grind-PFV.L-3PL=if beer brew-PFV.L-3PL=if beer=DEF go.out-PFV.L=if

    'Mmm... they would wet the grain, [and] grind the grain, [and] brew millet beer, [and] once the millet beer [had] come out,'

5. *Nɛ́ɛ́ kay... dɔ̀gɔ̌-m...   ɔ̀ɔ̀... dìgɛ̀^{L} năm... kádá-na=yo ⇒*
    now TOP Dogon-HUM.PL uh evening sun   oldest.man-HUM.SG=if

    Nìŋàlù^L íbɛ́=ǹ^{82}...   Nìŋàlù^L íbɛ́=ǹ   dìgɛ̀^{L}
    Ningari market=COP Ningari market=COP evening

    năm dìgɛ̀^{L} năm tíg-ìrɛ̀-dìŋ...   kádá-na=ǹ.
    sun evening sun call.names-TR-IMPF.3PL oldest.man-HUM.SG=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.'

---

82 Here the object marker is being used in place of a locative.

6.   *Dìgὲ^L*   *năm*   *tìg-ìr-ì-ὲⁿ=yo,*   *dìgὲ^L*
        evening   sun   call.names-TR-PFV.L-3PL=if   evening

         năm   *tìg-ìr-ì-ὲⁿ=yo*   *ɔ̀gɔ̀^L*   *búru=yɔ̂...*
         sun   call.names-TR-PFV.L-3PL=if   Hogon   horn=be.DIST

         ɔ̀gɔ̀^L   *búru=mbe*   *súdɔ̀-dìɲ.*
         Hogon   horn=PL   blow-IMPF.3PL

         '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.'

7.   *Wárá=mbe=le* ⇒   *màlbá=mbe=le* ⇒   *ɔ̀gɔ̀^L*   *búru=gɛ=mbe=le*   *éé...*
        spear=PL=ASSOC   gun=PL=ASSOC   Hogon   horn=DEF=PL=ASSOC   uh

         'With spears, and with guns, and with Hogon horns, uh...'

8.   *Yém*   *kàn-ì-ὲⁿ=yo,*   *nɛ́ɛ́*   *kay,*   *àgà^L*
        like.that   do-PFV.L-3PL=if   now   TOP   morning

         báá=mɔ[83]*...*   *nɛ́ɛ́*   *kay*   *gò-ì-ὲⁿ=yo*
         day=POSS   now   TOP   go.out-PFV.L-3PL=if

         'Once they [had] done that, now... the next morning... now, once they [had] come out,'

9.   *wárá=mbe=le*   *yónnu*   *yánnà-dìɲ,*[84]
        spear=PL=ASSOC   rounds   walk.around-IMPF.3PL

         màlbá=mbe   *táà-dìɲ,*   *sóm=mbe*   *jɔ́bɔ̀-ndɔ̀-dìɲ.*
         gun=PL   shoot-IMPF.3PL   horse=PL   run-FACT-IMPF.3PL

         'They would make their rounds with spears, they would shoot guns, [and] they would race horses.'

10.   *Éè*   *yém.*
        yes   like.that

         'Yes, like that.'

---

83 I believe this expression should be parsed with a possessive clitic, though the whole means 'the next morning.'

84 This expression means to walk around the village, either through the streets or around the edges, generally while singing.

11. S: *Néɛ́*   *súgɔ́=gɛ*   *néɛ̀...*   *yìmú*   *kɛ́m=nɛ*   *kánà-dìŋ=ma* ⇒ ...
    now   *sugɔ*=DEF   now   death   all=OBL   do-IMPF.3PL=or?

    ma   *ǹdɛ̀ᴸ*   *bɛ̀lú*   *sɛ́=mɔ=ǹ.*
    or?   person   animal   have.REL=POSS=OBJ

    'Now, the *sugɔ* dance, would they do it for any death or... or was it [just]
    for people who had animals?'

12. E: *Ǹdɛ̀ᴸ*   *bɛ̀lú=sɛ́*   *yáá* ⇒ .
    person   animal=have.REL   TOP

    '[For] people with animals....'

13. C: *Bɛ̀lú*   *bàŋàà ᴸ=mɔ=ǹ,*   *súgɔ́=gɛ.*
    animal   master=POSS=COP   *sugɔ*=DEF

    'It was for animal owners, the *sugɔ* [dance].'

14. E: *Súgɔ́...*   *ǹdɛ̀ᴸ*   *nàá*   *yé=sɛ̀ᴸ...*   *eee...*   *hálè*   *nàá,*
    sugɔ   person   cow   EXIST=have   uh   even   cow

    nàá   *yé=sɛ̀ᴸ,*   *ɛ̀nɛ́*   *yé=sɛ̀ᴸ.*
    cow   EXIST=have   goat   EXIST=have

    'The *sugɔ*... [it was for] people who have cows... uh... even cows, who have
    cows, who have goats.'

15.   *Yém*   *kán-àà-dɛ̀=yo,*   *súgɔ́=gɛ...*   *gɔ́ɔ̀-dìŋ*   *tíí=gɛ*
    like.that   do-PFV-IMPF=if   *sugɔ*=DEF   dance-IMPF.3PL   one=DEF

    ɛ̀nɛ̀ᴸ   *gír-ínɛ́*   *kúyɔ́-go*   *gɔ́ɔ̀-dɛ̀.*   *ɛ̀nɛ̀ᴸ*   *gír-ínɛ́=gɛ.*
    goat   herd-AGT.SG   first-ADV   dance-IMPF   goat   herd-AGT.SG=DEF

    'Once it had been done like that, they would dance the *sugɔ*, the first
    (number one), the goat herder[s] would dance first. The goat herder[s].'

16.   *Wó*   *gɔ́-ɛ̀=yo,*   *nàà ᴸ*   *gír-ínɛ́=gɛ*   *ónnu=nɛ*   *gɔ́ɔ̀-dɛ̀.*
    3SG.PRO   dance-PFV.L=if   cow   herd-AGT.SG=DEF   last=OBL   dance-IMPF

    'Once he (they) had danced, the cowherd would dance last.'

17.   *Wó=lɛ*   *wó=ǹ.*
    3SG.PRO=also   3SG.PRO=COP

    'It was also that (i.e. that's how it was).'

18.   *Yónnu=gɛ*   *yá-ì-ɛ̀ⁿ.*
    rounds=DEF   go-PFV.L-3PL

    'They did their rounds.'

19. *Wárá   kúyɔ́   yɛ̀l-ɛ̀...   yóò-dɛ̀,   wárá*
     spear   first   come-PFV.L   enter-IMPF   spear

     nàà-nù^L,   yónnu=gɛ   wó   kúyɔ́   yóò-dɛ̀.
     master-HUM.SG   rounds=DEF   3SG.PRO   first   enter-IMPF

     'First the spear came, he would enter [the family of the deceased], the
     spear master, he entered into the rounds first.'

20. *Wó-   wó...   wárá   nàà-m^L=gɛ   yànn-áa*
     3SG.PRO   3SG.PRO   spear   master-HUM.PL=DEF   make.rounds-PFV

     gò-ì-ɛ̀ⁿ=yo   màlbá   nàà-m^L   yé=yòò-dìⁿ^L.
     leave-PFV.L-3PL=if   gun   master-HUM.PL   EXIST=enter-IMPF.3PL

     'When he-, he... the spear masters had made their rounds and left, [then]
     the gun masters would enter.'

21. *Wó=lɛ   wó=ɲ̀.*
     3SG.PRO=also   3SG.PRO=COP
     'It was also that.'

22. S: *ɛ̀ɛ̀... nɛ́ɛ́... kúyɔ́   émmé   nɔ̀mbáà   yɛ́l-ím   dògò èè... kídɛ́...*
     uh   now   before 1PL.PRO   around.here   come-AGT.PL   but   uh   thing
     'Uh... now... if not for us, the people who came here before... uh... uh...'

23. *Bòmbú=baa=mbe   kúyɔ́   dàbá=gɛ=mbe=le...   dàbà^L*
     Bombu-LOC=PL   before   hoe=DEF=PL=ASSOC   hoe

     ǹdɛ́=gɛ   wòlú   wàlá=be=gɛ=mbe,
     person=DEF   farming   farm.IMPF=be.PST.REL=DEF=PL

     'The people of Bombu, before, [they would take] hoes and... the hoes the
     person used to farm with,'

24. *ínɛ́=gɛ=mbe   kɛ́m   gàmbáá   múnj-ùlɔ̀-dìⁿ,   gàmbáá*
     iron=DEF=PL   all   some   break-TR-IMPF.3PL   some

     bànjá=gɛ=mbe=le   kɛ́m   jɔ́gɔ̀=bì-ɛ̀ⁿ
     bowl=DEF=PL=ASSOC   all   break.IMPF=be.PST-3PL

     'and some [people] would break all of the blades, some people used to
     break all of the bowls.'

25. Est-ce que   *émmɛ=baa   kó=yɔ̂?*
     Q.FR   1PL.POSS=LOC   that.DD=be.DIST
     'Did that exist where we are?'

26. E: *Émmɛ=baa   yé=bè^L.*   *Pà~pád-ì-ɛ̀ⁿ.*
    1PL.POSS=LOC   EXIST=be.PST   RED~leave-PFV.FOC-3PL
    'It was where we are. They <u>abandoned</u> [it].'

27.   *Émmɛ=baa...   yàá-m...   kɔ̀rɔ́=gɛ...   ìsǎy*
       1PL.POSS=LOC   female-HUM.PL   calabash=DEF   grain

       jòò-nd-ì-ɛ̀ⁿ=yo,   *yìmú=gɛ=ǹ*
       fill-FACT-PFV.L-3PL=if   death=DEF=OBL

       tìg-ìr-ì-ɛ̀ⁿ=yo,   *mòlùgíyé=gɛ=nɛ*
       call.names-TR-PFV.L-3PL=if   doorway=DEF=OBL

       jɔ̀g-ì-ɛ̀ⁿ=yo   *bírìdìì...   kánà-dìⁿ.*
       break-PFV.L-3PL=if   scattered   do-IMPF.3PL

       'Around here, women... they would fill a calabash with grain, sing the
       names of the ancestors of the deceased, break the calabash in the doorway,
       they would splatter it everywhere.'

28.   *Tùmbùtù^L   nɛ̌m=mbe   nàmá=mbe   kɛ́m   kánà-dìⁿ.*
       Timbuktu   salt=PL   meat=PL   all   do-IMPF.3PL
       'Timbuktu salt, etc., meat etc., they would do [it] all.'

29. C: *Árá=mbe.*
       rice=PL
       'Rice, etc.'

30. V: *Árá-   kánà=b-ì-ɛ̀ⁿ.*   *Kɛ́m   pà~pád-ì-ɛ̀ⁿ.*
       rice   do.IMPF=be.PST-3PL   all   RED~leave-PFV.FOC-3PL
       'They used to do rice [too]. They <u>abandoned</u> it all.'

31.   *ɔ̀gɔ̀-nɔ́*   *pàdà-m-ì.*
       Hogon-HUM.SG   leave-CAUS-PFV.L
       'The Hogon made [them] abandon [it].'

32. S: *ɔ̀gɔ̀-nɔ́=gɛ*   *pádà-m-ì.*
       Hogon-HUM.SG=DEF   leave-CAUS-PFV.L
       'The Hogon made [them] abandon [it].'

33. E: *Éè.*
       'Yes.'

34. S: *Yámu   gàbáá=y   g-àà.*
       waste   too.much=COP   say-PFV
       'He said it was too much waste.'

35. E: *Éè.*
    'Yes.'

36. C: *Néê̂   súgɔ́=gɛ=nɛ   bèlù^L   gír-íné=gɛ,   íí*
    now   *sugɔ*=DEF=OBL   animal   herd-AGT.SG=DEF   child

    wómɔ=gɛ   kɛ̀mmɛ̀^L   póó=nɛ   ém   jóó-nd-ì=yo,
    3SG.POSS=DEF   gourd   fat=OBL   milk   fill-FACT-PFV.L=if

    yɛ̀l-áa   yìmú=gɛ   tìg-ìr-ì-ɛ̀^n=yo,
    come-PFV   death=DEF   sing.names-TR-PFV.L-3PL=if

    mòlùgíyé=nɛ   dáà-nì   kàn-ì=yo   bìréé,
    doorway=OBL   chuck.down-ADV   do-PFV.L=if   scattered

    'Now, in the *sugɔ*, 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!!*'

37. *Wó=lɛ   yém   kánà=b-ì-ɛ̀^n.*
    3SG.PRO=also   like.that   do.IMPF=be.PST-3PL
    'They also used to do [things] like that.'

38. S: *Wó=lɛ   kémmɛ̂...*
    3SG.PRO=also   gourd
    '[So] that also, the gourd...'

39. C: *ɔ̀^nhɔ̂^n   kémmɛ́=gɛ   kɔ̀nɔ́   kɔ́llɔ̀-dìn.   Kògódó=gɛ.*
    uh-huh   gourd=DEF   there.DD   take.down.REV-IMPF.3PL   shell=DEF
    'Yes, they would unhook the gourd form up there. The shell [of it].'

40. E: *Ǹdɛ̀^L   bèlú   sɛ̀-lɛ̀=mɔ=ǹ   súgɔ́   gɔ̀-énnè.*
    person   animal   have-NEG.REL=POSS=OBJ   *sugɔ*   dance-NEG.IMPF.3PL
    'They would not dance the *sugɔ* for those who did not have animals.'

41. C: *Bɛ̀lú   sɛ̀-lɛ̀=mɔ   súgɔ́   gɔ̀-énnè.*
    animal   have-NEG=POSS   *sugɔ*   dance-NEG.IMPF.3PL
    'They did not dance the *sugɔ* for [a person] without animals.'

42. *Wómɔ   kay   ónnu=ǹ.*
    3SG.POSS   TOP   behind=COP
    'As for his [funeral], it would come afterwards.'

43. S: *Wó   kay   súgɔ́=gɛ   kay   ǹdɛ́=gɛ   bɛ̀lú*
     3SG.PRO TOP   *sugɔ*=DEF TOP   person=DEF   animal

    nàà-nù^L=ǹ=yo   kɛ́m   yém   júgɔ̀-mɔ̀-dɛ̀.
    master-HUM.SG=COP=if   all   like.that know-CAUS-IMPF

    'As for that, as for the *sugɔ*, if a person was an animal owner, [it] would let everyone know that.'

44. C: *ɔ̀^{n}hɔ̂^{n} ɛ̀nɛ́=ǹ=yo=lɛ   gɔ́ɔ̀-dìn,   nàá=ǹ=yo=lɛ*
    uh-huh   goat=COP=if=NEG.COP dance-IMPF.3PL cow=COP=if=also

    gɔ́ɔ̀-dìn.
    dance-IMPF.3PL

    'Yes, even if it was a goat, they would dance, even if it was a cow, they would dance.'

45. E: *Gɔ́ɔ̀-dìn.*
    dance-IMPF.3PL
    'They would dance.'

46. C: *Wó   kay   bɛ̀lú   bànàà^L=mbe.*
    3SG.PRO TOP   animal   owner=COP.PL
    'As for that, [it was what they did for] animal owners.'

23.5 The story of the co-wives and their children

Recorded on June 15, 2008 in Tongo-Tongo
    Narrated by Segire Ouologuem

1.   Bon,   *yàa-ná$_i$=gɛ*   *wó$_i$*   *[ígὲ yàà-nà$_j$]^{HL}=gɛ^{85}*
     well .FR   female-HUM.SG=DEF 3SG.PRO   co-wife=DEF

     íí   wómɔ$_J$=gɛ   wó$_i$=le   pád-aa   dámmá   yà-è.
     child   3SG.POSS=DEF 3SG.PRO=ASSOC leave-PFV village go-PFV.L

     'Well, the woman$_i$, her$_i$ co-wife$_j$ left her$_j$ child with her$_i$ and went to the village.'

---

85 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 three or more syllables, it takes a {HL} overlay across the whole string; if it were simply 'her husband's wife', we would expect [wó ígɛ́^{H} yàà-nà^L].

2.   *Dámmá   wó   yà-à,   yàa-ná=gɛ   wó*
       village   3SG.PRO   go-PFV   female-HUM.SG=DEF   3SG.PRO

       òlú=baa   ɛ́ɛ́ⁿ   kɛ́bɛ́-nú   yà-è.
       field=LOC   ash   gather-PPL   go-PFV.L

       'She [the co-wife] went to the village, and the woman [≠the co-wife] went to the field to gather soda ash (from burning millet stalks).'

3.   *ɛ́ɛ́ⁿ=gɛ   kɛ́bɛ́-nú   yà-à,   wó   kɛ́bɛ́-gú   wó*
       ash=DEF   gather-PPL   go-PFV   3SG.PRO   gather-PPL   3SG.PRO

       kɛ́bɛ́-gú   sáy-nu   gáà-nd-ìy-ì.
       gather-PPL   a.lot-ADV   big-FACT-MP-PFV.L

       'She went to gather ash, and as she gathered and gathered, it [the pile of millet stalks] became very big.'

4.   *ɛ́ɛ́ⁿ=gɛ   sáy-nu   wó   gáà-nd-ìy-àà[86]   nɛ́ɛ́*
       ash=DEF   a.lot-ADV   3SG.PRO   big-FACT-MP-PFV   now

       gay   ɲăm   kúnd-ílé[87]   dɔ̀-è.
       TOP   fire   put-NOM   arrive-PFV.L

       'The ash (millet stalks) got so big, so now [the time] came to set fire [to them].'

5.   *Yàa-ná,   wó   íí   wómɔ=gɛ=le*
       female-HUM.SG   3SG.PRO   child   3SG.PRO=POSS=ASSOC

       wó   [ígὲ yàà-nà]^HL   ìⁱ^L=gɛ=le=wɔ.
       3SG.PRO   co-wife   child=DEF=ASSOC=be

       '[The] woman, she was (is) with her child and the child of her co-wife.'

6.   *Yém   wó   kán-aa.*
       like.that   3SG.PRO   do-PFV
       'She did like that.'

7.   Bon,   *í-   ɛ́ɛ́ⁿ=gɛ   wó   gàà-nd-íy-aa   wó*
       well.FR   ch-   ash=DEF   3SG.PRO   big-FACT-MP-PFV   3SG.PRO

       [ígὲ yàà-nà]^HL   ìⁱ^L=gɛ=ǹ   wó   bò-áa   wòô   g-àà
       co-wife   child=DEF=COP   3SG.PRO   call-PFV   present   say-PFV

       'Well, the [pile of] stalks got [so] big, she called her co-wife's child, he[88] said "Yes, I'm here",'

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86 An unusual tone pattern for this perfective non-final verb.
87 It is not clear why the tone of the object is not lowered here. It must not be being treated as a nominal compound.
88 The gender of the child is not specified in the story; I have arbitrarily assigned the child masculine gender.

8. *wó=wa*   *ɛ́ɛ́ⁿ=gɛ=nɛ*   *jɔ̀bɔ́*   *yóó=wa,*
    3SG.PRO=QUOT   ash=DEF=OBL   run.IMPER   enter.IMPER=QUOT
    'she told him to run into the millet stalks.'

9. *Kùgɔ̀lù^L*   *wó*   *mɔ́ɔ̀nd-ì*   *ɛ̀ɛ̀ⁿ^L*   *dúm=gɛ=nɛ.*
    stalk   3SG.PRO   assemble-PFV.REL   ash   pile=DEF=OBL
    '[run and enter into] the millet stalks she'd assembled in a pile.'

10. *Nɛ́ɛ́*   *gay*   *íí=gɛ*   *jɔ̀b-áa*   *yò-è=yó*   *ɲăm*   *kúndò-dè*   *g-àà.*
    now   TOP   child=DEF   run   enter-PFV.L=if   fire   put-IMPF   say-PFV
    'Now, once the child had run into [there], she said she would light the fire.'

11. *Wó=wa*   *sŏm*   *kó=yɛ́llè=gɛ*
    3SG.PRO=QUOT   horse   EXIST=come.IMPF.REL=DEF

    jɔ̀bɔ́   *yóó=wa*   *de,*   *gɔ̀ndɔ̀^{L}*   *sŏm*
    run.IMPER   enter.IMPER=QUOT   EMPH   Gɔndɔ   horse

    kó=yɛ́llè=gɛ   *jɔ̀bɔ́*   *yóó=wa.*
    EXIST=come.IMPF.REL=DEF   run.IMPER   enter.IMPER=QUOT

    '[She said] a horse is coming, run inside! The horse from Gɔndɔ is coming, run inside.'

12. *Núyɔ́-go*   *kìdè^L*   *wó*   *núyɔ́-dɛ=wa*   *sŏm*
    sing-ADV   thing   3SG.PRO   sing-IMPF.REL=QUOT   horse

    kó=yɛ́llè   *jɔ̀bɔ́*   *yóó=wa,*
    EXIST=come.IMPF   run.IMPER   enter.IMPER=QUOT

    gɔ̀ndɔ̀^{L}   *sŏm*   *kó=yɛ́llè*   *jɔ̀b-ée*   *yóó=wa.*
    Gɔndɔ   horse   EXIST=come.IMPF   run-NF   enter.IMPER=QUOT

    '[She] pretended to sing, "A horse is coming, run inside! The horse from Gɔndɔ is coming, run inside!"'

13. *Yém*   *wó*   *g-àà*   *íí=gɛ*   *wó*
    like.that   3SG.PRO   say-PFV   child=DEF   3SG.PRO

    jɔ́b-ɔ̀=gɛ   *ɛ́ɛ́ⁿ=gɛ*   *yòndíl-aa*   *yènɛ́*   *yò-è.*
    run-PFV.REL=DEF   ash=DEF   pull.aside-PFV   there.DD   enter-PFV.L

    '[The woman] having said [that], the child ran and pulled aside the millet stalks, and entered there.'

14. *Yènɛ́*   *wó*   *yó-aa*   *yàa-ná=gɛ*   *ɲăm*   *tɔ́ⁿ-aa*   *kùnd-ì.*
    there.DD   3SG.PRO   enter-PFV   female-HUM.SG=DEF   fire   strike-PFV   put-PFV.L
    'He went inside there, and the woman lit [the] fire.'

15.   *ɲăm tɔ́ⁿ-aa   wó   kúnd-aa íí=gɛ   yènɛ́   yím-aa=ỳ.*
           fire   strike-PFV 3SG.PRO put-PFV child=DEF there.DD   die-PFV=COP
           'She lit the fire, and the child died there.'

16.   *Yím-aa   ɲăm=gɛ   kɛ́m   wó=ɲ̀   tɛ́m-aa*
           die-PFV   fire=DEF   all   3SG.PRO=OBJ eat-PFV

           j-àà   ɛ́ɛ́ⁿ   wó   bìl-áa   yàa-ná=gɛ
           finish-PFV   ash   3SG.PRO   become-PFV   female-HUM.SG=DEF

           ɛ́ɛ́ⁿ   wómɔ   dùy-y-áa   gìnè-ý   yɛ̀l-ɛ̀.
           ash   3SG.POSS   load.up-MP-PFV   house-DIM   come-PFV.L

           '[He] died, the fire finished eating all of him up, he became ash, the
           woman loaded up his ashes and came home.'

17.   *ɛ́ɛ́ⁿ=gɛ   dùy-y-áa   gìnè-ý   wó*
           ash=DEF   load-MP-PFV   house-DIM   3SG.PRO

           yɛ́l-ɛ̀=gɛ,   éyɔ́ɔ̀ ⇒, [ígɛ́ yàà-nà]ᴴᴸ=gɛ   dámmá
           come-PFV.REL=DEF   uh-huh!   co-wife=DEF   village

           gò-áa   wó   yɛ̀l-áa,   íí=gɛ   òndú.
           leave-PFV   3SG.PRO   come-PFV   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].'

18.   *Íí   ǹdɛ́mmɔ   yàbáá=wɔ=ma=wa.*
           child   LOG.SG.POSS   where=be=or?=QUOT
           '[She asked] where is my child?'

19.   *á   ǹdɛ̀mɔ́   íí=gɛ=ɲ̀   yém   wó*
           ah   LOG.SG.PRO   child=DEF=OBJ   like.that   3SG.PRO

           g-àà   [ígɛ́ yàà-nà]ᴴᴸ=gɛ ǹdɛ̀mɔ́   nɔ̀nú
           say-PFV   co-wife=DEF   LOG.SG.PRO   here

           pád-aa   òlú   yà-è=ɲ̀=wa.
           leave-PFV   field   go-PFV.L=OBJ=QUOT

           'Ah, she asked for her child like that, [and] the co-wife said "I left him here
           and went to the fields".'

20. *É   wó=ǹ   ǹdɛ̀mɔ́   wó=le   pád-aa*
     eh   3SG.PRO=OBJ   LOG.SG.PRO   3SG.PRO=ASSOC   leave-PFV

     dámmá   yà-è=ǹ=wa.
     village   go-PFV.L=OBJ=QUOT

     '[She said] "Eh! I left him here with her and went to the village".'

21. *Wó   íí=gɛ=ǹ   nɔ̀nú pád-aa   òlú   yà-è.*
     3SG.PRO   child=DEF=OBJ   here   leave-PFV   field   go-PFV.L
     'She left the child here and went to the field.'

22. *Yállà   íí=gɛ=nɛ   nɛ́ɛ́   yàŋgénu   kàn-ì.*
     wonder   child=DEF=OBL   now   how   do-PFV.L
     'What happened to the child?'

23. *à   ǹdɛ̀mɔ́   nɔ̀nú pád-aa   òlú   yà-à*
     ah   LOG.SG.PRO   here   leave-PFV   field   go-PFV

     dùl-íy-aa   tɛ̀mbɛ̀-lí-m=wa.
     return-MP-PFV   find-NEG.PFV-1SG=QUOT

     '[The co-wife said] "Ah! I left him here and went to the field, and when I
     came back, I [could] not find [him]".'

24. *Dámmá   kɛ́m   íí=gɛ=ǹ   dènn-áa*
     village   all   child=DEF=OBJ   search-PFV

     dènn-íl-aa   íí=gɛ   yɛ̀-mɛ̀-lí.
     search-REV-PFV   child=DEF   see-CAUS-NEG.PFV

     'The whole village searched for the child, they searched [again], [but] the
     child wasn't found.'

25. *Yêm   wó   kán-aa,   yàa-ná=gɛ*
     like.that   3SG.PRO   do-PFV   woman-HUM.SG=DEF

     òlú=nɛ   ɛ̀ɛ̀ⁿᴸ   wó   dìŋ-áá-dɛ̀=gɛ   ɛ́ɛ́ⁿ=gɛ
     field=OBL   ash   3SG.PRO   burn-PFV-IMPF.REL=DEF   ash=DEF

     bàl-áa   yém   jɛ̀ɛ̀l-ì.
     sweep.up-PFV   like.that   bring-PFV.L

     'After that (having done) that, the woman swept up the ashes, the ashes
     she made in the field, and brought them [home] like that.'

26. $\acute{\varepsilon}\acute{\varepsilon}^n$=gɛ   bàl-áa   wó   jɛ́ɛ́l-aa, $\acute{\varepsilon}\acute{\varepsilon}^n$=gɛ
     ash=DEF   sweep.up-PFV   3SG.PRO   bring-PFV   ash=DEF

     díí=nɛ   kúnd-aa   bé   tég-ír-aa.
     water=OBL   put-PFV   3PL.PRO   drip-TR-PFV

     '[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).'

27. $\acute{\varepsilon}\acute{\varepsilon}^n$=gɛ   tégé-gú   íí=gɛ=j̀ $\acute{\varepsilon}\acute{\varepsilon}^n$=gɛ
     ash=DEF   drip-PPL   child=DEF=OBJ   ash=DEF

     kɔ̀lɔ̀^{L}=nɛ   núyɔ́   núyɔ̀-dɛ̀,   ìì   dá-í-ɛ̀^{n}=gɛ.
     inside=OBL   sing   sing-IMPF   child   kill-PFV.L.REL-3PL=DEF

     'As the ash was dripping, the child [started to] sing [from] inside the ashes,
     the child that was killed.'

28. $\acute{\varepsilon}\acute{\varepsilon}^n$=gɛ   tégé-dɛ=gɛ   íí=gɛ   gò-è=yó,
     ash=DEF   drip-IMPF.REL=DEF   child=DEF   leave-PFV.L=if

     sŏm   yɛ́lè-dɛ̀ ⇒   jɔ̀bɔ́   yóó,   Gɔ̀ndɔ̀^{L} sŏm
     horse   come-IMPF   run.IMPER   enter.IMPER   *Gɔndɔ*   horse

     yɛ́lè-dɛ̀ ⇒   jɔ̀bɔ́   yóó.
     come-IMPF   run.IMPER   enter.IMPER

     '[When] the ash was dripping, the child said, "A horse is coming, run
     inside, a horse from Gɔndɔ is coming, run inside".'

29. *Yém*   wó   g-àà,   yàa-ná=gɛ   jáá
     like.that   3SG.PRO   say-PFV   female-HUM.SG=DEF   meal

     sírè-dè   g-àà   ɛ̀ɛ̀^{nL} wó
     cook-IMPF   say-PFV   ash   3SG.PRO

     tég-ír-áá-dɛ̀=gɛ   núyɔ́=gɛ   núyɔ́-gú   wó
     drip-TR-PFV-IMPF.REL=DEF   song=DEF   sing-PPL   3SG.PRO

     wɔ́-gú   wó   kééŋ-íy-aa   íí   wómɔ=gɛ   núyɔ́-gú=sɛ.
     be-PPL   3SG.PRO   listen-MP-PFV   child   3SG.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.'

30. *ǹdɛ̌-m=gɛ=ǹ*   *bò-áa*   *wó*
person-HUM.PL=DEF=OBJ   call-PFV   3SG.PRO

     yɛ́l-ɛ̀=gɛ,   *bé=wa*   *dànn-íyɛ̂=wa.*
come-PFV.REL=DEF   3PL.PRO=QUOT   sit-MP-IMPER=QUOT

     '[When] she had called the people and come [back], [she told] them to sit.'

31. *Bé*   *dànn-íy-aa*   *ɛ́ɛ́ⁿ=gɛ*   *wɔ̀g-áa*   *wó*   *kúnd-aa*   *díí*
3PL.PRO   sit-MP-PFV   ash=DEF   scoop-PFV   3SG.PRO   put-PFV   water

     wó   *kɔ́ɛ́r-aa*   *íyɛ̀lɛ̀*   *àníyɛ̂=mɔ=genu*   *yém*   *nùy-ɛ̀.*
3SG.PRO   pour-PFV   again   before=Poss=like   like.that   sing-PFV.L

     '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.

32. *Nɔ̌ɔ́*   *íí*   *ǹdɛ́mmɔ=gɛ*   *mìyɛ̀ᴸ=lɛ=lɛ=ma=wa.*
this   child   LOG.SG.POSS=DEF   voice.L=DEF=NEG.COP=or?=QUOT

     '[She asked] is this not my child's voice?'

33. *Bé*   *sélúm-aa*   *yàa-ná=gɛ*   *yállà*
3PL.PRO   ask-PFV   female-HUM.SG=DEF   wonder

     wó=ǹ   *sǒm*   *yɛ̀lɛ́-dɛ=gɛ*   *jɔ̀bɔ́*
3SG.PRO=OBJ   horse   come-IMPF.REL=DEF   run.IMPER

     yóó   *àá*   *g-ì=ma=wa.*
enter.IMPER   who   say-PFV.L=or?=QUOT

     'They asked [something], the woman asked [the child] who told him that a horse was coming, to run inside.'

34. *Náá-na⁸⁹=gɛ*   *yém*   *wó*   *g-àà.*
mother-HUM.SG=DEF   like.that   3SG.PRO   say-PFV

     'The mother said that.'

35. *ɛ́ɛ́ⁿ=gɛ*   *wó*   *yábìl-ì=gɛ*   *yàà-nàᴸ*
ash=DEF   3SG.PRO   answer-PFV.REL=DEF   female-HUM.SG

     ǹdɛ̀mɔ́   *ɔ́bɔ́ᴴ=gɛ=wa*   *ǹdɛ̀mɔ́=wa*   *sǒm*
LOG.SG.PRO   step=DEF=QUOT   LOG.SG.PRO=QUOT   horse

     yɛ́lɛ̀-dɛ̀ ⇒   *ɛ̀ɛ̀ⁿᴸ*   *dúm=gɛ=nɛ*   *jɔ̀bɔ́*   *yóó*
come-IMPF   ash   pile=DEF=OBL   run.IMPER   enter.IMPER

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89 This appears to be the human singular suffix added to 'mother', but this form is only attested here.

wó   *g-àà*   *yó-aa*   *ǹdὲmɔ́*   *kán-aa*
3SG.PRO say-PFV enter-PFV LOG.SG.PRO do.Perf

wó=wa   *ɲăm* *tɔ́ⁿ-aa*   *kùnd-ù=wa,*
3SG.PRO=QUOT fire strike-PFV put-PFV.L=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,'

36.   *ǹdὲmɔ́=le*   *túmɔ́-go* *dànn-è=wa.*
     LOG.SG.PRO=ASSOC one-ADV burn-PFV.L=QUOT
     'He said that [she] burned him together [with the stalks].'

37.   *Yàà-nà^L*   *wó=ǹ*   *kò^L*   *bǎy* *gàndà^L*
     woman-HUM.SG 3SG.PRO=OBJ that.DD day place

     kɔ̀nɔ́   *àw-ì-ὲⁿ=wa.*
     there.DD catch-PFV.L-3PL=QUOT

     '[They say] that that day they caught that woman there [to find out what happened].'

38.   *Yàa-ná*   *wó*   *[ígὲ yàà-nà]^{HL}=mɔ=nɛ* *bìrὲ^L*
     female-HUM.SG 3SG.PRO co-wife=POSS=OBL work

     pàdíyέ=ɲ̀ *bírὲ-dὲ=wa,*   *nòŋgónu* *yém* *kìdέ* *kánà-dὲ=wa.*
     bad=OBJ work-IMPF=QUOT like.that like.that thing do-IMPF=QUOT

     '[They say that] a woman does bad work towards her co-wife, that she does things like that.'

23.6 The story of the animals and the sun

Recorded on June 15, 2008 in Tongo-Tongo
    Narrated by Segire Ouologuem

1.   Bon, *òlù^L* *nàmá* *kέm* *bé*   *móòmb-ìy-ì=gɛ*   *bé*
     well.FR field meat all 3PL.PRO assemble-MP-PFV.REL=DEF 3PL.PRO

     dánn-ìy-ì=gɛ,   *kìdέ* *kέm* *yàá-m=le=wɔ-ὲⁿ,*
     sit-MP-PFV.REL=DEF thing all female-HUM.PL=ASSOC=be-3PL

     kìdέ *kέm* *líí-m^{90}=le=wɔ-ὲⁿ.*
     thing all children-HUM.PL=ASSOC=be-3PL

     'Well, [when] all of the wild animals got together and sat down, they were all with wives, they were all with children.'

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90 An unusual form of the word 'children'; usually speakers say *úlûm*.

2. *Náá* bon, *năm=wa* *yàa-ná* *sɛ-lɛ=wa* *wó*
   now well.FR sun=QUOT female-HUM.SG have-NEG=QUOT 3SG.PRO

   túmáá=ǹ, *wó* *ǹdɛ̀mbé=ǹ* *ɛ̀lɛ̀-nd-ìyɛ̀-lí=wa.*
   only=COP 3SG.PRO LOG.PL.PRO=OBJ pleasing-FACT-MP-NEG.PFV=QUOT

   'Now then, [they said] the sun does not have a wife, he is the only one, this did not make them happy.'

3. *Kìdɛ̀ᴸ* *kó* *hákílé* *ǹdɛ̀mbé=mɛ* *yɛ̀l-ɛ̀=wa,* *bé*
   thing that.DD mind LOG.PL.PRO=POSS come-PFV.L=QUOT 3PL.PRO

   dánn-ìy-ì=gɛ *yàa-ná* *óbó-mɔ́=wa.*
   sit-MP-PFV.REL=DEF female-HUM.SG give-HORT=QUOT

   '[They said] that thing (idea) came into their minds, [so] they sat down, [and said] let's give [him] a wife.'

4. *Nɛ́ɛ́* *kay* *bày̌ᴸ* *kúyɛ́* *ɛ́rɛ́núyón* *bé* *kán-ì=gɛ* *bé*
   now TOP day first meeting 3PL.PRO do-PFV.REL=DEF 3PL.PRO

   dánn-ìy-ì=gɛ *sɔ̀ɔ̀ᴸ* *wó* *sɔ́-ì-ɛ̀ⁿ.*
   sit-MP-PFV.REL=DEF speech that.DD speak-PFV.L-3PL

   'Now, they met that first day and sat down and that is what they spoke.'

5. *Bǎy=gɛ,* *mómbu=gɛ* *bày̌ᴸ=gɛ* *jɔ̀mɔ́=be~be-li.*
   day=DEF meeting=DEF day=DEF hare=RED~be.PST-NEG

   '[That] day, the day of the meeting, Hare wasn't there.'

6. *Jɔ̀mɔ́* *dámmá* *yà-è.*
   hare village go-PFV.L

   'Hare had gone to the village.'

7. *Wó* *úŋgúl-aa* *j-àà* *wó* *yɛ̀l-áa,* *Eh!,*
   3SG.PRO get.up-PFV finish-PFV 3SG.PRO come-PFV eh

   jɔ̀mɔ́=wa *wóô* *g-àà,* bon *ǹdɛ̀mbé* *gay*
   hare=QUOT come! say-PFV well.FR LOG.PL.PRO TOP

   nòŋgónu *yàmíyé* *ɛ̀rɛ̀núyón* *kàn-ì-ɛ̀ⁿ=wa* *de.*
   like.that other.day meeting do-PFV.L-3PL=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!'

8. *Kìdɛ́* *kɛ́m* *yàá-m=le=wɔ-ɛ̀ⁿ,*   *nǎm=wa*
   thing   all   female-HUM.PL=ASSOC=be-3PL   sun=QUOT

   yàa-ná   *sɛ̀-lɛ́.*
   female-HUM.SG   have-NEG

   'Everyone was with wives, [but] the sun did not have a wife.'

9. *Tsk! Nǎm* *yàà-nà^L*   *sɛ̀-lɛ̀^{L}=gɛ*
   tsk   sun   female-HUM.SG   have-NEG.REL=DEF

   wó   *ǹdɛ̀mbé=ɲ̀*   *ɛ̀lɛ̀-nd-ìyɛ̀-lí=wa,*
   3SG.PRO   LOG.PL.PRO=OBJ   sweet-Fact-MP-NEG.PFV=QUOT

   'Tsk, [they said] the sun's not having a wife doesn't make us happy,'

10. *ǹdɛ̀mbé*   *wó=ɲ̀*   *yɛ̀-nd-ée*   *yàa-ná*
   LOG.PL.PRO   3SG.PRO=OBJ   see-FACT-NF   female-HUM.SG

   óbó-mɔ́   *g-ì-ɛ̀ⁿ=wa.*
   give-HORT   say-PFV.L-3PL=QUOT

   '[They] said they looked at him and said let's give [him] a wife.'

11. *Hɔ̀ⁿ=wa*   *jɔ̀mɔ́* *kó=nɛ*   *dàg-áa=wɔ=má=wa.*
   huh=QUOT   hare   that.DD=OBL   be.good-PFV=be=or?=QUOT

   '"Huh", Hare asked, "Is that good?"'

12. *ǹdɛ̌-m=mbe=gɛ*   *dàg-áa=wɔ*   *g-ì-ɛ̀ⁿ=wa.*
   person-HUM.PL=PL=DEF   be.good-PFV=be   say-PFV.L-3PL=QUOT

   'The people said it is good.'

13. *Tààmáá*   *ǹdɛ́mmɔ=nɛ*   *dàgà-lú=wa*   *de.*
   thought   LOG.SG.POSS=OBL   be.good-NEG.PFV=QUOT   EMPH

   '[Hare said], "In my opinion, it's not good!"'

14. *ɲ́jɛ́=ɲ̀=ma,*   *yállà*   *nǎm=wa* ⇒ *ííyé*   *nìmɛ́m* *wó*   *túmɛ̋ɛ̋*
   what=COP=or? wonder   sun=QUOT   today   now   3SG.PRO   only

   gò-ìlè^L   *wó*   *gòò-dɛ̀^{L}*   *nɔ́*   *ǹdɛ̀mbé*   *yɛ̀-dɛ̀^{L}*   *nɔ́,*
   go.out-GER1 3SG.PRO go.out-IMPF.REL this LOG.PL.PRO see-IMPF.REL this

   'Why is that, [well], if now today we see the sun come out by himself, this coming out of his,'

15. *Yàa-ná*   *wó*   *j-èè,*   *íí*   *wó*
    female-HUM.SG   3SG.PRO   marry-NF   child   3SG.PRO

    nàl-ée,   *wó*   *wó*   *gò-ée*   *yàa-ná*
    birth-NF   3SG.PRO   3SG.PRO   go.out-NF   woman-HUM.SG

    wó   *gò-ée*   *úlûm=mbe*   *gò-ée*   *yállà*
    3SG.PRO   go.out-NF   children=PL   go.out-NF   whether

    ḿmɔ   *ǹdèmɔ́*   *úndu=nɛ*   *nàmà^L*
    1SG.POSS   LOG.SG.PRO   forest=OBL   meat

    tóó=mbe=lɛ   *dóm*   *bílè-dè=má=wa.*
    be.in.REL=PL=NEG.COP   seat   be.possible-IMPF=or?=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].'

16. *Yém*   *wó*   *g-àà,*   *nàmà^L*   *úndu=nɛ*
    like.that   3SG.PRO   say-PFV   meat   forest=OBL

    tóó=gɛ=mbe   *jàd-áa*   *gàndà^L*   *kó*   *nà-áa=bì-è^n,*
    be.in.REL=DEF=PL   reflect-PFV   place   that.DD   forget-PFV=be.PST-3PL

    jàd-áa   *bé*   *yὲ-nd-áa,*   *wàlláy*   *sɔ́ɔ́=gɛ*   *mùlú-go=wɔ.*
    reflect-PFV   3PL.PRO   see-FACT-PFV   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 what he had said and saw], my God, it is like that.'

17. *Mómbu=gɛ*   *g-àà=bi-è^n=wa*   *dògò*   *dàgà-lú=wa.*
    meeting=DEF   say-PFV=be.PST-3PL=QUOT   but   be.good-NEG.PFV=QUOT

    'They had spoken [at] the meeting, but [they said] [what they said] was not good.'

18. *Dàgà-lú=wa*   *de.*
    be.good-NEG.PFV=QUOT   EMPH

    'It was not good, [they said]!'

19. *Kó=yὲlὲ-dìɲ^L.*
    EXIST=come-IMPF.3PL

    'They came back.'

20. *Íyèlè   bày^L   yàgá   yém   mòmb-ìy-ì-è^n.*
    again   day   other   like.that   assemble-MP-PFV.L-3PL
    'They met like that again the next day.'

21. *Àà, ǹdèmbé   yàmmé   mómbu=gɛ*
    ah   LOG.PL.PRO   other.day   meeting=DEF

    g-àà=bì-è^n=wa   mɛ, jɔ̀mɔ́=wa   nòŋgónu g-ì=wa   de.
    say-PFV=be.PST-3PL=QUOT but hare=QUOT like.that say-PFV.L=QUOT EMPH

    '[They said], ah, we had met the other day, but Hare had said like that (that it
    wasn't good).'

22. *Sàbé   jàd-áa   ǹdémbé   yɛ̀-nd-áa*
    because   reflect-PFV   LOG.PL.PRO   see-FACT-PFV

    kɔ̀mmɔ́=nɛ   nàmà^L   tóó=mbe=yó   dògò   úndu=nɛ
    cave=OBL   meat   be.in.REL=PL=if   but   forest=OBL

    nàmà^L   tóó=mbe=ǹ   bìl-éélè=wa.
    meat   be.in.REL=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.'

23. *Sàbé   nàm   wó   túmáá   gò-ée   dànn-ìlè^L*
    because   sun   3SG.PRO   alone   go.out-NF   burn-GER1

    wó   dànnà-dè̀^L   nɔ́,   yàa-ná
    3SG.PRO   burn-IMPF.REL   this   female-HUM.SG

    wó   j-ì,   yàa-ná   wó
    3SG.PRO   marry-PFV.REL   female-HUM.SG   3SG.PRO

    dánn-è,   íí   wó   gó-è,   íí
    burn-PFV.REL   child   3SG.PRO   go.out-PFV.REL   child

    wó   gó-è,   íí   wó   dánn-è,   wó
    3SG.PRO   go.out-PFV.REL   child   3SG.PRO   burn-PFV.REL   3SG.PRO

    wó   dánn-è,   ǹdèmbé   kɛ́m   yím-ee   dúmɔ̀-dìn=wa.
    3SG.PRO   burn-PFV.REL   LOG.PL.PRO   all   die-NF   finish-IMPF.3PL=QUOT

    'Because they said that [even when] he alone comes out, [with] this burning of
    his, [if] he marries a woman, and the woman burns, and [his] child comes out,
    and [his] child comes out, and [his] child burns, and he himself burns, [they
    said] all of us would end up dying.'

24. *Yém*   *kàn-ì=yó*   *năm=mɔ*   *yàà-nà^L*
    like.that   do-PFV.L=if   sun=POSS   woman-HUM.SG

    jɛ́^{H}=gɛ   *ìŋɛ̀-lɛ́=wa.*
    marry=DEF   stand-NEG=QUOT

    'If it's like that, [they said] the sun's marrying a woman will not happen.'

25. Donc   *kò^L*   *băy*   *nàmí=ǹ*   *yàa-ná*
    thus.FR   that.DD   day   sun=OBJ   female-HUM.SG

    òbó-lú-go   *kó=gɛ*   *sɔ̀-ɛ̀*   *yèŋgónu*
    give-NEG.PFV-ADV   that.DD=DEF   speak-PFV.L   like.that

    yém   *pàdà-m-ì-ɛ̀^{n}=wa.*
    like.that   leave-CAUS-PFV.L-3PL=QUOT

    'Thus, that day they did not give the sun a wife, they (DD) spoke like that, and left it at that.'

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