

A Grammar of Kelenga (Hainyaxo), Bozo language of Mali

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1 Introduction

1.1 Bozo languages

Bozo is a small language family, traditionally composed mainly of fishing people along the Niger and Bani rivers in central Mali, West Africa. It also includes riverine rice cultivators, and some millet cultivators some distance from the rivers. It belongs to the large Mande family, and is most closely related to Soninké.

Four Bozo languages have been recognized, some of which have multiple names.

(1)	language	location(s)
	Tiema Cewε	Lac Débo
	Tigemaxo and Tiéyaxo	Diafarabé, pockets near Djenné
	Kelenga (= Hainyaxo)	Ké-Macina near Ségou
	Jenaama (= Sorogaama)	Djenné, Mopti, Konna, Youwarou, Lac Débo

“Jenaama” probably now has 300,000 speakers in a number of geographically discontinuous areas, and it has several varieties. Whether it should be considered as a language with dialects, or as two or more languages, is discussed in grammars of two very distinct “Jenaama” varieties (Heath 2022ab). One possibility is to revive “Sorogaama” for at least the riverine fisher population near Djenné, and keep “Jenaama” for at least the Cliffs variety spoken by millet cultivators on the western edge of the Dogon plateau. Hereafter I refer to the two previously described varieties as “JSDj” (for Jenaama-Sorogaama of Djenné) and “Cliffs,” and use “Jenaama-Sorogaama” as a cover term for both of these (and other) varieties.

The other three Bozo languages are estimated to have a few thousand speakers each and are spoken in compact zones. There is dialectal variation between Tigemaxo and Tiéyaxo, and some within Kelenga, but apparently much less variation than within Jenaama-Sorogaama.

1.2 Kelenga language

The native terms in (2) are relevant to determining the language name.

(2)	a.	kèléngà-à	‘Kelenga person’
		kéléngá-hòò	‘Kelenga language’
	b.	hàâ ⁿ	‘Bozo person’
		háá ⁿ -yá-hòò	‘Bozo language(s)’

Clearly Kelenga is more appropriate as official name for this language, since Hainyaxo (hááⁿ-yá-hòò) denotes the ensemble of all Bozo languages and dialects.

1.3 Geography and neighboring ethnicities

Kelenga-speaking villages cluster along the Niger River in the Cercle (administrative unit) of Ké-Macina (or Ké-Massina) in the Région (province) of Ségou in east central Mali. Some relevant village and city names are in (3).

(3)	Kelenga	map name	comment
a. cosmopolitan cities and large towns nearby			
	bómòkò	Bamako	capital of Mali
	móòtì	Mopti	major provincial capital to north
	ʃéégú	Ségou	major provincial capital
	jénè	Djenné	city to north, urbanites speak Songhay
	máásíné	Macina	<i>chef-lieu</i> of the Cercle de Macina
	márákàlà	Markala	major bridge (<i>barrage</i>)
b. Kelenga-speaking villages (alphabetized by Kelenga name)			
	bàráá-bùgù	Barkabougou	
	bólibàà-nà-à	Bolibana	important market (Saturday)
	dánnà	Danina	
	jóórò	Dioro	
	gómà	Gomodaga	large town
	hàyò ⁿ	Kayo-Bozo	
	hólóŋù	Kolongo-Bozo	
	hólóŋù-láhàà-húlò	Kolongo campement	
	kòkírì	Kokri-Bozo	mixed Kelenga-Tigemaxo
	kúmáhàlà	Siranikoro	old name, see síráníŋgòrò below
	míérù	Mièrou	
	nàkírì	Nakri	
	nwè ⁿ	Noyidaga	
	nwén-láhàà	Noyidaga (small campement across river)	
	sámà	Sama	
	síráníŋgòrò	Siranikoro	new name; see kúmáhàlà above
	súgúlí-í	Sogoli	
	sósè ⁿ	Sossé Bozo	
	tàgàlà	Takala	

In Kolongo, Mièrou, and Noyidaga in particular, Kelenga is the dominant vernacular and is the native language even of resident ethnic Soninké (Marka). Kolongo and Mièrou claim to have originally settled there from Dia (the heartland of the Tigemaxo-Tiéyaxo language).

Geo-coordinates for the Kelenga villages are in (4). Most are from our own GPS readings (made by project manager Minkailou Djiguiba) and are shown in degrees, minutes, and decimal fractions of minutes. Those for Sogoli are approximate values (in degrees and minutes) from inspection of the 2017 government map for “Ké-Massina” sector.

(4)	map name	north	west
	Barkabougou	13 47.284	05 44.211
	Bolibana	13 52.219	05 39.757
	Danina	13 40.342	05 57.675
	Dioro	13 41.685	05 49.700
	Gomodaga	13 41.622	05 56.565
	Kayo Bozo	13 50.461	05 36.315
	Kolongo campement	13 50.845	05 41.225
	Kokri-Bozo	13.58.136	05 29.637
	Mièrou	13 58.922	05 17.710
	Nakri	13 42.308	05 52.647
	Noyidaga	13 50.380	05 38.347
	Sama	13 43.506	05 45.432
	Siranikoro	13 53.758	05 33.570
	Sogoli	13 56	05 29
	Sossé Bozo	13 43.172	05 48.139
	Takala	13 55.001	05 32.615

There are many Bambara-dominant villages and towns in the immediate region, and the most relevant big cities in southern Mali, Ségou and Bamako, are also Bambara-dominant. Most if not all adult Kelenga speakers are fluent in Bambara. Since Bambara and Bozo are linguistically related within the larger Mande language family, and are structurally similar, loanwords from Bambara into Kelenga are very common in all stem classes.

There are small camps of Fulbe herders, on higher ground away from the river, and Fulbe women come into the villages to sell milk and butter. Few native Kelenga speakers are proficient in Fulfulde.

1.4 Environment

The Kelenga villages are mainly located on the banks of the main body of the Niger River. Adjacent areas on the northern side of the river become floodplains annually. The primary economic activities are fishing and rice farming. Large-scale rice farming is relatively new and is dependent on the dam at Markala. It is said to have begun in earnest in this zone around 1980.

Before that, fishing and related activities (smoking and drying the fish, fish-oil production) predominated. Skiff (*pirogue*) construction was not well-developed in the immediate area due to the absence of large trees in the floodplains.

The Niger River flows roughly from southwest to northeast (e.g. from Bamako and Segou to Djenné and Mopti) in this area. Its current is slow because of bottlenecks farther downstream (e.g. at the border with the Republic of Niger east of Gao). As a result, much of the zone floods laterally during and just after the rainy season. Maximum precipitation occurs from mid-July through August, and the water level (including water fed from upstream) peaks in September. The flooding slowly retreats by downstream flow plus evaporation after that. This provides a favorable context for various forms of fishing and for rice farming, the latter being supported by the water management system centered on the dam at Markala.

Traditional fishing techniques include net-casting from the riverside or from a skiff (a large canoe-shaped boat, local French *pirogue*), plunging small wicker fishtraps or multi-pronged fish spears into water or marsh, and setting weir traps in the form of long nets across creeks and small ponds. Fish are sold or consumed fresh, or are dried or smoked for year-round sale. Small sardine-like fish (*Brycinus leuciscus*) are a source of fish oil. Fish excrement is used in soap-making.

Documentary-style videos of Bozo fishing and other activities will soon be produced from footage already shot. They will be archived at Deep Blue Data (University of Michigan Libraries).

The most important weekly market in the immediate zone is Bolibana. This Bambara village is near the highway and a good place for selling fresh, dried, and smoked fish and for purchasing grain and other commodities. There are also some smaller markets in the zone.

1.5 Previous and contemporary study of Kelenga

1.5.1 Previous work

Early works on Bozo did not formally divide Bozo into distinct languages and dialects. The most important early work is Monteil (1932), which described varieties spoken in and around Djenné. This was followed by Daget, Konipo & Sanakoua (1953), which has valuable dialect-specific texts for all major Bozo varieties with the unfortunate exception of Kelenga. The latter is described thus (p. 12):

Les bozos du groupe Kélinga se rencontrent en amont du groupe tié. Ils se nomment eux-mêmes kelenḡa (pl. kelenḡaye). Leur dialecte, incompréhensible aux autres Bozo est un mélange de Bambara et de Bozo phonétisé de façon très spéciale qui n'est pas sans rappeler le Khassonké. Les Kélinga se distinguent en outre par des modifications apportées au rituel, probablement sous l'influence bambara: ce seraient en quelque sorte des Bozo hérétiques. Leur région étant enclavée en plein pays bambara, les Somono et les Marka qui vivent près d'eux ne parlent que le Bambara.

The current classification of Bozo into Kelenga (or Hainyaxo), Tigemaxo-Tiéyaxo, Jenaama (or Sorogaama), and Tiema Cewε, was systematized by Smeltzer & Smeltzer (1996), who collected

300-word lists from various Bozo communities and applied lexicostatistical methods to them. The Kelenga data were from “Nakary” (current map name: Nakri). They concluded that “Haiñaxo” (i.e. Kelenga) is the most divergent Bozo variety, forming a sister node to the node subsuming all other Bozo varieties. The percentage of lexical matches between Kelenga and any other variety is less than 50%.

1.5.2 Fieldwork

My personal access to Kelenga (and other Bozo) country was prevented by the combination of the COVID pandemic and deteriorating security. Since about 2020 the Bozo heartland had become off limits to white foreigners due to the spread of interethnic and communal violence into the area, chiefly opposing Fulbe herders to Bozo and Bambara cultivators and fishers. It has therefore been necessary to do the fieldwork at my base in Bobo Dioulasso in neighboring Burkina Faso, with native speakers who travel there from Mali.

The closure of airports in 2020 due to the pandemic led to the cancellation of planned summer fieldwork. Air travel resumed in 2021, allowing me to spend most of that year in Burkina, but the Burkina-Mali land border unexpectedly remained closed for several months in early 2021, preventing Malians from coming to Bobo Dioulasso. The security situation has deteriorated further as of early 2023 as I write.

The grammatical and lexical material that are used in this grammar were elicited from two pairs of Kelenga speakers who worked with me at different times at my base in Burkina Faso. An older man named Mama Tereta worked with us on flora-fauna lexicon in 2021. A younger speaker who joined us, from Kolongo village, prefers anonymity. Much of the basic grammar and lexicon was initially elicited from that individual in summer 2022. Two other speakers from Kolongo, Alhasan Tereta (a young man) and Sinali Tereta (an older man), worked with us, fleshing out grammar and lexicon, for about four weeks in winter 2022-23. A number of other, mostly older Kelenga speakers are featured, often briefly, in recordings made in Bamako and in Kelenga villages. I refer to the two younger speakers as “assistants” since much of the grammatical elicitation and text transcription was done with them.

It must be acknowledged that many sections of this grammar are based mainly on elicitation with one or the other of the two young assistants, who were available to me at different times. How representative the material is for the Kelenga community as a whole is unclear.

My long-time Malian project manager, Minkailou Djiguiba, originally my Jamsay (Dogon) native-speaker assistant, made trips to Ké-Macina in 2021 and 2022 to photograph villages, obtain geographical information, collect plant specimens, record audio texts, and shoot video footage. He has also done this work in connection with the other Bozo languages in the larger project.

1.5.3 Acknowledgements

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2 Sketch

A few basic typological facts about Kelenga will serve to begin this sketch.

Like nearly all other Mande languages, Kelenga is SOVX. More specifically, it is S-infl-O-V-X, where “infl” is a class of post-subject grammatical markers with clausal semantic scope (aspect, negation, mood). X includes any additional material, including dative, instrumental, purposive, and spatiotemporal PPs, and various simple (mostly spatiotemporal) adverbs. Temporal adverbs occur either at the very end or, to set the scene, at the very beginning. Kelenga morphology lacks structural case marking for subject and object NPs. Tonal oppositions can correlate roughly with subject versus object position but depend on prosodic phrasing and on postpausal versus other positions.

An example of a transitive clause is (5). It consists of a subject NP, a post-subject inflectional marker, an object NP, a verb marked for aspect, and a locational expression. The core of the clause begins with the subject and ends with the verb; the locational here is an adjunct.

- (5) sèédù há ʰsògó-ó-yèⁿ sá-nù [són-ó nî]
S Ipfv goat-Sg-Pl buy-Ipfv [market-Sg Loc]
'Seydou buys goats in the market.' (< sógó-ó, sá-nù, són-ó)

Kelenga is challenging because the subject, inflectional morpheme, object, and verb can each trigger tonal ablaut on the following word. After tonal ablaut, the final syllable of each word can undergo tone sandhi triggered by the tone(s) of the following word.

2.1 Phonology

2.1.1 Segmental phonology

Kelenga has seven vowel qualities {u o ɔ a ε e i}. Vowels may be long or short, and may be oral or nasalized. Nasality of a short vowel adds a mora, so that Cvⁿ behaves in some respects like CvN with final nasal consonant.

The high back unrounded vowel u that occurs in Cliffs, and apparently in no other language of the immediate area, is absent in Kelenga.

There are relatively few segmental phonological processes (rewrite rules) converting underlying to surface forms. The segmental process most likely to cause problems for parsing and morpheme identification is vv-Contraction at boundaries. Since vowel-initial stems are rare, the bulk of contractions involve a vowel-final word or particle followed by a grammatical morpheme consisting of a vowel: pronominal proclitics 2Sg á, 2Pl í, 3Sg à, and 3Pl ì, or discourse-definite demonstrative ó. The boundary = is used in transcriptions as a warning that vv-Contraction has occurred. For example, Ipfv hà surfaces as hí= in (6) after vv-Contraction and tone sandhi.

(6)	à	hí=	í	ˈkwàrì-lì	(output)
	/à	hà	ì	kwárí-lí/	(at lexical level)
	3Sg	Ipfv	3Pl	hit-Ipfv	
	‘He/She (often) hits them.’				

Words end in a vowel, or in a vowel plus a nasal element that is realized as vocalic nasality before pause and often before some other consonants, and often as a homorganic nasal before other consonants (stops, sibilants, l, and sometimes h which hardens to g). A voiceless stop is often (but not consistently) voiced after this nasal element or after 1Sg proclitic í. For example, perfective negative tí often shifts to dí after one of these nasals.

This interacts with a diachronic process that converted many cases of Proto-Bozo *k into h in Kelenga. Initial h in some stems shifts to g after a nasal, reflecting what was once a regular *k/g voicing alternation. Thus hálú-ú ‘man’, but kónón-gálú-ú ‘bridegroom’.

2.1.2 Tones and tonal diacritics

Kelenga has two tone levels in lexical representations: H[igh] and L[ow]. Syllables may be H, L, <HL> (falling), <LH> (rising), or occasionally bell-shaped <LHL>. These formulae use angled brackets <...> to enclose tone sequences on a single syllable. This two-level tonal system aligns with that of JSDj (or Sorogaama) but contrasts with that of Cliffs, which has three lexical tone levels for nouns (two for verbs), and distinguishes the three in tone sandhi and tonal ablaut for all stem-classes including verbs.

As a result of tonal phonology and morphophonology (ablaut), Kelenga makes systematic use of M[id] tones, e.g. ā as opposed to á and à. M-tones can reflect **Upstep** of L tone or **Downstep** of H tone (these terms are used here in a slightly noncanonical fashion).

Upstep is limited to third-person pronominal proclitics 3Sg à ~ ñ and 3Pl ì. Upstep occurs in postpausal position when followed by a nonhigh tone, under some conditions. Upstepped proclitics are transcribed with M-tones: ā and ī, with no further diacritics. One could alternatively transcribe ˈà and ˈì. Or one could just transcribe à and ì in all positions, on the grounds that subphonemic pitch upstep is predictable.

Downstep from H to ˈM is more common and applies to nouns, verbs, and other stems. When a stem-wide or stem-initial H-tone is downstepped to ˈM, this has consequences for the preceding word or particle, since a nonhigh tone (ˈM or L) triggers Final Tone-Raising. Thus when L.L#H.L is downstepped to L.L#ˈM.L, the final result is L.H#ˈM.L. Downstep of H to ˈM is distinct from **Tone-Dropping** of H to L, which is also common. A downstepped H is transcribed as ˈM, a tone-dropped H is transcribed as ˈL, and in both cases the IPA downstep symbol ˈ precedes the relevant word. For example, sèèdú ˈbàsà-à ‘Seydou’s agama lizard’ shows Downstep from básà-à to ˈbàsà-à, which then triggers the conversion sèédù → sèèdú (Rightward H-Tone Shift). In this transcription, ˈ is not a phonetic diacritic, rather an indicator that a tone-lowering process (Downstep or Tone-Dropping) has applied. Similarly, the IPA upstep diacritic ˈ indicates that an initial L-tone has been raised to H.

Tone diacritics are shown in (7), using *ma*, *maa*, and *maⁿ* (with nasality that counts as a mora) as props to illustrate mono- and bimoraic syllables. Note in particular the mid-falling diacritic in *māⁿ*.

(7)	tone(s)	<i>ma</i>	<i>maa</i>	<i>maⁿ</i>
	H	<i>má</i>	<i>máá</i>	<i>máⁿ</i>
	L	<i>mà</i>	<i>màà</i>	<i>màⁿ</i>
	M	<i>mā</i>	<i>māā</i>	<i>māⁿ</i>
	<LH>	—	<i>màá</i>	<i>mǎⁿ</i>
	<LHL>	—	<i>màâ</i> (or <i>mǎà</i>)	(absent)
	<HL>	<i>mâ</i> (rare)	<i>máà</i>	<i>mâⁿ</i>
	<ML>	—	<i>māà</i>	<i>māⁿ</i>

Minimal pairs include, among nouns, *súgú-ú* ‘grass’ and *sùgù-ù* ‘net’. Lexical tones are subject to rather complex tonal ablaut and tone sandhi processes, which can partially invert the tonal opposition. For example, in most noninitial positions between clause onset and the verb, *súgú-ú* ‘grass’ surfaces as ¹*sùgù-ú* or ¹*sùgù-ù* (depending on the following tone) due to Tone-Dropping, while *sùgù-ù* ‘net’ surfaces as ¹*súgù-ù* or ¹*súgù-ú* (depending on the following tone) due to Initial H-Ablaut. As compound initials or before a modifying adjective, the two nouns merge as *súgù-* but their tonal distinction is expressed indirectly in the following element.

Downstep, Tone-Dropping, and Initial H-Ablaut are collectively referred to as **tonal ablaut** processes. This is distinct from the more superficial **tone sandhi**. The most important tone sandhi process is **Final Tone-Raising**, which occurs when two L-tones meet across a boundary (schematically, *L.L#L* → *L.H#L*).

Although Kelenga has a more complex system of tonal processes than either Jenaama-Sorogaama variety, it lacks the special tonal ablaut patterns associated with 1Sg proclitic *ɲ* and variants in those varieties. Kelenga also does not use tonal ablaut to distinguish perfective (Pfv) from imperfective (Ipfv) stems of verbs.

“Melody” in this grammar means the lexical tone pattern of a stem. This involves factoring out variation due to tonal ablaut at stem level, and due to tone sandhi at boundaries. For nouns and numerals, the singular citation form reveals the melody. For verbs, the Pfv stem in prepausal position reveals the melody. Adjectives too have lexical melodies, but they are masked in binary N-Adj strings by Tone Leveling. Slashes /.../ are used for lexical melodies, e.g. /H/ and /LHL/.

Bimoraic (CvCv, Cv, Cvⁿ, rarely Cv) stems of all classes (noun, verb, etc.) can have the following lexical tone melodies: /H/, /HL/, /LHL/. Non-verbs can also have /L/ melody, but verbs cannot. The absence of /LH/ melody in all stem-classes is notable; the principle is that a stem cannot end in an H-tone unless it is all-H.

Uncompounded noun stems with several moras can also have /HLHL/ melody with two H-toned peaks, as in *dúúwàlá-à* ‘trunkfish sp.’ and *hóòrɔ́-ò* ‘back (body)’.

2.1.3 Tone sandhi

The main tone-sandhi process and the only one that needs to be flagged in this chapter is Final Tone-Raising (§3.6.5.4.3-5), which converts input (L*)L and sometimes (L*)ML to (L*)H before a nonhigh tone (L or M). This is a tone dissimilation process that is helpful in marking word and phrase boundaries, and some stem-suffix boundaries. In (8), the plural suffix (bolded) is affected, but only after the verb *bágí* is downstepped.

(8)	sàgà-à- yém	⁴ bāgī	[⁴ núnù-ù	nî]	(output)
	/sàgà-à-yè ⁿ	bágí	[nùnù-ù	nî]/	(at lexical level)
	sheep-Sg-Pl	exit(v).Pfv	[village	Loc]	
	‘The sheep-Pl left the village.’				

2.1.4 Tonosyntax (tonal ablaut)

Kelenga has a rich system of tonal ablaut that regularly masks the lexical tone melodies of words of all stem-classes.

Tone-Dropping lowers /H/-melodic verbs to all-L, and lowers /H/-melodic nouns to an L*HL pattern in isolation, which is then realized as L*HH or all-L medially depending on the following element.

Downstep lowers /HL/-melodic nouns to ⁴ML, and lowers /H/-melodic stems to ⁴M.

Initial H-Ablaut raises an initial L-tone to H; in longer stems the H may spread rightward into adjacent syllables, though it cannot totally erase the first L-tone of the word.

Upstep raises 3Sg and 3Pl proclitic pronominals from L to M.

Tone-Leveling is a complex ablaut process that applies to N-Adj combinations and to noun-noun compounds; initial and final stems are raised to H, except that if the initial has a lexical tone melody including an L-tone, this L is realized on the rightmost syllable of the final.

Tone Inversion drops H-toned pronominals (and demonstrative *kú*) to L-toned, and raises L-toned pronominals to H, in most clause-medial positions.

Tone-Terracing applies to postpausal combinations of 3Sg à and 3Pl ì and following words, which combine as a flat M-terrace.

Some tonal ablaut processes then interact with lower-level tone sandhi processes.

In a typical Kelenga sentence, several words and particles may have been affected by tonal ablaut. In (9), 3Sg à is tone-inverted clause-medially to á, *sógó-ó* ‘goat’ as possessum is tone-dropped to ⁴sògò-ò (before tone sandhi), and the verb *tóóró* ‘sell’ following a nonpronominal object NP is downstepped to M. Postverbal constituents (PPs and other adjuncts) are subject to tonal ablaut only under limited conditions, and in (9) *són-ó* ‘market’ is tonally autonomous.

(9)	sèédù	ṅá=	[á	⁴ sògò-ó]	⁴ tōōrō	[són-ó	nî]
	S	Sbj/Obj	[3Sg	goat-Sg]	sell.Pfv	[market-Sg	Loc]
	‘Seydou _x sold her _y goat in the market.’ (< /à sógò-ó/, <i>tóóró</i>)						

In (10), Initial H-Ablaut raises the initial L-tones of the possessums to H. Two syllables are affected in ‘woman’, just one in ‘rosary’, since the first L-tone of the stem must retain one syllable.

- (10) a. $\eta\grave{\alpha}\eta\grave{\alpha}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}$ ‘woman’
 à $\grave{\eta}\acute{\eta}\acute{\eta}\acute{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}$ ‘his/her wife’
- b. $\grave{\tau}\grave{\alpha}\grave{s}\grave{\alpha}\grave{b}\acute{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}$ ‘rosary’
 à $\acute{\tau}\grave{\alpha}\grave{s}\grave{\alpha}\grave{b}\acute{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}\grave{\eta}$ ‘his/her rosary’

The basics of Tone Leveling are illustrated in (11). Both N-Adj combinations are realized as all-H up to the final syllable of the adjective. This final syllable is H-toned if the lexical melody of the noun is /H/. It is L-toned if the lexical melody of the noun contains an L-tone (equivalently, if the lexical melody of the noun ends in L-tone, since there is no /LH/ melody).

- (11) a. $\acute{s}\acute{u}\acute{g}\acute{u}\acute{u}$ ‘grass’
 $\acute{s}\acute{u}\acute{g}\acute{u}\acute{h}\acute{o}\acute{o}\acute{n}\acute{a}\acute{n}\acute{a}\acute{a}$ ‘white grass’
- b. $\acute{s}\grave{u}\grave{g}\grave{u}\grave{\eta}$ ‘net’
 $\acute{s}\acute{u}\acute{g}\acute{u}\acute{h}\acute{o}\acute{o}\acute{n}\acute{a}\grave{n}\grave{a}\grave{a}$ ‘white net’

2.1.5 Limited role for intonation

Focalization of a constituent is expressed by addition of a focus particle. Polar interrogation is expressed mainly by a clause-final particle. Various forms of emphasis are expressed by clause-final emphatic particles, especially *dě?*. The upshot is that the language has less need for prosodic intonation effects than many nontonal languages. However, some types of interrogative are expressed by intonation, and planned pauses in some contexts can be accompanied by a falling pitch (§3.7).

2.2 Verbal and clausal inflection

2.2.1 Pfv and Ipfv stems of verbs

Verbs have two primary forms, perfective and imperfective, e.g. *kwárí* ‘hit.Pfv’ versus *kwárí-lí* ‘hit-Ipfv’. To distinguish these morphological categories from clause-level constructions, the abbreviations **Pfv** and **Ipfv** (with uppercase P and I) denote the verb-stem categories. The clause-level constructions are referred to by unabbreviated “perfective” and “imperfective”, or (in table headings that require compression) with lower-case *pfv* and *ipfv* (likewise *pfvneg*, *ipfvneg*).

The Ipfv stem is formed by adding a suffix *-lv* to the Pfv stem, rather than by tonal ablaut as in many Jenaama-Sorogaama verbs. The vowel quality (“v”) of the suffix is copied from the preceding stem-final vowel (or final semivowel *y*, copied as *i*). The tones of the Pfv are retained

except that a final C \acute{v} syllable combines with the suffix as C \acute{v} -l \grave{v} with the tone break at the syllable boundary. The suffixal l becomes n after a nasalized vowel or a nasal (N \acute{v}) syllable. The resulting nasal suffixal allomorph -nv with variable vowel has a further variant -nu with fixed vowel. There is no variant #-lu with fixed vowel for the nonnasal stems.

Full citation forms of verbs are of the form hóólò(-lò) ‘run’, meaning Pfv hóólò and Ipfv hóólò-lò. Where this is not typographically possible the citation form is Pfv/Ipfv, as in m \acute{e}^n /m \acute{e} -nè ‘drink’.

The most clearly irregular verb is byé/bé-lé ‘come’, where the extra y in the Pfv is absent from the Ipfv. Three other verbs (‘go’, ‘say’, ‘put/pour in’) arguably belong to this pattern but their pronunciation is variable (§10.1.2-2-4).

The Pfv stem is distributionally as well as morphologically unmarked. The Pfv stem occurs not only in the perfective construction (positive and negative) but also in future and imperative constructions. It is likewise the basis for most nominalizations.

2.2.2 Suffixal derivation of verb stems

The only productive suffixal derivations within verbal morphology is the causative. Verbs can also form participles, verbal nouns, and agentives.

The causative suffix is -ni, acquiring its tone by spreading from the stem (§9.1.1). It adds an external causal agent. Usually the input verb is intransitive (12a), so the causativized verb is a simple transitive (12b).

- (12) a. à hóólò
 3Sg run.Pfv
 ‘He/She ran.’
- b. sèédù ḡá = á ‘hōōlō-nì
 S Sbj/Obj 3Sg run-**Caus**.Pfv
 ‘Seydou made him/her/it run.’ or ‘Seydou drove it (=vehicle).’

There is no productive morphological intransitivization process in Kelenga, unlike Jenaama-Sorogaama, where fronting a stem-final back or low vowel to e or ϵ is moderately productive in both mediopassive (=middle) and antipassive functions. There is one known trace of this in Kelenga, namely transitive jáá(-lá) ‘eat (sth)’ and intransitive jéé(-lé) ‘eat, have a meal’.

In the absence of a productive mediopassive derivation, Kelenga makes extensive use of ambi-valency (lability) on the one hand, and Spanish-like reflexive constructions on the other.

2.2.3 Clause-level inflections (TAMP)

The aspectual (Pfv/Ipfv) marking on verb stems is complemented by the array of post-subject inflectional particles in (13). These particles reinforce the verb's own aspect marking but also mark polarity and (epistemic and deontic) mood. Tonal variants are omitted here.

- (13) a. (zero) perfective positive
tí ~ dí perfective negative
há ~ gá imperfective positive (also 'be')
tá ~ dá imperfective negative (also 'not be')
há bélé ~ há bílí future
lí counterfactual consequent
mání ~ míní prohibitive
- b. ṅá bidirectional case marker (transitive perfective positive)
- c. bí sequential and subjunctive

An etymological cluster is future bélé ~ bílí, counterfactual consequent lí (< bílí), and sequential bí, which likely all derive from byé/bé-lé 'come'. Also noteworthy is the relationship between positive and negative imperfective markers (preceding regular VPs) and positive and negative 'be' (copular or locational).

The past-time marker kúⁿ directly follows subject NPs, if there is a nonzero aspect-marking particle kúⁿ, and it intervenes between the subject and the aspect marker. kúⁿ resets the reference point from which eventualities are "viewed" into the past, as in past imperfective and past perfect.

The bidirectional case marker (BCM) is a feature of some Mande languages (e.g. Soninke) and several Songhay languages. It separates what would otherwise be directly adjacent subject and object NPs, i.e. in the perfective positive of transitive verbs. In Kelenga it can, however, be preceded by past-time marker kúⁿ, following the subject.

2.3 Pronouns and demonstratives

The inclusive/exclusive opposition described by Blecke for Tiéyaxo has not been observed in Kelenga. The Kelenga pronominal system is structurally similar to that of Jenaama-Sorogaama varieties, but the forms are rather different. 1Pl 'we' is ṅí versus JSDj ííⁿ and Cliffs é ; compare Tiéyaxo inclusive allomorph ki and exclusive allomorph ī, respectively. 2Pl is Kelenga í versus Cliffs āā and JSDj áá along with Tiéyaxo xai, the latter possibly homologous to Kelenga plural-addressee imperative kà. For the Tiéyaxo forms see Blecke (1996:109).

Logophoric and third-person reflexive singular (Logo/3ReflSg) í is a match for Tiéyaxo reflexive ī (Blecke 1996: 111). Logo/3ReflSg í is more noun-like than 2Pl í, and has an optional plural í-yèⁿ (Logo/3ReflPl) with the usual nominal plural suffix. The variant 3Sg subject proclitic ñ (§4.3.4) may be cognate to 3Sg reflexive í (JSDj) or ī (Cliffs).

The unusual tonal effects of Jenaama-Sorogaama 1Sg η or variant on adjacent words do not occur in Kelenga. For apparent “case” marked by tonal changes, see §2.6 below.

Kelenga demonstratives, deictic $kú$ ‘that’ and discourse-definite $ó$, have some pronoun-like properties, but they too take nominal plural $-yè^n$.

2.4 Nominal morphology

There are no noun classes of the typical African sort. There is no structural (subject, object) case-marking on NPs.

The most unusual feature of Kelenga noun morphology is what is here called the “singular” suffix (**Sg**). It is really a kind of absolute suffix showing that the noun is autonomous, i.e. not the initial in a compound and not followed by a modifier (adjective, numeral, demonstrative). It is cognate to the definite singular suffix in JSDj. The Sg suffix takes vocalic form υ (of variable tone) after a stem-final nasal (realized as η in this case), otherwise it lengthens the stem-final short vowel. A stem-final long vowel has no overt Sg suffix.

The stem without the Sg suffix, i.e. in the form used before a modifier and under very limited conditions elsewhere, is here called the **bare stem**.

The plural suffix $-yè^n$ (**Pl**) is actually superimposed on the Sg suffix. It too cannot be added directly to a noun that is followed by a modifier.

Examples are in (14).

(14)	bare stem	singular	plural	gloss
	a. $mùnù$	$mùnù-ù$	$mùnù-ú-yè^n$	‘dog’
	b. $hònè^n$	$hònè\eta-ô$	$hònè\eta-ó-yè^n$	‘bird’

The citation form for nouns and for nominal suffixes is the singular form.

The most important derivational suffixes in noun stems are diminutive $-nó\eta-ò$ and deverbal agentive $-ya-a$ (of variable tone). Many Pfv verbs can be nominalized as verbal nouns without a suffix.

2.5 Noun phrase (NP)

The order of primary elements in NPs is (15). See §6.1.1 for examples and discussion. Discourse-functional elements have senses like ‘too’ and ‘as for’ (topic).

(15) ‘even’ - Poss/Dem - noun - Adj - Num - Dem - Pl - DiscFunct/‘all’

The linear order is typologically unremarkable. Note, however, that there are two demonstrative slots, one prenominal and one following the N-Adj-Num sequence.

Noun-adjective combinations are treated tonally like noun-noun compounds. In other words, they are subject to Tone-Leveling, which entirely erases the noun’s lexical tone melody (except for an indirect trace at the end of the adjective), and which partially masks the adjective’s lexical melody.

Noun-numeral combinations also show tonal changes on the noun, but quite different from those in noun-adjective combinations.

2.6 “Case-marking” and PPs

There is no structural case-marking as such (e.g. nominative and accusative). Nouns and (except as noted below) pronominal proclitics have the same forms whether they function as subjects, objects, possessors, or postpositional complements.

The apparent exception is that nouns and pronouns have different tones depending on their position in clauses. The lexical tone is observed in postpausal position. This can be clause-initial (subject, possessor of subject, or object of a singular-addressee imperative). For example, clause-initially or initially in an isolated phrase, 2Sg *á* is H-toned while 3Sg *à* is L-toned (upstepped to M before a nonhigh tone).

- (16) a. 2Sg
- | | |
|--|---------------------------------|
| <i>á</i> <i>ʃóò</i> | ‘you-Sg went’ |
| [<i>á</i> ^{‘sògò-ò}] <i>ʃóò</i> | ‘your-Sg goat went’ |
| <i>á</i> <i>fógò</i> | ‘sit (yourself-Sg) down!’ |
| <i>á</i> ^{‘sògò-ò} | ‘your-Sg goat’ (isolation form) |
- b. 3Sg
- | | |
|--|-----------------------|
| <i>à</i> <i>ʃóò</i> | ‘he/she went’ |
| [<i>à</i> ^{‘sògò-ò}] <i>ʃóò</i> | ‘his/her goat went’ |
| <i>à</i> ^{‘sàgà-nì} | ‘put him/her to bed!’ |
| <i>à</i> ^{‘sògò-ò} | ‘his/her goat’ |

In position after any of a large set of post-subject particles and in other clause-medial positions, lexically H-toned pronominals like 2Sg *á* drop to L-toned, while lexically L-toned pronominals (3Sg *à* and 3Pl *ì*) raise to H-toned. See Tone Inversion (§3.6.5.1.1).

Because subjects are usually clause-initial while objects are usually clause-medial, these tonal alternations could be misconstrued as tonal case-marking. However, when subjects are preceded by certain particles like *ní* ‘if’ they take their non-postpausal form, and when objects are clause-initial (in transitive imperatives) they take postpausal form. Moreover, even a slight hesitation in the middle of a clause allows the following word to take postpausal form. So the tone alternations do not constitute case-marking.

If by structural case is meant morphological marking of subject, object, and perhaps possessor, nonstructural cases are expressed primarily by postpositions, which may be simple or

composite. Some of the simple ones are in (17). Postpositions can be preceded by any NP or pronominal clitic.

- (17)
- | | |
|-----------------|---|
| té | dative (with ‘say’) |
| ná ~ lá | dative (with ditransitives like ‘give’) |
| nî ⁿ | basic locative (‘in’, ‘at’) |
| nìŋî | ‘inside’ |
| fáà | ‘by’ |
| ʃéè | ‘on’ |
| tî ⁿ | ‘under’ |

The most important preposition-like morpheme is kí. Without a postposition, it is the ‘and’ conjunction for NPs and pronouns (18a). However, it combines with postposition tîⁿ (elsewhere ‘under’) to form an instrumental circumposition (18b).

- (18)
- a. á [kí ‘nò]
 2Sg [and 1Sg]
 ‘you and me’
- b. íj gá cèè sógò-lò [kí cwàà tîⁿ]
 1Sg Ipfv field cultivate-Ipfv [Inst daba under]
 ‘I cultivate a field (=do farm work) with a daba (=hoe).’ (< cwàà)

2.7 Relative clauses

Relative clauses are internally headed. There is no extraction or doubling of the noun of the head NP in external position. The NP is likewise not resumed by a pronoun in the main clause, unless the relative clause is fronted as preclausal topic (see below). The relative morpheme is mwò (or variant), plural mwò-yèⁿ. The relative marker follows a maximal Poss-N-Adj-Num sequence, but can itself be followed by súnúⁿ ‘all’. Internal-headedness makes it easy to relativize on NPs in any grammatical function (subject, object, postpositional complement, possessor).

- (19) sèédù ñá [ʃsàgà-á mwò] sáⁿ
 S Sbj/Obj [sheep-Sg Rel] buy.Pfv
 ‘the sheep-Sg that Seydou bought’ (< sàgà-à)

In addition to classic relative-clause function, mwò may also introduce a referentially variable (nonspecific) entity (‘someone’, ‘something’, ‘some time’, etc). The sense is roughly ‘(suppose there is) [someone who .../something that ...]’, introducing a nonspecific (generic) referent in a backgrounded clause. Because of this, the “relative” morpheme can occur twice on different constituents denoting referents that are introduced in the same clause, as in ‘(suppose there is) [someone] who buys [some goat]’. This can make it impossible to translate Kelenga relative

constructions with English relatives. See §14.1.2 on such double-headed relatives, which also occur in other Bozo languages.

2.8 Interclausal syntax

One important construction is the combination of a regular main clause with a following **sequential VP** (§15.2). These VPs can function as same-subject complements, for example with *híní* ‘be able [to VP]’, and therefore resemble subjectless English infinitival complements with *to*. However, the sequential construction can also function to combine two same-subject clauses denoting chronologically sequenced events, usually closely connected in some way. For example, ‘X fell and (then) got up’ can be expressed in Kelenga as “X fell [(only) to get up].”

Sequential VPs lack an overt subject, and consist of sequential morpheme *bí* (glossed as “Seq”) and a VP (beginning with the verb if intransitive, otherwise with the object). The logical subject of the sequential VP is coindexed in most cases with the subject of the main clause.

When a subject is added to a sequential VP, the result is a **subjunctive** clause. Therefore *bí* is glossed as “Sbjn” when it is preceded by a subject, and as “Seq” otherwise. A distinction between Sbjn and Seq is motivated comparatively, since in Jenaama-Sorogaama the two morphemes are phonologically unrelated. There is also a synchronic argument for distinguishing the two in Kelenga. Whereas a sequential VP lacks a negative counterpart, a subjunctive clause does have one, namely a prohibitive clause (§17.3.2).

Subjunctive clauses can function as quoted imperatives (20), among other functions.

- (20) *ń wó [sèédù bí ‘byē]*
 1Sg said [S **Sbjn** come.Pfv]
 ‘I told Seydou to come.’

These brief comments should suffice for an initial orientation.

3 Phonology

3.1 Internal phonological structure of stems and words

3.1.1 Syllables

Syllables in Kelenga are predominantly Cv and Cvv (with long vowel). Final Cvⁿ behaves much like CvN. There are many Cvv, CvCv, CvvCv, CvCvv and longer stems.

3.1.1.1 Minimality conditions for lexical stems

Monomoraic Cv lexical stems with oral short vowels do not occur, or if they occur lexically they must be lengthened as word forms. This does not apply to Cvⁿ which occurs freely in stems, indicating that Cvⁿ (realized as Cvŋ, Cvm, etc. before various consonants) is bimoraic. The question whether Cv stems are allowed at the lexical level depends on the analysis of mixed Cvv/Cv verbs like ‘put in’: ʃéé (Pfv), sé-lé (Ipfv). Since they are distinct from Cvv/Cvv- verbs like ‘spit’ (Pfv túú, Ipfv túú-lú), it would be reasonable to treat ʃé and túú as the respective lexical shapes, and require ʃé to lengthen to ʃéé to satisfy a bimoraic output constraint when not followed by a suffix.

The issue does not arise for nouns, adjectives, and numerals, none of which have monomoraic Cv shapes even when suffixed.

As noted, Cvⁿ with nasal vowel is acceptable in all stem-classes. Examples are the numeral táⁿ ‘ten’ and the Pfv verb sáⁿ ‘died’. Nouns of the shape Cvⁿ occur as such in the bare stem (normally followed by a modifier), and become Cvŋ- before nominal suffixes. Cvv is also an acceptable shape for all stem-classes: túú ‘spit.Pfv’, júú ‘water’, méé/mèè ‘good’.

3.1.1.2 Word-initial onsets

The word-initial consonant position (C₁) may be empty under limited conditions. Among grammatical morphemes, several pronouns consist of just a vowel (§4.3.1). A handful of nouns, mostly borrowed ultimately from Arabic, begin with a, e.g. álá ‘God’ (§3.3.3). All known adjectives, numerals, and verbs begin with consonants.

Onsets may be Cw and less often Cy rather than just C, as in gwéé(-lé) ‘dance (v)’ and byé ‘come’ (but Ipfv bé-lé). There is a subtle distinction between Cwv and Cuv, and between Cyv and Civ (§3.2.12.2).

A significant number of nouns begin with clusters of nasal plus voiced obstruent (§3.2.12.1), symbol NC. The nasal does not bear an independent tone, and initial NC could be analysed as a prenasalized consonant. A few verbs also begin with NC, e.g. ŋgólò(-lò) ‘be bent’.

There are no examples among basic adjectives or numerals. The atonal nasal in NC contrasts with nasal proclitics like 3Sg ñ and 1Sg ñ that do bear independent tones.

For medial CC clusters, mainly homorganic nasal plus voiced stop combinations, see §3.2.12.3.

3.1.1.3 Syllabicity of diphthongal Cvv noun stems

There are many monophthongal Cvv noun stems (21a), but also some diphthongal Civ and Cuv noun stems (21b), and other noun stems that fluctuate between the two (21c).

(21)	a.	céé	‘oil’
		mââ ~ màà	‘mother’
	b.	fúð ⁿ	‘fonio’
		híé ⁿ	‘business’
		húé	‘tiny termites’
		húó ⁿ	‘bone’
		ʃîé ⁿ	‘venom’
	c.	cîê ~ cêê	‘field’
		fíé ~ féé	‘(a) grain’
		ʝîê ~ ʝêê	‘(social) club, association’
		túò ~ tóò	‘sand’

The issue here is syllabicity. The monophthongal Cvv (e.g. Caa) stems are clearly single syllables; this is less clear with the diphthongal Cvv stems. The best test is the tones of nouns when they function as finals of tone-leveled compounds whose initial is not /H/-melodic. This is because initials in tone-leveled compounds are raised to all-H, but if the initial contains an L-tone the final syllable of the compound final is L-toned.

The examples in (22a), and many others, show that monophthongal Cvv is treated as a single syllable. As finals in compounds of the indicated type that are in current use, such stems are fully L-toned, regardless of their own lexical melody. When this test is applied to the diphthongal stems in (21b) above, the results are mixed (22b). The only such noun that is in common use as compound final is ‘bone’, and in the relevant compounds it varies between -húðⁿ (suggesting bisyllabicity) and -hùðⁿ (suggesting monosyllabicity, since Cùù is a variant of Cùù, §4.1.1.5). Invented compounds with ‘fonio’, ‘business’, and ‘tiny termites’ had L-toned finals, suggesting monosyllabicity, but ‘venom’ favored the bisyllabic type.

(22)	final	compound	initial
a.	céé ‘oil’	hááló-cèè ‘shea butter’	hààlò-ò ‘tree sp. (<i>Vitellaria</i>)’
	mââ ‘mother’	kógóbá-mââ ‘termite queen’	kògòbá-à ‘termites’

b. fùḏ ⁿ ‘fonio’	háá ⁿ -fùḏ ⁿ ‘Bozo fonio’	hàà ⁿ ‘Bozo (person)’
híé ⁿ ‘business’	háá ⁿ -hìè ⁿ ‘Bozo business’	hàà ⁿ ‘Bozo (person)’
húé ‘tiny termites’	hóó-hùè ‘house termites’	hòò ‘house’
húó ⁿ ‘bone’	gáláká-húḏ ⁿ ‘ribs’	gálákà-à ‘flank’
	bóóró-hùḥ ⁿ ‘femur’	bòòrò-ò ‘thigh’
fìè ⁿ ‘venom’	háá ⁿ -fìè ⁿ ‘Bozo venom’	hàà ⁿ ‘Bozo (person)’

Of the stems attested in both monophthongal and diphthongal Cvv form in (21c) above, ‘field’, ‘grain’, and ‘club (association)’ readily function as compound finals. ‘Field’ and ‘club’ have L-toned final forms (23a). By contrast, ‘grain’ has HL-toned finals whether pronounced with a monophthong or with a diphthong (23c).

(23) a. cìè/cèè ‘field’	jón-cìè ~ -cèè ‘millet field’	jòŋ-ò ‘millet’
jìè ~ jèè ‘club’	jàŋjànú-jèè ‘women’s club’	jàŋànú-ù ‘woman’
b. fíé/féé ‘grain’	jó ⁿ -fíè ~ -fèè ‘millet grain’	jòŋ-ò ‘millet’

Interpretation of these data is tricky for several reasons. First, interspeaker variation is likely. Second, each of the variable Cvv stems tends to have a favorite pronunciation for a given speaker. Third, the phonetic difference between diphthongal Cív and monophthongal Cvv is barely audible even in careful pronunciation when the consonant is palatal (c, j, ʃ), allowing almost imperceptible shifts.

With these caveats, it does seem that diphthongal Cuv and Cie have some tendency to pattern as bisyllabic.

3.1.1.4 Syllabicity of diphthongal Cvv verb stems

The same issue arises in verbal morphology. Here the key issue is the tonal patterning of Cvv-lv Ipfv stems when the stem has /HL/ melody (Cýv̂). The tonal options are Cýv̂-l̂v and Cýv̂-l̂v (§3.6.5.4.5).

The strictly monophthongal verbs (24a) have Ipfv Cýv̂-l̂v, where the tone break is shifted rightward to align with the syllable boundary. By contrast, the strictly diphthongal verb (24b) has Ipfv Cýv̂-l̂v. Verbs that fluctuate between monophthongal and diphthongal forms (24c) likewise favor monophthongal Cýv̂-l̂v and diphthongal Cýv̂-l̂v. The latter is parallel to CýCv̂-l̂v for bisyllabic /HL/-melodic verbs (24e).

(24)	Pfv	Ipfv	gloss
a.	héè	héé-lè	‘see’
	jéè	jéé-lè	‘miss (v)’ (< Bambara)

b.	húè	húè-lè	‘jab’
c.	híè ⁿ ~ h'éè ⁿ cíè ~ c'éè	híè-nè ~ h'éé-nè cíè-lè ~ c'éé-lè	‘help (v)’ ‘get up’ (also kíè)
d.	c'éè ⁿ (~ kíè ⁿ)	c'éè-nè ~ c'éé-nè	‘arrive’
e.	sógò	sógò-lò	‘cultivate’

Although caveats similar to those mentioned in the preceding section apply here as well, there is some evidence that diphthongal Cvv verbs are bisyllabic.

3.1.2 Word-internal metrical structure

Since syncope and accentual processes are rare in Kelenga, there is not much to say about foot structure. CvCvCv words do not syncopate systematically to CvCCv, although when C₂ is r it allows optional syncope of the second vowel: màrífá-à ~ màrfá-à ‘rifle’. There is no well-defined stress system as such.

Whereas some languages of the zone allow only one H-toned peak (whether on a single mora or syllable or spread over multiple syllables), Kelenga allows two peaks in noun stems, as in téèndáŋ-ò ‘hamerkop (bird)’ and tómondígí-ì ‘ricin (shrub)’.

There is no sensitivity to overall prosodic weight of stems in affixal morphology. Nominal plurals and singulars are the same for prosodically light and heavy stems. Imperfective suffixation for verbs likewise disregards stem weight. Some tonal processes have different effects on light and heavy stems, but only because light stems have fewer available tone-bearing units. For example, stems with at least two initial L-toned syllables can add an initial H in in tonal ablaut (Initial H-Ablaut), but stems without only one such cannot express the H.

Hints of a templatic target CvCv- might be discerned in the initials of exemplar-based composite adjectives with final -maŋ-ɔ (§4.5.1.2.2).

3.2 Consonants

Kelenga has the consonants in (25). Parentheses enclose consonants that are marginal to the system, e.g. those that occur in a few loanwords. Glottal stop ʔ occurs only in vocalizations not clearly integrated into the lexicon or grammar. Labial velars and phonemically nasalized semivowels, occur in some languages of the zone. Their absence from Kelenga is marked by the dash — in the table.

(25) Consonants

	1	2	3	4	5	6	7	8
labial	p	b	m	f	v	w	—	
alveolar	t	d	n	s	z	l, r	—	
alveopalatal	c	j	ɲ	ʃ	(3)	y	—	
velar	k	g	ŋ					
labial velar	—	—	—					
laryngeal								h, (ʔ)

notes: stop j is IPA [ɟ], semivowel y is [j], r is tap [ɾ]

key to columns: 1. aspirated voiceless stops (c is affricated); 2. voiced stops; 3. nasals, 4. voiceless fricatives (including sibilants); 5. voiced fricatives (including sibilants); 6. nonnasal sonorants; 7. nasalized sonorants; 8. laryngeals

v (voiced labial fricative) occurs in a few nouns, and elsewhere it appears due to voicing of f after a nasal. It is of course distinct from “v” as a vocalic variable in formulae like C^vC^{v̄}. The lower-case permits tone markings which are difficult typographically for capital V.

Tap r does not occur initially in lexical stems. It does occur initially in some enclitics like focus marker rá (§13.1.1).

3.2.1 Stem-final consonants

Most full words ends in vowels. Word-final nasalized vowels are bimoraic, and the nasalization can be realized as a homorganic nasal consonant before stops. For example, sâⁿ ‘buy.Pfv’ combines with gôⁿ ‘here’ as sâɲ gôⁿ. Many nouns and adjectives end in a similar nasalized vowel in the bare stem, the form that appears before an adjective or other modifier. Autonomous forms of the same nouns and adjectives end in ɲ plus a suffixal vowel, e.g. hɔ̀nɔ̀ɲ-ô ‘bird’, compare hɔ̀nɔ̀ⁿ húlò-ò ‘big bird’ with adjective added to the bare stem.

The other consonant that can end a word is y. Final y occurs in a handful of verbs, like háy ‘show’. In each case it likely reflects apocope from *Cvyi → Cvy.

3.2.2 Alveopalatals (c j)

c occurs initially in a few stems. Comparative and in some cases internal variants suggest that c can derive from *t (26a) or *k (26b) before front vowels or u/w.

(26)	stem	gloss	related form
a.	cèè	‘field’	JSDj tìyè, Cliffs tùṣè ~ cìyè
	cúḏ ⁿ	‘fart (n)’	JSDj túwó ⁿ , Cliffs tūwō ⁿ
	céé	‘oil, butter’	JSDj tíyé, Cliffs tyé
	cwáá-ná	‘red’	Kelenga tóṅ-ó, JSDj and Cliffs tòmò-nà
b.	cíè	‘get up’	JSDj kìrì, Cliffs kì
c.	céénè	‘slide (v)’	
	cóṅgó	‘crumple’	

j (IPA [j]) occurs in many stems including júú ‘water’, jí-rí ‘tree’, jàkú-mà-à ‘cat’, jéé ‘eat’ (< *díyé), jójì ‘clean, wipe’, nzáájé-è ‘thorny acacia sp.’

3.2.3 Labial fricative f

f is fairly common and occurs in core vocabulary, e.g. verbs fógò(-lò) ‘sit’ and fòṅé(-nè) ~ fèṅé/fèṅé-nè ‘rot’, predicate adjective féjú ‘be lightweight’, and nouns fàrà-à ‘lagoon’ and fòlì-ì ‘laughing dove’. f in native (unborrowed) vocabulary often reflects *p, which is preserved in Cliffs cognates like pwò/pò-lò ‘sit’ and pēlūⁿ ‘be lightweight’.

3.2.4 Voiceless stops (p t c k) and voiced stops (b d j g)

For c and j, see §3.2.3 above. Voiceless stops {p t k} are common stem-initially and rare medially. Voiced stops {b d g} are common initially and medially (intervocalically).

Within stems, nasal-stop clusters normally have the voiced rather than unvoiced stop. At boundaries (compounds, full-stem iterations, noun plus adjective or numeral, composite numerals), voiceless stops often become voiced after a stem-final nasal, as in iterated kénèèṅ-kénèèⁿ ~ kénèèṅ-génèèⁿ ‘one by one’ (§3.4.2.4).

3.2.5 Labial velars (kp gb ṅm) absent

No examples of labial velars {kp gb ṅm} have been recorded. kw and gw clusters are common initial clusters, but ṅw is unattested.

3.2.6 Laryngeals (h ʔ)

h is common stem-initially and can occur medially. It occurs in borrowings and in native vocabulary. Examples are húlò-ò ‘big’, fàráhón-ó ‘tree sp. (*Syzygium*)’, máhàlà/máhàlá-là ‘de-scale (fish)’, hári/hàri-li ‘tie’, and imperfective particle há.

In native vocabulary h usually reflects Proto-Bozo *k, and h still behaves like k in some phonological alternations. After a nasal or nasalized vowel, voiceless obstruents are sometimes voiced, including k → g. In the same environments, h is voiced and hardened to g. Thus imperfective há combines with 1Sg íj as íj gá, and hòndòŋ-ò ‘bird’ combines with húlò-ò ‘big’ as hòndòŋ gúlò-ò ‘big bird’ (§3.4.2.4, §5.1.5.2).

In the post-subject morpheme há (imperfective or ‘be’) the h is often elided after a vowel in allegro speech, triggering vv-Contraction. Most transcribed examples in this grammar do not reflect this elision.

Glottal stop ʔ is not a regular phoneme. Clause-final emphatic dèʔ can have a final glottal as a prosodic marker (§19.4.1.2). ááhò ‘yes!’ and àyí ‘no!’ as affirmative and negative responses do not have glottal stops, although some grunted variants for ‘no!’ of the *unh-unh!* variety may have a medial glottal.

3.2.7 Sibilants (s ʃ z ʒ)

s and z are distinct consonants. Both occur initially and medially (27).

- (27) a. sòŋò-ò ‘price’
 bòsò-ò ‘gravel’
- b. záámé-é ‘riz au gras (rice with sauce cooked in)’
 fěézèŋ-ò ‘thick’

However, z is less common than s in stem-initial position. Medially it can function as the secondarily voiced counterpart of s after a nasal or nasalized vowel.

- (28) fěéⁿzè ‘lay out (to dry)’
 síⁿzíⁿ ‘lean against’
 táⁿ-zúgó ‘30’ cf. táⁿ ‘10’, jííyò ‘3’

The distinction between s and ʃ has variable status depending on the speaker. For some speakers, s and ʃ are phonemically distinct. The number of stems with s is greater than the number with ʃ for these speakers. For other speakers, s is the usual pronunciation for all of the relevant stems. In the lexical spreadsheet, s and ʃ are transcribed based on the speakers who make the distinction.

For these speakers, the words that have stem-initial ʃ are listed in (29). In at least some cases, it is likely that the initial ʃ goes back to an initial cluster *sy or *sw, and a few of them have variants of this form. For the three verbs in (29a), see §10.1.2-4.

(29) a. monosyllabic verbs with irregular s/ʃ alternation by aspect

ʃóò	‘go.Pfv’	versus reduced só, Ipfv só-lò
ʃéé	‘say.Pfv’	versus reduced sé, Ipfv sé-lé
ʃéé	‘pour into.Pfv’	versus reduced sé, Ipfv sé-lé

b. initial before front vowel {i e ε}

ʃííkè(-lè)	‘fish (v), go fishing’
ʃíí	‘grind, mill (v)’
ʃéné	‘hold out (hand)’
ʃéè	‘tomorrow’
ʃéè	‘on’ (postposition)

c. initial before {u w}

ʃúá(-lá)	‘find (sth lost); weave’
ʃwáá	‘wood’
ʃwòò	‘horse’ (variant)
ʃwòò ⁿ	‘crocodile’

d. initial before low or back vowel {a o ɔ u}

ʃáá-hòò ⁿ	‘head’
ʃáà	‘size’
ʃáákì(-lì)	‘return, go back’
ʃáà/ʃáá-là	‘laugh (v)’
ʃàà ⁿ	‘bamboo fibers’
ʃááná-á	‘butter catfish’
ʃáárò(-lò)	‘caress’
ʃáá ⁿ hà-à	‘eel sp.’
ʃòò	‘horse’ (variant)
ʃóó ⁿ /ʃóó-nó	‘roll up (net)’
ʃòò	‘thing (abstract)’
ʃóó nà	‘for’ (postposition)

An incomplete but representative sample of stems with stable initial s rather than ʃ for all speakers checked is in (30).

(30) a. monosyllabic verbs

sá ⁿ /sá-ná	‘die’
sâ ⁿ /sá-nà	‘buy’
sô ⁿ /só-nò	‘quarrel’
sèè ⁿ	‘be equal; be normal’ (stative)

b. initial before front vowel {i e ε}

sélé(-lé)	‘sing’
séémè(-nè)	‘put up against’
sénè(-nè)	‘incise’
séηé(-né)	‘pound in mortar’
sígí(-ní)	‘rub on’
sínì(-nì)	‘urinate’
sí ⁿ zí(-lí)	‘(water) spring out’
sísà ⁿ	‘now’
síí	‘any’
síírá	‘shade’
símí-nóη-ð	‘stinging black ant’
síné-é	‘gazelle’
síní-ì	‘butterfly’
sírá-á	‘chewing tobacco’
sìsì-ì	‘smoke’

c. initial before {u w}

sùlê ⁿ /sùlé-nè	‘propel (boat)’
súmá(-ná)	‘measure (v)’
sú ⁿ /sú-nú	‘be fasting’
súúné(-né)	‘breathe’
súúró(-lú)	‘winnow by shaking’
sùbáà	‘chicken’
súgú-ú	‘grass’
sùgù-ù	‘fishnet’
súmá-á	‘milk (n)’
súmbó-ó	‘fly (insect)’
súnú-ú	‘husband’
sùη-ð	‘navel’
súη-ó	‘guest’

d. initial before low or back vowel {a o ɔ u}

sàgà(-à)	‘sheep’
sárí(-lí)	‘cast (net)’
sógóró(-ló)	‘stack up’
sóná-yà(-là) ~ sóné-yà(-là)	‘become foul’
só ⁿ zòrò/só ⁿ zòró-lò	‘squat’
sógò(-lò)	‘cultivate (crops)’
sógóbé(-lé)	‘pick (teeth)’
sólò(-lò)	‘cook by boiling’
sógó-ó	‘goat’
sòmú-ù	‘waterjar’

sóŋ-ó	‘market’
sòŋ-ó	‘fight (n)’
sòŋò-ò	‘price’
sóómó-ó	‘mortar (for pounding)’

Some stems with medial ʃ are in (31).

(31)	káʃi(-li)	‘(heart) be angry’	(< Bambara)
	móóʃi(-li)	‘caress’	
	wóóʃi(-li)	‘sweat (v)’	
	hóóʃáà	‘wall (of house)’	
	[kírí-kírí]-kòʃí-ì	‘catfish sp.’	
	máʃòò ~ máʃòò	‘need (n), interest’	

ʒ occurs as the voiced form of ʃ following a nasal. An example is postposition ʃèè ‘on’ in such combinations as [kírí m̀ẁó-yèⁿ] ʒèè ‘in the ways that ...’ (2021-01 @ 00:34).

3.2.8 Nonnasal sonorants (l, r, w, y)

{l w y} freely occur stem-initially: lógó-ó ‘mouth’, wórón-ó ‘place’, yágà ‘put down’. Kelenga l sometimes corresponds to Jenaama d, as in légé(-lé) ‘pick up’ versus JSDj dé(-ré), which also illustrates the Kelenga imperfective suffix -lv matching JSDj -rv. There is no restriction against yi or wu sequences: wúsú ‘roast’, yígí-yígí ‘shake’. r is not attested initially in stems but does occur in enclitic-like elements such as focus marker rá (§13.1.1).

All four nonnasal sonorants may occur intervocalically: álá ‘God’, h̀r̀èⁿ ‘wait for’, bùyààkí-ì ‘guava’, dúdúwàlá-à ‘trunkfish sp.’. However, the two liquids are more common intervocalically than the semivowels with the exception of inchoative verbs with suffix -ya (§9.4.2.2). A few verbs like póy(-lí) ‘ooze, leak’ have the shape Cvy, likely by apocope or syncope from *Cvyi (§10.1.1.5).

y and especially w are common in initial Cy and Cw clusters (§3.2.12.2).

3.2.9 Velar nasal ŋ

The velar nasal is rare stem-initially (except in the homorganic cluster ŋg, cf. §3.2.12.3 below). Among nouns it is attested as initial consonant in ŋááhàà ‘giant catfish (*Arias*)’ and ŋóŋó-ŋóŋó-nóŋ-ò ‘bush sp. (*Senna occidentalis*)’. The very common bidirectional case marker ŋá ~ ŋà follows subjects in transitive perfective positive clauses.

3.2.10 Nasalized sonorants absent

There are no phonemically nasalized sonorants w^n , y^n , or r^n .

3.2.11 Consonant clusters

3.2.11.1 Stem-initial NC

There are quite a few nouns that begin with homorganic nasal plus voiced obstruent. A few examples are in (32).

(32)	cluster	noun	gloss
	mb	mbáláŋ-ó	‘shoulderbag’
	mv	mvèrèŋ-ò	‘sparrowhawk’
	nd	ndóŋ-ò	‘grasshopper’
	nz	nzímí-nóŋ-ó	‘doug palm’
	ŋj	ŋjòrò-nóŋ-ò	‘gray-headed sparrow’
	ŋg	ŋgèlèŋ-ò	‘ground squirrel’

A disproportionate number of the nouns with initial NC are flora-fauna terms, suggesting that the nasal is the vestige of a noun-class marker. However, there are also some non-flora-fauna nouns: ŋgèrèŋ-ò ‘side’, ndòlò-ò ‘liver’, ŋgòmí-ì ‘dew’.

The nasal in NC does not bear its own lexical tone. It is usually pronounced with low pitch when postpausal, but it does not trigger Final Tone-Raising or Rightward H-Tone Shift in a preceding word: sèédù (not sèèdú) in sèédù ŋgààná-à ‘Seydou’s crow’.

Initial NC clusters are rare with non-noun stem classes. For verbs the known cases are ŋgólò(-lò) ‘become bent’ and the semantically similar ŋgóólí(-lí) ‘become curved’. There are no known cases among numerals or adjectives, other than participles of these verbs. Among grammatical morphemes, preclausal ŋgàà ‘but’ may be mentioned. Its nasal does have an independent tone.

One of the variant forms meaning ‘what?’ is màⁿ ~ mwàⁿ. It can be pronounced [m:à] with /mw/ merging into a geminate.

3.2.11.2 Stem-initial Cy and Cw clusters

The distinction between Cyv and Civ, and between Cwv and Cuv, where “v” is a variable vowel, is subtle.

The known examples of initial Cy not involving ʃ are in (33).

(33)	stem	gloss	comment
	byé	‘come.Pfv’	variant bé, Ipfv bé-lé (§10.1.2.1)
	fyê-fyé-è	‘African black pepper’	
	fyéé/fyé-lé	‘winnow by shaking’	variant fíé

Additional cases of Cyv in Pfv verbs are masked by the palatalization of *sy to ʃ. Parallel to the irregular Pfv/Ipfv pairing in byé/bé-lé ‘come’ are the pairs ʃód/só-lò ‘go’, ʃéé/sé-lé ‘say’, and ʃéé/sé-lé ‘put/pour in’ as typically pronounced by some speakers (others prefer bé/bé-lé and só/só-lò for the two motion verbs and merge s with ʃ throughout). Other stems with invariant ʃ before low or back vowels may have originally begun with *sy but are now more or less lexicalized.

Some stems beginning with c, j, and ɲ may also have originated in this way. For example, jáá/jáá-lá ‘eat’ has Jenaama-Sorogaama cognates like díyá which likely resyllabified as *dyáá in Pre-Kelenga.

For diphthongal Civ with equal sonority on the two vowels, see §3.3.6 below.

The examples of initial Cw are more numerous and involve a wider range of consonants. Some relevant verbs are in (34).

(34)	stem	gloss	comment
	bwé ⁿ /bwé-né	‘ruin, damage’	variant béé ⁿ /béé-né
	gwéngé(-lé)	‘drive in (nail)’	
	gwérè-nà-à	‘unripe’	participle
	gwéé(-lé)	‘dance (v)’	
	gwéè/gwéé-lè	‘untie’	
	gwéngè(-lè)	‘drive ahead (herd)’	
	gwérè(-lè)	‘approach’	
	gwóó(-ló)	‘weep; cry out’	
	hwó ⁿ /hwó-nó	‘shun’	variant hós ⁿ /hós-nó
	kwáí(-lí)	‘hit’	
	kwéè/kwéé-lè	‘steal’	
	ʃwó ⁿ /ʃwó-nó	‘roll up’	variant ʃós ⁿ /ʃós-nó

Nouns have many similar Cw initials with the same array of consonants, to which nw and tw ~ cw can be added: nwéèⁿ ‘leech’, twàà ~ cwàà ‘daba (hoe) or pick-hoe’. The optional palatalization of tw is consistent with the occurrence of ʃw but not #sw as initial cluster for verbs in (34) above, and likewise with nouns, e.g. ʃwáá ‘wood’, ʃwòò ‘horse’, and ʃwòòⁿ ‘crocodile’ but no nouns beginning in #sw. This makes sense of the unusual t/c alternation in the word-family for the adjective ‘red’ (35).

(35)	short modifying form	tón-ó/tòn-ò	§4.5.1.2.1
	verb ‘become red’	cwáá ⁿ -yà(-là)	§9.4.3

An assistant also sometimes alternates between Cɔ and Cwa or Cwe, as in hɔ̀rêⁿ ~ hwèrêⁿ ‘wait for’. However, kwárí/kwárí-lí ‘hit’ has kw.

3.2.11.3 Medial CC and CCC clusters

The only common medial CC clusters are homorganic nasal plus voiced stop (36a). Nasal plus voiced obstruent is heard as nasalized vowel plus the obstruent in some cases, but the nasal is likely responsible for voicing the obstruent and so one can argue for structural mv and nz clusters.

(36)	cluster	example	gloss
	a. stop		
	mb	bóómbòŋ-ô	‘chin’
	nd	fííndóŋ-ó	‘snakehead (fish)’
	nj	ŋgɔ́ŋjérá-á	‘various small bird spp.’
	ŋg	súŋgálàŋ-ô	‘kneading stick’ (variant)
	b. fricative		
	mv ~ ⁿ v	bà ⁿ vúlà-à	‘hat’
	nz ~ ⁿ z	sú ⁿ -zùŋ-ô	‘shrub sp. (<i>Annona</i>)’
		sì ⁿ zìmbá-à	‘euphorbia (shrub)’

Homorganic nasal plus voiceless obstruent is rare and is limited to loanwords like báraǵáántè-è ‘bdellium (resin used as incense)’.

No triple CCC clusters have been recorded.

3.2.11.4 Final CC clusters absent

There are no final consonant clusters at stem or word level.

3.3 Vowels

The inventory of vowel qualities is (37). All seven qualities occur long and short, and oral and nasalized.

(37)		back		front
	high	u		i
	mid	[+ATR] o		e
		[-ATR] ɔ		ɛ
	low	a		

This is the regionally widespread 7-vowel system found in nearby Mande languages, Bangime, and Dogon languages. There is an ATR-like distinction, or arguably just a Romance-type open/closed distinction, in the mid-height vowels but not in the high or low vowels. See §3.3.5 for ATR harmony.

3.3.1 Short and long vowels

In native vocabulary, long vowels occur mainly in Cv_v monosyllabics and in stem-initial syllables in longer stems. Most noninitial syllables have short vowels but some cases of noninitial long vowels are also known.

The minimal shapes for monosyllabic lexical stems other than verbs are Cvⁿ and Cv_v. These are both structurally bimoraic; Cvⁿ can be realized as CvN with a homorganic nasal before another consonant. For verbs, oral (nonnasal) monomoraic Cv can be added at lexical (underlying) level, assuming that the verbs in (38a) have the lexical shape Cv and are lengthened to Cv_v by a phonological rule when unsuffixed. Verbs of the shape Cvⁿ are in (38b), and those of stable shape Cv_v or Cv_vⁿ are in (38c).

(38)	Pfv	gloss	Ipfv
	a. Cv _v stems with presuffixal Cv- form		
	lóó	‘give’ or ‘enter’	ló-ló
	ʃéé	‘put in’	sé-lé
	ʃéé	‘say’	sé-lé
	ʃóò (~ só)	‘go’	só-lò
	fyéé	‘winnow by shaking’	fyé-lé
	b. nasalized vowel (Cv ⁿ)		
	bá ⁿ	‘shave (head)’	bá-ná
	sú ⁿ	‘fast, be fasting’	sú-nú
	tô ⁿ	‘swallow’	tó-nò

c. Cvv and Cvvⁿ

hòò ⁿ	‘call’	hóó-nù
léé	‘sew’	léé-lé
túú	‘spit’	túú-lú
múù	‘ripen; be cooked’	múù-nò

For non-verb stems, Cvⁿ and Cvv are viable in bare stems. The corresponding singulars are Cvη-ɔ and Cvv, respectively (39). There are no examples of monomoraic Cv.

(39)	bare stem	gloss	singular
a. Cv ⁿ			
<i>nouns</i>			
	jò ⁿ	‘grain crop’	jòη-ô
	kè ⁿ	‘road’	kèη-ô
	lé ⁿ	‘child’	léη-ó
	tó ⁿ /tò ⁿ	‘red’ (short form)	tóη-ó/tòη-ô (§4.5.1.2.1)
<i>numeral</i>			
	tá ⁿ	‘10’	—
b. Cvv			
<i>nouns</i>			
	cèè	‘field’	cèè
	dàà	‘roselle’	dàà

Examples of bisyllabic and longer shapes in nouns are in (40). The distinction between medial C and NC is disregarded.

(40)	shape	bare stem	singular	gloss
	CvCv	dísí	dísí-í	‘chest (body)’
		fàrì	fàrì-ì	‘donkey’
	CvvCv	góòmô	góòmó-ò	‘fish sp. (<i>Distichodus</i>)’
		háálá	háálá-á	‘bamboo’
	CvCvv	hàbáà	(= bare stem)	‘cloud; rain’
		jàmáà	(= bare stem)	‘crowd’
	CvvCvv	búúmáá	(= bare stem)	‘red kapok tree (<i>Bombax</i>)’
		hòóndàà	(= bare stem)	‘cattle egret’
	CvCvCv	jàkúmà	jàkúmà-à	‘cat’
		jígíjè	jígíjè-è	‘granary’
	CvvCvCv	bááwòlô	bááwòlô-ò	‘mallard’
		háámúná	háámúná-á	‘rainy season’

CvCvCv	sàjódê	sàjódê-è	‘yellow-billed stork’
	tàmààtí	tàmààtí-ì	‘tomato’
CvCvCv	bóló-mèè	(= bare stem)	‘young person’
	búrúpàà	(= bare stem)	‘hyena’

Longer stems occur, but they are arguably treated prosodically as compounds.

3.3.2 Nasalized vowels

All seven oral vowel qualities, both short and long, are compatible with phonemic nasalization. However, the nasal element can have a life of its own.

3.3.2.1 Short nasalized vowels

Most short nasalized vowels are stem- or word-final. They are pronounced as short nasalized vowels prepausally. Before stops, nasals, and l the nasalization is often realized as a homorganic nasal consonant in seamless phrasing. This suggests that short nasalized vowels are bimoraic. This in turn supports the claim that non-verb stems (nouns, adjectives, numerals) are minimally bimoraic, while verbs can be monomoraic at lexical level but must be bimoraic at word level after phonological processes.

(41) illustrates the vN pronunciation.

- (41) a. ā ‘sàⁿ
3Sg die.Pfv
‘He/She died.’
- b. ā ‘sàn [nùŋú-ú nîŋî]
3Sg die.Pfv [village-Sg inside]
‘He/She died in the village.’
- c. ā ‘sàm bómòkò
3Sg die.Pfv B
‘He/She died in Bamako.’
- d. ā ‘sàn [lómú-ú nî]
3Sg die.Pfv [bedding-Sg Loc]
‘He/She died on the bed.’

Before other consonants (fricatives, semivowels, and h if it doesn’t harden to g), these vowels are still pronounced as short nasalized vowels.

- (42) a. \bar{a} ${}^{\prime}s\bar{a}^n$ $w\acute{e}\acute{e}$
 3Sg die.Pfv today
 ‘He/She died today.’
- b. \bar{a} ${}^{\prime}s\bar{a}^n$ [$f\acute{a}r\grave{a}-\grave{a}$ $\int\acute{e}\acute{e}$]
 3Sg die.Pfv [stone-Sg on]
 ‘He/She died on the rock.’

Short nasalized vowels at the end of noun and adjective stems occur only in bare stems, the forms used before modifiers (adjectives, numerals). There are hundreds of such stems, and they are the only noun and adjectival stems that end in consonants. They always correspond to stem-final η before the $-\grave{o}$ suffix of the singular, which is also the morphological basis for the plural. The singular is the usual citation form.

(43)	gloss	bare stem	singular	plural
	‘neck’	$h\acute{a}^n$	$h\acute{a}\eta-\acute{o}$	$h\acute{a}\eta-\acute{o}-y\grave{e}^n$
	‘place’	$w\acute{o}r\acute{o}^n$	$w\acute{o}r\acute{o}\eta-\acute{o}$	$w\acute{o}r\acute{o}\eta-\acute{o}-y\grave{e}^n$

Short nasalized vowels that are not realized with a nasal consonant are rare stem-internally. The medial consonants that clearly permit a preceding nasalized vowel are f (becoming v) and h .

- (44) $b\grave{a}^n v\acute{u}l\grave{a}-\grave{a}$ ‘hat’
 $\int\acute{a}^n h\grave{a}-\grave{a}$ (~ $\int\acute{a}^n h\grave{a}-\grave{a}$) ‘fish sp. (*Gymnarchus*)’

In words like $s\acute{u}^n-z\grave{u}\eta-\acute{o}$ ‘shrub sp. (*Annona*)’ and $t\acute{o}^n z\grave{o}-\grave{o}$ ‘fruit bat sp.’, the nasal is sometimes consonantal (nz cluster).

In languages that distinguish Cv from Cv^n after an oral consonant C , the issue arises whether such a distinction is possible after a nasal consonant (Nv versus Nv^n), and if not whether Nv functions phonologically as Nv^n (i.e. as parallel to Cv^n).

In Kelenga, for nouns, adjectives, and numerals there is no requirement that final Nv function as nasalized. There is a clear distinction between noun and adjective stems ending in Nv^n , which require η in presuffixal position ($n\acute{e}\eta-\grave{o}$ ‘tongue’, bare stem $n\acute{e}^n$; $h\acute{u}m\grave{o}\eta-\grave{o}$ ‘paddle’, bare stem $h\acute{u}m\grave{o}^n$), and stems that end in Nv with phonemically oral vowel and form the singular by lengthening it (e.g. $s\acute{u}m\acute{a}-\acute{a}$ ‘milk’, $s\acute{in}\acute{e}-\acute{e}$ ‘gazelle’).

The situation is different in verbs. They distinguish Cv from Cv^n with oral consonant C . There is only a marginal distinction between Nv and Nv^n word boundaries. $m\acute{e}^n$ ‘drink’ consistently grows homorganic nasals before a stop in an assistant’s speech. This is the only monosyllabic Nv^n verb stem, and without the final nasalization (which counts as a mora) this stem would have to lengthen its vowel to have an acceptable shape. There are no contrasting Nv verbs with nasal consonant and oral vowel, only long Nvv verbs. The *Ipfv* stem $m\acute{e}-n\grave{e}$ ~ $m\acute{e}-n\grave{u}$ ‘drink(s)’ ends in an oral vowel.

- (45) a. Ø ɲá = á **méɲ** gôⁿ
 1Sg Sbj/Obj 3Sg drink.Pfv here
 ‘I drank it here.’
- b. ɲ gá = á **mé-nè** gôⁿ
 1Sg Ipfv 3Sg drink-Ipfv here
 ‘I (often) drink it here.’

Other verbs ending in a short Nv or long Nvv syllable, including causatives with suffix -ni, are treated as ending in oral vowels. They do not regularly appear with a homorganic nasal before a stop.

It is therefore somewhat surprising that every single verb whose Pfv stem ends in an Nv or Nvv syllable requires the -nv or -nu allomorph of the Ipfv suffix (46c). By contrast, every verb ending in Cv or Cvv with oral consonant and vowel has Ipfv -lv (46a).

(46)	type	Pfv	Ipfv	gloss
a.	Cv	ʃéé	sé-lé	‘put into’
	CvCv	jàgî	jàgí-lì	‘be humiliated’
b.	Cv ⁿ	sá ⁿ	sá-ná	‘die’
	Cvv ⁿ	héè ⁿ	héé-nè	‘help’
	...Cv ⁿ	hérù ⁿ	hérù-nù	‘throw’
c.	Nv ⁿ	mê ⁿ	mé-nè	‘drink’
	Nvv	múú	múú-nú	‘insult (v)’
	...Nv	mànúɲù	mànúɲù-nù	‘stir’
		sénè	sénè-nè	‘incise’

3.3.2.2 Long nasalized vowels and nasalized diphthongs

Cvvⁿ syllables are attested but relatively uncommon. Nouns consisting of or ending in such a syllable do not realize the nasalization as ɲ before the singular suffix -ɔ. There is one partial exception to this, namely nàáɲ-ð, a variant pronunciation of nàɲáɲ-ð ‘middle; waist’. The bare stem is nàɲâⁿ ~ nââⁿ.

In all other nouns, long Cvvⁿ is treated like long oral Cvv. There is no presuffixal #Cvvɲ- form. The bare stem is identical to the singular, and plural -yèⁿ is added directly to it. The few known monosyllabic nouns and nominal compound finals are in (47).

(47)	singular = bare	plural	gloss
	a. long nasalized vowel		
	hàâ ⁿ	hàá ⁿ -yè ⁿ	‘Bozo person’
	ʃwòò ⁿ	ʃwòó ⁿ -yè ⁿ	‘crocodile’
	ʃáá ⁿ -(ⁿ -)hóò ⁿ	ʃáá ⁿ -hóó ⁿ -yè ⁿ	‘head’
	~ ʃíá ⁿ -(ⁿ -)hóò ⁿ		
	b. nasalized diphthong		
	húó ⁿ	húó ⁿ -yè ⁿ	‘bone’
	fúù ⁿ	fúù ⁿ -yè ⁿ	‘fonio’
	híé ⁿ	híé ⁿ -yè ⁿ	‘task, business’
	ʃî ⁿ	—	‘venim’
	cúù ⁿ	cúù ⁿ -yè ⁿ	‘fart (n)’

There are two known examples of long stems, not transparently composite, that end in a Cvvⁿ syllable (48).

(48)	singular	plural	gloss
	hóóʃáá ⁿ	hóóʃáá ⁿ -yè ⁿ	‘wall’
	hònòhúù ⁿ	hònòhúù ⁿ -yè ⁿ	‘tree sp. (<i>Diospyros</i>)’

Cvvⁿ syllables are rare in nonfinal syllables, and most examples are transparent or possible compounds (49a). (49b) is not composite, but may reflect variation between ⁿz and nz.

(49)	noun	gloss	related form
	a. compounds		
	húó ⁿ -ɲáɲá-á	‘(bone) joint’	húó ⁿ ‘bone’
	húá ⁿ -léɲ-ò	‘grass sp. (<i>Eragrostis</i>)’	léɲ-ó ‘child’ (?)
	ʃíá ⁿ -hóò ⁿ ~ ʃáá ⁿ -hóò ⁿ	‘head’	ā ʃàà ⁿ -hóò ⁿ ‘his/her head’
	ɲjòò ⁿ yí-ì	‘vine sp. (<i>Leptadenia</i>)’	
	b. uncompounded		
	tóó ⁿ zò-ò	‘fruit bat’	

3.3.3 Initial vowels

Vowel-initial morphemes are primarily proclitic pronominals like 3Sg à and 2Pl í (§4.3.1), along with demonstrative ó. These morphemes readily contract with preceding vowels. The demonstrative is pronounced wó by some speakers.

Vowel-initial lexical stems are rare. There are no vowel-initial verb, adjective, or numeral stems.

There are a handful of a-initial nouns borrowed from Arabic: *álá* ‘God’ and *àlikáámà-à* ‘wheat’ (not grown locally). *àlimétì-ì* ‘matches’ is from French *allumette(s)*. *ájúlá-á* of unknown origin denotes a floating plant (*Neptunia*).

One example of initial *i* is recorded. It is *ìyààfá-à* ‘pardon (n)’, an irregular verbal noun that corresponds to the verb *yááfà(-là)* ‘forgive, pardon (v)’. The latter is a regionally widespread word of Arabic origin.

3.3.4 Stem-final vowels

All vowel qualities may occur stem-finally, and therefore word-finally.

3.3.5 ATR harmony and Back/Rounding Harmony

As noted above, the opposition between {*e o*} and {*ε ɔ*} in languages of the zone is often described as an ATR (advanced tongue root) distinction, though its actual articulation needs further study and may be variable.

There are few vocalic alternations within stems so there is little evidence for ATR harmony. The alternation between transitive *jáá(-lá)* ‘eat (sth)’ and intransitive *jéé(-lé)* ‘eat’ (§9.3.1.1) suggests that *a* is, or at least can be, [-ATR]. Compare Jenaama-Sorogaama *díyá* and *díyé*, respectively.

Two apparent shifts of *ɔ* to *oo* after *h* have been noted (50), assuming that *hóófáàⁿ* is a frozen compound.

- (50) a. *hòò* ‘house’
 hóófáàⁿ ‘wall (of house or courtyard)’
- b. *kírí-hónón-ó* ~ *kírí-hónó-ó* ‘finger’
 [*kírí-hónónⁿ-lá*]-*ménú-ú* ‘ring (on finger)’
 ~ [*kírí-hóóⁿ-lá*]-*ménú-ú*

3.3.6 Diphthongal C_vv with high then mid vowel

There is a subtle distinction between C_vv and C_iv, and a similar one between C_wv and C_uv. For C_vv and C_wv see §3.2.12.2 above. The situation is complicated by the existence of monophthongal variants C_{ee}, C_{εε}, C_{oo}, and C_{ɔɔ} for some of the examples. Younger speakers generally prefer the monophthongal variants.

The known examples of C_iv are in (51). They are all C_{ie} or C_{iε}, usually varying with C_{ee} and C_{εε}, respectively. The C_{ie} and C_{iε} variants are diphthongal and behave in most respects like

long monosyllabics rather than as bisyllabics (Ciyε, Ciyε). For example, Cie and Cie nouns have identical bare stems and singulars, as is the case with monophthongal Cvv nouns.

(51)	stem	gloss	related form
	a. nouns		
	fíé	‘grain; bullet’	variant féé
	híé ⁿ	‘task’ or ‘inheritance’	
	híéní-méé	‘adolescent boy’	variant hééní-méé
	b. numeral		
	fíénú	‘2’	contracted in tá ⁿ -víné ‘20’
	c. verbs		
	kíè/kíè-lè	‘get up’	variant céè
	híè ⁿ /híè-nè	‘help’	variant héè ⁿ
	híé ⁿ /híé-né	‘send on errand’	variant héé ⁿ
	kíè ⁿ /kíè-nè	‘arrive’	variants kéè ⁿ , céè ⁿ
	fíélè/fíélè-lè	‘lick’	variant féélè
	fíéré/fíéré-lé	‘chop; split’	variant fééré

‘Get up’ is Pfv kíè ~ céè (51c), where the second variant plausibly derives from *kyèè resyllabified from earlier *kíè and then fusing *ky into c. The Ipfv has distinct tones in the variants kíè-lè and céé-lè, following the regular tonal distinction between Ipfv’s of diphthongal Cýv̄ and monophthongal Cýv̄ (§10.1.1.5). Cognates are JSDj kírì/kírí ‘get up’ and Cliffs kù/kí.

The known examples of Cuv are in (52). The u can be followed by front as well as back vowels. Some but not all of the Cuo and Cuɔ forms have monophthongal variants. Again Cuv behaves like a monosyllabic (e.g. Cuɔ, not Cuwɔ) in nominal morphology.

(52)	stem	gloss	related form
	a. nouns		
	cúð ⁿ	‘fart (n)’	
	fúð ⁿ	‘fonio’	
	fúórð-ð	‘tree sp. (<i>Piliostigma</i>)’	variant fúórð-ð
	húé	‘tiny termite in houses’	
	húɔ ⁿ	‘bone’	
	kùô	‘daytime, sun’	variant kòô
	túð	‘sand’	variant tóð

b. verbs

cúś ⁿ /cúś-nó	‘fart (v)’	
húè/húè-lè	‘jab; bite’	
húé/húé-lé	‘snap, break’	
kúđ ⁿ /kúđ-nò	‘arrive early’	variant kóđ ⁿ
múś/múś-nó	‘shape into a ball’	
múđ/múđ-nò	‘(food) be fully cooked’	

3.3.7 Vocalic sound symbolism

No systematic vocalic sound symbolism has been observed.

3.4 Segmental phonological rules

3.4.1 Local segmental processes

3.4.1.1 l/n alternation (‘child’ and diminutives)

An apparent alternation of initial l and n is observed in the noun léŋ-ś ‘child’ (young person or offspring) and the diminutive ending -nóŋ-đ for nouns. The latter has bare-stem (i.e. premodifier) form -nêⁿ with the same vowel as léŋ-ś. The diachronic relationship of the two is complex, however (§5.1.11).

3.4.1.2 vv-Contraction

Two vowels come together at boundaries under limited conditions. The only combinations that regularly contract are those whose second element is a vocalic pronominal proclitic (2Sg á, 2Pl í, 3Sg à, 3Pl ì, Logo/3ReflSg í) or discourse-definite demonstrative ó. These contract with preceding words or particles ending in a vowel (V₁). Many actual examples involve post-subject inflectional particles (ŋá, há, tá, tí, bí, mání) or instrumental preposition kí (which doubles as ‘and’ conjunction) followed by a pronominal in object or possessor function. Most contractions result in long aa, ii, or oo.

vv-Contraction occurs only sporadically in other vowel combinations. The combinations /e a/ and /e i/ involving the ‘say’ verb (śéé ~ séé/sé-lé) are sometimes contracted to aa and ii, respectively. In (53), a speaker who otherwise says ‘śèè with ś pronounces s in the full contraction sá = [à té], implying reduction to monomoraic sé, but keeps ś in the partially contracted śé = [à té]. The H-tones in sá = and śé = reflect tone sandhi. Similar contractions occur with ‘put in’ (śéé/sé-lé) as in (53b), suggesting reduction of śéé to sé. However, back rounded {u o o} as first vowels do not normally contract (53c). In rapid speech they desyllabify before they fully contract.

3.4.1.3 Cvgi ~ Cvy in verbs

Some verbs show dialectal variation between Cvgi and Cvy, in both Pfv and Ipfv stems. Evidently an original *g has been elided for some speakers, and the resulting *vi became a rising diphthong vy rather than undergoing vv-Contraction to ii (“v” = variable vowel).

- (55) a. báǵí(-lí) báý(-lí) ‘exit (v)’ or transitive ‘take out, remove’
 fǎǵí(-lí) fǎý(-lí) ‘become full’
- b. bóǵì(-lì) bóỳ(-lì) ‘hear’

háý(-lí) ‘show’ and póý(-lí) ‘ooze out, leak’ are not attested in fuller variants with g. The former is questionably related to JSDy gàsì and Cliffs wǎjì ‘show’.

3.4.2 Processes involving nasality

3.4.2.1 Denasalization of vowels

A word-final nasalized vowel can be denasalized when followed by a vowel (i.e. by a pronominal like 2Sg á or 2Pl í), even without full vv-Contraction. Nasalization is audible with ‘ruin’ in (56a) but is suppressed in (56b).

- (56) a. à ǵá= á *b(w)èⁿ
 3Sg Sbj/Obj 3Sg ruin.Pfv
 ‘He/She ruined it.’
- b. à ǵá= á bḗ= [à má]
 3Sg Sbj/Obj 3Sg ruin.Pfv [2Sg Cust]
 ‘He/She ruined it for you-Sg.’

3.4.2.2 vⁿ alternating with vN and vŋ-

Many noun and adjective stems end in a nasal element. For these stems, the singular suffix is -ɔ (of variable tone) and the nasal element appears as velar nasal ŋ, hence ...ŋ-ɔ. The plural suffix is added to this, hence ...ŋ-ɔ-yèⁿ.

The singular suffix is absent when the stem is followed by a modifier (adjective, numeral, or demonstrative). In this case the bare stem of these nouns ends in either a vowel plus assimilated nasal consonant (N) or in a nasalized vowel (vⁿ). The assimilated nasal is usual before stops (including k hardened from h), nasals, and l. It is also possible before sibilants s and ʃ. Stem-initial voiceless obstruents (stops and fricatives) can be voiced after the nasalization (§3.4.2.4), e.g. k→g and s→z, though the frequency of such voicing varies across speakers. The unchanged nasalized

vowel is usual before other consonants (labial fricatives, semivowels, h when not hardened to k). The alternations are illustrated with ‘bird’ in (57).

- (57) a. suffixed
 hònòη-ô ‘bird’
 hònòη-ó-yèⁿ ‘birds’
- b. bare stem
 hónóⁿ ʰviēnū ‘two birds’ (< fíénú)
 hónóη gálù-ù ‘male bird’ (< hálú-ú)
 hónóⁿ wóró-nà-à ‘skinned bird’
- c. hónón sá-nà-à (~ hónóⁿ sá-nà-à) ‘dead bird’
- d. hónóη nájánù-ù ‘female bird’
 hónón ʰtāⁿ ‘ten birds’
 hónón lébè ‘forty birds’

At other word boundaries, the same alternation between final vN and vⁿ occurs, but there is no parallel to suffixal ...η-ɔ. Nouns and adjectives whose bare stem ends in a long nasalized vowel or diphthong do not take an overt singular suffix and so can occur prepausally or directly before other words. They end in a nasalized vowel prepausally, e.g. in citation (58a), as well as before fricatives and semivowels (58b).

- (58) a. húóⁿ ‘bone’
 hààⁿ ‘Bozo (person)’
- b. húóⁿ húló-ó ‘big bone’ variant húóη gúló-ó
 hááⁿ húlò-ò ‘big Bozo’ variant hááη gúlò-ò
- c. húóη cwáá-ná-á ‘red (brown) bone’
 hááη cwáá-nà-à ‘red (brown) Bozo’

Numerals, verbs, and adverbs can also end in nasalized vowels and present similar alternations (59).

- (59) a. táⁿ ‘10’
 sáⁿ ‘die.Pfv’
 gôⁿ ‘here’
- b. [sógó táⁿ] fí-nà ‘ten goats became black’
 ā ʰsàⁿ wéè ‘he/she/it died today’
 góⁿ ʰhā-lèèⁿ ‘men of here, local men’ < gôⁿ há-lèèⁿ

- c. [sógó **tám**] ⁴byē ‘ten goats came’
 ā **sàn** dúgò-ò-nì ‘he/she/it died yesterday’
gón nàṅà-léèⁿ ‘women of here, local women’

The distinction between final vⁿ and vN presented here is somewhat idealized. In careful speech it is always possible to pronounce vⁿ regardless of following consonant.

Words ending in a nasal syllable Nv(v) most often do not treat the vowel as nasalized and so do not have Nv(v)N variants before stops, nasals, and l. For example, nàà ‘cow’ and ṅóṅ-ó ‘fish’ (bare stem ṅóṅ) do not usually show alternations like #nààⁿ ~ #nààN and #ṅóṅ-óⁿ ~ #ṅóṅ-óN (or bare stem #ṅóṅⁿ ~ #ṅóṅN). However, the pronunciations with homorganic N do occasionally occur in an assistant’s casual speech.

3.4.2.3 r → n after nasalized vowel

Tap r does not occur initially in lexical stems but does occur in the enclitic-like rá-ní ‘it is’, as in sèédù rá-ní ‘it’s Seydou’ (§11.2.1.1). It nasalizes to nání after a nasalized vowel under limited conditions. The nasalization is consistent in the combination with past morpheme kúⁿ (60a). It occurs optionally after plural -yèⁿ as in (60b). It does not seem to be usual after singular nouns that end in long nasalized vowels or diphthongs (60c).

- (60) a. ná-rà kúⁿ ⁴nà-nì
 1Sg-Indep Past it.is
 ‘It was me.’
- b. hàáⁿ-yèⁿ ná-ní (~ rá-ní)
 Bozo-Pl it.is
 ‘They are Bozo (people).’
- c. hàáⁿ ⁴rà-ní
 Bozo it.is
 ‘It’s a Bozo (person).’

3.4.2.4 Voicing and hardening of voiceless consonants after nasal

Stem- or morpheme-initial voiceless obstruents {p f t s c k} can voice to {b v d z j g} after a nasal consonant (1Sg ṅ, 3Sg nasal variant ṅ) or a nasalized vowel. Parallel to this is hardening (and voicing) h → g, reflecting the fact that many cases of Kelenga h reflect *k.

A number of high-frequency grammatical morphemes are subject to voicing and hardening (61).

(61)	form	after nasal	gloss or category
	a. with f		
	fáà	váà	‘by’ (postposition)
	b. with t		
	tá	dá	IpfvNeg
	tí	dí	PfvNeg
	c. with k		
	kí	gí	conjunction (‘and’)
	d. with h		
	há	gá	imperfective or ‘be’

The shift há → gá (61d) for the imperfective morpheme (also the ‘be’ verb) is obligatory after a nasal pronominal, thus always 1Sg ń gá and 3Sg nasal variant ń gá, not #ń há or #ń há. In allegro speech the ńg cluster is optionally further reduced to just ń in these combinations.

Speakers diverge regarding the productivity of the other voicing alternations (61a-c). For one speaker, it is optional. He stated that voicing was obligatory after the nasal allomorph of the 3Sg pronominal, hence IpfvNeg ń dá and PfvNeg ń dí, and that this differentiated 3Sg ń from 1Sg ń since the latter does not voice a following stop. Many of the examples throughout this grammar are from this speaker and reflect this pattern. However, various speakers in the recordings regularly voice the stops after either 3Sg ń or 1Sg ń, making the distinction only by tones. The second speaker who was carefully checked applied voicing more or less obligatorily to voiceless obstruents after nasals or nasalized vowels, as in sóg-ó ‘goat’ versus ń ‘zòg-ò ‘my goat’.

Obligatory voicing is also observed for all speakers in certain frozen compounds like the composite numerals in (62), whose final elements are barely recognizable.

(62)	tá ⁿ -víné (~ tá ⁿ -mné)	‘20’	cf. tá ⁿ ‘ten’, fíénú ‘two’
	tá ⁿ -zúgò	‘30’	cf. tá ⁿ ‘ten’, jíyò ‘three’

Voicing occurs optionally in ordinary (unlexicalized) noun-numeral combinations (63). The noun is hònòh-ò ‘bird’ (bare stem hònòⁿ).

(63)	hònòh kénèè ⁿ (~ génèè ⁿ)	‘one bird’
	hónó ⁿ ‘fíēnū (~ ‘vīēnū)	‘two birds’
	hònòh jíyò (~ zíyò)	‘three birds’
	hònòh kólóhò (~ gólóhò)	‘five birds’
	hònòh túúmì (~ dúúmì)	‘six birds’
	hónón ‘sēgī ⁿ (~ ‘zēgī ⁿ)	‘eight birds’
	hònòh kááfì (~ gááfì)	‘nine birds’
	hónón ‘tā ⁿ (~ ‘dā ⁿ)	‘ten birds’

Voicing of obstruents does not normally occur in noun-adjective combinations, like those with *hònòŋ-ô* ‘bird’ in (64a). Incorrect (at least for one assistant) voiced pronunciations are in the rightmost column. However, if the adjective begins with *h*, hardening (and voicing) to *g* is common, though not obligatory (64b).

(64)	noun-adjective	gloss	incorrect (#)
a.	<i>hónóm pásá-nà-à</i>	‘emaciated bird’	(#básá-nà-à)
	<i>hónóⁿ fúré-nà-à</i>	‘wet bird’	(#vúré-nà-à)
	<i>hónón tóri-ì</i>	‘new bird’	(#dóri-ì)
	<i>hónóŋ cwáá-nà-à</i>	‘red bird’	(#jwáá-nà-à)
	<i>hónóⁿ sùŋ-ô</i>	‘foreign bird’	(#zùŋ-ô)
	<i>hónóŋ kógó-nà-à</i>	‘full-grown bird’	(#gógó-nà-à)
b.	<i>hònòⁿ húlò-ò ~ hònòŋ gúlò-ò</i>	‘big bird’	
	<i>hónóⁿ hòŋ-ô ~ hónóŋ gòŋ-ô</i>	‘white bird’ (short variant)	
	<i>hónóⁿ hálù-ù ~ hónóŋ gálù-ù</i>	‘male bird’	

3.4.3 Apocope and syncope

3.4.3.1 Apocope (deletion of final vowel)

Nearly all Kelenga words end in vowels, and they do not undergo apocope as a synchronic process. A few verbs have a Pfv form *Cvy*, likely always apocopated from **Cvyi*, as in *háy(-lí)* ‘show’ (§10.1.1.5).

3.4.3.2 Syncope

Closely related to apocope (word-final) is ayncope. This is rare in Kelenga, except in multisyllabic verbs that include a rhotic syllable, as in *màrifá-à ~ màrfá-à* ‘rifle’ and *gíràngè-è ~ gràngè-è* ‘leatherworker (caste)’. Both syncopated and unsyncopated pronunciations are possible for these stems.

Four known nouns have a stable medial *wl* cluster, e.g. *dáwlà-à* ‘charm, elegance’ (< Arabic), *káwlá-á* ‘cold season’ (< Bambara). There is no evidence for a short vowel after *w*.

3.5 Cliticization and linkers

There are no moveable, e.g. second-position, clitics.

Since prefixes do not occur in Kelenga morphology and since there is no well-defined stress system, it is not possible to distinguish proclitics from prefixes by phonological criteria. The common short forms of pronominals can be analysed as proclitics. They precede nouns (as possessors), verbs (as intransitive subjects in the perfective positive, or as transitive objects), and postpositions. Fuller independent pronouns are required in isolation and in some other contexts. Proclitic pronouns have phonological interactions, chiefly tonal, with their hosts. Prenominal demonstrative *kú* behaves similarly, but it can also occur independently. While the tonal interactions are now morphologized (ablaut rather than sandhi), they mainly derive from Pre-Kelenga tone-spreading from the proclitic rightward into the host.

Such tonal interactions, however, are not limited to proclitic pronominals. There are also some nonpronominal grammatical morphemes that have similar effects on following words. This includes all the H-toned post-subject particles, sequential or subjunctive *bí*, and instrumental preposition or ‘and’ conjunction *kí*.

Likewise, the paucity of suffixes, and the absence of stress, make it difficult to distinguish suffixation from enclisis by phonological criteria. Good candidates for enclisis are morphemes that begin with tap *r*, which does not occur initially in lexical stems. Examples are the ‘it is’ morpheme *rá-ní* (§11.2.1.1) and the focus morpheme *rá* or variant, which are added to NPs.

Plural suffix *-yèⁿ* might actually be better analysed as an enclitic. When added to a noun or adjective, it requires the latter’s full singular form. *-yèⁿ* occurs once per NP at the end of the maximal N-Adj-Num-Dem string, so it is a phrasal “suffix.” It behaves somewhat like a separate L-toned word in triggering a variant of Final Tone-Raising on the final syllable of the preceding word.

Demonstrative ‘this/that’ is expressed as a circumposition *kú X kù*, and the postposed *kù* is another candidate for enclisis.

Linkers are clitic-like morphemes that require preceding and following words of particular types. The bidirectional case marker *ɲá/ɲà* (§11.1.2.1) is the best candidate for this status, since it is jointly required by otherwise adjacent subjects and objects. For some speakers there is also a phonologically motivated linker *ɲv* (the vowel “v” always contracts) between verbs and immediately following vocalic pronominals in pronominal PPs (§8.4).

3.6 Tones

A distinction is necessary between lexical tone **melodies** and output tones after tonal ablaut and tone sandhi. At the lexical level, there are two tone levels, H and L, e.g. *á* versus *à*. They can be combined at stem level, and even at syllable level to form contour tones. There are lexical minimal pairs and trios, such as *fàrà-à* ‘stone’ versus *fàrà-à* ‘lagoon’ versus *fàrà-á* ‘tortoise sp.’. Slashes */.../* enclose stem-level melodic formulae, such as */L/*, */H/*, */LHL/*, and */HL/*. Angled brackets are used for individual contour-toned syllables, e.g. *<HL>*.

For stems of one or two syllables, lexical melodies are like autosegmental strings that are attached to the syllables (and moras) of stems by automatic processes. However, an autosegmental approach does not work for longer stems. This is because heavy (e.g. trisyllabic) nouns of */LHL/* or */HL/* melody may have the tone break in locations that cannot be predicted in advance. For

example, *mìsírì-ì* ‘mosque’ and *màrìfá-à* are both /LHL/-melodic trisyllabics, but they have the H-tone in different places, L.H.L versus L.L.<HL>. There are similar issues with /HL/-melodic noun and verb stems.

3.6.1 Status of “mid tones”

At the lexical level, there is no evidence for M-tones. Every noun, adjectival, numeral, verb, and adverb stem, and every grammatical particle, can be represented in the lexicon with H and/or L tones.

However, an M-tone is recognized in tonal ablaut, since it has phonological consequences. The strongest evidence for this is that /H/-melodic stems can appear in three distinct surface forms that have different tone-sandhi effects on adjacent words. For example, *bágí* ‘exit (v)’ remains H-toned after H-toned pronominal proclitics (and demonstrative *kú*) and as a clause-initial imperative for singular addressee. It is tone-dropped to *‘bàgì* after L-toned pronominal proclitics (3Sg and 3Pl), and it is downstepped to *‘bāgī* after nonpronominal NPs. Thus *bágí* ‘exit!’, *á bágí* ‘you-Sg exited’, *ā ‘bàgì* ‘he/she/it exited’, and *sèèdú ‘bāgī* ‘Seydou exited’. Both *‘bāgī* and *‘bàgì* trigger Final Tone-Raising on a preceding L-tone, requiring recognition of the category of **nonhigh tone**. The tones of *‘bāgī* and *‘bàgì* behave differently when they are followed by an L-initial word after them; *‘bàgì* is raised to *‘bàgí* by tone sandhi (Final Tone-Raising), while *‘bāgī* remains level-pitched.

A distinction is therefore made between **Downstep** (H to *‘M*) and **Tone-Dropping** (H to *‘L*). In the notation used here, *‘* preceding a word indicates that one or the other of these processes has applied. If the first syllable is marked with M-tone (e.g. *‘bāgī*), it is Downstep, and if it is marked with L-tone (e.g. *‘bàgì*) it is Tone-Dropping. *‘* is not a phonetic diacritic; the output tones are indicated by accent diacritics on the vowels.

M-tones can also be created by **Upstep** (L to M). This is limited to L-toned proclitic pronominals 3Sg *à* (\rightarrow *ā*) and 3Pl *ì* (\rightarrow *ī*) when they precede a nonhigh tone, as in 3Sg *ā nùgûⁿ* ‘he/she swam’, compare 2Sg *á nùgûⁿ* ‘you-Sg swam’. No diacritics are used to indicate that Upstep has applied since only two pronominal proclitics are involved.

Upstep and Downstep occasionally converge, as in *ā ñā ‘sāgà-à hée* ‘he/she saw a sheep’ (§10.2.2.3). The first three syllables form a level-pitched terrace, as do the first two in *ā ‘jēñè* ‘he/she descended’ (§3.6.5.6). The fact that downstepped H and upstepped L have the same pitch level is the reason for treating them both as M-tones.

A practical orthography, for example in a literacy program aimed at native speakers, could dispense with M-tone marking and with *‘* and *†* symbols.

3.6.2 Downdrift and prepausal pitch lowering

As in many African tonal languages, lengthy prosodic groups (such as sentences) drift downward in pitch, with the result that tonal oppositions toward the end of the groups can become imperceptible. It is difficult to determine the tones of postverbal constituents such as adverbs.

In Kelenga, postpositions like dative *té* have two structurally distinct tonal forms, *té* after H-toned pronominal proclitics (and *kú* ‘this/that’), and *‘tè* after 3Sg/3Pl pronominals or any nonpronominal NP. Because PPs are postverbal, the postposition is often clause-final. At the end of clauses it is often impossible to hear a tonal distinction between *té* and *‘tè*, thanks to downdrift. However, if another word is added, e.g. *gôⁿ* ‘here’, the structural opposition is audible.

Even in isolation pronunciation of individual words, where downdrift as such is not an issue, final H-toned C^vv syllables are noticeably lower-pitched than they are in non-prepausal position. For example, *fánáá* ‘long ago’ or ‘first’ has a prepausal (including isolation) pronunciation where *náá* is lower-pitched than *fá*, and the word risks being mistranscribed as *fánàà*. This is a regular problem with nouns, many of which end in a long-voweled syllable thanks to the singular suffix. Again, addition of a following word can lead to a correct transcription.

3.6.3 Lexical tone melodies

As a reminder, lexical tone melodies are represented in slashes /.../. Melodies are subject to modification by tonal ablaut and by tone sandhi processes.

3.6.3.1 Summary of lexical tone melodies of verb stems

The tone melodies applicable to verb stems are /H/, /HL/, and /LHL/. There is no /L/ melody distinct from /H/ at the lexical level for verbs.

The contoured melodies /LHL/ and /HL/ are relatively stable, undergoing only minor tone sandhi. By contrast, verbs of /H/ melody can surface as H-toned, M-toned, or as L-toned. The decision to recognize this melody as /H/ is supported by the occurrence of the H-toned form clause-initially (intransitive imperatives) and as a verbal noun. Examples of /H/-melodic imperatives are *byé* ‘come!-2Sg’ and *hélé* ‘pass!-2Sg’. Compare, with other melodies, imperatives *jóò* ‘go!-2Sg’ (/HL/) and *gùlùⁿ* ‘do (for a) long time!-2Sg’ (/LHL/). No regular intransitive verb has an L-toned imperative.

Verbs occur in Pfv/Ipfv stem pairs. The Pfv is basic both in morphology and in grammatical distribution (imperative, verbal noun, etc.). The Ipfv stem adds a syllabic suffix to the Pfv and retains its tone melody.

/H/-melodic verbs drop to L-toned after third-person proclitics, 3Sg *à* and 3Pl *ì*, either as intransitive subjects or as transitive objects. The resulting L-toned verbs are subject to Final Tone-Raising when they are followed by another L-tone. /H/-melodic verbs are also downstepped to M after nonpronominal NPs and after the composite LogoPl pronominal *í-yèⁿ* (which has a nominal plural suffix).

3.6.3.2 Summary of lexical tone melodies for noun stems

Lexical tone melodies for uncompounded noun stems are /H/, /L/, /HL/, /LHL/, /HLHL/, /LHLHL/, and one known case of /HLHLHL/. The basic principle is that a noun may be all-H-toned (/H/), all-L-toned (/L/), or contour-toned with final L-tone. Unlike verbs, nouns distinguish /H/ from /L/ melodies. There are no /LH/ or /HLH/ melodies since they are contoured and end with H.

The lexical melody is heard in isolation pronunciations of nouns. In clausal context, the melody is subject to tone-sandhi and tonal ablaut. Under tone sandhi, small tonal changes are made but they do not erase lexical melodies. Tonal ablaut can be more far-reaching. For example, all noun stems merge as H-toned before a modifying adjective, but the adjective then indirectly distinguishes /H/-melodic nouns from all other nouns (which are merged).

There is an issue whether Cvv noun stems like hòô ‘house’ have lexical /L/ or /LHL/ melody. A case can be made (§4.1.1.5) that they have /L/ melody although the isolation pronunciation is <LHL>.

3.6.3.3 Examples of tonal melodies of nouns

The arrays presented below include the bare stem (which occurs before modifiers), the singular (with lengthened final vowel if not already long), and the plural (with -yèⁿ added to the singular).

(65)	melody	bare stem	singular	plural	gloss
	/H/	júú	júú	júú-yè ⁿ	‘water’
		fálátó	fálátó-ó	fálátó-ó-yè ⁿ	‘orphan’
	/L/	gùlù	gùlù-ù	gùlù-ù-yè ⁿ	‘night’
		ɲàɲà̀nù	ɲàɲà̀nù-ù	ɲàɲà̀nù-ù-yè ⁿ	‘woman’
	/HL/	máà	máà	máà-yè ⁿ	‘manatee’
		ségè	ségè-è	ségè-yè ⁿ	‘soda ash’
		gálákà	gálákà-à	gálákà-à-yè ⁿ	‘flank’
	/LHL/	hàbáà	hàbáà	hàbáà-yè ⁿ	‘cloud; rain’
		jàbâ	jàbâ-à	jàbâ-à-yè ⁿ	‘onion’
	<i>L.H.L trisyllabics</i>				
		lèmbùrù	lèmbùrù-ù	lèmbùrù-ù-yè ⁿ	‘citrus’
		mìsírì	mìsírì-ì	mìsírì-ì-yè ⁿ	‘mosque’
	<i>L.L. <HL> trisyllabics</i>				
		màrìfâ	màrìfâ-à	màrìfâ-à-yè ⁿ	‘rifle’
		tàmààtí	tàmààtí-ì	tàmààtí-ì-yè ⁿ	‘tomato’

/HLHL/	záàjê tómóndìgî	záàjé-è tómóndìgí-ì	záàjé-è-yè ⁿ tómóndìgí-ì-yè ⁿ	‘thorny acacia sp.’ ‘ricin (shrub)’
/LHLHL/	wùlúnàájì	wùlúnàájì-ì	wùlúnàájì-ì-yè ⁿ	‘pike (fish)’ (variant with r for l)
/HLHLHL/	álímùkáyìkáyì	álímùkáyìkáyì-ì	álímùkáyìkáyì-ì-yè ⁿ	‘narcotic bush sp.’

The lexical melody of monosyllabic nouns of the form C^hv̂ ~ C^hv̂ is discussed in §4.1.1.5.

3.6.3.4 Lexical tone patterns for adjectives and numerals

When an adjective modifies a preceding noun, its own lexical melody is suppressed. This is the case both with lexical adjectives and with deverbal participles. Nouns of all melodies raise to all-H, and the following adjective has either an all-H form (if the noun had lexical /H/ melody) or a form beginning or ending with an L-tone (if the noun had a lexical melody including at least one L-tone). For example, as modifiers, ‘bitter’ appears as kágáyí-í or kágáyì-ì, and ‘slow’ appears as lá-mún-ò or là-mún-ò, in each case depending on the lexical (not surface) tone melody of the preceding stem. See §4.5.1.1 for more examples.

When an adjective or participle functions as predicate, without a modified noun, it does reveal its lexical melody. Many adjectives have a special stative predicative form that is sometimes identical segmentally to the modifying form and sometimes different (e.g. lêⁿ ‘be sweet’ versus modifying lúmá-á/lúmà-à). Uncompounded predicative adjectives can have /H/ or /HL/ lexical melody (66a-b). Composite predicative adjectives can have L-HL tones (66c).

(66)	melody	predicative	gloss
a.	/H/	kágáyí tígé ⁿ	‘be bitter’ ‘be heavy’
b.	/HL/	lê ⁿ lógò	‘be sweet, pleasing’ ‘be small’
c.	L-HL	là-mû ⁿ	‘be slow’

Participles get their tones from the input verb.

Uncompounded numerals have /H/ or /HL/ melody (67).

(67)	melody	numeral	gloss
a.	/H/	fíénú séǵí ⁿ	‘2’ ‘8’

b. /HL/	ʃíyò	‘3’
	lébè	‘40’

3.6.3.5 Tone-break location for bitonal verb stems (/HL/)

Bitonal verbs are those of /HL/ melody. Addition of the Ipfv suffix does not affect the tones of the Pfv stem, except that two L-toned stem syllables plus the Ipfv suffix trigger Final Tone-Raising.

Bisyllabic verbs have the tone break at the syllable boundary, as in báándà(-là) ‘get tired’. Underived trisyllabics and longer stems are mostly H.H.L with a right-biased tone break (68a). Of the few H.L.L stems with left bias, one (‘squat’) is a clear Bambara loan and two others (‘de-scale’, ‘manufacture’) may be etymologically composite (68b). There is one quadrisyllabic with its tone break in the middle (68d). The stems in (68c-d) therefore end in ...H.L.L, with a final L-toned syllable. The resulting string is subject to Final Tone-Raising before the Ipfv suffix, as is the second mora of a the final long syllable in ‘entrust’ (68b).

(68)	type	verb	gloss
a.	H.H.L with final Cv syllable	géréndè(-lè)	‘hug (a surface)’
		gíríndì(-lì)	‘belch’
		góróndò(-lò)	‘snore’
		púrúti(-lì)	‘pinch; snatch’
		sánáŋgò(-lò)	‘rinse’
		ténéŋgù(-lù)	‘slip and fall’
		yégéndù(-lù)	‘hiccup’
b.	H.H.L with final Cvv syllable	hálífàà/hálífàá-là	‘entrust’
c.	H.L.L	só ⁿ zòrì/só ⁿ zòrí-lì	‘squat’ (< Bambara, variant só ⁿ zòrò)
		máhàlà/máhàlá-là	‘de-scale (fish)’ (cf. hálá-á ‘scale’)
		mátìŋè/mátìŋé-lè	‘manufacture; cook (food)’ (cf. múŋè ‘be done well’)
d.	H.H.L.L	kólóŋgòlò/kólóŋgòlò-lò	‘roll (sth) on the ground’ (variant)
	H.H.H.L	kólóŋgólò/kólóŋgólò-lò	" "

All known suffixed causatives and inchoatives that are derived from bisyllabic /HL/-melodic stems are of the right-biased H.H-L type with the H-tone extended to the end of the stem. Two examples are in (69).

- (69) a. múŋɛ̀(-nè) ‘be done well’
 múŋɛ̀-nì(-nì) ‘repair; cook (food)’
- b. dúúɛ̀nè⁽ⁿ⁾ ‘be short’ (stative)
 dúúɛ̀nⁿ-yà(-là) ‘become short(er)’ (inchoative)

3.6.3.6 Tone-Component location for tritonal verb stems (/LHL/)

Tritonal verbs have /LHL/ melody. Most of them have no choice where to locate the tone break since they have only three moras. However, tònî/tònî-nì ‘look at’ shows a right bias, as does the inchoative derivative làwòlòⁿ-yà(-là) ‘become empty’.

There are a few lexically iterative stems with LH-L tones: lègò-lègò ‘tickle’, màá-màá ‘greet’, sògò-sògò ‘cough (v)’. Here the medial H-tone could be attributed to Final Tone-Raising. The latter also clearly applies to the pre-suffixal syllable in the Ipfv stems: lègò-lègò-lò, etc.

3.6.3.7 Tone-break location for bitonal non-verb stems

Bitonal nouns and other non-verb stems have /HL/ melody. The bisyllabics have the break at the syllable boundary: báánà-à ‘pestle’, jéénì ‘7’. All known /HL/ nouns of more than two syllables have right-biased tone breaks, consistent with the H*L surface tones (e.g. H.H.L, H.H.H.L) that are observed in compounds and N-Adj combinations. Examples of trisyllabic /HL/ nouns are giráŋgè-è ‘leatherworker (caste)’ and jíjínè-è ‘granary’. A quadrisyllabic example is máníngéémù-ù ‘scolopender (biting centipede)’.

However, the unusual and unsegmentable numeral máníngè^{mè} ‘60’ has the break in the middle. It is borrowed from a Bambara compound, literally “Mande-hundred”.

3.6.3.8 Tone-Component location for tritonal non-verb stems

Tritonal non-verb stems have /LHL/ melody. A right bias for the tone breaks is indicated by several nouns including tà^mààtí-ì ‘tomato’ and gàlámúsà(-à) ‘Thursday’. Note, however, that ‘tomato’ is L-toned up until its final <HL>-toned syllable (the bare stem is tà^mààtí), while ‘Thursday’ ends in the more typical H.L syllable sequence.

Also like ‘tomato’ with (...)L.<HL> tones and final short vowel (in the bare stem) are tàⁿàyé-è ‘blacksmith’s tongs’, bàlâwú-ù ‘catastrophe’, and bàⁿàngú-ù ‘cassava’, among others. Two (...)L.<HL> stems with final long vowel (so the bare stem is identical to the suffixed singular) are known: à^rájòò ‘radio’, tùmàháàⁿ ‘kitchen, cooking area’.

3.6.3.9 Tone-Component location for quadrifontal non-verb stems

/HLHL/ non-verb stems, all nouns, also show a right bias in the tone break. Examples are *dúúwàlá-à* ‘trunkfish sp.’ and *sámánéèné-è* ‘spleen’.

3.6.4 Grammatical tone patterns

3.6.4.1 Summary of grammatical tone modifications for verbs

Verbs can have /H/, /HL/, or /LHL/ melody, but there is no /L/ melody for verbs. Verb stems undergo tonal ablaut under the influence of preceding words and particles as indicated in (70). /H/-melodic stems are subject to Tone-Dropping (to ⁴L) or Downstep (to ⁴M) in most noninitial positions. /HL/-melodic verbs are stable, except for combinations where their initial H is downstepped to M and forms a level M-toned sequence (or terrace) with a clause-initial third-person pronominal proclitic. /LHL/-melodic stems are immune to tonal changes. Omitted from (70) are minor tone-sandhi effects triggered by words following the verbs.

(70) a. /H/-melodic verb

remains H-toned as clause-initial imperative

Tone-Dropping to ⁴L after a third-person proclitic that presents as any of:

- i) upstepped subject *ā/ī* (in perfective positive intransitive), §3.6.5.3.1; or
- ii) upstepped object *ā/ī* (in transitive imperative), §3.6.5.3.2; or
- iii) tone-inverted clause-medial object *á/í* (in other transitives), §3.6.5.3.3

Downstep to ⁴M after nonpronominal NP that is:

- i) subject (in perfective positive intransitive), §3.6.5.3.1; or
- ii) object (in transitive), §3.6.5.3.2-3

Downstep to ⁴M after H-toned post-subject inflectional particles (intransitive), §3.6.5.3.4

b. /HL/-melodic verb

remains HL-toned in most positions

Downstep to ⁴ML after postpausal 3Sg *à* or 3Pl *ì* that are:

- i) upstepped subject *ā/ī* (in perfective positive intransitive), §3.6.5.3.1; or
- ii) upstepped object *ā/ī* (in transitive imperative), §3.6.5.3.2
(but remains HL after tone-inverted clause-medial object *á/í*)

c. /LHL/-melodic verb

[no changes]

More detailed analysis of the relevant tonal processes are given later in this chapter and in later chapters. Here a few representative examples will be given for each verbal melodic class. 2Sg *á* is proxy for all H-toned pronominals. 3Sg *à* likewise represents the tonal patterns of the other third-person pronominal (3Pl *ì*). ‘Seydou’ is proxy for nonpronominal NPs.

(71-72) illustrated =/H/-melodic verbs. They actually appear with H-tones only under limited conditions: clause-initially (intransitive imperatives) and after H-toned pronominal proclitics. Elsewhere they are tone-dropped to all-L (after 3Sg and 3Pl proclitics) or downstepped to all-M (after inflectional particles and after nonpronominal NPs).

(71) /H/-melodic intransitive verb *hélé(-lé)* ‘pass’

a. H-toned

<i>hélé</i>	‘Pass!’	imperative
<i>á hélé</i>	‘You-Sg passed’	perfective 2Sg subject

b. L-toned (tone-dropped)

<i>ā hèle</i>	‘He/She/It passed’	perfective 3Sg subject
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c. M-toned (downstepped)

<i>sèèdú ‘hēlē</i>	‘Seydou passed.’	perfective nonpronominal subject
<i>á há ‘hēlē-lē</i>	‘You pass.’	imperfective
<i>ɲ gá ‘hēlē-lē</i>	‘He/She/It passes.’	imperfective
<i>sèèdù há ‘hēlē-lē</i>	‘Seydou passes.’	imperfective

(72) /H/-melodic transitive verb *kwárí(-lí)* ‘hit’

a. H-toned

<i>... à kwárí</i>	‘... hit-Past you.’	perfective 2Sg object
<i>á kwárí</i>	‘Hit yourself!’	imperative 2Sg reflexive object

b. L-toned (tone-dropped)

<i>ā ‘kwàrì</i>	‘Hit him/her/it!’	imperative 3Sg object
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c. M-toned (downstepped)

<i>sèèdú ‘kwāri</i>	‘Hit Seydou!’	imperative nonpronominal object
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/HL/-melodic verbs are presented in (73-74). The tonal pattern is largely invariant across contexts.

(73) /HL/-melodic intransitive verb *kómù(-nù)* ‘sleep (v)’

a. HL-toned

<i>kómù</i>	‘Sleep!’	imperative
<i>á kómù</i>	‘You-Sg slept.’	perfective 2Sg subject
<i>sèèdù kómù</i>	‘Seydou slept.’	perfective nonpronominal subject
<i>á há kómù-nù</i>	‘You sleep.’	imperfective
<i>ɲ gà kómù-nù</i>	‘He/She/It sleeps.’	imperfective
<i>sèèdù há kómù-nù</i>	‘Seydou sleeps.’	imperfective

b. ML-toned (clause-initial)
 ā 'kōmù 'He/She slept' perfective 3Sg subject

(74) /HL/-melodic transitive verb hári(-li) 'tie'

a. HL-toned
 ... à hári '... tie-Past you.' perfective 2Sg object
 á hári 'Tie yourself!' imperative 2Sg reflexive object
 sèédù hári 'Tie Seydou!' imperative nonpronominal object

b. ML-toned (clause-initial)
 ā 'hāri 'Tie him/her/it!' imperative 3Sg object

/LHL/-melodic verbs like hòêⁿ/hòéⁿ-nè 'wait for' are tonally invariant across contexts, except that the few that begin with two L-toned moras acquire an initial H-tone. This is the case with 'become empty' (75).

(75) /LHL/-melodic làwòlòⁿ-yà(-là) 'become empty'

a. LHL-toned
 làwòlòⁿ-yà 'Empty!' imperative
 ā làwòlòⁿ-yà 'He/She/It emptied' perfective 3Sg object

b. HLHL-toned
 á 'lávòlòⁿ-yà 'You-Sg emptied.' perfective nonpronominal subject
 sógó-ó 'lávòlòⁿ-yà 'A goat emptied.' perfective nonpronominal subject
 sàgà-à 'lávòlòⁿ-yà 'A sheep emptied.' perfective nonpronominal subject
 básà-à 'lávòlòⁿ-yà 'An agama emptied.' perfective nonpronominal subject
 sèédù 'lávòlòⁿ-yà 'Seydou emptied.' perfective nonpronominal subject
 ñ gà 'lávòlòⁿ-yà-là 'It empties.' imperfective
 á há 'lávòlòⁿ-yà-là 'You-Sg empty.' imperfective

Diachronically, Tone-Dropping (after 3Sg à/ñ and 3Pl ì) and Downstep (after nonpronominals NPs and grammatical particles) likely originated as spreading of tones rightward across boundaries. One of the key drivers of the transition from simple phonology (tone sandhi) to morphophonology (ablaut) was the effect of /H/-melodic nouns like sógó-ó 'goat' as subject or object of immediately following verbs. Because there is no /LH/ melody, /H/ is the only nominal melody that ends in H-tone. In a simple tone-spreading system, the unmodified form sógó-ó should raise the tone of the following verb, but when it is tone-dropped to 'sògó-ò it ends in L-tone and so should lower the tone of the following verb. Synchronically, the form sógó-ó occurs before verbs only as subject in the intransitive perfective positive and as object in the imperative, while 'sògó-ò occurs before transitive verbs in all non-imperative clauses. The effect is that 'sògó-ò is more common in

immediate preverbal position than *sógó-ó*. What happened diachronically was that the tone-lowering effect that *ʰsógó-ò* had on following verbs generalized to verbs following *sógó-ó*. At this point, verbs that immediately followed nouns of any melody had their tones lowered; this had become morphotonology (tonal ablaut) rather than tone sandhi (phonology).

3.6.4.2 Summary of grammatical tone modifications for nouns

The main tonal patterns of nouns and secondarily of modifying adjectives and simple numerals are summarized here. Nouns can have /H/, /L/, /HL/, /LHL/, and /HLHL/ melodies, but not /LH/ or /HLH/. That is, any noun that has an L-tone anywhere must also end in an L-tone at the lexical level. Nouns of the various melodies undergo the changes in (76) under the influence of adjoining words and particles.

- (76) a. all melodies
to all-H as initial element in:
- i) N-Adj, §6.3.1.1;
 - ii) tone-leveled N-N compound, §5.1.6.1-3;
 - iii) noun before /H/-melodic numeral, §6.4.1.2
- to all-H as final element in:
- i) N-Adj after /H/-melodic noun, §6.3.1.1;
 - ii) tone-leveled N-N compound after /H/-melodic initial, §5.1.6.1-3
- to H*L as final element in:
- i) N-Adj after non-/H/-melodic noun, §6.3.1.1;
 - ii) tone-leveled N-N compound after non-/H/-melodic initial, §5.1.6.1-3
- b. /H/ melody
unchanged except as below
Tone-Dropping to *ʰL*HL* (eventually all-L or *L*HH*) after:
- i) grammatical particle, §3.6.5.3.5;
 - ii) 3Sg *ā* or 3Pl *ī* possessor (upstepped), §6.2.3.1;
 - iii) nonpronominal possessor, §6.2.3.1.2;
 - iv) copula *kélé*, §11.2.2.1
 - v) verb (under some conditions), §3.6.5.3.6
- c. /HL/ melody
unchanged except as below
Downstep to *ʰML* after
- i) H-toned post-subject inflectional particle, §3.6.5.3.5;
 - ii) nonpronominal possessor, §6.2.3.1;
 - iii) copula *kélé*, §11.2.2.1;
- inverted to *L*H* before *kènèè* ‘1’; §6.4.1.1

d. /L/ melody

unchanged except as below

Initial H-Ablaut to ¹H*L after

- i) grammatical particle (pre- or post-subject), §3.6.5.4.2;
- ii) nonpronominal possessor, §3.6.5.4.2;
- iii) H-toned pronominal possessor, §3.6.5.4.2;
- v) verb (under some conditions), §3.6.5.4.2

e. /LHL/ melody

Initial H-Ablaut to H*LHL as in (d), only if stem begins with two L syllables

leveled to all-L before /HL/-melodic numeral, §6.4.1.2

shifted to L*H before

- i) downstepped /H/-melodic numeral, §6.4.1.2;
- ii) kénèèⁿ ‘1’; §6.4.1.1

f. /HLHL/ melody

Downstep to ¹MLHL (~ ¹ML*) as in (c)

Examples featuring nouns of various melodic classes are in (77-81).

In (77), /H/-melodic sógó-ó ‘goat’ has a tone-dropped form ¹sògò-ò (realized as such prepausally) in the following combinations: after third-person pronominal possessor (here 3Sg), after nonpronominal possessor (‘Seydou’), after grammatical particles (here tí and ñá), and after copula kélé. A following /HL/-melodic verb sâⁿ ‘bought’ is downstepped to <ML>-toned ¹sâⁿ. Clause-medially, tone-dropped ¹sògò-ò surfaces as ¹sògò-ó before nonhigh tone (including ¹sâⁿ) or as ¹sògò-ò before H-tone. The falling tone pattern in hááⁿ-sògò-ò ‘Bozos’ goat’ reflects compound-wide Tone-Leveling where the /L/-melodic initial hààⁿ determines the tone of the rightmost syllable of the final.

(77) /H/-melodic sógó-ó ‘goat’

a. all-H-toned

sógó ñáñánú-ú	‘female goat’	before Adj
sógó fiénú	‘two goats’	before Num ‘2’ (/H/)
sógó-táá	‘goat-foot’	compound initial
fílá-sógó-ó	‘Fulbe’s’ goat’	compound final after /H/
háá ⁿ -sògò-ò	‘Bozos’ goat’	compound final after non-/H/
sógó jííyò	‘three goats’	before Num ‘3’ (/HL/)
á sógó-ó	‘your-Sg goat’	after 2Sg possessor

b. L*HL (tone-dropped) before tone sandhi

ā ¹ sògò-ò	‘his/her goat’	after 3Sg possessor
sèèdú ¹ sògò-ò	‘Seydou’s goat’	after NP possessor
á tí ¹ sògò-ó ¹ sâ ⁿ	‘you-Sg didn’t buy a goat’	after PfvNeg tí

à tí 'sògò-ó 'sā ⁿ	'he/she didn't buy a goat'	after PfvNeg tí
á ñá 'sògò-ó 'sā ⁿ	'(you-Sg) bought a goat'	after 2Sg transitive á ñá
à ñá 'sògò-ó 'sā ⁿ	'(he/she) bought a goat'	after 3Sg transitive à ñá
á kélé 'sògò-ò	'you-Sg are a goat'	after copula kélé
ā 'kèlè 'sògò-ò	'he/she/it is a goat'	after copula kélé
S 'kēlē 'sògò-ò	'Seydou is a goat'	after copula kélé

In (78), /L/-melodic sàgà-à 'sheep' is raised to ságá before /H/-melodic numeral ('2'), before an adjective ('female'), and as compound initial ('sheep-foot'). It remains L-toned before /HL/-melodic numerals. It undergoes Initial H-Ablaut to 'ságà-à after possessors and after grammatical particles (tí ~ tì, ñá ~ ñà). Clause-initially, the expected 3Sg combinations à 'ságà-à 'his/her sheep' and à ñà 'ságà-à 'he/she (verb-ed) a sheep' are partially leveled by Tone Terracing (§3.6.5.6) to ā 'ságà-à and to ā 'sāgà-à, respectively. In 'Fulbe's sheep' and 'Bozos' sheep' the tones are determined by compound-wide Tone-Leveling. The verb sâⁿ 'buy' remains <HL>-toned and so does not trigger Final Tone-Raising on preceding 'sheep'.

(78) /L/-melodic sàgà-à 'sheep'

a. all-H-toned

ságá ñáñánù-ù	'female sheep'	before Adj
ságá 'fiēnū	'two sheep'	before Num '2' (/H/)
ságá-tàà	'sheep-foot'	compound initial
fíla-ságá-á	'Fulbe's' sheep'	compound final after /H/

b. all-L-toned

sàgà kénèè ⁿ	'one sheep'	before Num '1'
sàgà jííyò	'three sheep'	before Num '3' (/HL/)

c. H*L-toned

háá ⁿ -sàgà-à	'Bozos' sheep'	compound final after non-/H/
á 'sàgà-à	'your-Sg sheep'	after 2Sg possessor
sèédù 'sàgà-à	'Seydou's sheep'	after NP possessor
á tí 'sàgà-à sâ ⁿ	'you-Sg didn't buy a sheep'	after PfvNeg tí
à tì 'sàgà-à sâ ⁿ	'he/she didn't buy a sheep'	after PfvNeg tì
á ñá 'sàgà-à sâ ⁿ	'you-Sg bought a sheep'	after 2Sg transitive á ñá
á kélé 'sàgà-à	'you-Sg are a sheep'	after copula kélé
ā 'kèlè 'sàgà-à	'he/she/it is a sheep'	after copula kélé
S 'kēlē 'sàgà-à	'Seydou is a sheep'	after copula kélé

d. M*L-toned (clause-initial combinations)

ā 'sāgà-à	'his/her sheep'	after 3Sg possessor
ā ñā 'sāgà-à sâ ⁿ	'he/she bought a sheep'	after 3Sg transitive à ñá

In (79), /HL/-melodic *bàsà-à* ‘agama’ shows the same tones as for *sàgà-à* ‘sheep’ before numerals (except ‘1’) and adjectives, as compound initial, and as compound final. It differs from *sàgà-à* in being downstepped to *‘bàsà-à* after a nonpronominal possessor (‘Seydou’) and after post-subject inflectional particles (tí), but not after the bidirectional case-marker *ńá ~ ńà*. The verb *sâⁿ* is not downstepped and remains <HL>-toned.

(79) /HL/-melodic *bàsà-à* ‘agama’

a. all-H-toned

<i>básá ńáńánù-ù</i>	‘female agama’	before Adj
<i>básá ‘fiēnū</i>	‘two agamas’	before Num ‘2’ (/H/)
<i>básá ‘jīyò</i>	‘three agamas’	before Num ‘3’ (/HL/)
<i>básá-tàà</i>	‘agama-foot’	compound initial

b. HL-toned

<i>fílá-bàsà-à</i>	‘Fulbe’s agama’	compound final after /H/
<i>hááⁿ-bàsà-à</i>	‘Bozos’ agama’	compound final after non-/H/
<i>á bàsà-à</i>	‘your-Sg agama’	after 2Sg possessor
<i>à bàsà-à</i>	‘his/her agama’	after 3Sg possessor
<i>á ńá bàsà-à sâⁿ</i>	‘you-Sg bought an agama’	after 2Sg transitive <i>á ńá</i>
<i>à ńà bàsà-à sâⁿ</i>	‘he/she bought an agama’	after 3Sg transitive <i>à ńà</i>

c. ML-toned (downstepped)

<i>sèèdú ‘bàsà-à</i>	‘Seydou’s agama’	after NP possessor
<i>á tí ‘bàsà-à sâⁿ</i>	‘you-Sg didn’t buy an agama’	after PfvNeg tí
<i>à tí ‘bàsà-à sâⁿ</i>	‘he/she didn’t buy an agama’	after PfvNeg tí
<i>á kélé ‘bàsà-à</i>	‘you-Sg are an agama’	after copula <i>kélé</i>
<i>ā ‘kèlé ‘bàsà-à</i>	‘he/she/it is an agama’	after copula <i>kélé</i>
<i>S ‘kēlē ‘bàsà-à</i>	‘Seydou is an agama’	after copula <i>kélé</i>

d. LH-toned (inverted)

<i>bàsá ‘kēnèè</i>	‘one agama’	before numeral ‘1’
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In (80), /LHL/-melodic *fòlí-ì* ‘dove’ behaves tonally like *sàgà-à* ‘sheep’ and *bàsà-à* ‘agama’ before /H/-melodic numeral (‘2’), before an adjective (‘female’), and as compound initial and compound final. This is because all of these melodies contain an L-tone (and therefore ends in an L-tone). *fòlí-ì* retains its initial L-tone before an /HL/-melodic numeral (‘3’), as possessum after all possessors, and after grammatical particles (tí, ńá). *fòlí-ì* levels partially to *fòlí-í* before a nonhigh tone as in downstepped *‘sâⁿ* ‘bought’.

(80) /LHL/-melodic fòlí-ì ‘dove’

a. all-H-toned

fóli nájánù-ù	‘female dove’	before Adj
fóli ‘fiēnū	‘two doves’	before Num ‘2’ (/H/)
fóli-tàà	‘dove-foot’	compound initial
fíla-fóli-í	‘Fulbe’s’ dove’	compound final after /H/

b. H*L-toned

háá ⁿ -fòli-ì	‘Bozos’ dove’	compound final after non-/H/
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c. L*HL-toned (before tone sandhi)

fòli ‘jīyò	‘three doves’	before Num ‘3’ (/HL/)
á fòli-ì	‘your-Sg dove’	after 2Sg possessor
ā fòli-ì	‘his/her dove’	after 3Sg possessor
sèèdú fòli-ì	‘Seydou’s dove’	after NP possessor
á tí fòli-í ‘sā ⁿ	‘you-Sg didn’t buy a dove’	after PfvNeg tí
à tí fòli-í ‘sā ⁿ	‘he/she didn’t buy a dove’	after PfvNeg tí
á ñá fòli-í ‘sā ⁿ	‘you-Sg bought a dove’	after 2Sg transitive á ñá
à ñá fòli-í ‘sā ⁿ	‘he/she bought a dove’	after 3Sg transitive à ñà

In (81), a rare /HLHL/-melodic noun nódzín-ò ‘chameleon’, bare stem nódzīⁿ, levels to all-H before an adjective (‘female’) and as compound initial. Before numerals it appears in HLH-toned form, and tone-drops the numeral from /H/ to all-L (‘2’) or downsteps it from /HL/ to ML (‘3’). It retains its internal tone-breaks as possessum and as compound final, however its initial H-tone is treated in the same way as that of básà-à ‘agama’. Specifically, it is downstepped to M after a nonpronominal possessor (‘Seydou’) and after a post-subject inflectional particle (tí). It remains H-toned after pronominal possessors and after the bidirectional case-marker ñá ~ ñà.

(81) /HLHL/-melodic nódzín-ò ‘chameleon’

a. all-H-toned

nódzī ⁿ nájánù-ù	‘female chameleon’	before Adj
nódzín-tàà	‘chameleon-foot’	compound initial

b. HLHL-toned

fíla-nódzín-ò	‘Fulbe’s’ chameleon’	compound final after /H/
háá ⁿ -nódzín-ò	‘Bozos’ chameleon’	compound final after non-/H/
á nódzín-ò	‘your-Sg chameleon’	after 2Sg possessor
à nódzín-ò	‘his/her chameleon’	after 3Sg possessor
á ñá nódzín-ò sâ ⁿ	‘you-Sg bought a chameleon’	after 2Sg transitive á ñá
à ñà nódzín-ò sâ ⁿ	‘he/she bought a chameleon’	after 3Sg transitive à ñà

c. MLHL-toned (downstepped)

á tí 'nḡḡzĩḡ-ḡ sâ ⁿ	'you-Sg didn't buy a chameleon'	after PfvNeg tí
à tí 'nḡḡzĩḡ-ḡ sâ ⁿ	'he/she didn't buy a chameleon'	after PfvNeg tí
sèèdú 'nḡḡzĩḡ-ḡ	'Seydou's chameleon'	after 'NP as possessor

d. HLH-toned

nóḡzì ⁿ 'fīēnū	'two chameleons'	before Num '2' (/H/)
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e. HL-toned

nóḡzì ⁿ 'fīīyò	'three chameleons'	before Num '3' (/HL/)
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The various processes that produce these tonal patterns are described individually in the sections below.

Historical considerations may help to make the tonal changes comprehensible (82).

(82) Primary diachronic tonal processes

- a. spreading of final tone from preceding to following element
 - i. L-tone spreads rightward from 3Sg *à and 3Pl *ì onto a following H-toned stem.
 - ii. H-tone spreads rightward from e.g. 2Sg *á onto a following L-toned stem.
- b. full or partial drop of tones on second of two adjacent H-toned forms
 - i. *há sógó-ó (Ipfv + /H/-melodic 'goat') tone-dropped to *há 'sògó-ò
 - ii. *há básà-à (Ipfv + /HL/-melodic 'agama') downstepped to *há 'bāsà-à

These likely originated as simple phonological processes but became morphophonologized and underwent various analogical extensions.

3.6.5 Tonal processes

3.6.5.1 Inversion

3.6.5.1.1 Tone Inversion of pronominal proclitics

In non-clause-initial positions preceding the verb, the tonal oppositions among pronominal proclitics that occur clause-initially are effectively inverted. Clause-initially or in isolation, 2Sg á contrasts with 3Sg à. The latter is upstepped to ā in many cases, closing the gap, but the distinction between 2Sg and 3Sg is reinforced by their respective tonal effects on the following stem (83a). In clauses with a post-subject inflectional particle, such as perfective negative tí, 1Sg ḡ contrasts with 3Sg allomorph ḡ (varying with à), reinforced by their effects on the particle (83b). The relevant proclitics are bolded here.

- (83) a. **á** **ʃòò** 'You-Sg went.'
ā 'ʃòò 'He/She/It went.'
á **byé** 'You-Sg came.'
ā 'byè 'He/She/It came.'
- b. **ń** **tí** **ʃòò** 'I did not go.'
̀ **dì** **ʃòò** 'He/She/It did not go.'
à **tì** **ʃòò** " "

As objects, as subjects following a grammatical particle, as complements of postverbal postpositions, and as possessors of nouns in any of these functions, these proclitics are no longer clause-initial. They are in a sense simultaneously proclitic and enclitic to the two flanking words or particles. In the absence of a prosodic break or a major syntactic boundary, they are tone-inverted in when they precede the verb and in some cases even after the verb. In (84), addition of clause-initial particle ní 'if' shifts 2Sg á to à, 1Sg ń to ̀, and 3Sg à/̀ to á/́.

- (84) a. **ná= à** **ʃòò** 'if you-Sg have gone'
ná= á **ʃòò** 'if he/she/it has gone'
- b. **ní ̀** **dí** **ʃòò** 'if I have not gone'
ní ń **dì** **ʃòò** 'if he/she/it has not gone'

The lowering of H-toned proclitics to L, and the raising of L-toned proclitics to H, combine to constitute a Tone Inversion process by which tone values are flipped between H and L.

One is initially tempted to separate the lowering and raising processes. In many combinations the L-toned 3Sg à and 3Pl ì are raised to H-tone before words that begin with nonhigh tones. In these contexts, the raising could be attributed directly to Final Tone-Raising and would have no connection to the lowering of H-toned proclitics. This is the case in (85a), for example. The raising of 3Sg à to á here differs only in magnitude from the upstepping of clause-initial à to ā in (85b).

- (85) a. **ná= á** 'bàgì
if 3Sg exit(v).Pfv
'if he/she/it has exited'
- b. **ā** 'bàgì
3Sg exit(v).Pfv
'He/She/It exited.'

However, it turns out that the raising of third-person pronominals cannot be fully ascribed to Final Tone-Raising. This is because third-person object pronominals are raised even before /HL/-melodic verbs, which are not downstepped.

- (86) a. sèédù ńá = **á** **húrù**
 S Sbj/Obj 3Sg cut.Pfv
 ‘Seydou cut it.’
- b. **á** tá = **á** **húrù**
 2Sg PfvNeg 3Sg cut.Pfv
 ‘You-Sg didn’t cut it.’

This is strong evidence to the effect that noninitial 3Sg **á** and 3Pl **í** have been raised by an ablaut process (Tone Inversion), rather than by tone sandhi.

3.6.5.1.2 An exception to Tone Inversion (à hà = à, etc.)

There is one very specific combination where noninitial 3Sg **à** and 3Pl **ì** do fail to raise. This is the combination of 3Sg/3Pl subject, a post-subject grammatical particle, and a (nonreflexive) 3Sg/3Pl object, before an /HL/-melodic verb. In (87a-b), the 3Sg object fails to raise before /HL/-melodic ‘cut’.

- (87) a. **à** hà = **à** **húrù-lù**
 ỳ gà = " "
 3Sg Ipfv 3Sg cut-Ipfv
 ‘He/She cuts him/her.’
- b. **ì** hà = **à** **húrù-lù**
 3Pl Ipfv 3Sg cut-Ipfv
 ‘They cut-Present him/her.’

Rather than seeking a phonological motivation for this, it is best to sequester the limited counterexamples reflected in (87a-b) as a specific exception to Tone Inversion. There is some logic for this exception. The key instigator is the clause-initial 3Sg or 3Pl subject, not the clause-medial object. There are other examples where third-person subject pronominals fuse tonally with following morphemes in unexpected ways. For example, 3Sg **à** or 3Pl **ì** combine with /HL/-melodic Pfv intransitive verbs like **jéńè** ‘descend’ as e.g. **ā** ‘jéńè’ ‘he/she/it descended’ (§3.6.5.3.1), instead of expected #**à** **jéńè**. The same subject proclitics combine with following post-subject particles in tonally flat strings like 3Sg imperfective **à** **hà** ..., versus H-toned Ipfv **há** after nonpronominal subjects and after /H/-melodic proclitics like 2Sg **á**. So in examples like **ì** **hà** = **à** **húrù-lù** (87b), 3Sg object **à** is part of a flattened L-toned string that begins with, and is determined by, the third-person subject proclitic, here 3Pl **ì**.

That there is no general prohibition on H-toned third-person proclitics before /HL/-melodic words was shown in the preceding subsection. Similarly, in (88a) the 3Sg proclitic is H-toned **á** before the HL-toned postposition, contrasting with L-toned 2Sg **à**, both bolded in (88b)

- (88) a. ì ñà= à yágà= [á]éè]
 3Pl Sbj/Obj 3Sg put.Pfv [3Sg on]
 ‘They put it on him/her/it.’
- b. ì ñà= à yágà= [à]éè]
 3Pl Sbj/Obj 3Sg put.Pfv [2Sg on]
 ‘They put it on you-Sg.’

3.6.5.2 Atonal-Suffix Tone-Spreading

In nominal morphology, plural *-yèⁿ* has L-tone, subject to subsequent tone sandhi. It does not undergo tone-spreading from the preceding stem. Therefore the only candidate in nominal morphology for an atonal suffix which gets its tone by spreading is the singular suffix. Its phonology, however, is nontransparent.

For nouns that end in a short vowel, the vowel is lengthened and its tone spreads to the end of the long vowel (89a). If we consider this to be a suffix *-v*, unspecified for tone and vowel features, it would fit into the “atonal” category. The situation is complicated by the nasal-final stems, whose singular has a syllabic suffix *-ɔ* (89b-c). The cases in (89b) are consistent with the spreading analysis and therefore with the atonal nature of the suffix. However, when the nasal-final bare stem ends in an L-toned syllable, the suffixal vowel is <HL>-toned for some stems (89c). Since the HL-tone does not overtly spread to the suffix from the stem, a suffixal allomorph with intrinsic tone must be recognized in this case.

(89)	bare stem	singular	gloss
a. vowel-final stems			
	sógó	sógó-ó	‘goat’
	sàgà	sàgà-à	‘sheep’
	básà	básà-à	‘agama lizard’
	fòlí	fòlí-ì	‘laughing dove’
b. η-final with final syllable H- or HL-toned			
	<i>/H/ melody</i>		
	tóóní ⁿ	tóóníη-ó	‘cormorant’
	<i>/HL/ melody</i>		
	jâ ⁿ	jâη-ò	‘fishtrap’
	<i>/LHL/ melody</i>		
	hàmâ ⁿ	hàmâη-ò	‘armpit area’
	<i>/HLHL/ melody</i>		
	nóðzî ⁿ	nóðzîη-ò	‘chameleon’

c. η-final with final syllable L-toned

/L/ melody

kè ⁿ	kèη-ô	‘road’
tôgò ⁿ	tôgòη-ô	‘gardenia (tree)’

/HL/ melody, at least two syllables

gébé-lè ⁿ	gébé-lèη-ô	‘tigerfish’ (frozen ‘child’ compound)
sóozà ⁿ	sóozàη-ô	‘hare’

For verbs, the atonal morphemes are Ipfv -lv (and variants), participial -na, and causative -ni.

Ipfv -lv and variants have no intrinsic tone. The tone of the bare verb stem (which in most cases is identical to the Pfv stem) spreads into the suffix (90a). Final <HL> syllables de-link the L which is then expressed on the suffix in (90b); this happens with long monophthongal syllables (‘see’, ‘untie’), and with short <HL> syllables (‘read’).

(90)	Pfv	Ipfv	gloss
a.	dá ⁿ	dá-ná	‘count (v)’
	kómù	kómù-nù	‘sleep (v)’
	mànújù	mànújù-nù	‘knead’
b.	héè	héé-nè	‘see’
	gwéè	gwéé-lè	‘untie’
	hàrà ⁿ	hàrà-nà	‘read’
c.	mátìjè	mátìjè-nè	‘manufacture’

The tone alternation in the stem-final syllable in Ipfv mátìjè-nè ‘manufacture’ (90c) is due to Final Tone-Raising triggered by the suffix, following the spread of L-tone from mátìjè to the Ipfv suffix: /mátìjè-nè/ → mátìjè-nè. This is not a genuine counterexample to Atonal-Suffix Tone-Spreading.

Participial suffix -na is also atonal. Participles as postnominal modifiers get their tones by Tone Leveling. The lexical tone of participles is observable, however, in predicates. For example, ‘black’ as modifier is (singular) fí-ná-ná-á or fí-ná-nà-à, whose final tone is determined at a distance by the tone melody of the preceding noun. Predicates like à hà fí-ná-nà ‘it is black’ bring out its /HL/ melody, compare à há fùré-nà ‘it is wet’ (/LHL/ melody) and à há ‘hōō-nā-nā ‘it is white’ (/H/ melody, here downstepped). These data (§4.5.1.4) show that even in predicates the participial suffix gets its tone from the verb stem. However, unlike suffixed Ipfv verbs described above, with predicative participles the lexical melody of the verb is reapplied to the derived stem, so /HL/ melody in fí-ná-nà ‘(be) black’ has H-toned stem and L-toned suffix, not #[fí-nà]-nà.

Causative suffix -ni is also atonal, getting its tone by spreading from the stem in the same way as the participial suffix just described. Examples are túmé-ní(-ní) ‘immerse’ from /H/-melodic túmé(-né) ‘sink’, fàrí-nì(-nì) ‘finish (sth)’ from /HL/-melodic fàrí(-lì) ‘be finished’, and sèjé-nì(-nì) ‘equalize’ from /LHL/-melodic sèjé/sèjé-nè ‘converge’ (§9.1.1). In fàrí-nì(-nì), the

/HL/ melody of fàrì is reapplied at the derived stem level, rather than spreading the final L-tone of fàrì to the suffix in the manner of the Ipfv suffix.

3.6.5.3 Processes lowering tones

As flagged above, /H/-melodic stems are subject to Tone-Dropping or to Downstep under various morphosyntactically defined conditions.

Tone-Dropping lowers /H/-melodic verbs to ⁴L. It lowers /H/-melodic nouns to L*HL prepausally, becoming L*HH or all-L clause-medially depending on the following tone.

Downstep partially lowers the initial H portion of stem melodies to ⁴M. This includes lowering /H/-melodic verbs to ⁴M, and /HL.../-melodic verbs and nouns to ⁴ML... . Downstep is usually a tonosyntactic process (tonal ablaut). However, there is also a more purely phonological process, **Local Downstep**, which results from de-linking a final L-tone and fusing it with a following H-initial word (§3.6.5.3.10). Some but not all cases of (tonosyntactic) Downstep might alternatively be modeled as an ablaut process creating word-final <HL> syllables, followed by Local Downstep; such a model is most attractive for some types of N-Num combination (§3.6.5.4.8).

Tone-Dropping as tonosyntax is itself rather complex since it can apply in several positions in clauses and it takes different forms for nouns and verbs. Whether a given word is tone-dropped is determined by the word or particle to its left. The latter may separately undergo its own tonal change determined by the word or particle to its own left. Tone sandhi (mainly Final Tone-Raising) can apply later at the boundary of the two words.

In the same morphosyntactic environments that trigger Tone-Dropping and Downstep on stems that begin with H-tone, other stems that begin with L-tone are subject to Initial H-Ablaut, which raises their initial tone (§3.6.5.4.2).

3.6.5.3.1 Tone-Dropping and Downstep on post-subject intransitive verbs

Verb stems have a lexical choice among /H/, /HL/, and /LHL/ melodies. There is no /L/ melody for verbs. In various positions /H/-melodic verbs are dropped to ⁴L or downstepped to ⁴M, and /HL/-melodic verbs are downstepped to ⁴ML, as already summarized in §3.6.4.1 above.

The lexical melodies /H/, /HL/, and /LHL/ surface directly in singular-addressee intransitive imperatives, where the verb is clause-initial: byé ‘come!’, jéŋè ‘descend!’, nùgûⁿ ‘swim!’.

In the perfective positive, an intransitive verb immediately follows the subject, which is always overt (nonzero). The tonal changes on the verb are those in (91).

(91)	verb melody	subject type	tone change on verb
a.	/H/	H-toned proclitic 3Sg à, 3Pl ì nonpronominal NP	(none) Tone-Dropping to ⁴ L Downstep to ⁴ M
b.	/HL/	H-toned proclitic 3Sg à, 3Pl ì nonpronominal NP	(none) postpausally, subject to Tone-Terracing with upstepped ā or ī (none)
c.	/LHL/	H-toned proclitic 3Sg à, 3Pl ì nonpronominal NP	(none) (none) (none)

After or in connection with these tonal changes on the verb, Final Tone-Raising and (for 3Sg/3Pl proclitics) Upstep can occur on the subject. Here we focus on the tones of the verbs.

/H/-melodic verb *bágí* ‘exit (v)’ is illustrated in (92). 2Sg is proxy for all H-toned pronominal proclitics (plus demonstrative *kú*). ‘Seydou’ is proxy for nonpronominal NPs. We observe Downstep after ‘Seydou’ (which then itself undergoes Rightward H-Tone Shift), and Tone-Dropping after 3Sg and 3Pl (which are themselves upstepped to M).

(92)	verb (Pfv)	gloss	2Sg	‘Seydou’	3Sg	3Pl
	byé	‘come’	á byé	sèèdú ⁴ byē	ā ⁴ byè	ī ⁴ byè
	bágí	‘exit (v)’	á bágí	sèèdú ⁴ bāgī	ā ⁴ bàgì	ī ⁴ bàgì

/HL/-melodic *jéṅè* ‘descend’ is illustrated in (93). /HL/-melodic verbs resist tonal ablaut, except that clause-initial 3Sg à and 3Pl ì combine with the initial syllable to form an M-toned terrace (§3.6.5.6), e.g. ā ⁴jēṅè for expected #à jéṅè. When the 3Sg/3Pl proclitic is preceded by a grammatical morpheme like *ní* ‘if’, the 3Sg/3Pl proclitic becomes H-toned by Tone Inversion (§3.6.5.1.1), and the verb remains HL-toned without Downstep. The effect in both contexts is that the 3Sg/3Pl proclitic is at the same tone/pitch level as the first syllable of the verb, forming a short level-toned H or M terrace.

(93)	verb (Pfv)	gloss	2Sg	‘Seydou’	3Sg	3Pl
	jéṅè	‘descend’	á jéṅè	sèèdù jéṅè	ā ⁴ jēṅè (... á jéṅè)	ī ⁴ jēṅè (... í jéṅè)

/LHL/-melodic verbs are not subject to Tone-Dropping or Downstep under any conditions. Their initial L-tone triggers Rightward H-Tone Shift on ‘Seydou’ and Upstep on 3Sg/3Pl proclitics.

(94)	verb (Pfv)	gloss	2Sg	‘Seydou’	3Sg	3Pl
	nùgû ⁿ	‘swim’	á nùgû ⁿ	sèèdú nùgû ⁿ	ā nùgû ⁿ	ī nùgû ⁿ

3.6.5.3.2 Tone-Dropping and Downstep on imperative transitive verbs

Transitive verbs are always immediately preceded by objects (pronominal or nonpronominal). Pfv and Pfv stems are treated similarly in tonal ablaut.

In the singular-addressee transitive imperative, the object is clause-initial and the verb is Pfv in form. Tone Inversion does not apply to the proclitics since they are clause-initial. As a result, the object-verb combinations exactly follow the patterns of intransitive subject-verb combinations (perfective positive), described in the preceding subsection.

(95) shows that /H/-melodic kwárí remains H-toned after the H-toned proclitic (2Sg), is downstepped to ‘M after nonpronominal ‘Seydou’ (which then undergoes Rightward H-Tone Shift), and is tone-dropped to ‘L after 3Sg and 3Pl proclitics (which are upstepped). The column headings in this subsection classify the object rather than the subject. For 2Sg object the construction is reflexive (‘hit yourself!’).

(95)	verb	gloss	reflexive	‘Seydou’	3Sg	3Pl
	kwárí	‘hit.Pfv’	á kwárí	sèèdú ‘kwāri	ā ‘kwàri	ī ‘kwàri

Array (96) presents the imperative of an /HL/-melodic verb. The verb retains its tones, except that it merges into an M-toned terrace with 3Sg à or 3Pl ì when the latter are clause-initial (§3.6.5.6). In the plural-addressee imperative with ká, the 3Sg or 3Pl proclitic is no longer clause-initial, so it undergoes Tone Inversion, and the verb remains HL-toned.

(96)	verb (Pfv)	gloss	reflexive	‘Seydou’	3Sg	3Pl
	a. singular addressee					
	húrù	‘cut’	á húrù	sèèdù húrù	ā ‘hūrù	ī ‘hūrù
	b. plural addressee					
	húrù	‘cut’	kì = ì húrù	ká sèèdù húrù	ká = á húrù	kí = í jéjè

Array (97) presents an /LHL/-melodic verb. The tones are identical to those for /LHL/ intransitives (preceding subsection).

(97)	verb (Pfv)	gloss	reflexive	‘Seydou’	3Sg	3Pl
	hòrê ⁿ	‘wait for’	á hòrê ⁿ	sèèdú hòrê ⁿ	ā hòrê ⁿ	ī hòrê ⁿ

3.6.5.3.3 Tone-Dropping and Downstep on indicative transitive verb

In all indicative transitive constructions, the sequence is S-infl-O-V(...). The verb is immediately preceded by the object. If the object is pronominal, it undergoes Tone Inversion, so 2Sg is now à and 3Sg/3Pl are now á/í. Tone Inversion of object pronominals has no effect on the tones of the verb, which behave as though the inversion had not applied. If the verb is /H/-melodic, 3Sg/3Pl still tone-drop it, 2Sg (and the other similar proclitics) still leave its tones alone, and ‘Seydou’ as nonpronominal NP still downsteps it. Pfv and Ipv verbs are treated equally.

(98) presents an /H/-melodic transitive verb with various objects. Subjects and post-subject grammatical particles are present but are represented only by the ellipsis so the focus is on the object and verb. 2Sg object is no longer strictly reflexive; it can have any subject.

(98)	verb	gloss	2Sg	‘Seydou’	3Sg	3Pl
	kwárí	‘hit.Pfv’	... à kwárí	... sèèdù ‘kwāri	... á ‘kwàrì	... í ‘kwàrì
	kwárí-lí	‘hit-Ipv’	... à kwárí-lí	... sèèdù ‘kwāri-lì	... á ‘kwàrì-lì	... í ‘kwàrì-lì

The 2Sg-object examples in (98) are transcribed in a somewhat idealized manner with H-toned verb, extrapolated from transitive imperatives like ń kwárí ‘hit-2Sg me!’. In clauses other than imperatives, the pronominal object contracts with a post-subject grammatical particle, and this leads to subtle pitch changes. What is ideally a falling tone (ńá = à) followed by H-toned verb can be flattened into a mid-pitch sequence (99a). This contrasts with the sharp pitch shift in the 3Sg-object form (99b).

(99)	transcription	phonetic realization	translation
a.	sèèdù ńá = à kwárí	[sě:dùńá:kwāri]	‘Seydou hit you-Sg.’
b.	sèèdù ńá = á ‘kwàrì	[sě:dùńá:kwàrì]	‘Seydou hit him/her/it.’
c.	à ńá = à kwárí	[àńá:kwāri]	‘He/She hit you-Sg.’
d.	à ńá = á ‘kwàrì	[àńá:kwàrì]	‘He/She hit him/her/it.’

The phonological transcription with 2Sg object in the left column in (99a) may need revision if it is concluded that the terracing in the phonetic transcription is systematic and phonologized. This is also an issue with the other H-toned vocalic pronominal that can occur in object function, namely Logo/3ReflSg í. See §9.2.1-3 for examples and discussion.

(100) presents an /HL/-melodic verb. Downstep does not apply.

(100)	verb	gloss	2Sg	‘Seydou’	3Sg	3Pl
	húrù	‘cut.Pfv’	... à húrù	... sèèdù húrù	... á húrù	... í húrù
	húrù-lù	‘cut-Ipv’	... à húrù-lù	... sèèdù húrù-lù	... á húrù-lù	... í húrù-lù

Array (101) presents an /LHL/-melodic verb. As usual such verbs are tonally invariant.

(101)	verb	gloss	2Sg	‘Seydou’	3Sg	3Pl		
			hòrê ⁿ	‘wait.for.Pfv’	... à hòrê ⁿ	... sèèdú hòrê ⁿ	... á hòrê ⁿ	... í hòrê ⁿ
			hòré-nè	‘wait.for-Ipfv’	... à hòré-nè	... sèèdú hòré-nè	... á hòré-nè	... í hòré-nè

When a monomoraic C^v verb is tone-dropped to C^{v̄} after a third-person pronominal, it can be re-raised to C^v by Final Tone-Raising when it contracts with a following vocalic pronominal. For example, Pfv *ʃéé* ‘put/pour in’ combines with 3Sg object *à* in (102a) as *á ʃèè*. When this is itself followed by *à nî*: ‘in it’, *á ʃèè* first shortens to *á sè* (with *s*, §10.1.2.4) and is then re-raised and contracted.

(102)	a.	Ø	ηá =	á	ʃèè		
		1Sg	Sbj/Obj	3Sg	put.in.Pfv		
					‘I poured it in.’		
	b.	ɲ	ηá =	á	sá =	[á	nî:]
		1Sg	Sbj/Obj	3Sg	put.in.Pfv	[3Sg	Loc]
							‘I poured it into it.’

3.6.5.3.4 Downstep on intransitive verb following post-subject particle

Downstep applies to /H/-melodic intransitive verbs, which become ⁴M following post-subject inflectional particles. It does not affect /HL/-melodic verbs, nor of course /LHL/-melodic verbs. The inflectional particles in indicative clauses are Ipfv *há ~ gá*, IpfvNeg *tá ~ dá*, and PfvNeg *tí ~ dí*. The second variant in each case occurs after a nasal. All of these particles are H-toned lexically. The bidirectional case marker *ηá ~ ηà* does not occur in intransitive clauses. The perfective positive intransitive lacks a post-subject inflectional particle and is covered in §3.6.5.3.1 above rather than here.

The inflectional particle itself is tone-dropped after 3Sg and 3Pl proclitics. As it happens, this can only be directly observed when the following verb is /HL/-melodic, as in *à hâ jéjè-nè* ‘he/she descends’. See the bolded examples in the 3Sg column in (103b). Before a nonhigh tone, whether a downstepped ⁴M from /H/ melody (103a) or a lexical L as with /LHL/-melodic verbs (103c), the tone-dropped inflectional particle is re-raised by the tone sandhi process Final Tone-Raising, as in *à há ʔbē-lē* (or *ɲ gá ʔbē-lē*) ‘he/she comes’ and *à há nùgú-nù* ‘he/she swims’. An alternative but less elegant analysis would be that Tone Dropping of the particle is blocked in this combination.

(103)	verb	gloss	Ipfv (3Sg) IpfvNeg (3Sg) PfvNeg (3Sg)	Ipfv (2Sg) IpfvNeg (2Sg) IpfvNeg (2Sg)	Ipfv ('Seydou') IpfvNeg ('Seydou') IpfvNeg ('Seydou')
	a. /H/-melodic				
	byé/bé-lé	'come'	à há 'bē-lē à tá 'bē-lē à tí 'byē	á há 'bē-lē á tá 'bē-lē á tí 'byē	sèédù há 'bē-lē sèédù tá 'bē-lē sèédù tí 'byē
			(3Sg nasal variants ñ gá 'bē-lē, ñ dá 'bē-lē, ñ dí 'byē)		
	b. /HL/-melodic				
	jéjè(-nè)	'descend'	à hà jéjè-nè à tà jéjè-nè à tì jéjè	á há jéjè-nè á tá jéjè-nè á tí jéjè	sèédù há jéjè-nè sèédù tá jéjè-nè sèédù tí jéjè
			(3Sg nasal variants ñ gá jéjè-nè, ñ dà jéjè-nè, ñ dì jéjè)		
	c. /LHL/-melodic				
	nùgù ⁿ /nùgú-nù	'swim'	à há nùgú-nù à tá nùgú-nù à tí nùgú-nù	á há nùgú-nù á tá nùgú-nù á tí nùgú-nù	sèédù há nùgú-nù sèédù tá nùgú-nù sèédù tí nùgú-nù
			(3Sg nasal variants ñ gá nùgú-nù, ñ dá nùgú-nù, ñ dí nùgú-nù)		

The downstep in há 'bē-lē 'comes' (103a) distinguishes it from the etymologically identical auxiliary-like future combination há bélé ~ há bílí which is treated as a single prosodic word (§10.2.4.3).

3.6.5.3.5 Tone-Dropping and Downstep on nouns after particles

Nouns in object function in non-imperative clauses are preceded by post-subject particles that express marked inflectional categories (Ipfv, PfvNeg, IpvNeg). In the unmarked perfective positive, the object noun is preceded by the bidirectional case marker *há*. Nouns in subject function can be preceded by one of the few pre-subject morphemes like *ní* 'if' and *mà* 'until'.

In these positions, pronominal proclitics undergo Tone Inversion (§3.6.5.1.1), so that L-toned 3Sg and 3Pl are raised to *á* and *í*, while H-toned pronominals like 2Sg *á* are dropped to L-tone. Here the focus is on the tones of the nouns. Independent pronouns and the discourse-definite demonstrative *ó* are treated as nouns in tonal patterning.

Nouns have lexical melodies /H/, /L/, /HL/, /LHL/, and /HLHL/ (a handful with more elaborate melodies are treated like /LHL/ and /HLHL/). Those with L-initial melodies are of course not subject to Tone-Dropping or Downstep, but a noninitial LHL sequence can be flattened to all-L under some conditions (§3.6.5.3.11). /H/-melody is subject to Tone-Dropping, and other H-initial melodies are subject to Downstep.

(104) presents the forms of several nouns after Ipfv *há* in L-toned form with preceding 3Sg subject, after bidirectional case marker (BCM) *ɲà* in L-toned form with preceding 3Sg subject, and after *mà* ‘until’. These L-toned forms undergo Final Tone-Raising before a nonhigh tone, so they are useful indirect indicators of the initial tone of the following noun. The inflectional (aspect-polarity) morphemes and the BCM precede objects, while ‘until’ precedes subjects. The remainder of the clause is represented by the ellipsis.

(104)	melody	noun	gloss	3Sg Ipfv	3Sg BCM	‘until’
	/H/	sógó-ó	‘goat’	à há ⁴ sògó-ò...	à ɲá ⁴ sògó-ò...	má ⁴ sògó-ò...
	/HL/	bàsà-à	‘agama’	à há ⁴ bàsà-à...	à ɲà bàsà-à...	mà bàsà-à...
	/HLHL/	nóðzín-ð	‘chameleon’	à há ⁴ nóðzín-ð...	à ɲà nóðzín-ð...	mà nóðzín-ð...

As usual, /H/-melodic stems like ‘goat’ are dramatically affected by tonal ablaut. Tone-Dropping applies to ‘goat’ in all three environments. Whereas Tone-Dropping for verbs results in an all-L pattern, for nouns it produces ⁴L*HL before tone sandhi.

The nouns whose melody begins with HL, like ‘agama’ and ‘chameleon’, undergo Downstep to ⁴ML after the Ipfv morpheme (and other post-subject inflectional morphemes). They retain their initial HL after the BCM and after ‘until’. The clearest manifestation of this is the H-toned Ipfv *há* versus L-toned BCM *ɲà* and *mà* ‘until’ before the /HL/ and /HLHL/ nouns, all of which bolded in the /HL/ and /HLHL/ rows in (104).

The tonal forms of the nouns shown above are subject to later adjustments when the rest of the clause is filled in. The final mora of *bàsà-à* or downstepped ⁴bàsà-à ‘agama’ is raised before a nonhigh tone (*bàsà-á*, ⁴bàsà-á) by Final Tone-Raising. Tone-dropped ⁴sògó-ò ‘goat’ is realized as ⁴sògó-ó before a nonhigh tone, but is flattened to ⁴sògò-ò before an /HL/-melodic verb or postposition (§3.6.5.3.11). One might argue that the basic post-ablaut representation of tone-dropped ‘goat’ should be all-L ⁴sògò-ò, on the theory that Final Tone-Raising could account for ⁴sògó-ó before nonhigh tone. However, as possessum the parallel tone-dropped form is X ⁴sògó-ò meaning ‘X’s goat’ in isolation pronunciation, as in *sèèdú* ⁴sògó-ò ‘Seydou’s goat’ (§3.6.5.3.9). The LHL tones contrast with the all-L tones of unpossessed *sàgà-à* ‘sheep-Sg’. Therefore the L*HL tones of possessed ⁴sògó-ò ‘goat’ cannot be derived from an all-L input, and must be stipulated as the tonal pattern of /H/-melodic stems under the version of Tone-Dropping that applies to nouns. By contrast, /H/-melodic verbs are all-L when tone-dropped (§3.6.5.3.1-3).

The imperfective particles *há* ~ *gá* (Ipfv) and *tá* ~ *dá* (IpfvNeg) are identical in form to the positive and negative locational-existential ‘be’ quasi-verbs (§11.2.3). These quasi-verbs can again be followed by nouns or noun-initial PPs denoting locations. (105) shows various nouns and pronominal proclitics (bolded) following *há* ~ *gá* ‘be.Loc’, in the ‘Y want(s) X’ construction phrased (arguably) as “Y be [by X]” (§11.2.5.6). ‘Goat’ is tone-dropped to ⁴L and ‘agama’ is downstepped to ⁴ML in (105) as in (104) above. For the raised tone of ‘sheep’ see Initial H-Ablaut, §3.6.5.4.2.

(105)	postverbal N/Pron	‘you-Sg want X’ á há [X fáà]	‘he/she wants X’ ɲ gà [X fáà] (~ à hà [X fáà])	‘Seydou wants X’ sèédù há [X fáà]
	2Sg	á há = [à fáà]	ɲ gá = [à fáà]	sèédù há = [à fáà]
	3Sg	á há = [á fáà]	ɲ gá = [á fáà]	sèédù há = [á fáà]
	‘goat’ (/H/)	á há [‘sògò-ò fáà]	ɲ gá [‘sògò-ò fáà]	sèédù há [‘sògò-ò fáà]
	‘agama’ (/HL/)	á há [‘bàsà-à fáà]	ɲ gá [‘bàsà-à fáà]	sèédù há [‘bàsà-à fáà]
	‘sheep’ (/L/)	á há [‘ságà-à fáà]	ɲ gà [‘ságà-à fáà]	sèédù há [‘ságà-à fáà]
	‘Seydou’ (/LHL/)	á há [sèédù fáà]	ɲ gá [sèédù fáà]	sèédù há [sèédù fáà]

The same tones occur with tà ~ dà ‘not be’, which are the L-toned forms of tá ~ dá that follow 3Sg and 3Pl proclitics. Examples are ò dá = [á fáà] ‘he/she doesn’t want him/her/it’, ò dà [‘ságà-à fáà] ‘he/she wants the sheep-Sg’, and ò dá [‘sògò-ò fáà] ‘he/she doesn’t want the goat’.

3.6.5.3.6 Tone-Dropping or Downstep of immediately postverbal noun

Other subsections in this chapter show that pronouns and nouns undergo tonal ablaut in several positions in clauses: possessum, subject after a particle like ní ‘if’, or object after a grammatical particles. For pronouns the main process is Tone Inversion. For nouns the main process depends on the lexical melody: Tone-Dropping and Downstep for /H/-melodic nouns, Downstep for /HL/-melodic nouns to ‘ML, and Initial H-Ablaut for nonmonosyllabic /L/-melodic nouns (and /LHL/-melodic nouns with at least two initial L-toned syllables).

The tonal changes on possessums are triggered locally by the possessor, regardless of the position of the possessed NP in the clause. The changes affecting (unpossessed) subjects and objects occur in mid-clause but to the left of the verb.

Similar tonal processes can apply but under limited conditions to nouns that immediately follow the verb. In general, only tightly-knit combinations are affected, and there is some variation in the data. The constructions in (106) will be considered in turn.

- (106) a. copula kélé ~ hálí ‘be’ or its negation, plus a noun
 b. yágà(-là) ‘become’ (intransitive) or ‘transform’ (transitive)
 c. intransitive motion verb plus a spatial expression (noun or PP)
 d. transitive transfer (‘put’) verb plus a spatial expression
 e. verb plus dative PP

The copula kélé ~ hálí does trigger the tonal ablauts. Tone-Dropping applies to /H/-melodic sógó-ó ‘goat’, and Downstep applies to /HL/-melodic bāsà-à ‘agama lizard’. After tonal ablaut both now begin with nonhigh tones, which trigger Final Tone-Raising in what would otherwise be ā ‘kèlè (107a). yágà(-là) ‘become, turn into’ induces Tone-Dropping on /H/-melodic ‘goat’ but has no effect on /HL/-melodic ‘agama’ in the data (107b). Transitive yágà(-là) ‘transform into’ has similar effects (107c).

- (107) a. with *kélé* ~ *hálí* ‘be’ (copula)
- | | |
|--------------------------------|-------------------------|
| <i>ā</i> ‘ <i>kélé</i> ‘sògò-ò | ‘It’s a goat.’ |
| <i>ā</i> ‘ <i>kélé</i> ‘bàsà-à | ‘It’s an agama lizard.’ |
- b. with *yágà(-là)* ‘become, turn into’
- | | |
|------------------------------------|------------------------|
| <i>ā</i> ‘ <i>yágà</i> ‘sògò-ò | ‘It became a goat.’ |
| <i>ɲ</i> <i>gà yágà-lá</i> ‘sògò-ò | ‘It becomes a goat.’ |
| <i>ā</i> ‘ <i>yágà</i> básà-à | ‘It became an agama.’ |
| <i>ɲ</i> <i>gà yágà-là</i> básà-à | ‘It becomes an agama.’ |
- c. with transitive *yágà(-là)* ‘transform’
- | | |
|---|-----------------------------------|
| <i>à</i> <i>ɲà</i> = <i>à yágà</i> ‘sògò-ò | ‘He/She turned it into a goat.’ |
| <i>ɲ</i> <i>gà</i> = <i>à yágà-là</i> ‘sògò-ò | ‘He/She turned it into a goat.’ |
| <i>à</i> <i>ɲà</i> = <i>à yágà</i> básà-à | ‘He/She turned it into an agama.’ |
| <i>ɲ</i> <i>gà</i> = <i>à yágà-là</i> básà-à | ‘He/She turned it into an amaga.’ |

Nouns or PPs denoting locations are common though not obligatory with basic motion verbs. An /H/-melodic postverbal noun like *júú* ‘water’ is (inconsistently) subject to Tone-Dropping if it is phrased with the verb with no prosodic break. A tone-dropped verb like *ā* ‘*bàgì* ‘he/she exited’ or an imperfective verb with two final L-toned syllables as in *ɲ* *gà jéjè-nè* ‘he/she descends’ shows only sporadic Final Tone-Raising triggered by a following tone-dropped /H/-melodic noun. Thus *ɲ* *gà jéjè-nè* [‘*jùù nî*] ‘he/she/it goes/comes down to the water’, usually with *jéjè-nè* not *jéjè-né*. Furthermore, there is no Downstep on /HL/-melodic nouns like *tégè-é* ‘type of fishtrap’. Overall, there is only inconsistent evidence of tonal ablaut at verb-noun level in such constructions.

- (108) a. with ‘go’
- | | |
|--|--|
| <i>ā</i> <i>sò</i> | ‘He/She/It went.’ (variant <i>ā</i> ‘ <i>ʃòò</i>) |
| <i>ɲ</i> <i>gà sò-lò</i> | ‘He/She/It goes.’ |
| <i>ā</i> <i>sò</i> [‘ <i>jùù nî</i>] | ‘He/She/It went to the water.’ |
| <i>ɲ</i> <i>gà sò-lò</i> [‘ <i>jùù nî</i>] | ‘He/She/It goes to the water.’ |
| <i>ā</i> <i>sò</i> [tégè-é ‘ <i>là</i>] | ‘He/She/It went to the fishtrap.’ |
| <i>ɲ</i> <i>gà sò-lò</i> [tégè-é ‘ <i>là</i>] | ‘He/She/It goes to the fishtrap.’ |
- b. with ‘come’
- | | |
|---|--|
| <i>ā</i> ‘ <i>bè</i> | ‘He/She/It came.’ (variant <i>ā</i> ‘ <i>byè</i>) |
| <i>ɲ</i> <i>gá</i> ‘ <i>bēlē</i> | ‘He/She/It comes.’ |
| <i>ā</i> ‘ <i>bè</i> [‘ <i>jùù nî</i>] | ‘He/She/It came to the water.’ |
| <i>ɲ</i> <i>gá</i> ‘ <i>bē-lē</i> [‘ <i>jùù nî</i>] | ‘He/She/It comes to the water.’ |
| <i>ā</i> ‘ <i>bè</i> [tégè-é ‘ <i>là</i>] | ‘He/She/It came to the fishtrap.’ |
| <i>ɲ</i> <i>gá</i> ‘ <i>bē-lē</i> [tégè-é ‘ <i>là</i>] | ‘He/She/It comes to the fishtrap.’ |

c. with ‘ascend’

ā ‘tā ⁿ	‘He/She/It went/came up.’
ɪ̄ gá ‘tā-nà	‘He/She/It goes/comes up.’
ā ‘tā ⁿ [‘jùù sɛ̀ɛ̀]	‘He/She/It went up on the water.’ (e.g. in a boat)
ɪ̄ gá ‘tā-nū [‘jùù sɛ̀ɛ̀]	‘He/She/It goes up on the water.’
ā ‘tā ⁿ [tɛ̀gɛ̀-ɛ̀ sɛ̀ɛ̀]	‘He/She/It went up on the fishtrap.’
ɪ̄ gá ‘tā-nū [tɛ̀gɛ̀-ɛ̀ sɛ̀ɛ̀]	‘He/She/It goes up on the fishtrap.’

d. with ‘descend’

ā ‘jɛ̀ɪ̄ɛ̀	‘He/She/It went/came down.’
ɪ̄ gá jɛ̀ɪ̄ɛ̀-nɛ̀	‘He/She/It goes/comes down.’
ā ‘jɛ̀ɪ̄ɛ̀ [‘jùù nî]	‘He/She/It went/came down to the water.’
ɪ̄ gá jɛ̀ɪ̄ɛ̀-nɛ̀ [‘jùù nî]	‘He/She/It goes/comes down to the water.’
ā ‘jɛ̀ɪ̄ɛ̀ [tɛ̀gɛ̀-ɛ̀ sɛ̀ɛ̀]	‘He/She/It went down on the fishtrap.’
ɪ̄ gá jɛ̀ɪ̄ɛ̀-nɛ̀ [tɛ̀gɛ̀-ɛ̀ sɛ̀ɛ̀]	‘He/She/It goes down on the fishtrap.’

e. with ‘exit (v), go/come out, leave’

ā ‘bàgì (~ bày)	‘He/She/It exited (went/came out).’
ɪ̄ gá ‘bāgī-lī (~ ‘bāy-lī)	‘He/She/It exits.’
ā ‘bàgì [‘jùù nî]	‘He/She/It came out of the water.’
ɪ̄ gá ‘bāgī-lī [‘jùù nî]	‘He/She/It comes out of the water.’
ā ‘bàgì [tɛ̀gɛ̀-ɛ̀ ‘là]	‘He/She/It left the fishtrap.’
ɪ̄ gá ‘bāgī-lī [tɛ̀gɛ̀-ɛ̀ ‘là]	‘He/She/It leaves the fishtrap.’

Transfer (‘put’) verbs yágà(-là) ‘put (down)’, jɛ̀ɛ̀/ɛ̀ɛ̀-ɛ̀ɛ̀ ‘put in’, and báy-ní(-nî) ~ bágí-ní(-nî) ‘take out’ are illustrated in (109). Nouns are /H/-melodic júú ‘water’ and mááɲó-ó ‘maize’, plus /HL/-melodic ságì-ì ‘basket’. The tonal interactions between the verb and the following noun are like those for intransitive motion verbs. /H/-melodic nouns are often but not reliably tone-dropped and they only sporadically trigger Final Tone-Raising, while /HL/-melodic nouns are unchanged.

(109) a. with ‘put (down)’

à ɲá = á yágà [‘jùù nî]	‘He/She put it in the water.’
ɪ̄ gá = à yágà-lá [‘jùù nî]	‘He/She puts it in the water.’
à ɲá = á yágà [‘mààɲò-ò nî]	‘He/She put it in the maize.’
ɪ̄ gá = à yágà-lá [‘mààɲò-ò nî]	‘He/She puts it in the maize.’
à ɲá = á yágà [ságì-ì nî]	‘He/She put it in the basket.’
ɪ̄ gá = à yágà-là [ságì-ì nî]	‘He/She puts it in the basket.’

b. with ‘put in (by pouring)’

à ɲá = á ‘jɛ̀ɛ̀ [‘jùù nî]	‘He/She poured it into the water.’
ɪ̄ gá = á ‘sɛ̀-ɛ̀ [‘jùù nî]	‘He/She pours it into the water.’
à ɲá = á ‘jɛ̀ɛ̀ [ságì-ì nî]	‘He/She poured it into the bag.’
ɪ̄ gá = á ‘sɛ̀-ɛ̀ [ságì-ì nî]	‘He/She pours it into the bag.’

c. with *báy-ní* ‘take out, remove’

à ɲá = á	‘bày-nì	[‘jùù nî]	‘He/She took it out of the water.’
ɲ gá = á	‘bày-nì-nì	[‘jùù nî]	‘He/She takes it out of the water.’
à ɲá = á	‘bày-nì	[sáǵì-ì nî]	‘He/She took it out of the bag.’
ɲ gá = á	‘bày-nì-nì	[sáǵì-ì nî]	‘He/She takes it out of the bag.’

Dative PPs are especially common with verbs like *ǵéé/sé-lé* ‘say’ (dative *té*) and *lós/ló-ló* ‘give’ (dative *lá*). Tone-Dropping of /H/-melodic nouns is attested at least with *té* (110a), but optional.

(110) a.	à ɲá = á	‘ǵèè	[sógó-ó ‘tè]	‘He/She said it to the goat.’
			~ [‘sògó-ó ‘tè]	
	ɲ gá = á	‘sè-lè	[sógó-ó ‘tè]	‘He/She says it to the goat.’
			~ [‘sògó-ó ‘tè]	
	à ɲá = á	‘ǵèè	[básà-á ‘tè]	‘He/She said it to the agama lizard.’
	ɲ gá = á	‘sè-lè	[básà-á ‘tè]	‘He/She says it to the agama lizard.’
b.	à ɲá = á	‘lò	[sógó-ó ‘là]	‘He/She gave it to the goat.’
	ɲ gá = á	‘lò-lò	[sógó-ó ‘là]	‘He/She gives it to the goat.’
	à ɲá = á	‘lò	[básà-á ‘là]	‘He/She gave it to the agama.’
	ɲ gá = á	‘lò-lò	[básà-á ‘là]	‘He/She gives it to the agama.’

The tone patterns described in this subsection are based on intensive but sometimes inconclusive elicitation with two twenty-something speakers at different times. In rapidly spoken recordings it is often difficult to determine whether a postverbal noun has undergone tonal ablaut. For one thing, even a slight pause or hesitation in the middle of a clause forces a reset by which lexical tone melodies reappear when speech resumes. Second, postverbal nouns are by definition usually at or near the end of clauses, and their tones can be difficult to pick up due to downdrift and phrasal smoothing. Therefore tonal transcriptions on postverbal nouns, in texts and even in elicited examples, should be taken with a grain of salt.

3.6.5.3.7 No tonal change on nonadjacent postverbal noun or adverb

An unpossessed noun, for example in a PP, that is separated from the verb by another constituent does not undergo Tone-Dropping or Downstep. For example, in (111) *júú nî* ‘in the water’ has its lexical tones. It does not even affect the tones of the preceding ‘sògó-ò.

(111)	ā	‘yāǵà	‘sògó-ò	[júú	nî]
	3Sg	become.Pfv	goat-Sg	[water	Loc]
				‘He/She/It turned into a goat in the water.’	

Some noun-like adverbs regularly occur at or near the end of clauses, like the extent adverbs in (112a-b). In this position their tones are indistinct due to downdrift. /H/-melodic forms like *dóóníⁿ* have sufficiently low pitch as to sound downstepped, but they do not trigger Final Tone-Raising.

- (112) a. *ɲ* *gà* *hōōlò-lò* *dóóníⁿ / méé-tááⁿ*
 3Sg Ipfv run-Ipfv a.little / a lot
 ‘He/She runs a little/a lot.’
- b. *ā* *ˈgwòò* *dóóníⁿ / méé-tááⁿ*
 3Sg weep.Pfv a.little / a lot
 ‘He/She wept a little/a lot.’
- c. *ā* *ˈkwàrì* *dóóníⁿ / méé-tááⁿ*
 3Sg hit.Pfv a.little / a lot
 ‘Hit-2Sg him/her/it a little/a lot.’

3.6.5.3.8 Tone-Dropping on simple postpositions

PPs follow the verb. The issue of how the noun in the PP is treated is considered in §3.6.5.3.6-7 above.

Postpositions are themselves subject to tonal processes. Not surprisingly, composite postpositions that are based on nouns, at least diachronically, behave like possessed nouns in tonal patterning. We therefore focus here on basic monosyllabic postpositions that are unrelated to nouns. Examples are scattered in preceding subsections, which however focused on the tones of the complement noun.

(113) presents combinations involving basic /H/-melodic *Ć* or *Ć́* postpositions. They appear as H-toned after /H/-melodic proclitics like 2Sg *á*, but they are tone-dropped to *ˈL* after 3Sg *à* and after nouns.

(113) X	‘say it to X!’ <i>ā ˈfèè [X té]</i>	‘give it to X!’ <i>ā ˈlòò [X lá]</i>	‘forget X!’ <i>ɲínè [X tóó]</i>
2Sg	<i>ā ʃà = [à té]</i>	<i>ā ˈlwá = [à lá]</i>	<i>ɲínà = [à tóó]</i>
3Sg	<i>à ʃá = [á ˈtè]</i>	<i>ā lwà = [á ˈlà]</i>	<i>ɲínà = [á ˈtòò]</i>
‘goat’ (/H/)	<i>ā ˈfèè [sógó-ó ˈtè]</i>	<i>ā ˈlòò [sógó-ó ˈlà]</i>	<i>ɲínè [sógó-ó ˈtòò]</i>
‘sheep’ (/L/)	<i>ā ˈfèè [sàgá-á ˈtè]</i>	<i>ā ˈlòò [sàgá-á ˈlà]</i>	<i>ɲínè [sàgá-á ˈtòò]</i>
‘agama’ (/HL/)	<i>ā ˈfèè [básà-á ˈtè]</i>	<i>ā ˈlòò [básà-á ˈlà]</i>	<i>ɲínè [básà-á ˈtòò]</i>
‘onion’ (/LHL/)	<i>ā ˈfèè [jàbá-á ˈtè]</i>	<i>ā ˈlòò [jàbá-á ˈlà]</i>	<i>ɲíné [jàbá-á ˈtòò]</i>
‘Seydou’ (/LHL/)	<i>ā ˈfèè [sèèdú ˈtè]</i>	<i>ā ˈlòò [sèèdú ˈlà]</i>	<i>ɲíné [sèèdú ˈtòò]</i>

Further examples with /HL/-melodic verbs (‘entrust’ and ‘accept’) and an /LHL/-melodic verb (‘fit’) are in (114). *sènê* ‘fit’ triggers Local Downstep (§3.6.5.3.10) on a following H-tone (‘goat’, tone-inverted 3Sg proclitic, or ‘agama’).

(114) X	‘entrust it to X!’ à hálífàà [X má]	‘accept X!’ dúnjè [X lá]	‘it fits X’ ā sènê [X má]
2Sg	à hálífá = [à má] (< à hálífàà [à má])	dúnjé [à lá]	ā sènê [à má]
3Sg	à hálífà = [á ⁺ mà]	dúnjè [á ⁺ là]	ā sènjá = [⁺ ā ⁺ mà]
‘goat’ (/H/)	à hálífàà [sógó-ó ⁺ mà]	dúnjé [sógó-ó ⁺ là]	ā sènê [sógó-ó ⁺ mà]
‘sheep’ (/L/)	à hálífàà [sàgá-á ⁺ mà]	dúnjé [sàgá-á ⁺ là]	ā sènê [sàgá-á ⁺ mà]
‘agama’ (/HL/)	à hálífàà [bàsà-á ⁺ mà]	dúnjè [bàsà-á ⁺ là]	ā sènê [⁺ bàsà-á ⁺ mà]
‘onion’ (/LHL/)	à hálífàà [jàbá-á ⁺ mà]	dúnjé [jàbá-á ⁺ là]	ā sènê [jàbá-á ⁺ mà]
‘Seydou’	à hálífàà [sèèdú ⁺ mà]	dúnjé [sèèdú ⁺ là]	ā sènê [sèèdú ⁺ mà]

nî Locative, *fàà* ‘by’, and *ǰéè* ‘on’, are /HL/-toned postpositions. They are not subject to Tone-Dropping, so they keep their lexical tones regardless of the complement type (115)

(115) X	‘put it in X!’ ā lǰò [X nî]	‘go with X!’ ǰóò [X fàà]	‘run on X!’ hóólò [X ǰéè]
2Sg	ā lwá = [à nî]	sá = [à fàà]	hóólò [à ǰéè]
3Sg	ā ⁺ lwà = [á nî]	sá = [á fàà]	hóólò [á ǰéè]
‘sheep’ (/L/)	ā ⁺ lǰò [sàgá-á nî]	ǰóò [sàgá-á fàà]	hóólò [sàgá-á ǰéè]
‘goat’ (/H/)	ā ⁺ lǰó [sógó-ó nî]	ǰóò [sógó-ó fàà]	hóólò [sógó-ó ǰéè]
‘agama’ (/HL/)	ā ⁺ lǰò [bàsà-à nî]	ǰóò [bàsà-à fàà]	hóólò [bàsà-à ǰéè]
‘onion’ (/LHL/)	ā ⁺ lǰó [jàbáà nî]	ǰóò [jàbáà fàà]	hóólò [jàbáà ǰéè]
‘Seydou’	ā ⁺ lǰó [sèèdù nî]	ǰóò [sèèdù fàà]	hóólò [sèèdù ǰéè]

A few clauses illustrating the *Cv̄v̄* postpositions and the tones of the preceding complement noun are in (116). The first three examples show tonal ablaut applying after ‘return’, but as noted above such ablaut applies inconsistently after verbs.

- (116) a. ǰààkí [ʔjùù nî]
return.Pfv [water Loc]
‘Return-2Sg to the water!’ (< ǰáákì, júú)
- b. ǰáákì [ʔnújù nî]
return [village Loc]
‘Return-2Sg to the village!’ (< nùjù)

- c. ìḡ gà ʃáákì-lí [ʔjùù nî]
- 3Sg Ipfv return-Ipfv [water Loc]
- ‘He/She returns to the water.’ (< ʃáákì-lì)
- d. à hóólò [súgú-ú ʃéè]
- 3Sg run.Pfv [grass-Sg on]
- ‘He/She ran on the grass.’
- e. à hóólò [sùgù-ù ʃéè]
- 3Sg run.Pfv [net-Sg on]
- ‘He/She ran on the net.’
- f. Ø ḡá= á ʔsùùrù [súgú-ú ʃéè]
- 1Sg Sbj/Obj 3Sg pour.out.Pfv [grass-Sg on]
- ‘I poured it on the grass.’ (< súúrí)

3.6.5.3.9 Tone-Dropping and Downstep on possessed nouns

Nouns with H-initial melodies are subject to Tone-Dropping (/H/ melody) or Downstep (other H-initial melodies) when they function as possessums. As usual these processes depend on the category of the preceding possessor. The possessor categories are /H/-melodic pronominal proclitics like 2Sg á, then L-toned third person pronominal proclitic like 3Sg à, and finally (noun-headed) nonpronominal NPs. Independent pronouns and discourse-definite demonstrative ó are treated as nouns, while deictic demonstrative kú as possessor behaves tonally like 2Sg á.

Representative examples are in (117), in postpausal (e.g. citation) form.

(117)	melody	noun	gloss	2Sg	3Sg	‘Seydou’
	/H/	sógó-ó	‘goat’	á sógó-ò	ā ʔsògó-ò	sèèdú ʔsògó-ò
	/HL/	bàsà-à	‘agama’	á bàsà-à	ā ʔbàsà-à	sèèdú ʔbàsà-à
	/HLHL/	nóðzín-ò	‘chameleon’	á nóðzín-ò	à nóðzín-ò	sèèdú ʔnòðzín-ò

The tonal pattern sèèdú ʔsògó-ò shows the L*HL tones which are usual for relatively short /H/-melodic possessums after nonpronominal possessors. However, examples of Downstep to ʔM instead of Tone-Dropping to L*HL also occur in the data, the effect being to level the pitch. Longer possessums, such as polysyllabic compounds and N-Adj combinations, are most prone to Downstep. See, for example, sèèdú ʔ[sògò fīnā-nā-ā] ‘Seydou’s black goat’ in §3.6.5.5.2.

The tonal treatment of possessums after various NPs and pronouns is usefully compared to the tonal treatment of verbs that follow a noun or pronoun (§3.6.5.3.1-3 above). Again, /H/-melodic stems are tone-dropped, though for verbs this is to all-L while for nouns it is to L*HL. The bigger difference is the treatment of /HL/- and /HLHL/-melodic stems. In (117) we see that the initial H-toned portion of the possessum is downstepped to ʔM after a nonpronominal

possessor, resulting in ¹ML and ¹MLHL (the latter sometimes further flattened to ¹ML*, §3.6.5.3.12). As a result, ‘Seydou’ undergoes Rightward H-Tone Shift from sèédù to sèèdú) not only before ‘goat’ but also before ‘agama’ and ‘chameleon’. ‘Agama’ and ‘chameleon’ remain HL...-toned after the 3Sg/3Pl proclitics, except that in postpausal position Tone-Terracing applies to light stems (ā ¹bāsà-à). Clause-medially, after Tone Inversion, these combinations are á bāsà-à and á nòðzìŋ-ò with no tone-lowering of the possessum. Longer /HL/-melodic stems may retain their HL-tones even after nonpronominal possessors (§6.2.3.1.3).

The difference between /HL/-melodic verbs and (possessed) bimoraic /HL/-melodic nouns is dramatized by the tones of preceding ‘Seydou’ in sèèdú ¹bāsà-à ‘Seydou’s agama’ (117) versus ... sèédù húrù ‘... cut.Pfv Seydou’ (§3.6.5.3.2-3). Only in sèèdú ¹bāsà-à does Downstep on the possessed noun create the environment for Rightward H-Tone Shift on ‘Seydou’.

The forms of the proclitics shown in the 2Sg and 3Sg columns in (117) above are for isolation or clause-initial pronunciations. Clause-medially, the proclitics undergo Tone Inversion (§3.6.5.1.1) in most contexts. This has no effect on the tones of the possessums. Likewise, Upstep of an L-toned proclitic has no effect on the possessum. ‘Goat’ is always sógó-ó after the 2Sg proclitic regardless of the latter’s surface tone (118a). It is always ¹sògó-ò before tone sandhi after the 3Sg proclitic (118b).

(118)	‘if ...’	object after Ipfv	‘gave (it) to ...’ (< lóó)
	a. á sógó-ó ‘your-Sg goat’		
	ná = [à sógó-ó] há = [à sógó-ó] lwá = [[à sógó-ó] ¹ là]
	b. ā ¹ sògó-ò ‘his/her goat’		
	ná = [á ¹ sògó-ò] há = [á ¹ sògó-ò] lwá = [[á ¹ sògó-ó] ¹ là]

3.6.5.3.10 Local Downstep (<HL>#H to H#¹M, H.L#H to H.H#¹M)

In this tone-sandhi (not ablaut) process, a short <HL>-toned syllable at the end of a word de-links its L-tone, which is manifested as downstepping a following H-tone to M. This is obligatory when the two words are phrased together.

Local Downstep can take place in noun-numeral combinations, where nouns occur in their bare stem (rather than in the suffixed singular). Monosyllabic C^vⁿ stems, and longer stems ending in a C^v syllable, are directly followed by numerals, all of which have either /H/ melody (like ‘2’) or /HL/ melody (like ‘3’). The downstep to ¹fiēnū ‘2’ would occur anyway since /H/-melodic numerals are undergo (morphophonological) Downstep after nouns whose lexical melody contains L. However, the downstep to ¹sīyò ‘3’ can only be attributed to Local Downstep.

(119)	singular	bare stem	gloss	‘2 __s’	‘3 __s’
	ján-ò	já ⁿ	‘fishtrap’	já ⁿ ¹ fiēnū	já ⁿ ¹ sīyò
	tàmààtí-ì	tàmààtí	‘tomato’	tàmààtí ¹ fiēnū	tàmààtí ¹ sīyò

Local Downstep is a byproduct of the leveling of the final <HL> syllable to H. This process de-links the L and frees it to lower the pitch of the following word. It is akin to Rightward H-Tone Spreading (§3.6.5.4.7-8).

3.6.5.3.11 LHL-Flattening (to all-L) for /L/ and /LHL/ melodies

The difficult issue of whether nouns like hð̂ ~ hð̄ ‘house’ have lexical /L/ or /LHL/ melody is discussed in §4.1.1.5. Since the pronunciation is hð̂ in isolation, and after third-person pronominal subjects before pause (e.g. ā hð̂ ‘his/her house’), a case can be made for /LHL/ melody, or at least for an ad hoc rule producing hð̂ at word level before further tone sandhi. Either way, if <LHL>-toned /hð̂/ is taken to be the input to combinations like hð̄ jé̄ɲè ‘the house descended’, a process of LHL-Flattening (in this case, before H-tone) must be recognized. Whether this process is also at work in combinations with other possessors, as in á hð̄ ‘your-Sg house’, depends on how it those combinations are modeled.

A stronger case for LHL-Flattening (before H-tone) can be made for tone-dropped versions of /H/-melodic Ćv́ nouns like júú ‘water’ in ā ‘jùú ‘his/her water’, á ‘jùú ‘your-Sg water’, and sèèdú ‘jùú ‘Seydou’s water’. This ‘jùú drops to ‘jùú before H-tone: [ā ‘jùú] jé̄ɲè ‘his/her water descended’ and so forth. The same flattening occurs with longer stems as long as the pre-surface H-tone is on the final syllable: ɲáná-á ‘eyes’, tone-dropped ā ‘ɲáná-à ‘his/her eyes’, before H-tone [ā ‘ɲáná-à] jé̄ɲè ‘his/her eyes descended’.

Also relevant are η-final nouns of any syllable count with /L/-melodic bare stems, as in jò̄η-ð̄ ‘millet; cereals’ from bare stem jò̄ⁿ. The singular suffix is <HL>-toned in isolation, with or without a possessor, but it drops to L-toned before an H-tone, as in jò̄η-ð̄ jé̄ɲè ‘the millet descended’. Likewise for a longer stem: ɲàmà̄η-ð̄ ‘garbage’, ɲàmà̄η-ð̄ jé̄ɲè ‘the garbage descended’. Similarly, tone-dropped /H/-melodic ...Ćv́η-ð̄ η-final stems are realized as ‘...C̀v̀η-ð̄, as in sè̄η-ð̄ ‘spear’ but ā ‘sè̄η-ð̄ ‘his/her spear’. Here too the <HL>-toned suffix drops before H-tone, as in [ā ‘sè̄η-ð̄] jé̄ɲè ‘his/her spear descended’.

We therefore formulate the process as (120).

(120) LHL-Flattening (nouns)

a. /L/-melodic monosyllabic vowel-final noun stems (if pre-surface C̀v̀)

C̀v̀ → C̀v̀ before H

b. tone-dropped /H/-melodic vowel-final noun stems

‘C̀v̀ → ‘C̀v̀ before H

‘C̀v̀Ćv̀ → ‘C̀v̀C̀v̀ "

c. /L/-melodic η-final noun stems

...C̀v̀η-ð̄ → ...C̀v̀η-ð̄ before H

d. tone-dropped /H/-melodic η-final noun stems

†...Cv̄η-δ̄ → ...Cv̄η-δ̄ before H

Subrule (120a) applies only to monosyllabic stems. This is because CvCv-v and CvCvv stems maintain a robust distinction between /L/ and /LHL/ melodies, even before an H-tone (121a-b). No flattening occurs in (121b).

(121) isolation gloss ‘X descended’

a. Cv̄Cv̄-ṽ and Cv̄Cv̄v̄

Cv̄Cv̄-ṽ

tòtò-ò	‘pouched rat’	tòtò-ò jéηè
sòηδ-ò	‘price’	sòηδ-ò jéηè
sùgù-ù	‘net’	sùgù-ù jéηè

Cv̄Cv̄v̄

làràà	‘level’	làràà jéηè
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b. Cv̄Cv̄-ṽ and Cv̄Cv̄v̄

Cv̄Cv̄-ṽ

jàbá-à	‘onion’	jàbá-à jéηè
hàbá-à	‘cloud’	hàbá-à jéηè

Cv̄Cv̄v̄

nàηàà	‘thing’	nàηàà jéηè
sùbáà	‘chicken’	sùbáà jéηè

/L/-melodic η-final nouns are subject to LHL-Flattening regardless of syllable count, but only if the pre-surface H-tone is on the singular suffix -δ. /LHL/-melodic stems with the H-tone on the penult are not flattened: jìláj-δ̄ ‘fishhook’, before H-tone jìláj-δ̄ jéηè ‘the fishhook descended’.

3.6.5.3.12 Partial LHL-Flattening of /...HLHL/ melody to /...HL*/

Stems with melodies of the type /...HLHL/ with double H-toned peaks are susceptible to lowering of the final H-tone when the stems function as finals in compounds. Compare the uncompounded versions with HLHL tones in (122a) and (123a) with the HL* versions as compound finals in (122b) and (123b). The noun stem in (122a) belongs to the majority vowel-final type while that in (123a) is an η-final stem with singular suffix -ò.

(122) a. mááηgòró-ò ‘mango’
 b. hááⁿ-mááηgòró-ò ‘Bozo mango’ (§5.1.6.1)
 sóηó-fáá-mááηgòró-ò ‘bush mango’

- (123) a. nódðzíŋ-ð ‘chameleon’
 b. [sónŋó-fáá]-nódðzíŋ-ð ‘bush chameleon’ (§5.1.6.2)

Other ŋ-final noun stems with /(L)HL/ melody show divergent treatment of the tones on the singular suffix when uncompounded. ‘Thickness’ (124a) allows <HL> tone on the suffix, as with /L/-melodic ŋ-final nouns, but ‘viper’ (124b) does not. For more examples of both types, see (168d-f) in §4.1.1.2. It is possible that further study with additional speakers will show that the -ô and -ð pronunciations are interchangeable. The plurals of both types merge as -ó-yèⁿ due to tone sandhi.

- (124) a. fééⁿzèŋ-ô ‘thickness’
 b. dàŋgáràŋ-ð ‘viper’

The flattening of /HLHL/ to HL* also applies when the leftmost H is downstepped to ⁴M, i.e. ⁴MLHL → ⁴ML*.

3.6.5.3.13 L-toned diminutive variant -nòŋ-ô

A minor but somewhat similar phenomenon is the occurrence of diminutive variant -nòŋ-ô in two known combinations, versus the overwhelming majority of combinations with -nónŋ-ð. The <HL> tone of the singular suffix in -nòŋ-ô is elsewhere associated with /L/-melodic stems. See §5.1.11.1 for the data.

3.6.5.4 Processes that raise tones

Here are considered processes that raise tones from L to H or M (mid pitch), and processes that spread H-tones to adjacent syllables or moras.

3.6.5.4.1 Upstep on 3Sg à ~ ñ and 3Pl ì (→ ā ~ ñ̄, î)

The 3Sg proclitic is à, often replaced by allomorph ñ in subject function preceding a post-subject inflectional morpheme. When postpausal 3Sg à ~ ñ and 3Pl ì are followed by nonhigh tones (after tonal ablaut), their own pitch is upstepped, except as noted below. The upstepped forms are transcribed as 3Sg ā ~ ñ̄ and 3Pl î. The upstep could be thought of as partial application of Final Tone-Raising, which also applies to final L-tones before another nonhigh tone. Upstep is subphonemic and could be disregarded in a practical orthography that marks just H and L tones.

Upstep occurs when the pronominal in question is clause-initial or otherwise postpausal (as in citation forms of possessed NPs), so there is no trigger for vv-Contraction. Upstepped L-toned pronominals ā (3Sg) and î (3Pl) are subtly distinct from H-toned pronominals á (2Sg) and í (2Pl, LogoSg). When followed by an LHL-toned word, which cannot be modified by tonal ablaut,

the pitch level is the only distinction. This is the case with the /LHL/-melodic verb ‘swim’ in (125a-b).

- (125) a. ā / ī nùgûⁿ
 3Sg/3Pl swim.Pfv
 ‘He-or-she/They swam.’
- b. á / í nùgûⁿ
 2Sg/2Pl swim.Pfv
 ‘You-Sg/You-Pl swam.’

In (126a-b), the possessum ‘onion’ has lexical /LHL/ melody. The subtle pitch distinction between {ā ī} and {á í} is the only cue to the identity of the pronominal. ‘Goat’ is lexically /H/-melodic but in (127a) it is tone-dropped as possessum to L*HL-toned, so the pitch distinction in the pronominals is reinforced by the tones of the possessum.

- (126) a. ā / ī jàbáà
 3Sg/3Pl onion
 ‘his-or-her/their onion.’
- b. á / í jàbáà
 2Sg/2Pl onion
 ‘your-Sg/your-Pl onion.’
- (127) a. ā / ī ‘sògó-ò
 3Sg/3Pl goat-Sg
 ‘his-or-her/their goat’
- b. á / í sógó-ó
 2Sg/2Pl goat-Sg
 ‘your-Sg/your-Pl goat’

In the left column of (128), 3Sg à and 3Pl ì merge tonally with the onset of the following /HL/-melodic verb jéŋè to form an M-toned terrace (§3.6.5.6). This contrasts subtly with the H-toned terrace with the same verb following H-toned second-person proclitics in the right column. In (129), the third-person but not the second-person proclitics trigger Tone-Dropping on the following /H/-melodic verb. The verb provides a valuable indirect tonal clue as to which pronominal category is present.

- (128) a. ā ‘jēŋè *versus* á jéŋè
 3Sg descend.Pfv 2Sg descend.Pfv
 ‘He/She descended.’ ‘You-Sg descended.’

- (130) a. a possessor other than 3Sg/3Pl proclitic;
 b. a grammatical particle (including bidirectional case-marker);
 c. a verb (i.e. in a postverbal PP)

Illustrations below use the /L/-melodic nouns hòḥ ~ hòḍ ‘house’, sàgà-à ‘sheep’, and nàṅàṅà-ù ‘woman’, and the /LHL/-melodic noun tàsàbíyà-à ‘rosary (prayer beads)’. The IPA upstep symbol † is used (noncanonically) to indicate that Initial H-Ablaut has applied overtly. It is not a phonetic diacritic. Because ‘house’ is monosyllabic, it does not undergo overt Initial H-Ablaut (see §4.1.1.5 for discussion whether such nouns are lexically /L/- or /LHL/-melodic).

Possessors can be /H/-melodic proclitics like 2Sg á, third-person /L/-melodic proclitics like 3Sg à (or upstepped ā), or nonpronominal NPs. Demonstrative kú ‘this/that’ as possessor (not modifier) is treated like the /H/-melodic proclitics, while discourse-definite demonstrative ó and all independent pronouns are treated like nonpronominal NPs. Initial H-Ablaut applies after the /H/-melodic proclitics (131a) and after nonpronominal NPs (131b), but not after the third-person /L/-melodic proclitics (131c).

- (131) noun gloss with possessor

a. /H/-melodic proclitic 2Sg á as possessor

hòḥ/hòḍ	‘house’	á hòḥ
sàgà-à	‘sheep-Sg’	á †sàgà-à
nàṅàṅà-ù	‘woman’	á †nàṅàṅà-ù
ṅgààná-à	‘crow’	á †ṅgààná-à
tàsàbíyà-à	‘rosary’	á †tàsàbíyà-à

b. nonpronominal NP ‘Seydou’ (sèédù) as possessor

hòḥ/hòḍ	‘house’	sèédù hòḥ
sàgà-à	‘sheep-Sg’	sèédù †sàgà-à
nàṅàṅà-ù	‘woman’	sèédù †nàṅàṅà-ù
ṅgààná-à	‘crow’	sèédù †ṅgààná-à
tàsàbíyà-à	‘rosary’	sèédù †tàsàbíyà-à

c. /L/-melodic proclitic 3Sg à as possessor

hòḥ/hòḍ	‘house’	ā hòḥ
sàgà-à	‘sheep-Sg’	ā sàgà-à
nàṅàṅà-ù	‘woman’	ā nàṅàṅà-ù
ṅgààná-à	‘crow’	ā ṅgààná-à
tàsàbíyà-à	‘rosary’	ā tàsàbíyà-à

Viewing these data, one could argue that Initial H-Ablaut in (131a) is due to spreading of the H-tone from the proclitic into the left edge of the possessum. This spread would be constrained by the principle that an initial lexical L-tone on the possessum must not be completely erased, though it can be reduced to a single syllable. This would explain why monosyllabic ‘house’ is unaffected

and why trisyllabic ‘woman’ allows the H-tone to spread into its second syllable. However, this does not account for Initial H-Ablaut in (131b), since ‘Seydou’ has no final H-tone to spread. Moreover, the /H/-melodic proclitics like 2Sg á are subject to Tone Inversion when the possessed NP is not clause-initial (or otherwise postpausal). For example, á †sàgà-à ‘your-Sg sheep’ becomes à †sàgà-à in noninitial position (e.g. as object or in postverbal PPs), where †sàgà-à is unaffected by the tonal change in the pronominal. H-tone spreading across the word boundary is the likely diachronic origin of Initial H-Ablaut, but the latter has become morphophonological (ablaut) and can no longer be accounted for by pure tonal phonology.

The post-subject inflectional particles like há (Ipfv), the post-subject bidirectional case marker (BCM) ñá, and clause-initial (pre-subject) ní ‘until’ trigger Initial H-Ablaut under the same conditions. In (132a-c), only monosyllabic ‘house’ shows no overt effect.

(132) noun gloss with grammatical particle

a. Ipfv há before object

hòð/hòð	‘house’	... há hòð ...
sàgà-à	‘sheep-Sg’	... há †sàgà-à ...
jàṅàṅà-ù	‘woman’	... há †jàṅàṅà-ù ...
ṅgààná-à	‘crow’	... há †ṅgààná-à ...
tàsàbíyà-à	‘rosary’	... há †tàsàbíyà-à ...

b. BCM ñá before object (perfective positive transitive)

hòð/hòð	‘house’	... ñá hòð ...
sàgà-à	‘sheep-Sg’	... ñá †sàgà-à ...
jàṅàṅà-ù	‘woman’	... ñá †jàṅàṅà-ù ...
ṅgààná-à	‘crow’	... ñá †ṅgààná-à ...
tàsàbíyà-à	‘rosary’	... ñá †tàsàbíyà-à ...

c. ní ‘if’

hòð/hòð	‘house’	ní hòð
sàgà-à	‘sheep-Sg’	ní †sàgà-à
jàṅàṅà-ù	‘woman’	ní †jàṅàṅà-ù
ṅgààná-à	‘crow’	ní †ṅgààná-à
tàsàbíyà-à	‘rosary’	ní †tàsàbíyà-à

However, Ipfv há and BCM ñá have L-toned variants after 3Sg à and 3Pl ì as subjects. The Ipfv alternation between há and hà has no effect on the tones of the following noun. In (133a), the nouns have the same tones as in (132a) above, even though the Ipfv morpheme is há in (132a), but hà for the nonmonosyllabics in (133a). By contrast, the L-toned BCM variant ñà combines with a clause-initial 3Sg (or 3Pl) subject proclitic and the onset of the object noun to form a level M-toned terrace in the nonmonosyllabics in (133b). The L-toned particle mà ‘until’ forms similar M-toned terraces (133c). Monosyllabic ‘house’, which is too short to allow overt Initial H-Ablaut, raises hà, ñà, and mà to H-toned by the tone sandhi process Final Tone-Raising.

(133) noun gloss with L-toned grammatical particle

a. Ipfv hà before object

monosyllabic

hòdò/hòô ‘house’ à há hòdò ...

nonmonosyllabic

sàgà-à ‘sheep-Sg’ à hà †sàgà-à ...

ɲàɲàɲù-ù ‘woman’ à hà †ɲàɲàɲù-ù ...

ɲgààná-à ‘crow’ à hà †ɲgààná-à ...

tàsàbíyà-à ‘rosary’ à há †tàsàbíyà-à ...

b. BCM ɲà before object (perfective positive transitive)

monosyllabic

hòdò/hòô ‘house’ à ɲá hòdò ...

nonmonosyllabic

sàgà-à ‘sheep-Sg’ ā ɲā †sàgà-à ...

ɲàɲàɲù-ù ‘woman’ ā ɲā †ɲàɲàɲù-ù ...

ɲgààná-à ‘crow’ ā ɲā †ɲgààná-à ...

tàsàbíyà-à ‘rosary’ ā ɲā †tàsàbíyà-à ...

d. mà ‘until’

monosyllabic

hòdò/hòô ‘house’ má hòdò

nonmonosyllabic

sàgà-à ‘sheep-Sg’ mā †sàgà-à

ɲàɲàɲù-ù ‘woman’ mā †ɲàɲàɲù-ù

ɲgààná-à ‘crow’ mā †ɲgààná-à

tàsàbíyà-à ‘rosary’ mā †tàsàbíyà-à

The M-toned terraces in (133b) are dissolved when they are not clause-initial (or postpausal). For example, when ní ‘if’ is preposed to these sequences, the 3Sg proclitic is raised to á by Tone Inversion, the BCM reverts to L-toned ɲà (before tone sandhi), and Initial H-Ablaut produces H rather than M tones (134). Final Tone-Raising raises ɲà to ɲá before ‘house’.

(134) ‘if he/she ... X’

monosyllabic

hòdò/hòô ‘house’ ná = á ɲá hòdò ...

nonmonosyllabic

sàgà-à ‘sheep-Sg’ ná = á ɲà †sàgà-à ...

ɲàɲàɲù-ù ‘woman’ ná = á ɲà †ɲàɲàɲù-ù ...

ngààná-à	‘crow’	ná = á nà †ngààná-à ...
tàsàbíyà-à	‘rosary’	ná = á nà †tàsàbíyà-à ...

In nouns that follow the copula *kélé* ~ *hálí* ‘be’, and nouns as complements of immediately postverbal PPs, tonal ablaut processes can apply. See the discussion of how tonal ablaut applies to /H/-melodic and /HL/-melodic nouns in postverbal positions in §3.6.5.3.6. Initial H-Ablaut applies to postverbal nouns under similarly limited conditions. See, for example, [†núŋù-ù nî] ‘to the village’ from *nùŋù-ù* ‘village’ after ‘go’ in (552b-c) in §10.1.2.2. Initial H-Ablaut is optional on nouns in dative PPs after ‘give’ (135). Because the postposition itself is tone-dropped after a nonpronominal NP, it triggers Final Tone-Raising on the rightmost mora of the noun.

(135) ‘Give it to X!’

hòð/hòð	‘house’	ā lòð [hòð †là]
sàgà-à	‘sheep-Sg’	ā lòð [†sàgà-á †là]
nàŋànú-ù	‘woman’	ā lòð [†náŋànú-ú †là]
ngààná-à	‘crow’	ā lòð [†ngààná-à †là]
tàsàbíyà-à	‘rosary’	ā lòð [†tàsàbíyà-á †là]

Like other tonal ablaut processes, Initial H-Ablaut requires tight prosodic phrasing with the preceding words illustrated above. Any hesitation or other prosodic reset prevents it from applying. When two PPs follow the verb, the one that is not immediately postverbal is not ablauted; compare a similar point about Tone-Dropping and Downstep (§3.6.5.3.6). For example, *nùŋù-ù* ‘village’ in the second PP in (136) remains L-toned, which in turn raises the otherwise preceding dative postposition from (tone-dropped) †là (back up) to lá.

(136) ā †lòð [†náŋànú-ú lá] [nùŋù-ù nî]
 3Sg give.Pfv [woman-Sg Dat] [village-Sg Loc]
 ‘Give-2Sg it to the woman in the village!’

3.6.5.4.3 Final Tone-Raising

Unlike the highly morphologized Initial H-Ablaut described above, Final Tone-Raising is a lower-level tone sandhi process. It raises the final syllable of words (other than verbs) and under limited conditions the final syllable of a stem before a suffix. Its most common form can be schematized as (L)L#[-H] → (L)H#[-H], where [-H] is a nonhigh tone (L or downstepped †M). This tonal dissimilation provides an acoustic cue of a stem or word boundary. It takes as input a sequence of mostly L-tones and produces a more rhythmic bell-shaped LH#L output. Final Tone-Raising is closely related to Rightward H-Tone Shift (§3.6.5.4.6) which applies to some /LHL/-melodic nouns in similar environments.

Final Tone-Raising is the most frequent tone sandhi process in Kelenga. Either or both of the input words may have previously undergone tonal ablaut (Initial H-Ablaut, Downstep, Tone-

Dropping). In some cases, Final Tone-Raising is an important indirect cue that an ablaut process has occurred on one of the words. In particular, when an /HL/-melodic stem is downstepped to ML-toned, the clearest indicator that this has happened is that a preceding L-final word has its final syllable tone-raised.

Examples of tone-raised nouns as they are pronounced before a nonhigh-tone, as in X ‘byē ‘X came’, are in the “tone-raised” middle column of (137). /L/-melodic words raise their final syllable, or if monosyllabic (‘house’) just their final mora. /HL/- and /LHL/-melodic nouns get an extra final H-tone, unless this would completely erase the final melodic L. So Final Tone-Raising applies in (137c) but not in (137d).

(137)	stem	tone-raised	gloss
	a. L → <LH> (monosyllabic)		
	hòḍ (~ hòḍ)	hòḥ	‘house’
	b. ...L.L → ...L.H (nonmonosyllabic)		
	bàrà-à	bàrá-á	‘porcupine’
	sàgà-à	sàgá-á	‘sheep’
	ɲàɲànù-ù	ɲàɲànú-ú	‘woman’
	c. ...H.L → ...H.<LH> (vowel-final stems)		
	bàsà-à	bàsà-á	‘agama lizard’
	mìsírì-ì	mìsírì-í	‘mosque’
	d. ...H.L → ...H.H (ɲ-final stems)		
	ndóɲ-ḍ	ndóɲ-ḍ	‘grasshopper’
	bùléɲ-ḍ	bùléɲ-ḍ	‘necked gourd’
	mààɲgáɲ-ḍ	mààɲgáɲ-ḍ	‘noise’

Comparison of (137b) on the one hand and (137c-d) on the other shows that raising does not apply to a mora that is preceded by an H-tone. This is an example of **clash avoidance**. Therefore only the final mora of *bàsà-à* is raised, to produce *bàsà-á* (137c), whereas in (137b) *bàrà-à* becomes *bàrá-á* with the entire final syllable raised. In (137d), the suffixal vowel is preceded by an H-toned syllable and is not raised (at least, not systematically).

Final Tone-Raising applies to other word-classes in addition to nouns. There are no /L/-melodic verbs, but several verb forms end in two L-toned moras and are therefore subject to raising. This is especially the case with imperfectives of some derived verbs, as in (138a). There are a handful of verbs that also have eligible perfectives, as in (138b).

(138)	verb	aspect	tone-raised	gloss
a.	hùlé-yà-là	Ipfv	hùlé-yà-lá	‘grows, becomes bigger’
b.	hálífàà	Pfv	hálífáá hálífáá-là	‘entrusted’ ‘entrusts’ (Ipfv)

3.6.5.4.4 Final Tone-Raising applies after tonal ablaut

Final Tone-Raising is a late rule (except for its word-internal subtype, on which see below). It applies to the output of morphophonological tone sandhi (tonal ablaut), specifically Initial H-Ablaut (for nouns) and Tone-Dropping (mainly for verbs).

/L/-melodic nouns of two or more syllables acquire H-tones on nonfinal syllables by Initial H-Ablaut, which is triggered by certain preceding elements. When these nouns (e.g. sàgà-à ‘sheep’) have been ablauted (to †sàgà-à), their final long C̀̀̀ syllable can then be raised only to C̀̀̀́, not to C̀̀̀́́, in order to avoid a clash between two adjacent unrelated H-tones (139b). In other words, H-ablauted †sàgà-à ‘sheep’ is treated like unablauted básà-à ‘agama lizard’ (139c). In addition, tone-raised †sàgà-à now begins with H-tone and so it cannot trigger Final Tone-Raising or Rightward H-Tone Shift in a preceding word: sèédù †sàgà-à ‘Seydou’s sheep-Sg’, not #sèédù †sàgà-à.

(139)	a.	sàgá-á	†byē
		sheep-Sg	come.Pfv
		‘A/The sheep-Sg came.’	
	b.	[á †sàgà-á]	†byē
		[2Sg sheep-Sg]	come.Pfv
		‘Your-Sg sheep-Sg came.’	
	c.	básà-á	†byē
		agama-Sg	come.Pfv
		‘A/The agama lizard came.’	

Final Tone-Raising also follows Tone-Dropping. When the latter process applies to nouns, the result is maximally L*HL with a final <HL>-toned syllable. Before a nonhigh tone like that of downstepped †byē ‘came’, Final Tone-Raising levels this syllable from <HL> to H.

(140)	lexical	gloss	‘X’s __’	‘X’s __ came’
a.	sógó-ó	‘goat’	X †sògò-ò	X †sògó-ó †byē
b.	júú	‘water’	X †jùù	X †jùú †byē

Final Tone-Raising can apply to nonhigh-toned monomoraic Cv words. The only such noun is *ká* ‘a certain one; somebody’. In (141a), as object following a grammatical particle, *ká* becomes nonhigh-toned ⁴*kā* —or arguably ⁴*kà*, since there is no clearly audible difference between ⁴M and L tones for monomoraic Cv). It stays this way in (141a) since it is followed by an /HL/-melodic verb (‘cut’). In (141b), the verb is /H/-melodic *kwárí*, which downsteps to ⁴*kwāri* after a nonpronominal object. This in turn triggers Final Tone-Raising, resulting in structural /*kǎ*/, which is usually heard as *ká* (141b).

- (141) a. Ø *ŋá* ⁴*kā* *húrù*
 1Sg Sbj/Obj a.certain cut.Pfv
 ‘I cut someone.’
- b. Ø *ŋá* *ká* ⁴*kwāri*
 1Sg Sbj/Obj a.certain hit.Pfv
 ‘I hit-Past someone.’

3.6.5.4.5 Word-internal Final Tone-Raising before -C^{v̄} suffixes

The relevant suffixes are those in (142). Causative -*nì* is not included.

- (142) a. -*yèⁿ* plural (of noun, adjective, or demonstrative)
- b. -*lv* imperfective (of verb)
 -*na* participle (of verb)

Plural suffix -*yèⁿ* triggers a variant of Final Tone-Raising on the preceding singular form of a noun or adjective that otherwise ends in a long L-toned vowel (143a). Only the second mora of this vowel is raised; this differentiates word-internal Final Tone-Raising from the inter-word version. It does not raise the final mora of an <HL>-toned syllable (143b), and it does not shift a nonfinal H-tone to the right (143c).

- | (143) | singular | plural | gloss | comment |
|-------|-----------------|--------------------------------|-----------|--|
| a. | <i>nàà</i> | <i>nàá-yèⁿ</i> | ‘cow’ | |
| | <i>sàgà-à</i> | <i>sàgà-á-yèⁿ</i> | ‘sheep’ | |
| | <i>tègè-è</i> | <i>tègè-é-yèⁿ</i> | ‘pig’ | |
| | <i>nààmù-ù</i> | <i>nààmù-ú-yèⁿ</i> | ‘sauce’ | |
| | <i>jàṅàṅù-ù</i> | <i>jàṅàṅù-ú-yèⁿ</i> | ‘woman’ | alternative plural <i>jàṅà-léèⁿ</i> |
| b. | <i>sùbáà</i> | <i>sùbáà-yèⁿ</i> | ‘chicken’ | |

c.	bàsà-à	bàsà-á-yè ⁿ	‘agama lizard’
	mìsírì-ì	mìsírì-í-yè ⁿ	‘mosque’

Although suffixed singular nouns like tэгè-è ‘pig’ are written with a hyphen and would seemingly fit the requirements for LL#L → LH#L, tone-raised forms like #tэгé-è do not occur. The singular suffix simply lengthens a final short vowel along with its tone, and never triggers word-internal Final Tone-Raising.

(144) shows plurals of η-final nouns. In (144a), the ɔ of the singular suffix is raised from <HL> or L to H before the plural suffix. In (144b), the preceding H-tone usually blocks raising of -ð to -ó, though an assistant sometimes pronounces e.g. ndóη-ð-yèⁿ with a faint pitch rise on the suffixal -ɔ.

(144)	singular	plural	gloss
a.	tùη-ð	tùη-ó-yè ⁿ	‘body’
	làwólòη-ð	làwólòη-ó-yè ⁿ	‘sth empty’
b.	ndóη-ð	ndóη-ð-yè ⁿ	‘grasshopper’
	hàráη-ð	hàráη-ð-yè ⁿ	‘studying (n)’

Ipfv suffix -lv or its nasal variant -nv is added to the bare stem, which is usually identical to the Pfv. The Ipv suffix gets its tone and its vowel quality by copying from the final vowel of the stem. After this, /HL/- and /LHL/-melodic verbs that end with at least two L-toned moras allow raising of the stem-final vowel before the Ipv suffix (145).

(145)	Pfv	Ipfv	gloss
	mátìηè	mátìηé-nè	‘manufacture’
	máhàlà	máhàlá-nà	‘de-scale (fish)’
	hálífàà	hálífàá-là	‘entrust’

Word-internal Final Tone-Raising does not apply when an /H/-melodic Ipv verb is dropped to all-L after 3Sg à or 3Pl ì (or their tone inversions). For example, in (146a), Ipv bágì-lí is dropped to ‘bàgì-lì, but this does not then raise to #‘bàgì-lì.

At word level, this ‘bàgì-lì is only sporadically subject to Final Tone-Raising (to ‘bàgì-lí) when it is followed by a nonhigh tone (146b). This may be because tonal processes that apply within the S-infl-O-V core of the clause do not systematically apply to postverbal constituents.

(146)	a.	à	hà =	á	‘bàgì-lì
		3Sg	Ipfv	3Sg	remove-Ipv
					‘He/She takes it out.’

b.	à	hà =	á	‘bàgì-lì	[hòó	nìŋî]
				‘bàgì-lí		
	3Sg	Ipfv	3Sg	remove-IPfv	[house	inside]
	‘He/She takes it out from house.’					

Deverbal participles have suffix -na added to the Pfv stem. When they occur as predicates, i.e. not modifying a noun, they allow word-internal Final Tone-Raising when the suffix and at least two stem-final moras would otherwise be L-toned. This is parallel to the tonal patterns just described for the Ipv suffix.

(147)	verb (Pfv/Ipfv)	participle (predicative)	gloss
a.	mátìŋè/mátìŋé-nè	mátìŋé-nà	‘manufactured’
b.	húùrù/húùrù-lù	húùrù-nà	‘roll up’

3.6.5.4.6 Rightward H-Tone Shift

A small minority of nouns of /HL/ or /LHL/ melody end in a monomoraic C̀ syllable and do not allow the singular suffix. This is the case with personal and place names like sèédù ‘Seydou’ and the city name móótì ‘Mopti’.

In positions where regular singular nouns, which end in a long C_vv syllable with or without the singular suffix, undergo Final Tone-Raising, nouns like ‘Seydou’ shift their medial H-tone to the right edge, becoming LH-toned (148a). Similarly, plurals of /L/- and /HL/-melodic have an H-tone in the mora preceding the plural suffix, by word-internal Final Tone-Raising. This H-tone shifts onto the plural suffix when the latter is followed by a nonhigh tone (148b). Preceding H-tones are left intact. Plurals of nouns of other melodies also raise the tone of the plural suffix, but do not shift any preceding tones (148c). The vowels affected by Rightward H-Tone Shift are bolded in (148a-b).

(148)	noun	melody	isolation	‘__ came’
a.	names			
	‘Seydou’	/LHL/	sèédù	sèè dú ‘b(y)ē
	‘Mopti’	/HL/	móótì	mòò tí ‘b(y)ē
b.	plurals of /L/- and /HL/-melodic nouns			
	‘house-Pl’	/L/	hòó-yè ⁿ	hòò-y ém ‘b(y)ē
	‘sheep-Pl’	/L/	sàgà-á-yè ⁿ	sàgà-à-y ém ‘b(y)ē
	‘agamas’	/HL/	básà-á-yè ⁿ	básà-à-y ém ‘b(y)ē

c. plurals of other nouns

‘rifles’	/LHL/	màrìfá-à-yè ⁿ	màrìfá-à-yém ‘b(y)ē
‘mosques’	/LHL/	mìsírì-í-yè ⁿ	mìsírì-ì-yém ‘b(y)ē
‘goats’	/H/	sógó-ó-yè ⁿ	sógó-ó-yém ‘b(y)ē

It may be appropriate to model Rightward H-Tone Shift as moving the H-tone specifically to the **onset** of the final syllable, initially producing an <HL>-toned final syllable as in /sèèdû/. The final L-tone would then be pushed out, amalgamating with the following nonhigh tone. This could even lead to a revised analysis especially of (apparently morphosyntactic) Downstep of following /HL/ melody to ‘ML, which could then be incorporated into Local Downstep. See also the data on N-Num combinations in §3.6.5.4.8 below.

3.6.5.4.7 Rightward H-Tone Spreading before -Cv̄ suffixes

A final long <HL>-toned syllable is not leveled to H-tone before plural -yèⁿ (149a). However, short-voweled <HL> syllables do level to H. This is the case with η-final nouns whose singular ends in ...η-ô (149b).

(149)	singular	plural	gloss
a.	máà sùbáà	máà-yè ⁿ sùbáà-yè ⁿ	‘manatee’ ‘chicken’
b.	súnǵálàṅ-ô	súnǵálàṅ-ó-yè ⁿ	‘kneading stick’

In verbal morphology, when the Ipfv suffix is added to a Pfv stem that ends in an <HL>-toned syllable with a monophthongal vowel quality, the L-tone is expressed on the Ipfv suffix and the final stem syllable is realized as H. This does not apply, at least systematically, to diphthongal Cv̄ syllables with two different vowel qualities. Stems that have monophthongal and diphthongal variants tend to apply spreading most systematically to the monophthongal variant (150b). See §10.1.1.5 for more detail on such Ipfv stems.

(150)	Pfv	Ipfv	gloss
a.	héè nùǵû ⁿ	héé-lè nùǵú-nù	‘see’ ‘swim’
b.	cíè céè	cíè-lè céé-lè	‘get up’ “

3.6.5.4.8 Rightward H-Tone Spreading and Shift before numerals

Nouns do not undergo Final Tone-Raising before adjectives because special ablaut processes apply to that combination (§6.3.1.1).

Numerals have /H/ or /HL/ melodies, so they begin with H-tones. As a result, Final Tone-Raising cannot apply to the noun. No tonal changes occur with nouns of /H/ or /L/ melodies. This is illustrated for an /HL/-melodic numeral *ʃíyò* ‘3’ in (151a-b). /HL/-melodic nouns (151c) spread the H to the right edge (Rightward H-Tone Spreading) and de-link the melodic L, which is manifested as Local Downstep (§3.6.5.3.10) on the following numeral. This spreading and de-linking is optional with heavy (e.g. trisyllabic nouns) like ‘granary’. The /LHL/-melodic trisyllabics that are of the L.H.L syllable-by-syllable subtype in (151d) either suppress the medial H to become all-L-toned (*mìsìrì ʃíyò* ‘3 mosques’), or shift the medial H-tone to the final syllable before numerals (Rightward H-Tone Shift). Arguably this is a two-stage process: first L.H.L → L.L.<HL> on the noun, merging tonally with the lexically L.L.<HL> subtype (‘rifle’), and then the H of the final <HL> syllable spreads to the boundary, de-linking the final L and (locally) downstepping the numeral.

(151)	bare stem	gloss	‘3 __s’
	a. /H/ melody		
	<i>júú</i>	‘water’	<i>júú ʃíyò</i>
	<i>sógó</i>	‘goat’	<i>sógó ʃíyò</i>
	b. /L/ melody		
	<i>hòò</i>	‘house’	<i>hòò ʃíyò</i>
	<i>tògò</i>	‘name’	<i>tògò ʃíyò</i>
	<i>nàṅàṅù</i>	‘woman’	<i>nàṅàṅù ʃíyò</i>
	c. /HL/ melody		
	<i>light stems</i>		
	<i>ndôⁿ</i>	‘grasshopper’	<i>ndôⁿ ʃíyò</i>
	<i>ʃ(y)áà</i>	‘size’	<i>ʃ(y)áà ʃíyò</i>
	<i>básà</i>	‘agama lizard’	<i>básà ʃíyò</i>
	<i>ndálèⁿ</i>	‘spider’	<i>ndálèⁿ ʃíyò</i>
	<i>heavy stems</i>		
	<i>jígínè</i>	‘granary’	<i>jígínè ʃíyò</i> ~ <i>jígíné ʃíyò</i>
	<i>ságálà</i>	‘tamarind’	<i>ságálà ʃíyò</i> ~ <i>ságálá ʃíyò</i>
	<i>hórókótò</i>	‘catfish sp.’	<i>hórókótò ʃíyò</i> ~ <i>hórókótó ʃíyò</i>

d. /LHL/ melody

L.H.L subtype

mìsìrì	‘mosque’	mìsìrì ʼʃíyò ~ mìsìrì ʃíyò
jàkùmà	‘cat’	jàkùmá ʼʃíyò ~ jàkùmà ʃíyò

L.L.<HL> subtype

màrìfà	‘rifle’	màrìfá ʼʃíyò ~ màrìfà ʃíyò
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3.6.5.4.9 Raising and spreading on nouns before verbs

Nouns that function as subjects in intransitive perfective positive clauses directly precede verbs. Nouns that function as preverbal objects in any inflectional category likewise directly precede verbs. Nouns can be common nouns in the singular or plural form, or else personal names. /H/-melodic verbs are downstepped to M after nouns (or other noun-headed NPs) in these combinations. The downstepping creates the conditions for Final Tone-Raising and Rightward H-Tone Shift affecting the right edge of the noun.

Final Tone-Raising occurs when a noun that ends in at least two L-toned moras is followed by an /H/-melodic verb that has been downstepped to ‘M. This is the case with ‘sheep’ in (152a). In (152b), the name ‘Seydou’ shifts from <LH>.L to L.H tones by Rightward H-Tone Shift in the same environment. In (152c), ‘mosque’ similarly shifts from mìsìrì-ì to mìsìrì-í. The most reasonable derivation is /mìsìrì-ì/ → /mìsìrì-ì/ by Rightward H-Tone Shift, then /rî/ is flattened to ríí before a nonhigh tone by Rightward H-Tone Spreading.

- (152) a. sàgá-á ʼbyē
sheep-Sg come.Pfv
‘The sheep-Sg came.’ (< sàgà-à)
- b. sèédú ʼbyē
S come.Pfv
‘Seydou came.’ (< sèédù)
- c. mìsìrì-í ʼbyē
mosque-Sg come.Pfv
‘The mosque came.’ (< mìsìrì-ì)

Plural suffix -yèⁿ on nouns is raised to -yéⁿ before any nonhigh tone, regardless of the other tones of the noun stem (153a-c). This has the seeming effect of undoing any raising that -yèⁿ had induced on the preceding vowel of the noun (153a-b).

- (153) a. sàgà-à-yém ʔbyē
 sheep-Sg-Pl come.Pfv
 ‘The sheep-Pl came.’ (< sàgà-á-yèⁿ)
- b. mìsírì-ì-yém ʔbyē
 mosque-Sg-Pl come.Pfv
 ‘The mosques came.’ (< mìsírì-í-yèⁿ)
- c. sógó-ó-yém ʔbyē
 goat-Sg-Pl come.Pfv
 ‘The goats came.’ (< sógó-ó-yèⁿ)

3.6.5.4.10 No raising or spreading on nouns before inflectional particles

The nonzero post-subject inflectional particles are Ipv há, IpvNeg tá, and PfvNeg tí and their variants. All are H-toned when they follow a nonpronominal subject NP, so no Final Tone-Raising or Final H-Tone Spreading applies to the subject NPs or to the particles themselves. The bidirectional case-marker (BCM) ɲá/ɲà has its L-toned variant ɲà after 3Sg and 3Pl pronominal, so it is susceptible to being raised back to ɲá.

3.6.5.5 Effect of tonal ablaut on multi-word NPs

3.6.5.5.1 Effect on compounds

In noun-noun compounds, a tonal ablaut process triggered by the category of the word to the left can apply to the whole compound. H-toned compound ɲóɲó-sáⁿ-yá-á ‘fishbuyer’ is downstepped to ʔM in its entirety after a nonpronominal possessor in (154a) and tone-dropped to L*HL in its entirety after a 3Sg possessor in (154b). As noted in §3.6.5.3.9 above, heavy /H/-melodic nouns such as compounds and N-Adj combinations are often downstepped rather than tone-dropped after nonpronominal possessors. HL-toned compound márifá-búrù-ù ‘rifle stock’ is downstepped to ʔML in its entirety after an inflectional particle in (154c).

- (154) a. sèèdú ʔɲòɲò-sāⁿ-yā-ā
 S fish-buy-Agent-Sg
 ‘Seydou’s fishbuyer.’ (< ɲóɲó-sáⁿ-yá-á)
- b. ā ʔɲòɲò-sàⁿ-yá-à
 3Sg fish-buy-Agent-Sg
 ‘his/her fishbuyer’ (< ɲóɲó-sáⁿ-yá-á)

- c. ń gá ʼmā́rífā-būrù-ù héé-lè
 1Sg Ipfv rifle-base see-Ipfv
 ‘I (will) see a/the rifle stock.’ (< mārífā-búrù-ù)

Initial H-Ablaut is less relevant to this issue since it only affects one or occasionally two L-toned syllables at the left edge of words, and since most compounds have H-toned initials due to Tone Leveling. However, there are some LHL-toned compounds (§5.1.5.1-8) that begin with two L-toned syllables and are therefore eligible for Initial H-Ablaut. In (155), the tone of the first syllable (bolded) of the compound is raised.

- (155) ń gá ʼ**nù**ńù-tígì-ì héé-lè
 1Sg Ipfv village-owner-Sg see-Ipfv
 ‘I (will) see the village chief.’ (< nùńù-tígì-ì)

3.6.5.5.2 Tonal ablaut on N-Adj

N-Adj is treated tonally like the main noun-noun compound type (on which see the preceding subsection). Therefore with limited exceptions the whole N-Adj complex, pronounced in isolation or clause-initially, are of the tonal types H-H (all-H) and H-(H*)L with exactly one final L-toned syllable and all preceding syllables H. The choice is determined by the lexical tone melody of the initial (§6.3.1.1).

Now consider what happens when the N-Adj combination occurs in a position where it is subject to tonal ablaut triggered by an element to its left. This element can be a post-subject grammatical particle (including copula ‘be’) or a possessor, so the relevant combinations are of the types Infl-[N-Adj] and Poss-[N-Adj]. The two logical possibilities are that the N-Adj is treated like a single /H/- or /H*L/-melodic noun, so that all-H is tone-dropped to L*HL and H-(H*)L is downstepped to ʼM-(M*)L, or that ablaut affects only the noun and leaves the adjective unaffected. Schematically, X ʼ[N Adj] versus X ʼN Adj.

Many of the recordings are spoken too rapidly to provide reliable evidence. However, there are clear cases of X ʼN Adj involving participial adjectives. For example, in (156a-b) the copula hálí tone-drops ńóńó wúsú-ná-á ‘smoked fish’ or ńóńó gógí-ná-á ‘dried fish’, but the modifying participle has the tonal form it would have if ńóńó were not tone-dropped. In (156a), the speaker’s self-interruption allows a prosodic reset, allowing the corrected ńóńó fěńé-ná-á to surface without tonal ablaut triggered by the copula.

- (156) a. ó ʼhālī [ʼńòńò wúsú-ná-à]— é [ńóńó fěńé-ná-á],
 Dem.Def be.Cop [fish **smoke-Ppl-Sg**]— oh! [fish rot-Ppl-Sg],
 ‘That is smoked fish—, I mean rotten (=fermented) fish.’ (2021-06 @ 04:18)
- b. à [kí [ʼńòńò gógí-nà-à]]
 3Sg [and [fish **dry(v)-Ppl-Sg**]]
 ‘that along with dried fish’ (2021-06 @ 00:16)

In (157), *túgò húlò-ò* ‘big wound’ is preceded by instrumental *kí* (here untranslated, §11.2.4.2), which tone-drops the noun but leaves the adjective unaffected.

- (157) *ó yágà [ká= [á ‘mà]] [kí [+tùgò húlò-ò]],*
 Dem.Def become.Pfv [Inst [3Sg Cust]] [Inst [**wound big-Sg**]]
 ‘That became on him a big wound.’ (2021-15 @ 02:23)

However, participles and ‘big’ (cf. §5.1.5.2) may behave differently in this respect than other adjectives that are more tightly fused lexically and prosodically to nouns. One tonal pattern that has been observed with other polysyllabic N-Adj combinations is what appears to be a leveling of expected L*HL (tone-dropped from all-H) to flat M-toned. In other words, the output has downstepped rather than tone-dropped form. In the elicited example (158a), the X ‘[N Adj]’ output from *sógó fí-ná-ná-á* should be ‘[sògò fí-nà-nà-à], but it is leveled to ‘[sògò fí-nā-nā-ā]. Alternatively, the N-Adj combination can be treated as tonally autonomous, resisting tonal ablaut triggered by a possessor (158b). This could be due to a faint hesitation, which can always trigger a prosodic reset.

- (158) a. *sèèdú ‘[sògò fí-nā-nā-ā]*
 Seydou [**goat be.black-Inch-Ppl-Sg**]
 ‘Seydou’s black goat.’
- b. *sèèdú [mísírí fí-ná-nà-à]*
 S [**mosque be.black-Inch-Ppl-Sg**]
 ‘Seydou’s black mosque.’

3.6.5.5.3 Tonal ablaut on N-Num

In the absence of a possessor, the tones of basic N-Num combinations are as follows. If the numeral is /H/-melodic, it combines with a preceding /H/-melodic noun unproblematically as H-H, but with a preceding noun of any other melody as ...H-⁴M by a tonal ablaut unique to N-Num. If the numeral is /HL/-melodic, it combines unproblematically with preceding nouns of /H/ or /L/ melody, but nouns of the contoured melodies undergo rightward spreading of the penultimate tone, and when an H-tone spreads to the boundary the numeral is downstepped to ⁴ML. See §6.4.1.2 for details and examples of N-Num combinations in isolation. The examples considered below place N-Num in clause-internal positions where it can be affected by tonal ablaut.

(159) features an /H/-melodic noun *ḡḡḡ-ḡ* ‘fish’ and a choice between two numerals of respectively /H/ melody (*féénú* ‘two’) and /HL/ melody (*ǰííyò* ‘three’). In (159a), tonal ablaut triggered by the inflectional particle (Ipfv) tone-drops the /H/-melodic noun, but leaves the numeral unchanged. This is already a big difference between the loosely phrased N-Num and the more tightly phrased N-Adj. (159b) shows the same N-Num combinations with 3Sg possessor. The 3Sg possessor treats ‘fish two’ as a single unit, tone-dropping it in its entirety to L*HL. By

contrast, the 3Sg possessor only modifies the tones of ‘fish’ in ‘fish three’, showing that the internal HL tone break in the numeral is a barrier blocking any further tone-dropping coming from the left. In (159c), the N-Num combination is interpreted **partitively**, expressed by tone-dropping just the noun and leaving the numerals in their lexical tones. In the nonpartitive construction (159b) but not in the partitive construction (159c), the numeral acquires a singular suffix, confirming that it is grouped with the noun morphosyntactically. The bracketing in the transcriptions is tonosyntactic as well as morphosyntactic, and ⁺ is intentionally placed inside the left bracket in (159a) but outside it in (159b).

- (159) a. íj gá [⁺ɲòŋò féénú / jííyò] hée-lè
 1Sg Ipfv [fish two / three] see-Ipfv
 ‘I (will) see two/three fish.’ (<ɲòŋò féénú, ɲòŋò jííyò)
- b. ā ⁺[ɲòŋò fèènú-ù / jííyò-ò]
 3Sg [fish two-Sg / three-Sg]
 ‘his/her two/three fish’
- c. [ā ⁺ɲòŋò] féénú / jííyò
 [3Sg fish] two / three
 ‘two/three of his/her fish’

Replacing 3Sg à/ā by 2Sg á as possessor, (159b) becomes á [ɲòŋò féénú-ú / jííyò-ò] ‘your-Sg two/three fish’, and (159c) becomes [á ɲòŋò] féénú / jííyò ‘two/three of your-Sg fish’, differing overtly only in the length of the final vowels. With ‘Seydou’ the results are sèèdú [⁺ɲòŋò fèènú-ù / jííyò-ò] ‘Seydou’s two/three fish’ and [sèèdú ⁺ɲòŋò] féénú / jííyò ‘two/three of Seydou’s fish’.

If /L/-melodic fàlà-à ‘egg’ replaces /H/-melodic ɲòŋò-ó ‘fish’, the N-Num combinations in isolation are fálá ⁺fèènú ‘two eggs’ and fàlà jííyò ‘three eggs’ (§6.4.1.2). The preceding examples then become (160a-d). In (160a), H-toned ⁺fálá (audibly tone-raised in ‘three eggs’) points to Initial H-Ablaut triggered by the inflectional particle, extending rightward to the internal N-Num boundary. In (160b), the version with ‘three’ is consistent with this, but when ‘two’ adds the singular suffix it switches from downstepped ⁺M to tone-dropped ⁺L*HL. In (160c-d) the N-Num has the same tones it has without a possessor. At least in the case of (160c), this shows that the 3Sg possessor has no tonal effect on the N-Num. This could be made explicit using the tonosyntactic island notation: à ⊂[fálá ⁺fèènú]⊃.

- (160) a. íj gá [⁺fálá ⁺fèènú / jííyò] hée-lè
 1Sg Ipfv [egg two / three] see-Ipfv
 ‘I (will) see two/three eggs.’ (< fálá ⁺fèènú, fàlà jííyò)
- b. à [⁺fálá ⁺fèènú-ù / jííyò-ò]
 3Sg [egg two-Sg / three-Sg]
 ‘his/her two/three eggs’

- c. à [fálá 'fēēnū]
 3Sg [egg two]
 'two of his/her eggs' (see comment above)
- d. ā [fàlà jíyò]
 3Sg [egg three]
 'three of his/her eggs'

With 2Sg á as possessor, (160b) becomes á [ʔfálá fēēnú-ù / jíyò-ò] 'your-Sg two/three eggs', and (160c) becomes [á ʔfálá] fēēnú / jíyò 'two/three of your-Sg eggs'. With 'Seydou' the results are sèédù [ʔfálá 'fēēnū-ū / jíyò-ò] 'Seydou's two/three eggs' and sèédù [ʔfálá fēēnú / jíyò] 'two/three of Seydou's eggs'.

3.6.5.5.4 Tonal ablaut on Poss-N

When a possessed NP is in a position to undergo tonal ablaut, the ablaut affects the possessor only. The tonal change on the possessor does not affect the possessor's ablaut effect on the possessum. In (161a), 'the man's skiff' in isolation (or otherwise postpausally) is hálú-ú 'hòlì-ì, with possessum tones on hòlì-ì 'skiff'. When the possessed NP functions as object after an inflectional particle, here Ipfv, tonal ablaut triggered by the particle applies only to hálú-ú, resulting in 'hàlú-ù. Tone sandhi affecting final syllables converts pre-surface /ʔhàlú-ù 'hòlì-ì/ to 'hàlú-ú 'hòlì-ì before the initial H-tone of 'see'. In (161b), Initial H-Ablaut and Final Tone-Raising apply to the possessor 'woman'.

- (161) a. ḡ gá [ʔhàlú-ú 'hòlì-ì] hée-lè
 1Sg Ipfv [man-Sg skiff-Sg] see-Ipfv
 'I (will) see the man's skiff.' (< hálú-ú 'hòlì-ì)
- b. ḡ gá [ʔnàḡnà-ú 'hòlì-ì] hée-lè
 1Sg Ipfv [woman-Sg skiff-Sg] see-Ipfv
 'I (will) see the woman's skiff.' (< nàḡnà-ú 'hòlì-ì)

3.6.5.6 Tone-Terracing (3Sg and 3Pl proclitics)

As noted elsewhere, in clause-initial (i.e. postpausal) position 3Sg à ~ ḡ and 3Pl ì are phonetically upstepped to ā ~ ḡ and ī before an L-tone.

In addition, in the same postpausal position (but not elsewhere) these pronominals may combine with the H-toned part of a following /HL/-melodic noun or verb to form a tonal **terrace** with level-M pitch. In the case of nouns, this is most systematic for prosodically light stems, especially mono- and bisyllabic. In (162a-b), what are lexically an L-toned pronominal and an /HL/-melodic verb (162a) or possessed noun (162b) fuse partially into an M-terrace.

- (162) a. /à hóólò/ → ā ‘hōōlò ‘He/She/It ran.’
 /î hóólò/ → ā ‘hōōlò ‘They ran.’
- b. /à básà-à/ → ā ‘bāsà-à ‘his/her agama lizard’
 /î básà-à/ → ī ‘bāsà-à ‘their agama lizard’

There is no need to recognize a terracing process when these combinations are clause-medial. For example, when ní ‘if’ is added, the third-person pronominals undergo Tone Inversion (to á and î), and the following /HL/-melodic stem is unaffected. One might speak here of an “H-terrace,” but the two adjacent H-tones are independently motivated, so there is no special process of H-terrace formation.

- (163) a. ná = á hóólò ‘if he/she runs’
 ní = í hóólò ‘if they run’
- b. ná = [á básà-à] ‘if his/her agama ...’
 ní = [í básà-à] ‘if their agama ...’

3.6.5.7 Tonal treatment of contracted vowels

In general, contractions of the type /Cv̄ v̄/ result in H-toned Cv̄ = v̄ in the transcription used here. The second element is a pronominal proclitic (tone-inverted 3Sg á, tone-inverted 3Pl î) or demonstrative ó. This fits in with the rarity of rising-toned syllables (Cv̄v̄) other than those due to Final Tone-Raising, e.g. /Cv̄Cv̄v̄ Cv̄/ → Cv̄Cv̄v̄ Cv̄).

However, further study may show that some cases of /Cv̄ v̄/ inputs may really have M-toned outputs (Cv̄ = v̄). The key combinations here are those third-person subject and object pronominals in the perfective positive, e.g. 3Sg on 3Sg à ñà à with bidirectional case-marker ñà. When à ñà à is followed by a Cv̄ syllable, the output is à ñá = á as transcribed here, but in careful speech style (in elicitation) a rising tone has been heard: à ñà = á. It may be that the more fluently pronounced à ñá = á is really à ñā = ā. This is an appropriate topic for careful follow-up study with multiple speakers.

Also relevant are the alternations of hḍḍ and hḍḥ ‘house’ before há ‘be.Loc’, see (689a-b) and (691a-d) in §11.5.1.1-2. Are the 3Sg possessor forms transcribed há = á actually M-toned hā = ā, in contrast to 2Sg possessor há = á (tone-raised from há = à)?

3.7 Word- or phrase-final intonation effects

3.7.1 Final falling HM in constituent interrogatives

Single nouns as well as larger constituents can be made into questions, without a full clause and without an overt interrogative morpheme, by means of final high-mid (high falling) pitch on the final syllable(s). See §13.2.1.2 for examples. This is an alternative to the usual final polar interrogative particle *wâ*, which also has falling pitch, but is not usually prolonged.

3.7.2 Final falling HL at prosodic break before complementary matter

Prolongation of a final vowel with falling tone (or pitch) can indicate incompleteness. This occurs at a planned prosodic break before complementary matter is added. For extended prolongation, → is added to the transcription.

In (164), the simple statement ‘it’s a monstrous beast’ with *rá-ní* ‘it is’ is prolonged since the speaker has pre-planned the addition of a following relative clause.

- (164) *sàbùlà-à, súúmbò-ó 'rà-nî, mwò há [ʔjùù nî]*
hippo-Sg, beast-Sg it.is, Rel be.Loc [water Loc]
‘A hippo, it’s a monstrous beast, which is in the water.’ (2021-01 @ 00:42)

Quotative particle *wó ~ wò*, which precedes quoted matter, can also take this intonational form (*wòò*).

- (165) *húúrú-ú wòò, [lɛ-néⁿ nɛn-lúmá-nɛŋ gù] wáà*
worm-Sg said, [child-Dim tongue-sweet-Dim Dem] Q
‘Caterpillar said (=asked), “that sweet-tongued girl?”’
(2021-08 @ 02:16)

This intonation effect can also appear in relative clauses when the speaker needs a pause to formulate the rest of the clause. The relative head is preposed with relative morpheme *mwò* reshaped as *m̀wòò*→. See the example ‘a cat who, black and white is on it’ (351b) in §6.3.3.2. Note that this is a planned pause (a pit stop, so to speak), not an interrupted or broken sentence.

Falling pitch plus variable prolongation is a feature of enumeration (=list) intonation (§7.1.9).

4 Nominal, pronominal, and adjectival morphology

4.1 Nouns

4.1.1 Simple nouns

The **bare stem** of a noun occurs before modifiers, and rarely elsewhere (§6.1.4). Depending on the noun, the bare stem ends in a nasal element (which appears as η before the singular suffix), a short vowel, or a long vowel. In the absence of modifiers, the noun adds a vocalic **singular** suffix. The singular suffix has no audible manifestation when the stem already ends in a long vowel. **Plural** suffix $-yè^n$ is added to the already suffixed singular form.

4.1.1.1 Prosodic shapes and tone melodies of noun stems

Nouns that do not end in a nasal element (on which see the following subsection) are minimally bimoraic (CvV or CvCv), as in $h\grave{d}\grave{d}$ (~ $h\grave{d}\hat{o}$) ‘house’ and $f\acute{a}r\grave{a}-\grave{a}$ ‘stone’.

A possible but uncertain vestige of monomoraic *Cv is in $h\acute{o}-h\grave{d}\grave{d}r\grave{o}-f\acute{a}\grave{a}$ ‘area outside of house and its courtyard wall’, if its initial is identified as $h\grave{d}\grave{d}$ ‘house’.

Lexical tone melodies of nouns are described and exemplified in §3.6.3.2-3. There are many processes that modify lexical melodies. They include tonal ablaut, which depends on the morphosyntactic context, and on tone sandhi.

Quite a few flora-fauna nouns begin with an NC cluster, i.e. nasal plus stop or fricative (§3.2.12.1). Similar initial sequences (N-, aN-, or a-) occur in modest numbers of mostly flora-fauna nouns in other languages in the zone, including Songhay languages (e.g. Humburi Senni η aN-) and Dogon (e.g. Toro Tegu $\grave{a}n-$). Some of the words in question are regional; they are easily borrowed. The initial elements may reflect an old noun-class prefix in one of the languages. Fulfulde is the only language in the zone with morphological noun classes and it does have some categories that require prenasalization of C_1 .

4.1.1.2 Bare stem and singular of nouns

When not followed by modifiers (other than the plural suffix) within the NP, most unsuffixed common nouns (but not personal names) lengthen a final short vowel, or add $-o$ to a stem-final η . This is labeled the “singular” suffix here, although the plural suffix is added on top of it.

In N-Adj sequences, the adjective rather than the noun hosts the suffixes (singular, plural). In unpossessed N-(Adj)-Num sequences there is no singular or plural suffixation.

The bare stem of a noun can end in a short oral vowel, a long oral vowel, or a nasal syllable. Most nouns have bare stems ending in a short oral vowel. The singular suffix has the effect of

lengthening the final vowel (166). There is no shifting or spreading of nonfinal H-tones in the stem when the singular suffix is added. Instead, the tone as well as vocalic quality features of the stem-final vowel is spread into the suffix.

(166) Singular nouns with bare stems and singulars

gloss	bare stem	singular
a. /H/ melody		
‘goat’	sógó	sógó-ó
b. /L/ melody		
‘night’	gùlù	gùlù-ù
c. /HL/ melody		
‘agama’	bàsà	bàsà-à
d. /LHL/ melody		
‘mosque’	mìsírì	mìsírì-ì
‘rifle’	màrìfâ	màrìfâ-à

If the bare stem already ends in a long vowel, there is no change from bare stem to singular. One could add -Ø in transcriptions to indicate a zero suffix, but this is omitted here.

(167) gloss bare stem singular

a. monosyllabic		
‘water’	júú	júú
b. bisyllabic		
‘cloud’	hàbáà	hàbáà

An interesting pair is *tálá-á* ‘ear’ versus *táláá* ‘lutefish spp.’. They are phonetically indistinguishable in the singular form, as well as in their plurals *tálá-á-yèⁿ* and *táláá-yèⁿ*. Their bare stems *tálá* and *táláá* are distinguishable by vowel length, as in *tálá húlò-ò* ‘big ear’ versus *táláá húlò-ò* ‘big lutefish’.

The third type of nouns consists of those whose bare stems end in a short nasal syllable Cvⁿ. This syllable is realized as Cvŋ- before the singular suffix, which takes the form -ɔ. The tone of the suffix is determined by the tone and shape of the stem except as noted. It is H-toned -ó if the stem has /H/ melody (168a). It is <HL>-toned -ò if the stem has /L/ melody (168b). If the (bare) stem ends in an <HL>-toned syllable (/LHL/, /HLHL/, or monosyllabic /HL/), the L-tone de-links and is realized on the suffix (-ò) (168c). If the (bare) stem has an internal HL tone break but ends

in an L-toned syllable, the suffix is -ò or -ô (168d-e). The -ò and -ô subtypes also have different tonal properties when followed by kénèèⁿ ‘1’ (§6.4.1.1).

(168) a. ...η-ó after /H/

‘neck’	há ⁿ	háη-ó
‘gully’	wóóló ⁿ	wóólóη-ó

b. ...η-ô after /L/

‘millet; cereals’	jò ⁿ	jòη-ô
‘bird’	hònò ⁿ	hònòη-ô

c. ...η-ò after <HL> syllable with de-linked L on suffix

‘fishtrap’	jâ ⁿ	jáy-ò
‘necked gourd’	bùlê ⁿ	bùléη-ò
‘swift (bird)’	nánáàlê ⁿ	nánáàléη-ò

d. ...η-ô after final L-tone (/...HL/ melody)

CVNCVη-ô

‘pauper’	fáá-ndà ⁿ	fáá-ndàη-ô	(< fájá-ndàη-ô)
‘thickness’	féé ⁿ zè ⁿ	féé ⁿ zèη-ô	
‘steamer’	jííndí ⁿ	jííndìη-ô	
‘labeo sp. (fish)’	tóóndò ⁿ	tóóndòη-ô	(dialectal)

CV(C)Vη-ô

‘steamboat’	bátò ⁿ	bátòη-ô	French <i>bateau</i>
‘chin’	bóómbò ⁿ	bóómbòη-ô	
‘cucumber’	kóηgò ⁿ	kóηgòη-ô	

e. ...η-ò after final L-tone (/LHL/ melody)

CVVCVη-ò

‘ladle’	féélè ⁿ	féélèη-ò
‘light (n)’	yéérè ⁿ	yéérèη-ò
‘tale’	zíírì ⁿ	zíírìη-ò

NCVCVη-ò

‘spider’	ndálè ⁿ	ndálèη-ò
‘insectivorous bat’	ndílè ⁿ	ndílèη-ò

/LHL/ melody

‘viper sp.’	dàηgàrà ⁿ	dàηgàràη-ò
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f. variable

CVCVη-ò ~ CVVCVη-ô

‘paddle (n)’	húmò ⁿ	húmòη-ò ~ húmòη-ô
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The tone of suffix *-ô* in (168b,d) is arguably due to the same tonal phenomenon observed in C̀̀̀̀ ~ C̀̀̀̀̀ nouns like *h̀̀̀̀ ~ h̀̀̀̀̀* ‘house’. The tones of ‘house’ and of *j̀̀̀̀̀-ô* ‘grain, millet’ behave similarly (169).

(169)	gloss	bare stem	singular	‘your-Sg X’	‘his/her X’	‘X descended’
	a. ‘house’	<i>h̀̀̀̀̀</i>	<i>h̀̀̀̀̀̀</i>	<i>á h̀̀̀̀̀̀</i>	<i>ā h̀̀̀̀̀̀</i>	<i>h̀̀̀̀̀̀ jéjè</i>
	b. ‘grain’	<i>j̀̀̀̀̀̀ⁿ</i>	<i>j̀̀̀̀̀̀̀-ô</i>	<i>á j̀̀̀̀̀̀̀-ô</i>	<i>ā j̀̀̀̀̀̀̀-ô</i>	<i>j̀̀̀̀̀̀̀-ô jéjè</i>

See §4.1.1.5 and §3.6.5.3.11 for discussion of the lexical tone melody of stems like ‘house’. If ‘house’ is lexically /L/-melodic *h̀̀̀̀̀̀* and is ablauted secondarily to LHL-toned *h̀̀̀̀̀̀̀* when it occurs in isolation, we could extend this analysis to ‘grain’. The bare stem of the latter would then be /L/-melodic *j̀̀̀̀̀̀̀ⁿ*, and the LHL-toned *j̀̀̀̀̀̀̀̀-ô* would be secondary.

However, the parallelism is not complete. Among *η*-final nouns, the *-ô* suffix is not limited to monosyllabic stems, as shown by *h̀̀̀̀̀̀̀̀-ô* ‘bird’. There is no parallel to this among vowel-final /L/-melodic stems.

4.1.1.3 Plural suffix *-yèⁿ*

Unmodified common nouns that denote countable entities have a singular form that ends in a long vowel or in ...*η-ɔ*. Plural suffix *-yèⁿ* is added to the already suffixed singular. There is no difference in this respect between human, nonhuman animate, and inanimate nouns.

Since the plural suffix is L-toned, and it triggers (word-internal) Final Tone-Raising on a preceding L-toned mora that is preceded by another L-toned mora, schematically ...LL-*yèⁿ* → ...LH-*yèⁿ*. This shows that *-yèⁿ* is an outer suffix phonologically. Its tonal interaction with the stem resembles that of an independent word or particle, though not exactly so (§3.6.5.4.5).

(170) presents plurals of nouns whose bare stem ends in a vowel.

(170)	melody	singular	gloss	plural
	/L/	<i>h̀̀̀̀̀̀ ~ h̀̀̀̀̀̀̀</i> <i>g̀̀̀̀̀̀̀-ù</i>	‘house’ ‘night’	<i>h̀̀̀̀̀̀̀-ó-yèⁿ</i> <i>g̀̀̀̀̀̀̀-ù-ú-yèⁿ</i>
	/HL/	<i>básà-à</i>	‘agama’	<i>básà-á-yèⁿ</i>
	/H/	<i>sógó-ó</i>	‘goat’	<i>sógó-ó-yèⁿ</i>

Array (171) presents nouns whose bare stem ends in *η* before the singular suffix.

(171)	melody	singular	gloss	plural
	/L/	nòŋ-ò	‘knife’	nòŋ-ó-yè ⁿ
	/LHL/	làwólòŋ-ò	‘sth empty’	làwólòŋ-ó-yè ⁿ

For the few irregular or suppletive nominal plurals, see §4.1.1.4 and §4.1.2 below.

-yèⁿ itself becomes H-toned before a nonhigh tone, regardless of the tones of the preceding stem. For example, sógó-ó-yèⁿ ‘goats’ becomes sógó-ó-yéⁿ before a nonhigh tone. In the case of /L/-melodic nouns, the secondary H-tone that would otherwise appear on the syllable or mora preceding the plural suffix shifts onto the plural suffix. For example, sàgà-à ‘sheep’ has plural sàgà-á-yèⁿ by Final Tone-Raising in isolation or before H-tone, but it shifts to sàgà-à-yéⁿ before a nonhigh tone (172a-b). (172a) also shows Initial H-Ablaut on the possessum ‘sheep-Pl’.

- (172) a. [zákì †sàgà-à-yéⁿ] †byē / nùgūⁿ
[Z sheep-Sg-Pl] come.Pfv / swim.Pfv
‘Zaki’s sheep-Pl came/swam.’
- b. [sàgà-à-yéⁿ †sūnūⁿ] †jóò
[sheep-Sg-Pl all] go.Pfv
‘All the sheep went.’

The final nasal element in plural -yèⁿ may have originated as a separate morpheme. Some other quantifiers end in a similar nasal. This is the case with súnúⁿ ‘all’, kénèèⁿ ‘one’, and various irregular nominal plurals like ní-rèèⁿ ‘people’ (see just below). Jenaama-Sorogaama varieties have unnasalized plural -yè, distinct from nominal ‘and’ conjunction yèⁿ.

4.1.1.4 Alternative human plurals ending in εεⁿ ~ eeⁿ

A considerable number of nouns denoting basic human categories (age, sex, ethnicity), along with agentive derivatives, have both a regular plural in -yèⁿ and an alternative plural ending in εεⁿ ~ eeⁿ. The latter is much more common than the regular plural in recordings. This final εεⁿ ~ eeⁿ is preceded by a sonorant that may or may not already be present in the singular. The tones of the alternative plural usually differ from those of the singular, with a maximally LHL tone pattern (‘young people’, ‘women’), reduced to HL if the stem is short (‘children’, ‘men’, ‘people’).

(173)	singular	-yè ⁿ	εε ⁿ ~ ee ⁿ	gloss (plural)
a.	léŋ-ó	léŋ-ó-yè ⁿ	lú-mèè ⁿ	‘children’
	bóló-mèè	bóló-mèé-yè ⁿ	bòlò-méè ⁿ	‘young people’

b.	ɲàŋà̀nù-ù há-lù-ù ɲí-í	ɲàŋà̀nù-ù-yè ⁿ há-lù-ù-yè ⁿ ɲí-í-yè ⁿ	ɲàŋà-léè ⁿ há-lèè ⁿ ɲí-rèè ⁿ	‘women’ ‘men’ ‘people’
c.	júmá-láŋá-á	júmá-láŋá-á-yè ⁿ	júmá-láŋ-éé ⁿ	‘Tié Bozos’
d.	ɲáŋá-nù-máá-nóŋ-ð há-lù-máá-nóŋ-ð	ɲáŋá-nù máá-nóŋ-ð-yè há-lù-máá-nóŋ-ð-yè	ɲáŋá-nù màà-nù-mèè ⁿ há-lù-máá-nù-mèè ⁿ	‘girls’ ‘boys’
e.	bòl-ð	bòl-ýè ⁿ	bòl-éè ⁿ	‘agemates, companions’
f.	-yá-á ~ -yà-à	-yá-á-yè ⁿ ~ -yà-á-yè ⁿ	(L-tone)-y-éè ⁿ	agentive (§4.2.2.1)

4.1.1.5 Lexical melody of C̀̀̀ ~ C̀̀̀ nouns

Several monosyllabic nouns shift between C̀̀̀ and C̀̀̀ tonal forms depending on context. A typical example is h̀̀̀ ~ h̀̀̀̀ ‘house’, some of whose forms are in (174).

- (174) a. isolation singular
h̀̀̀ ‘house’
- b. plural
h̀̀̀̀-ýèⁿ ‘houses’
- c. before adjective
h̀̀̀̀ m̀̀̀̀ ‘good house’
- d. before numeral
h̀̀̀̀ ‘fiēnū ‘two houses’
h̀̀̀̀̀ jíyò ‘three houses’
- e. after possessor
í h̀̀̀̀ ‘my house’
á h̀̀̀̀ ‘your-Sg house’
ā h̀̀̀̀ ‘his/her/its house’
sèèdú h̀̀̀̀ ‘Seydou’s house’

As shown in (174e), the distinction between C̀̀̀̀ and C̀̀̀̀ forms can be a useful secondary cue to indirectly distinguish 2Sg á and 3Sg à (upstepped ā). The same is true for the similar pair of 2Pl (or Logo/3Refl) í and regular 3Pl ì (upstepped ī). The pronominals are subject to Tone Inversion (§3.6.5.1.1) when clause-medial (175b,d-e), but the inversion does not affect the tones of the

following noun. The distinction between C \hat{v} and C \hat{v} forms of the noun is neutralized by Final Tone-Raising when the next word begins with nonhigh tone as in (175e).

(175)	2Sg	3Sg	2Pl (=Logo/3RefPl)	3Pl
a. basic	á	à	í	ì
b. inverted	à	á	ì	í
c. ‘X’s father’ (postpausal)	á kàà	ā kàâ	í kàà	í kàâ
d. ‘X’s father’ (medial)	...à kàà	...á kàâ	...ì kàà	...í kàâ
e. ‘to X’s father’ (medial)	...à kàá ‘là	...á kàá ‘là	...ì kàá ‘là	...í kàá ‘là

The question here is whether to recognize h \hat{d} or h \hat{d} as lexically basic. Either choice would require addition of an ad hoc rule to derive the other form.

f \hat{i} ēⁿ ‘venom’ has invariant <LHL> tones. The 2Sg possessor combinations are á f \hat{i} ēⁿ and á n \hat{d} , not #á f \hat{i} ēⁿ. Other nouns with similar tones are f(w) \hat{d} ‘horse’, fw \hat{d} ‘crocodile’, and f \hat{a} âⁿ ‘bamboo fibers (for netting)’. On the other hand, there are no nouns that have C \hat{v} tonal form in all environments, even if Final Tone-Raising is factored out. Since the alternating type C \hat{v} /C \hat{v} (h \hat{d} /h \hat{d} ‘house’ and kàâ/kàà ‘father’) contrasts with invariant C \hat{v} (‘venom’) but not with nonexistent invariant #C \hat{v} , it is reasonable to take ‘house’ and ‘father’ as lexically /L/-melodic and ‘venom’ as /LHL/-melodic. If so, there are many /L/-melodic C \hat{v} /C \hat{v} nouns, while /LHL/ melody is rare for monosyllabics. This numerical divergence is what we would expect, since /LHL/ is highly marked phonologically for monosyllabic stems.

This analysis, however, requires recognition of an ad hoc tone rule modifying C \hat{v} to C \hat{v} in isolation pronunciation and under 3Sg/3Pl possession. If the isolation pronunciation is taken to be decisive, ‘house’ and ‘father’ would have to be taken as /LHL/-melodic, and an LHL-Flattening process would have to be recognized (§3.6.5.3.11). A third analytic possibility is to think of C \hat{v} ~ C \hat{v} as a network relationship.

4.1.2 Key nouns (‘woman’, ‘man’, ‘child’, ‘person’, ‘thing’, ‘place’, ‘manner’)

High-frequency nouns denoting basic ontological categories are in (176). The nonhuman terms have regular plurals with -yèⁿ. The human terms have both regular plurals and (more frequently occurring) special plurals ending in εēⁿ ~ eeⁿ (§4.1.1.4).

(176) a. human			
	jíní-í	‘person’	
	jàṅàṅ-ù	‘woman’	
	hálú-ú	‘man’	
	léṅ-ó	‘child (offspring)’	cf. §5.1.11.2
	bóló-mèè	‘young person’	

b. nonhuman		
nàŋàà	‘thing’	cf. §6.6.2.4
f̀d̀	‘(abstract) thing, matter’	
wóróŋ-ó	‘place’	
kámù-ù	‘place’	
kírì-ì	‘manner’	
cógó-ó	‘manner’ (< Bambara)	
sáŋà-à	‘point in time’	

4.1.3 Nouns with lexicalized full-stem iteration

A few nouns have the appearance of full-stem iterations. In addition to onomatopoeic bird names, several other flora-fauna terms are of this type. In most cases the uniterated form does not occur. The two segments may have one, two, or three syllables, with a preference for two. The two segments are usually identical (177a), but in a few cases they differ in vowel quality, usually with a in the second segment (177b).

(177) a. no vocalic change

flora-fauna

fyê-fyé-è	‘African black pepper’
gùŋ-gíŋ-ò	‘owl’
módò-módò	‘dragonfly’
sú ⁿ -zùŋ-ò	‘shrub sp. (<i>Annona</i>)’
b̀r̀ó-b̀r̀ó-ò	‘sandgrouse’
f̀r̀ú-f̀r̀ú-ù	‘fritters’
k̀l̀é-k̀l̀é-è	‘yellow honey ant (<i>Camponotus</i>)’
k̀l̀é-k̀l̀é-è	‘thick-knee (bird)’
làgá-làgá-à	‘gull or tern’
m̀ǹé-m̀ǹé-è	‘sesame’
t̀m̀é-t̀m̀é-è	‘black-winged stilt’
ẁl̀ó-ẁl̀ó-ó	‘stingless bee sp.’
ŋ̀g̀ú-ŋ̀g̀ú-ò	‘earthworm’
ndímí-ndímí-ó	‘bush sp. (<i>Scoparia</i>)’
ŋ̀g̀àlà-ŋ̀g̀àlà-à	‘bushy plant sp. (<i>Sida</i>)’
<i>non-flora-fauna</i>	
b̀b̀b̀-ò	‘Bobo (Bwamu) person’
f̀í ⁿ -v̀iŋ-ò	‘charcoal’, based on adjective ‘black’ (§4.5.1.2.1)

b. with vocalic change

shift to i

hààⁿ-hîⁿ ‘gob of spittle’

shift to a

bèlém-bàlá-à ‘fish sp. (*Brycinus macrolepidotus*)’

ḡgóró-ḡgáí-í ‘civet (mammal)’

kòdòrò-káára-à ‘hingeback tortoise (*Kinixys*)’

fórógó-fárágá-á ‘trailing plant (*Ipomoea*)’

shift to ɔ

ndíínì-ndóónò-ò ‘potter (=mud-dauber) wasp’

In [kírí-kírí]-kòǵí-ì ‘spotted catfish sp. (*Synodontis*)’, the iterative initial is related to an adjectival intensifier kírí-kírí ‘very black’.

There are also some cases where the iterative stem is attested only as a diminutive with -nóḡ-ò (178a) or as the initial of a larger compound (178b).

(178) a. attested as diminutive (§5.1.11.1) only

fírí-fírí-nóḡ-ò ‘ant-lion (adult)’

kóyó-kóyó-nóḡ-ò ‘buffalo-weaver or starling (birds)’

ḡḡḡó-ḡḡḡó-nóḡ-ò ‘bush sp. (*Senna*)’

pírí-pírí-nóḡ-ò ‘butterfly’

b. attested as compound initial only

[póm-bóm]-bógòlò-ò ‘shrub sp. (*Calotropis*)’

[péré-péré]-ḡḡóòḡó-ò ‘tiny fish sp. (*Chromidotilapia*)’

4.1.4 Associative plural nì

If X is a human personal name or another expression denoting an individual, an associative plural can be formed by adding nì to it. The associative plural denotes the individual plus his/her associates (family, household, companions, etc.). nì does not combine with pronouns and it does not occur elsewhere. It is probably unrelated to locative postposition nî (§8.2.3.1).

- (179) a. [sèèdú nì] †byē
 [S AssocPI] come.Pfv
 ‘The Seydou’s (=Seydou and his group) have come.’

- b. [sèèdú nì] †múnù-ù
 [S AssocPI] dog-Sg
 ‘the dog of the Seydou’s’

4.2 Derived nominals

4.2.1 Deverbal nominalizations

4.2.1.1 Verbal nouns: bare-stem or suffix -ní-í ~ -ní-ì

In this section un-compounded verbal nouns are described. They are typically based on intransitive verbs, but can also be used for transitives if an object is not specified. For verbal nouns of transitive verbs with incorporated object initials, see §5.1.7.1.1.

There are two ways to nominalize a verb. One is to use the Pfv stem without affixal modification as the bare stem of the verbal noun. The singular and plural suffixes can be added to it. If the verb's final syllable has a nasalized vowel, the singular verbal noun is ...ŋ-ɔ. The other verbal noun has a suffix -ní-í or -ní-ì, including the singular suffix. For one speaker checked, -ní-í occurred after /H/-melody while -ní-ì occurred after other melodies. For a second speaker checked, the form is -ní-ì regardless of verb melody.

The nonsuffixal and suffixal verbal nouns are somewhat interchangeable. Where a semantic difference has been observed, the nonsuffixal verbal noun is a pure abstractive, like English verbal nouns with *-ing* (*running*, *eating*), and the suffixal verbal noun has a somewhat more specialized sense. For example, in a context like 'entering is difficult', *lós* 'entering' suggests a physical challenge in getting in, while *lós-ní-í* might refer to an authorization to enter.

(180) presents some examples, mostly intransitive or reflexive, from the speaker who has -ní-í ~ -ní-ì. Parenthesized forms in the two leftmost columns are not in common use. /H/-melodic verbs have H-toned stems in both types of verbal noun (180a). /HL/-melodic verbs have L-toned stems in both types (180b). /LHL/-toned verbs preserve the lexical melody in the bare form but are leveled to all-L before -ní-ì (180c).

(180)	bare	suffixal	gloss	Pfv(-Ipfv)	gloss
	a. /H/ melody				
	tá ⁿ	tá ⁿ -ní-í	'ascending'	tá ⁿ /tá-ná	'ascend'
	(múú)	mú-ní-í	'insulting'	múú/mú-nú	'insult (v)'
	kúŋ-ɔ	kú ⁿ -ní-í	'catching'	kú ⁿ /kú-nú	'catch'
	lós	lós-ní-í	'entering'	lós/ló-ló	'enter'
	ɲós	ɲós-ní-í	'breathing'	ɲós(-nó)	'breathe'
	jéé	(jéé-ní-í)	'eating; food'	jéé(-lé)	'eat.Antip'
	bágí-í	bágí-ní-í	'exiting'	bágí(-lí)	'exit'
	ɲíní-í	ɲíní-ɲí-í	'bathing'	ɲíní(-ní)	'bathe'
	tórí-í	tórí-ní-í	'jumping'	tórí(-lí)	'jump'
	ságá-á	ságá-ní-í	'lying down'	ságá(-lá)	'lie down'
	tógó-ɔ	tógó-ní-í	'staying'	tógó(-ló)	'stay'
	tóóró-ó	tóóró-ní	'selling'	tóóró(-ló)	'sell'

b. /HL/ melody

ʃàà	ʃàà-ní-ì	‘laughing’	ʃàà/ʃáá-là	‘laugh’
mèŋ-ô	mè ⁿ -ní-ì	‘drinking’	mê ⁿ /mé-nè	‘drink’
sàŋ-ô	sà ⁿ -ní-ì	‘buying’	sâ ⁿ /sá-nà	‘buy’
fògò-ò	fògò-ní-ì	‘sitting’	fógò(-lò)	‘sit’
wàgà-à	wàgà-ní-ì	‘killing’	wágà(-là)	‘kill’
kòmù-ù	kòmù-ní-ì	‘sleeping’	kómù(-lù)	‘sleep’
jèè ^m -ù	jèè ^m -ní-ì	‘speaking’	jéé ^m (-nù)	‘speak’

c. /LHL/ melody

nùgùŋ-ò	nùgù-ní-ì	‘swimming’	nùgù ⁿ /nùgù-nù	‘swim’
hòréŋ-ò	hòrè-ní-ì	‘waiting’	hòrê ⁿ /hòré-nè	‘wait for’

Final Cvⁿ syllables in the verb stem require stem-final ŋ before the singular suffix in the nonsuffixal verbal noun (e.g., ‘swimming’). Final Nv syllables do not usually behave in this way, but mèŋ-ô ‘drinking’ does follow the pattern of Cvⁿ verbs.

The irregular verbs with post-C₁ y in the Pfv, which fuses with s to form ʃ (§10.1.2.1-3) for some speakers, have the verbal nouns in (181). The nonsuffixal verbal noun is segmentally identical to the Pfv.

(181)	bare	suffixed	gloss	Pfv(-Ipfv)	gloss
	a. byé	byé-ní-í	‘coming’	byé/bé-lé	‘come’
	b. ʃòò	ʃòò-ní-ì	‘going’	ʃóò/só-lò	‘go’
	c. ʃéé	ʃéé-ní-í	‘saying’	ʃéé/sé-lé	‘say’

4.2.1.2 Vestiges of vowel fronting in verbal nouns

Vowel fronting is rare in verbal nouns in Kelenga, unlike Jenaama-Sorogaama. jéé ‘eating’ (or ‘food’) is based on an already fronted antipassive form jéé(-lé) ‘eat, have a meal’. A survival of a fronted verbal noun is cùè-ní-ì ~ tùè-ní-ì ‘(esoteric) knowledge’, cf. stative tóò ‘know’.

4.2.1.3 Negative verbal noun with suffix -barí-nà-à

A negative verbal noun (‘non-VERB-ing’) is a compound with participial final -barí-nà-à, related to negative agentive -bá-ri-i (§4.2.2.2). The tone of ba in -barí-nà-à depends on the tone melody of the stem: -bá-ri-nà-à after /H/-melodic verb (182a), -bà-ri-nà-à after stems of other melodies (182b).

(182)	a. tám-bá-ri-nà-à	‘non-ascending (non-climbing)’	tá ⁿ /tá-ná	‘ascend’
	b. hóóló-bà-ri-nà-à	‘non-running’	hóólò(-lò)	‘run’

For combinations with an additional incorporated object, see §5.1.7.2.2.

See also the negative agentive (‘non-doer’) with -báři-i (§4.2.2.2).

4.2.1.4 Place-of-action nominal with suffix -tóó ~ -tòò

Addition of suffix -tóó ~ -tòò to a Pfv verb produces a place-of-action nominal. The suffix is unrelated to the noun wóróŋ-ś ‘place’ or its synonym kámù-ù. That -tóó ~ -tòò is a nominalizing suffix, not the related postposition tóó (§8.2.15), is shown by the fact that it can be pluralized: lóó-tóó-yèⁿ ‘entrances’.

The suffix is H-toned -tóó after /H/-melodic verb and L-toned -tòò after verbs of other melodies. It optionally voices to -dóó ~ -dòò after a nasal (from a nasalized vowel). The tone of the preceding verb is derived from its lexical melody. If the lexical melody of the verb is /H/, it remains H-toned. If the lexical melody of the verb is /HL/ or /LHL/, i.e. if it contains an L-tone, the verb is all-L-toned.

(183)	nominal	gloss	verb and gloss
	a. verb of /H/ melody		
	tán-tóó (~ -dóó)	‘the way up’	tá ⁿ /tá-ná ‘ascend’
	lóó-tóó	‘entrance, the way in’	ló/ló-ló ‘enter’
	ságá-tóó	‘bedroom’	ságá(-lá) ‘lie down’ (reflexive)
	jírí-tóó	‘medical center’	jírí(-lí) ‘treat (medically)’
	bágí-tóó	‘exit (n), the way out’	bágí(-lí) ‘exit (v)’
	b. verb of other melodies		
	<i>/HL/ melody</i>		
	fǒgǒ-tòò	‘place to sit’	fǒgǒ(-lǒ) ‘sit’ (reflexive)
	mèn-tòò (~ -dòò)	‘drinking place’	mê ⁿ /mê-nè ‘drink’
	jèŋè-tòò	‘the way down’	jèŋè(-nè) ‘descend’
	<i>/LHL/ melody</i>		
	nùgùn-tòò (~ -dòò)	‘place to swim’	nùgù ⁿ /nùgú-nù ‘swim’
	là-jèn-tòò (~ -dòò)	‘opening (n)’	là-jê ⁿ /là-jé-nè ‘open’

‘Eat’ distinguishes intransitive antipassive jéé(-lé) from transitive jáá(-lá). The intransitive can form an uncompounded place-of-action nominal: jéé-tóó ‘eating place’.

If the verb is transitive it can incorporate a noun, resulting in N-Vb-tóó. See §5.1.7.3 for examples.

4.2.1.5 Place nominal with suffix -lógó-ó ‘mouth, opening’

lógó-ó ‘mouth; orifice’ can occur instead of -tóó in a kind of place-of-action nominal involving transitions in space or time. It is really a compound, subject to Tone-Leveling (§5.1.6). As initial, it occurs with ‘open’ or ‘close’, especially in the sense of publically opening or closing e.g. a school, a work project, a shop, or a newly built house. The nominals in (184a) are often themselves compounded to an appropriate preceding noun. The tones in (184a) suggest that là- is L-toned (§9.5.4), and its L-tone is expressed on the final syllable of the compound. As final, lógó-ó sticks close to the sense ‘doorway, passageway (into or out)’ (184b).

(184)	nominal	gloss	verb and gloss
	a. lógó- as initial		
	lógó-[lá-jéŋ-ò]	‘opening’	là-jê ⁿ /-jé-nè ‘open’
	lógó-[lá-tégè-è]	‘closure’	là-tègè/-tègè-lè ‘close’
	b. -lógó-ó as final		
	lós-lógó-ó	‘entrance (doorway)’	lós/ló-ló ‘enter’
	bágí-lógó-ó	‘exit (doorway)’	bágí(-lí) ‘exit (v)’

For lógó- as compound initial with verbs, see §9.5.3. For lá-/là- in ‘open’ and ‘close’, see §9.5.4.

4.2.2 Uncompounded agentives

4.2.2.1 Positive agentives (-ya-a)

The (positive) agentive suffix is -ya-a, plural -ya-á-yèⁿ or -y-éèⁿ. It is added to the Pfv stem of a verb, whose tone melody determines the tone of the suffix. /H/-melodic verbs form all-H agentives ending in -yá-á (185a). Verbs of other melodies (those containing an L-tone) raise the stem to all-H but have L-toned agentive suffix -yà-à (185b), as in tone-leveled compounds.

Uncompounded agentives are mainly derivable from intransitive verbs; an exception is ‘thief’ from ‘steal’ (185b). In the case of ‘eat’, only the antipassive intransitive jéé can form an uncompounded agentive (185a)

(185)	verb Pfv (-Ipfv)	gloss	agentive	gloss
	a. verb of /H/ melody			
	gwéé(-lé)	‘dance (v)’	gwéé-yá-á	‘dancer’
	jéé(-lé)	‘eat.Antip’	jéé-yà-à	‘eater’
	gábú(-lú)	‘stutter’	gábú-yá-á	‘stutterer’
	gwóó(-ló)	‘weep’	gwóó-yá-á	‘crybaby’

b. verb of a melody containing an L-tone

/HL/ melody

kwéè/kwéé-lè	‘steal’	kwéé-yà-à	‘thief’
góbò(-lò)	‘get sick’	góbó-yà-à	‘patient, sick one’
kómù(-nù)	‘sleep (v)’	kómú-yà-à	‘sleeper’
góróndò(-lò)	‘snore’	góróndó-yà-à	‘snorer’

/LHL/ melody

nùgù ⁿ /nùgú-nù	‘swim’	nùgú ⁿ -yà-à	‘swimmer’
sògò-sògò/-sògò-lò	‘cough (v)’	sògò-sògò-yà-à	‘cougher’

Plural variant -ya-á-yèⁿ is tonally regular, e.g. gwéé-yá-á-yèⁿ ‘dancers’ and núgúⁿ-yà-á-yèⁿ ‘swimmers’. The alternative human plural -y-éèⁿ produces tonal patterns similar though not identical to those of irregular plurals of human nouns. There is some variation in the data regarding the tone of the stem, but the predominant pattern is H*L-toned stem.

(186)	singular	plural	gloss of plural
a.	céé-yà-à	céè-y-éè ⁿ	‘risers’
	kwéé-yà-à	kwéè-y-éè ⁿ	‘thieves’
	góróndó-yà-à	góróndò-y-éè ⁿ	‘snorers’
b.	nùgú ⁿ -yà-à	nùgù ⁿ -y-éè ⁿ	‘swimmers’
c.	mújé-ní-yà-à	mújé-nì-y-éè ⁿ	‘maker, manufacturers’

An alternative construction for intransitive verbs is an agentive based on a compound with tááⁿ ‘do’ preceded by an incorporated verbal noun, i.e. ‘VblN-doer’. This is a subtype of the compound agentive construction covered in §5.1.7.2.1.

There are also a few lexical agentives such as mwóózáò-ò ‘builder, mason’ (< French *maçon*), dóóⁿzò-ò ‘hunter’, gíránḡè-è ‘leatherworker’, and náà ‘blacksmith’. ‘Leatherworker’ and ‘blacksmith’ are really endogamous castes that are traditionally connected with the trades indicated.

4.2.2.2 Negative agentives (-bári-i)

A negative agentive ‘one who does not VP, non-VPer’ can be formed from verbs. The verb appears with its lexical tones, except that /LHL/ is flattened to L (187c). The final is -bári-í after /H/ melody, -bári-ì after other melodies.

(187) a. /H/ melody

tám-bári-í	‘one who does not ascend’	tá ⁿ /tá-ná ‘ascend’
jéé-bári-í	‘one who does not eat’	jéé(-lé) ‘eat.Antip’

b. /HL/ melody		
ɲíjì-bá-rì-ì	‘one who does not travel’	ɲíjì-(nì) ‘walk, travel’
kómùm-bá-rì-ì	‘one who does not sleep’	kómù(-nù) ‘sleep (v)’
hóólò-bá-rì-ì	‘one who does not run’	hóólò(-lò) ‘run’
c. /LHL/ melody		
nùgùm-bá-rì-ì	‘one who does not swim’	nùgù ⁿ /nùgú-nù ‘swim’

Most examples involve transitive verbs, including ‘do’, with incorporated nouns (§5.1.7.1.2).

For the related negative verbal noun -bá-rì-nà-à see §4.2.1.3. The source of both is likely in the word-family including Kelenga intransitive bá-y ~ bágí ‘exit (v)’ or transitive ‘take out, remove’. Transitive cognates with a medial liquid include JSDj bá-rì and Cliffs bālī ‘take out, remove’.

4.2.3 Abstractive nominals

-na-a and -ya-a suffixes form abstractives from verbs, nouns, and/or adjectives. Some stems take -na-a, others take -ya-a. There is some lexicalization in form and meaning, as shown below.

4.2.3.1 Abstractive suffix -na-a

This suffix is identical in form to the very common deverbal participial suffix. Here it forms abstractive nouns that are semantically similar to those in -ya-a (see the following section).

In (188a) -na-a is added to a noun. In (188b) it is added to an otherwise unsuffixed verbal noun that is identical in form to the Pfv stem. Unusually, hiéⁿ-ná-á can also denote the commissioned envoy. In (188c-d) the suffix is added to an adjectival stem, but the precise morphology is difficult to pin down, as is often the case when dealing with adjectives.

(188)	abstractive	gloss	related forms
a.	híní-tígí-ná-á	‘wealth, richness’	híní-tígí-í ‘rich person’ (“owner of means”)
b.	hié ⁿ -ná-á	‘mission, errand’ or: ‘(God’s) Prophet’	hié ⁿ /hié-né ‘send (sb) on a mission’
	ságá-ná-á	‘trust (n), faith’	ságá(-lá) [X lá/ná] ‘believe in X’
c.	lúmá-nà-à	‘sweetness, tastiness’	lúmá/lúmà ‘sweet’, lê ⁿ ‘be sweet’
	kágáyí-ná-á	‘bitterness’	kágáyí/kágáyì ‘bitter’, kágáyí ‘be bitter’
d.	kúmú-yá-nà-à	‘sourness’	kúmú-ná/-nà ‘sour’, kúmù(-nù) ‘become sour’

4.2.3.2 Abstractive suffix -ya-a

This suffix is identical in form to agentive -ya-a but has a different meaning and occurs with different types of stem. It forms an abstractive nominal with several adjectives that denote scalar qualities or measurable dimensions. The melody of the adjective as reflected in the stative predicative form determines the tones of the derivative. The abstractive is typically possessed (‘its length’, etc.). Such abstractives are not attested with color or taste adjectives (‘redness’, ‘sweetness’).

(189)	derived noun	gloss	stative	inchoative
	a. /HL/-melodic adjective			
	móónó ⁿ -yà-à	‘length’	móónò ‘be long’	móónó-yà(-là) ‘become long’
	túúlé ⁿ -yà-à	‘proximity’	túúlè ⁿ ‘be near’	túúlé ⁿ -yà-nì(-nì) ‘bring near’
	kúúlé ⁿ -yà-à	‘depth’	kúúlé ⁿ ‘be deep’	kúúlé ⁿ -yà(-là) ‘become deep’
	b. /H/-melodic adjective			
	tígé ⁿ -yá-á	‘weight’	tígé ⁿ ‘be heavy’	tígé ⁿ -yá(-lá) ‘become heavy’
	ḡáá-yá-á	‘nastiness’	ḡáá ‘be nasty’	ḡáá-yá(-lá) ‘become nasty’

Some additional abstractive nominals with this suffix are in (190).

(190)	abstractive	gloss	related form
	fáándá ⁿ -yà-à	‘poverty’	fáándàḡ-ḡ ‘pauper’
	ḡáḡáráámá-yá-á	‘(entire) life’	ḡáḡáráámá-á ‘life, being alive’
	násó ⁿ -yá-á	‘kind, category, breed’	
	síífá-yá-á	‘category, description’	
	bóló-méé-yà-à	‘youth, childhood’	bóló-mèè ‘young person’, plural b̀̀l̀̀-`m̀̀éé ⁿ
	hónómónó-yà-à	‘adulthood’	hónómónò-ò ‘adult’
	súré-yá-á	‘old age’	súré-yá(-lá) ‘get old’
	háá ⁿ -yà-à	‘Bozo-hood, typical Bozo activities’	

4.2.4 Gentilic nominals

4.2.4.1 Tone-leveled gentilics with -ḡa-a as final

The suffix or compound final -ḡa-a of variable tone (due to Tone Leveling) can be added to place names to denote a person who is a native or resident of that location.

(191)	village/city	map name	gentilic
	a. H-initial		
	móótí	Mopti	móótí-ηά-ά
	kólóngó	Kolongo	kólóngó-ηά-ά
	b. L-initial		
	jénè	Djenné	jéné-ηά-ά
	bómòkò	Bamako	bómókó-ηά-ά

4.2.4.2 Gentilics with ní-ní ‘person’ as final

The noun ‘person’ is ní-ní, with regular plural ní-ní-yèⁿ and irregular (but common) human plural ní-rèèⁿ. Gentilics based on regions or directions rather than on village names make use of this noun as compound final. Tone-Leveling applies.

(192)	spatial	gloss	gentilic	gloss
	a. yògó-fàà	‘on top’	[yógó-fáá]-ní-ní-ì	‘highlander’
	nòηómà	‘ground’	nòηómá-ní-ní-ì	‘lowlander’
	b. ká ⁿ -vàà	‘in front’	[ká ⁿ -váá]-ní-ní-ì	‘leader, one in front’
	hóórò-ò fàà	‘in back’	[hóóró-fáá]-ní-ní-ì	‘laggard, one in back’
	c. kògò-dúgù-ù	‘north’	[kógó-dúgú]-ní-ní-ì	‘northerner’
	wòrò-dúgù-ù	‘south’	[wóró-dúgú]-ní-ní-ì	‘southerner’
	fónó ⁿ váà	‘in the east’	[fónó ⁿ -váá]-ní-ní-ì	‘easterner’
	gááhà-à fàà	‘in the west’	[gáá(há)-fáá]-ní-ní-ì	‘westerner’

4.3 Pronouns

4.3.1 Proclitic personal pronouns

The system distinguishes three persons and two numbers (singular versus plural), plus anaphorics that can function as logophorics or as third-person reflexives.

The most common pronominal forms are clitics, which occur in all major grammatical functions in the absence of focalization. The forms in the “basic” column are straightforward **proclitics**, except that the Logo/3ReflPl form is noun-like with plural -yèⁿ. The “basic” forms occur clause-initially as subjects, as possessors of subjects, and as objects in singular-addressee imperatives. The **inverted** forms occur when the pronominals are **interclitics**, i.e. both proclitic to

the following word and enclitic to a preceding grammatical morpheme (pre-subject particle like ‘if’ or ‘but’, or more often a post-subject particle marking categories like aspect and polarity).

(193) Pronominal proclitics

	basic	inverted
1Sg	ń	ṅ
1Pl	ńgí	ṅgì
2Sg	á	à
2Pl	í	ì
3Sg	à	á
	ṅ	—
3Pl	ì	í
Logo/3ReflSg	í	ì
Logo/3ReflPl	í-yè ⁿ	ì-yè ⁿ

For the distribution of the two 3Sg allomorphs à and ṅ, see §4.3.4 below.

The categorial oppositions in (193) make heavy use of tonal distinctions (2Sg versus 3Sg, 2Pl versus 3Pl, 1Sg subject versus the variant ṅ for 3Sg subject). In the “inverted” positions, where the H-toned basic forms drop to L-toned, potential ambiguity is avoided by various indirect tonal processes. This is because the H-toned basic pronominals (first and second persons plus Logo/3ReflSg) and the L-toned ones (simple third person) have different tonal effects on the following word. This is made clear in the reorganized paradigm (194), using the perfective positive of the /H/-melodic verb ‘exit (v)’.

(194) Pronominal proclitics

category	basic	‘__ exited’
a. no tonal ablaut effect on following /H/ melody		
1Sg	ń	ń bágí
1Pl	ńgí	ńgí bágí
2Sg	á	á bágí
2Pl	í	í bágí
Logo/3ReflSg	í	í bágí
b. drop of following /H/ melody to L		
3Sg	à ~ ṅ	ā ‘bàgì
3Pl	ì	ī ‘bàgì

c. downstep of following /H/ melody to M

Logo/3ReflPl í-yèⁿ í-yém ‘bāgī

Clause-initial or otherwise postpausal 3Sg à ~ ñ and 3Pl ì are upstepped to what are here written as ā ~ ñ̄ and ī before L-tone (§3.6.5.4.1). In clause-initial position they also combine with a following H-tone to form a level M-toned terrace (§3.6.5.6), as in à básà-à ‘his/her agama’ becoming ā ‘bāsà-à. They remain distinct from 2Sg á and 2Pl í.

In (195a), 1Sg ḥ is inverted to ḥ̄ since it is noninitial in the clause. In (195b) 1Sg ḥ̄ is a clause-initial object and remains H. The choice of ḥ versus ḥ̄ for 1Sg is not based on case, rather on position. The tones of the verbs are not affected by the tone inversion of the pronominal.

(195) a. ì tí= ḥ̄ sálì / kwárí / hòrêⁿ
 3Pl PfvNeg 1Sg pull.Pfv/hit.Pfv/wait.for.Pfv
 ‘They didn’t pull/hit/wait for me.’

b. ḥ̄ sálì / kwárí / hòrêⁿ
 1Sg pull.Pfv/hit.Pfv/wait.for.Pfv
 ‘Pull/hit/wait for me!’

4.3.2 1Sg variants

In addition to the primary 1Sg proclitic ḥ̄, which patterns tonally with the other H-toned pronominals, there is a syllabic form ná ~ nó. ná ~ nó that can always substitute for the proclitic. Its tonal effects are like those of independent pronouns (and nonpronominal NPs) and therefore unlike those of proclitic ḥ̄. (196a) and (196b) are semantically equivalent, but the syllabic form in (196b) downsteps the H-toned verb.

(196) a. m̄ bágí
 1Sg exit.Pfv
 ‘I exited.’

b. ná/nó ‘bāgī
 1Sg exit.Pfv
 [= (a)]

4.3.3 Independent pronouns

In addition to the high-frequency proclitics, each pronominal category has independent pronouns. For most categories, the independent pronoun adds a rhotic suffix to the forms used as proclitics. The suffix (or enclitic) is -rà ~ -rò, with a third option -rè for plural pronominals. The suffix is H-toned in 2Sg á-rá ~ á-ró, otherwise L-toned. The specifically plural variant -rè permits a

distinction between 2Pl í-rè and the LogoSg variants. For 1Sg, nonrhotic ná ~ n3 (see the preceding subsection) competes with rhotic ná-rà ~ n3-r3.

(197) Independent pronouns

	non-rhotic	rhotic	
a. singular and LogoPl			
1Sg	ná	ná-rà	
	~ n3	~ n3-r3	
2Sg		á-rá	fully H-toned
		~ á-r3	fully H-toned
3Sg		à-rà	
		~ à-r3	
LogoSg		ì-rà	
		~ ì-r3	
LogoPl		í-yè-rà	
		~ í-yè-r3	
b. other plurals			
1Pl		ngí-rà	
		~ ngí-r3	
		~ ngí-rè	with plural -rè
		~ ngé-rè	with plural -rè
2Pl		í-rà	
		~ í-r3	
		~ í-rè	with plural -rè
3Pl		ì-rà	
		~ ì-r3	
		~ ì-rè	with plural -rè

Independent pronouns can occur, sometimes competing with proclitics, under focalization (§13.1.2), in conjunctions (§7.1.1), in copular and identificational predicates (§11.2.1-2), and before particles like topic ('as for') k3nìⁿ (§19.1.1).

4.3.4 3Sg proclitic subject allomorphs à and ñ

The 3Sg proclitic is always à (or upstepped ā) as subject in perfective positive clauses (198a-b). The nasal 3Sg allomorph ñ (or upstepped ñ̄) cannot occur in this function. Likewise, only à ~ ā is possible for possessors and for postpositional complements. The only 3Sg independent pronoun is à-rà. # in (198) means ungrammatical.

- (198) a. ā ʔbyè
 #m̄
 3Sg come.Pfv
 ‘He/She/It came.’
- b. à ñà múnù-ù hɛ̀ɛ
 #ɲ
 3Sg Sbj/Obj dog-Sg see.Pfv
 ‘He/She/It saw a/the dog.’ (< múnù)
- c. ā sàgà-à
 #ɲ
 3Sg sheep-Sg
 ‘his/her sheep-Sg’

Before post-subject inflectional (aspect-negation) markers and subjunctive bí, both à and ñ are possible for clause-initial subjects. Some speakers freely shift between the two; others strongly favor ñ. (199a-b) illustrate with the perfective negative. The nasal 3Sg allomorph usually voices the t to d.

- (199) a. à tí ʔbyɛ̀
 ñ dí
 3Sg PfvNeg come.Pfv
 ‘He/She/It came.’
- b. à tì ʔmúnù-ù hɛ̀ɛ
 ñ dì
 3Sg PfvNeg dog-Sg see.Pfv
 ‘He/She/It didn’t see a/the dog.’

Both à and ñ are also possible as subjects of subjunctive clauses, where they precede Sbjn bí. In this position, ñ is preferred (m̄ bí ...).

In all nonsubject functions, ñ is ungrammatical, so only à (or tonal variant) is possible. This is the case for objects both clause-initially (in singular-addressee imperatives) as in (200a), and medially as in (200b).

- (200) a. ā ʔkwàrì
 #ɲ "
 1Sg hit.Pfv
 ‘Hit-2Sg him/her/it!’

b.	ń	tá=	á	‘kwàrì
	"	"	#ń	"
	1Sg	PfvNeg	3Sg	hit.Pfv
	‘I didn’t hit him/her/it.’ (< tí)			

4.3.5 Combinations of subject proclitics with following words

Subject proclitics are directly followed by intransitive verbs in the perfective positive (§4.3.5.1). Otherwise they are followed by nonzero post-subject grammatical particles (§4.3.5.2). Here the tones of these combinations are focused on.

4.3.5.1 Subject proclitics plus perfective positive intransitives

Array (201) shows the combination of pronominal subjects with directly adjacent verbs, which is possible in the perfective positive of intransitives. In addition to place assimilation of the nasal 1Sg proclitic, the tonal processes observed are the following. Contour /LHL/- and /HL/-melodic verbs are invariant across all subjects. /H/-melodic verbs appear as all-H-toned in (201a), but as all-L-toned in (201b) due to Tone-Dropping after third-person proclitics (§3.6.5.3.1). After this drop, or in conjunction with it, 3Sg à and 3Pl ì are upstepped to ā and ī. LogoPl í-yèⁿ behaves tonally like the noun ‘Seydou’ and downsteps the /H/-melodic verb (201c-d).

(201)	proclitic	‘__ passed’ /H/ melody	‘__ dried out’ /LHL/ melody	‘__ consented’ /HL/ melody
a.	1Sg	ń hélé	ń gògî	ń dúŋè
	1Pl	ńgí hélé	ńgí gògî	ńgí dúŋè
	2Sg	á hélé	á gògî	á dúŋè
	2Pl	í hélé	í gògî	í dúŋè
	LogoSg	í hélé	í gògî	í dúŋè
b.	3Sg	ā ‘hèlè	ā gògî	ā dúŋè
	3Pl	ī ‘hèlè	ī gògî	ī dúŋè
c.	LogoPl	í-yé ⁿ ‘hēlē	í-yéŋ gògî	í-yèn dúŋè
d.	‘Seydou’	sèédú ‘hēlē	sèédú gògî	sèédú dúŋè

If a pronominal subject proclitic is itself preceded by a clause-initial particle such as ní ‘if’, the proclitic is subject to Tone Inversion (§3.6.5.1.1).

4.3.5.2 Subject proclitics plus post-subject inflectional particles

Pronominal subject proclitics may be followed by any of several post-subject grammatical particles. These include the post-subject inflectional particles (imperfective, negative, subjunctive) and the bidirectional case-marker. For data see §10.2.2.1 and §10.2.3.1.2.

4.3.6 Nonsubject pronominal proclitics

4.3.6.1 Pronominal objects

Pronominal objects are proclitic to transitive verbs. In singular-addressee imperative clauses the object is clause-initial. An /H/-melodic verb ('hit') remains H-toned after the H-toned pronominal proclitics, but is tone-dropped to ⁴L after 3Sg and 3Pl proclitics and is downstepped to ⁴M after nouns and other forms that are treated like nouns (including independent pronouns). 3Sg *à* and 3Pl *ì* are upstepped to *ā* and *ī* before L-tone.

(202) singular imperative				
	object	'Hit-2Sg __!'	'Cut-2Sg __!'	'Wait-2Sg for __!'
a.	1Sg	ń kwárí	ń húrù	ń hòrê ⁿ
	1Pl	ngí kwárí	ngí húrù	ngí hòrê ⁿ
	2Sg (reflexive)	á kwárí	á húrù	á hòrê ⁿ
b.	3Sg	ā ⁴ kwàrì	à húrù	ā hòrê ⁿ
	3Pl	ī ⁴ kwàrì	ì húrù	ī hòrê ⁿ
c.	'Seydou'	sèèdú ⁴ kwāri	sèèdù húrù	sèèdú hòrê ⁿ

When they follow post-subject inflectional particles (Ipfv, IpfvNeg, or PfvNeg), the pronominal proclitics that are H-toned post-pausally become L-toned, and vice versa, by Tone Inversion (§3.6.5.1.1). However, they are re-raised to H by tone sandhi when followed by a nonhigh tone.

(203-205) illustrate with Ipfv *há*, PfvNeg *tí*, and IpfvNeg *tá*, which behave in the same way tonally. Subjects are omitted from these arrays but are present in actual examples. The pronominals in (203a), (204a), and (205a) are H-toned when clause-initial but they are L-toned here. The third-person pronominals in (203b), (204b), and (205b) are L-toned when clause-initial but they are H-toned here. The parenthesized forms are those for 3Sg or 3Pl pronominal subject (not shown) acting on a nonreflexive 3Sg or 3Pl object, as in *à hà* = *à ...* or variant *ń gà* = *à ...* (3Sg acting on 3Sg, imperfective). In this specific frame the inflectional morpheme drops to L-toned *hà*, *tì*, or *tà*, which is best seen in the '*... cuts __*' column with its /HL/-melodic verb. Before verbs of /LHL/ melody or tone-dropped verbs of /H/-melody, *à hà* = *à ...* becomes *à há* = *á ...* by Final Tone-Raising, which treats *hà* = *à* as a syllabic unit and raises it to H before a nonhigh tone. In careful speech it has sometimes been heard as *hà* = *á* in this context, with Final Tone-Raising applying

only to the pronominal, but most of the data are of the type há = á. It is not necessary for speakers to clearly pronounce a rising tone; the key is not to allow the pitch to decline during the articulation of the long contracted vowel, since such a decline would be interpreted as há = à with 2Sg rather than 3Sg object.

(203) Ipfv há

object	‘... hit(s) __’	‘... cut(s) __’	‘... wait(s) for __’
a. 1Sg	há ñ kwárí-lí	há ñ húrù-lù	há ñ hòré-nè
1Pl	há ñgì kwárí-lí	há ñgì húrù-lù	há ñgì hòré-nè
2Sg	há = à kwárí-lí	há = à húrù-lù	há = à hòré-nè
2Pl	hí = ì kwárí-lí	hí = ì húrù-lù	hí = ì hòré-nè
Logo/3ReflSg	hí = ì kwárí-lí	hí = ì húrù-lù	hí = ì hòré-nè
b. 3Sg	há = á ⁴ kwàrì-lì	há = á húrù-lù	há = á hòré-nè
(3 → 3Sg)	(há = á ⁴ kwàrì-lì)	(hà = à húrù-lù)	(há = á hòré-nè)
3Pl	hí = í ⁴ kwàrì-lì	hí = í húrù-lù	hí = í hòré-nè
(3 → 3Pl)	(hí = í ⁴ kwàrì-lì)	(hì = ì húrù-lù)	(hí = í hòré-nè)
c. Logo/3ReflPl ‘Seydou’	hí = ì-yéñ ⁴ kwāri-lī	hí = ì-yèñ húrù-lù	hí = ì-yéñ hòré-nè
	há sèèdú ⁴ kwāri-lī	há sèèdù húrù-lù	há sèèdú hòré-nè

(204) PfvNeg tí

object	‘... didn’t hit __’	‘... didn’t cut __’	‘... didn’t wait for __’
a. 1Sg	tí ñ kwárí	tí ñ húrù	tí ñ hòré ⁿ
1Pl	tí ñgì kwárí	tí ñgì húrù	tí ñgì hòré ⁿ
2Sg	tá = à kwárí	tá = à húrù	tá = à hòré ⁿ
2Pl	tí = ì kwárí	tí = ì húrù	tí = ì hòré ⁿ
Logo/3ReflSg	tí = ì kwárí	tí = ì húrù	tí = ì hòré ⁿ
b. 3Sg	tá = á ⁴ kwàrì	tá = á húrù	tá = á hòré ⁿ
(3 → 3Sg)	(tá = á ⁴ kwàrì)	(tà = à húrù)	(tá = á hòré)
3Pl	tí = í ⁴ kwàrì	tí = í húrù	tí = í hòré ⁿ
(3 → 3Pl)	(tí = í ⁴ kwàrì)	(tì = ì húrù)	(tí = í hòré)
c. Logo/3ReflPl ‘Seydou’	tí = ì-yéñ ⁴ kwāri	tí = ì-yèñ húrù	tí = ì-yéñ hòré ⁿ
	tí sèèdú ⁴ kwāri	tí sèèdù húrù	tí sèèdú hòré ⁿ

(205) IpfvNeg tá				
object		‘... doesn’t hit __’	‘... doesn’t cut __’	‘...doesn’t wait for __.’
a. 1Sg	tá ɲ kwárí-lí	tá ɲ húrù-lù	tá ɲ hòré-nè	
1Pl	tá ɲgì kwárí-lí	tá ɲgì húrù-lù	tá ɲgì hòré-nè	
2Sg	tá = à kwárí-lí	tá = à húrù-lù	tá = à hòré-nè	
2Pl	tí = ì kwárí-lí	tí = ì húrù-lù	tí = ì hòré-nè	
Logo/3ReflSg	tí = ì kwárí-lí	tí = ì húrù-lù	tí = ì hòré-nè	
b. 3Sg	tá = á *kwàrì-lì	tá = á húrù-lù	tá = á hòré-nè	
(3 → 3Sg)	(tá = á *kwàrì-lì)	(tá = à húrù-lù)	(tá = á hòré-nè)	
3Pl	tí = í *kwàrì-lì	tí = í húrù-lù	tí = í hòré-nè	
(3 → 3Pl)	(tí = í *kwàrì-lì)	(tí = ì húrù-lù)	(tí = í hòré-nè)	
c. Logo/3ReflPl	tí = ì-yéɲ *kwārī-lī	tí = ì-yèɲ húrù-lù	tí = ì-yéɲ hòré-nè	
‘Seydou’	tá sèèdù *kwārī-lī	tá sèèdù húrù-lù	tá sèèdù hòré-nè	

A consequence of vv-Contraction is that PfvNeg tí and IpfvNeg tá are indistinguishable before vocalic object proclitics. However, the following verb is in the Pfv stem in perfective negative clauses and in the Ipfv stem in imperfective negative clauses, so there is no aspectual ambiguity at clause level.

(206) features the bidirectional case marker ɲá ~ ɲà. Again, subjects are omitted. The only tonal differences in comparison to the post-subject inflectional particles is that /HL/-melodic verbs are downstepped after 3Sg and 3Pl object pronominals. See the middle column with ‘cut’ in (206) for examples. In third-person on third-person combinations (3Sg on 3Sg, 3Pl on 3Pl, 3Sg on 3Pl, 3Pl on 3Sg), M-terraces have been heard with these /HL/-melodic verbs. Similar M-terraces occur in combinations of third person subject proclitic, the BCM, and object nouns; see (565a) in §10.2.2.3. Before /H/-melodic and /LHL/-melodic verbs, any such distinctions are masked by tone sandhi.

(206) BCM ɲá ~ ɲà (perfective positive transitive)				
object		‘... hit-Past __’	‘... cut-Past __’	‘... waited for __’
a. 1Sg	ɲá ɲ kwárí	ɲá ɲ húrù	ɲá ɲ hòré ⁿ	
1Pl	ɲá ɲgì kwárí	ɲá ɲgì húrù	ɲá ɲgì hòré ⁿ	
2Sg	ɲá = à kwárí	ɲá = à húrù	ɲá = à hòré ⁿ	
2Pl	ɲí = ì kwárí	ɲí = ì húrù	ɲí = ì hòré ⁿ	
Logo/3ReflSg	ɲí = ì kwárí	ɲí = ì húrù	ɲí = ì hòré ⁿ	
b. 3Sg	ɲá = á *kwàrì	ɲá = á *hūrù	ɲá = á hòré ⁿ	
(3 → 3Sg)	(ɲá = á *kwàrì)	(ɲā = ā *hūrù)	(ɲá = á hòré)	
3Pl	ɲí = í *kwàrì	ɲí = í *hūrù	ɲí = í hòré ⁿ	
(3 → 3Pl)	(ɲí = í *kwàrì)	(ɲī = ī *hūrù)	(ɲí = í hòré ⁿ)	

c. Logo/3ReflPl 'Seydou'	ɲí = ì-yéɲ 'kwārí ɲá sèèdú 'kwārí	ɲí = ì-yé ⁿ 'hūrù ɲá sèèdú hūrù	ɲí = ì-yé ⁿ hòrê ⁿ ɲá sèèdú hòrê ⁿ
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Arrays (207-208) feature prohibitive (Proh) mání and plural-addressee imperative (ImprtPl) ká. The prohibitive forms in (207) are preceded in negative imperative clauses by 2Sg subject á or by 2Pl subject í (§10.4.1.3), which are omitted here. In prohibitive clauses that function as negative subjunctives, quoted negative imperatives, or negative wishes, a wider range of subjects is possible (§10.4.3.1, §17.1.5.1, §17.3.2).

(207) Proh mání object	'... don't hit __!'	'... don't cut __!'	'... don't wait for __!'
a. 1Sg	mání ɲ kwárí	mání ɲ hūrù	mání ɲ hòrê ⁿ
1Pl	mání ɲgì kwárí	mání ɲgì hūrù	mání ɲgì hòrê ⁿ
2Sg (reflexive)	máná = à kwárí	máná = à hūrù	máná = à hòrê ⁿ
2Pl (reflexive)	mání = ì kwárí	mání = ì hūrù	mání = ì hòrê ⁿ
b. 3Sg	máná = á 'kwàrì	máná = á 'hūrù	máná = á hòrê ⁿ
3Pl	mání = í 'kwàrì	mání = í 'hūrù	mání = í hòrê ⁿ
c. 'Seydou'	mání sèèdú 'kwārí	mání sèèdú hūrù	mání sèèdú hòrê ⁿ

(208) ImprtPl ká object	'Hit-2Pl __!'	'Cut-2Pl __!'	'Wait-2Pl for __!'
a. 1Sg	ká ɲ kwárí	ká ɲ hūrù	ká ɲ hòrê ⁿ
1Pl	ká ɲgì kwárí	ká ɲgì hūrù	ká ɲgì hòrê ⁿ
2Pl (reflexive)	kí = ì kwárí	kí = ì hūrù	kí = ì hòrê ⁿ
b. 3Sg	ká = á 'kwàrì	ká = á 'hūrù	ká = á hòrê ⁿ
3Pl	kí = í 'kwàrì	kí = í 'hūrù	kí = í hòrê ⁿ
c. 'Seydou'	ká sèèdú 'kwārí	ká sèèdú hūrù	ká sèèdú hòrê ⁿ

Sequential or subjunctive bí is featured in (209).

(209)	Sequential/Subjunctive bí			
	object	‘to hit ___’	‘to cut ___’	‘to wait for ___.’
a.	1Sg	bí ñ kwárí	bí ñ húrù	bí ñ hòrê ⁿ
	1Pl	bí ñgì kwárí	bí ñgì húrù	bí ñgì hòrê ⁿ
	2Sg	bí= à kwárí	bí= à húrù	bí= à hòrê ⁿ
	2Pl	bí= ì kwárí	bí= ì húrù	bí= ì hòrê ⁿ
	Logo/3ReflSg	bí= ì kwárí	bí= ì húrù	bí= ì hòrê ⁿ
b.	3Sg	bá= á ‘kwàrì	bá= á ‘hūrù	bá= á hòrê ⁿ
	3Pl	bí= í ‘kwàrì	bí= í ‘hūrù	bí= í hòrê ⁿ
c.	Logo/3ReflPl	bí= í-yé ⁿ ‘kwàrì	bí= í-yé ⁿ ‘hūrù	bí= í-yé ⁿ hòrê ⁿ
	‘Seydou’	bí sèèdú ‘kwārí	bí sèèdú húrù	bí sèèdú hòrê ⁿ

4.3.6.2 Pronominal possessors

Pronominally possessed forms of nouns of various tonal melodies, as pronounced in isolation or clause-initially, are in (210). The pronominals show the same tones that they have in subject function: H for first and second person and for Logo3ReflSg (210a), and L for regular third person (210b). Logo/3ReflPl again functions tonally like a nonpronominal NP. The /HL/- and /LHL/-melodic nouns are unaffected tonally by the possessors. /H/-melodic ‘goat’ remains H-toned in (210a) but is tone-dropped in (210b-c). /L/-melodic ‘sheep’ undergoes Initial H-Ablaut throughout, but in (210b) this feeds into Tone-Terracing, e.g. /à ‘sàgà-à/ → ā ‘sāgà-à.

(210)	Isolation forms				
	possessor	‘___’s goat’	‘___’s sheep’	‘___’s soda ash’	‘___’s waterjar’
		sógó-ó	sàgà-à	ségè-è	sòmú-ù
		/H/	/L/	/HL/	/LHL/
a.	1Sg	íj sógó-ó	íj ‘sàgà-à	íj ségè-è	íj sòmú-ù
	1Pl	ñgí sógó-ó	ñgí ‘sàgà-à	ñgí ségè-è	ñgí sòmú-ù
	2Sg	á sógó-ó	á ‘sàgà-à	á ségè-è	á sòmú-ù
	2Pl	í sógó-ó	í ‘sàgà-à	í ségè-è	í sòmú-ù
	Logo/3ReflSg	í sógó-ó	í ‘sàgà-à	í ségè-è	í sòmú-ù
b.	3Sg	ā ‘sògó-ò	ā ‘sāgà-à	à ségè-è	ā sòmú-ù
	3Pl	ī ‘sògó-ò	ī ‘sāgà-à	ì ségè-è	ī sòmú-ù
c.	Logo/3ReflPl	í-yé ⁿ ‘sògó-ò	í-yè ⁿ ‘sàgà-à	í-yè ⁿ ségè-è	í-yé ⁿ sòmú-ù
	‘Seydou’	sèèdú ‘sògó-ò	sèèdú ‘sàgà-à	sèèdú ségè-è	sèèdú sòmú-ù

When these possessed NPs are preverbal objects in nonimperative clauses, or are postpositional complements immediately following the verb, the pronominals undergo Tone Inversion. The forms shown in (211) are those that occur in object function following a post-subject inflectional particle (which is not shown).

(211) As object NPs (after a grammatical particle)

	possessor	'__'s goat'	'__'s sheep'	'__'s soda ash'	'__'s waterjar'
		sógó-ó	sàgà-à	ségè-è	sòmú-ù
a.	1Sg	ɨ̃ sógó-ó	ɨ̃ †sàgà-à	ɨ̃ ségè-è	ɨ̃ sòmú-ù
	1Pl	ɨ̃gì sógó-ó	ɨ̃gì †sàgà-à	ɨ̃gì ségè-è	ɨ̃gì sòmú-ù
	2Sg	à sógó-ó	à †sàgà-à	à ségè-è	à sòmú-ù
	2Pl	ì sógó-ó	ì †sàgà-à	ì ségè-è	ì sòmú-ù
	Logo/3ReflSg	ì sógó-ó	ì †sàgà-à	ì ségè-è	ì sòmú-ù
b.	3Sg	á †sògó-ò	á †sàgà-à	á ségè-è	á sòmú-ù
	3Pl	í †sògó-ò	í †sàgà-à	í ségè-è	í sòmú-ù
c.	Logo/3ReflPl	ì-yé ⁿ †sògó-ó	ì-yè ⁿ †sàgà-à	ì-yè ⁿ ségè-è	ì-yé ⁿ sòmú-ù
	'Seydou'	sèèdú †sògó-ó	sèèdù †sàgà-à	sèèdù ségè-è	sèèdú sòmú-ù

Examples showing the tones of pronominal possessors (bolded) in subject and object NPs are in (212).

(212) a. [ɨ̃ sógó-ó] †byē
 [1Sg goat-Sg] come.Pfv
 'My goat has come.'

b. sèèdù n̄á [ɨ̃ sógó-ó] †tōōrō
 S Sbj/Obj [1Sg goat-Sg] sell.Pfv
 'Seydou sold my goat.'

c. [ā †sògó-ó] †byē
 [3Sg goat-Sg] come.Pfv
 'His/Her goat has come.'

d. Ø n̄á= [á †sògó-ó] †tōōrō
 1Sg Sbj/Obj [3Sg goat-Sg] sell.Pfv
 'I sold his/her goat.'

4.4 Determiners

4.4.1 Definite (absent)

There is no regular marking of (weak) definiteness, parallel to Jenaama-Sorogaama definites. The suffixed singular form of nouns may have originated as definite marking but if so it no longer serves this function. For a vestigial construction where the absence of the singular suffix indicates existential indefiniteness, see (319-320) in §6.1.4.

For discourse-definite ó ‘that (same/aforementioned) one’, see below.

4.4.2 Demonstrative pronouns

There are two demonstrative categories, deictic ‘this/that’ referring to a visible entity, and discourse-definite ‘that (same)’ recalling a previous discourse referent or a referent known to speaker and addressee.

Demonstratives (‘this’, ‘that’) can be absolute (i.e. without a modifying noun), or modifying (with a noun).

4.4.2.1 ‘This/that’ demonstratives in absolute function

Absolute forms of demonstratives (i.e. without modified nouns) are in (213). -yèⁿ is the regular nominal plural suffix.

(213) Absolute forms

category	Sg	Pl
deictic or weak discourse-definite	kú	kú-yè ⁿ
recent discourse-definite	ó ~ wó	ó-yè ⁿ ~ wó-yè ⁿ

Some speakers pronounce ó and allow vv-Contraction to apply to it, while others say wó. A possible vestige of an original nasalized form is the frozen combination n-ón dè ‘if it is not that’, i.e. ‘otherwise’ (§16.1.3), which begins with ní ‘if’. Probable cognates of ó are nasal: JSDj nóⁿ ~ nóⁿ and Cliffs nóⁿ.

In its usual clausal contexts ó is pronounced with H-tone. However, it can occur in isolation, as in a list of entities separated by pauses, and here it can have a [-ATR] vowel and falling tone (214a), compare the adverb wôⁿ ‘there (definite)’. In (214b), (w)ó behaves like a nonpronominal NP in its tonal effects on following words. In (214c), however, ó behaves somewhat like 3Sg à and 3Pl ì in taking L-toned variants of the post-subject grammatical particles (214c), although in many environments they are re-raised by tone sandhi. Future há bílí, which is fused into a single prosodic word, optionally drops (214d). Overall, (w)ó shows some signs of

having originally been <HL>-toned as still in the isolation pronunciation, but (if so) it is shifting toward H-tone.

- (214) a. wô ‘that one’ (isolation pronunciation)
- b. (w)ó ‘rà-nì ‘that [focus] is it’
 ó ‘hālī ‘sògò-ò ‘that one (definite) is a goat’
 Ø ñó = ó héè ‘I saw that’
 ó ‘sògò-ó ‘that one’s goat’
- c. ó hà hóólò-lò ‘that one runs’
 ó tà hóólò-lò ‘that one doesn’t run’
 ó ñà ‘sàgà-à wágà ‘that one killed the sheep-Sg’
- d. ó hà bìlì hóólò ‘that one will run’

By contrast, deictic kú behaves tonally like an H-toned pronominal proclitic (215a-c).

- (215) a. kú ‘that/this’ (isolation pronunciation)
- b. kú rá-ní ‘that [focus] is it’
 kú hálí ‘sògò-ò ‘that/this is a goat’
 Ø ñá kù héè ‘I saw that/this.’ (with Tone Inversion)
 kú sógò-ó ‘the goat of this’
- c. kú há hóólò-lò ‘that/this runs’
 kú tá hóólò-lò ‘that/this doesn’t run’
 kú ñá sàgà-à wágà ‘that/this killed the sheep-Sg’

4.4.2.2 ‘This/that’ demonstratives preceding and following nouns

Modifying demonstratives can combine with a modified noun (or N-Adj combination). Both kú and ó can precede nouns. kú can follow nouns, with or without a pronominal kú or ó. Tonal ablaut processes apply to the noun in these combinations. Postnominal kú can bear the plural suffix, which as usual comes after the final word in the NP.

See §6.5.1-3 for analysis and examples of NPs containing demonstratives.

4.4.3 Demonstrative adverbs

4.4.3.1 Locative adverbs

Locative adverbs based on deictic and discourse-definite demonstrative categories are in (216). The basic distinction is binary ‘here’ versus ‘there’. There are high-frequency short forms (216a) and elaborated forms (216b), the latter being required under focalization. In most contexts, $w\hat{o}^n$ is discourse-definite rather than deictic (216a-b), but it combines with postposition $f\acute{a}\grave{a}$ as $w\hat{o}^n$ $v\grave{a}\grave{a}$ ‘over there (deictic)’.

(216)	form	gloss
	a. high-frequency short forms	
	$g\hat{o}^n \sim g\acute{o}\hat{o}^n$	‘here’
	$w\hat{o}^n \sim w\acute{o}\hat{o}^n$	‘there’ (discourse-definite)
	b. expanded forms (especially focalized, §13.1.6.4)	
	$g\acute{o}-n\grave{i}\grave{i}n\acute{o}\grave{d}\grave{d} \sim g\acute{o}-n\grave{i}n\acute{o}\grave{d}\grave{d}$	‘here’
	~ $g\acute{o}\hat{o}-n\acute{o}\hat{o}$	
	$w\acute{o}-n\grave{i}\grave{i}n\acute{o}\grave{d}\grave{d} \sim w\acute{o}-n\grave{i}n\acute{o}\grave{d}\grave{d}$	‘there’ (discourse-definite)
	~ $w\acute{o}\hat{o}-n\acute{o}\hat{o}$	
	c. other	
	$g\hat{o}^n$ $v\grave{a}\grave{a} \sim g\acute{o}\hat{o}^n$ $v\grave{a}\grave{a}$	‘over there’
	$w\hat{o}^n$ $v\grave{a}\grave{a} \sim w\acute{o}\hat{o}^n$ $v\grave{a}\grave{a}$	‘over there’

$g\hat{o}^n$ ‘here’ and $w\hat{o}^n$ ‘there (definite)’ are very often added to other spatial adverbials (see §8.5.5.6 for some lexical adverbs). Both are therefore very common in clause-final position.

4.4.3.2 Deictic manner adverb ($n\acute{i}\grave{e} \sim n\acute{e}\grave{e} \sim n\acute{j}\acute{e}\grave{e}$)

$n\acute{i}\grave{e} \sim n\acute{e}\grave{e} \sim n\acute{j}\acute{e}\grave{e}$ is the deictic manner adverb ‘thus, like this/that’. It is not a verb and does not take aspect marking.

(217)	a.	$n\acute{g}\acute{i}$	$n\acute{a}$	$\uparrow m\acute{u}n\grave{u}-\acute{u}$	$\acute{k}w\bar{a}r\acute{i}$	$n\acute{i}\grave{e}$
		1Pl	Sbj/Obj	dog-Sg	hit.Pfv	like.this
		‘We hit-Past the dog like this.’				
	b.	$n\acute{g}\acute{i}$	$h\acute{a}$	$\uparrow m\acute{u}n\grave{u}-\acute{u}$	$\acute{k}w\bar{a}r\acute{i}-l\acute{i}$	$n\acute{i}\grave{e}$
		1Pl	Ipfv	dog-Sg	hit-IPfv	like.this
		‘We (often) hit the dog like this.’				

A verbal counterpart of *nîè* could not be elicited.

A composite form *njéè-néŋ-gù* has the more emphatic sense ‘exactly like this/that’ (2021-06 @ 02:33). It appears to be a fusion containing nominal diminutive *-nêⁿ* and demonstrative *kù*.

4.4.4 Presentative *héè* (‘here’s ...!’, ‘there’s ...!’)

héè is the Pfv of ‘see’. The Pfv is the basis for imperatives, so in presentative function *héè* is analogous to French *voici* and *voilà* from imperative *vois!* ‘see!’.

Simple presentatives are in (218a-b). There are no tone sandhi effects on preceding nouns or pronominals. Pronouns can take proclitic or independent form.

- (218) a. *zákì* *héè*
S Prsntv
‘Here’s/There’s Zaki!’
- b. *ná* *héè*
ń *héè*
1Sg Prsntv
‘Here I am!’
- c. *à* *héè*
3Sg Prsntv
‘Here/There he/she/it is!’

Textual examples of the presentative are these: 2021-06 @ 06:12 and 06:32.

Presentative *héè* may combine with predicates that describe a specific activity. See §10.2.4.5 for examples and discussion.

4.5 Adjectives

4.5.1 Inventory of modifying adjectives

This section presents the forms of postnominal modifying adjectives, but looks ahead to the analysis of adjectival predicates (§11.4). For deadjectival verbs (inchoative and factitive) see §9.4.

Modifying adjectives immediately follow the noun. Four morphological types can be distinguished: simple adjectives with final vowel (§4.5.1.1), simple adjectives with final *ŋ* (§4.5.1.2), composite adjectives (§4.5.1.3), and participles with suffix *-na* (§4.5.1.4). Some adjectival stems including the three basic color terms (‘black’, ‘white’, ‘red’) occur in both simple and participial form.

N-Adj combinations undergo tonal ablaut similar to that in N-N compounds. See §6.3.1 for details.

4.5.1.1 Simple vowel-final modifying adjectives

As shown in detail in §6.3.1.1, N-Adj combinations are subject to tonal ablaut that affects both the noun and the adjective. Nouns of /H/, /L/, /HL/, and /LHL/ melodies merge as H-toned before an adjective, but the adjective takes two different tonal forms that indirectly express the lexical melody of the noun.

(219) presents some basic adjectives and shows their forms as modifiers after /H/-melodic nouns and after nouns of other melodies. (219) also presents the stative predicate ‘it is ___’ if there is one. The (positive) stative predicate is preceded only by a subject, and subject-verb combinations follow the tonal patterns for regular intransitive verbs. If there is no true stative predicate, a nominal predicate with *kélé* ‘be’ is shown if attested.

(219)	after /H/	otherwise	‘it is ___’	melody	gloss
a. monosyllabic, /H/ alternating with L, stative predicate with /HL/ or /L/ melody					
	méé	mèè	ā ‘mēè	/H(L)/	‘good’
	ɲáá	ɲàà	ā ɲàà	/H(L)/	‘nasty’
b. all-H versus HL, stative predicate with /H/ melody (tone-dropped after 3Sg)					
	hóró-ó	hórò-ò	ā ‘hòrò	/H/	‘difficult; expensive’
	húló-ó	húlò-ò	ā ‘hùlò	/H/	‘big, wide, spacious’
	kágáyí-í	kágáyì-ì	ā ‘kàgàyì	/H/	‘bitter’ (~ kágáyí-ná)
c. all-H versus HL, stative predicate with /HL/ melody (M-terraced after 3Sg)					
	nógó-ó	nógò-ò	ā ‘nōgò	/HL/	‘easy; inexpensive’
	lúmá-á	lúmà-à	ā ‘lē ⁿ	/HL/	‘sweet, delicious; sharp’
d. all-H versus HL, take nominal predicates					
	ɲáɲánú-ú	ɲáɲánù-ù	ā ‘kèlè ʔɲáɲánù-ù	/L/	‘female; woman’
	hálú-ú	hálù-ù	ā ‘kèlé ʔhálù-ù	/H/	‘male; man’
	(gálú-ú after nasal)				
	fúgáárú-ú	fúgáárù-ù	ā ‘kèlè fúgáárù-ù	/HL/	‘weak; weakling’
	tórí-í	tórí-ì	ā ‘kèlè tórí-ì	/HL/	‘new’
e. all-H versus HL, combine with nouns					
	kíná-á	kínà-à	—	—	‘other’ (§4.5.1.3.3)
	ɲáɲánámá-á	ɲáɲánámà-à	—	—	‘alive; real; good (person)’

f. HL versus LHL, combine with nouns

báábírì-ì bààbírì-ì — — ‘fat, corpulent’

Those in (219e-f) require a noun and so do not form simple adjectival predicates (220).

- (220) a. ságá (ká-)kínà-à
 sheep other-Sg
 ‘another sheep’
- b. zàkí ‘kēlē ‘[ɲìní ɲàɲànamá-à]
 Z be.Cop [person good-Sg]
 ‘Zaki is a good person.’

4.5.1.2 Modifying adjectives with stem-final nasal

4.5.1.2.1 Uncompounded adjectives with stem-final nasal

The adjectives in (221) have bare stems ending in a nasal element in modifying function. When these adjectives are followed by another modifier, the nasal element is word-final and is pronounced as vocalic nasalization or as an assimilated nasal consonant, depending on the initial consonant of the following word. In the absence of a following modifier, these adjectives appear in the singular ending in ...ŋ-ɔ (with variable tone) or with an additional suffix in the plural with ...ŋ-ɔ-yèⁿ.

(221) presents these adjectives as NP-final modifiers after nouns of /H/ melody and “otherwise” (i.e. after nouns of other melodies). Stative predicates (‘it is ___’) are shown for comparison. The “melody” column is based on the predicate, if attested.

(221)	after /H/	otherwise	‘it is ___’	melody	gloss
a. H versus L (monosyllabic stems)					
	dúŋ-ɔ́	dùŋ-ɔ̀	ā dū ⁿ , à dū ⁿ	/HL/	‘deep’ (< Bambara)
	fíŋ-ɔ́	fìŋ-ɔ̀	—	—	‘black; dense (forest)’
	lájŋ-ɔ́	làŋ-ɔ̀	ā lā ⁿ , à lā ⁿ	/HL/	‘distant; long (time)’
	súŋ-ɔ́	sùŋ-ɔ̀	—	—	‘foreign, strange’
	tójŋ-ɔ́	tòŋ-ɔ̀	—	—	‘red, brown’
	hójŋ-ɔ́	hòŋ-ɔ̀	—	—	‘white; clean’
b. all-H versus HL					
	fáríŋ-ɔ́	fáříŋ-ɔ̀	ā ‘fàrí ⁿ	/H/	‘fearsome (fighter)’
	féŋújŋ-ɔ́	féŋùŋ-ɔ̀	ā ‘fêŋù	/H/	‘lightweight’
	nógójŋ-ɔ́	nógòŋ-ɔ̀	ā ‘nōgò, à nógò	/HL/	‘easy; inexpensive’
	láj-gújŋ-ɔ́	láj-gùŋ-ɔ̀	ā là-gù ⁿ	/L-HL/	‘fast, rapid’

tígèŋ-ó	tígèŋ-ò	ā 'tìgè ⁿ	/H/	'heavy'
dúúnéŋ-ó	dúúnéŋ-ò	ā 'dūūnè ⁽ⁿ⁾ , à dúúné ⁽ⁿ⁾	/HL/	'short'
kúúlèŋ-ó	kúúlèŋ-ò	ā 'kūūlè ⁿ , à kúúlè ⁿ	/HL/	'deep (well, water)'
móónòŋ-ó	móónòŋ-ò	ā 'mōōnò ⁽ⁿ⁾ , à móónò ⁽ⁿ⁾	/HL/	'long, tall'
túúlèŋ-ó	túúlèŋ-ò	ā 'tūūlè ⁿ , à túúlè ⁿ	/HL/	'nearby'
c. HL (unusual in having identical after-/H/ and other forms)				
lógòŋ-ò	lógòŋ-ò	ā 'lōgò ⁿ , à lógò ⁿ	/HL/	'small'
míèŋ-ò	míèŋ-ò	ā 'mīè ⁿ , à míè ⁿ	/HL/	'thin'
d. H*L				
gwéréŋ-ò	gwéréŋ-ò	—	—	'unripe (fruit)'
húbúŋ-ò	húbùŋ-ò	—	—	'fresh (meat, milk)'
e. H*L-L				
lávólòŋ-ò	lávólòŋ-ò	ā lāvólòŋ-ó 'rá-ní	/LHL/	'empty, bare'

4.5.1.2.2 Exemplar-based adjectives with -maŋ-ɔ

-maŋ-ɔ is a derivational suffix that is added to nouns that denote exemplars of a color (cf. English *orange*) to produce adjectives. The stem appears to favor a CvCv- template, requiring shortening of input vowels in the cases of 'yellow' and 'blue'. The tones are like those of Cvŋ-ɔ adjectives including fíŋ-ó/fiŋ-ò 'black'. One suspects that checking with additional speakers might show tones for 'blue' matching those for 'yellow' and 'green'.

(222)	after /H/	otherwise	as noun	gloss	source
a.	néré-mán-ó	néré-màn-ò	néré-màn-ò	'yellow'	néérè 'tree sp. (<i>Parkia</i>)'
b.	ɲúgú-mán-ó	ɲúgú-màn-ò	ɲúgú-màn-ò	'green'	ɲùgúŋ-ò 'amaranth'
c.	búlá-mán-ó	bùlà-màn-ò	bùlà-màn-ò	'blue'	búláá 'blue laundry detergent'

Compare -mán-ò in nominal compounds (§5.1.13).

4.5.1.3 Composite modifying adjectives

4.5.1.3.1 With 'big' as second element

húló-ó/húlò-ò 'big' may be added as a compound final to intensify adjectives that already denote an above-modal scalar value. Two examples have been recorded (223). The h of 'big' is hardened and voiced to g after a nasal (§3.4.2.4).

(223)	after /H/	otherwise	gloss
a.	fé ⁿ zèŋ-gúlò-ò	fé ⁿ zèŋ-gúlò-ò	‘very thick, massive (e.g. wall)’
b.	mó ⁿ nóŋ-gúlò-ò	mó ⁿ nòŋ-gúlò-ò	‘very long’

Plurals add -yèⁿ in the usual way.

4.5.1.3.2 With diminutive -nóŋ-ò or -hùŋ-ô as second element

The nominal diminutive is -nóŋ-ò, with bare-stem -nêⁿ before modifiers (§5.1.11.1). It can be added as an intensifier to adjectives that already denote a low scalar value (224a-b). For the variants in (224c-d) see below.

(224)	after /H/	otherwise	gloss
a.	ɲíí ⁿ é-nóŋ-ò	ɲíí ⁿ è-nóŋ-ò	‘small’
b.	dúú ⁿ é-nóŋ-ò	dúú ⁿ è-nóŋ-ò	‘very short’
	mí ⁿ é-nóŋ-ò	mí ⁿ è-nóŋ-ò	‘very thin’
	másá ⁿ -nóŋ-ò	másà ⁿ -nóŋ-ò	‘very lightweight’
c.	mí ⁿ -hùŋ-ô	mí ⁿ -hùŋ-ô	‘very small, very thin’
d.	mí ⁿ -hú ⁿ -nóŋ-ò	mí ⁿ -hù ⁿ -nóŋ-ò	‘extremely thin’

In (224a), the initial does not otherwise occur so the constructional relationship between initial and final is opaque. ɲííⁿé- has some classic diminutive sound-symbolic elements (front vowels, palatal nasal).

In (224b), -nóŋ-ò strengthens adjectives that already denote a below-modal scalar value. One of the base adjectives in (224b) is míⁿéŋ-ô ‘thin’, also ‘small, minute’ (in any dimensions). In (224c), -nóŋ-ò is replaced by an otherwise unattested element -hùⁿ, with no clear difference in meaning. The two elements are combined in (224d), which is the most strongly diminutive form.

4.5.1.3.3 Other composite adjectives

The list is (225); see comments below.

(225)	after /H/	otherwise	gloss
a.	húʒ ⁿ -hóró-ó	húʒ ⁿ -hòrò-ò	‘very hard (seed, wood, metal)’
b.	lógó-lúmá-á lógó-só-ná-á	lógó-lúmà-à lógó-só-nà-à	‘talkative (person); sharp (blade)’ ‘blunt (blade); (person) unable to taste spices; (person) who speaks awkwardly’
c.	lá-múŋ-ò lá-gúŋ-ò lá-gúléŋ-ó	là-múŋ-ò lá-gùŋ-ò lá-gúlèŋ-ò	‘slow’ ‘fast’ ‘fast’
d.	ká-kíná-á	ká-kínà-à	‘other’

The compound in (225a) describes something that is too hard to chew, too hard to bend, etc. The initial is húʒⁿ ‘bone’ and the final is hóró ‘difficult’.

In (225b) the initial is lógó-ó ‘mouth’, by extension ‘blade (of knife)’. The finals mean ‘sweet, good-tasting’ and ‘foul, bad-tasting’, respectively. The initial la- in (225c) is distantly related to lógó-ó ‘mouth’ and more directly related to its near-synonym lágà-à ‘mouth’ (in some phrases). Here la- is added to a form of ‘cold’ to produce ‘slow’, and to a form of ‘hot’ to produce ‘fast’. See also the composite verbs with la- in §9.5.4.

In (225c), ká- is a seemingly meaningless extension of kíná/kínà ‘other’, which can also occur without ká-.

See also the bahuvrihi compounds in §5.2 below.

4.5.1.4 Participles as modifying adjectives

The deverbal participial suffix is -na, of variable tone. Many modifying adjectives are participial in form. In some cases this morphology makes sense since the quality is the result of a process, hence glosses like ‘emaciated’ and ‘well-nourished’ in the rightmost column in (226). In the ‘it is’ (stative predicate) forms, the singular suffix is absent.

Basic color terms have participial forms shown in (226a) alongside the shorter forms presented in §4.5.1.2.1 above. The tonal patterns of other participles are exemplified in (226b). As modifiers, participles of H-initial melody (/H/ or /HL/) appear as all-H following /H/-melodic nouns, but as H*-L with just the participial suffix L-toned after nouns of other melodies. /H/-melodic participles are downstepped to ʹM after há ‘be’, here 3Sg à hà ‘it is ___’. /LHL/-melodic participles appear as H*-L after /H/-melodic nouns and as L*H-L after nouns of other melodies.

(226)	after /H/	otherwise	‘it is ___’	melodygloss
a. color				
<i>/H/ melody</i>				
	cwáá-ná-á	cwáá-nà-à	à há ‘cwāā-nā	/H/ ‘red, brown’
	hóó-ná-ná-á	hóó-ná-nà-à	à há ‘hōō-nā-nā	/H/ ‘white, clean’
<i>/HL/ melody</i>				
	[fí-ná] -ná-á	fí-ná-nà-à	à hà fí-ná-nà	/HL/ ‘black, dark; dense (forest)’
b. other (not iterative)				
<i>/H/ melody</i>				
	fágí-ná-á	fágí-nà-à	à há ‘fāgī-nā	/H/ ‘full; well-nourished (animal)
	fónjé-ná-á	fónjé-nà-à	à há ‘fōnjē-nā	/H/ ‘rotten’
	húmá-ná-á	húmá-nà-à	à há ‘hūmā-nā	/H/ ‘lean, emaciated’
	kágáyí-ná-á	kágáyí-nà-à	à há ‘kāgāyī-nā	/H/ ‘bitter’ (also kágáyí)
	kílé-ná-á	kílé-nà-à	à há ‘kīlē-nā	/H/ ‘straight’
	kógó-ná-á	kógó-nà-à	à há ‘kōgō-nā	/H/ ‘robust, stocky’
	mósó-ná-á	mósó-nà-à	à há ‘mōsō-nā	/H/ ‘ripe; cooked, done’
	súré-yá-ná-á	súré-yá-nà-à	à há ‘sūrē-yā-nā	/H/ ‘old (person, thing)’
	táándá-ná-á	táándá-nà-à	à há ‘tāāndā-nā	/H/ ‘tightly stretched (rope, chain)’
	wálangá-ná-á	wálangá-nà-à	à há ‘wālāngā-nā	/H/ ‘lukewarm’
<i>/H/ melody (slightly irregular)</i>				
	gwéré-ná-á	gwéré-nà-à	à há ‘gwērē-nā	/H/ ‘unripe (fruit)’
<i>/LHL/ melody</i>				
	fùré-nà-à	fùré-nà-à	à há fùré-nà	/LHL/ ‘wet; green (firewood)’
	gógí-nà-à	gògí-nà-à	à há gògí-nà	/LHL/ ‘dry, hard, coarse, rough’
	húbú-nà-à	hùbú-nà-à	à há hùbú-nà	/LHL/ ‘fresh (meat, fish, milk)’
	lámóó-nà-à	là mòó-nà-à	à há là mòó-nà	/LHL/ ‘polite (child)’
	lávágá-nà-à	là wàgá-nà-à	à há là wàgá-nà	/LHL/ ‘second-hand, used’
	màráá-nà-à	màráá-nà-à	à há màráá-nà	/LHL/ ‘well-behaved’
	nógó-ná-à	nògó-nà-à	à há nògó-nà	/LHL/ ‘dirty’
	núgú-nà-à	nùgú-nà-à	à há nùgú-nà	/LHL/ ‘smooth, sleek’
	jàgégé-nà-à	jàgégé-nà-à	à há jàgégé-nà	/LHL/ ‘marked, branded’
	pásá-nà-à	pàsá-nà-à	à há pàsá-nà	/LHL/ ‘lean, emaciated’ (< Bambara)

/HL/ melody

fóróhí-ná-á	fóróhí-nà-à	à hà fóróhí-nà	/HL/	‘loose, slack (rope); watery, mushy’
jéngé-ná-á	jéngé-nà-à	à hà jéngé-nà	/HL/	‘crooked, curved’
kúmú-ná-á	kúmú-nà-à	à hà kúmú-nà	/HL/	‘sour; over-fermented (beer)’
múná-ná-á	múná-nà-à	à hà múná-nà	/HL/	‘cold’
ngóólí-ná-á	ngóólí-nà-à	à hà ngóólí-nà	/HL/	‘curved’
só-ná-á	só-nà-à	à hà sónó-nà	/HL/	‘foul; inept; defective’
tóró-ná-á	tóró-nà-à	à hà tóró-nà	/HL/	‘fatty, plump’
(variants with tóré-)				
<i>mixed</i>				
dátú-nà-à	dátú-nà-à	à hà dátú-nà à dátù	mixed	‘undiluted, full-strength’

c. iterative

/H/ melody

jéngé-jéngé-ná-á	à há ‘jéngé-jéngé-nā	/H/	‘multicolored’ (blotched, striped, etc.)
jéngé-jéngé-nà-à			

4.6 Numerals

4.6.1 Cardinal numerals

The numeral system is mainly based on ‘10’, with traces of base ‘40’.

4.6.1.1 ‘One’ (kénèèⁿ, sáánà), bòlò-ò ‘(the) other (one)’

‘1’ is kénèèⁿ, optionally voicing to génèèⁿ after a nasal. The vowel length of the final syllable is variable. For -kénèè-ò in bahuvrihi compounds, see §5.2.1.2.

kénèèⁿ occurs both postnominally (attributively) as in (227a) and absolutely as in (227b-c). kénèèⁿ is usually replaced by sáánà in the counting recitation (§4.6.1.3). For distributive kénèè-
kénèèⁿ ~ kénèè-ⁿgénèèⁿ with meanings like ‘at times, now and then’, see §4.6.1.7 and §6.4.1.1.

(227) a. sùbàà kénèèⁿ
chicken **one**
‘one chicken’ (< sùbáà)

b. kénèén ‘l55 [á ‘là]
one give.Ipfv [3Sg Dat]
‘Give him/her one!’

4.6.1.2 ‘2’ to ‘10’ as postnominal modifiers

These numerals are of either /H/ or /HL/ melody. The forms shown in (230) are postnominal in the tonal form they have after /H/-melodic nouns. If the noun is of a different melody, there are idiosyncratic tonal-ablaut interactions between noun and numeral (§6.4.1.2).

(230) gloss	form	melody
‘2’	fíénú	/H/
‘3’	ʃííyò	/HL/
‘4’	náánà	"
‘5’	kólóhò	"
‘6’	túúmì	"
‘7’	jéénì	"
‘8’	ségí ⁿ	/H/
‘9’	kááfì	/HL/
‘10’	tá ⁿ	/H/

For numerals in bahuvrihis (e.g. ‘two-headed’), see §5.2.1.2.

4.6.1.3 ‘1’ to ‘10’ in the counting recitation

In the counting recitation (‘1, 2, 3, ...’) and in tallying, the numerals have the same forms given above, except that sáánà often suppletes kénèèⁿ ‘1’.

(231) counting recitation

gloss	form	tones
‘1’	sáánà	HL
"	or: kénèè ⁿ	HL
‘2’	fíénú	H
‘3’	ʃííyò	HL
‘4’	náánà	"
‘5’	kólóhò	"
‘6’	túúmì	"
‘7’	jéénì	"
‘8’	ségí ⁿ	H
‘9’	kááfì	HL
‘10’	tá ⁿ	H

4.6.1.4 Decimal multiples ('10', '20', ...) and composites ('11', '59', ...)

The multiples of '10' are in (232). *lébè* '40' is the only unsegmentable form. This is a vestige of a partial 40-base system that is otherwise masked by Bambara loanwords in Kelenga but that is better preserved in Jenaama-Sorogaama. *máníngèmè* '60' has a compound-like tone melody, reflecting its origin as "Mande-hundred" in Bambara. '20' and '30' consist of variants of the numeral '2' or '3' following *táⁿ*- '10' (compare English *-ty* in *twenty* etc.). The odd-numbered decimal terms '50' and '70' add "and 10" to the preceding decimal. Before /H/-melodic numerals and before *kénèèⁿ* '1', the conjunction 'and' takes H-toned form *kí* and tone-drops or downsteps the following numeral. '80' and '90' and an alternative form for '40' are Bambara borrowings and likely replaced traditional terms that are no longer in use.

(232)	<i>táⁿ-víné</i>	20	"ten-two"
	<i>táⁿ-zúgó</i>	30	"ten-three"
	<i>lébè</i>	40	
	or: <i>bí-nààni</i>	"	< Bambara "ten-four"
	<i>lébè [kí 'tàⁿ]</i>	50	"forty and ten"
	<i>máníngèmè</i>	60	< Bambara "Mande-hundred".
	<i>máníngèmè [kí 'tàⁿ]</i>	70	"sixty and ten"
	<i>bí-'sègìⁿ</i>	80	< Bambara "ten-eight"
	<i>bí-kónndòⁿ</i>	90	< Bambara "ten-nine"

Combinations of decimal terms with digits are regular in form, with "and (digit)" added to the decimal term. (233) illustrates with *kénèèⁿ* '1' as the digit.

(233)	'11'	<i>tàŋ [gí 'kēnèèⁿ]</i>
	'21'	<i>táⁿ-víné [kí 'kēnèèⁿ]</i>
	'31'	<i>táⁿ-zúgó [kí 'kēnèèⁿ]</i>
	'41'	<i>lébè [kí 'kēnèèⁿ]</i>
	'51'	<i>lébè [kí 'tàŋ] [gí 'kēnèèⁿ]</i>
	'61'	<i>máníngèmè [kí 'kēnèèⁿ]</i>
	'71'	<i>máníngèmè [kí 'tàŋ] [gí 'kēnèèⁿ]</i>
	'81'	<i>bí-'sègìŋ [gí 'kēnèèⁿ]</i>
	'91'	<i>bí-kónndòŋ [gí 'kēnèèⁿ]</i>

Likewise e.g. *tàŋ gí 'kōlōhò* '15', *lébè kí 'sīyò* '43'.

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

The stems denoting hundreds and higher quantities are somewhat noun-like morphosyntactically but do not normally take the singular suffix.

Hundreds are presented in (234). There is an irregular form for ‘100’ and an H-toned contracted form for ‘200’. From ‘300’ to ‘900’, hundreds are expressed by *kèmè* plus a digit. *kèmè* is treated tonally as a modified noun, so it raises to *kémé* before /H/-melodic numeral (*séǵí* ‘8’), cf. *fálá* ‘sēǵí’ ‘eight eggs’ from *fàlà-à* ‘egg’ (§6.4.1.2).

(234)	<i>kéérúmá</i> ~ <i>céérúmá</i>	‘one hundred’
	<i>ké-fénú</i>	‘two hundred’
	<i>kèmè-ǵíyò</i>	‘three hundred’
	<i>kémé-‘sēǵí</i> ⁿ	‘eight hundred’

The forms in (234) can be added without change to /H/-melodic nouns like *sógó* ‘goat’. Nouns of other melodies are raised to all-H, in the fashion of N-Adj ablaut, but induce tonal changes on the numerals. *sàgà* ‘sheep’ is raised to *ságá* in *ságá* ‘*kèèrùmà*, and in *ságá* ‘*kè-fènù*. Oddly, it is L-toned in *sàgà* ‘*kémè-ǵíyò* ‘three hundred sheep’, where the first syllable of the numeral is tone-raised. In effect, the expected H-tone on *sàgà* is realized on the first syllable of the following numeral.

‘Thousand’ is *gúlú* (235).

(235)	<i>gúlú kénèè</i> ⁿ	‘one thousand’
	<i>gúlú fíénú</i>	‘two thousand’
	<i>gúlú ǵíyò</i>	‘three thousand’

When the modifier of ‘thousand’ is high, e.g. ‘40’ or more, the numeral can shift to Bambara, e.g. *wáá bínààni* ‘forty thousand’.

Addition of a modified noun of /L/ or /H/ melody does not affect the tones of the ‘thousand’ numerals (236a). Nouns of melody /LHL/ (236b) and /HL/ (236c) spread their H to the boundary and downstep ‘thousand’ to ‘*gūlū*’.

(236)	a.	<i>sàgà gúlú kénèè</i> ⁿ	‘one thousand sheep’ (<i>sàgà-à</i>)
		<i>sógó gúlú kénèè</i> ⁿ	‘one thousand goats’ (<i>sógó-ó</i>)
	b.	<i>jàbá ‘gūlū</i> ‘ <i>kénèè</i> ⁿ	‘one thousand onions’ (<i>jàbá-à</i>)
	c.	<i>básá ‘gūlū</i> ‘ <i>kénèè</i> ⁿ	‘one thousand agamas’ (<i>básà-à</i>)

*mílyó*ⁿ ‘million’, singular *mílyóŋ-ó*, is from French, as throughout the zone (237a). When a modified noun is added, the noun is raised to all-H, as in N-Adj combinations, but the initial tone of the nominal melody determines the tone of ‘million’. The latter appears as *milyò*ⁿ after /L/- and /LHL/-melodic noun (237b), as *mílyó*ⁿ after /H/- and /HL/-melodic noun (237c).

- (237) a. mílyóŋ gɛ̀nɛ̀ɛ̀ⁿ ‘one million’
 b. ságá mìlyòŋ gɛ̀nɛ̀ɛ̀ⁿ ‘one million sheep’ (sàgà-à)
 jábá mìlyòŋ gɛ̀nɛ̀ɛ̀ⁿ ‘one million onions’ (jàbá-à)
 c. sógó mílyóŋ gɛ̀nɛ̀ɛ̀ⁿ ‘one million goats’ (sógó-ó)
 básá mílyóŋ gɛ̀nɛ̀ɛ̀ⁿ ‘one million agamas’ (bàsà-à)

In more complex numerals, the decimal term sometimes precedes the hundreds term (238a), but in most examples the order is larger units and then smaller units (238b).

- (238) a. sàgà lébè [kí ‘kè-fènù]
 sheep forty [and hundred-two]
 ‘two hundred and forty sheep’
 b. ságá ‘kè-fènù [kí ‘lɛ̀bè]
 sheep hundred-two [and forty]
 [= (a)]

4.6.1.6 Currency

As in all languages of the zone, currency is calculated by means of a currency unit that is equivalent to five CFA francs. Thus ‘one thousand FCFA’ is expressed as ‘two hundred (units)’. The unit is called *dórómè* in Kelenga, as in Bambara. The smallest coin is for 5 FCFA.

Most actual occurrences of higher numerals from ‘100’ up in everyday speech are references to money. *dórómè* is usually omitted when money is understood to be the topic, for example in market transactions.

The 5000 FCFA banknote is called *silàamí* ‘gūlū kɛ̀nɛ̀ɛ̀ⁿ ‘Muslim’s one thousand’ or *silààmè-yà-á* ‘gūlū ‘kɛ̀nɛ̀ɛ̀ⁿ ‘Muslimhood’s one thousand’ especially among older speakers. *silàamí* here is slightly specialized from *silààmé-è* (archaic *silààmá-à*) ‘Muslim (person)’. The 10000 FCFA banknote is then *silààmè-yà-á* ‘gūlū ‘fīēnū. Younger speakers generally drop the ‘Muslim(hood)’ term.

4.6.1.7 Distributive iteration of numerals

Numerals are iterated to form distributive adverbs: ‘two each’, ‘two by two’, ‘two at a time’, etc. The forms for the basic numerals are in (239). They can be postnominal modifiers, but are often syntactically separate, as adverbs.

(239)	gloss	digit	distributive
	‘1’	kénèè ⁿ	kénèèṅ-kénèè ⁿ ~ kénèèṅ-génèè ⁿ
	‘2’	fíénú	fíénú-fíénú
	‘3’	ḡíyò	ḡíyò-ḡíyò
	‘4’	náánà	náánà-náánà
	‘5’	kólóhò	kólóhò-kólóhò
	‘6’	túúmì	túúmì-túúmì
	‘7’	jéénì	jéénì-jéénì
	‘8’	ségí	ségí-ségí
	‘9’	kááfì	kááfì-kááfì
	‘10’	tán	tán-tá ⁿ ~ tán-dá ⁿ
	‘20’	tá ⁿ -víné	[tá ⁿ -víné]-[tá ⁿ -víné]
	‘40’	lébè	lébè-lébè

fíénú-fíénú ‘two by two’ occurs in 2021-01 @ 02:21.

Complex numerals other than ‘20’ and ‘30’ that end in a clearly recognizable digit term usually just iterate this digit term (240).

(240)	a.	lébè [kí ‘tàn-‘dà ⁿ]	‘fifty by fifty’
	b.	tán [gí kénèèṅ-génèè ⁿ]	‘eleven by eleven’

Alternatively, the full complex numeral can be iterated. See also interrogative jénì-jénì ‘how much/many each?’ (§13.2.2.7).

When an iterative distributive modifies a noun, tonal processes that apply between noun and numeral are implemented and feed into the tonal form of the iteration. Thus hòḍ ~ hòḍ ‘house’, hóḥ ‘fíēnū ‘two houses’, hóḥ ‘fíēnū-‘fíēnū ‘two houses each, two houses at a time’, compare nonmodifying distributive fíénú-fíénú ‘two each, two at a time’.

4.6.2 Ordinal adjectives

Ordinals derived from numerals are presented below.

4.6.2.1 ‘First’ (fánáá) and ‘last’ (lávágà-à ~ làwágà-à)

fánáá ‘first’ is a suppletive ordinal adjective (compare English *first* and many other parallels). It is also a noun or adverb meaning ‘(in) the past, (in) the old days’. It is also the basis for iterative adverb fánáá-fánáá ‘before, previously’. Its antonym is lávágà-à ~ làwágà-à ‘last’. The usual tonal interactions of N-Adj combinations are observed (241).

(241)	noun	gloss	‘first’	‘last’
a.	nàà jàbá-à	‘cow’ ‘onion’	náá fánàà jábá fánàà	náá làwágà-à jábá làwágà-à
b.	sógó-ó bàsà-à	‘goat’ ‘agama’	sógó fánáá básá fánáá	sógó làwágà-à básá làwágà-à

While kénèèⁿ ‘1’ is not the morphological basis for ‘first’, it is the basis for ordinals like ‘eleventh’ (see the following section).

(242) presents positive predicate forms of ‘be first/last’. This is the regular copula construction with kélé.

(242)	a.	zákì Z ‘Zaki is first.’	kélé be.Cop	‘fānāā first
	b.	zákì Z ‘Zaki is last.’	kélé be.Cop	làwágà-à last-Sg

4.6.2.2 Other ordinals (-ná-á)

Other ordinals are formed by adding -ná-á (plural -náá-yè) to the numeral. After nouns of other than /H/ melody, the final syllable or monosyllabic mora of the numeral stem itself drops to L-tone before -ná-á (243a,d). In composite numerals that have two recognizably distinct numeral stems, with or without intervening kí ~ gí ‘and’, the entire second numeral drops to all-L (243b-c).

(243)	after /H/	otherwise	gloss
a.	from single-digit numeral		
	fíénú-ná-á	fíénù-ná-á	‘second’
	jíyó-ná-á	jíyò-ná-á	‘third’
	nááná-ná-á	náánà-ná-á	‘fourth’
	kólóhó-ná-á	kólóhò-ná-á	‘fifth’
	túúmí-ná-á	túúmì-ná-á	‘sixth’
	jééní-ná-á	jéénì-ná-á	‘seventh’
	ségí-ná-á	ségì-ná-á	‘eighth’
	kááfí-ná-á	kááfì-ná-á	‘ninth’
	tá ⁿ -ná-á	tâ ⁿ -ná-á	‘tenth’

b. decimal	tá ⁿ -víné-ná-á	tá ⁿ -vìnè-ná-á	‘twentieth’
c. decimal plus single-digit numeral	táŋ-gí-kéné-ná-á	táŋ-gí-kènè-ná-á	‘eleventh’
	táŋ-gí-túmí-ná-á	táŋ-gí-tùmì-ná-á	‘sixteenth’
d. hundred	céérúmá-ná-á	céérúmà-ná-á	‘hundredth’

Ordinals are treated like other adjectives in N-Adj tonal ablaut. Examples are sógó jííyó-ná-á ‘third goat’ and ságá jííyó-nà-à ‘third sheep’ from sógó-ó and sàgà-à, respectively.

Ordinals can be used absolutely (without a noun). In this case the variant used is that with an L-tone, as in the “otherwise” column in (243).

The interrogative is jénì-ná-á ‘how-manieth?’ (§13.2.2.7).

4.6.3 Fractions and portions

‘Half’ is téré-é. It can occur alone (with understood partitive), or with an overt possessor or compound initial denoting the partitive as in wárí-í ‘tèrè-è ‘half of the money’, nàà-yén ‘tèrè-è ‘half of the cows’ (< nàà-yèⁿ), mááŋgòró-ó ‘tèrè-è ‘half of a/the mango’, and simple pronominal ā ‘tèrè-è ‘half of it’. téré-é can refer to the split half of a nut, or the cut half of a fruit such as a watermelon.

Also relevant is húŋgúrùŋ-ô ‘piece (of meat, fabric, etc.)’ or ‘shard (of calabash, pottery)’

5 Nominal and adjectival compounds

5.1 Nominal compounds

Most Kelenga noun-noun compounds are of the tone-leveled type, which have the tonal form of N-Adj combinations. Possessor-possessum type compounds are usually transparent and weakly lexicalized. Some compounds, mostly borrowed from Bambara, have independent tone patterns on initial and final.

5.1.1 Nasal linker between initial and final

Rarely, a compound has an apparent nasal linker between initial and final. This is not common in Kelenga and it tends to occur in compounds whose final also has a nasalized vowel. Except in ‘head’ the nasal linker is inconsistently pronounced.

(244)	compound	gloss	recognizable components
	ʃáá ⁻ⁿ -hóò ⁿ	‘head’	ʃáà ‘size’
	kírí ⁻ⁿ -húó ⁿ	‘arm bones’	kírí-í ‘hand, arm’

5.1.2 Tripartite and larger compounds

Compounding is recursive. A simple N₁-N₂ or similar compound may itself function as the initial or the final in a tripartite compound, and so on.

If the component nouns are identifiable, the complex compound can usually be bracketed as either [N₁-N₂]-N₃ or N₁-[N₂-N₃] based on the meaning of the complex compound. If, as in most cases, the complex compound is of tone-leveled type, the lexical tone melody of N₁ determines that of the complex compound regardless of bracketing.

(245) a.	jírí-[náṅá-júú]	‘tree sap’
	jírí-í	‘tree’
	náṅá-júú	‘tears’
	náṅá-á	‘eye(s)’
	júú	‘water’

b.	[súbáá-kú ⁿ]-hánámà-à	‘genet (mammal)’
	súbáá-kú ⁿ	‘chicken-catching’
	sùbàà	‘chicken’
	kú ⁿ	‘catch (v); catching (n)’
	hánámá-á	‘predatory wild animal’
c.	[máá-hòò]-jínì-ì	‘maternal kinsman’
	máá-hòò	‘mother-house’ (=maternal kin)
	màà	‘mother’
	hòò	‘house’
	jíní-í	‘person’

5.1.3 Possessor-possessum as quasi-compound

In possessor-possessum combinations, the possessor retains its lexical tones (except for minor tone sandhi adjustments) and the possessum undergoes some tonal ablaut changes (§6.2.3). The effect is quite different from tone-leveled compounds, where the initial is always level H regardless of its lexical melody. In addition, possessors readily take singular and plural suffixes, while initials in tone-leveled compounds are not pluralizable.

Only a handful of possessor-possessum combinations arose in elicitation of several hundred flora-fauna terms, or showed up in subsequent general lexical study.

In (246a), the initial has its singular suffix and has a contour tone. In (246b), the initial is a plural noun.

(246)	compound	gloss
a.	kúújì-í	‘knob-billed goose (<i>Sarkidiornis</i>)’
	kúújì-ì	‘spur-winged goose (<i>Plectropterus</i>)’
	màà	‘mother’
	tòndórò-ò	‘appendage’ (?), cf. táá-tòndólì-ì ‘heel’
b.	hònòṅ-ḍ-yém	‘drinking trough for domestic birds’
	hònòṅ-ḍ-yè ⁿ	‘birds’
	bàzég-ḍ	‘basin’ (< French <i>bassin</i>)

See also §5.1.7.1 below on verbal-noun compounds.

5.1.4 Compounds borrowed from Bambara

A number of compound-like nouns have tones that do not obey the productive Tone-Leveling rule for compounds and are not possessor-possessive compounds. These are entirely or partially

borrowed from Bambara. Some initials have Cv- shapes which are subminimal for nouns in Kelenga. Although these compounds are at least partially borrowed, they are in common use and can take Kelenga singular and plural affixes.

(247)	bàníŋ-gòndó-ò	‘Abdim’ stork’ (“ <i>Ceiba</i> .tree-bird”)
	bèlè-kílì-ì	‘testicle (ball)’
	dà-kúmù-ù	‘green roselle calices (for sauce)’
	sùù-kòláj-ò	‘basil’ (“corpse-wash”)
	kàmà-húò ⁿ	‘shoulder’ (initial < Bambara)
	kó-méŋú-ú	‘doorlock’ (initial < Bambara)
	kòó sàfínè-è	‘liana sp. (<i>Cajanus</i>)’ (“wash-soap”, initial < Bambara)

5.1.5 Tonally irregular compounds (mostly L-HL)

Compounds that are neither possessor-possessum combinations nor tone-leveled compounds (with H-toned initial) are considered here. They are highly lexicalized and likely archaic.

Several of these compounds are of the general tonal type L-HL (§5.1.5.1-8). This is unproductive and archaic in Kelenga. By contrast, in JSDj the combination of an initial of /L/ or /LH/ melody with a final of any contour melody regularly produces an L-HL compound.

Some other irregular compounds have some tonal affinities to possessor-possessum combinations, though the initial does not have full possessor form (§5.1.5.9-10).

5.1.5.1 With -húòⁿ as final

húòⁿ ‘bone’ is a common compound final (‘back-bone’, ‘thigh-bone’, etc.). Its partly unpredictable tones as final in such compounds are attributable to ambiguity as to whether it is mono- or bisyllabic (§3.1.1.3).

Here the focus is on a different issue. There are two L-HL compounds with this noun (or a homophone) as final that denote spatial regions (248).

(248)	a.	hàbàà-húò ⁿ	‘sky’
		hàbàà	‘cloud’
	b.	nòŋómà-húò ⁿ	‘ground, land’
		nòŋómà	‘(on) the ground’

5.1.5.2 With húlò-ò ‘big’ as final

húlò-ó ~ húlò-ò ‘big’ is a productive modifying adjective, as in hábáá-júú húlò-ò ‘big storm’. Here the focus is on two lexicalized, compound-like combinations with L-HL tone patterns.

‘Chopping ax’ appears to have the same final. The initial may be etymologically related to another verb, *ságà-là* ‘dig’. However, this particular ax is not normally used for chopping into the earth, and the compound formation is rather opaque.

5.1.5.6 *nùṅù-tígì-ì* ‘village chief’

Another tonal minimal pair is in (252).

- (252) a. *núnú-tígí-í* ‘pregnant woman’
 b. *nùṅù-tígì-ì* ‘village chief’

Both compounds have *-tigi-i* ‘owner’ as the final (§5.1.12). The compound in (252) shows regular Tone-Leveling. Its initial is related to that of *núnú-bàrà-à* ‘belly’, whose final is obscure (cf. JSDj uncompounded *nùùⁿ* ‘belly’ < **nùṅù*), and more distantly to the postposition *nìṅî* ‘inside’ (< **nùṅú-ỳ* with locative ending).

‘Village’ is *nùṅù-ù* (cognate to JSDj *nògù*). For ‘village chief’ the regular tonal output should be #*núnú-tígì-ì*. Instead it is the irregular, and likely archaic, *nùṅù-tígì-ì*, perhaps frozen in that form to reduce any unfortunate confusion with ‘pregnant woman’.

5.1.5.7 *tègè-jábà-à* ‘wild onion’

Wild liliaceous plants that have inedible onion-like corms are called “pig-onion.” The most common one in the zone is probably *Crinum ornatum*. The initial is *tégé-é* ‘pig’ and the final is *jábà-à* ‘onion’. There are two tonal variants.

- (253) a. *tégé-jábà-à* ‘wild onion’
 b. *tègè-jábà-à* ‘wild onion’

Example (253b) shows an overlaid L-HL tone pattern. (253a) approximates a possessor-possesum combination, whose result tonal form would be #*tégé-jábà-á*.

5.1.5.8 Time term (initial) plus human noun (final)

Nouns denoting time periods like *wéè* ‘today’, *jéè* ‘tomorrow’, and *dúgò-nì* ‘yesterday’ can function as initials in compounds with such senses as ‘today’s X’ (i.e. ‘modern X’). For ‘today’ and ‘tomorrow’, the singular compounds belong to the regular tone-leveled type. For basic human nouns that have slightly irregular plurals ending in *eeⁿ* or *εεⁿ* (§4.1.1.4), the plurals have L-toned initial, followed by HL or HLHL on the noun. This follows the L*HL tone pattern of the uncompounded plurals themselves, observable in full form in *bòlò-méèⁿ* ‘young people’ and *nàṅà-léèⁿ* ‘women’.

(254)	singular	plural	gloss
a.	wéé-hálù-ù	wèè-há-lèè ⁿ	‘man of today, modern man’
b.	wéé-ṅánà-ù	wèè-ṅánà-léè ⁿ	‘woman of today, modern woman’
c.	wéé-ṅínì-ì	wèè-ṅínì-rèè ⁿ	‘person of today, modern person’
d.	wéé-bóló-mèè	wèè-bólò-mèè ⁿ	‘young person of today’

Likewise, with ‘tomorrow’ as initial, *ḡéé-hálù-ù* ‘man of tomorrow’ with plural *ḡèè-há-lèèⁿ* and so forth.

5.1.5.9 Compounds with *ḡî* ‘seedstock’ as final

These compounds preserve the tone melody of the initial, except that /LHL/ levels to all-L. The tones are not compatible with Tone Leveling. On the other hand, the initial is in bare stem rather than singular form, as shown unambiguously by ‘millet’ seedstock, so these are not true possessor-possessum compounds.

(255)	compound	gloss	initial
a.	after /H/ melody <i>mááṅó-ḡî</i>	‘maize seedstock’	<i>mááṅó-ó</i> ‘maize’
b.	after /L/ melody <i>màànù-ḡî</i> <i>jòṅ-ḡî ~ -ḡî</i>	‘rice seedstock’ ‘millet seedstock’	<i>màànù-ù</i> ‘rice’ <i>jòṅ-ô</i> ‘millet’
c.	after /HL/ melody [<i>méné-ménè</i>]- <i>ḡî</i>	‘sesame seedstock’	<i>méné-ménè-è</i> ‘sesame’
d.	after /LHL/ melody <i>bìmbìrì-(-ⁿ)-ḡî</i>	‘brown sorghum seedstock’	<i>bìmbìrì-ì</i> ‘brown sorghum’

5.1.5.10 Compounds with *-móṅ(-)ó* ‘manner’ as final

The noun *kírì-ì* ‘manner’ can be a compound final, as in *ḡwéé-kírì-í* ‘dance style’, where it is added to a bare verbal noun. However, there is another stem *-móṅ-ó*, attested only as compound final, that can have a similar meaning.

After verbal nouns denoting spending a part of the day or night, it denotes one of the daily meals (256). The verbs in question happen to be /H/-melodic, and the tones of the compounds respect Tone Leveling.

(256)	compound	gloss	verb related to initial
	a. kúró-móŋ-ó	‘lunch, mid-day meal’	kúró(-ló) ‘spend mid-day’
	b. ságá-móŋ-ó	‘supper, evening meal’	ságá(-lá) ‘lie down’ (reflexive)

After other verbal nouns, -móŋð means ‘manner’ (257). Whether it is segmentable as -móŋ-ð is discussed below. In the ‘manner’ examples, the tones are normalized as as -móŋð, and Tone Leveling. does not apply

(257)	a. after /H/-melodic verb		
	táá ⁿ -móŋð	‘method, way of doing’	táá ⁿ /táá-ná ‘do’
	bágí-móŋð	‘way of resembling’	bágí-ná [X fâà] ‘resembling X’
	b. after /HL/-melodic verb		
	ŋíŋì-móŋð	‘gait, way/style of walking’	ŋíŋì(-nì) ‘walk’
	c. after /LHL/-melodic verb		
	nùŋù ⁿ -móŋð	‘way of swimming’	nùŋù ⁿ /nùŋù-nù ‘swim’

The meal compounds (256) have bare stems ending in -móⁿ before adjectives, while the manner examples (257) have bisyllabic -móŋð. Regular N-Adj tonal ablaut (Tone Leveling) applies in both cases.

(258)	a. kúró-móm méé	‘good lunch’
	b. ŋíŋí-móŋð mèè	‘good gait’

This suggests that the final ɔ in -móŋð ‘manner’ might be part of the bare stem. However, the plural is -móŋð-yèⁿ as in ŋíŋì-móŋð-yèⁿ. If the bare stem were -móŋð we would expect lengthening of the final ɔ, as #-móŋð-ó-yèⁿ.

When -móŋð ‘manner’ is added to a transitive verb, a characteristic object can be incorporated. ‘Do’ lends itself to this construction (259).

(259)	a. ʃóó-táá ⁿ -móŋð	‘behavior’	ʃòð ‘thing (abstract)’
	b. báárá-táá ⁿ -móŋð	‘way of working’	báárá-á ‘work (n)’

-móŋð ‘manner’ is sometimes added to nouns other than verbal nouns. An example is ʃìèⁿ-móŋð ‘poisonous thing’. It occurs in the tonal form ʃíéⁿ-móŋð as a modifier in text 2021-01 @ 01:39.

5.1.6 Tone-leveled compounds

This is the productive N-N compound type in Kelenga. In most cases the final is the lexical and semantic head. In other words, most compounds are right-headed as in English: ‘back-bone’ is a kind of bone, not a kind of back. A wide range of common nouns, including place names and even rudimentary spatial PPs (§5.1.9), can function as initials. A wide range of semantic relationships between initial and final is observed. The initial may denote the whole versus a part (‘bird-foot’), a location, a time period, a function, or any associated entity other than an outright possessor.

The compound functions syntactically as a noun stem. The compound as a whole can fit into any construction where an uncompounded noun can occur. The compound final can take nominal suffixes (singular, plural). The initial cannot be independently pluralized or otherwise modified, except by compounding as in [N-N]-N.

The tones of both the initial and the final undergo tonal ablaut in the fashion of N-Adj combinations (§6.3.1.1). The initial is raised to all-H, erasing its lexical melody, but its tone melody is reflected in the tones of the final. The tones of the final depend on the lexical melody of the initial: /H/-melody versus all other melodies. The non-/H/ melodies could be described positively as those containing an L-tone, or as those that end in an L-tone. These definitions converge in practice, since /LH/ and /HLH/ melodies do not exist.

The compound as a whole may then undergo tonal ablaut (Downstep or Tone-Dropping) triggered by a word or particle to the left (§3.6.5.5.1).

5.1.6.1 Tones of vowel-final nouns as finals in tone-leveled compounds

Nouns that end in an oral vowel and that have /H/, /L/, or /HL/ melody (i.e. any melody that does not include an LH sequence) merge tonally as finals in tone-leveled compounds (260). They take all-H-toned form after initials of /H/ melody, so the entire compound is all-H-toned. They take the form (H*)L after initials of other melodies. (H*)L is realized syllabically as L, H.L, H.H.L, etc. depending on the number of syllables. The last syllable is L-toned (agreeing with the melodic L-tone of the initial), and any preceding syllables are H-toned.

(260)	noun	gloss	after /H/ melody	after other melody
a. /H/ melody				
	júú	‘liquid’	-júú	-jùù
	dúú	‘powder’	-dúú	-dùù
	húó ⁿ	‘bone’	-húó ⁿ	-hùò ⁿ
	húú-rú-ú	‘grub, larva’	-húú-rú-ú	-húúrù-ù
	fálátó-ó	‘orphan’	-fálátó-ó	-fálátò-ò

b. /L/ melody including C̀̀̀ ~ C̀̀̀̀ monosyllabics

tàà ~ tàâ	‘foot’	-táá	-tàà (-tàâ)
fàlà-à	‘egg’	-fálá-á	-fàlà-à
ɲàɲà̀̀̀-̀̀̀	‘woman’	-ɲáɲá̀̀̀-̀̀̀	-ɲàɲà̀̀̀-̀̀̀

c. /HL/ melody

fíè	‘grain, seed’	-fíé	-fíè
wólóhò-ò	‘tree bark’	-wólóhó-ó	-wólóhò-ò
jígíjè-è	‘granary’	-jígíjé-é	-jígíjè-è

Array (261) shows vowel-final /LHL/ noun stems in their forms as compound finals. If C̀̀̀ ~ C̀̀̀̀ monosyllabics are assigned to /L/ melody (§4.1.1.5), true /LHL/ melody requires bisyllabic or longer stems. As finals, all stems in (261) are all-H after /H/-melodic initials. After initials of other melodies, the output tones of the final reflect competing factors.

(261)	noun	gloss	after /H/ melody	after other melody
<i>/LHL/ melody</i>				
<i>bisyllabic</i>				
	bùrú-̀̀̀	‘base; trunk’	-bùrú-̀̀̀	-bùrù-̀̀̀
<i>trisyllabic L.H.L</i>				
	mìsírì-̀̀̀	‘mosque’	-mìsírì-̀̀̀	-mìsírì-̀̀̀
	bà ⁿ vùlà-à	‘hat’	-bá ⁿ vùlá-á	-bà ⁿ vùlà-à
<i>trisyllabic L.L.<HL></i>				
	màrífá-à	‘rifle’	-márífá-á	-màrífá-à
	tàmààtì-̀̀̀	‘tomato’	-támáátì-̀̀̀	-tàmààtì-̀̀̀
<i>quadrasyllabic</i>				
	àlímétì-̀̀̀	‘matches’	-á límétì-̀̀̀	-àlímétì-̀̀̀
 e. /HLHL/ melody				
	mááɲgòró-ò	‘mango’	mááɲgòró-ò	mááɲgòró-ò

The factors at work in the right-hand column of (261) are these: 1) the stem must end in L-tone reflecting the melodic L of the initial; 2) the medial H of the /(H)LHL/ melody must surface in its lexical position; 3) the first L of the /(H)LHL/ melody must surface in its lexical position; 4) the H of the all-H initial (after Tone Leveling) must spread into the left edge of the final.

For bimoraic ‘base; trunk (of tree)’, the output -bùrù-̀̀̀, not *-bùrù-̀̀̀, could be modeled tonally in different ways, depending on whether the initial H is due to factor (2) or factor (4). Since this rather common final is the only known one that is based on a lexical C̀̀̀C̀̀̀-̀̀̀ shape, it is not clear whether its behavior as compound final is regular or lexically specific.

For longer stems of /LHL/ melody, ‘mosque’ and ‘hat’ show that factor (4) is outranked by the other factors, so the outputs remain L.H.L-toned. ‘Rifle’, ‘tomato’, and ‘matches’ respect all

four factors. ‘Matches’ shows that lexical L.L.H.L inputs surface as H.L.H.L, i.e. the first melodic L surfaces but is reduced to one syllable to make room for the spreading H from the initial.

/HLHL/-melodic nouns are rare (‘mango’, ‘chameleon’, a few other flora-fauna terms). None of these nouns is common as a compound final, so the data are questionable. The output -mááŋgòrò-ò for ‘mango’ has initial H which could be attributed to the first melodic H and/or to the spreading H from the initial. In elicitation, the output -mááŋgòrò-ò was more common than -mááŋgòró-ò reflecting a tendency to reduce H.L.H.L to H.L.L.L in some positions (§3.6.5.3.12). Compare ‘chameleon’ at the end of the following subsection.

5.1.6.2 Tones of η-final nouns as finals in tone-leveled compounds

Array (262) shows the forms of η-final nouns (those that end in a nasalized vowel in the bare stem, but end in η before singular -ò) of /H/ and /L/ melodies. As finals in tone-leveled compounds, the two melodies are indistinguishable. After an /H/-melodic initial, the finals are H-toned. After initials of other melodies, the syllable preceding the final η of the final is L-toned and any preceding syllables are H-toned due to spreading from the initial. Because the singular suffix -ò follows an L-tone, it takes <HL>-toned form as it does in uncompounded nouns like tùŋ-ô ‘body’. ‘Hair’ (262a) and ‘body’ (262b) are distinguished tonally as uncompounded nouns but they are homophonous as compound finals.

(262)	noun	gloss	after /H/ melody	after other melody
	a. /H/ melody			
	túŋ-ô	‘hair’	-túŋ-ô	-tùŋ-ô
	sóŋ-ô	‘market’	-sóŋ-ô	-sòŋ-ô
	wóróŋ-ô	‘place’	-wóróŋ-ô	-wòróŋ-ô
	sáráŋ-ô	‘holy day’	-sáráŋ-ô	-sàráŋ-ô
	b. /L/ melody			
	tùŋ-ô	‘body’	-túŋ-ô	-tùŋ-ô
	hònòŋ-ô	‘bird’	-hónóŋ-ô	-hònòŋ-ô
	kòròŋ-ô	‘skin’	-kóróŋ-ô	-kòròŋ-ô

Array (263) shows η-final nouns of contour tone melodies. For /HL/-melodic finals (263a), if the noun including the singular suffix is at least trisyllabic (‘holy day’), the syllable preceding η is L-toned as in the preceding array. However, an assistant does not drop the tone of bisyllabic nouns (‘tongue’, ‘shadow’) after non-/H/-melodic initials. Instead, he downsteps the pitch of the onset of the final after those initials, or else allows a slight pitch decline on the initial, as in hááⁿ-⁴nēŋ-ò ~ hááⁿ-néŋ-ò ‘Bozo tongue’. In other words, there is an L-toned segment at the compound boundary that is trying to find a host. /LHL/-melodic finals (263b) appear to aim at the HLHL tone pattern described in the preceding subsection, though no known η-final noun of /LHL/ melody has enough syllables to allow the initial H of HLHL to surface. The /HLHL/-melodic noun ‘chameleon’ (263c)

preserves its melody after /H/-melodic initial, but drops the second H-tone after other initials (§3.6.5.3.12). Compare ‘mango’ at the end of the preceding subsection.

(263)	noun	gloss	after /H/ melody	after other melody
	a. /HL/ melody			
	<i>bisyllabic including suffix</i>			
	néŋ-ð	‘tongue’	-néŋ-ð	-‘nēŋ-ð
	jóŋ-ð	‘shadow’	-jóŋ-ð	-‘jōŋ-ð
	b. /LHL/ melody			
	hènέŋ-ð	‘calabash’	-hénέŋ-ó	-hènέŋ-ð
	bùléŋ-ð	‘necked gourd’	-búlέŋ-ó	-bùléŋ-ð
	c. /HLHL/ melody			
	nóðzìŋ-ð	‘chameleon’	-nóðzìŋ-ð	-nóðzìŋ-ð

5.1.6.3 Examples of tone-leveled compounds

The tone-leveled compound type is further illustrated here with selected finals that combine with multiple initials. The initials surface as H-toned regardless of lexical melodies. The finals surface as H*L-toned if the lexical melody of the initial contains an L-tone. The finals surface as H-toned if the initial is /H/-melodic. Tone Leveling works the same way in these compounds as it does in N-Adj combinations.

(264)	compound	gloss	initial
	a. júú ‘water’ (in compounds also ‘juice’, ‘liquid’)		
	<i>final H-toned</i>		
	ɲáŋá-júú	‘tears’	ɲáŋá-á ‘eye’
	<i>final L-toned</i>		
	mááŋgóró-jùù	‘mango juice’	mááŋgòró-ò
	lèmbúru-jùù	‘citrus juice’	lèmbúru-ù
	b. dúú ‘powder’		
	<i>final H-toned</i>		
	mááŋó-dúú	‘maize flour’	mááŋó-ó
	<i>final L-toned</i>		
	jón-dùù	‘millet flour’	jòŋ-ð
	nééré-dùù	‘Parkia powder’	nèèrè-è ‘Parkia tree’

c. húʂⁿ ‘bone’ (see also §3.1.1.3)

final H-toned

kírí-ⁿ-húʂⁿ ‘arm bones’ kírí-í

final HL-toned

ʃáá-ⁿ-hóʂⁿ-hùʂⁿ ‘skull’ ʃáá-ⁿ-hóʂⁿ ‘head’

bóóró-hùʂⁿ ‘femur’ bòòrò-ò ‘thigh’

d. fàlà-à ‘egg’

final H-toned

ɲóŋó-fálá-á ‘fish egg’ ɲóŋó-ó

final HL-toned

súbáá-fàlà-à ‘chicken egg’ sùbáà

e. nààmù-ù ‘sauce’

final H-toned

gwán-náámú-ú ‘okra sauce’ gwáŋ-ó

final HL-toned

[tígé-dégé]-náámù-ù ‘peanut sauce’ tígé-dégè-è ‘peanut paste’

f. ɲàŋà-ù ‘woman’

final H-toned

fílá-ɲáŋá-ú ‘Fulbe woman’ fílá-á

final HL-toned

hááⁿ-ɲáŋà-ù ‘Bozo woman’ hàâⁿ

g. sóŋ-ó ‘market’

final H-toned

dáábá(á)-sóŋ-ó ‘animal market’ dáábá(-)á

final LHL-toned

júgú-sòŋ-ò ‘clothing market’ jùgù-ù

jéné-sòŋ-ò ‘Djenné market’ jénè

h. lálá-á ‘leaf; greens’

final H-toned

hámá-lálá-á ‘peanut greens’ hámá-á

gwán-lálá-á ‘okra leaves’ gwáŋ-ó

final HL-toned

dáá-là-à ‘roselle greens’ dàà

5.1.7 Nominal compounds that include a verb stem

The following subsections cover deverbal nominals (verbal noun, agentive, place of action) that additionally incorporate a noun that denotes a characteristic object. These subsections are followed by another on function-specifying compounds (§5.1.7.4), which indicate the use to which the entity is put, and one on *hóó* ‘sound’ as final after a noun or a verbal noun (§5.1.7.5).

Most of these complex compounds are of the tone-leveling type as described in the preceding sections.

5.1.7.1 Verbal-noun final with incorporated object as initial

5.1.7.1.1 Compounded positive verbal noun (unsuffixed or with *-ní-í*)

Verbs have two positive verbal nouns (§4.2.1.1). The unsuffixed verbal noun is almost always identical to the Pfv stem. The suffixed verbal noun adds suffix *-ní-í* ~ *-ní-ì*. For compounds with the negative verbal noun, see the following subsection.

If the verb is transitive, the unsuffixed verbal noun may incorporate a noun representing an object category. The tones are those of tone-leveled compounds.

(265)	bare	gloss	noun
a.	<i>mêⁿ/mé-nè</i> ‘drink’		
	<i>initial is /H/-melodic</i>		
	júú-méŋ-ó	‘water-drinking’	júú
	súmá-méŋ-ó	‘milk-drinking’	súmá-á
	<i>initial has another melody</i>		
	lóló-mèŋ-ò	‘beer-drinking’	lòlò-ò
b.	<i>sógò(-lò)</i> ‘cultivate (crops)’		
	<i>initial is /H/-melodic</i>		
	mááŋó-sógó-ó	‘maize-farming’	mááŋó-ó
	hámá-sógó-ó	‘peanut-farming’	hámá-á
	<i>initial has another melody</i>		
	jó ⁿ -sógò-ò	‘millet-farming’	jòŋ-ò
	jábá-sógò-ò	‘onion-farming’	jàbá-à
	máánú-sógò-ò	‘rice-farming’	màànù-ù

c. táá-nì(-nì) ‘build, erect’ (causative < ‘stand’)

initial is /H/-melodic

jírí-táá-ní-í ‘tree-erecting’ jírí-í

initial has another melody

hóó-táá-nì-ì ‘house-building’ hòò

jígíjé-táá-nì-ì ‘granary-building’ jígíjè

mísírí-táá-nì-ì ‘mosque-building’ m̀̀sírì-ì

‘Eat’, which distinguishes intransitive antipassive jéé(-lè) from transitive jáá(-lá), requires the latter in verbal nouns with incorporated noun: túbú-jáá ‘meat-eating’.

The alternative suffixed verbal noun with -ní-í allows incorporating the noun, although such compounds do not appear to be common. An assistant prefers a possessor-possessum phrasing, even when the reference is general. The tones in (266) are based on a few elicited forms and would benefit from checking with other speakers. The initials are jàbá-à ‘onion(s)’ and mááńó-ó ‘maize’.

(266) a. jábá-sògò-ní-ì ‘onion-farming’
jábá-à †sògò-ní-ì ‘farming of onion(s)’

b. mááńó-sògò-ní-í ‘maize-farming’
mááńó-ó †sògò-ní-ì ‘farming of maize’

5.1.7.1.2 Compounding negative verbal noun (-barí-nà-à)

For uncompounded negative verbal nouns with -bàrí-nà-à or -bàrí-nà-à depending on verb-stem tone melody (§4.2.1.3). If the verb stem is transitive, an object noun can be incorporated.

(267) céé-sògò-bàrí-nà-à
field-cultivate-NegVblN-Ppl-Sg
‘non-farming, not farming’ (< cèè, sògò)

5.1.7.2 Agentive compounds with incorporated object

5.1.7.2.1 Compounded positive agentive (-ya-a)

For uncompounded positive agentives with suffix -ya-a, see §4.2.2.1. An incorporated object can be added for more specificity. The tones of the initial and those of the verb are raised, but the tone melody of the initial determines the tone of the agentive suffix: H if the initial is /H/-melodic, otherwise L. The tone melody of the verb is erased.

(268)	compound	gloss	initial	verb (Pfv)
a. with /H/-melodic initial				
	jéé-sóló-yá-á	‘cook (n)’	jéé ‘food, meal’	sólò ‘cook (v)’
	wóró ⁿ -fúrá ⁿ -yá-á	‘sweeper’	wóróŋ-ó ‘place’	fúrá ⁿ ‘sweep’
	ʃáá-bá ⁿ -yá-á	‘shaver, barber’	ʃáá(-hóò ⁿ) ‘head’	bá ⁿ ‘shave’
	ʃwáá-húrú-yá-á	‘tree-chopper’	ʃwáá ‘wood’	húrù ‘cut; fell (tree)’
	ʃwáá-pósó-yá-á	‘wood-cutter’	ʃwáá ‘wood’	pósó ‘cut up’
	túmé-háy-yá-á	‘show-off’	túmé-é ‘self’	háy ‘show’
b. with initial of another melody				
	húló-kólóngóló-yà-à	‘dung beetle’	húlò-ò ‘shit (n)’	kólóngòlò ‘roll’
	húú-pásá-yà-à	‘kneader’	hùù ~ hùù ‘meal’	pàsà ‘knead’
	námú-mánúŋú-yà-à	‘sauce stirrer’	nààmù-ù ‘sauce’	mánúŋù ‘stir’
	hólí-sulé ⁿ -yà-à	‘gondolier’	hólí-ì ‘skiff’	sùlê ⁿ ‘propel’
	fálá-ságá-ní-yà-à	‘layer (hen)’	fàlà-à ‘egg’	ságá-ní ‘lay’
	jón-zíí-yà-à	‘grain-grinder’	jòŋ-ò ‘grain crop’	síí ‘grind’
	dáábá-hará ⁿ -yà-à	‘herder’	dáábà-à ‘animal’	hárá ⁿ ‘tend (herd)’

A textual example is sábulá-wágá-yà-à ‘hippo killer (=hunter)’ (2021-01 @ 00:30), based on sàbulà-à ‘hippo’ and Pfv wágà ‘kill’. The plural is sábulá-wágà-y-éèⁿ (2021-01 @ 00:34).

Agentives cannot be made directly from stative verbs like tódò ‘know’, híní ‘be able’, or fàà ‘want’ (the latter may not even be a real verb). ‘Knower’ is [túé-ní]-tááⁿ-yà-à, literally “knowledge-doer”, or the morphologically unusual agentive tùè-ní-yà-à. ‘Capable one’ is híní-tígí-í, with ‘owner’ (§5.1.12) as the final. No agentive has been elicited for ‘want’.

The initial can itself be expanded, for example by adding an adjective (269).

(269)	[jírí-húló]-fóló-yà-à
	[tree-big]-pierce-Agent-Sg
	‘woodpecker’ (< jírí-í, fóló)

A special case is agentive -tááⁿ-ya-a ‘doer’ with an incorporated noun that denotes an action. Because of Tone-Leveling, the tone of -ya-a depends on the tone melody of the initial noun, which may be an unsuffixed verbal noun or one with verbal-noun suffix -ní-í. This construction competes with uncompounded agentives from intransitive verbs (§4.2.2.1).

(270)	verbal noun	gloss	‘doer’ agentive	gloss
a.	jírí-í	‘medication (n)’	jírí-táá ⁿ -yá-á	‘healer’
	tórí-í	‘jump (n)’	tórí-táá ⁿ -yá-á	‘jumper’
	hóólò-ò	‘race, running’	hóóló-táá ⁿ -yà-à	‘runner’
	tóóró-ó	‘sale, selling’	tóóró-táá ⁿ -yá-á	‘merchant, shopkeeper’

báará-á	‘work (n)’	báará-táá ⁿ -yá-á	‘worker’
gàlógò-ò	‘blessing (n)’	gàlógò-táá ⁿ -yà-à	‘giver of blessings’
b. fúrá-ní-í	‘sweeping’	[fúrá-ní]-táá ⁿ -yá-á	‘sweeper’

5.1.7.2.2 Compounded negative agentive (-bári-i)

For uncompounded negative agentives with suffix -bári-i, see §4.2.2.1. Examples with an incorporated object noun are in (271). These compounds are tone-leveled.

(271) a. céé-sógò-bàrí-ì	‘one who doesn’t farm’	cèè ‘field’, sógò ‘cultivate’
b. báará-táám-bàrí-í	‘lazy person’	báará-á ‘work (n)’, táá ⁿ ‘do’
híé ⁿ -táám-bàrí-í	‘one who does nothing’	híé ⁿ ‘task’, táá ⁿ ‘do’
jéé-jáá-bàrí-í	‘one who doesn’t eat’	jéé ‘food’, jáá ‘eat (sth)’

5.1.7.3 Place-of-action nominal (-tóó) plus incorporated object

Simple place nominals consist of a verbal noun (identical to the Pfv stem of the verb) plus suffix -tóó (§4.2.1.4), which optionally voices to -dóó after a nasal. If the verb is transitive, an incorporated object may be added as compound initial. The suffix remains H-toned -tóó, but the preceding noun-verb sequence is subject to Tone-Leveling, with the tonal alternation expressed on the verb. For example, tááⁿ ‘do’ combines with -tóó as N-táán-tóó if the noun has lexical /H/-melody (272a), and as N-tààn-tóó if the noun has a melody that contains an L-tone (272b). In either case, the noun itself is raised to all-H-toned, as in tone-leveled compounds.

(272)	compound	initial	verb (Pfv)
a.	[báará-táán]-tóó (~ -dóó) [work(n)-do.VblN]- place ‘workplace’	báará-á	táá ⁿ
b.	[báró-tààn]-tóó (~ -dóó) [chat(n)-do.VblN]- place ‘place for conversing’	bàrò-ò	táá ⁿ
c.	[síní-ʃèè]-tóó [urine-lay.VblN]- place ‘place for urinating’	síní-ì	sé

- d. [túgú-jáá]-tóó túgú-ú jáá
 [meat-eat.VblN]-**place**
 ‘place for eating meat’
- e. [mááŋgòró-jàà]-tóó mááŋgòró-ò jáá
 [mango-eat.VblN]-**place**
 ‘place for eating mangoes’
- f. [lɛŋ-jírí]-tóó lɛŋ-ó jírí
 [child-treat.Vbl]-**place**
 ‘place for (medically) treating children’

5.1.7.4 Function-specifying compounds for substances and implements

Nouns like ‘water’, ‘oil’, and ‘wood’ denote substances that are put to different uses. In the case of ‘oil’ the uses correlate with the source species (peanut, shea-tree, etc.). This is less so with wood and irrelevant to water.

The substance-denoting noun can function as a compound final, preceded by an unsuffixed verbal noun (identical to the Pfv stem) that denotes the prototypical action. These are tone-leveling compounds. (273a) exemplifies with ‘water’ and (273b) with ‘oil’.

(273)	noun	gloss	verb (Pfv)
a.	júú	‘water’	
	ɲíní-júú	‘bathwater’	ɲíní ‘wash, bathe’
	mɛŋ-jùù	‘drinking water’	mɛ ⁿ ‘drink’
b.	cɛ́é	‘oil’	
	sígí-cɛ́é	‘lotion, rubbing oil’	sígí ‘rub on’
	jéé-cɛ́é	‘cooking (eating) oil’	jéé ‘eat (antipassive)’

This construction can be expanded by incorporating an object noun before the verb.

- (274) a. júú-légé-hénéŋ-ó
 water-take.VblN-calabash-Sg
 ‘calabash for holding water’ (< hénéŋ-ò)
- b. mínéⁿ-ɲíní-jùù
 gear-wash.VblN -water
 ‘water for washing kitchen utensils (pots), dishwater’ (< mìnéŋ-ò)

An alternative construction is the substance noun modified by a composite adjective consisting of the unsuffixed verbal noun plus -f(w)óó/-f(w)òò or variant, cf. the default possessum fwòò (§6.4.2). The original construction was of the form “water drink-thing.” The f is often voiced to v after a nasalized vowel. Examples are in (275). In (275b) the verb ‘eat’ is transitive jáá(-lá) rather than antipassive jéé(-lé).

- (275) a. júú méⁿ-vwóó ‘drinking water’
 júú jíní-fwóó ‘bathwater’
- b. céé sígí-fwóó ‘lotion, rubbing oil’
 céé jáá-fwóó ‘cooking (eating) oil’

5.1.7.5 Tone-leveled compounds with verbal noun and hóó ‘sound’

hóó ‘sound (of doing sth)’ is readily combined with a preceding unsuffixed verbal noun, forming a tone-leveled compound. For -gòò in (276c) see §3.4.2.4.

(276)	compound	gloss	verb (Pfv)
	a. /H/-melodic verb		
	gwóó-hóó	‘sound of weeping’	gwóó
	kúúró-hóó	‘sound of shouting’	kúúró
	b. /HL/-melodic verb		
	ʃáá-hòò	‘sound of laughing’	ʃáá
	hóóló-hòò	‘sound of running’	hóólò
	tísó-hòò	‘sound of sneezing’	tísò
	c. /LHL/-melodic verb		
	núgúŋ-gòò	‘sound of swimming’	nùgù ⁿ

5.1.8 Compounds with júú ‘water’ as final

júú ‘water’ is the final in tone-leveled compounds that denote liquids (277). lógó-ó (277a) and lágà-à (277b) are obscurely related terms for ‘mouth’ (§9.5.3-4).

(277)	compound	gloss	initial
a. initial is of /H/ melody			
	túgú-júú	‘meat juice (pan juice)’	túgú-ú ‘meat’
	lógó-júú	‘saliva’	lógó-ó ‘mouth’
	hón-júú	‘breast milk’	hón-ó ‘breast’
	ɲáɲá-júú	‘tears’	ɲáɲá-á ‘eye(s)’
b. initial is of another melody			
	háábáá-jùù	‘rainwater’	háábáá ‘cloud; rain (n)’
	hóló-jùù	‘saltwater; liquid soda ash’	hóló-ò ‘salt’
	fóóró-jùù	‘foam’	fóóró-ò ‘foaming (n)’
	lágá-jùù	‘saliva’	lágá-à ‘mouth’
	mááɲgóró-jùù	‘mango juice’	mááɲgóró-ò ‘mango’
	lémbúú-jùù	‘citrus juice’	lémbúú-ù ‘citrus fruits’

Liquids emerging from a tree (jírí-í) are double compounds (278), the finals being ‘tears’ and ‘breast milk’ from (277) above.

(278)	a. jírí-[ɲáɲá-júú]	‘tree sap’ (“tree tears”)
	b. jírí-[hón-júú]	‘tree latex’ (“tree breast-milk”)

5.1.9 Compounds with spatial PP initials

5.1.9.1 Habitat-specifying compounds

In this type, the initial is a spatial PP that indicates the habitat of the referent of the final. The most obviously PP-type initials are those in (279).

(279)	compound	gloss	final
a. ‘aquatic __’ from júú nî ‘in water’			
	[júú-níí]-ɲgóbó-nón-ò	‘aquatic bug spp.’	ɲgóbó-nón-ò ‘bug-Dimin’
	[júú-níí]-múnú-ú	‘otter’	múnú-ù ‘dog’
	[júú-níí]-náɲáá-fúó	‘aquatic snake (<i>Grayia</i>)’	náɲáá-fùò ‘snake’
	[júú-níí]-ndálèɲ-ò	‘aquatic spider’	ndálèɲ-ò ‘spider’
	[júú-níí]-ɲémbéré-é	‘water scorpion (<i>Nepidae</i>)’	ɲémbéré-è ‘cockroach’
	[júú-níí]-ságálá-á	‘floating plant (<i>Neptunia</i>)’	ságálá-à ‘tamarind’
b. ‘domestic __’ from hòó ‘to house’			
	[hós-lá]-kámì-ì	‘domestic guinea-fowl’	kámì-ì ‘guinea-fowl’

c. ‘arboreal __’ from jírí-í nî ‘in tree’

[jírí-ní]-húúrí-ú

‘arboreal grub’

húúrí-ú ‘worm, grub, larva’

An especially common initial is sòṅó-fáá-, which distinguishes wild from domestic natural species (280). By itself, sòṅó-fáà is rather fused (as a true PP it would have been #sòṅó-ó fáà), and it functions either as a noun ‘the bush (outback, wilderness, brousse)’ or as a quasi-PP ‘out in the bush’. As a compound initial, sòṅó-fáá- ‘wild (species)’ behaves as /H/-melodic, reflecting the tones of the simple noun sòṅó-ó ‘market’. The original sense was ‘the bush’, preserved in Kelenga in the phrase jóḍ [sòṅ-ó nî], which can mean ‘went (out) fishing’ (probably shifted from ‘went out hunting’) as well as ‘went to the market’. (JSDj sòṅó preserves the original sense ‘the bush’.)

(280) compound (‘wild __’)	gloss	final
[sòṅó-fáá]-sùbáá	‘black crane’	sùbáá ‘chicken’
[sòṅó-fáá]-fógóló-ó	‘bushy hibiscus sp.’	fógóló-ó ‘hibiscus sp.’
[sòṅó-fáá]-fólí-í	‘wild dove’	fólí-í ‘laughing dove’
[sòṅó-fáá]-hámá-á	‘erect herb sp.’	hámá-á ‘peanut’
[sòṅó-fáá]-húá-ná-á	‘hollow-stemmed herb sp.’	hùàná-à ‘floater’
[sòṅó-fáá]-jábá-á	‘wild onion sp.’	jàbá-à ‘onion’
[sòṅó-fáá]-jàkúmá-á	‘wild cat spp.’	jàkúmà-à ‘cat’
[sòṅó-fáá]-kámí-í	‘wild guinea-fowl’	kàmì-ì ‘guinea-fowl’
[sòṅó-fáá]-kòrò-ó	‘tree sp. (<i>Crataeva</i>)’	kòrò-ò ‘baobab tree’
[sòṅó-fáá]-múnú-ú	‘lycaon, wild dog’	mùnù-ù ‘dog’
[sòṅó-fáá]-náá	‘African buffalo’	nàà ‘cow, bovine’
[sòṅó-fáá]-níná-á	‘fieldmouse, bush mouse’	níná-á ‘mouse’
[sòṅó-fáá]-njòṅṅ-ḍ	‘sedge sp.’	njòṅṅ-ḍ ‘sweet sedge tubers’
[sòṅó-fáá]-zará-á	‘small wild melon sp.’	zará-á ‘watermelon’

Without -fáá-, the compound initial sòṅó- ‘the bush’ is treated variably as /H/-melodic as in sòṅó-yáará-á ‘hunting (out in the bush)’ or as non-/H/-melodic as in sòṅó-kámù-ù ‘place in the bush’.

nòṅómà ‘(on) the ground’ is another possible case of a fused noun-postposition that can function as noun or adverb, if derived from *nòṅó-ḍ ‘mà with custodial postposition má. nòṅó-ḍ by itself means ‘knife’. As compound initial, nòṅómá- denotes terrestrial and subterranean species (281).

(281) compound (‘terrestrial __’)	gloss	final
nòṅómá-húúrí-ù	‘subterranean grub’	húúrí-ú ‘grub, larva’
nòṅómá-hònḍḅ-ḍ	‘terrestrial bird’	hònḍḅ-ḍ ‘bird’

5.1.9.2 Other PP-initial compounds

A few other postpositions are attested in structurally similar compounds. In (282) the initials differentiate species of *kóηη-δ* ~ *kóηgóη-δ* ‘certain catfish spp. of genus *Synodontis*’.

- (282) a. ‘at bottom of tree/wood’ (< jírí-í nòηó mà)
 [jírí-nóηó má]-kóηη-δ ‘*Synodontis* catfish sp. under sunken logs’
- b. ‘at top of tree/wood’ (< jírí-í yògófàà)
 [jírí-yógó-fáá]-kóηη-δ ‘*Synodontis* catfish sp. over sunken logs’
- c. ‘in tree-hole’ (< jírí-wóó nî)
 [jírí-wóó-ní]-kóηη-δ ‘*Synodontis* catfish sp.’
- d. ‘in lagoons’ (< (fàrà-)fàrà-à nî)
 [fàrá-fàrá-ní]-kóηη-δ ‘*Synodontis* catfish sp.’

The other examples of PP initials recorded in lexical elicitation are in (283).

- (283) a. ‘at house’ (< hòò nî)
 [hóó-ní]-mónò-ò ‘toad’ mónò-ò ‘frog’
- b. ‘on water lily’ (< gwààηá-à fέè)
 [[gwááηá-á]-fέé]-hónò-nóη-ò ‘jacana (bird)’ hònò-nóη-ò ‘bird-Dimin’
- c. ‘in (stored) crops’ (< jòη-ò nî)
 [jóⁿ-ní]-ηgóbò-nóη-ò ‘red flour beetle’ ηgóbó-nóη-ò ‘bug-Dimin’
- d. ‘at (=on) neck’ (< háη-ó ná, contracted to háá-ná)
 [háá-ná]-yólóhó-ó ‘yoke’ yólóhò-ò ‘chain’
- e. ‘at (=on) hand’ (< kírí-í ‘là)
 [kírí-lá]-mέη-ó ‘bracelet’ mέη-ó ‘metal’

The regular N-N compound pattern without a spatial postposition is another way to indicate a habitat or a feature of a habitat. For example, [náá-húló]-zàrà-à ‘[cow-dung]-melon’ denotes the inedible wild melon *Citrullus colocynthis*.

5.1.10 ‘Male’ (-hálu-u) and ‘female’ (-náǵánu-u) in compounds

‘Man’ is hálu-ú. The morphologically regular plural hálu-ú-yèⁿ is less common than the alternative plural há-lèèⁿ. ‘Woman’ is náǵánu-ù, plural náǵánu-ú-yèⁿ (regular) or more often náǵà-lèèⁿ (irregular). For the irregular plurals see §4.1.1.4.

As adjectives or compound finals (which cannot be sharply distinguished), tone-leveled hálu-ú ~ hálu-ù ‘male’ and náǵánu-ú ~ náǵánu-ù ‘female’ occur frequently with human terms, especially kin terms, and with animal names. The h of hálu-ú hardens and voices to g after a nasal (§3.4.2.4).

Kin-term examples are in (284). Tone-Leveling (§5.1.6) occurs throughout.

(284) a.	léŋ-ó	‘child’
	léŋ náǵánu-ú	‘daughter’
	léŋ gálú-ú	‘son’
b.	lóǵólò-ò	‘younger sibling’
	lóǵóló náǵánu-ù	‘younger sister’
	lóǵóló hálu-ù	‘younger brother’
c.	tágáyò-ò	‘elder sibling’
	tágáyó náǵánu-ù	‘elder sister’
	tágáyó hálu-ù	‘elder brother’
d.	tàrà-à	‘grandparent’
	tárá náǵánu-ù	‘grandmother’
	tárá hálu-ù	‘grandfather’
e.	tíǵà-à	‘grandchild’
	tíǵá náǵánu-ù	‘granddaughter’
	tíǵá hálu-ù	‘grandson’
f.	tùǵù-ù	‘affine of adjacent generation’
	túǵú náǵánu-ù	‘female affine’
	túǵú hálu-ù	‘male affine’
g.	bòlò-ò	‘agemate, companion’
	bóló náǵánu-ù	‘female agemate’
	bóló hálu-ù	‘male agemate’

The female-to-female relationship term téⁿ-náǵánu-ú ‘co-wife’, plural téⁿ-náǵánu-ú-yèⁿ (regular) or more often téⁿ-náǵà-lèèⁿ (irregular), has no male counterpart. It may be a contraction of téné náǵánu-ú ‘paternal aunt (father’s sister)’, synonym of téné-é. It occurs in text 2021-10, often in the composite form máá-[téⁿ-náǵánu-ù] ‘mother-co.wife’, i.e. ‘(potential) stepmother’.

5.1.11.1 Diminutive -nóŋ-ò (-nêⁿ)

The productive nominal diminutive suffix is -nóŋ-ò. The bare stem forms have -nêⁿ, with a unique vocalic mutation. Presumably -nêⁿ has the original vocalism and *ε has assimilated to the suffixal vowel in -nóŋ-ò. There is also an adverb néndàⁿ ‘a little, slightly’.

This diminutive emphasizes small size rather than age or parent-offspring relationship. In animal tales it is attested with ‘chicken’ and ‘frog/toad’ (text 2021-15) where neither small size nor juvenile age-grade is indicated.

If it is cognate to Cliffs diminutive -náwⁿ, its similarity to léŋ-ó ‘child (offspring)’ (cognate to Cliffs dyéwⁿ ‘child’) may reflect secondary convergence. Relevant to this is that singular -nóŋ-ò corresponds to plural -nú-mèèⁿ in composite terms meaning ‘boys’ and ‘girls’ (§4.1.1.4), homologous to plural lú-mèèⁿ ‘children’.

The stem of the noun preserves its lexical melody, except that /LHL/ flattens to all-L. The diminutive suffix is HL-toned regardless of the tones of the stem, except as noted below. In other words, Tone Leveling does not occur. Note that diminutive lé-nóŋ-ò is specifically female although léŋ-ó ‘child’ is unisex.

(287) a. /H/ melody

nóŋ-ó	‘fish’	nóŋ-ó-nóŋ-ò	‘minnow’
níní-í	‘person’	níní-nóŋ-ò	‘unimportant person’
báará-á	‘work (n)’	báará-nóŋ-ò	‘minor job’
léŋ-ó	‘child’	lé-nóŋ-ò	‘adolescent girl’
hálú-ú	‘man’	héeé-nóŋ-ò	‘adolescent boy’

b. /L/ melody

hòò	‘house’	hòò-nóŋ-ò	‘small house’
hònòŋ-ò	‘bird’	hònòŋ-nóŋ-ò	‘small bird’
kòlòŋ-ò	‘well (n)’	kòlòŋ-nóŋ-ò	‘small well’

c. /HL/ melody

wáà-ì	‘money’	wáà-nóŋ-ò	‘a little money’
jéémù-ù	‘talk (n)’	jéémù-nóŋ-ò	‘small talk (a few words)’

d. /LHL/ melody

sùbàà	‘chicken’	sùbàà-nóŋ-ò	‘chick’
mìsìrì-ì	‘mosque’	mìsìrì-nóŋ-ò	‘small mosque’
màrìfá-à	‘rifle’	màrìfá-nóŋ-ò	‘small rifle’

The tone pattern -nòŋ-ò is much rarer, but there are two attestations (288). That these are diminutive is suggested by their senses and by their bare stems in -nêⁿ.

(288) a.	súmú-nòŋ-ò	‘boil (on skin)’	cf. sùmù-ù ‘caries, tooth decay’
b.	pétéré-nòŋ-ò	‘kerosene’	French <i>pétrole</i>

For diminutive -nóŋ-ð with adjectives see §4.5.1.3.2.

líflón-ó ‘nylon cord’ (used in fishnets and musical string instruments) has no obvious connection with diminutivity, but the vocalism of its bare stem líléⁿ may have been influenced by the -nêⁿ bare stem of diminutives.

5.1.11.2 Compounds with léŋ-ó ‘child’ as final

The noun for ‘child’, especially in the kinship sense, is léŋ-ó, regular plural léŋ-ó-yèⁿ, irregular plural lú-mèèⁿ, emphatic plural lú-mèèⁿ-yèⁿ (§4.1.2). As possessum, it is léŋ-ó after H-toned pronominal proclitic and after demonstrative kú, e.g. á léŋ-ó ‘your-Sg child’. It is †lèŋ-ð after 3Sg à or 3Pl ì, e.g. ā †lèŋ-ð ‘his/her child’. It is tone-dropped after nonpronominal possessor: sèèdú †lèŋ-ð ‘Seydou’s child’.

léŋ-ó can also mean ‘unit’, in counting anything (e.g. sheep, people, mangoes); see §13.2.2.7. It is often used in uncompounded form in this sense along with a numeral, when the category being counted is understood.

As the final in compounds, léŋ-ó denotes a relationship to a whole or to a parent, not simply small size. The latter is usually indicated by the diminutive suffix -nóŋ-ð (preceding subsection).

léŋ-ó in the sense ‘offspring’ can be added as a compound final to names of animals to denote juveniles. Tone-Leveling applies, so the initial becomes all-H-toned in the singular. The final is -léŋ-ó after initials whose melody begins with H (289a), and -lèŋ-ð after initials that begin with L (289b). The plural can be morphologically regular (add suffix -yèⁿ) or more often it takes the irregular plural form lú-mèèⁿ. Only the latter is shown in (289). Before -lú-mèèⁿ the leftmost tone of the initial spreads to the compound boundary.

(289)	noun	gloss	‘juvenile’	plural	gloss
a. initial has H-initial melody					
	<i>/H/-melodic initial</i>				
	sógó-ó	‘goat’	sógó-léŋ-ó	sógó-[lú-mèè ⁿ]	‘goat kid’
	<i>/HL/-melodic initial</i>				
	básà-à	‘agama’	básá-léŋ-ó	básá-[lú-mèè ⁿ]	‘young agama’
b. initial has L-initial					
	<i>/L/-melodic initial</i>				
	nàà	‘cow’	náá-lèŋ-ð	nàà-[lú-mèè ⁿ]	‘calf’
	sàgà-à	‘sheep’	ságá-lèŋ-ð	sàgà-[lú-mèè ⁿ]	‘lamb’
	hònòŋ-ð	‘bird’	hónón-lèŋ-ð	hònòn-[lú-mèè ⁿ]	‘bird chick’
	<i>/LHL/-melodic initial</i>				
	jákú-mà-à	‘cat’	jákú-má-lèŋ-ð	jàkù-mà-[lú-mèè ⁿ]	‘kitten’
	sùbàà	‘chicken’	sùbáá-lèŋ-ð	sùbàà-[lú-mèè ⁿ]	‘chick’

gébé-lèŋ-ô ‘tigerfish sp.’ is likely a frozen case; the initial is not otherwise attested and the only plural is gébé-lèŋ-ó-yèⁿ.

For plants, the “child” compound denotes a fruit or other conspicuous product.

(290)	noun	gloss	‘fruit’ etc.	plural	gloss	
	a.	jírí-í	‘tree’	jírí-léŋ-ó	jírí-[lú-mèè ⁿ]	‘fruit of tree’
	b.	hààlò-ò	‘shea tree’	hááló-lèŋ-ô	hààlò-[lú-mèè ⁿ]	‘shea (karité) fruit’

However, for species terms (as opposed to generic ‘tree’ or ‘grass’), the fruit/product term is often the main sense of the uncompounded noun. The tree or plant as a whole can be specified using bùrú-ù ‘base, trunk’ as the final.

(291)	mááŋgòró-ò	‘mango (fruit)’
	mááŋgòró-bùrú-ù	‘mango tree’

‘Water lily (*Nymphaea*)’ is gwààŋá-à. Its tuber (edible) is gwààŋá-à lèŋ-ô, a possessor-possessum combination rather than a tone-leveled compound.

One flora term contains léŋ-ó after an otherwise unattested initial: húáⁿ-léŋ-ó ‘grass sp. (*Eragrostis*)’.

The construction with léŋ-ó ‘child’ as final extends to cases involving the “child” of a habitat or a prominent product (292).

(292)	noun	gloss	“child”	plural	gloss	
	a.	júú	‘water’	júú-léŋ-ó	júú-[lú-mèè ⁿ]	‘whirlygig beetle’
	b.	tùù-ù	‘honey’	túnú-lèŋ-ô	tùù-[lú-mèè ⁿ]	‘honey bee’

léŋ-ó can also be added to a verbal noun denoting an activity. The compound then denotes an individual associated with the activity.

(293)	noun	gloss	“child”	plural	gloss	
	a.	híé ⁿ	‘task’	híén-léŋ-ó	híén-[lú-mèè ⁿ]	‘messenger’
	b.	hàráŋ-ò	‘study (n)’	hàrán-lèŋ-ô	hàrán-[lú-mèè ⁿ]	‘pupil, student’

hàrán-lèŋ-ô ‘pupil, student’ (293b) can be further specified as “high” or “low” in expanded compounds (294).

(294)	a.	yògó fáà	‘on top, above’
		[yógó-fáá]-[hàrán-lèŋ-ô]	‘university student’

An opposition between ‘child’ and ‘mother’ compounds occurs in (298).

(298)	kálá-á	‘bow (and arrows)’
	kálá-máá	‘bow’
	kálá-léŋ-ó	‘arrow’
	kálá-fíé	‘arrow’ (“bow-grain”)

‘Handful’ (the amount that one can collect in one hand and put in one’s mouth), local French *tartine*, is kírí-máá, based on kírí-í ‘hand’, or lógó-máá, based on lógó-ó ‘mouth’. Whether this -máá should be connected to ‘mother’ is questionable; another possible equation would be custodial postposition má (§8.1.2).

5.1.12 Compounds with tígí-í ‘owner’

tígí-í ‘owner’, plural tígí-í-yèⁿ or irregular plural tíg-ééⁿ ~ tìg-èèⁿ ‘owners’, can occur in isolation, but in practice it is almost always either possessed or compounded. Possessed examples are ā tìgí-ì ‘its owner’ and hòḍ tìgí-ì ‘owner of the house’. True compounds are tone-leveled, as in hós-tígí-ì ‘homeowner’ (< hòḍ).

In addition to land, livestock, and gear, the initial may denote a more abstract attribute. Examples are in (299).

(299)	compound	gloss	initial	gloss
	a. /H/-melodic initial			
	sógó-tígí-í	‘goat owner’	sógó-ó	‘goat’
	jírí-tígí-í	‘tree owner’	jírí-í	‘tree’
	b. /L/-melody initial			
	hós-tígí-ì	‘house owner’	hòḍ ~ hòḍ	‘house’
	ságá-tígí-ì	‘sheep owner’	sàgà-à	‘sheep’
	núnú-tígí-ì	‘village chief’	nùnù-ù	‘village’
	c. /HL/ initial			
	tónú-tígí-ì	‘homeowner’	tónù-ù	‘house and courtyard’
	gáálé-tígí-ì	‘intelligent one’	gáálè-è	‘mind’
	jígíjé-tígí-ì	‘granary owner’	jígíjè	‘granary’
	d. /LHL/ initial			
	nàṅáá-tígí-ì	‘wealthy person’	nàṅáá	‘thing’
	bítígí-tígí-ì	‘storekeeper’	bítígí-ì	‘store, shop’

In addition to the regular plurals in -yèⁿ, the irregular human plurals are -tíg-ééⁿ after /H/-melodic initial, and variably -tíg-èèⁿ or -tìg-éèⁿ after initials of other melodies.

‘Owner’ compounds can be created on the spot to refer to an entity metonymically, using a distinctive attribute. For example, in a tale where one girl washed her hands with water and another girl did so with oil, the former girl is referred to as júú-tígí-í ‘water-owner’ (2021-10 @ 01:39).

The initial may itself be a compound: [bóómbó-tún]-tígì-ì ‘bearded person’, based on bóómbó-tùṅ-ḍ ‘beard’ (lit. “chin-hair”). It may also be a lexicalized noun-adjective pair: gòbò húlò-ḍ ‘leprosy’ (lit. “big disease”), [góbó-húló]-tígì-ì ‘leper’.

5.1.13 Compounds with -máṅ-ḍ ‘entity’

This compound final (or derivational suffix) is added to nouns and adjectives. Either the compound denotes a thing (concrete or abstract) that has the property denoted by the initial, or it functions as an abstractive. It is therefore semantically similar to some of the ‘owner’ compounds (preceding subsection).

(300)	compound	gloss	initial
	náfáá-máṅ-ḍ	‘useful thing’	nàfáà ‘usefulness’
	tórí-máṅ-ḍ	‘something new, novelty’	tórí/tórì ‘new’
	súró-máṅ-ḍ	‘something old’	súró/súrò ‘very old’
	jííné-máṅ-ḍ	‘childhood’	jííné-nóṅ-ḍ/jííné-nòṅ-ḍ ‘small’
	bóló-méé-máṅ-ḍ	‘youth, childhood’	bóló-mèè ‘young person’

Compare -máṅ-ḍ ~ -màṅ-ḍ in exemplar-based adjectives ‘yellow’, ‘green’, and ‘blue’ (§4.5.1.2.2).

5.1.14 Compounds with X-ndaṅ-ḍ ‘one who lacks X’

These compounds are antonyms to some of those with ‘owner’ (preceding subsection), cf. English *-less*. /L/-melodic initials result in tone-leveled compounds with all-H initial, and the usual ...L-<HL> for ṅ-final stems as finals (301a). The same pattern is attested with one /HL/-melodic noun (301b), but most initials with contour-toned melodies merge as H*L-H-L (301c).

(301)	noun	melody	gloss	compound	gloss
a.	hòḍ ~ hòḍ	L	‘house’	hóó-ndaṅ-ḍ	‘one without a house’
	jàṅàṅ-ù	L	‘woman’	jàṅàṅ-ù-ndaṅ-ḍ	‘man without a wife’

b.	gálíyógò-ò	HL	‘luck’	gálíyógó-ndàŋ-ò	‘unlucky one’
	fìè	HL	‘grain, seed’	fíé-ndáŋ-ò	‘blind person’
	cf. nájá-fíé		‘eyeball’	can reduce to fíéŋ-ó	
	jígíŋè-è	HL	‘granary’	jígíŋè-ndáŋ-ò	‘one without a granary’
	màrífá-à	LHL	‘rifle’	màrífá-ndáŋ-ò	‘one without a rifle’
	mìsírì-ì	LHL	‘mosque’	mìsírì-ndáŋ-ò	‘one without a mosque’
	náfáà	LHL	‘usefulness’	náfáà-ndáŋ-ò	‘useless thing’
	wá-rì-ì	HL	‘money’	wá-rì-ndáŋ-ò	‘person without money’

See má:-ndâŋ ‘motherless’ (in bare-stem form as predicate of copula) in 2021-10 @ 02:19.

-ndaŋ-ò may be related to tá ~ dá ‘not be’ (also IpfvNeg inflectional marker), but the morphology is obscure.

5.1.15 ‘True’ versus ‘false’ species

There are a number of asymmetrical pairs of natural-species terms where one variety is the focal or “true” version, in contrast to a secondary variety. One way to make the distinction overt is to express the non-prototypical variety with a nonhuman animate possessor. Two such examples have been recorded. (302a) distinguishes the less edible wild jujube *Ziziphus mucronata* from the edible native jujube *Ziziphus mauritiana* (and an edible introduced species). (302b), denoting a climbing vine with a small, inedible melon (*Coccinea grandis*) is borrowed from Bambara.

(302)	compound	gloss	literal
	a. sùrúkú-ndóómó-ó	‘false jujube’	“hyena jujube”
	b. bàkòr̀nín-dégè ⁿ -è ⁿ	‘climbing melon sp.’	“goat-cream.of.millet” (< Bambara)

5.1.16 Phrasal compounds

There are a few colorful compounds based on phrases or clauses. The simplest type is [noun-verb]-noun (303).

(303)	a. júú-hélé-kéŋ-ó
	water-pass.VbIN-road-Sg
	‘seasonal stream’ (or its seasonally dry bed)
	b. [ndóŋ-kú ⁿ]-hónò-nóŋ-ò
	[grasshopper-catch]-bird-Dim-Sg
	‘Abyssinian roller (bird)’

Example (304) incorporates a reflexive verb, in sequential VP form.

(304) húúrú-[bí-í-⁺sārì]-húúrù-ù
 worm-[Seq-3ReflSg-throw.itself]-worm
 ‘caterpillar that hops around’ (story word)

Example (305) is a relative construction but it is lexicalized as a species term.

(305) làgá-làgá -mòdò -hí -[ì -lágà-à] -[jáárò-ló -[⁺jùù-nî]
 gull -Rel -Ipfv -[3ReflSg -mouth-Sg] -stroke(v)-Ipfv -[water-Loc]
 ‘skimmer (bird, *Rhynchops*)’, lit. “gull that strokes its mouth on the water”

5.2 Adjectival compounds

For more or less lexicalized composite adjectives, see §4.5.1.2-3 above.

5.2.1 Bahuvrihi compounds

Bahuvrihis can function as modifiers or as nouns in Kelenga. A bahuvrihi denotes or describes individuals who have a feature (such as a body part) of a specified quality (e.g. size, color) or quantity. Compare English adjectives *big-bellied* and *two-headed*, and nouns *Blackbeard* and *greenhorn*.

5.2.1.1 With adjectival final

Bahuvrihis that function as independent nouns are in (306). The one in (306b) is from Bambara, partially nativized.

(306)	compound	gloss	literal
a.	lógó-hóŋ-ó	‘roan antelope’	“mouth-white”
b.	fáráá-fīŋ-ô	‘African (person)’	“skin-black”

As modifiers, adjectival bahuvrihis are subject to tonal ablaut and depend on the tone melody of the modified noun. Usually the tonal alternation is limited to the final syllable, as with most simple adjectives. However, a common composite adjective meaning ‘massive’ is *jáá-húlò-ò* after /H/-melodic noun and *fàà-húlò-ò* after other melodies. This bahuvrihi is from noun *jáà* ‘size, dimensions’ plus *húlò-ò* ‘big’. The tones are correct if the bahuvrihi has a basic form *fàà(-)húlò-ò* with LHL tone pattern (cf. §5.1.5.2), so an /H/-melodic initial can only raise the initial tone of the modifier.

Adjectival bahuvrihis in the lexical data that function as modifiers of another noun are in (307).

(307) compound	gloss	literal
góómó múnú-móónòḡ-ḡ	‘fish sp.’	“ <i>Distichodus</i> .fish nose-long”
hánámá háá-húló-ó	‘zorilla (polecat)’	“beast odor-big”
hóóndáá há ⁿ -móónòḡ-ḡ	‘great egret’	“egret neck-long”
hónón dáá-fḡḡ-ḡ (dáá- < Bambara)	‘piapiac (magpie)’	“bird mouth-black”
mónó táá-móónòḡ-ḡ	‘bullfrog’	“frog leg-long”
ndílé há ⁿ -móónòḡ-ḡ	‘giraffe’	“?? neck-long”
jíní háá-tóḡ-ḡ	‘white (person)’	“person scale/shell-red”
sóḡónó nḡḡḡ-ḡḡ-ḡ	‘catfish sp.’	“catfish soul-hard” (=long-lived)
súḡú fáá-hóḡ-ḡ	‘grass sp. (<i>Eragrostis</i>)’	“grass head-white”
súmbó háá-húlò-ò	‘pangolin’	“animal scale-big”
súúmbó [fáá ⁿ -hón]-tóḡ-ḡ	‘blowfly’	“fly [head]-red”
wááá lógó-dúúnḡḡ-ḡ	‘trunkfish sp.’	“trunkfish mouth-short”
wááá lógó-móónòḡ-ḡ	‘trunkfish sp.’	“trunkfish mouth-long”
wóóndó lógó-móónòḡ-ḡ	‘spiny eel sp.’	“lungfish mouth-long”

The term in (308) has a bahuvrihi as the second adjective in a N-Adj1-Adj2 construction..

(308) kóḡḡḡ fí-ná-ná lógó-dúúnḡḡ-ḡ ‘catfish sp.’ “*Synodontis* black mouth-short”

5.2.1.2 With numeral final

Noun-numeral bahuvrihis are elicitable as modifiers of another noun. The tonal patterns reflect Tone-Leveling.

If the numeral at the end of the bahuvrihi is /H/-melodic, its final tone is determined by the tone melody of the modified noun. Therefore /H/-melodic ‘goat’ in (309a) and /L/-melodic ‘cow’ in (309b) determine the final tone of the numeral ‘2’ at the end of the bahuvrihi.

- (309) a. sóḡó [fááⁿ-hóóⁿ]-fíénú-ú
 goat [head]-two-Sg
 ‘two-headed goat’ (< sóḡó-ó)
- b. náá [fááⁿ-hóóⁿ]-fíénù-ù
 cow [head]-two-Sg
 ‘two-headed cow’ (< nàà)

If the numeral is /HL/-melodic, its own tone is fixed, so the tonal distinction is made at the end of the nominal initial, as with ‘head’ in (310a-b).

- (310) a. sógó [ʃááⁿ-hóóⁿ]-ʃíyò-ò
goat [head]-three-Sg
 ‘three-headed goat’ (< sógó-ó)
- b. náá [ʃááⁿ-hòòⁿ]-ʃíyò-ò
cow [head]-three-Sg
 ‘three-headed cow’ (< nàà)

An example with ‘1’ is (311).

- (311) a. hálú táá-kénèṅ-ò
man foot-one-Sg
 ‘one-legged man’
- b. sógó táá-kénèṅ-ò
goat foot-one-Sg
 ‘one-legged goat’

e'. sógó -yéⁿ 'sūnūn 'tūmēⁿ
 [= (e)]

f. sèédù 'ságà-à kónìⁿ
 S sheep-Sg Topic
 'as for Seydou's sheep-Sg'

Poss-N-DiscFun

Unlike other modifying adjectives, kíná 'other' can follow N-Num. See 'two other girls' in 2021-06 @ 00:46.

6.1.2 Headless NPs (absolute function of demonstratives, etc.)

A numeral or demonstrative by itself may function as an NP in the absence of a noun (314a-b).

(314) a. kú lóó [ná 'nà]
Dem give.Pfv [1Sg Dat]
 'Give me that!
 (variant: kú nóó 'give me that!')

b. kénèén / kólóhò 'lṣṣ [zàkí 'nà]
one / five give.Pfv [Z Dat]
 'Give-2Sg one/five to Zaki!'

Adjectives normally follow a noun, minimally a semantically light noun like nàháà 'thing', when the referent is nonspecific (e.g. 'a black one', 'something black'). However, adjectives can function nominally when the referent is specific.

(315) a. hóó-ná-ná-á 'lṣṣ [zàkí 'nà]
white-Inch-Ppl-Sg give.Pfv [Z Dat]
 'Give Zaki the white one!'

b. jííné-nóḡ-ò 'lṣṣ [zàkí 'nà]
small-Dimin-Sg give.Pfv [Z Dat]
 'Give Zaki the small one!'

c. tígèḡ-ó-yén 'lṣṣ [zàkí 'nà]
heavy-Sg-Pl give.Pfv [Z Dat]
 'Give Zaki the heavy ones!'

In texts, it is more common to express the omitted noun in the form of a third-person pronominal, ostensibly a possessor but functioning as a partitive. For example, in 2015-06 @ 02:33, two types

of processed fish are distinguished: \bar{a} hùbúŋ-ð ‘its fresh (type)’, and \bar{a} wùsù-ná-à ‘its smoked (type)’.

The universal quantifier ‘all’ systematically distinguishes its absolute form $súnú^n$ ‘everyone’ (human only) from its 3Sg possessive/partitive form \bar{a} ‘ $sūnū^n$ ‘everything’ (nonhuman only). Examples are in §6.6.1.1.

6.1.3 Singular and plural forms of nouns and adjectives

Common nouns (i.e. other than names) have singular and plural forms (316). The singular is formed by adding -ó after a stem-final nasal element (ⁿ), or by lengthening a stem-final short vowel unless. Nouns whose bare stem already ends in a long oral vowel are unchanged. The plural suffix -yèⁿ is added to the singular form.

(316)	bare stem	singular	plural
	a. sógó	sógó-ó	sógó-ó-yè ⁿ
	b. sùbáà	sùbáà	sùbáà-yè ⁿ
	c. hònò ⁿ	hònòŋ-ô	hònòŋ-ó-yè ⁿ

One could alternatively analyse the “singular” suffix as an “absolute” suffix, i.e. an indicator that the noun is capable of functioning as an independent NP in a clause (without a following modifier).

For the morphology, including irregular plurals, see §4.1.1 above. For the distribution and functions of the bare stem, see the following subsection.

6.1.4 Singular versus bare stem

The bare stem occurs before a modifier (adjective, numeral, demonstrative) and as compound initial. In order to function as an NP constituent within a clause, the bare stem must be converted into the singular (or plural) form, with rare exceptions described below. As a result, the singular suffix is generally neutral as to definiteness.

(317)	Ø	ŋá	†ságà-à / †hónòŋ-ð	héè
	1Sg	Sbj/Obj	sheep-Sg / bird-Sg	see.Pfv
			‘I saw a/the sheep-Sg/bird.’	

The “singular” form is also a morphological part of regular nominal plurals, preceding plural -yèⁿ (318).

(318)	Ø	ŋá	†ságà-á-yè ⁿ / †hónòŋ-ó-yè ⁿ	héè
	1Sg	Sbj/Obj	sheep-Sg-Pl / bird-Sg-Pl	see.Pfv
			‘I saw (the) sheep-Pl/birds.’	

The exception to this is that irregular plurals for certain human nouns, like há-lèèⁿ ‘men’ (§4.1.1.4), show no singular morphology.

The singular suffix is likely homologous to the definite singular suffix in JSDj, whose full form -yàwⁿ is contracted except in prepausal position. The distribution of the vocalic singular suffix in Kelenga is too general for it to be glossed as definite. However, there is a faint trace of the original indefinite/definite opposition, in that the bare stem can be used in strongly existential contexts. This is illustrated with tón-ó ‘wind (n), air’, in bare-stem form tóⁿ, concerning the availability of air for pumping into tires (319).

- (319) a. tón gá ʔwɔ̃ⁿ
 air be.Loc there.Def
 ‘There is (some) air.’
- b. tón dá ʔwɔ̃ⁿ
 air not.be.Loc there.Def
 ‘There is no air.’

A bare stem can also occur once at the beginning of a tale as a kind of title. The noun zírìŋ-ò ‘tale’ itself appears in bare-stem form zírìⁿ, as a formal announcement that a narrative is beginning. An example is at the beginning of text 2021-08 @ 00:09. Here zírìⁿ is followed by húúrú-nêⁿ ‘caterpillar’, the bare-stem form of diminutive húúrú-nóŋ-ò, announcing the main protagonist of the tale. Once the actual narrative begins, bare stems do not occur as independent nouns.

The bare stem is also used in the peculiar [X wóó X] construction with repeated noun X, meaning ‘any X (at all)’, see §7.1.2.2.

jíní-í ‘person’ can occur in unsuffixed form jíní in the sense ‘(not) anyone’ in negative clauses. See 2021-01 @ 02:32 for an example. This can also be expressed as jíní sí: ‘any person’ with an overt quantifier (§6.6.2.2).

With these minor exceptions, the singular form occurs in nearly all indefinite as well as in all definite contexts in the absence of an immediately following modifier (on which see below).

- (320) a. Ø ŋá ʔhónòŋ-ó ʔhɛ̀ɛ̀
 1Sg Sbj/Obj bird-Sg see.Pfv
 ‘I saw a/the bird.’ (< hònòŋ-ò)
- b. íj gá bélé ʔtòŋ-ó ʔsãⁿ
 1Sg Ipfv Fut air-Sg buy.Pfv
 ‘I will buy some air.’ (< tón-ó)

The bare stem is obligatory before inner modifiers. These are illustrated in (321-323).

- (321) noun + adjective
- a. sógó / dúú méeé
 goat / powder good
 ‘a good goat/powder’ (< sógó-ó, dúú)
- b. gúlú / múnú / hónóⁿ mèè
 night / dog / bird good
 ‘a good night/dog/bird’ (< gùlù-ù, mùnù-ù, hòndò-ò)
- (322) noun + numeral
- a. sógó / dúú jíyò
 goat / powder three
 ‘three goats/powders’
- b. gùlù / mùnù / hòndòⁿ jíyò
 night / dog / bird three
 ‘three nights/dogs/birds’
- (323) noun + demonstrative
- a. kú sógó / dúú kú
 Dem goat / powder Dem
 ‘this/that goat/powder’
- b. kú gúlú / múnú / hónóⁿ kù
 Dem night / dog / bird Dem
 ‘this/that night/dog/bird’

6.2 Possessive NPs

Possessors immediately precede possessed nouns (**possessums**). There is no segmental genitive morpheme. The presence of a possessor has no effect on the segmental form (including suffixation) of the possessum. The latter occurs in its usual singular or plural form, not in its bare stem. The possessum is subject to tonal ablaut (§6.2.3 below).

- (324) a. sèèdú ‘sògó-ò / nàà
 S goat-Sg / cow
 ‘Seydou’s goat/cow’
- b. sèèdú ‘sògó-ó-yèⁿ / nàá-yèⁿ
 S goat-Sg-Pl / cow-Pl
 ‘Seydou’s goats/cows’

6.2.1 Alienability

There is no distinction in morphosyntax or tones between alienable and inalienable nouns. In particular, kin and body-part possessums undergo tonal ablaut in the same way as alienable possessums. In addition, kin and body-part terms like other nouns can occur in unpossessed form, in contexts like ‘I don’t have a foot’ or ‘I don’t have a cousin’, unlike the case in languages where such nouns require at least a pro forma possessor.

6.2.2 Pronominal and nonpronominal possessors

Based on their tonal effects on possessums, pronominal possessors can be grouped as in (325). The forms in (325a-b) are proclitics. Demonstrative kú ‘this/that one’ as possessor (e.g. ‘this one’s sheep’) behaves like an H-toned proclitic. The forms in the left column are lexically basic, and appear when the possessive NP is clause-initial or spoken in isolation. The forms in the right column, which reflect tonal inversions on pronominals and kú, occur in other positions, i.e. after a grammatical particle or a verb. These are the same tonal changes that apply to these pronominal proclitics in other functions (subject after particle, direct object, complement of postverbal postposition).

(325)	after pause	inverted
a. H-toned proclitics and pronominal demonstrative		
1Sg	ń́	ń̀
1Pl	ń́gí	ń̀gì
2Sg	á	à
2Pl	í	ì
Logo/3ReflSg	í	ì
‘this/that’ (deictic)	kú	kù
b. L-toned proclitics		
3Sg	à (~ ā)	á
3Pl	ì (~ ĩ)	í
c. nonpronominal		
Logo/3ReflPl	í-yè ⁿ	ì-yè ⁿ
‘that’ (definite)	ó	ó
nonpronominal NP	(various)	

6.2.3 Tonal ablaut of possessums

Possessums are subject to tonal ablaut, either affecting just the left edge (adjacent to the possessor) or stem-wide. Applicable tone-lowering processes are described and exemplified in §3.6.5.3.9 above. /H/-melodic nouns are tone-dropped to L*HL after 3Sg à and 3Pl ì and after nonpronominal possessors. When not prepausal, this L*HL surfaces as all-L or as L*H* due to tone sandhi. Heavy /H/-melodic nouns such as compounds and N-Adj combinations can be downstepped to ʹM instead of tone-dropped after nonpronominal possessors. /HL/-melodic nouns are downstepped to ʹML after nonpronominal possessors but not after proclitics, except after third-person proclitics in postpausal position as part of Tone Terracing (à básà-à → ā ʹbāsà-à ʹhis/her agamaʹ). /L/-melodic nouns that have at least two syllables, and /LHL/-melodic nouns that begin with at least two L-toned moras, undergo Initial H-Ablaut (§3.6.5.4.2).

Either or both of the possessor and the possessum may then undergo low-level tone sandhi (Final Tone-Raising).

6.2.3.1 Possessums whose stems end in vowels

Further to §3.6.5, the subsections below present examples of possessor-possessum combinations, beginning with vowel-final possessums. 2Sg á is proxy for the set of H-toned pronominals, 3Sg à is proxy for L-toned pronominals, and ʹSeydouʹ represents nonpronominal possessors.

6.2.3.1.1 L-initial nouns as possessums

Array (326) illustrates /L/- and /LHL/-melodic nouns of two moras as possessums. The monosyllabic /L/-melodic Cvv stems in (326a) have somewhat unique alternations of Cṽṽ and Cṽṽ, on which see §4.1.1.5. The bisyllabic /L/-melodic stems in (326b) undergo Initial H-Ablaut after 2Sg and ʹSeydouʹ possessors. The bisyllabic /LHL/-melodic stems in (326c) have only one initial L-toned syllable and so are unaffected by Initial H-Ablaut. All forms shown are postpausal (isolation or clause-initial). Clause-medially, 2Sg á becomes à and 3Sg à becomes á by Tone Inversion, but this does not affect the tones of the possessum.

(326)	unpossessed	2Sg	3Sg	ʹSeydouʹ	gloss
a. (arguably) /L/ melody, monosyllabic					
	kââ	á kââ	ā kââ	sèèdú kââ	ʹfatherʹ
	mââ	á mââ	ā mââ	sèèdú mââ	ʹmotherʹ
	nââ	á nââ	ā nââ	sèèdú nââ	ʹcowʹ
	hòô	á hòô	ā hòô	sèèdú hòô	ʹhouseʹ
	tââ	á tââ	ā tââ	sèèdú tââ	ʹfootʹ

b. /L/ melody, CvCv-

sàgà-à	á ¹ ságà-à	ā sàgà-à	sèédù ¹ ságà-à	‘sheep’
hòlò-ò	á ¹ hólò-ò	ā hòlò-ò	sèédù ¹ hólò-ò	‘salt’
jùgù-ù	á ¹ júgù-ù	ā jùgù-ù	sèédù ¹ júgù-ù	‘garment’
tàrà-à	á ¹ tàrà-à	ā tàrà-à	sèédù ¹ tàrà-à	‘grandparent’
fùrù-ù	á ¹ fúrù-ù	ā fùrù-ù	sèédù ¹ fúrù-ù	‘stomach’
fòrò-ò	á ¹ fórò-ò	ā fòrò-ò	sèédù ¹ fórò-ò	‘intestines’
fólò-ò	á ¹ fólò-ò	ā fólò-ò	sèédù ¹ fólò-ò	‘corpse’
bòsò-ò	á ¹ bósò-ò	ā bòsò-ò	sèédù ¹ bósò-ò	‘gravel’
tòtò-ò	á ¹ tótò-ò	ā tòtò-ò	sèédù ¹ tótò-ò	‘pouched rat’

c. /LHL/ melody, CvCv-

kòfó-ò	á kòfó-ò	ā kòfó-ò	sèédù kòfó-ò	‘nail (body)’
jàbá-à	á jàbá-à	ā jàbá-à	sèédù jàbá-à	‘onion’
ndòlò-ò	á ndòlò-ò	ā ndòlò-ò	sèédù ndòlò-ò	‘liver’

Array (327) features heavier possessums of three or four moras with L-initial melodies. The extra initial L-toned mora allows Initial H-Ablaut to apply overtly to /LHL/-melodic nouns in (327b), but not to those in (327c).

(327) unpossessed 2Sg 3Sg ‘Seydou’ gloss

a. /L/ melody with three moras

nààmù-ù	á ¹ náàmù-ù	ā nààmù-ù	sèédù ¹ náàmù-ù	‘sauce’
bòòrò-ò	á ¹ bóòrò-ò	ā bòòrò-ò	sèédù ¹ bóòrò-ò	‘thigh’
ṅàṅà-à	á ¹ ṅáṅà-à	ā ṅàṅà-à	sèédù ¹ ṅáṅà-à	‘woman/wife’

b. /LHL/ melody with at least two initial L-toned moras

lèèṅgè-è	á ¹ lèèṅgè-è	ā lèèṅgè-è	sèédù ¹ lèèṅgè-è	‘tree (<i>Azelia</i>)’
ṅgààná-à	á ¹ ṅgààná-à	ā ṅgààná-à	sèédù ¹ ṅgààná-à	‘crow’
sì ⁿ zìmbá-à	á ¹ sì ⁿ zìmbá-à	ā sì ⁿ zìmbá-à	sèédù ¹ sì ⁿ zìmbá-à	‘euphorbia’
tàmààtí-ì	á ¹ tàmààtí-ì	ā tàmààtí-ì	sèédù ¹ tàmààtí-ì	‘tomato’

c. /LHL/ melody with a single initial L-toned mora

bòsólò-ò	á bòsólò-ò	ā bòsólò-ò	sèédù bòsólò-ò	‘hip’
ṅìmógò-ò	á ṅìmógò-ò	ā ṅìmógò-ò	sèédù ṅìmógò-ò	‘sib-in-law’

6.2.3.1.2 /H/-melodic nouns as possessums

/H/-melodic possessums are unaffected by 2Sg á possessor, but they are tone-dropped to (maximally) L*HL after 3Sg à possessor and after nonpronominal possessor.

(328)	unpossessed	2Sg	3Sg	‘Seydou’	gloss
a. /H/ melody, monosyllabic					
	júú	á júú	ā ‘jùù	sèèdú ‘jùù	‘water’
	húó ⁿ	á húó ⁿ	ā ‘hùò ⁿ	sèèdú ‘hùò ⁿ	‘bone’
	fíé	á fíé	ā ‘fîê	sèèdú ‘fîê	‘grain’
b. /H/ melody, CvCv-v					
	téné-é	á téné-é	ā ‘tènè-è	sèèdú ‘tènè-è	‘aunt’
	bórí-í	á bórí-í	ā ‘bòrí-ì	sèèdú ‘bòrí-ì	‘heart’
	sógó-ó	á sógó-ó	ā ‘sògó-ò	sèèdú ‘sògó-ò	‘goat’
c. /H/ melody					
	máájó-ó	á máájó-ó	ā ‘màájó-ò	sèèdú ‘màájó-ò	‘maize’
	kùmbéré-é	á kùmbéré-é	ā ‘kùmbèrè-è	sèèdú ‘kùmbèrè-è	‘knee’
	lèŋ-gálú-ú	á lèŋ-gálú-ú	ā ‘lèŋ-gàlú-ù	sèèdú ‘lèŋ-gàlú-ù	‘son’
	báájíníyá-á	á báájíníyá-á	ā ‘bàájìnì-yá-à	sèèdú ‘bàájìnìyá-à	‘parent’
	téné-ŋájánú-ú	á téné-ŋájánú-ú	ā ‘tènè-ŋàjànú-ù	sèèdú ‘tènè-ŋàjànú-ù	‘aunt’

Textual examples of the postnominal L*HL pattern (surface all-L or L*H*) from /H/ melody are á-rá ‘tògó-ó ‘your-Sg name’ (with independent pronoun) 2021-01 @ 00:11, sàbùlà-á ‘wòròŋ-ò ‘the hippo’s place’ 2021-01 @ 04:48, ó ‘bààrá-à ‘the work of that (era)’ 2021-06 @ 07:00, [ŋgì kónìⁿ] ‘ŋàjá-á ‘our [topic] eye’ 2021-06 @ 02:28, and júú ‘lògó-ó ‘the mouth (=edge) of water’ 2021-08 @ 00:22.

6.2.3.1.3 /HL/- and /HLHL/-melodic nouns as possessums

Possessums of /HL/-melody are unchanged after 2Sg á. Bimoraic stems in particular are downstepped to ‘ML after nonpronominal possessors. Heavy possessums (e.g. trisyllabics), can remain unchanged. The effect in (329) is that ‘Seydou’ appears in two forms, sèèdú (with Rightward H-Tone Shift triggered by Downstep on the possessum) and sèèdù (no shift and no downstep). Postpausally, 3Sg à can combine with light /HL/-melodic possessums via Tone Terracing, e.g. à básà-à → ā ‘bāsà-à, but heavy possessums can remain unchanged. There is likely some interspeaker variation here, but the constant is that /HL/-melodic stems retain a falling tone break, whether HL or ‘ML.

(329)	unpossessed	2Sg	3Sg	‘Seydou’	gloss
a. /HL/ melody, monosyllabic					
	ǰáà	á ǰáà	à ǰáà	sèèdú ‘ǰáà	‘size’
	tóò	á tóò	à tóò	sèèdú ‘tóò	‘sand’

b. /HL/ melody, CvCv				
bàsà-à	á bàsà-à	ā 'bàsà-à	sèèdú 'bàsà-à	'agama'
kírì-ì	á kírì-ì	ā 'kírì-ì	sèèdú 'kírì-ì	'manner'
c. /HL/ melody, CvvNCv-v				
bééṅgè-è	á bééṅgè-è	ā 'bēēṅgè-è	sèèdú 'bēēṅgè-è	'uncle'
d. /HL/ melody, CvvCv-v				
tíj̀nà-à	á tíj̀nà-à	à tíj̀nà-à	sèèdú tíj̀nà-à	'grandson'
e. /HL/ melody, with at least two initial H-toned syllables				
gálákà-à	á gálákà-à	à gálákà-à	sèèdú gálákà-à	'flank'
bóló-mèè	á bóló-mèè	à bóló-mèè	sèèdú bóló-mèè	'young person'
jígíj̀nè-è	á jígíj̀nè-è	à jígíj̀nè-è	sèèdú jígíj̀nè-è	'granary'
kánímè-è	á kánímè-è	à kánímè-è	sèèdú kánímè-è	'cousin'
lógólò-ò	á lógólò-ò	à lógólò-ò	sèèdú lógólò-ò	'younger sib'
tágáyò-ò	á tágáyò-ò	à tágáyò-ò	sèèdú tágáyò-ò	'elder sib'
báláhálù-ù	á báláhálù-ù	à báláhálù-ù	sèèdú báláhálù-ù	'friend'
jànj̀á-lágà-à	á jànj̀á-lágà-à	à jànj̀á-lágà-à	sèèdú jànj̀á-lágà-à	'face'
tárá-hálù-ù	á tárá-hálù-ù	à tárá-hálù-ù	sèèdú tárá-hálù-ù	'grandfather'
téj̀né-ṅánù-ù	á téj̀né-ṅánù-ù	à téj̀né-ṅánù-ù	sèèdú téj̀né-ṅánù-ù	'co-wife'
túgú-hálù-ù	á túgú-hálù-ù	à túgú-hálù-ù	sèèdú túgú-hálù-ù	'male in-law'
bárágáántè-è	á bárágáántè-è	à bárágáántè-è	sèèdú bárágáántè-è	'bdellium'

The few /HLHL/-melodic nouns are in (330). The speaker who was checked applies Downstep after nonpronominal 'Seydou' except when the possessum has an initial <HL>-toned syllable (330a).

(330)	unpossessed	2Sg	3Sg	'Seydou'	gloss
a. /HLHL/ melody, with an initial <HL>-toned syllable					
	hóòrò-ò	á hóòrò-ò	ā 'hóòrò-ò	sèèdú hóòrò-ò	'back (n)'
b. /HLHL/ melody, with a single initial H-toned syllable					
	bááwòlò-ò	á bááwòlò-ò	à bááwòlò-ò	sèèdú 'bāāwòlò-ò	'mallard'
	mááṅgòrò-ò	á mááṅgòrò-ò	à mááṅgòrò-ò	sèèdú 'māāṅgòrò-ò	'mango'
c. /HLHL/ melody, with at least two initial H-toned syllables					
	tómòndìgí-ì	á tímòndìgí-ì	ā 'tómòndìgí-ì	sèèdú 'tòmòndìgí-ì	'ricin bush'
	sámánèèné-è	á sāmánèèné-è	ā 'sámánèèné-è	sèèdú 'sāmānēèné-è	'spleen'
	póm-bóm-bógòlò-ò		ā 'pòm-bòm-bógòlò-ò		' <i>Calotropis</i> '
		á póm-bóm-bógòlò-ò		sèèdú 'pòm-bòm-bógòlò-ò	

6.2.3.2 η-Final nouns as possessums

Nouns (and adjectives) whose stems end in a nasal syllable add suffix -ɔ̄ (of variable tone) to η in the singular. They differ slightly from vowel-final noun stems in the position of the H tone in LHL and HLHL patterns, in that a nonlexical H-tone is realized on the suffix, which is then <HL>.

(331) presents prosodically light stems, whose singular is segmentally Cvη-ɔ̄. The /L/-melodic stems (331a) are too short to allow overt Initial H-Ablaut. They have an <HL>-toned suffix when unpossessed, e.g. t̄uη-ɔ̄ ‘body’. They keep this tone pattern after third-person pronominal possessors and after nonpronominal possessors. They are fully L-toned after H-toned pronominal possessors, hence á t̄uη-ɔ̄ ‘your body’. Both t̄uη-ɔ̄ and t̄uη-ɔ̄ are subject to later tone sandhi triggered by a following word. /H/-melodic stems have three tonal possessed forms, including tone-dropped forms after nonpronominal possessors (331b). /HL/-melodic stems are downstepped to ʔML after nonpronominal possessors (331c).

(331)	unpossessed	2Sg	3Sg	‘Seydou’	gloss
a. /L/ melody					
	t̄uη-ɔ̄	á t̄uη-ɔ̄	ā t̄uη-ɔ̄	sèèdú t̄uη-ɔ̄	‘body’
	s̄ɔ̄η-ɔ̄	á s̄ɔ̄η-ɔ̄	ā s̄ɔ̄η-ɔ̄	sèèdú s̄ɔ̄η-ɔ̄	‘war’
	n̄ɔ̄η-ɔ̄	á n̄ɔ̄η-ɔ̄	ā n̄ɔ̄η-ɔ̄	sèèdú n̄ɔ̄η-ɔ̄	‘knife’
b. /H/ melody					
	háη-ɔ̄	á háη-ɔ̄	ā hàη-ɔ̄	sèèdú ʔháη-ɔ̄	‘neck’
	ɲíη-ɔ̄	á ɲíη-ɔ̄	ā ɲìη-ɔ̄	sèèdú ʔɲìη-ɔ̄	‘tooth’
	léη-ɔ̄	á léη-ɔ̄	ā lèη-ɔ̄	sèèdú ʔlèη-ɔ̄	‘child’
	gwáη-ɔ̄	á gwáη-ɔ̄	à gwàη-ɔ̄	sèèdú ʔgwàη-ɔ̄	‘okra’
c. /HL/ melody					
	jáη-ɔ̄	á jáη-ɔ̄	à jáη-ɔ̄	sèèdú ʔjáη-ɔ̄	‘fishtrap’
	néη-ɔ̄	á néη-ɔ̄	à néη-ɔ̄	sèèdú ʔnēη-ɔ̄	‘tongue’
	ndóη-ɔ̄	á ndóη-ɔ̄	à ndóη-ɔ̄	sèèdú ʔndōη-ɔ̄	‘grasshopper’

η-final nouns of two or more stem syllables are in (332). The main difference vis-à-vis (331) is that the /L/-melodic stems now have enough syllables to allow overt Initial H-Ablaut after H-toned pronominal possessors and after nonpronominal possessors.

(332)	unpossessed	2Sg	3Sg	‘Seydou’	gloss
a. /L/ melody					
	t̄ámàη-ɔ̄	á ʔt̄ámàη-ɔ̄	ā t̄ámàη-ɔ̄	sèédú ʔt̄ámàη-ɔ̄	‘side of face’
	hònɔ̄η-ɔ̄	á ʔhónɔ̄η-ɔ̄	ā hònɔ̄η-ɔ̄	sèédú ʔhónɔ̄η-ɔ̄	‘bird (any)’
	t̄èrèη-ɔ̄	á ʔt̄èrèη-ɔ̄	ā t̄èrèη-ɔ̄	sèédú ʔt̄èrèη-ɔ̄	‘line (drawn)’

b. /H/ melody

wóròŋ-ó	á wóròŋ-ó	ā 'wòròŋ-ô	sèèdú 'wòròŋ-ò	'place'
zégéŋ-ó	á zégéŋ-ó	ā 'zègèŋ-ô	sèèdú 'zègèŋ-ò	'wild date'
fúrá-lán-ó	á fúrá-lán-ó	ā 'fùrà-làn-ô	sèèdú 'fùrà-làn-ò	'broom'

c. /HL/ melody

húmòŋ-ò	á húmòŋ-ò	à húmòŋ-ò	sèèdú 'hūmòŋ-ò	'paddle'
húŋgúrùŋ-ó	á húŋgúrùŋ-ò	ā hùŋgùrùŋ-ô	sèèdú húŋgúrùŋ-ò	'piece'

d. /LHL/ melody

hàmán-ò	á hàmán-ò	ā hàmán-ò	sèèdú hàmán-ò	'wing'
dàŋgàràŋ-ò	á dàŋgàràŋ-ò	ā dàŋgàràŋ-ò	sèèdú dàŋgàràŋ-ò	'viper sp.'

e. /HLHL/ melody

nóðzìŋ-ò	á nóðzìŋ-ò	à nóðzìŋ-ò	sèèdú 'nòðzìŋ-ò	'chameleon'
ndúbàlèŋ-ò	á ndúbàlèŋ-ò	à ndúbàlèŋ-ò	sèèdú 'ndūbàlèŋ-ò	'fig tree'
nánáàlèŋ-ò	á nánáàlèŋ-ò	ā nānāàlèŋ-ò	sèèdú 'nānāàlèŋ-ò	'swift (bird)'

As with vowel-final stems with 3Sg shapes C \hat{v} and C \hat{v} C \acute{v} - \grave{v} , all forms of η -final stems in (332) that have <HL>-toned suffix - \hat{o} following an L-toned stem drop the L-tone in clausal context before another H-tone. (333a-b) illustrate with h \grave{o} n \grave{o} ŋ- \hat{o} 'bird'.

- (333) a. h \grave{o} n \grave{o} ŋ- \hat{o} tí 'byē
 bird-Sg PfvNeg come.Pfv
 'The bird didn't come.'
- b. [ā h \grave{o} ŋ \hat{o} ŋ- \hat{o}] tí 'byē
 [3Sg bird-Sg] PfvNeg come.Pfv
 'His/her bird didn't come.'

The <HL>-toned suffix - \hat{o} becomes H-toned - \acute{o} before nonhigh tones (L and downstepped \acute{M}), parallel to what happens with vowel-final C \hat{v} and C \hat{v} C \acute{v} - \grave{v} in the same context.

- (334) a. h \grave{o} n \acute{o} ŋ- \acute{o} 'byē
 bird-Sg come.Pfv
 'The bird came.'
- b. [ā h \grave{o} n \acute{o} ŋ- \acute{o}] 'byē
 [3Sg bird-Sg] come.Pfv
 'His/her bird came.'

6.2.3.3 Possible origin of the L*HL ablaut pattern

An interesting but speculative hypothesis is that the L*HL ablaut pattern associated with 3Sg à and 3Pl ì possessors originated as word-internal (presuffixal) tone sandhi. The singular forms of Kelenga are likely homologous to definite singular forms in JSDj, with suffix -yàwⁿ that induces Final Tone-Raising on an /L/-melodic noun stem, schematically C̀̀C̀̀→ C̀̀C̀̀́-yàwⁿ.

In Kelenga, in many of the examples in the preceding subsections the H in the third person L*HL forms appears in the stem-final C̀́ preceding the extra vocalic mora of the singular. However, the L*HL pattern has spread beyond such cases.

If this diachronic scenario is correct, the C̀̀C̀̀ pattern observed with monosyllabic stems, both in isolation and after a third-person pronominal possessor (nàâ ‘cow’, ā nàâ ‘his/her cow’) could likewise point back to definite singular forms *nàá-à and *ā nàá-à whose suffix triggered Final Tone-Raising.

6.2.4 Default possessum fẁ̀̀ ~ fẁ̀̀̀

When possessum type is contextually understood, it is expressed minimally by the default possessum fẁ̀̀ ~ fẁ̀̀̀. The isolation pronunciation is fẁ̀̀̀ after 3Sg or 3Pl pronominal, but fẁ̀̀̀ after other possessors. Before L or downstepped H, as in plural fẁ̀̀̀́-yèⁿ, the form is fẁ̀̀̀ regardless of the possessor.

(335)	possessor	singular	plural	gloss
a.	1Sg	í fẁ̀̀̀	í fẁ̀̀̀́-yè ⁿ	‘mine’
	1Pl	ngí fẁ̀̀̀	ngí fẁ̀̀̀́-yè ⁿ	‘ours’
	2Sg	á fẁ̀̀̀	á fẁ̀̀̀́-yè ⁿ	‘yours-Sg’
	2Pl	í fẁ̀̀̀	í fẁ̀̀̀́-yè ⁿ	‘yours-Pl’
	Logo/3ReflSg	í fẁ̀̀̀	í fẁ̀̀̀́-yè ⁿ	‘(said:) his/hers’
b.	3Sg	ā fẁ̀̀̀̀	ā fẁ̀̀̀̀́-yè ⁿ	‘his/hers’
	3Pl	ī fẁ̀̀̀̀	ī fẁ̀̀̀̀́-yè ⁿ	‘theirs’
c.	‘Seydou’	sèèdú fẁ̀̀̀	sèèdú fẁ̀̀̀́-yè ⁿ	‘Seydou’s’

Combinations with perfective positive intransitive verbs and with post-subject particles are in (336). An /H/-melodic verb is downstepped (as in ‘passed by’), so the form is fẁ̀̀̀ before such verbs as well as before /LHL/ verbs (as in ‘swam’). The form is fẁ̀̀̀ before H-tone.

(336)	form	gloss	‘his/hers _’	‘yours-Sg _’
	a. perfective positive verbs			
	hélé	‘passed by’	[ā fwòó] ‘hēlē	[á fwòó] ‘hēlē
	nùgû ⁿ	‘swam’	[ā fwòó] nùgû ⁿ	[á fwòó] nùgû ⁿ
	céè	‘got up’	[ā fwòò] céè	[á fwòò] céè
	b.			
	há	Ipfv	[ā fwòò] há ‘hēlē-lē	[á fwòò] há ‘hēlē-lē
	tá	IpfvNeg	[ā fwòò] tá ‘hēlē-lē	[á fwòò] tá ‘hēlē-lē
	tí	PfvNeg	[ā fwòò] tí ‘hēlē	[á fwòò] tí ‘hēlē
	ɲá	Sbj/Obj	[ā fwòò] ɲá ...	[ā fwòò] ɲá ...

A prototypical context of use for these forms is when two possessors of the same possessum type are compared. The possessum is spelled out the first time and is replaced by fwòò the second time.

- (337) a. [sèèdú hòó] ‘kēlē ‘cwāā-nā-ā,
 [S **house**] be.Cop be.red-Ppl-Sg,
 [ɲgàà [ná fwòó] ‘kēlē fí-ná-nà-à
 [but [1Sg **Poss**] be.Cop black-Inch-Ppl-Sg
 ‘Seydou’s house is brown, (but) mine is black.’
- b. [sèèdú hòó-yěⁿ] ‘kēlē ‘cwāā-nā-ā(-yèⁿ),
 [S **house-Pl**] be.Cop be.red-Ppl-Sg,
 [ɲgàà [ná fwòó-yěⁿ] ‘kēlē fí-ná-nà-á-yèⁿ
 [but [1Sg **Poss-Pl**] be.Cop black-Inch-Ppl-Sg-Pl
 ‘Seydou’s houses are brown, (but) mine are black.’

See also 2021-01 @ 03:56, 2021-08 @ 01:36 & 02:28. When preposed, X fwòò can function as a way to topicalize a constituent X (§19.1.2).

Since fwòò ~ fwòò is always possessed, its tones are consistent with those of /H/-melodic C’v stems that are tone-dropped as possessums, as with júú ‘water’, X ‘jùù ~ X ‘jùù ‘X’s water’. fwòò is cognate to JSDj fá ‘thing’. However, the tonal status of Kelenga fwòò ~ fwòò is opaque since it has no unpossessed counterpart. Unpossessed ‘thing’ is the unrelated nàṅàà (concrete objects) or ʃòò (abstractions).

A tonal variant of fwòò ~ fwòò occurs in the ‘belong(s) to X’ possessive predicate (§11.5.2.1).

6.2.5 Recursive possession

A possessed NP can itself be a possessor (338a-b).

- (338) a. [sèèdú kàá] hòô
 [S father] house
 ‘Seydou’s father’s house’ (< sèèdù, kàà)
- b. [sèèdù †múnù-ú] †hòrí-ì
 [S dog-Sg] tail-Sg
 ‘Seydou’s dog’s tail’ (< múnù-ù, hòrí-ì)

6.3 Noun plus adjective

6.3.1 Tonal interactions between noun and modifying adjective

6.3.1.1 Tone-Leveling in N-Adj

Tone-Leveling applies in N-Adj combinations in the same way as it applies to the main type of N-N compounds (§5.1.6). The tones of the noun are raised to all-H. The tones of the adjective are all-H if the lexical melody of the noun is /H/, otherwise the tones of the adjective are normally (H*)-L with exactly one L-toned final syllable and any other syllables H-toned. The lexical melody of the adjective is erased, with some exceptions noted below for heavy (i.e., trisyllabic and longer) adjectives.

Nouns of different lexical melodies are presented in (339) in isolation, before numeral ‘3’ (for comparison), and before adjectives.

(339)	noun	gloss	‘3 Xs’	‘good X’	‘black X’
a. /H/-melodic noun					
	júú	‘water’	júú jííyò	júú méeé	júú fí-ná-ná-á
	léŋ-ó	‘child’	lé ⁿ zííyò	lé ⁿ méeé	lé ⁿ fí-ná-ná-á
b. /L/-melodic noun					
	hòò ~ hòô	‘house’	hòò jííyò	hóó mèè	hóó fí-ná-nà-à
	fàlà-à	‘egg’	fàlà jííyò	fàlá mèè	fàlá fí-ná-nà-à
c. /HL/-melodic noun					
	jáŋ-ò	‘trap’	já ⁿ †zīíyò	já ⁿ mèè	já ⁿ fí-ná-nà-à
	jéné-ŋà-à	‘of Djenné’	jéné-ŋà jííyò	jéné-ŋá mèè	jéné-ŋá fí-ná-nà-à
	bóló-mèè	‘child’	bóló-mèè jííyò	bóló-méeé mèè	bóló-méeé fí-ná-nà-à
d. /LHL/-melodic noun					
	há báá	‘cloud’	há báá jííyò	há báá mèè	há báá fí-ná-nà-à
	mí sírí-ì	‘mosque’	mí sírí jííyò	mí sírí mèè	mí sírí fí-ná-nà-à
	mà rí fá-à	‘rifle’	mà rí fá jííyò	mà rí fá mèè	mà rí fá fí-ná-nà-à

For more detail on N-Num combinations including additional variants, see §6.4.1.2. For now, note that the numeral does not erase the noun’s lexical melody, while the adjectives shift all nouns to H-toned.

After Tone-Leveling applies to N-Adj, if the singular adjective now ends in a long L-toned vowel (with or without the singular suffix), it is subject to word-internal Final Tone-Raising before L-toned plural suffix -yèⁿ. For example, *máریفá mèè* ‘good rifle’ is pluralized as *máریفá mèé-yèⁿ* ‘good rifles’. The singular or plural adjective is also subject to Final Tone-Raising if it is followed by a nonhigh tone. Examples: [*máریفá mèé*] ‘byè ‘a good rifle came’, [*máریفá mèè-yéⁿ*] ‘byè ‘good rifles came’.

A broader range of adjectives including participles (which have suffix -na), showing tonal forms after /H/-melodic and /L/-melodic nouns, is in (340). See §4.5.1.1 for a more complete list of modifying adjectives. Throughout (340), the adjective is all-H-toned after /H/-melodic noun, so the whole N-Adj is entirely H-toned. After nouns of other melodies, monosyllabic adjectives are L-toned, bisyllabic adjectives are HL-toned, and longer adjectives split into H*L-toned and L*HL-toned, the latter being the choice of /LHL/-melodic participles (which present this melody as copular predicates) and a few adjectives of probably composite origin like ‘fat’ (340c). As usual, L* and H* notation means that the initial L or H tone can spread over one or two syllables depending on the syllable count of the adjective (including the participial suffix).

(340)	after /H/	otherwise	gloss
	a. all-H and all-L (Cvv only)		
	<i>méé</i>	<i>mèè</i>	‘good’
	<i>ᵐáá</i>	<i>ᵐàà</i>	‘nasty’
	b. all-H and H*L		
	<i>bisyllabic</i>		
	<i>hóró-ó</i>	<i>hórò-ò</i>	‘difficult’
	<i>trisyllabic and longer</i>		
	<i>kágáyí-í</i>	<i>kágáyì-ì</i>	‘bitter’
	<i>ᵐgóólí-ná-á</i>	<i>ᵐgóólí-nà-à</i>	‘curved’
	<i>ᵐánánámá-á</i>	<i>ᵐánánámà-à</i>	‘alive; good (person)’
	c. H*L and L*HL		
	<i>trisyllabic and longer</i>		
	<i>báábírì-ì</i>	<i>bààbírì-ì</i>	‘fat’
	<i>fúré-nà-à</i>	<i>fùré-nà-à</i>	‘wet’
	<i>lávágá-nà-à</i>	<i>làwàgá-nà-à</i>	‘second-hand’

Somewhat similar alternations involving η-final adjectives are in (341). In tonal formulae like HL-<HL>, the hyphen represents the stem-suffix boundary. For fuller lists of these adjectives see §4.5.1.2.1. The relatively light adjectives in (341a-b) are all-H toned after /H/-melodic nouns, but

their final Cvη syllable is L-toned after nouns of other melodies. In the latter case, the singular suffix is <HL>-toned. We can think of the adjectives in (341a-b) as lexically /H/-melodic but acquiring a stem-final L passed on by the noun. In (341c-e), on the other hand, the stem contains an internal HL tone break that is kept regardless of the melody of the noun. In (341d), ‘empty’ has an extra syllable in comparison to the others, and the tone of its initial syllable reflects the melody of the noun. In (341c-d), the singular suffix is L-toned, but in the two diminutive adjectives in (341e) the suffix is <HL>-toned. These diminutive adjectives have Jenaama-Sorogaama cognates with diminutive suffix -gu.

(341)	after /H/	otherwise	gloss
	a. all-H and L-<HL> (monosyllabic stems)		
	fíη-ó	fîη-ô	‘black’ (short form)
	dúη-ó	dùη-ô	‘deep’
	láη-ó	làη-ô	‘distant’
	hóη-ó	hòη-ô	‘white’
	b. all-H and HL-<HL>		
	fáríη-ó	fáríη-ô	‘fearsome’
	kúúléléη-ó	kúúléléη-ô	‘deep’
	c. HL-L fixed		
	gwérèη-ò	gwérèη-ò	‘unripe’
	húbùη-ò	húbùη-ò	‘fresh’
	d. H*L-L and L*HL-L		
	lávólòη-ò	lávólòη-ò	‘empty’
	e. HL-<HL> fixed (two adjectives with diminutive sense)		
	lógòη-ô	lógòη-ô	‘small’
	míèη-ô	míèη-ô	‘thin’

For N-Adj1-Adj2 combinations, see §6.3.3.1 below.

6.3.1.2 kíná-á and ká-kíná-á ‘other’

The modifying adjective ‘(an)other’ is kíná-á. It can be used in both replacement and supplementation contexts. In its uncompounded form, kíná-á patterns tonally as a modifying adjective. It therefore takes tonal form kínà-à after a noun whose melody contains an L-tone (342b-d).

(342)	noun	gloss	‘other _’
	a. /H/ melody		
	jíŋ-ó	‘year’	jíŋ gíná-á
	sógó-ó	‘goat’	sógó kíná-á
	b. /L/ melody		
	hòò	‘house’	hóó kínà-à
	kòò	‘day’	kóó kínà-à
	sàgà-à	‘sheep’	ságá kínà-à
	c. /HL/ melody		
	jáŋ-ò	‘fishtrap’	jáŋ gínà-à
	jéné-ŋà-à	‘Djenné person’	jéné-ŋá kínà-à
	d. /LHL/ melody		
	hàbàà	‘cloud’	hábáá kínà-à
	mìsírì-ì	‘mosque’	mìsírí kínà-à
	màrifá-à	‘rifle’	márifá kínà-à

It has a composite variant ká-kíná-á ‘another’. Here ká ‘a certain’ (§6.3.3.3) effectively occupies the position of the modified noun. The two forms appear to be interchangeable. Examples with ká-kíná-á are in (343).

(343)	noun	gloss	‘other _’	
	a. /H/ melody			
	jíŋ-ó	‘year’	jíŋ ká-kíná-á	source of jíŋ(g)íná-á ‘next year’
	kóó	‘day’	kóó ká-kíná-á	
	sógó-ó	‘goat’	sógó ká-kíná-á	
	b. /L/ melody			
	hòò	‘house’	hóó ká-kínà-à	
	sàgà-à	‘sheep’	ságá ká-kínà-à	
	c. /HL/ melody			
	hàsà-à	‘odor’	hásá ká-kínà-à	
	jáŋ-ò	‘fishtrap’	jáŋ ká-kínà-à	
	jéné-ŋà-à	‘of Djenné’	jéné-ŋá ká-kínà-à	

d. /LHL/ melody

hàbáà	‘cloud’	há bá á ká-kínà-à
mìsírì-ì	‘mosque’	mìsírí ká-kínà-à
màrífá-à	‘rifle’	màrífá ká-kínà-à

In definite contexts involving a counterparty or alter ego that is already active in the discourse, *bòlò-ò* ‘agemate’ can be used to mean ‘the other one’ in the demonstrative form *bóló kù*, plural *bóló kú-yèⁿ* (§18.4.2). It can also become a modifying adjective in the tonal forms *bóló kú* after /H/-melodic noun (*sógó bóló kú* ‘the other goat’) and *bóló kù* after nouns of other melodies (*náá bóló kù* ‘the other cow’).

6.3.1.3 *hónómónó-sóη-ò* ‘old’ and *súré-yá-ná-á* ‘very old’

hónómónó-sóη-ò ‘old’ can function as an independent noun or as a modifying adjective (344a). It is based on the noun *hónómónò-ò* ‘mature adult person’. Participle *súré-yá-ná* from verb *súré-yá(-lá)* ‘get old’ is a modifying adjective denoting more advanced old age. The related abstractive noun is *súré-yá-á* ‘old age’.

- (344) a. *hónómónó-sóη-ò* ‘old person’ (e.g. aged 50+ years)
jàṅánú hónómónó-sóη-ò ‘old woman’
hálú hónómónó-sóη-ó ‘old man’
- b. *jàṅánú súré-yá-nà-à* ‘very old woman’ (e.g. aged 60+ years)
hálú súré-yá-ná-á ‘very old man’

6.3.2 Set-partitioning quantifier (*ká*)

For mass nouns, *ká* denotes a portion. It is added to a suffixed singular noun in (345). The noun is omitted in the repetition that denotes the remainder.

- (345) [súmá-á ‘kā] ṅí= ì fíè nḡṅómà,
[milk-Sg **some**] Sbj/Obj 3ReflSg dump.Pfv on.ground
ká tí= ì fíè
some PfvNeg 3ReflSg dump.Pfv
‘Some milk spilled on the ground, some (=the rest) didn’t spill.’

More often *ká* denotes a specific but unnamed individual. The referent is not yet fully identified but is, or will be, a specific individual from a larger set. Glosses like ‘a certain X’ capture the sense.

ká and plural ká-yèⁿ can function absolutely, i.e. without a modified noun. Alternatively, they can modify a preceding noun or N-Adj. As modifier, ká occurs in two distinct constructions, parallel to those with other quantificational modifiers like kóó-ṅá(á) ‘many’ (§6.4.2).

In one construction, ká follows the singular form of a noun (or noun-adjective string). ká is downstepped to ‘kā (plural ‘kā-yèⁿ) and triggers Final Tone-Raising in the last syllable of preceding elements. The combinations in (346) show downstepped ‘kā and ‘kā-yèⁿ added to singular nouns, not to bare stems, as most clearly with ‘bird’ where singular -ô is present. That this is Downstep rather than Tone-Dropping is shown by the pitch decline in plural ‘kā-yèⁿ.

(346)	noun	gloss	‘a (certain) _’	‘certain _s’
a.	/H/ melody			
	sógó-ó	‘goat’	sógó-ó ‘kā	sógó-ó ‘kā-yè ⁿ
b.	/HL/ melody			
	básà-à	‘agama lizard’	básà-á ‘kā	básà-á ‘kā-yè ⁿ
c.	/LHL/ melody			
	mìsírì-ì	‘mosque’	mìsírì-í ‘kā	mìsírì-í ‘kā-yè ⁿ
	màrìfá-à	‘rifle’	màrìfá-á ‘kā	màrìfá-á ‘kā-yè ⁿ
d.	/L/ melody			
	<i>ᶱ-final</i>			
	hònòᶱ-ô	‘bird’	hònòᶱ-ó ‘kā	hònòᶱ-ó ‘kā-yè ⁿ
	<i>other</i>			
	hòò (~ hòò)	‘house’	hòó ‘kā	hòó ‘kā-yè ⁿ
	ṅàṅàṅ-ù	‘woman’	ṅàṅàṅ-ú ‘kā	ṅàṅàṅ-ú ‘kā-yè ⁿ
	hòrì-ì	‘waterjar’	hòrì-í ‘kā	

In the second construction, ká/kà directly follows the bare stem of a noun, like true modifying adjectives. Tone-Leveling then applies, so the noun is all-H, and the modifier is ká after /H/-melodic noun and kà after nouns of other melodies. The plural is ká-yèⁿ in both cases. Thus sógó ká as an alternative to sógó-ó ‘kā ‘a (certain) goat’, and hónóᶱ kà as an alternative to hònòᶱ-ó ‘kā ‘a (certain) bird’. Plurals in the second construction are sógó ká-yèⁿ and hónóᶱ ká-yèⁿ.

Clausal examples are in (347). (347d) shows ‘kā added to a relative head with nonspecific indefinite reference.

(347)	a.	ní	[‘ṅìní-í	‘kā]	‘byē	[ná	hóò ⁿ]
		if	[person-Sg	a.certain	come.Pfv	[1Sg	call.Pfv]
		‘If somebody comes, call-2Sg me!’					

- b. ní [ʰhónòŋ-ó / ʰságà-á ʰkā] ʰbyē [ó ʰkùⁿ]
 if [bird-Sg / sheep-Sg **a.certain**] come.Pfv [Dem.Def catch.Pfv]
 ‘If some/any bird/sheep comes, catch that one!’ (< hònòŋ-ô)
- c. ná= à ɲá [nàɲáá ʰkā] ʰjàà,
 if.Pfv 2Sg Sbj/Obj [thing **a.certain**] eat.Pfv,
 á há góbò-lò
 2Sg Ipfv sicken.Ipfv
 ‘If you-Sg eat anything, you will get sick.’
- d. [ɲíní m̀wó ʰkā] ʰbyē, f̀ògò-tóó ʰl̩̩ [á ʰnà]
 [person Rel **a.certain**] come.Pfv, place give.Pfv [3Sg Dat]
 ‘Some person who comes, give him/her a place!’
 (i.e. ‘If somebody comes, ...’)

Further examples with plural *ká-yèⁿ* are in (348). It lends itself to parallelistic passages involving two incompatible (e.g. positive and negative) predicates where one occurrence denotes a subset, and the second denotes the complementary second subset, understood to exhaust the set (348a-b).

- (348) a. *ká-yén* ʰtògò ŵⁿ, *ká-yèŋ* ʃòò
 some-Pl stay.Pfv there.Def, **a.certain-Pl** go.Pfv
 ‘Some stayed there, some (=others) went away.’
- b. [ɲàŋànú-ú / hònòŋ-ó ʰkā-yèⁿ] ʰtògò ŵⁿ
 [woman-Sg / bird-Sg **a.certain-Pl**] stay.Pfv there.Def
 ‘Some women/birds stayed there.’
- c. *sáŋà-á* ʰkā-yèⁿ
 time-Sg **a.certain-Pl**
 ‘sometimes, at times, from time to time’
- d. *wóróŋ-ó* ʰkā-yèⁿ
wóróŋ gá-yèⁿ
 place(-Sg) **a.certain-Pl**
 ‘(in) some places’

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

Two adjectives may follow the same noun. Unless there is a lexicalized N-Adj1 collocation, the order of the adjectives appears to be free. For most adjectival pairings, the N-Adj1-Adj2 complex

undergoes Tone-Leveling as a unit, so that only the final syllable of Adj2 is tonally variable (depending at a distance on the lexical melody of the noun). Both the noun and Adj1 are in bare-stem form segmentally, while Adj2 gets singular or plural suffixation as appropriate.

- (349) a. [hóó móónóⁿ] fí-ná-nà-à
 [house long] black-Inch-Ppl-Sg
 ‘a/the long black house’ (< hòò)
- b. [hóó fí-ná-ná] móónòη-ò
 [house black-Inch-Ppl] long-Sg
 [=(a)]
- c. [póηó móónóⁿ] fí-ná-ná-á
 [fish long] black-Inch-Ppl-Sg
 ‘a/the long black fish’ (< póηó-ó)
- d. [póηó fí-ná-ná] móónóη-ó
 [fish black-Inch-Ppl] long-Sg
 [=(c)]

húlo-o ‘big’ has idiosyncratic tonal properties. When húlo-o is either Adj1 or Adj2 in [N-Adj1]-Adj2, Tone-Leveling affects Adj1 independently of Adj2. Thus ‘big’ as Adj1 is húlò after hòò ‘house’ (350a) but húló after póηó-ó ‘fish’ (350c). Likewise, when húlo-o is Adj2, ‘black’ is fí-ná-nà after ‘house’ (350b) but fí-ná-ná after ‘fish’ (350d). As Adj2, ‘big’ is húlò-ò regardless of the tone melody of the noun (350b,d). This may involve merger with, or at least analogical influence from, a semantically distinct construction where húlò-ò has the adverbial sense ‘very much, greatly’ (as in ‘it is very black’).

- (350) a. [hóó húlò] fí-ná-nà-à
 [house big] black-Inch-Ppl-Sg
 ‘a/the big black house’ (< hòò)
- b. [hóó fí-ná-nà] húlò-ò
 [house black-Inch-Ppl] big-Sg
 [=(a); can also mean ‘a very black house’]
- c. [póηó húló] fí-ná-ná-á
 [fish big] black-Inch-Ppl-Sg
 ‘a/the big black fish’ (< póηó-ó)
- d. [póηó fí-ná-ná] húlò-ò
 [fish black-Inch-Ppl] big-Sg
 [=(c); can also mean ‘a very black fish’]

húlo-o ‘big’ also occurs in some equally idiosyncratic L-HL toned combinations like nùṅù húlò-ò ‘big city’ (§5.1.5.2).

6.3.3.2 Conjunction of adjectives

An assistant did not accept overt conjunction of two modifying adjectives after a noun. To express ‘white-and-black cat’, a relative clause with ‘white and black’ as subject of ‘the cat on which ___ is’ was produced. Two versions are in (351). (351b) is a relative construction with a planned prosodic break (§3.7.2).

- (351) a. [fí-ná-nà-à [kí ʰhòò-nà-ná-à]]
 [black-Inch-Ppl-Sg [**and** white-Inch-Ppl-Sg]]
 há [[jàkúmà m̀ẁó] ʰm̀à]
 be.Loc [[cat Rel] Cust]
 ‘a/the cat on which black and white is’
- b. [jàkúmà m̀ẁóð→],
 [cat Rel],
 [fí-ná-nà-à [kí ʰhòò-nà-nà-à]] há= [á ʰm̀à]
 [black-Inch-Ppl-Sg [**and** white-Inch-Ppl-Sg]] be.Loc [3Sg Cust]
 ‘a cat who, black and white is on it’ (< m̀ẁó, for the HL-intonation see §3.7.2)

6.3.3.3 Basic adjective plus ká ‘(a) certain’

Set-partitioning quantifier ká ‘a certain’ or its plural (§6.3.3.3) can follow a modifying adjective. Like nouns, adjectives can take suffixal singular form before ká.

- (352) a. h́óó fí-ná-nà-á ʰk̄ā
 house black-Inch-Ppl-Sg **a.certain**
 ‘a certain black house’
- b. kólón kúúlèṅ-ó ʰk̄ā-yèⁿ
 well(n) deep-Sg **certain.Pl**
 ‘some (=certain) deep wells’

6.3.3.4 Adjectival intensifiers

Some adjectives are associated with noncognate expressive adverbials that function as intensifiers.

- (353) a. [ɲ hɔ̀ɔ̀] há fí-ná-nà kírí-kírí
 [1Sg house] be be.black-Inch-Ppl **very.black**
 ‘My house is very black.’
- b. [ɲ hɔ̀ɔ̀] há ʰhōō-nā-nā pásì-pásì
 [1Sg house] be be.white-Inch-Ppl **very.white**
 ‘My house is very white.’

Most intensifiers are lexicalized iterations whose bases do not occur independently. Those in (354) have been recorded. Some are regional and likely borrowed from Bambara.

(354)	gloss	‘it is ADJ’	intensified ADJ
a. iterative in form			
	‘black’	ā hà fí-ná-nà	fí-ná-nà kírí-kírí(→) fí-ná-nà móní-mónì
	‘white’	à há ʰhōō-nā-nā	hóó-ná-ná pásì-pásì hóó-ná-ná téré-téré
	‘red’	à há ʰcwāā-nā	cwáá-ná córi-córi(→) cwáá-ná dóró-dóró
	‘rotten’	à há ʰfɔ̀ŋē-nā	fɔ̀ŋé-ná pótí-pótí(→)
	‘emaciated’	à há ʰhūmā-nā	hú má-ná kéé ⁿ -kéé ⁿ
	‘sweet, pleasing’	à lê ⁿ	(à lê ⁿ) tá má-tá má
	‘bitter’	ā ʰkàgàyì	kàgáyí ká rí-ká rí
	‘dirty’	à há nògɔ́-nà	nògɔ́-nà kótí-kótí
b. non-iterative in form			
	‘bad-tasting’	ā ʰsɔ́ ⁿ	sɔ́ ⁿ jóbé

The default intensifier of adjectives is adverbial húlò(→) ‘very’, based on the adjective ‘big’. It can occur after any scalar adjective.

The adverb ‘a little, slightly, somewhat’ is dóóníⁿ (< Bambara) or néndàⁿ. Either can be added to any adjectival or other predicate. dóóníⁿ can be iterated as dóónín-dóóníⁿ ~ dóón-dóóníⁿ ‘gently, slowly, softly’.

See §8.5.3 for more on extent expressions.

6.3.3.5 ‘Good to eat’

‘X is good to eat’ is phrased as ‘X-eating (or possessive ‘X’s eating’) is sweet/good’ with stative adjectival predicate lêⁿ. The verbal concept cannot directly modify the predicate adjective. The subject is a verbal noun (usually of the unsuffixed type) with a third person possessor or an incorporated object.

- (355) a. [ā ʔjàà] lêⁿ
 [3Sg eat.VblN] **be.sweet**
 ‘It is good to eat (=edible).’
- b. [jírí kú] húrù-ù lêⁿ
 [tree Dem] cut.VblN-Sg **be.sweet**
 ‘Cutting that tree is pleasant (=easy).’

6.4 Noun or N-Adj plus numeral

6.4.1 Regular N-Num and N-Adj-Num sequences

Numerals follow nouns and N-Adj strings. No inversion of numeral and adjective is allowed.

- (356) a. sógó fíénú
 goat two
 ‘two goats’
- b. sógó fí-ná-ná-á
 goat black-Inch-Ppl-Sg
 ‘(a/the) black goat’
- c. sógó fí-ná-ná fíénú
 goat black-Inch-Ppl two
 ‘two black goats’ (not #sógó fíénú fí-ná-ná-á)

There is no plural marker (-yèⁿ) in nouns or adjectives preceding a nonsingular numeral.
 For noun-numeral bahuvrihi compounds like ‘two-headed’, see §5.2.1.2.

6.4.1.1 Combination of noun plus numeral ‘1’

The numeral kénèèⁿ (also heard as kénèⁿ) has /HL/ melody. If it modifies a preceding noun, the noun occurs in bare-stem form, showing that kénèèⁿ is treated like a modifying adjective. In some combinations, kénèèⁿ is downstepped to ʔML.

A preceding /H/- or /L/-melodic noun retains its level-toned form before kénèèⁿ (357a-b). /HL/- and /LHL/-melodic nouns take the form (L*)H with exactly one H-toned syllable before kénèèⁿ (357c). /LHL/-melodic nouns (357d) either spread the initial L to the boundary, before kénèèⁿ, or shift the H to the final syllable to form an L.(L...)<HL> stem (§3.6.5.4.8). In the latter case, the final <HL> syllable de-links its L, resulting in an L.(L...).H noun stem before locally downstepped ʔkénèèⁿ.

(357)	noun	with ‘1’	gloss
a. /H/ melody			
	húó ⁿ	húó ⁿ gēnèè ⁿ	‘one bone’
	sógó-ó	sógó kénèè ⁿ	‘one goat’
	jírí-ó	jírí kénèè ⁿ	‘one tree’
b. /L/ melody			
	nàà	nàà kénèè ⁿ	‘one cow’
	fàlà-à	fàlà kénèè ⁿ	‘one egg’
	jàṅàṅù-ù	jàṅàṅù kénèè ⁿ	‘one woman’
	bòòrò-ò	bòòrò kénèè ⁿ	‘one thigh’
c. /HL/ melody			
	kwáà	kwáà ‘kēnèè ⁿ	‘one wooden fishtrap’
	hákè-è	háké ‘kēnèè ⁿ	‘one amount’
	básà-à	básá ‘kēnèè ⁿ	‘one agama’
	sábàbù-ù	sàbàbù ‘kēnèè ⁿ	‘one reason’
d. /LHL/ melody with melodic H on penultimate syllable or mora			
	sùbáà	sùbàá ‘kēnèè ⁿ ~ sùbàà kénèè ⁿ	‘one chicken’
	bèéṅgè-è	bèéṅgé ‘kēnèè ⁿ	‘one uncle’
	màrìfá-à	màrìfá ‘kēnèè ⁿ ~ màrìfà kénèè ⁿ	‘one rifle (musket)’
	mìsìrì-ì	mìsìrì ‘kēnèè ⁿ ~ mìsìrì kénèè ⁿ	‘one mosque’
e. /HLHL/			
	nóḍzìṅ-ḍ	nóḍzìṅ ‘gēnèè ⁿ	‘one chameleon’

Noun stems ending in η or in a nasalized vowel show similar tonal patterns (358). The two types of η -final /HL/-melodic nouns, respectively with $-\delta$ and $-\hat{\delta}$ in the unmodified singular, remain distinct tonally even after the suffixal vowel is elided. This is because the $-\delta$ nouns spread their initial H-tone to the end of the stem before the numeral, while the $-\hat{\delta}$ nouns keep their L-toned stem-final syllable (358c).

(358)	noun	with ‘1’	gloss
a. /H/ melody			
	léŋ-ḍ	léŋ gɛ̀nɛ̀ɛ̀ ⁿ	‘one child (offspring)’
	húṣ ⁿ	húṣ ⁿ gɛ̀nɛ̀ɛ̀ ⁿ	‘one bone’
	kóŋóŋ-ḍ	kóŋóŋ gɛ̀nɛ̀ɛ̀ ⁿ	‘one marriage’
b. /L/ melody			
	sùŋ-ḍ	sùŋ gɛ̀nɛ̀ɛ̀ ⁿ	‘one navel’
	kòlòŋ-ḍ	kòlòŋ gɛ̀nɛ̀ɛ̀ ⁿ	‘one well’
c. /HL/ melody			
<i>with -ḍ</i>			
	jáŋ-ḍ	jáŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one fishtrap’
	húmòŋ-ḍ	húmóŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one paddle’
	ndálèŋ-ḍ	ndáléŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one spider’
<i>with -ḍ</i>			
	súŋgálàŋ-ḍ	súŋgálàŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one kneading stick’
	bátòŋ-ḍ	bátòŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one steamboat’
	mártòŋ-ḍ	mártòŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one hammer’
d. /LHL/ melody			
	ŋègɛ̀ŋ-ḍ	ŋègɛ̀ŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one mark/brand’
	làwólòŋ-ḍ	làwólóŋ ʔgɛ̀nɛ̀ɛ̀ ⁿ	‘one empty (one)’

The distributive iteration *kénèèŋ-kénèèⁿ ~ kénèèŋ-gɛ̀nɛ̀ɛ̀ⁿ* indicates spatial or temporal separation (‘one by one’, ‘one at a time’, ‘one each’), or else a scattered or occasional presence.

- (359) a. [à kénèèŋ-gɛ̀nɛ̀ɛ̀ⁿ] há ʔgòⁿ
 [3Sg Rdp-one] be.Loc here
 ‘It (e.g. a fish species) is isolated (scattered, infrequent) here.’
- b. sàgà kénèèŋ-gɛ̀nɛ̀ɛ̀ⁿ
 sheep Rdp-one
 ‘one sheep at a time’

6.4.1.2 Combination of noun plus numeral ‘2’ to ‘10’

Before a numeral ‘2’ to ‘10’, a noun has its bare-stem form. The numerals are in two tonal classes, /H/ illustrated here by *fíyù* ‘2’ and *ségí* ‘8’, and /HL/ illustrated by *jíyò* ‘3’ and *kólóhò* ‘5’.

The /H/-melodic numerals ‘2’ and ‘8’ are presented in (360). Nouns of /H/, /L/, and /HL/ melodies (i.e. those that do not begin with LH) merge as H-toned. Nouns of /LHL/ melody shift

the H to the rightmost syllable. The numeral is downstepped after nouns of all melodies except /H/.

(360) noun with numerals gloss

a. with ‘2’

/H/-melodic noun (there are variants with féénú)

júú	júú fiénú	‘two waters’
sógó-ó	sógó fiénú	‘two goats’
jírí-í	jírí fiénú	‘two trees’
fálátó-ó	fálátó fiénú	‘two orphans’

/L/-melodic noun

nàà	náá ⁺ fiēnū	‘two cows’
fàlà-à	fálá ⁺ fiēnū	‘two eggs’
kòlòŋ-ô	kólón ⁺ fiēnū	‘two wells’
ɲàŋàɲ-ù	ɲáŋáɲ ⁺ fiēnū	‘two women’

/HL/-melodic noun

fíè	fíé ⁺ fiēnū	‘two grains’
máà	máá ⁺ fiēnū	‘two manatees’
jáŋ-ò	já ⁺ fiēnū	‘two traps’
básà-à	básá ⁺ fiēnū	‘two agama lizards’
kírì-ì	kírí ⁺ fiēnū	‘two manners’
tágáyò-ò	tágáyó ⁺ fiēnū	‘two elder siblings’

/LHL/-melodic noun

jàbá-à	jàbá ⁺ fiēnū	‘two onions’
sùbáà	sùbáá ⁺ fiēnū	‘two chickens’
mìsírì-ì	mìsirí ⁺ fiēnū	‘two mosques’
màrìfá-à	màrìfá ⁺ fiēnū	‘two rifles (muskets)’

/HLHL/-melodic noun

nóðzìŋ-ò	nóðzìŋ ⁺ fiēnū	‘two chameleons’
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b. with ‘8’

/H/-melodic noun

júú	júú ségí ⁿ	‘eight waters’
sógó-ó	sógó ségí ⁿ	‘eight goats’
jírí-í	jírí ségí ⁿ	‘eight trees’
fálátó-ó	fálátó ségí ⁿ	‘eight orphans’

/L/-melodic noun

nàà	náá ⁺ sēgī ⁿ	‘eight cows’
fàlà-à	fálá ⁺ sēgī ⁿ	‘eight eggs’
kòlòŋ-ô	kólón ⁺ sēgī ⁿ	‘eight wells’
ɲàŋàɲ-ù	ɲáŋáɲ ⁺ sēgī ⁿ	‘eight women’

/HL/-melodic noun

fíè	fíé 'sēgī ⁿ	'eight grains'
máà	máá 'sēgī ⁿ	'eight manatees'
jáŋ-ò	já ⁿ 'sēgī ⁿ	'eight traps'
básà-à	básá 'sēgī ⁿ	'eight agama lizards'
kírì-ì	kírí 'sēgī ⁿ	'eight manners'
tágáyò-ò	tágáyó 'sēgī ⁿ	'eight elder siblings'

/LHL/-melodic noun

jàbá-à	jàbá 'sēgī ⁿ	'eight onions'
sùbáà	sùbáá 'sēgī ⁿ	'eight chickens'
mìsírì-ì	mìsírí 'sēgī ⁿ	'eight mosques'
màrìfá-à	màrìfá 'sēgī ⁿ	'eight rifles (muskets)'

/HLHL/-melodic noun

nóðzìy-ò	nóðzìy 'sēgī ⁿ	'eight chameleons'
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Array (361) presents the same nouns preceding /HL/-melodic numerals '3' and '5'. The numeral is downstepped after /HL/-melodic nouns, and optionally after /HLHL/-melodic nouns (if the penultimate H is not suppressed). The process here is that the penultimate H-tone spreads rightward to the boundary and de-links the noun's final L-tone, which then downsteps the onset of the numeral. /LHL/-melodic nouns either spread the initial L to the boundary, or shift the H-tone rightward. In the latter case, the noun's final syllable first becomes <HL> and then de-links its L-tone to downstep the numeral.

(361) noun with numerals gloss

a. with '3'

/H/-melodic noun

júú	júú fííyò	'three waters'
sógó-ó	sógó fííyò	'three goats'
jírì-í	jírí fííyò	'three trees'
fálátó-ó	fálátó fííyò	'three orphans'

/L/-melodic noun

nàà	nàà fííyò	'three cows'
fàlà-à	fàlà fííyò	'three eggs'
kòlòŋ-ò	kòlòŋ fííyò	'three wells'
ŋàŋà-ù	ŋàŋà fííyò	'three women'

/HL/-melodic noun

fíè	fíé 'fííyò	'three grains'
máà	máá 'fííyò	'three manatees'
jáŋ-ò	já ⁿ 'zìíyò	'three traps'
básà-à	básá 'fííyò	'three agama lizards'

kírì-ì	kírí 'fīyò	'three manners'
tágáyò-ò	tágáyó 'fīyò ~ tágáyò fíyò	'three elder siblings'
<i>/LHL/-melodic noun</i>		
jàbá-à	jàbà fíyò ~ jàbá 'fīyò	'three onions'
sùbàà	sùbàà fíyò ~ sùbàá 'fīyò	'three chickens'
mìsírì-ì	mìsírì fíyò ~ mìsírí 'fīyò	'three mosques'
màrìfá-à	màrìfà fíyò ~ màrìfá 'fīyò	'three rifles (muskets)'
<i>/HLHL/-melodic noun</i>		
nóðzìṅ-ḍ	nóðzì ⁿ fíyò ~ nóðzì ^m 'fīyò (less common)	'three chameleons'

b. with '5'

<i>/H/-melodic noun</i>		
júú	júú kólóhò	'five waters'
sógó-ó	sógó kólóhò	'five goats'
jírì-í	jírì kólóhò	'five trees'
fálátó-ó	fálátó kólóhò	'five orphans'
<i>/L/-melodic noun</i>		
nàà	nàà kólóhò	'five cows'
fàlà-à	fàlà kólóhò	'five eggs'
kòlòṅ-ḍ	kòlòṅ kólóhò	'five wells'
ṅàṅàṅ-ù	ṅàṅàṅ kólóhò	'five women'
<i>/HL/-melodic noun</i>		
fíè	fíè 'kòlòhò	'five grains'
máà	máà 'kòlòhò	'five manatees'
jáṅ-ḍ	já ⁿ 'kòlòhò	'five traps'
básà-à	básá 'kòlòhò	'five agama lizards'
kírì-ì	kírì 'kòlòhò	'five manners'
tágáyò-ò	tágáyó 'kòlòhò	'five elder siblings'
<i>/LHL/-melodic noun</i>		
jàbá-à	jàbà kólóhò jàbá 'kòlòhò	'five onions'
sùbàà	sùbàà kólóhò ~ sùbàá 'kòlòhò	'five chickens'
mìsírì-ì	mìsírì kólóhò ~ mìsírí 'kòlòhò	'five mosques'
màrìfá-à	màrìfà kólóhò ~ màrìfá 'kòlòhò	'five rifles (muskets)'

/HLHL/-melodic noun

nóḍzìṅ-ḍ nóḍzìṅ kólóhò ‘five chameleons’
~ nóḍzìⁿ ʰkólóhò (less common)

For the tonology of N-Num combinations with the addition of a preceding possessor, see §3.6.5.5.3.

6.4.1.3 Combination of noun plus decimal numeral

Decimal-multiple numerals (‘20’ to ‘90’), all of which begin with H-tone, have tonal interactions with preceding nouns like those described above for ‘2’ to ‘10’.

(362) a. mìsìrì lēbè
 mìsìrì ʰlēbè
 mosque 40
 ‘forty mosques’ (< mìsìrì-ì)

b. mìsìrì ʰtāⁿ-vīnē
 mosque ten-two
 ‘twenty mosques’

c. sógó táⁿ-víné / lēbè
 goat ten-two / 40
 ‘twenty/forty goats’

6.4.1.4 Combination of noun plus higher numeral

Examples (363a-b) illustrate non-/H/-melodic nouns plus a higher numeral. gúlú ‘thousand’ is tone-dropped to ʰgùlù before tone sandhi with the following digit term. mílyóⁿ drops to ʰmilyòⁿ and raises the tones of the noun to all-H.

(363) a. mìsìrì / múnú ʰgùlú ʰkēnèèⁿ
 mosque / dog **thousand** one
 ‘a thousand mosques/dogs’ (< mìsìrì-ì, múnù-ù)

b. mísìrì / múnú ʰmilyòṅ gēnèèⁿ
 mosque / dog **million** one
 ‘a million mosques/dogs’

Examples (364a-b) show the same numerals with an /H/-melodic noun. The noun and ‘thousand/million’ are H-toned in both. *kɛ̀nɛ̀ɛ̀*ⁿ undergoes Local Downstep after ‘thousand’ but not after ‘million’.

- (364) a. sógó gúlú ʼkɛ̀nɛ̀ɛ̀ⁿ
 goat **thousand** one
 ‘a thousand goats’ (< sógó-ó)
- b. sógó mílyóŋ gɛ̀nɛ̀ɛ̀ⁿ
 goat **million** one
 ‘a million mosques/dogs’

6.4.2 kóó-ŋá(á) ‘many/much’

This quantifier follows both count nouns (‘many Xs’) and mass nouns (‘much X’). It occurs in two morphological constructions, parallel to those with *ká* ‘a certain’ and its plural *ká-yè*ⁿ ‘some, certain (ones)’ (§6.3.3.3).

In one construction, the noun is in bare-stem form and is raised to all-H-toned. The quantifier then takes the form *kóó-ŋá* after /H/-melodic nouns and *kóó-ŋà* after nouns of other melodies. This is the regular tonal treatment of N-Adj combinations. Both tonal variants, e.g. *kóó-ŋá* and *kóó-ŋà*, have a final short vowel, which is not followed by the singular suffix. See the “bare-stem variant” column in (365).

In the other construction, the noun takes singular form (with suffix) and keeps its lexical tones, though Final Tone-Raising is allowed at the boundary. The quantifier is now *kóó-ŋáá* after /H/ melody. It is downstepped to ʼkōō-ŋāā after other melodies, which triggers Final Tone-Raising on a preceding L-tone. These forms end a long vowel, cf. adjective *ŋáá/ŋàà* ‘nasty’. See the “singular variant” column in (365).

(365)	noun	bare-stem variant	singular variant	gloss
a. /H/ melody				
	júú	júú kóó-ŋá	júú kóó-ŋáá	‘water’
	ŋóŋó-ó	ŋóŋó kóó-ŋá	ŋóŋó-ó kóó-ŋáá	‘fish’
b. /L/ melody				
	hòò	hóó kóó-ŋà	hòò ʼkōō-ŋāā	‘house’
	mùnù-ù	múnú kóó-ŋà	mùnù-ú ʼkōō-ŋāā	‘dog’
	ŋàŋà-ù	ŋáŋá kóó-ŋà	ŋàŋà-ú ʼkōō-ŋāā	‘woman’
	hònò-ô	hónó kóó-ŋà	hònò-ó ʼkōō-ŋāā	‘bird’

c. /HL/			
jáŋ-ð	jáŋ kóó-ŋà	jáŋ-ó 'kōō-ŋāā	'trap'
básà-à	básá kóó-ŋà	básà-á 'kōō-ŋāā	'agama lizard'
bóló-mèè	bóló-méé kóó-ŋà	bóló-mèé 'kōō-ŋāā	'child'
d. /LHL/ melody			
mìsírì-ì	mísírí kóó-ŋà	mìsírì-í 'kōō-ŋāā	'mosque'
màrìfá-à	márfíá kóó-ŋà	màrìfá-á 'kōō-ŋāā	'rifle'
e. /HLHL/ melody			
nóðzín-ð	nóðzín kóó-ŋà	nóðzín-ó 'kòò-ŋàà	'chameleon'

Like other quantifiers, kóó-ŋáá follows modifying adjectives (366), but here too it is downstepped, even after an all-H-toned N-Adj. It does not co-occur with numerals.

(366)	ŋóŋó	fí-ná-ná-á	'kōō-ŋāā
	fish	black-Inch-Ppl-Sg	many
	'many black fish'		

kóó-ŋáá can also function as an independent NP 'a lot' (367a), and less often as an adverb 'a lot, greatly' (367c). Where it is possible to phrase it as part of an NP, that is preferred (367b), so adverbial use is limited.

(367)	a.	Ø	ŋá	kóó-ŋáá	'tōōrō	
		1Sg	Sbj/Obj	many	sell.Pfv	
		'I sold a lot/many.'				
	b.	[hàbáà	'kōō-ŋāā]	há	'bē-lē	
		[cloud	much]	Ipfv	come-Ipfv	
		'It rains a lot.' (< hàbáà)				
	c.	hàbáà	'byē	kóó-ŋáá		
		cloud	come.Pfv	a.lot		
		'It rained a lot.'				
	d.	zákì	ŋá	['bààrà-á	'kōō-ŋāā]	'tāā ⁿ
		Z	Sbj/Obj	[work(n)	much]	do.Pfv
		'Zaki did a lot of work.'				

The noun modified by kóó-ŋáá may take a possessor. This tends to force a partitive interpretation ('many/much of ...'). In nonsubject positions such as object, kóó-ŋáá must be phrased with the possessed noun, showing no outward sign of the partitive-quantifier division (368a). A nonsingular pronominal, or 3Sg à denoting a mass, may also combine with kóó-ŋáá (368c).

- (368) a. Ø ɲá [ɲ náá kóó-ɲá] ʔtōōrō
 1Sg Sbj/Obj [1Sg cow **many**] sell.Pfv
 ‘I sold many of my cows.’
- b. [ɲí náá kóó-ɲá] ʔsāⁿ
 [1Sg cow **many**] die.Pfv
 ‘Many of my cows died.’
- c. [ɲgí kóó-ɲáá] ʃóò
 [1Pl **many**] go.Pfv
 ‘Many of us went.’

The related inchoative verb is kóó-ɲá (Ipfv kóó-ɲá-ná) ‘become numerous (common, frequent)’.

The stative predicate ‘abound, be many/much, be common, be frequent’ is kóòⁿ ~ kúòⁿ (§11.4.1).

For the structurally parallel adverb ʔɲáá-tááⁿ ‘too much’ or ‘greatly, a lot’ see §8.5.3.1.1.

6.4.3 lámáá-lámáá ‘a few’

The logical particle lámàà ‘only’ (§19.3.2.1) is the basis for the iterative adjective ‘a few’. A preceding noun, minimally a semantically light noun like nàɲáà ‘thing’ or ɲímí ‘person’, is required. The iterative adjective undergoes Tone-Leveling along with the noun, in the fashion of regular N-Adj combinations. The noun is raised to all-H, followed by lámáá-lámáá after /H/-melodic noun (369a), and lámáá-lámàà after nouns of other melodies (369b-d).

- | (369) | noun | dámá-dámá | gloss |
|----------------|-----------|---------------------|-----------------------|
| a. /H/ melody | | | |
| | júú | júú lámáá-lámáá | ‘a few waters’ |
| | ɲíní-í | ɲíní lámáá-lámáá | ‘a few people’ |
| b. /L/ melody | | | |
| | hòò | hóó lámáá-lámàà | ‘a few houses’ |
| | nàà | náá lámáá-lámàà | ‘a few cows’ |
| | fàrà-à | fárá lámáá-lámàà | ‘a few lagoons’ |
| | ɲàɲà-nù-ù | ɲáɲá-nú lámáá-lámàà | ‘a few women’ |
| c. /HL/ melody | | | |
| | jàɲ-ò | ján lámáá-lámàà | ‘a few fishtraps’ |
| | fàrà-à | fárá lámáá-lámàà | ‘a few stones’ |
| | ɲéné-ɲà-à | ɲéné-ɲá lámáá-lámàà | ‘a few Djenné people’ |

d. /LHL/ melody

hàbàà	há báá lámáá-lámàà	‘a few clouds’
mìsírì-ì	mìsírì lámáá-lámàà	‘a few mosques’
màrifá-à	màrifá lámáá-lámàà	‘a few rifles’

6.4.4 ká-nèⁿ ‘a little’

ká-nèⁿ ‘a little’ is a slightly irregular combination of indefinite ká ‘a certain’ (§6.3.3.3) and the bare form -nèⁿ of the nominal diminutive suffix -nóŋ-ò (§5.1.11.1). ká-nèⁿ can occur in absolute function, i.e. without a modified noun (370).

(370) a. à ɲá ‘kā-nèⁿ ‘lòó [sèèdú ‘nà]
 3Sg Sbj/Obj **a.little** give.Pfv [S Dat]
 ‘He/She gave a little to Seydou.’

b. ká-nè^m ‘byē
a.little come.Pfv
 ‘A little came.’

ká-nèⁿ can also modify a noun. It can be treated tonally as a modifier (adjective or numeral) and so be added to the bare stem of the noun. The noun is raised to all-H, except that noun stems of other than /H/-melody become H*L toned with the L-tone at the end. In the alternative construction as a free quantifier, ká-nèⁿ follows the singular form of the stem. /LHL/-melodic nouns shift the H-tone to the final syllable. If the noun is other than /H/-melodic, the quantifier is downstepped to ‘kā-nèⁿ, triggering Final Tone-Raising on a preceding L-tone.

(371) noun	ká-nè ⁿ as modifier	ká-nè ⁿ as free quantifier	gloss
súgóró-ó	súgóró ká-nè ⁿ	súgóró-ó ká-nè ⁿ	‘a little sugar’
máájó-ó	máájó ká-nè ⁿ	máájó-ó ká-nè ⁿ	‘a little maize’
jòŋ-ò	jòŋ ká-nè ⁿ	jòŋ-ó ‘kā-nè ⁿ	‘a little grain (millet)’
màànù-ù	màànù ká-nè ⁿ	màànù-ú ‘kā-nè ⁿ	‘a little rice’
mìsírì-ì	mìsírì ká-nè ⁿ	mìsírì-í ‘kā-nè ⁿ	‘a few mosques’

6.4.5 dóóníⁿ ‘a little’

This Bambara loanword dóóníⁿ (variant dóóníⁿ) is now more common than ká-nèⁿ (preceding subsection).

- (372) a. à ḡá ʔdòóníⁿ ʔlòò [sèèdú ʔnà]
 3Sg Sbj/Obj **a.little** give.Pfv [S Dat]
 ‘He/She gave a little to Seydou.’
- b. dóóním ʔbyē
 a.little come.Pfv
 ‘A little came.’

dóóníⁿ has the same combinatory possibilities illustrated above for ká-nèⁿ ‘a little’ and similar quantificational modifiers. As modifier its final syllable is sensitive to the lexical melody of the preceding noun, in the manner of N-Adj.

(373) noun	dóóní ⁿ as modifier	dóóní ⁿ as free quantifier	gloss
súgóró-ó	súgóró dóóní ⁿ	súgóró-ó dóóní ⁿ	‘a little sugar’
máájó-ó	máájó dóóní ⁿ	máájó-ó dóóní ⁿ	‘a little maize’
jòḡ-ó	jón dóóní ⁿ	jòḡ-ó ʔdōōnī ⁿ	‘a little grain (millet)’
màànù-ù	máánú dóóní ⁿ	màànù-ù ʔdōōnī ⁿ	‘a little rice’

See §8.5.3.1.2 for more on dóóníⁿ and synonyms.

6.5 NP with determiner

Demonstratives may occur absolutely (without a modified noun). They may also combine with a noun, either prenominally, postnominally, or both. The formulae are therefore Dem (absolute), Dem-N, N-Dem, and Dem-N-Dem.

For the forms of demonstratives, see §4.4.2.1.

6.5.1 Absolute kú and (w)ó

kú or its plural kú-yèⁿ is the only option for deictic ‘this’ or ‘that (over there)’ as absolute NPs based on the ‘here’ of the speech event, i.e. indicating or pointing to an entity. kú can also shade into weakly discourse-definite function.

(w)ó or its plural (w)ó-yèⁿ functions to recall a recent discourse referent. Often a new referent is introduced by a preposed topicalized relative construction or by a conditional antecedent, and is then immediately resumed in a foregrounded main clause by focalized ó, as in (374).

- (374) ní †súgù-ù há= [à fàà],
 if net-Sg be.Loc [2Sg by],
 á hó= [ó rá] †lēgē-lē
 2Sg Ipfv [Dem.Def Foc] take-Ipfv
 ‘If you-Sg have a fishnet (with you), that [focus] is what you-Sg will pick up (=use).’

Textual examples are as follows. For absolute kú, 2021-08 @ 00:36 and 02:47. For absolute ó, among many others, 2021-01 @ 00:38, 01:04, 01:12, and 02:28.

kú behaves tonally like the H-toned pronominal proclitics (e.g. 2Sg á). By contrast, ó behaves tonally like a nonpronominal (noun-headed) NP (§4.4.2.1). For example, /H/-melodic verbs like ‘pass’ remain H-toned after kú but are downstepped after ó (375a-b).

- (375) a. kú hélé ‘this/that one (deictic) passed’
 b. ó †hēlē ‘that (same) one passed’

Likewise, kú but not ó is subject to Tone Inversion in clause-medial position, for example in object function following a post-subject inflectional particle. In (376a), kú drops to kù. In the same environment, ó remains H-toned (376b). This too connects kú with lexically H-toned pronominal proclitics, and connects ó with nouns.

- (376) a. ní tí **kù** hēè
 1Sg PfvNeg Dem see.Pfv
 ‘I didn’t see this/that.’
 b. ní tó= **ó** hēè
 1Sg PfvNeg Dem.Def see.Pfv
 ‘I didn’t see that (definite).’ (< íj tí ó)

6.5.2 Dem-N with pronominal kú or ó

In the simple Dem-N construction, invariant deictic kú or (recent) discourse-definite ó is preposed to a noun, which appears in its regular suffixed singular or plural form except for tonal changes. The pronoun-like kú has no effect on a following H-tone. The noun-like ó tone-drops a following /H/-melodic noun and downsteps the H of a following /HL/-melodic noun; this is highlighted by bolding in (377a-b).

(377)	noun	gloss	deictic	discourse-definite
a.	báará-á báará-á-yè ⁿ	‘work (n)’ ‘works (n)’	kú báará-á kú báará-á-yè ⁿ	ó ¹ bààrá-à ó ¹ bààrá-á-yè ⁿ
	sógó-ó sógó-ó-yè ⁿ	‘goat’ ‘goats’	kú sógó-ó kú sógó-ó-yè ⁿ	ó ¹ sògó-ò ó ¹ sògó-ó-yè ⁿ
b.	jáŋ-ð jáŋ-ð-yè ⁿ	‘fishtrap’ ‘fishtraps’	kú jáŋ-ð kú jáŋ-ð-yè ⁿ	ó ¹ jāŋ-ð ó ¹ jāŋ-ɔ-yè ⁿ
	lógóló-hálù-ù lógóló-hálù-ù-yè ⁿ	‘y. brother’ ‘y. brothers’	kú lógóló-hálù-ù kú lógóló-hálù-ù-yè ⁿ	ó ¹ lōgōlō-hālù-ù ó ¹ lōgōlō-hālù-ù-yè ⁿ

The semantic distinction between e.g. kú sógó-ó ‘this/that goat’ and ó ¹sògó-ò ‘that (same) goat’ is the same as that between absolute kú (mostly deictic, but shading into weak discourse-definiteness) and absolute ó (recent discourse-definite). However, prenominal ó could be construed in some cases as morphosyntactically a possessor, e.g. ‘the goat of that (situation)’.

6.5.3 Dem-N-Dem and N-Dem

The only postnominal demonstrative construction (N-Dem) is noun plus kú or kù. The plurals are kú-yèⁿ and ¹kū-yèⁿ. The only combination with flanking demonstratives (Dem-N-Dem) is the same schema N-Dem with an additional invariant prenominal kú or ó. N-Dem is more frequent in the recordings than Dem-N-Dem.

Tonal interactions of demonstratives with modified nouns are illustrated in (378).

(378)	melody	noun	gloss	Dem-N-Dem	N-Dem
a.	/H/	sógó-ó	‘goat’	kú sógó kú	sógó kú
b.	/L/	sàgà-à jàŋànú-ù	‘sheep’ ‘woman’	kú ságá kù kú jáŋánú kù	ságá kù jàŋánú kù
c.	/HL/	húmòŋ-ô básà-à jígíjè-è	‘paddle (n)’ ‘agama’ ‘granary’	kú hómóŋ kù kú básá kù kú jígíjé kù	hómóŋ kù básá kù jígíjé kù
d.	/LHL/	sòmú-ù mìsìrì-ì tàmààtí-ì	‘waterjar’ ‘mosque’ ‘tomato’	kú sòmú kù kú mìsìrì kù kú tàmààtí kù	sòmú kù mìsìrì kù tàmààtí kù

e. /HLHL/	mááŋgòró-ò	‘mango’	kú mááŋgòró kù	mááŋgòró kù
	nóðzìŋ-ð	‘chameleon’	kú nóðzìŋ kù	nóðzìŋ kù

In (378a-c), the tonal outputs of the N-Dem strings (disregarding the prenominal demonstrative) seemingly mirror those of N-Adj combinations. The noun becomes all-H if not already so, and the final demonstrative is H-toned *kú* after H-melodic nouns and L-toned *kù* if the noun’s melody contains an L-tone. In (378d-e), whose nouns have /(H)LHL/ melodies, the medial H shifts to the right edge, best seen in ‘mosque’. If the noun then begins with two L-toned syllables or with a nonfinal C \grave{v} syllable, the prenominal *kú* triggers Initial H-Ablaut on the noun, seen in ‘mosque’ and ‘tomato’.

If the (Dem-)N-Dem combination is plural, this is indicated by adding plural $-y\grave{e}^n$ to the final demonstrative. The resulting combinations end in $kú-y\grave{e}^n$ corresponding to singular *kú* in (378a) above, and downstepped ${}^k\bar{k}\bar{u}-y\grave{e}^n$ corresponding to singular *kù* in (378b-e) above.

(379) a. /H/	sógó-ó	‘goat’	kú sógó kú-y \grave{e}^n	sógó kú-y \grave{e}^n
b. /L/	sàgà-à	‘sheep’	kú ságá ${}^k\bar{k}\bar{u}-y\grave{e}^n$	ságá ${}^k\bar{k}\bar{u}-y\grave{e}^n$

This suggests that what is written *kù* in the singular combinations in (378b-e) may be structurally ${}^k\bar{M}$ (downstepped from H) rather than a true L-tone. It is difficult if not impossible to distinguish ${}^k\bar{M}$ from L in Cv-shaped grammatical particles.

Dem-N-Dem combinations are basically deictic, to judge by textual examples involving quotations by protagonists. In (380), they are quoted addressing a giant caterpillar whom they have just come upon.

(380)	[á-rá	húúrú-ú	ǰáá-húló	kú],	
	[2Sg-Indep	worm-Sg	head-big	Dem],	
	á há	mánzìí	${}^t\bar{t}\bar{a}\bar{a}-n\bar{a}$	[[kù júú-lógó	kú] ${}^t\bar{m}\bar{a}$],
	2Sg Ipfv	what?	do-Ipfv	[[Dem water-mouth	Dem] Cust]
	‘ “Hey you, the big caterpillar! What are you-Sg doing there at the edge of the water?” ’				
	(2021-08 @ 01:07)				

Similarly, in 2015-10 @ 03:17 and again @ 03:17, the quoted *kú* X *kù* construction denotes an individual who is immediately present to the quoted speaker and addressee.

There are no textual examples of \acute{o} N *kú*/*kù*. This combination was elicitable, e.g. \acute{o} *hós kù* ‘that (same) house’ (< $h\grave{o}\grave{o} \sim h\grave{o}\grave{d}$) and \acute{o} *júú kú* ‘that (same) water’ (< *júú*). These examples show that the tones of the noun are determined by postnominal *kú*/*kù* rather than by prenominal \acute{o} .

The N-Dem combination with the noun followed by *kú*/*kù* or its plural appears to be weakly discourse-definite, i.e. less strongly discourse-definite than \acute{o} plus noun. Some examples from the texts are in (381). (381a) shows an association with temporal adverbs denoting current time periods. The cases in (381b) appear to be mildly discourse-definite in context. (381c) and (381d) show *kù* at the end of complex NPs including a possessor, an appositional pronoun, and/or a compound element, any of which might make a prenominal demonstrative \acute{o} awkward.

(381) a.	ɲèèné kù	‘this evening (afternoon)’	2021-10 @ 00:02
	súbáá kù	‘this morning’	2021-01 @ 00:18
	sísà ⁿ -néŋ gù	‘right now’	2021-06 @ 06:27
b.	ʃíéŋ kù	‘the venom’	2021-01 @ 01:49
	héeé kù	‘the stick’	2021-01 @ 02:42
	nàŋáá kù	‘that thing’	2021-06 @ 05:59
c.	... á nàŋáá kù	‘its whatchamacallit’	2021-06 @ 01:39
d.	á-rá húúrú-ú ʃáá-húló kú	‘hey you, the big caterpillar’	2021-08 @ 01:07
	lé-né ⁿ nén-lúmá-néŋ gù	‘that sweet-tongued child’	2021-08 @ 02:16

In 2021-01 @ 02:00, kù is inserted between a noun and a modifying adjective (nàŋáá kù ʃí-ná-nà-à ‘that black thing’. Since the passage is somewhat broken, it is possible that nàŋáá kù ‘that thing’ was uttered first, with the adjective ‘black’ added as an afterthought.

6.6 Universal and distributive quantifiers

6.6.1 Universal quantification

6.6.1.1 ‘All’ (súnúⁿ)

The universal quantifier is súnúⁿ. For some speakers the s voices to z after a nasalized vowel like that of the plural suffix -yèⁿ.

Combinations with pronominal clitics are in (382). An /L/-melodic pronominal (3Sg, 3Pl) induces Downstep.

(382)	category	‘__ all’	gloss
a.	1Pl	ŋgí súnú ⁿ	‘all of us’
	2Pl	í súnú ⁿ	‘all of you’
b.	3Sg	ā ‘sūnū ⁿ	‘all of it’
	3Pl	ī ‘sūnū ⁿ	‘all of them’
c.	LogoPl	í-yé ⁿ ‘sūnū ⁿ	‘all of them (logophoric)’

There is a semantic issue with ‘all’ modifying an NP or pronoun as to whether ‘all’ is a true modifier, or a (partitive) possessum (e.g., ‘you all’ versus ‘all of you’).

In absolute form, without a modified noun or a pronominal, súnúⁿ has human reference: ‘everyone’ (383).

- (383) a. súnúⁿ ʃóò bómàkò
all go.Pfv B
 ‘Everyone went to Bamako.’
- b. súnúm ‘byē
all come.Pfv
 ‘Everyone came/has come.’

Nonhuman ‘everything’ requires a 3Sg possessor in partitive function, literally “all of it” (384).

- (384) a. [ā ‘sūnūⁿ] ʃóò
 [3Sg **all**] go.Pfv
 ‘Everything/All of it has gone.’
- b. [ā ‘sūnūn] nóó
 [3Sg **all**] give.1SgDat.Pfv
 ‘Give it all (=everything) to me!’

súnúⁿ can follow a singular or plural noun, or an NP including modifiers. The noun preceding súnúⁿ has suffixed singular form for masses or intact objects (385a). The noun optionally takes suffixed plural form for count nouns (385b). súnúⁿ is downstepped to ‘sūnūⁿ after nouns, which triggers Final Tone-Raising on preceding L-toned syllables, including plural -yèⁿ. When -yèⁿ is raised to -yéⁿ, a preceding H-tone due to word-internal Final Tone-Raising is absorbed by the plural suffix: compare cèé-yèⁿ ‘fields’ with cèè-yéⁿ ‘sūnūⁿ ‘all the fields’. /HL/-melodic stems sometimes shift their H-tone from the penult to the final syllable before the quantifier. When a count noun takes singular form, as in cèé ‘sūnūⁿ, the sense can be either ‘the whole field’ or ‘all the fields’. In the latter sense it is synonymous with cèè-yéⁿ ‘sūnūⁿ with an overt plural suffix.

Combinations with singular nouns, as pronounced in isolation or clause-initially, are in (385).

(385)	melody	noun X	gloss	‘all the X(s)’
a. mass nouns and intact objects				
	/L/	cèè	‘field’	cèé ‘sūnū ⁿ
		hòò	‘house’	hòó ‘sūnū ⁿ
		hòlò-ò	‘salt’	hòlól-ó ‘sūnū ⁿ
		màànù-ù	‘rice’	màànú-ú ‘sūnū ⁿ
		kòlòŋ-ò	‘well (n)’	kòlòŋ-ó ‘sūnū ⁿ
	/H/	súmá-á	‘milk’	súmá-á ‘sūnū ⁿ
		báárá-á	‘work (n)’	báárá-á ‘sūnū ⁿ
	/LHL/	màrifá-à	‘rifle’	màrifá-á ‘sūnū ⁿ
		mìsírì-ì	‘mosque’	mìsírì-í ‘sūnū ⁿ

/HL/	mómbólì-ì	‘vehicle’	mómbólì-í ⁺ sūnū ⁿ ~ mómbòlí-í ⁺ sūnū ⁿ
	húlò-ò	‘excrement’	húlò-ó ⁺ sūnū ⁿ ~ hùló-ó ⁺ sūnū ⁿ

b. count nouns

ɲàɲà-léè ⁿ	‘women’	ɲàɲà-léè ⁿ ⁺ sūnū ⁿ
ʃwòò-yèè ⁿ	‘horses’	ʃwòò-yéè ⁿ ⁺ sūnū ⁿ
fàrà-á-yèè ⁿ	‘stones’	fàrà-à-yéè ⁿ ⁺ sūnū ⁿ
hòó-yèè ⁿ	‘houses’	hòò-yéè ⁿ ⁺ sūnū ⁿ

Further examples including súnúⁿ are in (386).

- (386) a. à ɲá [⁺sùmá-á ⁺sūnūⁿ] mêⁿ
 3Sg Sbj/Obj [milk-Sg **all**] drink.Pfv
 ‘He/She drank all the milk.’ (< sùmá-á)
- b. à ɲí= [ì hòó ⁺sūnūⁿ] ⁺tōōrō
 3Sg Sbj/Obj [3ReflSg house **all**] sell.Pfv
 ‘He sold all of his houses.’
- c. ɲ gà bèlé [ɲgì súnúⁿ] wágà
 3Sg Ipfv Fut [1Pl **all**] kill.Pfv
 ‘He/She will kill us all.’
- d. kú súnúⁿ
 Dem **all**
 ‘all that’
- e. [nùɲù-ù-yéèⁿ ⁺sūnūⁿ] nî
 [village-Pl **all**] Loc
 ‘in all the villages’

There is also an interjection-like clause-final intensifying adverb péw ‘totally, completely’ (§19.4.1.4)

6.6.1.2 Negation scopes over universal quantifier

Clausal negation scopes over a universal quantifier in (387).

- (387) ná tí [‘sūbāā-fālā-á ‘sūnūŋ] ‘jāā
 1Sg PfvNeg [chicken-egg-Sg all] eat.Pfv
 ‘I didn’t eat all the eggs.’ (< sūbāā-fālā-à)

Compare negation plus ‘only’ (§19.3.2.1).

6.6.1.3 súnúⁿ kénèèŋ-kénèèⁿ ‘every (one)’

súnúⁿ can also function as distributive ‘each’ (or for a set of two, ‘both’). In this case the noun is morphologically singular (388a). Distributive sense is clearest when iterative kénèèŋ-kénèèⁿ ‘Rdp-one’ is added to the NP with súnúⁿ, and when this NP is paired with another quantified or possessed NP. In (388b), ‘woman’ is coindexed distributively with the possessor of ‘husband’. (388c) illustrates a construction of the literal type “[each X] and its_x Y” meaning ‘every X has its Y’.

- (388) a. [ŋàŋànú-ú ‘sūnūm] ‘byē [kí= [ì súnú-ú] tîⁿ]
 [woman-Sg all] come.Pfv [with [3ReflSg husband-Sg] under]
 ‘Each/Every woman brought (“came with”) her husband.’ (< súnú-ú)
- b. [ŋàŋànú-ú ‘sūnūŋ génèèŋ-génèè^m] ‘byē
 [woman-Sg all Rdp-one] come.Pfv
 [kí= [ì súnú-ú] tîⁿ]
 [with [3ReflSg husband-Sg] under]
 ‘Every (single) woman brought her husband.’
- c. [hòŋhòŋ-ó ‘sūnūŋ] kí= [ì tógó-ó]
 [bird-Sg all] with [3ReflSg name-Sg]
 ‘Every bird has its name.’

6.6.2 ‘Any X’ constructions

6.6.2.1 ‘Any X (at all)’ (X wóó X)

In a colorful and expressive construction, a noun X is repeated with wóó separating the two instances. See §7.1.2.2 for more examples. In (389) the X wóó X combination is prosodically insulated, avoiding the usual Tone-Dropping triggered by ní ‘if’.

- (389) [ní [ŋíní wóó ‘ŋíní] ‘byē] [ná hóòⁿ]
 [if [person and person] come.Pfv] [1Sg call.Pfv]
 ‘If anyone at all comes, call me!’

6.6.2.2 ‘(Not) any X’ (X sí)

sí can be added to a bare noun stem in the sense ‘any’ in a negative clause. ‘Any X’ may occur in any grammatical function, including subject (390b). The noun is usually in bare-stem form. However, the noun is occasionally plural (390d). sí is H-toned after an /H/-melodic noun, otherwise L-toned (sì), as in N-Adj combinations.

- (390) a. ṅgí tí [ʔnìní sí] hĕĕ
 1Pl PfvNeg [person **any**] see.Pfv
 ‘We didn’t see anyone.’ (< níní-í)
- b. [hónón ʔsì] tí ʔbyē
 [bird **any**] PfvNeg come.Pfv
 ‘No bird(s) came.’ (< hònòṅ-ô)
- c. zákì tí ʃòò [[mìsirí ʔsì] nî]
 Z PfvNeg go.Pfv [[mosque **any**] Loc]
 ‘Zaki didn’t go to any mosque.’
- d. ná tí [ʔsògò-ò-yéⁿ ʔjì] hĕĕ
 1Sg PfvNeg [goat-Sg-Pl **any(-Pl)**] see.Pfv
 ‘I didn’t see any goats.’
- e. ṅgí tí ʃòò [ʔwòròṅ ʒí]
 1Pl PfvNeg go.Pfv [place **any**]
 ‘We didn’t go anywhere.’

níní-í ‘person’ in unsuffixed form níní can replace níní sí ‘(not) anyone’ in examples like (390a). See 2021-01 @ 02:32 for a textual example. This is the human parallel to nàṅàà ‘(not) anything’ from nàṅáà ‘thing’ (§6.6.2.4 below).

6.6.2.3 Emphatic fóy ‘(not) anything’

Emphatic ‘nothing’ is fóy (391a-b) in a negative clause. It is morphologically a noun and can be tone-dropped by a post-subject inflectional particle.

- (391) a. ná tí ʔfòy ʔjāā
 1Sg PfvNeg **nothing** eat.Pfv
 ‘I haven’t eaten anything.’

b. ń dá ʼfòy hée-lè
 1Sg IpfvNeg **nothing** see-Ipfv
 ‘I don’t see anything.’

6.6.2.4 nàṅàà ‘(not) a thing’

The otherwise /LHL/-melodic noun nàṅàà ‘thing’ can function as a negative polarity item; compare English ‘(not) a thing’. In this function it is treated as /L/-melodic nàṅàà. It can therefore undergo Initial H-Ablaut to ʼnàṅàà in some phrasal combinations.

(392) ó tà ʼnàṅàà kírè-lè
 Dem.Def IpfvNeg **thing** get-Ipfv
 ‘That one doesn’t get anything.’ (2021-10 @ 04:00)

Another example of this ʼnàṅàà is in 2021-10 @ 03:26.

6.6.2.5 ‘Any X at all’ (mána-mána X)

A derogatory ‘any X at all’ phrase consists of mána-mána plus the noun X in a compound-like construction. Examples are mána-mána ʃòò ‘any thing/matter at all’, mána-mána báàrà-à ‘any work at all’.

6.7 Accusative (absent)

There is no accusative marking on direct object NPs. Since transitive clauses are S-infl-O-V-X, with both subject and object slots obligatorily filled except for subject in imperatives, there is rarely any difficulty in identifying the object. The exception would be when the inflection slot is empty (perfective positive clauses without the bidirectional case marker), so that the S-O sequence could plausibly be briefly (mis-)parsed as possessor-possessum.

7 Coordination

7.1 Conjunction

7.1.1 kí ‘and’

The instrumental (‘with’) circumposition is kí X tîⁿ (§8.1.3.1). Without tîⁿ, the productive ‘and’ conjunction linking two NPs (including adverbs) is kí. The construction is [X] [kí Y] where kí is bracketed prosodically with the right conjunct, as shown by the possibility of a pause after the left conjunct.

- (393) a. há-lèɛŋ kí †náŋà-léèⁿ
 man-Pl and woman-Pl
 ‘men and women’
- b. náŋà-léèŋ kí †há-lèèⁿ
 woman-pl and man-pl
 ‘women and men’

The pronominal paradigm for the right conjunct is (394). The same forms can function as possessor of the right conjunct, as in ‘X and [our Y]’. Because kí is not a postposition, the usual 1Sg proclitic ŋ cannot combine with it. Instead, syllabic 1Sg allomorphs must be used. Other pronominals can use either proclitics (subject to Tone Inversion) or independent forms (which are tone-dropped if H-toned like 2Sg á-rá and 1Sg nó, and downstepped if H-L).

(394)	category	with proclitic	with fuller form
a.	1Pl	kí ŋgì	kí †ŋgì-rò ~ kí †ŋgì-rè
	2Sg	kí à	kí †à-rà
	2Pl	kí= ì	kí †ì-rò ~ kí †ì-rè
	Logo/3ReflSg	kí= ì	kí †ì-rò
b.	3Sg	kí à ~ ká= á	kí à-rò ~ ká= à-rà
	3Pl	kí= í	kí ì-rò ~ kí= ì-rò

- c. Logo/3RefIP1 kí ì-yèⁿ —
- d. 1Sg — kí 'nò ~ kí 'nà

kí has tonal effects on following nouns, similar to the effects induced by nonpronominal possessors. /L/-melodic nouns, and /LHL/-melodic nouns that begin with at least two L-toned syllables (e.g., ‘rifle’) or with a nonfinal C^v syllable, undergo Initial H-Ablaut. /H/-melodic nouns are tone-dropped. Other H-initial nouns are downstepped.

(395)	melody	noun	gloss	with kí
	/L/	hòò ~ hòô	‘house’	kí hòò
		sàgà-à	‘sheep’	kí 'sàgà-à
		ɲàɲà-ù-ù	‘woman’	kí 'ɲàɲà-ù-ù
	/LHL/	sùbá-à	‘chicken’	kí sùbá-à
		màrifá-à	‘rifle’	kí 'màrifá-à
	/H/	sógó-ó	‘goat’	kí 'sògó-ò
	/HL/	bàsà-à	‘agama lizard’	kí 'bàsà-à

kí is part of composite numerals like lébè [kí 'tàⁿ] ‘50’ (“forty and ten”) and táɲ [gí 'kēnèèⁿ] ‘11’ (“ten and one”).

In recordings, it often happens that a heavy NP is produced, followed by a pause (perhaps planned), then another NP is added in conjunction form. In this case the first NP is resumed by a third-person pronominal. The structure is therefore ‘X, it_x and Y’. This is useful when Y is added as an afterthought or when it requires some planning.

- (396) á-wó-tá 'ɲòɲò-wùfú-ù, [à [kí ['ɲòɲò gógí-nà-à]]]
 like fish-smoke.VblN-Sg, [3Sg [and [fish dry(v)-Ppl-Sg]]]
 ‘For example smoking fish, that along with dried fish.’ (2021-06 @ 00:16)

7.1.2 Conjunctions with repeated nouns

In the constructions described below, a noun is conjoined to itself. The sense is distributive or universal quantification.

7.1.2.1 X [ki X] ‘some X’s’

This construction can be used to indicate infrequent or scattered occurrences. It occurs mainly in temporal adverbials. The noun X is in its bare-stem (not singular) form, twice.

- (397) a. wáátí [kí wáátì]
 time [and time]
 ‘at times, from time to time’ (< wáátì-ì)
- b. táá [kí ˈtāā]
 day [and day]
 ‘on some days’ (< táá)
- c. jíŋ [kí ˈjĩːn]
 year [and year]
 ‘in some years’ (< jíŋ-ó)

The tone pattern is [x kí x̄] for nouns with H-initial melody, parallel to that of [x wóó x̄], which is discussed below.

7.1.2.2 X woo X ‘every X’

This version emphasizes universality (‘every’ or ‘any’) as opposed to distribution. It can extend beyond time expressions to space and other referents. The noun X occurs in its bare-stem (not singular) form, twice.

- (398) a. wáátí [wóó ˈwāātí]
 time [and time]
 ‘constantly, frequently, every time’
- b. táá [wóó ˈtāā]
 day [and day]
 ‘every day, always’
- d. jíːn [wóó ˈjĩːn]
 year [and year]
 ‘every year’ (< jíŋ-ó)
- c. wóróŋ [wóó ˈwōrōŋ]
 place [and place]
 ‘everywhere’ (< wóróŋ-ó)

Two speakers checked agreed on the tonal forms where the melody of the noun begins with H-tone, as in (398) above and (399) below. The result is [x wóó ˈx̄] where the first noun forms a level H-toned string with wóó, followed by downstepped second noun.

(399)	noun	gloss	‘every ___’
	a. /H/ melody		
	níní-í	‘person’	níní [wóó ‘nīnī]
	sógó-ó	‘goat’	sógó [wóó ‘sōgō]
	b. /HL/ melody		
	kámù-ù	‘place’	kámú [wóó ‘kāmū]
	básà-à	‘agama lizard’	básá [wóó ‘bāsā]

The two speakers diverged slightly in tone patterns when the nominal melody begins with L-tone. One speaker produced combinations of the type [x̣ wòḍ x̣] (400). Here the leftmost tone of the initial spreads rightward through wòḍ, which is followed by an H*L-toned second noun. The H*L tones are compatible with Initial H-Ablaut applied to a noun with all-L tones (either lexically so or due to LHL-Flattening, §3.6.5.3.10).

(400)	noun	gloss	‘every ___’
	a. /LHL/ melody		
	nàṅáà	‘thing’	nàṅàà [wòḍ ‘nánàà] (2021-01 @ 01:27)
	jàbá-à	‘onion’	jàbà-à [wòḍ ‘jábà-à]
	b. /L/ melody		
	hònṅ-ḍ	‘bird’	hònḍ ⁿ [wòḍ ‘hónḍ ⁿ]
	ṅàṅà-ù	‘woman’	ṅàṅà-ù [wòḍ ‘ṅánánù]

The other speaker differed only in that the initial noun (but not wòḍ) is H-toned (401).

(401)	noun	gloss	‘every ___’
	a. /LHL/ melody		
	nàṅáà	‘thing’	nánáá [wòḍ ‘nánàà] (2021-01 @ 01:27)
	jàbá-à	‘onion’	jábá-á [wòḍ ‘jábà-à]
	b. /L/ melody		
	hònṅ-ḍ	‘bird’	hónḍ ⁿ [wòḍ ‘hónḍ ⁿ]
	ṅàṅà-ù	‘woman’	ṅánánú [wòḍ ‘ṅánánù]

See also wóó/wòḍ intervening between iterations of the same verb (§9.6.2), and wóó as clause-final particle in willy-nilly (‘whether or not’) conditional antecedents (§16.3).

7.1.3 Three or more conjuncts

A third conjoined NP may be added, with the same *kí* ‘and’ at the beginning of each noninitial conjunct. To mark the right edge of long conjunctions, a summative *súnúⁿ* ‘all’ may be added as a right-edge marker.

- (402) há-lè̀ɲ [kí †nájà-léèⁿ] [kí †bólò-méè-yéⁿ] †sūnūm †byē
 man-Pl [and woman-Pl] [and child-Pl] all come.Pfv
 ‘The men, women, and children came.’

However, beginning with three conjoined items, list intonation is generally preferred (§7.1.9).

7.1.4 *kí* between two quantities specifying a range

Phrases with meanings like ‘two or three’ that give a range of possible values are expressed as ‘two and three’.

- (403) ná= á ɲà [[kóó †fīēɲū] [kí [†kòò síyò]]] †tāāⁿ
 if 3Sg Sbj/Obj [[sun two] [and [sun three]]] do.Pfv
 ‘when you-Sg have spent two or three days, ...’ (2021-06 @ 04:55)

7.1.5 Reflexive possessor in right conjunct

If the NP serving as left conjunct denotes a single individual other than the current speaker or addressee, it binds a coindexed third-person reflexive pronominal possessor (§18.1.3) in the right conjunct (404a-b). The order of the two conjuncts cannot be inverted unless the second discourse referent has been previously introduced. By contrast, 1st/2nd person pronouns can freely co-occur with coindexed possessors in either order regardless of discourse context (404c).

- (404) a. [sèédù [kí= [ì kàá]]] †byē
 [S [and [3RefISg father]]] come.Pfv
 ‘Seydou_x and his_x father came.’ (< kàà)
- b. [bólò-méè-yèⁿ [kí= [ì-yéⁿ màà-yém]]] †byē
 [young.person-Pl [and [3RefPl mother-Pl]]] come.Pfv
 ‘The young people and their mothers came.’
- c. [ná [kí [ì kàá]]] †byē
 [1Sg [and [1Sg father]]] come.Pfv
 ‘I and my father came.’

- d. [[íj kàà] [kí ná]] 'byē
 [[1Sg father] [and 1Sg]] come.Pfv
 'My father and I came.'

Without an overt predicate, the phrasing [X all/each] [and/with [its_x Z]] means 'every X has its Z'. See §11.5.3 for examples.

7.1.6 'X and Y' with a broad-scope modifier

When a possessor has scope over both conjuncts, the possessor is repeated (in pronominal form). Similarly, if an adjective has scope over both conjuncts, it is repeated. This avoids ambiguity between narrow and broad scope. Numerals are also repeated on both conjuncts since they normally have narrow scope.

In (405), the repeated modifier is bolded in the interlinear. It is a possessor in (405a-b), an adjective in (405c), and a numeral in (405d). Omission of the repeated modifier results in ungrammaticality or in a narrow-scope reading. Free English translations show optional "conjunction reduction" (except with numerals).

- (405) a. à jí= [[í 'sàgà-á-yèŋ] [kí= [í 'sògò-ò-yén]]] 'tōrō
 3Sg Sbj/Obj [[**3ReflSg** sheep-Pl] [and [**3ReflSg** goat-Pl]]] sell.Pfv
 'He_x sold his_x sheep and (his_x) goats.'
- b. ì jí= [[í-yèⁿ 'sàgà-á-yèŋ] [kí= [í-yéⁿ 'sògò-ò-yén]]] 'tōrō
 3Pl Sbj/Obj [[**3ReflPl** sheep-Pl] [and [**3ReflPl** goat-Pl]]] sell.Pfv
 'They_x sold their_x sheep and (their_x) goats.' (< sàgà-á-yèⁿ)
- c. Ø jí [['sògò 'sūrè-yà-nà-à]
 1Sg Sbj/Obj [[goat **be.old-Inch-Ppl-Sg**]
 [kí ['sāgā 'sūrē-yā-nà-à]] sâⁿ
 [and [sheep **be.old-Inch-Ppl-Sg**]] buy.Pfv
 'I bought an old goat and (old) sheep.' (< ságá sūrē-yā-nà-à)
- d. [ságá 'fīnū] [kí ['sògò 'fīnū]]
 [sheep **two**] [and [goat **two**]]
 'two sheep and two goats.'

However, the flanking demonstratives in [kú X kù] or plural [kú X kú-yè] optionally omit the pronominal kú on the second conjunct. Thus (406a) can be slightly trimmed to (406b). This reduces but does not eliminate the second modifier, it causes no scope ambiguities or ungrammaticality (since the pronominal demonstrative is optional), and it avoids two consecutive kv syllables.

- (406) a. [kú sógó kú-yèⁿ] [kí [⁺kù ságá kú-yèⁿ]]
 [Dem goat Dem-Pl] [and [**Dem** sheep **Dem-Pl**]]
 ‘these goats and (these) sheep’ (< [kú ságá kú-yèⁿ])
- b. [kú sógó kú-yèⁿ] [kí [⁺sàgà kú-yèⁿ]]
 [Dem goat Dem-Pl] [and [sheep **Dem-Pl**]]
 [= (a)] (< [ságá kú-yèⁿ])

Similarly, quantifiers like ‘many’ and ‘all’ that are somewhat peripheral to the NP need not be repeated with each conjunct. In (407a), ‘many’ occurs on the first conjunct, and the plural marking on the second conjunct implies that ‘many’ has scope over both. In (407b), ‘all’ occurs in its usual right-edge position. It can have either universal quantifier sense with scope over both ‘men’ and ‘women’, or it can be summarizing (‘both X and Y’ or ‘X as well as Y’).

- (407) a. [sàgá-á ⁺kōō-nāā] [kí ⁺sògò-ó-yèⁿ]
 [sheep-Sg **many**] [and goat-Sg-**Pl**]
 ‘many sheep and (many) goats’
- b. [há-lèèŋ] [kí [⁺naŋà-lééⁿ]] [⁺sūnūm] [⁺byē]
 [man-Pl] [and woman-Pl] [**all**] [come.Pfv]
 ‘All the men and (all the) women came.’
 or: ‘The men as well as the women came.’

7.1.7 ‘X and Y’ with a shared adposition

In (408a-b), *kí ... tîⁿ* is an instrumental circumposition (§8.1.3.1). It takes scope over the conjoined NPs. It is not usual to repeat instrumental *kí* before the second conjunct, which would result in two adjacent *kí* morphemes. Likewise, *tîⁿ* occurs only once, at the end. The effect is that the conjoined NP [X *kí* Y] is flanked by the circumposition.

- (408) a. ŋgí há cèè sógò-lò [kí [cwàà [kí ⁺wólòsò-ò]] tîⁿ]
 1Pl Ipfv field cultivate-Ipfv [**with** [daba [and sickle]] **under**]
 ‘We cultivate (crops) with a daba (=hoe) and a sickle.’
- b. ā ⁺byè [kí [⁺sàgà-à [kí ⁺sògò-ò]] tîⁿ]
 3Sg come.Pfv [**with** [sheep-Sg [and goat-Sg]] **under**]
 ‘He/She brought (“came with”) a sheep and a goat.’

Although bracketings of type [kí [X *kí* Y]] *tîⁿ* in (408a-b) make most sense semantically, one could argue for a more parallelistic bracking [[kí X Ø] [kí Y]] *tîⁿ*, with the first copy of *tîⁿ* suppressed.

Similarly, a single occurrence of a postposition can be added at the end of a conjoined NP (409a-b). The fuller version with two separate PPs is also possible, so (409c) is an alternative to (409a).

- (409) a. Ø ḡá = á ʼjèè
 1Sg Sbj/Obj 3Sg say.Pfv
 [[[ḡ kàà]] [ká = [à kàá]]] ʼtè]
 [[[1Sg father] [and [2Sg father]]] **Dat]**
 ‘I said it to [my father and your father].’
- b. ḡḡí há só-lò [cèé [ʼkí ʼkólòḡ-ò]] nḡ]
 1Pl Ipfv go.Pfv [field [and [well(n)-Sg]]] **Loc]**
 ‘We are going to the field and to the well.’ (< cèè, kólòḡ-ò)
- c. ... [[ḡ kàá] ʼtè] [ká = [[à kàá] ʼtè]
 ... [[1Sg father] **Dat]** [and [[2Sg father]]] **Dat]**
 ‘... to my father and to your father’

7.1.8 Conjunctions under negation

Unlike English, in Kelenga a conjunction scopes over negation. (410) is literally “I don’t like [couscous and cowpea]” but it means that I dislike both couscous and cowpeas individually, not just their (unlikely) combination. The ‘or’ in the free translation is a quirk of English.

- (410) ḡ tá [[ʼbási-ì [kí ʼbòòlò-ò]] fáà]
 1Sg IpfvNeg [[couscous-Sg [and cowpea-Sg]] by]
 ‘I don’t like (either) couscous or cowpeas.’ (< bàsi-ì, bóóló-ó ; ‘want’ §11.2.5.6)

7.1.9 Lists (incompleteness intonation)

In lists with from three to many items, the last syllable of each nonfinal item is prolonged, with falling pitch. This is transcribed here as <HL> tone on that syllable followed by →. The final item may have normal prosody if the speaker knows that no further items are coming, as with the final ‘millet’ in (411).

- (411) [ŋgí há m̀ẁó-yèⁿ s̀óg̀ò-l̀ò], ó-yéŋ ˈkēlē,
 [1Pl Ipfv Rel-Pl cultivate-Ipfv], Dem.Def-Pl be,
 màànù-ù→,
 rice,
 mááńó-ò→,
 maize,
 fúòⁿ→,
 fonio,
 kééndé-è→,
 sorghum,
 j̀òŋ-ò
 millet
 ‘The things (=crops) that we cultivate, they are: rice, maize, fonio, sorghum, and millet.’
 (< màànù-ù, mááńó-ó, fúòⁿ, kééndé-é, j̀òŋ-ò)

For similar cases of prolongation with falling pitch in planned pauses preceding complementary matter, see §3.7.2.

7.1.10 “Conjunction” of verbs, VPs, and clauses

Verbs, VPs, and clauses cannot be conjoined by kí ‘and’ See chapter 15 for various mechanisms to combine verbs, VPs, and clauses.

7.2 Disjunction

7.2.1 ‘Or’ (wáli-mà ~ wál-mà, wálà)

When the two elements to be disjoined are non-verb constituents (NP, PP, adverb), the construction usually begins with a clause containing the first disjunct. After a pause (with or without prolongation of the final syllable), this is followed by a separate ‘or’ phrase beginning with wáli-mà (often syncopated to wál-mà) or wálà and containing the second disjunct. wáli-mà can trigger Tone-Dropping on a following /H/-melodic noun, in which case Final Tone-Raising produces wáli-má.

- (412) a. [s̀àg̀à-à wág̀à→] [wáli-má ˈs̀òg̀ó-ò]
 [sheep-Sg kill.Pfv] [or goat-Sg]
 ‘Slaughter-2Sg a sheep, or a goat!’
- b. ń gá ˈs̀àg̀à-á ˈt̀òòr̀ò-l̀ò, wáli-má ˈs̀òg̀ó-ò
 1Sg Ipfv sheep-Sg sell-Ipfv, or goat-Sg
 ‘I (regularly) sell either a sheep or a goat.’

- c. [ǰ́ gá bélé ʔbààrá-á ʔtāā́ wéè], wáli-mà ʃíè
 [1Sg Ipfv Fut work(n)-Sg do.Pfv today], **or** tomorrow
 ‘I will work today, or tomorrow.’

The disjunction ‘X or Y’ is therefore not embedded as an intact phrase in a larger clause. For example, (412a) can be analysed as ‘Slaughter a sheep, or (slaughter) a goat’ with the second clause pruned.

Two imperative clauses cannot be combined as a disjunction. Instead, only the first clause is imperative in form (i.e. with a Pfv verb). The second clause is subjunctive.

- (413) [ǰ́ sàrà] [wáli-mà á bí ʃòò]
 [1Sg pay.Pfv] [or 2Sg **Sbjn** go.Pfv]
 ‘Pay me, or else go!’

wáli-mà has no tonal effect on a following pronominal proclitic. In (413), for example, 2Sg á is H-toned as it is in clause-initial position.

French *ou bien* ‘or (else)’ is widely used by younger speakers.

7.2.2 X wâ(→) Y ‘X or Y?’

In this construction, there is no clear prosodic break between the left disjunct X and the right disjunct Y. The disjunction [X wâ(→) Y] is therefore phrased prosodically by itself, either before or after the relevant clause. In (414) it is postposed.

- (414) jàá ʔhà bìlì ʃòò, á-rá wâ(→) nó
 who Ipfv Fut go.Pfv, 2Sg-Indep **or** 1Sg
 ‘Who will go? You-Sg, or me?’

Compare (736c) in §13.2.2.2 (‘Between us, who will go?’). For clause-final wâ in polar interrogatives, see §13.2.1.1.

8 Adpositions and adverbials

Most adpositions are postpositions. They generally behave tonally like possessed nouns. Instrumental ‘with’ (§8.1.3.1) is expressed by a kind of circumposition, combining a preposition-like element (elsewhere the ‘and’ conjunction) and a postposition. mà ‘until’ (§8.5.5.7) is also preposed.

Some speakers add an optional linker *ɲà* between a verb and an immediately following PP that begins with a vocalic pronominal proclitic (3Sg, 3Pl, 2Sg, 2Pl, Logo). This prevents vv-Contraction from contracting the nucleus of a Cv(v) verb with the pronominal. Of the two speakers with whom grammatical elicitation was done, one never used the linker (and freely applied vv-Contraction) and the other used it often.

8.1 Dative, instrumental, and comitative

8.1.1 Dative

There are two dative postpositions, *té* and *lá ~ ná*. They occur in different constructions. In general, *té* occurs in optional dative PPs that can be added to already well-formed clauses, as with ‘say (it)’ and in add-on benefactives. *lá ~ ná* tends to occur in constructions where it is an obligatory argument, as with ‘give’. There are some interspeaker differences on the fine points of this opposition.

As with all H-toned monomoraic C[́] particles, it is difficult to distinguish downstepped [́]C[̃] from tone-dropped [́]C[̃]. The practice in this grammar is to transcribe as [́]C[̃] when in doubt. With respect to the present chapter, this is relevant to the two dative postpositions *té* and *ná* and to custodial *má*.

8.1.1.1 Dative *té* with ‘say (it)’

A postverbal PP with dative postposition *té* adds an optional indirect object (denoting the person addressed) to the already transitive verb *ʃéé/sé-lé* ‘say (sth), tell’, on which see §17.1.3. The clause is grammatical with or without the dative PP (415a-b).

- (415) a. *sèédù* *ɲá* *máⁿ* *ʃá=* (*[à* *té]*)
 S Sbj/Obj what? say.Pfv (*[2Sg* **Dat])
 ‘What did Seydou say (to you-Sg)?’**

b.	á	ɲá	má ⁿ	ʼfēē	[sèèdú	ʼtè]
	2Sg	Sbj/Obj	what?	say.Pfv	[S	Dat]
	‘What did you-Sg say to Seydou?’					

té does not occur when impersonal quotative particle wó ~ wò replaces fée/sé-lé. This is because wó ~ wò combines with custodial postposition má rather than té. The custodial postposition can also replace té in clauses with fée ‘say (it)’ like those in (415a-b).

Addition of a dative PP of the form [X té] converts a simple adjectival predicate (‘be long’) into an asymmetrical comparative (‘be longer than X’) (§12.1.2). Again the dative PP is optional.

PP [X té] also occurs in the construction ‘be sweet/pleasing to X’, 2021-06 @ 05:23.

The pronominal paradigm of té is (416). When prosodically integrated into clauses, the pronominals undergo the usual tone inversions (1Sg ò té, 3Sg á tè, etc.).

(416)	category	isolation	after verb (with Tone Inversion)
a.	1Sg	ń té	ò té
	1Pl	ɲí té	ɲì té
	2Sg	á té	à té
	2Pl	í té	ì té
	Logo/3ReflSg	í té	ì té
b.	3Sg	ā ʼtè	á ʼtè
	3Pl	ī ʼtè	í ʼtè
c.	Logo/3ReflPl	í-yén ʼtè	ì-yén ʼtè

8.1.1.2 Dative ná ~ lá with ditransitives (‘give’)

The dative postposition in ‘X give/show Y [to Z]’ is ná ~ lá. The two variants are interchangeable after an oral vowel. Only ná occurs after 1Sg proclitic ɲ and after nasalized vowels. The pronominal paradigm is (417).

(417)		isolation		after verb (with Tone Inversion)	
a.	1Sg	ń ná	—	ò ná	—
	1Pl	ɲí ná	ɲí lá	ɲì ná	ɲì lá
	2Sg	á ná	á lá	à ná	à lá
	2Pl	í ná	í lá	ì ná	ì lá
	Logo/3ReflSg	í ná	í lá	ì ná	ì lá

b.	3Sg	ā 'nà	ā 'là	á 'nà	á 'là
	3Pl	ī 'nà	ī 'là	í 'nà	í 'là
c.	Logo/3ReflPl	ì-yén 'nà	—	ì-yén 'nà	—

As explained in §11.1.2.4.1 below, there are two constructions translatable as ‘X give Y [to Z]’. One is with the verb *lós/ló-ló* ‘give’, which follows the ‘X give Y [to Z]’ syntactic model and ends with a dative PP. The other, not relevant to the present subsection, is of the syntactic type “X furnish Z [with Y]” and does not have a dative PP.

Examples of dative PPs with *lós/ló-ló* ‘give’, *háy(-lí)* ‘show’, and *síⁿ/sí-ní* (also pronounced *ʃíⁿ/ʃí-ní*) ‘show (face)’ are in (418).

- (418) a. Ø *ɲá* *wá-rì-í* ¹*lṵṵ* [*zàkí* ¹*nà / 'là*]
1Sg Sbj/Obj money-Sg give.Pfv [Z **Dat**]
‘I gave the money to Zaki.’
- b. Ø *ɲá* *wá-rì-í* ¹*hāy* [*zàkí* ¹*nà / 'là*]
1Sg Sbj/Obj money-Sg show.Pfv [Z **Dat**]
‘I showed the money to Zaki.’
- c. *à* *ɲí=* [*ì* *ɲáɲá-á*] ¹*ʃíⁿ* [*zàkí* ¹*nà*]
3Sg Sbj/Obj [3ReflSg eye-Sg] face.Pfv [Z **Dat**]
‘He/She faced (“presented eyes to”) Zaki.’

The alternative ‘give’ construction of the ‘X furnish Z [with Y]’ model phrases the theme Y (the thing given), not the recipient, as a dative PP.

- (419) *à* *ɲà* *zákí* *kóò* [*wá-rì-í* ¹*là*]
3Sg Sbj/Obj Z furnish.Pfv [money-Sg **Dat**]
‘He/She furnished Zaki with money.’

For ‘have pity on X’, see (984a) in §19.6.5.

lá ~ ná is also a ‘than’ postposition in comparative constructions based on the verb *hélé(-lé)* ‘(sur)pass’ (§12.1.1.1).

Other attested contexts for this postposition can be briefly mentioned here, with textual references. Several of them are more explicitly spatial than the preceding examples. Exposure to enveloping atmospheric elements: ‘drying out in the sun’ (2021-06 @ 04:03), ‘drying out in the wind’ (2021-06 @ 04:53), ‘being out in the rain’ (2021-08 @ 01:14). Proximity or inclusion: ‘pass by X’ (2021-08 @ 00:46 & 02:30), ‘come up next to X’ (2021-01 @ 03:24), and ‘(shaft) be attached to (harpoon blade)’ (2021-01 @ 02:38 & 02:31). Along the same lines but more abstract: ‘be included in X’ (2021-01 @ 01:27), ‘be involved in X’ (2021-06 @ 02:53), ‘be put in X’s mind’ (2021-06 @ 03:33), and in ablative sense ‘Y be lost to X’ = ‘X lose Y’ (2021-08 @ 01:52). Being in a location defined by an activity: ‘go to/be at work’ (2021-06 @ 01:44 & 03:27), ‘exit (=come

back from) VPing’ (2021-10 @ 00:27), ‘be finished with X’ (2021-06 @ 03:29), ‘left X in his (=X’s) sleep’ (2021-10 @ 01:54). Also ‘in the way/manner of VPing’ (2021-06 @ 00:16).

lá ~ ná also occurs as the final element in semi-fused postpositions like háá-nà ‘on the torso of’ (§8.2.5). These are rather fused combinations of a body-part term, in this case háŋ-ó ‘neck’, plus lá ~ ná in spatial sense ‘on’ (or ‘enclosing’), and are mainly used in the context of donning and wearing garments. Another combination, less fully fused, is purposive-causal ʃóó ‘ná ~ ʃóó ‘lá ‘for’ (§8.3.1).

8.1.2 Custodial [X má]

This postposition can express the optional indirect object of ʃéé/sé-lé ‘say (it)’ (420a), in competition with dative té (§8.1.1.1). Only má is attested for the optional indirect object of quotative particle wó ‘said’ (420b).

(420) a. ā ʔwàà [bá= á ʔsèè [lé-nóŋ-ò ʔmà]
 3Sg do.then [Seq 3Sg say.Pfv [child-Dim-Sg **Cust]**
 ‘Then it (=fig tree) said to the girl, ...’ (2021-10 @ 02:45)

b. ì wó [ʔhùùrú-ú ʔmà]
 3Pl said [worm-Sg Cust]
 ‘They said to the caterpillar, ...’ (2021-08 @ 02:12)

The context ‘arrive at/reach/attain X’, especially ‘arrive into the presence of X’, occurs in many textual examples, such as these: ‘it (quantity) reached (=added up to) X’ (2021-06 @ 03:52), ‘(activity) reaches (=lasts until) late afternoon’ (2021-06 @ 04:50), ‘arrive into the presence of X’ (2021-08 @ 01:02), ‘come into the presence of the hippo’ (2021-01 @ 03:10), ‘hippos become aggressive in the presence of humans’ (2021-01 @ 04:30 & 04:33), ‘come into contact with X’ (2021-01 @ 02:32, 2021-06 @ 04:40), ‘arrive at (fig tree)’ (2021-10 @ 02:01), ‘caused X to arrive at Y’ (2021-10 @ 02:44), and more abstractly ‘within (=in the space of) three days’ (2021-15 @ 02:23) and ‘(event) coincided with (another event)’ (2021-06 @ 01:21). Surface or subsurface contact is relevant to ‘poison on (the tip of) the harpoon’ (2021-01 @ 02:06), ‘a pointed object is (jabbed) on/in X’ (2021-15 @ 02:04 & 02:13).

The contact examples segue into phrases involving putting on garments. má is always possible as the postposition, but depending on the part of the body covered it may compete with body-part specific postpositions like háá-nà ‘on the torso of’ (§8.2.5). The common verb for ‘wear, put on, don’ for garments of fixed shape is lóó/ló-ló (421a-b), elsewhere ‘enter’ or ‘give’. Other garments are tied/wrapped (421c).

(421) a. Ø ɲá kámí-nòŋ-ó ʔlõõ [m̄ má]
 1Sg Sbj/Obj shirt-Dim-Sg wear.Pfv [1Sg **Cust]**
 ‘I put-Past on a shirt.’

- b. zàkì ɲá ʔpàndlòŋ-ó ʔlɔ̃ [ì má]
 Z Sbj/Obj pants-Sg enter.Pfv [3ReflSg **Cust]**
 ‘Zaki put on shoes on himself.’ (< French *pantalon*)
- c. ɲàɲà̀nù-ù ɲá ʔhā̀rī-jū̀gù-ù há̀rì [ì má]
 woman-Sg Sbj/Obj wrap(n)-Sg tie.Pfv [3ReflSg **Cust]**
 ‘The woman tied on (=wore) a wrap on herself.’

In 2021-15 @ 00:52 & 00:58, a protagonist “wears” a cup as protection against a rainstorm. This and other examples show that the sense ‘on X’ is more loosely construed with má than postposition ʃéè ‘on’ (§8.2.6).

Unpleasant afflictions can also be ‘on X’ as in (422), cf. §11.1.1.3.

- (422) a. fìndà̀nì-ì há [m̃ má]
 heat(n) be [1Sg **Cust]**
 ‘I am (=feel) hot.’
- b. mènú-ù há [zàkí ʔmà]
 water-thirst be [Z **Cust]**
 ‘Zaki is thirsty.’

The label “custodial” is suggested by examples like (423a-b), but custody is not far semantically from being in the socially recognized presence of another individual or group as in several previous examples.

- (423) a. Ø ɲá wá̀rì-ì há̀lífà̀à [zàkí ʔmà]
 1Sg Sbj/Obj money-Sg entrust.Pfv [Z **Cust]**
 ‘I entrusted the money to/with Zaki.’
- b. Ø ɲá [ɲ̃ fwòó] ʔtṑgō [á̀lá ʔmà]
 1Sg Sbj/Obj [1Sg Poss] leave.Pfv [God **Cust]**
 ‘I left mine (=my fate) in the hands of God.’

With a plural complement, the sense may be ‘distributed among X’. Examples are: ‘there is no trouble among X’ (2021-01 @ 00:07) in the greeting cycle, and ‘wealth was among people (=they were wealthy)’ (2021-06 @ 00:45).

In a handful of examples, ‘arrive in the presence of’ is expanded to the sense ‘overstep, exceed’: ‘sleep passed (=became excessive for) X’ (2021-15 @ 01:41), ‘be (too) fast with it’ (2021-06 @ 03:13).

One collocation worth mentioning is ‘have need of X’ (2021-01 @ 04:58).

The pronominal paradigm is (424).

(424)	category	isolation	after verb (with Tone Inversion)
a.	1Sg	ń má	ń má
	1Pl	ńgí má	ńgì má
	2Sg	á má	à má
	2Pl	í má	ì má
	Logo/3ReflSg	í má	ì má
b.	3Sg	ā 'mà	á 'mà
	3Pl	ī 'mà	í 'mà
c.	Logo/3ReflPl	í-yém 'mà	ì-yém 'mà

má is part of the adverbial phrase bóló 'mà 'together' (2021-01 @ 01:04, 2021-06 @ 01:05), cf. b̀̀l̀̀ 'counterpart' in reciprocals (§18.4.1). It is part of the composite postposition lógó-ó 'mà 'at the edge of (water)' (2021-08 @ 00:22 & 01:07), ń̀̀ǹ̀é 'mà 'unbeknownst to' (§8.2.17), and (diachronically) purposive hóómá 'for' (§8.3.2).

8.1.3 Instrumental and comitative

Like some other West African languages (e.g. Songhay) that otherwise have postpositional phrases, Kelenga has a preposition kí in instrumental phrases. It combines with a postposition to form a kind of circumposition (see just below) in basic instrumental sense. kí is glossed as “Inst” or as “and” in interlinears as the case may be.

Comitative ‘with’ is expressed either by the postposition fáà ‘by’ or by the instrumental circumposition depending on context.

8.1.3.1 Instrumental (and comitative) circumposition (kí X tîⁿ)

[kí X] without tîⁿ is the conjunction ‘and X’ (§7.1.1).

Instrumental function is expressed by combining prenominal kí with postnominal tîⁿ. The latter is elsewhere a spatial postposition meaning ‘under’ or ‘at the feet of, in the shadow of’ (§8.2.10.1). The tones of the complement are the same as after kí ‘and’ (§7.1.1). The complement of an instrumental phrase may denote an instrument (425a-b), an abstraction (425c), an ingredient (425d), or an assisting animal (425e).

(425)	a.	Ø	ńá	ʔmúnù-ú	ʔkwāri	[kí	hèè	tî ⁿ]
		1Sg	Sbj/Obj	dog-Sg	hit.Pfv	[Inst	stick	under]
		‘I hit-Past the dog with a stick.’ (< m̀̀ǹ̀ù-ù)						

- b. zàkì há ʔnòŋó-ó ʔkū-nū [kí ʔsùgù-ù tîⁿ]
 Z Ipfv fish-Sg catch-Ipfv [**Inst** net-Sg **under**]
 ‘Zaki catches fish with a net.’ (< nòŋó-ó, sùgù-ù)
- c. ī ʔlòò [kí ʔfàŋà-à tîⁿ]
 3Pl enter.Pfv [**Inst** force(n)-Sg **under**]
 ‘They entered by force.’ (< fàŋà-à)
- d. ŋgí há hùù mátiŋé-nè [kí ʔsēgè-è tîⁿ]
 1Pl Ipfv tô cook-Ipfv [**Inst** soda.ash-Sg **under**]
 ‘We cook tô (=grain cakes) with soda ash.’ (< sēgè-è, mátiŋé/mátiŋé-nè)
- e. Ø ŋá ʔsòⁿ-yààrá-á ʔtāāⁿ [kí ʔmúnù-ù tîⁿ]
 1Sg Sbj/Obj hunt(n)-Sg do.Pfv [**Inst** dog **under**]
 ‘I hunted with a dog.’ (< sòⁿ-yáárá-á)

Some further textual examples of kí X tîⁿ in instrumental sense are these: ‘kill hippo with harpoon’ (2021-01 @ 00:52), ‘wash hands with water’ (2021-10 @ 01:29), ‘speak (praises) on the harpoon with magic’ (2021-01 @ 04:04), ‘make a living with X’ (2021-06 @ 02:16).

‘With what?’ is kí ʔmàn tîⁿ (§13.2.2.3).

In some constructions, kí X tîⁿ has comitative sense, although sometimes one could construe the sense as instrumental. In one textual passages, a container is moved along with an object inside it; one could construe this as ‘move container along with object’ or as ‘move object by means of container’. The specific context is ‘take off pot with harpoon in it’ (2021-01 @ 01:55). See also the ‘flip fish along with the grill’ example discussed below.

A more purely comitative sense, though still asymmetrical with an agent and a passive theme, occurs in ‘X bring/convey Y’, expressed as “X come/go [kí Y tîⁿ].” Such conveyance expressions are common and can have any motion verb (§11.1.1.6).

bòlò ‘counterpart’, a key element in reciprocals and obviatives (§18.4), occurs in kí ʔbólò tîⁿ in the context ‘poison and harpoon are boiled together’ (2021-01 @ 01:44).

The complement may be a pronominal (proclitic or independent). In (426), the 3Sg pronoun resumes ‘knife’ from the initial clause.

- (426) Ø ŋá nòŋ-ó ʔlēgē
 1Sg Sbj/Obj knife-Sg take.Pfv
 [bí ʔtùgù-ù hùrù [ká= á tîⁿ]
 [Seq meat-Sg cut.Pfv [**Inst** **3Sg** under]
 ‘I took a knife and cut the meat with it.’ (< nòŋ-ó, légé, tógú-ú, hùrù)

The high-frequency 3Sg combination ká= á tîⁿ in (426) has a contracted variant kèè in allegro speech that cannot be synchronically hyphenated. A textual example is 2021-06 @ 01:08.

kí also occurs in the fixed adverbial phrase kí= í ‘sùrò ‘in the old days’. The internal structure of this phrase is somewhat opaque but it may be from kí plus possessive ... í ‘sùrò ‘their old(ness)’.

kí is attested rarely before a postposition other than tîⁿ ‘under’. In (427) the postposition is ʃéè ‘on’. The context (the fish are on the grill as the latter is flipped) is similar to that in the ‘take off pot with harpoon in it’ example mentioned above.

- (427) ósòdò á há= á gùlénì-nì [kí †mèŋù-ù ʃéè]
 then 2Sg Ipfv 3Sg flip-Ipfv [Inst iron-Sg on]
 ‘then you will flip it (=fish) along with the grill.’ (2021-06 @ 03:33) (< mèŋù-ù)

yágà(-là) is a versatile and high-frequency verb: transitive ‘put’ or ‘transform into’, intransitive ‘be put’ or ‘become, turn into’. In the sense ‘transform X into Y’ or ‘(X) become Y’, it is often followed by kí and the NP. Examples are 2021-01 @ 01:04, 2021-06 @ 01:14 & 05:46. In 2021-15 @ 02:23 the PP is [kí Y má] with the custodial postposition.

8.1.3.2 Instrumental circumlocution with tááⁿ/táá-ná ‘do, use’

The verb tááⁿ/táá-ná ‘do; use’ also occurs in a construction that describes instrumental function without requiring an adposition. The main clause has tááⁿ/táá-ná in the sense ‘use’ with the instrument as direct object, and this is followed by a sequential VP in purposive function.

- (428) ì hà kárbíní-í †tāā-nā [bá= á húè]
 3Pl Ipfv carbine-Sg do-Ipfv [Seq 3Sg jab.Pfv]
 ‘They use the carbine to shoot it (=hippo).’ (2021-01 @ 05:14)

8.1.3.3 ‘By X’ (X fáà)

Postposition fáà has a range of senses. A gloss ‘by’ captures some of its semantic range, cf. English *by night, by our side, down by the sea*.

- (429) a. zákì há †bààrá-á †tāā-nā [ŋgì fáà]
 Z Ipfv work(n)-Sg do-Ipfv [1Pl by]
 ‘Zaki works with us.’
- b. ŋgí há †bààrá-á †tāā-nā [gùlù-ù / kóó-tàà fáà]
 1Pl Ipfv work(n)-Sg do-Ipfv [night-Sg / daytime by]
 ‘We work at night/during the day.’

- c. háámúná-á fáà
rainy.season-Sg **by**
‘during the rainy season’

Some textual examples with comitative sense: ‘get involved with X’ (2021-01 @ 00:38), ‘keep it with us’ (2021-06 @ 02:38), ‘go with each other’ (2021-10 @ 03:41), and ‘come into the house with you’ (2021-15 @ 01:22 & 01:26). A slightly different sense occurs in ‘on the trail of (=in pursuit of) a hippo’ (2021-01 @ 02:52 & 04:52). More difficult to analyse is ‘pick themselves up with (=work up) heroic courage’ (2021-01 @ 03:24).

For fáà in ‘X resemble Y’, see §11.2.6.

In the ‘want’ construction, whether fáà is the ‘by’ postposition or a homophonous verb is discussed in §11.2.5.6. In the ‘have’ constructions, literally “Y is by X” meaning ‘X has (a) Y’, it is clear that fáà is the postposition.

Spatiotemporal ‘at, in’ is the sense of fáà in certain phrases: ‘at dawn’ (2021-06 @ 01:44 & 06:50), ‘hunt fish in a skiff’ (2021-06 @ 06:12).

L-toned -fàà is a common ending in composite postpositions denoting spatial relationships (§8.2.7-9), where one might have expected the unmarked locative postposition nî.

fàà occurs in a few combinations that can function grammatically as nouns or as spatial adverbs. The most important is sòḡ-fàà ‘(out in) the bush’, local French *la brousse*, which can function grammatically as a noun or as a spatial adverb. This is distinct from the noun sòḡ-ḡ ‘market’, plural sòḡ-ḡ-yèⁿ, whose locative is with postposition nî ‘in, at’ (430a).

- (430) a. ḡ gá [‘sòḡ-ḡ nî] wéè
3Sg be.Loc [market **Loc**] today
‘He/She is at the market today.’
- b. ḡ gá ‘sòḡḡ-fàà wéè
3Sg be.Loc **(out.in.)the.bush** today
‘He/She is out in the bush today.’

Treated as compound nouns, sòḡ-fàà ‘(out in) the bush’ and sòḡ-ḡ-nî ‘(in) the market’ can function as arguments in a clause. For example, a spatial PP normally follows the verb, but either of these nouns can appear as preverbal objects (431a-b).

- (431) a. ḡ gá ‘sòḡḡ-fàà tóò
1Sg Ipfv (in.)the.bush know.Stat
‘I know the bush.’
- b. ḡ gá ‘sòḡ-ḡ-nî tóò
1Sg Ipfv market know
‘I know (my way around) the market.’

The pronominal paradigm of fáà is (432).

(432)	category	isolation	after verb (with Tone Inversion)
a.	1Sg	ń fáà	ń fáà
	1Pl	ngí fáà	ngì fáà
	2Sg	á fáà	à fáà
	2Pl	í fáà	ì fáà
	Logo/3ReflSg	í fáà	ì fáà
b.	3Sg	ā fáà	á fáà
	3Pl	ī fáà	í fáà
c.	Logo/3ReflPl	í-yè ⁿ fáà	ì-yè ⁿ fáà

8.2 Spatial postpositions

8.2.1 Spatial NPs without overt postposition

Toponyms including names of villages and cities, in other than subject or object position, are assumed to be locative adverbs. No overt locative postposition is present (433a-b). Similarly, the noun *hòḍ* ‘house’ can occur without a postposition as *hòḍ* in the adverbial sense ‘at home’ (433c).

(433)	a.	ń	gá	bómòkò		
		1Sg	be.Loc	B		
		‘I am in Bamako.’				
	b.	ń	gá	‘bààrá-á	‘tāā-nā	bómòkò
		1Sg	Ipfv	work(n)	do.Ipv	B
		‘I work in Bamako.’				
	c.	ń	gá	hòḍ		
		1Sg	be.Loc	house		
		‘I am at home.’				

8.2.2 Locative, allative, and ablative senses

The distinction between (stationary) locative, allative (‘to’), and ablative (‘from’) is not made by PPs or other locational expressions, rather by verbs, as in other languages of the zone. Thus the city name ‘Bamako’ (see the preceding section) can occur without postpositions in any of these three contexts. Spatial PPs with a spatial postposition can also occur in locative, allative, and ablative contexts (434a-c).

- (434) a. íj gá [[ɲgì †núɲù-ù] nî] wéè
 1Sg be.Loc [[1Pl village-Sg] **Loc**] today
 ‘I am in our (=my) village today.’ (< nùɲù-ù)
- b. íj gá só-lò [[ɲgì †núɲù-ù] nî]
 1Sg Ipfv go.Ipfv [[1Pl village-Sg] **Loc**]
 ‘I am going to our (=my) village.’
- c. ḿ bágí [[ɲgì †núɲù-ù] nî]
 1Sg exit.Pfv [[1Pl village-Sg] **Loc**]
 ‘I have left (=I come from) our (=my) village.’

8.2.3 All-purpose locatives

8.2.3.1 Unmarked locative (X nî)

The unmarked locative postposition is nî (435a-c). With reference to passenger vehicles, either nî or fâà ‘by’ can occur (435d).

- (435) a. júú †sēē [sòmú-ù nî]
 water pour.Pfv [waterjar-Sg **Loc**]
 ‘Pour-2Sg (the) water into the waterjar!’
- b. íj gá bélé níɲì [júú nî]
 1Sg Ipfv Fut walk.Pfv [water **Loc**]
 ‘I am going to walk (=wade) in the water.’
- c. à ɲá ɲgèléɲ-ð yágà [[i mbáɲáɲ-ó] nî]
 3Sg SbjObj squirrel-Sg put.Pfv [[3ReflSg shoulderbag-Sg] **Loc**]
 ‘He_x put the squirrel in his_x shoulderbag.’
- d. íj gá só-lò [†kààrè-è nî/fâà]
 1Sg Ipfv go.Ipfv [bus-Sg **Loc/by**]
 ‘I (will) go in the bus.’
- e. Ø ɲá =á yáɲì= [[i nòð] nî]
 1Sg Sbj/Obj 3Sg leave.Pfv [[3ReflSg place] **Loc**]
 ‘I put him/her_x in his/her_x place.’ (< yágà, nòð ~ nòð)

Some common locative PPs are in (436).

- (436) a. cèè nî ‘in/at the field’
 b. kòlòŋ-ò nî ‘at the well’ (< kòlòŋ-ò)
 c. sóŋ-ó nî ‘at the market’
 d. báára-táán-tóó nî ‘at work’
 e. mìsírì-ì nî ‘at the mosque’

More abstract senses of “location” are exemplified in (437).

- (437) a. [à má{ðð}] tá [sèédù nî]
 [3Sg interest(n)] not.be.Loc [S **Loc**]
 ‘He/She doesn’t care about Seydou.’ (lit. “His interest is not in Seydou.”)
 (can be pronounced ā ‘mā{ð-ò ... postpausally)
- b. kòná= á ságá [hééré nî]
 Q 2Sg lie.down.Pfv [wellbeing-Sg **Loc**]
 ‘So did you-Sg sleep well?’ (kòní, §13.2.1.4) (2021-01 @ 00:05)
- c. ná= à há ‘hīnī [bí ká ‘{ēē [ó nî]]
 if 2Sg Ipfv be.able [Seq a.certain say.Pfv [Dem.Def **Loc**]]
 ‘If you can say something about it.’ (2021-01 @ 00:28)
- d. bí ŋgì tógó [[bóló-méé]-yà-à nî]
 Seq 1Pl find.Pfv [[children]-Abstr-Sg **Loc**]
 ‘to find us still in (our) childhood.’ (2021-06 @ 00:25)

The pronominal paradigm is (438).

(438)	category	isolation	after verb (with Tone Inversion)
a.	1Sg	ń nî	̀n nî
	1Pl	ŋgí nî	ŋgì nî
	2Sg	á nî	à nî
	2Pl	í nî	ì nî
	Logo/3ReflSg	í nî	ì nî
b.	3Sg	à nî	á nî
	3Pl	ì nî	í nî
c.	Logo/3ReflPl	í-yè ⁿ nî	ì-yè ⁿ nî

In contexts involving complete enclosure in a container or other bounded space, nî can be replaced by the more specific nìŋî ‘in(side)’, see §8.2.4 below.

Combinations of habitat-denoting noun (‘water’, ‘tree’, etc.) plus *nî* can also occur as complex compound initials (§5.1.9.1). They are then subject to Tone-Leveling, as in [júú-ní]- ‘aquatic’ from júú *nî* ‘in (the) water’.

8.2.3.2 Traces of locative suffix (X-*ỳ*)

The once-productive locative suffix (or enclitic) **-ỳ* is likely preserved as part of the postpositions in (439).

(439)	<i>nî</i>	locative	§8.2.3.1	
	<i>nìŋî</i>	‘inside’	§8.2.4	< <i>*nùŋù</i> ‘belly’
	<i>húèrè</i>	‘behind’	§8.2.9.1	cf. <i>hóðr-ò</i> ‘back (n)’
	<i>tîⁿ</i>	‘under’	§8.2.10.1	cf. <i>tàà</i> ‘foot’

8.2.4 ‘In(side) X’ (*nìŋî*)

Location inside a container or other enclosing space (such as a house) is expressed by *nìŋî*.

(440)	<i>ŋ</i>	<i>gá</i>	[<i>hòs</i>	<i>nìŋî</i>]
	1Sg	be.Loc	[house	inside]
	‘I am in(side) the house.’			

nìŋî is etymologically from **nùŋù-ỳ* ‘in belly (of)’. ‘Belly’ is now the compound *nùŋù-bàrà-à* ‘belly’ in Kelenga, but simple *nùⁿ* < **nùŋù* in Jenaama-Sorogaama. Kelenga uncompounded *nùŋù* ‘village’ is likely unrelated diachronically; cf. Jenaama-Sorogaama *nògù* ‘village’.

8.2.5 ‘On the torso of’ (*háá-nà*) and similar postpositions for garments

The postposition *háá-nà* ‘on the torso of’ occurs mainly in reference to upper garments like shirts and men’s boubous (robes) that sit on the shoulders and upper torso. It is obscurely related to *háŋ-ó* ‘neck’ (bare stem *háⁿ*) and perhaps *háamá-húⁿ* ‘(bones of) shoulder area’. The final *-nà* is likely the dative postposition, here in locative function. The combination is rather fused and it is transcribed here as a single hyphenated postposition.

When the wearer is subject of the clause, the verb is *lóó/ló-ló* ‘put on, don’ (441a-b). This verb elsewhere means ‘enter’ or ‘give’. When the garment is subject, the locational ‘be’ predicate is used (441c).

(441)	a.	Ø	<i>ŋá</i>	[<i>kámí-nòŋ</i>]- <i>ó</i>	⁴ l ₅₅	[<i>ŋ</i>	<i>háá-nà</i>]
		1Sg	Sbj/Obj	[boubou]-Sg	don.Pfv	[1Sg	on.neck]
		‘I put on a boubou.’					

b. à ɲà [kámí-nòŋ]-ó ʼlɔ̃ [ì háá-nà]
 3Sg Sbj/Obj [boubou]-Sg don.Pfv [3ReflSg **on.neck**]
 ‘He/She put on a boubou.’

c. kámí-nòŋ-ó há = [á ʼhàà-nà]
 [boubou]-Sg be.Loc [3Sg **on.neck**]
 ‘A boubou is on him/her.’ (i.e. he/she is wearing a boubou)

lɔ̃/lɔ̃-lɔ̃ in the sense ‘give’ rather than ‘enter’ combines with the same postposition háá-nà in connection with loans that are to be reimbursed (442) as opposed to gifts. The semantic connection is that the loan is (conceptually) hung over the recipient and can be “doffed” by repaying the loan.

(442) Ø ɲá ʼtààmú-ú ʼlɔ̃ [zàkí ʼhàà-nà]
 1Sg Sbj/Obj loan(n) give.Pfv [Z **on.neck**]
 ‘I gave a loan to Zaki.’

The pronominal paradigm is (443)

(443)	category	isolation	after verb (with Tone Inversion)
a.	1Sg	ɲ háá-nà	ɲ háá-nà
	1Pl	ɲí háá-nà	ɲì háá-nà
	2Sg	á háá-nà	à háá-nà
	2Pl	í háá-nà	ì háá-nà
	Logo/3ReflSg	í háá-nà	ì háá-nà
b.	3Sg	ā ʼhàà-nà	á ʼhàà-nà
	3Pl	ī ʼhàà-nà	í ʼhàà-nà
c.	Logo/3ReflPl	í-yé ⁿ ʼhàà-nà	í-yé ⁿ ʼhàà-nà

For headware and footwear, the body-part specific PP is the partonym (‘head’, ‘foot’) plus semi-fused dative lá ~ ná in locative function.

(444) a. zàkì ɲá sàbàrà-á ʼlɔ̃ [ì táá-là)
 Z Sbj/Obj shoes-Sg don.Pfv [3ReflSg **on.foot**]
 ‘Zaki put on shoes (on his feet).’

b. zàkì ɲá bàⁿvúlà-á ʼlɔ̃ [ì ʃááⁿ-hóòⁿ-là]
 Z Sbj/Obj hat-Sg don.Pfv [3ReflSg **on.head**]
 ‘Zaki put on (=wore) a hat on his head.’

Custodial má (§8.1.2) may replace ‘on foot’ and ‘on head’ postpositions in these examples, and for pants and women’s wraps only má is attested.

8.2.6 ‘On X’ or ‘over X’ (X ʃéè)

In this PP, the landmark X is conceptualized as being supported or held in place by an extended surface, whether horizontal (e.g., mat) or vertical (e.g., wall), or else as being in the atmosphere above something (object or surface). The postposition is ʃéè, sometimes ʒéè after a nasal syllable. The HL-tones are stable.

- (445) a. f́ará-á há [ˈjèèrè-è ʃéè]
 rock-Sg be.Loc [mat-Sg **on**]
 ‘The rock is on the mat.’
- b. Ø ñá f́ará-à yágà [ˈjèèrè-è ʃéè]
 1Sg Sbj/Obj stone put.Pfv [mat-Sg **on**]
 ‘I put the stone on the mat.’
- c. básà-à há [ˈhòò-f́ààⁿ ʃéè]
 agama-Sg be.Loc [wall **on**]
 ‘The agama lizard is on the wall.’

ʃéè occurs in a frequent collocation with noun kírì-ì ‘manner, way (of sth)’. Among other textual occurrences are (2021-01 @ 00:34 & 01:16). Other abstract contexts are ‘speak about X’ (2021-06 @ 00:03) and ‘speak magical praises (=charms) on harpoon’ (2021-01 @ 04:04).

ʃéè is also a crucial part of the progressive construction, which is phrased as “be on it” plus a sequential VP (§10.2.4.6).

Most textual examples, however, are literal ‘on X’ involving direct contact with a horizontal surface: ‘be put (=ride) on animal’ (2021-01 @ 03:27), ‘put fish on the grill’ (2021-06 @ 01:05 & 02:19 & 02:36), ‘put grill with fish on the fire’ (2021-06 @ 03:08), ‘break up ice over fish’ (2021-06 @ 01:44), ‘spread out fish on straw’ (2021-06 @ 04:18), and ‘rain was (beating down) on X’ (2021-15 @ 01:14). Verticality is unclear in ‘keep figs on/with oneself’ (2021-10 @ 02:55), ‘ascend on (=climb) the tree’ (2021-10 @ 03:10 & 03:13), and ‘sit on (the top of) the tree’ (2021-10 @ 04:22 & 04:26).

8.2.7 Proximity

The postpositions discussed below are composite, consisting of a noun plus -f́àà. The latter is related to f́àà ‘by’ and here functions semantically as a simple locative ‘at’. The noun may be stripped down (without the long final vowel of the singular). The complement takes the form of a

possessor, and the landmark noun usually takes the tonal form of a possessum, but there are some minor irregularities.

8.2.7.1 ‘Beside X’ (X ¹bélè-fàà)

The noun bèlè-è ‘entire side (of a person)’ has a derivative bèlè-fàà ‘side (of an object)’ or ‘edge (of water)’, plural bèlè-fàà-yèⁿ. This is slightly compressed from the PP bèlè-è fàà ‘by the side’. The related postposition has an idealized full form [X ¹bélè-è] fàà ‘beside X, next to X’. The actual pronunciation typically has just one audible H-tone. For 3Sg and 3Pl, bèlè remains L-toned so fàà keeps its audible H-tone: ā bèlè-fàà ‘beside him/her/it’ and ī bèlè-fàà ‘beside them’ (isolation pronunciations). With other complements, the usual possessum tones for /L/-melodic nouns, with Initial H-Ablaut, kick in, so ¹bélè has its H-tone and is followed by -fàà. Examples: 2Sg á ¹bélè-fàà, 1Sg m̄ ¹bélè-fàà. All of these are isolation (postpausal) pronunciations.

The landmark is usually an oriented entity (e.g. person, house) with a front, back, and sides.

- (446) a. í gá [sèédù ¹bélè-fàà]
 1Sg be.Loc [S **beside**]
 ‘I am next to Seydou.’
- b. sèédù há [hòò ¹bélè-fàà]
 S be.Loc [house **beside**]
 ‘Seydou is next to the house.’

See also (932a-b) in §18.1.5.

8.2.7.2 ‘Beside X’ (X ηgèréη-ò fàà)

The noun ηgèréη-ò ‘side (of person, house, skiff, etc.)’, from Bambara, is the basis for another postposition meaning ‘beside’. ηgèréη-ò with its singular suffix is more clearly recognizable as an independent noun than is the case with the rather fused ¹bélè-fàà.

- (447) a. í gá [[sèédú ηgèréη-ò] fàà]
 1Sg be.Loc [[S **beside-Sg**] **by**]
 ‘I am next to Seydou.’
- b. sèédù há [[hòó ηgèréη-ò] fàà]
 S be.Loc [[house **beside-Sg**] **by**]
 ‘Seydou is next to the house.’

Pronominal combinations in isolation pronunciation include 1Sg í ηgèréη-ò fàà and 3Sg ā ηgèréη-ò fàà.

8.2.7.3 ‘Near X’ (X kámù-fàà)

From noun kámù-ù ‘place’ is formed the postposition (X) kámù-fàà ‘near X, in the vicinity of X’. The postposition specifies proximity rather than orientation. The landmark may be human or nonhuman. It can also mean ‘(in) a part of X’ (448c).

- (448) a. ñ gá [sèédú ‘kāmù-fàà]
 1Sg be.Loc [S **near**]
 ‘I am close to Seydou.’
- b. sèédù há [hòó ‘kāmù-fàà]
 S be.Loc [house **near**]
 ‘Seydou is close to the house.’
- c. bòmòkó ‘kāmù-fàà
 B **in.part.of**
 ‘in a place in Bamako (city)’ (< bómòkò)

These examples show the tonal form ‘kāmù-fàà after nonpronominal NP complement. This form triggers Final Tone-Raising from sèédù, hòó, and bómòkò. kāmù-fàà with initial H-tone occurs after H-toned pronominal proclitics. Thus sógó-ó ‘kāmù-fàà ‘close to the goat’, and (in isolation pronunciations) 1Sg ñ kámù-fàà.

8.2.7.4 ‘At the edge/bank of’ (X lògò-fàà, X lógó-ó ‘mà)

lògò-fàà is mainly combined with topographic or other physical landmarks like ‘(body of) water’, ‘well’, ‘field’, ‘market’, and ‘village’. It is based on lógó-ó ‘mouth’, which can also mean ‘rim’ or ‘outer edge’. As an /H/-melodic noun, lógó-ó is regularly tone-dropped to ‘lògò-ò as possessum, and this is grammaticalized as the L-toned lògò- in the postposition, which does not occur with first- or second-person pronominal complements.

- (449) a. dùgò-ò ‘river’ dùgó-ó lògò-fàà ‘on the shore of the pond’
 fàrà-à ‘lagoon’ fàrà-á lògò-fàà ‘on the shore of the lagoon’
 júú ‘water’ júú lògò-fàà ‘on the shore (of the water)’
- b. sòjò-fàà ‘the bush’ sòjò lògò-fàà ‘at the edge of the bush (outback)’
 hólí-í-yéⁿ ‘skiffs (boats)’ hólí-í-yéⁿ lògò-fàà ‘near the skiffs (departure area)’

- c. kòlòŋ-ô ‘well’ kòlòŋ-ó lògò-fàà ‘at (the edge of) the well’
- d. cèè ‘field’ céé lògò-fàà ‘at the field’ (2021-03 @ 11:16)

A pronominal combination is ā lògò-fàà ‘at its edge’ (isolation pronunciation).

See also [júú lògó-ó] ‘mà ‘at the edge of (water)’ ending in custodial má (2021-08 @ 00:22 & 01:07).

8.2.8 ‘In front of’

8.2.8.1 ‘In front of’ (X kââⁿ ~ káâⁿ, X kááⁿ-vâà)

The noun kââⁿ ‘ahead, in front, forward’ has a composite adverbial form kááⁿ-vâà in the same sense (with f→v after nasal). Compare the reduced initial in the irregular compound ká-jínì-ì ‘leader, boss, chief’, with jínì-í ‘person’ as final.

The related postpositions are (X) kââⁿ ~ káâⁿ and (X) kááⁿ-vâà ‘in front of X’. The latter is ‘kââⁿ-vâà after a nonpronominal complement, triggering Final Tone-Raising.

- (450) a. ñ gá [sèèdú ‘kââⁿ-vâà]
 1Sg be.Loc [S **in.front.of**]
 ‘I am in front of Seydou.’
- b. sèédù há [‘mòmbòlí-í ‘kââⁿ-vâà]
 S be.Loc [vehicle-Sg **in.front.of**]
 ‘Seydou is in front of the vehicle.’

Pronominal combinations in isolation pronunciation include full forms 1Sg ñ kááⁿ-vâà and 3Sg à kááⁿ-vâà, along with short forms 1Sg ñ kââⁿ and 3Sg ā kââⁿ.

This postposition can also have the temporal sense ‘before X’.

- (451) ñ gá ‘kílā-lā [ñ kââⁿ]
 3Sg Ipfv finish-Ipfv [1Sg **in.front.of**]
 ‘He/She finishes (work) before me.’

The postposition occurs in adjuncts to the verb ‘fear’ (§11.2.5.8). The image is of one trembling in the presence of an entity.

- (452) ñ gà kónò-nó [mùnù-ú kââⁿ]
 3Sg Ipfv fear-Ipfv [dog-Sg **before**]
 ‘He/She is afraid of the dog.’ (< múnù-ù)

8.2.8.2 ‘In the presence of’ (X *náǵáná*)

This postposition is slightly compressed from *náǵá-á* ‘eye’ and dative *ná ~ lá*. It denotes the presence of an experiencer or eyewitness.

- (453) *ā* *ŋī=* *ì* *tááⁿ* [*à* *náǵáná*]
 3Sg Sbj/Obj 3ReflSg do.Pfv [2Sg **in.presence.of**]
 ‘It (=hippo hunt) was done in your-Sg presence’ (cf. 2021-01 @ 00:26)

The 3Sg form (in isolation) is *ā* ‘*nàǵà*’.

8.2.9 ‘Behind X’

8.2.9.1 ‘Behind X’ and ‘after X’ (X *húèrè ~ hóórè-fàà*)

The noun *hóórò-ò* ‘back (of body)’ has possessed forms like *sèédù hóórò-ò* ‘Seydou’s back’, 3Sg *ā* ‘*hóórò-ò*’, and 2Sg *á* *hóórò-ò*. There is a transparent postposition [X *hóórò-fàà*] ‘behind X, in back of X’, related to the composite PP *hóórò-ò fáà* ‘later’ (§8.5.5.3). There is a variant postpositional form *húèrè*.

- (454) a. *í* *gá* [*sèédù* *húèrè / hóórò-fàà*]
 1Sg be.Loc [S **behind**]
 ‘I am behind Seydou.’
- b. *sèédù* *há* [*hòò* *húèrè / hóórò-fàà*]
 S be.Loc [house **behind**]
 ‘Seydou is behind the house.’

Pronominal forms are 1Sg *í* *húèrè* or *í* *hóórò-fàà*, 3Sg *à* *húèrè* or *à* *hóórò-fàà*.

The variant *húèrè* is most closely related to an adverb *hóórèè* ‘in the rear’. Both of these likely derive from a form of ‘back’ ending in the obsolete locative *-*y* or variant (§8.2.3.2). Relevant comparative data are in the grammars of JSDj and Cliffs.

The sense ‘after X’, where X is a temporal reference point like *sáráŋ-ó* ‘holy day, holiday’, is expressed occasionally by these postpositions (455a), but more usually by a phrase of the type ‘(when) X has passed’ (455b).

- (455) a. *sáráŋ-ó* *húèrè / hóórò-fàà*
 holy.day-Sg **behind**
 ‘behind (=after) the holy day’

- b. ní ʼsàràŋ-ð ʼhēlē
 if holy.day **pass.Pfv**
 ‘when the holy day has passed’

8.2.9.2 ‘(Following/pursuing) after X’ ([X nód] nî)

This composite postposition occurs with a motion verb. The context is following (an individual or track) or pursuit. *nód* is related to the compound final in *táá-nód* ‘footprint’ and *jíŋí-nód* ‘tracks (e.g. of snake)’, cf. *tàà* ‘foot’ and *jíŋí(-nì)* ‘walk’.

- (456) a. ní zá = [[á nód] nî]
 1Sg go.Pfv [[3Sg **track**] Loc]
 ‘I pursued/followed him/her/it.’ (< ŋ só)

- b. ní zó [[sèédù nód] nî]
 1Sg go.Pfv [[S **track**] Loc]
 ‘I pursued/followed Seydou.’

A textual example is 2021-08 @ 01:52.

Examples like (456a-b) should not be confused with similar-sounding examples based on the noun *nód* ~ *nòð* ‘(the) place/role (of sb)’ (§8.2.13). The context in that case is role substitution. Note the different tones of ‘Seydou’ and of *nód* in (456b) above and (457b) below. It may, however, be difficult for speakers to keep the two distinct.

- (457) a. ní zá = [[á nòð] nì]
 1Sg go.Pfv [[3Sg **place**] Loc]
 ‘I went in his/her place.’

- b. ní zó [[sèèdú nòð] nì]
 1Sg go.Pfv [[S **place**] Loc]
 ‘I went in the place of Seydou.’ (< só)

8.2.10 ‘Below/under X’

8.2.10.1 ‘Under/At the foot of’ (X tîⁿ)

By itself, *tîⁿ* can mean ‘under’ or more often ‘at the feet of, in the shadow of, near’. The entity in question is on the ground or otherwise in a low position. It may be related to *tàà* ‘foot’, see §8.2.3.2.

Simple *tîⁿ* produces PPs like *sèédù tîⁿ* ‘at the feet of Seydou’, and pronominal combinations like 2Sg *á tîⁿ* and 3Sg *à tîⁿ*.

- (458) ìḡ gá= [à tîⁿ]
 3Sg be.Loc [2Sg **under**]
 ‘He/She/It is at your-Sg feet.’ (i.e. close to you, on the ground)

For ‘get angry with X’ using this postposition, see (627) in §11.1.1.4.

tîⁿ is also part of búrù-tîⁿ, the usual ‘under X’ postposition (see below). It is also part of the very common instrumental circumposition [kí X tîⁿ] ‘by means of X’ (§8.1.3.1), which is also a component in the conveyance construction (§11.1.1.6).

8.2.10.2 ‘Below/under X’ (X búrù-tîⁿ)

The adverb ‘down below, at the bottom’ is búrù-tîⁿ. Its initial element is probably related to búrù-ù ‘trunk (of tree)’ (as possessum ā búrù-ù ‘its trunk’), and to the initial in búrù-hùndùrù-ù ‘buttock’. The final element is tîⁿ ‘under’ (see just above).

The related postposition is (X) búrù-tîⁿ ‘under X’ or ‘at the base of X’.

- (459) a. Ø ḡá fàrà-à yágà [ʔjèèè-è búrù-tîⁿ]
 1Sg SbjObj stone-Sg put.Pfv [mat-Sg **under**]
 ‘I put the stone under the mat.’ (< fàrá-á)

Pronominal combinations include 1Sg ṁ búrù-tîⁿ ‘under me’ and 3Sg ā búrù-tîⁿ.

8.2.11 ‘Between’ ([X nàáḡ-ḡ] nì, X nàḡáà)

Corresponding to the noun nàḡáḡ-ḡ ~ nàáḡ-ḡ ‘waist; middle’ is locative adverbial nàáḡ-ḡ nì. Careful pronunciation has ... nî ; for the flattening see §3.6.5.3.11-12. nàáḡ-ḡ nì can also function as a postposition meaning ‘in the middle of’ (460a). It can co-occur with plural pronouns (460b) and with 3Sg à denoting e.g. a field or village, but not with 1st/2nd singular person pronouns except in the irrelevant sense ‘my/your waist’. A temporal sense is apparent in (460c).

- (460) a. [nùḡú-ú nàáḡ-ḡ] nì
 [village-Sg **middle-Sg**] Loc
 ‘in the middle of the village’ (< nùḡù-ù)
- b. ḡḡí / áá / è nàáḡ-ḡ
 1Pl / 2Pl / 3Pl **between**
 ‘between us/you-Pl/them’ (literal position)
- c. ḡùlú-ú nàáḡ-ḡ
 night **middle**
 ‘late at night, in the middle of the night (11pm to 3am)’ (< ḡùlù-ù)

There is a related postposition *nàṅáà* that can be a synonym of *nàáṅ-ò* but can also have a more abstract, not strictly spatial sense. This should not be confused with the noun *nàṅáà* ‘thing’.

- (461) a. *à há [ṅì nàṅáà]*
 3Sg be.Loc [1Pl **amidst**]
 ‘It (e.g. information) is between us.’ or ‘He/She is in our midst.’
- b. *náṅáá-fùò há [+sùgú-ú nàṅáà] wéè*
 snake be.Loc [grass **amidst**] today
 ‘The snake is in the grass today.’ (< *sùgú-ú*)
- c. *màⁿ há [[ṅì [kí ‘bólè-ó]] nàṅáà]*
 what? be.Loc [[1Pl [and Recip-Sg]] **amidst**]
 ‘What (trouble) is there between us?’ (i.e. ‘Why are you angry with me/us?’)
- d. *[mòtì [kí ‘bòmòkò]] nàṅáà*
 [M [and B]] **between**
 ‘between Mopti and Bamako (cities)’ (< *bòmòkò*)

8.2.12 X *máṅgè* ~ *mégè* ‘chez X’

The postposition *máṅgè* (dialectally *mégè*) can function like French *chez*, i.e. in the sense ‘at the place (or home) of X’. The complement X denotes humans, or personified animals in tales. Pronominal combinations are 1Pl *ṅí máṅgè* ‘at our place’, 2Pl *í máṅgè* ‘at your-Pl place’, and 3Pl *ì máṅgè* ‘at their place’.

Plural nouns can also be the complements: *nàṅà-léèⁿ máṅgè* ‘at the women’s place’. A singular noun such as a personal name is allowed as complement if the person lives alone (462a). In the usual case where the individual shares a residence, the name is expanded by adding either the regular plural (462b) or associative plural (§4.1.4) suffix as in (462c).

- (462) a. *sèédù máṅgè*
 S-people **chez**
 ‘at Seydou’s place’ (Seydou lives alone)
- b. *sèédù-yèⁿ máṅgè*
 S **chez**
 ‘at Seydou’s place’ (lit. “chez the Seydou’s”)
- c. *[sèédú nì] máṅgè*
 [S AssocPl] **chez**
 ‘at Seydou’s place’ (lit. “chez Seydou &co”)

8.2.13 [X nòó] nì ‘instead of X, in X’s place’

[X nòó] nì means ‘in the place of X’, denoting replacement or roll substitution in a location or activity. The components are the noun nòò ~ nòô in the abstract sense ‘(someone’s) place’, and locative postposition nî, the latter irregularly in L-toned form.

- (463) a. ñ gá só-lò [[sèèdú nòó] nì]
 1Sg Ipfv go.Pfv [[S **place**] **Loc**]
 ‘I will go in Seydou’s place.’ (< só-lò)
- b. ñ gá= á ‘tòòrò-lò [[ñ nòó] nì]
 3Sg Ipfv 3Sg sell.Ipfv [1Sg **place**] **Loc**]
 ‘He/She is selling it (=running the shop) in my place.’

As pointed out in §8.2.9.2 above, this [X nòó] nì is tonally and semantically distinct from a segmentally identical composite postposition [X nòô] nî ‘(following) after X’, which combines with a verb meaning ‘follow’ or ‘pursue’. However, some speakers may mix the two.

8.2.14 lámàà ‘apart, distinct’

lámàà ‘only’ can be added to NPs in various functions (§19.3.2.1). It can also function as a predicative PP that specifies the spatial separateness or qualitative difference of two or more entities. It can have a plural NP or pronoun as subject, usually ending with súnúⁿ ‘all’ (464a-b). Alternatively, each referent has its own parallel lámàà clause (464c). In either case the complement of lámàà is a reflexive pronominal.

- (464) a. [hàáⁿ-yèⁿ [gí ‘fílà-yéⁿ ‘sūnūŋ] gí= [ì lámàà]
 [Bozo-Pl [and Fulbe-Pl] all] be.Loc [3ReflSg **apart**]
 ‘Bozo and Fulbe are (both) separate/distinct.’ (< fílà-yèⁿ)
- b. [kòròò [kí ‘kòlòó] ‘sūnūŋ] [gí= [ì lámàà]]
 [carp [and tigerfish] all] [be.Loc [3ReflSg **apart**]]
 ‘Carp and tigerfish are different.’ (< kòlò-ó, há ~ gá)
- c. sèèdù hí= [ì lámàà]
 S be.Loc [3ReflSg **apart**]
 [ámádú hí= [ì lámàà]
 [A be.Loc [3ReflSg **apart**]
 ‘Seydou is apart, Amadou is apart.’
 (= ‘Seydou and Amadou are separate/different.’)

- d. ɲgí há [ɲgí lámàà], ì hí= [ì-yèⁿ lámàà]
 1Pl be.Loc [1Pl **apart**], 3Pl be.Loc [3Ref1Pl **apart**]
 ‘We are apart, they are apart.’ (i.e. we and they are separate)

8.2.15 [X tóó] as postposition

This postposition is related to -tóó ~ -tòò in place-of-action deverbal nominals (§4.2.1.4) and to tóó-fàà ‘the other (=far) side’. It is also suggestively, but perhaps accidentally, similar to the stative verb tòò ‘know’. Here it is glossed as ‘about’ in interlinears, a gloss that is intended to suggest a mix of spatial and more abstract senses.

8.2.15.1 tóó as spatial postposition

tóó occurs as a postposition in spatial adverbial clauses (‘[at] the place where ...’). In this construction, tóó follows [... wóróⁿ mwò] ‘the place where ...’ at the end of a relative construction. The combination is fused and slightly contracted as ... wóróⁿ-mùn-dóó (§14.4.5, §15.4.2).

8.2.15.2 tóó in the ‘forget (about)’ construction

The ‘X forget (about) Y’ construction is often expressed as ‘[X’s mind] exit(v) [Y tóó]’, where the verb ‘exit’ reinforces the spatial conceptualization of forgetting. The tonal patterning of tóó is like that of possessums: ⁴tòò after nonpronominal possessors and third-person pronouns, tóó after H-toned pronominals (e.g. 2Sg á tóó in isolation pronunciation).

- (465) a. [ɲ́ gáálè-é] ⁴bāy [sèèdú ⁴tòò]
 [1Sg mind-Sg] exit.Pfv [S **about**]
 ‘I have forgotten Seydou.’
- b. [á gáálè-è] mání ⁴bāy [̀n tóó]
 [2Sg mind-Sg] Proh exit.Pfv [1Sg **about**]
 ‘Don’t forget me!’

The alternative ‘forget’ verb is ɲínè(-nè) which has similar syntax.

The postposition húèrè ‘behind’ can also be used instead of tóó in ‘forget’ clauses.

8.2.16 kàbìnì ~ kàmìnì ‘since/from’ and mà ‘until/all the way to’

kàbìnì ~ kàmìnì ‘since’ and mà ‘until’ (cf. §8.5.5.7) precede PPs and adverbial nouns denoting points in time. They are often heard with final H-tone (e.g. kàbìní, má) due to Final Tone-Raising. They have final L-tone before /HL/-melodic words, with minor lexicalized exceptions for mà mentioned below.

Especially in spatial function these forms are emphatic: ‘all the way from’, ‘all the way to’. The ‘since’ and ‘until’ phrases may occur individually, or they may be juxtaposed to define temporal or spatial bookends.

(466) a. à ñá ʔbààrá-á ʔtāāⁿ, [kàbìní ʔdūgò-ò-nì] [má wèè]
 3Sg Sbj/Obj work(n)-Sg do.Pfv, [since yesterday] [until today]
 ‘He/She has worked since (=from) yesterday until today.’ (< dūgò-ò-nì)
 (for the tones of má wèè see comments below]

b. ā ʔhōōlò [kàmìnì bómòkò] [má ʔjēébū]
 3Sg run.Pfv [from B] [until S]
 ‘He/She ran all the way from Bamako to Segou (cities).’ (< hóólò, jēébú)

wèè ‘now’ and jèè ‘tomorrow’ are L-toned after mà, which then raises to má by tone sandhi: má wèè ‘until today, up to now’, má jèè ‘until tomorrow’.

/H/-melodic nouns are tone-dropped: má ʔsògò-ò ‘until (=even) a goat’. /L/-melodic nouns under to Initial H-Ablaut: mà ʔsàgà-à ‘until (=even) a sheep’. Combinations with a wide range of nouns (not just spatiotemporal nouns/adverbs) are most common in ‘until’ clauses (§15.5.3.2).

Some combinations with kàbìnì ~ kàmìnì are in (467). Locative nî and custodial má are postpositions. The tonal patterns of the nouns are like those following the Ćv post-subject inflectional particles.

(467)	phrase	gloss	noun
a.	kàmìnì bómòkò kàmìnì wèè	‘all the way from Bamako’ ‘from today on’	bómòkò wèè
b.	kàmìnì ʔkólòŋ-ò kàmìnì [cèè nî] kàmìnì ʔsàgà-à kàmìnì [ʔnúŋù-ù nî]	‘all the way from the well’ ‘all the way from the field’ ‘all the way from the sheep-Sg’ ‘all the way from the village’	kòlòŋ-ò cèè ~ cèè sàgà-à núŋù-ù
c.	kàmìnì ʔjēébù kàmìnì [ʔjùú ʔmà] kàmìnì ʔsògò-ò kàmìnì jàbá-à	‘all the way from Segou’ ‘all the way from the water’ ‘all the way from the goat’ ‘all the way from the onion’	jēébú júú sògò-ò jàbá-à

d. kàmìní 'zàkì 'all the way from Zaki (name)' zàkì

For indicative 'since ...' and 'until ...' clauses, see §15.5.3.-2.

8.2.17 [[X ɲìnɛ́] 'mà] 'unbeknownst to X'

The verb ɲínɛ̀(-nɛ̀) 'forget' has a verbal noun ɲínɛ̀-ɛ̀ 'forgetting (n)'. Related to this verbal noun is a composite postposition [[X ɲìnɛ́] 'mà meaning 'unbeknownst to X, without X's knowledge' (French *à l'insu de X*). It does not entail that X previously knew and then forgot. má is the custodial postposition.

(468) ā ɲī= ì tááⁿ [[zàkí ɲìnɛ́] 'mà]
 3Sg Sbj/Obj 3RefISg do.Pfv [[Z **ignorance**] **Cust**]
 'It (e.g. marriage) took place without Zaki's knowledge.'

In isolation pronunciations, pronominal forms are 1Sg [ɲ ɲìnɛ́] 'mà 'unbeknownst to me' and 3Sg [ā ɲìnɛ́] 'mà 'unbeknownst to him/her'.

8.3 'For' and 'because of'

For purposive clauses, see §17.3.5-6. For causal 'because ...' clauses see §15.5.1. There are two postpositions denoting purpose or cause. Purposive clauses are generally prospective, causal clauses generally retrospective.

8.3.1 Purposive-causal 'for; because of' ([X ʃóó] 'nà ~ [X ʃóó] 'là)

The noun ʃòò ~ ʃòò means 'thing (abstract), matter, issue'. Combined with dative ná ~ lá (§8.1.1.2) it produces a composite postposition ʃóó 'nà ~ ʃóó 'là 'for' or 'for the sake/benefit of'. In this forward-looking, purposive or benefactive context it competes with purposive hóómá (see the following subsection). ʃóó 'nà ~ ʃóó 'là can also mean 'because of' (reactive, backward-looking) as in (469c). Finally, it can mean 'out of respect for, in deference to' with either 'God' or a respected person as complement, as in (469d-e).

(469) a. ī 'byè [[†túnù-ù ʃóó] 'nà]
 3Pl come.Pfv [[honey-Sg **sake**] **Dat**]
 'They came for (=to get) the honey.' (< túnù-ù)

b. à ʃòò [ɲínì-ì tóó] [[báára-á ʃóó] 'nà]
 3Sg go.Pfv [walk.VblN-Sg toward] [[work(n)-Sg **sake**] **Dat**]
 'He/She traveled for (the) work.'

- c. ηγί lóó [[hàbáà ʃóó] ʼlà]
 1Pl enter.Pfv [[cloud **sake**] **Dat**]
 ‘We went in(side) because of the rain.’
- d. ì ʼbyè [[sèédù ʃóó] ʼnà]
 3Pl come.Pfv [[S **sake**] **Dat**]
 ‘They came for (because of) Seydou.’
- e. à ηά= á ʼnòò [[álà ʃóó] ʼnà]
 3Sg Sbj/Obj 3Sg give.me.Pfv [[God **sake**] **Dat**]
 ‘He/She gave it to me for the sake of God.’ (i.e., freely, without payment)

8.3.2 Purposive ‘for’ ([X hóómá])

This postposition is not easily segmentable, though it may be a frozen combination ending in custodial postposition má (§8.1.2). Noun stems that sound like the first syllable, but are not good semantic matches, include hóó ‘characteristic sound’ (mainly possessed or compounded) and the verbal noun of hóóⁿ/hóó-nó ‘call’. Pronominal forms include 1Sg η hóómá ‘for me’ and 3Sg ā ʼhòòmà. After nonpronominal NPs it is ʼhòòmà.

- (470) a. ā byè [fógó-fòó ʼhòòmà]
 3Sg come.Pfv [sit-thing **Purp**]
 ‘He/She came for (=to get) a chair.’
- b. η̄ gá ʼbààrá-á ʼtāā-nā [wári-í ʼhòòmà]
 3Sg Ipfv work(n)-Sg do-Ipfv [money-Sg **Purp**]
 ‘He/She works for (=to get) money.’
- c. ā byè [à hóómá]
 3Sg come.Pfv [2Sg **Purp**]
 ‘He/She came for (=to get) you-Sg.’

For hóómá with a verbal noun, see §15.3.7.

8.4 Linker ηv between verb and vocalic pronominal PP

3Sg à or 3Pl ì as complements of spatial PPs that immediately follow a verb are often preceded by a linking element ηv (“v” = underdetermined vowel). The contractions are ηà = à and ηì = ì before an /HL/-melodic postposition and (tone-inverted) ηά = á and ηί = í before an /H/-melodic postposition (which is tone-dropped after these proclitics).

One of two younger speakers checked did not use this linker, but it appeared regularly in recordings with two older speakers. The attested combinations are those in (471); they show that only core, high-frequency spatial postpositions are eligible. There are no examples involving PPs that are not immediately postverbal. 3Sg à and 3Pl ì do not undergo Tone Inversion in these combinations (471a) but the whole combination ñà = à or ñì = ì raises to H-tone by Final Tone-Raising before a nonhigh tone (471b).

(471)	form	gloss	references
a. with /HL/-melodic postposition			
	ñì = ì fáà	‘by them’	2021-01 @ 00:38 (twice)
	ñà = à nî	‘in it’	2021-01 @ 02:12, 02:17, and 03:45 2021-06 @ 05:38
	ñà = à ʃéè	‘on it’	2021-06 @ 02:19
b. with /H/-melodic postposition			
	ñá = á ʹmà	‘with it’	2021-01 @ 02:32 2021-06 @ 04:40

There appear to be no restrictions on which verbs can be followed by the linker. The textual examples cited follow the verbs in (472). The transcriptions are normalized to factor out tonal processes that are not relevant here.

(472)	verb	gloss	category	reference
	héè	‘saw’	Pfv	2021-01 @ 00:38
	lóó	‘entered’	Pfv	2021-01 @ 00:38
	sólò	‘cooked’	Pfv	2021-01 @ 02:12 and 02:17
	céè ⁿ	‘arrived’	Pfv	2021-01 @ 02:32
	céè-nè	‘arrives’	Ipfv	2021-06 @ 04:40 (usually céé-nè)
	kóò ⁿ ~ kúò ⁿ	‘be many’	stative	2021-01 @ 03:45
	yágà	‘put’	Pfv	2021-06 @ 02:19
	kírè	‘obtained’	Pfv	2021-06 @ 05:38

Two of the textual examples are formatted here (473-b). In (473a), the PP that immediately follows the verb has the linker, but the second PP à nî does not have it.

(473)	a.	ń	dí	ʹlɔ̃	[ñì =	[ì	fáà]	[à	nî]	dè?
		1Sg	PfvNeg	enter.Pfv	[Link	[3Pl	by]]	[3Sg	Loc]	Emph
		‘I didn’t enter (=get involved) in it with them, mind you.’ (2021-01 @ 00:38)								

- b. [á tá céé-nè [ɲá = á 'mà]]
 [2Sg IpfvNeg arrive-Ipfv [**Link** 3Sg Cust]]
 'You don't come into contact with it.' (2021-06 @ 04:40)

This linker is distinct from the bidirectional case marker $\eta\grave{a} \sim \eta\acute{a}$, also a kind of linker which precedes objects and therefore does not occur postverbally.

8.5 Other adverbs (or equivalent)

8.5.1 Similarity 'like X' (á-wó-tá and reduced variants)

In careful speech, the full form for 'like' ('similar to') is á-wó-tá. This originated from a phrase beginning with á wó 'you said' (i.e. 'you would have said'). Phrasing of this type occurs in JSDj and other languages of the region, and cf. French *on dirait* in contexts like 'it looks like it's going to rain'. This would leave -tá as either an original 'that' quotative complementizer or an original 'like' particle. á-wó-tá can be reduced to á-wó or to just wó.

wó-tá or just wó has the same tonal effects on following elements as grammatical particles. /H/-melodic nouns are tone-dropped: wó(-tá) 'sògò-ò 'like a goat'. Initial H-Ablaut applies to nouns that begin with two or more L-toned moras: wó(-tá) 'ságà-à 'like a sheep'. /HL/-melodic nouns are downstepped: wó(-tá) 'bāsà-à 'like an agama'. H-toned and (third-person) L-toned proclitics are tonally inverted: wó(-tá) ηgì 'like us' and wó(tí=) í 'like them'. However, pronouns tend to take independent forms after wó(-tá).

Predicative 'Y be like (similar to) X' is expressed in positive contexts as a presentative (with hêê) or as simple 'be' (há ~ gá), followed by wó or wó-tá 'like', reduced from á-wó-tá, plus the NP denoting the comparandum (474a-b). If the comparandum is a pronoun, it takes independent form. Under negation, presentative hêê cannot be used, leaving tá 'not be' as the only option (474d).

- (474) a. [ná hêê] [wó(-tá) sèédù]
 [ɲ "] [" "]
 [1Sg Prsntv] [**like** S]
 'I am like Seydou.'
- b. ɲ gá [wó-tá = 'à-rò]
 1Sg be [like 2Sg-Indep]
 'I am like you-Sg.'
- c. [sèédù hêê] [wó(-tá) 'nò / 'à-rò]
 [S Prsntv] [like 1Sg.Indep / 2Sg-Indep]
 'Seydou is like me/you-Sg.'

- d. ná kúⁿ héè [wó-tá sèédù]
 1Sg Past Prsntv [**like** S]
 ‘I was (=used to be) like Seydou.’
- e. sèédù tá [wó(-tá) ‘nò]
 S not.be [**like** 1Sg.Independ]
 ‘Seydou is not like me.’

The ‘like X’ adverbial phrase may also be attached to a main verb as an adjunct (475).

- (475) í gá ‘bààrá-á ‘tāā-nā [wó-tá= ‘àmàdù]
 1Sg Ipfv work(n)-Sg do-Ipfv [**like** A]
 ‘I work like Amadou.’

Strong similarity can also be expressed with kēnèèⁿ ‘one’ (i.e. ‘the same’) as nominal predicate.

- (476) [á hòò] [kí [ná hòò] ‘sūnūŋ] gélé ‘kēnèèⁿ
 [2Sg house] [and [1Sg house] all] be.Cop one
 ‘Your-Sg house and my house are one (i.e., of the same kind)’

Clause-initial (or preclausal) á-wó-tá can mean ‘For example, ...’. In this case there is no tonal effect on the following subject. This is observed in á-wó-tá ì hà = á ‘sàrì-lì ‘for example, they would cast it (=net) ...’ (2021-06 @ 06:05) where 3Pl ì remains L-toned (it does not undergo Tone Inversion).

For demonstrative manner adverb jíè (and variants) ‘like this/that’, see §4.4.3.2. See also compounds in §5.1.5.10, and the adverbial relative clauses in §15.4.3.

8.5.2 Specificity

8.5.2.1 Specific identity (túméⁿ)

túméⁿ ‘(one-)self’ can be added to a nonpronominal NP or to an independent or proclitic pronoun to emphasize identity. It is downstepped to ‘tūmēⁿ after nonpronominal NPs. It is tone-dropped to ‘tūmèⁿ after third-person proclitics, before tone sandhi (which can raise its final syllable to H).

- (477) a. sèédù tá ‘kēlē [í] kàá ‘tūmēⁿ
 S not.be be.Cop [1Sg father **self**]
 ‘Seydou is/is not my real father.’
- b. [ná ‘tūmēⁿ] ‘rà-ní
 [1Sg.Independ **self**] it.is
 ‘It’s (precisely) me.’

- c. [á túmém] ʼbyē
 [2Sg self] come.Pfv
 ‘You yourself came.’
- d. [á túmé⁽ⁿ⁾ rá] ʼbyē
 [2Sg self Foc] come.Pfv
 ‘You yourself [focus] came.’

túméⁿ in these examples is emphatic and lends itself to overt focalization, as in (477d). Another example is (478). The nasal vowel in túméⁿ can be denasalized before the rhotic of the focus marker.

- (478) í tá bélé [ñ léŋ-ó] yágà só-lò,
 1Sg IpfvNeg Fut [1Sg child] leave.Pfv go-Ipfv,
 [ná ʼtūmé⁽ⁿ⁾ ʼrà] há só-lò
 [1Sg self Foc] Ipfv go.Pfv
 ‘I won’t (just) have my son go (to do a job); (rather) I will go myself.’

túméⁿ is elsewhere the basic ‘also, too’ morpheme (§19.1.3). As a result, many examples including it can be translated in either of two ways, involving specific identity versus referential addition, respectively.

8.5.2.2 Specific identity (X jáátì ‘exactly X’)

This regionally widespread form occurs in contexts where a speaker confirms an interlocutor’s statement (‘exactly!’, §19.4.1.3) or emphasizes precise identity. In the latter function, only túméⁿ occurs in the texts transcribed to date. However, an assistant indicates that jáátì is also in use.

As a confirmation, it takes the form jáátì-ká at the end of a clause or by itself. As part of an NP, it is jáátì after H-toned proclitics (2Sg á jáátì), ʼjáātì after nonpronominal NPs (479b), and ʼjàátì after L-toned proclitics (3Sg ā ʼjàátì, 3Pl ī ʼjàátì).

- (479) a. à ɲá= á ʼʃèè jáátì-ká
 3Sg Sbj/Obj 3Sg say.Pfv **exactly**
 ‘He/She definitely said it.’ or ‘That’s exactly what he/she said.’
- b. [sèèdú ʼjáātì rá] ʼbyē
 [S **exactly** Foc] come.Pfv
 ‘Precisely Seydou [focus] came.’ or ‘Seydou himself [focus] came.’

8.5.3 Extent and evaluation

There is spillage between quantitative and evaluative manner adverbials. In both contexts, the adverbs often combine with a form of the verb *tááⁿ/táá-ná* ‘do’.

8.5.3.1 Extent

8.5.3.1.1 *méé-tááⁿ* and *ńáá-tááⁿ* ‘greatly, a lot, much’ (adverbial)

Adverbial ‘greatly, a lot’ is expressed by combining *méé* ~ *mèè* ‘good’ or *ńáá* ~ *ńàà* ‘bad, nasty’ with Pfv *tááⁿ* ‘do’. For *méé-tááⁿ* as an evaluative adverb ‘well’, see §8.5.3.2.

As extent adverbs, both *méé-tááⁿ* and *ńáá-tááⁿ* indicate above-modal or above-expectation quantity, frequency, or effort. They are nearly interchangeable in contexts like (480).

- (480) a. *à* *hóólò* *méé-tááⁿ / ńáá-tááⁿ* *wéè*
 3Sg run.Pfv **greatly** today
 ‘He/She ran a lot today.’
- b. *̀̀* *dì* *hóólò* *méé-tááⁿ / ńáá-tááⁿ* *wéè*
 3Sg PfvNeg run.Pfv **greatly** today
 ‘He/She didn’t run a lot today.’
- c. *̀̀* *gà* *hóólò-lò* *méé-tááⁿ / ńáá-tááⁿ*
 3Sg Ipfv run-Ipfv **greatly**
 ‘He/She runs a lot.’

ńáá-tááⁿ can have a negative evaluative element (‘too much, excessively’), depending on the nature of the activity and the context. In (481a), the boundary between evaluation and extent is blurred since sleep is often beneficial. (481b) is more unconditionally pejorative.

- (481) a. *ā* *‘kōmù* *méé-tááⁿ / ńáá-tááⁿ*
 3Sg sleep.Pfv **well / too much**
 ‘He/She slept well (=a lot)/too much.’ (< *kómù*)
- b. *à* *hà* *ńínè-ńé* *ńáá-tááⁿ*
 3Sg Ipfv forget-Ipfv **too.much**
 ‘He/She forgets a lot (too much).’

For *kóó-ńáá* and variants ‘many, much’ (adjective) or ‘a lot’ (noun), see §6.4.2.

See also the interjection-like *péw* ‘totally’ (§19.4.1.4, §6.6.1.1).

8.5.3.1.2 dóóníⁿ, dóónín-dóóníⁿ, némé-némé, néndàà ('a little' or 'gently')

dóóníⁿ (~ dǒóníⁿ) 'a little' and its distributive iteration dóónín-dóóníⁿ 'gently, slowly' can straddle the line between manner and extent. dóónín-dóóníⁿ is in the process of displacing the native equivalent némé-némé of similar meaning. néndàà is more strongly diminutive 'a (little) bit'.

- (482) a. à hóólò dóóníⁿ / néndàà wéè
 3Sg run.Pfv **gently / a.bit** today
 'He/She ran a little/a bit today.'
- b. ìj gà hóólò-lò dóóníⁿ / néndàà
 3Sg Ipfv run-Ipfv **gently / a.bit**
 'He/She runs a little/a bit.'

néndàà is likely related to nominal diminutive -nǒŋ-ǒ (bare-stem form -nêⁿ), cf. also ká-nèⁿ 'a little' (§6.4.4). Whether the remaining àà in néndàà originated as *^htāāⁿ 'do' as in the 'greatly' adverbs (preceding subsection) is unclear since there is no vocalic nasalization. Voicing to d after a nasal is regular, however.

8.5.3.2 Evaluative adverb méé-tááⁿ 'well' and its alternatives

The modifying adjectives that describe the poles of evaluation are those in (483). As monosyllabic adjectives they get their tone from the melody of the initial (whose own tones are raised to all-H).

- (483) a. méé/mèè 'good'
 b. jíáá/jàà 'bad, nasty'

Instead of adverbial phrases 'well' and 'badly, poorly', it is often possible to add one of the adjectives in (483) to a noun functioning as object of tááⁿ/táá-ná 'do' or another verb (484).

- (484) ìj gá [^hbààrà méé/jíáá] ^htāā-nā
 3Sg Ipfv [**work(n)** good/bad] do-Ipfv
 'He/She does good/bad work.'

Another alternative to adverbial phrases is to add a sequential VP with the verb múŋè(-nè) 'be done well' or its causative.

- (485) ìj gá ^hbààrá-á ^htāā-nā [bí múŋè]
 3Sg Ipfv work do-Ipfv [**Seq** **be.well.Pfv**]
 'He/She does good work.'

The only true adverb for evaluation is *méé-tááⁿ* ‘well’ (486a). It is based on *méé* ‘good’ and the verb *tááⁿ/táá-ná* ‘do’. ‘Badly, poorly’ is expressed by negating a clause with *méé-tááⁿ* (486b).

- (486) a. *ɲ* *gà* *jéémù-nù* *méé-tááⁿ*
 3Sg Ipfv speak-Ipfv **well**
 ‘He/She speaks well.’
- b. *ɲ* *dà* *jéémù-nù* *méé-tááⁿ*
 3Sg Ipfv speak-Ipfv **well**
 ‘He/She doesn’t speak well.’ = ‘He/She speaks poorly.’

The parallel adverb *jáá-tááⁿ* based on *jáá* ‘bad, nasty’ is not commonly used in the sense ‘badly, poorly’ as in ‘speaks poorly’. For its use as an extent adverb (‘too much’), see §8.5.3.1.1 above.

8.5.4 Deadjectival adverbs

There is no morphological mechanism for converting adjectives into adverbs or adverbial phrases. Certain adjective-like senses do have an adverbial phrase, however.

8.5.4.1 ‘Fast, quickly’ and ‘slowly’

The adjectives ‘fast, rapid’ and ‘slow’ and their derivatives are compounds of *lá-/là-* and adjectives meaning ‘hot’ and ‘cold, cool’ respectively (§4.5.1.3.3, cf. §9.5.4). The abstractive nominals (§4.2.3.1) are *lá-gùlé-nà-à* ‘speed, rapidity’ and *lá-mùné-nà-à* ‘slowness’. Locative PPs based on the abstractives are used adverbially.

- (487) a. *ɲgí* *ɲá=* *á* *ˈtàà-nì* [[*lá-gùlé*]-*nà-à* *nî*]
 1Pl Sbj/Obj 3Sg stand-Caus.Pfv [[**be.fast**]-Abstr-Sg Loc]
 ‘We built it (=house) fast.’
- b. *ɲgí* *ɲá=* *á* *ˈtàà-nì* [[*lá-mùné*]-*nà-à* *nî*]
 1Pl Sbj/Obj 3Sg stand-Caus.Pfv [[**be.slow**]-Abstr-Sg Loc]
 ‘We built it (=house) slowly.’

8.5.4.2 Adverbial ‘far’ and ‘near’

Two constructions with *wóró-láⁿ* ‘far away’ are in (488). This is a somewhat fused adverbial variant of the regular noun-adjective *wóró⁽ⁿ⁾ lán-ó* ‘distant place’. In (488a), *wóró-láⁿ* is treated as direct object of the normally intransitive *ɲíɲì(-nì)* ‘walk’. In (488b), ‘go’ or ‘come’ in Ipfv is compounded with ‘walk’ (§15.1.1), followed by *wóró-láⁿ*.

jíníná-á ~ jíníná-á	‘next year’	< *jínj kíná-á ‘other year’
jíníná-á [fó ‘h55rò]	‘the year after next’	
jírì	‘this year’	

-nì in (490b) and some forms in (490d) is related to locative postposition nî but is treated tonally as part of the word. hórò ~ ‘h55rò in (490c-d) is related to the noun hórò-ò ‘back (body)’ and postpositions meaning ‘behind/after’ (§8.2.9).

wèè ‘today’ and jèè ‘tomorrow’ have L-toned forms in some combinations: as compound initials (491a) (§5.1.5.8), after mà ‘until’ (491b), and before focus marker ró (491c). However, they are HL-toned in isolation and after hàlì (491d).

- (491) a. wèè-nàṅàṅù-ù ‘a woman of today (=a modern woman)’ < nàṅàṅù-ù
 jèè-nàṅàṅù-ù ‘a woman of tomorrow (=of the future)’
- b. má wèè ‘until today, up until today’
 má jèè ‘until tomorrow’
- c. wèè ró ‘today [focus]’
 jèè ró ‘tomorrow [focus]’
- d. hàlì wèè ‘even today’
 hàlì jèè ‘even tomorrow’

The European (and Arab) 7-day cycle is used by the various nearby weekly markets. The seven days of the week are expressed by terms of Arabic origin, as generally in the region. Some of them are disguised by phonological mutations. The initial gà in several of the day names is from Arabic definite prefix *al-* or an assimilated variant, with the addition of initial g of unknown origin which avoids a disfavored word-initial vowel. The initial gà is absent in ‘Tuesday’ and ‘Friday’ which begin with consonants.

- (492) gáténèṅ-ò ‘Monday’
 tàrààtá-à ‘Tuesday’
 gàrààbá-à ‘Wednesday’
 gàlámúsà-à ‘Thursday’
 júmà-à ‘Friday’
 gásíbìrì-ì ‘Saturday’
 gàhàrì-ì ‘Sunday’

8.5.5.2 Present perfect with kábàⁿ or bí 'kilā

A rough equivalent to the English (positive) present perfect is expressed by adding an adverb meaning 'already' or a sequential VP '(and) finished' to a perfective clause. For kábàⁿ 'already' see §19.3.3. For sequential bí 'kilā 'and finished' see §15.2.11.

8.5.5.3 'First(ly)' (fánáá) and 'later' (hóórò-ò fáà)

These adverbials function to sequence two or more time intervals and associated activities. hóórò-ò 'back (of body)' is also the basis for the composite postposition hóórò-fàà 'behind, in back of' (§8.2.9).

- (493) a. ηγί há bélé 'vààrà-á 'tāāⁿ fánáá,
 1Pl Ipfv Fut work(n)-Sg do.Pfv **first**,
 [bí 'kilā] [bí 'jēē]
 [Seq finish.Pfv] [Seq eat.Antip.Pfv]
 'We'll work first, when we're finished then we'll eat.'

- b. ηγί há bélé 'jēē [hóórò-ò fáà]
 1Pl Ipfv Fut eat.Antip.Pfv [**back-Sg** **by**]
 'We will eat later.'

8.5.5.4 '(Not) yet' (fánáá)

'Not yet' is expressed by fánáá 'first(ly)' in a negated clause.

- (494) a. à tì jòò fánáá
 3Sg PfvNeg go.Pfv **yet**
 'He/She has not yet gone.'

- b. à tí 'byē [kí 'tēè tîⁿ] fánáá
 3Sg PfvNeg come.Pfv [with tea under] **yet**
 'He/She hasn't brought the tea yet.'

8.5.5.5 'Still' (mà sísàⁿ)

mà sísàⁿ 'until (=all the way to) now' and má wèè 'until today' indicate that the eventuality has not ended at the time of speaking (495).

- (495) [mà sísaⁿ] ngì dá ‘kēēndē
 [**until** **now**] 1Pl IpfvNeg be.healthy
 ‘We are still sick.’ (dá variant of tá)

See §8.2.16 for larger ‘from X until Y’ phrases.

8.5.5.6 Spatial adverbs

The following are the main nouns used in simple nondemonstrative spatial adverbials. For ‘here’ and ‘there’ see §4.4.3.1.

- (496) a. yògó-fàà ‘above, on top; upstairs’ (the usual form)
 yògóò ‘above, up high’ (2015-10 @ 04:39)
 nòḡómà ‘below, (at) the bottom, down; downstairs’
- b. fónóḡ-ó ‘east’
 gááhà-à ‘west’
 wòrò-dúḡù-ù ‘south’ < Bambara ‘kola.nut-village’
 kòḡò-dúḡù-ù ‘north’ < Bambara ‘salt-village’
- c. hóórò-ò fàà ‘(in) the rear, behind’
 ~ hóórò-fàà
 kââⁿ, kâⁿ-vâà ‘forward, ahead, (in) front’

‘Right’ and ‘left’ are used in connection with body parts. The key stems are those in (497).

- (497) a. kírí-méé ‘right hand; right side’ < “hand-good”
 b. kírí-kón-ó ‘left hand; left side’ < “hand-tabooed”

For nouns other than ‘hand’, the compounds in (497a-b) above are further compounded to the other noun. (498) illustrates with tàà ~ tàâ ‘foot’.

- (498) a. [kírí-méé]-táá ‘right foot’
 b. [kírí-kón]-táá ‘left foot’

‘Right’ and ‘left’ may be used to indicate the position of one entity in comparison to an oriented landmark (such as a person), and to indicate a direction defined with reference to such a landmark. These constructions involve ‘by’ PPs with ‘right’ or ‘left’ as complement, plus a possessor denoting the landmark.

- (499) a. zàkì há [[ḥ] kírí-méé] fáà]
 Z be.Loc [[1Sg **right.hand**] by]
 ‘Zaki is on my right.’
- b. ʃòò [[à kírí-kóŋ-ɔ́] fáà]
 go [[2Sg **left.hand-Sg**] by]
 ‘Go-2Sg to your left!’

8.5.5.7 mà ‘all the way to/until’

mà ‘until’ often precedes a temporal or spatial NP or adverb. In temporal contexts, it is translated as ‘until’, whether emphatic or not (500a). In spatial contexts it is consistently emphatic ‘all the way to’ (500b). It is raised to má by Final Tone-Raising before a nonhigh tone.

- (500) a. ŋgí há bílí ‘bààrá-á ‘tāāⁿ [má ʃèè]
 1Pl Ipfv Fut work(v).Pfv do.Pfv [**until** tomorrow]
 ‘We will work until tomorrow.’
- b. à hóólò [mà bómòkò]
 3Sg run.Pfv [**until** B]
 ‘He/She ran all the way to Bamako (city).’

For ‘until’ with sequential VP see §15.2.15. For indicative ‘until ...’ clauses, see §15.5.3.2. For subjunctive and other modally marked ‘until ...’ clauses, see §17.3.3.

8.5.5.8 Adjectival intensifiers

Expressive adverbials (“ideophones”) can be added to intensify some adjectives. See §6.3.3.4 for a list. They are generally added to predicate adjectives and to deadjectival inchoative verbs, and so are not directly relevant to NP syntax.

For ordinary extent modifiers like ‘very’, ‘a lot’, and ‘a little’, see §8.5.3.1 above.

8.5.5.9 Iterative adjectives in distributive sense

Iteration of color-denoting participles indicates distributivity: ‘spotted with (color)’ or otherwise of mixed colors. The iterations are based on the predicative form of the participles.

(501)	adjective	gloss	iterative	gloss
	fí-ná-nà	‘black’	[fí-ná-nà]-[fí-ná-nà-à]	‘dark-spotted on lighter background’
	hóó-ná-ná	‘white’	[hóó-ná-ná]-[hóó-ná-ná-á]	‘light-spotted on darker background’
	cwáá-ná	‘red’	[cwáá-ná]-[cwáá-ná-á]	‘having red (brown) spots’

9 Verbal derivation

At stem-level, the main suffixal verb-to-verb derivation is the fully productive causative with suffix *-ni*. Only ‘eat’ has an intransitivized form (antipassive in function) expressed by vowel fronting. Several other verbs are ambi-valent (labile), and some transitives express intransitive equivalents using the VP-level reflexive construction. ‘Give’ has a special fused form for 1Sg recipient. A few nouns (sometimes archaic) can be incorporated into selected verbs. Many adjectives have a corresponding inchoative verb.

There is no morphological reversive (‘un-’). Pairs of meanings like ‘open/close’, ‘forget/remember’, and ‘tie/untie’ are expressed by pairs of unrelated verb stems.

9.1 Causative

9.1.1 Causative suffix *-ni*

Many verbs can be causativized by addition of derivational suffix *-ni*. The Ipfv is then *-ni-ni*.

The causative suffix is atonal lexically (§3.6.5.2). The tone melody of the input stem is reapplied to the complete causative derivative. If the input stem is /H/-melodic, the entire causative is H-toned. If the input is /HL/-melodic, the causative has H-toned stem followed by L-toned suffix. If the input is /LHL/-melodic, the H-tone extends to the end of the stem, followed by L-toned suffix.

(502) presents causatives with no unusual phonology. Here as elsewhere verbs are cited as Pfv/Ipfv stem pairs.

(502)	verb	gloss	causative	gloss
	a. input of /H/ melody			
	dúmé(-né)	‘catch fire’	dúmé-ní(-ní)	‘ignite; turn on’
	gúlé(-lé)	‘boil [intr]’	gúlé-ní(-ní)	‘boil (sth)’
	gwóó(-ló)	‘weep’	gwóó-ní(-ní)	‘cause to weep’
	hélé(-lé)	‘go past’	hélé-ní(-ní)	‘take past’
	húúní(-ní)	‘survive’	húúní-ní(-ní)	‘nourish, keep alive’
	ságá(-lá) (1)	‘lie down’	ságá-ní(-ní)	‘set; put to bed’
	ságá(-lá) (2)	‘believe’	ságá-ní(-ní)	‘persuade’
	tá ⁿ /tá-ná	‘ascend’	tá-ní(-ní)	‘take (sth) up’
	tínjé(-né)	‘carry on head’	tínjé-ní(-ní)	‘put up (on sb’s head)’
	tóó(-ló)	‘cross’	tóó-ní(-ní)	‘take across’
	tú ⁿ /tú-nú	‘disappear’	tú-ní(-ní)	‘make disappear’
	túmé(-né)	‘sink’	túmé-ní(-ní)	‘immerse’

b. input of /HL/ melody

báándà(-là)	‘get tired’	báándá-nì(-nì)	‘weary (sb)’
fàrì(-lì)	‘be finished’	fàrí-nì(-nì)	‘finish (sth)’
fógò(-lò)	‘sit’	fógó-nì(-nì)	‘seat (sb)’
jáákùyà/jáákùyá-là	‘be forced’	jáákúyá-nì(-nì)	‘compel (sb)’
jéŋè(-nè)	‘descend’	jéŋè-nì(-nì)	‘bring/take (sth) down’
hóólò(-lò)	‘run’	hóóló-nì(-nì)	‘drive (vehicle)’
húrù(-lù)	‘cut; be cut’	húrú-nì(-nì)	‘cross (river, road)’
kíè(-lè)	‘get up’	kíé-nì(-nì)	‘lift (sth)’
kónò(-nò)	‘fear’	kónó-nì(-nì)	‘scare (sb)’
kúmè(-nè)	‘coincide’	kúmé-nì(-nì)	‘welcome (a guest)’
múŋè(-nè)	‘be well made’	múŋé-nì(-nì)	‘repair; manufacture’
ḡáákì(-lì)	‘return’	ḡáákí-nì-nì(-nì)	‘turn (sth) around’
táà/táá-là	‘stop’	táá-nì(-nì)	‘stop (sb, sth)’

c. input of /LHL/ melody

sèŋè/sèŋé-nè	‘converge’	sèŋé-nì(-nì)	‘make equal or level’
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Three monosyllabic verbs have irregular Pfv/Ipfv pairings for many speakers (§10.1.2). For some speakers the Pfv has an extra y in the Pfv in ‘come’ (byé ~ bé ~ béé/bé-lé), and a shift of s to ʃ (< *sy) in ‘go’ (ʃòd/só-lò), ‘say’ (ʃéé/sé-lé), and ‘put/pour in’ (ʃéé/sé-lé). Of these, ‘come’ and ‘go’ can be morphologically causativized, though these causatives do not function as conveyance predicates (‘bring X’, ‘convey/take X’). The causatives are based on the Pfv of the input stems (503). The Ipv of the causative is derived regularly from the Pfv causative, not directly from the input Ipv.

(503)	verb	gloss	causative	gloss
	a. byé/bé-lé	‘come’	byé-ní(-ní) ~ béé-ní(-ní)	‘cause to come’
	b. ʃòd/só-lò	‘go’	ʃóo-nì(-nì)	‘cause to go’

‘Cause to come’ occurs in 2021-15 @ 01:04 in the context ‘wind cause rain to come’, based on the collocation ‘rain come’ (= ‘rain fall’).

Most causatives in common use are based on intransitive or reflexive inputs. The subject of the input becomes the object of the causative. Transitive inputs are more difficult (for case frames see §11.1.2.5). The most commonly causativized transitives are consumption verbs (504).

(504)	a. jéé(-lé)	‘eat’	jéé-ní(-ní)	‘feed (sb)’
	b. mɛ̃ ⁿ /mɛ́-nè	‘drink’	mɛ́-nì(-nì)	‘give drink to (sb)’

‘Eat’ distinguishes transitive jáá(-lá) ‘eat (sth)’ from antipassive intransitive jéé(-lé) ‘eat (have a meal)’. This is the only known example in Kelenga of intransitivization by vowel fronting, which

is common in Jenaama-Sorogaama. The causative is based on the intransitivized stem, regardless of whether the food is overtly specified (as a PP adjunct with dative *lá*). This avoids competition between the eater and the food as the object of the causative. ‘Drink’ follows the same causative pattern, though it does not have an audibly distinct antipassive form (it occurs in a reflexive frame in antipassive contexts).

Deadjectival inchoatives with suffix *-ya* can be causativized to produce factitives (‘cause X to be ADJ’). Usually the causative suffix is added to the inchoative suffix (505a). In the case of ‘sweet, pleasing’, which has various irregularities as an adjective, the suffix *-ya* is omitted (505b).

(505)	inchoative (Pfv)		causative (Pfv)	
a.	<i>móónó-yà</i>	‘become long(er)’	<i>móónó-yá-nì</i>	‘lengthen (sth)’
	<i>kágáyí-yá</i>	‘become bitter’	<i>kágáyí-yá-ní</i>	‘make (sth) bitter’
	<i>hùlé-yà</i>	‘become big(ger)’	<i>hùlé-yà-nì</i>	‘make (sth) big(ger)’
b.	<i>lúmá-yá</i>	‘be sweet, pleasing’	<i>lúmá-ní/lúmá-ní-ní</i>	‘make (sth) sweet’

9.1.2 *bágí* ‘remove’ versus *bágí-ní* ‘extract’

bágí(-lí) without further suffixation can be intransitive or transitive with the meanings in (506).

(506)	intransitive	‘exit (come or go out), leave (a place)’
	transitive	‘remove, get rid of (sth)’ ‘pick (fruit, from tree or plant)’ ‘draw (water, from well)’

Transitive *bágí* emphasizes removal (disposal) as opposed to the process of extracting, and does not assume a container or other enclosed space that the object exits from. It lends itself to collocations (picking fruit, drawing water) and compounds, some of which are detailed in §9.5.1.

By contrast, the morphological causative *bágí-ní/bágí-ní-ní* is a pure semantic causative based on intransitive *bágí* ‘exit (v)’. It means ‘extract, cause to exit’, emphasizing the process (rather than the resulting state) and usually presupposing a container or other enclosed space.

9.2 Functions of reflexive clauses

In addition to true reflexives whose subject and object are coindexed but conceptually distinct, as in ‘I hit myself’ (§18.1), some verbs occur in reflexive frames with other functions. The rather productive mediopassive function compensates for the absence of a passive derivation in verbal morphology. Overall there are significant similarities between Kelenga reflexives and those of Romance languages like Spanish and French.

- (510) à ηì = ì mêⁿ ‘He/She had a drink.’
à ηà = á mêⁿ ‘He/She drank it.’

9.2.3 Lexicalized reflexive verbs

Verbs that occur chiefly in reflexive clausal frames, other than the mediopassive versions of transitives and the single antipassive (‘drink’) mentioned in preceding subsections, are listed in (511).

(511)	verb	gloss	‘he/she __ed’	‘I __ed’
a. stances				
	fógò(-lò)	‘sit down’	à ηì = ì fógò	ηγί ηά ηγì fógò
	ηόνγί(-lí)	‘squat’	à ηί = ì ηόνγί	ηγί ηά ηγì ηόνγί
	ságá(-lá)	‘lie down’	à ηί = ì ságá	ηγί ηά ηγì ságá
b. bodily functions				
	húlò(-lò)	‘defecate’	à ηί = ì húlò	ηγί ηά ηγì húlò
	tá-ní(-ní)	‘vomit (v)’	à ηί = ì tá-ní	ηγί ηά ηγì tá-ní
	cús ⁿ /cús-nó	‘fart (v)’	à ηί = ì cús ⁿ	ηγί ηά ηγì cús ⁿ
c. other				
	fóóni(-ní)	‘sulk’	à ηί = ì fóóni	ηγί ηά ηγì fóóni
	kálè ⁿ /kálè-nè	‘take an oath’	à ηί = ì kálè ⁿ	ηγί ηά ηγì kálè ⁿ
	kólósì(-lí)	‘watch out’	à ηί = ì kólósì	ηγί ηά ηγì kólósì
	là-bê ⁿ /bê-nè	‘get ready’	à ηί = ì là-bê ⁿ	ηγί ηά ηγì là-bê ⁿ
	lá-gúlé-yà(-là)	‘hurry’	à ηί = ì lá-gúlé-yà	ηγί ηά ηγì lá-gúlé-yà

9.3 Valency reduction by dropping a nonsubject argument

9.3.1 Intransitivization of transitive verbs

9.3.1.1 Vowel-mutating jáá(-lá) ‘eat’ and antipassive jéé(-lé)

‘Eat’ has a unique vocalic alternation. jáá(-lá) is transitive, requiring an overt object (512a). jéé(-lé) is intransitive antipassive (512b).

- (512) a. à ηά hùú ‘jāā
3Sg Sbj/Obj meal eat.Pfv
‘He/She ate a meal.’

- b. ā ʔjèè
 3Sg eat.Antip.Pfv
 ‘He/She has eaten.’

This is the only known example of such vowel mutation in Kelenga and is likely a fossil. Cognates in Jenaama-Sorogaama, where vowel mutations are more productive, are transitive díyá/díyà ‘eat (sth)’ and antipassive díyé/díyè ‘eat, have a meal’.

Nominal derivatives that are based on transitive jáá ‘eat’ include an object as a compound initial.

- (513) a. túgú-jáá tá ʔmèè
 meat-eat.VblN not.be be.good
 ‘Meat-eating is not good.’
- b. [kú jáá-ní-í] tá ʔmēē
 [Dem eat-VblN-Sg] not.be be.good
 ‘Eating that is not good.’
- c. túgú-jáá-yá-á
 meat-eat-Agent
 ‘meat-eater, carnivore’

The causative, however, is jéé-ní/jéé-ní-ní ‘feed (sb, sth)’, based on the antipassive intransitive. If the food given is overtly mentioned, it is expressed as a dative adjunct.

- (514) Ø ŋá zàkí ʔjēē-nī [túgú-ú ʔlà]
 1Sg Sbj/Obj Z eat-Caus.Pfv [meat-Sg **Dat**]
 ‘I fed Zaki with meat.’

The noun jéé means ‘eating’ or ‘food’, and it is part of compounds: jéé-fó-ó ‘food, meal’, jéé-sóló-yá-á ‘cook (n)’ (‘food-cooker’).

9.3.1.2 Ambi-valent (labile) verbs

In the absence of a productive passive derivation, some transitive verbs can function as passive intransitives without derivational marking at word level. An example of such an ambi-valent verb is ‘sell’. The intransitive construction competes with the reflexive construction, and with ‘be’ plus participle in resultative function.

- (515) a. ā ŋā nàá ʔtōōrō
 3Sg Sbj/Obj cow sell.Pfv
 ‘He/She sold the cow.’ (< nàà)

- b. nàá ʼtōōrō
 cow be.sold.Pfv
 ‘The cow was sold.’
- c. hòḍ há ʼtōōrō-lō
 house Ipfv be.sold-Ipfv
 ‘The house is for sale.’

Other ambi-valent verbs include *lós/ló-ló* ‘put in’ or ‘be put in; enter’, *yágà(-là)* ‘put; transform’ or ‘be put; become’, *táándá(lá)* ‘stretch’ or ‘become stretched’, and *wúsú(-lú)* ‘smoke (fish)’. *tááⁿ/táá-ná* can be ambi-valent ‘do; use’ or ‘be done, happen; be used’ (e.g., §17.2.4) but can also occur in the reflexive construction.

9.3.1.3 ‘Do’ construction in antipassive sense

Kelenga does not favor the use of unmodified transitive verbs in intransitive frames for antipassive function. In most cases at least a minimal object is overt. It may be a pro forma object like ‘meal’ in ‘they cook (meals)’ or ‘field’ in ‘they cultivate (fields)’, or else a 3Sg pronominal object. If no such object is available, a construction with ‘do’ following a verbal noun can be used (516).

- (516) a. ñ dá ʼhùè-ní-í ʼtāā-nā
 3Sg IpfvNeg bite-VblN-Sg do-Ipfv
 ‘It (=dog) doesn’t bite.’
- b. à ñá tḍḍníṅ-ḍ ʼtāāⁿ
 3Sg Sbj/Obj look.VblN-Sg do.Pfv
 ‘He/She looked (=took a look).’
- c. ṅ gá ʼtòòró-ó ʼtāā-nā
 1Sg Sbj/Obj sell.VblN-Sg do-Ipfv
 ‘I do selling (=commerce).’

The verbal noun can also incorporate an object (§5.1.7.1.1).

9.3.2 *nós* ‘give to me’ < *lós* ‘give’

The regular ditransitive morphosyntax of ‘give’ clauses is presented in §11.1.2.4.1 below. A preverbal direct object denoting the theme is obligatory, minimally a 3Sg pronominal. The postverbal dative PP is optional. When the dative PP is omitted, there is no change in the form of the ‘give’ verb (no JSDj-style Dative-Dropping).

There is, however, one irregularity. *lós/ló-ló* ‘give’ can occur in its regular construction with 1Sg dative PP, which takes the form *ná ná* with 1Sg proclitic *ń*, or the form *ná* ‘*nà* with independent pronoun. In practice, this transparent construction is replaced by the verb *nós/nó-nó* ‘give to me’, which fuses *lós/ló-ló* with the *n* of 1Sg *ná*. There is then no dative PP.

- (517) a. *sàgá-á* ⁴*nṵṵ*
 sheep-Sg **give.1SgDat.Pfv**
 ‘Give-2Sg me the sheep!’
- b. *zákì* *ńá* ⁴*ságà-á* ⁴*nṵṵ*
 Z Sbj/Obj sheep-Sg **give.1SgDat.Pfv**
 ‘Zaki gave me a/the sheep.’
- c. *à* *hà* ⁴*ságà-á* ⁴*nṵ-nṵ*
 3Sg Ipfv sheep-Sg **give.1SgDat.Ipfv**
 ‘He/She (often) gives me a sheep.’

9.4 Deadjectival inchoative verbs

Most but not all basic modifying adjectives have corresponding intransitive inchoative verbs. In some cases, the “adjective” is a deverbal participle. A default ‘become’ verb is available for adjectives and similar forms that do not have a dedicated inchoative.

9.4.1 *yágà(-là)* as default ‘become’ verb

Some noun-like and iterative adjectives lack inchoative derivatives in common use. They can be made into inchoative predicates using the verb *yágà(-là)* ‘become’ (518a). Elsewhere this verb has the sense ‘become, turn into, be transformed into’ (§11.2.4.2) with nominal complements (518b).

- (518) a. *ā* ⁴*yāgà* *ńègè-ńègè-nà-à*
 3Sg **become.Pfv** multicolored-Ppl-Sg
 ‘It became multicolored (e.g. spotted).’
- b. *ā* ⁴*yāgà* ⁴*hónòṅ-ṵ*
 3Sg **become.Pfv** bird
 ‘He/She/it turned into a bird.’

Some “adjectives” that require *yágà(-là)* are *sún-ó* ‘stranger, visitor’ and *ká-kíná-á* ‘(an)other’. The construction is also common with *tóri-ì* ‘new’.

True adjectives that do have corresponding inchoatives occasionally use the construction with *yágà(-là)* as an alternative.

yágà(-là) is an ambi-valent verb. As transitive it means ‘put’ or ‘transform (sth, into sth)’, as in (107c) in §3.6.5.3.6.

9.4.2 Deadjectival inchoative verbs

Inchoative verbs can have either scalar or categorical sense, e.g. ‘become small’ or ‘become smaller’. Deadjectival inchoatives can be simple (unaffixed), sometimes with slight phonological changes vis-à-vis the modifying form, or they can have inchoative suffixes.

9.4.2.1 Inchoatives without derivational suffix

Here the inchoative verb is morphologically simple, without an obvious derivational suffix. The participle derived from the verb can function as a modifying adjective in most cases (519a) and can also occur as a predicate. The tone melody is /L/, /HL/, or /LHL/. In one case the verb is obscurely related to a simple modifying adjective méé/mèè (519b), cf. also stative predicate méè ‘be good’.

(519) Deadjectival inchoatives without derivational suffix

Pfv	Ipfv	gloss	modifying after /L/
a. modifying form is participial			
<i>/H/ melody</i>			
fágí	fágí-lí	‘fill up, become full’	fágí-nà-à
fóhé	fóhé-né	‘rot, become rotten’	fóhé-nà-à
gúlé	gúlé-lé	‘get hot’	gúlé-nà-à
kílé	kílé-lé	‘straighten out, become straight’	kílé-nà-à
kógó	kógó-ló	‘mature, reach full size’	kógó-nà-à
nógó	nógó-ló	‘become dirty’	nógó-nà-à
táándá	táándá-lá	‘become stretched’	táándá-nà-à
wáláṅgá	wáláṅgá-lá	‘become lukewarm’	wáláṅgá-nà-à
<i>/HL/ melody</i>			
kúmù	kúmù-nù	‘become sour’	kúmù-nà-à
múḍ	múḍ-nḍ	‘ripen; be done (ready to eat)’	móó-nà-à
múnà	múnà-nà	‘become cold’	múnà-nà-à
ṅgólḍ	ṅgólḍ-lḍ	‘become curved’	ṅgólḍ-nà-à
tórè	tórè-lè	‘become plump’	tórè-nà-à
<i>/LHL/ melody</i>			
fùrè ⁿ	fùrè-nè	‘get wet’	fùrè-nà-à
gògí	gògí-lì	‘dry out, become dry’	gògí-nà-à

- b. modifying form is a simple adjective
 múḡè múḡè-nè ‘be well-done, be well-made’ mèè ‘good’

These verbs are simple intransitives (520a). The corresponding factitives (‘cause X to be/become ADJ’) add the productive causative suffix -ni (520b).

- (520) a. ā ‘mūnà / gògî / ‘fḡḡè
 3Sg become.cold.Pfv/become.dry.Pfv/rot.Pfv
 ‘It got cold / dried out / rotted.’
- b. Ø ḡá = á múná-nì / gògí-nì / ‘fḡḡè-nì
 1Sg Sbj/Obj 3Sg cold.Inch-Caus.Pfv / dry.Inch-Caus.Pfv / rot-Caus.Pfv
 ‘I cooled it / dried it / let it rot.’

9.4.2.2 Deadjectival inchoatives with suffix -yà

Several inchoative verbs have a suffix -yà added to a stem similar to the associated modifying adjective. This formation includes the inchoatives for the two primary size adjectives. ‘Big’ shifts final o in the modifying form to e before -yà (521a). ‘Small’ is nasal-final as modifying adjective (originally a diminutive, cf. Cliffs dègè-náwⁿ ‘small’) but loses nasality in the inchoative.

(521) Deadjectival inchoatives for primary size adjectives

	Pfv	Ipfv	gloss	modifying
a.	hùlé-yà	hùlé-yà-là	‘grow, increase, become big’	húló-ó/húlò-ò
b.	lógó-yà	lógó-yà-là	‘shrink, become small or narrow’	lógḡḡ-ḡ ‘small; narrow’

Adjectives that have singular ...ḡ-ḡ in modifying function, other than ‘small’, have a nasalized vowel before -yà (522).

(522)	Pfv	Ipfv	gloss	modifying after /H/, /L/
a. /H/ melody				
	féḡú ⁿ -yá	féḡú ⁿ -yá-lá	‘become light’	féḡúḡ-ḡ/féḡùḡ-ḡ
	lágá ⁿ -yá	lágá ⁿ -yá-lá	‘move far away’	lāḡ-ḡ/lāḡ-ḡ
	tígé ⁿ -yá	tígé ⁿ -yá-lá	‘become heavy’	tígéḡ-ḡ/tígèḡ-ḡ

b. /HL/ melody			
dú ⁿ -yà	dú ⁿ -yà-là	‘become deep’	dúŋ-ó/dùŋ-ò
dúúné ⁿ -yà	dúúné ⁿ -yà-là	‘become short’	dúúnéŋ-ó/dúúnéŋ-ò
kúúlé ⁿ -yà	kúúlé ⁿ -yà-là	‘become deep’	kúúléŋ-ó/kúúléŋ-ò
míé ⁿ -yà	míé ⁿ -yà-là	‘become thin’	míèŋ-ò/míèŋ-ò
móónó ⁿ -yà	móónó ⁿ -yà-là	‘become long’	móónóŋ-ó/móónóŋ-ò
túúlé ⁿ -yà	túúlé ⁿ -yà-là	‘approach, come close’	túúléŋ-ó/túúléŋ-ò
c. /LHL/ melody			
làwòló ⁿ -yà	làwòló ⁿ -yà-là	‘become empty’	làwólòŋ-ò/làwólòŋ-ò

Other inchoatives with -yà, without stem-final nasal element, are listed in (523).

(523)	Pfv	Ipfv	gloss	modifying
a. modifying adjective is simple				
<i>/H/ melody</i>				
	hóré-yá	hóré-yá-lá	‘become difficult’	hóró-ó/hórò-ò
	kágáyí-yá	kágáyí-yá-lá	‘become bitter’	kágáyí-í/kágáyí-ì
	lúmá-yá	lúmá-yá-lá	‘become sweet’	lúmá-á/lúmà-à
	ɲáá-yá	ɲáá-yá-lá	‘become nasty’	ɲáá/ɲàà
<i>/HL/ melody</i>				
	nógó-yà	nógó-yà-là	‘become easy’	nógó-ó/nógò-ò ~ nógóŋ-ó/nógóŋ-ò
	tórí-yà	tórí-yà-là	‘become new’	tórí-í/tórí-ì
b. modifying adjective is participial				
<i>/H/ melody</i>				
	súré-yá	súré-yá-lá	‘age (v), get old’	súré-yá-ná-á/súré(-)yá-nà-à ‘aged (person)’, but súró/súró ‘worn-out (object)’
<i>/HL/ melody</i>				
	sóná-yà	sóná-yà-là	‘become foul’	sóná-ná-á/sóná-nà-à

Some composite adjectives also have the inchoative in -yà (524).

(524)	Pfv	Ipfv	gloss
a.	míé-hú ⁿ -yà	míé-hú ⁿ -yà-là	‘become thin’
b.	fíé ⁿ -hú ⁿ -yá	fíé ⁿ -hú ⁿ -yá-lá	‘become lightweight’

All such inchoatives are intransitives syntactically (525).

- (525) a. \bar{a} hùlé-yà
 3Sg big-Inch.Pfv
 ‘He/She/It grew.’
- b. à dúúnéⁿ-yà (or: tone-terraced \bar{a} dūūnéⁿ-yà)
 3Sg short-Inch.Pfv
 ‘He/She/It became short(er).’

The productive factitive (‘cause X to be/become ADJ’) simply adds the productive causative suffix -nì. /H/-melodic stems spread their tone into the -yà suffix before causative -nì (526a). /HL/-melodic stems spread the H and leave just -nì L-toned (526b).

- | | | | | |
|-------|----------------|----------------|-------------------------------|------------------|
| (526) | Pfv | Ipfv | gloss | inchoative (Pfv) |
| | a. hùlé-yà-nì | hùlé-yà-nì-nì | ‘cause to be big, grow (sth)’ | hùlé-yà |
| | b. móónó-yá-nì | móónó-yá-nì-nì | ‘lengthen (sth)’ | móónó-yà |

9.4.3 Inchoatives of core color adjectives

The three core color adjectives have unexpected inchoative forms, as well as a choice between simple and participial modifying forms. The simple modifying forms are nasal-final. ‘Red’ has inchoative -yà (527a), but uses a stem-shape cwàáⁿ- distinct from the short modifying form tóŋ-ó/tòŋ-ô ‘red’. The two nonchromatic adjectives ‘black’ and ‘white’ have an inchoative suffix -na (527b). This is not the same as the participial suffix, which can be added to it.

- | | | | | | |
|-------|--------------------------|--------------------------|----------------|---|------------------------|
| (527) | Pfv | Ipfv | gloss | modifying | ‘it is ___’ (§4.5.1.4) |
| | a. cwàá ⁿ -yà | cwàá ⁿ -yà-là | ‘become red’ | tóŋ-ó/tòŋ-ô
cwáá-ná-á/cwáá-nà-à | à há ‘cwāā-nā |
| | b. fí-nà | fí-nà-nà | ‘become black’ | fíŋ-ó/fíŋ-ô
fí-ná-ná-á/fí-ná-nà-à | à hà fí-ná-nà |
| | hóó-ná | hóó-ná-ná | ‘become white’ | hóŋ-ó/hòŋ-ô
hóó-ná-ná-á/hóó-ná-nà-nà | à há ‘hōō-nā-nā |

Like other inchoatives, these are simple intransitives syntactically. Again the factitive is formed by adding causative -ni.

- (528) Ø ŋá= á cwàáⁿ-yà-nì / fí-ná-nì / ‘hòò-nà-nì
 1Sg Sbj/Obj 3Sg red-Inch-Caus.Pfv / black-Inch-Caus.Pfv / white-Inch-Caus.Pfv
 ‘I made it red/black/white.’

9.5 Nouns as compound initials in verbs

Kelenga has somewhat fewer noun-verb compounds than JSDj. For example, (529) is phrased as a regular transitive, rather than incorporating ‘breast’ into the verb.

- (529) à ɲá ʰhòŋ-ð mɛ̃ⁿ
 3Sg Sbj/Obj breast-Sg drink.Pfv
 ‘He/She (=baby) suckled, nursed.’

The known Kelenga examples of noun-verb compounds are presented in the following subsections.

9.5.1 Compounds versus collocations with báǵí(-lí) ‘remove’

The distinction between regular transitive clauses and clauses with an incorporated noun in the verb can be difficult to discern in an S-infl-O-V-X language. To illustrate the distinction, consider the verb báǵí(-lí).

As an intransitive, this is the common verb ‘exit, go or come out, leave’. It has a morphological true causative báǵí-ní/báǵí-ní-ní ‘cause (sb) to exit; extract (sth, from inside sth)’. However, báǵí/báǵí-lí without derivational suffixation also has transitive functions with senses like ‘remove, get rid of (sth)’ and ‘pick, collect (sth)’. This transitive verb lends itself to collocations with particular object nouns. For example, in (530a-b) ‘remove’ comes to mean ‘sharpen’ in the sense ‘remove irregularities of, trim’.

- (530) a. Ø ɲá [nðŋ-ó ʰlòǵó-ó] ʰbāǵī
 1Sg Sbj/Obj [knife-Sg mouth-Sg] **remove.Pfv**
 ‘I sharpened the blade of the knife.’ (< nðŋ-ð, lòǵó-ó)
- b. Ø ɲá [ʰsɛŋ-ð ʰmúnú-ú] ʰbāǵī
 1Sg Sbj/Obj [harpoon-Sg nose-Sg] **remove.Pfv**
 ‘I sharpened the point of the arrow.’ (< sɛŋ-ó, múnú-ú)

In (531) báǵí combines with a possessed noun based on nðð ‘sign, tracks, footprints’. Here báǵí has an extended sense like ‘bring out, bring to light, expose, reveal, uncover’.

- (531) Ø ɲá [ʰkwɛ̃ɛ-yà-à ʰnóó] ʰbāǵī
 1Sg Sbj/Obj [steal-Agent-Sg tracks] **remove.Pfv**
 ‘I followed the tracks of (=pursued) the thief.’

These collocations are distinct from noun-verb compounds, where the incorporated noun lacks the telltale tonal ablaut of possessives and does not appear with a singular suffix. The same noun lòǵó-ó ‘mouth’ featured in (530a) above can also be incorporated, in the form lòǵó-. The composite

verb is transitive, with ‘work’ as object (not possessor) in (532). *lógó-bágí* in its entirety is downstepped.

- (532) Ø ηά ʔbààrá-á ʔlōgō-bāgī
 1Sg Sbj/Obj work(n)-Sg **mouth-remove.Pfv** (=begin.Pfv)
 ‘I began the work.’

See §9.5.3 below for more on *lógó-* compounds.

9.5.2 Possessum versus compound initial with *wórón-ó* ‘place’

As another example of how compounding differs from other constructions, consider (533a) where ‘place’ is the possessum in a possessed subject NP, versus (533b) where ‘place’ is incorporated into the verb. In (533a), ‘place’ has its singular suffix and shows possessum tonal ablaut. If the negative morpheme is included, it separates the possessed subject NP from the stative predicate ‘be distant’. In (533b), the construction requires an overt ‘be’ even in the positive, so the subject ‘Zaki’ is always separated from ‘place’, which is unsuffixed as compound initial.

- (533) a. [zàkí ʔwòròn-ó] (ʔtà) lâⁿ
 [Z **place-Sg**] (IpfvNeg) be.distant.Stat
 ‘Zaki’s place is (not) far away.’
- b. zàkì há / tá ʔwōrōⁿ-lāⁿ
 3Sg be.Loc / not.be.Loc **place-be.distant.Stat**
 ‘Zaki is (not) far away.’

9.5.3 *lógó-* ‘mouth’ as compound initial

As a simple noun, *lógó-ó* is the usual word for ‘mouth’. Its extended senses are ‘doorway, passage’ on the one hand and ‘rim’ on the other.

The compound *lógó-bágí(-lí)* ‘begin (sth)’, literally “mouth-remove,” was described in §9.5.1 above. “Mouth-remove” = ‘begin’ is based on a metaphor of opening the mouth of something to penetrate inside. Here metaphorically it means getting started in a job or activity, with ‘mouth’ equated with its beginning.

A near-synonym and structural analogue is *lógó-kúⁿ/kú-nú* ‘begin’ with verb *kúⁿ/kú-nú* ‘catch’. Both compounds are ambi-valent, occurring in transitive and (unaccusative) intransitive frames.

- (534) a. à ηά ʔbààrá-á ʔlōgō-kūⁿ / ʔlōgō-bāgī
 3Sg Sbj/Obj work(n)-Sg **mouth-catch.Pfv** / **mouth-remove.Pfv**
 ‘He/She began the work.’

- b. báará-á tí ʼlōgō-kūⁿ / ʼlōgō-bāgī
 work(n)-Sg PfvNeg **mouth-catch.Pfv** / **mouth-remove.Pfv**
 ‘The work did not start.’

Of the two, lógó-kúⁿ is attested in neutral contexts like ‘(film, soccer match, month of Ramadan) started’, while lógó-bágí is attested in contexts involving human effort like ‘(job, wedding, fishing trip, vehicle trip) started up, was launched’.

lógó-jêⁿ ‘end (v), be finished’ is the antonym for both of the ‘begin’ compounds. The second element is jêⁿ/jé-nè ‘discontinue’.

- (535) a. à ŋá ʼbààrá-á ʼlōgō-jêⁿ
 3Sg Sbj/Obj work(n)-Sg mouth-discontinue.Pfv
 ‘He/She ended the work.’

- b. báará-á tí ʼlōgō-jêⁿ
 work(n)-Sg PfvNeg mouth-discontinue.Pfv
 ‘The work didn’t end.’

lógó-fágí(-lí) means ‘complete (sth)’. Elsewhere fágí(-lí) has senses like ‘fill (sth)’.

9.5.4 lá-/là- as compound initial

A number of verbs and adjectives begin with lá- or là- of obscure meaning but probably related to lágà-à ‘mouth’, an archaic variant of lógó-ó ‘mouth’. lógó-ó is widely used both to refer to the human and animal body part and to various geometric abstractions derived from it such as ‘rim’ or ‘opening’. Its compounds are described in the preceding subsection. As noun, lágà-à is less common and is usually restricted to the body-part sense.

lá-/là- occurs as a more or less identifiable initial in a number of verbs. Similar constructions occur in other Bozo languages. For example, JSDj has compounds with dós- and with dáá-, cf. dós ‘mouth’.

In (536), two Kelenga compounds with lá-/là- as initials form an unmistakable antonymic set. The verbs are transitive, but they can occur in reflexive frames to express agentless mediopassive events.

(536)	Pfv	Ipfv	valency	gloss	related verb
a.	là-jê ⁿ	là-jé-nè	tr	‘open; release’	jê ⁿ /jé-nè ‘discontinue’
b.	lá-tègè	lá-tègè-lè	tr	‘shut; bar, dam’	tégé(-lé) ‘set (weir fishtrap) across a stream’

Further compound verbs with these initials are in (537).

(537)	Pfv	Ipfv	valency	gloss	related verb
a.	là-bê ⁿ	là-bé-nè	tr	‘get (sb) ready’	bê ⁿ /bé-nè ‘reach agreement’
b.	lá-dègè	lá-dègé-lè	tr	‘imitate’	dégè(-lè) ‘instruct, train (sb)’
e.	lá-kùmè	lá-kùmé-nè	tr	‘reply to (sb)’	kùmè(-nè) ‘coincide’

The two adjectives and related inchoative verbs relating to speed polarities are in (538). The lexical association between speed and temperature is widespread among languages of the zone. See also the related adjectives ‘slow’ and ‘fast’ in §4.5.1.3.3.

(538)	stative	modifying after /H/	inchoative Pfv	gloss	related verb
a.	là-gû ⁿ	lá-gúŋ-ó	lá-gúlé-yà	‘(be) fast’	gúlé(-lé) ‘become hot’
b.	là-mû ⁿ	lá-múŋ-ò	lá-mùné-yà	‘(be) slow’	múnà(-nà) ‘become cold’

At least diachronically relevant is the modifying adjective *lávólòŋ-ò* ~ *lávólòŋ-ò* ‘empty’ and its inchoative *lávólòⁿ-yà(-là)* ‘become empty’ cf. JSDj *wúwóⁿ* ‘empty’.

In all of these examples, H-toned *lá-* occurs before L-tone. This implies that L-toned *là-* is basic but is subject to Final Tone-Raising before nonhigh tone.

9.5.5 háŋ(-ó) ‘neck’ as compound initial

háŋ-ó ‘neck’ combines with *húrù/húrù-lù* ‘cut’ as *hàŋ-gúrù(-lù)* ‘cut the throat of, slaughter (an animal)’. The use of the bare stem *háŋ* (in L-toned form) shows that this is a compound.

(539)	ŋí	ŋá	†sàgà-á	hàŋ-gúrù
	1Pl	Sbj/Obj	sheep-Sg	neck-cut.Pfv
	‘We slaughtered (the) sheep-Pl.’			

9.6 Verb-stem iteration

9.6.1 Simple iteration

Verb stems can be iterated to indicate repetition or prolongation. In iterations, the first part has fixed form based on the simple Pfv. The second part marks aspect as with simple verbs.

(540)	Pfv (-Ipfv)	gloss	iteration Pfv (Ipfv)	gloss
	húrù(-lù)	‘cut’	húrù-húrù(-lù)	‘cut into pieces’
	kání(-ní)	‘(rope) be woven’	kání-kání(-ní)	‘weave (rope) on thigh’
	sárí(-lí)	‘dump, toss’	sárí-sárí(-lí)	‘(blood, water) spurt, gush’
	kwárí(-lí)	‘hit’	kwárí-kwárí(-lí)	‘keep hitting’
	jínjì(-nì)	‘walk’	jínjì-jínjì(-nì)	‘walk around’
	yáárá(-lá)	‘take a walk’	yáárá-yáárá(-lá)	‘wander around’

Such iteration is most productive with bisyllabic verbs. For verbs that do not lend themselves to such iteration, the same effect can be achieved by adding a sequential VP with the same verb.

(541)	a.	Ø	ɲá=	á	‘tìim	[bá=	á	‘tì ⁿ]
		1Sg	Sbj/Obj	3Sg	look.for.Pfv	[Seq	3Sg	look.for.Pfv]
		‘I searched and searched for it.’						
	b.	à	góróndò	[bí	góróndò]			
		3Sg	snore.Pfv	[Seq	snore.Pfv]			
		‘He/She snored and snored.’						

Some verbs occur only in iterative form (542a-b). Most of them have bisyllabic segments. Those in (542a) have LH-L tones in the Pfv, arguably from L-L via Final Tone-Raising.

(542)	Pfv	Ipfv	gloss
a.	lògó-lògò	lògó-lògó-lò	‘tickle (sb)’
	sògó-sògò	sògó-sògó-lò	‘cough’
	màá-màà	màá-màá-nà	‘greet’
b.	múnú-múnú	múnú-múnú-lú	‘(sth) spin, keep turning’
	músú-músú	músú-músú-lú	‘(rain) drizzle’
	pégé-pégé	pégé-pégé-lé	‘(bird) flap wings’
	pírí-pírí	pírí-pírí-lí	‘writhe, shake all over’
	sógó-sógó	sógó-sógó	‘thrust at repeatedly with stick (in hole)’
	(~ sùgú-sùgú)		
	yígí-yígí	yígí-yígí-lí	‘shake’
c.	fó-fò	fó-fò-lò	‘drag on ground’

9.6.2 Iteration with intervening wòdò

The combination of two iterations of a verb with intervening wòdò creates a stylistically marked phrase meaning ‘(verb) habitually’ or ‘(verb) constantly’. It is attested in narrative. It resembles a similar construction with wóó/wòdò between repetitions of the same noun, meaning ‘every X’ (§7.1.2.2), but the tonal patterns are not identical.

- (543) hánámá-á hée wòdò hée [ŋ gá sōŋō-fāà]
 lion-Sg see and see [3Sg be.Loc the.bush]
 ‘The lion was habitually (present) out in the bush.’

Further examples with other verbs are in (544). The iterated stems have the segmental form of the Pfv stem, with no trace of Ipfv suffixes. /H/-melodic verbs are followed by H-toned wóó and an L-toned copy of the verb (544a). /HL/-melodic verbs flatten their first occurrence to all-H, are followed by L-toned wòdò, and end with their regular HL-tones (544b). /LHL/-melodic verbs behave like /H/-melodic verbs except that the first occurrence begins with the lexical L-tone (544c).

- (544) a. /H/ melody
- | | | |
|-----------|-------------|----------------|
| jéé(-lé) | ‘eat.Antip’ | jéé wóó ‘jēē |
| gwóó(-ló) | ‘weep’ | gwóó wóó ‘gwōō |
| tórí(-lí) | ‘jump’ | tórí wóó ‘tōrī |
- b. /HL/ melody
- | | | |
|------------|---------|------------------|
| hóólò(-lò) | ‘run’ | hóóló wòdò hóólò |
| jéémù(-nù) | ‘speak’ | jéémú wòdò jéémù |
| ńíńì(-nì) | ‘walk’ | ńíńí wòdò ńíńì |
| wágà(-là) | ‘kill’ | wágá wòdò wágà |
- c. /LHL/ melody
- | | | |
|----------------------------|----------------|---|
| hòrê ⁿ /hòré-nè | ‘wait for’ | hòré ⁿ wóó hòrè ⁿ |
| sùlê ⁿ /sùlé-nè | ‘propel skiff’ | sùlé ⁿ wóó sùlè ⁿ |

When the verb is transitive, the sense is habitual passive. Thus ‘be (often) seen’ in (543), likewise ‘be (often) killed’ (544b), ‘(skiff) be (often) propelled’ (544c).

10 Verbal inflection

The abbreviations Pfv (perfective) and Ipfv (imperfective) with uppercase initial refer to the two stems that each verb presents; these are word-level morphological categories. Phrasal terms for syntactic constructions or groupings of them (e.g. perfective negative, imperfective system) are not abbreviated in the main text, and in tables where spellout is not possible they are abbreviated with lowercase formulae like pfv, ipfv, pfvneg, and ipfvneg.

10.1 Inflection of regular indicative verbs

At the word level, verbs have two basic indicative forms, **Pfv** (perfective) and **Ipfv** (imperfective). The Ipfv is formed by adding a suffix to the Pfv. The Pfv is also the usual basis for deverbal nominals. Verbs can be cited as Pfv/Ipfv pairings, e.g. *hóbí/hóbí-lí* ‘cover’, abbreviated as *hóbí(-lí)*.

Many verbs also have a stative, in the form of a predicate with participial (Ppl) suffix *-na*. Some adjectives have an unsuffixed stative predicate (§11.4.1).

At clause level, TAMP (tense, aspect, mood, polarity) categories are expressed by a combination of verbal morphology, post-subject inflectional particles, and auxiliary verbs.

(545) category	expressed by
marked tenses (past, future)	auxiliary verbs
aspect (perfective, imperfective)	inflectional particle and verb stem
stative	participial suffix and auxiliary ‘be’
mood (subjunctive, deontic)	inflectional particle
polarity (negative, unmarked [positive])	inflectional particle

As (545) indicates, verb-stem morphology plays only a limited role in TAMP marking.

This chapter covers both the morphology of verbs (Pfv, Ipfv, Stat) and the broader TAMP inflectional system in main clauses.

10.1.1 Form of verb stems

10.1.1.1 Tone melodies

As shown in §3.6.3.1, verbs have /H/, /HL/, and /LHL/ melodies. There is no /L/ melody for verb stems, but /H/-melodic stems become L-toned in some clausal contexts.

10.1.1.2 Form of Ipfv suffix

The productive Ipfv suffix is -lv for stems that do not end in a nasal or nasalized syllable. The “v” stands for a short vowel with features copied from the preceding vowel.

For stems whose final syllable is nasal (Nv, Nvv) or nasalized (Cvⁿ, Cvvⁿ), -lv is nasalized to -nv. In addition, underived stems that end in a nasalized (but not nasal) syllable can replace -nv (with copied vowel quality) by -nu with a fixed vowel; this is not possible with suffixally derived causative stems.

These patterns are exemplified in (546).

(546)	Pfv	Ipfv	gloss
	a. final oral syllable		
	ʃéé	sé-lé	‘put into a container’
	sàrà	sàrà-là	‘pay’
	b. final nasal syllable (Nv, Nvv) including causatives		
	múḍ	múḍ-nḍ	‘(food) be cooked, done’
	tónómí-ní	tónómí-ní-ní	‘twist (causative)’
	c. underived with final nasalized vowel (Cv ⁿ , Cvv ⁿ)		
	bwé ⁿ	bwé-né, bwé-nú	‘malfunction’
	ɲègê ⁿ	ɲègê ⁿ -nè, ɲègê ⁿ -nú	‘mark (v), brand (v)’

10.1.1.3 Pfv/Ipfv tonal relationships

The suffixed Ipfv preserves the lexical melody that is expressed in the Pfv. There are minor tone-sandhi processes that operate in the Ipfv.

First, stems ending in monophthongal <HL>-toned syllables realign the tone break to coincide with the syllable boundary in the Ipfv, so that the final L is expressed on the suffix. See Rightward H-Tone Spreading (§3.6.5.4.7). The relevant stems are /HL/-melodic monophthongal C^ˀv̄ and C^ˀv̄ⁿ stems and /LHL/-melodic C^ˀv̄C^ˀv̄ stems (547a). Diphthongal C^ˀv̄ or C^ˀv̄ⁿ does not realign, at least not systematically. For example, ‘help’ and ‘get up’ (547b-c) have monophthongal and diphthongal variants, and only the monophthongal ones regularly realign. There is no rightward shift of H-tones across syllable boundaries in the Ipfv of stems ending in C^ˀv̄C^ˀv̄, since the tone breaks are already aligned with syllable boundaries in the Pfv (547d).

(547)	Pfv	Ipfv	gloss
a.	hɛ̀ɛ̀ sâ ⁿ gùlú ⁿ	hɛ̀ɛ̀-lɛ̀ sá-nà, sá-nù gùlú-nù	‘see’ ‘buy’ ‘do a long time’
b.	híɛ̀ ⁿ hɛ̀ɛ̀ ⁿ	híɛ̀-nɛ̀ hɛ̀ɛ̀-nɛ̀	‘help (v)’ “
c.	cíɛ̀ cɛ̀ɛ̀	cíɛ̀-lɛ̀ cɛ̀ɛ̀-lɛ̀	‘get up’ “
d.	kògòsì	kògòsì-lì	‘scratch’

Second, the few underived /HL/- and /LHL/-melodic verbs whose Pfv stems end in at least two L-toned moras are subject to word-internal Final Tone-Raising (§3.6.5.4.5) before the Ipfv suffix (548a). This does not have a chance to apply to suffixed causatives with -nì since the last two syllables of their Pfv stems are never both L-toned (548b).

(548)	Pfv	Ipfv	gloss
a.	mátɪ̀ɲɛ̀ hálífàà	mátɪ̀ɲɛ̀-nɛ̀ hálífàà-là	‘manufacture’ ‘entrust’
b.	túmɛ̀-ní fá-rí-nì sɛ̀ɲɛ̀-nì	túmɛ̀-ní-nì fá-rí-nì-nì sɛ̀ɲɛ̀-nì-nì	‘dive in; be submerged’ (reflexive) ‘finish (sth)’ ‘equalize’

10.1.1.4 Vowel-final verbs

A handful of verb stems end in y (see the following subsection). All verb stems end in a vowel (oral or nasalized). Examples showing various tone melodies and stem shapes are in (549). Monosyllabic stems have /H/ or /HL/ melody. Stems of two or more syllables can have /H/, /HL/, or /LHL/ melody.

(549)	Pfv	Ipfv	gloss	
	a. /H/ melody			
	<i>monosyllabic</i>			
	bá ⁿ	bá-ná	‘shave (head)’	
	<i>bisyllabic</i>			
	dígí	dígí-lí	‘press’	
	<i>trisyllabic</i>			
	féréké	féréké-lé	‘become tangled’	
	b. /HL/ melody			
	<i>monosyllabic</i>			
	sâ ⁿ	sá-nà	‘buy’	
	héè	héé-lè	‘see’ (for Ipv tones see §3.6.5.4.6)	
	<i>bisyllabic</i>			
	sàrà	sàrà-là	‘pay’	
	báándà	báándà-là	‘get tired’	
	dééngù	dééngù-lù	‘peek at’	
	<i>trisyllabic</i>			
	hálífàà	hálífàà-là	‘entrust’ (for Ipv tones see §3.6.5.4.5)	
	c. /LHL/ melody			
	<i>bisyllabic</i>			
	gògî	gògî-lì	‘dry out; harden’	
	hòrê ⁿ	hòrê-nè	‘wait for’	
	<i>trisyllabic</i>			
	mànúnjù	mànúnjù-nù	‘knead’	

10.1.1.5 Cvy verbs

The following verbs have Cay or Coy shape. These are the only verb stems that do not end in a vowel. The Ipv suffix is segmentally -li.

(550)	Pfv	Ipfv	gloss	
	a.			
	háý	háý-lí	‘show’	cf. JSDj kàsì ‘show’
	báy	báy-lí	‘exit (v)’	variant of bágí(-lí)
	fáy	fáy-lí	‘fill up’	variant of fágí(-lí)
	b.			
	póý	póý-lí	‘ooze, leak’	
	bóý	bóý-lì	‘hear’	variant of bógi(-lì)

These stems likely originated from *CaCi and *Coyi stems whose medial *C was deleted (apocopated/syncopated). báy(-lí) ‘exit (v)’ (550a) and bóy(-lì) ‘hear’ (550b) coexist with uncontracted Cvgi variants.

10.1.2 Verbs with y inserted after C1 in the Pfv

The four verbs described below insert y after the initial consonant in the Pfv but not in the Ipfv stem, though not for all speakers. The Ipfv is otherwise regularly formed.

If C1 is s, as it is in three of the four stems, the sibilant and the semivowel merge as ʃ. Only ‘come’ has a clearly separate inserted semivowel. As a consequence, speakers who do not distinguish s from ʃ phonemes have only one irregular verb of this type, namely ‘come’. Even for ‘come’ the y is absent for some speakers.

10.1.2.1 byé/bé-lé or ~ bé/bé-lé ‘come’

This is a simple intransitive, though it can be followed by a spatial expression like ‘here’ or ‘in(to) the village’. It can denote arrival, as in ‘X has come’, or the entire trajectory.

(551) ā ʼb(y)è gôⁿ
 3Sg come.Pfv here
 ‘He/She came here.’ or ‘He/She has arrived here.’

As simple perfective verb, some speakers use byé and others use bé. Even speakers who have byé in simple main clauses reduce it to bé in sequential VPs (§15.2.2.2).

Ipfv bé-lé occurs as the second stem in verb-verb compounds, in any aspectual context (§15.1.1).

Ipfv bé-lé is the etymological source of future bélé ~ bílí, and Pfv byé ~ bé is the likely source of sequential and subjunctive bí.

10.1.2.2 ʃód/só-lò or só/só-lò ‘go’

Like ‘come’, this verb can occur alone (‘went’), or it can be followed by a spatial expression (‘went there’). The initial sibilant (s versus ʃ), the syllabic weight of the Pfv (ʃód ~ sóð versus só), and the tones of the Ipfv (só-lò versus só-ló) are variable across speakers and, for some speakers, across morphosyntactic contexts.

For speakers with Pfv ʃód, the extra y in the Pfv is absorbed by the sibilant, which is palatalized. The contour tone favors the long vowel in the Pfv. For some speakers who do not distinguish ʃ from s, the verb is more or less regular: sóð/só-lò. However, some speakers reduce the Pfv to monomoraic só in all contexts (hence e.g. 3Sg ā ‘sò ‘he/she went’).

Even for speakers who use *ʃòd* or *sòd* in simple perfective main clauses, as in *à ʃòd* ‘he/she went (away)’, the short variant *só* (always with *s*) may occur when an overt spatial expression follows.

- (552) a. *ā* *ʃòd*
 3Sg go.Pfv
 ‘He/She went (away).’
- b. *ā* *ʃò* [*ʔnúŋù-ù* *nî*]
 3Sg go.Pfv [village-Sg Loc]
 ‘He/She went to the village.’
- c. *ì* *gà* *só-lò* [*ʔnúŋù-ù* *nî*]
 ì *gá* *ʃò-lò* [" "]
 3Sg Ipfv go-Ipfv [village-Sg Loc]
 ‘He/She goes to the village.’

For monomoraic Pfv *só* and variants in multi-verb constructions, see §15.1.4 and §15.1.5.2.

Ipfv *só-ló* (H-toned) occurs as the second stem in verb-verb compounds, in any aspectual context, even for speakers who have HL-toned *só-lò* elsewhere (§15.1.1). *só-ló* is also part of the construction *só-ló cêèⁿ X* ‘until X’ (§15.1.5.1).

It appears that some speakers generalize the H-toned form *só-ló* even to main clauses, at least as a variant. This could make *só/só-ló* entirely /H/-melodic. A corollary is that the Ipfv can be downstepped to *ʃò-lò* in the relevant morphosyntactic positions. This seems to be the case in (553a). However, another process unique to this verb is the detressing of the first syllable of the Ipfv, especially when the second syllable contracts with a following vocalic pronominal proclitic, leading to pronunciations like [səl...] as in (553b).

- (553) a. *á* *há* *ʃò-lò* *dóónín-dóóníⁿ*
 2Sg Ipfv go-Ipfv Rdp-slowly
 ‘You-Sg will go slowly.’ (2021-06 @ 03:29)
- b. *á* *há* *ʃò-lá=* [*á* *ʔògò*]
 2Sg Ipfv go-Ipfv [3Sg find.Pfv]
 ‘You-Sg will go and find (=observe) it.’ (2021-01 @ 02:52)

10.1.2.3 *ʃéé/sé-lé* ‘say’

As with ‘go’, the extra *y* in the Pfv is absorbed by the sibilant, resulting in *ʃéé/sé-lé*. Speakers who do not distinguish *s* from *ʃ* phonemes have *séé/sé-lé*.

This verb is optionally followed by a dative PP with postposition *té*. When *ʃéé* is followed by a PP beginning with a vocalic pronominal proclitic, it is shortened to *sé* (always with *s* rather

than ʃ) in the same way that ʃóð ‘went’ contracts to só as described above. Combinations of sé with 3Sg á ‘tè and 3Pl í ‘tè (tone-inverted clause-medial forms) then undergo vv-Contraction (554).

- (554) a. à ηά= á さá= [á ‘tè]
 3Sg Sbj/Obj 3Sg say.Pfv [3Sg Dat]
 ‘He/She said (it) to him/her.’
- b. Ø ηά= á sí= [í ‘tè]
 1Sg Sbj/Obj 3Sg say.Pfv [3Pl Dat]
 ‘I said (it) to them.’

10.1.2.4 ʃéé/sé-lé ‘put/pour in’

The transitive verb ʃéé/sé-lé describes putting a liquid or grain into a container, normally by pouring. It also occurs in the collocation ‘lay egg’. Speakers who do not distinguish s from ʃ have séé/sé-lé.

ʃéé/sé-lé often contracts with a following locative PP à nî: ‘in it’, resulting in more or less lexically fused さá = [á nî:] ‘put (sth) in it’. Since the sibilant is always s rather than ʃ in this case, ʃéé ~ séé evidently first shortens to sé and then contracts.

- (555) ì ηά= á さá= [á nî:]
 3Pl Sbj/Obj 3Sg put.in.Pfv [3Sg Loc]
 ‘They put/poured it in.’ (lit. “into it”) (< ʃéé)

10.1.3 Stative predicates

10.1.3.1 Lexical statives

Some morphologically simple verbs are lexical statives. They cannot be marked for aspect (Pfv versus Ipfv).

Intransitive statives directly follow the subject in positive clauses (which therefore resemble perfective positives of regular intransitives), and they follow IpfvNeg tá ~ dá in negative clauses (which therefore resemble imperfective negatives of regular intransitives). Most intransitive statives are deadjectival, e.g. lêⁿ ‘be sweet’ and its negation tá lêⁿ ‘not be sweet’. They are listed in §11.4.1. They do not require postverbal constituents.

Other intransitive statives are presented in (556). The two in (556a) behave like adjectival statives in directly following the subject in positive clauses, without Ipfv há ~ gá. By contrast, híní (556b) is intrinsically imperfective and requires post-subject Ipfv há ~ gá in positive clauses. It is followed by either a PP or a sequential VP.

ʃúúrì-nà	‘(be) bent over’	ʃúúrì	ʃúúrì-lì	‘bend over’
táá-nà	‘(be) standing’	táà	táá-là	‘stand up, stop’

b. from transitive or reflexive

lá-tègè-nà	‘(be) shut’	lá-tègè	lá-tègè-lè	‘shut’
béé-ná	‘(be) out of order’	béé ⁿ	béé-né	‘ruin (v)’ (variant)
hwé-ná	‘(be) broken’	hwé	hwé-lé	‘break (tr)’
húúrú-nà	‘(be) rolled up’	húúrù	húúrú-lù	‘roll up’
mátìṅé-nà	‘(be) manufactured’	mátìṅè	mátìṅé-nè	‘manufacture’

Participles are made into predicates by há ‘be’ or its negation tá ‘not be’. /H/-melodic participles are downstepped.

(559) a. léŋ-ó há ʔsāgā-nā [hòó nìṅî]
 child-Sg be lie.down-Ppl [house inside]
 ‘The child is lying down (=asleep) inside the house.’ (< ságá-ná)

b. mómóbilì-ì tá ʔbēē-nā
 vehicle not.be ruin(v)-Ppl
 ‘The vehicle is not malfunctioning.’

Participles that function as adjective-like postnominal modifiers occur in the same segmental form as stative predicates, but as predicates they revert to their lexical tones (§11.4.2).

10.2 Indicative inflectional categories (aspect, negation)

Clause-level inflectional categories are expressed by a combination of verbal morphology (Pfv versus Ipfv versus stative verb stem), post-subject inflectional morphemes, and auxiliaries. Ipfv and stative add suffixes to the bare stem, which can usually be identified with the Pfv.

10.2.1 Inventory of post-subject inflectional particles

The post-subject inflectional markers for indicative clauses, in their H-toned variants, are shown in (560).

(560) a. perfective positive [none] (intransitive)
 ṅá (bidirectional case marker, transitives)

b. perfective negative tí
 imperfective positive há
 imperfective negative tá

Since $\eta\grave{a} \sim \eta\acute{a}$ (560a) occurs only in transitives, i.e. to separate otherwise adjacent subjects and objects, it is analysable as a bidirectional case marker (BCM).

Stative verbs do not distinguish aspect, but they occur with imperfective particles under some conditions.

The initial consonant of the inflectional markers is subject to phonological processes triggered by preceding nasal pronominal proclitics. After 3Sg η and 1Sg $\acute{\eta}$, t optionally voices to d, and h (< *k) voices and hardens to g (§3.4.2.4).

10.2.2 Tones of post-subject inflectional particles

The four nonzero particles (preceding subsection) have subtle tonal properties. §10.2.2.1 considers intransitive clauses, followed by transitives in §10.2.2.2.

10.2.2.1 Inflectional particles before intransitive verbs

Array (561) illustrates the four indicative inflectional categories (aspect-polarity) that an intransitive verb can occur with. The perfective positive (561a) has no post-subject particle, while the other three do have a particle. The following subjects are illustrated: 2Sg \acute{a} as proxy for H-toned proclitics (including demonstrative $k\acute{u}$), $s\grave{e}\acute{e}d\grave{u}$ ‘Seydou’ representing nonpronominal NPs, and 3Sg $\grave{a} \sim \eta$ as proxy for L-toned proclitics. The forms shown are clause-initial (postpausal).

(561)	subject	‘come’ /H/	‘descend’ /HL/	‘swim’ /LHL/
a. perfective				
	2Sg	\acute{a} byé	\acute{a} jé η è	\acute{a} nùgù ⁿ
	Seydou	$s\grave{e}\acute{e}d\acute{u}$ ⁴ byē	$s\grave{e}\acute{e}d\acute{u}$ jé η è	$s\grave{e}\acute{e}d\acute{u}$ nùgù ⁿ
	3Sg	\grave{a} ⁴ byè	\grave{a} ⁴ jē η è (< \grave{a} jé η è)	\grave{a} nùgù ⁿ
b. perfective negative				
	2Sg	\acute{a} tí ⁴ byē	\acute{a} tí jé η è	\acute{a} tí nùgù ⁿ
	Seydou	$s\grave{e}\acute{e}d\acute{u}$ tí ⁴ byē	$s\grave{e}\acute{e}d\acute{u}$ tí jé η è	$s\grave{e}\acute{e}d\acute{u}$ tí nùgù ⁿ
	3Sg	\grave{a} tí ⁴ byē ~ \grave{a} dí ⁴ byē	\grave{a} tí jé η è ~ \grave{a} dì jé η è	\grave{a} tí nùgù ⁿ ~ \grave{a} dí nùgù ⁿ
c. imperfective				
	2Sg	\acute{a} há ⁴ bē-lē	\acute{a} há jé η è-nè	\acute{a} há nùgù-nù
	Seydou	$s\grave{e}\acute{e}d\acute{u}$ há ⁴ bē-lē	$s\grave{e}\acute{e}d\acute{u}$ há jé η è-nè	$s\grave{e}\acute{e}d\acute{u}$ há nùgù-nù
	3Sg	\grave{a} há ⁴ bē-lē ~ η gá ⁴ bè-lè	\grave{a} hà jé η è-nè ~ η gà jé η è-nè	\grave{a} há nùgù-nù ~ η gá nùgù-nù

d. imperfective negative

2Sg	á tá ⁴ bē-lē	á tá jéŋè-nè	á tá nùgú-nù
Seydou	sèédù tá ⁴ bē-lē	sèédù tá jéŋè-nè	sèédù tá nùgú-nù
3Sg	à tá ⁴ bē-lē	à tà jéŋè-nè	à tá nùgú-nù
	~ ò dá ⁴ bē-lē	~ ò dà jéŋè-nè	~ ò dá nùgú-nù

In the perfective positive (561a), where the verb immediately follows the subject, the /H/-melodic verb ('come') is tone-dropped to ⁴L after 3Sg à. It is downstepped to ⁴M after a nonpronominal subject ('Seydou'). ā ⁴jēŋè in (561a) reflects Tone Terracing in postpausal position. Medially the proclitic undergoes Tone Inversion and the result is ... á jéŋè.

The three inflectional particles (561b-d), PfvNeg tí ~ dí, Ipfv há ~ gá, and IpfvNeg tá ~ dá share the same tonal properties. They remain H-toned after 2Sg á and after 'Seydou'. They drop to L-toned after 3Sg à (and 3Pl ì), which can only be directly observed before /HL/-melodic verb jéŋè(-nè). Before 'come' and 'swim', the tone-dropped 3Sg à (or 3Pl ì) is re-raised to H by Final Tone-Raising.

10.2.2.2 Downstep versus Tone-Dropping in intransitive perfectives

M and L tones are not always easily distinguishable phonetically, and both nonhigh tones serve as triggers for Final Tone-Raising on the word to their left. However, the M versus L distinction is confirmed by the fact that L-toned but not M-toned words can themselves undergo Final Tone-Raising when followed by another nonhigh tone. This is easier to hear with a bisyllabic /H/-melodic Pfv verb like báǵí 'exit (v)'.
 In (562), sèédù undergoes Rightward H-Tone Shift (§3.6.5.4.2). This shows that ⁴bāǵí now begins with a nonhigh tone.

(562) sèédù ⁴bāǵí
 S exit(v).Pfv
 'Seydou exited (=came/went out).'

The distinction between downstepped ⁴bāǵí and tone-dropped ⁴bàǵì is brought out by adding hòdò nìŋŋì 'inside the house'. In (563a), ⁴bàǵì has been tone-dropped by the preceding 3Sg subject à, which is then upstepped to ā. Then ⁴bàǵì can undergo Final Tone-Raising before the initial L-tone of hòdò nìŋŋì, resulting in ⁴bàǵí. In (563b), ⁴bāǵí is downstepped to M-tone following the nonpronominal subject, and it remains level-M-toned even when hòdò nìŋŋì is added. The relevant syllables are bolded.

(563) a. ā ⁴**bàǵí** [hòdò nìŋŋì]
 3Sg exit(v).Pfv [house inside]
 'He/She/It exited from inside the house.'

- b. sèédú ʼbāgī [hòò nìŋî]
 S exit(v).Pfv [house inside]
 ‘Seydou exited from inside the house.’

In (563a), the pitch of gí is higher than that of the preceding bà. In (563b), bā and gī are at the same pitch level.

10.2.2.3 Grammatical particles before transitive objects

In non-imperative transitive clauses, the subject is always separated from the VP by a **grammatical** particle. This term includes both the bidirectional case marker (**BCM**) and the true **inflectional** particles that mark aspect, polarity, and mood.

Tonal interactions between subjects and true inflectional particles are the same as with intransitives presented above (§10.2.2.1). However, the BCM is limited to transitive perfective positive clauses. Its tonal behavior is slightly different from that of the true inflectional particles with 3Sg and 3Pl proclitic subjects.

There is no tonal difference between the BCM (564a) and the three inflectional particles (564b-d) when the object noun is ‘goat’, ‘sheep’, or ‘cloud’, representing /H/, /L/, and /LHL/ melodies. ‘Goat’ undergoes Tone-Dropping to L*HL (before tone sandhi), and ‘sheep’ undergoes Initial H-Ablaut. However, the /HL/-melodic object noun ‘paddle’ has subtly different tones. It is hūmòŋ-ò after the BCM (564a) but downstepped ʼhūmòŋ-ò after the inflectional particles (564b).

(564)	‘goat’ /H/	‘sheep’ /L/	‘cloud’ /LHL/	‘paddle (n)’ /HL/
a. perfective with BCM (transitive only)				
2Sg	á ŋá ʼsògò-ò	á ŋá ʼsàgà-à	á ŋá hàbáà	á ŋá hūmòŋ-ò
S.	sèédù ŋá ʼsògò-ò	sèédù ŋá ʼsàgà-à	sèédù ŋá hàbáà	sèédù ŋá hūmòŋ-ò
b. perfective negative				
2Sg	á tí ʼsògò-ò	á tí ʼsàgà-à	á tí hàbáà	á tí ʼhūmòŋ-ò
S.	sèédù tí ʼsògò-ò	sèédù tí ʼsàgà-à	sèédù tí hàbáà	sèédù tí ʼhūmòŋ-ò
c. imperfective				
2Sg	á há ʼsògò-ò	á há ʼsàgà-à	á há hàbáà	á há ʼhūmòŋ-ò
S.	sèédù há ʼsògò-ò	sèédù há ʼsàgà-à	sèédù há hàbáà	sèédù há ʼhūmòŋ-ò
d. imperfective negative				
2Sg	á tá ʼsògò-ò	á tá ʼsàgà-à	á tá hàbáà	á tá ʼhūmòŋ-ò
S.	sèédù tá ʼsògò-ò	sèédù tá ʼsàgà-à	sèédù tá hàbáà	sèédù tá ʼhūmòŋ-ò

In (565), the subject is now 3Sg à (3Pl ì behaves in the same way). At least for some speakers, the tones are different in the bolded forms of the BCM (565a) versus those of the inflectional particles (565b-d).

(565)	‘goat’	‘sheep’	‘cloud’	‘paddle (n)’
a. perfective with BCM (transitive only)				
3Sg	à ḡá ¹ sògó-ò	ā ḡā ¹ sāgà-à	à ḡá hàbáà	à ḡà hūmòḡ-ò
b. perfective negative				
3Sg	à tí ¹ sògó-ò	à tì ¹ sāgà-à	à tí hàbáà	à tí ¹ hūmòḡ-ò
	~ ì dí ¹ sògó-ò	~ ì dì ¹ sāgà-à	ì dí hàbáà	ì dí ¹ hūmòḡ-ò
c. imperfective				
3Sg	à há ¹ sògó-ò	à hà ¹ sāgà-à	à há hàbáà	à há ¹ hūmòḡ-ò
	~ ḡ gá ¹ sògó-ò	~ ḡ gà ¹ sāgà-à	ḡ gá hàbáà	ḡ gá ¹ hūmòḡ-ò
d. imperfective negative				
3Sg	à tá ¹ sògó-ò	à tà ¹ sāgà-à	à tá hàbáà	à tá ¹ hūmòḡ-ò
	~ ì dá ¹ sògó-ò	~ ì dà ¹ sāgà-à	ì dá hàbáà	ì dá ¹ hūmòḡ-ò

The inflectional particles in (565b-d) drop to L-toned *tì ~ dì*, *hà ~ gà*, and *tà ~ dà* after the 3Sg proclitic, as seen in the ‘sheep’ column, but they are re-raised to H-tone before nonhigh tones in the other three columns. The BCM is also L-toned as shown in the ‘paddle’ column, but it too is re-raised in the other three columns. In the ‘sheep’ column, ā ḡā ¹sāgà-à has undergone Tone Terracing, but only in the postpausal pronunciation shown. Adding ní ‘if’ results in ná = á ḡā ¹sāgà-à ... ‘if ...’ with the same tones as its negation ná = á *tì* ¹sāgà-à ‘Paddle’ is downstepped to ¹hūmòḡ-ò after the inflectional particles but not after the BCM. For similar M-terraces involving third-person subject proclitics, the BCM, and third-person pronominal objects, see (206b) in §4.3.6.1.

10.2.3 Perfective and perfect categories

10.2.3.1 Perfective positive

The perfective positive differs from other indicative categories in lacking a post-subject inflectional particle marking aspect and polarity. In intransitive clauses, the verb is directly adjacent to the subject. /H/-melodic Pfv verbs are downstepped after nonpronominal subjects like ‘Seydou’, and they are dropped to all-L-toned after 3Sg à and 3Pl ì. In transitive clauses, the subject and object (which would otherwise be adjacent) are separated by the bidirectional case marker ḡà ~ḡá (glossed “Sbj/Obj”).

10.2.3.1.1 Perfective positive of intransitive verbs

Because the Pfv stem of the verb directly follows the subject, the tones of the verb depend on the choice of subject as well as on the verb's lexical tone melody. Here we focus on tonal ablaut.

An /H/-melodic verb is tone-dropped to all-L after L-toned pronominals 3Sg *à* and 3Pl *ì*, and it is downstepped to all-M after nonpronominal subject NPs. If tone-dropped to all-L, the verb is then subject to Final Tone-Raising if followed by a nonhigh tone. See §3.6.5.3.1 for details and data.

An /HL/-melodic verb generally retains its lexical tones, but it can combine with a clause-initial 3Sg or 3Pl pronominal by Tone Terracing (§3.6.5.6).

An /LHL/-melodic verb with two initial L-toned syllables (a rarity) is subject to Initial H-Ablaut on the first syllable following an H-toned proclitic or after any nonpronominal NP subject. See §3.6.5.4.2 and the forms of *làwòlóⁿ-yà* in (75) in §3.6.4.1.

These ablaut patterns are clear for verbs of two or more syllables, which are well exemplified in the sections just cited. Monosyllabic verbs are illustrated in (566).

(566) Perfective positive of monosyllabic intransitives

melody	3Sg	2Sg	'Seydou'	gloss
/H/	<i>ā</i> ¹ <i>sàⁿ</i>	<i>á</i> <i>sáⁿ</i>	<i>sèèdú</i> ¹ <i>sāⁿ</i>	'died'
	<i>ā</i> ¹ <i>lòò</i>	<i>á</i> <i>ló</i>	<i>sèèdú</i> ¹ <i>lōō</i>	'entered'
	<i>ā</i> ¹ <i>gwòò</i>	<i>á</i> <i>gwóó</i>	<i>sèèdú</i> ¹ <i>gwōō</i>	'wept'
/HL/	<i>à</i> <i>fīⁿ</i>	<i>á</i> <i>fīⁿ</i>	<i>sèédù</i> <i>fīⁿ</i>	'darkened'
	<i>à</i> <i>kîêⁿ</i>	<i>á</i> <i>kîêⁿ</i>	<i>sèédù</i> <i>kîêⁿ</i>	'arrived' (variant <i>cîêⁿ</i>)

10.2.3.1.2 Perfective positive of transitive verbs

The Pfv stem of the verb is used. The tones of the verb depends on its lexical melody and on the type of object that precedes it. Object NPs and pronominals have the same tonal-ablaut effects on verbs as do intransitive subject NPs and pronominals, as summarized just above.

/H/-melodic verbs are tone-dropped after 3Sg and 3Pl proclitics, and downstepped after nonpronominal object NPs (§3.6.5.3.2-3).

/HL/-melodic verbs retain their lexical tones, but in imperatives a 3Sg or 3Pl pronominal object can combine with the verb by Tone Terracing (§3.6.5.6).

/LHL/-melodic verbs with two initial L-toned syllables undergo Initial H-Ablaut (§3.6.5.4.2) after an H-toned pronominal proclitic or after a nonpronominal object NP. Other /LHL/-melodic verbs (the great majority) have stable tones.

10.2.3.2 Perfective negative of intransitive verbs

Post-subject *tí* or (after 3Sg or 3Pl pronominal) *tì* is followed by the Pfv stem of the intransitive verb.

/H/-melodic verbs are downstepped to ‘M after the inflectional particle. /HL/-melodic stems keep their lexical tones (§3.6.5.3.4).

The rare /LHL/-melodic verbs that begin with two L-toned syllables undergo Initial H-Ablaut.

10.2.3.3 Perfective negative of transitive verbs

When the perfective negative particle *tí* ~ *tì* is followed by an object NP or pronominal and then the Pfv verb, *tí* ~ *tì* has tonal-ablaut effects on the object (§3.6.5.3.5, §3.6.5.4.2). The tones of the verb are determined by the type of object in the same way as in the perfective positive transitive.

10.2.3.4 Experiential perfect ‘have ever’ (auxiliary *lálì*)

This construction denotes a past event that may have occurred long ago but that has left an imprint in the subject’s memory and/or status. It corresponds to *have ever* and to its negation *have never* in English. Its main ingredient is the auxiliary *lálì*, which occurs in a perfective clause. In negative clauses it is preceded by PfvNeg *tí*. This clause is followed by a same-subject sequential VP, beginning with *bí* and containing a Pfv verb.

- (567) a. *á lálì [bí ˈsámà-à héè] wâ*
 2Sg **ExpPf** [Seq elephant-Sg see.Pfv] Q
 ‘Have you-Sg ever seen an elephant?’ (< *sámà-à*)
- b. *ń lálì [bí ˈlólò-ò mɛ̃ˀ]*
 1Sg **ExpPf** [Seq beer-Sg drink.Pfv]
 ‘I have (at least once) drunk (millet) beer.’ (< *lólò-ò*)
- c. *ń tí lálì [bí ˈlólò-ò mɛ̃ˀ]*
 1Sg **PfvNeg ExpPf** [Seq beer-Sg drink.Pfv]
 ‘I have never drunk (millet) beer.’
- d. *ń tí lálì [bí ˈhūmòŋ-ò héè]*
 1Sg **PfvNeg ExpPf** [Seq paddle-Sg see.Pfv]
 ‘I have never seen a paddle.’

10.2.3.5 Equivalentents of present perfect

There is no fully grammaticalized present perfect. Addition of *sísàⁿ ~ ssàⁿ* ‘now’ to a perfective clause approximates one type of perfect (‘has just VPed’) as in (568).

- (568) *ngí* *jéé* *s(í)sàⁿ*
1Pl eat.Antip.Pfv **now**
‘We just ate.’

Combining the main verb with the verb *kílá* ‘finish’ approximates a resultative perfect. If *kílá* is the verb in the main clause, it is followed by a dative verbal noun (569a). If the other verb is in the main clause, *kílá* is in a following sequential VP (569b).

- (569) a. *ī* *‘kìlà* [*jéé* *‘là*]
3Pl **finish.Pfv** [eat.Vbln Dat]
‘They have finished eating.’ (= ‘They already ate.’)
- b. *jí* *jéé* [*bí* *‘kìlà*]
1Sg eat.Antip.Pfv [Seq **finish.Pfv**]
‘I have finished eating.’ (= ‘I already ate.’)

A textual example of *bí ‘kìlà* is 2021-06 @ 02:38. Another construction that emphasizes temporal separation is to express the first event by itself, and follow this with subject plus *wáá ‘kìlā* and the second event in sequential VP form (§15.2.13).

10.2.3.6 No perfective positive marker in conditionals

In Kelenga there is no post-subject perfective marker in conditional antecedents. There is such a marker in Jenaama-Sorogaama.

10.2.4 Nonperfective categories

The nonperfective indicative categories are a) imperfective, b) future, c) presentative, and d) progressive. They are expressed by a combination of verbal morphology and preverbal particles.

10.2.4.1 Imperfective positive

The post-subject imperfective positive (Ipfv) morpheme is *há*. It becomes *gá* after a nasal. After 3Sg and 3Pl proclitics it drops to *hà* (~ *gà*) unless (re-)raised by tone sandhi. The verb is in the Ipfv stem.

10.2.4.1.1 Imperfective positive of intransitives

Here the Ipfv verb directly follows post-subject particle há (~ gá), or L-toned hà after 3Sg à and 3Pl ì. /H/-melodic verbs are downstepped to ʼM (§3.6.5.3.4). /HL/-melodic verbs are unchanged. /LHL/-melodic verbs with two initial L-toned syllables undergo Initial H-Ablaut.

10.2.4.1.2 Imperfective positive of transitives

há (or variant) is now followed by the object and then the Ipfv verb. The Ipfv particle has tonal-ablaut effects on the object (§3.6.5.3.5, §3.6.5.4.2). The object has its own tonal effects on the verb, as in other noun-verb combinations (§3.6.3.3.3, §3.6.5.4.2).

10.2.4.2 Imperfective negative

The post-subject IpfvNeg morpheme is tá, often voiced to dá after nasals. It has the same tonal effects on the following object NP or pronominal, or on the following intransitive verb, as in the other marked inflectional categories (perfective negative, imperfective positive).

10.2.4.3 Future (há bélé ~ bílí)

This is a marked future construction; future events can also be denoted by the general imperfective.

The construction contains Ipfv particle há ~ gá, a specifically future morpheme bélé ~ bílí, and a Pfv verb. The combination há bélé behaves tonally like a single H-toned word. It is tone-dropped as a unit after 3Sg and 3Pl proclitics, as in 3Sg ñ gà bèlè jóò ‘he/she/it will go’, versus e.g. 1Sg ñ gá bélé jóò ‘I will go’. Tone-dropped hà bèlè ~ gà bèlè is subject to Final Tone-Raising (to hà bèlé) when followed by a nonhigh syllable.

bélé ~ bílí is etymologically identical to Ipfv bé-lé ‘comes’. However, it no longer has any directional or motional semantics, and it combines freely with any verb, e.g. bélé ‘byē ‘will come’ and bélé jóò ‘will go’. Future bélé ~ bílí and bé-lé ‘comes’ differ in tonal behavior. In ñ gá ‘bē-lē ‘he/she/it comes (often)’, bé-lé is downstepped and then triggers Final Tone-Raising (gà → gá), whereas in future ñ gà bèlè jóò ‘he/she/it will go’ bélé is at the same pitch level as gà.

In allegro speech the bv syllable in the future morpheme can be elided, especially in subordinated clauses, as in ... ñ gà lì jóò ‘(I don’t know when) he/she/it will go’, cf. §17.2.1.1. This is evidently the source of lì ~ lí in counterfactual consequent clauses (§16.4.1).

The positive intransitive future is illustrated in (570). The Ipfv particle shows its usual tonal and segmental variation. An /H/-melodic verb (‘ascend’) is downstepped.

(570)	a.	íj	gá	bélé	ˈtā ⁿ	‘I will ascend.’
		"	"	"	nùgû ⁿ	‘... swim.’
		"	"	"	kómù	‘... sleep.’
	b.	à	hà	bélé	ˈtā ⁿ	‘He/She/It will ascend.’
		~ ñj	gà	"	"	
		"	"	"	nùgû ⁿ	‘... swim.’
		"	"	bèlè	kómù	‘... sleep.’
	c.	sèédù	há	bélé	ˈtā ⁿ	‘Seydou will ascend.’
		"	"	"	nùgû ⁿ	‘... swim.’
		"	"	"	kómù	‘... sleep.’

If the verb is transitive, the object follows bélé ~ bílí. The object undergoes the usual tonal changes following H-toned grammatical particles, and the object has its usual tonal effects on the verb.

(571)	íj	gá	bélé	ˈsàgà-á	hàŋ-gúrù
	1Sg	Ipfv	Fut	sheep-Sg	neck-cut.Pfv
	‘I will slaughter a sheep.’ (< sàgà-à)				

10.2.4.4 Future negative (tá bélé ~ bílí)

The future negative replaces há ~ gá with IpvNeg tá (or dá after nasal) preceding bélé ~ bílí. After 3Sg or 3Pl pronominal subject, tà bèlè and variants are L-toned.

(572)	a.	ń	dá	bélé	ˈtā ⁿ	‘I will not ascend.’
		"	"	"	nùgû ⁿ	‘... swim.’
		"	"	"	kómù	‘... sleep.’
	b.	à	tà	bélé	ˈtā ⁿ	‘He/She/It will not ascend.’
		~ ñ	dà	"	"	
		"	"	"	nùgû ⁿ	‘... swim.’
		"	"	bèlè	kómù	‘... sleep.’
	c.	sèédù	tá	bélé	ˈtā ⁿ	‘Seydou will ascend.’
		"	"	"	nùgû ⁿ	‘... swim.’
		"	"	"	kómù	‘... sleep.’

A transitive example is (573).

- (573) ń tá bélé ‘sògó-ó hàṅ-gúrù
 1Sg Ipfv **Fut** goat-Sg neck-cut.Pfv
 ‘I will not slaughter a goat.’ (< sògó-ó)

10.2.4.5 Presentative (héè) combined with VPs and clauses

Adding presentative héè (or géè after nasal) to a subject NP or pronominal calls the addressee’s attention to an individual (§4.4.4). This can combine with an additional phrase that describes the individual’s ongoing activity. This phrase may take the form of a sequential VP, a full (subject-headed) imperfective clause, or a ‘while’ adverbial phrase with -tòò.

The construction with sequential bí is illustrated in (574).

- (574) a. ì héè [bí jéémù / ‘tāⁿ]
 3Pl **Prsntv** [**Seq** speak.Pfv / ascend.Pfv]
 ‘(Look!) There they are speaking/ascending!’
- b. ń géè [bí ‘tùgú-ú ‘jáā]
 1Sg **Prsntv** [**Seq** meat-Sg eat.Pfv]
 ‘(Look!) Here I am eating meat!’ (< túgú-ú)

In (575), the presentative is followed by a subject-headed imperfective clause.

- (575) a. ń géè [ń gá jéémù-nù / ‘tā-nū]
 S **Prsntv** [1Sg **Ipfv** speak-Ipfv / ascend-Ipfv]
 ‘(Look!) Here I am speaking/ascending!’
- b. sèédù héè [ń gá ‘tùgú-ú ‘jáā-lā]
 S **Prsntv** [3Sg **Ipfv** meat-Sg eat-Ipfv]
 ‘(Look!) There’s Seydou eating meat!’ bèlé

In (576), bare presentative héè is added at the end of what is elsewhere a ‘while’ adverbial phrase with -tós ~ -tòò (§15.3.1.1). The -tós phrase functions as the subject of héè.

- (576) a. ī ‘tàn-tòò héè
 3Pl ascend.VblN-**while** **Prsntv**
 ‘There they are ascending!’
- b. ń hónón-**kún-tòò** héè
 1Sg bird-catch.VblN-**while** **Prsntv**
 ‘Here I am catching a bird!’

- c. zàkí ʼbē-tṣṣ hēè
 Z come-while Prsntv
 ‘Here comes Zaki!’

If the scene to which the addressee’s attention is called is a resulting state rather than an ongoing process, Prsntv hēè is added to a participle (suffix -na), which here functions as a deverbal nominal (§4.2.3.1) with a possessor. Omitting hēè in (577a) does not result in a viable clause, which would require ‘be’ and a predicative participle (577b).

- (577) a. à fṣgṣ-nà-à / jéṅé-nà-à hēè
 3Sg sit-**Ppl**-Sg / descend-**Abstr**-Sg **Prsntv**
 ‘(Look!) There he/she is seated / having descended!’
- b. à hà jéṅé-nà
 3Sg be descend-Ppl
 ‘He/She is (having) descended.’

In true presentative clauses including those presented above, negation is not possible, and shifts to non-present time are only possible as part of a full-fledged narrative time shift.

10.2.4.6 Progressive (há = [à jéè])

The progressive ‘be VPing’ is expressed by a main clause with the sense ‘be on it’ followed by a sequential VP. 3Sg ‘it’ as complement of the postposition anticipatorily resumes the content of the sequential VP. Unlike the presentative, the progressive can be negated (578c).

- (578) a. ì hà= [à jéè] [bí ʼtāⁿ]
 3Pl be.Loc [3Sg **on**] [**Seq** ascend.Pfv]
 ‘They are ascending.’
- b. íj gá= [á jéè] [bí ʼtùgú-ú ʼjāā]
 1Sg be.Loc [3Sg **on**] [**Seq** meat-Sg eat.Pfv]
 ‘I am eating meat.’
- c. í tá= [á jéè] [bá= á ʼfùràⁿ]
 1Sg not.be.Loc [3Sg **on**] [**Seq** 3Sg sweep.Pfv]
 ‘I am not sweeping (it).’
- d. íj kúnj gà= [à jéè] [bí nàà sâⁿ]
 1Sg Past be.Loc [3Sg **on**] [**Seq** cow buy.Pfv]
 ‘I was buying a cow.’

- e. ì hà= [à]éè] [bá= á ‘tìⁿ]
 3Pl be.Loc [3Sg on] [Seq 3Sg look.for.Pfv]
 ‘They were looking for her.’ (2021-08 @ 01:27)

A textual example is 2021-08 @ 01:27.

10.3 Shift of reference time

10.3.1 Shift to past time viewpoint (kúⁿ)

Ordinary tense-aspect marking (perfective, present, future, progressive, stative) presupposes the perspective of the here-and-now of the speech event. The time interval of an event or situation that is described is automatically compared to the moment of speaking.

In narrative, an unfolding scenario may use the displaced “present” as the reference time. The shift is indicated by adding kúⁿ after the subject, preceding any post-subject inflectional particle or ‘be’. kúⁿ drops to kùⁿ after 3Sg à (and 3Pl ì). In combinations of third-person proclitic, kùⁿ, and a post-subject inflectional particle, the latter is L-toned (e.g. Ipfv ā kùŋ gà) unless re-raised by tone sandhi, as kùŋ gà behaves like a single level-toned word. With H-toned proclitics, a post-subject particle has been heard as L-toned before another H-tone, as in á kúŋ gá hóólò ‘you-Sg used to run’. However, it may be that the low pitch of gà in this combination is due to lack of stress. If so, the correct transcription structurally would be á kúŋ gá hóólò, with kúŋ gá again behaving like a single level-toned word.

Combinations with an H-toned proclitic (2Sg), an L-toned proclitic (3Sg), and ‘Seydou’ are in (579). The 2Sg combinations are transcribed with L-toned post-subject particles, but see the disclaimer in the preceding paragraph.

(579)	2Sg	3Sg	‘Seydou’	comment
a. ‘was/were (sw)’	á kúŋ gà	ā kùŋ gà	sèédù kúŋ gà	~ kúŋ ñá/ñà
‘was/were not (sb)’	á kún tà	ā kùn tà	sèédù kúŋ tà	~ kún dá/dà
b. perfective positive	á kú ⁿ	ā kù ⁿ	sèédù kú ⁿ	intransitive
c. perfective positive	á kú ⁿ ñà	à kù ⁿ ñà	sèédù kú ⁿ ñà	transitive
perfective negative	á kún tì	ā kùn tì	sèédù kún tì	~ kún ò
imperfective positive	á kúŋ gà	ā kùŋ gà	sèédù kúŋ gà	
imperfective negative	á kún tà	ā kùn tà	sèédù kúŋ dà	~ kún dà

The tonal distinction between kúⁿ (2Sg or ‘Seydou’) and kùⁿ (3Sg, also 3Pl) is clear before any of the nonzero particles shown in (579a,c). However, in the intransitive perfective positive, which lacks a post-subject inflectional particle (579b), Final Tone-Raising merges kùⁿ into kúⁿ before a

nonhigh tone (580a). The distinction kúⁿ versus kùⁿ is overt before /HL/-toned intransitive verbs (580b).

(580)	verb type	2Sg	3Sg	gloss
a.	/H/ /LHL/	á kú ⁿ ʰhēlē á kú ⁿ nùgû ⁿ	à kú ⁿ ʰhēlē à kú ⁿ nùgû ⁿ	‘__ had passed’ ‘__ had swum’
b.	/HL/	á kú ⁿ fòò	ā kù ⁿ fòò	‘__ had gone’

Perfective negative intransitive clauses are in (581).

(581)	verb type	2Sg	3Sg	gloss
a.	/H/ /LHL/	á kún tí ʰhēlē á kún tí nùgû ⁿ	ā kùn tí ʰhēlē ā kùn tí nùgû ⁿ	‘__ had not passed’ ‘__ had not swum’
b.	/HL/	á kún tì fòò	ā kùn tì fòò	‘__ had not gone’

Transitive perfective and perfective negative examples are in (582).

(582)	melody	2Sg	3Sg	gloss
a.	/H/ /LHL/	á kú ⁿ ɲá ʰsògò-ó ʰtōōrō á kún tí ʰsògò-ó ʰtōōrō	ā kùn ɲá ʰsògò-ó ʰtōōrō ā kùn tí ʰsògò-ó ʰtōōrō	‘had sold the goat’ ‘had not sold the goat’
	/LHL/	á kú ⁿ ɲá jàbá-à ʰtōōrō á kún tí jàbá-à ʰtōōrō	ā kù ⁿ ɲá jàbá-à ʰtōōrō ā kùn tí jàbá-à ʰtōōrō	‘had sold the onion’ ‘had not sold the onion’
b.	/L/ /HL/	á kú ⁿ ɲà ʰságà-á ʰtōōrō á kún tì ʰságà-á ʰtōōrō	ā kù ⁿ ɲà ʰságà-á ʰtōōrō ā kùn tì ʰságà-á ʰtōōrō	‘had sold the sheep’ ‘had not sold the sheep’
	/HL/	á kún ɲà básà-á ʰtōōrō á kún tì básà-á ʰtōōrō	ā kù ⁿ ɲà básà-á ʰtōōrō ā kùn tì básà-á ʰtōōrō	‘had sold the agama’ ‘had not sold the agama’

10.3.2 Past imperfective

The past imperfective describes either a formerly habitual eventuality (‘we used to hunt antilopes’), or one that was in progress as background to a separate foregrounded event (‘I was sweeping the place when they arrived’). It consists of the past-time morpheme kúⁿ, the Ipfv or IpfvNeg particle, and a VP that includes an Ipfv verb. Intransitive examples are (583a-b). kúⁿ drops

to kùⁿ after 3Sg and 3Pl proclitics. The Ipfv and IpfvNeg particles appear (after the nasal) as L-toned gà and dà, or gá and dá before a nonhigh tone by Final Tone-Raising.

- (583) a. ā ˈkùŋ gà hóólò-lò / ...
 " " gá ... / ˈtā-nū
 3Sg **Past** **Ipfv** run.Ipfv / ascend-Ipfv
 ‘He/She used to run/go up.’
- b. ā ˈkùŋ dà hóólò-lò / ...
 " " dá ... / ˈtā-nū
 3Sg **Past** **IpfvNeg** run.Ipfv / ascend-Ipfv
 ‘He/She didn’t use to run/go up.’

Transitive examples are in (584).

- (584) a. fánáá ŋgí kúŋ gà fúòⁿ sógò-lò
 before 1Pl **Past** **Ipfv** fonio cultivate.Ipfv
 ‘In the past we used to grow fonio.’
- b. fánáá ŋgí kún dá ˈkòròn-dòŋ-ò sógò-lò
 before 1Pl **Past** **IpfvNeg** cotton-bush-Sg cultivate.Ipfv
 ‘In the past we didn’t use to grow cotton.’ (< kórón-dóŋ-ó)

Textual examples contrast activities from the old days with those of today, e.g. ‘the way you used to VP’ 2021-01 @ 00:20, ‘women used to VP’ 2021-06 @ 05:59 & 06:02. The past marker is omitted when contextually clear, as in 2021-06 @ 05:27-05:32 (‘women used to fish’ etc.).

10.3.3 Past stative

kúⁿ can also be added to a stative to shift its time to the past. (585a-b) illustrates with a stative derived from a reflexive verb fógò/fógò-lò ‘sit’.

- (585) a. ā ˈkùŋ gà fógò-nà
 3Sg **Past** **Ipfv** sit-Ppl
 ‘He/She was sitting (=seated).’
- b. ā ˈkùŋ dà fógò-nà
 3Sg **Past** **IpfvNeg** sit-Ppl
 ‘He/She was not sitting (=seated).’

Textual example: ‘was lying down’ (= ‘was asleep’) 2021-15 @ 01:19.

Other semantically stative constructions are illustrated in (586).

- (586) a. íj kúnj gà [ʔnújù-ù nî]
 1Sg **Past** **be.Loc** [village-Sg Loc]
 ‘I was in the village.’ (< nùjù-ù)
- b. [hðó ʔkā] kúnj gá [íj gírìì]
 [house some] **Past** **be.Loc** [1Sg Poss]
 ‘I had a house.’
- c. íj kúnj ʔgēlē ʔcēē-sōgō-yà-à
 1Sg **Past** **be.Cop** cultivate-Agent-Sg
 ‘I used to be a farmer.’
- e. íj kúnj gá ʔjìrì-yà-à tódò
 1Sg **Past** **Ipfv** heal-Agent-Sg **know.Stat**
 ‘I used to know the healer.’ (< jírí-yá-á)

Textual example: ‘had an awl’ (2021-15 @ 01:26.

10.3.4 Past perfect

To indicate that an event had already happened at a reference time in the past, the Past morpheme is added to a perfective clause. Intransitive examples below are for 3Sg subject (587a-b), 2Sg subject as proxy for H-toned pronominals (588a-b), and ‘Seydou’ as subject (589a-b) representing nonpronominal NPs.

- (587) a. ‘he/she had ...’
 ā kúnj fódò ‘... gone’
 ā kúnʰ hólò ‘... run’
 à kúm ʔbyē ‘... come’
- b. ‘he/she had not ...’
 ā kún tí fódò ‘... gone’
 ā kún tí hólò ‘... run’
 à kún tí ʔbyē ‘... come’
- (588) a. ‘you-Sg had ...’
 á kúnj fódò ‘... gone’
 á kúnʰ ʔhólò ‘... run’
 á kúm ʔbyē ‘... come’

- b. ‘you-Sg had not ...’
 á kún tì fódò ‘... gone’
 á kún tì hóólò ‘... run’
 á kún tí ‘byē ‘... come’

- (589) a. ‘Seydou had ...’
 sèédù kún fódò ‘... gone’
 sèédù kún hóólò ‘... run’
 sèédù kún byē ‘... come’

- b. ‘you-Sg had not ...’
 sèédù kún tì fódò ‘... gone’
 sèédù kún tì hóólò ‘... run’
 sèédù kún tí ‘byē ‘... come’

This construction is specifically past perfect. Translation equivalents of present perfect ‘has gone’ etc. can be produced by combining perfective clauses with adverb kábàⁿ ‘already’ (§19.3.3) or with sequential VP bí ‘kīlā ‘already’ (§15.2.11).

10.3.5 Future-in-past (‘was/were about to VP’)

The future-in-past means ‘was/were going to VP’ or ‘was/were about to VP’. It makes use of the same future particle bélé ~ bílí that occurs in the regular future construction (positive gá bélé, negative tá bélé). Even the positive future-in-past (590a) does not imply that the event actually took place.

- (590) a. ā ‘kùŋ gà bèle fódò / ...
 " " " bélé ... / ‘hēⁿ
 3Sg Past Ipfv **Fut** go.Pfv / fall.Pfv
 ‘He/She was about to go/fall.’ or ‘He/She was going to go/fall.’

- b. ā ‘kùn tà bèle fódò / ...
 " " " bélé ... / ‘hēⁿ
 3Sg Past Ipfv **Fut** go.Pfv / fall.Pfv
 ‘He/She was not about to go/fall.’ or ‘He/She was not going to go/fall.’

The future-in-past construction is the likely source of the slightly contracted counterfactual consequent construction (§16.4.1).

10.4 Deontic modals

Deontic modals are imperatives (including prohibitives) and hortatives.

10.4.1 Imperatives and prohibitives

All imperatives and prohibitives are based on the Pfv stem of the verb. The inflectional morphemes that occur with them, and examples using ‘come’ and ‘go’ along with transitive ‘shatter it!’, are in (591). In addition to the basic proclitics 2Sg á and 2Pl í which occur in prohibitives, and 3Sg object à (ā) in the example ‘shatter it!’, the key deontic morphemes are plural-subject ká ~ kà and prohibitive mání ~ mànì or variant míní ~ minì.

(591) Imperatives and prohibitives

category	morpheme	‘come!’	‘go!’	‘shatter it!’
a. positive				
Sg subject	(none)	byé	ʃòò	ā ‘kàlà
Pl subject	ká	ká ‘byē	ká ʃòò	ká = á ‘kàlà
b. negative (prohibitive)				
Sg subject	mání	(á) mání ‘byē	(á) mání ʃòò	(á) máná = á ‘kàlà
Pl subject	mání kà, mànì	í mání ‘byē ~ kà mànì ‘byē	í mání ʃòò ~ kà mànì ʃòò	í máná = á ‘kàlà kà màná = á ‘kàlà

Details are given in the following subsections. For indirect commands and imprecations, see §10.4.3 below. For quoted deontics see §17.1.5.1-2.

10.4.1.1 Imperative (bare Pfv for singular, ImprtPl ká ~ kà)

The Pfv stem is used, without an overt subject and with no post-subject inflectional particle.

(592)	Pfv/Ipfv	Imprt (Sg)	gloss
a. /H/ melody			
	tá ⁿ /tá-ná	tá ⁿ	‘ascend!-2Sg’
	byé/bé-lé	byé	‘come!-2Sg’
	lós/ló-ló	lós	‘enter!-2Sg’
	kálá(-lá)	ā ‘kàlà	‘shatter it!-2Sg’
	tógó(-ló)	tógó	‘stay!-2Sg’
	pírindá(-lá)	pírindá	‘fly away!-2Sg’

b. /LHL/ melody		
gùlù ⁿ /gùlù-nù	gùlù ⁿ	‘do long time!-2Sg’
c. /HL/ melody		
ʃóò/só-lò	ʃóò	‘go!-2Sg’
jéŋè(-nè)	jéŋè	‘descend!-2Sg’
tísò(-lò)	tísò	‘sneeze!-2Sg’

For plural addressee, imperative plural (“ImprtPl”) ká precedes the VP.

(593) singular addressee	plural addressee	gloss
byé	ká ‘byē	‘come-2Pl!’
ʃóò	ká ʃóò	‘go-2Pl!’
ā ‘kálá	ká = á ‘kàlà	‘shatter-2Pl it!’
sógó-ó ‘tōōrō	ká ‘sògó-ó ‘tōōrō	‘sell-2Pl a/the goat!’

In intransitive imperatives for singular addressee, the verb is clause-initial. Transitive imperative clauses begin with the object unless imperative plural ká is present.

Imperatives of reflexive verbs require a 2Sg or 2Pl object pronominal preceding the verb. A 2Pl reflexive imperative begins with kà which contracts with tone-inverted 2Pl object ì as kì = ì.

(594) Imprt (Sg)	Imprt (Pl)	gloss
á fógò	kì = ì fógò	‘sit down!’
á táà	kì = ì táà	‘stop!’

That the imperatives in (594) are true reflexives is shown by the overtly reflexive (3ReflSg) morphology of the quoted imperative in (595).

(595) ā	wò	[záki	bí=	ì	fógò]
3Sg	said	[Z	Sbjn	3ReflSg	sit.Pfv]
‘He/She told Zaki to sit down.’					

10.4.1.2 No conjoining or juxtaposition of two imperatives

If the command involves two different verbs, the second is expressed as a subjectless sequential VP or as a subjunctive clause with overt 2Sg or 2Pl subject proclitic. (596a-b) show how two same-actor events are combined in indicative contexts, using the sequential morpheme bì. The

corresponding commands (596c-d) begin with simple imperatives, which are followed by sequential VPs or by subjunctive clauses.

- (596) a. [ā ʔjèè] [bí jéŋè]
 [3Sg eat.Antip.Pfv] [Seq descend.Pfv]
 ‘He/She ate and (then) went down.’
- b. [ŋ gá ʔjēē-lē] [bí jéŋè]
 [3Sg Ipfv eat.Antip.Pfv] [Seq descend.Pfv]
 ‘He/She will eat and (then) go down.’
- c. jéé [Ø bí jéŋè]
 " [á " "
 eat.Antip.Pfv [(2Sg) Seq/Sbjn descend.Pfv]
 ‘Eat-2Sg and (then) go down!’
- d. ká ʔjēē [Ø bí jéŋè]
 " " [í " "
 ImprtPl eat.Antip.Pfv [(2Pl) Seq/Sbjn descend.Pfv]
 ‘Eat-2Pl and (then) go down!’

10.4.1.3 Prohibitive (mání ~ míní)

The prohibitive (negative imperative) has its own post-subject inflectional particle mání ~ míní. In classic prohibitive sense, the particle is preceded by a second person pronominal. Singular addressee prohibitives optionally omit the 2Sg pronominal. For plural addressee, the particle is preceded by either the regular 2Pl í or the special plural-addressee imperative particle (elsewhere ká). The latter combines with the particle as L-toned kà mànì ~ kà mìnì before tone sandhi, suggesting fusion into a single word (e.g. kà-mànì). The formulae are therefore those in (597).

- | (597) | prohibitive (Sg) | prohibitive (Pl) | gloss |
|-------|----------------------------------|--|---------------|
| a. | (á) mání ʔbyē
~ (á) míní ʔbyē | í mání ʔbyē
~ í míní ʔbyē
~ kà mànì ʔbyē
~ kà mìnì ʔbyē | ‘Don’t come!’ |
| b. | (á) mání ʔòò
(á) míní ʔòò | í mání ʔòò
í míní ʔòò
kà mànì ʔòò
kà mìnì ʔòò | ‘Don’t go!’ |

c.	(á) mání ñ wágà	(í) mání ñ wágà	‘don’t kill me!’
	(á) míní ñ wágà	(í) míní ñ wágà	
		kà mání ñ wágà	
		kà míní ñ ‘wágà	

Prohibitive clauses that have an open-ended subject function as negative counterparts to (positive) subjunctive clauses with bí. The tonal patterns suggest that mání (~ míní) is treated in tonal ablaut as an /H/-melodic verb; see §10.4.3.1 for data. A corollary of this is that ImprtPl kà in prohibitives tone-drops the following /H/-melodic “verb” in the fashion of 3Sg à and 3Pl ì subjects.

10.4.1.4 Tonal interactions between object and transitive imperative

The tonal interactions involving a clause-initial object and a transitive imperative are the same as those that occur in regular transitive clauses (with subjects and post-subject inflectional morphemes). /H/-melodic verbs (‘wash’) drop to L-toned after 3Sg and 3Pl proclitics, and are downstepped to M after nonpronominal NPs. Contour melodies (‘hide’, ‘wait for’) are stable throughout. /LHL/-melodic verbs that begin with two L-toned syllables are subject to Initial H-Ablaut; other /LHL/-melodic verbs have stable tones.

(598)	jíní ‘wash’ /H/	lógò ‘hide’ /HL/	hòrê ⁿ ‘wait for’ /LHL/
1Sg	... ñ jíní	... ñ lógò	... ñ hòrê ⁿ
1Pl	... ñgì jíní	... ñgì lógò	... ñgì hòrê ⁿ
3Sg	... á jìnì	... á lógò	... á hòrê ⁿ
3Pl	... í jìnì	... í lógò	... í hòrê ⁿ
‘Seydou’	... sèèdú ‘jìnì	... sèèdù lógò	... sèèdú hòrê ⁿ

The same tonal interactions occur in prohibitives and hortatives.

10.4.1.5 hòⁿ ‘here, take this!’

When handing something to another person, the (mild) imperative ‘here, take this!’ is the one-syllable utterance hòⁿ ~ hwòⁿ. That it is imperative is shown by the plural-addressee form ká h(w)òⁿ. hòⁿ ~ hwòⁿ cannot be preceded by an object (or subject). It is optionally followed by a dative NP expressing the item transferred (599). There is no negative counterpart.

- (599) h̀n [mááŋ̀d̀ró nà]
 take! [mango Dat]
 ‘Here, take a/the mango!’

10.4.2 Hortatives

10.4.2.1 Hortative positive

The first inclusive plural hortative (‘let’s VP!’) can be expressed either by a dedicated hortative post-subject morpheme *ŋá* (subject to contraction) or by subjunctive *bí* (§17.3.1). A subject is obligatory. The subject in either case is 1Pl, with no indexing of addressee number. The verb is in Pfv form.

Simple intransitive examples are in (600). (600a) shows the specifically hortative post-subject morpheme *ŋá*. The high-frequency 1Pl combination *ŋí ŋá* very often contracts to *ŋá = á* (600b). The alternative construction with subjunctive *bí* is in (600c).

- (600) a. *ŋí ŋá* *ʃòò / ʔt̩ḡ̩ / nùḡ̩*ⁿ
 1Pl **Hort** go.Pfv / stay.Pfv / swim.Pfv
 [= (a)]
- b. *ŋá = á* *ʃòò / ʔt̩ḡ̩ / nùḡ̩*ⁿ
 1Pl **Hort** go.Pfv / stay.Pfv / swim.Pfv
 ‘Let’s go/stay/swim!’
- c. *ŋí bí* *ʃòò / ʔt̩ḡ̩ / nùḡ̩*ⁿ
 1Pl **Sbjn** go.Pfv / stay.Pfv / swim.Pfv
 [= (a)]

Transitive hortative clauses are in (601). By using the contraction *ŋá = á* (601a) or the subjunctive (601b), ambiguity with the perfective positive indicative is avoided. The latter would be *ŋí ŋá*

- (601) a. *ŋá = á* *ʔtùḡ̩-ú* *ʔjāā / ʔtōōrō*
 1Pl **Hort** meat-Sg eat.Pfv / sell.Pfv
 ‘Let’s eat/sell (the) meat!’ (< *tùḡ̩-ú*)
- b. *ŋí bí* *ʔtùḡ̩-ú* *ʔjāā / ʔtōōrō*
 1Pl **Sbjn** meat-Sg eat.Pfv / sell.Pfv
 [= (a)]

For hortative *ŋá* as an alternative to subjunctive *bí* in ‘until ...’ clauses in future-hypothetical contexts, see §17.3.3.

10.4.2.2 Hortative negative

The hortative negative combines the prohibitive (i.e., negative imperative) post-subject morpheme *mání* (~ *míní*) with 1Pl subject. There is no specifically hortative morpheme here, nor is the subjunctive morpheme present.

- (602) a. *ngí mání ʃóò / nùgûⁿ*
 1Pl Proh go.Pfv / swim.Pfv
 ‘Let’s not go/swim!’
- b. *ngí mání ʹtōgō [hðó nìŋî]*
 1Pl Proh stay.Pfv [house inside]
 ‘Let’s not stay in the house!’

A transitive example is (603).

- (603) *ngí mání ʹtùgú-ú ʹjāā / ʹtōōrō*
 1Pl Proh meat-Sg eat.Pfv / sell.Pfv
 ‘Let’s not eat/sell (the) meat!’

10.4.3 Open-ended subjects with deontics

10.4.3.1 Wishes with open-ended subject

A formal wish, blessing, curse, or other imprecation is expressed as a positive subjunctive clause (§17.3.1) with *álá* ‘God’ as subject (604a-b). The negative counterpart is a prohibitive *mání* (~ *míní*) with ‘God’ as subject (604c).

- (604) a. *álá bí ŋgì híêⁿ*
 God **Sbjn** 1Pl help.Pfv
 ‘May God help us!’
- b. *álá mání bááʃî ʹtāāⁿ [ŋgì má]*
 God **Proh** trouble do.Pfv [1Pl Cust]
 ‘May God not make trouble to us!’

The full range of subjects can occur in a more general, less formal wish (or indirect command) construction. 3Sg *à* and 3Pl *ì* subjects have their usual tone-dropping effect on following words, resulting in L-toned *bì* and *màni*, which can then be secondarily raised to *bí* and *mání* before L or

M tone by Final Tone-Raising (605a-c). The structure is identical to that of 1Pl hortatives. The exhortative particle *yálà* expressing a wish can be preposed.

- (605) a. *à bí ʔtāⁿ / ...*
à bì ... / jéŋè
 3Sg **Sbjn** ascend.Pfv / descend.Pfv
 ‘May he/she ascend/descend!’
- b. *ā mání ʔtāⁿ / ...*
ā mანი ... / jéŋè
 3Sg **Proh** ascend.Pfv / descend.Pfv
 ‘May he/she not ascend/descend!’
- c. *sèédù bí ʔbyē*
 S **Sbjn** come.Pfv
 ‘May/Let Seydou come!’

Examples like (605a-b) with open-ended subjects can be converted into formal wishes (with ‘God’ as subject) by causativizing the verb (606).

- (606) *álá bá= á ʔtā-nī*
 God Sbjn 3Sg ascend-Caus.Pfv
 ‘May God have him/her ascend!’

These wishes have the same form as quoted imperatives (jussives), as in ‘I told Seydou (not) to come’. See §17.1.5.1 for this construction.

The tonal forms of nouns of various melodic classes as subjects before prohibitive *mání* and subjunctive *bí* are presented in (607).

- | (607) | melody | noun | gloss | prohibitive | subjunctive |
|-------|--------|------------------------|---------|---------------------------------|--------------------------------------|
| a. | /H/ | sógó-ó | ‘goat’ | sógó-ó <i>mání</i> ... | sógó-ó <i>bí</i> ... |
| b. | /L/ | sàgà-à | ‘sheep’ | sàgà-à ʔmānī ... | sàgà-à <i>bí</i> ... |
| c. | /HL/ | básà-à | ‘agama’ | básà-à ʔmānī ... | básà-à <i>bí</i> ... |
| d. | /LHL/ | bà ⁿ vúlà-à | ‘hat’ | bà ⁿ vúlà-à ʔmānī... | bà ⁿ vúlà-à <i>bí</i> ... |

The prohibitive morpheme induces Final Tone-Raising on preceding nouns in (607b-d). This is clearest with /L/-melodic sheep (607b), where the tonal distinction between *sàgà-à ʔmānī* and *sàgà-à bí* is unmistakable. This implies that *mání* is downstepped to ʔmānī after nouns whose melodies contain an L-tone, triggering Final Tone-Raising.

10.4.3.2 First-person subject with deontics

This construction occurs when the speaker is unsure whether the addressee wants the speaker to do something. It functions pragmatically as a question, but overt interrogative marking is optional. The 1Sg subject is optionally present.

(608) a. (ń) bí ʼbyē [kí ʼtēè tîⁿ] (wâ)
(1Sg) **Sbjn** come.Pfv [Inst tea under] (Q)
‘Shall I bring the tea?’ (local French: *d’amener le thé?*)

b. (ń) bí ʃòò wôⁿ (wâ)
(1Sg) **Sbjn** go.Pfv there.Def (Q)
‘Shall I go there?’

11 Clause, VP, and predicate structure

11.1 Clausal constituents

Constituent order is maximally S-infl-O-V-X. There is no overt subject in imperatives. The post-subject “infl” position is empty in perfective positive intransitive main clauses and in imperatives. There is a single preverbal object slot; if a second “object” is present it must follow the verb as part of the residual X, which also includes adverbs.

(609a) is S-(infl)-V-Adv with zero inflection marker (shown here as \emptyset but usually omitted in transcriptions). (609b) is S-infl-O-V-Adv. (609c) is S-infl-O-V-PP. The negative sentence (609d) is S-infl-V-PP.

- (609) a. sèédú \emptyset ʼbyē dúgò-ò-nì
 S (Pfv) come.Pfv yesterday
 ‘Seydou came yesterday.’
- b. sèédù ḡá ʼsáǵà-à wáǵà dúgò-ò-nì
 S Sbj/Obj sheep-Sg kill.Pfv yesterday
 ‘Seydou killed (=slaughtered) the sheep-Sg yesterday.’
- c. \emptyset ḡá wári-í ʼlṣṣ [sèédú ʼlà]
 1Sg Sbj/Obj money-Sg give.Pfv [money Dat]
 ‘I gave (the) money to Seydou.’
- d. sèédù tí ʼbyē [kí ʼtēè tíŋ]
 S PfvNeg come.Pfv [with tea under]
 ‘Seydou didn’t bring (the) tea.’

11.1.1 Subjects

11.1.1.1 Subjects in indicative main clauses

There is no difference in form for nonpronominal NPs in subject versus object function. Nevertheless, it is easy to distinguish subjects from objects on the basis of their linear position and some other properties.

Subjects, both pronominal and noun-headed, occur in a fixed clause-initial position. Except in imperatives, an overt nonzero subject is obligatory in main clauses. Subjects are preceded only by pre-clausal elements of the types listed in (610).

- (610) a. yálà ‘whether’, ní ‘if’, ñgàà ‘but’, etc.
 b. temporal adverbials
 c. topicalized NPs and adverbials

Temporal adverbials can also occur clause-finally, so when they precede subjects they are most likely topical, establishing a general temporal setting for what follows.

Subjects are immediately followed by any of a number of inflectional morphemes, marking aspect and polarity for indicatives (611a) and some modal elements (611b).

(611) Post-subject inflectional particles

a. indicative

há (~ gá)	imperfective positive
tá (~ dá)	imperfective negative
tí (~ dí)	perfective negative
(zero)	perfective positive (intransitive)
ṅá	bidirectional case marker (perfective positive transitives)

b. bí subjunctive

mání prohibitive

Singular-addressee imperatives have neither an overt subject nor an overt modal particle. Plural-addressee imperatives have only a morpheme ká ~ kà, glossed as “ImprtPI” in interlinears, preceding the VP. The ImprtPI morpheme does not resemble any pronoun and is best analysed as an addressee-number marker for deontics. Prohibitives (negative imperatives) have optional true subject pronominals 2Sg á and 2Pl í before the negative morpheme, but ImprtPI ká ~ kà often replaces 2Pl í in this construction. See §10.4.1-2 for more on deontic modals.

“Subject” as a syntactic category is relevant to anaphora. Reflexive objects and possessors, which have distinctive forms when the antecedent is third person, are normally coindexed to clausemate subjects (§18.1).

Since reflexive objects can occur in imperative as well as indicative clauses, the preponderance of evidence supports recognition of imperative subjects, even if covert.

The absence of a subject is also relevant to the morphosyntax. Sequential VPs, which lack overt subjects, play an important role in multiverb constructions (§15.2).

11.1.1.2 Temporal and meteorological collocations

Transitions between day and night are expressed by subject-verb collocations that only make sense as units. In some cases it is not possible to meaningfully gloss the individual words, so parentheses are used in interlinears.

Daybreak (first light) is described by jíⁿ ~ jíní (without suffix) and the verb kélé(-lé) (612). jíⁿ ~ jíní is obscurely related to the noun jíṅ-ó ‘year’. kélé(-lé) is not elsewhere attested in this form

(with initial k, voicing to g after a nasal), but it is etymologically identical to hélé(-lé) ‘pass, pass by’.

- (612) a. jíŋ ʼgēlē
 jíní ʼkēlē
 (daybreak) day.break.Pfv
 ‘Day has broken’ (first light)
- b. jín tí ʼkēlē
 (daybreak) PfvNeg day.break.Pfv
 ‘Day has not (yet) broken.’
- c. jíŋ gá ʼkēlē-lē
 (daybreak) Ipfv day.break-Ipfv
 ‘Day breaks (regularly).’

The antonymic expression ‘night fall’ does have gùlù-ù ‘night’ as subject, but oddly the verb is túⁿ/tú-nú, which elsewhere means ‘disappear, get lost’. Perhaps the phrasing of this formula has been reduced from an original causative “night has made it (=the day, the world) disappear”.

- (613) a. gùlù-ú ʼtūⁿ
 night-Sg disappear.Pfv
 ‘Night has fallen.’
- b. gùlù-ù tí ʼtūⁿ
 night-Sg PfvNeg disappear.Pfv
 ‘Night has not (yet) fallen.’
- c. gùlù-ù há ʼtū-nū
 night-Sg Ipfv disappear-Ipfv
 ‘Night falls (regularly).’

kùô ~ kùò ‘sun’ (monophthongal variant kòô ~ kòò) has its own collocations. The verbs make sense semantically. For sunrise/dawn, the verb is ‘get up, arise’ (i.e. at dawn) or ‘exit’ (i.e. ‘come out, emerge’) with a wider time span.

- (614) a. kùò cíè
 sun get.up.Pfv
 ‘The sun has arisen (at dawn).’
- b. kùó ʼbāgī
 sun exit.Pfv
 ‘The sun has come out.’

The setting sun “falls.”

- (615) kùó ʼhēēⁿ
sun fall.Pfv
‘The sun has set.’

The mid-day sun “boils,” like water.

- (616) kùó ʼgūlē
sun boil.Pfv
‘The sun is blazing (at its peak).’

háámúná-á ‘rainy season’ (roughly June to September) is the most distinctive season of the year. It “enters” around June and “passes” around September (617a-b). The same verbs (‘enter’ and ‘pass’) are used with káwlá-á ‘cold season, winter’ (December to February) and fíndání-í ʼsàṅà-à ‘hot season’.

- (617) a. háámúná-á ʼlṣṣ
rainy.season enter.Pfv
‘The rainy season has entered (=begun).’
- b. háámúná-á ʼhēlē
rainy.season pass.Pfv
‘The rainy season has passed (=ended).’

The rainy season sharply raises the water level in the river and floods the low-lying plains. Then it recedes in the autumn. The floodwaters “enter” (618a) and then “dry out” (6184b). An alternative to the latter is the verb hóló(-ló). It is here glossed ‘ebb’, but it not otherwise attested as a verb. It may be related, at least by secondary association, to the noun hólò-ò ‘salt’. By the time the floodwaters recede, they have become moderately “salty” by absorption of deposits in the underlying earth.

- (618) a. júú ʼlṣṣ
water enter.Pfv
‘The floodwaters have entered.’
- b. júú gògî
water dry.out.Pfv
‘The floodwaters have dried out.’

- c. júú ʼhɔ̃lɔ̃
 water (ebb).Pfv
 ‘The floodwaters have ebbed (receded).’

The primary agricultural crop in the area is rice, and its harvest around December is a major landmark in the year. Some relevant nouns are in (619). sáŋà-à means ‘(point in) time’.

- (619) cíé-sógò-ò ‘agriculture, farm work’ cìè ‘field’, sógò ‘cultivate.VblN’
 cíé-sógò-sáŋà-à ‘agricultural season’
 máánú-kwárí-sáŋà-à ‘rice harvest’ màànù-ù ‘rice’, kwárí ‘hit.VblN’
 máánú-húú-sáŋà-à ‘rice harvest’ húú ‘cut.VblN’

Ambient temperature extremes are phrased with the nouns mùnòŋ-ò ‘cold (n)’ (620a) and fìndánì-ì ~ fìndénì-ì ‘heat, hotness’ (620b). mùnòŋ-ò can also mean ‘fever, malaria’ which is thought to peak during the cold months. It is also possible to use ‘heat’ or a variant of ‘cold (n)’ with participial predicate báǵí-ná ~ báý-ná ‘having exited (=emerged)’ (620c).

- (620) a. mùnòŋ-ò há ʼwɔ̃ⁿ
 cold(n)-Sg be.Loc there.Def
 ‘It is cold (out) (there).’ (French *il fait froid*)
- b. fìndánì-ì há ʼwɔ̃ⁿ
 heat-Sg be.Loc there.Def
 ‘It is hot (out).’ (French *il fait chaud*)
- c. múúú-ù há ʼbāǵí-nā
 cold-Sg be exit-Ppl
 ‘It’s cold (out).’

Expressions involving rain have as subject the noun hàbáà ‘cloud’, here understood as ‘rain cloud’. It “comes” or else “gets up” (621a), and then “stands/stops,” the latter either intransitive or reflexive (621b-c). There is a special verb for ‘drizzle’ (621d).

- (621) a. hàbáá ʼbyē / céè
 cloud come.Pfv / get.up.Pfv
 ‘It rained.’
- b. hàbáà táà
 sky stand.Pfv
 ‘The rain has stopped.’

- c. hàbáà ñí= ì táà
 sky Sbj/Obj 3ReflSg stand.Pfv
 ‘The rain has stopped.’
- d. hàbáà há ‘[mūsū-mūsū]-lū
 cloud Ipfv [drizzle]-Ipfv
 ‘It’s drizzling.’

The subject in (622) is tóŋ-ó ‘wind’. The same collocations occur with fórókò-ò ‘dust’, i.e. ‘airborn dust, dust storm’.

- (622) a. tóŋ-ó cíè
 wind-Sg get.up.Pfv
 ‘The wind has arisen/picked up.’
- b. tóŋ-ó (ñí= ì) táà
 wind-Sg (Sbj/Obj 3ReflSg) stand.Pfv
 ‘The wind has stopped/died down.’

11.1.1.3 Affliction predications

Afflictions such as hunger, thirst, and most named diseases or discomforts are subjects of locational ‘be’ in (623), with the afflictee appearing in a custodial PP.

- (623) a. hójó-ó há [sèèdú ‘mà]
 hunger-Sg be.Loc [S Cust]
 ‘Seydou is hungry.’
- b. mènú-ù há [sèèdú ‘mà]
 thirst-Sg be.Loc [S Cust]
 ‘Seydou is thirsty.’
- c. múnòŋ-ò há [sèèdú ‘mà]
 malaria-Sg be.Loc [S by]
 ‘Seydou has (=suffers from) measles.’

However, simple ‘be sick’ is expressed in other ways, with the sufferer as subject. One option is the intransitive verb góbò(-lò) ‘get sick’ (624a) or its participle góbó-nà.

- (624) a. sèédù há góbò-lò
 S Ipfv get.sick-Ipfv
 ‘Seydou (often) gets sick.’

- b. sèédù há ʼgɔ̃bɔ̃-nà
 S be be.sick-Ppl
 ‘Seydou is sick.’

A very common option for sickness is to negate the stative verb kɛ́éndé ‘be healthy’. (625a-b) are positive and negative versions, the latter meaning ‘be sick’. There is an inchoative verb kɛ́éndé-yá/kɛ́éndé-yá-lá ‘get healthy, recuperate’.

- (625) a. sèédú ʼkɛ́éndɛ̃
 S be.healthy
 ‘Seydou is in good health.’
- b. sèédù tá ʼkɛ́éndɛ̃
 S IpfvNeg be.healthy
 ‘Seydou is sick (“not healthy”).’

For ‘fever’ a different construction is used. Possessed ‘body’ is subject of a participial predicate based on ‘hot’.

- (626) [ā tũŋ-ð] há ʼgũlɛ̃-nā
 [3Sg body-Sg] be be.hot-Ppl
 ‘His/Her body is hot.’ (= ‘He/She has a fever.’)

11.1.1.4 Emotional state predications

The verb néŋɛ̀(-nè) can mean ‘be angry’ or (with a body part as subject) ‘hurt, be painful’. In the anger sense, a PP with tîⁿ (§8.2.10.1) may be added to specify the target of anger.

- (627) sèédù néŋɛ̀ ([ŋgì tîⁿ])
 S get.angry.Pfv ([1Pl under])
 ‘Seydou got angry (with us).’

A possessed form of bóri-í ‘heart (emotional center)’ is the subject of various verbs and other predicates that describe emotional states.

- (628) a. [sèédú ʼbòrì-ì] há káfî-nà
 [S heart-Sg] be be.angry-Ppl
 ‘Seydou is upset (angry).’ (káfî < Bambara is only attested with bóri-í)

- b. [sèèdú ʼbòrì-ì] há ʼgūlē-nā
 [S heart-Sg] be boil-Ppl
 ‘Seydou is seething (with anger).’
- c. [sèèdú ʼbòrì-ì] há túrì-lì
 [S heart-Sg] Ipfv tremble-Ipfv
 ‘Seydou is shaking (with fear).’
- d. [sèèdú ʼbòrì-ì] há néṅè-nà
 [S heart-Sg] be be.angry-Ppl
 ‘Seydou is angry.’
- e. [sèèdú ʼbòrì-ì] húrù
 [S heart-Sg] be.cut.Pfv
 ‘Seydou was terrified.’
- f. [ā ʼbòrí-í] ʼsāgā
 [3Sg heart-Sg] lie.down.Pfv
 ‘He/She has calmed down (after being angry).’

Euphoria and dysphoria can be expressed by possessed *nísò-ò* ‘emotion, mood’ as subject, combined with a taste predicate (‘be sweet/delicious’ or ‘be foul/bad-tasting’).

- (629) a. [à nísò-ò] lēⁿ
 [3Sg mood-Sg] be.sweet.Stat
 ‘He/She is happy.’
- b. [à nísò-ó] ʼlūmā-yā
 [3Sg mood-Sg] sweet-Inch.Pfv
 ‘He/She has become overjoyed.’
- c. [à nísò-ò] sóná-yà
 [3Sg mood-Sg] unpleasant-Inch.Pfv
 ‘He/She has become devastated (very sad or disappointed).’

tímíná-á ‘mood, state of encouragement’ can also combine with taste predicates.

- (630) [ā ʼtìminà-à] lēⁿ
 [3Sg encouragement] be.sweet.Stat
 ‘He/She is happy.’ or ‘He/She is encouraged.’

11.1.1.5 Bodily emission predications

Ordinary ‘X bleed’ is phrased as “blood exit (v)” plus a custodial PP (631).

- (631) jéérè-é ‘bāgī [sèèdú ‘mà]
 blood-Sg exit.Ipfv [S Cust]
 ‘Seydou is bleeding.’ (blood is oozing out slowly)

Nosebleeds are described with possessed ‘nose’ (múnú-ú) as subject and reflexive verb ‘be shattered’.

- (632) [ā ‘mùnù-ù] ɲí= ì kálá
 [3Sg nose-Sg] Sbj/Obj 3ReflSg shatter.Pfv
 ‘His/Her nose broke (=is bleeding).

There is a dedicated intransitive verb wóǒǒ(-lì) ‘sweat, perspire’. ‘Foam (up)’ is expressed by fóórò(-lò) ‘become swollen’ with ‘foam, froth’ as subject.

- (633) a. sèédù wóǒǒ
 S sweat.Pfv
 ‘Seydou perspired.’
- b. téé-múúsi-ì fóórò
 tea-foam-Sg swell.Pfv
 ‘The tea foamed up.’ (< French *mousse*)

Foul bodily excretions are expressed by reflexive verbs.

- (634) a. ā ɲí= ì sínì
 3Sg Sbj/Obj 3ReflSg urinate.Pfv
 ‘Seydou urinated.’
- b. ā ɲí= ì húlò
 3Sg Sbj/Obj 3ReflSg defecate.Pfv
 ‘Seydou defecated.’
- c. ā ɲí= ì ‘cūṣⁿ
 3Sg Sbj/Obj 3ReflSg fart.Pfv
 ‘Seydou farted.’

Other emissions consisting mainly of sound are expressed by dedicated intransitive verbs.

- (635) a. ā ʔgírìndì
 3Sg belch.Pfv
 ‘He/She belched (burped).’
- b. ā ʔyēgēndù
 3Sg hiccough.Pfv
 ‘He/She hiccoughed.’ (< yégēndù)
- c. ā ʔgwòò
 3Sg weep.Pfv
 ‘He/She wept.’
- d. ā ʔkùùrù
 3Sg shout.Pfv
 ‘He/She shouted.’
- e. ā ʔḡùùndà (~ ʔùùndà)
 3Sg groan.Pfv
 ‘He/She groaned/moaned.’

‘Lay an egg’ can be expressed with a similar reflexive verb (636a), or by a transitive ‘put’ verb with ‘egg’ as overt object (636b).

- (636) a. sùbáà ḡí= ì fálà
 chicken Sbj/Obj 3ReflSg lay.egg
 ‘The hen has laid (an egg).’
- b. sùbáà ḡá ʔfálà-á ʔḡēē
 chicken Sbj/Obj egg-Sg put.down.Pfv
 ‘The hen has laid an egg.’ (< fálà-à)

11.1.1.6 Conveyance (motion verb plus instrumental)

Conveyance of an entity is expressed by a motion verb plus an instrumental PP in comitative function (§8.1.3.1). The usual motion verbs in this construction are ‘come’ (637a) and ‘go’ (637b). Other motion verbs can be accommodated by this flexible construction, as with ‘ascend’ in (637c).

- (637) a. zàkí ʔbyē [kí ʔtēè tîⁿ]
 Z come.Pfv [Inst tea under]
 ‘Zaki brought some/the tea.’

- b. ì ʃòò [kí ˈtèè tíŋⁿ] [í-yèm mángè]
 3Pl go.Pfv [Inst tea under] [3ReflPl chez]
 ‘They took the tea to their home.’
- c. ā tàn [kí ˈtèè tíŋⁿ]
 3Sg ascend.Pfv [Inst tea under]
 ‘He/She brought/took the tea up.’

Textual examples (among many) include ‘go with X’ = ‘convey X’ 2021-08 @ 01:35 and ‘come with X’ = ‘bring X’ 2021-01 @ 04:10.

11.1.2 Transitives and ditransitives

The semantic range of transitive verbs resembles that of English. Simple transitives include verbs of impact and creation (‘hit’, ‘cut’, ‘make/fix’), perception (‘see’, ‘hear’), acquisition (‘get’), and transportation (‘carry’).

The inflectable ‘say’ verb, ʃéé/sé-lé (§10.1.2.3, §17.1.3) is transitive. It has an obligatory 3Sg pronominal object (‘say it’) even when followed by quoted matter. There is also a ‘said’ quasi-verb wó ~ wò introducing quoted matter, but it is not a true verb (§17.1.2).

For predicates of conveyance (‘bring X’, ‘take/convey X’) expressed as ‘come [with X]’ and ‘go [with X]’, see §11.1.1.6 above.

11.1.2.1 Direct objects and the bidirectional case marker (BCM)

The S-infl-O-V-X linear order of Kelenga makes it easy to identify objects and study their properties, even though there is no accusative marking. Direct object NPs including pronominals follow the subject NP and any post-subject inflectional particles (e.g. imperfective há), and immediately precede the verb.

- (638) sèédù há ˈsògò-ò sá-nù gôⁿ
 S Ipfv **goat-Sg** buy-Ipfv here
 ‘Seydou (often) buys a goat here.’ (< sógó-ó)

In perfective positive main clauses, which have no overt inflectional particle, a bidirectional case marker (BCM) ná (~ nà), glossed “Sbj/Obj,” separates the subject NP from the object NP. Therefore subjects and objects are never adjacent.

- (639) sèédù ná ˈsògò-ò sâŋ gôⁿ
 S **Sbj/Obj** goat-Sg buy.Pfv here
 ‘Seydou bought a goat here.’

ηά satisfies most of the theoretical criteria for being a linker. Both the subject and the object must be overt (see below for how this applies to 1Sg subject). ηά cannot occur in sequential VPs, which lacks an overt subject (cf. English subjectless infinitival VPs). ηά cannot occur in intransitive clauses since there is no object. ηά is therefore neither a “perfective” nor a “transitive” morpheme. It cannot occur in imperatives, since singular-addressee imperatives have no overt subject and since plural-addressee imperatives do not have true pronominal 2Pl subjects (§10.4.1.1).

In clause-initial position, 1Sg proclitic η̣ is inaudible before ηά, the combination being transcribed Ø ηά (640a). The deletion is a low-level phonological process and is not a counterexample to the claim that ηά separates overt subjects from overt objects. Indeed, when preceded by a particle like ní ‘if’, the 1Sg proclitic has an audible effect. In (640b), η̣ is tone-dropped (like other H-toned proclitics) to η̣̄, and although this nasal segment is usually inaudible (because of the following η) its L-tone is audible either as a slight pitch fall at the end of ní or as a slight downstep of ηά to η̄ā.

- (640) a. Ø ηά = à hɛ̀ɛ̀
 1Sg Sbj/Obj 2Sg see.Pfv
 ‘I saw you-Sg.’
- b. ní (η̣̄) ηά = à hɛ̀ɛ̀
 if 1Sg Sbj/Obj 2Sg see.Pfv
 ‘if I see you-Sg’
 heard as [n̄η̄áà ...] or as [níη̄ā ...]

The only counterevidence to the linker analysis is that the past morpheme kúⁿ can separate ηά from the subject (§10.3.1). Whether this is a real counterexample depends on whether kúⁿ is modeled as fusing to the subject.

As in many SOV languages, when the S-inflection-O portion of a transitive clause is uttered, if the object is heavy (multiple words), the clause is often restarted with pronominalized subject and object. An example is at 2021-15 @ 00:45. Even without a subject, the same restart can happen in a sequential VP that has a heavy object NP; examples are at 2021-10 @ 01:32 and 01:46.

11.1.2.2 Tones of words following post-subject inflectional particles

After a nonzero post-subject grammatical particle, pronominal proclitics undergo Tone Inversion (§3.6.5.1.1). Since this (usually) applies to objects, and (usually) does not apply to subjects, the result is a kind of tonal case-marking. However, the inversion fails to apply to clause-initial objects (in transitive imperatives), and it does apply to subjects when preceded by a particle like ní ‘if’, so Tone Inversion is triggered by prosodic position and not by case.

For tones of object NPs after post-subject grammatical particles, see §3.6.5.3.5 (Tone-Dropping, Downstep) and §3.6.5.4.2 (Initial H-Ablaut). For tones of intransitive verbs following

post-subject inflectional particles, see §3.6.5.3.4 (Tone-Dropping, Downstep) and §3.6.5.4.2 (Initial H-Ablaut), the latter being rare for verbs.

11.1.2.3 tááⁿ/táá-ná ‘do’ in collocations

This verb occurs in a number of collocations with object NPs.

- (641) a. Ø ηά ˈbààrá-á ˈtāāⁿ
 1Sg Sbj/Obj work(n) **do**.Pfv
 ‘I did (=performed) the work.’ (< báára-á)
- b. sèédù ηά ˈfèèlé-é ˈtāāⁿ
 S Sbj/Obj hunt(n)-Sg **do**.Pfv
 ‘Seydou did (=went on) a hunt.’ (< fèéle-é)
- c. ì ηà tóó-mèé ˈtāāⁿ
 3Pl Sbj/Obj boat.race **do**.Pfv
 ‘They did (=competed in) a boat race.’ (tóó-mèè)

11.1.2.4 Ditransitives

11.1.2.4.1 ‘Give’ constructions

There are two constructions, one of the syntactic type ‘X give Y [to Z]’ and another of the type ‘X furnish Z [with Y]’. However, the postverbal PP is dative (not instrumental) in both constructions.

The most common ‘give’ verb is lóó/ló-ló. Elsewhere lóó/ló-ló is intransitive ‘enter’ or transitive ‘wear (garment)’ or ‘take (sth) in’. In the sense ‘give’ there is a preverbal object (theme) and a postverbal PP with dative postposition lá ~ ná (642).

- (642) ηγί ηά ˈsága-á ˈlɔɔ [zàkí ˈlà]
 1Pl Sbj/Obj sheep-Sg **give**.Pfv [Z **Dat**]
 ‘We gave a/the sheep to Zaki.’

lóó/ló-ló ‘give’ requires at least a 3Sg object pronominal denoting the theme (=the object transferred). The postverbal dative PP is an adjunct and can be omitted (643).

- (643) ì dí ˈfòy ˈlɔɔ (sèédú ˈlà)
 3Sg PfvNeg nothing **give**.Pfv S Dat)
 ‘He/She didn’t give anything (to Seydou).’ (< fóy)

lóó/ló-ló ‘give’ is attested in ‘give (=send) message’ 2021-06 @ 01:18.

For the irregular fusion of this verb with 1Sg dative, to *nóó* ‘give to me’ (Ipfv *nó-nó*), see §9.3.2. Fused *nóó/nó-ló* ‘give to me’ occurs in ‘give fish to X (to be smoked)’ 2021-06 @ 02:31.

The other ‘give’ verb is *kóò/kóó-lò* ‘furnish, provide’. It has an obligatory preverbal object denoting the (usually human) recipient and an optional postverbal dative PP denoting the theme.

- (644) à *ɲà* *zákì* *kóò* ([¹*jùú* ¹*là*])
 3Sg Sbj/Obj Z **furnish.Pfv** ([water **Dat**])
 ‘He/She furnished Zaki (with water).’

11.1.2.4.2 Other ditransitives (‘show’, ‘entrust’)

háý(-lí) ‘show’ has the syntax of *lóó* ‘give’ (see the preceding subsection), as in (645a). There is an obligatory preverbal object denoting the theme (i.e., the object shown), and a dative PP. *hálífàà/hálífàá-là* ‘entrust’ is similar but has a PP with custodial postposition *má* (645b).

- (645) a. à *ɲá* ¹*jùú* ¹*hāy* [*zákí* ¹*nà*]
 3Sg water water **show.Pfv** [Z **Dat**]
 ‘He/She showed (the) water to Zaki.’
- b. à *ɲí=* [*ì* ¹*sògò-ò*] *hálífàá* [*zákí* ¹*mà*]
 3Sg Sbj/Obj [3ReflSg goat-Sg] **entrust.Pfv** [Z **Dat**]
 ‘He/She entrusted his/her goat to/with Zaki.’

11.1.2.5 Valency of causatives

Most suffixal causatives are based on intransitive verbs. The subject of the intransitive (646a) becomes the object of the causative (646b).

- (646) a. *lèɲ-ó* ¹*tōrī*
 child-Sg jump.Pfv
 ‘The child jumped.’
- b. *zákì* *ɲá* ¹*lèɲ-ó* ¹*tōrī-nī*
 Z Sbj/Obj child-Sg jump-Caus.Pfv
 ‘Zaki made the child jump.’

ságá(-lá) ‘lie down, go to bed’ is a lexically reflexive verb, i.e. it has a pro forma reflexive pronominal object that is coindexed with the subject (647a). The causative has a simple object with no trace of reflexivity (647b).

- (647) a. \bar{a} $\eta\bar{i}$ = \bar{i} $s\acute{a}g\acute{a}$
 3Sg Sbj/Obj **3ReflSg** lie.down.Pfv
 ‘He/She lay down (=went to bed).’
- b. $z\acute{a}k\bar{i}$ $\eta\acute{a}$ = = \acute{a} ${}^{\prime}s\grave{a}g\grave{a}-n\bar{i}$
 Z Sbj/Obj **3Sg** lie.down-**Caus**.Pfv
 ‘Zaki put him/her to bed.’

Among the transitive verbs that are readily causativized are ‘eat’ and ‘drink’. The causative of ‘eat’, freely translated as ‘feed (v)’, is illustrated in (648a-b). It is based on the antipassive of ‘eat’ with $\epsilon\epsilon$ vowel (§9.3.1.1). The obligatory object denotes the recipient, and the specific food is optionally expressed by an instrumental PP (648b). This food term corresponds to the direct object of transitive ‘eat’, which has aa vowel (648c).

- (648) a. $z\acute{a}k\bar{i}$ $\eta\acute{a}$ ${}^{\prime}l\grave{e}\eta-\acute{o}$ ${}^{\prime}j\bar{\epsilon}\bar{\epsilon}-n\bar{i}$
 Z Sbj/Obj child-Sg eat.Antip-Caus.Pfv
 ‘Zaki fed the child.’
- b. $z\acute{a}k\bar{i}$ $\eta\acute{a}$ ${}^{\prime}l\grave{e}\eta-\acute{o}$ ${}^{\prime}j\bar{\epsilon}\bar{\epsilon}-n\bar{i}$ [$k\bar{i}$ ${}^{\prime}b\grave{o}\grave{o}l\grave{o}-\grave{o}$ $t\bar{i}^n$]
 1Sg Sbj/Obj child-Sg eat.Antip-Caus.Pfv [with **cowpea**-Sg under]
 ‘Zaki fed the child with cowpeas (=beans).’ (< $b\acute{o}\acute{o}l\acute{o}-\acute{o}$)
- c. $l\acute{\epsilon}\eta-\acute{o}$ $\eta\acute{a}$ ${}^{\prime}b\grave{o}\grave{o}l\acute{o}-\acute{o}$ ${}^{\prime}j\bar{a}\bar{a}$
 child-Sg Sbj/Obj **cowpea** eat.Pfv
 ‘The child ate cowpeas (=beans).’

The syntax of causative $m\acute{\epsilon}-n\bar{i}/m\acute{\epsilon}-n\bar{i}-li$ ‘cause to drink, give something to drink to (sb)’ is the same.

With most other transitives it is not possible to express causativity with a single clause, probably because neither the underlying subject (agent) nor the underlying object can readily be expressed in a postverbal PP.

The use of instrumental PPs for “demoted” objects is reminiscent of their use in predicates of conveyance (§11.1.1.6) based on motion verbs (‘come [with X]’ = ‘bring X’), where no demotion from transitive object has occurred.

11.1.3 Verb phrase (VP)

VP, consisting of a clause minus the subject and the post-subject grammatical morphemes, is relevant to Kelenga syntax. In particular, sequential $b\bar{i}$ (similar to English infinitival *to*) combines with VPs in a high-frequency subordinated clause type (§15.2).

11.2 ‘Be’, ‘become’, and other statives and inchoatives

11.2.1 Identificational predicates

11.2.1.1 ‘It is X’ (X rá-ní ~ ‘rà-ní)

rá-ní, usually heard as ‘rà-ní or ‘rà-nì, is added to a pronoun or NP to identify a specific but previously unidentified referent. The latter is usually contextually understood, and may be expressed in a preclausal topical NP, but it is not overt in the ‘it is’ clause proper. The overt NP can be focalized.

X rá-ní can be translated ‘it’s X’ as in ‘who is it?’ (to someone knocking at the door) or ‘it’s me’ as the answer. The interlinear gloss is “it.is”. The ‘it’ is nonreferential.

After NPs that end in a nasalized vowel, the initial r optionally nasalizes; if it does not, the nasality of the vowel is usually dropped.

The tonal form rá-ní is rare. It would take this form after an H-toned pronominal proclitic, for reasons explained below this combination is uncommon. The example of rá-ní that is in common use is (649a) with the demonstrative. This tonal form also occurs after HL-toned names (649b), which do not end in the singular suffix that common nouns require.

- (649) a. kú rá-ní
 Dem it.is
 ‘That’s it!’
- b. sèédù / móótì rá-ní
 S / M
 ‘It’s Seydou/Mopti’ (a personal name and a city name)

Pronouns are normally in independent rather than proclitic form in this construction (650). The variants with apparent proclitics are avoided in careful speech, and may be secondary haplological creations favored by the awkwardness of two adjacent short-vowel rhotic syllables. 3Sg and 3Pl proclitics (à ‘rà-ní, ì ‘rà-ní) are better tolerated than other proclitics. Syncopated variants like 1Pl ngí-ṛ ‘rà-ní ~ ngí-ṛ ‘rà-nì can be pronounced with a strange trill that does not occur elsewhere in the language. The 1Sg proclitic ḥ definitely cannot be used, since the combination #n rá-ní would be borderline unpronounceable.

- (650) a. ngí-rè ‘rà-ní (~ ‘rà-nì)
 ngí-ṛ "
 (?) ngí rá-ní (~ ‘rà-nì)
 1Pl(-Indep) it.is
 ‘It’s us.’

- b. ná 'rà-ní (~ 'rà-nì)
 1Sg.Indep it.is
 'It's me.'
- c. à-rà 'rà-ní
 à-r "
 à "
 3Sg(-Indep) it.is
 'It's him/her/it.'
- d. ì-rè 'rà-ní
 ì-r "
 ì "
 3Pl(-Indep) it.is
 'It's them.'
- e. á-rá 'rà-ní (~ 'rà-nì)
 á-r "
 2Sg-Indep it.is
 'It's you-Sg.'

Examples with nonpronominal NPs are in (651).

(651)	noun/NP	'it's ___'	gloss
	sàgà-à	sàgá-á 'rà-ní (~ 'rà-nì)	'It's a sheep.'
	mìsírì-í-yè ⁿ	mìsírì-ì-yé ⁿ 'nà-ní	'It's (some) mosques'
	jàâ	jàá 'rà-ní	'Who is it?'
	mà ⁿ	má ⁿ 'nà-ní	'What is it?'
	hònòṅ-ô	hònòṅ-ó 'rà-ní (~ 'rà-nì)	'It's a bird.'
	sógó-ó	sógó-ó 'rà-ní (~ 'rà-nì)	'It's a goat.'
	mìsírì-ì	mìsírì-í 'rà-ní (~ 'rà-nì)	'It's a mosque.'
	íj kàâ	[íj kàá] 'rà-ní (~ 'rà-nì)	'It's my father.'
	ā kàâ	[ā kàá] 'rà-ní (~ 'rà-nì)	'It's his father.'

There is a past-time version kúⁿ 'nà-ní (652), based on past morpheme kúⁿ.

- (652) a. [ná 'rà] kúⁿ 'nà-ní (~ 'nà-nì)
 [1Sg.Indep Foc] **Past** it.is
 'It was me.'

- b. [sógó-ó 'rà] kún 'nà-ní (~ 'nà-nì)
 [goat-Sg Foc] **Past** it.is
 'It was a/the goat.'
- c. [sógó-ó-yé 'rà] kún 'nà-ní (~ 'nà-nì)
 ~ [sógó-ó-yè 'nà]
 [goat-Sg-Pl Foc] **Past** it.is
 'It was (the) goats.'

In texts, an NP can be pronounced in isolation with or without overt topic marking ('as for'), followed by an 'it is X' predication after a prosodic break. Examples include 'a hippo, it's a beast' (2021-01 @ 00:42), 'what they kill it with, it's a harpoon' (2021-01 @ 00:52), 'as for that one (a child with a mother), it's a well-fed one' (2021-10 @ 04:11).

The combination ó 'rà-ní 'it's that (discourse-definite)' can sum up a just described situation. An example is 2021-06 @ 01:42: 'if it (=fish) has all been sold, that's it'.

rà-ní is likely composite diachronically. The rhotic syllable is related to focus marker rá and to -rà ~ -rè and variants in independent pronouns. In other words, the rhotic syllable was part of the NP or pronoun. The original 'it is' particle was *ni of uncertain tone, cf. Jenaama-Sorogaama nì. The two syllables subsequently fused to form the Kelenga 'it is' particle. The past-time form kún 'nà-ní separates both syllables of rà-ní from the NP, and ní does not occur by itself in identificational clauses. The only synchronic reason to hyphenate rá-ní ~ 'rà-ní ~ 'rà-nì is its tonal patterning, since the tone of the rhotic syllable can be dropped without affecting the tone of the final syllable.

11.2.1.2 'It isn't X' (X té)

Identificational clauses are negated by replacing positive rá-ní 'it is' with the suppletive negative té. It is tone-dropped to 'tè except after H-toned pronominal proclitics (653d) and demonstrative kú (653e). Tone-dropped 'tè can trigger Final Tone-Raising or Rightward H-Tone Shift in preceding words.

- (653) a. sèèdú 'tè
 S **it.is.not**
 'It isn't Seydou.'
- b. mìsírì-í / h̀̀ǹ̀d̀̀η-ó 'tè
 mosque-Sg / bird-Sg **it.is.not**
 'It isn't a sheep/a bird.' (< mìsírì-ì, h̀̀ǹ̀d̀̀η-ô)
- c. ὴ̀gí-rè 'tè
 1Pl-Indep **it.is.not**
 'It isn't us.' (< ὴ̀gí-rè)

d. ɲǵí té
 1Pl it.is.not
 [= (c)]

e. kú té
 Dem it.is.not
 ‘That’s not it.’

The past-time version is kún ʔtè.

(654) ná kún ʔtè
 1Sg Past it.is.not
 ‘It wasn’t me.’

ʔtè occurs in the phrase bááǵî ʔtè (and variants) ‘there is no trouble’, a common reply in greeting exchanges (2021-06 @ 00:21). An alternative phrasing is bááǵî tá X ‘there is no trouble in X (=some locational expression).’

ʔtè can be used to negate a single constituent, when separated from the main clause. In 2021-06 @ 00:39 three such constituents precede the relevant clause: ‘it’s not (just) the cold season, it’s not (just) the hot season, it’s not (just) the rainy season; we fished together (all year).’

Another example: ‘it (=fire for smoking fish) isn’t (like) a fire for cooking’ (2021-06 @ 03:10, passage somewhat broken).

11.2.2 Equational (copular) clauses

11.2.2.1 ‘Y is X’ (Y kélé/hálí X)

Equational clauses, or copular clauses, take the form [Y kélé X], [Y hálí X], or [Y hélé X]. Initial k or h (< *k) becomes g after a nasal proclitic, resulting in additional surface variants [Y gélé X], [Y gálí X], and [Y gález X]. The tonal patterns are those of Pfv stems of /H/-melodic verbs (hence e.g. 3Sg ā ʔkèlè). The subject Y is a known entity (often expressed by a pronominal proclitic), and X provides information about this entity. X but not Y may be a content interrogative. In interlinears, kélé or variant is glossed ‘be.Cop’. The very common combination kú kélé ... ‘that is ...’ as in (655a) contracts in allegro speech to kw = élé.

(655) a. kú kélé màⁿ
 Dem **be.Cop** what?
 ‘What is that?’ (lit. ‘That is what?’)

- b. sèèdú ʼkēlē ʼcēē-sōgō-yà-à
 S **be.Cop** field-cultivate-Agent-Sg
 ‘Seydou is a farmer.’
- c. hálú-ú ʼkēlē ʼcēē-sōgō-yà-à
 man-Sg **be.Cop** field-cultivate-Agent-Sg
 ‘The man is a farmer.’
- d. ī ʼkèlé ʼcēē-sōgō-yà-à / ʼcēē-sōgō-yà-á-yèⁿ (~ ʼcēē-sōgō-y-éèⁿ)
 3Pl **be.Cop** field-cultivate-Agent-Sg / field-cultivate-Agent-Sg-Pl
 ‘They are farmers.’
- e. ā ʼkèlé ʼhàlú-ù
 3Sg **be.Cop** man-Sg
 ‘He is a man.’
- f. á kélé jàà
 á-rá ʼkēlē ”
 2Sg(-Indep) **be.Cop** who?
 ‘Who are you-Sg?’
- g. kú hálí ʼhónòŋ-ô
 Dem be bird-Sg
 ‘That is a bird.’

The noun following kélé ~ hálí undergoes tonal ablaut (656). /H/-melodic nouns are tone-dropped. /HL/-melodic nouns downstep the H to M. A tone-dropped or downstepped noun then triggers Final Tone-Raising on e.g. a preceding 3Sg ā ʼkèlè ‘he/she/it is’. /L/-melodic nouns show Initial H-Ablaut if they begin with two or more L-toned syllables.

(656)	melody	kélé	_	noun	gloss	‘he/she is X’	‘you-Sg are X’	‘NP is X’
	/H/	ʼM	sógó-ó	‘goat’	ā ʼkèlé ʼsògó-ò	á kélé ʼsògó-ò	NP ʼkēlē ʼsògó-ò	
	/HL/	ʼML	bàsà-à	‘agama’	ā ʼkèlé ʼbàsà-à	á kélé ʼbàsà-à	NP ʼkēlē ʼbàsà-à	
	/L/	H*L	sàgà-à	‘sheep’	ā ʼkèlè ʼsàgà-à	á kélé ʼsàgà-à	NP ʼkēlē ʼsàgà-à	

For past time, kélé is preceded by kúⁿ.

- (657) sèèdú kún ʼgēlē ʼcēē-sōgō-yà-à
 S **Past** be.Cop field-cultivate-Agent-Sg
 ‘Seydou was (=used to be) a farmer.’

Some textual examples: ‘your name is how? (=what?)’ and reply ‘I am X (name)’ (2021-01 @ 00:11); ‘my name is X (2021-08 @ 00:04); ‘the situation is (=involves) up to three harpoons’ (2021-01 @ 03:56).

Often an NP or a longer description is resumed as *ó* ‘that (definite)’ as subject of a copula sentence that qualifies it: ‘that (definite) is the truth’ (2021-06 @ 02:49), ‘that (definite) is harpoon spearing’ (2021-01 @ 05:04); ‘the rifle they shoot, that (definite) is a carbine’ (2021-01 @ 05:09), ‘that (definite) is children’s work’ (2021-06 @ 00:51), ‘that (definite) is (work of) Bozo ethnicity, that is (work of) my ethnicity’ (2021-01 @ 01:28 & 01:54), ‘the grill for smoking fish, that (definite) is metal (iron) (2021-06 @ 02:11), ‘that (definite) was in the past’ (2021-06 @ 06:27), ‘the one who used water, if that (definite) was her daughter’ (2021-10 @ 01:39), ‘if that (definite) was the one who ...’ (2021-10 @ 03:46).

ó hálí kú, literally ‘that (definite) is this/that’, has the pragmatic sense ‘that (just described) is how/what it is’, summing up a description (2021-01 @ 05:04 & 05:19).

11.2.2.2 ‘Y isn’t X’ (Y tá kélé/hálí X, Y tá-lí X, Y tá X)

The copular construction is negated using the regular IpvNeg post-subject particle *tá*, the full forms being [Y tá kélé X] and variant [Y tá hálí X]. The full forms are generally contracted, for example to [Y tá-lí X]. Or *kélé* ~ *hálí* can be omitted, leaving just [Y tá X], where X is a noun in bare-stem form (without singular suffix). Even the full forms like *tá kélé* are treated as single words prosodically. *hálí* should not be confused with *hàlì* ‘even’.

For 3Sg and 3Pl proclitic subject, Tone-Dropping produces [ā/ī ʰ[tà kèlè] X] or a contraction thereof.

X cannot be focalized in this negative construction.

The singular suffix for a noun in the X position is sometimes omitted in the negative copular construction where it would not be omitted in positive counterparts; see especially the form taken by *hònòṅ-ṣ* ‘bird’ in (658f).

- (658) a. *hálú-ú tá ʰcēē-sōgō-yà-à*
 man-Sg **not.be.Cop** field-cultivate-Agent-Sg
 ‘The man is not a farmer.’
- b. *kú tá ʰsàgà-à*
 Dem **not.be.Cop** sheep-Sg
 ‘That is not a sheep.’ (< *sàgà-à*)
- c. *á tá Ø ʰhàlù*
 " " *kélé ʰhàlú-u*
 2Sg **not.be(.Cop)** (**be.Cop**) man(-Sg)
 ‘You-Sg are not a man.’

d. ā ʼ[tà kèlé] ʼhàlú-ù
 ̀ ʼ[dà kèlé] ʼhàlú-ù
 3Sg **not.be** **be.Cop** man-Sg
 ‘He is not a man.’

e. à tá ʼhàlù
 ̀ dá "
 3Sg **not.be.Cop** man
 [= (d)]

f. kú tá-lí ʼhónòⁿ
 ʼhónòŋ-ô
 Dem **not.be.Cop** bird(-Sg)
 ‘That is not a bird.’

For past time, tá kélé or variant is preceded by kúⁿ, resulting in kún ʼ[tà (kèlè)]. If kèlè is overt, ʼtà remains L-toned. This confirms that tá kélé is treated as a unit for tonal purposes.

(659) a. ná kún ʼ[tà kèlé] ʼcēē-sōgō-yà-à
 1Sg **Past** [not.be be.Cop] field-cultivate-Agent-Sg
 ‘I was not a farmer.’

b. ná kún tá ʼcēē-sōgō-yà
 1Sg **Past** not.be.Cop field-cultivate-Agent
 [= (a)]

Textual examples: tá-lí (2021-06 @ 02:24); tá (2021-06 @ 00:25, 2021-10 @ 00:50 & 00:59, 2021-10 @ 03:17).

11.2.3 Locational-existential ‘be’

The constructions described below express ‘X be (present) [in a location]’. In the limiting case where the location is nonspecific, free translations can be of the type ‘X exists’ or ‘there is/are some Xs’. wôⁿ ‘there (definite)’ can refer to a specific location already introduced into the discourse, or it can be a pro-forma locative in predications of existence.

11.2.3.1 ‘Is/are (present)’ (há ~ gá)

The basic locational ‘be (present)’ verb is há, becoming gá after a nasal (1Sg íj gá ‘I am’). The 3Sg form is à hà or ñ gà, before tone sandhi. há ~ gá is identical in form, and cognate, to the post-subject imperfective particle (§10.2.4.1), which occurs in some stative as well as imperfective

constructions (§10.1.3.2). The tonal effects of imperfective há ~ gá on a following noun (in a transitive clause) also apply to constituents that follow locational-existential há ~ gá.

In locational-existential function, há requires a following locational expression, minimally ‘here’ or ‘there’, the latter sometimes as a pro-forma location. há without a spatial adverbial is ungrammatical (660e). With village/city names and adverbs of spatial orientation, no locative postposition is needed (660d). há in locational-existential function is glossed ‘be.Loc’ in interlinears.

- (660) a. à há †gòⁿ / †wòⁿ
 ìj gá " / "
 3Sg **be.Loc** here / there.Def
 ‘He/She/It is here/there.’
- b. ìj gà [†nújù-ù nî]
 3Sg **be.Loc** [village-Sg Loc]
 ‘He/She/It is in the village.’ (< nùjù-ù)
- c. ìj gá †sòjò-fáà
 3Sg **be.Loc** (out.in)the.bush
 ‘He/She/It is out in the bush.’
- d. à hà bómòkò
 ìj gà "
 3Sg **be.Loc** B
 ‘He/She/It is in Bamako.’
- e. #à hà
 #ìj gà
 #3Sg **be.Loc**
 intended: ‘He/She/It is present (here/there).’ or ‘There is some.’
- f. jàà há [†jìrì-ì]éè]
 who? **be.Loc** [tree-Sg on]
 ‘Who is up in the tree?’ (< jírì-í)
- g. [ná †rà] há [†jìrì-ì]éè]
 [1Sg Foc] **be.Loc** [tree on]
 ‘I [focus] am up in the tree.’

A frequent combination is há [á nî] ‘be in it, be therein’ or more abstractly ‘be included’, e.g. 2021-01 @ 01:22 to 01:27)

11.2.3.2 ‘Was/were (present)’ (kún gà)

The past-time version of locative-existential há is kún gà, which can be raised to kún gá by tone sandhi. After 3Sg à and 3Pl ì, the past-time morpheme is L-toned kùn.

- (661) a. ngí kún gá ‘gòⁿ
 1Pl **Past** **be.Loc** here
 ‘We were here.’
- b. jàà kún gà [‘núŋù-ù nî]
 who? **Past** **be.Loc** [village-Sg Loc]
 ‘Who was in the village?’
- c. ā ‘kùn gá ‘gòⁿ
 3Sg **Past** **be.Loc** here
 ‘He/She/It was here.’

11.2.3.3 ‘Is/Are not (present)’ (tá) and past-time counterparts

Negation of present-time locational-existentials is expressed by tá (dá after nasal) replacing há ~ gá (662a). Like há, tá cannot be used without an overt locational (662b). tá is elsewhere the post-subject imperfective negative particle and also occurs in stative negatives.

- (662) a. à tà [‘núŋù-ù nî]
 n dà [" "]
 3Sg **not.be.Loc** [village Loc]
 ‘He/She/It is not in the village.’
- b. #à tà
 #n dà
 #3Sg not.be.Loc
 intended: ‘He/She/It is absent’ or ‘There is/are none.’

For past time, tá is preceded by kúnⁿ, producing kún tà ~ kún dà, or after third-person proclitics kùn tà ~ kùn dà. In either case, the tones of tà/dà can be raised by tone sandhi.

- (663) ā ‘kùn tá ‘gòⁿ
 3Sg **Past** not.be.Loc here
 ‘He/She/It was not here.’ or ‘There was none (here).’

11.2.3.4 kú yágà X ‘there was/were X’

At the beginning of a narrative, protagonists X can be introduced with the formula kú yágà X ‘there was/were X’ (2021-08 @ 00:36). Elsewhere this means ‘this/that one became X’ (§11.2.4.2 below), but that translation would not fit the introduction of new protagonists in a narrative context. The verb yágà(-là) can also mean transitive ‘put (down)’ or mediopassive ‘be put’, and these phrases occur in narrative contexts, whose protagonists are ‘taken, picked up’ at the beginning and are ‘put (back)’ when completed (see 2021-08 @ 01:47).

- (664) a. kú yágà [‘sògò-ó ‘kā]
Dem be.put.Pfv [goat-Sg a.certain]
‘There was a (certain) goat.’
- b. kú yágà [‘lē-nēn jíyò]
Dem be.put.Pfv [child-Dim three]
‘There were three girls.’ (2021-08 @ 00:36)

11.2.4 ‘Become (noun)’, ‘happen’, and ‘remain’ predicates

11.2.4.1 ‘Stay, remain’ tógó(-ló)

As a simple intransitive verb, ‘stay, remain’ is tógó(-ló).

- (665) ā ‘tògò gòⁿ
3Sg remain.Pfv here
‘He/She stayed here.’

The sense can be ‘remain (in a location)’ as here, or ‘remain (in a situation)’. The latter occurs in narrative passages denoting situations that precede a new foregrounded event (e.g., 2021-10 @ 01:10 & 01:17).

Transitive tógó(-ló) means ‘leave (behind), abandon’ or ‘encounter (by chance)’; see §15.2.12. It is possible that ‘remain’ is understood as passive ‘be left (somewhere)’, or at least originated in that context.

11.2.4.2 ‘Become, turn into’ (yágà)

yágà(-là) is a transitive ‘put down; leave (sth)’ or intransitive ‘be put down’. In combination with a preceding object X and a following noun Y (without postposition), the sense is ‘make/transform X into a Y’ (666a). The noun Y, as an immediately postverbal noun (§3.6.5.3.6), is subject to tonal ablaut (Tone-Dropping, Initial H-Ablaut) depending on its lexical melody. This phrasing can be

elaborated by using *gùlénì(-nì)* ‘change, transform’ (also ‘pour out’) as the main verb and putting *yágà* in a sequential VP (666b).

- (666) a. Ø *ɲá* *sèédù* *yágà* ¹*hónòŋ-ô* / ¹*sògó-ò*
 1Sg Sbj/Obj S **transform.Pfv** bird-Sg / goat-Sg
 ‘I made Seydou (into) a bird/a goat.’ (< *hònòŋ-ô*, *sógó-ó*)
- b. Ø *ɲá* *sèèédú* *gùlénì* [*bá* = *á* *yágà* ¹*hónòŋ-ô*]
 1Sg Sbj/Obj S **transform.Pfv** [Seq 3Sg **transform.Pfv** bird-Sg]
 ‘I turned/transformed Seydou into a bird.’

The noun following *yágà* sometimes appears in bare-stem rather than suffixed singular or plural form. The distinction between bare stem and singular is moot for CvV and CvCvV nouns that take no overt singular suffix. The distinction can be difficult to hear for stems whose bare stem ends in a short vowel (667a). The distinction is clear, however, for *ŋ*-final noun stems because the singular suffix has its own syllable (667b).

- (667) a. *ā* ¹*yāgà* ¹*ɲáŋánù(-ù)*
 3Sg become.Pfv woman(-Sg)
 ‘He/She became a woman.’ (< *à yágà*)
- b. *ā* ¹*yāgà* ¹*hónòⁿ* / ¹*hónòŋ-ô*
 3Sg become.Pfv bird(-Sg)
 ‘He/She became a bird.’
- c. *sèédù* *yágà* ¹*kā-ŋīnì-ì*
 S become.Pfv chief-Sg
 ‘Seydou has become the chief.’

yágà(-là) also occurs in reflexive clauses in the sense ‘become, turn into’ (668).

- (668) *sèédù* *ɲí* = *ì* *yágà* ¹*hónòŋ-ô*
 S Sbj/Obj 3ReflSg become.Pfv bird-Sg
 ‘Seydou turned (himself) into a bird.’

In a number of textual passages, *yágà(-là)* as transitive ‘transform’ or as intransitive ‘become, turn into’ is followed by *kí* plus the NP. The clearest example is (669). Elsewhere *kí* is a conjunction ‘and’ or the first part of instrumental circumposition *kí X tîⁿ*.

- (669) *súnúⁿ* *ɲí* = *ì* *yágà* [*kí* ¹*tùbààbù-ù*]
 all Sbj/Obj 3ReflSg transform.Pfv [Inst white.person-Sg]
 ‘Everyone has turned into a white person.’ (2021-06 @ 05:46)

The other passages including *kí* are: ‘transform harpoon to being poisoned’ (2021-01 @ 01:04), ‘be caused by X’s illness’ (2021-06 @ 01:14), ‘become useless (=scorned) work’ (2021-06 @ 06:32), and ‘become on him a big (=festering) wound’ (2021-15 @ 02:23).

For *yágà(-là)* ‘become’ with noun-like “adjectives” see §9.4.1. For *kú yágà X* in the introduction of protagonists at the beginning of a tale, see §11.2.3.4 above.

11.2.5 Mental and emotional verbs

The stems in the following subsections range from regular verbs that mark aspect (Pfv versus Ipfv) to statives that do not mark aspect morphologically but that occur in otherwise imperfective (positive and negative) frames.

11.2.5.1 Stative *tòò* ‘know’ and dynamic *tó-yà(-là)* ‘recognize’

tòò is a stative transitive verb. It does not distinguish Pfv from Ipfv aspectual stems. It does combine with imperfective *há* and imperfective negative *tá*, though not with perfective counterparts. It can denote knowledge (awareness) of a fact, or familiarity with an entity. It requires an object, minimally 3Sg à (670a).

- (670) a. *ń* *gá=* *á* *tòò*
 1Sg Ipfv 3Sg **know.Stat**
 ‘I know (it).’
- b. *ń* *gá* *sèédù* *tòò*
 1Sg Ipfv S **know.Stat**
 ‘I know Seydou.’
- c. *ń* *dá=* *á* *tòò*
 1Sg IpfvNeg 3Sg **know.Stat**
 ‘I don’t know (it).’

Textual examples: 2021-06 @ 02:21 & 02:33 & 05:55 & 06:57; 2021-08 @ 01:46. In 2021-06 @ 02:24 “know its eye” (i.e. have visibility into it) means effectively ‘have experience with it’.

For past time ‘knew’, post-subject past-time morpheme *kúⁿ* (§10.3.1) is added.

- (671) a. *ā* *‘kùŋ* *gá* *sèédù* *tòò*
 3Sg **Past** Ipfv S **know.Stat**
 ‘He/She knew Seydou.’

b. ń gún tá= á tóò
 1Sg Past IpfvNeg 3Sg know.Stat
 ‘I didn’t know (it/him/her).’

Stative tóò can be converted into a dynamic (i.e. aspect-marking) verb by adding -ya, a special case of the deadjectival inchoative -ya (§9.4.2.2). The result is tó-yà(-là), which expresses an event of recognition or identification.

(672) sèédù ńí= [ì mómbóli-ì] tó-yà
 S Sbj/Obj [3ReflSg vehicle-Sg] know-Inch.Pfv
 ‘Seydou recognized his (own) vehicle.’

The noun ‘(esoteric) knowledge’ is the obscurely related tùè-ní-ì ~ cùè-ní-ì, now also regularized as tòò-ní-ì. ‘Knowledgeable person, knower, connaisseur’ is either tùè-ní-yà-à with agentive -ya, or [túé-ní]-tááⁿ-yà-à with tááⁿ ‘do’ and agentive suffix, or tùè-ní-yà-à without ‘do’.

There is no morphological causative of tóò ‘know’. The sense ‘X inform Y’ is expressed by the verb kúnáfónì(-nì), from Bambara. The object is the person informed. A dative PP can be added as an adjunct (673). The related noun is kúnàfónì-ì ‘news, information’.

(673) Ø ńá zákì kúnáfónì [á ‘là]
 1Sg Sbj/Obj Z inform.Pfv [3Sg Dat]
 ‘I informed Zaki of it.’

11.2.5.2 kàlámà ‘be aware of’

This is another transitive stative. The minimal object is 3Sg à.

(674) a. à há= á kàlámà wéè
 3Sg Ipfv 3Sg be.aware.of.Stat today
 ‘He/She is aware of it today.’

b. ā ‘kùn dá ‘kòṅṅ-ó kàlámà
 3Sg Past IpfvNeg marriage-Sg be.aware.of.Stat
 ‘He/She was not aware of the marriage.’

11.2.5.3 ńínè(-nè) and other ‘forget’ constructions

ńínè(-nè) is an intransitive verb ‘forget’ that takes an optional adjunct in the form of a PP with postposition húèrè ‘behind’ (§8.2.9) or tóó (§8.2.15.2).

(675) a. jí jínè
 1Sg **forget.Pfv**
 ‘I forgot.’

b. zàkì há jínè-nè [wàrì-í ʔtòò / húèrè]
 Z Ipfv **forget-Ipfv** [money-Sg **about / after**]
 ‘Zaki (often) forgets (about) the money.’

For [X jìnè] ʔmà ‘unknownst to X’, see §8.2.17.

A common alternative construction is literally “X’s mind/attention exit (v).” It takes the same optional PP adjuncts.

(676) [jí gáálè-é] ʔbāgī [kójóŋ-ó ʔtòò / húèrè]
 [1Sg **mind-Sg**] **exit.Pfv** [marriage-Sg about / after]
 ‘I forgot (about) the marriage.’

11.2.5.4 ‘X like(s) Y’ (lêⁿ plus dative)

For the sense ‘X like(s) Y’, the attracting entity Y is the subject. It is followed by the stative adjectival predicate lêⁿ ‘be sweet, pleasing’ and a dative PP with té.

(677) túgú-ú lêⁿ [á ʔtè]
 meat-Sg **be.sweet** [3Sg **Dat**]
 ‘He/She likes meat.’ (lit. “Meat is sweet/pleasing to ...”)

The combination with an adjectival predicate and a dative PP with té can also have comparative functions (‘be more ADJ than X’), see §12.1.2.

11.2.5.5 ‘Seek, look for’ (tíⁿ/tí-ní)

This verb means ‘look for, search for, seek’. It does not seem to mean ‘want’ as such, even in imperfective clauses.

(678) ñ gá ʔtùgú-ú ʔtī-nī
 3Sg Ipfv meat-Sg **look.for.Ipfv**
 ‘He/She looks for for meat.’

Textual examples: 2021-08 @ 00:36 (‘go look for firewood’) & 01:17 (‘look for lost girl’), 2021-15 @ 00:17 (‘chicken go looking for straw’).

11.2.5.6 ‘Want’ (fàà)

‘X want Y’ where Y is an NP is expressed as (apparent) ‘X be.Loc [by Y]’ with what is arguably the ‘by’ postposition fàà.

(679) a. à há [‘tùgù-ù fàà]
 3Sg be.Loc [meat-Sg **by**]
 ‘He/She wants (would like) some meat.’

b. ò dá [‘tùgù-ù fàà]
 3Sg not.be.Loc [meat-Sg **by**]
 ‘He/She doesn’t want meat.’

‘Want’ can also take a VP or clausal complement. For ‘X want [to VP]’ see §15.2.3. For different-subject ‘X want Y [to VP]’ see §17.3.9.3.

It is difficult to determine whether fàà in this construction is the ‘by’ postposition in a predicative PP (‘be [by meat]’), or a stative transitive verb (‘want meat’). This is because há can be parsed as either locational ‘be.Loc’ or as Ipfv, and likewise with its negation. Comparative evidence shows that both constructions are possible. JSDj has one ‘want’ construction with predicative comitative PP (postposition pà) and another with verb fùwòⁿ ‘want’. If the two constructions coexisted in Proto-Bozo, they may have merged in Kelenga. In the absence of clear evidence that Kelenga fàà is a verb (e.g. a causative, inchoative, or participial derivative), it is marked up here as a postposition.

Another issue is the relationship between this ‘want’ construction and the ‘have’ construction when the latter has fàà instead of kùrì (§11.5.1). There is usually no confusion since the nouns preceding fàà denote the (often nonhuman) entity wanted and the (normally human) owner, respectively.

11.2.5.7 ‘Need’ and ‘care about’ (máfḍḍ)

‘X need Y’ where Y is an NP is expressed by a possessed form of the noun máfḍḍ ~ máfḍḍ ‘need (n), interest (in sth)’ as subject, followed by há ‘be.Loc’ or its negation and then by a PP with custodial postposition má. A literal translation would be ‘X’s need/interest is with Y’.

(680) a. [ím máfḍḍ] há [‘wārì-í ‘mà]
 [1Sg **need(n)**] be [money **Cust**]
 ‘I need money.’ (< wārì-ì)

b. [sèédù máfḍḍ] tá [‘fārìbòṅ-ṓ ‘mà]
 [S **need(n)**] not.be.Loc [charcoal **Cust**]
 ‘Seydou doesn’t need any charcoal.’

With a locative postposition, the sense is ‘care about, have a personal interest in’.

- (681) [m máʃðð] tá= [á nî]
 [1Sg **interest(n)**] not.be.Loc [3Sg Loc]
 ‘I don’t care about it.’ (French *je m’en fous*)

There may be a connection of some sort between máʃðð ~ máʃðð and the noun ʃðð ~ ʃðð ‘thing (abstract), matter’, but the structure is opaque.

11.2.5.8 ‘Fear’ kónð(-nð)

The verb kónð(-nð) ‘fear, be afraid’ can function by itself as a regular aspect-marking intransitive (682a) or as a stative participial predicate (682b). An NP complement can be added in the form of a PP with the postposition kââⁿ ‘in front of, before’ (§8.2.8.1) (682c-d).

- (682) a. í gá kónð-nð
 1Sg Ipfv **fear-Ipfv**
 ‘I am (often) afraid.’
- b. í gá kónó-nà
 1Sg Ipfv **fear-Ppl**
 ‘I am afraid (now).’
- c. í gá kónð-nð [sèèdú kââⁿ]
 1Sg Ipfv **fear-Ipfv** [S **in.front.of**]
 ‘I am afraid of Seydou.’ (variant sèédù kââⁿ)
- d. [léŋ-ó há kónð-nð [↑túbà-á kââⁿ]
 [child]-Sg Ipfv **fear-Ipfv** [fire-Sg **in.front.of**]
 ‘The child is afraid of the fire.’ (< túbà-à)

For this ‘fear’ verb with a prohibitive clausal complements (‘lest ...’), see §17.3.8.

11.2.6 ‘Resemble’ (bágí-ná)

The state ‘X resemble Y’ is expressed as a participial predicate based on the verb bágí plus a PP with postposition fáà ‘by’ (683). bágí elsewhere means ‘exit (v)’ so one might gloss the construction literally as “X have emerged by/with Y.” The two compared referents can be combined into a plural subject (a conjoined NP or a semantically plural noun or pronoun), followed by the participial predicate without an adjunct PP, i.e. ‘X and Y resemble (each other)’. An explicit

reciprocal PP is then optional (683b). To denote a transition rather than a state, a regular aspect-marking form of *bági(-lí)* is required (683c).

- (683) a. *ń* *gá* ⁴*bāgī-nā* [*sèédù* *fáà*]
 1Sg be **resemble-Ppl** [S by]
 ‘I resemble Seydou.’
- b. *ì* *há* ⁴*bāgī-nā* ([*bòlò* *fáà*])
 3Pl be **resemble-Ppl** ([Recip by])
 ‘They resemble each other.’
- c. *ń* *gá* *bíí* ⁴*bāgī* [*sèédù* *fáà*]
 1Sg Ipfv Fut **resemble.Pfv** [S by]
 ‘I will (come to) resemble Seydou.’

The verb ‘imitate’ is *lá-dègè/lá-dègé-lè*, which has regular aspect-marking.

11.3 Quotative verbs

‘Say’ is expressed either by a regular transitive verb *féé/sé-lé* (§10.1.2.3, §17.1.3), compatible with all inflectional categories and requiring a nominal object (‘said it’, ‘said that’), or with an uninflectable quotative quasi-verb *wó ~ wò* ‘said’ preceding actual quoted matter (§17.1.2).

11.4 Adjectival predicates

11.4.1 Stative adjectival predicates

This section covers stative predicates of the type ‘X be red/heavy’ etc., as opposed to inchoative (change of state) predicates of the type ‘X become red/heavy’. Several of the most prototypical adjectives have simple stative predicates (‘it is _’, ‘you-Sg are _’). The morphologically simple statives have /H/ or /HL/ melodies; there are also two compounds beginning with *là-* (684b). The melodies appear as such with 2Sg á subject (as proxy for other H-toned pronominals). The forms with L-toned 3Sg (and 3Pl) pronominal subject tone-drop /H/ melody to all-L, and (clause-initially) form an M-toned terrace with /HL/ melody as M ML.

(684) ‘it is _’ ‘you-Sg are _’ gloss modifying (after /H/)

a. basic size adjectives

/H/ melody

ā ‘hùlò á húló ‘big’ húló-ó

/HL/ melody

ā ‘lōgò á lógò ‘small, narrow’ lógòŋ-ò

b. compounds

ā là-gûⁿ á là-gûⁿ ‘fast’ lá-gúléŋ-ó

ā là-mûⁿ á là-mûⁿ ‘slow’ lá-múŋ-ò

c. other adjectives

/H/ melody

ā ‘fàríⁿ á fáriⁿ ‘fearsome’ fáriŋ-ó

ā ‘fèŋù á fèŋú ‘lightweight’ fèŋúŋ-ó

ā ‘hòrò á hóró ‘difficult’ hóró-ó

ā ‘kàgàyì á kágáyí ‘bitter’ kágáyí-í

ā ‘tìgèⁿ á tígèⁿ ‘heavy’ tígèŋ-ó

/HL/ melody

ā ‘dātù á dátù ‘full-strength’ dátù-nà-à

ā ‘dûⁿ á dûⁿ ‘deep’ dúŋ-ó

ā ‘dūúnè⁽ⁿ⁾ á dúúnè⁽ⁿ⁾ ‘short’ dúúnéŋ-ó

ā ‘fóròhìⁿ á fóróhìⁿ ‘soft’ fóróhìŋ-ò

ā ‘kūòⁿ á kúòⁿ ‘many, much’ —

ā ‘kūúlèⁿ á kúúlèⁿ ‘deep’ kúúléŋ-ó

ā ‘lāⁿ á láⁿ ‘distant’ láŋ-ó

ā ‘lèⁿ á léⁿ ‘delicious; sharp’ lúmá-á

ā ‘mēè á mēè ‘good’ mēé

ā ‘mīèⁿ á míèⁿ ‘thin, slender’ míèŋ-ò

ā ‘mōónò á móónò ‘long’ móónóŋ-ó

(~ ā ‘mwōnò)

ā ‘nōgò á nógò ‘easy’ nógó-ó

ā ‘ŋāà á ŋáà ‘nasty’ ŋáá

ā ‘sòⁿ á sòⁿ ‘foul’ só-ná-á, sóná-ná-á

ā ‘tūúlèⁿ á túúlèⁿ ‘nearby’ túúléŋ-ó

These statives are simple intransitives syntactically. They have no Pfv/Ipfv aspectual split. Negation is by tá ‘not be’ (elsewhere imperfective negative and stative negative).

(685) a. ā ‘tìgèⁿ
3Sg be.heavy
‘He/She/It is heavy.’

b.	à	tá	‘tīgē ⁿ
	̀̀	dá	"
	3Sg	not.be	be.heavy
	‘He/She/It is not heavy.’		

11.4.2 Participial adjectival predicates

Many modifying adjectives are participial in form, with suffix -nà-à ~ -ná-á. When they function as stative predicates, they are preceded by há (~ gá) ‘be’. The participial suffix then omits the singular suffix (vocalic lengthening), and it does not allow plural -yèⁿ. Negation is by tá (~ dá) ‘not be’ replacing há (686b). 3Sg and 3Pl proclitic subjects have L-toned hà ~ gà and tà ~ dà before tone sandhi. /H/-melodic participles are downstepped to M (686e). This is the same construction used for nonadjectival derived statives like ságá-ná ‘lying down’ (§10.1.3.2).

- (686) a. à há gògí-nà
 ̀̀ gá "
 3Sg be be.dry-Ppl
 ‘It is dry.’
- b. à tá gògí-nà
 ̀̀ dá "
 3Sg not.be be.dry-Ppl
 ‘It is not dry.’
- c. ì há gògí-nà
 3Pl be be.dry-Ppl
 ‘They are dry.’
- d. ì hà pásá-nà
 3Pl be be.lean-Ppl
 ‘They are lean (=emaciated).’
- e. hò̀̀ há ‘hṑ̀-nā-nā
 house be white-Inch-Ppl
 ‘The house is white.’ (< hó̀̀-ná-ná)

11.4.3 Past adjectival predicates

As with stative verbs, the time frame for adjectival predicates is shifted to the past with kúⁿ (kùⁿ after 3Sg or 3Pl proclitic subject).

- (687) a. \bar{a} ${}^4k\bar{u}^n$ $g\acute{a}$ $cw\acute{a}\acute{a}-n\grave{a}$
 3Sg **Past** be be.red-**Ppl**-Sg
 ‘He/She/It was red.’
- b. \bar{a} ${}^4k\bar{u}n$ $t\acute{a}$ $cw\acute{a}\acute{a}-n\grave{a}$
 3Sg **Past** not.be be.red-**Ppl**-Sg
 ‘He/She/It was not red.’

11.5 Possessive predicates

11.5.1 ‘X have Y’

The phrasing is ‘Y be.Loc [X Postp]’ with either of two postpositions *kìrì* or *fàà*. ‘Be.Loc’ is *há* or variant, and it is replaced by *tá* ‘not.be.Loc’ for negation. Of the two postpositions, *kìrì* is specialised for this possessive construction, while *fàà* is a more general ‘by’ postposition (§8.1.3.3). The two ‘X have Y’ constructions are more or less interchangeable and can be used for ownership as well as temporary custody/availability.

há ‘be.Loc’ and its negation *tá* ‘not.be.Loc’ have their usual tonal effects on following NPs or pronouns.

11.5.1.1 With postposition *kìrì*

This postposition is related to the noun *kírí-í* ‘hand’, cf. $\acute{\eta}$ *kírí-í* ‘my hand’, \bar{a} *kírí-ì* ‘his/her hand’. The possessed item is the subject in this construction. It is followed by *há* ‘be (somewhere)’ and the PP.

The postposition likely originated as a compound postposition ‘in [X’s hand]’ but if so the locative postposition $*-y\grave{}$ (preserved in Jenaama-Sorogaama and Tiéyaxo) has been absorbed into the noun. In addition, the tones have dropped. An LHL tonal variant $\#k\grave{r}\hat{i}$ might be expected but has not been heard. However, a proto-form $*k\grave{r}\acute{i}-y\grave{}$ with this contour tone pattern might be reconstructible.

- (688) a. $h\grave{o}$ $h\acute{a}$ $[\acute{\eta}$ $g\grave{r}\grave{i}$]
 house be.Loc [1Sg **Poss**]
 ‘I have a house.’ (< *kìrì*)
- b. $[\acute{l}\acute{e}^n$ $v\acute{i}\acute{e}n\acute{u}$] $h\acute{a}$ $[s\grave{e}\grave{e}d\acute{u}$ $k\grave{r}\grave{i}$] $[s\acute{o}\eta-\acute{o}$ $n\hat{u}]$
 [child two] be.Loc [S **Poss**] [market-Sg Loc]
 ‘Seydou has two children at the market.’ (< *fíénú*)

- c. mómboì-ì hí = [í kìrìì]
 vehicle be.Loc [3Pl **Poss**]
 ‘They have a vehicle.’
- d. màrifá-à há [ʼfàlàtó-ó kìrìì]
 rifle-Sg be.Loc [orphan-Sg **Poss**]
 ‘The orphan has a rifle.’ (< fálátó-ó)

For hòò (689a) versus hòò (689b) see the following subsection.

- (689) a. hòò há = [á kìrìì]
 house be.Loc [3Sg Poss]
 ‘He/She has a house.’
 (cf. ā hòò ‘his/her house’)
- b. hòò há = [à kìrìì]
 house be.Loc [2Sg Poss]
 ‘You-Sg have a house.’
 (cf. á hòò ‘your-Sg house’)

Textual examples of kìrìì are 2021-06 @ 02:38 & 06:32 (‘according to’), 2021-10 @ 00:08 (two), 2021-15 @ 00:49 & 01:26.

11.5.1.2 With fáà ‘by’

The ‘by’ postposition also occurs in the ‘have’ construction as an alternative to kìrìì.

- (690) a. hòò há [ɲ fáà]
 house **be.Loc** [1Sg **by**]
 ‘I have (=own) a house.’ (variant ɲ vâà)
- b. wá-rì-ì tá [ɲ fáà]
 money **not.be.Loc** [1Sg **by**]
 ‘I don’t have any money.’

See also 2021-10 @ 02:14.

With ‘house’ as subject, there is a subtle tonal distinction between hòò and hòò. In (691a-b) with nonpronominal possessor, hòò occurs before H-toned há ‘be.Loc’, while hòò < hòò occurs before L-toned hà. When the possessor is a vocalic pronominal proclitic, contraction and tone sandhi obscure the distinction between há and hà, but in (691d) hòò suggests indirectly that ‘be.Loc’ is structurally nonhigh-toned hà or hā even though it is heard raised to há. See also (189a-b) above, and discussion in §3.6.5.7.

- (691) a. hòḍ há [sèédù / 'hàlú-ú fáà]
house be.Loc [S by]
‘Seydou/The man has a house.’
- b. hòḍ hà [ʔnáǵánù-ù fáà]
house be.Loc [woman-Sg by]
‘The woman has a house.’
- c. hòḍ há= [à fáà]
house **be.Loc** [2Sg **by**]
‘You-Sg have (=own) a house.’
- d. hòḍ há= [á fáà]
house be.Loc [3Sg by]
‘He/She has a house.’

The ‘have’ construction with fáà must be distinguished from a superficially similar ‘want’ construction with what is arguably the same postposition fáà (§11.2.5.6). In the ‘have’ construction, the NP preceding fáà denotes the (usually human) owner. In the ‘want’ construction, the NP in this position denotes the entity that is wanted.

11.5.2 ‘Y belong to X’ predicates

These constructions presuppose that Y is known, and its possessor or owner X is to be specified. There are two versions, depending on whether the NP denoting Y is overt or omitted. Both involve a form of the default possessum fwḍḍ ~ fwḍḍ (§6.2.4). However, in these constructions the tonal form is fwḍḍ. The difference between fwḍḍ as default possessum and fwḍḍ in predicates determines whether Final Tone-Raising and Rightward H-Tone Shift apply to the possessor (692a-b). In addition, the default possessum can be pluralized, but the predicate form cannot be (692c).

- (692) a. default possessum
- | | | | |
|-------|----------------------|--|-----------------|
| sèédú | fwḍḍ | | ‘Seydou’s one’ |
| sèédú | fwḍḍ-yè ⁿ | | ‘Seydou’s ones’ |
- b. predicate (grammatical)
- | | | | |
|-------|-------|-------------------|----------------------------|
| sèédù | fwḍḍ | ‘rà-ní | ‘It’s Seydou’s (one/ones)’ |
| Y | ‘kēlē | [sèédù fwḍḍ) | ‘Y is Seydou’s (one/ones)’ |
- c. predicates (ungrammatical)
- | | | | |
|--------------------|------------------------|------------------------------------|--|
| #[sèédù | fwḍḍ-yè ⁿ] | ‘rà-ní | intended sense:
‘It’s (=They’re) Seydou’s ones’ |
| #Y-yè ⁿ | ‘kēlē | [sèédù fwḍḍ-yè ⁿ] | ‘(The) Y’s are Seydou’s ones’ |

11.5.2.1 ‘It’s X’s’ [X fwóò] ‘rà-ní

The construction with ‘rà-ní ‘it is’ (§11.2.1.1) encliticized to the [X fwóò] phrase is illustrated in (693). The possessed entity (‘it’) is unexpressed but contextually understood.

- (693) a. [à fwóò] ‘rà-ní wâ
 [3Sg Poss] it.is Q
 ‘It is his/hers?’
- b. [á fwóò] ‘rà-ní
 [2Sg Poss] it.is
 ‘It’s yours-Sg.’

Negative counterparts replace ‘rà-ní by its regular negation té.

- (694) [sèédù fwóò] ‘tè
 [S Poss] it.is.not
 ‘It isn’t Seydou’s.’

11.5.2.2 Copular construction Y kélé [X fwóò]

In this copular construction, the possessed entity Y is expressed overtly as an NP or pronoun. It is followed by kélé (or variant) ‘be.Cop’, then predicative [X fwóò] specifying the possessor (695).

- (695) a. [kú hós kù] ‘kēlē [jàà fwóò]
 [Dem house Dem] be.Cop [who? Poss]
 ‘This/That house belongs to who(m)?’ (< hòò, jàâ)
- b. cèé ‘kēlē [ì fwóò]
 field be.Cop [1Sg Poss]
 ‘The field is mine.’ (< cèè ~ cèê)

Negative counterparts replace kélé (or variant) by its regular negation tá, tá-lí, or tá ‘kēlē (696).

- (696) a. cèé ‘tā-lā = [á fwóò]
 cèè tá = " "
 field not.be.Cop [3Sg Poss]
 ‘The field is not his/hers.’ (< tá-lí)

- b. cèè-yén ʼtā-lī [sèédù fwóò]
- cèé-yèn tá " "
- field-Pl not.be.Cop [S **Poss**]
- ‘The fields are not Seydou’s.’ (< cèé-yèⁿ)
- c. cèé ʼtā-kēlā = [á fwóò]
- field not.be.Cop [3Sg **Poss**]
- ‘The field is not his/hers.’

11.5.3 ‘X and (=has) his/her Y’

The construction [[X all/each] [and/with its Z]] (697a) or [[X and Y each] [and/with its Z]] (697b), in either case with reflexive possessor, means ‘Each X has its (own) Z’ and ‘X and Y each have their (own) Z’. kí ‘and’ or ‘with’ is part of this construction, which implies a missing ‘have’ verb. The possessor of Z has 3ReflSg (not 3ReflPl) form.

- (697) a. [nùñú-ú ʼsūnūŋ] [gí = [ì ʼkólòŋ-ò]]
- [village-Sg all] [with/and [3ReflSg well(n)]]
- ‘Each village has its (own) well.’ (< kòlòŋ-ò)
- b. [hàáⁿ-yèŋ [gí ʼfílà-à-yéⁿ] ʼsūnūŋ] [gí = [ì kámù-ù]]
- [Bozo-Pl [and Fulbe-Sg-Pl] be.Loc] [with [3ReflSg place-Sg]]
- ‘Bozo and Fulbe (ethnicities) each have their own place.’ (< fílà-á-yèⁿ)

12 Comparatives

12.1 Asymmetrical comparatives

12.1.1 With verb *hélé(-lé)* ‘(sur)pass’

12.1.1.1 ‘(Sur)pass’ as main verb plus PP with dative *lá ~ ná*

The intransitive motion verb ‘pass’ is *hélé(-lé)*. As a motion verb, it can mean ‘X pass (by) Y’, where Y is expressed as the complement of dative postposition *lá ~ ná* (§8.1.1.2). (698) can express a change of position (rank) in a race, or more abstractly a change of relative position in a scalable dimension not involving literal motion.

- (698) *ámádú* *‘hēlē* [*sèèdú* *‘là*]
 A **pass.Pfv** [S **Dat**]
 ‘Amadou passed Seydou.’ (e.g. in a race)
 or: ‘Amadou has surpassed Seydou.’

A domain of comparison, e.g. strength or wealth, may be expressed overtly. Two ways to phrase ‘X has become stronger than Y’ are in (699). The first is of the form “X pass Y [in strength]” with a locative PP specifying the domain. The second is of the form “[X’s strength] pass [Y’s strength].”

- (699) a. *ámádú* *‘hēlē* [*sèèdú* *‘là*] [*fàṅà-à* *nî*]
 A **pass.Pfv** [S **Dat**] [**power-Sg** **Loc**]
 ‘Amadou has (sur)passed Seydou in strength.’ (< *fàṅà-à*)
 (= ‘Amadou has become stronger than Seydou.’)
- b. [*ámádú* *‘fàṅà-á*] *‘hēlē* [[*sèédù* *‘fàṅà-á*] *‘nà*]
 [A **power-Sg**] **pass.Pfv** [[S **power-Sg**] **Dat**]
 ‘Amadou’s strength has (sur)passed Seydou’s strength.’

When a domain of comparison is specified, it is also possible to use the predicative participle *hélé-ná* ‘having passed’ to indicate a state of superiority (as opposed to a change of state).

- (700) *ámádú* *há* *‘hēlē-nā* [*sèèdú* *‘là*] [*jéémù-ù* *nî*]
 A **be** **pass-Ppl** [S **Dat**] [**talk(n)-Sg** **Loc**]
 ‘Amadou is better than Seydou at speaking.’ (= ‘Amadou speaks better than Seydou’)

12.1.1.2 '(Sur)pass' in sequential VPs

Any predicate describing a scalable situation or process can be made into an asymmetrical comparative by adding a sequential VP with *bí* followed by 'pass'.

- (701) a. *ámádú* ¹*kēlē* *nájáá-tígì-ì* [*bí* ¹*hēlē* [*sèèdú* ¹*là*]]
 A be.Cop thing-owner-Sg [**Seq** **pass.Pfv** [S Dat]]
 'Amadou is wealthier than Seydou.' (< *nájáá-tígì-ì*, §5.1.12)
- b. *ámádú* ¹*jēē* [*bí* ¹*hēlē* [*sèèdú* ¹*nà*]]
 A eat.Pfv [**Seq** **pass.Pfv** [S Dat]]
 'Amadou ate more than Seydou (ate).'
- c. *ámádú* *ńá=* *á* ¹*nòò* [*bí* ¹*hēlē* [*sèèdú* ¹*nà*]]
 A 1Sg 3Sg give.1Sg.Dat.Pfv [**Seq** **pass.Pfv** [S Dat]]
 'Amadou gave me more than Seydou (gave me).'
- or: 'Amadou gave me more than (Amadou gave to) Seydou.' (< *nóó*, §9.3.2)
- d. *ń* *gá* ¹*tēè* *mé-nè* [*bí* ¹*hēlā=* [*à* *lá*]]
 1Sg Ipfv tea drink.Ipfv [**Seq** **pass.Pfv** [2Sg Dat]]
 'I drink more tea than you-Sg (drink tea).'
- e. *sèèdú* *ńá* *ń* *kwárí* [*bí* ¹*hēlā=* [¹*àmàdú* ¹*nà*]]
 S Sbj/Obj 1Sg hit.Pfv [**Seq** **pass.Pfv** [A Dat]]
 'Seydou hit me more than Amadou (hit me).'
- or: 'Seydou hit me more than (Seydou hit) Amadou.'
- f. *sèèdú* *hùlé-yà* [*bí* ¹*hēlā=* [¹*àmàdú* ¹*nà*]]
 S big-Inch.Pfv [**Seq** **pass.Pfv** [A Dat]]
 'Seydou has gotten fatter than Amadou.'
- or: 'Seydou has grown more than Amadou (has grown).'
- g. *á* *há* ¹*gwēē-lē* [*bí* ¹*hēlē* [*ń* *ńá*]]
 2Sg Ipfv dance.Ipfv [**Seq** **pass.Pfv** [1Sg Dat]]
 'You-Sg dance better than I (dance).'

The same construction can be applied to adjectival predicates with participialized adjectives (702a-b). An alternative construction for such predicates, without the 'pass' verb and with singular suffix on the participle, is presented in the following subsection.

12.1.3 ‘Be better’

No dedicated construction of the type ‘X is better than Y’ has been found. Only the previously described construction with phrasing like ‘X is good [to pass Y]’ has been found.

12.1.4 Superlative ‘most’, ‘best’

There is no dedicated superlative construction. Something like a superlative reading can be forced by adding an expression denoting or presupposing a pool of individuals, either as possessor or in an adverbial adjunct. An example is ‘village’ in (705).

- (705) sèèdú ʼkēlē ʼ[sēlē-yā mēē] [nùŋú-ú nìŋî]
 S be.Cop [sing-Agent good] [village-Sg inside]
 ‘Seydou is the good (=best) singer in the village.’

Another way to express something like the superlative is to iterate an adjective. For example, hùbúŋ-ð ‘fresh’ is iterated in ó hùbúⁿ-hùbúŋ-ð ‘the freshest ones (of those)’ in 2021-06 @ 04:22.

12.2 Symmetrical comparatives

12.2.1 Stative ‘be equal’ (sêêⁿ ~ sèèⁿ)

sêêⁿ is a stative spin-off of the regular (aspect-marking) verb sèŋê/sèŋé-nè ‘become equal or level; (garment) fit’. The reduction of a medial nasal consonant to vocalic nasalization is not regular, but it does occur in nàáŋ-ð ‘middle; waist’, variant of nàŋáŋ-ð.

sêêⁿ ~ sèèⁿ ‘be equal’ is an intransitive stative predicate. It therefore occurs without a post-subject inflectional particle in positive clauses, and with IpfvNeg tá for negation. Combinations of stative sêêⁿ ~ sèèⁿ with subjects include 3Pl ī sêêⁿ ‘they are equal’, 1Pl ŋgí sèèⁿ ‘we are equal’, and sèèdú sèèⁿ ‘Seydou is equal’. These match the tonal alternations of Cṽ and Cṽ̄ noun stems with different possessors: ī hòò ‘their house’, ŋgí hòò ‘our house’, sèèdú hòò ‘Seydou’s house’. There are no other known Cṽ̄ verb stems.

In the sense ‘be equal, equivalent’, the subject is usually plural, either a conjunction of two NPs or an already plural NP or pronoun. The universal quantifier súnúⁿ ‘all’ or ‘both’, e.g. ŋgí súnúⁿ ‘both/all of us’, often occurs at the end of the subject in either case. If the domain of comparison is jointly understood in context, no further adjunct is needed (706a). As in asymmetric comparatives, it is possible to specify the domain of comparison. In (706b) this is done by adding a locative PP. Its noun can undergo tonal ablaut when the PP is closely phrased with sêêⁿ.

- (706) a. [sèèdù [kí ʼàmàdú] ʼsūnūn] dá sèèⁿ
 [S [and A] all] IpfvNeg **be.equal**
 ‘Seedu and Amadou are not equal.’ (< tá)

- b. [[á [kí ná]] †sūnūⁿ] sèêⁿ [jéémù-ù nî]
 [[2Sg [and 1Sg]] all] be.equal [talk(n)-Sg Loc]
 ‘You-Sg and I are equal in speaking.’

Elsewhere sèêⁿ can mean ‘be fitting, proper, (contextually) right’, with reference to behavior (§15.2.9), or ‘fit well’ with reference to a garment. These constructions can take singular subjects (707a-b).

- (707) a. ā sèêⁿ
 3Sg be.fitting.Stat
 ‘It is the right thing (to do).’

- b. jùgù-ú sèêⁿ [m̄ má]
 garment-Sg be.fitting.Stat [1Sg Cust]
 ‘The boubou (=man’s garment) fits me.’ (< jùgù-ù)

With human subjects (singular or plural) and a following sequential VP, the sense is ‘ought to VP’ (§15.2.9). The notion of measure runs through all these senses.

12.2.2 ‘Be one’ = ‘be equal’ (kénèèⁿ)

A common way of expressing either identity (‘X and Y are the same’) or equality (‘X and Y are equal’) is to use kénèèⁿ ‘one’ as predicate nominal with kélé ‘be’. The comparanda form a plural, either as subject or as possessor of a subject noun (708a). A variation on this expresses the domain of comparison as a predicate noun modified by ‘one’, as in (708b), where “be [one weight]” means ‘have the same weight’.

- (708) a. [[á [kí †nà]] †fāṅà-á †sūnūṅ] †gēlē †kēnèèⁿ
 [[2Sg [and 1Sg]] power-Sg all] **be** **one**
 ‘You-Sg and I are equally strong.’

- b. [[í súnún] †gēlē [†tìgèⁿ-yà kénèèⁿ]
 [[2Pl all] **be** [heavy-Abstr **one**]
 ‘You-Pl have the same weight.’ (lit. “Your weights are equal”)

12.2.3 Adverbial ‘as much (as)’

12.2.3.1 á-wó-tá ‘like’

[á-wó-tá X] ‘like X’ (§8.5.1) can mean ‘as much as X’ in some contexts.

- (709) ì há ʔjēē-lē [á-wó-tá ʔnò]
 3Pl Ipfv eat-Ipfv [**like** 1Sg]
 ‘They eat like me (=as much as I eat).’

12.2.3.2 Quantity phrases with kénèèⁿ ‘one’

The noun hákè-è ‘amount, quantity’ occurs in a wide range scalar comparisons, both symmetrical and asymmetrical. For symmetrical comparison, it can combine with kénèèⁿ ‘one’ in the sense ‘same, equivalent’.

- (710) [ŋgí súnúⁿ] há [hàké ʔkēnèéŋ] ʔjāā-lā
 [1Pl all] Ipfv [**amount one**] eat.Ipfv
 ‘We both/all eat the same amount (as each other).’ (< hákè-è via ʔhākè)

12.2.3.3 síi ‘the likes of’ or ‘the equal of’

síi added to an NP denoting a quantity or measurement equates it with another one. Its status as possessum is reminiscent of ‘the likes of’ or ‘the equal of’ in English. After nonpronominal NPs it takes possessum form ʔsìi before tone sandhi.

- (711) a. á há [[ʔhākè-é m̀wò] ʔsìi] ʔjāā-lā,
 2Sg Ipfv [[amount-Sg Rel] **likes.of**] eat-Ipfv,
 [ń túméⁿ] hó = [ó ʔsìi] ʔjāā-lā
 [1Sg also] Ipfv [Dem.Def **likes.of**] eat-Ipfv
 ‘The likes of the amount that you-Sg eat, I too eat the likes of that (amount).’
- b. [ná wàri-í ʔsìi] há = [à fáà]
 [1Sg money-Sg **likes.of**] be.Loc [2Sg by]
 ‘You-Sg have the likes of my money.’ (i.e., you have as much)
- c. á há [[ná fẁò] ʔsìi] ʔjāā-lā
 2Sg Ipfv [[1Sg Poss] **likes.of**] eat-Ipfv
 ‘You-Sg eat the likes of mine (=the amount that I eat).’
- d. ámadú ʔkēlē [sèèdú ʔsīi] [jéé nî]
 A be.Cop [S **likes.of**] [eating(n) Loc]
 ‘Amadou is the equal of Seydou in eating.’ (< jéé)

Pronominal combinations include 2Sg á ʔsìi and 3Sg ā sîi.

13 Focalization and interrogation

13.1 Focalization

13.1.1 Basic morphosyntax of focalization (rá ~ r̂)

NPs including pronouns and most adverbs can be focalized. They remain in their regular position within the clause. The focus marker rá ~ r̂, phonologically an enclitic, follows the NP (712). It takes L-toned form 'rà after 3Sg and 3Pl pronouns and most nonpronominal NPs, before tone sandhi which can re-raise it to rá. The variant r̂ is specialized to topic-like setting adverbs and to NPs in clause-final position (in copula constructions).

- (712) a. [sèédù rá] 'byē
 [S **Foc**] come.Pfv
 'It's Seydou [focus] who came.'
- b. Ø ñá [sèédù 'rà] hêè / ...
 " " " rá] ... / 'kwārī
 1Sg Sbj/Obj [S **Foc**] see.Pfv / hit.Pfv
 'It's Seydou [focus] whom I saw/hit.'
- c. Ø ñá wári-í 'l̩s̩ [[sèédù rá] 'là]
 1Sg Sbj/Obj money-Sg give.Pfv [[S **Foc**] Dat]
 'It's Seydou [focus] to whom I gave the money.'
- d. íj gá= [á fáà] [bí ['sáǵà-á 'rà] s̩n̩]
 1Sg be.Loc [3Sg by] [Seq [sheep-Sg **Foc**] buy.Pfv]
 'It's a sheep [focus] (not a goat) that I want to buy.'
- e. íj gá [['kū 'rà] fáà]
 1Sg be [[Dem **Foc**] by]
 'That [focus] is what I want.'

The same rá ~ r̂ particle occurs when the focalized NP is plural. Since most plural NPs end in a nasal (e.g. plural suffix -yèⁿ), rá optionally nasalizes to ná. Alternatively, the final vocalic nasalization of the plural NP is dropped. Both options are presented in (713a) and (713b).

- (713) a. Ø ɲá [ʔnáɲà-léèⁿ ná] héẽ
 " " [ʔnáɲà-léè rá] "
 1Sg Sbj/Obj [woman-Pl **Foc**] see.Pfv
 ‘It’s the women [focus] that I saw.’
- b. ɲ́ gá [[⁺kū-yèⁿ ná] fáà]
 " " [[⁺kū-yè rá]] "
 1Sg be [[Dem-Pl **Foc**] by]
 ‘Those [focus] are what I want.’

Tonally irregular combinations are wèè rô ‘today’ (< wéè) and fèè rô ‘tomorrow’ (< fèè).

In copular clauses with kélé ‘be’, focalization is uncommon. It is absent in most such clauses, as in (714a). However, it is possible to focalize either the subject (714b) or the predicate nominal (714c).

- (714) a. kú kélé sèédù
 Dem be.Cop S
 ‘That is Seydou.’
- b. [kú rá] ‘kēlē sèédù
 [Dem Foc] be.Cop S
 ‘That one [focus] is Seydou.’
- c. kú kélé [sèédù rô]
 Dem be.Cop [S Foc]
 ‘That is Seydou [focus].’

Nouns of various tone melodies combine with rá as shown in (715), before any other tonal operations that are triggered by preceding words.

(715) melody	noun	gloss	focalized
/H/	sógó-ó	‘goat’	sógó-ó rá
/L/	sàgà-à	‘sheep’	sàgà-á ‘rà
/HL/	bàsà-à	‘agama lizard’	bàsà-á ‘rà
/LHL/	hàbàà	‘cloud’	hàbàà rá

13.1.2 Focalization of pronouns

Most independent pronouns already end in a rhotic enclitic -rà ~ -rá, -rò, or -rè (§4.3.3). 2Sg has H-toned á-rá ~ á-ró (subject to Tone Inversion clause-medially). 1Sg is exceptional since it has both a non-rhotic independent form ná ~ nó and a less common rhotic version ná-rà ~ nó-rò.

A focalized pronoun has independent form plus focus marker rá. Since independent pronouns are treated as nonpronominal NPs tonally, the main focus variant rá (~ ná) is tone-dropped to ʼrà (~ ʼnà), though it is re-raised to rá (~ ná) when followed by a nonhigh tone. The sequence of two adjacent rhotic syllables in all pronominal combinations (except 1Sg ná ʼrà) is awkward, as in 1Pl ɲǵí-ré ʼrà. An assistant nevertheless pronounces both syllables, or in allegro speech he syncopates them into a trill: ɲǵí-r ʼrà.

Combinations like 1Sg ná ʼrà (716a), 1Pl ɲǵí-ré ʼrà, and 2Sg á-rá ʼrà can be treated tonally like /HL/-melodic nouns when they are clause-medial. In other words, they can be downstepped to ML-tones as objects or in postverbal PPs (716a-c).

- (716) a. sèédù ɲá [ʼnā rà] hêè
 S Sbj/Obj [1Sg-**Indep** **Foc**] see.Pfv
 ‘It was me [focus] that Seydou saw.’
- b. sèédù ɲá [ʼɲǵí-rè ʼrà] hêè
 S Sbj/Obj [1Pl-**Indep** **Foc**] see.Pfv
 ‘It was us [focus] that Seydou saw.’ (< ɲǵí-rè)
- c. sèédù ɲá = [ʼā-rā ʼrà] hêè
 S Sbj/Obj [2Sg-**Indep** **Foc**] see.Pfv
 ‘It was you-Sg [focus] that Seydou saw.’ (< á-rá)
- d. [ná rá] ʼbyē
 [1Sg **Foc**] come.Pfv
 ‘It’s I [focus] who came.’
- e. [à-rà rá] ʼbyē
 [3Sg-**Indep** **Foc**] come.Pfv
 ‘It’s he/she [focus] who came.’
- f. [ì-rè rà] tí ʼbyē
 [3Pl-**Indep** **Foc**] PfvNeg come.Pfv
 ‘It’s they [focus] who did not come.’

The historically related ‘it is’ identificational construction with rá-ní ~ rà-ní is described in §11.2.1.1. If the nominal in that construction is a pronoun, it takes independent form, meaning more instances of adjacent rhotic syllables (and more trills in allegro speech).

- (717) à-rà ʼrà-ní
 3Sg-**Indep** it.is
 ‘It’s him/her/it.’

While there is a certain natural focus on the predicate nominal in the identificational construction, there is no strong evidence for parsing rá-ní ~ 'rà-ní synchronically as focus marker plus identificational ní. The latter does not occur without the rhotic syllable.

13.1.3 Interaction of focalization and negation

Negative clauses do not lend themselves readily to constituent focalization. In (718), ‘it wasn’t Seydou [focus] that I saw’ is rephrased with a preposed topical relative clause that is then resumed as a definite demonstrative ó in a negative identificational clause.

- (718) [Ø ɲá mwò hɛ̀ɛ̀] ó tá 'kɛ̀lɛ̀ sɛ̀édú
 [1Sg Sbj/Obj **Rel** see.Pfv] Dem.Def IpfvNeg be.Cop S
 ‘The one who(m) I saw was not Seydou.’

A good textual example is (719), where the positive clause has an overt focus marker and a final emphatic particle, while the parallel negative clause has neither.

- (719) [[ɲánánú ɲàá] 'lɛ̀ɲ-ó 'rà] há= [à ʃɛ̀ɛ̀] dɛ̀?,
 [[woman nasty] child-Sg **Foc**] be.Loc [2Sg on] **Emph**,
 [[ɲánánú 'mɛ̀ɛ̀] lɛ̀ɲ-ò] tá= [à ʃɛ̀ɛ̀]
 [[woman good] child-Sg] not.be.Loc [2Sg on]
 ‘It’s the daughter of the cruel woman [focus] who is on you (=tree)! The daughter of the good woman is not on you.’ (2015-10 @ 04:30)

However, a constituent may be focalized under negation in some circumstances. For example, (720a) can answer the question ‘Who did not go?’ in a context where most others did go, and (720b) can answer ‘What did he/she not eat?’ in a context where the individual did eat other foods. The focalized constituent is the subject in (720a), but the object in (720b), so there is no subject/nonsubject asymmetry.

- (720) a. [sɛ̀édú rá] tì ʃòò
 [S **Foc**] **PfvNeg** go.Pfv
 ‘It was Seydou [focus] who did not go.’
- b. ò dí ['bòòlò-ò rá] 'jāā
 3Sg **PfvNeg** [cowpea-Sg **Foc**] eat.Pfv
 ‘It was cowpeas [focus] that he/she did not eat.’ (< bóóló-ó)

Independent pronouns can occur in examples parallel to (720a), where the negation scopes over the first clause. The object ‘us’ takes independent pronominal form suggesting weak focalization, with occasional addition of the overt focus marker for stronger focus. Overt focus marking is much more common in the second, positive clause (721).

- (721) á tí [ʔŋgī-rè (rá)] ʔkwāri,
 2Sg PfvNeg [1Pl-Indep (Foc)] hit.Pfv,
 á ŋá [sèédù rá] ʔkwāri
 2Sg Sbj/Obj [S Foc] hit.Pfv
 ‘It wasn’t us [focus] that you-Sg hit, it was Seydou [focus] that you hit.’

The ‘it is’ construction [X rá-ní] cannot be directly negated; its negative counterpart has a suppletive enclitic té (§11.2.1.2) The resistance of the positive ‘it is’ enclitic to negation supports the idea that the rhotic in rá-ní ~ ʔrà-ní originated as a focus morpheme.

13.1.4 Subject focalization

Further examples of pronominal subject focalization are in (722).

- (722) a. [ŋgī-ré / ná ʔrà] há bílí ʔtāⁿ
 [1Pl-Indep/1Sg.Indep Foc] Ipfv Fut ascend.Pfv
 ‘It’s we/I [focus] who will ascend.’
- b. [à-rà rá] há bílí ʔtāⁿ
 [3Sg-Indep Foc] Ipfv Fut ascend.Pfv
 ‘It’s he/she [focus] who will ascend.’

Examples (723a-c) present nonpronominal NPs as focalized subjects.

- (723) a. [fàrí-í ʔrà] ŋá = á ʔlègè bé-lé
 [donkey-Sg Foc] Sbj/Obj 3Sg take.Pfv come-Ipfv
 ‘It was a donkey [focus] that took it and came (=fetched it).’ (< fàrì-ì)
- b. [fàrì kú ʔrà] ŋá = á ʔlègè bé-lé
 [donkey Dem Foc] Sbj/Obj 3Sg take.Pfv come-Ipfv
 ‘It was this donkey [focus] that took it and came (=fetched it).’
- c. [sèédù rá] ŋá = á ʔlègè bé-lé
 [S Foc] Sbj/Obj 3Sg take.Pfv come-Ipfv
 ‘It was Seydou [focus] who took it and came (=fetched it).’

13.1.5 Object focalization

Further examples of object focalization are in (724).

- (724) a. sèédù ñá = [‘à-rà rá] ‘kwāri
 S Sbj/Obj [2Sg-Indep **Foc**] hit.Pfv
 ‘It’s you-Sg [focus] that Seydou hit.’ (< á-rá)
- b. Ø ñá [‘hànámá-á ‘rà] hée
 1Sg Sbj/Obj [lion-Sg **Foc**] see.Pfv
 ‘It’s a lion [focus] that I saw.’ (< hánámá-á)

13.1.6 Focalization of PP or other adverbial phrase

13.1.6.1 Focalization of purposive-causal expression

In purposive PPs like [kú ʃó] ‘là ‘for this/that (deictic)’ and [ó ʃó] ‘là ‘for that (discourse-definite)’, the complement of the postposition is often focalized when the clause is positive. The purposive PP may be preclausal (fronted) or in its regular postverbal position (725a-b). Under negation, overt focalization is possible but uncommon, and the PP must be postverbal to avoid an incorrect reading (725c),

- (725) a. [[[ó ‘rà] ʃó] lá] ì byé
 [[[Dem.Def **Foc**] sake] Dat] 1Sg come.Pfv
 ‘That (discourse-definite) [focus] is why I came.’
- b. í byé [[[ó ‘rà] ʃó] ‘là]
 1Sg come.Pfv [[[Dem.Def **Foc**] sake] Dat]
 [=(a)]
- c. í tí ‘byē [[[kú (rá)] ʃó] ‘là]
 1Sg PfvNeg come.Pfv [[[Dem **(Foc)**] Purp] Dat]
 ‘This ([focus]) is not why I came.’

13.1.6.2 Focalization of temporal adverb or PP

A simple temporal adverb can be focalized. It may be preclausal (726a) or postverbal (726b), reflecting the positional freedom of (unfocalized) temporal adverbs.

- (726) a. [ʃèè rô] ɲgí há bílí ʃòò
 [tomorrow Foc] 1Pl Ipfv Fut go.Pfv
 ‘It’s tomorrow [focus] that we will go.’ (< ʃèè)
- b. ɲgí há bílí ʃòò [ʃèè rô]
 1 Ipfv Fut go.Pfv [tomorrow Foc]
 [=(a)]

Some relevant combinations are in (727). An assistant prefers the focus allomorph *rô* for these adverbs when the morpheme is not downstepped. The forms in (727a) irregularly drop tones on the adverb, while those in (727b-c) keep their lexical tones. The falling tone on *rô*, which can be prolonged especially when preposed to the clause to define the broad temporal setting, is suggestive of the falling pitch on final syllables in words preceding a planned prosodic break (§3.7.2).

(727)	adverb	focalized	gloss
a.	wéè ʃèè jírì	wèè rô ʃèè rô jírì rô	‘today’ ‘tomorrow’ ‘this year’
b.	fánáá sísà ⁿ jíńínà-à	fánáá rô sísà ⁿ nô jíńínà-à rô	‘in the old days’ ‘now’ ‘next year’
c.	dúgò-ò-níí hééhòò-níí	dúgò-ò-níí ‘rò hééhòò-níí ‘rò	‘yesterday’ ‘last year’

Usually just the complement NP of a PP is focalized. However, if the PP including the postposition is tightly knit (i.e. lexicalized), it can be focalized as a whole. An example is ‘on their own feet’ 2021-06 @ 06:05.

13.1.6.3 Focalization of manner adverbial

The simple demonstrative adverb ‘thus, like this’ can be focalized with *rô* (728).

- (728) ɲgí há bílí ɲgì fógò [níé rô]
 1Pl Ipfv Fut 1Pl sit-Pfv [like.this Foc]
 ‘(Like) this [focus] is how we will sit.’ (< níè)

‘Like X’ is expressed with á-wó-tá ‘like’ (§8.5.1) preceding the complement X (729a). The complement may be focalized.

- (729) a.

ngí	há	bílí	‘bààrá-á	‘tāā ⁿ	[á-wó-tá	sèédù]
1Pl	Ipfv	Fut	work(n)-Sg	do.Pfv	[like	S]

 ‘We will work like Seydou.’
- b.

ngí	há	bílí	‘bààrá-á	‘tāā ⁿ	[á-wó-tá	[sèédù	rá]]
1Pl	Ipfv	Fut	work(n)-Sg	do.Pfv	[like	[S	Foc]]

 ‘We will work like Seydou [focus].’

13.1.6.4 Spatial adverbs focalized with -nìnòò rô

Spatial adverbs gôⁿ ‘here’ and wôⁿ ‘there (definite)’ (§4.4.3.1) can be focalized with rò like other adverbs (730b). They also have idiosyncratic extended focalized forms with -nìnóò rô or variant -nìnóó ‘rò.

- (730) a.

ngí	há	bílí	‘tōgō	gô ⁿ / wô ⁿ
1Pl	Ipfv	Fut	stay.Pfv	here / there.Def

 ‘We will stay here/there.’
- b.

ngí	há	bílí	‘tōgō	[gô ⁿ	rô] / [wô ⁿ	rô]
1Pl	Ipfv	Fut	stay.Pfv	[here	Foc] / [there.Def	Foc]

 ‘It’s here/there [focus] that we will stay.’
- c.

ngí	há	bílí	‘tōgō	[gó-nìnóò	rô] / [wó-nìnóò	rô]
1Pl	Ipfv	Fut	stay.Pfv	[here	Foc] / [there.Def	Foc]

 [= (b)]

13.2 Interrogatives

The following sections describe questions that take the form of main clauses. For quoted questions see §17.1.6.

13.2.1 Polar (yes/no) interrogatives

13.2.1.1 Clause-final polar interrogative wâ ~ à

The productive polar (yes-no) interrogative marker outside of formulaic greetings is clause-final wâ, or a reduced form à. For optional preclausal yálà (~ yélà) see §13.2.1.3.

- (731) a. (yálà) á jéé wâ
 (whether) 2Sg eat.Antip.Pfv Q
 ‘Have you-Sg eaten?’
- b. (yálà) á há sèédù tóò wâ
 (whether) 2Sg Ipfv S know.Stat Q
 ‘Do you-Sg know Seydou?’
- c. (yálà) Ø ñá = à kwárí wâ
 (whether) 1Sg Sbj/Obj 2Sg hit.Pfv Q
 ‘Did I hit you-Sg?’
- d. (yálà) ñ gà bilí ʰhēēⁿ wâ
 (whether) 3Sg Ipfv Fut fall.Pfv Q
 ‘Will he/she fall?’
- e. (yálà) á há só-lò [sójó-ó nî] wâ
 (whether) 2Sg Ipfv go.Ipfv [market-Sg Loc] Q
 ‘Are you-Sg going to the market?’
- f. (yálà) á ñá = á fáámù wâ
 (whether) 2Sg Sbj/Obj 3Sg understand.Pfv Q
 ‘Did you-Sg understand it?’
- g. (yálà) [á kàá] ʰbyē wâ
 (whether) [2Sg father] come.Pfv Q
 ‘Did your-Sg father come?’

This interrogative particle can be added to a single constituent, such as an NP (including independent pronouns) or PP, functioning as a truncated question, with the rest of the clause understood from context. The irregular tone-dropping on three temporal adverbs in (732b) is paralleled by their focalized forms with *rô* (§13.1.6.2 above).

- (732) a. ná (~ nó) wâ
 1Sg Q
 ‘Me?’
- b. fèè / wèè / jìrì wâ
 tomorrow / today / this year Q
 ‘Tomorrow?’ (< fèè, wèè, jìrì)

- c. sèédù wâ
 S Q
 ‘Seydou?’
- d. [hòó nìṅí] wâ
 [house inside] Q
 ‘In the house?’

wâ can also link two alternative constituents in a reduced ‘X or Y? question such as ‘you or me?’ (§7.2.2). This raises the possibility that wâ is really a disjunction ‘or’. If so, the examples given above are reduced from fuller, two-part polar interrogatives with the second option (often the simple negation of the first option) omitted.

Against this analysis is the fact that a fuller ‘or’ expression wâlì-mà is used in biclausal polar interrogatives (§13.2.1.5 below).

13.2.1.2 Polar interrogation by terminal intonation (pitch change)

Polar interrogation can be expressed without the final wâ. The word in question then ends in HM pitch (§3.7.1) and may be prolonged.

- (733) a. sèédū(→)
 S
 ‘Seydou?’ (< sèédù)
- b. sógó-ō(→)
 goat-Sg
 ‘A/The goat?’
- c. sàgá-ā(→)
 sheep-Sg
 ‘A/The sheep-Sg?’ (< sàgà-à)

13.2.1.3 Pre-interrogative yálà ‘(wondering) whether’

A polar interrogative with final wâ can be preceded by preclausal yálà (~ yélà). This is a more formal style of questioning. yálà is glossed ‘whether’, but when preposed to a question a better gloss would be ‘I wonder whether ...’ or ‘Could it be that ...(?)’. Examples are in (731) in §13.2.1.1 above. For propositional ‘whether ...’ complements of ‘know’, ‘not know’, and ‘forget’, see §17.2.1.1-2. For yálà in purposive clauses see §17.3.6.

13.2.1.4 Clause-initial k̀̀ń in greeting questions

k̀̀ń can occur clause-initially at the beginning of formulaic greeting questions of the ‘how did you sleep?’ variety. Phonologically similar forms occur in several languages of the zone in the same function. Examples are in 2021-01 @ 00:05 and 00:08.

13.2.1.5 Disjunctive polar interrogatives with wá̀lì-mà ‘or’

This differs from simple juxtaposition of the two polar interrogative clauses in presenting an overt disjunction wá̀lì-mà ‘or’. This is also the disjunction in non-interrogative contexts (§7.2.1). A clear prosodic break may occur between the two parts. wá̀lì-mà may be grouped prosodically with the second alternative, or it may itself be followed by a brief, planned prosodic break.

- (734) á há bílí ʃò̀̀,
 2Sg Ipfv Fut go.Pfv,
 wá̀lì-mà á há bílí †t̩g̩ g̩ⁿ
or 2Sg Ipfv Fut stay.Pfv here
 ‘Will you-Sg go, or will you stay here?’

13.2.2 Content (WH) interrogatives

Content interrogatives normally remain *in situ*, i.e. they are usually not fronted to clause-initial position.

13.2.2.1 Interrogative topic d̩ⁿ ~ dúⁿ ‘what about _?’

The particle d̩ⁿ ~ dúⁿ (dialect variants) is glossed “QTop” (quotative topic). It follows an NP or pronoun, either as an isolated phrase (‘what about X?’) or as subject of a clause. Pronouns can take independent or proclitic form, e.g. 2Sg á d̩ⁿ or á-rá d̩ⁿ and variants.

- (735) a. [sèédù dúŋ] †gà bílí = ì †sāgā míni
 [sèédú †dūŋ] gā bílí = " " "
 [S **QTop**] Ipfv Fut 3ReflSg lie.down.Ipfv where?
 ‘Where will Seydou (topic) spend the night?’

- b. ná d̩ⁿ / †d̩ⁿ
 n̩ d̩ⁿ
 1Sg(.Indep) **QTop**
 ‘And (what about) me?’

13.2.2.2 ‘Who?’ (jàâ)

The human WH interrogative noun is jàâ, becoming jàá before nonhigh tone and jàà before H-tone. It occurs in the normal range of syntactic environments for NPs. There is an explicitly plural form jàá-yèⁿ that occurs optionally when the questioner knows in advance that the answer will be a plural NP.

- (736) a. jàà ʃòò / ʃáákì
 who? go.Pfv / return.Pfv
 ‘Who went/returned?’
- b. jàá ʼbyē / nùgûⁿ
 who? come.Pfv / swim.Pfv
 ‘Who came/swam?’
- c. [ŋgí nàŋáà] jàá hà bìli²¹ ʃòò
 [1Sg between] **who?** Ipv Fut go.Pfv
 ‘Between us, who (=which of us) will go?’

Combinations with ‘who?’ as subject before various post-subject inflectional particles are in (737). The forms in the leftmost column and those before ‘go’ are basic. What are transcribed as L-toned hà, tà, tì, tà may be equivalent to locally downstepped (§3.6.5.3.10) ʼhā, etc., since monomoraic particles do not clearly distinguish M from L tone. Final Tone-Raising applies to the particles before ‘come’, which then fail to trigger the same raising process on jàâ.

(737)	combination	category	with ‘go’	with ‘come’
a.	jàá hà	imperfective	jàá hà só-lò	jàà há ʼbē-lē
	jàá tà	imperfective negative	jàá tà só-lò	jàà tá ʼbē-lē
	jàá tì	perfective negative	jàá tì ʃòò	jàà tí ʼbyē
b.	jàá hà bìli	future	jàá hà bìli ʃòò	jàá hà bìlí ʼbyē
	jàá tà bìli	future negative	jàá tà bìli ʃòò	jàà tá bìlí ʼbyē

As subject of a perfective positive clause, jàâ is immediately followed by an intransitive verb (738a-b) or by the bidirectional case marker ŋá separating subject from object (738c-h).

- (738) a. jàà ʃòò
 who? go.Pfv
 ‘Who went/came/swam?’

- d. jàá ʼrà-ní
who? it.is
 ‘Who is it?’
- e. jàà kúⁿ ʼnà-ní
who? Past it.is
 ‘Who was it?’

‘Who?’ can be conjoined to itself, avoiding the morphological plural. Here ʼki has undergone Local Downstep (§3.6.5.3.10).

- (740) [jàá [ʼkī jàâ]] ʃòò
 [who? [and who?]] go.Pfv
 ‘Who all went?’

13.2.2.3 ‘What?’ (mànásiì, mánziì, màⁿ, mwàⁿ), ‘with what?’, ‘why?’

The simple nonhuman content interrogative ‘what?’ has the forms in (741). They are interchangeable. The ending siì (or variant) is likely related to síí ‘any’ (§6.6.2.2).

- (741) a. mànásiì ~ mànáʃiì
 b. mánziì ~ mánʒiì
 c. màⁿ ~ mwàⁿ

mwàⁿ can also be pronounced [m:à] with an unusual initial geminated m.

Examples of ‘what?’ are in (742).

- (742) a. kw = élé mànáʃiì / mánziì / màⁿ
 Dem be **what?**
 ‘What is that?’
- b. mànásiì / mánziì há ʼwɔ̃ⁿ
 màŋ gá "
 what? be.Loc there.Def
 ‘What is there?’ or ‘What’s the matter?’
- c. mànásiì ɲá = à byé-ní gôⁿ
 [**what?** Sbj/Obj 2Sg come-Caus.Pfv here
 ‘What made you-Sg come here?’

- d. sèèdù ɲá mwàⁿ / mánásì / mánzì hɛ̀ɛ
 S Sbj/Obj **what?** see.Pfv
 ‘What did Seydou see?’
- e. sèèdù ɲá màn / mánásì / mánzì ʼtōōrō
 S Sbj/Obj **what?** sell.Pfv
 ‘What did Seydou sell?’
- f. á há mán / mánásì / mánzì ʼtāā-nā / ʼtīī-nī
 2Sg Ipfv **what?** do-Ipfv / look.for-Ipfv
 ‘What are you-Sg doing/looking for?’
- g. mánásì / mánzì / màⁿ ɲá = à kírɛ̀ⁿ
 what? Sbj/Obj 2Sg get.Pfv
 ‘What has gotten (=happened to/afflicted) you-Sg?’

With the instrumental circumposition (§8.1.3.1) the usual form is [kí màn tîⁿ] ‘with what?’ (743a). Purposive ‘why?’ is mánásì ʼnà, mánzì ʼnà, or mán ʼnà, any of which can be fronted (743b) or postverbal (743c).

- (743) a. á há cèè sógò-lò [kí màn tîⁿ]
 2Sg Ipfv field cultivate.Ipfv [Inst **what?** under]
 ‘With what do you-Sg cultivate (=do farming)?’
- b. [mánásì nà] ádamá ʼbyē
 [**what?** **Dat**] A come.Pfv
 ‘Why did Adama come?’
- c. á byé [mánásì ʼnà]
 2Sg come.Pfv [**what?** **Dat**]
 ‘Why did you-Sg come?’

13.2.2.4 ‘Where?’ (mínì, míní-fàà)

The simple interrogative ‘where?’ is mìⁿ. The most common combinations are in (744).

- (744) a. ... jóò mínì / míní-fàà ‘... went where?’
 b. ... há ʼmìnì / ʼmìnì-fàà ‘... be where?’

More examples with ‘where?’ are in (745).

- (745) a. á há só-lò míni
 2Sg Ipfv go.Ipfv **where?**
 ‘Where are you-Sg going?’
- b. nàà há ‘mīni
 cow be where?
 ‘Where is the cow?’
- c. à / ì há ‘mīni
 3Sg / 3Pl be.Loc where?
 ‘Where is he-or-she/are they?’
- d. á kúnj gá ‘mīni dúgò-ò-nù
 2Sg Past Ipfv where? yesterday
 ‘Where were you-Sg yesterday?’

13.2.2.5 ‘When?’ (‘which time?’, etc.)

Interrogatives for time are of the type ‘which time/day/year’ with a temporal noun plus interrogative adjective *júmèⁿ* ‘which?’ (§13.2.2.8) and no postposition. For time frames likely to be during the same day, the noun *sánà-à* or *wáàtì-ì* ‘(moment in) time’ is used as default (746a). The ‘when?’ phrase may follow the verb (746a) or be preposed (746b).

- (746) a. á há bélé ‘byē [sáná ‘júmèⁿ]
 2Sg Ipfv Fut come-Pfv [time **which?**]
 ‘When (at what time) will you-Sg come (back)?’
- b. [táá / jín júmèⁿ] á há bélé ‘byē
 [day / year **which?**] 2Sg Ipfv Fut come.Pfv
 ‘On what day/In what year will you-Sg come (back)?’ (< jín-ó)

13.2.2.6 ‘How?’ (cógó-díí, díí)

The noun ‘manner, way, method’ is *kírì-ì* or the Bambara loan *cógó-ó*. The manner interrogative ‘how?’ can be expressed lexically as *cógó-díí* (747a), also from Bambara, or by the PP [*kírì ‘júmèⁿ*] *ǰéè* ‘on (=in) what manner?’ (747b).

- (747) a. ngí há bílá = á ‘tààn cógó-díí
 1Pl Ipfv Fut 3Sg do.Pfv **how?**
 ‘What (“how”) will we do (it)?’ (< tááⁿ)

- b. ɲgí há bílá = á ʔtààŋ [[kírí ʔjūmèⁿ] ʃéè]
 1Pl Ipfv Fut 3Sg do.Pfv [[**manner** **which?**] on]
 ‘What (“how”) will we do (it)?’

Further examples of cógó-díí are in (748).

- (748) a. á há ʔbààrá-á ʔtāā-nā cógó-díí
 2Sg Ipfv work(n)-Sg do.Ipfv **how?**
 ‘How do you-Sg work?’
- b. á byé cógó-díí
 2Sg come.Pfv **how?**
 ‘How did you-Sg come?’
- c. ɲ gá ʔcōgō-dīī
 3Sg be.Loc **how?**
 ‘How is it (going)?’ (in greetings)

A simpler form díí occurs with reference to names and other quoted speech. Free translations are with ‘what?’ (749).

- (749) a. [á-rá ʔtògó-ó] ʔkēlē ʔdīī
 [2Sg-Indep name-Sg] be.Cop **how?**
 ‘What is your-Sg name?’ (< tógó-ó) (2021-1 @ 00:11)
- b. á wó ʔdīī
 2Sg said **how?**
 ‘What did you-Sg say?’

13.2.2.7 ‘How much/many?’ (jéni)

The interrogative for quantities is jéni. The quantity may be a measure or a number. jéni may occur by itself, especially in connection with money, but otherwise it is usually added to a noun, even if only a pro forma noun like ‘person’. léŋ-ó ‘child’ can be used in the general sense ‘units’ when the category of nonhuman objects being counted (sheep, mangoes) is understood (750c). The noun preceding jéni takes bare-stem form, and tonal patterns are the same as with /HL/-melodic numerals. The iterative is distributive jéni-jéni ‘how much/many each?’ (750f).

- (750) a. jéni ʔrà-ní
 jéni ʔnà-ní
how.much? it.is
 ‘How much is it?’

- b. [níní jénì] ʼbyē
 [person **how.many?**] come.Pfv
 ‘How many people came?’
- c. [léŋ jénì] ʼnà-ní
 [child how.many?] **how.many?**
 ‘How many (units)? (< léŋ-ó)
- d. [í níní jénì] há ʼbē-lē
 [2Pl person **how.many?**] Ipfv come-Ipfv
 ‘How many of you-Pl are coming?’
- e. á ŋá [ʼságà jénì] sáⁿ
 2Sg Sbj/Obj [sheep **how.many?**] buy.Pfv
 ‘How many sheep did you-Sg buy?’
- f. [fúrá-láŋ]-ó-yéŋ ʼkēlē jénì-jénì
 [broom]-Sg-Pl be **Rdp-how.much?**
 ‘How much (each) are the brooms?’ (distributive, §4.6.1.7)
- g. hòlò jénì
 salt **how.much?**
 ‘how much salt?’ (< hòlò-ò)
- h. hònòŋ ʼjénì
 bird **how.many?**
 ‘How many birds?’ (< hònòŋ-ò)
- i. mìsìrì ʼjēnì
 mìsìrì jénì
 mosque **how.many?**
 ‘How many mosques?’ (< mìsìrì-ì)
- j. màrìfà ʼjēnì
 màrìfà jénì
 rifle **how.many?**
 ‘How many rifles?’ (< màrìfà-à)

The entity to be counted may be expressed as a preposed topicalized PP with postposition nàŋáà ‘between, among’ (751).

- (751) [á nàà-yéⁿ] nàṅàà, á ṅá jénì 'tōōrō
 [2Sg cow-Pl] **among**, 2Sg Sbj/Obj how.many? sell.Pfv
 'Among your-Sg cows, how many (of them) did you-Sg sell?'

Ordinal adjective 'how-manieth?' (Fr *quantième*) is jénì-ná-á, with regular ordinal suffix -ná-á (§4.6.2.2).

13.2.2.8 'Which X?' (X júmèⁿ ~ dùmèⁿ)

júmèⁿ ~ dùmèⁿ 'which?' occurs at the end of NPs, following N, N-Adj, and N-(Adj-)Num strings. A preceding noun is required. The noun has bare-stem form. The tone patterns are the same as those with /HL/-melodic numerals like '3' and '5' (§6.4.1.2). 'Which?' is downstepped to 'jūmèⁿ ~ 'dūmèⁿ after a noun or numeral whose lexical melody contains a HL tone break (752a,d), but not if 'which?' follows a N-Adj sequence (752b). júmèⁿ can bear the NP-level plural suffix -yèⁿ, resulting in júmèⁿ-yèⁿ (752c).

(752)	'which __?'	gloss	noun/numeral
a.	nàà júmè ⁿ	'which cow?'	nàà
	sógó júmè ⁿ	'which goat?'	sógó-ò
	sàgà júmè ⁿ	'which sheep?'	sàgà-à
	hòndṅ júmè ⁿ	'which bird?'	hòndṅ-ò
	básá 'jūmè ⁿ	'which agama lizard?'	básà-à
	màrifá 'jūmè ⁿ	'which rifle?'	màrifá-à
	mìsirí 'jūmè ⁿ	'which mosque?'	mìsirí-ì
b.	náá fí-ná-nà júmè ⁿ	'which black cow?'	
c.	nàà júmè ⁿ -yè ⁿ	'which cows?'	
d.	nàà jííyó 'jūmè ⁿ	'which three cows?'	jííyò

Some clauses with 'which?' are in (753).

- (753) a. á há 'bāgī-lī [[nùṅù júmèⁿ] nî]
 2Sg Ipfv exit-Ipfv [[village **which?**] Loc]
 'What (=which) village are you-Sg from?'
- b. á ṅá [nàà júmèⁿ] 'tōōrō
 2Sg Sbj/Obj [cow **which?**] sell.Pfv
 'Which cow did you-Sg sell?'

- c. á há bílí [̀n nàà júmè̀n] sâⁿ
 2Sg Ipfv Fut [1Sg cow **which?**] buy.Pfv
 ‘Which cow of mine will you-Sg buy?’
- d. [̀nà̀jà̀nù júmè̀ⁿ] ̀nà= à hóòⁿ
 [woman **which?**] Sbj/Obj 2Sg call.Pfv
 ‘Which woman called you-Sg?’
- e. á ̀nà [̀ⁿnà̀jà̀nù júmè̀ⁿ] hóòⁿ
 2Sg Sbj/Obj [woman **which?**] call.Pfv
 ‘Which woman did you-Sg call?’

14 Relativization

14.1 Basics of relative clauses

14.1.1 Relative marker mẁ̀ ~ mùⁿ and its plural

Relatives are consistently internally headed in the recordings. The relativized NP (or adverb) remains in its clause-internal position. The relative morpheme (754) follows a complete NP, for example a noun with singular suffixation, as in h̀̀ǹ̀ǹ̀-́ mẁ̀ ‘the bird that ...’.

(754)	basic form	tone-raised before nonhigh tone
a. singular	mẁ̀	m̀̀́
b. plural	m̀̀́-ỳ̀ ⁿ	m̀̀́-ỳ̀́ ⁿ

There is a variant mùⁿ, as in mùn dá ˈjĩŋgĩnà ‘what is not next year,’ i.e. ‘the year after next’, see (986) in §196.6.

(755a-c) illustrate the singular-plural distinction. The singular head noun in (755a) has its singular suffix; this is clearer with η-final noun stems as in h̀̀ǹ̀ǹ̀-́ mẁ̀ ‘the bird that ...’. When the head is plural, the relative marker is obligatorily pluralized. The noun is also optionally pluralized with the usual plural suffix -ỳ̀ⁿ (755b).

(755)	a.	[sàgá-á m̀̀́]	ˈbyē
		[sheep-Sg Rel]	come.Pfv
		‘the sheep-Sg that came’	
	b.	[sàgà-à-ỳ̀m m̀̀́-ỳ̀m]	ˈbyē
		[sàgá-á “ “	
		[sheep-Sg(-Pl) Rel-Pl]	come.Pfv
		‘the sheep-Pl that came’	

High-frequency human nouns like ‘person’, ‘man’, ‘woman’, and ‘child’ that have irregular plurals tend to use those plurals before m̀̀́-ỳ̀ⁿ (756b).

(756)	a.	[ǹ̀̀̀̀ǹ̀̀̀-ú m̀̀̀̀̀̀]	jéém̀̀̀̀̀
		[woman-Sg Rel]	speak.Pfv
		‘the woman who spoke’ (< ǹ̀̀̀̀ǹ̀̀̀-̀̀̀̀̀)	

- b. [nàjà-léèⁿ mwò-yêŋ] jéémù
 [woman-**PI** **Rel-PI**] speak.Pfv
 ‘the women who spoke’

The typical *in situ* position of the relativized constituent is illustrated by the relatives in (757). The relativized subject (757a) is in the usual clause-initial subject position. The relativized object (757b) occurs in the normal object position between the post-subject grammatical morpheme and the verb. The relativized complement of postposition in (757c) occurs inside the postverbal PP.

- (757) a. [sàgá-á mwò] ‘hēēⁿ
 [sheep-Sg **Rel**] fall.Pfv
 ‘the sheep-Sg who fell’
- b. á ŋá [ʔsàgà-á mwò] sâⁿ
 2Sg Sbj/Obj [sheep **Rel**] buy.Pfv
 ‘the sheep-Sg that you-Sg bought’
- c. ì ŋá = á ‘tāāⁿ [[kírí mwò] ʃéè]
 3Pl Sbj/Obj 3Sg do.Pfv [[manner **Rel**] on]
 ‘the way in which they did it’
- d. [sàgá-á mwò] [á ŋá = á sâⁿ]
 [sheep-Sg **Rel**] [2Sg Sbj/Obj 3Sg buy.Pfv]
 [= (a)]

14.1.2 Nonspecific and double-headed relatives

Relative clauses are often preposed as topical phrases, then resumed with a third person pronoun in the following main clause. This is essentially a correlative construction. With a definite (and referentially specific) relative clause, this re-introduces a discourse referent that will then play a role in the ensuing clause(s). Schematic example: ‘We bought a cow in the market. The cow that we bought, we will sell it tomorrow.’

A textual example is 2021-06 @ 02:33: ‘(Like) the way I know fresh (fish), I know smoked (fish) every bit as well.’

This use of relative clauses can be expanded to introduce a new, nonspecific discourse referent (‘any/whatever X’, ‘anyone/whoever’, ‘anywhere/wherever’, etc.). Furthermore, two distinct nonspecific constituents in the same clause may be introduced simultaneously in such a preposed topical NP. Thus (758a) and (758b), each with one relative head, can be combined as (758c) which has two relative heads.

- (758) a. [sùgù-ú mwò] há 'ᵀᵀᵀᵀᵀ-ᵀᵀ 'kū-nū
 [net-Sg **Rel**] Ipfv fish-Sg catch-Ipfv
 'any net that catches a/the fish' (< sùgù-ù, ᵀᵀᵀᵀᵀ-ᵀᵀ)
- b. sùgù-ù há ['ᵀᵀᵀᵀᵀ-ᵀᵀ mwò] 'kū-nū
 neg-Sg Ipfv [fish-Sg **Rel**] catch-Ipfv
 'any fish (species) that the net catches'
- c. [sùgù-ú mwò] há ['ᵀᵀᵀᵀᵀ-ᵀᵀ mwò] 'kū-nū
 [net-Sg **Rel**] Ipfv [fish-Sg **Rel**] catch-Ipfv
 'any/some net that catches any/some fish (species)'

A translation of (758c) using an English relative clause would not make much sense. The actual usage of double-headed topical relatives clauses like (758c) is better captured by an existential conditional antecedent: 'if there is some type of net that catches some type of fish, ...'.

Indeed, preclausal ní 'if' is readily combinable with what is otherwise a relative construction with one or more heads. This combination is attested in temporal relative adverbial clauses: '(at the time) when ...'. The conceptual content of the clause is bookended by initial ní 'if' and the concluding sàᵀà mwò 'time that'. A locative postposition ('at/on') is understood but omitted. This construction occurs four times in the texts: (2021-01 @ 01:39 & 01:49; 2021-06 @ 03:29 & 04:09).

Another example of the combination is 'if it manages to get ahold of anything/whatever' (2021-01 @ 03:18).

14.2 Internal head NP

14.2.1 Pronoun as head

A pronoun (independent or proclitic) can function as relative head.

- (759) a. [ᵀᵀᵀᵀ-rè mwò-yèⁿ] há ['ᵀᵀᵀᵀ-ù nî]
 [**1PI Rel-PI**] be [village-Sg Loc]
 'we who are in the village.' (< ᵀᵀᵀᵀ-rè, ᵀᵀᵀᵀ-ù)
- b. á há [ná mwò] tóò
 2Sg Ipfv [**1Sg.Indep Rel**] know.Stat
 'I who(m) you-Sg know'

14.2.2 Conjoined NP as head

When the head is a conjoined NP, both conjuncts may have the relative morpheme (760a). Alternatively, a single occurrence of plural *m̀ẁs̀-ỳèⁿ* follows the entire conjoined NP (760b).

- (760) a. [nàṅànú-ú mẁ] [kí [ʰàlú-ú mẁs̀]] ʰbyē
 [woman-Sg **Rel**] [**and** [man-Sg **Rel**]] come.Pfv
 ‘the woman and the man who came’
- b. [nàṅànú-ù [kí [ʰàlú-ú mẁs̀-ỳém]] ʰbyē
 [woman-Sg [**and** [man-Sg **Rel-Pl**]] come.Pfv
 [= (a)]

14.2.3 Headless relative

The relative marker, singular or plural, may head a relative clause without an overt head NP.

- (761) a. mẁs̀ ʰt̩g̩s̩ g̩ⁿ
Rel stay.Pfv here
 ‘(the) one who stayed here’
- b. [mẁs̀-ỳèṅ gá ʰbààrá-á ʰtāā-nā]
 [**Rel-Pl** Ipfv work(n)-Sg do.Ipfv]
 [kí [mẁs̀-ỳèṅ tá ʰbààrá-á ʰtāā-nā]
 [**and** [**Rel-Pl** IpfvNeg work(n)-Sg do-Ipfv]]
 ‘those who work, and those who don’t work’
- c. Ø ṅá mẁ h̩èè [sábúla-húé-cógò-ò nî]
 1Sg Sbj/Obj **Rel** see.Pfv [hippo-jab-manner-Sg Loc]
 ‘what I have seen in the manner of hippo-spearing’ (2021-01 @ 05:00)

14.2.4 Head in subordinated clause or VP

In a language like this with *in situ* relatives, there should be no restriction on the relativization site. Indeed, there is a textual example with combined ‘if’ before the main clause and the relative marker inside a sequential VP. See ‘if it manages to get ahold of anything/whatever’ with headless relative (2021-01 @ 03:18).

14.2.5 Construction with -nàá mwò 'tááⁿ

Example (762) is a difficult-to-parse construction with *mwò* following a participle-like verb form with suffix *-nàá* ‘when’, and completed with ‘be done’ (§15.6).

- (762) ó góbó-nàá mwò 'tāāⁿ
 Dem.Def get.sick-when Rel be.done.Pfv
 ‘with that one (=mother) having gotten sick, ...’ (2021-06 @ 01:18)

14.3 Position of *mwò* vis-à-vis postnominal modifiers in head NPs

Relative *mwò* or its plural follows adjectives and numerals. It precedes *súnúⁿ* ‘all’ and discourse-functional particles.

14.3.1 Adjectives

Modifying adjectives follow the noun in the same way (including tonal interactions) as in main clauses. The relative morpheme follows and is not included in the domain of Tone Leveling that applies to the N-Adj pair.

- (763) a. [nújú jínè-nóη-ò mwò] há 'gòⁿ
 [village small-Dimin-Sg Rel] be.Loc here
 ‘the small village that is here’ (< nùηù-ù)
- b. [nújú jínè-nóη-ò mwó-yèⁿ] há 'gòⁿ
 [village-Dimin small-Dimin-Sg Rel-Pl] be here
 ‘the small villages that are here’
- c. Ø ηá [hós tóri-í mwò] sâⁿ
 1Sg Sbj/Obj [house new-Sg Rel] buy.Pfv
 ‘the new house that I bought’ (< hòò, hós tóri-ì)

14.3.2 Numerals

Numerals are likewise added to the head noun, preceding the relative marker. If the head is inanimate, any further plural marking is optional and an assistant avoided it. He produced (764a) with “singular” *mwò* and 3Sg resumptive pronoun, though he accepted a version with 3Pl resumptive (... *ηí= í sâⁿ*). For animate heads the relative marker can be plural in form (764b).

- (764) a. Ø ɲá [hòò ʃíyò mwò] sâⁿ
 1Sg Sbj/Obj [house **three** **Rel**] buy.Pfv
 ‘the three houses that I bought’ (< hòò)
- b. [nàà náánà mwò / mwò-yéⁿ] ʰhēēⁿ
 [cow **four** **Rel / Rel-Pl**] fall.Pfv
 ‘the four cows who fell’ (< nââ)

14.3.3 Postnominal demonstrative

The relative marker also follows the postnominal demonstrative kú ~ kù (765).

- (765) [á ɲáɲá-á] há [[hós kú mwò] ʰlà]
 [2Sg eye-Sg] be.Loc [[house **Dem** **Rel**] Dat]
 ‘that house that you-Sg see’ (< hós kù)

14.3.4 Universal quantifier (‘all’)

The universal quantifier directly follows the relative morpheme when it has scope over the head. A plural relative marker occurs when the sense is universal ‘all’ (766a-b). If the sense is indefinite ‘any’, no quantifier is present (766c).

- (766) a. [bòlò-méèⁿ mwò-yéⁿ ʰsūnūⁿ] ʰhēēⁿ dúgò-ò-nì
 [young.person-Pl **Rel-Pl** **all**] fall.Pfv yesterday
 ‘all the young people who fell yesterday’ (< bòlò-méèⁿ)
- b. [á ɲáɲá-á] há [[hòò mwò-yéⁿ ʰsūnūⁿ] ʰnà]
 [2Sg eye-Sg] be.Loc [[house **Rel-Pl** **all**] Dat]
 ‘all the houses that you-Sg see’
- c. [jín-ó mwò] [há báá kóó-ɲáá] há bílí ʰbē
 [year-Sg **Rel**] [cloud much] Ipfv Fut come.Pfv
 ‘a/any year when it has rained well’ (< hà báá, bé variant of byé)

14.3.5 Discourse-functional morphemes

Topic morpheme kónìⁿ follows the entire relative construction including the verb with scope over the entire NP.

- (767) [[b̀̀l̀-̀̀m̀̀̀n mẁ̀-̀̀ỳ̀̀n] ˈh̀̀n k̀̀n, i ˈbỳ̀
 [[young.person-Pl **Rel-Pl**] fall.Pfv **Topic**, 3Pl come.Pfv
 ‘As for the young people who fell, they have come.’ (< b̀̀l̀-̀̀m̀̀̀n, h̀̀̀n)

14.4 Grammatical relation of relativized-on NP

The subsections below give more examples of relative clauses, organized by the grammatical role of the head, but also illustrating various clause-level inflectional categories.

14.4.1 Subject relative clause

From main clause (768a) is formed the subject relative in (768b). The relative morpheme *mẁ̀* or its plural occurs at the end of the head. There is no change in the rest of the clause.

- (768) a. b̀̀l̀-̀̀m̀̀̀ / h̀̀̀ ˈh̀̀n d̀̀g̀-̀̀-̀̀n
 young.person/house fall.Pfv yesterday
 ‘The young person/The house fell yesterday.’ (< b̀̀l̀-̀̀m̀̀̀, h̀̀̀)
- b. [b̀̀l̀-̀̀m̀̀̀ / h̀̀̀ mẁ̀] ˈh̀̀n d̀̀g̀-̀̀-̀̀n
 young.person/house **Rel**] fall.Pfv yesterday
 ì gá ˈm̀̀n
 3Sg be.Loc where?
 ‘The child who / The house that fell yesterday, where is it?’

The main clause (769a) with plural subject corresponds to the relative clause in (769b). There is a plural relative marker. If the head is an ordinary noun like ‘house’ that takes the productive plural suffix *-ỳ̀*, this suffix is often omitted before the plural relative marker. Irregular plurals like ‘children’ are allowed as relative heads.

- (769) a. b̀̀l̀-̀̀m̀̀̀-̀̀ỳ̀ / h̀̀̀-̀̀ỳ̀ ˈh̀̀n d̀̀g̀-̀̀-̀̀n
 young.person-Pl-Pl / house-Pl fall.Pfv yesterday
 ‘The young people/houses fell yesterday.’
- b. [[b̀̀l̀-̀̀m̀̀̀ / h̀̀̀ mẁ̀-̀̀ỳ̀] ˈh̀̀n d̀̀g̀-̀̀-̀̀n
 [[young.person-Pl / house **Rel-Pl**] fall.Pfv yesterday]
 ì há ˈm̀̀n-fáà
 3Pl be.Loc where?
 ‘The young people who/The houses that fell yesterday, where are they?’

Example (770a) is perfective negative. (770b) is imperfective positive, and (770c) is imperfective negative.

- (770) a. [bóló-mèé mwò] tí ‘hēēⁿ
 [young.person Rel] **PfvNeg** fall.Pfv
 ‘the young person who didn’t fall’
- b. [bóló-mèé mwò] há ‘hē-nū
 [child Rel] **Ipfv** fall-IPfv
 ‘the child who falls’
- c. [bóló-mèé mwò] tá ‘hē-nū
 [child Rel] **IpfvNeg** fall-IPfv
 ‘the child who doesn’t fall’

Textual examples of subject relatives: ‘the (model of) rifle that came’ (2021-01 @ 05:06); ‘yesterday which has passed (=in the old days)’ (2021-06 @ 00:25 & 05:27 and elsewhere); ‘a woman who is there nowadays’ (2021-06 @ 06:48); ‘a woman who spends the night fishing’ (2021-06 @ 06:53); ‘a person who washes her hands with oil’ (2021-10 @ 00:55). The “subject” of presentative *hēē* is relativized in (2021-06 @ 06:12). A prosodic break or interruption occurs in ‘women, (the ones) who fish’ (2021-06 @ 05:12) and ‘it’s a monstrous beast, which is in the water’ (2021-01 @ 00:42).

14.4.2 Object relative clause

The object NP functioning as head may remain in its regular position, following the subject and post-subject inflectional markers but preceding the verb. As indicated above, the head may alternatively be fronted.

- (771) a. [Ø ɲá [nàá mwò] sán dúgò-ò-nì] há ‘mīnì
 [1Sg Sbj/Obj [cow **Rel**] buy.Pfv yesterday] be.Loc where?
 ‘Where is the cow that I bought yesterday?’ (< nàà, sâⁿ)
- b. [Ø ɲá [nàá m̀ẁó-yèⁿ] sán dúgò-ò-nì] há ‘mīnì
 [1Sg Sbj/Obj [cow **Rel-PI**] buy.Pfv yesterday] be.Loc where?
 ‘Where are the cows that I bought yesterday?’

Further examples of object relatives are perfective negative (772a), imperfective positive (772b), and imperfective negative (772c).

- (772) a. ń tí [‘lèŋ-ò mwò] hēē
 1Sg PfvNeg [child-Sg **Rel**] see.Pfv
 ‘the child (=offspring) who(m) I didn’t see’

- b. ḡ gá [‘bɔ̃lɔ̃-mɛ́ mwɔ̃] hɛ́ɛ-lɛ̀
 1Sg Ipfv [young.person **Rel**] see-Ipfv
 ‘the young person who(m) I see (often)’
- b. ṅ tá [‘bɔ̃lɔ̃-mɛ́ mwɔ̃] hɛ́ɛ-lɛ̀
 1Sg IpfvNeg [young.person **Rel**] see-Ipfv
 ‘the young person who(m) I do not see’

Textual examples are these: ‘the kinds of fishing that they do’ (2021-06 @ 05:12); ‘what I have seen’ (2021-01 @ 05:00), and ‘the tale that I will tell you’ (2021-10 @ 00:02 and elsewhere).

14.4.3 Possessor relative clause

Possessors precede possessums with no genitive marker (773a). It is easy to form possessor relatives by adding the relative morpheme to the possessor (773b). The possessum still has possessum tones, as shown by ʔnánànù-ù ‘woman/wife’ in (773c).

- (773) a. hálú-ú hɔ̃ɔ̃
 man-Sg house
 ‘the man’s house’
- b. [[hálú-ú m̀wɔ̃] hɔ̃ɔ̃] ‘hɛ́ɛⁿ
 [[man-Sg **Rel**] house] fall.Pfv
 ‘the man whose house fell’
- c. [[níní-í m̀wɔ̃] màá] ‘sāⁿ
 [[person-Sg **Rel**] mother] die.Pfv
 ‘a person whose mother has died’ (2021-10 @ 02:06)
- d. [lé-nóŋ-ɔ̃ m̀wɔ̃] ‘nɛ́ŋ-ɔ̃] lɛ́ⁿ
 [child-Dim-Sg **Rel**] tongue-Sg] be.sweet
 ‘the girl whose tongue was sweet (=who spoke glibly)’
 (2021-08 @ 00:56) (< néŋ-ɔ̃)

14.4.4 Relativization on the complement of a postposition

A relative can easily be formed from the complement of a postposition or that of the instrumental circumposition. This is illustrated for the dative in (774a), for one of the spatial postpositions in (774b), and for the instrumental in (774c). The PP remains in its usual postverbal position.

- (774) a. Ø ηά wáři-í ʼl55 [[nàjànú-ú m̀wò] ʼlà]
 1Sg Sbj/Obj money give.Pfv [[woman-Sg **Rel**] **Dat**]
 ‘the woman to whom I gave the money’
- b. Ø ηά wáři-ì yágà [[s̀d̀g̀óósi-í m̀wò] ǹηî]
 1Sg Sbj/Obj money put.in.Pfv [[bag **Rel**] **inside**]
 ‘the bag into which I put-Past the money’ (< s̀d̀g̀óósi-ì ~ s̀ak̀óósi-ì)
- c. ñ gá cèè s̀óg̀d̀-ì [kí [twáá mẁd̀] tîⁿ]
 1Sg Sbj/Obj field cultivate.Ipfv [**Inst** [daba **Rel**] **under**]
 ‘the daba (=hoe) with which I cultivate (=work in the field).’

There are quite a few textual examples. The nouns ‘manner’, ‘place’, and ‘time/day’ are commonly relativized to produce adverbial relative clauses: *kíri mẁd̀ jéè* ‘the way in which ...’ (2021-01 @ 00:34, 2021-06 @ 06:09 and elsewhere); ‘the place in which ...’ (2021-06 @ 05:43, 2021-08 @ 02:47, 2021-110 @ 04:47); ‘the day on which ...’ (2021-06 @ 06:57). Other examples are these: ‘the harpoon onto which they put the shaft’ (2021-01 @ 03:31); ‘the city in which that I have settled’ (2021-06 @ 01:56); ‘the grill on which the fish are smoked’ (2021-06 @ 02:00 & 02:07); and ‘the metal on which it is put’ (2021-06 @ 02:36).

Similarly, the complement of instrumental circumposition *kí ... tîⁿ* is relativized in ‘the thing with which they kill it’ (2021-01 @ 00:52) and ‘the rifle with which they do it’ (2021-01 @ 05:09).

The ‘X have Y’ construction phrased as “Y be [by X]” relativizes the possessor X in ‘a person who do not have a mother’ (2021-10 @ 02:14).

14.4.5 Irregular *wóróⁿ-m̀n-dóó* ‘the place where’

For the spatial adverbial relative ‘in the place where ...’, in addition to the regular relative (775a) there is an irregular compound version (775b). It contains *wóróⁿ-ó* ‘place’ in its bare stem form, plus *m̀ⁿ* variant of relative *mẁd̀*, and *-tóó* ‘place of’ (§4.2.1.4, §5.1.7.3).

- (775) a. [wóróⁿ-ó mẁd̀] nî
 [place-Sg Rel] Loc
 ‘in the place that/where ...’
- b. wóróⁿ-m̀n-dóó nî
place-Rel-place Loc
 [=a)]

See also §15.4.2. A similarly irregular compound with the same sense, repeating a noun meaning ‘place’ on both flanks, occurs in Cliffs, but apparently not in JSDj.

14.4.6 Manner relatives (kírí mwò)

Manner relatives of the type ‘(in) the way X VPs’ can function as NP constituents in clauses (776).

- (776) [zákì há ‘bààrá-á ‘tāā-nā [kírí mwò], ó tà mēè
 [Z Ipfv work(n)-Sg do-Ipfv [**manner Rel**], Dem.Def IpfvNeg be.good
 ‘The way Zaki works, it isn’t good.’

This can be made into a manner adverbial relative by adding the postposition (ʃéè). This combination occurs several times in the texts.

- (777) [séŋ-ó ‘rà] há ‘bē-lē [kí sàbùlà-à tîⁿ],
 [harpoon-Sg Foc] Ipfv come-Ipfv [Inst hippo-Sg under],
 ŋí ŋí= í hēè [[kírí mwò] ʃéè]
 1Pl Sbj/Obj 3Pl see.Pfv [[**manner Rel**] **on**]
 ‘The harpoon [focus] is what will bring the hippo (onto the shore). The way we saw them (old-timers).’ (2021-01 @ 04:10) (< hēè)

The synonym cógó-ó ‘manner’ (< Bambara) can also be relativized on. However, cógó mwò occurs either without a postposition (2016-01 @ 00:20) or with dative lá (2016-06 @ 00:16).

15 Multi-verb combinations

This chapter covers two general types of constructions. In one type, a verb or a subjectless VP is juxtaposed to a clause or to another VP. This includes constructions that express consecutive, more or less independent events, and those that involve some degree of integration and subordination. The second type is adverbial clauses (e.g. ‘when/where/the way...’) that are only loosely subordinated to other clauses.

For more highly structured combinations of two subject-headed clauses, see the chapter 16 on conditionals and chapter 17 on complementation.

15.1 Verb-verb compounds and similar constructions

15.1.1 Ipfv bé-lé ‘comes’ and só-ló ‘goes’ as finals in verb-verb compounds

byé/bé-lé ‘come’ or jóò/só-lò ‘go’ can follow another verb in a compound-like verb-verb construction. The first verb is aspectually marked as the context requires. The ‘come’ or ‘go’ verb that follows is in fixed Ipfv form segmentally regardless of the aspectual context, and is H-toned (bé-lé, só-ló). It cannot be independently negated or made subjunctive. Any adjuncts follow the two-verb compound.

Some intransitive verbs that can function as the inflectable first verb in this construction are in (778). When added to one of the other motion verbs (778a), ‘come’ or ‘go’ functions to specify direction (centripetal or noncentripetal), e.g. ‘enter’ plus ‘come’ = ‘come in’. Such combinations are common. When added to a non-motion verb like ‘sing’ (778b), ‘come’ or ‘go’ adds simultaneous motion as well as direction. In this case, the ‘while’ construction with -tṣṣ ~ -tḁḁ (§15.3.1.1) is usually preferred.

(778)	gloss	Pfv/Ipfv
a. intransitive motion verbs		
	‘exit (v)’	bágí(-lí)
	‘run’	hóólò(-lò)
	‘descend’	jéṅè(-nè)
	‘enter’	lṣṣ/ló-ló
	‘walk’	níṅì(-nì)
	‘return’	ṣáákì(-lì)
	‘ascend’	tá ⁿ /tá-ná
c. other intransitive verbs (example)		
	‘sing’	sélé(-lé)

Examples (779a-b) illustrate with ‘return’, showing that ‘come’ and ‘go’ are Ipfv morphologically even when the clause as a whole is perfective.

- (779) a. à fǎákì bé-lé gôⁿ
 3Sg return.Pfv **come-Ipfv** here
 ‘He/She came back here.’
- b. à fǎákì só-ló wôⁿ
 3Sg return.Pfv **go-Ipfv** there.Def
 ‘He/She went back there.’

Examples showing other main-clause inflectional categories are perfective negative (780a) imperfective (780b), future (780c), and imperative (780d). The ‘come’ or ‘go’ verb remains in invariant Ipfv form throughout.

- (780) a. à tì fǎákì bé-lé gôⁿ
 3Sg PfvNeg return.**Pfv** come-**Ipfv** here
 ‘He/She did not come back here.’
- b. ì gà fǎákì-lì só-ló wôⁿ
 3Sg Ipfv return-**Ipfv** go-**Ipfv** there.Def
 ‘He/She (often) goes back there.’
- c. ì gà bìlì fǎákì bé-lé gôⁿ
 3Sg Ipfv Fut return.**Pfv** come-**Ipfv** here
 ‘He/She will come back here.’
- d. fǎákì só-ló wôⁿ
 return.**Pfv** go-**Ipfv** there.Def
 ‘Go-2Sg back there!’

Because ‘come’ and ‘go’ follow the other verb, there is no impediment to combining ‘come’ or ‘go’ with a preceding object-verb string. In other words, transitive VPs may combine with these motion verbs.

- (781) à ñá ʔùgú-ú ʔjāā bé-lé
 3Sg Sbj/Obj meat-Sg eat.**Pfv** **come-Ipfv**
 ‘He/She came eating meat.’ (< túgú-ú)

bé-lé or só-ló may be combined with a phrase beginning mà ‘until’ (§8.5.5.7), the sense being ‘come/go all the way to’. The mà particle can be implied but omitted, as in (782).

- (782) tòrò-ò ηí= ì jéηé-nì [bé-lé nòηómà-à]
 fig.tree-Sg Sbj/Obj 3ReflSg descend-Caus.Pfv [come-Ipfv ground-Sg]
 ‘The fig tree came all the way down to the ground.’ (modified < 2015-10 @ 04:15)

This compound construction with ‘go’ or ‘come’ should be distinguished from another construction where ‘come’ or ‘go’ is followed by a perfective VP, often in purposive function. That construction (§15.1.4) describes a genuine motion event that leads up to a distinct second event.

15.1.2 Other Ipfv motion verbs as finals in verb-verb compounds

Other motion verbs that express direction (vertical or with reference to a transition) can also occur instead of ‘come’ and ‘go’ as finals in the construction described above. As with ‘come’ and ‘go’, they take fixed Ipfv form regardless of the aspectual context.

- (783) à ηά ʹtùgú-ú ʹjāā tá-ná / jéηè-nè / ló-ló / bágí-lí
 3Sg Sbj/Obj meat-Sg eat.Pfv **ascend-/descend-/enter-/exit(v)-Ipfv**
 ‘He/She ascended/descended/entered/exited eating meat.’

A high-frequency example is yágà só-ló ‘send’ (from ‘put’ and ‘go’), imperfective yágà-là só-ló. ‘Come’ or ‘go’ may be added to such compounds, resulting in two consecutive Ipfv motion verbs added to the main verb.

- (784) à ηά ʹtùgú-ú ʹjāā tá-ná bé-lé
 3Sg Sbj/Obj meat-Sg eat.Pfv **ascend-Ipfv** **come-Ipfv**
 ‘He/She came up (here) eating meat.’

15.1.3 Ipfv non-motion activity verb following a main clause

An activity verb in its imperfective stem may be added to a clause in any tense-aspect category that ends in a verb. Thus antipassive intransitive ‘eat(s)’ can be added to the imperfective, perfective, future, and prohibitive of ‘do work’ (785a-d). The two verbs are adjacent and cannot readily be separated by any other element.

- (785) a. η̣ gá ʹbààrá-á ʹtāā-nā jéé-lé
 3Sg Ipfv work(n)-Sg do-Ipfv eat.Antip-**Ipfv**
 ‘He/She eats while working.’
- b. à ηά ʹbààrá-á ʹtāāη̣ jéé-lé
 3Sg Sbj/Obj work(n)-Sg do.Pfv eat.Antip-**Ipfv**
 ‘He/She ate while working.’

- c. ñ gà bèlé ʔbààrá-á ʔtāāɲ jéé-lé
 3Sg Ipfv Fut work(n)-Sg do.Pfv eat.Antip-**Ipfv**
 ‘He/She will eat while working.’
- d. á mání ʔbààrá-á ʔtāāɲ jéé-lé
 2Sg Proh work(n)-Sg do.Pfv eat.Antip-**Ipfv**
 ‘Don’t-2Sg eat while working!’

This construction occurs infrequently in the available data. It competes with the productive ‘while’ construction with -tós ~ -tòò (§15.3.1.1).

15.1.4 Motion verb plus perfective VP

An intransitive motion clause is commonly followed by a VP. The second event is expressed by a Pfv verb or a VP containing a Pfv verb, without an overt subordinator. Spatiotemporal adverbs following the second VP, like ‘here’ in these examples, may have broad scope including the motion event.

This construction is not usual when both verbs are motion verbs, as in ‘X came and entered’. In this case the sequential VP construction with bí is favored.

(786) illustrates with ‘come’ as the main verb. Both clauses have Pfv verbs, denoting a completed two-part event beginning with motion. ‘Come’ here can have its regular Pfv form byé or can be simplified to bé. In either case it is tone-dropped after a third-person proclitic. It is understood that both events actually took place. The object nouns in (786a-c,e) show the tonal effects (Initial-H Ablaut, Downstep, Tone-Dropping) typical of position after post-subject inflectional particles (§3.6.5.3.5, §3.6.5.4.2). This can then trigger Final Tone-Raising on the first verb (786b). A suffixed singular noun sometimes alternates with a bare stem (786e).

- (786) a. ā ʔb(y)è [ʔsága-à sâⁿ]
 3Sg **come.Pfv** [sheep-Sg buy.**Pfv**]
 ‘He/She came here to buy a sheep.’ (< sàgà-à)
- b. à b(y)é [ʔsògò-ò sâⁿ]
 3Sg **come.Pfv** [goat-Sg buy.**Pfv**]
 ‘He/She came here to buy a sheep/a goat.’ (< sógó-ó)
- c. à b(y)é [ʔbààrá-á ʔtīīⁿ]
 3Sg **come.Pfv** [work(n)-Sg look.for.**Pfv**]
 ‘He/She came to look for work.’ (< báárá-á)

- d. ā ʼb(y)ā = [à kwárí]
 3Sg **come.Pfv** [2Sg hit.**Pfv**]
 ‘He/She came and hit you-Sg.’
- e. ā ʼb(y)ē ʼhónòŋ-ó ʼtīīⁿ
 " " ʼhónòní ʼdīīⁿ
 3Sg **come.Pfv** bird(-Sg) look.for.**Pfv**
 ‘He/She came to look for a bird.’

The time frame is shifted to the future in (787a) and to general imperfective (habitual) in (787b). The verb of the appended VP remains Pfv.

- (787) a. ñ gà bìlí ʼbyē [ʼsága-à / ʼsògò-ò sâⁿ]
 3Sg Ipfv **Fut** come.Pfv [sheep-Sg / goat-Sg buy.**Pfv**]
 ‘He/She will come and buy a sheep/a goat.’
- b. ñ gá ʼbē-lē [ʼsága-à / ʼsògò-ò sâⁿ]
 3Sg **Ipfv** come-Ipfv [sheep-Sg / goat-Sg buy.**Pfv**]
 ‘He/She (regularly) comes and buys a sheep/a goat.’

Negation denies that the combination of motion and following activity took place.

- (788) à tì b(y)é [ʼbààrá-á ʼtīīⁿ]
 ñ dī
 3Sg PfvNeg come.Pfv [work(n)-Sg look.for.**Pfv**]
 ‘He/She didn’t come and look for work.’

Other motion verbs can replace ‘come’ in these examples (789).

- (789) ñ gà só-lò / jéŋè-nè [ʼsága-à / ʼsògò-ò sâⁿ]
 3Sg Ipfv **go-Ipfv / descend-Ipfv** [sheep-Sg / goat-Sg buy.**Pfv**]
 ‘He/She (regularly) goes/descends and buys a sheep/a goat.’

Perfective *jóò* can reduce to *só* (always with *s*) in this construction, even for speakers who prefer *jóò* ‘go’ in simple main clauses. *só* can then be treated as a monomoraic /H/-melodic verb stem, so it can be downstepped (after a nonpronominal subject) and tone-dropped (after 3Sg *à* or 3Pl *ì* subject). The latter is observed in (790).

- (790) ná = á ʼsò [céèⁿ yògó-fàà]
 if 3Sg **go.Pfv** [arrive.Pfv on.top]
 ‘when it goes and arrives on the shore, ...’ (2021-01 @ 04:21)

15.1.5 ‘Until’ adverbials including ‘go’ or ‘come’

For mà ‘until’ see §8.2.16 (NP/adverb complements) and §15.5.3 (clauses). The following subsections describe marked ‘until’ expressions including ‘go’.

15.1.5.1 Subjectless só-ló cêèⁿ X ‘until X’

One way to express ‘until X’ emphatically is a construction beginning in só-lò ‘go.Ipfv’, without a subject. This is followed by cêèⁿ ‘arrive.Pfv’ and a PP with custodial postposition má (791a-d). The tones are irregularly só-ló cêèⁿ for expected #só-lò cêèⁿ. There is a tendency to de-stress the first syllable of só-lò in this construction (see later in this subsection). Except for the absence of a subject, the combination of ‘go’ and Pfv verb is consistent with the construction (motion verb plus perfective VP) described in the preceding subsection.

- (791) a. só-ló cêèⁿ [ɲèèné-é ˈmà]
 go-Ipfv **arrive.Pfv** [late.afternoon-Sg Cust]
 ‘until (arriving at) late afternoon.’ (2021-06 @ 04:50)
- b. só-ló cêèⁿ [súbáhá-á ˈmà]
 go-Ipfv **arrive.Pfv** [morning Cust]
 ‘until (arriving at) the morning’
- c. só-ló cêèⁿ [[ɲgì byé-ní-í] ˈmà]
 go-Ipfv **arrive.Pfv** [[1Pl come-VblN-Sg] Cust]
 ‘until our arrival (here)’

Some speakers use just só-ló without cêèⁿ in this construction. With a verbal noun, a speaker who elsewhere does include cêèⁿ ‘arrive’ optionally omits it (792a-b). In (792b), for some speakers the só syllable is de-stressed, L-toned, and can be nearly syncopated to [sà] when the second syllable contracts with a 3Sg or 3Pl pronominal to form a long vowel.

- (792) a. só-ló [[ɲgì byé-ní-í] ˈmà]
 go-Ipfv [[1Pl come-VblN-Sg] Cust]
 ‘until our arrival (here)’
- b. sò-lá= / só-lá= [[á ˈbyè-ní-í] ˈmà]
 go-Ipfv [[3Sg come-VblN-Sg] Cust]
 ‘until his/her arrival (here)’

15.1.5.2 mà ì bì sò (céèⁿ) X ‘until X’

Another emphatic way to say ‘(all the way) until X’ is mà ì bì sò X or mà ì bì sò céèⁿ X. Although [màmbìsò] is treated prosodically as a single word, it can be unpacked synchronically as the same-subject ‘until VPing’ construction (§15.2.15) with ‘go’ as the verb, optionally followed by ‘arrive’. The whole phrase mà ì bì sò is L-toned, as shown in e.g. mà ì bì sò [ˈgùlù-ú ‘mà] ‘until the night’, but sò raises to só before a nonhigh tone by tone sandhi (793). The noun X may be subject to tonal ablaut if it follows sò.

- (793) mà ì bì só [ˈkòó ˈhèè-ní-ì],
 until **3Sg** **Sbjn** **go.Pfv** [sun fall-VblN-Sg],
 ì hà= [à ʃéè] [bá= á ˈtììⁿ]
 3Pl be.Loc [3Sg on] [Seq 3Sg look.for.Pfv]
 ‘All the way until the sun’s setting, they were looking for her.’ (2021-08 @ 01:27)
 (< kòò)

One speaker checked requires céèⁿ in this construction, as in mà ì bì sò céèⁿ

15.2 Sequential VPs

bí is probably a diachronic offshoot of the Pfv stem b(y)é of ‘come’, but as sequential or subjunctive morpheme it has lost its centripetal directional quality.

15.2.1 Sequential VPs

In the absence of an ‘and’ conjunction for VPs and clauses, the sequential-VP construction is the usual way to combine two VPs with a shared subject. By the definitions used here, a sequential VP lacks an overt subject. It is understood that the missing subject is coindexed with an earlier NP, normally the subject of the preceding main clause. The same construction with an overt subject is here defined as a subjunctive clause. Subjunctive and prohibitive clauses are treated in §17.3 below along with other clausal complements.

The main clause and the sequential VP often denote consecutive events, but if so they are usually closely related temporally and thematically. There may or may not be a prosodic break before the sequential VP. In other contexts a sequential VP functions as the complement to a main-clause verb, e.g. after ‘be able to’ (§15.2.2.4).

The sequential VP has no overt subject and begins with the sequential (“Seq”) morpheme bí, then the VP. The latter begins with an intransitive verb or, in transitive VPs, with the object NP or pronoun. bí has the same tonal effects on immediately following words as do the H-toned post-subject inflectional particles (imperfective há, perfective negative tí, and imperfective negative tá). The verb in a sequential clause takes fixed Pfv form regardless of the aspectual context or the morphological aspect of the main-clause verb.

- (794) a. à táⁿ [ʔjìrì-ì ʃéè] [bí ʰhēēⁿ]
 3Sg ascend.**Pfv** [tree on] [**Seq** fall.**Pfv**]
 ‘He/She climbed up on a tree and fell (off).’ (< jírí-í)
- b. ìj gá ʰtā-nā [ʔjìrì-ì ʃéè] [bí ʰhēēⁿ]
 3Sg Ipfv ascend-**Ipfv** [tree-Sg on] [**Seq** fall.**Pfv**]
 ‘He/She (often) climb up on a tree and falls (off).’
- c. ā ʰhèè^m [bí céè]
 3Sg fall.**Pfv** [**Seq** get.up.**Pfv**]
 ‘He/She fell and (then) got up.’
- d. ìj gá ʰhē-nū [bí céè]
 3Sg Ipfv fall-**Ipfv** [**Seq** get.up.**Pfv**]
 ‘He/She (often) falls and (then) gets up.’
- e. à ñà wá-rì-ì kúmà [bí ʰságà-à sâⁿ]
 3Sg Sbj/Obj money-Sg take.**Pfv** [**Seq** sheep-Sg buy.**Pfv**]
 ‘He/She took (=received) the money and bought a sheep.’ (< sàgà-à)
- f. ñgí há bílí ʰsāgā gôⁿ [bí ʃòò]
 1Pl Ipfv Fut lie.down.**Pfv** here [**Seq** go.**Pfv**]
 ‘We will lie down (=spend the night) and (then) go.’ (< gôⁿ)

15.2.2 Sequential VPs involving motion and ability

15.2.2.1 ‘Go’ or ‘come’ in the main clause

A clause with a motion verb may be followed by a sequential VP denoting a same-subject event. The motion is asserted to have taken place prior to the second event. This can sometimes be translated freely as a purposive construction, since a motion event is often goal-directed. However, in perfective positive contexts, this construction asserts that the second event did take place. Therefore the sequential construction (795a-b) is more or less interchangeable with the juxtaposition of two Pfv verbs without an intervening sequential morpheme (§15.1.4). For true purposive constructions that do express intention, see §17.3.5-6.

- (795) a. ā ʰbyè [bí ìj kwá-rí]
 3Sg **come.Pfv** [**Seq** 1Sg hit.**Pfv**]
 ‘He/She came and hit me.’

- b. à ʃóò wâⁿ-vàà [bí ñ kwárí]
 ā ʼsò
 3Sg **go**.Pfv there.Def [Seq 1Sg hit.Pfv]
 ‘He/She went there and hit me.’

If the main clause is imperfective, the sequential VP still has a Pfv verb (796a). Negation is possible only in the main clause, and denies that the combined event sequence took place (796b).

- (796) a. ñ gá ʼbē-lē [bí ñ kwárí]
 3Sg Ipfv come-**Ipfv** [Seq 1Sg hit.**Pfv**]
 ‘He/She (often) comes and hits me.’
- b. ñ dí ʼbyē [bí ñ kwárí]
 3Sg **PfvNeg** come.Pfv [Seq 1Sg hit.Pfv]
 ‘He/She didn’t come and hit me.’

If both clauses contain motion verbs, the two motion events were chronologically sequenced (797a-b). That is, the construction does not describe a single motion event that can be broken down into directional and manner components as with ‘come up’ or ‘run down’.

- (797) a. ā ʼbyè [bí ʼtāⁿ]
 3Sg come.Pfv [Seq ascend.Pfv]
 ‘He/She came and (then) climbed up.’
- b. ā ʼhōōlò [bí jéñè]
 3Sg **run**.Pfv [Seq descend-Pfv]
 ‘He/She ran and (then) went down.’

15.2.2.2 ‘Come’ and ‘go’ in sequential VPs

The verbs ‘come’ and ‘go’ often occur at the beginning of sequential VPs with two verbs, resulting in constructions like ‘X VERBed [and **came/went** and VPed]’. There is no second *bí* before the final VP, suggesting that ‘come/go’ and that VP are conceptually integrated.

In some cases the ‘come’ or ‘go’ adds little or nothing to the meaning. The motion verb may be **doubled** and therefore semantically redundant as in ‘X **came** [and **came** and VPed]’. Or motion may simply be deemphasized as in ‘X received the money [and **came/went** and kept it]’. Compare English *proceeded to VP* which allows but no longer requires actual motion, instead describing chronological sequence.

A composite sequential clause of this type begins with *bí*, followed by ‘come’ or ‘go’, then an open-ended VP. An /H/-melodic noun or verb following *bí* *bé* or *bí* *só* is subject to Downstep.

In this construction, the sequential clause takes the form *bí bé* ‘and come and ...’ or *bí só* ‘and go and ...’. Even speakers who pronounce *byé* ‘come.Pfv’ and *ʃòò* ‘go.Pfv’ in main clauses reduce them to *bé* and *só* in this construction.

The usual Downstep of /H/-melodic verbs after sequential *bí* does not apply to *bí bé* and *bí só*. Contrast these doubled forms with regular sequential *bí ʃòò* ‘and go’ and especially with downstepped *bí* ‘*byé* ‘and come’. However, the word following *bí bé* or *bí só* is subject to Downstep (/H/-melodic word) or to Initial H-Ablaut (word with two or more initial L-toned moras).

(798) has ‘come’ in the main clause and doubles it in the sequential clause.

(798) á há ʼbē-lē [bí bá= á gùlénì-gùlénì]
 2Sg Ipfv **come**-Ipfv [Seq **come**.Pfv 3Sg Rdp-flip.Pfv]
 ‘You-Sg will come to turn it (=fish) over.’ (2021-06 @ 03:22; < *bí* ʼbē)

In (799), the already sequential *bí ʃòò* ‘and go’ in its lexical sense is then followed by another sequential VP with doubled ‘go’.

(799) [nájánú ʼfīēnū ʼtūmēŋ] gwá= à ʼl̩-l̩ [hólí-í n̩],
 [woman two also] Past Ipfv enter-Ipfv [skiff-Sg Loc],
 [bí ʃòò] [bí ʼsō ʼsúgù-ú ʼsārī]
 [Seq go.Pfv] [Seq go.Pfv net-Sg cast.Pfv]
 ‘Two women used to go into a skiff, and go and cast nets (from the skiff).’
 (2021-06 @ 06:16) (< *sùgù-ù*)

Example (800) has both *bí só* and *bí bé*, denoting two distinct motion-and-action event complexes.

(800) [táá wóó ʼtāā] [*quatre heures*-lí ʼsāŋà-à] ń gá céé-lè,
 [day and day] [four hours-at time-Sg] 1Sg Ipfv get.up-Ipfv,
 [bí só= [[ó ʼŋòŋò húbúŋ-ó ʼlēgē]]
 [Seq **go**.Pfv [[Dem.Def fish fresh-Sg pick.up.Pfv]]
 [bí bó= [ó ʼtōōrō]]
 [Seq **come**.Pfv [Dem.Def sell.Pfv]
 ‘Every day at 4:00 AM I get up, and go pick up fresh fish and come and sell that.’ (2021-06 @ 01:50)

Tonal effects on the word following *bí bé* or *bí só* are illustrated in (801). Tone-Dropping applies to *túgú-ú* ‘meat’ in (801a). Downstep applies to the verb *tórí* ‘jump’ in (801b), while (801c) shows Initial H-Ablaut on *sàgà-à* ‘sheep’.

(801) a. [bí bé ʼtùgú-ú ʼjāā] ‘and come and eat meat’
 [bí só ʼtùgú-ú ʼjāā] ‘and go and eat meat’

- b. [bí bé †tōrī gôⁿ] ‘and come and jump here’
 [bí só †tōrī wôⁿ] ‘and go and eat meat there’
- c. [bí bé †sáǵà-à sâⁿ] ‘and come and buy a sheep’
 [bí só †sáǵà-à sâⁿ] ‘and go and buy a sheep’

Doubling of ‘come’ and ‘go’ in homologs of Kelenga sequential VPs occurs in JSDj. Mande languages are S-(infl-)O-V-X, which disfavors verb-verb compounding in this construction because objects intervene between the two verbs. In non-Mande SVO languages of the general area, actual verb-verb compounding can develop, as in Tiefo-D (southwestern Burkina).

15.2.2.3 ǵáákì(-lì) ‘return’ plus sequential VP (‘VP again’)

ǵáákì(-lì) ‘return’ is primarily a motion verb. It may combine with ‘come’, ‘go’, or other direction-specifying motion verb (802a). It may also combine with a non-motion sequential VP in the sense ‘VP again; repeat VPing’ (802b). In either case the second verb or VP takes the form of a sequential VP.

- (802) a. ā †ǵáákì [bí †tāⁿ / jéŋè]
 3Sg **return.Pfv** [Seq ascend.Pfv / descend/Pfv]
 ‘He/She went back up/down.’
- b. ī †ǵáákì [bí mìsírì-ì táá-nì]
 3Pl **return.Pfv** [Seq mosque stand-Caus.Pfv]
 ‘They rebuilt the mosque.’

15.2.2.4 híní ‘be able to’ plus sequential VP

híní is an invariant stative verb ‘be able’. It follows imperfective há (~ gá) or its negation tá (~ dá). It can function as an intransitive verb with dative PP in the sense ‘be stronger than X’, ‘be able (to defeat) X’.

- (803) à há †hīnī [zàkí †nà (~ †là)]
 ñ gá
 3Sg Ipfv **be.able.Ipfv** [Z **Dat**]
 ‘He/She can beat Zaki.’

In the sense ‘be able to VP’, híní is followed by a sequential VP.

- (804) a. ñ gá ʼhīnī [bí hóólò / ʼtāⁿ]
 3Sg Ipfv be.able.Ipfv [Seq run.Pfv / ascend.Pfv]
 ‘He/She can run/go up.’
- b. ñ dá ʼhīnī [bí hóólò / ʼtāⁿ]
 3Sg IpfvNeg be.able.Ipfv [Seq run.Pfv / ascend.Pfv]
 ‘He/She cannot run/go up.’
- c. ñ gá ʼhīnī [bí ʼságà-à sâⁿ]
 3Sg Ipfv be.able.Ipfv [Seq sheep buy.Pfv]
 ‘He/She can buy a sheep/a goat.’

híní can be made into an aspect-marking verb by adding the inchoative suffix: híné-yá ‘be able to’, Ipfv híné-yá-lá. This describes a successful attempt rather than a continuous capability. It is followed as before by a sequential VP. Textual examples: ‘if it (=hippo) manages to get ahold of something, ...’ (2021-01 @ 03:18); and ‘did you manage to climb the tree?’ (2021-10 @ 03:10).

15.2.3 fáà ‘want to’ with sequential VP

The ‘X want Y’ construction takes the form “X be [by Y],” if we assume that fáà is the ‘by’ postposition and not a verb. For a discussion of the two analytic possibilities, see §11.2.5.6. When the complement is a same-subject VP it is expressed as a regular sequential VP (805). The main clause has an invariant 3Sg postpositional complement, anticipatorily resuming the content of the sequential VP. (805) is therefore literally “we are by it, to ask you.”

- (805) ñgí há= [á fáà] [bá= à tɛlé]
 1Pl **be.Loc** [3Sg **by**] [Seq 2Sg ask.Pfv]
 ‘We would like to ask you-Sg.’

A textual example is ‘if you want to lay something out (to dry) in the sun’ (2021-06 @ 04:03).

This construction can also describe an impending action or event, i.e. ‘be about to VP’ or ‘be on the verge of VPing’ (806).

- (806) ī ʼkùŋ gá= [à fáà] [bí góbò]
 3Pl Past **be.Loc** [3Sg **by**] [Seq get.sick.Pfv]
 ‘They were about to get sick.’

For different-subject clausal complements of ‘want’ in subjunctive form, see §17.3.9.3.

15.2.4 dúṅè(-nè) ‘consent to’ plus sequential VP

dúṅè(-nè) ‘accept’ is an intransitive verb that can take a dative PP in the sense ‘accept, take (sth given)’.

- (807) ā ʼdūṅè [wárí-í ʼlà]
 3Sg accept.Pfv [money-Sg Dat]
 ‘He/She accepted the money.’

dúṅè(-nè) can also take a sequential VP, denoting an action that the subject has agreed to perform, on the suggestion or petition of others.

- (808) ā ʼdūṅè [bí ʼbyē]
 3Sg accept.Pfv [Seq come.Pfv]
 ‘He/She agreed to come.’

For subjunctive clausal complements of this verb in the context ‘X consent that Y ...’, see §17.3.11.1.

15.2.5 kónò(-nò) ‘fear to’ plus sequential VP

kónò(-nò) ‘fear (v), be afraid’ can be a simple intransitive with optional PP [X kàâⁿ] ‘in front of X’, specifying the source of fear (§11.2.5.8).

The complement may also be a same-subject sequential clause in the sense ‘fear to VP’, where the fear is focused on possible adverse consequences of an action by the fearful one.

- (809) a. ñ gà kónò-nò [bí ʼtāⁿ / jéṅè]
 3Sg Ipfv **fear(v)**-Ipfv [Seq ascend.Pfv / descend.Pfv
 ‘He/She is afraid to climb up/down.’
- b. í gá kónò-nò [bí ʼlólò-ò mēⁿ]
 1Sg Ipfv **fear(v)**.Ipfv [Seq beer-Sg drink.Pfv]
 ‘I am afraid of drinking beer.’ (< lólò-ò)

For prohibitive clausal complements where the fear is directed at a potential event with a distinct agent (‘be afraid lest ...’), see §17.3.8.

15.2.6 ‘Forget to’ with sequential VP

‘X forget’ is expressed either with the intransitive verb jínè-nè ‘forget’ or with the phrasing ‘X’s mind exit’. An NP complement may be added in the form of a PP with postposition tóó ‘about’

(§8.2.15.2). Instead of this PP, ‘X forget’ can be expanded with a same-subject sequential VP in the sense ‘X forget to VP’.

- (810) a. [ǰ gáálè-é] ʼbāgī [bí ʼtāⁿ / ʼbyē]
- [1Sg mind-Sg] exit.Pfv [Seq ascend.Pfv / come.Pfv]
- ‘I forgot to go up/come.’
- b. ǰí ǰínè [bí ʼtāⁿ / ʼbyē]
- 1Sg forget.Pfv [Seq ascend.Pfv / come.Pfv]
- ‘I forgot to go up/come.’

For ‘forget (that/whether ...)’ with an indicative clausal complement, see §17.2.1.2.

15.2.7 bálí-nì(-nì) ‘prevent (sb)’ with sequential VP

The verb bálí-nì(-nì) can function as a simple transitive (‘obstruct, block, stymie’) when the larger context is understood (811).

- (811) Ø ǰá sèédù bálí-nì
- 1Sg Sbj/Obj S **prevent.Pfv**
- ‘I stymied/blocked Seydou.’

If the stymied action is spelled out explicitly, that action can be expressed as a sequential VP. The agent of the stymied action is expressed as the object of ‘prevent’ in the main clause. This is a rare case where the understood subject of the sequential VP is an object rather than the subject of the main clause. Another such case, with ‘put (down)’, is described in §15.2.12.

- (812) a. sèédù ǰá ǰì bálí-nì [bí ǰì fǒgò]
- S Sbj/Obj 1Pl **prevent.Pfv** [Seq 1Pl sit.Pfv]
- ‘Seydou prevented us from sitting down.’ (fǒgò ‘sit’ is reflexive)
- b. sèédù ǰá m̄ bálí-nì [bí ʼsògò-ò sâⁿ]
- S Sbj/Obj 1Sg **prevent.Pfv** [Seq goat buy.Pfv]
- ‘Seydou prevented me from buying a goat.’

15.2.8 hêèⁿ/hêé-nè ‘help (sb) to’ with sequential VP

The transitive verb ‘help’ (547b) as in ‘X helped Y’ is monophthongal hêèⁿ/hêé-nè or diphthongal híèⁿ/híê-nè. It can be expanded by adding a sequential VP with bí (813b).

- (813) a. sèédù nǎ ñ hɛ̀ɛⁿ
 S Sbj/Obj 1Sg help.Pfv
 ‘Seydou helped me.’
- b. sèédù nǎ ñ hɛ̀ɛⁿ [bí ‘sògò-ò hári]
 S Sbj/Obj 1Sg **help**.Pfv [Seq goat-Sg tie.Pfv]
 ‘Seydou helped me tie up the goat.’
- c. ì hà síkè-lè,
 3Pl Ipfv fish(v)-Ipfv,
 [ɲgí túmɛ́ŋ] gí= í hɛ̀ɛ-nè [bí síkè]
 [1Pl also] Ipfv 3Pl **help**-Ipfv [Seq fish(v).Pfv]
 ‘They fished, and we also helped them fish.’ (2021-06 @ 00:30)

The fact that ‘prevent X from VPing’ (preceding subsection) has the same syntax shows that the covert subject/agent of ‘tie up the goat’ is indeed the 1Sg object of ‘help’ in (813b). With ‘help’ there is the possibility that the covert agent of the final activity is ‘Seydou and I’ in (813b), and ‘we and they’ in (813c), i.e. the combination of main-clause subject and object. With ‘prevent’, no such construal is possible.

In other languages of the zone where ‘help’ differs syntactically from ‘prevent’, the analysis may have to be different.

15.2.9 ‘Ought to VP’ with sɛ̀ɛⁿ and sequential VP

Here the main clause has stative intransitive sɛ̀ɛⁿ ‘should, ought to’, denoting mild obligation. It is followed by a sequential VP.

- (814) a. ñ zɛ̀ɛm [bí ‘ságà-à sâⁿ]
 1Sg **ought** [Seq sheep-Sg buy.Pfv]
 ‘I should/ought to buy a sheep.’
- b. ní tá sɛ̀ɛm [bí ‘bāgī]
 1Sg IpfvNeg **ought** [Seq exit(v).Pfv]
 ‘I shouldn’t go out.’
- c. ñ kúⁿ zɛ̀ɛm [bí ‘wārì-ì yágà]
 1Sg Past **ought** [Seq money-Sg leave.Pfv]
 ‘I was supposed to leave the money.’

Without the sequential VP, sɛ̀ɛⁿ means ‘(X and Y) are equal, level’, ‘(behavior) is fitting’, or ‘(garment) fits well’ (§12.2.1). sɛ̀ɛⁿ is the stative of sɛ̀ɛ̀ɛ̀/ɛ̀ɛ̀ɛ̀-nè ‘become equal or level; (garment) fit’.

15.2.10 wáájíbí-yá-ná ‘obligated’ plus sequential VP

An ‘it is’ predicate with participle wáájíbí-yá-nà-à ‘obligated’ can take a sequential VP.

- (815) ηgí wáájíbí-yá-nà-á ʼrà-ní, [bí ʼmààṅḍ-ḍ sógḍ]
 1Pl be.obligated-Inch-Ppl-Sg it.is, [Seq maize-Sg cultivate.Pfv]
 ‘We were obligated/forced to cultivate maize.’ (< máájó-ó)

The related verbs are wáájíbí-yà(-là) ‘(sb) be obligated, be forced’ and its morphological causative wáájíbí-yá-nì(-nì) ‘compel, obligate (sb)’. The related noun is wáájíbí-ì ‘duty, obligation’, of Arabic origin and now widespread in the zone.

See also mà ‘must’ with a subjunctive clause in a similar sense (§17.3.10).

15.2.11 [bí ʼkīlā] ‘already’ after a clause

The verb kílá(-lá) ‘be finished’ can occur as a simple sequential VP added to a main clause. The sense is approximately ‘already’.

- (816) à jóò [bí ʼkīlā]
 ā ʼsò
 3Sg go.Pfv [Seq **finish.Pfv**]
 ‘He/She (has) already left.’

This construction can often be translated as a present perfect (§8.5.5.2). An alternative is to add the Bambara form kábàⁿ ‘already’ (§19.3.3).

Negation of the main clause scopes over bí ʼkīlā (817).

- (817) ñ dí ʼbyē [bí ʼkīlā]
 3Sg **PfvNeg** come.Pfv [Seq **finish.Pfv**]
 ‘He/She hasn’t left yet.’

However, this negative construction seems less idiomatic than one with temporal adverb fánáá (818).

- (818) ñ dí ʼbyē fánáá
 3Sg PfvNeg come.Pfv **firstly**
 ‘He/She hasn’t left yet.’ = ‘He/She hasn’t left as of now.’

15.2.12 yágà(-là) ‘put’ and tógó(-ló) ‘leave’ periphrastic causatives

yágà(-là) ‘put down (and leave)’ and tógó(-ló) ‘leave, abandon’ are basic transitive verbs with NP objects. They can also take sequential VP complements in active or passive causal contexts. tógó ‘leave’ here means ‘allow to VP’ (passive causation) as in (819a). yágà ‘put down’ has the more dynamic sense ‘have (sb) VP’ (active causation) as in (819b). In both cases, the understood subject of the sequential VP is the object of the main-clause verb, as was observed with ‘prevent’ in §15.2.7 above.

- (819) a. zákì ńí= í ʼtògò [bí jéémù]
 Z Sbj/Obj 3Pl **leave.Pfv** [Seq speak.Pfv]
 ‘Zaki let them speak.’
- b. zákì ńí= í yágà [bí jéémù]
 Z Sbj/Obj 3Pl **put.Pfv** [Seq speak.Pfv]
 ‘Zaki let/had them speak.’

Under negation, the tógó construction entails that the subordinated event was prevented from occurring and did not in fact occur (820a), while yágà does not always make this entailment (820b).

- (820) a. zákì tí= í ʼtògò [bí jéémù]
 Z PfvNeg 3Pl **leave.Pfv** [Seq speak.Pfv]
 ‘Zaki didn’t let them speak.’
- b. zákì tí= í yágà [bí jéémù]
 Z PfvNeg 3Pl **put.Pfv** [Seq speak.Pfv]
 ‘Zaki didn’t have them speak.’

15.2.13 wós ~ wáá ‘do then’ plus sequential

In this high-frequency construction, the main clause consists of a subject (usually pronominal) plus wós ~ wáá (dialectal variants), then a sequential clause. wós ~ wáá is invariant segmentally and can be analysed as a stative verb. There is no negative counterpart. This construction occurs in narratives when one action is followed by a second one that is expressed with wós ~ wáá plus sequential VP. Translations are of the type ‘and then X VP-ed’ or ‘and X proceeded to VP’. wós ~ wáá is L-toned after 3Sg à and 3Pl ì, otherwise H-toned.

- (821) ì ʼwòdò [bó= ó ʼtāām] [bá= á wágà]
 3Pl **do.then** [Seq Dem.Def do.Pfv] [Seq 3Sg kill.Pfv]
 ‘(they soak the harpoon) then they use that (=harpoon) to kill it (=hippo).’
 (2021-01 @ 01:12)

Often the sequential VP expressing the second action is separated from wóó ~ wáá by an intervening sequential VP [bí 'kīlā] 'and finish', denoting the completion of the previous action (822).

- (822) ηgé-rè há= á sá-nù [ó-yèj 'kìrì],
 1Pl-Indep Ipfv 3Sg buy-Ipfv [Dem.Def-Pl Poss],
 ηgí wóó [bí 'kīlā]
 1Pl **do.then** [Seq **finish.Pfv**]
 [bí bá= [á 'mārā] [ηgì fàà]]
 [Seq come.Pfv [3Sg keep.Pfv] [1Pl by]]
 'We buy it from those (people), then afterwards we proceed to keep it with us.'
 (2021-01 @ 02:38)

Sometimes sequential bí is omitted immediately after wóó ~ wáá. The latter is then followed directly by the verb denoting the second action, or by intervening 'kīlā.

- (823) á wáá 'kīlā [bó= ó 'kōlō]
 2Sg **do.then** finish.Pfv [Seq Dem.Def split.belly.Pfv]
 'Then you-Sg will proceed to split it (at the belly).' (2021-06 @ 04:32)

15.2.14 sí/sí-ní plus sequential VP 'do immediately'

sí/sí-ní combines with a sequential VP in the sense 'do immediately, do right away'.

- (824) ā 'sìm [bá= á 'lègè]
 3Sg do.immediately.Pfv [Seq 3Sg take.Pfv]
 'He/She took it immediately.'

15.2.15 mà bí 'until' with sequential VP

A same-subject 'until' clause can be expressed as mà bí

- (825) [bá= á 'jàà], mà bí= ì fágí-ní
 [Seq 3Sg eat.Pfv], **until** Seq 3ReflSg be.sated-Caus.Pfv
 '... and ate them (=figs), until she filled herself up.' (2021-10 @ 02:49)

A special case of this is mà ì bì sò (cèèⁿ) X 'until X' where X is a noun. Here sò is the 'go' verb, but the combination is highly fused (§15.1.5.2).

In this same-subject construction, mà bí is invariant and does not show subject agreement, thus mà bá= à ... '(you ate them) until you (filled) yourself ...' and so forth. For the parallel subjunctive 'until' construction with mà 'until' and a subject, see §17.3.3. In that

d. nùgû ⁿ ‘run.VblN’		
ā	nùgún-tòò	‘while he/she swims’
á	nùgún-tòò	‘while you-Sg swim’
sèèdú	nùgún-tòò	‘while Seydou swims’

If the verb is transitive, an object noun may be incorporated (827a-b).

- (827) a. à há ʔjēē-lē [á ʔbààrà-tààn-tóó] [3Sg **work(n)**-do.VblN-**while**]
 3Sg Ipfv eat.Antip-Ipfv [3Sg **work(n)**-do.VblN-**while**]
 ‘He/She eats while he/she works.’ (< báará-á, tááⁿ)
- b. à há ʔjēē-lē [á ʔhònòn-tòòní-tòò] [3Sg **bird**-look.at.VblN-**while**]
 3Sg Ipfv eat.Antip-Ipfv [3Sg **bird**-look.at.VblN-**while**]
 ‘He/She eats while he/she looks at a bird.’ (< hònòṅ-ò, tòòní)

15.3.1.2 Perception verb plus ‘while’ phrase

In this construction, the main clause is transitive with ‘see’ as the verb. The perceived eventuality is expressed as a ‘while’ complement (suffix -tóó ~ -tòò, §15.3.1.1 just above). This progressive complement is unrelated morphologically to the main-clause progressive construction (§10.2.4.6).

- (828) a. Ø ḡá [ʔbólò-méè-yèṅ ʔgwēē-tōō / ʔhēēn-dōō] hēè
 1Sg Sbj/Obj [young.person-Pl-Pl dance-**while** / fall-**while**] see.Pfv
 ‘I saw the children dancing/fall(-ing).’ (< gwéé, héeⁿ)
- b. Ø ḡá [ʔbólò-méè-yèn ʔtūgū-jāā-tōō] hēè
 1Sg Sbj/Obj [young.person-Pl-Pl meat-eat-**while**] see.Pfv
 ‘I saw the children eat(-ing) meat.’ (< tūgú-ú, jáá)

With ‘hear’ instead of ‘see’, the complement is expressed as a possessed verbal noun (829).

- (829) Ø ḡá [ʔbólò-méè-yèṅ ʔgōō-māāṅgāṅ-ò] bóḡì
 1Sg Sbj/Obj [young.person-Pl-Pl weep.VblN-noise-Sg] **hear**.Pfv
 ‘I heard the children(s) weeping.’ (< g(w)óó, màāṅgāṅ-ò)

15.3.2 ‘When’ phrases with sáḡà-à ‘time’ after verbal noun

sáḡà-à ‘time’ can be added to a possessed verbal noun to form a ‘when’ phrase. In (830a-b) the verbal noun is transitive and incorporates an object. The possessor imposes possessum tones on the verbal noun.

- (830) a. ñ gá ʼjēē-lē [[ñ gónón-dóónì] sáṅà-à]
 3Sg Ipfv eat.Antip-Ipfv [[1Sg bird-look.at.VblN] **time-Sg**
 ‘He/She eats while I look at birds/a bird.’ (< hòṅṅ-ô, tòṅṅ)
- b. ñ gá ʼjēē-lē [[à ʼhōnōn-dōōnì] sáṅà-à]
 1Sg Ipfv eat.Antip-Ipfv [[3Sg bird-look.at.VblN] **time-Sg**
 ‘I eat while he/she looks at birds/a bird.’

15.3.3 ‘Begin’ (“mouth-catch”) plus verbal noun

Complements in the ‘begin [to VP]’ construction are verbal-noun phrases. The verbal noun is the object of ‘begin’, which itself is a compound “mouth-catch.” Adjuncts to the subordinated verb follow the ‘begin’ verb.

- (831) a. à ṅá ʼlòlò-mèṅ-ó ʼlōgō-kūⁿ
 3Sg Sbj/Obj beer-drink.VblN-Sg mouth-catch.Pfv
 ‘He/She began to drink beer.’ (< lòlò-ò, mēⁿ/mé-nè ‘drink’, lóló-mèṅ-ô)
- b. à ṅá ʼtàⁿ-ní-í ʼlōgō-kūⁿ
 3Sg Sbj/Obj ascend-VblN-Sg mouth-catch.Pfv
 ‘He/She began to go up.’ (< táⁿ, táⁿ-ní-í)
- c. à ṅá ʼbyè-ní-í ʼlōgō-kūⁿ lóló-mèn-dóó
 3Sg Sbj/Obj come-VblN-Sg mouth-catch.Pfv beer-drink.VblN-place
 ‘He/She has begun coming to the beer-drinking place.’

15.3.4 kílá(-lá) ‘finish VPing’ with dative verbal noun

Intransitive kílá(-lá) ‘complete, be finished with (an activity)’ is followed by a dative PP whose complement is a verbal noun. If the subordinated verb is transitive, it can take an incorporated object as compound initial (832b) or a full object NP (832c).

- (832) a. ā ʼkìlà [jéé ʼlà]
 3Sg **finish**.Pfv [eat.Antip.VblN **Dat**
 ‘He/She finished eating.’
- b. ā ʼkìlà [túgú-jáá ʼlà] wâ
 3Sg **finish**.Pfv [meat-eat.VblN **Dat** Q
 ‘Has he/she finished eating the meat?’

- c. ā ʼkìlà [[ḥ †zàgà-à-yéⁿ] †tòrò-ó] ʼlà]
 3Sg **finish.Pfv** [[1Sg sheep-Sg-Pl] sell.VblN-Sg] **Dat]**
 ‘He/She has finished selling my sheep-Pl.’ (< sàgà-á-yèⁿ)
- d. ò dí ʼkìlì= [[ì níní-í] ʼlà]
 3Sg PfvNeg **finish.Pfv** [[3ReflSg wash.VblN-Sg] **Dat]**
 ‘He/She has not finished bathing.’
- e. ā ʼkìlà [[ḥ gwá-rí-í] ʼlà]
 3Sg **finish.Pfv** [[1Sg hit.Vbl-Sg] **Dat]**
 ‘He/She has finished hitting me.’ (< kwá-rí-í)

15.3.5 ‘Stop VPing’ (táà, táá-nì) with verbal-noun

Reflexive ‘stop, come to a halt’ is táà/táá-là. Transitive ‘stop, put a halt to’ is its causative táá-nì(-nì). Both can be used in contexts like a person or vehicle in motion coming to a halt. They can also denote the cessation of an activity, which is expressed by a verbal-noun phrase. In (833a), the verbal noun is subject of reflexive ‘stop’. The possessor of the verbal noun denotes the “subject” of the verbal noun. In (833b-c), causative táá-nì denotes the voluntary cessation of an activity. In this case, no possessor is needed on the verbal noun.

- (833) a. [ā ʼnòò] ḥí= ì táá
 [3Sg breathe.VblN] Sbj/Obj 3ReflSg **stop.Pfv**
 ‘He/She stopped breathing.’ (“His/Her breathing stopped.”) (< nóó)
- b. ì ḥà lóló-mèḥ-ò táá-nì
 3Pl Sbj/Obj beer-drink.VblN **stop-Caus.Pfv**
 ‘They stopped drinking beer.’
- c. Ø ḥá ʼwà-rì-lòò táá-nì [zàkí ʼnà]
 1Sg Sbj/Obj money-give.VblN stop-Caus.Pfv [Z Dat]
 ‘I have stopped giving money to Zaki.’

The object may be expressed by a pronominal “possessor.”

- (834) a. à ḥá [ḥ kwá-rí-ní-ì] ʼtāá-nì
 " " [" kwá-rí-í] "
 3Sg Sbj/Obj [1Sg hit(-)VblN-Sg] stop-Caus.Pfv
 ‘He/She stopped hitting me.’

- b. Ø ηά = [á ʼkwàrì-ní-í] ʼtāā-nì
 1Sg Sbj/Obj [3Sg hit-VblN-Sg] stop-Caus.Pfv
 ‘I stopped hitting him/her.’
- c. à ηά [ñ ʼtóónì-ní-ì / ʼjúúkì-ní-ì] ʼtāā-nì
 3Sg Sbj/Obj [1Sg look.at-VblN-Sg / push-VblN-Sg] stop-Caus.Pfv
 ‘He/She stopped hitting/pushing me.’ (< tððnì, ʼjúúkì)
- d. Ø ηά = [á tððnì-ní-ì / ʼʃūūkì-ní-ì] táá-nì
 1Sg Sbj/Obj [3Sg hit-VblN-Sg / push-VblN-Sg] stop-Caus.Pfv
 ‘I stopped hitting/pushing him/her.’

15.3.6 ‘Abandon VPing’ with verbal noun (lógó-jêⁿ, yágà)

Abandoning (voluntarily and permanently ceasing) an activity can also be expressed by lógó-jêⁿ/-jê-nè ‘finish, end’, or by yágà in the sense ‘put down (and leave)’. The activity is phrased as a verbal noun (835a-b).

- (835) a. Ø ηά hóólò-ó / ʼtāⁿ-ní-í ʼlōgō-jêⁿ
 1Sg Sbj/Obj run.VblN-Sg / ascend-VblN-Sg **finish.Pfv**
 ‘I have (permanently) given up running/climbing.’ (< hóólò-ò)
- b. Ø ηά hóólò-ò / ʼtāⁿ-ní-í yágà
 1Sg Sbj/Obj run.VblN-Sg / ascend-VblN-Sg **put.down.Pfv**
 [= (a)]

15.3.7 Verbal noun in purposive PP (hóómá)

The purposive postposition hóómá ‘for’ (§8.3.2) can take a verbal noun as its complement. The result is a purposive adjunct to a main clause. The verbal noun may include a possessor (denoting the object) or an incorporated noun. The main clause may denote motion.

- (836) a. ā ʼbyè [[ñ kwá-rí-í] ʼhòòmà]
 3Sg come.Pfv [[1Sg hit.VblN-Sg] **Purp]**
 ‘He/She came in order to hit me.’
- b. ā ʼbyè [là-béŋ-ò ʼhòòmà]
 3Sg come.Pfv [prepare.VblN-Sg **Purp]**
 ‘He/She came in order to get ready (for travel).’ (< verb là-bêⁿ)

c. ā ʼbyè [lóló-mèŋ-ó ʼhòòmà]
 3Sg come.Pfv [beer-drink.VblN-Sg **Purp**]
 ‘He/She came (here) to drink beer.’ (< lólò-ò)

Under negation, the motion event is not necessarily denied, but the purpose is.

(837) ò dí ʼbyē [[ŋ kwá-rí-í] ʼhòòmà]
 3Sg **PfvNeg** come.Pfv [[1Sg hit.VblN-Sg] **Purp**]
 ‘He/She didn’t come in order to hit me.’
 or: ‘It wasn’t in order to hit me that he/she came.’

15.4 Noun-headed adverbial relative clauses

With nouns like ‘time’, ‘place’, and ‘manner’ as heads, relatives can function as adverbial clauses (‘at the time when ...’, ‘in the place where ...’, ‘in the way that ...’). The logically implied postposition (‘at’, ‘in’) is variously overt or covert.

15.4.1 Temporal relative clause (‘[at] the time when ...’)

A relative clause headed by a temporal noun (‘time/moment’, ‘day’, ‘year’, etc.) can function as a temporal relative. A locative postposition as in (838) is optional.

(838) [[táá mwò] (nî)] zàkí ʼbyē,
 [[**day** **Rel**] (Loc)] Z come.Pfv
 ŋ gá só-lò
 1Sg Ipfv go-Ipfv
 ‘On the day when Zaki comes (“has come”), I will go.’

In the texts, often sáná mwò ‘time which’ occurs finally in the ‘(at the time) when ...’ clause. Examples are 2021-01 @ 01:39 & 01:49, and 2021-06 @ 03:29 & 04:09.

15.4.2 Spatial adverbial clause (‘[at] the place where ...’)

For the irregular and somewhat fused wóróⁿ-mùn-dóó ‘(in) the place where ...’ see §14.4.5. In (839) a relative clause built around this is proposed to establish a spatial setting. It is resumed in the following clause by wòⁿ ‘there (definite)’.

- (839) [ŋgí ɲá †sámà-à hɛ̀ɛ wóróⁿ-mùn-dóó,
 [1Pl Sbj/Obj elephant-Sg see.Pfv **place-Rel-place,**
 [ɲ gá bílí hòdò táá-nì wôⁿ
 [1Sg Ipfv Fut house stand-Caus.Pfv **there.Def]**
 ‘(In) the place where we saw the elephant, I will build a house there.’

One can alternatively phrase the wóróⁿ-mùn-dóó relative as an NP followed by locative postposition nî, and include it as an adjunct within the second (main) clause.

15.4.3 Manner clause ‘(in) the way ...’

As an alternative to a relative clause ‘the way (in which) X VPs’, the construction in (840) is based on a nominal compound consisting of a verbal noun and kírì-ì ‘manner’. This compound along with any incorporated object or possessor, is the complement of the basic locative postposition nî ‘in’.

- (840) ŋgí há bílí nùgûⁿ [zàkí †nūgūŋ-kírì-ì] nî]
 1Pl Ipfv Fut swim.Pfv [Z swim.VblN-manner-Sg] **Loc]**
 ‘We will swim in the (same) way Zaki swims.’

15.5 Backgrounded indicative clauses

15.5.1 Causal clause (bárí ~ bárí-sàà ‘because’)

‘Because’ is expressed by bárí or bárí-sàà ~ bá-sàà at the beginning of the causal clause. bárí does not trigger tonal changes on a following pronominal or noun. For -sàà compare yálí-sàà ‘lest’ (§17.3.6).

- (841) a. ní tí †ságà-à sâⁿ,
 1Sg PfvNeg sheep buy.Pfv,
 bárí / bárí(-sàà) [ā †sòŋó-ó] †hōrō
because [3Sg price-Sg] be.difficult
 ‘I didn’t buy a sheep, because its price is (too) expensive.’ (< sàgà-à, sòŋò-ò)
- b. ní tí †byē
 S PfvNeg come.Pfv,
 bárí zàkí tá †kēēndē
because Z IpfvNeg be.healthy
 ‘I didn’t come, because Zaki isn’t feeling well.’

For young people, clause-initial French *parce que* is now standard, as in other languages of the zone. *bá-rí-sàà* itself may be from this source.

15.5.2 ‘As soon as’ (*lámàà*)

The ‘as soon as’ construction adds *lámàà* ‘only’ (§19.3.2.1) to a perfective positive clause. This can serve as background to another perfective clause denoting a past event (842a), or to an imperfective or future clause denoting an impending future event (842b). In this construction, *lámàà* is understood to have scope over the time index of the clause.

- (842) a. [ā ‘bàgì lámàà→]
 [3Sg exit.Pfv **only**]
 [ì ñà= à wágà]
 [3Pl Sbj/Obj 3Sg kill.Pfv]
 ‘As soon as he went outside, they killed him.’
 = ‘No sooner did he step outside than they killed him.’
- b. [ná= á ‘byē lámàà] [ŋgí há ‘jēē-lē]
 [if.Pfv 3Sg come.Pfv **only**] [1Pl Ipfv eat.Antip-Ipfv]
 ‘As soon as he/she comes, we will eat.’
- c. ó ñó= ó ‘jēē lámàà,
 Dem.Def Sbj/Obj Dem.Def say.Pfv only,
 húúrú-nóŋ-ò ñá= á tîⁿ
 worm-Dim-Sg Sbj/Obj 3Sg swallow.Pfv
 ‘As soon as that one said that, the caterpillar swallowed her.’ (2021-08 @ 01:12)

Other textual examples: 2021-08 @ 02:40 (repeat of 842c), 2021-10 @ 02:38 & 04:34, and 2021-15 @ 00:52 & 01:04.

15.5.3 ‘Since’ and ‘until’ clauses

15.5.3.1 ‘Since ...’ clauses (*kàmìnì* ~ *kàbìnì*)

kàmìnì ~ *kàbìnì* means ‘(ever) since’. It can precede an NP that denotes a point in time (§8.2.16). It can also be followed by a perfective clause. The ‘since’ clause describes a past event that entailed or led to a state that has persisted. The ‘since ...’ clause usually precedes the foregrounded main clause. When it precedes a vocalic subject pronominal, *kàmìnì* may contract (842c).

- (843) a. kàbìní ì byé, ñ tí ʼjēē
since 1Sg come.Pfv, 1Sg PfvNeg eat.Pfv
 ‘(Ever) since I got here, I haven’t eaten.’
- b. kàmìní sèèdú ʼbyē
since S come.Pfv
 ‘(ever) since Seydou came, ...’
- c. kàmìná = á ʼbyè
 kàmá = " "
since 3Sg come.Pfv
 ‘(ever) since he/she/it came’, ...’
- d. [kàmìná = [á kàà] fàrí], [[à gáálè-è] tí fógò]
 [**since** [3Sg father] die.Pfv], [[3Sg mind-Sg] PfvNeg sit.Pfv]
 ‘Ever since his/her father passed away, his/her spirit has not been at ease.’
- e. kàmìná = á kómù
since 3Sg sleep.Pfv
 ‘since he/she slept’
- f. kàmìná = à kómù
since 2Sg sleep.Pfv
 ‘since you-Sg slept’

Examples (843c-f) show Tone Inversion on the subject pronominal. However, one speaker checked pronounces kàmìní separately and treats the subjects as clause-initial.

15.5.3.2 Indicative ‘until ...’ clauses (mà)

mà preceding a spatiotemporal PP or adverbial noun is spatial ‘all the way to X’ or temporal ‘(all the way) until X’. For ‘until’ with a temporal adverb see §8.5.5.7 and §8.2.16.

Clause-initial mà also forms indicative ‘until’ clauses, the prospective counterpart to the retrospective ‘(ever) since’ clauses with kàbìní ~ kàmìní described above. A different mà construction meaning ‘must VP’ is described in §17.3.10.

When the ‘until’ event has already taken place, the clause has perfective form. The ‘until’ clause can denote a culminating event (844a) or an interrupting or terminating event (844b-d).

- (844) a. \bar{a} $\eta\bar{a}$ ${}^t\text{m}\bar{u}\bar{n}\bar{u}\text{-}\bar{u}$ ${}^t\text{k}\bar{w}\bar{a}\bar{r}\bar{i}$
 3Sg Sbj/Obj dog hit.Pfv
 [má = á ${}^t\text{s}\bar{a}^n$]
 [until 3Sg animal.die.Pfv]
 ‘He/She beat the dog until (=to the point that) it died.’
- b. \emptyset $\eta\bar{a}$ ${}^t\text{n}\bar{a}\eta\bar{a}\bar{a}\text{-f}\bar{o}\bar{o}$ ${}^t\text{h}\bar{a}\bar{r}\bar{a}^n$,
 1Sg Sbj/Obj snake chase.Pfv],
 má = á ${}^t\text{l}\bar{o}\bar{o}$ [kòŋ-ò nî]
 until 3Sg enter.Pfv [burrow-Sg Loc]
 ‘I pursued the snake, until it went into its hole.’
- c. \bar{a} ${}^t\text{k}\bar{o}\bar{m}\bar{u}$
 3Sg sleep.Pfv
 [mí = í $\eta\bar{a}$ = á ${}^t\text{y}\bar{i}\bar{g}\bar{i}\text{-y}\bar{i}\bar{g}\bar{i}$]
 [until 3Pl Sbj/Obj 3Sg shake.Pfv]
 ‘He/She slept until they shook him/her.’
- d. \bar{n} $\text{d}\bar{i}$ ${}^t\text{f}\bar{o}\bar{y}$ ${}^t\text{t}\bar{a}\bar{a}^n$,
 3Sg PfvNeg nothing do.Pfv,
 $\text{m}\bar{a}$ \emptyset $\eta\bar{a}$ ${}^t\text{s}\bar{o}\bar{g}\bar{o}\text{-}\bar{o}$ ${}^t\text{k}\bar{w}\bar{a}\bar{r}\bar{i}$
 until 1Sg Sbj/Obj goat-Sg hit.Pfv
 ‘He/She didn’t do anything, until I beat the goat.’ (< má ñ $\eta\bar{a}$ $\text{s}\bar{o}\bar{g}\bar{o}\text{-}\bar{o}$)

Pronominal combinations $\text{m}\bar{a} = \bar{a}$ (3Sg) and $\text{m}\bar{i} = \bar{i}$ (3Pl) behave prosodically like C $\bar{v}\bar{v}$ words and can be tone-raised to C $\bar{v}\bar{v}$ before a nonhigh tone. (844d) reflects pre-surface /má ñ $\eta\bar{a}$ /.

The examples in (844) are perfective, but an imperfective example occurs at 2021-01 @ 03:27 in a habitual context.

Combinations of $\text{m}\bar{a}$ with following subjects of various tone melodies are $\text{m}\bar{a}$ $\text{b}\bar{a}\text{s}\bar{a}\text{-}\bar{a}$... ‘until the agama ...’, $\text{m}\bar{a}$ $\text{b}\bar{a}^n\text{v}\bar{u}\bar{l}\bar{a}\text{-}\bar{a}$... ‘until the hat ...’, $\text{m}\bar{a}$ ${}^t\text{s}\bar{o}\bar{g}\bar{o}\text{-}\bar{o}$... ‘until the goat ...’ (< $\text{s}\bar{o}\bar{g}\bar{o}\text{-}\bar{o}$), and $\text{m}\bar{a}$ ${}^t\text{s}\bar{a}\bar{g}\bar{a}\text{-}\bar{a}$... ‘until the sheep’ (< $\text{s}\bar{a}\bar{g}\bar{a}\text{-}\bar{a}$).

Combinations of $\text{m}\bar{a}$ and verb $\text{b}\bar{y}\bar{e}$ ‘come.Pfv’ with various pronominal proclitics are 3Sg $\text{m}\bar{a} = \bar{a}$ ‘bye’ ‘until he/she/it came’, 2Sg $\text{m}\bar{a} = \bar{a}$ $\text{b}\bar{y}\bar{e}$, and 1Pl $\text{m}\bar{a}$ $\eta\bar{g}\bar{i}$ $\text{b}\bar{y}\bar{e}$.

For ‘until ...’ clauses in future-hypothetical contexts, with subjunctive or prohibitive form, see §17.3.3.

15.5.3.3 ‘VPed until got tired’ = ‘VPed for a very long time’

As in other languages of the region, the duration of an activity can be exaggerated by adding an ‘until X got tired’ clause (local French *jusqu’à fatiguer*). The main clause may have a verb like ‘work’ or ‘run’ that makes physical weariness plausible. However, it can also be a verb like ‘laugh’ (845) or ‘speak’ where duration is focal and weariness or pain secondary, compare English *he*

laughed until his sides ached or she laughed her ... off. Adding the verb *jóò* ‘went’ before ‘got tired’ contributes a mocking or derogatory stylistic element.

- (845) \bar{a} †*ʃāà* [má = á (jóò) báándà]
 3Sg laugh.Pfv [until 3Sg (go.Pfv) get.tired.Pfv]
 ‘He/She laughed until he got tired.’ (i.e. he couldn’t stop laughing)

15.5.3.4 Combination of ‘since’ and ‘until’ clauses

In this combination, the ‘since’ clause precedes the ‘until’ clause. If the subject is the same in the two clauses, the ‘until’ clause can be reduced to *màmbì* plus a possessed verbal noun. For *-ní-í* ~ *-ní-ì* verbal noun suffix (unpossessed) see §4.2.1.1.

(846a-c) illustrate the ‘until’ clause using possessed forms of *jèŋè-ní-ì* ‘descending’ and *hélé-ní-í* ‘passing’.

- (846) a. *màmbí* *ŋgì* †*jéŋè-ní-ì* ‘until our descent’
màmbí *ŋgì* *hélé-ní-í* ‘until our passing’
- b. *màmbá = á* *jèŋè-ní-ì* ‘until his/her/its descent’
màmbá = á †*hèlè-ní-ì* ‘until his/her/its passing’
- c. *màmbí* *sèédù* †*jéŋè-ní-ì* ‘until Seydou’s descent’
màmbí *sèèdú* †*hélé-ní-í* ‘until Seydou’s passing’

màmbì most likely originated as the combination of *mà* ‘since’, 3Sg subject allomorph *ŋ*, and subjunctive *bí* (becoming L-toned *bì* after the 3Sg proclitic). However, the original parsing would make little synchronic sense in (846).

Examples with ‘since’ and ‘until’ clauses combined are in (847).

- (847) a. *kàmíná = á* †*tàⁿ*,
since 3Sg ascend.Pfv,
màmbá = á *jéŋé-ní-ì*,
until 3Sg descend-VbIN-Sg,
ŋ *dí* †*jēē*
 3Sg PfvNeg eat.Pfv
 ‘From the time that he/she went up, until he/she came (back) down, he/she didn’t eat.’

- b. [kàmìní= í kírè]
 [since 3Pl be.born.Pfv]
 [màmbí= [í 'sàⁿ-ní-ì]
until [3Pl die-VbIN-Sg]
 [ī nàà]
 [3Pl be.nasty]
 'From the time they are born until they die, they are evil.'

15.5.3.5 légé(-lé) 'take' denoting starting point

This construction describes a spatial extent stretching from landmarks X to Y. The starting point X is specified by the verb légé(-lé) 'take, pick up' in the contextual sense 'start'. The endpoint is specified by mà 'until' plus a spatial expression denoting landmark Y.

- (848) ñ gá= á 'lègè-lè gôⁿ,
 3Sg Ipfv 3Sg **take**-Ipfv here,
 má [mìsírì-í 'mà]
until [mosque-Sg Cust]
 'It goes from here all the way to the mosque.'

The same construction occurs in temporal contexts (849).

- (849) ñ gá= á 'lègè-lè wéè,
 3Sg Ipfv 3Sg **take**-Ipfv today,
 má jèè
until tomorrow
 'It goes from today all the way to tomorrow.'

15.5.4 'As though ...' clause (á-wó-tá)

An 'as though' clause begins with with á-wó-tá or variant 'like' (§8.5.1) and is otherwise an ordinary main clause. It is usually appended to a first clause. Using 'put it' in the first clause, here in the contextual sense 'pretend' or 'act (like)', makes the 'like' clause dubitative (i.e. understood to be false). If the subject of the two clauses is third person, as in (850a-b), a Logo/3Refl subject pronominal occurs in the 'as though' clause.

- (850) a. ñ gá= à yágà-là
 3Sg Ipfv 3Sg put-Ipfv
 [á-wó-tí= ì tá ñ tóò]
[like LogoSg IpfvNeg 1Sg know.Stat]
 'He_x acts like (pretends that) he_x doesn't know me.'

- b. léŋ-ó há ʔgwōō-lō
 child-Sg Ipfv weep-Ipfv
 [á-wó-tí= ì tí ʔjēē]
 [like LogoSg PfvNeg eat.Pfv]
 ‘The child is weeping as though he/she hasn’t eaten.’

Pronominal subjects after á-wó-tá (or variant) are subject to Tone Inversion. LogoSg í therefore drops to ì in (850a-b). Likewise 1Pl ŋí drops its tone in á-wó-tá ŋì tí ʔjēē ‘as though we haven’t eaten’. Nouns also undergo tonal changes, e.g., á-wó-tá ʔságà-à ... ‘as though the sheep ...’ from sàgà-à, and á-wó-tá ʔsògò-ò ... ‘as though the goat ...’ from sógó-ó.

The phrase with á-wó-tá does not always imply that the content of the ‘like’ phrase is false. It can also occur in comparison with a past eventuality. In this case, a relative clause with ‘manner’ as head is preferred (851).

- (851) jírí hàbáà tá lí ʔbyē
 this.year rain(n) IpfvNeg Fut come.Pfv
 [á-wó-tá hàbáà ʔbyē [kírí mwò] hééhòò-nî]
 [like cloud come.Pfv [manner Rel] last.year]
 ‘This year it won’t rain (like) the way it rained last year.’ (< jírì, kírì)

15.6 Participial -naa as ‘when’ clause

A clause with -naa following a verb stem describes a state of an individual such as a stance (e.g. lying down) or a situation created by an initial event. This is backgrounded to another, foregrounded event in narrative. The subjects of the two clauses need not be coindexed. The tone of -naa is derived from the melody of the verb: -náá after /H/-melody, otherwise -nàà, before tone sandhi. The participle is subject to tonal ablaut triggered by a preceding subject.

Morphologically, -naa likely represents a special use of the participial ending, but it has a life of its own. The textual occurrences are listed in (852), omitting irrelevant tone sandhi.

- | (852) | reference | form | gloss | context |
|-------|----------------------|-----------------------|---------------------|-----------------------|
| | a. /HL/-melodic verb | | | |
| | 2021-08 @ 01:17 | táá ⁿ -náá | ‘being done’ | (with sequential VP) |
| | 2021-08 @ 02:09 | ságá-náá | ‘lying down’ | ‘X find Y lying down’ |
| | 2021-10 @ 03:26 | kélé-náá | ‘day having broken’ | |

b. /HL/-melodic verb

2021-01 @ 01:31	jíé-nàà	‘united’	‘X look for Y as a unit’
2021-01 @ 02:06	bárí-nàà	‘stuck’	‘X leave Y stuck’
2021-06 @ 00:51	yágá-nàà	‘having become’	‘X grow up’
2021-06 @ 01:18	góbó-nàà	‘having gotten sick’	‘X get sick’
2021-08 @ 00:46	ʃóó-nàà	‘having gone’	‘X go looking for Y’
2021-08 @ 01:35	céé ⁿ -nàà	‘having arrived’	‘X arrive home’

c. /LHL/-melodic verb.

2021-06 @ 01:35	gògí-nàà	‘dried’	‘X sell Y dried’
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The passage with góbó-nàà (852b) also includes the relative marker mwò. See (762) in §14.2.5.

In (853), the -naa clause describes an encompassing background process. The verb is ʃóò/só-lò ‘go’.

- (853) \bar{i} ^ʃòò-náá ^ʃwàá ^tīⁿ, lé-néⁿ fíénú kìnáá-yèⁿ,
 3Pl go.Pfv-**when** firewood look.for.Pfv, child-Dim two other-Pl,
 [ó-yéⁿ ^sūnūⁿ] ^hēlē [húúrú-ú ^là]
 [Dem.Def-Pl all] pass.Pfv [worm-Sg Dat]
 ‘Having gone looking for firewood, the two other girls, those ones (=the two girls) passed by the caterpillar.’ (2021-08 @ 00:46) (< ʃwáá)

In (854) the aspectual context is perfective since the verb ‘arrive’ is telic. The clause with -naa describes the end of a motion event, which is followed by another event.

- (854) bí só hòò, kí= [ì-yéⁿ ^ʃwàá-yèn] tīⁿ,
 Seq go.Pfv home, Inst [LogoPl firewood-Pl] under,
 \bar{i} ^cēēⁿ-nàá hòò, ...
 3Pl arrive.Pfv-**when** home, ...
 ‘And (they) went home, with their firewood. After they got home, ...’
 (2021-08 @ 01:35) (< ʃwáá)

In (855), tááⁿ ‘be done’ is a place-holder, and the main content (‘swallow’) is phrased as a following sequential VP.

- (855) húúrú-ú tááⁿ-náá [bá= á tōⁿ],
 worm-Sg do.Pfv-**when** [Seq 3Sg swallow.Pfv],
 [lé-néⁿ víénú kìnáá-yém] ^ʃbyē
 [child-Dim two other-Pl] come.Pfv
 ‘After the caterpillar had swallowed her, the other two girls came.’ (2021-08 @ 01:17)
 (< fíénú)

16 Conditional constructions

16.1 Hypothetical conditional

16.1.1 Simple hypothetical antecedent with clause-initial ní ‘if’

A hypothetical conditional antecedent begins with ní ‘if’. If the antecedent eventuality is a simple event in the future, the clause takes perfective form (positive or negative).

- (856) a. ní sèédú ʼbyē
 if S come.Pfv
 ‘if Seydou comes/has come’
- b. ní sèédù tí ʼbyē
 if S PfvNeg come.Pfv
 ‘if Seydou doesn’t/hasn’t come’

However, imperfective antecedents are also possible if they describe an ongoing process or a habitual activity. An example is (860) in §16.1.1.2 below.

For ní ‘if’ in indicative complements, see §17.2.1.2 (‘forget that/whether ...’) and §17.2.1.3 (‘not be sure whether ...’).

16.1.1.1 Tone patterns of conditional antecedent with ní

ní ‘if’ affects the tones of the following subject pronoun or NP. Pronominal proclitics are subject to Tone Inversion (857).

- (857) a. ná= à byé
 if 2Sg come.Pfv
 ‘if you-Sg come’
- b. ní ngì tí ʼbyē
 if 1Pl PfvNeg come.Pfv
 ‘if we don’t come’
- c. ná= á ʼbyè
 if 3Sg come.Pfv
 ‘if he/she comes’

- d. ní= í tí ʼbyē
if 3Pl PfvNeg come.Pfv
‘if they don’t come’
- e. nî Ø ɲá= á hɛ̀ɛ̀
if 1Sg Sbj/Obj 3Sg see.Pfv
‘if I see him/her/it’ (< ní ɲ ɲá)

Example (857e) is interesting because the 1Sg proclitic is silent clause-initially before the bidirectional case marker, the combination appearing in that position as Ø ɲá. In (857e), the presence of ní allows the 1Sg proclitic to become at least faintly audible, usually in the form of a downstep on the BCM. After Tone Inversion an unclipped pronunciation would be ní ɲ ɲá á ... with HLH tone sequence. Although 1Sg ɲ is not clearly audible segmentally, the pitch drop is at least faintly audible, as nî Ø ɲá á ... or as ní Ø ʼɲá= ā ... with local downstep.

Nouns following ní are subject to the usual tonal ablaut processes. /H/-melodic nouns are tone-dropped to L*HL; then either the final <HL> syllable is raised by tone sandhi to H before a nonhigh tone (858a), or L*HL is realized as all-L before an H-tone (858b). /HL/-melodic nouns are downstepped (858c-d).

- (858) a. ní ʼjùú / ʼsògó-ó / ʼfàlàtó-ó ʼtāⁿ
if water / goat-Sg / orphan-Sg ascend.Pfv
‘if the water/goat/orphan ascends’ (< júú, sógó-ó, fálátó-ó)
- b. ní ʼjùù / ʼsògò-ò / ʼfàlàtò-ò jéɲè
if water / goat-Sg / orphan-Sg descend.Pfv
‘if the water/goat/orphan descends’
- c. ní ʼbāsà-á ʼtāⁿ
if agama-Sg ascend.Pfv
‘if the agama lizard ascends’ (< básà-à)
- d. ní ʼbāsà-à jéɲè
if agama-Sg descend.Pfv
‘if the agama lizard descends’

Nouns that begin with two or more L-toned syllables undergo Initial H-Ablaut (859a-c).

- (859) a. ní ʼsàgà-á / ʼɲáɲànù-ú ʼbyē
if sheep-Sg / woman-Sg come.Pfv
‘if the sheep/woman comes’ (< sàgà-à, ɲàɲànù-ù)

- b. ní †sáǵà-à / †náǵánù-ù jéǵè
 if sheep-Sg / woman-Sg descend.Pfv
 ‘if the sheep/woman descends’
- c. ní †bùrùkú-ù †tāⁿ
 if bourgou-Sg ascend.Pfv
 ‘if the bourgou grass ascends’ (< bùrùkú-ù)

16.1.1.2 Rare post-subject nì ‘if/when’

In the recordings, one speaker has a construction with L-toned nì ‘if/when’ **following** the subject rather than H-toned ní preceding it. The two examples from the recordings are both in perfective positive antecedents. There is no evidence that the subject is a preclausal topic; there is no prosodic break and no resumptive pronoun. The subject is a demonstrative in one case and a noun in the other. The tone is raised to ní in (860) by Final Tone-Raising, while in (861) L-toned nì induces Final Tone-Raising on the subject, so the basic form of the particle is clearly nì.

- (860) ó ní †fǿǵē [[kírí wóó †kírì] jǵèè],
 Dem.Def **if** rot.Pfv [[manner and manner] on],
 á há †ǵǿǵó-ó †lǵǵē-lē [bó = ó mùǵé-nì]
 2Sg Ipfv fish-Sg take-Ipfv [Seq Dem.Def be.well.made-Caus.Pfv]
 ‘Once it has rotted in any manner, you take the fish and prepare it (for drying).’
 (2021-06 @ 04:29) (ǵǿǵó-ó ; for wóó see §7.1.2.2)

- (861) ósòò kòó nì céèⁿ [[*dix heures* †jǵàtè-é] nî], ...
 then sun **if** arrive.Pfv [[ten hours calculation-Sg] Loc], ...
 ‘Then when the sun arrives, at 10 AM, ...’ (2021-06 @ 04:43) (< kòò, jǵàtè-è)

Jenaama-Sorogaama varieties have a structurally similar and possibly cognate post-subject morpheme in perfective positive conditional antecedents. It is JSDj nà or Cliffs na(wⁿ), the latter getting its tone by a dissimilation process. The Jenaama-Sorogaama post-subject morpheme can co-occur with the clause-initial ‘if’ particle that corresponds to Kelenga ní (JSDj nì ~ né, Cliffs ǵāⁿ ~ ǵīⁿ).

16.1.1.3 bé as right-edge marker in conditional antecedents

bé is attested at the right edge of a conditional antecedent, whose content is therefore bookended by ní ... bé. Here bé has a mild admonitive function. In textual example (862), the speaker is warning that putting firewood into a fire too fast will ruin the fish being smoked.

- (862) ná= à [lá-gùlé]-yà [á 'mà] bé
if 2Sg [be.fast]-Inch.Pfv [3Sg Cust] **if**
 ‘if you-Sg are (too) fast with it’ (2021-06 @ 03:13, repeated at 03:19)

16.1.1.4 Double antecedents

Two antecedents can be juxtaposed, typically describing two successive events, followed by the consequent clause. An example is 2021-06 @ 03:20 ‘when you have put it (=fish) on the grill, when it has done a little while there, ...’.

16.1.2 Hypothetical conditional consequents

There is no special marking of hypothetical conditional consequents as opposed to other main clauses. In the usual case where both the antecedent and consequent are bounded events, the consequent is imperfective (863a-b) or a deontic modal: hortative (863c) or imperative (863d), the latter with subjectless Pfv verb.

- (863) a. ní hàbáà byē,
 if cloud come.Pfv,
 ní dá só-lò [cèè nî]
 1Sg **IpfvNeg** go-Ipfv [field inside]
 ‘If it rains, I won’t go to the field(s).’
- b. ní hàbáà tí ‘byē,
 if cloud PfvNeg come.Pfv,
 ñ gá só-lò [cèè nî]
 1Sg **Ipfv** go-Ipfv [field inside]
 ‘If it doesn’t rain, I will go to the fields.’ (< só-lò)
- c. ní hàbáà tá ‘bē-lē,
 if cloud PfvNeg come-Ipfv,
 ñgá= á jóò (~ só) [cèè nî]
 1Pl **Hort** go.Pfv [field inside]
 ‘If it isn’t raining, let’s go to the fields!’
- d. ní hàbáà tá ‘bē-lē,
 if cloud PfvNeg come-Ipfv,
 jóò (~ só) [cèè nî]
 go.**Pfv** [field inside]
 ‘If it doesn’t rain, go!-2Sg to the fields!’

e. ná= à hééⁿ, céè
 if 2Sg fall.Pfv, get.up.Pfv
 ‘If you-Sg fall, get (back) up!’

16.1.3 n-ón dè ‘otherwise (=if not)’

Consider a passage of the type ‘if X, then Y; otherwise (=if not X), then Z’. The ‘otherwise’ expression is phrased as ‘if it is not that’ with discourse-definite demonstrative (864). This demonstrative is elsewhere ó (§4.4.2.1), and ní ó ‘tè would normally contract as #nó = ó ‘tè. The actual form is irregularly n-ón ‘dè, variants nó-òn ‘dè, n-ón ‘tè.

(864) ní hàbáà ‘byē
 if cloud come.Pfv
 ngá= á ‘tōgō gōⁿ,
 1Pl Hort stay.Pfv here,
 n-ón ‘dè, ngá= á ʃóò [cèè nî]
if-Dem.Def it.is.not, 1Pl Hort go.Pfv [field Loc]
 ‘If it rains, let’s stay here. Otherwise (=if not), let’s go the fields.’

A textual example is at 2021-06 @ 06:37.

The unexpected medial nasal in n-ón ‘dè may be a relic of original nasalization of ó. The JSDj equivalent is né nōⁿ té ‘if it is not that’ = ‘otherwise’.

16.1.4 ‘As soon as ...’ not a conditional antecedent

This construction meaning ‘as soon as’ is not a conditional antecedent in form. See §15.5.2 for the use of clause-final lámàà ‘only’ in this context.

16.2 ‘Even if ...’ (hàlí nì)

Here the speaker knows that others might think that the factuality of the antecedent would block that of the consequent. The speaker asserts that the consequent will occur regardless. The antecedent begins with hàlì ‘even’ (§19.1.4), which triggers Tone-Dropping on ní ‘if’, though it can be re-raised to ní by tone sandhi as in (865a-b). The remainder of the antecedent is the same as in hypothetical conditionals.

- (865) a.

hàlí	ní	m̀	byé	ʃèè,
even	if	1Sg	come.Pfv	tomorrow,
ń	tá	bélé	ˈjēē	gô ⁿ
1Sg	IpfvNeg	Fut	eat.Pfv	here

‘Even if I come tomorrow, I won’t eat here.’
- b.

hàlí	ní	hàbáà	ˈbyē	ʃèè,
even	if	cloud	come.Pfv	tomorrow,
ń	dá	bélé	dà-ńí-ì	ˈtāā ⁿ
1Sg	IpfvNeg	Fut	sow-VblN-Sg	do.Pfv

‘Even if it rains tomorrow, I won’t plant (seeds).’ (< verb dáⁿ)
- c.

hàlí	nì	ámádú	ˈbyē
even	if	A	come.Pfv

‘even if Amadou comes’

A textual example is 2021-06 @ 06:45.

16.3 Willy-nilly antecedents (‘whether X or Y ...’)

16.3.1 With wóó

In this construction, two paired antecedents have opposite truth conditions. Usually a positive clause is followed by its negation. If so, the second subject is always pronominalized, some adjuncts may be omitted in the second clause, and the verb is repeated. Whichever antecedent turns out to be true is asserted to have no effect on the truth of the consequent.

The particle wóó appears at the end of the first antecedent clause. It is optionally repeated after the second antecedent clause and in this position it may be intonationally prolonged. The two antecedent clauses are pronounced without a prosodic break between them.

- (866)

[ní	hàbáà	ˈbyē	wóó]
[if	cloud	come.Pfv	whether]
[ń	dí	ˈbyē	(wóó→)],
[3Sg	PfvNeg	come.Pfv	(whether)],
íj	gá	só-lò	[cèè nî]
1Sg	Ipfv	go.Ipfv	[field Loc]

‘Whether it rains or it doesn’t rain, I’m going to the field(s).’ (< só-lò)

Compare the [X woo X] ‘every X’ construction for nouns (§7.1.2.2).

16.4 Counterfactual conditionals

16.4.1 Counterfactuals with *lì* ~ *lí*

In a counterfactual, the eventuality expressed by the antecedent, whether a current state or a past event, is understood to be false. It is asserted that in an alternative reality where the antecedent was true, the consequent would also have been realized, as in ‘if you had hit me, I would have killed you’. The post-subject past-time morpheme *kúⁿ* occurs in both antecedent and consequent clauses.

ní ‘if’ occurs at the beginning of the antecedent as in hypothetical conditionals. The antecedent is aspectually perfective, so it combines with *kúⁿ* as in the past perfect (§10.3.4).

(867)	2Sg	3Sg	gloss
a.	<i>ná = à kúⁿ ‘hēlē</i>	<i>ná = á kúⁿ ‘hēlē</i>	‘if __ had passed’
	<i>ná = à kún tí ‘hēlē</i>	<i>ná = á kùn tí ‘hēlē</i>	‘if __ had not passed’
	<i>ná = à kúⁿ fòò</i>	<i>ná = á kùⁿ fòò</i>	‘if __ had gone’
b.	<i>ná = à kúⁿ ñá ñ hēè</i>	<i>ná = á kùⁿ ñá ñ hēè</i>	‘if __ had seen me’
c.	<i>ná = à kúⁿ ñá ‘sògò-ò hēè</i>	<i>ná = á kùⁿ ñá ‘sògò-ò hēè</i>	‘if __ had seen the goat’
	<i>ná = à kúⁿ ñà ‘ságà-à hēè</i>	<i>ná = á kùⁿ ñà ‘ságà-à hēè</i>	‘if __ had seen the sheep’
	<i>ná = à kúⁿ ñà bāsà-à hēè</i>	<i>ná = á kùⁿ ñà bāsà-à hēè</i>	‘if __ had seen the agama’

The consequent has *Ipfv* or *IpfvNeg* post-subject morpheme followed by a counterfactual particle, in L-toned form (positive *kúnj* *gà* *lì*, negative *kùn* *dà* *lì*). The verb of the consequent is *Pfv* in form.

(868)	2Sg	3Sg	gloss
a.	<i>á kúnj gà lí ‘hēlē</i>	<i>ā kùnj gà lí ‘hēlē</i>	‘__ would have passed’
	<i>á kúnj gà lì fòò</i>	<i>ā kùnj gà lì fòò</i>	‘__ would have gone’
	<i>á kún dà lí ‘hēlē</i>	<i>ā kùn dà lí ‘hēlē</i>	‘__ would not have passed’
b.	<i>á kúnj gà lí ñ hēè</i>	<i>ā kùnj gà lí ñ hēè</i>	‘__ would have seen me’
c.	<i>á kúnj gà lí ‘sògò-ò hēè</i>	<i>ā kùnj gà lí ‘sògò-ò hēè</i>	‘__ would have seen the goat’
	<i>á kúnj gà lì ‘ságà-à hēè</i>	<i>ā kùnj gà lì ‘ságà-à hēè</i>	‘__ would have seen the sheep’
	<i>á kúnj gà lí ‘bāsà-à hēè</i>	<i>ā kùnj gà lí ‘bāsà-à hēè</i>	‘__ would have seen the agama’

The source of counterfactual *lì* is undoubtedly contraction of the regular future *bélé* ~ *bílí*. Combinations of *bélé* ~ *bílí* with a preceding post-subject inflectional particle drop as a unit to L-toned after past-time *kúⁿ* (or after 3Sg or 3Pl proclitic). In other words, counterfactual consequents are slightly modified versions of the future-in-past construction (§10.3.5). The tonal patterns and the requirement of a verb in *Pfv* stem support this claim.

Examples combining antecedent and consequent clauses to illustrate the entire counterfactual construction are in (869).

- (869) a. ná= à kúⁿ ɲá ɲ gwárí dúgò-ò-nìì,
 if 2Sg **Past** Sbj/Obj 1Sg hit.Pfv yesterday,
 ɲ kúɲ gà lá= à wágà
 1Sg **Past** Ipfv **Counterf** 2Sg kill.Pfv
 ‘If you-Sg had hit me yesterday, I’d have killed you.’ (< kwárí)
- b. ná= à kún tí ʼbyē dúgò-ò-nìì,
 if 2Sg **Past** PfvNeg come.Pfv yesterday
 ɲ kúɲ gà lá= à tíⁿ
 1Sg **Past** Ipfv **Counterf** 2Sg look.for.Pfv
 ‘If you-Sg hadn’t come yesterday, I’d have gone looking for you.’
- c. ní sèédù kún ʼnà-ní,
if S **Past** it.is,
 ā ʼkùn tà lì hóólò
 3Sg **Past** IpfvNeg **Counterf** run.Pfv
 ‘If it had been Seydou, he wouldn’t have run.’ (< rá-ní)

A variation on this is to use *lì ~ lí* as a mildly (and politely) counterfactual consequent along with an ordinary hypothetical conditional antecedent, which in this case can follow the consequent (870). See also ‘you would say ...’ in 2021-10 @ 01:17.

- (870) ɲ gà lí ʼlūmā-yā [ɲ té]
 3Sg Ipfv **Counterf** be.sweet-Inch.Pfv [1Sg Dat]
 [ní ɲ ʃóò [à fáà]]
 [ní Ø zá=
 [if 1Sg go.Pfv [2Sg by]]
 ‘It would give me pleasure if I were to go with you-Sg.’ (< ní ɲ ʃóò/só)

16.4.2 Dubitative counterfactuals without *lì ~ lí*

A construction similar to the counterfactual, but without the *lì* morpheme and therefore with Ipfv rather than Pfv verb in the consequent, appears when the antecedent denotes a state that is presently untrue or a future event that is possible unlikely to happen. This is pragmatically halfway between hypothetical and (past) counterfactual conditionals.

- (871) a. ní 'mòtó-ó 'kūŋ gà [ŋ váà],
if motorcycle-Sg **Past** be.Loc [1Sg by],
 ŋ kún gà só-lò [ʔnúŋù-ù nî] bé-lé
 1Sg **Past** Ipfv go-Ipfv [village-Sg Loc] come.Ipfv
 'If I had a motorcycle, I would go to the village and come back.' (< mótó-ó, fáà)
- b. ní 'mòtó-ó 'kūn tá [ŋ váà],
 if motorcycle-Sg **Past** not.be.Loc [1Sg by],
 n kún tá 'hīnī [bí ʃòò [ʔnúŋù-ù nî]]
 1Sg Past IpfvNeg be.able.Ipfv [Seq go.Pfv [village-Sg Loc]]
 'If I didn't have a motorcycle, I wouldn't be able to go to the village.'
 (i.e., 'were it not for the fact that I have a motorcycle')
- c. ní ŋ kún 'kēlē 'nāŋāā-tīgī-ì,
if 1Sg **Past** be.Cop thing-owner-Sg,
 ŋ kún tá 'tōgō-lō [ʔnúŋù-ù nî]
 1Sg **Past** IpfvNeg stay-Ipfv [village-Sg Loc]
 'If I were a rich person, I wouldn't stay in the village.'

17 Complement clauses

This chapter describes subordinated clauses that include subject, as opposed to just VPs. They are quotative, indicative (factive), and subjunctive/prohibitive. For loosely adjoined temporal adverbial clauses ('when ...') and subordinated VPs, see chapter 15.

17.1 Quotative complements

There are two 'say' verbs. One is the unconjugated quasi-verb *wó* 'said', which occurs before quoted matter. The other is the fully inflectable transitive verb *ʃéé/sé-lé* 'say, tell', which requires an overt NP object, minimally 'it' or 'that', and can be followed by quoted matter. Both verbs allow an optional dative PP specifying the original addressee.

17.1.1 Pronominal replacement in indirect quotation

Direct quotation preserves all features of the original utterance, including first and second person pronominals. Indirect quotation replaces 1Sg and 1Pl by the corresponding logophorics, and replaces 2Sg and 2Pl (original addressee) with 3Sg and 3Pl, assuming that the original speaker and addressee are not speaker or addressee of the current speech event.

Transitions between first person and logophoric pronominals is unmistakable: 1Sg *ń* and 1Pl *ńgí* versus LogoSg *í* and LogoPl *í-yèⁿ*. That between 2Sg *á* and 3Sg *à*, or between 2Pl *í* and 3Pl *ì*, is tonal only and could lead to mistranscriptions.

Tales are ideal for studying quotations. The relevant texts are 2021-08, -10, and -15, with the same (relatively young) narrator.

2021-08 starts with direct quotation, preserving original first and second person pronouns. Examples are 'you-Sg' @ 01:07 & 01:12, 'we' @ 01:46 & 02:21, and 'I' @ 02:30. In a quotation within a quotation, 'you' preserves the original pronoun @ 02:35. Starting at 02:55 the quotations are indirect. However, there is a logophoric instead of 1Sg @ 03:00-03:04, and a 3Sg pronoun instead of 2Sg for the original addressee @ 03:07.

2021-10 has an (indirect) quoted imperative early on ('she told them to sit down' @ 01:36), but the next quoted matter is an extended lament (corresponding to a song in other versions) beginning @ 02:06, in direct discourse with 1Sg pronouns. The next quoted imperative appears to be in direct form @ 02:45. Beginning at 03:00, there is a shift to indirect discourse using LogoSg for 1Sg (@ 03:00 & 03:04 & 03:13), and 3Sg for 2Sg denoting the original addressee (@ 03:07 & 03:17). The final quotation @ 04:20 also appears to be indirect (3Sg for 2Sg).

2021-15 has mostly indirect quotation (e.g. LogoSg for 1Sg @ 00:49 & 01:19), except for a 1Pl hortative @ 00:22 and a 1Sg-subject subjunctive clause @ 01:18.

17.1.2 wó ‘said’

wó ‘said’ (‘wò after 3Sg and 3Pl proclitics, 1Sg variant ñ gó) introduces actual quoted matter; it is the spoken equivalent of a left quotation mark (“). It does not mean ‘say (it, that, the same thing)’ when the quoted matter is summarized by a pronoun, demonstrative, or noun. Such nominal objects require the inflectable verb *ǰéé/sé-lé* ‘say, tell’ (next subsection below).

wó normally occurs in reports of individual past speech events. It can also extend to the habitual present. wó cannot be negated, made imperfective, or used as imperative or hortative ‘say’; these contexts require the inflectable verb *ǰéé/sé-lé*.

wó combines with subjects as in (872).

(872)	a.	sèédú	‘wō	‘Seydou said’
		í-yé ⁿ	‘wō	‘LogoPl said’
	b.	ā	‘wò	‘he/she said’
		ī	‘wò	‘they said’
	c.	ñ	wó ~ gó	‘I said’
		ngí	wó	‘we said’
		á	wó	‘you-Sg said’
		í	wó	‘you-Pl said’
		í	wó	‘LogoSg said’

The quoted matter must be close to what is stated to have been spoken (or thought) by the ascribed author of the quotation, except for pronominal substitutions such as logophorics (873a-b). A quoted imperative, if not directly reproduced, takes subjunctive (*bí*) or prohibitive (*mání*) clausal form, with an overt subject (873c). A content or polar interrogative can be quoted (873d-e).

(873)	a.	à	wí=	[ì	tí	sèédù	héè]		
		3Sg	said	[LogoSg	PfvNeg	S	see.Pfv]		
		‘He/She _x said that he/she _x hadn’t seen Seydou.’ (< ā ‘wò)							
	b.	[táá	wóó	‘tāā]	à	wí=	[ì	há	‘bē-lē]
		[day	and	day]	3Sg	said	[LogoSg	Ipfv	come-IPfv]
		‘Every day he/she _x says that he/she _x is coming.’							
	c.	ā	‘wò	[m̄	bí	‘byē]			
		3Sg	said	[1Sg	Sbjn	come.Pfv]			
		‘He/She told me to come.’							

- d. ā ˈwò [ɲ kélé jàâ]
 3Sg **said** [1Sg be.Cop who]
 ‘He/She asked (me) who I am/was.’
- e. ā ˈwò [ɲ gá ˈɲòŋó-ó ˈjāā-lā wâ]
 3Sg **said** [1Sg Ipfv fish-Sg eat.Ipv Q]
 ‘He/She asked (me), do/did I eat fish?’

wó can be followed by a PP with custodial postposition má, specifying the original addressee.

- (874) à wó [ɲ má] [sèèdú ˈbyē]
 3Sg **said** [1Sg **Cust**] [S come.Pfv]
 ‘He/She told me that Seydou has/had come.’

Textual examples with má are 2021-08 @ 02:12 and 2021-15 @ 00:22.

In (874) the 1Sg proclitic ɲ has its tone-inverted form ɲ̃ (assimilating as ɲ̃). wó induces the full set of tonal changes on following proclitics and nouns, provided they are spoken without a prosodic break. Proclitics can undergo inversion (§3.6.5.1.1) whether functioning as the complement of custodial má (874), or as the subject of the quoted matter (873c-e above). Similarly, nouns that follow wó are subject to the usual tonal changes triggered by a preceding grammatical morpheme: Downstep for /H/ melody (875a), Initial H-Ablaut for nouns beginning in two L-toned syllables or a nonfinal C̃ṽ syllable (875b).

- (875) a. à wó [ˈsògò-ò há ˈgòⁿ]
 3Sg said [goat-Sg be.Loc here]
 ‘He/She said that the goat is here.’ (< sógò-ó)
- b. ā ˈwò [ˈsàgà-à há ˈgòⁿ]
 3Sg said [sheep-Sg be.Loc here]
 ‘He/She said that the sheep is here.’ (< sàgà-à)

wò in L-toned form (unless re-raised by tone sandhi) can follow the inflectable ‘say’ verb. It can also occur without a subject or a preceding verb, as an introducer of a spoken or thought quotation (including intentions). The L-tone would be expected with a 3Sg or 3Pl pronominal subject and may have originated that way. See §17.1.4 below for wò following the inflectable ‘say’ verb, and §17.3.5 for other contexts.

17.1.3 Inflectable verb fée/sé-lé ‘say, tell’

fée/sé-lé ‘say, tell’ (§10.1.2.3) is compatible with any inflectional frame (perfective or imperfective, positive or negative, indicative or modal). It is immediately preceded by a pro forma 3Sg object à if there is no other preverbal object NP (such as a demonstrative), even when an actual

quotation immediately follows without a prosodic boundary. The à is unmistakable in imperatives where it is clause-initial and cannot contract with a preceding inflectional particle (876b). *ǰéé/sé-lé* is followed by an optional dative or custodial PP denoting the original addressee (in which case the usual free translation has ‘tell’ rather than ‘say’), then by quoted material if there is any.

- (876) a. à ǰá [kù rá] ʼǰēē [ǰ té]
 3Sg Sbj/Obj [Dem Foc] **say.Pfv** [1Sg Dat]
 ‘That [focus] is what he/she told me.’ (< kù)
- b. ì tá= á ʼǰèè [ǰ té]
 3Pl PfvNeg 3Sg **say.Pfv** [1Sg Dat]
 ‘They didn’t tell (it to) me.’

The postposition after *ǰéé/sé-lé* is usually dative *té* but can be custodial *má*. Elicited examples consistently have *té*. Textual examples with dative *té* are 2021-01 @ 01:16, 2021-08 @ 00:04 & 00:56, 2021-10 @ 00:02, and 2015 @ 00:02. However, there are also textual examples of *ǰéé/sé-lé* with custodial *má* in 2021-08 @ 01:02, and 2021-10 @ 02:45 & 03:13 & 03:31. The custodial postposition is regular with *wó* ‘said’.

17.1.4 L-toned *wò* ‘said’ without a subject

wò ‘said’ in L-toned form (likely generalized from 3Sg *ā* ‘he/she said’) can function as a ‘that’ quotation introducer with no subject and no following dative or custodial PP. To begin with, it occurs optionally after the inflectable ‘say’ verb, with or without a PP. *wò* is then bracketed prosodically with the following quoted matter. More often than not, *wò* becomes H-toned *wó* by tone sandhi.

- (877) a. ā ʼǰèè [wó sèédù bí ʼbyē]
 3Sg **say.Pfv** [**said** S Sbjn come.Pfv]
 ‘Tell Seydou to come!’ (lit. “say it, Seydou should/must come”)
- b. à ǰá= á ʼǰèè [ǰ té], [wó sèédú ʼbyē]
 3Sg Sbj/Obj 3Sg **say.Pfv** [1Sg Dat], [**said** S come.Pfv]
 ‘He/She told me that Seydou had/has come.’

For *wò* after ‘ask, inquire’, see §17.1.6. For *wò* after ‘forget’, see §17.2.1.2.

wò can also replace *ā* *wò* ‘he/she said’ or *ī* *wò* ‘they said’ in the absence of an overt ‘say’ or other inflectable verb, especially in narrative when it is obvious who is speaking. For example, *wò* by itself introduces quotations at 2021-10 @ 02:28 & 02:45 & 03:00. This makes *wò* useful in descriptions of a protagonist’s intentions, for example specifying the purpose of a motion event (§17.3.5).

17.1.5 Jussive complement (quoted imperative or hortative)

17.1.5.1 Quoted imperatives and prohibitives

If not reproduced verbatim, quoted imperatives take the form of subjunctive clauses: [X say [Y Sbjn ... Verb.Pfv ...]]. Either wó ~ wò ‘said’ or inflected jéé/sé-lé ‘say’ may be used (the latter is optionally followed by L-toned wò). Y is an open-ended NP coindexed with the addressee in the original utterance, but updated in the context of the current speech event. This construction can be elaborated by adding a dative addressee, but the lower subject Y remains obligatory: [X say [to Y (or Z)] [Y ...]]. The dative is often omitted, since it is usually understood that the original addressee was also the subject Y of the original imperative. Therefore the usual form is [X say [Y ...]]. The free translation ‘X tell Y [Ø to ...]’ with Y functioning as main-clause object is syntactically misleading. With [X say [Y ...]] and no dative it is also possible that Y was not the immediate addressee, in which case the translation could be ‘X say (to an intermediary) that Y must/should VP’.

If the original command was positive, the quoted imperative clause has subjunctive bí after the subject (878). An H-toned subject pronominal before bí undergoes Tone Inversion after wò (878b).

(878) a. à wó [m̀ bí ˈtāⁿ]
 3Sg said [1Sg **Sbjn** ascend.Pf]
 ‘He/She told me to go up.’ (or: ‘He said that I should go up.’) (< ā wò)

b. à ɲá= á ˈjèè [wó m̀ bí ˈtāⁿ]
 [Ø m̀
 3Sg Sbj/Obj 3Sg say.Pfv [said 1Sg **Sbjn** ascend.Pfv]
 [= (a)]

If the original utterance was a negative imperative with prohibitive mání, the original form is preserved in the quotation except for the presence of an overt subject, plus any updating of other deictics (879).

(879) ɲ́ wó [sèédù mání ˈtāⁿ]
 1Sg said [S **Proh** ascend.Pfv]
 ‘I told Seydou not to go up.’ or ‘I said that Seydou should not go up.’

17.1.5.2 Quoted hortatives

A quoted hortative has the same type of structure as described above for quoted imperatives. Positive hortatives can be expressed under quotation with hortative morphology (880a). They can

also be expressed as 1Pl-subject subjunctive clauses, though these can also be interpreted as quoted imperatives not proposing joint action (880b).

(880) a. sèédù wó [ŋá= á ʃòò]
 S said [1Pl Hort go.Pfv]
 ‘Seydou said, “let’s go!” ’

b. sèédù wó [ŋì bí ʃòò]
 S said [1Pl Sbjn go.Pfv]
 ‘Seydou said, “let’s go!” ’ (or: ‘Seydou said that we should go/told us to go.’)

A main-clause hortative negative has the form of a prohibitive with 1Pl subject. The quoted version therefore has the same form as a quoted prohibitive. The difference in the two translations of (881) is that Seydou includes himself in the proposed (non-)motion in translation (a).

(881) sèédù wó [ŋì mání ʃòò]
 S said [1Pl Proh go.Pfv]
 a) ‘Seydou said, “let’s not go!” ’
 b) ‘Seydou told us not to go.’

17.1.6 Quoted questions

Polar interrogatives ending in particle wâ can be quoted without change, other than updating deictics. Either a simple quotation with wó (882a) or a main clause with télé(-lé) ‘ask, inquire’ (882b) can be the frame.

(882) a. à wó [‘àmàdù há ‘wɔ̃ⁿ wâ]
 3Sg Quot [A be.Loc there.Def Q]
 ‘He/She asked whether Amadou was there.’

b. à ŋá= ò télé, wó ‘àmàdù há ‘wɔ̃ⁿ wâ
 3Sg Sbj/Obj 1Sg ask.Pfv, Quot A be.Loc there.Def Q
 ‘He/She asked me whether Amadou was there.’

Content interrogatives can also be quoted in the same way (883).

(883) a. à wó [jàá ‘hà só-lò]
 3Sg said [who? Ipfv go-Ipfv]
 ‘He/She said (=asked), who is/was going?’ (< ā wò jââ há)

- b. à ɲá = ñ télé, wó ñ gá màná sí ʔtāā-nā
 3Sg Sbj/Obj 1Sg ask.Pfv, Quot 1Sg Ipfv what? do-Ipfv
 ‘He/She asked me, what was I doing?’

17.2 Indicative clausal complements

These clauses, which function as complements to a higher clause, have the same form as indicative main clauses.

17.2.1 Clausal complements of knowledge verbs

17.2.1.1 ‘(Not) know’ with indicative or ‘whether’ complement

‘Know’ is the transitive stative verb *tóò*. It can take direct objects as in ‘I know it’ (where ‘it’ refers to a proposition) and in ‘I know him/her’ in the sense of acquaintanceship (§11.2.5.1).

When the complement is a spelled-out proposition like (884a), the complement follows the main clause, which includes a 3Sg object pronoun. The complement optionally begins with *wò* ‘said’ functioning as ‘that’ quotation introducer. If *wò* is present, it has its usual tonal effects on the subject. (884b) is literally ‘I know it, [(that) Amadou came]’. In positive contexts, ‘X know S’, it is understood that the eventuality S denoted by the complement (Seydou’s having come) is veridical.

- (884) a. ámádú ʔbyē
 A come.Pfv
 ‘Amadou came (=has come).’
- b. ñ gá = á tóò [wó ʔàmàdú ʔbyē]
 " " " " [Ø ámádú "]
 1Sg Ipfv 3Sg know.Stat [(said) goat ...’ A come.Pfv]
 ‘I know that Amadou has come.’

When ‘know’ is negated, if the subject of ‘know’ is not the current speaker, the factuality of the embedded proposition is not presupposed. In (885a), the speaker does not have to commit to this factuality. Either ‘that’ (factive) or ‘whether’ (dubitative) can occur in the free translation depending on context. In (885b), the two alternative possibilities are spelled out as full main clauses without a subordinator. In (885c) the complement begins with dubitative *yálà* ‘whether’ or a synonymous composite form that includes variants of the ‘if’ particle *ní*, namely *yálá-nìi ~ yàlà-ní* (dialectal variants).

- (885) a. sèédù tá = á tóò [wó ɲgì byé]
 S IpfvNeg 3Sg **know.Stat** [said 1Pl come.Pfv]
 ‘Seydou doesn’t know that/whether we have come.’
- b. sèédù tá = á tóò [ɲgí byé],
 S IpfvNeg 3Sg **know.Stat** [1Pl come.Pfv],
 wálì-má ɲgì tí ‘byē
or 1Pl PfvNeg come.Pfv
 ‘Seydou doesn’t know whether we have come or we haven’t come.’
- c. ní tá = á tóò
 1Sg IpfvNeg 3Sg **know.Stat**
 [yálà (~ yálá-ní ~ yàlà-ní) sèédú ‘byē]
[whether S come.Pfv]
 ‘I don’t know whether Seydou has come.’

When the complement of ‘not know’ is logically a content interrogative, *jâ* ‘who?’ and sometimes *júmè* ‘which?’ are retained by some speakers (886a,e). The bare relative marker *mwò* is adequate for ‘what?’ (886b). Nouns like ‘place’, ‘day’, and ‘manner’ are used for adverbial interrogatives, either as relative heads or with ‘which?’ (886d). Other speakers avoid the content interrogatives even for ‘who?’ (replaced by *jíní mwò* ‘person who’) and ‘which?’ (replaced by relative *mwò* after the noun). Dubitative *yálà* ‘whether’ or variant can be preposed but is not required.

- (886) a. ní tá = á tóò
 1Sg IpfvNeg 3Sg **know.Stat**
 [(yálá-ní) *jâ* ‘byē]
[(whether) Rel come-Pfv]
 ‘I don’t know who came.’
- b. ní tá = á tóò
 1Sg IpfvNeg 3Sg **know.Stat**
 [(yálá-ní) sèédù ɲá *m̀wò* ‘jāā]
[(whether) S Sbj/Obj Rel eat.Pfv]
 ‘I don’t know what Seydou ate.’
- c. ní tá = á tóò
 1Sg IpfvNeg 3Sg **know.Stat**
 [yálà = á ‘byè [kí [‘ságà-à *mwò*] tíⁿ]
[whether 3Sg come.Pfv [Inst [sheep-Sg **Rel**] under]
 ‘I don’t know which sheep he/she bought.’

- d. ń tá = á tóò
 1Sg IpfvNeg 3Sg **know.Stat**
 [sèédù ʃòò [kámú ʹjũmèⁿ]]
 [S go.Pfv [**place** **which?**]]
 ‘I don’t know where Seydou went.’
- e. ń tá = á tóò
 1Sg IpfvNeg 3Sg **know.Stat**
 [[táá júmèⁿ]] ɲ gà lí ʹbyē]
 [[**day** **which?**] 3Sg Ipfv Fut come.Pfv]
 ‘I don’t know on what day he/she will come.’

17.2.1.2 ‘Forget that/whether’ with indicative clausal complement

If the complement S of positive ‘X forget that S’ is treated as veridical, it may begin with wò ‘said’ as quotative particle (887b). If the factuality of the complement is in doubt, this can be phrased using a disjunct complement (‘whether X or Y’) (887b).

- (887) a. sèédù ńínè [wó m̀ byé]
 S forget.Pfv [**said** 1Sg come.Pfv]
 ‘Seydou forgot that/whether I have (=had) come.’
- b. [ɲ gáálè-é] ʹbāgī [(ní) sèédú ʹbyē]
 [1Sg mind-Sg] exit(v).Pfv [(**if**) S come.Pfv]
 [wálà ɲ dí ʹbyē]
 [**or** 3Sg PfvNeg come.Pfv]
 ‘I have forgotten whether Seydou has come or he has not come.’

‘X remembered’ is phrased as ‘X’s mind fell on it’. (888) has two variants, the second including a linker ɲà favored by some speakers before an immediately postverbal vowel-initial pronominal PP (§8.4).

- (888) a. [à gáálè-é] ʹhēēⁿ [á nî] [wó m̀ byé]
 [3Sg **mind**] **fall.Pfv** [3Sg Loc] [**said** 1Sg come.Pfv]
 ‘He/She remembered that I came.’
- b. [à gáálè-é] ʹhēēⁿ ɲà = [à nî] [wó m̀ byé]
 [3Sg **mind**] **fall.Pfv** Link [3Sg Loc] [**said** 1Sg come.Pfv]
 [(=a), dialectal variant]

17.2.3 ‘Encounter (by chance)’ with indicative clausal complement

An event that happens to have occurred or a situation that happens to exist when another event occurs (often motion) is expressed by *ó bá = á* ‘tògò ‘that one (definite) came and left (behind)’, or *ó f̣w = á* ‘tògò ‘that one (definite) went and left (behind)’ with *f̣w =* from *ƒóò* ‘went’. Compare local French *ça trouve/trouvait que ...* used in the same contexts. Translations can be ‘it happened that ...’, ‘it turned out that ...’, or ‘only to find that ...’.

The opposition of ‘come’ and ‘go’ shows that *bá = á* here involves a variant *bé* of the Pfv of ‘come’, elsewhere *byé* or *bé* depending on speaker, rather than subjunctive *bí*, despite the phonological ambiguity. In the combinations cited, the initial *ó* is the definite demonstrative ‘that (same) one’, referring to the initial event (891a). It is also possible to replace *ó* with a concrete subject like 1Sg pronoun (891b-c).

- (891) a. *zàkí* ‘byē, *ó* *bá = á* ‘tògò [ná ƒóò]
 Zaki come.Pfv, Dem.Def **come.Pfv** 3Sg **leave.Pfv** [1Sg.Independ go.Pfv]
 ‘Zaki came (=arrived here), only to find that I had gone.’
- b. *ná* *bá = á* ‘tògò [à ƒóò]
 1Sg **come.Pfv** 3Sg **leave.Pfv** [3Sg go.Pfv]
 ‘I came, only to find that he/she had left.’
- c. *ná* ƒ(w)á = *á* ‘tògò [à ƒóò]
 1Sg **go.Pfv** 3Sg **leave.Pfv** [3Sg go.Pfv]
 ‘I went (there), only to find that he/she had left.’

17.2.4 ‘Be possible’ (*híní bí* ‘tāāⁿ/yágà) with indicative clausal complement

‘Be possible’ (i.e. ‘maybe’) is expressed as ‘it can happen (that) [...]’, where the verb is *tááⁿ* in intransitive function ‘be done’, or else *yágà* in the intransitive sense ‘become’. The embedded clause can have main-clause form in any indicative inflectional category.

- (892) a. *ì* *gá* ‘hīnī [bí ‘tāāⁿ / yágà]
 3Sg Ipfv **be.able.Ipfv** [Seq be.done.Pfv / become.Pfv]
ì ƒóò
 3Pl Ipfv
 ‘They may have gone.’ = ‘It is possible that they have gone.’
- b. *ì* *gá* ‘hīnī [bí ‘tāāⁿ
 3Sg Ipfv **be.able.Ipfv** [Seq be.done.Pfv]
 [ní ñgì há ‘bē-lē]
 [if 1Pl Ipfv come-Ipfv]
 ‘We might come.’ = ‘It is possible that we will come.’

17.2.5 tááⁿ/táá-ná ‘bring it about (that ...)’ with indicative clausal complement

A transitive clause like ‘X killed Y’ is not easily causativized using the regular morphological causative suffix. A periphrasis with tááⁿ/táá-ná ‘do’ in a higher clause, with invariant 3Sg object, plus a transitive main clause can express the intended sense. There is a similar French construction (*faire en sorte que ...*). tógó ‘encounter; leave behind’ can replace tááⁿ in (893).

- (893) [hónó-ó rà] ñá = á ‘tààⁿ
 [hunger-Sg Foc] Sbj/Obj 3Sg **do**.Pfv
 [záki ñá ‘ságà-à wágà]
 [1Sg Sbj/Obj sheep-Sg kill.Pfv]
 ‘Hunger [focus] is what brought it about that Zaki killed the sheep-Sg.’

If the causal agent is human, the preferred construction expresses the causal agent as subject of ‘say’, and the caused event as a quoted imperative (894).

- (894) [ñ kàà] wó [m bí ‘ságà-à wágà]
 [1Sg father] **said** [1Sg Sbjn sheep-Sg kill.Pfv]
 ‘My father told me to kill the sheep-Sg.’
 = ‘My father had me kill the sheep-Sg.’

17.3 Subjunctive and prohibitive clausal complements

17.3.1 Subjunctive (bí) clauses

The particle bí functions as a subjunctive modal marker when it occurs in a subject-headed positive clause. bí follows the subject, in the fashion of other post-subject inflectional morphemes. For prohibitive clauses as negative counterparts of the (positive) subjunctive, see the following subsection.

When bí occurs with a following VP but no subject, it is here called “sequential” and analysed separately (chapter 15). Sequential VPs have no negative counterparts.

Both 3Sg proclitic variants, à and ñ, can occur as subjunctive subjects: à bí ... or ñ bí ... ‘that he/she/it ...’. For some speakers, only ñ bí is allowed. For both 3Sg ñ bí and 1Sg m bí, the mb cluster can simplify to m in allegro speech, leaving only a faint tonal distinction.

In careful speech, bí is H-toned (except after third-person pronominals). It has the same tonal effects on following words as H-toned post-subject inflectional particles (Ipfv, IpfvNeg, PfvNeg). Thus ... bí ‘hēlē with hélé ‘pass.Pfv’, and ... bí ‘hūmòṅ-ḍ ... with hūmòṅ-ḍ ‘paddle (n)’. After 3Sg à ~ ñ and 3Pl ì it drops to bì, as in à bì hóólò or ñ bì hóólò ‘that he/she/it run’. This L-toned bì is re-raised to bí before nonhigh tone by Final Tone-Raising: ì bí ‘hēlē ‘that they pass’, à bí ‘hūmòṅ-ḍ sâⁿ ‘that he/she buy a paddle’.

In allegro speech style the structurally H-toned form *bí* (after subjects other than 3Sg and 3Pl proclitics) is often heard with low pitch. This is here attributed to lack of stress. Even when low-pitched, *bí* does not trigger Final Tone-Raising on the preceding word as it would if it were phonologically L-toned: *sèédù bí* ‘byē ‘that Seydou come’ (not #*sèédú bì* ‘byē). In some constructions, as in the ‘be able to VP’ construction *X híní* [(*bí*) ...], *bí* is often entirely elided in allegro speech.

A subjunctive clause is prosodically reset beginning if it follows a complete main clause. For example, in (895a-c) the pronominal subject proclitic preceding *bí* has its lexical tone, i.e., the tones are not inverted. This does not apply after quotative *wó ~ wò*, which does trigger tonal changes on subjunctive subjects.

- (895) a. *à* *hà*= [*à* *fáà*] [*á* *bí* ‘byē]
 3Sg be.Loc [3Sg by] [2Sg Sbjn come.Pfv]
 ‘He/She wants you-Sg to come.’
- b. *à* *hà*= [*à* *fáà*] [*ì* *bí* ‘byē]
 3Sg be.Loc [3Sg by] [3Pl Sbjn come.Pfv]
 ‘He/She wants them to come.’
- c. *à* *hà*= [*à* *fáà*] [*ngí* *bí* ‘byē]
 3Sg be [3Sg by] [3Pl Sbjn come.Pfv]
 ‘He/She wants us to come.’

The pronominal-subject paradigm of subjunctive *bí* is (896) assuming a prosodic reset.

(896)	subject	subjunctive
a.	1Sg	<i>mí</i> <i>bí</i>
	1Pl	<i>ngí</i> <i>bí</i>
	2Sg	<i>á</i> <i>bí</i>
	2Pl	<i>í</i> <i>bí</i>
	Logo/3ReflSg	<i>í</i> <i>bí</i>
b.	3Sg	<i>à</i> <i>bì</i>
		<i>~ m</i> <i>bì</i>
	3Pl	<i>ì</i> <i>bì</i>
c.	Logo/3ReflPl	<i>í-yèm</i> <i>bí</i>

Likewise, nouns as subjunctive subjects do not undergo tonal ablaut (Initial H-Ablaut, Downstep) when the subjunctive clause follows a complete main clause. ‘Goat’ in (897a) and ‘sheep’ in (897b) have their melodic tones.

- (897) a. à hà= [à fàà] [sógó-ó bí 'byē]
 3Sg be.Loc [3Sg by] [**goat-Sg** Sbjn come.Pfv]
 'He/She wants the goat to come.'
- b. à hà= [à fàà] [sàgà-à bí 'byē]
 3Sg be.Loc [3Sg by] [**sheep-Sg** Sbjn come.Pfv]
 'He/She wants the goat to come.'

Subjunctive clauses occur in irrealis contexts, as opposed to assertions. Quoted imperatives take subjunctive form as shown in §17.1.5.1 above. See §10.4.2-3 on bare subjunctives without a quotative frame ('say that ...') as hortatives and wishes. Other constructions that require subjunctive complements are described in the following subsections.

17.3.2 Prohibitive clauses as negative subjunctives

The subjunctive is negated by replacing bí with the prohibitive morpheme mání ~ míní (§10.4.1.3).

- (898) [ɲ kàà] há= [á fàà]
 [1Sg father] be.Loc [3Sg by]
 [ɲgí mání ʃáákì [[ɲgí 'núŋù-ù] nî]
 [1Pl **Proh** return.Pfv [[1Pl village-Sg] Loc]
 'My father wants us not to go back to our village.'

Prohibitive mání is treated tonally like a verb. It is downstepped to 'mānī after nouns whose melodies contain an L-tone (any melody except /H/), and it is tone-dropped to 'mànì after 3Sg and 3Pl pronominals. 'mānī and 'mànì trigger Final Tone-Raising on the preceding noun. See the end of §10.4.3.1 for examples.

17.3.3 mà 'until' plus subjunctive, prohibitive, or hortative

'Until ...' clauses denoting completed events have perfective indicative form (§15.5.3.2). However, when the context is future and therefore hypothetical (and often purposive), mà 'until' takes a subjunctive complement (899). These complements with mà can also be construed as 'must' clauses (§17.3.10).

- (899) a. mùnú-ú 'kwārī, mà ò bí 'sāⁿ
 dog-Sg hit.Pfv, **until** 3Sg **Sbjn** die.Pfv
 'Hit-2Sg the dog, until it dies!'

(903) a. $\dot{\eta}$ gá bílí $\dot{\eta}$ lógò fánáá,
 1Sg Ipfv Fut 1Sg hide.Pfv first,
 [sóníí $\dot{\eta}$ túnù-[lú-mèè̀m] bí céè
 [before honey-[child-Pl] **Sbjn** get.up.Pfv
 ‘I will hide (=take shelter) before the bees swarm.’ (< lógò, túnù-lú-mèè̀ⁿ)

b. á lógò,
 2Sg hide.Pfv,
 [sóníí $\dot{\eta}$ túnù-[lú-mèè̀m] bí céè
 [before honey-[child-Pl] **Sbjn** get.up.Pfv
 ‘Hide yourself (=take shelter) before the bees get up (=swarm)!’

Alternative ‘before’ elements that can be substituted for *sóníí* are *só-ló* (cf. §15.1.5.1) and (Bambara) *yà̀nì*.

17.3.5 Same-subject purposive clause with wò ‘said’ and quoted future

A simple quotative construction of the type [X said (=thought) “I will VP”] can be trimmed of its subject and combined with a preceding motion clause with X as subject. The result is a purposive construction. The structure is of the type [X came, saying (thinking) “I will VP”], but there is no prosodic break between ‘came’ and ‘saying’. The future morpheme has its usual form (*bélé* ~ *bílí*, sometimes truncated to *lé* ~ *lí*). For subjectless *wò* ‘said’ see §17.1.4.

This construction competes with one that consists of a verbal noun (with or without possessor or incorporated noun) plus purposive postposition *hóómá* (§15.3.7).

Examples are in (904a-c). Ipfv *há* tends to be heard as low-pitched in this construction but this may be a low-level phonetic phenomenon.

(904) a. á byé [wá= à há bílí $\dot{\eta}$ kwárí]
 2Sg come.Pfv [said 2Sg Ipfv Fut 1Sg hit.Pfv]
 ‘You-Sg came intending (=in order) to hit me.’

b. η gí byé [wó η gì há bílí sèédù híè̀ⁿ]
 1Pl come.Pfv [said 1Pl Ipfv Fut S help.Pfv]
 ‘We came intending (=in order) to help Seydou.’

When X is not a first or second person pronominal, the lower subject X is expressed as a third-person logophoric (singular *í*, plural *í-yè̀ⁿ* in isolation pronunciation).

(905) a. sèédù $\dot{\eta}$ byē [wí= ì há bílí $\dot{\eta}$ kwárí]
 S come.Pfv [said LogoSg Ipfv Fut 1Sg hit.Pfv]
 ‘Seydou came intending (=in order) to hit me.’

- b. \bar{i} 4 byè [wí= ì-yèⁿ há bílí ñ kwárí]
- 3Pl come.Pfv [**said** **LogoPl** Ipfv Fut 1Sg hit.Pfv
- ‘They came intending (=in order) to hit me.’

A textual example is 2021-08 @ 02:21.

17.3.6 Positive purposive with yálà or yálí-sàà ‘so that’ and subjunctive

A prosodically independent purposive clause (‘in order that X VP’) takes the form of a positive subjunctive clause including a variable subject, preceded by the dubitative epistemic modal particle yálà (elsewhere ‘whether’). This is the only attested positive purposive clause involving a subject switch between main and purposive clauses.

- (906) sèèdú 4 byē [kí twàà tíⁿ],
- S come.Pfv [Inst daba under],
- yálà [m̄ bí 4 hīnē-yā [bí cèè sógò jíri]]
- so.that** [1Sg **Sbjn** be.able-Inch.Pfv [Seq field cultivate.Pfv this.year]]
- ‘Seydou brought a daba (=hoe), so that I may be able to cultivate a field this year.’
- (< twàà ~ cwàà)

The composite form yálí-sàà ~ yálá-sàà can replace simple yálà (907a-b). Another speaker has tàlí in place of yálà or yálí-sàà. These examples also show how Logo/3ReflSg í, perhaps in logophoric function (expressing the subject’s thoughts), can mark coindexation with the subject of the main clause.

- (907) a. [ā ñàṅàṅù-ú] 4 byē, yálí-sàà m̄ bí 4 jēē
- [3Sg woman-Sg] come.Pfv, **so.that** 3Sg Sbjn eat.Antip.Pfv
- ‘His_x wife came, so that he_x (might) eat.’
- b. [ā ñàṅàṅù-ú] 4 byē, yálí-sì= ì bí 4 jēē
- [3Sg woman-Sg] come.Pfv, **so.that** **LogoSg** Sbjn eat.Antip.Pfv
- ‘His wife_x came, so that she_x (might) eat.’

yálí-sàà ~ yálá-sàà appears to be composite. For -sàà compare bári ~ bári-sàà ‘because’ (§15.5.1).

17.3.7 Negative purposive with yálí-sàà ‘lest’ and prohibitive

A ‘lest’ clause denoting an eventuality to be avoided, therefore functioning like a negative purposive clause, takes the form of a prohibitive clause with variable subject, often preceded by yálí-sàà ~ yálá-sàà ‘so that’ (or, as here, ‘lest’). The subjects of the main and purposive clauses may be disjoint (908).

- (908) sèèdú ʼbyē [kí ʼjìrì-ì tîⁿ],
 S come.Pfv [Inst medication-Sg under],
 yálí-sàà [[íj kàá] ʼmānī ʼsāⁿ]
so.that [[1Sg father] **Proh** die.Pfv]
 ‘Seydou brought medicine, so my father won’t die.’ (< jírí-í)

17.3.8 ‘Fear lest ...’ with prohibitive or subjunctive complement

In this construction, the subject painfully imagines an undesirable possible future event. The complement is a prohibitive clause with variable subject. The ‘so that/lest’ expression yálà ~ yálí-sàà can precede the prohibitive clause (909b). However, it can be omitted since the ‘fear’ verb makes the modal context clear.

- (909) a. íj gá kónò-nò
 1Sg Ipfv **fear(v).Ipfv**
 [mùnù-ú ʼmānī ʼbyē [íj húè]]
 [dog-Sg **Proh** come.Pfv [1Sg bite.Pfv]]
 ‘I am afraid that the dog might come and bite me.’
- b. íj gá kónò-nò [yálí-sàà léŋ-ó ʼmānī ʼhēēⁿ]
 1Sg Ipfv **fear(v).Ipfv** [lest child-Sg **Proh** fall.Pfv]
 ‘I am afraid that the child might fall down.’
- c. íj gá kónò-nò [(ā) ʼmàní ʼsāⁿ]
 1Sg Ipfv **fear(v).Ipfv** [(3Sg) **Proh** die.Pfv]
 ‘I am afraid that he/she might die.’

Some variants on the 3Sg-subject prohibitive clause in (909c) are in (910). Whether or not 3Sg subject à (ā) is audible, it tone-drops mání to ʼmàní (before tone sandhi). The particles yálà and yálí-sàà ‘so that’ are optional.

- (910) a. Ø Ø ʼmàní ʼsāⁿ
 b. Ø ā " "
 c. yálá Ø " "
 d. yálá= á " "
 e. yálí-sàà ā " "

Undesirable outcomes can also be expanded by adding jóò ‘go’ (reduced to só in compound-like contexts), in pejorative sense (911). Cf. English *my dog went and died on me*.

- (911) yálí-sàà ā ʼmà̀nì só ʼsā̀n
 so.that 3Sg Proh go.Pfv die.Pfv
 ‘lest he/she/it go and die’

The prohibitive form of the complement denoting the undesirable event means that the complement is not under the direct modal scope of ‘fear’. For example, (909c) above is best understood as a loose two-part construction: ‘I am afraid; may he/she not die!’. As a corollary, if the future event is desirable, it is expressed by a regular positive subjunctive clause with bí.

- (912) íj gá kóǹ-̀ǹ-̀ǹ [hà̀báà bí ʼbyḗ]
 1Sg Ipfv fear(v).Ipfv [rain(n) Sbjn come.Pfv]
 ‘I am afraid that the rain might not come.’
 (lit. ‘I am afraid; may the rain come!’)

For sequential VP complements (‘be afraid to VP’) see §15.2.5.

17.3.9 ‘Want’ and ‘like’ with complements

17.3.9.1 lēⁿ ‘be pleasing’ plus dative and subjunctive

The deadjectival stative verb lēⁿ ‘be sweet, be pleasing’ is used with a dative PP in (913a). The subject can be elaborated as a verbal noun, either intransitive (913b) or transitive, in the latter case with a possessor or incorporated object noun (913c). Tonal ablaut applies to nouns in the PP (913d-e).

- (913) a. ā ʼlēⁿ [̀n̄ dé]
 3Sg be.pleasing [1Sg Dat]
 ‘I like it.’ (< lēⁿ)
- b. hóólò-ò léⁿ [̀n̄ té]
 run.VblN be.pleasing [1Sg Dat]
 ‘I like running.’
- c. [ā mēⁿ-ní-ì] léⁿ [̀n̄ té]
 [3Sg drink.VblN] be.pleasing [1Sg Dat]
 ‘I like drinking it.’
- d. à léⁿ [ʼsògó-ó ʼtè]
 3Sg be.pleasing [goat-Sg Dat]
 ‘The goat likes it.’

- e. ā ʼlēⁿ [ʼsáǵà-á ʼtè]
 3Sg be.pleasing [sheep-Sg Dat]
 ‘The sheep likes it.’

17.3.9.2 tííⁿ/tíí-ní ‘look for, seek’ plus subjunctive

The transitive verb tííⁿ/tíí-ní ‘look for, seek’ can express desire tinged with intention and effort. It can combine with a different-subject subjunctive clause (914). Here the content of the subjunctive clause is resumed anticipatorily with 3Sg à (→ á) as object of ‘seek’.

- (914) ń ǵá= á ʼtìì-nì [zákì bí ʼbyē ǵôⁿ]
 1Sg Ipfv 3Sg **seek**-Ipfv [Z **Sbjn** come.Pfv here]
 ‘I seek for Zaki to come here.’

17.3.9.3 ‘Want’ plus subjunctive

For the single-clause ‘X want Y’ construction where Y is an NP, see §11.2.5.6. For ‘X want [to VP]’ with same-subject sequential VP complement, see §15.2.3. When the complement denotes an action with a different subject, it takes the form of a subjunctive clause (915).

- (915) a. ńǵí há= [á fáà] [á bí byé [ńǵì fáà]]
 1Pl be.Loc [3Sg by] [2Sg **Sbjn** come.Pfv [1Pl by]]
 ‘We want (=would like) you-Sg to come with us.’ (< bí ʼbyē)
- b. [ń kàà] há= [á fáà]
 [1Sg father] be.Loc [3Sg by]
 [ńǵí bí ǵáákì [[ńǵì ʼnúńù-ù] nî]
 [1Pl **Sbjn** return.Pfv [[1Pl village-Sg] Loc]
 ‘My father wants us to go back to our village.’ (< nùńù-ù)

17.3.10 mà ‘must’ plus subjunctive or imperfective

Clause-initial mà is an impersonal obligation marker like French *il faut*. It is followed by a subjunctive clause or an imperfective clause to express strong obligation. It usually raises to má before a nonhigh tone other than 3Sg or 3Pl pronominals. It may be an offshoot of mà ‘until, all the way to’.

Combinations of the subjunctive variant with various subjects are in (916). 3Sg uses its nasal allomorph, so it cannot be confused with 2Sg, but it is only subtly distinguished tonally from 1Sg. 3Sg mà ñ and 3Pl mì = ì in this construction are fused forms that behave prosodically like unsegmentable màñ and mìì, respectively. In particular, they do not undergo Tone Inversion to

raise the tone of the pronominal, except (by tone sandhi) when following by L-toned *bì* as in ‘__ must go’. In (916c), the nouns show their usual tonal ablaut as when they follow C’v grammatical morphemes, including Initial H-Ablaut (‘sheep’) and Downstep (‘goat’). Before an /HL/-melodic verb like ‘go’, the subjunctive morpheme (elsewhere *bí*) is L-toned. This implies that H-toned *bí* before a (downstepped) nonhigh tone in ‘__ must come’ is secondarily raised by tone sandhi. ‘Seydou’ resists Final Tone-Raising, showing that *bí* has not totally lost its H-tone.

(916)	subject	‘__ must come’	‘__ must go’
a.	1Sg	má ìn bí ‘byē	má ìn bì fòò
	1Pl	má ηgì bí ‘byē	má ηgì bì fòò
	2Sg	má = à bí ‘byē	má = à bì fòò
	2Pl	mí = ì bí ‘byē	mí = ì bì fòò
	LogoSg	mí = ì bí ‘byē	mí = ì bì fòò
b.	3Sg	mà ìn bí ‘byē	mà m bì fòò
	3Pl	mì = ì bí ‘byē	mì = í bì fòò
c.	‘Seydou’ (sèédù)	má sèédù bí ‘byē	má sèédù bì fòò
	‘the goat’ (sógó-ó)	má ‘sògò-ò bí ‘byē	má ‘sògó-ó bì fòò
	‘the sheep’ (sàgà-à)	mà ‘sàgà-à bí ‘byē	mà ‘sàgá-á bì fòò
	‘the agama’ (bàsà-à)	mà bàsà-à bí ‘byē	mà bàsà-á bì fòò
	‘the woman’ (nàṅàṅ-ù)	mà ‘nàṅàṅ-ù bí ‘byē	mà ‘nàṅàṅ-ù bì fòò

The sequence *mà X bí* including 3Sg *mà m bì* ~ *mà ìn bí* is reminiscent of *mà ìn bì sò X* ‘until X’ (§15.1.5.2). However, *mà ìn bì sò* ‘until’ is invariant in form and thoroughly fused, behaving tonally like a single /L/-melodic stem. The *mà X bì* ‘must’ construction has open-ended subject *X* and open-ended verb after *bì*. It is (therefore) more transparent morphemically, and it allows both *mà* and *bì* to raise to H-tone before nonhigh tones. The ‘until X’ and ‘must’ constructions share the L-toned “subjunctive” *bì* (before tone sandhi), contrasting with the regular subjunctive *bí*. Some full examples are in (917).

(917)	a.	má =	à	bí	‘màṅṅ-ṅ	sógò
		must	2Sg	Sbjn	maize-Sg	cultivate.Pfv
						‘You-Sg must cultivate maize.’ (< mááṅṅ-ṅ)
	b.	mì =	ì	bí	‘màṅṅ-ṅ	sógò
		must	3Pl	Sbjn	maize-Sg	cultivate.Pfv
						‘They must cultivate maize.’
	c.	má	ηgì	bí	‘màṅṅ-ṅ	sógò
		must	1Pl	Sbjn	maize-Sg	cultivate.Pfv
						‘We must cultivate maize.’

d. má sèédù bí †mààṅò-ò sógò
must S **Sbjn** maize-Sg cultivate.Pfv
 ‘Seydou must cultivate maize.’

e. má = à bì †ságà-á †sāⁿ
 must 2Sg **Sbjn** sheep-Sg buy.Pfv
 ‘You-Sg must buy a sheep.’

A past-time version with kúⁿ is possible.

(918) má = à kúm bí †mààṅò-ò sógò
 must 2Sg **Past** **Sbjn** maize-Sg cultivate.Pfv
 ‘You-Sg had to cultivate maize.’

17.3.11 ‘Allow/Let’ plus subjunctive clause

Several main-clause verbs are possible in this construction.

17.3.11.1 dúṅè(-nè) ‘consent, give permission’ plus subjunctive

For dúṅè(-nè) as intransitive verb ‘accept’ (with dative PP) and with sequential VP complement in the sense ‘agree to VP’, see §15.2.4. In the sense ‘consent, give permission’ it can also take a full subjunctive complement (919). The context is more formal than with ‘stand’ or ‘let, leave’ (cf. the following subsections).

(919) [ṅí kàà] dúṅè [ṅí bí ʃòò [[ṅì †núṅù-ù] nî]
 [1Pl father] **consent.Pfv** [1Pl **Sbjn** go.Pfv [[1Pl village-Sg] Loc]
 ‘Our father consented (=gave us permission) that we go to our village.’

The complement takes prohibitive form when it is independently negated (920).

(920) ā †dūṅè [ṅí mání cèè sógò jíri]
 3Sg **consent.Pfv** [1Pl **Proh** field cultivate.Pfv this.year]
 ‘He/She gave permission that we not cultivate the field this year.’

17.3.11.2 taa/táá-là ‘stand, stop’ plus subjunctive

The reflexive verb taa/táá-là ‘stand, stop’ can also take a subjunctive clausal complement in the sense ‘allow’. In (921) the main clause is imperative, beginning with the reflexive object.

(921) a. á táà [ḿ bí ʼl55]
 2Sg stop.Pfv [1Sg Sbjn enter.Pfv]
 ‘Let-2Sg me come in!’ (2021-15 @ 01:18)

b. k̀ì= ì táà [ḿ bí ʼl55]
 ImprtPl 2Pl stop.Pfv [1Sg Sbjn enter.Pfv]
 ‘Let-2Pl me come in!’

17.3.11.3 tógó(-ló) ‘let, leave’ plus subjunctive

This verb has various senses including ‘remain’ and ‘leave/abandon’. In the sense ‘let, allow’, with fixed 3Sg object, it occurs with subjunctive clausal complements.

(922) a. ā ʼtògò [ḿ bí sóò]
 3Sg let.Pfv [1Sg Sbjn go.Pfv]
 ‘Let-2Sg me go (there)!’

b. k̀á= á ʼtògò [ḿ bí sóò]
 ImprtPl 3Sg let.Pfv [1Sg Sbjn go.Pfv]
 ‘Let-2Pl me go (there)!’

18 Anaphora

18.1 Reflexive

When the subject and a nonsubject argument or nonsubject possessor are co-indexed, the second element is expressed either by a simple pronominal (overtly reflexive in the case of third person), or more elaborately with a pronominally possessed form of *túmɛ̃* ‘self’.

Under limited conditions, an object as opposed to a subject can function as antecedent for a pronominal later in the clause. This can happen with verbs like ‘put’.

- (923) Ø ɲá ʔmúnù-ù yáɲì = [[ì hòó] nìɲî]
- 1Sg Sbj/Obj dog-Sg put.Pfv [[3ReflSg house] inside]
- ‘I put the dog_x in its_x house.’ (< yáɲà)

18.1.1 Reflexive object expressed by simple pronominal

The option to express a coindexed object with a simple pronominal proclitic is typical of contexts where subject and object are conceptually conflated. The forms that express the object in this construction in clause-initial position are presented in (924). A transitive verb (not shown) follows each of these sequences. For first and second persons, the form of the object pronominal is identical to that for a nonreflexive object, as in ‘you-Sg hit me’ or ‘I hit you-Pl’. For third persons, dedicated reflexive pronominals (3ReflSg, 3ReflPl) are required; they are identical in form to logophorics. The presence of the bidirectional case marker (BCM) *ɲá ~ ɲà* in the perfective (positive) shows that the clauses are not intransitivized.

(924)		pfv with BCM	pfvneg	ipfv	ipfvneg
a.	1Sg	Ø ɲá ɲ	ń tí ɲ	ɲ ɲá ɲ	ń dá ɲ
	1Pl	ɲɲí ɲá ɲɲì	ɲɲí tí ɲɲì	ɲɲí há ɲɲì	ɲɲí tá ɲɲì
	2Sg	á ɲá = à	á tá = à	á há = à	á tá = à
	2Pl	í ɲí = ì	í tí = ì	í hí = ì	í tí = ì
b.	3Sg (reflexive)	ā ɲī = ì	à tí = ì	à hí = ì	à tí = ì
	3Pl (reflexive)	ī ɲī = ì(-yé ⁿ)	̀n dí = ì	̀n ɲí = ì	̀n dí = ì
			̀ì tí = ì(-yè ⁿ)	̀ì hí = ì(-yè ⁿ)	̀ì tí = ì(-yè ⁿ)
c.	‘Seydou’	sèédù ɲí = ì	sèédù tí = ì	sèédù hí = ì	sèédù tí = ì

- b. 3Sg à hí = [ì túmɛ́ⁿ] à hí = [ì túmɛ́ⁿ]
 3Pl ì hí = [ì-yén ˈtūmɛ́ⁿ] ì hí = [ì-yén ˈtūmɛ́ⁿ]
- c. ‘Seydou’ sèédù hí = [ì túmɛ́ⁿ] sèédù hí = [ì túmɛ́ⁿ]

All of the sequences in (926) are followed by transitive verbs. An example of a complete reflexive-object clause is (927).

- (927) Ø ñá [ñ túmɛ́ⁿ] hári
 1Sg Sbj/Obj [1Sg **self**] tie.Pfv
 ‘I tied myself up.’

18.1.3 Reflexive imperatives

In a reflexive imperative, when the addressee is singular, the VP is preceded by a single occurrence of 2Sg á, either alone before the verb or as possessor of túmɛ́ⁿ ‘self’. The pronoun evidently represents the (reflexive) object rather than the subject, which is absent in other singular-addressee imperatives.

- (928) a. á fógò
 2Sg sit.Pfv
 ‘Sit-2Sg down!’
- b. [á túmɛ́ⁿ] hári
 [2Sg **self**] tie.Pfv
 ‘Tie yourself (up)!’

When the addressee is plural, the clause begins with the plural-subject imperative morpheme ká, followed by the 2Pl pronominal í (inverted to ì) in reflexive object function. There is no additional 2Pl í before ká. In the version without túmɛ́ⁿ the combination of ká and ì was heard as L-toned kî = ì for one speaker (929).

- (929) a. kî = ì fógò
 ImprtPl **2Pl** sit.Pfv
 ‘Sit-2Pl down!’
- b. kî = [ì túmɛ́ⁿ] hári
 Pl.Imprt [2Pl **Refl**] tie.Pfv
 ‘Tie yourselves (up)!’

The fact that the object in these imperatives can be expressed with túmɛ́ⁿ ‘self’ shows that covert second person imperative subjects have at least some ability to bind reflexive anaphors.

18.1.4 Reflexive possessors

The combinations in (930) occur in clauses whose subject is coindexed with the possessor of the direct object. The noun featured here is *sógó-ó* ‘goat’. It is tone-dropped to *‘sògó-ò* as a possessum after 3ReflPl possessor, but not after the other reflexive possessors all of which are H-toned before Tone Inversion.

(930) ‘X (verb) X’s (own) goat’

	subject	perfective with <i>ḡá</i>	imperfective
a.	1Sg	Ø <i>ḡá</i> [ḡ sógó-ó]	<i>ḡ gá</i> [ḡ sógó-ó]
	1Pl	<i>ḡí ḡá</i> [ḡḡí sógó-ó]	<i>ḡí há</i> [ḡḡí sógó-ó]
	2Sg	<i>á ḡá</i> = [à sógó-ó]	<i>á há</i> = [à sógó-ó]
	2Pl	<i>í ḡí</i> = [ì sógó-ó]	<i>í hí</i> = [ì sógó-ó]
	LogoSg	<i>í ḡí</i> = [ì sógó-ó]	<i>í hí</i> = [ì sógó-ó]
b.	3Sg	<i>à ḡí</i> = [ì sógó-ó]	<i>à hí</i> = [ì sógó-ó]
c.	3Pl	<i>ì ḡí</i> = [ì-yé ⁿ ‘sògó-ò]	<i>ì hí</i> = [ì-yé ⁿ ‘sògó-ò]
d.	‘Seydou’	<i>sèédù ḡí</i> = [ì sógó-ó]	<i>sèédù hí</i> = [ì sógó-ó]

Reflexive possessors also occur on complements of postpositions. Such PPs follow the verb, like the dative PPs in (931a-b).

(931) a.	<i>ì</i>	<i>ḡá</i> =	<i>á</i>	<i>‘lòò</i>	[[<i>ì-yéⁿ</i>	<i>‘sògó-ó</i>]	<i>‘là</i>]
				<i>‘l(w)ì</i> =			
	3Pl	Sbj/Obj	3Sg	give.Pfv	[[3ReflPl	goat-Sg]	Dat]
							‘They gave it to their goat.’
b.	<i>à</i>	<i>ḡá</i> =	<i>á</i>	<i>‘lòò</i>	[[<i>ì</i>	<i>sógó-ó</i>]	<i>‘là</i>]
				<i>‘l(w)ì</i> =			
	1Pl	Sbj/Obj	3Sg	give.Pfv	[[3ReflSg	goat-Sg]	Dat]
							‘He/She _x gave it to his/her _x goat.’

The conjunction type ‘X and his/her_x Y’, e.g. ‘Seydou_x and his_x father’, requires a reflexive possessor if X is other than a first or second person pronoun (§7.1.5).

18.1.5 Reflexive PP complements

If the complement of a postverbal PP is coindexed with the clausemate subject, it is expressed as a regular proclitic for first and second persons (932a), and as a 3Refl (singular or plural) pronominal for third person (932b).

- (932) a. Ø ɲá fàrà-à yágà [m̄ ʔbélè-fàà]
 1Sg Sbj/Obj stone-Sg put.Pfv [1Sg beside]
 ‘I put the stone next to me/myself.’ (< fàrá-á)
- b. zàkì ɲá fàrà-à yágà [ì ʔbélè-fàà]
 Z Sbj/Obj stone-Sg put.Pfv [3ReflSg beside]]
 ‘Zaki put the stone next to him/himself.’

It is usually not necessary to add túméⁿ ‘self’ in reflexive PPs. However, PPs in purposive-causal function are more favorable to the túméⁿ reflexive (933).

- (933) Ø ɲá hòò táá-nì [[n̄ túmén] ʔtè]
 1Sg Sbj/Obj house build.Pfv [[1Sg **self**] Dat]
 ‘I built the house for myself.’

18.1.6 Reflexive subject in subordinated clause

A third person reflexive pronoun can occur in subject position in an embedded subordinated clause. Most examples that seem to show this could be interpreted as having logophoric rather than third-person reflexive pronominals (the two are identical in form). In (934), however, it is difficult to construe í as logophoric, so it appears to show that a third-person reflexive can occur as subject of an embedded clause.

- (934) sèédù tá= á tóò
 S IpfvNeg 3Sg know.Stat
 [ì há m̀wó ʔtāā-nā]
 [3ReflSg Ipfv Rel do-Ipfv]
 ‘Seydou_x doesn’t know what he_x is doing.’

18.2 Emphatic pronouns

There are no special emphatic pronominal forms comparable to emphatic adverbial *X-self/selves* in English, as in *I built the house myself*. Various particles like lámàà ‘only’ (§19.3.2.1) and the numeral ‘one’ (§4.6.1.1) carry out roughly similar functions.

18.3 Logophoric and indexing pronouns

18.3.1 Logophorics identical to third-person reflexives

The forms used for third-person reflexives, 3Sg *í* and 3Pl *í-yèⁿ*, are also third-person logophorics. A logophoric is an anaphoric pronominal inside a quotation that is coindexed to the ascribed author of the quoted material, which may be an articulated thought as well as a spoken utterance. In other words, logophorics are embedded 1Sg or 1Pl pronominals.

LogoSg *í* is homophonous with 2Pl *í*. In quotations, there is occasional ambiguity between LogoSg and 2Pl readings.

18.3.2 Syntax of logophorics

Unlike reflexives, which are coindexed to a specific antecedent (normally the clausemate subject), logophorics can occur in a range of syntactic positions limited only by coindexation to the ascribed author. In other words, logophorics can represent 1Sg and 1Pl pronouns anywhere in the original discourse. In (935a-e) LogoSg is subject, object, dative complement, object possessor, and subject possessor, respectively.

- (935) a. *à wí= [ì byé]*
3Sg said [LogoSg come.Pfv]
'He/She_x said that he/she_x came.' (< wò)
- b. *à wá= [à / ì ñí= ì kwárí]*
3Sg said [2Sg/2Pl Sbj/Obj LogoSg hit.Pfv]
'He/She_x said that you-Sg/you-Pl hit him/her_x.' (< ā 'wò)
- c. *à wá= [à ñà wá-rì-í 'lwí= [ì lá]]*
3Sg said [2Sg Sbj/Obj money give.Pfv [LogoSg Dat]]
He/She_x said that you-Sg gave (the) money to him/her_x.' (< lóó)
- d. *à wá= [à ñí= [ì 'hólò-ó] 'tōōrō]*
3Sg said [2Sg Sbj/Obj [LogoSg salt-Sg] sell.Pfv]
'He/She_x said that you-Sg sold his/her_x salt.' (< hólò-ò)
- e. *à wí= [[ì kàà] ʃòò]*
3Sg said [[LogoSg father] go.Pfv]
'He/She_x said his/her_x father went away.'

All of these examples have exact parallels with 3Pl author paired with LogoPl pronominals.

Ambiguity can arise when a nonsubject logophoric occurs in a position where a third-person reflexive reading is also possible. When the grammatical function in question is object or

postpositional complement, the problem is usually not serious. The theoretically possible ambiguity in (936a) can be averted by using *túméⁿ* ‘self’ in the reflexive reading (936b), making the logophoric reading of (936a) most plausible.

- (936) a. *à wí= [[ì kàà] ñí= ì kwárí]*
 3Sg said [[LogoSg father] Sbj/Obj **Logo/3ReflSg** hit.Pfv]
 ‘He/She_x said his/her_x father hit him/her_x.’
 or, less likely: ‘He/She_x said his/her_x father_y hit himself_y.’
- b. *à wí= [[ì kàà] ñí= [ì túméŋ] ‘kwārí]*
 3Sg said [[LogoSg father] Sbj/Obj [**3ReflSg** Refl] hit.Pfv]
 ‘He/She_x said his/her_x father_y hit himself_y.’

However, with nonsubject possessor in the quoted matter, ambiguity is harder to avoid, since *túméⁿ* is only occasionally used for reflexive possessor.

18.3.2.1 No logophorics for second or first person author

Pronominals in quoted material that are coindexed to an author who is also the current addressee take second-person (not logophoric) form (937a-b). That is, the current speaker-addressee arrangement overrides third-person anaphora. The unusual combination of 2Sg author and 2Pl quoted subject has a similar structure (937c). These examples have *wó* ‘said’.

- (937) a. *á wá= [à byé]*
 2Sg said [**2Sg** come.Pfv]
 ‘You-Sg said that you-Sg came.’
- b. *í wí= [ì byé]*
 2Pl said [**2Pl** come.Pfv]
 ‘You-Pl said that you-Pl came.’
- c. *á wí= [ì byé]*
 2Sg said [**2Pl** come.Pfv]
 ‘You-Sg said that you-Pl came.’

Likewise, a first person author requires first-person coindexed pronominals.

- (938) *ń wó [sèédù ñá ñ kwárí]*
 1Sg said [S Sbj/Obj **1Sg** hit.Pfv]
 ‘I said that Seydou hit me.’

- d. kà mìnì ʔbólò ʔmūū
 2Pl Proh **Recip** insult.Pfv
 ‘Don’t-2Pl insult each other!’

The (sloppily) coindexed NP may also be the complement of a postposition (941a) or the possessor of a nonsubject NP (941b-c).

- (941) a. ì há ʔbààrá-á ʔtāā-nā [bòlò fáà]
 3Pl Ipfv work(n)-Sg do-Ipfv [**Recip** by]
 ‘They work together.’
- b. ì ḡà [ʔbólò hòó] ʔbūō
 3Pl Sbj/Obj [**Recip** house] burn.Pfv
 ‘They burned each other’s houses (down).’
- c. ì ḡà wáàrì-í ʔlṣṣ [[bòlò lú-mèéⁿ] ʔnà]
 3Pl Sbj/Obj money-Sg give.Pfv [[**Recip** child-Pl] Dat]
 ‘They gave money to each other’s children.’

There is a slightly irregular adverbial form *bóló-là* ‘(stuck) together’ containing a variant of dative postposition *lá*. Adverbial phrase *kí bóló-là* occurs in 2021-06 @ 04:32.

- (942) a. ì há ʔnōrō-nā bóló-là
 3Pl be stick(v)-Ppl **together**
 ‘They are stuck together.’
- b. Ø ḡí= í ʔbàý bóló-là
 1Sg Sbj/Obj 3Pl remove.Pfv **together**
 ‘I pulled them apart.’ (i.e. removed them from being stuck together)

18.4.2 *bòlò-ò* or *bóló kù* as obviative ‘the counterpart, the other one’

In narratives that have already introduced two parallel entities, such as a tale of two siblings, the noun *bòlò-ò* ‘comrade, agemate’ can function as obviative, i.e. ‘the other one’, ‘the alter ego’. (943) illustrates with *bóló kù*, where postnominal demonstrative *kù* requires an H-toned noun.

- (943) [bóló kù kónìⁿ] [nó= [ó kóníⁿ] ʔfṣṡē]
 [**mate** Dem Top] [if [Dem.Def Top] rot.Pfv]
 ‘As for the other (kind), if that has rotted (=fermented), ...’ (2021-06 @ 04:25)

See (228) in §4.6.1.1 for another example involving human protagonists.

19 Grammatical pragmatics

19.1 Topic

For interrogative topic *dù*ⁿ ‘what about _?’, see §13.2.2.1.

19.1.1 Topic (*kónì*ⁿ)

The primary topicalization marker (‘as for X’) is *kónì*ⁿ ~ *kónì* ~ *kón*. Examples with nonpronominal NP are in (944).

(944) NP	gloss	topicalized
<i>sèédù</i>	‘Seydou’	<i>sèédù kónì</i> ⁿ
<i>ṅàṅàṅù-ù</i>	‘a/the woman’	<i>ṅàṅàṅù-ù kónì</i> ⁿ
<i>kú ṅájánú kù</i>	‘that woman’	<i>kú ṅájánú kù kónì</i> ⁿ
<i>sógó-yè</i> ⁿ	‘the goats’	<i>sógó-yèṅ kónì</i> ⁿ
<i>hònṅṅ-ṅ</i>	‘a/the bird’	<i>hònṅṅ-ṅ kónì</i> ⁿ

Pronouns may take proclitic or independent form before *kónì*. Proclitics are illustrated in (945).

(945) Simple pronominal topics

a. with proclitic pronominal		
1Sg	<i>ń</i>	<i>kónì</i> ⁿ
1Pl	<i>ṅgí</i>	<i>kónì</i> ⁿ
2Sg	<i>á</i>	<i>kónì</i> ⁿ
2Pl	<i>í</i>	<i>kónì</i> ⁿ
LogoSg	<i>í</i>	<i>kónì</i> ⁿ
b.		
3Sg	<i>à</i>	<i>kónì</i> ⁿ
3Pl	<i>ì</i>	<i>kónì</i> ⁿ
c.		
LogoPl	<i>í-yèṅ</i>	<i>kónì</i> ⁿ

Textual examples with proclitic pronouns: 1Sg *ń gónì*ⁿ 2021-06 @ 01:56, 1Pl *ṅgí kónì*ⁿ 2021-06 @ 02:16 & 02:28.

Independent pronouns are illustrated in (946). As usual, 1Sg has (short) non-rhotic as well as less common (long) rhotic forms.

(946) Full pronominal topics

	non-rhotic	with rhotic suffix
1Sg	ná kónì ⁿ ~ nó kónì ⁿ	ná-rà kónì ⁿ ~ nó-rò kónì ⁿ
1Pl		ngí-rà kónì ⁿ ~ ngí-rò kónì ⁿ ~ ngí-rè kónì ⁿ
2Sg		á-rá kónì ⁿ ~ á-ró kónì ⁿ
2Pl		í-rà kónì ⁿ ~ í-rò kónì ⁿ ~ í-rè kónì ⁿ
3Sg		à-rà kónì ⁿ ~ à-rò kónì ⁿ
3Pl		ì-rà kónì ⁿ ~ ì-rò kónì ⁿ ~ ì-rè kónì ⁿ
LogoSg		í-rà kónì ⁿ ~ í-rò kónì ⁿ
LogoPl		í-yè-rà kónì ⁿ ~ í-yè-rò kónì ⁿ

Textual examples with independent pronouns: 1Sg ná kónìⁿ 2021-06 @ 01:28 and 2021-10 @ 02:19 & 02:32, 1Pl ngé-rè kónìⁿ 2021-08 @ 01:46, LogoSg í-rà kónìⁿ 2021-10 @ 03:00 & 03:04, 3Sg à-rà kónìⁿ 2021-10 @ 03:17 ~ 03:26.

The gloss ‘as for X’ seemingly suggests preclausal position, followed by a clause with a resumptive pronoun. Actually, a Kelenga topicalized NP can either be preclausal or clause-internal. In (947a) the object is topicalized. In (947b) the subject is topicalized, with no resumptive pronoun. Subject topicalization is common.

- (947) a. ngí tá [‘jākūmā-tūgù-ù kónìⁿ] ‘jāā-lā
 1Pl IpfvNeg [cat **Topic**] eat-Ipfv
 ‘As for cat (meat), we don’t eat it.’ = ‘We don’t eat cat meat, for its part.’
 (< jākúmā-à, jākúmā-tūgù-ù)

- b. [ná kónìⁿ] tá kù ‘jāā-lā
 [1Sg **Topic**] IpfvNeg Dem eat-Ipfv
 ‘As for me, I don’t eat that.’ = ‘I personally don’t eat that.’ (< kù)

19.1.2 fwòò ‘possession’ as topicalizer

A nonpredicative noun followed by fwòò can function as a topic. fwòò is the default possessum (§6.2.4). Here it has abstract sense, similar to ‘(in) the case/matter of X’ or ‘concerning X’. Cf. the related but tonally distinct fwóò in possessive predicates of the ‘Y belong to X’ type (§11.5.2).

In (948), hunting hippos with harpoons and hunting them with guns are contrasted.

- (948) ó ‘hālī [[sɛŋ-ó fwòò] ‘hùè-ní-ì],
 Dem.Def be.Cop [[harpoon-Sg **Poss**] jab-VblN-Sg],
 óò, ɲgàà [màrifá-à m̀wó] ‘byē,
 uh, but [rifle-Sg Rel] come.Pfv,
 Ø ɲó = [[ó ‘tūmēⁿ] fwòò] hēè
 1Sg Sbj/Obj [[Dem.Def also] **Poss**] see.Pfv
 ‘That (=what I have described) is spearing (hippos) with a harpoon. Uh, but the rifle that came, I have seen (hunting with) that too [topic].’ (2021-01 @ 05:04 to -06) (< hùè-ní-ì)

See also 2021-06 @ 06:45.

19.1.3 ‘Also, too’ (túméⁿ ~ tíméⁿ)

túméⁿ ~ tíméⁿ ‘also, too’ can be added to any NP or similar constituent, in any syntactic position. It can be added to either proclitic or independent pronouns. It is tone-dropped in 3Sg ā ‘tùmèⁿ and 3Pl ī ‘tùmèⁿ (isolation pronunciations). After a nonpronominal NP it is downstepped ‘tūmēⁿ. One speaker checked has a long vowel: tímé:ⁿ.

For reflexive sense see §18.1.2. Only ‘also/too’ is exemplified here. In prototypical use tíméⁿ is added to the specific constituent that constitutes new information (e.g. ‘my friends have gone, and I too will go’).

- (949) a. [m̀nú-ú ‘tūmēm] ‘byē
 [dog-Sg **too**] come.Pfv
 ‘The dog came too.’
- b. ā ɲā [ɲ túmɛŋ] ‘kwārī
 à ɲà [ná ‘tūmɛŋ] "
 3Sg Sbj/Obj [1Sg/1Sg.Indep **too**] hit.Pfv Pfv
 ‘He/She hit me too.’
- c. [ā ‘tùmèⁿ] ɲá ɲ kwárī
 [3Sg **too**] Sbj/Obj 1Sg hit.Pfv
 ‘He/She too hit me.’

‘Today’ and ‘tomorrow’ in (951c) fail to undergo Downstep; they also have irregular tonal behavior elsewhere, for example with mà ‘until’ (§8.5.5.7).

(951) a. /H/ melody: hàlí plus Tone-Dropping (or Downstep)

hàlí ‘hàlú-ù	‘even a man’	< hálú-ú
hàlí ‘sògó-ò	‘even a goat’	< sógó-ó
hàlí ‘jùù	‘even water’	< júú
hàlí ‘lèŋ-ò	‘even a child’	< léŋ-ó
hàlí ‘nò (~ ‘nà)	‘even I’	< nó

b. /HL/ melody (nouns): hàlí plus Downstep

hàlí ‘māà	‘even a manatee’	< máà
hàlí ‘hā-lèè ⁿ	‘even men’	< há-lèè ⁿ
hàlí ‘bāsà-à	‘even an agama lizard’	< básà-à
hàlí ‘sīsà ⁿ	‘even now’	< sīsà ⁿ
hàlí ‘gò ⁿ	‘even here’	< gò ⁿ
hàlí ‘dūgò-ò-nì	‘even yesterday’	< dūgò-ò-nì

c. /HL/ melody (exceptions): hàlí plus lexical tones

hàlí wéè	‘even today’
hàlí féè	‘even tomorrow’
hàlí bómòkò	‘even Bamako (city)’

d. /L/ or /LHL/ melody with 2+ initial L syllables: hàlí plus Initial H-Ablaut

/L/ melody

hàlí ‘jàŋà-nù-ù	‘even a woman’	< jàŋà-nù-ù
hàlí ‘sàgà-à	‘even a sheep’	< sàgà-à

/LHL/ melody

hàlí ‘tàmà-à-tì-ì	‘even a tomato’	< tàmà-à-tì-ì
-------------------	-----------------	---------------

e. /L/ melody (monosyllabic): hàlí plus lexical tone

hàlí hòò	‘even a house’
----------	----------------

f. H-toned pronominal subject proclitics: hàlí plus L-toned pronominal

hàlá = à fòò	‘even you-Sg went’
hàlá = à byé	‘even you-Sg came’
hàlí ŋì fòò	‘even we went’
hàlí ŋì byé	‘even we came’
hàlí m̀ byé	‘even I came’

g. L-toned third-person subject proclitic: hàlí plus L-toned pronominal

hàlà = à fòò	‘even he/she went’
hàlà = á ‘byé	‘even he/she came’

hàlì combines readily with negation in the sense ‘not even’ (952a). When the focal constituent is noninitial, *hàlì* may be clause-initial (952b,d) or occur with the constituent (952c).

- (952) a. [hàlì ‘[nīnī kēnèèⁿ]] tá ‘wǎⁿ
 [**even** person one] not.be.Loc there.Def
 ‘There was not even one person there.’
- b. *hàlì* ò tí ‘[nīnī kēnèèⁿ] hēè
 even 1Sg PfvNeg [person one] see.Pfv
 ‘I didn’t even see one person.’ (< nīnī-í)
- c. í tí [hàlì ‘[nīnī kēnèèⁿ]] hēè
 1Sg PfvNeg [**even** [person one]] see.Pfv
 [=(b)]
- d. *hàlì* í dí ‘māā-māā-nì-í ‘tāāⁿ
 even 3Sg PfvNeg greet-Vbl-Sg do.Pfv
 ‘He/She didn’t even greet (=say hello).’ (< ò ‘tì, < māā-māā-nì-ì)

Textual examples are of the context ‘even now/today’ (2021-06 @ 02:31 & 02:46 & 02:49), emphasizing that a behavior or skill from the past is still active.

For ‘even if’ conditional antecedents with *hàlì* ò, see §16.2.

19.1.5 ‘A fortiori’ (jàṅgò)

This is the local variant of a widespread regional form (variably beginning with *j* or *s*) preceding NPs and adverbs in the sense ‘a fortiori’, or more colloquially ‘not to mention ...’ or ‘never mind ...’ or the like (local French *à plus forte raison ...* or *ne parlons pas de ...*). A typical context is ‘(Even) X doesn’t VP, not to mention Y’ where X and Y are parallel constituents. X may be in any syntactic function in its clause.

jàṅgò combines with nouns and adverbs in the same tonal patterns as for *hàlì* (preceding subsection). Examples showing the tones are *jàṅgó* ‘hàlú-ù ‘not to mention a man’, *jàṅgó* ‘hāl-èèⁿ ‘not to mention men’, *jàṅgò* ‘nájánù-ù ‘not to mention a woman’, and *jàṅgò* wéè ‘not to mention today’. A textual example is (953).

- (953) *hàlì* [‘hā-lèèⁿ síkéké-yà-à] lógò wéè
 even [man-Pl fish(v)-Abstr-Sg] be.small today
 [jàṅgò ‘nájánà-léèⁿ]
 [**a.fortiori** woman-Pl]
 ‘Even men’s fishing is rare today (=nowadays), never mind (that of) women.’
 (2021-06 @ 05:49) (< há-lèèⁿ, nájánà-léèⁿ)

19.2 Preclausal discourse markers

19.2.1 ‘But ...’ (ńgàà ~ ńkààrà)

‘But ...’ is expressed by ńgàà or (dialectally) ńkààrà (954a-b). It may be set off by a pause (‘however, ...’), and it does not modify the tones of the subject of the following clause. It can therefore be considered preclausal.

- (954) a. sèédú ʼbyē [ńgàà ñ dí ʼjēē]
- S come.Pfv [**but** 3Sg PfvNeg eat.Antip.Pfv]
- ‘Seydou came, but he didn’t eat.’
- b. ńgí byé [ńgàà ńgí tí ʼjēē]
- 1Pl come.Pfv [**but** 1Pl PfvNeg eat.Antip.Pfv]
- ‘We came, but we didn’t eat.’
- c. ń jéé, [ńgàà sèédú tí ʼjēē]
- 1Sg eat.Antip.Pfv [**but** S PfvNeg eat.Antip.Pfv]
- ‘I ate, but Seydou didn’t eat.’
- d. ńgàá sàgà-à tí ʼbyē
- but** sheep-Sg PfvNeg come.Pfv
- ‘but the sheep didn’t come’ (< sàgà-à)
- e. ńgàà sógó-ó ʼbyē
- but** goat-Sg come.Pfv
- ‘but a goat came’

Textual examples of ńgàà include, among others, 2021-01 @ 00:52 & 02:57 & 03:38 and 2021-06 @ 00:51 & 01:28.

Nowadays mèè (French *mais*) has become current, e.g. 2021-01 @ 00:42.

19.3 Pragmatic adverbs or equivalents

19.3.1 ‘Again’

In addition to adverbial particles with this sense (presented below), see the construction with ǰáákì(-lì) ‘return’ in §15.2.2.3.

19.3.1.1 kúⁿ ‘again’

The adverb kúⁿ means ‘again (another time)’. Its position is clause-final, following postverbal adjuncts (PPs, other adverbs). In this position its H-tone is usually suppressed by downdrift. Under negation (955b), the sense is ‘not again’.

- (955) a. ā ʼkōmù kúⁿ
 3Sg sleep.Pfv **again**
 ‘He/She/It went back to sleep.’
- b. ò dí ʼbyē kúⁿ
 3Sg **PfvNeg** come.Pfv **again**
 ‘He/She didn’t come (back) again.’
- c. ò dà ʼlólò-ò mé-nù kúⁿ
 3Sg **IpfvNeg** beer-Sg drink-IPfv **again**
 ‘He/She no longer drinks beer.’ (< lólò-ò)

19.3.1.2 túgúⁿ or túgú-ní ‘again’

Some speakers use these forms as an alternative to kúⁿ.

- (956) ā ʼkōmù túgúⁿ
 3Sg sleep.Pfv **again**
 ‘He/She/It went back to sleep.’

19.3.1.3 bíléⁿ ‘(not) again since’

This clause-final particle occurs in perfective negative and stative negative clauses. There is an understood event or state in the past, and the clause with bíléⁿ indicates that it has not recurred since. In textual example (957a), the quoted character has been searching for her missing daughter, who was last seen collecting firewood some time earlier.

- (957) a. ŋgí tá= á hēè bíléⁿ
 1Pl PfvNeg 3Sg see.Pfv **not.since**
 ‘We haven’t seen her since (then).’ (2021-08 @ 02:25) (< tí à hēè)
- b. ŋgí tá= á tóò bíléⁿ
 1Pl IpvNeg 3Sg know.Stat **not.since**
 ‘We don’t recognize him/her/it any more.’ (< tóò)

- c. ñ dí ʼbyē bíléⁿ
 3Sg PfvNeg come.Pfv **not.since**
 ‘He/She/It hasn’t come (back) since.’

The phrase *hàlí ʼbíléⁿ* ‘even now’ can occur in a positive clause, emphasizing that no change has occurred in spite of expectations. The context for (958) is that the speaker has not done any fishing (the hallmark of her ethnicity) for many years, but remains very much a Bozo.

- (958) ñgàà [hàlí ʼbíléⁿ] ñ gá [[ñ káá-síí-yà-á ʼrà] nî]
 but [**even now**] 1Sg be.Loc [[1Sg father-race-Abstr-Sg Foc] Loc]
 ‘But even at present I am (still) in my father’s ethnicity.’ (2021-06 @ 02:49)

19.3.2 ‘Only’

19.3.2.1 ‘Only’ (*lámàà*, *lámáá-nà*)

lámàà ‘only’ (→ *lāmàà* after 3Sg and 3Pl proclitics) is added at the end of an NP, a clitic or (for focus) independent pronoun, or adverbial phrase. It is often followed by focus particle *rá* ~ *ró*.

(959) shows combinations with pronominal proclitics (independent pronouns are also possible) and NPs.

- (959) category ‘only ___’
- | | | | |
|----|--------------|---------------------|------------------|
| a. | 1Sg | ń <i>lámàà</i> | |
| | 1Pl | ñgí <i>lámàà</i> | |
| | 2Sg | á <i>lámàà</i> | |
| | 2Pl | í <i>lámàà</i> | |
| | Logo/3ReflSg | í <i>lámàà</i> | |
| b. | 3Sg | ā ʼ <i>lámàà</i> | (clause-initial) |
| | 3Pl | ī ʼ <i>lámàà</i> | (clause-initial) |
| c. | Logo/3ReflPl | í-yèn <i>lámàà</i> | |
| d. | ‘Seydou’ | sèédù <i>lámàà</i> | |
| | ‘goat’ | sógó-ó <i>lámàà</i> | |
| | ‘sheep’ | sàgà-à <i>lámàà</i> | |

The examples in (960) show the frequent combination of *lámàà* with the focus particle. However, the focus particle is not obligatory after *lámàà*.

- (960) a. [ɲíní kélè̀̀n lámàá rá] ʼbyē
 [person one **only** Foc] come.Pfv
 ‘Only one person came.’ (< lámàá ʼrà)
- b. [ná lámàá ʼrà] há ʼwṑ̀n tó̀̀
 [1Sg one **only**] Ipfv there.Def know.Stat
 ‘Only I know that place.’ (< wṑ̀n)
- c. ɲ́ gá [ʼwṑ̀n lámàá ʼrà] tó̀̀
 1Sg Ipfv [there.Def **only** Foc] know.Stat
 ‘I know only that place.’
- d. ɲ́ gá cè̀̀ só̀̀gò̀̀-lò [kí [cwà̀̀ lámàá ʼrà] tî̀̀n]
 1Sg Ipfv field cultivate.Ipfv [Inst [daba **only** Foc] Inst]
 ‘I do farm work only with a daba (=hoe).’
- e. [záki lámàá ʼrà] há só̀̀-lò
 [Z **only** Foc] Ipfv go.Ipfv
 ‘Only Zaki goes.’
- f. [sé̀̀ŋ-ó ʼmū̀̀nū̀̀-nṑ̀ŋ-ò lámàá ʼrà] há ʼtā̀̀ā-nā
 [harpoon-Sg nose-Dim-Sg **only** Foc] Ipfv be.done-Ipfv
 [bá = á hú̀̀è]
 [Seq 3Sg jab.Pfv]
 ‘Only the harpoon tip (=blade) is used to jab it.’ (2021-01 @ 03:35)

lámàá can also occur clause-finally. In the elicited example (961a) it has scope over the VP ‘sleeps’. In textual example (961b) the precise scope is unclear.

- (961) a. ̀̀n dá ʼbà̀̀àrá-á ʼtā̀̀ā-nā,
 3Sg IpfvNeg work(n)-Sg do-Ipfv,
 ɲ́ gá kó̀̀mù̀̀-nù̀̀ lámàá ró̀̀
 3Sg Ipfv sleep-Ipfv **only** Foc
 ‘He doesn’t work, he just sleeps.’
- b. bí ʼbḕ̀, mónó̀̀-nó̀̀ŋ-ò ʼtṑ̀gṑ̀ [kó̀̀mù̀̀-ú ʼlà] lámàá
 Seq go.Pfv, frog-Dim-Sg find.Pfv [sleep(n)-Sg Dat] **only**
 ‘... and (chicken) came and found the frog sleeping’ (2021-15 @ 01:54)

All other textual occurrences of clause-final lámàá have sense ‘as soon as’ or ‘no sooner than’, with scope over the time index of the entire clause (§15.5.2). Even the occurrence in (962b) might be interpreted this way, although the following event is phrased as another sequential VP (not shown here) rather than as a main clause.

Clause negation scopes over a constituent with lámàà even in subject NPs.

- (962) a. [ŋgí lámàà] tá só-lò
 [1Pl **only**] **IpfvNeg** go-IPfv
 ‘It’s not only us who will go.’
- b. ì tá [‘sèŋ-ò lámàá] ‘tāā-nā
 3Pl **IpfvNeg** [harpoon-Sg **only**] do-IPfv
 [bá= á wágà] dè?
 [Seq 3Sg kill.Pfv] Emph
 ‘They don’t do (=use) only harpoons to kill it, mind you.’ (2021-01 @ 00:58)
 (< wágà)

However, if the lámàà phrase is focalized, the scope relationship can be switched. This makes sense given the close relationship between focalization and ‘it is X’ identificational predicates. Therefore (963) implies that everyone except us is going.

- (963) [ŋgé-rè lámàá ‘rà] tá só-lò
 [1Pl-Indep **only Foc**] IpvfNeg go-IPfv
 ‘It’s only us [focus] who are not going.’

There is a participial form lámáá-nà ‘alone, separate, apart, not included’. It functions as a reflexively possessed predicate nominal.

- (964) a. ń gá [ń lámáá-nà]
 1Sg be [1Sg **apart-Ppl**]
 ‘I am separate.’
- b. ń gí= [ì lámáá-nà]
 3Sg be [3ReflSg **apart-Ppl**]
 ‘He/She/It is separate.’
- c. Ø ńí= í yágì= [ì lámáá-nà]
 1Sg Sbj/Obj 3Pl put.Pfv [3ReflSg **apart-Ppl**]
 ‘I put them apart.’

19.3.2.2 d̀̀r̀̀n ‘only’

Some speakers make use of a particle d̀̀r̀̀n ‘only’, likely borrowed from Bambara. It does not occur in the recordings transcribed to date.

19.3.2.3 Circumlocution with ‘not (any)’ plus ‘except ...’

A common but somewhat formal phrasing of ‘only X’ is ‘not anything/anyone if it is not X’. The ‘any’ phrase can include *sí* ~ *ʃí* added to any noun, or the interjection-like *fóy* ‘nothing (at all)’ (§6.6.2.3). The adjoined clause ends with *té* ‘it is not’.

- (965) a. [ní ní sɪ́] kún dá ʔwɔ̃ⁿ,
 [person any] Past not.be.Loc there.Def,
 ní ʔnà ʔtè
 if 1Sg.Indep it.is.not
 ‘Nobody was there, except me.’ = ‘Only I was there.’ (< kún dà)
- b. fóy kún dá ʔwɔ̃ⁿ,
 nothing Past not.be.Loc there.Def
 ní ʃwɔ̃ɔ̃n ʔtè
 if crocodile it.is.not
 ‘There was nothing but crocodiles there.’ (< kún dà, ʃwɔ̃ɔ̃ⁿ)

19.3.3 kábàⁿ ‘already’

This adverb is borrowed from Bambara sequential VP *kà bàⁿ* ‘and finish’. In Kelenga it occurs clause-finally, as an alternative to its own sequential VP *bí ʔkīlā* (‘and finish’), on which see §15.2.11. Some speakers use *kábàⁿ* frequently, others apparently not.

- (966) a. à ʃòò kábàⁿ
 3Sg go.Pfv already
 ‘He/She has already left.’
- b. à ɲà wáɾì-í ʔlɔ̃ [ɲ ná] kábàⁿ
 3Sg Sbj/Obj money-Sg give.Pfv [1Sg Dat] already
 ‘He/She already gave me the money.’

The textual examples are from a single speaker: 2021-01 @ 03:38 & 04:37 & 04:45.

19.4 Emphatic particles

In addition to the mostly interjection-like clause-final particles presented below, see the extent adverbs meaning ‘greatly, a lot’ in §8.5.3.1.1.

19.4.1 Clause-final emphatics

19.4.1.1 Clause-final emphatic kóy

The clause-final emphatic particle *kóy* can function to strongly confirm an interlocutor's statement or the speaker's own previous statement after an expression of doubt. It can also accompany a confident answer to a polar interrogative.

- (967) A: gôⁿ há 'gū-lē-nā
 here be hot-Ppl
 'It's hot out!'
- B: gôⁿ há 'gū-lē-nā kóy
 here be hot-Ppl **Emph**
 'It sure is (hot out)!'

kóy is not used as a one-word response; it must come at the end of a clause. It is a regionally widespread form. It is most productive in languages farther north (e.g. Songhay).

There are no examples in the texts transcribed to date.

19.4.1.2 Clause-final emphatic dè?

This emphatic particle, which is pronounced with a final glottal stop, is more common than *kóy*. It occurs in a range of contexts ranging from confirmation to warning. It can combine with imperatives as well as with statements. A dialectal variant *rè?* has been reported.

- (968) a. gôⁿ há 'gū-lē-nā dè?
 here be hot-Ppl **Emph**
 'It sure is (hot out)! (confirming; see preceding subsection)
- b. á mání 'hēēⁿ dè?
 2Sg Proh fall.Pfv **Emph**
 'Don't fall now!' (warning)
- c. [á túménj] kólòsì dè?
 [2Sg self] watch.out.Pfv **Emph**
 'Watch out (for yourself) now!'

A textual example is 2015-10 @ 04:30.

Like *kóy*, *dè?* can only occur at the end of a clause. It does not occur as a one-word comment or response. It occurs widely in the region and is especially productive in Bambara-Jula and several other languages.

See also bé in conditional antecedents (§16.1.1.3).

19.4.1.3 Clause-final or independent jáátí ‘indeed’

jáátí ‘indeed’ can occur at the end of a clause, with or without a prosodic break. It confirms the correctness of the interlocutor’s statement. Unlike the particles kóy and dè?, jáátí can occur by itself as a confirming response to a statement by the interlocutor, like ‘exactly!’ in English.

For tonal variants in phrases of the type X jáátí ‘precisely X’, see §8.5.2.2.

There are no textual examples.

19.4.1.4 Clause-final emphatic péw and fíéw

péw is an emphatic particle meaning ‘completely, totally, absolutely’ in positive clauses (969a). A distinct particle fíéw occurs in negative clauses in the sense ‘(not) at all, never, in no way’ (969b).

(969) a. ngí ná fúòⁿ yágà péw
 today Sbj/Obj fonio leave.Pfv **completely**
 ‘Nowadays we have completely abandoned (cutivating) fonio.’

b. ń dá ‘lólò-ò mé-nù fíéw
 1Pl IpfvNeg beer drink-Ipfv **at.all**
 ‘I don’t drink (alcohol) at all.’ (< lólò-ò)

19.4.1.5 Clause-final dèrè in a mildly emphatic answer

Clause-final dèrè can be added, as an alternative to kóy, as a mild emphatic in affirmative answers to polar interrogatives. It insists on the truth of the utterance to a questioning or skeptical interlocutor. It comes in response to a pointed question by the interlocutor, but no anger or malice is involved.

(970) A: á só bómòkò wâ, wál-mà á tí ‘sò
 2Sg go.Pfv B Q, or 2Sg Pfv go.Pfv
 ‘Did you go to Bamako, or did you not go?’

B: ń zó dèrè
 1Sg go.Pfv **Emph**
 ‘(Indeed) I did go.’

19.4.1.6 Clause-final kè in angry answers

In the scenario described just above, if the interlocutor expresses disbelief at what the speaker has been claiming, the speaker may reply angrily by adding kè.

- (971) B: ń zó kè
 1Sg go.Pfv **Emph**
 ‘I did go, dammit!’

19.4.1.7 Clause-final kónìⁿ ‘anyway’

The particle kónìⁿ, elsewhere the topic marker (‘as for X’), has a special function in clause-final position. The event in question occurred in spite of expectations that it would not occur. It can be glossed ‘anyway’ or ‘nevertheless’ (local French *quand même*).

- (972) Ø ńá= á ʔjyà= [á ʔtè] [Ø màní ʔbyē]
 1Sg Sbj/Obj 3Sg say.Pfv [3Sg Dat] [3Sg Proh come.Pfv],
 ā byè kónìⁿ
 3Sg come.Pfv **anyway**
 ‘I told him/her not to come, (but) he/she came anyway.’ (< ʔjéé, ā màní)

19.4.1.8 Clause-final clarifying sá

This is a widespread regional emphatic, possibly from French *ça*. It can be added to an imperative or prohibitive that has had to be repeated since the addressee did not immediately obey. It has a pleading (not yet angry) quality. For example, if á mání hóólò ‘don’t-2sg run!’ is not obeyed, the second volley is (973).

- (973) á mání hóólò sá
 2Sg Proh run.Pfv **Emph**
 ‘(For the second time:) Don’t run!’

A stronger and angrier version of this is to add ń gó ‘I said’ at the beginning, invoking authority.

- (974) ń wá= [á mání hóólò]
 1Sg said [2Sg Proh run.Pfv]
 ‘I said, don’t run!’

sá also has clarifying function in contexts where the particular referent in question needs to be carefully specified. In 2021-10 @ 01:04, the narrator adds final sá (pronounced zá after a nasalized

vowel) in a comment clarifying which of two protagonists is referred to. Similarly 2021-10 @ 03:46.

19.5 Uptake and backchannel

19.5.1 Uptake check

In a narrative or other extended speaking turn, the speaker may ask for verification that the preceding material has been processed. The preferred verb is *bógì(-lì)* ‘hear’, variant *bóy(-lì)*.

(975) á ɲá= á bóy
2Sg Sbj/Obj 3Sg hear.Pfv
‘Did you-Sg hear it?’ (2021-06 @ 03:16)

The reply is of the type ‘I heard it’ or ‘I understood it’.

Sometimes this exchange is a filler while the narrator formulates the next sentence.

19.6 Greetings

The transitive verb ‘X greet Y’ is Pfv *màá-màà*, Ipfv *màá-màá-là*. The noun ‘greeting’ is its verbal noun *máá-máá-nì-ì*.

The tone patterns and morphology in some greetings are slightly distinct from those in ordinary utterances.

19.6.1 All-purpose greetings

A simple greeting exchange among two people A and B who come across each other is (976).

(976) A: kí ⁺wàlè-è
B: mbáà→, kí ⁺wàlè-è

If two groups meet, the sequence is (977). These forms are especially common given that people in a village are usually around others.

(977) A: éé ⁺wàlè-è ~ yé ⁺wàlè-è
or: í kí ⁺wàlè-è

B: mbáà→, éé ⁺wàlè-è
or: mbáà→, í kí ⁺wàlè-è

- b. A: kí 'kúò 'good day' (between noon and 4 PM)
 B: mbáà→, kí 'kúò (reply)
 cf. noun kùò ~ kòò 'daytime; sun'
- c. A: kí 'jéèné-è 'good afternoon' (4-6 PM)
 B: mbáà→, kí jéèné-è (reply)
 cf. noun jéèné-è 'late afternoon'
- d. A: kí 'gúlù 'good evening' (7 PM or later)
 B: mbáà→, kí 'gúlù (reply)
 cf. noun gùlù-ù 'night'

For prospective '(have a) good night!', said as people retire for the night, is (981a) or (981b).

- (981) a. álá bí [gúlù-ú 'hēērè-é] 'lṣṣ
 God Sbjn [night-Sg welfare-Sg] give.Pfv
 'May God give the night's welfare (=safety, peace)! (< gùlù-ù, hēērè-è)
- b. álá bí jéé 'hāy [ŋgì lá]
 God Sbjn tomorrow show.Pfv [1Pl Dat]
 'May God show us tomorrow!' (< jéè)

The response to any wish with 'God' as subject is àmínà 'amen!' or shortened àmí (often repeated two or three times).

19.6.4 Travel greetings

Departing travelers are given the 'bon voyage!' blessing, with 2Sg or 2Pl pronoun as the case requires (982a-b). kíèⁿ ~ céèⁿ 'arrive' is here understood as reduced from 'cause you to arrive, deliver you.

- (982) a. álá bí kíèⁿ [[ká= [à m'éè] tîⁿ
 God Sbjn arrive.Pfv [[Inst [2Sg be.good.VblN] under]
 'May God (let you-Sg) arrive with your goodness (=in safety).'
- b. álá bí kíèⁿ [[kí= [ì m'éè] tîⁿ
 God Sbjn arrive.Pfv [[Inst [2Pl be.good.VblN] under]
 'May God (let you-Pl) arrive with your goodness (=in safety).'

Arriving visitors, or villagers returning from a long voyage, are received by the seriously opaque 'welcome!' expressions (983). The 'goodness' noun míèⁿ ~ m'éè suggests crossing from stative míèⁿ 'be thin, insignificant' into m'éè 'be good'. byé 'has come' is understood here as reduced from

B: àmíínà
amen!

A: m̀̀n dá ʔ̀jìngìnà-à,
Rel not.be.Cop next.year,
á-lá bó= ó ʔ̀hāy [ngì lá]
God Sbjn Dem.Def show.Pfv [1Pl Dat]
‘What is not next year (=the year after next), may God show that to us!’

Texts

Recordings in Kelenga were made in 2021 (Bamako), 2022 (Kolonga and Kaya villages), and 2023 (Bobo Dioulasso). Only some have been transcribed and translated. End-users, whether future linguists or native speakers, are welcome to listen to and transcribe them. The sound files will soon be archived at Deep Blue Data (online archive), University of Michigan Libraries and are open access. The texts are inventories below. The inventories are followed by transcriptions-translations of some of the texts.

Catalogue of 2021 recordings

These recordings were made by project manager Minkailou Djiguiba with Kelenga speakers in Bamako, capital of Mali. Texts 2021-01 to 2021-07 have M or I interviewed by L. Texts 08 to 16 are short tales told by L, with another young person as listener-respondent. I is female, the others are male. F and L were young (twenties), M and I older. Recording quality is good.

Speakers and their abbreviations are:

I	Mba Aissata Tereta
F	Aboubakar Fanafo
L	Ali Tereta
M	Baa Mama Tereta

	duration	transcribed?	speakers	topic
2021-01	05:26	yes	M with L	hippo hunt
2021-02	15:14		M with L	fishing with nets and boat building
2021-03	11:20		M with L	education of boys, marriage
2021-04	05:40		M with L	boat building, kinds of boat
2021-05	03:30		I with L	education of girls, marriage
2021-06	07:12	yes	I with L	women's catching, drying, smoking, and selling fish
2021-07	11:46		M with L	courtship and marriage
2021-08	02:52	yes	L with F	tale: caterpillar and three girls
2021-09	03:04		L with F	tale: lion and hyena
2021-10	04:51	yes	L with F	tale: orphan girl and stepmother
2021-11	03:38		L with F	tale: poor and rich women
2021-12	07:30		L with F	tale: orphan girl and stepmother
2021-13	01:56		L with F	tale: girl and husband with scar
2021-14	02:25		L with F	tale: girl and husband without a scar
2021-15	02:35	yes	L with F	tale: chicken and frog
2021-16	02:55		L with F	tale: young man and sorceress

Catalogue of 2022 recordings

These recordings were made by Minkailou Djiguiba in Kayo (2022-01) and Kolongo (all others), in Mali. The Kolongo session involved a group with some shifts among speakers. Recording quality is subpar in parts due to wind interference.

Speakers and their abbreviations are:

D1	Drise Tereta (older)
D2	Drise Tereta (younger)
H	Hasimi Tereta
K	Kebe Seydou
Mg	Mougoutari Tereta
M1	Mamadi Tereta (younger)
M2	Mamadi Tereta (older)
Sl	Salo Tereta
Sn	Sinali Tereta
Y	Yousouf Tereta

	duration	transcribed?	speakers	topic
2022-01	06:23		K with Sn	hippo hunt
2022-02	04:49		various	various
2022-03	02:44		H with M1	various
2022-04	02:06		Mg with M1	finding a bride
2022-05	01:32		H with M1	crocodile hunt
2022-06	01:32		H with M1	crocodile hunt secrets
2022-07	03:13		D1 with M1	rice farming
2022-08	03:17		M2 with M1	fishing near hippos
2022-09	02:33		D2 with M1	life in the old days
2022-10	03:13		H with M1	autobiography
2022-11	02:15		Sl with M1	circumcision
2022-12	02:38		Y with M1	selling fish

Catalogue of 2023 recordings

These recordings were made by Heath at the project base in Bobo Dioulasso, Burkina Faso, in January 2023. The two speakers came to Bobo and each spent four to six weeks there in connection with the project. A was young (twenties), Sn was middle-aged. Recording quality is good.

Speakers and their abbreviations are

A Alhasan Tereta

Sn Sinali Tereta

	duration	transcribed?	speakers	topic
2023-01	01:16		Sn with A	quarreling brothers 1
2023-02	01:17		Sn with A	quarreling brothers 2
2023-03	01:51		A with Sn	fishing
2023-04	01:26		A with Sn	a student's history
2023-05	01:25		Sn with A	village of Kolongo
2023-06	02:19		Sn with A	a fisherman's history
2023-07	02:02		A with Sn	young people of Kolongo
2023-08	01:06		Sn with A	security control on trip to Mopti

Kelenga 2021-01 Hippo hunt

recorded in Bamako; main speaker is Baa Mama Tereta (M), male born c. 1958, interviewed by Ali Tereta (L) born 1996
duration 05:26

(00:03) L éé 'sùbàhà-à
2Pl morning-Sg

M àhàbàà,
(reply)

L: 'Good morning.'

M: 'Greeting.'

[greetings (§19.6); àhàbàà, like mbáà (see below), is a greeting response with no independent meaning]

(00:04) M héérè-é 'sāgā =à àlî
wellbeing-Sg lie.down.Pfv Q L

L mbáà

M: 'Did you sleep well, Ali?'

L: 'Fine.'

[question particle =à reduced from interrogative wâ]

(00:05) M kòná= á ságá [hééré nî]
Q 2Sg lie.down.Pfv [wellbeing Loc]

L mbáà
(reply)

M: 'So did you-Sg sleep well?'

L: 'Fine.'

[< kòní, introduces questions in greetings (§13.2.1.4); hééré simplified in this greeting from noun héérè-è]

(00:07) M [tònù-mà]-ní-rèéⁿ 'kēēndē
[family]-person-Pl be.healthy.Stat

L bááî tí= [í 'mà]
trouble not.be.Loc [3Pl Cust]

M: '(Your) family is healthy?'

L: 'There is no trouble among them.'

[< kēéndé ; < tá ì ; bááî (< Arabic) in greeting formulae]

(00:08) M k̀ńí bááfi tá ʼwɔ̃ⁿ
 Q trouble-Sg not.be.Loc there.Def
 L bááfi tá ʼwɔ̃ⁿ
 trouble-Sg not.be.Loc there.Def
 M: ‘So there is no trouble there?’
 L: ‘There is no trouble there.’

(00:09) M éé ʼwàlè-è
 2Pl work-Sg
 L mbáà
 (reply)
 M mbáà
 (reply)
 M: ‘How are you?’
 L: ‘Fine.’
 M: ‘Fine.’

(00:11) L [á-rá ʼtògó-ó] ʼkēlē ʼdīī
 [2Sg-Indep name-Sg] be.Cop how?
 M ná ʼhālī [báà máámà]
 1Sg be.Cop [B M]
 L báà máámà
 B M
 L: ‘What is your-Sg name?’
 M: ‘I am Baa Mama.’
 L: ‘Baa Mama.’
 [*< tógó-ó ; díí ‘how?’ (§13.2.2.6); ná ʼhālī may contract to ná = ʼālī*]

(00:14) M àhò, táárìtá
 yes, Tereta
 L táárìtá, héérè-è
 Tereta, wellbeing-Sg
 M mbáà
 M: ‘Yes. Tereta (surname).’
 L: ‘Tereta. You are well?’
 M: ‘Fine.’

(00:18) L [súbáá kù] ŋí bá = [à télé]
 [morning Dem] 1Pl come.Pfv [2Sg ask.Pfv]

M àhòó
 yes.Q

L: ‘This morning we have come to ask you-Sg.’

M: ‘Yes?’

[< ŋí b(y)é]

(00:20) L sàbùlà-à há wágà-là [cógó mwò]
 hippo-Sg Ipfv be.killed-Ipfv [manner Rel]
 í kún gá = á ‘tāā-nā [cógó mwò],
 2Pl Past Ipfv 3Sg do-Ipfv [manner Rel],

‘(Ask you) the way a hippo is killed. The way you-Pl used to do it.’

[throughout this text, ‘kill’ implies hunting leading up to the kill]

(00:26) L à [kí [á ŋí = ì ‘tāāⁿ
 3Sg [and [3Sg Sbj/Obj 3ReflSg do.Pfv
 [à nánáná] [cógó mwò]]]
 [2Sg in.presence.of] [manner Rel]]]

‘That and the way it was done in your presence.’

[nánánà in the context of being an eyewitness (§8.2.8.2)]

(00:28) L ná = à há ‘hīnī
 if 2Sg Ipfv be.able
 [bí ká ‘ʃēē [ó nī]]
 [Seq a.certain say.Pfv [Dem.Def Loc]]

‘If you can say something about it.’

[< ní à]

(00:30) M ò [jéémù-ù nī] Ø ŋá = á ‘ʃèè,
 ah [talk(n)-Sg Loc] 1Sg Sbj/Obj 3Sg say.Pfv,
 ná ‘tā-lī sábulá-wágá-yà-à,
 1Sg IpfvNeg-be hippo-kill-Agent-Sg,

‘Ah, as I said (before), I am not a hippo killer (=hunter).’

[equivalent to ná tá ‘hāli ; compound agentive (§5.1.7.2.1)]

(00:34) M ŋgàà sábulá-wágà-y-éèⁿ ŋá = á ‘tāāⁿ
 but hippo-kill-Agent-Pl Sbj/Obj 3Sg do.Pfv
 [[kírí mwò-yèⁿ] ʒéè], ná ‘nānānā,
 [[manner Rel-Pl] on], 1Sg in.presence.of,

‘But the ways how the hippo killers did it, in my presence,’

[plural agentive with final L-tone before -y-éèⁿ (§4.2.2.1); < ʃéè]

(00:38) M Ø ηó= ó hêè [ηì= [ì fáà]],
 1Sg Sbj/Obj Dem.Def see.Pfv [Link [3Pl by]],
 ní dí 'l55 [ηì= [ì fáà] [à nî] dèʔ,
 1Sg PfvNeg enter.Pfv [Link [3Pl by]] [3Sg Loc] Emph,
 'I did see that, with them. I didn't enter (=get involved) in it with them, mind you.'
 [*< hêè [ηà ì fáà], with ηà as an optional linking element before a vocalic pronominal*
 (§8.4)]

(00:42) M mais ā ηī= ì 'tāāⁿ [ɲ̩ ɲáɲánà],
 but 3Sg Sbj/Obj 3ReflSg do [1Sg in.presence.of],
 sàbùlà-à, súúmbò-ó 'rà-nî, mwò há ['jùù nî],
 hippo-Sg, beast-Sg it.is, Rel be.Loc [water Loc],
 'But it was done in my presence. A hippo, it's a monstrous beast, which is in the water.'
 [*súúmbò-ò 'beast, huge wild animal' (elephant, hippo, giraffe, crocodile), cf. hánámá-á 'large to mid-sized predatory wild animal' (lion, leopard, hyena, jackal); 'rà-nî 'it is' with final falling pitch for incompleteness (§3.7.2)*]

(00:48) M ɲ gá 'ɲìní-ì wágà-là,
 3Sg Ipfv person-Sg kill-Ipfv,
 ɲ gá 'dāābā-ā-yèⁿ wágà-là,
 3Sg Ipfv animal-Sg-Pl kill-Ipfv,
 'It kills a person (=people), and it kills animals.'
 [*ɲìní-í 'a person, someone', here singular in generic function*]

(00:52) M ɲgàà [sàbùlà-à wágà-y-éèⁿ], ì hà= [à wágà-à] 'tāā-nā
 but [hippo-Sg kill-Agent-Pl], 3Pl Ipfv [3Sg kill.VblN-Sg] do-Ipfv
 [kí [ɲàɲáá mwò] tîⁿ], séɲ-ó 'rà-ní,
 [Inst [thing Rel] under], harpoon-Sg it.is,
 'But the killers of a hippo, the thing with which they do its killing, it's a harpoon.'
 [*agentive with regular NP object (not incorporated); adpositional relative*]

(00:58) M bon séɲ-ó, ì tá ['sèɲ-ò lámàá] 'tāā-nā
 okay harpoon-Sg, 3Pl IpfvNeg [harpoon-Sg only] do-Ipfv
 [bá= á wágà] dèʔ,
 [Seq 3Sg kill.Pfv] Emph,
 'Okay, (as for) harpoons, they don't do (=use) only harpoons to kill it, mind you.'

(01:02) M ì hà [ɲáɲáá kínáá-yèⁿ ná] 'tāā-nā
 3Pl Ipfv [thing other-Pl Foc] do-Ipfv
 [bá= á wágà],
 [Seq 3Sg kill.Pfv],
 'They do (=use) other things [focus] to kill it.'
 [*ná < rá*]

(01:04) M *pour que*, [ó nàṅàà-yè rá] há 'kābī-lī [bóló 'mà]
 in order that, [Dem.Def thing-Pl Foc] Ipfv combine-Ipfv [Recip Cust],
 [bó= ó yágà [kí ʃîêⁿ]],
 [Seq Dem.Def change.Pfv [Inst venom]],
 'So that— Those things combine together, to make it (=harpoon) be with venom.'
[the tips of harpoons are poisoned]

(01:12) M [bó= ó 'tāām [bí 'sèṅ-ò mé-nì]],
 [Seq Dem.Def do.Pfv [Seq harpoon-Sg drink-Caus.Pfv]],
 ī 'wòò [bó= ó 'tāām] [bá= á wágà],
 3Pl do.then [Seq Dem.Def do.Pfv] [Seq 3Sg kill.Pfv],
 'To do it, to soak the harpoon. Then they use that (harpoon) to kill it (=hippo).'
[wóó 'do then' (§15.2.13)]

(01:16) M ì ṅá= á 'ʃèé [ṅgì té] [[kírí mwò] ʃèè],
 3Pl Sbj/Obj 3Sg say.Pfv [1Pl Dat] [[manner Rel] on],
 ní= í hà bèlé [sàbúlà-à wágà],
 if 3Pl Ipfv Fut [hippo-Sg kill.Pfv],
 'The way they told it to us. When they are going to kill a hippo,'
[imperfective conditional antecedent]

(01:22) M símínéṅ-ó, ó hà= [à 'nî],
 stinging.ant-Sg, Dem.Def be.Loc [3Sg Loc],
 náró-ó hà= [à nî],
 scorpion-Sg be.Loc [3Sg Loc],
 'The stinging black ant (*Brachyponera*), that is (included) in it. The scorpion is included
 in it.'
*[nouns denoting insects and arthropods, with generic or collective reference, are often
 singular in form]*

(01:27) M nájá-fòó hà= [à 'nî],
 snake be.Loc [3Sg Loc],
 [nàṅàà wòò nàṅàà] ní ʃîêⁿ hó= [ó 'là],
 [thing and thing] if venom be.Loc [Dem.Def Dat],
 'The snake is included in it. Anything at all, if venom is in that.'
[wóó (§7.1.2.2)]

(01:31) M ì hó= [ó 'sūnūⁿ jíé-nàà] tíí-ní,
 3Pl Ipfv [Dem.Def all unite-when] look.for-Ipfv,
 bó= ó 'sēē [bòlò nî],
 Seq Dem.Def put.in.Pfv [Recip Loc],
 'They look for all of those together, and put them in together.'
[verb jíè(-lè) 'unite, associate'; -nàà (§15.6)]

(01:35) M bó= ó 'sēē [[hòrí-í 'kā] nî],
 Seq Dem.Def put.in.Pfv [[waterjar a.certain] Loc],
 bó= ó sòlò,
 Seq Dem.Def cook.Pfv,
 'Then they put them into a certain waterjar and let it cook.'

(01:39) M ná= á sòlò [bá= [á 'sùnùⁿ] lóó [bòlò nî]]
 if 3Sg be.cooked.Pfv [Seq [3Sg all] be.put.in.Pfv [Recip Loc]]
 [sáŋá mwò], [ó 'sūnūŋ] 'gālī [nánáá ʃíéⁿ-móŋò-yèⁿ],
 [time Rel], [Dem.Def all] be.Cop [thing venom-manner-Pl]
 'When it is cooked and all of it has been put in together, all of that is a poisonous thing.'
[cf. noun sáŋá-á 'time'; < hálí 'be'; -móŋò 'manner' (§5.1.5.10)]

(01:44) M ì 'wòò [bí 'sèŋ-ò]—, sábulá-húé-sèŋ-ó yágà= [à nî],
 3Pl do.then [Seq harpoon-Sg]—, hippo-jab-harpoon-Sg put.Pfv [3Sg Loc],
 [bá= [á [kó= ó]] sòlò [kí 'bòlò tîⁿ],
 [Seq [3Sg [and Dem.Def]] cook.Pfv [Inst Recip under],
 'Then they put the harpoon—, the hippo-spearing harpoon in it (poisonous mix), so that
 it (=poison) and that one (harpoon) cook together.'
*[combination of 3Sg à and discourse-definite ó referring back to two different
 discourse referents]*

(01:49) M ná= á sòlò [kó= ó tîⁿ] [sáŋá mwò],
 if 3Sg cook.Pfv [Inst Dem.Def under] [time Rel],
 ósòò sábulá-húé-sèŋ-ò, ó hà bèlé [ʃíēŋ kù] kúⁿ,
 then hippo-jab-harpoon-Sg, Dem.Def Ipfv Fut [venom Dem] catch.Pfv,
 'When it and that have cooked together, so the hippo-spearing harpoon, that (=harpoon)
 will catch the poison.'
[<ʃíēŋ kù]

(01:55) M ná= á ŋá ʃíēŋ 'kūⁿ, ósòò á há= á héé-lè,
 if 3Sg Sbj/Obj venom catch.Pfv, then 2Sg Ipfv 3Sg see-Ipfv,
 ì hà= á 'bàŋ-lì [ká= á tîⁿ],
 3Pl Ipfv 3Sg remove-Ipfv [Inst 3Sg under],
 'When it has caught the poison, then you-Sg will see it, they will take it (=pot) off with
 it (=harpoon).'

(02:00) M [nàṅáá kù fí-ná-nà-à]—
 [thing Dem black-Inch-Ppl-Sg]—
 é→ [jíéⁿ fí-ná-nà-à] há—
 uh [venom black-Inch-Ppl-Sg] Ipfv—
 há yágà-là [wó-tá ¹[nāāmū-jūū fī-nā-nà-à]],
 Ipfv become-Ipfv [like [sauce-water black-Inch-Ppl-Sg]],
 ‘That black thing— uh, the black poison becomes like a black sauce.’
[i.e. a thick liquid; N-Dem-Adj order instead of N-Adj-Dem because nàṅáá kù functions as ‘whatchamacallit’; wó-tá for á-wó-tá ‘like’ (§8.5.1)]

(02:06) M ó há = á—, ì hó = [ó bári-nàà—
 (false start), 3Pl Ipfv= [Dem.Def stick(v)-when—
 bári-nàà] ¹tōgō-lō [séṅ-ó ¹mà],
 stick(v)-when] leave-Ipfv [harpoon-Sg Cust],
 ‘They leave that (=poison) stuck on (the tip of) the harpoon.’
[-naa (§15.6)]

(02:12) M séṅ gú, ì há ¹hīnī
 harpoon Dem, 3Pl Ipfv be.able
 [bí [¹nàṅàà jíyò]— sólò [ṅà = à nî]],
 [Seq [thing three]— cook.Pfv [Link 3Sg Loc]],
 ‘That (type of) harpoon, they can cook three things (=harpoons) in it (=poison).’
[< nàṅàà ; ‘be able to VP’ (§15.2.2.4); ṅà linker before vocalic pronominal (§8.4)]

(02:17) M [nàṅáá ¹tāān tūmēⁿ] sólò [ṅà = à nî],
 [thing ten also] cook.Pfv [Link 3Sg Loc]],
 ì há ¹hīnī [bí [nàṅáá ¹fīēnū] sólò [ṅà = à nî],
 3Pl Ipfv be.able [Seq [thing two] cook.Pfv [Link 3Sg Loc]],
 ‘(They can) also cook ten things in it. They can cook (just) two things in it.’
[beginning of this segment slightly broken (omitted); tones of N-Num, §6.4.1.2]

(02:21) M bon ní = í ṅó = ó sólò,
 okay if 3Pl Sbj/Obj Dem.Def cook.Pfv,
 ì hó = ó ¹bāy-lī [bá = á yágà ¹fīénú-fīénú],
 3Pl Ipfv Dem.Def remove-Ipfv [Seq 3Sg put.Pfv Rdp-two],
 ‘Okay, when they have cooked that, they take that (=harpoons) out and put it (=them) down two by two.’
[Ipfv báy-lí (§10.1.1.5); distributive iteration of numeral (§4.6.1.7)]

(02:25) M [bá= á yágà, [náá-hómò-ó nìṅî], náá-hómò-ò,
 [Seq 3Sg put.Pfv, [cow-horn-Sg inside], cow-horn-Sg,
 ì hà= à yágà-là [ó nìṅî],
 3Pl Ipfv 3Sg put-Ipfv [Dem.Def inside],
 ‘And put it (=them) in a cow horn. A cow horn, they put it (=harpoon) inside that.’
[The tips of the harpoons are kept in the hollows of cow horns to keep the poison from dissipating; nââ ‘cow’, hómó-ó ‘horn’]

(02:32) M [bí [*jūgū sūrò-ó] ‘tāām [bá= á hárì],
 [Seq [garment old-Sg] do.Pfv [Seq 3Sg tie.Pfv],
pour que jíní mání cêèⁿ [ṅá= á ‘mà],
 in.order.that person Proh arrive.Pfv [Link 3Sg Cust],
 ‘And (they) use an old rag to tie it (=harpoons), so nobody will come into contact it.’
[cf. jūgù-ù ‘garment’; prohibitive as ‘lest’ clause (§17.3.7); unsuffixed jíní ‘anybody’]

(02:38) M ósòò, ó sábúlá-húé-sèṅ-ò,
 then, Dem.Def hippo-jab-harpoon-Sg,
 hèé há= [á ‘là],
 stick be.Loc [3Sg Dat],
 ‘Then, the hippo-spearing harpoon, it has a wooden shaft.’
[compound final ‘harpoon’ ending in ṅ (§5.1.6.2)]

(02:42) M *mais*, hêê— ì tá= [á [kí [hée kù]] yágà-là,
 but, stick— 3Pl IpfvNeg [3Sg [and [stick Dem]]] put-Ipfv,
 [náá-hómò-ó nìṅî] dè?,
 [cow-horn-Sg inside] Emph,
 ‘But, the shaft, they don’t put it (=harpoon blade) and the shaft (together), in the cow horn, mind you.’
[The poisoned blade is stored in the cow horn without the wooden shaft]

(02:47) M [hèé ‘rà] hí= [ì lámáá-nà], ó hà yágà-nà,
 [stick Foc] be.Loc [3ReflSg alone-Ppl], Dem.Def be put-Ppl,
bon ní= í hà bèlé sàbúlà-à húè,
 okay if 3Pl Ipfv Fut hippo-Sg jab.Pfv,
 ‘The shaft is by itself (=stored separately). That one (=shaft) is put (aside). Okay, when they are going to spear a hippo, ...’
[participial predicate (§4.5.1.4); lámáá-nà (§19.3.2.1)]

(02:52) M ní= í hà bèlè jóò [[sàbùlà-á 'nóò] fàà],
 if 3Pl Ipfv Fut go.Pfv [[hippo-Sg track] by],
 á há 'sè-lá= [á 'tògò]
 2Sg Ipfv go-Ipfv [3Sg find.Pfv]
 'When they are going to go in search of a hippo, you-Sg will go and find (=observe) it,
 ...'
 [nòò 'tracks, trail'; 'sè-lá=, §10.1.2.2]

(02:54) M ká há 'l̩-l̩ [[hólí-í 'hàŋ-ò] n̩]
 a.certain Ipfv enter-Ipfv [[skiff-Sg neck-Sg] Loc]
 ká há 'l̩-l̩ [[hólí-í fàlá-á] n̩],
 a.certain Ipfv enter-Ipfv [[skiff-Sg rear-Sg] Loc],
 '... (observe that) one (person) goes into the front ("neck") of the skiff and one (other
 person) goes into the rear of the skiff.'
 [The harpooner stands near the bow, and the navigator sits near the stern; < háŋ-ò
 'neck' (here possessed), fàlá-à 'rear']

(02:57) M ńgàà sàbùlà-à tá wágà-là [bá= á 'jèè
 but hippo-Sg IpfvNeg be.killed-Ipfv [Seq 3Sg say.Pfv
 [ń gá bélé súumbò-ò wágà níèⁿ],
 [1Sg Ipfv Fut beast-Sg kill.Pfv like.this]],
 'But a hippo isn't killed (in such a way) that you would say, "I will kill a beast like this."'
 [i.e., killing a hippo is completely different from killing any other large animal]

(03:00) M ì há sàbùlà-à wágà-là
 3Pl Ipfv hippo-Sg kill-Ipv
 [kí ['lògò-kírìsì-í-yèⁿ] [ŋ gí= [ì lágà-à]],
 [and [mouth-secret.word-Sg-Pl] [3Sg be.Loc [3ReflSg mouth-Sg]],
 'They kill a hippo with secret words, it is (=they are) in their mouth(s).'

(03:04) M [cùè-ní-í 'kā-yèŋ] gá= [á n̩],
 [knowledge-Sg a.certain-Pl] be.Loc [3Sg Loc],
 ì hó= [ó cùè-ní-ì-yèⁿ ná] 'tāā-nā [bí sàbùlà-à hárì],
 3Pl Ipfv [Dem.Def knowlege-Sg-Pl Foc] do-Ipfv [Seq hippo-Sg tie.Pfv],
 'There is (esoteric) knowledge in it. That knowledge [focus] is what they use to tie
 (=immobilize) the hippo.'
 [< cùè-ní-ì ká-yèŋ]

(03:10) M ní sàbùlà-à— ní= í há 'bē-lē [sàbùlà-á 'mà],
 (false start) if 3Pl Ipfv come-Ipfv [hippo-Sg Cust],
 sàbùlà-à hí= [ì 'nàṅà-à] céé-nì-nì [bí= í tònî],
 hippo-Sg Ipfv [3ReflSg eye-Sg] get.up-Caus-Ipfv [Seq 3Pl look.at.Pfv],
 ‘When they come up to the hippo, the hippo raises its eyes (out of the water) to look at them.’
 [< náná-á]

(03:14) M ná= á ṅí= [ì 'lágà-à] wáà
 if 3Sg Sbj/Obj [3ReflSg mouth-Sg] open.wide.Pfv
 [ñ dá 'hīnī [bí= í 'kùⁿ]],
 [3Sg IpfvNeg be.able [Seq 3Pl catch.Pfv]],
 ‘If it (=hippo) opens up its mouth (=jaws), it can’t catch them.’

(03:18) M ná= á 'hìnè-yà [bí mùṅ 'gūⁿ],
 if 3Sg be.able-Inch.Pfv [Seq Rel catch.Pfv],
 á há 'sè-lá= [á 'tògò]
 2Sg Ipfv go-Ipfv [3Sg find.Pfv]
 ‘If it manages to get ahold of whatever, you will go and find (that ...)’
 [híné-yá (§15.2.2.4); mùⁿ variant of relative mwò ; < kúⁿ ; relativization out of sequential VP (§14.2.4); relative introducing a nonspecific referent (§14.1.2)]

(03:21) M ṅ gá ['hòlì-ì rá] 'kū-nū,
 3Sg Ipfv [skiff-Sg Foc] catch-Ipfv,
 mais ò dá ['ṅìní-í 'tūmēṅ] 'kū-nū,
 but 3Sg IpfvNeg [person-Sg self] catch-Ipfv,
 ‘(... find that) the skiff [focus] is what it has got ahold of. It doesn’t (=can’t) get ahold of a person.’
 [tūméⁿ ‘self’ or ‘also’ here in semi-focalizing function (§8.5.2.1)]

(03:24) M ì hà gwérè-là= [á 'là],
 3Pl Ipfv come.next.to-Ipfv [3Sg Dat],
 ká-yèṅ gí= ì légé-lé [fáíⁿ-yá-nà-à fáà]
 a.certain-Pl Ipfv 3ReflSg pick.up-Ipfv [be.heroic-Inch-Abstr-Sg by]
 ‘They come right up beside it. Some (of them) work up heroic courage.’

(03:27) M mì= ì hí= ì tórí-lí [bí= ì yágà= [á fɛ̀ɛ]],
 until 3Pl Ipfv 3ReflSg jump-Ipfv [Seq 3ReflSg put.Pfv [3Sg on],
 á-wó-tá fɔ̀wòð, ì ʷwòð [bí ʷsɛ̀ŋ-ó ʷtāām] [bá= á húè],
 like horse, 3Pl do.then [Seq harpoon-Sg do.Pfv] [Seq 3Sg jab.Pfv],
 ‘To the point that they jump (onto it) and ride on it, as though it were a horse. Then they
 use the harpoon and spear it.’

[< mà ‘until’ (§15.5.3.2), cf. 3Sg mà ñ gí= ì tórí-lí and 1Pl má ñgì há ñgì ʷtórí-lí ;
 3ReflSg is optional with 3Pl subject as here, but the full form is mì= ì hí= ì-yèⁿ ʷtōrī-lī
 with 3ReflPl object]

(03:31) M ì há sɛ̀ŋ-ô— hɛ̀é ʷl̩-ʷl̩ [[sɛ̀ŋ-ò m̀wò] ʷlà]
 3Pl Ipfv harpoon-Sg— stick put.in-Ipfv [[harpoon-Sg Rel] Dat],
 [bó= ó ʷtāām] [bá= á húè],
 [Seq Dem.Def do.Pfv] [Seq 3Sg jab.Pfv],
 ‘The harpoon— (or rather) the harpoon (blade) onto which they put the wooden shaft, to
 use it (=harpoon) to spear it (=hippo),’

[relative on complement of postposition (§14.4.4)]

(03:35) M [sɛ̀ŋ-ó ʷmūnū-nōŋ-ò lámàá ʷrà] há ʷtāā-nā
 [harpoon-Sg nose-Dim-Sg only Foc] Ipfv be.done-Ipfv
 [bá= á húè], [ó ʷmūnū-nōŋ-ò] há ʷl̩-ʷl̩,
 [Seq 3Sg jab.Pfv], [Dem.Def nose-Dim-Sg] Ipfv enter-Ipfv,
 ‘Only the tip (=blade) of the harpoon is used to jab it. That one’s (=harpoon’s) tip goes
 in (=penetrates).’

(03:38) M ɲgàà [f̩iɛ̀ⁿ ʷrà] há= [á kìnáá ʷsālī-lī [bí ʷl̩ɔ̀],
 but [venom Foc] Ipfv [3Sg other] pull-Ipfv [Seq enter.Pfv],
 [kàmíná= á ɲí= ì húè kábàⁿ]
 [since 3Sg Sbj/Obj 3ReflSg jab.Pfv already]
 ‘But the poison diffuses into in the rest (of its body). Once it has already been speared,
 ...’

[< à kìnáá ‘its other (part)’; kàmìnì ‘since’ clause (§15.5.3.1); kábàⁿ (§19.3.3)]

(03:42) M sàbùlà-à hí= ì sárí-lí [bí f̩òð],
 hippo-Sg Ipfv 3ReflSg throw-Ipfv [Seq go.Pfv],
 ɲgàà sɛ̀ŋ-ó tá ʷhē-nē dɛ̀?,
 but harpoon-Sg IpfvNeg fall-Ipfv Emph,
 ‘The hippo hurtles to go away. But the harpoon doesn’t fall out, mind you.’

(03:45) M [à kòòⁿ [ɲà = à nî]] [séŋ-ó mwò] há = á 'kù-nù,
 [3Sg be.many [Link 3Sg Loc]] [harpoon-Sg Rel] Ipfv 3Sg catch.Pfv,
 [ʃiéⁿ 'rà] há = á sáli-lì [bí 'lɔ̃],
 [venom Foc] Ipfv 3Sg pull-Ipfv [Seq enter.Pfv],
 'Most of the time, (if there is) a harpoon that strikes it, it's the poison [focus] that pulls
 it (=harpoon) into it.'

(03:49) M [ʃiéⁿ 'rà] há = á sáli-lì [bí 'lɔ̃],
 [venom Foc] Ipfv 3Sg pull-Ipfv [Seq enter.Pfv],
 ósòò ó há 'lɔ̃-lɔ̃ [wóróⁿ-mùn-dóó nî]
 then Dem.Def Ipfv enter-Ipfv [place-Rel-place Loc]
 'It's the poison [focus] that pulls it into it. Then, in the place where it enters, ...'
*[compound wóróⁿ-mùn-dóó 'the place where' (§14.4.5), synonymous to regular
 relative wóróŋ-ó mwò]*

(03:52) M [ó 'sūnūŋ] gá 'fɔ̃ŋē-nē, bon yàà—
 [Dem.Def all] Ipfv rot-Ipfv, okay (false start)
 [séŋ gɛ̀nɛ̀ɛ̀ŋ] gá 'hīnī [bá = [á ká-yèŋ] wágà]
 [harpoon one] Ipfv be.able [Seq [3Sg a.certain-Pl] kill.Pfv],
 'All of that gets rotten (=poisoned). Well, a single harpoon can kill certain ones
 (=hippos)'.
[< kɛ̀nɛ̀ⁿ ; à ká-yèⁿ 'certain ones of it']

(03:56) M [séⁿ víénú] há 'kā-yèⁿ wágà-là
 [harpoon two] Ipfv a.certain-Pl kill-Ipfv
 [ká-yéⁿ vwòó] 'kēlē [má ['sɛ̀n zíyò]],
 [a.certain-Pl Poss] be.Cop [until [harpoon three]],
 'Two harpoons kill some others. The case of some others is (=requires) as many as three
 harpoons.'
*[< fíénú ; < fwòò ; < jíyò ; mà 'until' tone-drops following /H/-melodic nouns
 (§8.2.16, §15.5.3.2)]*

(03:59) M [ká-yéⁿ vwòó 'tūmēŋ] gá 'kōō-ŋā-nā [ó 'tè]
 [a.certain-Pl Poss also] Ipfv become.many-Ipfv [Dem.Def Dat]
 ósòò ì hà só-lò [séŋ-ó 'tūmēⁿ] májàmù,
 then 3Pl Ipfv go-Ipfv [harpoon-Sg also] sing.praises.of.Pfv,
 'The case of still others is (=requires) more (harpoons) than that. Then they go and sing
 praises of the harpoon.'
*[They praise the harpoon to give it magical powers, as a griot chants the praises of a
 noble; perfective VP after motion verb (§15.1.4)]*

(04:04) M ì hà jéémù-nù [séŋ-ó ʃéè], [kí ˈcùè-ní-ì tîˀ],
 3Pl Ipfv speak-Ipfv [harpoon-Sg on], [Inst knowledge under],
 [bí ˈsèŋ-ó ˈhōōˀ] [bí ˈsèŋ-ó ˈhōōˀ] [bí ˈsèŋ-ó ˈhōōˀ],
 [Seq harpoon-Sg call.Pfv] (repetitions)
 ‘They speak (praises) on the harpoon, with (esoteric) knowledge. They keep calling to the harpoon.’
[VP repeated to indicate continuous repetition; hóóˀ/hóó-nó ‘call’]

(04:10) M [séŋ-ó ˈrà] há ˈbē-lē [kí sàbùlà-à tîˀ],
 [harpoon-Sg Foc] Ipfv come-Ipfv [Inst hippo-Sg under],
 ŋgí ŋí= í hēè [[ˈkírì mwò] ʃéè],
 1Pl Sbj/Obj 3Pl see.Pfv [[manner Rel] on],
 ‘The harpoon [focus] is what will bring the hippo (onto the shore). The way we saw them (old-timers).’
[manner adverbial relative; < hēè [kírì mwò]; for relative manner adverbials with kírì mwò see §14.4.6]

(04:14) M [[à ká-yén ˈtūmēŋ] gá ˈwōˀ]
 [[3Sg a.certain-Pl also] be.Loc there.Def]
 [ó-yèˀ gá= á ˈsè-lè, sàbùlà-à,
 [Dem.Def-Pl Ipfv 3Sg say-Ipfv, hippo-Sg,
 ‘There are also some (people) there, those (people) say, the hippo, ...’

(04:17) M séŋ-ó táŋ [gí sàbùlà-à tîˀ] [má yògó-fàà],
 harpoon-Sg ascend.Pfv [Inst harpoon-Sg under] [until on.top].
 à bì ʃwá= [[á ˈŋèŋgù-ù] húrù wōˀ,
 3Sg Sbjn go.Pfv [[3Sg soul] cut.Pfv there.Def,
 ‘“(Hey) harpoon, bring the hippo up all the way to the shore, in order for it (=harpoon) to go and cut its life force (=kill it) there!”’
[séŋ-ó here is a quoted vocative; táˀ here is imperative; gí < kí ; < bì fòò ; < ŋèŋgù-ù]

(04:21) M sàbùlà-à há ˈtā-nā [má yògó-fàà], cùè-ní-ì nî,
 hippo Ipfv ascend-Ipfv [until on.top], knowledge-Sg Loc,
 ná= á ˈsò [cèèˀ yògó-fàà]
 if 3Sg go.Pfv [arrive.Pfv on.top]
 ‘The hippo goes up onto the shore, by esoteric knowledge. When it goes and arrives on the shore, ...’
[motion verb plus perfective VP (§15.1.4)]

- (04:27) M [à ká-yèŋ] gá 'sā-nā wôⁿ,
 [3Sg a.certain-Pl] Ipfv die-Ipfv there.Def,
 ŋgàà [à ká-yèŋ] gá gùlú-nù,
 but [3Sg a.certain-Pl] Ipfv do.long.time-Ipfv,
 'Some (hippos) die there (=on the shore). But some others last a long time.'
- (04:30) M [bá= á 'tōgō [ó-yèŋ tí 'sān dè?]],
 [Seq 3Sg find.Pfv [Dem.Def-Pl PfvNeg die.Pfv Emph]],
 ó-yèŋ gá ʃáákì-lì [bí 'fāriŋā [hádámá-léŋ-ò 'mà]],
 Dem.Def-Pl Ipfv return-Ipfv [Seq become.ferocious [Adam-child-Sg Cust]],
 'So it may be that those (hippos) don't die, mind you. Those become ferocious with humans.'
- (04:33) M ì há 'ŋā-yā-lā [hádámá-léŋ-ò] 'mà],
 3Pl Ipfv nasty-Inch-Ipfv [Adam-child-Sg] Cust],
 [bí hádámá-léŋ-ò 'bāāndā-nī 'mēē-tāāⁿ,
 [Seq Adam-child-Sg get.tired-Caus.Pfv greatly,
 'They become aggressive with humans, so they cause a lot of trouble for humans.'
- (04:37) M [[júú-kámú-ú 'sūnūⁿ nî] [ní= í ŋá ['ŋìní kónìⁿ]]—
 [[water-place-Sg all] Loc] [if 3Pl Sbj/Obj [person Top]]—
 [ní= í ŋà hádámá-léŋ-ò héè kábàⁿ,
 [if 3Pl Sbj/Obj Adam-child-Sg see.Pfv already,
 'In the whole watery zone, when they (see) a person [topic]—, when they have seen a human, ...'
[kónìⁿ topic marker in mid-clause]
- (04:40) M ì há= á 'sē-lē [í-yèŋ gá= á wágà-là],
 3Pl Ipfv 3Sg say-Ipfv [LogoPl Ipfv 3Sg kill-Ipfv],
 [ó 'wāātī-ī 'rò] [níní-í 'sūnūŋ] gá 'jùù yágà-là,
 [Dem.Def time-Sg Foc] [person-Sg all] Ipfv water leave-Ipfv,
 'They will say (=intend), "we will kill him/her." That time [focus] is when everybody leaves the water.'
[LogoPl subject]
- (04:45) M [ní [sàbúlà-à kónìⁿ] jógíŋ kábàⁿ]
 [if [hippo-Sg Top] be.wounded.Pfv already]
 [súnúŋ gá 'jùù yágà-là],
 [all Ipfv water leave-Ipfv],
 'If the hippo [topic] was previously wounded, everybody leaves the water.'
[< jógíⁿ ; súnúⁿ 'everybody' (§6.6.1.1), synonymous with níní-í 'sūnūⁿ in the preceding segment]

(04:48) M ósòdò jí-rèèŋ gá [sàbùl̀à-á ʼwòròŋ-ò] h́é-ìè
 then person-Pl Ipfv [hippo-Sg place-Sg] see-Ipfv
 [bá= á ʼtògò wòʼ],
 [Seq 3Sg leave.Pfv there.Def],
 ‘Then, the people will see the hippo’s place and (they will) leave it there.’

(04:52) M *bon* [sàbùl̀á-hùè-y-èèŋ gónìŋ] gá ʼtògò-lò [[sàbùl̀à-à ʼnòd] fáà],
 okay [hippo-jab-Agent-Pl Top] Ipfv stay-Ipfv [[hippo-Sg tracks] by],
 mì= ì ñà= à h́è [ā ʼsàʼ],
 until 3Pl Sbj/Obj 3Sg see.Pfv [3Sg die.Pfv],
 ‘Okay, the hippo spearers [topic] remain on the tracks of the hippo, until they see that it has died.’
 [*< nòd ; < má ì ñà ; invariant 3Sg à before h́è resumes ‘it has died’*]

(04:55) M ná= á ʼsàʼ, ì há= á ʼsē-lē [jí-rèéʼ ʼmà]
 if 3Sg die.Pfv, 3Pl Ipfv 3Sg say-Ipfv [person-Pl Cust]
 [ká ʼbyè], [sàbùl̀à-á ʼsāʼ],
 [Pl.Imprt come.Pfv], [hippo-Sg die.Pfv],
 ‘When it has died, they will tell the people, “(you-Pl) come! The hippo has died.”’
 [*quoted imperative*]

(04:58) M [è-rè máʼdò] há [m̀wò ʼmà]
 [3Pl-Indep need(n)] be.Loc [Rel Cust]
 [ì hó= ó ʼbāy-lā= [á nî]],
 [3Pl Ipfv Dem.Def remove-Ipfv [3Sg Loc]],
 ‘What they (=spearers) need, they remove that from it (=hippo).’
 [*è-rè 3Pl pronoun; máʼdò ‘need (of), interest (in)’; < báy-lí*]

(05:00) M jí-rèèŋ gá= [á ʼkìnáá] ʼlégē-lē,
 person-Pl Ipfv [3Sg other] pick.up-Ipfv,
 Ø ñá mwò h́è [sàbùl̀á-hùé-cògò-ò nî],
 1Sg Sbj/Obj Rel see.Pfv [hippo-jab-manner-Sg Loc],
 ‘The (other) people take the rest of it. What I have seen in the manner of hippo-spearings,’
 [*< ā kìnáà*]

(05:04) M ó ʼhālì ʼkū,
 Dem.Def be.Cop Dem,
 ó ʼhālì— [[séŋ-ó fwòd] ʼhùè-ní-ì],
 Dem.Def be— [[harpoon-Sg Poss] jab-VblN-Sg],
 ‘That (=what I have seen) is that. That is—spearing of (=with) a harpoon [topic].’
 [*fwòd as topicalizer (§19.1.2) here and in the following segment; hùè-ní-ì here as hùè-ní-ì with possessum tones*]

(05:06) M óð, ògàà [màrìfá-à mwò] 'byē,
 uh, but [rifle-Sg Rel] come.Pfv,
 Ø òó= [[ó 'tūmēⁿ] fwðð] héè,
 1Sg Sbj/Obj [[Dem.Def also] Poss] see.Pfv,
 'Uh, but the rifle that came, I have seen (hunting with) that too [topic].'

(05:09) M ì hó= ó 'tāā-nā [kí ['màrìfá-à mwò] tūⁿ],
 3Pl Ipfv Dem.Def do-Ipfv [Inst [rifle-Sg Rel] under],
 ó 'hāli kárbíní-í,
 Dem.Def be.Cop carbine-Sg,
 'The rifle with which they do it, that one is the carbine.'
 [*< màrìfá-à*]

(05:14) M ì hà kárbíní-í 'tāā-nā [bá= á húè]
 3Pl Ipfv carbine-Sg do-Ipfv [Seq 3Sg jab.Pfv]
 [bá= á 'kwàrì], [ò gá 'sā-nū],
 [Seq 3Sg hit.Pfv], [3Sg Ipfv die-Ipfv],
 'They use the carbine to jab it (=hippo), to shoot it (=rifle). It (=hippo) dies.'
 [*-nu Ipfv allomorph, optional with a verb ending in a nasalized vowel (§10.1.1.2)*]

(05:19) M Ø òá [sàbúlà-à húé-cógò-ò] héè,
 1Sg Sbj/Obj [hippo-Sg be.jabbed.VblN-manner-Sg] see.Pfv,
 [cógó mwò] ó 'hāli 'kū
 [manner Rel] Dem.Def be.Cop Dem
 'The hippo's harpooning method that I have seen, it is that.'
 [*can be repaired by relocating relative mwò to position after húé-cógò-ò*]

Kelenga 2021-06 Women’s catching, drying, smoking, and selling fish

recorded in Bamako; main speaker is Mba Aissata Tereta (I), female born circa 1970’s, interviewed by Ali Tereta (L)
duration 07:12

(00:03) L á ηά jéémù [mwò ʃéè],
2Sg Sbj/Obj speak.Pfv [Rel on],
ηγί ηά= á fáámú-yà mée-tááⁿ
1Pl Sbj/Obj 3Sg understand-Inch.Pfv greatly
‘What you-Sg have spoken about, we have understood it well.’
[refers to the preceding recording by I]

(00:08) L è→ sísaⁿ ηγί há bélá= à télé, ηόηό-ό, í kúnj
uh now 1Pl Ipfv Fut 2Sg ask.Pfv, fish-Sg, 2Pl Past
gá ‘ηòηò-bààrá-á ‘tāā-nā [[kírí mwò] ʃéè] [kí= [í ‘sùrò]],
Ipfv fish-work do-Ipfv [[manner Rel] on] [and [3Pl old]],
‘Uh, now we will ask you-Sg, (as for) fish, about the way you-Pl used to do fish work in the old days.’
[< há bélé ; kí= [í ‘sùrò] (§8.1.3.1)]

(00:16) L á-wó-tá ‘ηòηò-wùsú-ù, [à [kí [‘ηòηò gógí-nà-à]]],
like fish-smoke.VblN-Sg, [3Sg [and [fish dry(v)-Ppl-Sg]]],
í há= á gògí-nì-nì [[cógó mwò] ‘là],
2Pl Ipfv 3Sg dry-Caus-Ipfv [[manner Rel] Dat],
‘For example smoking fish, that along with dried fish. The way you-Pl dry it (=fish).’
[< ηόηό-wúsú-ú ; < ηόηό gógí-nà-à]

(00:21) L ná= á há ‘hīnī [bí ‘dòònīⁿ ʃéé [ηγì té] [ó nî]]
if 2Sg Ipfv be.able [Seq a.little say.Pfv] [1Pl Dat] [Dem.Def Loc]]
I Ø ηά= á bóy, bìsímílà báási ‘tè,
1Sg Sbj/Obj 3Sg hear.Pfv, please trouble it.is.not,
L: ‘If you-Sg could tell us a little about it.’
I: ‘I have heard it (=what you said). Please go ahead. It’s no trouble.’

(00:25) I [ó ‘tūmēn] tá ‘bāási, dúgò-ò-níí mwò ‘hēlē
[Dem.Def also] not.be.Cop trouble, yesterday Rel pass.Pfv
[bí ηγì tógó [[bóló-méé]-yà-à nî]], [ηγί ‘ηàηά-à] là-jēⁿ,
[Seq 1Pl find.Pfv [[children]-Abstr-Sg Loc]], [1Pl eye-Sg] open.Pfv,
‘That too is no trouble. Yesterday (=the old days) which has passed, to find us still in (our) childhood. Our eyes opened.’
[abstractive nominal -ya-a (§4.2.3.2)]

(00:30) I [bí [[ŋgí kàá-yèŋ] [kí [ŋgí màá-yèŋ]]] gɛ̀ɛ̀,
 [Seq [[1Pl father-Pl] [and [1Pl mother-Pl]]] see.Pfv,
 ì hà síkè-lè, [ŋgí túmɛ̀ŋ] gí= í héé-nè [bí síkè],
 3Pl Ipfv fish(v)-Ipfv, [1Pl also] Ipfv 3Pl help-Ipfv [Seq fish(v).Pfv],
 ‘And (we) saw our fathers and mothers. They fished, and we also helped them fish.’
 [gɛ̀ɛ̀ < héé ‘see’]

(00:36) I [ná ˈtūmɛ̀ˢ] ɲá [ˈjìn zégín] ˈtāˢ [ɲ gɛ̀nɛ̀ˢ],
 [1Sg self] Sbj/Obj [year eight] do.Pfv [1Sg one],
 ɲ gá síkè-lè,
 1Sg Ipfv fish(v)-Ipfv,
 ‘I myself spent eight years by myself, I was fishing.’
 [< ségíˢ ; kɛ̀nɛ̀ˢ ‘one’ = ‘alone’]

(00:39) I [múná-nà-á ˈtɛ̀] [kúnánà-á ˈtɛ̀] [háámúná-á ˈtɛ̀],
 [cold-Pfv-Sg it.is.not] [dry.season-Sg it.is.not] [rainy.season-Sg it.is.not],
 [ɲ [gí ˈɲí-rèèŋ]] gá jíè-lè [bí síkè]
 [1Sg [and person-Pl] Ipfv unite-Ipfv [Seq fish(v).Pfv]
 ‘Not (just) the cold season, not (just) the dry season, not (just) the rainy season (i.e. all year round). I and the people fished together.’
 [< kí, ɲí-rèèˢ]

(00:42) I ɲgí há sáákì-lì [bá= [á ˈɲòŋó-ó] ˈlɛ̀gɛ̀],
 1Pl Ipfv return-Ipfv [Seq [3Sg fish-Sg] pick.up.Pfv],
 [bí sá= [á ˈtòdò],
 [Seq go.Pfv [3Sg sell.Pfv],
 ‘We kept taking the fish from it (=work), and go and sell it (=fish).’
 [ʃáákì(-lì) plus sequential VP (§15.2.2.3); < bí só ‘to go and ...’ (§15.2.2.2)]

(00:45) I ó bá= á ˈtògò [híní-í há [ɲí-rèéˢ ˈmà]],
 Dem.Def Seq 3Sg find.Pfv [means-Sg be.Loc [person-Pl Cust]],
 ó bá= á ˈtògò [sííkè-è há ˈwɔ̀ˢ],
 Dem.Def Seq 3Sg find.Pfv [fish(v).VblN-Sg be.Loc there.Def],
 ‘It happened that the people had the means (=were well off). It happened that there was (good) fishing.’

(00:48) I ó̀ sísàˢ [á́lá kónìˢ] ɲí= ì tógó [[ì híní-í nî]
 uh now [God Top] Sbj/Obj 3ReflSg find.Pfv [[3ReflSg means-Sg] Loc]
 [ŋgí bágí [[ó ˈsííkè-è] nî]]
 [1Pl exit.Pfv [[Dem.Def fish(v).VblN-Sg] Loc]]
 ‘Uh, now God [topic] found Himself in His grace, we have gotten away from that fishing.’
 [i.e. God has willed that ...]

(00:51) I ó 'hālī [[bóló-méé]-yà-á 'bààrá-à],
 Dem.Def be.Cop [[young.person]-Abstr-Sg work(n)-Sg],
 ñgàà ñgí yágá-nàà báálúgù-ù,
 but 1Pl become-when mature.adult-Sg,
 'That is the work of youth. But as we have become adults,'
 [-nàà 'when/while' (§15.6), cf. verb yágà]

(00:53) I ní ñgì lóó ['júgù-ù nî],
 if 1Pl wear.Pfv [garment-Sg Loc],
 [ná 'tūmēŋ] [gí= [ñ góó-tígì-ì]] fódò
 [1Sg self] [and [1Sg house-owner-Sg]] go.Pfv
 [bí só séléŋgé—]
 [Seq go.Pfv S—]

'When we put on boubous (robes, i.e. got married), I myself and my husband went to Selingué (village)—

[< hóó-tígì-ì ; 'Selingué' is an error, corrected just below]

(00:58) I sààfúru láàyì, ábíjàⁿ, ñgí fódò
 oops!, A, 1Pl go.Pfv
 [bí só ['jīn zīyò] 'tāāⁿ wôⁿ],
 [Seq go.Pfv [year three] do.Pfv there.Def],

'Oh my goodness! (I mean) Abidjan. We went and spent three years there.'

[Abidjan, capital of Côte d'Ivoire; 'go' doubled in sequential VP (§15.2.2.2); < jíyò]

(01:01) I ñ gá síkè-lè, ñ gá 'bē-lē [kí 'nòŋò-ò tíⁿ],
 3Sg Ipfv fish(v)-Ipfv, 3Sg Ipfv come-Ipfv [Inst fish-Sg under],
 ñgá= á ['gúlù-ú 'sūnūn] 'tāā-nā [bí 'nòŋó-ó 'wūsū],
 1Pl Ipfv [night-Sg all] do-Ipfv [Seq fish-Sg smoke(v).Pfv],

'He fished. He brought the fish. We spent all night smoking the fish,'

[< nòŋó-ó ; ñgá= á < ñgí há ; < gúlù-ù]

(01:05) I [bá= á yágá [díbì-ì fèè],
 [Seq 3Sg put.Pfv [grill-Sg on],
 [ní ñgì ñá= á 'kàbì [bòlò 'mà],
 [if 1Pl Sbj/Obj 3Sg add.Pfv [Recip Cust],

'And (we) put it (=fish) on the grill. When we put it (all) together,'

[the fish are cooked slowly on an open grill; reciprocal with object as antecedent]

(01:08) I ń gá sáákì-li [bí ʃòò kɛ̀ɛ ábíjàⁿ],
 1Sg Ipfv return-Ipfv [Seq go.Pfv with.it A]
 bí sáákì [bí sá= [á ʔtòòrò] [ó nî]],
 Seq return.Pfv [Seq go.Pfv [3Sg sell.Pfv] [Dem.Def Loc]],
 ‘I returned with it to Abidjan, and (I) went back to sell it (=fish) in it (=Abidjan).’
 [kɛ̀ɛ contracted < ká= á tîⁿ ‘with it’; ‘go’ doubled in sequential VP as @ 00:58
 above]

(01:11) I Ø ńá [léⁿ víénú] kírè [bá= á ʔtògò
 1Sg Sbj/Obj [child two] get.Pfv [Seq 3Sg find.Pfv
 [ńgí há [[ó ʔábíjàⁿ] [ó nî]],
 [1Pl be.Loc [[Dem.Def A] [Dem.Def Loc]],
 ‘I bore two children (while) it happened that we were in that Abidjan.’
 [< fiénú ; demonstrative ó modifying place name; smooth out as [ó ábíjàⁿ] nî]

(01:14) I ʃò [ńgí bágí ábíjàⁿ],
 uh [1Pl exit.Pfv A]
 [[ó ʔrà] yágà [ká= [á ńáńánú-hónómónò-sóŋ-ò] ʔgòbò-ò],
 [[Dem.Def Foc] be.put.Pfv [Inst [3Sg woman-adult-old-Sg] illness-Sg],
 ‘Uh, we left Abidjan. That [focus] was due to the illness of his old woman (=mother).’
 [< kí ; < gòbò-ò with possessum tones]

(01:18) I [ó gòbò-nàá m̀wó ʔtāāⁿ]
 [Dem.Def get.sick-when Rel be.done.Pfv]
 ní= í ńá [ʔhìè-ná]-á ʔlɔ̃
 if 3Pl Sbj/Obj [message]-Sg give.Pfv,
 ‘With that one (=the old mother) having gotten sick, when they sent the message, ...’
 [gòbò-nàá (§15.6) < verb gòbò ‘get sick’; < híè-ná-á]

(01:19) I [bá= á ʔsèè [ó tá ʔkēēndē]],
 [Seq 3Sg say.Pfv [Dem.Def IpfvNeg be.healthy.Stat]],
 ósòò [ó kónìⁿ] yágà [ńgì déplacé-nà-à]
 then [Dem.Def Top] put.Pfv [1Pl move-Abstr-Sg]
 ‘... to say that that one (=mother) was not healthy (=was sick), then that [topic] caused
 our moving.’
 [ʃéé ‘say’; déplacé is H-toned here]

(01:21) I [ńgí báy ábíjàⁿ [bí ʔbē]]
 [1Pl exit.Pfv A [Seq come.Pfv]]
 ó sɛ̃ŋɛ̃ [[músá-kúŋ-ò] ʔmà],
 Dem.Def coincide.Pfv [[Moussa-catch.VblN-Sg] Cust],
 ‘We left Abidjan and came (back). That coincided with the arrest of Moussa.’
 [< músá-kúŋ-ò ; Mousse Traoré, head of state until his deposition]

(01:23) I kàmìní ηγì byé [ó nî],
 since 1Pl come.Pfv [Dem.Def Loc],
 [ó [kí 'sìsáⁿ]] nàηáà, ηγί tí [sííkè-è kón] 'dāāⁿ,
 [Dem.Def [and now]] between, 1Pl PfvNeg [fish.VblN-Sg Top] do.Pfv,
 'Ever since we came in that (situation), between that (time) and now, we haven't done
 any fishing [topic].'
 [< sísàⁿ ; < kónì tááⁿ]

(01:28) I ηγàà [[ná kónìⁿ] 'bààrà-á] 'hēlē 'ηòηò-hùbùn-dóórò-ó,
 but [[1Sg Top] work(n)] be fish-fresh-sell.VblN-Sg,
 ó 'hālī hááⁿ-yà-à, ó 'hālī [ñ zíí-yà-à],
 Dem.Def be.Cop Bozo-Abstr-Sg, Dem.Def be.Cop [1Sg race-Abstr-Sg],
 'But my [topic] work is selling fresh fish. That is (the work of) Bozo ethnicity. That is
 (the work of) my ethnicity.'
 [*cf.* ηόηό húbún-ó 'fresh fish'; < tóóró ; < síí-yà-à]

(01:32) I η γά 'sō-lō ['ηòηó-ó 'lēgē [súgúnīη-gúràà nî]],
 1Sg Ipfv go-Ipfv [fish-Sg pick.up.Pfv [new.market Loc]],
 η γά 'sō-lō [bí sá= [á 'tòòrò]] [[*huit heures*] nî],
 1Sg Ipfv go-Ipfv [Seq go.Pfv [3Sg sell.Pfv]] [[eight hours] Loc],
 'I go and get fish at the Suguni Kura (market). (Then) I go and sell it (at a smaller market)
 at 8:00 AM.'
 [< ηόηó-ó ; < bí 'sō 'go (and VP)'; súgúnīη-gúràà < Bambara "new market," a large
 wholesale market in Bamako; 'go' doubled in sequential VP (§15.2.2.2)]

(01:35) I ηγί há= [á hùbún-ò] 'tōōrō-lō,
 1Pl Ipfv [3Sg fresh-Sg] sell-Ipfv,
 ηγί há= [á gògí-nàá] 'tōōrō-lō,
 1Pl Ipfv [3Sg dry(v)-when] sell-Ipfv,
 'We sell it fresh. We sell it dried.'
 [< ā hùbún-ò ; < gògí-nàà (§15.6)]

(01:39) I ηγί há= [á nàηáá kù] 'tōōrō-lō,
 1Pl Ipfv [3Sg thing Dem] sell-Ipfv,
 óò, ní ηγì sá= [á 'tòòrò]
 uh, if 1Pl go.Pfv [3Sg sell.Pfv]
 'We sell its whatchamacallit. Well, when we go and sell it,'
 [*'thing' as 'whatchamacallit' word; < só à tóóró*]

(01:42) I [ná= á fàrì], [ó 'rà-ní] [ní ñ dì fàrì]
 [if 3Sg finish.Pfv], [Dem.Def it.is] [if 3Sg PfvNeg finish.Pfv]
 ηγί há= á 'lò-lò [fírgó-ò nî]
 1Pl Ipfv 3Sg put.in-Ipfv [fridge-Sg Loc]
 'If it has finished (=all has been sold), that's it. If it has not finished, we put it in a fridge.'
 [*< ní ñ tì (equivalent to ná= á tì); unsold fish is stored in an old refrigerator (French frigo) along with some ice*]

(01:44) I [bí 'glāāsì-í 'kālā= [à]éè]], [fájírì-ì fàà]
 [Seq ice-Sg shatter.Pfv [3Sg on]], [dawn-Sg by]
 ηγά= á sáákì-lì [bí céè] [bí sóò [báará-á 'là]],
 1Pl Ipfv return-Ipfv [Seq get.up.Pfv] [Seq go.Pfv [work(n)-Sg Dat]],
 'And (we) break up some ice over it (=fish). At dawn we again get up and go to work.'
 [*< glāāsì-ì 'ice' (French glace); < ηγί há]*]

(01:47) I jírì 'hēlē [ñ [jín táⁿ-víné]], [à [kí 'fìènú]]
 this.year be [1Sg [year ten-two]], [3Sg [and two]]
 [[ó 'bààrà-à] nî],
 [[Dem.Def work(n)-Sg] Loc],
 'This year is my twenty years, plus two (years), in that work, every day, at 4:00 AM.'
 [*< jírì hélé]*]

(01:50) I [táá wóó 'tāā] [quatre heures-lí 'sāṅà-à] í gá céé-lè,
 [day and day] [four hours-at time-Sg] 1Sg Ipfv get.up-Ipfv,
 [bí só= [[ó 'ṅòṅò húbúṅ-ḍ] 'lēgē]]
 [Seq go.Pfv [[Dem.Def fish fresh-Sg] pick.up.Pfv]]
 [bí bó= [ó 'tōōrō]],
 [Seq come.Pfv [Dem.Def sell.Pfv]],
 'Every day at 4:00 AM I get up, and go pick up that fresh fish and come and sell that.'
 [*X wóó X (§7.1.2.2); a syllable -lí is added to heures in time-of-day expressions;*
< ṅóṅò húbúṅ-ḍ]]

(01:54) I bàrì [ó 'hālì hááⁿ-yà-à]
 because [Dem.Def be.Cop Bozo-Abstr-Sg]
 [ó 'hālì [ñ zí-yà-à]]
 [Dem.Def be.Cop [1Sg race-Abstr-Sg]]
 'Because that is (the work of) Bozo ethnicity. That is (the work of) my ethnicity.'
 [*< ñ sí-yà-à]*]

(01:56) I [ń gónìn] dó= ó yágà,
 [1Sg Top] PfvNeg Dem.Def leave.Pfv,
 ńgàà ń vógò [[nùṅù-húlò-ó mwò] nî]
 but 1Sg sit.Pfv [[village-big-Sg Rel] Loc]
 ‘I [topic] haven’t abandoned that. But the big city that I have settled in, ...’
 [< tí ó yágà ; < fógò ; nùṅù-húlò-ò ‘city, big village’]

(01:57) I ó tá= á ‘tògò
 Dem.Def PfvNeg 3Sg find.Pfv
 [Ø ńá [n zí-yà-à] yágà dè?],
 [1Sg Sbj/Obj [1Sg race-Abstr-Sg] leave.Pfv Emph,
 ‘It (=city) hasn’t happen to have made me abandon my ethnicity.’

(02:00) L ńńń-ń— ńńń-ń há ‘wūsū-lū díbì-ì— [[díbì-í mwò] ní],
 (hesitation) fish-Sg Ipfv be.smoked-Ipfv (hesit.) [[grill(n)-Sg Rel] Loc],
 [ó ‘díbì-ì] há múńé-ń-ń [[kírí mwò] ńé],
 [Dem.Def grill(n)-Sg] Ipfv be.well.made-Caus-Ipfv [[manner Rel] on],
 ‘Fish—. The grill on which the fish are smoked (=slow-roasted), the way that grill is made, ...’
 [< kírí mwò, §14.4.6; causative múńé-ń(-ń) ‘make, manufacture’ is transitive in the following segment, but intransitivized (mediopassive) here]

(02:07) L í há= á múńé-ń-ń kírí— [[kírí ‘dūmèⁿ] ńé]
 2Pl Ipfv 3Sg be.well.made-Caus-Ipfv (hesitation) [[manner which?] on]
 I [ńńń-ń há ‘wūsū-lū [[díbì-í mwò] nî],
 [fish-Sg Ipfv be.smoked-Ipfv [[grill(n)-Sg Rel] Loc],
 L: ‘In what way do you-Pl make it?’
 I: ‘The grill on which the fish are smoked, ...’
 [< kírì-ì ; ‘which?’ (§13.2.2.8)]

(02:11) I ó ‘hālì ‘mèṅù-ù,
 Dem.Def be.Cop iron-Sg,
 ńgè-rè tó= ó múńé-ń-ń,
 1Pl-Indep IpfvNeg Dem.Def be.well.made-Caus-Ipfv,
 [ó ‘mūńē-ń-y-éèṅ] gí= [ì lámáá-nà],
 [Dem.Def be.well.made-Caus-Agent-Pl be [3ReflSg apart-Ppl],
 ‘That is metal. We (ourselves) don’t make that. The makers are separate.’
 [< mēṅù-ù ; agentive múńé-ń-y-à-à ‘maker, manufacturer’, plural múńé-ń-y-éèⁿ (as here) or múńé-ń-y-à-á-yèⁿ (§4.2.2.1); < há ì]

(02:16) I [ŋgí kónìŋ] gá= á sá-nù,
 [1Pl Top] Ipfv 3Sg buy-Ipfv,
 [bí [ŋgì máʃðð] múŋé-nì [ká= á tîⁿ],
 [Seq [1Pl need(n)] be.well.made-Caus.Pfv [Inst 3Sg under],
 ‘We [topic] buy it (=grill), and (we) make our needs (=our living) with it,’
 /< kí á tîⁿ/

(02:19) I [bí ʔnðŋð-ð yágà] [ŋà= à ʃéè],
 [Seq fish-Sg put.Pfv] [Link 3Sg on],
 [ó ʔnðŋð-wùsù-ú ʔtūmēⁿ]
 [Dem.Def fish-smoke(v).VblN-Sg also]
 ‘... and (we) put the fish on it. As far as smoking fish is concerned,’
 [linker between verb and vocalic pronominal (§8.4); < ʔnðŋð-wùsù-ú]

(02:21) I ná= à há= á tóò rá dèʔ,
 if 2Sg Ipfv 3Sg know.Stat Foc Emph,
 ɣ gá ʔnðŋð-ð héé-lè ɲjèè [bá= á ʔwùsù]
 1Sg Ipfv fish-Sg see-Ipfv like.this [Seq 3Sg smoke(v).Pfv],
 ‘If you-Sg know it (well), mind you. (Suppose) I (just) see the fish like this (as an outsider) and (I) (try to) smoke it.’
 [ɲjèè variant of ɲiè ~ ɲèè ‘like this’ (§4.4.3.2)]

(02:24) I ɲónɔ́-báará-á tá-lí ó, mà= à bì bé ʔtōgō
 fish-work(n)-Sg not.be.Cop Dem.Def, must 3Sg Sbjn come.Pfv find.Pfv
 [á céé [à ní ʔrò]] [á há= [á ʔnàŋà-à] tóò],
 [2Sg get.up.Pfv [3Sg Loc Foc]] [2Sg Ipfv [3Sg eye-Sg] know.Stat],
 ‘That isn’t (real) fish work. It must happen to be the case that you-Sg were brought up in it [focus], (and) you-Sg can see into it (=have experience with it).’
 [mà ‘must’ with subjunctive clause (§17.3.10); < cèè ; ɲánjá-á ‘eye’ (of a thing) in roughly the sense ‘window into’, i.e. understanding of]

(02:28) I [[ŋgí kónìⁿ] ʔnàŋá-á] là-jêⁿ
 [[1Pl Top] eye-Sg open.Pfv
 [bí ʔnðŋð-ð héè [[kírí mwò] ʃéè] [díbì-ì ʃéè],
 [Seq fish-Sg see.Pfv [[manner Rel] on] [grill(n)-Sg on],
 ‘The way our eyes opened (in childhood) and we saw fish on the grill.’

(02:31) I [hàlì sísàⁿ-sísàⁿ] ná= à ɲá= á ʔnòð
 [even now] if 2Sg Sbj/Obj 3Sg give.me.Pfv
 [ɣ gá ʔhīnī [bá= á ʔwùsù],
 [1Sg Ipfv be.able [Seq 3Sg smoke(v).Pfv],
 ‘Even right now, if you-Sg give it (=fish) to me, I can smoke it.’
 [nóó ‘give to me’ (§9.3.2)]

(02:33) I ń gá= [á hùbún-ò] tóò [[kírí mwò] fèè]
 1Sg Ipfv [3Sg fresh-Sg] know.Stat [[manner Rel] on]
 [ń gá= [á wùsù-ná-á ‘tūmēn] tóò nǰèè-néŋ-gù]
 [1Sg Ipfv [3Sg smoke(v)-Ppl-Sg also] know.Stat like.this-Dim-Dem]
 ‘(Like) the way I know fresh (fish), I know smoked (fish) every bit as well.’
 [adjectives with 3Sg “possessor” (§6.1.2); nǰèè-néŋ-gù (§4.4.3.2)]

(02:36) I ńgàà ñ gà yágà-là [[mèñú-ú mwò] fèè]
 but 3Sg Ipfv be.put-Ipfv [[iron-Sg Rel] on]
 [ńíní kínáá-yèⁿ ná] hó= ó ‘mūŋē-nì-nì,
 [person other-Pl Foc] Ipfv Dem.Def be.well.made-Caus-Ipfv,
 ‘But the metal on which it (=fish) is put, other people [focus] (not Bozo) make it.’

(02:38) I ńgè-rè há= á sá-nù [ó-yéŋ kírì],
 1Pl-Indep Ipfv 3Sg buy-Ipfv [Dem.Def-Pl Poss],
 ńgí wóó [bí ‘kīlā] [bí bá= [á mārà] [ŋgì fáà]],
 1Pl do.then [Seq finish.Pfv] [Seq come.Pfv [3Sg keep.Pfv] [1Pl by]],
 ‘We buy it from those (people), then afterwards we proceed to keep it with us.’
 [< ó-yèⁿ; possessive postposition kírì (§11.5.1.1); wóó ‘do then’; bí ‘kīlā’ (§15.2.11);
 bí bé ‘and come and’ (§15.2.2.2)]

(02:42) I ósòò [ńónón-ó kónì] yágà-à [bá= á gùlénì]
 then [fish-Sg Top] put.VblN-Sg [Seq 3Sg flip.Pfv]
 [bá= á múŋé-nì], bá= á yágà ‘ńòŋó-ò,
 [Seq 3Sg be.well.made-Caus], Seq 3Sg transform.Pfv fish-Pfv
 ‘Then putting the fish [topic] and flipping it and cooking it well, to turn it into fish.’
 [i.e. to turn it into marketable smoked fish; postverbal NP (theme)]

(02:46) I [ó kónìⁿ] ń gá ‘hīnī [bó= [ó kónìn] tāāⁿ],
 [Dem.Def Top] 1Sg Ipfv be.able [Seq [Dem.Def Top] do.Pfv],
 [hàlì wéè] [ń gáálè-è] tí ‘bāgō= [ó ‘tòò],
 [even today] [1Sg mind-Sg] PfvNeg exit.Pfv [Dem.Def about],
 ‘As for that, I can (still) do that [topic]. Even today, I have not forgotten it.’
 [< kónìⁿ; < bágí; ‘forget (about) X’ with postposition tóó (§8.2.15.2)]

(02:49) I [ń vógò [nùŋù-húlò-ò nī] [ó ‘hālī tónón-ò]
 [1Sg sit.Pfv [village-big-Sg Loc] [Dem.Def be.Cop truth-Sg]
 ńgàà [hàlì ‘bilèⁿ] ń gá [[ń káá-síi-yà-á ‘rà] nī],
 but [even now] 1Sg be.Loc [[1Sg father-race-Abstr-Sg Foc] Loc]
 ‘I settled in a big city. That is the truth. But even at present I am (still) in my father’s
 ethnicity.’
 [< fógò; hàlì ‘bilèⁿ (§19.3.1.3); kàà ‘father’]

(02:53) I í gá [[síkè-è rá] 'là],
 1Sg be.Loc [fish(v).VblN-Sg Foc] Dat],
 L ó há 'tāā-nā [[kírí mwò]]éè]
 Dem.Def Ipfv be.done-Ipfv [[manner Rel] on]
 I: 'Fishing [focus] is what I am (involved) in.'
 L: 'The way that is done, ...'

(02:56) L á há 'hīnī [bí, ká-yéⁿ 'nàṅà-]éé [ó nū]]
 2Sg Ipfv be.able [Seq, a.certain-Pl eye-say.Pfv [Dem.Def Loc]]
 I díbì-ì wā
 grill-Sg Q
 L: 'Can you-Sg explain something about that?'
 I: '(About) the grill?'

[sequential bí is often fused prosodically to preceding hīnī, followed by a pause]

(02:59) L áhòò, [nóṅó-ó 'tūmēⁿ] há 'wūsū-lū [cógó mwò]
 yes, [fish-Sg also] Ipfv be.smoked-Ipfv [manner Rel]
 I [nóṅó-ó há 'wūsū-lū [[kírí mwò]]éè]
 [fish-Sg Ipfv be.smoked-Ipfv [[manner Rel] on]
 L: 'Yes. The way fish are smoked also.'
 I: 'The way in which fish are smoked?'

[The narrator uses the native term kírì-ì 'manner' while the younger interviewer uses the Bambara loan cógó-ó]

(03:02) I ṅgá = á 'nòṅò-ò húùrù-lù, ní ṅgì ṅá = á húùrù,
 1Pl Ipfv fish-Sg roll.up-Ipfv, if 1Pl Sbj/Obj 3Sg roll.up.Pfv,
 [bá = á 'nìnì] [bá = á 'hòò-nà-nì],
 [Seq 3Sg wash.Pfv] [Seq 3Sg white-Inch-Caus.Pfv],
 'We roll up the fish. When we have rolled it up, we wash it and clean it.'

[< ṅgì há ; the rolling up of the fish (see below) occurs after the washing, one could emend to imperfective or future 'when we are going to roll it up']

(03:05) I ṅgí wáá 'kīlā [bá = á húùrù],
 1Pl do.then finish.Pfv [Seq 3Sg roll.up.Pfv],
 [bá = á yágà-yágà [díbì-ì]éè]],
 [Seq 3Sg Rdp-put.Pfv [grill-Sg on]],

'Then we proceed to roll it up, and put it here and there on the grill.'

[wáá (§15.2.13); the iteration of 'put' suggests repetition and/or spatial distribution; rolling up is done with mid-sized catfish (Clarias, Clarotes, Chrysichthys), smaller fish are cooked flat]

(03:08) I ηǵí wáá [bá = á yágà [tùbà-à ʃéè]],
 1Pl do.then [Seq 3Sg put.Pfv [fire-Sg on]],
 ní ηǵì ηá = á yágà [tùbà-à ʃéè],
 if 1Pl Sbj/Obj 3Sg put.Pfv [fire-Sg on]
 ‘Then we put it (grill with fish) on the fire. When we have put it on the fire,’
[firewood is in place but the fire has not yet been lit (see below)]

(03:10) I ηǵá = á †túbà-á †lō-lā = [à tîⁿ],
 1Pl Ipfv fire-Sg put.in-Ipfv [3Sg under],
 [à tùbá-á] †tè [á-wó-tá †hūū-sōlō-túbà-á] dè?
 [3Sg fire-Sg] it.is.not [like meal-cook-fire-Sg] Emph,
 ‘We put fire in under it (=grill with fish). It isn’t its fire, like (a fire) for cooking a meal,
 mind you.’
*[for example, some straw can be lit and inserted as kindling to spread fire to the wood;
 < ηǵí há ; < ló-ló ; an assistant suggests emending to [ā tùbá-á] tà yágà-là á-wó-tá ... ;
 ‘meal-cook-fire’ (function-specifying compound, §5.1.7.4)]*

(03:13) I á há [†túbà-á †rà] yágà-là dóónín-dóóníⁿ,
 2Sg Ipfv [fire-Sg Foc] put-Ipfv slowly,
 [ná = à [lá-gùlè]-yà [á †mà] bé]
 [if 2Sg [be.fast]-Inch.Pfv [3Sg Cust] if]
 ‘He/She puts in fire(wood) [focus] slowly. If you-Sg are (too) fast with it,’
*[< tùbà-à ; bé is a right-edge marker for conditional antecedents, with mildly
 admonitive function (§16.1.1.3)]*

(03:16) I [ǵ] ǵí = ì bwé-né],
 [3Sg Ipfv 3ReflSg ruin-Ipfv],
 á ηá = á bóȳ,
 2Sg Sbj/Obj 3Sg hear.Pfv,
 ‘It will be ruined. Did you-Sg hear it?’
[uptake check, §19.5.1]

(03:19) I [ná = à [lá-gùlè]-yà [á †mà] bé]
 [if 2Sg [be.fast]-Inch.Pfv [3Sg Cust] if]
 [ǵ] ǵí = ì bwé-né],
 [3Sg Ipfv 3ReflSg ruin-Ipfv],
 ‘If you-Sg are (too) fast with it, it will be ruined.’

(03:20) I bá-sàà [ná= à ɲá= á yágà [díbì-ì]éè]]
 because [if 2Sg Sbj/Obj 3Sg put.Pfv [grill-Sg on]]
 [ná= á ɲá ʔkā-nēn ʔdāāⁿ],
 [if 3Sg Sbj/Obj a.little do.Pfv],
 ‘Because when you have put it on the grill, (and) when it (=fish) has done a little while (there),’
 [bá-sàà (variant of bári-sàà) ‘because’ (§15.5.1); ká-nēⁿ ‘a little’ (§6.4.4); double conditional antecedent]

(03:22) I á há ʔbē-lē [bí bá= á gùlénì-gùlénì]
 2Sg Ipfv come-Ipfv [Seq come.Pfv 3Sg Rdp-flip.Pfv]
 [ná= à ɲá= á gùlénì]
 [if 2Sg Sbj/Obj 3Sg flip.Pfv]
 ‘You-Sg will come to turn it (=fish) over. When you have turned it over, ...’
 [‘come’ doubled in sequential VP (§15.2.2.2)]

(03:24) I á há sáákì-lì
 2Sg Ipfv return-Ipfv
 [bí [ʔtúbà-à ká] ʔlwā= [á tîn] kúⁿ,
 [Seq [fire-Sg a.certain] put.in.Pfv [3Sg under] again’
 á há ʔhīnī [bí [[ʔēēri síyò] [kí [ʔēēri náánà]]] ʔtāāⁿ,
 2Sg Ipfv be.able [Seq [[hour three] [and [hour four]]] do.Pfv],
 ‘You-Sg will return and put some more fire(wood) under it. You can take three or four hours.’
 [< túbá-á ʔkā ; < lóó [à tînⁿ] kúⁿ ; kí ‘and’ between ends of a range (‘three or four’);
 éēri < French heure]

(03:27) I á hó= [[ó ʔbààrá-á] ʔnà],
 2Sg be.Loc [[Dem.Def work(n)-Sg] Dat],
 pérésé-é tá= [á nî],
 hurry-Sg not.be.Loc [3Sg Loc],
 ‘(while) you-Sg are at that work. There is no rushing in it.’
 [< French pressé]

(03:29) I á há ʔsō-lō dóónín-dóóníⁿ [bí ʔsō dóónín-dóóníⁿ]
 2Sg Ipfv go-Ipfv Rdp-slowly [Seq go.Pfv Rdp-slowly]
 [ná= à kílá [ó ʔlà] [sánjá mwò]
 [if 2Sg finish.Pfv [Dem.Def Dat] [time Rel]
 ‘You-Sg will go slowly, and go slowly. When you-Sg have finished with that,’
 [ʔsō-lō, §10.1.2.2; sánjá mwò ‘when’ combined with ní ‘if/when’, cf. sánjá-á ‘time’]

(03:33) I ná= á yágà [à gáálè-é] 'là
 if 3Sg be.put.Pfv [2Sg mind-Sg] Dat
 ósòò á há= á gùlénì-nì [kí 'mèṅù-ù]éè],
 then 2Sg Ipfv 3Sg flip-Ipfv [Inst iron-Sg on],
 'If it suits you (=when the fish is done cooking), then you will flip it (=fish) along with
 the grill.'
 [*< mèṅù-ù ; the grill with the fish on it is lifted off the fire and flipped over to dump
 the fish into the container; kí combined with a spatial postposition, §8.1.3.1*]

(03:36) I [bá= á yágà [mìnéṅ-ò nî]],
 [Seq 3Sg put.Pfv [gear-Sg Loc]]
 L [ṅóṅ-ó 'tūmēⁿ], wúsú-ná-á hóòrè, ṅóṅ gógí-nà-à,
 [fish-Sg also], smoke(v)-Ppl-Sg behind, fish dry-Ppl,
 I: 'To put it into a container.'
 L: The fish itself, after (=in addition to) smoked, (there's) dried fish.'
 [*participle of verb gògí 'dry'*]

(03:42) L [ó 'bààrá-á] sèém [bí 'tāāⁿ]
 [Dem.Def work(n)] be.proper [Seq be.done.Pfv]
 cógó— [[kírí mwò]]éè],
 manner— [[manner Rel] on],
 'The way that work should be done.'
 [*sèémⁿ 'be proper, appropriate, right', §15.2.9*]

(03:44) I èè háyà
 uh all.right
 L ná= à 'hīnī [bí ká 'fēē]
 if 2Sg be.able [Seq a.certain say.Pfv]
 I: 'All right.'
 L: 'If you-Sg can say something (about it).'

(03:46) I ń gá 'hīnī [bí ká 'fēē] [[ó 'tūmēⁿ] nî],
 1Sg Ipfv be.able [Seq a.certain say.Pfv] [[Dem.Def also] Loc],
 bàrì ń jéè [[ó 'tūmēⁿ] nî],
 because 1Sg get.up.Pfv [[Dem.Def also] Loc],
 'I can say something about that too, because I grew up in that too.'
 [*< ń cèè*]

(03:49) I Ø ɲá [ɲ gwì] ʔtāāⁿ [[ó ʔtūmēⁿ] nî],
 1Sg Sbj/Obj [1Sg life] do.Pfv [[Dem.Def also] Loc],
 [Ø ɲá [ʔjìⁿ zéǵíⁿ] ʔtāāⁿ]
 [1Sg Sbj/Obj [year eight] do.Pfv]
 [ɲ ǵó = [[[ó ʔtūmēm] ʔbààrà-à] nî],
 [1Sg be.Loc [[[Dem.Def also] work] Loc],
 ‘I have spent my lifetime in that too. I spent (around) eight years in that work.’
 /< gwì ; < jìⁿ ; < séǵíⁿ/

(03:52) I [bí ʔbē céèⁿ [[ʔjìn dām] ʔmà]
 [Seq come.Pfv arrive.Pfv [[year ten] Cust],
 [bí ʔbē céèⁿ [[ʔjìn dáj] [ǵí ʔkǒlǒhò]] ʔmà]
 [Seq come.Pfv arrive.Pfv [year ten] [and five]] Cust],
 ‘(Or) it amounted to ten years, (or) it amounted to fifteen years.
 /< jín táⁿ ; ǵí not audible on recording but understood; ‘and come (and) arrive’ = ‘be as much as, add up to, amount to’; kǒlǒhò ‘5’/

(03:55) I [ɲǒǵǒ fǒǵé-ná-á] hùbúǵ-ð, éè, kǒlǒ-ó,
 [fish rot-Ppl-Sg] fresh-Sg, uh, split.belly.VblN-Sg,
 [à [kí [ʔɲǒǵǒ hùbúǵ-ð]] ʔkǒlǒ-ò],
 [3Sg [and [fish fresh-Sg]] split.belly.VblN-Sg],
 ‘Splitting the bellies of rotten fish—fresh. It and splitting bellies of fresh fish.’
 [emend to [ɲǒǵǒ fǒǵé-ná-á ʔkǒlǒ-ò] kí [ʔɲǒǵǒ hùbúǵ-ð ʔkǒlǒ-ò] ‘splitting rotten fish and splitting fresh fish’; fish for drying can be split open when fresh, or killed fish can be left to “rot” (i.e. soften) in water for a day before splitting]

(04:00) I ɲ ǵá ʔhīnī [bí ká ʔjēē] [[ó ʔsūnūⁿ] nî],
 1Sg Ipvf be.able [Seq a.certain say.Pfv] [[Dem.Def all] Loc],
 sísàⁿ ná = à byé [kí ʔɲǒǵǒ-ð tīⁿ],
 now if 2Sg come.Pfv [Inst fish-Sg under],
 ‘I can say something about all that. Now when you-Sg have brought fish,’

(04:03) I ná = à há [á fáà],
 if 2Sg be.Loc [3Sg by],
 [bí— bí mǔⁿ ʔvēē [kòó ʔlà]],
 [Seq— Seq Rel lay.out.Pfv [sun Dat]],
 ‘If you want to lay something out (to dry) in the sun,’
 /‘want’ construction (§15.2.3); relative clause introducing nonspecific referent;
 < fēé ; < kòò ~ kùò/

- (04:06) I á hó = ó 'sē-lē [mìnēŋ-ð nìŋû],
 2Sg Ipfv Dem.Def put-Ipfv [gear-Sg inside],
 [bó = ó yágà] [bí 'sāgā],
 [Seq Dem.Def leave.Pfv] [Seq spend.night.Pfv],
 'You-Sg will put that in a container and leave that (to soak) overnight.'
[this is to let the fish "rot" (soften by fermenting) in water before drying in sun]
- (04:09) I [nó = ó 'sāgā] [jíní 'kēlē [sájá mwò]],
 [if Dem.Def spend.night.Pfv] [day break.Pfv [time Rel]],
 ó hà bìlá = [á 'tògò]
 Dem.Def Ipfv Fut [3Sg find.Pfv]
 'When that has spent the night (soaking), when day breaks, that (time) will find (it) ...'
[jɪⁿ 'gēlē ~ jíní 'kēlē 'day has broken' (§11.1.1.2)]
- (04:11) I [ó tūŋ-ð] fóróhíⁿ-yà dóóníⁿ,
 [Dem.Def body-Sg] soft-Inch.Pfv a.little,
 [nó = [ó tūŋ-ð] fóróhíⁿ-yà]
 [if [Dem.Def body-Sg] soft-Inch.Pfv]
 '... that one's (=fish's) body has softened a little. (When) that one's body has softened,
 ...'
[< tūŋ-ð]]
- (04:14) I [á hó = ó 'mūŋē-nì-nì],
 [2Sg Ipfv Dem.Def be.well.made-Caus-Ipfv],
 á wáá 'kīlā [bó = ó 'fēē [díbì-ì jéè]],
 2Sg do.then finish.Pfv [Seq Dem.Def lay.out [grill-Sg on]],
 'You-Sg will prepare it (split the bellies). Then you proceed to spread it out on a grill.'
- (04:18) I [bó = ó 'fēē [súgú-ú jéè]],
 [Seq Dem.Def lay.out [grass-Sg on]],
 ó 'hālī ['nòŋò wúsú-ná-à]— é [nóŋó fēŋé-ná-á],
 Dem.Def be.Cop [fish smoke-Ppl-Sg]— oh! [fish rot-Ppl-Sg],
 '(Or) spread it out on some straw. That is smoked fish—, I mean rotten (=fermented) fish.'
[< nóŋó wúsú-ná-á (see below)]
- (04:22) I [[nóŋó wúsú-ná-á kónìⁿ] vòò, ó 'hēlē—
 [[fish smoke-Ppl-Sg Top] Poss, Dem.Def be—
 [ó hùbúⁿ-hùbúŋ-ð, rá] há yágà-là ['túbà-à jéè],
 [Dem.Def Rdp-fresh-Sg, Foc] Ipfv be.put-Ipfv [fire-Sg on],
 'Smoked fish for its part is that. That one is— That one's freshes ones [focus] are put on the fire.'
[< kónìⁿ f(w)òò ; superlative 'freshes', §12.1.4]

(04:25) I ńgàà [ná= á ʼfɛ̀ŋɛ̀] [̀n dá ʼhĩnĩ [bí ʼwũsũ]],
 but [if 3Sg rot.Pfv] [3Sg IpfvNeg be.able [Seq be.smoked.Pfv]],
 [bóló kù kónìⁿ] [nó= [ó kónìⁿ] ʼfɔ̀ŋɛ̀],
 [mate Dem Top] [if [Dem.Def Top] rot.Pfv],
 ‘But once it has rotted (overnight), it can’t be smoked. As for the other (kind), if that has
 rotted (=fermented), ...’
 [bòlò-ò in obviative function, §18.4.2]

(04:29) I ó ní ʼfɔ̀ŋɛ̀ [[kírí wóó ʼkìrì] ʃɛ̀ɛ̀],
 Dem.Def if rot.Pfv [[manner and manner] on],
 á há ʼɲòŋó-ó ʼlɛ̀gɛ̀-lɛ̀ [bó= ó ʼmũŋɛ̀-nì],
 2Sg Ipfv fish-Sg take-Ipfv [Seq Dem.Def be.well.made-Caus.Pfv],
 ‘Once that has rotted in any manner, you take the fish and prepare it (for drying).’
 [post-subject nì ‘if’ (§16.1.1.2), likewise @ 04:43 below; [X wóó X] construction
 (§7.1.2.2)]

(04:32) I á wáá ʼkĩlā [bó= ó ʼkòlò]
 2Sg do.then finish.Pfv [Seq Dem.Def split.belly.Pfv]
 [bó= ó ʼfɔ̀rò [kí bóló-là],
 [Seq Dem.Def rip.Pfv [Inst stuck.together],
 ‘Then you-Sg will proceed to split it (at the belly), and rip it apart from the other (into
 two separate halves).’
 [wáá ʼkĩlā (§15.2.13); bóló-là ‘stuck together’, §18.4.1]

(04:35) I [bá= á ʼɲìnì] [bá= á ʼhò-à-nì],
 [Seq 3Sg wash.Pfv] [Seq 3Sg white-Inch-Caus.Pfv],
 á wáá [bá= á yágà [díbì-ì ʃɛ̀ɛ̀]]— é [súgú-ú ʃɛ̀ɛ̀],
 2Sg do.then [Seq 3Sg put.Pfv [grill-Sg on]]— oh! [grass-Sg on],
 ‘And (you) wash it and clean it. Then you put it on the grill—, I mean on the straw.’

(04:38) I ná= à ɲá= á yágà [ʼsùgù-ù ʃɛ̀ɛ̀],
 if 2Sg Sbj/Obj 3Sg put.Pfv [grass-Sg on],
 ɲ gá ʼkūrō-lō [kòó ʼlā],
 3Sg Ipfv spend.day-Ipfv [sun Dat],
 ‘When you have put it on the straw, it will spend all day in the sun.’
 [< súgú-ú ‘grass’; for the tones compare ... yágà ʼsùgù-ù ʃɛ̀ɛ̀ ‘put it on the net’ with
 sùgù-ù ‘net’]

- (04:40) I á tá céé-nè [ɲá= á 'mà],
 2Sg IpfvNeg arrive-Ipfv [Link 3Sg Cust],
 [bí [bé 'sāgā]
 [Seq [come.Pfv spend.night.Pfv]
 [á tá céé-nè [ɲá= á 'mà]]
 [2Sg IpfvNeg arrive-Ipfv [Link 3Sg Cust]]
 ‘... (and) you don’t come into contact with it, then it spends all night and you don’t come into contact with it.’
 [céèⁿ/céé-nè ‘arrive’, §3.1.1.4]
- (04:43) I [bí sáákì [bí 'jīŋ-gēlē-nī kúⁿ]],
 [Seq return.Pfv [Seq day.break-Caus.Pfv again]],
 ósòò kòò nì céèⁿ [[*dix heures* 'jáàtè-è] nî],
 then sun if arrive.Pfv [[ten hours calculation-Sg] Loc],
 ‘And it once again stays until daybreak. Then when the sun arrives, at 10:00 AM,’
 [post-subject nì ‘if’, cf. @ 04:29 above; < jáàtè-è]
- (04:46) I [wàlímà *onze heures* sàŋà-à], á há 'sō-lō
 [or eleven hours time-Sg], 2Sg Ipfv go-Ipfv
 [bí sá= [á gùlénì-gùlénì]], ná= à ɲá= á gùlénì,
 [Seq go.Pfv [3Sg Rdp-flip.Pfv]], if 2Sg Sbj/Obj 3Sg flip.Pfv,
 ‘... or 11:00 AM, you-Sg will go and be flipping it (=fish). When you have flipped it,
 ...’
 [< bí 'sō]
- (04:50) I só-ló céèⁿ [ɲèèné-é 'mà] [*cinq heures* 'sàŋà-à]
 go-Ipfv arrive.Pfv [late.afternoon-Sg Cust] [five hours time-Sg]
 [á há sáákì-lì [bá= á céé-nì kúⁿ]
 [2Sg Ipfv return-Ipfv [Seq 3Sg get.up-Caus.Pfv again]
 ‘... until the late afternoon, 5:00 PM, you will again lift it (=fish).’
 [só-ló céèⁿ, §15.1.5.1; < céé-nì kúⁿ]
- (04:53) I [bí sáákì [bá= á gùlénì [tón-ó 'là] kúⁿ],
 [Seq return.Pfv [Seq 3Sg change.Pfv [wind-Sg Dat] again],
 tón-ó há= á gògí-lì,
 wind-Sg Ipfv 3Sg dry-Ipfv,
 ‘And (you will) move them over into the wind again. The wind dries it.’
 [gùlénì here means ‘relocate, reposition’ rather than ‘flip’]

(04:55) I [ná= á ɲà [[kóó 'fīēɲū] [kí ['kòò síyò]]] 'tāāⁿ
 [if 3Sg Sbj/Obj [[sun two] [and [sun three]]] do.Pfv]
 [ó hà bilá= á 'tògò [ā gògí]],
 [Dem.Def Ipfv Fut 3Sg find.Pfv [3Sg dry.Pfv]],
 'When you-Sg have spent two or three days, that (time) will find that it has dried.'
 [kí 'and' marking endpoints of a range (§7.1.4); < kòò ~ kòô ; < bílí (future)]

(04:57) I [ósòò á há= á 'kòòni-nì],
 [then 2Sg Ipfv 3Sg gather.up-Ipfv],
 á wáá 'kīlā [bó= [ó 'tūmēⁿ] mārà],
 2Sg do.then finish.Pfv [Seq [Dem.Def also] keep.Pfv],
 'Then you will gather them up. Then you will store them.'

(05:00) I ó 'hālī [[ɲòɲò gógí-ná-á] fòò]
 Dem.Def be.Cop [[fish dry(v)-Ppl-Sg] Poss]
 L *on va reprendre, donc* á wó, í há—
 we'll restart, so 2Sg said, 2Pl Ipfv—
 I: 'That is the part about dried fish.'
 [recording paused and restarted]
 L: 'So, we'll restart. You-Sg said, you-Pl—'

(05:12) L [ɲàɲà-léèⁿ, m̀wó-yèɲ] gá jíkè-lè,
 [woman-Pl, Rel-Pl] Ipfv fish(v)-Ipfv,
 ì há ['jíkè-[nāsóⁿ-yà-á] mwò-yén] 'tāā-nā,
 3Pl Ipfv [fishing(n)-[kind(n)] Rel-Pl] do-Ipfv,
 'Women, who fish, the kinds of fishing that they do.'
 [nāsóⁿ-yà-á 'kind, type']

(05:17) L á-wó-tá 'sūgū-sārì-ì, wálímà [bí 'lōō ['hòlì-fálà-à n̄],
 like net-cast.VblN-Sg, or [Seq enter.Pfv [skiff-rear-Sg Loc],
 wálímà [bí 'dùlāáŋgòrò-ó 'sāgā-nī]
 of [Seq fishtrap lie.down-Caus.Pfv]
 'Like net-casting, or getting into the stern of the skiff (to propel it), or setting fishtraps
 (in the water).'
 [< sùgù-ù 'fishnet'; < dùlāáŋgòrò-ò]

(05:23) L *donc* ná= à híní [bí ká 'jēē [ó n̄]]
 so if 2Sg be.able [Seq a.certain say.Pfv [Dem.Def Loc]]
 I óò, á ɲá ò télé, ó 'lūmā-yā [n̄ té],
 ah, 2Sg Sbj/Obj 1Sg ask.Pfv, Dem.Def sweet-Inch.Pfv [1Sg Dat],
 L: 'So, if you-Sg can say something on that.'
 I: 'Ah, you-Sg have asked me. That was pleasing to me.'

(05:27) I dúgò-ò-ní m̀wó 'hēlē, ǹǹà-lèèŋ gá síkè-lè,
 yesterday Rel pass.Pfv, woman-Pl Ipfv fish(v)-Ipfv,
 ní dá= á 'sèè wèè dè→, dúgò-ò-ní m̀wó 'hēlē,
 1Sg IpfvNeg 3Sg say.Pfv today Emph, yesterday Rel pass.Pfv,
 'Yesterday which has passed (=in the old days), women used to fish. I'm not saying
 (=talking about) today, mind you. Yesterday which has passed.'
 [*'yesterday' and 'today' (wèè) in broadened senses*]

(05:32) I ǹǹà-lèèŋ gá síkè-lè, ì hà 'sùgù-ú 'sārī-lī,
 woman-Pl Ipfv fish(v)-Ipfv, 3Pl Ipfv net-Sg cast-Ipfv,
 ì hà 'sùgù-ù síkè-lè, ì hà [sùgú húlò-ò] síkè-lè,
 3Pl Ipfv net-Sg fish(v)-Ipfv, 3Pl Ipfv [net big-Sg] fish(v)-Ipfv,
 'Women used to fish. They would cast nets, (and) they would set nets across (the water),
 (and) they would pull the big nets.'
 [*three techniques for fishing with nets (sùgù-ù); verb síkè(-lè) ~ jíkè(-lè) meaning
 'do fishing' in general, or more specifically (synonym ságá-ní) setting out long nets
 across a body of water in order to collect fish the next morning; the even larger "big
 nets" are used in the annual collective fishhunt*]

(05:38) I ì hà 'dùràáŋgòrò-ó 'l̩-l̩, ì há j̩l̩áŋ-ò síkè-lè,
 3Pl Ipfv fishtrap-Sg put.in-Ipfv, 3Pl Ipfv fishhook-Sg fish(v)-Ipfv,
 [bí 'j̩n̩ò-ò kírè [ŋà= à n̩],
 [Seq fish-Sg get.Pfv [Link 3Sg Loc],
 '(And) they would put in fishtraps, (and) they would set out (baited) fishhooks to get fish
 on them.'
 [*dùràáŋgòrò-ò ~ dùràáŋgòlò-ò (local French: nasse) is a sturdy fishtrap of wood and
 netting that is positioned in a weir extending across a body of water, or placed between
 flooded trees among vegetation; the fish are harvested the next morning; large numbers
 of fishhooks can be mounted on ropes laid across the water*]

(05:43) I ńgàà wèè ńgí há [['wòròŋ-ó mwò] n̩],
 but today, 1Pl be.Loc [[place-Sg Rel] Loc],
 díⁿyáá ńí= ì gùlénì,
 world Sbj/Obj 3ReflSg change.Pfv,
 'But today (=nowadays) in the place (=situation) in which we are, the world has
 changed.'
 [*< wóròŋ-ó ; díⁿyáá ~ díⁿyáá 'world (of the living)'*]

- (05:46) I [ádámá-léⁿ-yá-á ʔtūmēⁿ] ɲí= í gùlénì,
 [Adam-child-Abstr-Sg also] Sbj/Obj 3ReflSg change.Pfv,
 súnúⁿ ɲí= ì yágà [kí ʔtùbààbù-ù],
 all Sbj/Obj 3ReflSg transform.Pfv [Inst white.person-Sg],
 ‘Humanity (=people) too has changed. Everyone has turned into a white person.’
 [“Adam-child” = ‘human’, here with abstractive suffix, i.e. ‘humanity’]
- (05:49) I á ɲá= á bóy, hàlí [ʔhà-léèⁿ ʔsīkē-yà-à] lógò wéè
 2Sg Sbj/Obj 3Sg hear.Pfv, even [man-Pl fish(v)-Abstr-Sg] be.small today
 [jàngò ʔnàṅà-léèⁿ], wèè-[nàṅà-léèṅ] gónìⁿ,
 [a.fortiori woman-Pl], today-[woman-Pl] Top,
 ‘Did you-Sg hear? Even men’s fishing is rare today (=nowadays), never mind (that of) women. As for today’s women, ...’
 [cf. jàngó ʔhā-lèèⁿ ‘a fortiori men’; plural compound wèè-nàṅà-léèⁿ, §5.1.5.8, < kónìⁿ]
- (05:55) I ì tá ʔfòy tóò [nóṅó-ʔóò nî],
 3Pl IpfvNeg nothing know.Stat [fish-matter Loc],
 wéè ʔlū-mèèⁿ, ì tá ʔfòy tóò [nóṅó-ʔóò nî],
 today child-Pl, 3Pl IpfvNeg nothing know.Stat [fish-matter Loc],
 ‘They don’t know anything about fish. Young people of today, they don’t know anything about fish.’
 [possessive-type compound wéè ʔlū-mèèⁿ]
- (05:59) I ā ʔlōgò dè?
 3Sg be.small Emph
 L nàṅà-léèṅ kúṅ gá, [nàṅáá kú] ʔtāā-nā,
 woman-Pl Past Ipfv, [thing Dem] do-Ipfv,
 I: ‘It is rare.’
 L: ‘Women used to do that thing.’
 [< lógò]
- (06:02) L ī ʔkùⁿ gà ʔííkè-lè [[kírí mwò] ʔéè],
 3Pl Past Ipfv fish(v)-Ipfv [[manner Rel] on],
 I fánáá
 first
 L: ‘The way they used to fish.’
 I: ‘In the past.’
 [after 3Pl ì the past imperfective is L-toned kùⁿ gà before /HL/-melodic verb]

(06:05) L á-wó-tá ì há= á †sàrì-lì, ì hà †sùgù-ú †sàrì-lì,
 like 3Pl Ipfv 3Sg cast-Ipfv, 3Pl Ipfv net-Sg cast-Ipfv,
 [[[í-yén tàà] fáà] †rò] wá,
 [[[3ReflPl foot] by] Foc] Q,
 ‘For example, would they cast it, would they cast the net (standing) on their own feet [focus]?’

[i.e., in shallow water near the shore; á-wó-tá, §8.5.1; PP focalized, §13.1.6.2]

(06:09) L wálímà, ī †kùŋ gá †l̩-l̩ [[hólí-í †rà] nî] wá,
 or, 3Pl Past Ipfv enter-Ipfv [[skiff-Sg Foc], Loc] Q
 ī †kùŋ gá yágà-là [[kírí mwò] jéè],
 3Pl Past Ipfv be.put-Ipfv [[manner Rel] on],
 ‘Or did they use to get into a skiff [focus] (to case the nets)? The way they used to be.’

(06:12) I fánáá [ŋàŋà-léèⁿ mwò-yèŋ] gèè,
 first [woman-Pl Rel-Pl] Prsntv,
 ká-yèŋ gwá= à síkè-lè [hólí-í fáà],
 a.certain-Pl Past Ipfv fish(v)-Ipfv [skiff-Sg by],
 ‘In the old days, (of) the women who were there, some used to fish in a skiff.’
 [presentative héè (§4.4.4); gwá= à contracted from kùŋ gá]

(06:16) I [ŋánánú †fiēnū †tūmēŋ] gwá= à †l̩-l̩ [hólí-í nî],
 [woman two also] Past Ipfv enter-Ipfv [skiff-Sg Loc],
 [bí fòò] [bí †sō †sùgù-ú †sārī]
 [Seq go.Pfv] [Seq go.Pfv net-Sg cast.Pfv]
 ‘Two women used to go into a skiff, and go and cast nets (from the skiff).’
 [ŋàŋà-ù ‘woman’, here H-toned before /H/-melodic numeral, §6.4.1.2; ‘go’ doubled in sequential clause (§15.2.2.2); < sùgù-ù]

(06:19) I [bí †byē [ká= [á †ŋòŋò-ò tîⁿ]], ká-yèŋ gá †sō-lō
 [Seq come.Pfv [Inst [3Sg fish-Sg] under]], a.certain-Pl Ipfv go-Ipfv
 [bí só [†kōkūrù-ú-yèn nî] [bí só †ŋòŋò-ò síkè],
 [Seq go.Pfv [local.pond-Sg-Pl Loc] [3Sg go.Pfv fish-Sg fish(v).Pfv],
 ‘(And) bring its fish; some would go to the small local (rainwater) ponds to fish.’
 [< ŋóŋó-ó; kókúrù-ù ‘small pond near village that fills up with rainwater’]

(06:23) I ká-yèŋ gá ʔbélè-é ʔkū-nū, [bí ʔnòŋò-ò síkè],
 a.certain-Pl Ipfv side-Sg catch-Ipfv, [Seq fish-Sg fish(v).Pfv],
 ká-yèŋ gá sè-lí= [ì fógò] [bí jílán-ò síkè],
 a.certain-Pl Ipfv go-Ipfv [3ReflSg sit.Pfv] [Seq fishhook-Sg fish(v).Pfv],
 ‘Some (others) would hug (=walk along) the shoreline to fish (by casting nets). Some (others) would go and sit (at the edge) and fish with a (baited) fishhook.’
 [*< bèle-è ‘side’; gá sè-ló ... for gá só-lò ... in contraction environment (§10.1.2.2) the fishhook technique here is casting a line with a baited fishhook, either by hand or with a rod*]

(06:27) I ká-yèŋ gá ʔdúraàngòró-ó ʔlō-lō, ó ʔhālī ʔdūgò-ò-nì,
 a.certain-Pl Ipfv fishtrap-Sg put.in-Ipfv, Dem.Def be.Cop yesterday,
 ɣgàà wèè [sísàⁿ-néŋ gù],
 but today [now-Dim Dem],
 ‘Some (others) would install a fishtrap. That is (=was) yesterday (=in the past). Today, right now, ...’
 [*diminutive of sísàⁿ ‘now’, compare dialectal Spanish ahorita; < kù*]

(06:32) I [ó ʔsūnūŋ] gèè [wó-tá ó yágà
 [Dem.Def all] Prsntv [like Dem.Def become.Pfv
 [kí= ʔbààrà fúù]] [ní-rèèŋ gírì]],
 [Inst work(n) useless]] [person-Pl Poss]],
 ‘Look at all that, it’s like it had come to be (considered) in the category of useless (=scorned) work according to the people.’
 [*presentative, §4.4.4*]; yágà [kí X] ‘become X’, §11.2.4.2; fúù, which has fixed falling pitch and can be prolonged intonationally, is an expressive adjective ‘worthless, useless’ (plural fúú-yèⁿ); < ní-rèèⁿ kírì with possessive postposition kírì, §11.5.1.1, here in the sense ‘according to’]

(06:34) I [ó ʔsūnūŋ] gá ní-rèèm báándá-nì-nì, [túbáábú-yà-á
 [Dem.Def all] Ipfv person-Pl fatigue(v)-Caus-Ipfv, [white.person-Abstr-Sg
 ʔbyē] [ní-rèèⁿ ɣó= [ó ʔsūnūⁿ] lógó-jêⁿ],
 come.Pfv [person-Pl Sbj/Obj [Dem.Def all] finish.Pfv],
 ‘All of that wearies (=oppresses) the people. White-hood (=modernity) has come (and) the people have finished (=abandoned) all that.’
 [*< ɣá ó súnúⁿ ; compound verb lógó-jêⁿ, §9.5.3*]

(06:37) I [n-ón dè] [dúgò-ò-níí m̀wó] ʔhēlē,
 [anyway] [yesterday Rel] pass.Pfv
 [[[níní kóó-ɣáá] ʔbààrà-à] kúŋ ʔgēlē ó]
 [[[person many] work(n)-Sg] Past be Dem.Def]
 ‘Anyway, yesterday which has passed (=in the past), that was the work of many people.’
 [*n-ón dè, §16.1.3; < kúⁿ ʔkēlē ó*]

(06:39) I ó kúnj jí= [ì dáhírímèè] kírè-lè [ó nî],
 Dem.Def Past Ipfv [3ReflSg livelihood] get-Ipfv [Dem.Def Loc],
 ́jgàà [wéè kónìⁿ] [á ́tààⁿ-yà-à] lógò,
 but [today Top] [3Sg do-Agent-Sg] be.small,
 ‘That one (=fisher) used to get his/her livelihood in that (=fishing). But as for today, one who does it is rare.’
 [dáhírímèè < Bambara, synonym lógó-jéé ; < tááⁿ-yá-á ; “its doer” = ‘one who does it’]

(06:43) I [ā ́tààⁿ-yà-à] lógò wéè,
 [3Sg do-Agent-Sg] be.small today,
 ́jgàà [há-lèèŋ gónìŋ] gá= á ́tāā-nā,
 but [man-Pl Top] Ipfv 3Sg do-Ipfv,
 ‘One who does it is rare today, but (some) men [topic] do it.’
 [< kónìⁿ]

(06:45) I ́jgàà [[nàŋà-léèⁿ vwòò] nî] [ā ́lōgò],
 but [[woman-Pl Poss] Loc] [3Sg be.small],
 [hàlí ní= í há [́làhà-à nî]]
 [even if 3Pl be.Loc [camp-Sg Loc]]
 ‘But as far as women go it is rare. Even when they are in the camp, ...’
 [< láhá-á]

(06:48) I [[nàŋànú-ú mwò] há ́wō-nìndò wéè]
 [[woman-Sg Rel] be.Loc there.Def today]
 [wó hà ́dúláàngòró-ó ́lō-lō],
 [Dem.Def Ipfv fishtrap-Sg put.in-Ipfv],
 ‘A woman who is there today (=nowadays), (when) she installs the fishtrap, ...’

(06:50) I [bí céè [fájírí-í fáà]
 [Seq get.up.Pfv [dawn-Sg by],
 [bí swí= [ì túmé-ní] [bó= ó ́bāgī],
 [Seq go.Pfv [3ReflSg immerse-Caus.Pfv] [Seq Dem.Def remove.Pfv],
 ‘And gets up at dawn and goes into the water in to take that (=trap) out, ...’
 [< bí ́sō ì]

(06:53) I ó lógò, [nàŋànú-ú mwò] há [́gúlù-ú ́sūnūⁿ] ́tāā-nā
 Dem.Def be.small, [woman-Sg Rel] Ipfv [night-Sg all] do-Ipfv
 [bí jìlāⁿ], ā ́lōgò,
 [Seq fish.with.hook.Pfv], 3Sg be.small,
 ‘That is rare. A woman who spends all night fishing with a hook, it is rare.’

(06:57) I ńgàà [dúgò-ò-nì kónìŋ] ńgí kún gá= á 'tāā-nā,
 but [yesterday Top] 1Pl Past Ipfv 3Sg do-Ipfv
 òò, á há= á tòò [ńí-rèèŋ gá [kòó mwò nî]]
 well, 2Sg Ipfv 3Sg know.Stat [person-Pl be.Loc [day Rel] Loc]
 'But yesterday (=in the old days) we used to do it. Well, you-Sg know (that) the day
 (=era) on which people are, ...'

(07:00) I [súnún gó= [ó 'bààrà-à rá] 'tāā-nā,
 [all Ipfv [Dem.Def work-Sg Foc] do-Ipfv,
 [dúgò-ò-nì ńí-rèèŋ kún gá= á 'tāā-nā]
 [yesterday person-Pl Past Ipfv 3Sg do-Ipfv]
 '... the work of that (era) [focus] is what everyone does. Yesterday (=in the old days)
 people used to do it.'
[súnún 'everyone' without a modified noun, §6.1.2, §6.6.1.1]

(07:02) I ńgàà [wèè 'tūmē"] dí'yáá ńí= ì gùlénì
 but [today also] world Sbj/Obj 3ReflSg change.Pfv
 [bí 'bē [[kírí mwò]]éè]],
 [Seq come.Pfv [[manner Rel] on]],
 'But today, the way in which the world has changed and come, ...'
[< kírì-ì]

(07:05) I [ńí-rèén 'tūmēŋ] gá, [[ó 'bààrà-à nî] wèè
 [person-Pl also] be.Loc, [[Dem.Def work(n)] Loc] today
 òò'hóò, áwò
 uh-huh, yes
 'The people for their part are in that (=today's) work today. Uh-huh, yes.'

Kelenga 2021-08 Tale of caterpillar and three girls

recorded in Bamako; narrator Ali Tereta (L) with Aboubacar Fanafo (F)
duration 02:52

- (00:02) F éé 'wàlè-è àlî
2Pl work(n) L
L mbàà éé 'wàlè-è
(reply) 2Pl work(n)
F: 'How are you, Ali!'
L: 'Fine, how are you?'
[greeting (§19.6.1)]

- (00:04) F á há bélé ['zīrīŋ 'jūmèⁿ] jéé [ŋgì té]
2Sg Ipfv Fut [tale which?] say.Pfv [1Pl Dat]
L ñ gá bélé— [ná 'tògò-ó] 'kēlē àlî,
1Sg Ipfv Fut— [1Sg name] be.Cop L,
F 'Which tale will you-Sg tell us?'
L 'I will—. My name is Ali.'
[zīrīŋ-ò 'tale' here in bare stem form before interrogative adjective jūmèⁿ, §13.2.2.8]

- (00:09) L ñ gá bélé, [zīrīŋ-ó 'kā rá] 'sāgā-nī= [ì té]
1Sg Ipfv Fut, [tale-Sg a.certain Foc] lie.down-Caus.Pfv [2Pl Dat]
zīrīⁿ, Ø ñá= á 'sāgā-nì, húúrú-nêⁿ,
tale, 1Sg Sbj/Obj 3Sg lie.down-Caus.Pfv, worm-Dimin,
'I will tell a certain story for you-Pl. A tale, I have put it down on caterpillar.'
[zīrīⁿ in bare-stem form without a modifier is uttered at the beginning of a story, §6.1.4; 'put it (=tale) down for X' = 'tell the story of X'; dative ná could have been added after 'worm'; húúrú-nêⁿ in bare-stem diminutive form (animals as protagonists in tales are often diminutive in form)]

- (00:22) L à kí ['lē-nōŋ-ò 'kā], húúrú-nōŋ-ò,
3Sg and [child-Dim-Sg a.certain], worm-Dim-Sg,
ñ gá 'sāgā-nā— ñ gá 'sāgā-nā [[júú 'lògò-ó] 'mà],
3Sg Ipfv lie.down-Ppl— 3Sg Ipfv lie.down-Ppl [[water mouth-Sg] Cust],
'It (=caterpillar) and a certain girl. The caterpillar, it was lying down at the edge of the water.'
[diminutive lē-nōŋ-ò 'adolescent girl' is specifically female, §5.1.11.1; há 'sāgā-nā participial predicate, §10.1.3.2]

(00:36) L áywà, kú yágà [‘lē-nēn síyò],
 well, Dem become.Pfv [child-Dim three],
 kú yágà [‘lē-nēn síyò],
 Dem be.put.Pfv [child-Dim three],
 ì só→ ‘šwàá ‘tīī.
 3Pl go.Pfv firewood look.for.Pfv,

‘Well, there were three girls. There were three girls, they went looking for firewood.’

[kú yágà *introducing protagonists* (§11.2.3.4); < yágà ‘lē-nēn ; só *reduced from* šóò *in compound VP*]

(00:46) L ì ‘šòò-náá ‘šwàá ‘tīī, lé-néⁿ fíénú kìnáá-yèⁿ,
 3Pl go.Pfv-when firewood look.for.Pfv, child-Dim two other-Pl,
 [ó-yéⁿ ‘sūnūⁿ] ‘hēlē [húúrú-ú ‘là],
 [Dem.Def-Pl all] pass.Pfv [worm-Sg Dat].

‘Having gone looking for firewood, the two other girls, those ones (=the two girls) passed by the caterpillar.’

[< ì šóò-nàà, §15.6; ó-yèⁿ *plural of discourse-definite demonstrative; N-Num-Adj order with ‘other’, §6.1.1]*

(00:56) L ì tì ‘nàṅàá ‘šēē [húúrú-ú ‘tè], [júú ‘lògó-ó] ‘mà,
 3Pl PfvNeg anything say.Pfv [worm-Sg Dat], [water mouth-Sg] Cust,
 áywà [lé-nóṅ-ò m̀wó] ‘nēṅ-ò] lēⁿ,
 well [child-Dim-Sg Rel] tongue-Sg] be.sweet,

‘They didn’t say anything to the caterpillar, at the edge of the water. The girl whose tongue was sweet (=who spoke glibly),’

[< nàṅàá ‘(not) anything’, §6.6.2.4; *possessor relative, §14.4.3; ‘sweet-tongued’ means ‘loquacious, glib’ (culturally inappropriate for a girl)*]

(01:02) L ó ‘bē céēⁿ [‘hùúrú-ú ‘mà],
 Dem.Def come.Pfv arrive.Pfv [worm-Sg Cust],
 ó ṅá= á ‘šēē [‘hùúrú-ú ‘mà],
 Dem.Def Sbj/Obj 3Sg say.Pfv [worm-Sg Cust],

‘That one (=girl) came into the presence of the caterpillar. That one said to the caterpillar, ...’

(01:07) L [á-rá húúrú-ú šáá-húló kù],
 [2Sg-Indep worm-Sg head-big Dem],
 á há mánzìí ‘tāā-nā [[kú júú-lógó kú] ‘mà],
 2Sg Ipfv what? do-Ipfv [[Dem water-mouth Dem] Cust],

‘ “Hey you, the big caterpillar! What are you-Sg doing there at the edge of the water?” ’

[šáá-húló ‘big-head’ often means ‘tall’, or as here ‘long’, i.e. ‘big, sizeable’; the reference to ‘head’ evokes height measurement]

(01:12) L ó ḡó= ó ʼʃēē lámàà,
 Dem.Def Sbj/Obj Dem.Def say.Pfv only,
 húúrú-nóḡ-ḡ ḡá= á tḡⁿ,
 worm-Dim-Sg Sbj/Obj 3Sg swallow.Pfv,
 ‘As soon as that one said that, the caterpillar swallowed her.’
 [lámàà *clause-finally* ‘as soon as’, §15.5.2]

(01:17) L húúrú-ú tááⁿ-náá [bá= á tḡⁿ],
 worm-Sg do-when [Seq 3Sg swallow.Pfv],
 [lé-nēⁿ víénú kìnáá-yém] ʼbyē, ì bá= á ʼtìⁿ,
 [child-Dim two other-Pl] come.Pfv, 3Pl Sbjn 3Sg look.for.Pfv,
 ‘After the caterpillar had swallowed her, the other two girls came in order to look for her.’
 [tááⁿ-náá, §15.6; *subjunctive clause* (§17.3.1) in purposive function, could also omit the 3Pl subject and form a sequential VP after ‘come’, §15.2.2.1]

(01:22) L ì ḡà [kámù-ú ʼsūnūⁿ] ʼyāārā,
 3Pl Sbj/Obj [place-Sg all] search.through.Pfv,
 ī tà= à hēē,
 3Pl PfvNeg 3Sg see.Pfv,
 ‘They searched everywhere, but they didn’t see her.’
 [< kámù-ù ; *bidirectional case-marker* (§11.1.2.1) is L-toned ḡà after third-person proclitic and before /HL/-melodic noun, cf. (565a) in §10.2.2.3; < ì tì à hēē]

(01:27) L mà ḡm bì só [kòó ʼhèè-ní-ì],
 until 3Sg Sbjn go.Pfv [sun fall-VblN-Sg],
 ì hà= [à ʃéè] [bá= á ʼtìⁿ]
 3Pl be.Loc [3Sg on] [Seq 3Sg look.for.Pfv]
 ‘All the way until the sun’s setting, they were looking for her.’
 [< hēé-ní-í (*here as possessum*); mà ḡm bì sò, §15.1.5.2; *progressive construction*, §10.2.4.6]

(01:30) L ì ḡá= á ʼtìⁿ [bí ʼdēsē],
 3Pl Sbj/Obj 3Sg look.for.Pfv [Seq fail.Pfv],
 ī tà= à hēē, ī ʼwòò [bí ʃáákì],
 3Pl PfvNeg 3Sg see.Pfv, 3Pl do.then [Seq return.Pfv],
 ‘They looked for her in vain. They didn’t see her. Then they went back.’
 [wóó bí... ‘do then, proceed to do’, §15.2.13]

(01:35) L bí só hðð, kí= [ì-yéⁿ ʼfwàá-yèn] tîⁿ,
 Seq go.Pfv home, Inst [LogoPl firewood-Pl] under,
 ì ʼcēēⁿ-nàá hðð,
 3Pl arrive.Pfv-when home,

‘And (they) went home with their firewood. After they got home, ...’

[conveyance construction, §11.1.1.6]

(01:39) L áywà, [lé-nóŋ-ð, màà] [kí [ì kàà],
 well, [child-Dim-Sg, mother] [and [3ReflSg father],
 ó-yèⁿ ñá= [á kìnáá ʼfīēnū kú-yén] ʼtēlē,
 Dem.Def Sbj/Obj [3Sg other two Dem-Pl] ask.Pfv,

‘Well, the girl’s mother and her father, those ones (=parents) asked those two others (=sisters) of hers, ...’

[3ReflSg í instead of 3Sg á in this context is optional]

(01:46) L ò [ŋgí lé-ŋánánú-ú] há ʼmīnī-fàà, ā wò á→,
 oh [1Pl child-female-sg] be.Loc where?, 3Sg said oh,
 [ŋgé-rè kónìn] tá= [á tò] tódò dè?,
 [1Pl-Indep Top] PfvNeg [3Sg location] know.Stat Emph,

‘“Where is our daughter?” She (another daughter) said, “ah, as for us, we just don’t know where she is.”’

[[X tò] tódò ‘know where X is’ with unusual monomoraic Cv “stem” can fuse into a noun tò-tódò ‘location’]

(01:52) L ā ʼbyè, [[ŋgé-rè nóð] nî] fwáá-tín-dóó,
 3Sg come.Pfv, [[1Pl-Indep tracks] Loc] firewood-look.for.VblN-place,
 ŋgàà, ā ʼtùⁿ [ŋgé-rè ʼnà],
 but, 3Sg get.lost.Pfv [1Pl-Indep Dat],

‘She came following (=lagging behind) us, in the firewood collecting area, but we lost track of her.’

[nóð nî, §8.2.9.2; < -tódò place nominal with incorporated object, §5.1.7.3; the preferred postposition with ‘get lost’ is custodial má rather than dative ná]

(02:00) L áywà kàà [kí= [í màà]],
 well father [and [3ReflSg mother]],
 ó-yèⁿ zó ʼyāārā→, [sónó-kámù-ú ʼsūnūⁿ] nî,
 Dem.Def-Pl go.Pfv search.through.Pfv, [the.bush-place-Sg all] Loc,

‘Well, her father and mother, those ones (too) went wandering (and searching) everywhere in the bush.’

[shortened < ā kàà [kí= [í màà]] ; zó < só after nasal; combination of ‘go’ with perfective VP, §15.1.4]

(02:05) L ì tí= [ì lé-nón-ò] hêè,
 3Pl PfvNeg [3ReflSg child-Dim-Sg] see.Pfv,
 mà ì 'sò céèⁿ, júú-lógó-ó 'mà,
 until 3Pl go.Pfv arrive.Pfv, water-mouth-Sg Cust,
 ‘They didn’t see their daughter. Eventually they went and arrived at the edge of the water.’

[3ReflSg optional agreement instead of 3ReflPl]

(02:09) L ì só [‘hūūrū ʃāā-húlò-ò, ságá-náá] ‘tṣgṣ
 3Pl go.Pfv [worm head-big-Sg, lie.down-when] encounter.Pfv
 [júú-lógó-ó ‘mà],
 [water-mouth-Sg Cust],

‘They encountered the big caterpillar lying down on the edge of the water.’

[ságá-náá, §15.6]

(02:12) L ì wó [‘hùúrú-ú ‘mà],
 3Pl said [worm-Sg Cust],
 á tí [ŋgì léŋ-ó] hêè wâ,
 2Sg PfvNeg [1Pl child-Sg] see.Pfv Q,

‘They said to the caterpillar, “have you-Sg not seen our child?” ’

(02:16) L húúrú-ú wòò, lé-néⁿ nén-lúmá-néŋ—
 worm-Sg said, (false start)
 [lé-néⁿ nén-lúmá-néŋ gù] wâ,
 [child-Dim tongue-sweet-Dim Dem] Q,

‘Caterpillar said (=asked), “that sweet-tongued girl?” ’

[wó ‘said’ with incompleton intonation, §.3.7.2]

(02:21) L ì ‘wò á→, [ŋgé-rè ‘lèŋ-ò kóním] ‘byē,
 3Pl said ah, [1Pl-Indep child-Sg Top] come.Pfv,
 [wí= ì há bélé ‘ʃwàá ‘tīⁿ],
 [said LogoSg Ipfv Fut firewood look.for.Pfv]

‘They said, “ah, our child came intending to look for firewood.” ’

[< ŋgé-rè léŋ-ó ; in second line, subjectless wò quotative particle plus logophoric expressing an intention]

(02:25) L áywà, ŋgí tá= á hêè bíléⁿ,
 well, 1Pl PfvNeg 3Sg see.Pfv not.since,
 à wòò, [jíní fíénú] ‘byē,
 3Sg said, [person two] come.Pfv,

‘“Well, we haven’t seen her since.” It (=caterpillar) said, “two (other) people came by.” ’

[bíléⁿ, §19.3.1.3; < ā ‘wò with incompleton intonation, §.3.7.2]

(02:30) L ó-yéⁿ ʰhēlē [ná ʰlà], ńgàà [à-rà kénèèⁿ],
 Dem.Def-Pl pass.Pfv [1Sg Dat], but [3Sg-Indep one],
 à cééⁿ-nàà [ná ʰmà],
 3Sg arrive-when [1Sg Cust],
 ‘Those (two) passed by me (in silence). But the (other) one, when she arrived in my presence, ...’

(02:35) L à wóò, á-rá kù, wó ʰkw = élé
 3Sg said, 2Sg-Indep Dem, said Dem be
 [mánzì ʰ[hùùrù ʃàà-hùlò-ò]], [júú-lógó-ó ʰmà],
 [what? [worm head-big-Sg]], [water-mouth-Sg Cust],
 ‘“She said, ‘you there, you are what (kind of) big caterpillar, at the edge of the water?’” ’
 [*< ʰkù kélé/*

(02:40) L kàbì á ńó = ó ʰʃēē lámàà,
 since 3Sg Sbj/Obj Dem.Def say.Pfv only,
 ná ńá = á tɔ̃ⁿ
 1Sg Sbj/Obj 3Sg swallow.Pfv
 ‘“As soon as she said that, I swallowed her.” ’
 [*kàbì for kàbìni ‘since’*]

(02:44) L áywà, [í léŋ-ó] ʰnēŋò-ò,
 well, [2Pl child-Sg] tongue-Sg,
 [ó ʰrà] ńá = á cééⁿ-nì [kù má]
 [Dem.Def Foc] Sbj/Obj 3Sg arrive-Caus.Pfv [Dem Cust]
 ‘“Well, your-Pl child’s tongue, that is what brought her into this.” ’

(02:47) L Ø ńá zírèŋ-ò kíré [[ʰwòròŋ-ó mwò] nî]
 1Sg Sbj/Obj tale-Sg get.Pfv [[place-Sg Rel] Loc]
 Ø ńá = á yágà wɔ̃ⁿ
 1Sg Sbj/Obj 3Sg put.down.Pfv there.Def
 ‘There where I got (=picked up) the tale, I have put it (back) there.’
 [*standard tale-ending phrase*]

Kelenga 2021-10 Tale of orphan girl and cruel stepmother

recorded in Bamako; narrator Ali Tereta (L) with Aboubacar Fanafo (F)

duration 04:51

This is the first of two cruel-stepmother tales from the same recording session

- (00:02) F á há bílí ‘[zīrīⁿ jīmèⁿ], ʃéé [ŋgì té], jèèné kù,
 2Sg Ipfv Fut [tale which?], say [1Pl Dat], afternoon Dem
 L ń gá bílí [‘zīrīŋ-ò m̀wó] ‘sēē [ì té] [jèèné kù],
 1Sg Ipf Fut [tale-Sg Rel] say.Pfv [2Pl Dat] [afternoon Dem],
 F: ‘Which tale will you tell this (late) afternoon?’
 L: ‘The tale that I will tell to you this afternoon, ...’

- (00:08) L ó há ‘sō-lō—, [lé-nóŋ-ò ‘kā] nî,
 Dem.Def Ipfv go-Ipfv—, [child-Dim-Sg certain] Loc,
 lé-néŋ gù, [ā m̀áá] ‘sāⁿ,
 child-Dim Dem, [3Sg mother] die.Pfv,
 L ‘That (tale) goes in (=is about) a certain girl. That girl, her mother (had) died.’

- (00:16) L [bá= á ‘tògò [m̀áá-[téⁿ-j́ánánù-ú] k̀r̀ìì],
 [Seq 3Sg leave.Pfv [mother-[co.wife-Sg] Poss],
 m̀áá-[téⁿ-j́ánánù-ú] ‘tīmēⁿ, [léŋ génèèⁿ] hó= [ó k̀r̀ìì],
 mother-[co.wife-Sg] too, [child one] be.Loc [Dem.Def Poss],
 ‘And left her in the custody of the mother’s co-wife (=the girl’s stepmother). The
 stepmother too, that one (=stepmother) had a child (= her own birth daughter).’
 [téⁿ-j́ánánù-ú, §5.1.10)]

- (00:22) L [ó [kí ‘lē-nēŋ-ò] súnúⁿ] gá ‘sō-lō
 [Dem.Def [and child-Dim-Sg] all] Ipfv go-Ipfv
 [[gwíí-hàké kēnèèⁿ] nî],
 [[age-amount one] Loc],
 ‘That one (=stepmother’s daughter) and the (first) girl both went in (=were of) the same
 age.’

- (00:27) L lé-néŋ-ò, ní— táá wóó ‘tāā, ní= í ‘sò m̀íné-j́ínì-ì,
 child, if— day and day, if 3Pl go.Pfv pot-wash.VblN-Sg,
 ní= í ‘bè [bí ‘bāy [‘m̀ìnè-j́ínì-í ‘nà]],
 if 3Pl come.Pfv [Seq leave.Pfv [pot-wash.VblN-Sg Dat]],
 ‘The girl, when—, every day, when they went to wash pots, when they came back from
 washing pots, ...’

(00:35) L máá-[tɛ̃ⁿ-ɲáɲánu] kù,
 mother-[co.wife] Dem,
 ɲ gí = [[ì léŋ-ó] ʼkírí-í] ʼɲíní-ní, kí ʼjùù tîⁿ,
 3Sg Ipfv [[3ReflSg child-Sg] hand-Sg] wash-Ipfv, Inst water under,
 ‘That stepmother, she washed her daughter’s hands with water.’

(00:39) L [bí [ʼtɛ̃ⁿ-ɲāɲānū-ū ʼlē-ɲāɲānū-ū], bó = [ó ʼkírí-í] ʼɲíní,
 [Seq [co.wife-Sg child-female-Sg], Seq [Dem.Def hand-Sg] wash.Pfv,
 kí ʼcèè tîⁿ,
 Inst oil under,
 ‘And (she) washed the hands of her (deceased) co-wife’s daughter with oil.’
 [cɛ́é ‘oil’]

(00:44) L ɲ gá = á ʼsè-lè [ì bí = ì-yèⁿ fógò],
 3Sg Ipfv 3Sg say [3Pl Sbjn 3ReflPl sit.Pfv],
 ní [m̀wó ʼkírí-í] gògì [m̀wó ʼkírí-ì] káàⁿ,
 if [Rel hand-Sg] dry(v).Pfv [Rel hand-Sg] in.front.of],
 ‘She would tell them to sit down. When one of them’s hand had dried before the other one’s hand (dried), ...’
[quoted imperative (§17.1.5.1) with reflexive clause; double-headed relative (§14.1.2); káàⁿ, §8.2.8.1]

(00:50) L ó há hùú ʼjāā-lā, júú dūⁿ,
 Dem.Def Ipfv meal eat-Ipfv, water QTop,
 [à [kí ʼcèè]] tá ʼkēnèèⁿ,
 [3Sg [and oil]] not.be.Cop one,
 ‘That one would eat a meal. Concerning water, it and oil are not the same.’
[dūⁿ quotative topic, §13.2.2.1]

(00:55) L ná = à ɲá = [à kírí-í] ʼɲíní [júú nî],
 if 2Sg Sbj/Obj [2Sg hand-Sg] wash [water Loc],
 [á [kí [[ʼɲíní-í m̀wó]] ɲí = [ì kírí-í] ʼɲíní
 [2Sg [and [[person-Sg Rel] Sbj/Obj [3ReflSg hand-Sg] wash.Pfv
 [cɛ́é nî:],
 [oil Loc].

‘If you-Sg wash your hands in water, you and a person (=someone else) who washes her hands in oil, ...’

(00:59) L ó-yéⁿ ʼgōgīⁿ-cōgò-ò tá ʼkēnèèⁿ,
 Dem.Def-Pl dry.VblN-manner-Sg not.be.Cop one,
 [[ā ʼlèŋ-ó] ʼkírí-ì] há gògí-nì jóó-ná,
 [[3Sg child-Sg] hand-Sg] Ipfv dry(v)-Ipfv fast-Ppl,
 ‘The ways those (two) dry are not the same. Her daughter’s hand would dry quickly.’

(01:04) L [ó há [hùú 'sūnūⁿ] 'jāā-lā] [bí,
 [Dem.Def Ipfv [meal all] eat-IPfv [Seq,
 [[máá-[tēⁿ-nájánù-ú] 'lèŋ-ó] 'tōgō], [m̀wó màá] 'sāⁿ zá,
 [[mother-[co.wife-Sg] child-Sg] leave.Pfv], [Rel mother] die.Pfv Ø,
 'That one (stepmother's daughter) would eat the entire meal, leaving (her) mother's co-
 wife's daughter (=the orphan) (to starve), (the one) whose mother had died.'
 [zá = clarifying sá, §19.4.1.8]

(01:10) L áywà, ī 'tògò [ó nî:],
 well, 3Pl remain.Pfv [Dem.Def Loc],
 [[bí 'tōgō [ó nî:]] [bí 'tōgō [ó nî:]],
 [[Seq remain.Pfv [Dem.Def Loc]] [Seq remain.Pfv [Dem.Def Loc]]
 'Well, they stayed like that for a long time.'
 [clause repetitions for duration in the narrative background]

(01:12) L [lé-nóŋ-ò há 'tōgō-lō] [ŋ gá 'hūmā-nā],
 [child-Dim-Sg Ipfv remain-IPfv] [3Sg be lean(adj)-Ppl],
 [ŋ gá 'hūmā-nā] [ŋ gá 'hūmā-nā] [ŋ gá 'hūmā-nā],
 [3Sg be lean-Ppl] [3Sg be lean-Ppl] [3Sg be lean-Ppl],
 'The (orphan) girl was becoming more and more emaciated.'

(01:17) L á há lá= á 'sèè ['mèŋù-sóó 'kààdirí-ì],
 2Sg Ipfv Counterf 3Sg say.Pfv [iron-horse frame-Sg],
 [lé-nóŋ-ò 'tōgō néè [ŋ gá 'hūmā-nā] [ŋ gá 'hūmā-nā],
 [child-Dim-Sg remain.Pfv like.this] [3Sg be lean-Ppl] [3Sg be lean-Ppl],
 'You would say (=she was like) a bicycle frame. The girl remained like this, getting more
 and more emaciated.'
 [há lí counterfactual consequent, §16.4.1; French cadre 'frame']

(01:23) L [kòó 'kā], ī 'bè, bí 'bāy [cááⁿ-hááⁿ nî],
 [day a.certain], 3Pl come.Pfv, Seq exit(v) [waterside Loc],
 [máá-[tēⁿ-nájánù-ù] ŋí= [[í 'fèènú 'sūnūⁿ] 'kírí-í] 'jīnī,
 [mother-[co.wife-Sg]] Sbj/Obj [[3Pl two all] hand-Sg] wash.Pfv,
 'One day they came back from the waterside. The stepmother washed the hands of both
 of them.'
 [kòó 'kā, §6.3.3.3; cááⁿ-hááⁿ is a spot at the edge of a river where one can do
 washing]

(01:29) L à ñì= [[ì léŋ-ó] 'kìrì-í] 'jīnī
 3Sg Sbj/Obj [[3ReflSg child-Sg] hand-Sg] wash.Pfv
 [kí 'jùù tîⁿ],
 [Inst water under],
 'She washed her own daughter's hand with water.'

(01:32) L bí ['māā-[tēⁿ-jāñānù-ú] 'lèŋ-ó] 'kìrì-ì,
 Seq [mother-[co.wife]-Sg] child-Sg] hand-Sg,
 bó= [ó 'kìrì-í] 'jīnī, kí 'cèè tîⁿ,
 Seq [Dem.Def hand-Sg wash.Pfv, Inst oil under],
 'And washed (her) co-wife's daughter's hand with oil.'
[sequential clause is restarted after heavy object NP]

(01:36) L wí= í bí= ì fógò,
 said 3Pl Sbjn 3ReflSg sit.Pfv,
 ní [m̀wó fòó] gòbí [[m̀wó fòò] káàⁿ],
 if [Rel Poss] dry(v).Pfv [[Rel Poss] in.front.of],
 '(She) told them to sit down. When one of them's (hands) dried before the other one's
 (hands), ...'
*[subjectless wò for 3Sg ā 'wò 'she said', quotation introducer, §17.1.2; f(w)òò as
 default possessum, here replacing 'hands']*

(01:39) L ó hà lí hùú 'jāā, alá ñá= á 'tààⁿ,
 Dem.Def Ipfv Fut meal eat.Pfv, God Sbj/Obj 3Sg do.Pfv,
 júú-tígí-í [nó= ó 'kēlē [á 'lè-ñàñànú-ù]—
 water-owner-Sg [if Dem.Def be.Cop [3Sg child-female-Sg]—
 [á 'lè-ñàñànú-ù],
 (repetition),
 'That one would eat a meal. As God would have it, the one who had the water, if it was
 her daughter, ...'
['owner' compound, §5.1.12]

(01:46) L [ó 'kìrì-í] gòbí, bí, tēⁿ-jāñānù-ú mwò—
 [Dem.Def hand-Sg] dry(v).Pfv, Seq, co.wife-Sg Rel—,
 [m̀wó màà] fàri, ó—
 [Rel mother] die.Pfv, Dem.Def—
 bó= [ó 'kìrì-í] gógím-bàrì-í 'tōgō,
 Seq [Dem.Def hand-Sg] dry(v)-AgentNeg-Sg leave.Pfv,
 'That one's hands dried (first), leaving behind the co-wife who— (correction:) the one
 whose mother had died, whose hands did not dry.'
*[transitive sequential VP restarted after heavy object NP (§11.1.2.1); negative
 agentive, §4.2.2.2]*

(01:55) L ó wáá [bí [hùú 'sūnūⁿ] 'jāā],
 Dem.Def do.then [Seq [meal all] eat.Pfv],
 bí 'lĕ-nōŋ-ò 'tōgō, lé-nōŋ-ò 'kūūrū, bí 'kūūrū,
 Seq child-Dim-Sg leave.Pfv, child-Dim-Sg shout.Pfv, Seq shout.Pfv,
 'That one (stepmother's daughter) proceeded to eat the whole meal, leaving the (other) girl (behind). The (other) girl cried out and cried out.'
 [wáá 'do then', §15.2.13]

(02:01) L bí só 'sōŋō-fāà, ā 'sò céèⁿ [tòró-ó 'mà],
 Seq go.Pfv the.bush, 3Sg go.Pfv arrive.Pfv [fig.tree-Sg Cust],
 ā ŋī = ì fōgò [tòrò-ò búrù-tìⁿ],
 3Sg Sbj/Obj 3ReflSg sit.Pfv [fig.tree-Sg under],
 'Then she went out into the bush. She went and arrived at a fig tree. She sat down under the fig tree.'
 [tòrò-ò, the sycamore fig, Ficus sycomorus subsp. gnaphalocarpa]

(02:06) L ā 'wàà [bá = á 'sèè [tòró-ó 'mà]],
 3Sg do.then [Seq 3Sg say [fig.tree-Sg Cust],
 ó, é→, [[níní-í mwò] màà] 'sāⁿ,
 Dem.Def, oh, [[person-Sg Rel] mother] die.Pfv,
 'She proceeded to say to the fig tree, "oh, a person whose mother has died, ..."'
 [in a full version of the tale, this and the following is sung (likely in Bambara)]

(02:11) L [ó rà] hà [kú ['sìì—
 (hesitation)
 [ó 'rà] há [kú ['sìì báándà-à]] kírè-lè,
 [Dem.Def Foc] Ipfv [Dem.InanSg [kind fatigue-Sg]] get-Ipfv,
 ' "It's that one (=orphan) [focus] who gets this kind of suffering." '

(02:14) L níní mwò— màà tá [['níní-í mwò] fáà],
 (false start)— mother not.be.Loc [[person-Sg Rel] by],
 [ó 'rà] há [kú ['sìì báándà-à]] kírè-lè,
 [Dem.Def Foc] Ipfv [Dem.InanSg [kind fatigue-Sg]] get-Ipfv,
 ' "A person who does not have a mother, it's that one [focus] who gets this kind of suffering" .'

(02:19) L áywà [ná kónìŋ] 'gēlē máá-ndâⁿ,
 well [1Sg Top] be mother-less,
 ná tí 'jèè-fòò kírè,
 1sg PfvNeg eat-thing get.Pfv,
 '(Orphan girl:) "Well, I am motherless. I haven't gotten any food".'
 [máá-ndâⁿ, §5.1.14]

(02:22) L [máá-[tɛ̃ⁿ-nápánù]-ù] ɲí= [[ì léŋ-ó] ʔkírí-í] ʔnīnī,
 [mother-[co.wife]-Sg] Sbj/Obj [[3ReflSg child-Sg] hand-Sg] wash.Pfv,
 kí ʔjùù tîⁿ, bí [ʔnà ʔkírí-í] nīnī [kí ʔcèè tîⁿ],
 Inst water under, Seq [1Sg hand-Sg] wash.Pfv [Inst oil under],
 ‘“(my) stepmother washed her (own) daughter’s hands with water, and washed my hands
 with oil.”’

(02:28) L wò ní [múⁿ kírí-í] gòbîⁿ [[m̀wó f̀òò] káàⁿ],
 said if [Rel hand-Sg] dry(v).Pfv [[Rel Poss] in.front.of],
 ó hà lí hùú ʔjāā,
 Dem.Def Ipfv Fut meal eat.Pfv,
 ‘“She (=stepmother) said, if one of them’s hands dried before the other one’s, that one
 will eat a meal.”’

(02:32) L [táá wóó ʔtàà rà] há ʔnēè,
 [day and day Foc] be like.this,
 [[ná kónìⁿ] tí ʔjèè kírè]
 [[1Sg Top] PfvNeg food get.Pfv
 ‘“Every day is like that. I haven’t gotten any food.”’
 [*< jéé*]

(03:35) L hòŋ-ô há bílí ʔnà wágà,
 hunger-Sg Ipfv Fut 1Sg kill.Pfv,
 [ná màà] há ʔmīnī-fàà,
 [1Sg mother] be.Loc where?,
 ‘“Hunger will kill me. Where is my mother?”’

(02:38) L à ɲó= ó ʔsēē lámàà,
 3Sg Sbj/Obj Dem.Def say.Pfv only,
 tòrò-ò ɲí= ì— [ì dúúné-yá-nì]
 fig.tree-Sg Sbj/Obj 3ReflSg— [3ReflSg short-Inch-Caus.Pfv]
 ‘As soon as she said that, the fig tree shortened itself.’

(02:42) L [bí= ì dúúné-yá-nì]
 [Seq 3ReflSg short-Inch-Caus.Pfv]
 mà̀m bí ʔbē [[lé-nóŋ-ò ʔbélè-fáà],
 until Seq come.Pfv [child-Dim-Sg beside],
 ‘And shortened itself (more), until (it) came beside the girl.’
 [*same-subject ‘until VP’, §15.2.15*]

(02:45) L ā ʷwàà [bá= á ʷsèè [lé-nóŋ-ò ʷmà]],
 3Sg do.then [Seq 3Sg say.Pfv [child-Dim-Sg Cust],
 wò [[ʷtòrò-ó ká] ʷbāy [á bá= á ʷjàà]],
 said [[fig-Sg a.certain] remove.Pfv [2Sg Sbjn 3Sg eat.Pfv]],
 ‘Then it (=fig tree) said to the girl, “pick some figs and eat them!” ’

[here tòrò-ò denotes the fruits, not the whole tree; form is singular but it is understood to be collective]

(02:49) L léŋ-ó ñá ʷtòró-ó ʷbāy [bá= á ʷjàà],
 child-Sg Sbj/Obj fig-Sg remove.Pfv [Seq 3Sg eat.Pfv],
 mà̀m bí= ì fágí-ní,
 until Seq 3ReflSg be.sated-Caus.Pfv,

‘The girl picked some figs and ate them, until she filled herself up.’

[same-subject ‘until VP’, §15.2.15]

(02:53) L bí ʷtòrò-ó ʷkōō-ñāà ʷbāgī
 Seq fig-Sg many remove.Pfv
 [bá= á ʷjèè [ì séè],
 [Seq 3Sg put.in.Pfv [3ReflSg on],

‘She loaded up on figs and put (=kept) them on her.’

(02:55) L tòrò-ò wáá [bí ʷtāⁿ [bí sí= [[ì nòò] nû]],
 fig.tree-Sg do.then [Seq ascend.Pfv [Seq go.Pfv [3ReflSg place] Loc]],
 lé-nóŋ-ò bé [kí [ʷtòró-ó ʷkōō-ñāà] tîⁿ hòò,
 child-Dim-Sg come.Pfv [Inst [fig-Sg many] under] house,

‘Then the fig tree rose back up and resumed its (original) position. The girl came home bringing many figs.’

(03:00) L [bí ʷbē ʷtòrò-ó ʷhāy, [máá-[[tēⁿ-ñáŋánù]-ú] ʷlà],
 [Seq come.Pfv fig-Sg show. [mother-[[co.wife]-Sg] Dat],
 wí= [ʷì-rà kónì] só ʷsōŋō-fāà],
 said [LogoSg-Indep Top] go.Pfv the..bush],

‘She came and showed the figs to her stepmother. She (=girl) said, “I went out into the bush.” ’

(03:04) L [í-rà kónì] ñá kù kírè,
 [LogoSg-Indep Top] Sbj/Obj Dem.Inan get.Pfv,
 bí ʷbē [ká= á tîⁿ hòò,
 Seq come.Pfv [Inst 3Sg under] house,

‘(She said:) “I got this and have brought it home.” ’

(03:07) L [máá-[[tén-ńáńánù]-ù], ó wáá [bá= á sèè é→],
 [mother-[[co.wife]-Sg], Dem.Def do.then [Seq 3Sg say.Pfv hey!],
 [à-rà ńá kù kírè]
 [3Sg-Indep Sbj/Obj Dem.Inan get.Pfv
 ‘The stepmother, that one (=stepmother) then said, “oh! You got (all) this?” ’

(03:10) L [à-rà ńá kù báy míní-fáà]
 [3Sg-Indep Sbj/Obj Dem.InanSg remove.Pfv where?]
 [ā ‘hìnè-yà [bí ‘tāⁿ [jírí-í séè]]]
 [3Sg be.able-Inch.Pfv [Seq ascend.Pfv [tree-Sg on]]]
 [bí kù báy],
 [Seq Dem.InanSg remove.Pfv],
 ‘(Stepmother: “Where did you get (all) this? Did you manage to climb the tree and pick (all) this?” ’
 [híné-yá(-lá) ‘manage (to VP)’, aspect-marking version of stative híní ‘be able (to VP)’]

(03:13) L à wí= [ì táⁿ [jírí-í séè] [bá= á ‘bāy]],
 3Sg said [LogoSg ascend.Pfv [tree-Sg on] [Seq 3Sg remove.Pfv]],
 ā ‘wàà [bá= á ‘sèè, [[í lé-ńáńánú-ú] mà]
 3Sg do.then [Seq 3Sg say.Pfv, [[3ReflSg child-female-Sg] Cust]
 ‘She (=girl) said, “I climbed the tree and picked it.’ She (=stepmother) said to her (own) daughter, ...’
 [< ā ‘wò plus í táⁿ]

(03:17) L wá= [à-rà kón] dá ‘fōy, kú lenε—
 said [3Sg-Indep Top] not.be.Cop anything, (false start)
 [kú lé-néⁿ fítí-néŋ gù] rà há ‘sō-lō ‘sōŋō-fáà,
 [Dem child-Dim small-Dim] Dem] Foc Ipfv go-Ipfv the.bush,
 ‘(Stepmother) said (to own daughter:) “You are nothing! This little girl [focus] goes out into the bush, ...”
 [3Sg in quoted speech for original 2Sg, §17.1.1; kú X kù with flanking demonstratives, §6.5.3]

(03:22) L [bí ‘bē [kí [kù tóro kóo-ńáá kù] tîⁿ]
 [Seq come.Pfv [Inst [Dem fig many Dem] under]]
 [à-rà tá ‘hīnī [bí só ‘fōy ‘lēgē]
 [3Sg-Indep IpfvNeg be.able [Seq go nothing pick.up.Pfv]
 [bí ‘bē [ká= á tîⁿ],
 [Seq come.Pfv [Inst 3Sg under],
 ‘(Stepmother to her daughter:) “And she brought this large amount of figs, (whereas) you can’t go and pick anything and bring it (here).” ’

(03:26) L [à-rà kòh] dá yágà-là †nàṅà wò,
 [3Sg-Indep Top] IpfvNeg become-Ipfv thing Emph,
 jíṅ gélé-náá, ní= ì báy [cááⁿ-hááⁿ nî],
 daybreak day.break-when, if 3Pl exit(v).Pfv [waterside Loc],
 ‘(Stepmother to her daughter:) “You won’t (ever) turn into anything.” After day broke,
 when they left the waterside, ...’
 [nàṅà ‘thing’ treated as /L/-melodic in the sense ‘(not) anything’ (see also @ 04:00
 below); kélé-náá, §15.6]

(03:31) L ā †wàà [bá= á †sèè [ì léⁿ-ṅánánú-ú] †mà]],
 3Sg do.then [Seq 3Sg say.Pfv [3ReflSg child-female-Sg] Cust]],
 áywà, [à †tìmèṅ] ṅá †sò [[tòró-ó †kā] †bày]
 well, [3Sg also] Hort go.Pfv [[fig-Sg a.certain] remove.Pfv]
 [bí †bē [ká= á tîⁿ],
 [Seq come [Inst 3Sg under],
 ‘She (=stepmother) then said to her daughter, “well, you too must go and collect some
 figs and bring them (here).” ’
 [hortative ṅá, §10.4.2.1]

(03:36) L máá-[téⁿ-ṅánánù-ù]— é [máá ṅàà],
 mother-[co.wife-Sg]— ah! [mother nasty],
 [à †lèṅ-ḍ] wáá [bí só †sḵḵ-ḵàà]
 [3Sg child] do.then [Seq go.Pfv the.bush]
 ‘The stepmother— the cruel mother, her daughter then went out into the bush.’

(03:41) L ā †cēèⁿ [tòró-ó †mà],
 3Sg arrive.Pfv [fig.tree-Sg Cust],
 [à [kí= [ì lógóló-ṅánánù-ù]]] só [bòlò fáà].
 [3Sg [and [3ReflSg younger.sib-female-Sg]]] go.Pfv [Recip by],
 ‘She arrived at the fig tree. She and her younger sister went together, ...’
 [reciprocal, §18.4]

(03:46) L ní ó †kēlē [m̀wó màá †sāⁿ] sá,
 if Dem.Def be.Cop [Rel mother] die.Pfv Emph,
 ī †sò cēèn [tòró-ó †mà],
 3Pl go.Pfv arrive.Pfv [fig.tree-Sg Cust],
 ‘That is to say, that one was the one whose mother had died. They arrived at the fig tree.’
 [first line explains that the ‘younger sister’ in the preceding segment was the orphan;
 clarifying sá, §19.4.1.8]

(03:51) L áywà, lé-nóŋ-ò ŋí= [ì sélé-é— sélé-é] [‘lōgō-bāy]-ni,
 well, child-Dim-Sg Sbj/Obj [3ReflSg (hesit.)— song-Sg] [begin]-Caus.Pfv,
 [m̀wò màá] ‘sāⁿ,
 [Rel mother] die.Pfv,
 [[ó rá] ‘kìrì-ì] há ‘jīnī-nī, céé nī,
 [[Dem.Def Foc] hand-Sg] Ipfv be.washed-Ipfv, oil Loc,
 ‘Well, the girl began her song: “(the girl) whose mother had died, it was that one [focus]
 whose hands were washed in oil.” ’

[lógó-báy ‘begin’, literally “mouth-remove,” §9.5.3; in full versions of such cruel-
 stepmother tales the victim sings (likely in Bambara)]

(03:57) L [[m̀wò màá] há ‘wɔ̃ⁿ]
 [[Rel mother] be.Loc there.Def]
 [ó ‘kìrì-ì] há ‘jīnī-nī [kí ‘jùù tīⁿ],
 [Dem.Def hand-Sg] Ipfv be.washed-Ipfv [Inst water under],
 ‘“The one whose mother was there (=alive), that one’s hands were washed with water.”’
 ,

(04:00) L áywà, [[jīnī-í m̀wò] màá] ‘sāⁿ,
 well, [[person-Sg Rel] mother] die.Pfv,
 ó tà ‘nájàà kírè-lè,
 Dem.Def IpfvNeg thing get-Ipfv,
 ‘“Well, a person whose mother had died, that one (=orphan) doesn’t get anything.”’

(04:04) L [[jīnī-í m̀wò] màá] tí ‘sāⁿ,
 [[person-Sg Rel] mother] PfvNeg die.Pfv,
 [ó ‘rà] há ‘nájàà kírè-lè,
 [Dem.Def Foc] Ipfv thing get-Ipfv,
 ‘“A person whose mother has not died, that one gets something.”’

(04:08) L áywà, [[jīnī-í m̀wò] màá] ‘sāⁿ,
 well, [[person-Sg Rel] mother] die.Pfv,
 h́ŋ-ó hó= ó wágà-là,
 hunger-Sg Ipfv Dem.Def kill-Ipfv,
 ‘“Well, a person whose mother has died, hunger kills that one.”’

(04:11) L [[jīnī-í m̀wò] màá] tí ‘sāⁿ,
 [[person-Sg Rel] mother] PfvNeg die.Pfv,
 [ó kónì] fáy-ná-á rà-nì [sájá-á ‘sūnūⁿ],
 [Dem.Def Top] be.sated-Ppl-Sg it.is [time-Sg all],
 ‘“A person whose mother has not died, that one is always well-fed.”’

(04:15) L ó ńí= ì 'sèè lámàà
 Dem.Def Sbj/Obj 3ReflSg say.Pfv only
 tòrò-ò ńí= ì jéńé-nì [bí 'bē nòńómà-à],
 fig.tree-Sg Sbj/Obj 3ReflSg descend-Caus.Pfv [Seq come.Pfv ground-Sg],
 'As soon as that was said, the fig tree came all the way down to the ground.'

(04:18) L tòrò-ò ńí= ì jéńé-nì [bí 'bē nòńómà-à],
 fig.tree-Sg Sbj/Obj 3ReflSg descend-Caus.Pfv [Seq come.Pfv ground-Sg],
 [ńánánú ńàá] 'lèń-ò, ó wáá [bí 'tāⁿ] bí—
 [woman nasty] child-Sg, Dem.Def do.then [Seq ascend.Pfv] Seq—
 '(After) the fig tree came all the way down to the ground, then the cruel woman's daughter climbed—'

[background 'when/after ...' clause with no overt subordinator; likewise @ 04:26 below]

(04:22) L ó wáá [bí, sím [bí 'tāⁿ [tòrò-ò jéè]]]
 Dem.Def do.then [Seq, do.immediately.Pfv [Seq ascend.Pfv] [fig.tree-Sg on]]
 [bí= ì fógò [tòrò-ò jéè]],
 [Seq 3ReflSg sit.Pfv [fig.tree-Sg on]],
 'That one climbed up right away onto the fig tree, and sat on the fig tree.'
 [síⁿ/sí-ní 'do immediately'; smooth out as bí 'sím [bí ...]]

(04:26) L ó ńí= ì fógò [tòrò-ò jéè→],
 Dem.Def Sbj/Obj 3ReflSg sit.Pfv [fig.tree-Sg on].
 [[máá-[téⁿ-ńánánú] mèé] 'lèń-ò] wàà [bá= á 'sèè],
 [[mother-[co.wife] good] child-Sg] do.then [Seq 3Sg say.Pfv],
 '(After) that one sat on the fig tree, the daughter of the good mother's co-wife proceeded to say, ...'
 [i.e. the orphan, rephrase as 'daughter of the good woman', but corrected in the next segment]

(04:30) L áywà, [[ńánánú ńàá] 'lèń-ó 'rà] há= [à jéè] dè?,
 well, [[woman nasty] child-Sg Foc] be.Loc [2Sg on] Emph,
 [[ńánánú 'mèé] lèń-ò] tá= [á jéè],
 [[woman good] child-Sg] not.be.Loc [3Sg on],
 '(Orphan girl, to fig tree:) "Well, it's the daughter of the cruel woman [focus] who is on you! The daughter of the good woman is not on you."'
 [emphatic dè?, §19.4.1.2]

(04:34) L à ɲó = ó ʔsèè lámàà, tòró-ó ʔtāⁿ,
 3Sg Sbj/Obj Dem.Def say.Pfv only, fig.tree-Sg ascend.Pfv,
 bí ʔtāⁿ, bí ʔtāⁿ, bí ʔtāⁿ,
 Seq ascend.Pfv, (repetitions)

‘As soon as she said that, the fig tree went (back) up, and up, and up.’

(04:39) L bí ʔtāⁿ [gí, [ɲánánú ɲàá] ʔlèŋ-ò] tîⁿ],
 Seq ascend.Pfv [Inst, [woman nasty] child-Sg] under],
 [bí ʃóò [ká = á tîⁿ] [má yògòò],
 [Seq go.Pfv [Inst 3Sg under] [until above],
 má = á ʔtùⁿ [ɲí-rèéⁿ ʔnà],
 until 3Sg disappear.Pfv [person-Pl Loc],

‘And it went up with the cruel woman’s daughter, taking her up high, to the point that she disappeared from the view of people.’

[< táⁿ kí ; can be emended to ɲí-rèéⁿ ʔmà]

(04:47) L [Ø ɲá zírìⁿ kírè [[wóróŋ-ó mwò] nî]]
 [1Sg Sbj/Obj tale get.Pfv [[place Rel] Loc]]
 [Ø ɲá = á yágà wòⁿ]
 [1Sg Sbj/Obj 3Sg put.Pfv there.Def]

‘In the place where I got the tale, I have put it (back) there.’

[standard tale ending]

Kelenga 2021-15 Tale of chicken and frog

recorded in Bamako; narrator Ali Tereta (L) with Aboubacar Fanafo (F)
duration 02:35

(00:02) F á há bílí †[zìirìⁿ jìméⁿ], †jéé [ŋgì té], †jèèné kù,
2Sg Ipfv Fut [tale which?], say [1Pl Dat], afternoon Dem
L í gá bílí †[zìirìŋ-ð m̀wó] †sēē [ì té] [†jèèné kù],
1Sg Ipf Fut [tale-Sg Rel] say.Pfv [2Pl Dat] [afternoon Dem],
F: ‘Which tale will you tell this (late) afternoon?’
L: ‘The tale that I will tell to you this afternoon,’

(00:05) L ó há †sō-lō †mōnō-nēⁿ, m̀ónó-nēⁿ, à [kí †sùbàà-nēⁿ]
Dem.Def Ipfv go-Ipfv frog-Dim, frog-Dim, 3Sg [and chicken-Dim]
ì só †sōŋō-fāà, álá ŋá= á †tāàⁿ,
3Pl go.Pfv the.bush, God Sbj/Obj 3Sg do.Pfv,
‘That (tale) goes to (=is about) frog and chicken. They went out to the bush. As God
would have it, ...’
[sùbàà-nōŋ-ð ‘little chicken’ (diminutives common for animal names in tales)]

(00:17) L sùbàà-nēⁿ, ó ŋí= [ì h̀d̀] táá-nì,
chicken-Dim, Dem.Def Sbj/Obj [3ReflSg house] stand-Caus.Pfv,
[bí †sùgù-ù-yéⁿ †tīīⁿ]
[Seq grass-Sg-Pl look.for.Pfv]
‘Chicken, that one (=chicken) built his house. He went looking for grass.’
[looking for grass flashes back to before the house was built]

(00:22) L ó wó †[mōnō-nēⁿ †m̀à] [ŋgá= á h̀d̀ táá-nì],
Dem.Def said [frog-Dim Cust] [1Pl Hort house stand-Caus.Pfv],
m̀ónó-nēⁿ wó †i-rā tá h̀d̀ táá-nì-nì,
frog-Dim said LogoSg-Indep IpfvNeg house stand-Caus-Ipfv,
‘That one (=chicken) said to the frog, “let’s build a house!” Frog said, “as for me, I’m
not building a house.”’
[hortative, §10.4.2.1]

(00:27) L á→ sùbàà-nēⁿ wò [ná= á tí h̀d̀ táá-nì],
ah! chicken-Dim said [if 3Sg PfvNeg house stand-Caus.Pfv],
ní hàbàà †bē, à= à lí †lō m̀íní-fāà,
if rain(n) come.Pfv, 3Sg Ipfv Fut enter.Pfv where?,
‘“Ah,” said the chicken, “if you don’t build a house, if it were to rain, where would you
go in (to take shelter)?”’
[3Sg in quoted speech for original 2Sg, §17.1.1; < à hà lì]

- (00:32) L é→ à wó [hàbàà tá ‘bē-lē],
 oh 3Sg said [rain(n) IpfvNeg come-Ipfv]
 áywà [álá ɲá= á ‘tāāⁿ]
 well [God Sbj/Obj 3Sg do.Pfv]
 ‘“Oh,” he (=frog) said, “the rain won’t come.” Well, as God would have it, ...’
- (00:36) L [sùbàà-nóŋ-ð ɲá hòò táá-nì], bí lèè—
 [chicken-Dim-Sg Sbj/Obj house stand-Caus.Pfv], (hesitation)
 [bí ‘lɔɔ [hòó nìŋû]],
 [Seq enter.Pfv [house inside]],
 ‘The chicken built a house, and went inside it.’
- (00:40) L mónó-nóŋ-ð, [hàbàà ‘tòŋ-ó] ‘bē céè,
 frog-Dim-Sg, [rain(n) wind-Sg] come.Pfv get.up.Pfv,
 [hàbàà ‘tòŋ-ó] céè,
 [rain(n) wind-Sg] get.up.Pfv,
 ‘(As for) the frog, a rainstorm arose then. (When) the rainstorm arose, ...’
[last clause is background repetition]
- (00:45) L mónó-nóŋ-ð ɲá ‘jùù-kàbì-férèŋ-ð,
 frog-Dim-Sg Sbj/Obj water-bail.out.VblN-bailing.cup-Sg,
 [à ɲó= ó ‘lēgē]
 [3Sg Sbj/Obj Dem.Def pick.up.Pfv]
 ‘The frog picked up a bailing cup.’
[clause restarted after heavy object NP]
- (00:49) L [wó hàbàà kónì], [hàbàà tí= ì-rà ‘kwārī-li]
 [said rain(n) Top], [rain(n) IpfvNeg 3ReflSg-Indep hit-Ipfv]
 [bí kù tógó [í kìrì]],
 [Seq Dem.Sg remain.Pfv [3ReflSg Poss],
 ‘(Frog) said, “as for the rain, the rain won’t strike me, as long as this (=bailing cup) remains in my possession.” ’
- (00:52) L ā wàà [bí, júú-kábì-férèŋ-ó ‘hōbī [ì má]],
 3Sg do.then [Seq, bailing.cup-Sg cover.Pfv [3ReflSg Cust]],
 [hàbàà ‘tòŋ-ó céè lámàà] [sùbàà-nóŋ-ð ‘lɔɔ [hòò nû]],
 [rain(n) wind-Sg get.up.Pfv only] [chicken-Dim-Sg enter.Pfv [house Loc]],
 ‘Then he (=frog) covered himself with the bailing cup. As soon as the rainstorm arose, the chicken entered the house.’

(00:58) L [á-lá ɲá = á ʼtáàⁿ] mónó-nón-ò,
 [God Sbj/Obj 3Sg do.Pfv] frog-Dim-Sg,
 à-rà ɲá ʼjùù-kàbì-férèⁿ, hóbí [ì ʼmà],
 3Sg-Indep Sbj/Obj bailing.cup, cover.Pfv [3ReflSg Cust],
 ‘As God would have it, the frog, he for his part covered himself with the bailing cup.’

(01:04) L à ɲá ʼjùù-kàbì-férèⁿ-ó ʼhōbī [ì ʼmà],
 3Sg Sbj/Obj bailing.cup-Sg cover.Pfv [3ReflSg Cust],
 [hàbáà ʼtòn-ò] céè lámàà] [bí [hàbáà ʼjùú] ʼbēē-nī],
 [rain(n) wind-Sg] get.up.Pfv only] [Seq [rain(n) water] come-Caus-Pfv],
 ‘(After) he covered himself with the bailing cup, as soon as the rainstorm arose and brought the rainwater, ...’
[first sentence in this segment spoken quickly and indistinctly]

(01:09) L tón-ó ɲá—, júú-kábí-férèⁿ-ò,
 wind-Sg Sbj/Obj—, bailing.cup-Sg,
 tón-ó ɲó = ó ʼlēgē [bí só ʼ[kā = ā tîⁿ]],
 wind-Sg Sbj/Obj Dem.Def pick.up.Pfv, [[Seq go.Pfv [Inst 3Sg under]],
 ‘The wind—, the bailing cup, the wind picked up that (=bailing cup) and took it away.’
[< bí sô [kí = á...]]

(01:14) L mónó-nón-ò ʼtōgō [hàbáà ʼnà],
 frog-Dim-Sg remain.Pfv [rain Dat],
 [hàbáà ʼtòn-ò] há = [á ʼjéè], [hàbáà ʼjùù] há = [á ʼjéè],
 [rain(n) wind-Sg] be.Loc [3Sg on], [rain(n) water] be.Loc [3Sg on],
 ‘The frog remained (=was stuck) in the rain. The rainstorm was on him, the rainwater was on him.’
[emend to hàbáà ʼlà]

(01:18) L ñ gá ʼkūūrū-lū, ñ gà ʼsúbàà-nón-ò ʼhōō-nū,
 3Sg Ipfv shout-Ipfv, 3Sg Ipfv chicken-Dim-Sg call-Ipfv,
 sùbàà-nēⁿ à táà [m̃ bí ʼlōō],
 chicken-Dim 3Sg stop [1Sg Sbjn enter.Pfv],
 ‘He (=frog) was crying out, he was calling to the chicken. “(Hey) chicken! Let me come in!”’
[imperative of reflexive ‘stop’, here with subjunctive complement, §17.3.11.2]

(01:22) L à táà [m bí 'l55 [á fáà] [hòò nìhî],
 3Sg stop.Pfv [1Sg Sbjn enter [3Sg by] [house inside],
 sùbàà-nóh-ò wáá [bá= á 'sèè] wó [m bí 'l55],
 chicken-Dim-Sg do.then [Seq 3Sg say.Pfv] said [3Sg Sbjn enter.Pfv],
 '(Frog:) "Let me come in with you inside the house!" The chicken then said that he
 (=frog) could come in.'

[wò here as quotative particle following overt 'say' verb]

(01:26) L ā 'lòò-ná [ó fáà], ó wáá [bí—
 3Sg enter-Ppl [Dem.Def by], Dem.Def do.then [Seq—
 [dóyì 'kā] kúh gó= [ó kìrì],
 [awl a.certain] Past be.Loc [Dem.Def Poss],
 'When he (=frog) had gone in with him, that one (=chicken) then—. That one (=chicken)
 had an awl.'

[an awl (sharp pointed tool) is heated in a fire by blacksmiths and boat-builders and
 driven into wood to make holes for large nails and spikes]

(01:30) L ó wáá [bó= ó 'l55 [tùbà-à nî]],
 Dem.Def do.then [Seq Dem.Def put.in.Pfv [fire-Sg Loc]],
 [mónó-nóh-ò kónì] hì= ì ságá,
 [frog-Dim-Sg Top] Sbj/Obj 3ReflSg lie.down.Pfv,
 'That one (=chicken) then put that one (=awl) into the fire. As for frog, he lay down (to
 sleep).'

(01:35) L ā kómù [bí kómù] [bí kómù] [bí kómù] [bí kómù],
 3Sg sleep.Pfv [Seq sleep.Pfv] (repetitions)
 ā kómù [bí kómù] [bí kómù] [bí kómù]
 3Sg sleep.Pfv [Seq sleep.Pfv] (repetitions)
 'He (=frog) slept and slept and slept.'

(01:41) L mà kómù-ú 'hēlē [á 'mà],
 until sleep(n)-Sg pass.Pfv [3Sg Cust],
 kómù-ú 'hēlē-ná [á 'mà],
 sleep-Sg pass-Ppl [3Sg Cust],
 'Until sleep became excessive for him. When sleep had become excessive for him, ...'
 [i.e. he was fast asleep; < kómù-ù 'sleep (n)']

(01:45) L sùbàà-nóh-ò [ó wáá [bí só 'dóyì-í 'l55,
 chicken-Dim-Sg [Dem.Def do.then [Seq go awl-Sg put.in.Pfv,
 [tùbà-à nî]],
 [fire-Sg Loc],
 'The chicken then put the awl in the fire.'
 [the fire is outside the house]

(01:49) L [dóyì-í 'lɔ̃ɔ-nāā] [séŋ-ó— séŋ-ó 'lɔ̃ɔ-nāā] [tùbà-à nî],
 [awl-Sg enter-when] [spear-Sg— spear-Sg enter-when] [fire-Sg Loc],
 [séŋ-ó 'gūlē] [bí 'gūlē] [bí 'gūlē] [bí 'gūlē],
 [spear-Sg get.hot.Pfv] [Seq get.hot.Pfv] (repetitions)
 ‘When the awl had gone in, (or rather) when the spear had gone into the fire, the spear kept getting hotter.’
[narrator changes ‘awl’ to ‘spear’]

(01:54) L ā 'wàà [bí 'bē [ká= á tîⁿ]]
 3Sg do.then [Seq come.Pfv [Inst 3Sg under]]
 [bí 'bē, mónó-nóŋ-ò 'tɔ̃gɔ̃ [kómù-ú 'là] lámàà]
 [Seq go.Pfv, frog-Dim-Sg find.Pfv [sleep(n)-Sg Dat] only]
 ‘Then he (=chicken) brought it (back in), and he came and found the frog asleep, ...’

(01:59) L [bí, séŋ-ó, túrá= [á nî],
 [Seq, spear-Sg, implant.Pfv [3Sg Loc],
 à ŋá 'sèŋ-ó 'tūrā= [á nî],
 3Sg Sbj/Obj spear-Sg implant.Pfv [3Sg Loc],
 ‘And he (chicken) planted it (=spear) into him (frog). He planted the spear into him,’
[< túrú ; spoken smoothly the first line would be bí 'sèŋ-ó 'tūrā= á ...]

(02:04) L ā 'kùùrù, [ā 'kùùrù] [bí 'kūūrū],
 3Sg shout.Pfv, [Seq shout.Pfv] [Seq shout.Pfv],
 ā wò [dóyì-ì há [á 'mà]]
 3Sg said [awl-Sg be.Loc [3Sg Cust]]
 ‘He (=frog?) cried out and cried out. He (=chicken) said, “An awl is on you!”
[if this were frog talking it would have logophoric ... ì má ; custodial má is less specific spatially than]èè ‘on’ or nîŋî ‘inside’]

(02:07) L [dóyì-ì há [á 'mà]] [dóyì-ì há [á 'mà]],
 (repetitions)
 [dóyì-ì há [á 'mà]] [dóyì-ì há [á 'mà]] [dóyì-ì há [á 'mà]],
 (repetitions)
 ‘(Chicken:) “An awl is on you! An awl is on you!” (etc.)’

(02:13) L è→, sùbàà-nóŋ-ò— sùbàà-nóŋ-ò wáá [bá= á 'sèè],
 ah, chicken-Dim-Sg— chicken-Dim-Sg do.then [Seq 3Sg say.Pfv],
 jàá ŋà dóyì-ì yágà= [á 'mà],
 who? Sbj/Obj awl-Sg put.Pfv [3Sg Cust],
 ‘Ah, then the chicken said, “who put the awl on you-Sg?”’

(02:19) L á→ à wó [‘ì-rà kún gá ‘sāgā-nā gôⁿ,
 ah 3Sg said [LogoSg-Indep Past be lie.down-Ppl here,
 wó [‘kà nà, dóyì-ì yági= [ì-rà ‘mà]],
 said [a.certain Sbj/Obj, awl-Sg put [LogoSg-Indep Cust]],
 ‘ “Ah,” he (=frog) said, “I was lying down (=asleep) here.” He said “somebody put an
 awl on me.” ’
 [< yágà]

(02:23) L ó yágà— ó yágà [ká= [á ‘mà]]
 (hesitation) Dem.Def become.Pfv [Inst [3Sg Cust]]
 [kí [‘tùgò húlò-ò]], yàni [‘[kóó fíyò-ó] ‘mà], à-rá ‘sàⁿ,
 [Inst [wound big-Sg]], before [[day three-Sg] Cust], 3Sg-Indep die.Pfv,
 ‘That became on him (=frog) a big wound. Within three days, he died.’
 [< tùgò-ò ‘(a) cut, wound’, túgò húlò-ò ‘(a) big wound’; < kòò ‘day’, kòò síyò ‘three
 days’; yàni is Bambara equivalent of sèni and variants ‘before’, §17.3.4]

(02:30) L [Ø nà zírìⁿ kírè [[wóróŋ-ó mwò] nî]]
 [1Sg Sbj/Obj tale get.Pfv [[place Rel] Loc]]
 [Ø nà zírìⁿ yágà wôⁿ]
 [1Sg Sbj/Obj tale put.Pfv there.Def]
 ‘In the place where I got the tale, I have put the tale (back) there.’

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Abbreviations and symbols

Abbreviations

Abstr	abstractive (nominal)
Adj	adjective
Agent	agentive nominal
Antip	antipassive (with ‘eat’ verb)
AssocPl	associated plural
ATR	advanced tongue root (vowel feature)
BCM	bidirectional case marker (§11.1.2.1)
C	consonant (in formulae like CvCv)
Caus	causative
Counterf	counterfactual conditional
Cust	custodial postposition
Dat	dative postposition
Def	(discourse-)definite
Dem	demonstrative
Dimin	diminutive
DiscFunct	discourse-functional (‘only’, ‘even’, ‘as for’, etc.)
Emph	emphatic (clause-final particle)
ExpPf	experiential perfect (§10.2.3.4)
Fut	future
Gent	gentilic (§4.2.4)
H	high (tone)
Hort	hortative
Imprt	imperative
Inch	inchoative (deadjectival verb)
Inst	instrumental postposition
Ipfv	imperfective (verb stem)
ipfv	imperfective (clause-level category)
JSDj	Jenaama-Sorogaama of Djenné
L	a) low (tone) b) any sonorant (in formulae like CvL)
Loc	locative
Logo	logophoric
M	mid tone
N	a) noun (in e.g. “N-Adj”) b) nasal consonant (in formulae like CvN)

(n)	noun, in glosses like ‘work (n)’
Neg	negative
NP	noun phrase
Num	numeral
Obj	object
Pf	perfect (in ExpPf)
Pfv	perfective (verb stem)
pfv	perfective (clause-level category)
Pl	plural
Poss	possessive, possessor
PP	postpositional phrase
Ppl	participle, in relative clauses
Pron	pronoun
Proh	prohibitive
Prsntv	presentative (‘here’s X!’, §4.4.4)
Purp	purposive
Q	question
QTop	interrogative topic (‘what about X?’, §13.2.2.1)
Recip	reciprocal
Refl	reflexive
Rel	relative marker
S	subject (in e.g. “SOV order”)
Sbj	subject (in e.g. “2PlSbj”)
Sbj/Obj	interlinear gloss for bidirectional case marker (BDM)
Sbjn	subjunctive (§17.3)
Seq	sequential VP (§15.2)
Sg	singular
Stat	stative
sb	somebody
st	something
sw	somewhere
V	a) verb (in e.g. “SOV order”) b) vowel (in names of phonological rules)
v	vowel (in formulae like CvCv)
(v)	verb, in interlinear glosses like ‘fight (v)’
VblN	verbal noun
VP	verb phrase

Symbols

*	reconstructed
#	ungrammatical, unacceptable, unattested
/L/, /LH/, etc.	lexical tone melody of a stem
<HL>, <LH>, <LHL>	contour-toned syllable, e.g. <HL>, <LH>, <LHL>
M.M.H, etc.	syllable-by-syllable tone pattern of a word
→	gradient prolongation of final segment of a word
=	clitic boundary
tone diacritics on vowels	
á, etc.	high tone (H)
à, etc.	low tone (L)
ā, etc.	mid tone (M)
â, etc.	falling high-low tone (<HL>)
ã, etc.	falling mid-low tone (<ML>)
ǎ, etc.	rising low-high (<LH>) tone
ã, etc.	bell-shaped tone (<LML>)

Index

1. selected morphemes

notes:

in suffixes, “v” is a variable vowel;

alphabetization: ε follows e, ɔ follows o, nasals ordered n then ŋ then ŋ ;

atonal morphemes are not tone-marked here;

not all variants due to tone sandhi are presented;

perfective/imperfective pairings shown with /

a

- à, ā, á 3Sg pronominal clitic, §4.3.1
á, à2Sg pronominal clitic, §4.3.1
á-wó-tá ‘like, similar to’, §8.5.1, §12.2.3.1
‘as though’ clause, §15.5.4
bágí, báy a) ‘exit (v)’, §10.1.1.5
b) ‘take out, remove’, §9.1.2
compounds, §9.5.1
bágí-ná ‘resemble’, §11.2.6
bálí-ní(-ní) ‘prevent’, §15.2.7
bari
báí ‘because’, §15.5.1
báí-sàà ‘because’, §15.5.1
-báí-i negative agentive, §4.2.2.2
as final in compounds, §5.1.7.2.2
-barí-nà-à negative verbal noun, §4.2.1.3
as final in compounds, §5.1.7.1.2
bé (see byé)
bele
bé-lé (see byé)
bélé, bílí future
bé right-edge marker in conditional antecedents, §16.1.1.3
bèlè-fàà ‘side (of an object); edge (of water)’
‘bélè-fàà ‘beside’ (postposition), §8.2.7.1
bí a) sequential (followed by VP)
b) subjunctive (between subject and VP)
bílén ‘(not) again since’, §19.3.1.3
bílí future (variant of bélé)

gá, gà	form of imperfective há/hà after nasal
gáálè-è	‘mind’, (676) in §11.2.5.3
gèè	(see hèè)
gélé(-lé)	(see hélé)
gí	(see kí)
gò ⁿ , gòò ⁿ	‘here’, §4.4.3.1
há ‘gò ⁿ	‘be here’, (660) in §11.2.3.1
gó-nìinòò	focalized, §4.4.3.1
gò ⁿ vâà	‘over there’, §4.4.3.1
gúlò-ò(see húlò-ò)	
há, gá, hà, gà	a) imperfective (positive), §10.2.4.1 (g after nasal)
	b) with transitive statives, (557) in §10.1.3.1
	not used with intransitive statives, §11.4.1, §10.1.3.1
	c) ‘be (somewhere), exist’, §11.2.3.1
	d) part of progressive construction, §10.2.4.6
há bélé	future, §10.2.4.3
há bílí	future, §10.2.4.3
háá-nà	‘on the torso of’ (postposition), §8.2.5
há-lèè ⁿ	‘men’, §4.1.1.4
hali	
hàlì	‘even’, §19.1.4
hàlí nì	‘even if’, §16.2
hálí	dialectal variant of kélé ‘be’
hálú-ú ‘man’, §4.1.1.4, §4.1.2	
hálu-u, gálu-u	adjective ‘male’, (219d) in §4.5.1.1
	final in compounds, §5.1.10
háŋ-ó	‘neck’
háŋ-	compound initial, §9.5.4
hèè, gèè	presentative, §4.4.4
	with clause or VP, §10.2.4.5
hèè ⁿ /hèé-nè	‘help (v)’, §15.2.8
hélé(-lé)	‘pass, go past’
	‘surpass’ in comparatives, §12.1.1
híní	‘be able to’, §15.2.2.4
hón-ó, hòŋ-ô	‘white’, (221a) in §4.5.1.2.1 (see also hóó-ná-na)
hoo	a) ‘sound (of an activity)’
	as compound final, §5.1.7.5
	b) (see hóó-ná-ná)
hóómá	‘for’ (postposition), §8.3.2
hóó-ná-ná/-nà	‘white’ (participial form), (226a) in §4.5.1.4 (see also hón-ó)
hò ⁿ	‘here, take this!’, §10.4.1.5
hóórò-fàà	‘behind’, §8.2.9.1
hùèè	‘behind’, §8.2.9.1

- húlo-o, gúlo-o ‘big’, (219b) in §4.5.1.1
 in compound-like L*-HL N-Adj pairs, §5.1.5.2
 as final in compound adjectives, §4.5.1.3.1
- hùŋ-ôdiminutive adjectives, §4.5.1.3.2
- húóⁿ ‘bone’
 as final in L*-HL compounds, §5.1.5.1
- i
- ì, í, í 3Pl pronominal clitic, §4.3.1
 í, ì a) 2Pl pronominal clitic, §4.3.1
 b) Logo/3ReflSg pronominal clitic, §4.3.1, §18.1.1, §18.3.1
 plural í-yèⁿ, §4.3.1, §18.1.1, §18.3.1
- jaati
- jáátí ‘indeed’, §19.4.1.3
 jáátì ‘exactly’, §8.5.2.2
- jàngò ‘a fortiori’, §19.1.5
- jénì ‘how much?, how many?’, §13.2.2.7
- jíŋ-ó ‘year’, §11.1.1.2
 jíŋ ‘gēlē ‘day has broken’ (< kélé), (612) in §11.1.1.2
- júmèⁿ, dúmèⁿ ‘which?’, §13.2.2.8
- ka
- ká, kà imperative plural, §10.4.1.1
 ká a) ‘a certain’, §6.3.2
 b) (see under kíná-á)
 ká-yèⁿ ‘certain (ones), some’
- kààⁿ, káàⁿ ‘in front of’, §8.2.8.1
 ‘forward, ahead’, §8.5.5.6
- kááⁿ-vàà ‘in front of’
- kábàⁿ ‘already’, §19.3.3
- kàbìni (see kàmìni)
- kàlámà ‘be aware of’ (transitive stative), §11.2.5.2
- kàmìni ‘since’, §8.2.16, §15.5.3.1
- kámù-ù ‘place’, §4.1.2
- kámù-fàà ‘near’ (postposition), §8.2.7.3
- ká-nèⁿ ‘a little’, §6.4.4
- kélé, hálí ‘be’ (copula), §11.2.2.1
- kélé(-lé) ‘(day) break’, §11.1.1.2
 jíŋ ‘gēlē ‘day has broken’, (612) in §11.1.1.2
- kè emphatic (clause-final), §19.4.1.6
- kénèèⁿ, génèèⁿ a) ‘one’, §4.6.1.1
 with noun, §6.4.1.1
 b) ‘equal, same’, §12.2.2, §12.2.3.2

kí, gí	‘and’ (conjunction for NPs and adverbs), §7.1.1 in ‘every X has a Y’ construction, §11.5.3 in greetings, §19.6.1-3
kí X tî ⁿ	‘with X’ (instrumental or comitative), §8.1.3.1 in conveyance construction, §11.1.1.6
kílá(-lá)	‘finish’ with dative verbal noun, §15.3.4
bí ‘kīlā	§15.2.11
kíná-á	‘other’, §6.3.1.2
ká-kíná-á	‘other’, §6.3.1.2, §4.5.1.3.3
kiri-i	
kírí-í	‘hand’, §11.5.1.1
kìrì	postposition, in ‘X have Y’ construction, §11.5.1.1
kírì-ì	‘manner’, §4.1.2 as final in compounds, §5.1.5.10 kírí mwò, relative clause, §14.4.6
kóó-ná(á)	‘many/much’, §6.4.2
kóy	emphatic (clause-final), §19.4.1.1
kónì ⁿ , kón	a) topic (‘as for’), §19.1.1 b) ‘anyway’ (clause-final), §19.4.1.7
kónò(-nò)	‘fear (v)’, §11.2.5.8 ‘fear to VP’ with sequential VP, §15.2.5
ku	
kú	a) demonstrative ‘this/that’ absolute (without a noun), §4.4.2.1, §6.5.1 before a noun, §6.5.2 after a noun, §6.5.3
kú ⁿ	a) past-time particle (post-subject), §10.3.1 b) ‘again’ (clause-final), §8.5.5.1, §19.3.1.1
kw = élé	contraction of kú kélé, §11.2.2.1
la	
lá, ‘là	dative with ditransitives, §8.1.1.2 in comparatives, §12.1.1.1 in PP initials of compounds, (279b) in §5.1.9.1
la-	compound initial (cf. lágà-à) with verbs (‘open’, ‘close’), §9.5.4 with adjectives (‘hot/fast’, ‘cold/slow’), §8.5.4.1, (225c) in §4.5.1.3.3
lá-dègè/lá-dègé-lè	‘imitate’, §11.2.6
lágà-à	‘mouth’ (see also lógó-ó, la-)
lálì	experiential perfect, §10.2.3.4

lámàà	a) ‘only’, §19.3.2.1 b) ‘as soon as’, §15.5.2 c) ‘apart, distinct’, §8.2.14
lámáá-lámáá	‘a few’, §6.3.4
-lèè ⁿ , -lèè ⁿ	plural, §4.1.1.4
légé(-lé)	‘take’ starting point, §15.5.3.5
lê ⁿ	‘be sweet’, §4.5.1.1 with dative PP in ‘X likes Y’ construction, §11.2.5.4, §17.3.9.1
léŋ-ó	‘child’, §5.1.2, §4.1.2 ‘unit’ in counting objects, §13.2.2.7 as compound final, §5.1.11.2 l/n alternation, §3.4.1.1
lí, lì	in counterfactuals, §16.4.1
lógó-ó ‘mouth’ (see also lágà-à, la-)	in place nominals, §4.2.1.5
lógó-	compound initial with verbs, §9.5.3, §15.3.3
lògò-fâà	‘at the edge/bank of’, §8.2.7.4
lógó-ó ‘mà	‘at the edge/bank of’, §8.2.7.4
lógó-jê ⁿ	‘end (activity)’, §15.3.6
lúma-a	‘sweet’ (modifying), (219c) in §4.5.1.1 (see also lê ⁿ)
ma, maa	
má, mà	custodial postposition, §8.1.2
mà, má	‘until, all the way to’ with NP/adverb, §8.2.16, §8.5.5.7 with sequential VP, §15.2.15 with indicative clause, §15.5.3.2-4 with subjunctive or other modal clause, §17.3.4
mà m̀ bì sò	§15.1.5.2
mà	‘must’, with subjunctive or imperfective, §17.3.9.3
màà	‘mother’ as final in compounds, §5.1.11.3
màà-léŋ-ò	‘sibling’, §5.1.5.4
mà m̀ bì sò	‘until’, §15.1.5.2
mànásì	‘what?’, §13.2.2.3
mà ⁿ , mwà ⁿ	‘what?’, §13.2.2.3
mání, míní	prohibitive, §10.4.1.3
mánzì	(variant of mànásì ‘what?’)
mángè, mégè	‘chez’ (postposition), §8.2.12
maŋ-ò	
-máŋ-ó, -màŋ-ò	in exemplar-based adjectives, §4.5.1.2.2
-máŋ-ò	as compound final, §5.1.13
máǎòò	‘need (of sth), interest (in sth)’, §11.2.5.7

mégè	(see máṅgè)
mεε	
méé, mèè	‘good’, (219a) in §4.5.1.1
méé-táá ⁿ	a) ‘greatly, a lot’ (adverb), §8.5.3.1.1 b) ‘well’ (adverb), §8.5.3.2
-mèè	bóló-mèè ‘young person’, §4.1.1.4
-mεε ⁿ	plural suffix allomorph
lú-mèè ⁿ	‘children’, §4.1.1.4
bòlò-méè ⁿ	‘young people’, §4.1.1.4
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míní	(variant of prohibitive mání)
mínì	‘where?’, §13.2.2.4
míní-fàà	‘where?’, §13.2.2.4
-mój(-)ɔ	final in ‘manner of’ compounds, §5.1.5.10
mù ⁿ	(see mwò)
mwò, mù ⁿ	relative marker (singular), §14.1
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ná, †nà	variant of dative postposition lá (q.v.)
-ná, -nà	participle, in stative predicates, §10.1.3.2, §11.4.2
-ná-á, -nà-à	a) participle, as nominal modifier, §4.5.1.4 (see also -náá) b) abstractive nominal, §4.2.3.1
-ná-á	ordinal adjective, §4.6.2.2
-náá, -nàà	‘when ...’, §15.6 (see also participial -na)
naa	(see na)
nàáj-ò	‘waist; middle’ (variant nàṅáj-ò)
nàáj-ò nì	‘in the middle of’, §8.2.11
naṅaa	
nàṅáà	‘thing’, §4.1.2
nàṅàà	‘(not) a thing’, §6.6.2.4
nàṅáà	‘amidst, between’, §8.2.11 (cf. nàáj-ò)
-ndaṅ-ɔ	‘one who lacks _’, in compounds, §5.1.14
némé-némé	‘gently’, §8.5.3.1.2
-né ⁿ	bare stem of -nój-ò
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-nì(-nì)	causative suffix on verb, §9.1.1
-ní	(see rá-ní)
ní	‘if’ (clause-initial), §16.1.1
nì	‘if’ (post-subject), §16.1.1.2
-ní-í, -ní-ì	verbal noun suffix, §4.2.1.1 as final in compounds, §5.1.7.1.1

nî	locative postposition, §8.2.3.1 in PP initials of compounds, (279a) in §5.1.9.1
-nîi	associative plural of nouns, §4.1.4
nii	(see ni)
nîŋî	postposition ‘in, inside’, §8.2.4
n-ón dè	‘otherwise (=if not)’, §16.1.3
-nóŋ-ò	diminutive suffix nouns, §5.1.11.1 adjectives, §4.5.1.3.2 (see also -hùŋ-ò) l/n alternation, §3.4.1.1
nòŋómà	‘below, down, at the bottom’, §8.5.5.6
noo	
nòò, nòò	‘(the) place/role (of sb)’, (457) in §8.2.9.2
nòò nîi	‘in the place of’ (postposition), §8.2.13
nòò nî	‘following/pursuing’ (postposition), §8.2.9.2
-nu	imperfective suffix allomorph for verbs with final nasalized vowel, §10.1.1.2
náá, nàà	‘bad; nasty, evil, cruel’, (219a) in §4.5.1.1
náá-táá ⁿ	‘greatly, a lot; too much, excessively’ (adverb), §8.5.3.1.1
nàŋà-léè ⁿ	‘women’, §4.1.1.4
náŋáná	‘in the presence of’ (postposition, §8.2.8.2
nàŋànù-ù	‘woman’, §4.1.1.4, §4.1.2 as adjective ‘female’, (219d) in §4.5.1.1 final in compounds, §5.1.10
níè, néè, njéè	‘like this, thus’, §4.4.3.2
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ŋv-	linker between verb and vowel-initial pronominal, §8.4
íŋgàà, íkààrà	‘but’, §19.2.1
ŋgèréŋ-ò fáà	‘beside’ (postposition), §8.2.7.2
ŋgí, ŋgì	1Pl pronominal clitic, §4.3.1
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-ó, -ô	singular suffix after η-final noun or adjective stem, §4.1.1.2
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-rá, -rà	independent pronouns, §4.3.3
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sá	emphatic/clarifying (clause-final), §19.4.1.8
sáánà	‘one’, §4.6.1.1
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sájà-à	‘time, moment in time’, §4.1.2 ‘when ...’ clause after verbal noun, §15.3.2
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sé-lé	(see féeé)
sé	(see féeé)
sé-lé	(see féeé)
sèè ⁿ ~ sèè ⁿ	a) ‘be equal’ (stative), §12.2.1 (cf. sèjê) b) ‘be right, appropriate; ought to’ (stative), §15.2.9
sèjê	‘become equal’, (556a) in §10.1.3.1
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-sìì	possibly in mànáàsìì ‘what?’, §13.2.2.3
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féeè ~ fíè	‘tomorrow’
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-tóó, -dóó, -tòò, -dóò	deverbal ‘place’ nominals, §4.2.1.4 as final in compounds, §5.1.7.3

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participial statives	§10.1.3.2
adjectival predicates	§11.4.1
‘be’	§11.2.1-3
‘know’	§11.2.5.1
‘have’	§11.5.1
‘want’	§11.2.5.6
presentative	§4.4.4
past stative	§10.3.3
‘stop’ complements	§15.3.5
subject	§11.1.1
subjunctive complements	§17.3
syllables	§3.1.1
temporal	(see also “past”)
adverbs	§8.5.5.1-5
focalization	§13.1.6.2
postpositions	
‘after’	§8.2.9.1
‘by’ = ‘during’	(439b-c) in §8.1.3.3
subject-verb collocations	§11.1.1.2
relative clause	§15.4.1
‘before ...’	§17.3.4
other temporal clauses	§15.5
tone	§2.1.2-3, §3.6
Tone-Dropping	§3.6.5.3
Tone Inversion	§3.6.5.1.1
Tone Leveling	
compounds	§5.1.6
noun-adjective	§6.3.1.1
Tone-Terracing	§3.6.5.6
‘too’	§19.1.3
topic	§19.1
valency	
intransitivization	§9.3.1
transitives	§11.1.2.1
ditransitives	§11.1.2.4
causatives	§11.1.2.5
verb	
derivations	chapter 9
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verbal noun	§4.2.1
in compounds	§5.1.7.1
as complement	§15.3
verb phrase	§11.1.4 (<i>see also "chaining"</i>)
vowels	§3.3
vv-Contraction	§3.4.1.2
‘want’	§11.2.5.6
complements	§15.2.3, §17.3.9.3
‘whether’	§13.2.1.3, §16.3 (willy-nilly), §17.2.1
WH interrogatives	§13.2.2
‘with’	(<i>see "instrumental" and "comitative"</i>)

category: cells are empty except as follows:

“bahuv” = bahuvrihi compound

“cpd” = other compounds

“drv” = derivative

“n+adj”, “n+num”, “n+ppl” (noun plus adjective, numeral, participle)

η/dim: cells are empty except as follows:

“dim” ends in diminutive -nónη-ð (singular) or variant

“η” stem-final η (singular η-ð) other than diminutives

selected subtypes of “cpd” and “drv” in “category” column

cpd and drv subtypes:

“abstr” (abstractive)

“agent”

“child” (‘child’ is compound final)

“fake” (nonprototypical species)

“gent” (gentilic)

“owner”

“phrase”

“place”

“PP” (initial contains a postposition)

“rel” (relative clause)

“sex” (specifies gender)

“thing” (‘thing’ is final)

“vbln” (verbal noun)

onset: flags stems beginning with diphthongal Cw, Cu, Ci, and Cy

bare stem: form of noun before modifiers

singular: form of singular stem as autonomous noun

plural: with plural suffix added to singular

class: selected lexical-semantic classes, including fa (fauna) and fl (flora)

“body”

“kin”

“fa-” with subcategories (annelid, arthropod, bird, fish, insect, mammal, reptile)

“flora”

“fl-fungus”

“fl-cult” (cultivated crops)

“fl-planted” (introduced fruit-bearing and ornamental/shade trees)

English

French

comments

biological order/family

species

Adjectives

Because modifying adjectives acquire tones by Tone Leveling, so the lexical tone melody of the noun affects the output tones of the adjective, the first four columns in this sheet are these:

after /H/ (sg): form of a singular adjective after /H/-melodic noun

after /H/ (pl): plural of the preceding

after other (sg): form of a singular adjective after nouns of other tone melodies

after other (pl): plural of the preceding

The first of these columns is suitable for alphabetizing.

The fifth column presents stative intransitive predicates for those adjectives that have one, with 3Sg à subject (3Pl ì for adjectives like ‘many’), like à lógòⁿ ~ ā lōgòⁿ ‘it is small’ (ā lōgòⁿ is the usual postpausal pronunciation due to Tone Terracing).

Especially for adjectives that do not have a stative intransitive predicate, the sixth column presents composite predicates based on ‘be’ plus a participle, or on the ‘it is’ enclitic added to a noun-like “adjective.”

The next two columns (seventh and eighth) present aspect-marking inchoative verbs, in Pfv and Ipfv stem forms, respectively. Some of these verbs are repeated in the “verbs” sheet.

The next two columns (ninth and tenth) present English and French glosses, followed by a column with any comments.

Numerals

This sheet is self-explanatory. Details of tonal interactions between nouns and numerals are presented in the grammar and are not repeated here.

Other

This sheet contains a wide range of grammatical morphemes and adverbial elements that do not fit into the other sheets. The column on the left can be sorted to group morphemes and stems into sets, like “postp” (postposition), “pron” (pronouns), and “adv manner”. There is only one column with data.

Verbs

The “Pfv” column should be used for alphabetizing.

The **valency** has the following values: “aux” (auxiliary), “caus” (causative), “caus refl”, “ditr” (ditransitive), “inch” (inchoative), “intr”, “tr”, “ppl” (participle), “quot” (quotative), “refl” (reflexive), “stat” (stative intransitive), “stat tr” (stative transitive), and “tr” (transitive). To any of these can be added “+pp” to indicate that a PP is additionally required. Likewise “+adv” and “+dat”.

The **shape** column has values like CvCv and CvCvN (the latter for CvCvⁿ). For suffixal derivatives, formulae like CvCv-NI (causative) and CvCv-YA (inchoative) are used.

The **melody** column has values like H, HL, LHL, and hyphenated values like H-LHL for composite verbs.

The **Pfv** and **Ipfv** columns present the two aspect-marked stems of most verbs. Stative verbs have only one form, shown in the Pfv column. The **Ipfv suffix** column summarizes the choice between -lv and -nv for the suffix (along with a few cases of -nu).

English and **French** columns are followed by a **comments** column which sometimes includes an example.