A Grammar of Togo Kan
(Dogon language family, Mali)

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color codes (excluding headings)
    blue: transcription of Togo Kan forms (italics)
    green: transcription of forms from other Malian languages and of all unitalicized forms
        (reconstructions, underlying forms, and IPA transcriptions]

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1 Introduction

1.1 Dogon languages

This is one of several grammars of Dogon languages produced by me and others as part of a project begun in 2004.

There are some 20 Dogon languages by a conservative count and perhaps 80 locally named varieties. The difference between dialect and language is often unclear.

The wider relationships of Dogon are not well understood. Traditionally they have been ascribed to the Niger-Congo family, but a demonstration of this or other genetic relationship has yet to be made and some linguists doubt the Niger-Congo connection.

1.2 Togo Kan language

Togo Kan (or TgK for short) is spoken in the sandy plains (south-)east of the plateau and cliffs of central Dogon country, still in Mali but not far from the Burkina border. It is the dominant language in a block ranging from about N 13’ 52’’ to 14’ 13’’, and from W 03’ 11’’ to 03’ 25’’.

The language is called *tògò*^{L}*-ká*^{n} by most of its native speakers. (For superscripts like ^{L} see §3.7.2.) Togo (*tògó*) is the overwhelmingly dominant family (i.e. clan) name among native speakers of TgK, even in the more southerly villages. “Kan” is from *ká*^{n} ‘mouth’, here as a compound final meaning ‘language’.

However, *tènè*^{L}*-ká*^{n} is the common term for varieties spoken in an area including Toroli and Azanga, generally south of the 14th parallel (but not including Zon or Wilwal). It is possible that speakers in this area consider Tene Kan to be a distinct variety, though my main TgK informant denied any major dialectal difference. *ténè* is the name of the zone, not a family name. Most speakers of Tene Kan have Togo as surname.

Villages where Togo Kan (or Tene Kan) is the dominant language are listed in (1). The names are given both in the native pronunciation and in the Gallicized written name found on maps, namely the colonial-era government maps for “Bandiagara” (above 14 N) and “Tougan” (below 14 N), sold by the Institut de Géographie in Bamako. Current official village names may be slightly different. In citations, I generally omit French accents.

Among the common adjectival modifiers in the village names are *kàná* ‘new’, *pě*^{n} ‘old’ and by extension ‘main, principal', *gàrá* ‘big’, and *ná:* ‘main, principal’. Forms of *àná* ‘village’, *kú*^{n} ‘head’, *ójú* ‘road’, and *gìr*^{n}*í* house’ also occur in some compounds. Unparenthesized coordinates are from our own survey, in degrees and minutes (both 0 to 60), plus decimal fractions of minutes (.001 to .999). Coordinates in parentheses are estimated from maps. The maps show two widely separated Pélédourou villages, one of which we surveyed. Some village clusters have a global name as well as specific names for each village.

(1)	native name	map name	coordinates
a. “Togo Kan” speaking			
	àmàdù-bádù ^{HL}*ánà*	[not on map]	14 15.230 03 19.701
	ámá-mùr^{n}*ù*, divided into:		

àmà-mùr^{n}ù-bɔ̀rɔ́	[not on map]	14 13.548	03 15.769
àmà-mùr^{n}ù-dùŋɔ́	[not on map]	14 13.580	03 15.201
àmà-mùr^{n}ù-kû^{n}	[not on map]	14 13.155	03 14.632
(àmà-mùr^{n}ù-)ànà-kágà	[not on map]	14 13.399	03 15.017
(àmà-mùr^{n}ù-)ɔ̀rɔ̀-sɔ́gù	[not on map]	14 13.355	03 15.215
àná bɛ́r^{n}ɛ́	[not on map]	14 14.387	03 17.438
ànà-bɛ̀r^{n}ɛ̀ dɔ́:rú	[not on map]	14 14.215	03 17.504
ànà-kágà	[see *ámá-mùr^{n}ù*]	—	—
ànà-mùlà kàná	[not on map]	14 02.636	03 18.476
ànà-mùlà pɛ̌^{n}	Anamouila	14 07.419	03 21.910
ànà-ójù (“village-road”)	[not on map]	14 14.259	03 20.792
ànjó:nó $^{\mathrm{HL}}$*ánà*	[not on map]	14 36.316	03 16.566
árú-nà:-bɛ̀r^{n}ɛ̀	[not on map]	14 08.555	03 19.399
bà:lí	Barelirou	14 07.386	03 22.275
bà:^{n}gòlò kàná	[not on map]	14 00.058	03 14.744
bà:^{n}gòlò pɛ̌^{n}	Baraniongolé	14 01.643	03 17.325
bàrkàlá	[not on map]	14 09.040	03 23.803
báw^{n}à	Bama	14 05.660	03 20.458
bɛ̀jɛ̀rɛ̀ gàrá	[not on map]	14 14.694	03 16.059
bɛ́ɲɛ̀, divided into:	Beniouma	—	—
bɛ̀ɲɛ̀ kàná		14 10.104	03 20.149
bɛ̀ɲɛ̀ ná:		14 09.823	03 23.323
bɛ̀ɲɛ̀-pèrú		14 09.493	03 22.969
bìrɛ́kàr^{n}à	[not on map]	14 04.222	03 13.426
bìrgɛ́	Birga	14 02.415	03 15.559
dàmísɛ̀^{n} $^{\mathrm{HL}}$*ánà*	[not on map]	14 13.896	03 16.112
dɛ́:rú	Déri	14 15.317	03 17.487
dɔ̂:^{n}	Don	14 11.060	03 17.133
dùnâ:	[=*tóról-dùnâ:*]	—	—
géwrú	Guéourou	14 10.187	03 14.505
gírè-gárà	[not on map]	14 13.665	03 21.633
górò	[not on map]	14 15.649	03 16.328
gɔ̌m, divided into:	Gomou	—	—
gɔ̀m kàná	[not on map]	14 11.582	03 19.329
gɔ̀m ná:	[not on map]	14 11.931	03 20.047
jàbàjǎ:	[not on map]	14 14.469	03 16.979
jìmɛ́:r^{n}ú	Djimérou	14 09.693	03 18.872
jìmɛ̀:r^{n}ù-dùŋɔ́	[not on map]	14 09.788	03 19.110
jɔ̂:^{n}	Zon	13 51.185	03 07.447
kɛ́:r^{n}ɛ̀	[not on map]	14 09.411	03 20.407
kòy^{n}-gìr^{n}í	Koporo-Kénié-Na	14 07.845	03 21.257
kɔ̀^{n}-pɛ̌^{n}	Koporo-Kénié-Pe	14 13.343	03 17.919
kɔ̀rɔ̀lí	Korolou	14 13.106	03 22.072
kùrù-kû^{n}, divided into:	[not on map]	—	—
kùrù-kù^{n} dágà	[not on map]	14 12.741	03 17.746
kùrù-kù^{n} gàrá	[not on map]	14 12.252	03 18.071
kùnúŋgóró	Kontogourou	14 05.889	03 21.257
ójú-tá:ŋà, divided into:	Oustanga	—	—
òjù-tà:ŋà nâ:	[not on map]	14 07.341	03 17.665
òjù-tà:ŋà pɛ̌^{n}	[not on map]	14 07.653	03 19.276

óròò	[not on map]	14 10.212	03 16.735
ɔ̀rɔ̀-gùrú	Orogourou	14 07.227	03 23.963
ɔ̀rɔ̀-pǎ: (“baobab-refuge”)	Oropa	14 12.025	03 14.505
ɔ̀rɔ̀-ségú	Oroségou	14 06.359	03 21.973
ɔ̀rɔ̀-sɔ́gù	[see *ámá-mùr^{n}ù*]	—	—
pɛ́:rú	Pel	14 05.048	03 16.149
pélé-dùrù (“dove-groan”)	Pélédourou	13 57.656	03 13.173
pɛ̀:rù kànà	Perkana	14 07.886	03 23.606
pɔ̀m-dójù, divided into:	Pomboro-Dodiou	—	—
pɔ̀m-dòjù bɛ́ɲɛ̀	[not on map]	14 09.192	03 10.478
pɔ̀m-dòjù kû^{n}	[not on map]	14 09.595	03 09.672
sà^{n}-sɔ́gú	Sansogou	14 12.331	03 22.670
ságúrú	Saourou	14 12.331	03 22.670
sá:sɔ́gù	[= *tìnà: sá:sɔ́gù*]	—	—
sà:-têm	[not on map]	14 14.381	03 20.402
sèmérè	Sembéré	14 08.815	03 17.589
sí:nɛ́	Sinnda	14 08.047	03 25.005
sóró-bárà	[not on map]	14 04.889	03 22.283
tà^{n}-sɔ́gù	[= *bàrà kàná*, but cf. *tɛ̀^{n}-sɔ̀gú*]	—	—
tà^{n}-sɔ̀gù kàná	[= *bàrà kàná*, but cf. *tɛ̀^{n}-sɔ̀gú*]	—	—
tɛ̀:^{n}góró	Témégolo	14 08.352	03 15.851
ténè	Tenndéli	14 05.663	03 24.896
tɛ́w^{n}ɛ̀	Tiémama	14 07.509	03 20.139
tí^{n}-sɔ̀gùrù, divided into:	Timessogou	—	—
tì^{n}-sɔ̀gùrù dágá	[not on map]	14 03.739	03 18.706
tì^{n}-sɔ̀gùrù kàná	[not on map]	14 03.462	03 18.493
tìnâ:	Tina	14 07.561	03 12.807
tìnà: sá:sɔ́gù	Sassougo	14 08.271	03 11.401
tògǒn-tínà:	[=*tìnâ:*]	—	—
tònò-àná	[not on map]	14 11.693	03 18.315
tɔ̀nɔ̌:	Tonou	14 04.159	03 20.637
tɔ̀:nɔ̀ŋú	Taounougou	14 06.710	03 19.476
tɔ́ŋɔ́r^{n}ɔ́-légù	[not on map]	14 02.087	03 09.870
wílwàl	[not on map]	13 58.146	03 13.173
wìlwàl-mǎ	[not on map]	13 58.197	03 14.452
yɔ̀wɔ̀-kórù	[not on map]	14 12.273	03 20.991

b. “Tene Kan” speaking

ànjàŋá	Azanga	13 55.934	03 19.739
bàrà kàná	[not on map]	13 47.349	03 25.383
jí:jà:	Diga	(13 57	03 16)
gà:^{n}-dúrú	Gandourou	13 52.925	03 16.855
gàná-gír^{n}í-kò:rò	Ganaguénékouro	13 50.760	03 20.008
gùrùséndé	Gouroussindé	13 53.414	03 19.450
kánúwá	Kanama	13 58.804	03 19.028
kòròmà-tí^{n}tí^{n}	[not on map]	13 50.020	03 25.453
pélé-dùrù (“dove-groan”)	Pélédourou	(13 56	03 25)
sá:lɔ́^{n}	Saalé	(13 56	03 20)
sòrò-gàrá	Sodougara	13 47.215	03 25.673
tɛ̀^{n}-sɔ̀gú	Tansogou	13 53.074	03 23.394

tènâ:	Téna	13 51.118	03 22.240
tóról	Toroli	13 55.510	03 13.348
tóról-dùnâ:	[not on map]	13 54.445	03 10.523

I was told that *tɛ́w^{n}ɛ̀* (Tiémama) was the oldest TgK speaking village.

Togo Kan and Tengou Kan have been regarded in recent classifications as dialects of a single language. There is no satisfactory overall name for this “language,” which has been somewhat arbitrarily called “Tene Kan” and more recently "Tengou Kan" in the online Ethnologue. There are actually five such endonyms for varieties of this “language”: Togo Kan, Tene Kan, Tengou Kan (in the narrow sense), Guimiri Kan language (*gìw^{n}r^{n}ì-ká^n*), and Worou Kan (*wɔ̀:rù-ká^n*). The latter is also known as Wolou Kan. The primary surnames are Guindo for Tengou Kan (narrow sense), Sagara for Guimiri Kan, and Poudiougo for Worou Kan. Perhaps a better name for the “language” would be “Southeastern Dogon” or “Tengou-Togo.”

I can find no reference to Guimiri Kan or Worou Kan in the literature, and it is evident that the relationships among all these varieties will have to be worked out by new fieldwork. For the time being I will follow Dogon usage and distinguish all of them.

Historically, the Togo (originally from Tiemama), the Guindo (from Ireli), the Sagara (from e.g. Ende), and the Poudiougo (from Wol) have spread from their original villages at or near the cliffs into the vast expanse of sandy plains to the southeast. Several of the Guimiri Kan and Worou Kan speaking villages are north and northeast of Togo Kan country, while many Tengou Kan speaking villages are to the west, but the boundaries are ragged. This is especially true of the southern part of the Togo Kan zone, where each village has a different mix of TgK, Tengou Kan, Guimiri Kan, and Worou Kan, plus Gourou (closely related to Jamsay, with surnames Djimde, Niangali, Dama, and Bamadio), and Mossi (speaking Moore). Pigué village (N 13 51.186 by W 03 07.448) is a Toro So outlier, with surname Douyon. Several villages in this southern area have three or four languages in use. Where they are closely related (Togo Kan, Tengou Kan, Worou Kan, Guimiri Kan), it would be interesting to study the sociolinguistics at the community level (e.g., how are “language” boundaries maintained over generations?).

There are numerous Fulbe in the area, mostly freeborn (surnames Diallo, Bari, Boli, Sidibe) rather than the Fulfulde-speaking ex-slaves known collectively as Rimaibe (primary surname Tamboura). Freeborn Fulbe specialize in cattle herding but many now also practice farming. There is a sharp social and cultural divide between Fulbe and Dogon, immediately visible in housing (Fulbe huts versus Dogon mud-brick houses), clothing, hairstyles, etc. There are several small Fulbe hamlets in the spaces between Dogon villages. There are also Fulbe quarters at the edges of some Dogon villages, or separate Fulbe “suburbs” a short distance away.

The majority of TgK speakers are Muslims. However, there are Protestant and/or Catholic churches in several villages in the area.

Weekly markets (on the seven-day cycle) are held at Gandourou (Sunday), Koporo-Pe and Toroli (both Monday), Zon and Témégolo (both Tuesday), Koporo-Na and Pomboro-Dodiou-Koun (both Wednesday), and Tendeli (Saturday). There is also a small-scale market at Geourou (Friday).

The primary informant for the grammar and lexicon was Boukel Togo, who was also the first Malian intern in our Dogon project. He grew up in Koporo-Pe, in an essentially all-TgK speaking area. This village has a weekly market which attracts vehicles from several directions, so there is some contact with non-TgK speakers. However, there is no especially salient second language, other than the French learned in schools and the Bambara that is often picked up by young people working seasonally in the cities, or by going to school in Bandiagara or other outside communities.

Some salient features of TgK are given in chapter 2.

1.3 Environment

Most of the TgK-speaking villages are in the sandy plains, some distance from the cliffs and plateaus of central Dogon country (far enough away to avoid the dune ridges that run parallel to the cliffs). There are no remarkable topographic features (rivers, large lakes, inselbergs, dense forests) in the zone. The economy revolves chiefly around millet farming and light herding. There is little dry-season gardening due to the absence of year-round water bodies. The rainy season extends from June to September with the main harvest around October. Blacksmiths, weavers, basket-weavers, and potters are widely scattered rather than concentrated in a few specific villages.

1.4 Previous and contemporary study of Togo Kan

1.4.1 Previous scholarship (Prost)

There is one significant previous work on TgK, a grammar in French by missionary André Prost (1969). Like most similar works of that era, it is accurate as far as it goes. Prost did not mark tones, and in view of the way tonal patterns (lexical and grammatical) permeate the grammar of the language this is a significant handicap. Consulting Prost was helpful to me in early stages of the fieldwork in suggesting constructions to study further. Prost’s work remains valuable with respect to TgK dialectology, since the main dialect he worked on (that of Pel) is somewhat different from the one described here, and since he adds some further notes about outlying dialects.

I mention Prost throughout this grammar primarily with respect to dialectology. I note here two striking lexical differences between Prost’s Pel dialect and the Koporo-Pe dialect I have studied:

(2)	Pel (Prost)	Koporo-Pe	gloss
	“ja”	*ɲàŋá*	‘take, pick up’ (‘prendre’)
	“kana”	*bìrɛ́*	‘do, make’

Underlined “n” is Prost’s symbol for retroflexed tap *n*, i.e. for *r*^{n} in my transcription. Most Dogon languages have cognates of “kana” as the basic ‘do, make’ verb, e.g. Jamsay *kár*^{n}*á* and Mombo *kání*, while cognates of *bìrɛ́* mean ‘perform, carry out (work or other purposeful activity)’. The languages disagree as to the basic verb for ‘take’ or ‘pick up’; “ja” belongs with Najamba *jɛ́-* and Bankan Tey *zɛ́*, while *ɲàŋá* is cognate to e.g. Jamsay *yàŋá*.

1.4.2 Fieldwork

My fieldwork on TgK began in late December 2009 and has continued off and on since. Boukel Togo, a native of Koporo-Pe village, was recruited as the first Malian intern in our project. He was with me in Douentza for several months during 2010.

During some of this time Boukel sat at an aging desktop computer and keyboarded TgK words and short phrases into our comparative Dogon lexical spreadsheet. Then he and I jointly edited the lexical material, some of which has found its way into this grammar (particularly sections on derivational morphology, compounding, and the like). Some additional grammatical elicitation was also done during this period, though I was simultaneously working on other Dogon languages.

In 2011 Boukel was hired (with a pay raise!) for three months. Our team made its first trip to Togo country then. We recorded texts in Koporo-Pe, surveyed most of the TgK speaking villages, and resolved a few difficult flora-fauna identifications by collecting or observing specimens. The recordings (a little over an hour) were transcribed and translated back in our bases in Douentza and Sevare.

Since then I have occasionally met with Boukel in Bamako to iron out remaining details.

1.4.3 Acknowledgements

The overall project on Dogon languages began with grant PA-50643-04 (2004-06) from the National Endowment for the Humanities (NEH) for solo fieldwork by me primarily on Jamsay. Brief survey work during that project led to the idea of a comparative Dogon linguistic project. Its three phases have been funded by The National Science Foundation, Documenting Endangered Languages program: grants BCS-0537435 (2006-09), BCS-0853364 (2009-13), and BCS-1263150 (2013-16). The bulk of the fieldwork on TgK was carried out during the second phase.

Our primary Malian assistant (and my Jamsay informant) is Minkailou Djiguiba. Readers are invited to view our website, which includes interesting documentary videos: www.dogonlanguages.org .

2 Sketch

A few highlights of the grammar will be given here for purposes of initial orientation. Features distinguishing Togo Kan (TgK) from other Dogon languages are emphasized.

2.1 Phonology

2.1.1 Segmental phonology

The consonantal inventory is a typical Dogon one, with the following typologically variable features. Sibilants: *s* but not *z* is present. Palatoalveolars: *j* is present, but *c* is generally absent except in foreign words and names (e.g. from Fulfulde). Nasalized sonorants {w^n y^n r^n} occur noninitially.

Vowels: the usual Dogon inventory with seven vowel qualities, long and short. Nasalized vowels are present, short as well as long. Mid-height vowels constitute two classes, [+ATR] {*e o*} and [-ATR] {*ɛ ɔ*}, that are the basis for some ATR-harmonic phenomena. High vowels are extraharmonic, compatible with either harmonic set, while *a* patterns as [-ATR].

TgK is notable for the full or partial deletion of word- and stem-final sonorants and short high vowels. The disappearance of a final nasal is sometimes reflected by nasalization of the originally preceding vowel, but final semivowels {*y *w}may disappear without a trace.

2.1.2 Prosody

Cv with short vowel is an allowable stem shape for verbs and nouns, alongside the more common *Cv:*, *CvCv*, *CvCvCv*, etc. Verbs must end in a vowel, while other stems including nouns may end in a consonant.

Nearly all stems, nouns as well as verbs, have either /H/ (all-high) or /LH/ (rising) as the basic lexical melody. The slash notation /…/ is used for lexical melodies, angled brackets {…} for tone overlays and more generally for surface tone patterns. For verbs, but not other stem-classes, the lexical tone-class is partially predictable from the initial consonant. Stem-initial voiced obstruents (the classic depressor consonants) require /LH/ while voiceless obstruents (anti-depressors) require /H/. Initial sonorants are neutral and allow a lexical choice between /LH/ and /H/. The lexical tones of verbs are subject to erasure by tone overlays controlled by verbal inflectional suffixes or by the larger syntactic construction. Therefore depressor consonants do not affect tones even for verbs at the phonetic level.

For nouns, adjectives, and numerals, lexical tones pay no attention to depressor versus other consonants. This is conspicuous in cognate verb-nominal pairings like *bɛ́: bɛ̌:* ‘defecate’, where the nominal *bɛ́:* is lexically (arbitrarily) /H/-toned while the verb is /LH/-toned, respecting the initial depressor consonant. Nouns, adjectives, and numerals have their lexical melodies overridden by tonosyntactic overlays words in a NP.

Dying-quail intonation (prolongation of the final syllable plus pitch decline) is the basic NP conjunction device, as in Jamsay. Prolongation without pitch drop is found with a number of adverbials.

2.1.3 Key phonological rules

The phonology, aside from the tonal morphophonology, is fairly simple.

There is some deletion (Syncope, Apocope) of short high vowels in positions like *CvC_Cv* and *CvC_*, especially in verbs.

Nasalization-Spreading is observable, especially in verbal derivational suffixes after a stem with a final syllable that consists of a nasal consonant plus a vowel. However, when the relevant nasal consonant has been simplified from an older nasal-stop sequence, e.g. *ŋ* from *ŋg, it behaves like the original cluster and does not induce nasalization of a suffixal consonant.

Some (but not all) verb stems of the shapes *Cvrv* and *Cvr*^{n}*v* reduce to *Cv-* and *Cv*^{n}*-*, respectively, before most inflectional suffixes.

2.2 Inflectable verbs

A verb form has the general shape [stem-derivation(s)-AMN-pronominal]. The stem is followed by any derivational suffixes; the productive ones are reversive *-rv*, causative (rarely passive) *-mv*, and paired mediopassive *-iː* (presuffixal *-ɛː-*) versus transitive *-rv*. The simple or derived stem is followed by an AMN (aspect-mood-negation) suffix, sometimes zero (imperative). There is a final pronominal-subject position, though in TgK it is reduced to singular versus plural subject, and even this distinction is not rigorously made. The AMN category may control tone overlays on the stem.

Unusually for a Dogon language, there is no conjugated past clitic that can be added to an aspectually inflected verb.

2.3 Noun phrase (NP)

Unpossessed NPs consist of words whose linear order is noun-adjective(s)-numeral-demonstrative-Pl-'all'. Tone-dropping on the noun (and on any intervening word) is controlled right-to-left by adjectives, by relative clauses, and by demonstratives.

Possession can be nonappositional (i.e. direct). In this case, all possessors except the 1Sg pronoun immediately precede the possessed NP. The 1Sg possessor in the nonappositional construction is *mà* following the possessed noun. When the possessor precedes the possessed NP, the latter is subject to a tone overlay, {H} for prosodically light possessed nouns (up to two moras), but {HL} for prosodically heavy possessed nouns. There are two monosyllabic nouns, 'child' and 'woman, wife', that take {L} overlay when possessed.

Pronominal possession can also be expressed by an appositional construction of the form [Y [X *kè*]] 'the Y of X', where *kè* 'possession' (originally 'thing') is in apposition to the possessed NP Y and where X is a pronominal.

When a possessed NP functions as head NP in a relative ('Seydou's dog that fell'), the possessive construction is rebuilt as an appositional construction with the possessor now preceding the possessed NP: [[X *kè*] Y]. This allows Y to undergo tonal and other changes as head NP of the relative, with no interference from the possessor.

Tonosyntactic controllers within NPs are nonappositional preposed possessors, plus adjectives, relative clauses, and demonstratives. These are the primary reference restrictors, i.e. the elements that divide the set of otherwise potential referents into those that are (potentially) included and those that are specifically excluded.

An example of a rather complex NP is (3). It shows a more complex tonosyntactic structure than simpler NPs do because of the combination of a numeral and a demonstrative. The first three words (elsewhere *péjú*, *már^{n}á*, and *kúré:*) are tone-dropped, but an H-tone is added on the final syllable of the numeral; the demonstrative itself is tone-dropped (from *yɔ́:*).

(3) *[pèjù màr^{n}à kùré:]*$^{L+H}$ ^{L}*yɔ̀:* *nà* *sâ:*^{n}
[sheep big six]$^{L+H}$ ^{L}NearDist Pl all
'all those 6 big sheep'

NPs functioning as head NPs of relatives are seemingly bifurcated, with the possessor, noun, adjective(s), and numeral remaining intact but surfacing inside the relative clause, while demonstratives, the plural morpheme, 'all' quantifiers, and discourse-function morphemes (like 'also' or 'even') constitute an NP coda following the verb. The "bifurcation" is really a function of the position of the relative clause within the larger NP, following Poss-N-Adj-Num but preceding the other elements.

The only definite marking is by addition of a final L-tone (tonal definite). A homophonous tonal locative with the same final L-tone is mentioned just below.

2.4 Case-marking and PPs

Adpositions are postpositions, i.e. they follow the NP or pronominal complement. Thus *sí:nɛ́* 'knife', instrumental *sí:nɛ́ bè* 'by means of a knife'. Core nonspatial postpositions are dative *nì* (often reduced to cliticized *=ǹ*), instrumental-comitative *bè*, and purposive *gɛ̂:* (and variants). Some but not all nouns have a tonal locative expressed by a final L-tone (as in Jamsay). Presumably there was once a *Cv̀ locative postposition that fell afoul of the diachronic erosion of final syllables, leaving behind only its tone. *bínì* ~ *bîn* 'in, inside of' and other marked spatial postpositions consist of synchronic or original nouns plus a falling melody consistent with an original possessor-controlled {H} overlay combined with the tonal locative (final L-tone).

There is no accusative case marker, except that the 1Sg pronoun has a special direct-object form. Dative *nì* is used broadly for indirect objects (nominal and pronomnal).

2.5 Main clauses and constituent order

Constituent order in main clauses is SOV. The limited pronominal-subject marking in verbs encourages the use of subject pronouns, which occupy the same position as subject NPs at the beginning of the clause. Subjects are strongly clause-initial in TgK. Whereas some Dogon languages frequently have setting adverbs like 'yesterday' preceding subjects, in TgK such adverbs follow subjects, typically occurring between subject and object (4d-e). Non-setting adverbs and adverbial phrases may precede or follow nonpronominal direct objects, with the more focal of the two usually just before the verb (4g).

(4) a. *sèydú bú:dú àmàdú=ǹ* ^{L}*ò-è*
S money A=Dat ^{L}give-Pfv
'Seydou gave (the) money to Amadou.'

b. *wó* *sèwárà* ^{L}*yè-y*
3SgSbj S ^{L}go-Pfv
‘He/She went to Sevare (a city).’

c. *ɛ́mɛ́* *wòrú* *yá:* ^{L}*wàr-è*
1PlSbj farming yesterday ^{L}do.farm.work-Pfv.PlSbj
‘We did farming (farm work) yesterday.’

d. *í*^{n} *yá:* *[ɛ́wɛ́* *bîn]* *wó* ^{L}*ɔ̀-ɛ̀*
1SgSbj yesterday [market in] 3SgObj ^{L}see-Pfv
‘I saw him/her yesterday in the market.’

e. *í*^{n} *yògó* *péjú* *dɔ́-ɲú*
1SgSbj tomorrow sheep sell-Ipfv
‘I will sell (the) sheep-Sg tomorrow.’

f. *[nǎ* *bè]* *já-wò→* *nî* *ɲǎ:* *ɲí:-ɲí*
[person Pl] always here meal eat-Ipfv
‘The people always eat here.’

g. *ɛ́mɛ́* *ɲú:* *[pòrùkɛ́:* *bè]* ^{L}*gɛ̀rɛ̀-jù*
1PlSbj millet [harvesting.knife with] ^{L}harvest-Ipfv
‘We harvest millet with a harvesting knife.’
(may be read as having ‘harvesting knife’ as focus, cf. §13.1.3)

2.6 Nominalized clauses and constituent order

Verbal-noun (i.e. infinitival) complement clauses may include nonsubject complements such as direct objects. Simple (unquantified, unmodified) object nouns are incorporated as compound initials to the verbal noun. Multi-word object NPs retain their full main-clause form, except that the presence of a demonstrative may trigger an unusual tonal pattern. If a subject NP is expressed, it takes the form of a possessor. See §17.3.1 for details.

2.7 Relative clauses

There is no full morphological system of verb-participles in relative clauses. Instead, the verb usually has the same form as the corresponding main-clause stem, but without subject agreement (whereas main-clause verbs may agree in plurality with their subject). Perfective verbs do show some participle-like changes in relative clauses.

Following a common Dogon pattern, the main lexical part of the head NP (possessor, noun, adjective, numeral) occurs inside the relative clause but undergoes tone-dropping. Demonstratives, plural *bè*, nonnumeral quantifiers like ‘all’, and discourse-function morphemes like ‘also’ follow the verb. The linear position and the tonosyntax can be accounted for by recognizing a basic order Poss-N-Adj-Num-Poss-Rel-Det-‘all’-DF. The relative clause functions as a reference-restricting modifier and therefore controls tone-dropping to its left, going as far as the noun. This is followed by movement of the string on the left of the relative clause into the relativization site within the relative clause proper. The entire sequence including the coda is really a NP with an incorporated relative clause.

In nonsubject relatives with a referentially specific subject NP, a pronominal subject pronoun appears immediately before the verb, not in clause-initial position as in main clauses. It is arguably a proclitic, but I do not transcribe it as such since there is no phonological interaction between it and the verb.

A semantically light noun with a sense like ‘owner’, ‘day’, or ‘place’ may follow the relative clause proper, with {L}-tone (arguably as possessed noun). This resembles the double-headed relative of some other Dogon languages, such as Jamsay.

Unusual features of TgK relatives include an optional inversion of adjective and numeral in the head NP (§6.4.2), and some quirks involving restructuring of possessed head NPs (§6.2.1-3)

A simple nonsubject relative is (5). The head NP ‘child’ occurs medially within the relative clause, i.e. in the relativization site. It is tone-dropped as internal relative head. Since the subject Seydou (man’s name) is specific, a coindexed 3Sg subject proclitic precedes the verb.

(5)	*sè:dú*	*ì:*$^{n\mathrm{L}}$	*wó*	$^{\mathrm{HL}}$*lág-ɛ̀*
	Seydou	child$^{\mathrm{L}}$	3SgSbj	$^{\mathrm{HL}}$hit-Pfv

‘the child who(m) Seydou hit’

2.8 Interclausal syntax

Direct VP-chaining, i.e. with no special morphology on the verb of a nonfinal clause, is common. Some such chains occur in both perfective and imperfective contexts, while others occur only in imperfective aspectual contexts (chapter 15).

Suffixally expressed switch reference is present in certain ‘while’ clauses (same-subject versus different-subject), see §15.2.1.2-4.

Particle *dè* is the regular conditional antecedent’if’ (chapter 16), but it also occurs in a pseudo-conditional chain-like construction with a positive perfective verb, followed by a clause (usually with the same subject) denoting a chronologically sequenced event. Both clauses are interpreted as imperfective with respect to the speech event, see §15.2.2.6.

In the more common perfective context, the same-subject anterior subordinator *-ɛ:* is used instead of *dè* to indicate a chronological sequence.

In quoted clauses, the unconjugated quotative particle *wà* occurs clause-finally, but also after a subject NP (§17.1.3-4).

Imperfective complements of perception verbs, as in ‘I saw the child fall(-ing) out of a tree’, require a preverbal subject pronoun (even when a full subject NP has already been uttered), see §17.2.2.1.

2.9 Anaphora

TgK differs from most Dogon languages in having fully productive transpersonal reflexives. The morpheme *sǎ*^{n} (plural *sǎ*^{n} *bè*) can function as a reflexive object (‘X hit X’), a reflexive possessor (‘X hit X’s dog’), or a reflexive postpositional complement (‘X gave it [to X]’). It is accompanied by no pronominal-person marker, and the antecedent (normally the clausemate subject) may be first, second, or third person. In reflexive possessor function, *sǎ*^{n} competes with a dedicated transpersonal reflexive possessor *má*, both of which precede the possessum.

The other Dogon language known to have transpersonal reflexives in object and other functions is Tomo Kan, where the reflexive morpheme is postnominal *hà* (dialectally *sà*). A third language, Toro Tegu, has only a transpersonal possessor morpheme (postnominal *mà*).

Transpersonal reflexives are important for the study of the syntactic properties of imperative and hortative "subjects." In all three Dogon languages that have them, imperative "subjects" fail to bind reflexives, in contrast to subjects of indicative clauses. Relevant examples for TgK are in §18.1.1 and §18.1.2.1 (*să*^{n} is absent in imperatives), and in §18.1.3.2 (*má* absent in imperatives). Therefore the plural suffix in imperative morphology must be understood as marking plural addressee, not plural subject. In hortatives, plural addressee is again marked in the morphology, but is distinct from the more inclusive 1Pl subject. The latter can bind reflexives.

Other anaphoric elements are logophoric *ɛ̀nɛ́* (coindexed to the attributed author of quoted speech) and reciprocal *sà*^{n}*-tú*^{n}, originally the reflexive possessor of a noun 'companion'. Chapter 18 covers all TgK anaphorics.

3 Phonology

3.1 General

In comparison to other Dogon languages, a notable feature of TgK is the abundance of short-voweled monosyllabic *Cv*, particularly in noun and adjective stems. Many of the relevant stems have lost an etymological syllable-final sonorant such as *y or *n (the latter may leave a trace in the form of vowel nasalization).

3.2 Internal phonological structure of stems and words

3.2.1 Syllables

The typical syllable of TgK is *Cv* (i.e. short-voweled open syllable) or, less often, *Cv:* . Stem-finally, and sporadically stem-internally, *CvL* with a final sonorant *L* is also possible.

3.2.2 Metrical structure

If we assume that a shift to high vowels {*i u*} can reflect metrically weak positions in multisyllabic words, we can argue that the second and third of three syllables in a trisyllabic verb with final-syllable rhotic are weak in the bare stem (and related paradigmatic forms), but not in the imperative or some other verb forms. We can see this in alternations like *túŋì-r*^{n}*ì* 'cause to kneel' (bare stem) and its imperative *túŋɔ́-r*^{n}*ɔ̀*. For other trisyllabic verb stems (i.e. with a non-rhotic consonant in the final syllable), the second (but not third) syllable is weak even in the imperative, as in *kúmúɲù* 'crumple' (bare stem), imperative *kúmúɲɔ́*.

3.3 Consonants

The primary consonants of TgK are those in (6). Parentheses indicate marginal or restricted consonants. Nasalized {*w*^{n} *y*^{n} *r*^{n}} are present, while {*z ʃ ʒ*} are absent except in recent loanwords. *f* and *h* are not original Dogon consonants but occur in a fair number of loanwords, mostly from Fulfulde, and are less foreign-sounding than the sibilants mentioned. Glottal stop *ʔ* is a predictable junctural element in some reduplicated forms of vowel-initial stems.

(6) Consonants

	1	2	3	4	5	6	7	8	9
labial	*p*	*b*	*m*	*(f)*		*w*	*w*^{n}		
alveolar	*t*	*d*	*n*	*s*	*l*	*r*	*r*^{n}		
alveopalatal	*(c)*	*j*	*ɲ*			*y*	*y*^{n}		
velar	*k*	*g*	*ŋ*						
laryngeal								*(h)*	*(ʔ)*

c is IPA [tʃ], *j* is [dʒ], *ɲ* is [ɲ], *r* is tap [ɾ], and *y* is [j].
key to columns: 1. voiceless stops (*c* is affricated); 2. voiced stops; 3. nasals, 4. voiceless fricatives including sibilants; 5. laterals; 6-7. respectively oral and nasalized sonorants (semivowels and rhotics); 8-9. laryngeals

There are important asymmetries in the positional possibilities of obstruents and sonorants, respectively. Excluding loanwords, reduplications, compounds, and nouns derived historically from compounds, obstruents (stops and fricatives) occur predominantly in stem-initial position; an exception is that *g* is moderately common in noninitial syllables. Non-rhotic oral sonorants occur freely freely in any syllable-initial position (word-initial or medial). By contrast, rhotics occur only in intervocalic position (i.e. never stem-initially).

3.3.1 Alveopalatals (*c*, *j*)

There is no particular tendency for velar stops {*k g*} to front to {*c j*} before front vowels (as they do in Jamsay, for example). Thus *kɛ́jɛ́* 'cut' (not #*cɛ́jɛ́*) and *gìré* 'eye' (not #*jìré*).

A *j* distinct from *g* is fairly common in a variety of vocalic environments. Examples are *bàjá* 'pull' and *jùjɔ́* 'brush against'.

Voiceless *c*, on the other hand, is virtually absent. In a working lexicon of several thousand items, only the flagrantly onomatopoeic *cî:*^{n}*-câ:*^{n} (sound of small birds chirping) contains this consonant.

3.3.2 Voiced velar stop *g* and spirantized *γ*

Voiced velar stop *g* is phonetically spirantized to [γ] between any combination of preceding and following *a* and *ɔ*. This appears to be a low-level allophonic process, and except in narrow phonetic transcriptions I write *g*.

3.3.3 Back nasals (*ŋ ɲ*)

ŋ and *ɲ* are distinguished before all vowels, with no tendency to merge before front vowels. We hear a clear *ŋ* in e.g. *(óŋó) sá:ŋì* 'make a yawn', but *ɲ* in e.g. *níɲíw*^{n}*ɛ́* 'sister's child'.

3.3.4 Voiceless labials (*p*, *f*)

p is one of the basic consonants: examples are *págá* ‘tie up’ and *pɛ́:gù* ‘break in half’. In native vocabulary it is normally in stem-initial position, but it occurs intervocalically in loanwords like *ná:pílɛ́* ‘optional Muslim prayer’ (often, as here, reflecting *f in the source language), in frozen reduplications like *púpúgɔ́* ‘out of shape’, and in various onomatopoeic or expressive forms like *pɔ̀gɔ̀rɔ̀pɔ́* ‘toy rifle’ and *póp* ‘landing powerfully’. Cluster *mp* occurs in a few loans like *làmpá*^{n} ‘(modern) lamp’.

f occurs in a few Fulfulde and French loanwords. From the working lexicon I can cite *má:fɛ́* ‘red sauce’, *fú:r* ‘oven’, and two important expressive elements *fő*→ … ‘all the way to …’ and *fű*→ ‘all, entirely’. As noted above, original *f in loanwords is normally realized as *p*.

3.3.5 Laryngeals (*h*, *ʔ*)

h is not an original Dogon consonant, but it occurs stem-initially in Fulfulde loans and in a few other regionally widespread forms: *háyà* ‘well, …’, *hâl* ‘even if’, *há:jù* ‘card (cotton)’, *hámp-ì:* ‘chew (tobacco)’, *hɔ̂:l* ‘trust(v)’, *hí:jí* ‘pilgrimage (to Mecca)’. One of the ‘yes!’ forms is the ubiquitous *ɔ̀*^{n}*hɔ́*^{n}.

Phonetic glottal stop [ʔ] is heard at the juncture between vowels within a word, in *ɔ́*^{n}*-ʔɔ̀*^{n} (one of the ‘no!’ forms) and in *Cv-* reduplications of stems with no initial consonant like (stative) *ì-ʔígɛ̀* ‘be standing’.

3.3.6 Sibilants (*s*, *ʃ*, *z*, *ʒ*)

s is a basic consonant in stem-initial and to some extent intervocalic position. There is no special tendency for it to palatalize before front vowels, as seen in *sí:rì* ‘cook (meal)’.

Other sibilants {*ʃ z ʒ*} are absent except in poorly-assimilated loanwords.

3.3.7 Nasalized sonorants (*r*^{n}, *w*^{n}, *y*^{n})

Nasalized semivowels occur intervocalically and syllable-finally. The nasalized rhotic occurs intervocalically (rhotics in general do not occur in other positions). We begin with examples where the nasalization is autonomous.

Examples of *r*^{n} are, *tír*^{n}*í* ‘go get (firewood)’ and *ùr*^{n}*ú* ‘burrow(n)’. In some other Dogon languages, *n* corresponds to TgK *r*^{n}.

Examples of *w*^{n} are *kúw*^{n}*-ì:* ‘shut (eyes)’, *áw*^{n}*á* ‘(animal) be in good condition’, *tɔ́w*^{n}*ɔ́* ‘do for a long time’, and expressive adverbial *dɛ́w*^{n}→ ‘looking straight at’. In some other Dogon languages, *m* corresponds to TgK *w*^{n}.

y^n is less common and is mostly found stem- (and therefore syllable-) finally. These include compounds ending (at least historically) in a desyllabified form of *-í:*^{n} ‘child’, such as *dɔ̌y*^{n} ‘pestle’ and *tùwɛ̌-y*^{n} ‘flint (for lighter)’. Other stems with final *y*^{n} include *sɛ̂y*^{n} ‘a lot, very’ and *dǎy*^{n} ‘boundary’. In a few nouns *y*^{n} is intervocalic; the known examples are *dɔ̀y*^{n}*ɛ́* ‘ashes’ (which has cognates with *y*^{n} in some other Dogon languages, but cf. Najamba *dɔ̀dɛ̌:*) and two items of cultural vocabulary, *bùy*^{n}*ɛ́* ‘tassels’ and *kày*^{n}*ɛ́* ‘bit (mouthpiece)’. There are also several expressive adverbials with syllable-final *y*^{n} like *kɔ́y*^{n}→ ‘oversized (teeth)’ and *dɛ́y*^{n}→ ‘apart’.

Sequences of intervocalic nasalized sonorants co-occur in e.g. *gɛ́w^{n}ɛ́r^{n}ɛ́* ‘charcoal’ and *súw^{n}ùr^{n}ù* ‘stalk(v)’. The sequence is usually *w^n* then *r^n* since rhotics but not semivowels are the typical sonorant consonants in the third or later syllables of complex words.

Nasalized sonorants often occur in stems or derivational verbal suffixes when preceded by a nasal syllable (such as *na* or *ba^n*). In such cases one could argue that the nasalization of the sonorant is phonologically secondary. Examples are *nɛ́w^{n}ɛ́* ‘scales (on skin)’, *sɛ́ŋɛ́r^{n}ɛ́* ‘foot-chain’, and *gàmúr^{n}ù* ‘divide’. In cases like *ɲàw^{n}úr^{n}ù* ‘scold’, the nasalization appears to spread recursively, starting from the initial nasal. However, TgK has many stems that fail to spread nasalization from a nasal to a subsequent sonorant: *déméré* ‘fat, stout’, *mùŋú-rù* ‘untie’ (reversive), *bòmí-rì* ‘put (child) on the back of (sb)’. In most such cases it can be shown that the nasal consonant reflects a cluster *mb or *ŋg that would not originally have spread nasality to subsequent syllables; see §3.5.1.1, below. But the synchronic effect is that Nasalization-Spreading, though productive in e.g. Jamsay, is not a productive process in TgK.

When a semivowel closes a nasal syllable (e.g. *naw*) it is phonetically nasalized. Since this nasalization is automatic it could be omitted from the transcription, but I choose to indicate it: *pùnǎy^n* ‘flour’, *nǎy^n* ‘four’, *tér^{n}éw^n-tér^{n}éw^n* ‘very tight (intensifier)’. Rhotics do not occur syllable-finally.

3.3.8 Consonant clusters

3.3.8.1 Word- and morpheme-initial *CC* clusters

There are no tautosyllabic word- or suffix-initial consonant clusters. A suffix-initial *CC* cluster could arise, in theory, from syncope of an intervening vowel, but I can cite no examples.

In *ŋ̀kúrú* ‘mouse’, the initial nasal has its own tone and functions as a syllable, albeit a reduced one. I know of no other initial-syllable nasals.

3.3.8.2 Medial geminated *CC* clusters

Geminated clusters do not occur within stems or other morphemes. They may arise accidentally at compound boundaries especially when the first stem has its final vowel syncopated: *bìn^L-nùr^{n}ú* ‘stomache ache’. Even these cases are rare in TgK, which has few stems with final consonants.

3.3.8.3 Medial non-geminate *CC* clusters

Nongeminate medial clusters are also uncommon within stems and other morphemes. However, they do occur in borrowed vocabulary and in frozen compounds. Nouns ultimately from Arabic (usually via Fulfulde) preserve definite prefix *al-* before noncoronal consonants, providing one source (among others) for *lC* clusters.

Some stems that I initially transcribed with a medial homorganic stop-nasal cluster have been retranscribed with a nasalized vowel and an unclustered stop. These include reduplicative *jɛ̀^{n}jɛ̀ŋɛ̀^{L} bá^n* ‘millet cultivar’ (*bá^n* ‘red’) and *ɲà^L dɛ́^{n}dɛ̀^{n}* ‘empty lot’ (*ɲá* ‘ground’); French loanwords *pɔ́^{n}tí* ‘nail’ (*pointe*), *kúmá^{n}dá:^{n}* ‘(military) commander’, and *sì^{n}gɔ́m* ‘chewing gum’; nouns *jɔ̀^{n}túrú* ‘donkey’ and *à^{n}dùŋùmá* ‘invisible devil’; and *sì:^{n}ká:^{n} bɛ̀rɛ́* ‘get a mate for’ (*bɛ̀rɛ́* ‘get’) and *àr^{n}ù^L jɔ̀^{n}kɛ̌:* ‘first rain of rainy season’ (*àr^{n}ú* ‘rain’).

Nasal-stop clusters were verified as follows: *mb* in *támbúrɔ́* ‘date (fruit)’ (ultimately from Arabic) and *bálɛ́mbá* ‘champion (fighter)’; *mp* in *làmpá*^{n} ‘lamp’, *hámp-ì:* ‘chew (tobacco)’ (<Fulfulde), and *pɔ́mpì* ‘pump(v)’; *nd* in *àndí:* ‘year’, *àndáŋú* ‘soft millet cakes’, *àndǎ*^{n} ‘tiny fly sp.’, *pà:ndé* ‘thick cotton thread’, *gándál* ‘vanity, pride’ (<Fulfulde), and *bándí* ‘bandit’; *nt* in *jántɛ́* ‘conversation’ (<Fulfulde) and *àlbàrkànté* ‘incense (bdellium)’; *ŋg* in *jóŋgólú* ‘basket holder’, *máŋgóró* ‘mango’, *àŋgɛ́:*^{n} ‘agemate’, *àŋgùŋùr*^{n}*ú* ‘giant tortoise’, and *àŋgìlɛ́:* ‘English person’; and *ŋk* in *wáŋkɛ́* ‘butcher’ and *dɔ́lɔ́ŋkɛ́* ‘short-length boubou’.

A list of the attested clusters, with one example each, is (7).

(7) *CC* clusters

cluster	example
a. homorganic nasal plus stop	
mb	*támbúrɔ́* ‘dates (fruit)’ (ultimately <Arabic)
mp	*pɔ́mpì* ‘pump’ (<French *pompe*)
nd	*àndí:* ‘year’ (frozen compound)
nt	*jántì* ‘converse (with laughter)’ (<Fulfulde)
ŋg	*máŋgóró* ‘mango’ (regional)
ŋk	*wáŋkɛ́* ‘butcher (caste)’ (regional)
b. *l* plus noncoronal	
lb	*àlbàrkànté* ‘bdellium (incense)’ (root <Arabic √brk)
lp	*sálpànà* ‘early PM prayer’ (<Fulfulde)
lg	*wàlgà-wàlgá* ‘bouncing (necklace)’ (source unknown)
lk	*àlká:má* ‘wheat’ (<Arabic)
lm	*àlmè:tú* ‘match(es)’ (<French)
lŋ	[unattested]
c. others	
rk	*àlbàrkànté* ‘bdellium (incense)’ (root <Arabic)
rs	*pɔ̀rsɔ́*^{n} ‘poison’ (<French)
ns	*ànsá:rá* ‘white person’ (syncopated from *ànàsá:rá, <Arabic)
wg	*jéwgé*→ ‘teetering’ (expressive adverbial)
wl	*dàwlɛ́* ‘esteem’ (<Arabic)
wr	*dáwrú* ‘spell (sorcery)’ (<Arabic)
yk	*báykál* ‘type of modern rifle’ (imported from Ghana)
ws	*háwsá* ‘Hausa (ethnicity)’

There are also some words that can be pronounced with or without a brief high vowel between two nonhomorganic medial consonants in trisyllabic or longer stems. Thus *àgsì*^{L}*-bɔ̀mbɔ́*^{n} ‘hard red candy’ with variant *àgùsì* ^{L}-…, and *nám-gì* ‘become poor (impoverished)’. These are transcribed as I hear them in normal speech. The native intuition (especially for verbs) is that the high vowel is present. Note the combination (cognate nominal plus verb) *dáwrú dàwírì* ‘cast spells’, where the usual pronounciation is *CvCCv* for the noun but *CvCvCv* with medial high vowel for the verb (cf. imperative *dàwárá*). ‘Rifle, musket’ is usually heard as *màrùpá:* .

Clusters are more common at boundaries in compounds. Any combination of an allowable stem-final consonant with an allowable stem-initial consonant is potentially possible. Recall however that only certain consonants are allowed stem-finally, so the number of potential clusters is limited. Except as the result of low-level syncope of high vowels in trisyllabics, there are no consonant clusters at boundaries in inflected verb forms, since every verb stem ends in a vowel.

3.3.8.4 Medial triple *CCC* clusters

Triple *CCC* clusters are virtually nonexistent. One is *mpl* in the poorly assimilated loanword *sɛ́mplɛ́s* ‘type of modern rifle (from Europe)’, said to derive from *cinq plus* on the label. Another is *wŋg* in *gáwŋgá* ‘furrow (or other low spot) in a field’.

3.3.8.5 Final *CC* clusters

Final *CC* clusters are also nonexistent except in poorly assimilated loanwords.

3.4 Vowels

The inventory of oral vowels is the standard one for Dogon languages, with seven vowel qualities, long and short. Nasalized vowels are less common than oral vowels but are well represented. Nasalized vowels may be long or short, unlike the situation in some other Dogon languages where they must be long. Short *Cv*^{n} syllables often reflect earlier *Cvŋ, *Cvw^n, or the like whose final consonant survives only as vowel nasalization.

(8) Vowels

oral		nasalized	
short	long	short	long
u	*u:*	*u*^{n}	*u:*^{n}
o	*o:*	*o*^{n}	*o:*^{n}
ɔ	*ɔ:*	*ɔ*^{n}	*ɔ:*^{n}
a	*a:*	*a*^{n}	*a:*^{n}
ɛ	*ɛ:*	*ɛ*^{n}	*ɛ:*^{n}
e	*e:*	*e*^{n}	*e:*^{n}
i	*i:*	*i*^{n}	*i:*^{n}

3.4.1 Oral short and long vowels

The short oral vowels are common in all positions, as the most typical shapes of stems include *Cv*, *CvCv*, and *CvCvCv*. Within a stem, excluding loanwords, there are vowel-harmonic constraints, particularly in verb stems; see §3.4.6, below. There is an issue whether short and long vowels following a nasal or nasalized consonant should be considered phonologically oral or nasal; for discussion see §3.4.2, below.

Long oral vowels are most common in stems of the shapes *Cv:* and *Cv:Cv*. They also occur in longer stems with shapes such as *Cv:CvCv*, but these are usually either loanwords or compounds (including frozen compounds).

Examples of the main syllabic shapes with short oral vowels are in (9), using verbs, nouns, adjectives, numerals, and various grammatical words and particles. In formulae like *CvCv*, the initial *C* position may be vacant.

(9) Short oral vowels

form	gloss
a. *Cv*	
verb stems, all non-nasal examples known	
ó	‘give’
tí	‘send’
jê	‘take away’ (most forms based on *jâ:-*)
yě	‘go’ (most forms based on *yǎ:-*)
noun stems, all non-nasal examples known	
lǒ	‘medication’
bɛ̌	‘beard’
jǎ	‘fiber’
lɛ̌	‘slashing earth (to sow), planting(n)’
té	‘tea’ (<French and Arabic)
compound initials and finals	
gìnɛ̀^{L}*-ǎ*	‘sleepiness’
bɔ̀^{nL}*-kɛ́*	‘nickname’
yɛ̀^{L} *X*	‘woman’ (in e.g. *yɛ̀*^{L} *ná:* ‘old woman’)
yɛ̀^{L}*-lǎ*	‘betrothal (at birth)’
kìr^{n}*ì*^{L}*-tǎ*	‘bone fracture’
ɔ̀:^{L}*-dú*	‘absence of moonlight’
kɛ̀nɛ̀^{L}*-dɔ́*	‘acidic reflux’
grammatical morphemes (sample)	
wó	3Sg pronoun
kó	‘that’ (definite demonstrative)
yî	‘here’ (generalized)
yɛ̂	‘there’ (definite)
wɔ̀	‘be (somewhere, human)’
kɔ̀	‘be (somewhere, nonhuman)’
yɔ́, yɛ́	existential particle
tɔ̀	‘around (somewhere)’
bè	instrumental postposition
b. *CvCv* (very common)	
stems (sample)	
gìré	‘eye’
nàŋá	‘cow’
túmó	‘(sun) rise’
pɛ́rú	‘ten’
ɛ́lú	‘sweet’
ìŋé	‘what?’

c. *CvCvCv* (fairly common, but include frozen derivatives)
stems (sample)

áwìrì	‘lay out (mat)’
kɛ́gɛ́rɛ́	‘saddle(n)’
déméré	‘fat, stout’

CvC is not very common, since so many final sonorants have been lost. However, I can cite *lǎy* ‘garlic’ (French *l’ail*).

In the fairly small number of *Cv* nouns and noun-like compound elements included in (9a), if we exclude ‘woman’ (whose short *Cv* form before adjectives and in compounds has parallels in other Dogon languages) and the loanword ‘tea’, we are left with a set of stems that have probably lost an original final semivowel. For example, ‘beard’ has cognates like Toro Tegu *bɛ̌w*, and ‘medication’ has cognates like Jamsay *lǒy*. *Cv̌* (from *Cv̌-y) is a regular verbal noun form for *Cv:* verb stems, and some nouns with this shape (including the rising tone) originated as verbal nouns. A case can be made that verbs *ó* ‘give’ and *tí* ‘send’ also formerly ended in semivowels, compare Toro Tegu *ów* ‘give’ and *tíw* ‘send’. These are the only two verb stems whose TgK paradigm is based consistently on *Cv* rather than *Cv:* shape. There are no *Cv* numerals or adjectives in TgK. So except for grammatical morphemes, *Cv* as a shape for stems may be an innovation.

The main stem shapes for long oral vowels are illustrated in (10). The number of *Cv:* stems is considerably greater than that of *Cv* stems, showing that *Cv:* is the more productive pattern.

(10) Long oral vowels

form	gloss
a. *Cv:*	
verb stems (lists in §10.1.3.1-2)	
noun stems (all known examples)	
ɔ̌:	‘moon, month’
bɛ́:	‘excrement’
bɔ̌:	‘member’
dɛ̌:	‘senior twin’
dí:	‘water’
gɛ̌:	‘hunger’
gɔ̌:	‘granary’
gó:	‘(courtyard) wall’
X ^{L}*kè:*	‘X’s (possession)’
kǔ:	‘yam (*Dioscorea*)’ (<Bambara)
jɔ̌:	‘fishhook’
lɔ́:	‘mother’s younger sister’; ‘step-mother’
lí:	‘bed’ (French *lit*)
pó:	‘tankard, drinking cup’ (French *pot*)
só:	‘pail’ (French *seau*)
tɛ̌:	‘honey’
tɛ̌:	‘pile of millet grain spikes’
tɔ̌:	‘sprout(s)’
sɔ̌:	‘matter, issue’
sǒ:	‘awareness’

sí:	‘saw (tool)’ (French *scie*)
compound initials and finals	
nùmɔ̀^{L}*-jɛ̌:*	‘handful’
nàŋà^{L}*-tɛ́:*	‘(dairy) butter’
nìŋìr^{n}*ì*^{L}*-tɔ̌:*	‘deadline’
kɛ̀^{nL}*-bǒ:*	‘splinter-removing gear’
àrà^{L}*-yá:*	‘heroism’
pòrù^{L}*-kɛ́:*	‘harvesting knife’
kír^{n}*í*^{L}*-sì:*	‘having a somewhat pointed snout’
adjective stems (all known examples)	
kǒ:	‘empty, plain’
tǒ:	‘stray (crop plant)’
ɛ̌:	‘tight’
wá:	‘wide’
adverbs and grammatical morphemes	
ǎ:	‘who?’
yǎ:	‘where?’
yá:	‘yesterday’
lá:	‘at first’
bà→	‘since’
nɔ́:	‘this’
kɛ̌: bà→	‘in the past’

b. *Cv:Cv* (fairly common)

stems (sample)	
gó:ró	‘kola nut’
là:rá	‘fields next to the village’
ɛ́:rɛ́	‘peanut, groundnut’
wǒ:ŋù	‘(liquid) be at full boil’
sí:rì	‘cook (meal)’
pɛ́:gù	‘harvest (grain spikes) by breaking or pulling off’

c. other

wàlâ:y	‘by God!’ (swearing an oath)

Cv:C is not a normal stem shape, but it occurs in the loanwords *fú:r* ‘covered oven’ (French *four*) and *lá:m* ‘razor blade’ (French *lame*).

In bisyllabic stems, and to a lesser extent in trisyllabic and longer stems (many of which originated as compounds), the initial syllable is favored for long vowels. However, TgK has a considerable number of nonmonosyllabic stems (other than verbs) with a final long vowel, and a few of these have final long oral vowels not preceded by a nasal consonant. All examples from my working lexicon are in (11).

(11) Final long oral vowel in nonmonosyllabics

form	gloss
a. bisyllabic	
noun stems (not obviously recent loanwords)	
àtí:	‘bird trap’ (perhaps with *à-* prefix, §4.1.7; also in Jamsay)
òtě:	‘well (for water)’ (cf. Toro Tegu *téwó*)
àndí:	‘year’ (frozen compound)
bɛ̀-sɛ́: ~ *bɔ̀-sɛ́:*	‘father’s younger brother’ (frozen compound < ‘little father’)
sàrɛ́:	‘legal proceeding’ (contracted from *sàríyá)
sárɛ́:	‘diarrhoea’ (contracted from *sáríyɛ́ or the like)
àr^{n}*ù*^{L} *jɔ̀*^{n}*kɛ̌:*	‘first heavy rain’
adjectives	
bɔ̀rɔ́-sɛ̀:bɛ̀:	‘skinny-buttocks’ (bahuvrihi compound)
French loanwords (nouns and adjectives)	
kèpí:	‘cap’ (French *képi*)
sàpó:	‘hat’ (French *chapeau*)
pòlí:	‘pulley’ (French *poulie*)
kílé:	‘key’ (French *clé*)
tìyó:	‘tube’ (French *tuyau*)
kàkî:	‘tan (color)’ (French *khaki*)
adverbs, expressive adverbials	
dùrô:	‘(garment) on backwards’
other	
ìyɔ̂:	‘want’ (irregular stative verb, §11.2.4.2)
b. trisyllabic or longer	
bànàkú:	‘cassava; sweet potato’ (<Bambara compound)
àŋgìlɛ́:	‘English person’ (French *anglais*)
bàrùpɔ́:	‘calabash tomtom’ (frozen compound)
màrùpá:	‘rifle, musket’ (ultimately <Arabic)
màrùtó:	‘hammer’ (French *marteau*)

For prolonged final vowels in adjective stems in predicative form, see §11.4.1.2, below.

3.4.2 Nasalized vowels

TgK is richer in nasalized vowels than many other Dogon languages. This applies mainly to stem-final syllables, where many final nasal consonants have been lost, leaving behind a trace in the form of vocalic nasalization. Typically the resulting nasalized vowel retains its original length (long or short), so TgK has many stem-final short nasalized vowels (which are absent from some other Dogon languages).

(12) presents cases of short nasalized vowels in monosyllabics, where the nasalized vowel is clearly autonomous, i.e. it does not follow a nasal or nasalized consonant.

(12) Short nasalized vowels (autonomous) in monosyllabics

form	gloss
a. *Cv*^{n}	
verb stems: for a list see §10.1.3.1	
noun stems: all known examples	
dɔ́^{n}	‘price’
tɔ́^{n}	‘hump (in person’s back)’
dǐ^{n}	‘hip’
gɛ́^{n}	‘gallbladder’
kú^{n}	‘head’
ká^{n}	‘mouth’
dǎ^{n}	‘size’
tǔ^{n}	‘fabric, garment’
tǐ^{n}	‘firewood’
jɔ́^{n}	‘private field’
kɔ̌^{n}	‘daba (hoe)’
kɔ̌^{n}	‘weeping(n)’
dɛ̌^{n}	‘waterjar’
jɛ́^{n}	‘handle (of pail)’; ‘forked stick’
bá^{n}	‘wooden bench’ (French *banc*)
pǎ^{n}	‘shortage of water’
jɔ̌^{n}	‘dyer’
sá^{n}	‘religion (Islam), prayer’
bɔ̌^{n}	‘tomtom’
bɔ́^{n}	‘name’
kɛ̌^{n}	‘pointed instrument’
pɔ̌^{n}	‘bridge’ (French *pont*)
adjective stems: all known examples	
kú^{n}	‘unmarried’
pɛ̌^{n}	‘old
dɛ̌^{n}	‘poorly developed (millet)’
bá^{n}	‘red’
sɛ́^{n}	‘good’
tɔ́^{n}	‘mild-mannered’
compound initials and finals	
[nùmɛ̀-y^{n}*]*^{L}*-dú*^{n}	‘pinky finger’
àɲù^{L}*-gɔ̌*^{n}	‘roselle plant’
kɔ̀rɔ̀^{L}*-gá*^{n}	‘meningitis’
grammatical morphemes	
sǎ^{n}	reflexive
tú^{n}	reciprocal
-gí^{n}	characteristic derivational suffix (human)

There are also some short nasalized vowels in nonmonosyllabic words. Most nasalized vowels are in stem-final syllables. For nouns they may reflect original compounds with an L-toned initial followed by *-í:^{n} ‘child’. Nasalized vowels in nonfinal syllables, in the absence of a nasal or nasalized consonant, are attested but uncommon.

Autonomous long nasalized vowels in monosyllabics are in (13).

(13) Long nasalized vowels (autonomous) in monosyllabics

form	gloss
a. verb stems	
(for a list see §10.1.3.1)	
b. noun stems: all known examples	
ɛ́:^{n}	‘soda ash’
í:^{n}	‘child’
gɔ́:^{n}	‘griot (caste)’
gí:^{n}	‘theft’
kɛ́:^{n}	‘inheritance’
gɔ́:^{n}	‘vestibule’
dɛ̌:^{n}	‘elder same-sex sibling’
c. compound initials and finals	
ɲà sá:^{n}	‘light (illumination)’
ì^{n}*-tá:*^{n}	‘friend’
d. adjective and numeral stems	
(no known example)	
e. grammatical morphemes	
hɔ́:^{n}	‘here! take (this)!’
gí:^{n}	‘like, similar to’
f. other	
jâ:^{n}	‘what is right’ (adverbial)

Final nasalized vowels in nonmonosyllabic stems are in (14). Those in (14b) are probably frozen diminutives. For the human nouns in (14c), the nasalization may be a vestige of a former suffix, compare Jamsay human singular *-n* and human plural *-m*.

(14) Final nasalized vowels

a. nonhuman	
hà:rɛ̌^{n}	‘Muslim holy day associated with cousins’
dùwɔ̀lɛ̌^{n}	‘mirror’
dɛ̀bɛ́^{n}	‘(modern) mat’
sùsùlɛ́^{n}	‘whip (branch)’
úsúlá^{n}	‘incense’
sàrí^{n}	‘plow’
b. frozen diminutive	
mɔ̀rí^{n}	‘small amulet’
gàrí^{n}	‘kidney’
àɲì^{L}*-gɔ̀:gí*^{n}	‘soft spot above collarbone’
lɛ̀gí^{n}	‘rolling pin for cotton’
kò-kòrí^{n}	‘shuttle in loom’

c. human

dɔ̀gɔ̌^{n}	‘Dogon (person)’
ɔ̀gɔ̌^{n}	‘Hogon, chief’
tɛ́lɛ́^{n}	‘Tellem (person)’
dégé^n	‘short person’
hɔ́:rɔ́^{n}	‘noble, freeborn person’
yérí^n	‘visitor, guest’
wálí^n	‘seer’

The stems in (15) have a nonfinal nasalized vowel. Those in (15b) also have a final nasalized vowel. Nonfinal nasals are not common.

(15) Nonfinal nasalized vowels

a. nonfinal nasalized vowel only

tá^n*tú*	‘tent’
málɛ́^{n}*kɛ́*	‘angel’
ì^n*sìr*^{n}*í*	‘urine’

b. nonfinal and final nasalized vowels

sì:^{n}*ká*^{n}	‘a match, an equivalent’
ɔ́^{n}*sà*^{n}	‘cemetery’
gù^n*sá*^{n}	‘full outback’
sì^n*-sí:*^{n}	‘childhood’

3.4.3 Phonetically nasalized vowels next to nasal consonants

There are also many stems with syllables like *na* or *r*^{n}*i*, where a nasal or nasalized consonant is followed by a vowel. The vowel is phonetically nasalized, but except in special cases involving morpheme breaks there is no phonological opposition between oral and nasalized vowels in this position. The same phonetic nasalization applies to vowels preceding a nasalized consonant, as in sequences like *ana*.

My assistant had a clear sense that such nasal-adjacent vowels are nasalized. For example, he would syllabify a sequence like *ana* as *a*^{n}*.na*^{n}, and would render the vowel of the second syllable (stripped of the preceding *n*) as [a^n]. He would correct me if I suggested pronunciations with oral vowels.

The vocalic nasalization in stems like *nǎ* ‘person’ can be strong enough to lead to optional pronunciations with (what sound like) homorganic nasal-stop sequences in e.g. plural *nǎ bè* ‘people’, i.e. [nǎmbè]. However, there is no productive process of the type /naga/ > *naŋga* within stems. Note, for example, (causative) verb *súnú-gù* ‘take down’, not #*súnú-ŋgù*. Likewise *ámúgì* ‘hold against one’s chest’ and *mánúgú* ‘thought’. Having said this, a quick run through the working dictionary shows that most nonmonosyllabic stems (excluding recent loans) that begin with a nasal have other nasals in following syllables, so that stems like *nàŋúr*^{n}*ù* ‘next year’ with three consecutive *Nv* syllables (and therefore continuous phonetic nasalization from start to finish) are entirely typical.

Examples of nasal-plus-vowel combinations are in (16).

(16) Nasal or nasalized consonant (N) plus vowel

form	gloss
a. *Nv*	
verbs stems: only example	
nú	‘go in’
noun stems: all known examples	
nǎ	‘person’
ɲɛ̌	‘woman’ (in compounds also *yɛ̀-* etc., §5.1.8)
nɛ́	‘blood’
mɔ́	‘laughter’
mɔ̌	‘gum arabic’
ɲá	‘ground’
mɛ̌	‘cut (wound)’
adjective stems: only example	
mǎ	‘dry’
grammatical morphemes (sample)	
mà	1Sg possessor
nî	‘here’
b. *Nv:*	
verb stems	
(for lists see §10.1.3.1-2)	
noun stems: all known examples	
nǔ:	‘death’
ɲǎ:	‘meal’
mɛ̌:	‘salt’
ɲɛ́:	‘fire’
ɲú:	‘millet’
nǐ:	‘cow-pea’
nǐ:	‘father’s sister’
mǎ:	‘light metal’
adjective stems: all known examples	
ná:	‘primary’
nú:	‘hot’
mǐ:	‘fine (powder)’
grammatical morphemes (sample)	
nɔ́:	‘that’ (demonstrative)
pílé-m-ɛ̀:	‘again’
c. bisyllabic and longer stems (sample)	
CvNv	
gìr^{n}í	‘house’
pàŋá	‘power’
CvNv: (uncommon)	
sɔ́mɛ́:	‘spices’ (Jamsay *sɔ́mɔ̂y^{n}*)
nùmɔ̀^{L}-dìŋɛ̌:	‘thin bead bracelets’ (*-dìŋɛ̌:* also occurs in other jewelry-type compounds, and is itself probably a frozen diminutive compound from *dìŋɛ-ý^{n})

Cv:Nv	
à:ŋá	‘how many?’
pó:nù	‘greet’
NvCv (uncommon)	
ɲùgú	‘herb (*Amaranthus dubius*)’ (<Bambara)
mèré	‘having just one testicle’
Nv:Cv (uncommon)	
má:fé	‘red sauce’
NvNv (very common)	
màŋá	‘honor(v)’
nàná	‘left (hand)’
ɲù-ɲǔ	‘cold weather’
Nv:Nv	
mɔ̌:ǹ (< *mɔ̌:nù*)	‘assemble’
ɲí:ɲí	‘sharp (blade)’

The suggestion that vowels next to nasal consonants are phonologically (not just phonetically) nasalized is pertinent to the analysis of *Cv-* reduplications from *TvNv…* stems, with oral consonant *T* and nasal *N*. For *Tv*^{n}*-TvNv…* as the reduplicated form, see the discussion of nouns such as *sɔ̀*^{n}*-sɔ̀nɔ́* ‘sand’ in §4.1.4, below.

3.4.4 Initial vowels

There are no restrictions on which vowels can occur initially. Initial vowels are found when the usual *C*$_1$ position happens to be vacant. Some examples: *ɔ́* ‘give’, *ú:-ǹ* ‘lay down’, *ɛ́:rɛ́* ‘peanuts’, *ɔ̀jɔ́* ‘thing’, *árá* ‘suckle’.

3.4.5 Stem-final vowels

For monosyllabic words, a final vowel may be long or short. For unsegmentable nonmonosyllabics, final vowels are usually short, except in loanwords. However, some nonmonosyllabic stems do have a final long vowel, in some cases due historically to a contraction. See (11a-b) in §3.4.1 above.

3.4.6 Vocalic harmony

The vowel-harmonic sets are [+ATR] {*e o*} and [-ATR] {*ɛ ɔ*}.

High vowels {*u i*} are extraharmonic and may co-occur with either vowel-harmonic set within the stem. Low vowel *a* is associated with [-ATR], to judge by verb forms like perfective *pág-ɛ̀* (not #*pág-è*) ‘tied’ from stem *págá* ‘tie’.

There are only a handful of known cases where different forms of the same word family, e.g. noun and verb, diverge in vowel-harmonic class (17).

(17) Harmonic divergences

a.	*dòŋó*	‘pound (to dislodge grain from spike)’
	dɔ̀n^{L}*-dɔ́ŋɔ́ɲú*	‘area at edge of village where women pound millet spikes in large mortars’
b.	*mɔ́m mòmó*	‘carry out second round of weeding’ (cognate noun plus verb)
c.	*ɛ́wɛ́*	‘sell’
	ɛ́wɛ́	‘market(n)’
	éw	‘(a) purchase’

3.4.7 Vowel symbolism

As in other Dogon languages, there are a few lexical families containing semantically and consonantally related stems that differ in vocalism in a manner suggesting a limited vowel-symbolic system. The sets in question are generally verbs and expressive adverbials.

For TgK, consider the set (18), which additionally involves consonantal repetition (reduplication is perhaps too strong a word). The form with *e*-vowels (hence with higher second formant) has diminutivizing sense, as often with *e* and *ɛ* in similar sets in other Dogon languages.

(18)	a.	*gògó*	‘eat (soft fruit)’
	b.	*gègé*	‘(grasshopper, mouse) nibble at (food)’
	c.	*gùgɔ́*	‘chew cud’; ‘spit up (food) into mouth’

Connecting the verbs in (18) further with *gɔ̀gɔ́* ‘say one’s beads (fingering the beads of a rosary)’ and ‘set (rifle cock)’ is more of a stretch.

See also the discussion of vowel sequences in nouns with full-stem iteration (§4.1.6), and the set of expressive adverbials meaning ‘flat’ (§4.5.3).

3.5 Segmental phonological rules

3.5.1 Trans-syllabic consonantal processes

3.5.1.1 Nasalization-Spreading

In many (but not all) stems, including suffixally derived verbs, a semivowel or rhotic consonant appears in nasalized form when preceded by a nasal syllable such as *nv*, *r*^{n}*v*, or *Cv*^{n}. Among many examples are *r*^{n} in *báŋár*^{n}*á* ‘shin’, *w*^{n} in *nɔ̀w*^{n}*ɔ́* ‘meat’, and *y*^{n} in *gàmù*^{L} *kàr*^{n}*íy*^{n}*á* ‘watermelon for cooking’. These forms reflect what was probably once a productive Nasalization-Spreading process.

However, there are a significant number of counterexamples where {*w y r*} remain unnasalized in a nasalizing context. These are generally cases where a nasal-stop cluster has simplified in TgK to just the nasal. Examples are *nèŋèrè*^{L}*-kú*^{n} ‘knee’ (compare Perge *nìŋgé*) and *lèmúrú* ‘citrus fruit’ (Perge *lèmbúrù*, from Bambara). Since these forms seem to be stable, we cannot assert a synchronically productive Nasalization-Spreading process.

This is a phonological problem insofar as it applies to a verbal derivational suffix, namely reversive *-rv*. As shown in §9.1, below, this suffix nasalizes to *-r*^{n}*v* after some but not all stems that end in a nasal syllable. For example, *óŋù-r*^{n}*ù* 'uncrumple' has a nasalized *r*^{n}, but *téŋì-rì* 'un-hobble (animal)' has oral *r*, reflecting an earlier form of the type *téŋgì-rì whose *ŋg cluster had no nasalizing effect on following suffixal segments. We are therefore stuck with a lexically arbitrary phonological rule by which some stems allow Nasalization-Spreading to a suffixal consonant while others do not.

In verbal inflectional morphology, the imperfective (positive) suffix -*jú* is nasalized to -*ɲú* after most stems ending in a nasal syllable, defined as either a syllable with a nasal or nasalized consonant as onset (e.g. *na*, *mo*, *w*^{n}*e*), or a syllable with a nasalized vowel as in monosyllabic stems like *jǐ:*^{n} 'fart'. Thus *gǔŋɔ́-ɲú* 'will take out', *jǐ:*^{n}-*ɲú* ' will fart'.

This suffixal nasalization does not apply to a set of such verbs whose medial nasal consonant reflects an etymological nasal-stop sequence, i.e. *ŋ* from *ŋg, *n* from *nd, or (in theory) *m* from *mb. Thus *téŋé-jú* 'will block' or 'will hobble (quadruped)', *mìné-jú* 'will roll up', *dùŋó-jú* 'will stop up (hole)', *bìné-jú* 'will turn (e.g. pocket) inside out', all with *-jú* instead of *-ɲú*. I cannot cite examples with *m* from *mb, and in fact there are counterexamples like *tɛ́mɛ́-ɲú* 'will encounter', *ɔ́mɔ́-ɲú* 'will rot', and *tímɛ́-ɲú* 'will cover (with a lid)', whose *m*'s reflect *mb.

In *CvC* syllables, a final {*y w*} is nasalized in most cases if *C*$_{1}$ is nasal or nasalized, as in *nú-ỳ*^{n} 'went in'.

Such nasalization-spreading as does exist synchronically in TgK is forward (progressive) rather than backward (regressive). However, backward nasalization-spreading has occurred diachronically in a handful of cases, where synchronic initial *ɲ* reflects an earlier *y^{n} that was nasalized under the influence of a following nasal. This has resulted in obscure alternations in two cases. For 'woman' and related forms (*ɲɛ̌*, *yɛ̀*, *yǎ:*) see §4.1.1 and §5.1.8. For *ɲá-má* 'let's go!' from *yɛ̌* 'go', see (285a) in §10.6.2.1. Another diachronic case, with no synchronic alternations, is *ɲàŋá* 'take, pick up', cf. Perge (Jamsay dialect) *yɛ̀ŋgɛ́*. The Dogon language with the most synchronic cases of backward nasalization-spreading is Toro Tegu.

3.5.1.2 Consonantal metathesis

Metathesis is not a common process. We see it on an isolated basis in the word-family with noun *bár*^{n}*úw*^{n}*á* 'wound(n)' and transitive verb *bàw*^{n}*úr*^{n}*ù* 'wound (someone)'. Here the verb has metathesized, cf. Jamsay *bármɛ́* 'wound (someone)' and other related forms (probably from Fulfulde).

My assistant showed variation between *g/j* and *j/g* sequences in the verb *kójùgù* ~ *kógùjù* 'cough'.

3.5.2 Vocalism of suffixally derived verbs

3.5.2.1 Suffixal Vowel-Spreading

Because derivational suffixes on verbs almost always result in heavy stems, derived verbs belong to the type with final short high vowel in the bare stem and perfective. In other inflected forms, the vowel of the derivational suffix is based on the vocalism of the stem. An exception is causative *-m̀*, which follows a different pattern. See chapter 9 *passim* for examples of derivational suffixes.

3.5.2.2 Presuffixal V$_2$-Raising

In *CvCv-Cv* verbs with some derivational suffixes (but not causative *-m̀*), the medial syllable raises its short vowel to a high vowel {*u i*} in the bare stem. This occurs with reversives (§9.1) and transitive derivatives (§9.3.1). An example is *págá* 'tie', reversive *págì-rì* 'untie'.

3.5.3 Vocalic rules sensitive to syllabic or metrical structure

3.5.3.1 Epenthesis

I know of no vocalic epenthesis processes in TgK.

3.5.3.2 *rv*-Deletion

Some *CvCv* stems (chiefly verbs) ending in *rv* or *r^{n}v*, where *v* is a short vowel, lose this syllable without compensatory lengthening in a metrically weak position before a consonant-initial suffix.

The process applies to several verb stems of the bimoraic bisyllabic shapes *Cvrv* and *Cvr^{n}v*, before certain suffixes. Some stems of the same shapes fail to reduce. *gɛ̀r-í:* 'look' is treated as /gɛ̀rɛ́/ before suffixes (compare *gɛ̀rɛ́* 'harvest'), and it is affected, but other *Cvr-i:* and *Cvr^n-i:* mediopassives are not, presumably because of the long suffixal vowel.

(19) Verb stems undergoing *rv*-Deletion

gloss	stem	Ipfv	IpfvNeg	PfvNeg
a. *Cvrv stems subject to rv-Deletion*				
'get'	*bɛ̀rɛ́*	*bɛ̌-jú*	*bɛ̌̂:-rò*	*bɛ̀-lí*
'pass, go past'	*gàrá*	*gǎ-jú*	*gǎ̂:-rò*	*gà-lí*
'add'	*bàrá*	*bǎ-jú*	*bǎ̂:-rò*	*bà-lí*
'do'	*bìrɛ́*	*bǐ-jú*	*bǐ̂:-rò*	*bì-lí*
irregular e ~ ɛ alternation				
'come'	*yɛ̀rɛ́*	*yě-jú*	*yě̂:-rò*	*yè-lí*
irregular (partial mediopassive morphology)				
'look'	*gɛ̀r-í:*	*gɛ̌-jú*	*gɛ̌̂:-rò*	*gɛ̀-lí*
irregular (imperative pɔ́-nɔ́)				
'say'	*pórì*	*pó-jú*	*pô:-rò*	*pò-lí*
b. *Cvr^{n}v stems subject to rv-Deletion*				
'be able'	*gɔ̀r^{n}ɔ́*	*gɔ̌-ɲú*	*gɔ̌̂:-r^{n}ò*	*gɔ̀^{n}-lí*
'kill'	*dàr^{n}á*	*dǎ-ɲú*	*dǎ̂:-r^{n}ò*	*dà^n-lí*
'beat drum'	*bàr^{n}á*	*bǎ-ɲú*	*bǎ̂:-r^{n}ò*	*bà^n-lí*
'sell'	*dɔ̀r^{n}ɔ́*	*dɔ̌-ɲú*	*dɔ̌̂:-r^{n}ò*	*dɔ̀^{n}-lí*
c. Stems not subject to *rv*-Deletion				
underived, with r				
'begin'	*tɔ́rɔ́*	*tɔ́rɔ́-jú*	*tɔ́rɔ̂:-rò*	*tɔ̀rɔ̀-lí*
'suckle'	*árá*	*árá-jú*	*árâ:-rò*	*àrà-lí*

‘pound’	*téré*	*téré-jú*	*térê:-rò*	*tèrè-lí*
‘be difficult’	*kírɛ́*	*kírɛ́-jú*	*kírɛ̂:-rò*	*kìrɛ̀-lí*
‘ripen’	*írɛ́*	*írɛ́-jú*	*írɛ̂:-rò*	*ìrɛ̀-lí*
underived, with r^{n}				
‘cut in strips’	*sír*^{n}*í*	*sír*^{n}*í-ɲú*	*sír*^{n}*î:-r*^{n}*ò*	*sìr*^{n}*ì-lí*
mediopassive				
‘jump’	*kír-ì:*	*kír-é:-jú*	*kírê:-rò*	*kìr-è:-lí*

The verbal suffixes that do and do not trigger *rv*-Deletion for the relevant verb stems are listed in (20). Only suffixes beginning with a *Cv* syllable (whether or not the vowel is subject to Apocope) are included.

(20) Suffixes and *rv*-Deletion

trigger deletion	do not trigger deletion
a. derivational	
-m causative (rarely)	*-m* causative (usually)
-rv reversive (becomes *-lv*)	*-nv* inchoative
	-gv causative
b. inflectional	
-jú ~ *-ɲú* imperfective	*jɛ̂* recent perfect
-rò imperfective negative	
-lí perfective negative	
=*lá* stative negative (infrequently)	
-tɛ́-jɛ̀ experiential perfect	
-*táŋà* progressive	
-wɔ̀-rɔ́ progressive negative	
-lé prohibitive	
-má hortative	
-m-lé hortative negative	
c. subordinating	
-nì different-subject ‘while’ (§15.2.1.2)	

Examples can be found in the relevant sections of chapters 9 and 10. From the array of suffixes in (20), it is not clear how a synchronic phonological analysis could neatly explain why some suffixes do and others do not allow *rv*-Deletion.

Regarding causative (and occasionally passive) *-m̀*, *rv*-Deletion is attested in a few high-frequency forms: *gɛ̌-m̀* ‘cause to look’, *gǎ-m̀* in *dàgá gǎ-m̀* ‘allow to go past’, and *bɛ̌-m̀* ‘be obtainable’. However, deletion is not productive before this suffix: *árá-m̀* ‘nurse, give suck to’, *wàrá-m̀* ‘have (animal) plow’, *(kɛ́nɛ́) párá-m̀* ‘make (sb) angry’.

For the reversive (normally *-rv*), the phonology is non-transparent in *tárá* ‘affix, glue’ with reversive *tá-lì* ‘remove (sth affixed)’, and *gòró* ‘cover (opening)’ with reversive *gǒ-lì* ‘remove cover from (opening)’. Arguably the suffixal /r/ dissimilates, becoming *l*, before *rv*-Deletion applies to the second stem vowel.

For the minor derivational suffixes that do not trigger *rv*-Deletion, examples are *yɔ̀rú-gí* ‘become soft’ and *gùrú-nì* ‘become long’.

rv-Deletion does not apply to most heavier (trimoraic and longer) stems, e.g. *Cv:r(^{n})v-* or *CvCvr(^{n})v-*. For example, *(sǎ^n) ná:-r^{n}ì* ‘remember’ and *kígìrì* ‘return’ retain their full shapes before suffixes, e.g. (perfective negative *sǎ^n nà:-r^{n}à-lí, kìgèrè-lí*). It does not affect mediopassive derivatives of the shape *Cvr(^{n})-i:*, e.g. *kír-ì:* ‘jump’ (perfective negative *kìr-è:-lí*). There is, however, one irregular and high-frequency *Cv:rv* stem that does undergo *rv*-Deletion, namely *jɛ̌:rì* ‘bring’, which has forms like progressive *jê:-táŋà*.

There are few opportunities for *rv*-Deletion to apply word-internally to stems other than verbs, because of very limited suffixation for those stems. However, there is an occasional compound or tightly-knit noun-adjective sequence that shows the deletion. *gìr^{n}í* ‘house’ is the initial in *gì-ná:* ‘extended family’. However, the bisyllabic form occurs in other common compounds with this initial such as *gìr^{n}ì-dú* ‘courtyard (with its apartments)’, in more transparent compounds such as *lɔ̀gɔ̀ [gìr^{n}ì tàr-ú]* ‘earth for replastering’, and in sequences of ‘house’ with an adjective or numeral. *àr^{n}ú* ‘rain’ retains its segmental shape as compound initial: *àr^{n}ù-dúrú* ‘thunder’, *àr^{n}ù-dí:* ‘rainwater’. *àr^{n}á* ‘man’ is also generally resistant to *rv*-Deletion, but I can cite one case of deletion, namely, *à^n kàná* ‘newlywed man’ (§5.1.8).

The derivational suffix *-ná* in deadjectival extent nouns (§4.2.2) does not trigger *rv*-Deletion: *gù-gùrù-ná* ‘length’, *wò-wòrù-ná* ‘depth’. Likewise characteristic *-gí^n* (§4.2.3), as in *nùr^{n}ù-gí^n* ‘sick person’.

As for numerals, *pɛ́rú* ‘10’ undergoes *rv*-Deletion to *pɛ̌-* before a single-digit numeral in compound numerals from ‘20’ to ‘90’, e.g. *pɛ̌-lɔ́y* ‘20’ (§4.6.1.3).

3.5.4 Syncope

Syncope is deletion of a vowel medially in a word, i.e. of the second vowel in *CvCvCv*.

Syncope is not widespread in TgK, assuming that we treat it separately from *rv*-Deletion. However, a short high vowel {*i u*} in the environment *CvC_Cv* is deleted under certain conditions.

dàní-gì ~ *dànú-gù* ‘make (sth) good, fix’ (§9.2.2), irregular causative of *dàg-î:* ‘be good, turn out well’, is normally heard in unsyncopated form in the bare stem and perfective. The forms with *a* or *ɛ* after the *g* are generally syncopated, e.g. imperative *dǎn-gá*, imperfective *dǎn-gá-jú*, and same-subject anterior *dǎn-g-ɛ̀:*, though careful pronunciations like *dànú-gá-jú* are also possible. The divergence within the paradigm suggests that a following high vowel disfavors Syncope, while a following *a* favors it.

Syncope was not observed in *ɲùnú-gù* ‘ruin’ or its paradigmatic forms such as imperative *ɲùnú-gó*. Since the *n…g* consonant sequence is the same as for ‘make good, fix’, this suggests that a following *o* vowel, like a following high vowel, disfavors Syncope.

káwá ‘become separated’ has an irregular causative *káw-gì*, imperative *káw-gá* (§9.2.2). Assuming underlying /kawu-gv/, we again have Syncope, this time throughout the paradigm. This suggests that the preceding homorganic *w* favors Syncope of *u*, regardless of the following vowel.

3.5.5 Apocope of final high vowels

Apocope is word-final deletion of a (short) vowel. As part of the general attrition of word-final segments, a final short high vowel {*i u*) is deleted under some conditions. Actual synchronic alternations are limited to verbs.

For some verbs, including all heavy stems (*Cv:Cv*, trisyllabic, or longer) and some *CvCv* stems, the important “bare stem” form ends in a short high vowel. This final vowel is usually deleted after an unclustered {*m n ŋ l*}, i.e. any sonorant other than a rhotic, semivowel, or *ɲ*. There are, however, careful pronunciations with the final high vowel audible. Other forms of these verbs have a clear (nonhigh) vowel, for example in the imperative. Examples are in (21).

(21) Apocope in verb stems

bare stem	imperative	gloss
gǔŋ̀	*gǔŋɔ́*	‘take out’
bàgá-m̀	*bàgá-mú*	‘cause to fall’
wáǹ	*wáná*	‘shallow-fry’
mǎ:-ŋ̀	*mǎ:-ŋá*	‘harden’
pôl	*póló*	‘break up’

In addition to the bare stem, the same verbs allow Apocope in the perfective, e.g. *gǔŋ̀-∅* ‘took out’, variant *gǔŋ-ì*.

Finally, verbal nouns in *-ú* of bisyllabic stems are typically apocopated, e.g. *wǎn-∅* ‘shallow-frying’, alongside *wàn-ú*.

3.5.6 Local consonant cluster rules

None.

3.5.7 Vowel-vowel and vowel-semivowel sequences

3.5.7.1 Hiatus between adjacent vowels in reduplications

The hiatus between the vowel of a *Cv-* reduplicant (in this case just *v-*) and a stem-initial vowel is filled by a glottal stop. See, for example, §4.1.4 for nouns, and §10.2.1.5 (among others) for verbs. An example is *ò-ʔó-è*, reduplicated perfective of ‘give’, from simple perfective *ó-è*.

3.5.7.2 *vv*-Contraction

There are relatively few situations where two vowels come together at a boundary and contract. Some vocalic sequences are tolerated, even aside from the reduplications with glottal-stop hiatus. Verbs often show uncontracted diphthong-like sequences like *oe* and *aɛ* in the perfective. Compound final *-í:*^{n} ‘child’ is often uncontracted after an initial ending in a vowel, though various contracted forms also occur, especially in terms for juvenile livestock, see (96) in §5.1.7.

Some pronouns contract with quotative subject *(w)à*, hence 1Sg *má à*, pronounced [mâ:], and 3Sg *wɔ́ ɔ̀* from /wó wà/.

The imperfective negative of verbs is *-rò* after a form of the stem with lengthened final vowel that also shifts from H-tone to {HL} (falling) tone, e.g. *págâ:-rò* ‘will not tie’. This is likely to have resulted from contraction of the stem with a bisyllabic suffix (complex).

3.5.8 Local vowel-consonant interactions

3.5.8.1 /i/ > *u* before labial

There is no productive process of this type, though short high vowels do fluctuate between *i* and *u* especially in verbs, and the consonantal environment probably plays a role in the phonetics.

The alternation of mediopassive *ìm-î:* ‘lie down’, stative *ù-ʔúmò* ‘be lying down’, and irregular causative *ú:-ǹ* ‘lay (sb, sth) down’ (perhaps from *úmú-ǹ) represents an isolated and archaic case.

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

Examples of this are perfective *ɲí-ỳ*^{n} ‘ate (meal)’, pronounced [ɲî:], and verbal noun *bǔw-∅* (apocopated from /bùw-ú/), pronounced [bǔ:], cf. verb *bùwɔ́* ‘scrub’.

3.6 Cliticization

There are no second-position (“special” or Wackernagel’s-position) clitics.

It is difficult to justify (on precise phonological grounds) a distinction between suffixes, clitics, and particles, and I cannot defend every orthographic decision I have made in this respect.

The best case for cliticization is when the putative clitic is reduced to a syllable-final consonant, pronounced with the final syllable of the preceding word. This is clearly the case with *=y* ‘it is’, which also acquires its tone from the preceding word (§11.2.1.1), and with the short allomorph *=ǹ* of dative postposition *nì* (§8.1.1).

In verbal morphology, the boundary between suffixation and chaining is not clearcut, and some “suffixes” that follow the same form of the verb used in nonfinal position in chains could be reanalysed as (auxiliary) verbs. See §10.1.1 on this matter.

3.7 Tones

Lexical tone melodies are enclosed in slashes, e.g. /H/ or /LH/. Curly brackets {…} enclose tone overlays like {HL}, each of which consists of one or more tone elements H[igh] and L[ow], that are superimposed on stems of variable syllable and mora counts. {…} is also used when the difference between lexical and overlaid tone patterns is not relevant or not known. Syllable-by-syllable representations like L.<LH> use the period to mark syllable boundaries, and angled brackets to represent contoured (nonlevel) syllable tones. For example, an /LH/ melody or overlay can be mapped onto any type of stem, e.g. as <LH> on a monosyllabic. For bisyllabic and longer stems, how the mapping works must be specified. For example, /LH/ could in principle be mapped onto Cv.Cv.CvC as L.H.H, as L.L.H, or as L.L.<LH>, depending on the language and perhaps varying by construction. See the discussions on tone-break locations for lexical melodies (§3.7.1.5-7).

Superscripts like ^{L} and ^{HL} are used to index the presence of a tone overlay in NPs and in nominal compounds. Superscripts do not add phonetic information, as tones for each syllable in the target domains are already adjusted to their overt forms due to the overlay. See §3.7.2 for details.

Syllables in TgK are H, L, <LH> (rising), <HL> (falling), and <LHL> (bell-shaped). The tonal diacritics are, respectively, x́, x̀, x̌, x̂, and x᷈, where x is a variable over vowels. <LHL> is not a lexical melody for monosyllabic stems in TgK, but due to Apocope it does occur (in a predictable fashion) in the “bare form” and related perfectives of some verbs that have <LH> elsewhere. Example: *mɔ̌:ǹ* ‘gather, assemble’ (apocopated from /mɔ̌:nù/). It also occurs in the imperfective negative of several verbs, e.g. *bi᷈:-rò* ‘will not do’. Among nouns, one can cite the archaic compound *ɲɛ̌-ỳ*^{n} ‘girl; daughter’ (§5.1.8).

In Dogon languages, verbs generally have restrictive tonal (as well as vocalic) properties that do not apply to non-verb stem-classes. Typically verbs belong to either /H/ or /LH/ lexical classes, and the choice is often predictable from the initial consonant (C_1). If C_1 is a voiced obstruent (depressor consonant), we get /LH/, if C_1 is a voiceless obstruent (nondepressor) we get /H/. If there is no C_1, or if C_1 is a sonorant, whether the stem is tonally /H/ or /LH/ is not predictable and must be learned verb by verb. By contrast, in these other Dogon languages, nouns, adjectives, and numerals have a broader range of lexically possible tone melodies, to wit /H/ /HL/ /LH/ /LHL/ and (in Toro Tegu and Ben Tey) /HLH/, and there is absolutely no correlation of lexical tone with features of the C_1 or with any other segmental property of the stem.

In TgK, verbs generally follow this widespread Dogon pattern. The basic lexical distinction for verbs is /H/ versus /LH/, and if C_1 is an obstruent we can predict the lexical tone (except in recent loanwords). However, there is an important class of verbs with a final high vowel {*i u*} in the “bare stem” and in some related forms. This class includes all stems of three or more moras (for example, all trisyllabics), as well as some bimoraic bisyllabics. See (242) in §10.1.3.5 and (246) in §10.1.3.9 for sample lists. In this class, the bare stem has a final L-tone, so the possibilities are /HL/ and /LHL/ allowing for the lexical distinction in the initial tone. Since the final L-tone in the bare stem is predictable, and since it is absent in the imperative and some other inflected forms, we could argue that the real lexical distinction for verbs of this class is /H/ versus /LH/, exactly as in other verbs.

Moreover, TgK non-verb stem-classes have inched closer to verbs. They still differ from verbs in showing no correlation of lexical melody with initial consonant type. However, they have replaced /HL/ by /H/ and /LHL/ by /LH/. The effect is to consolidate non-verb stem-class tone melodies around /H/ and /LH/, as in verbs.

Lexical melodies of all stem-classes (except expressive adverbials) are subject to partial modification or to full erasure, as syntactically or suffixally controlled tone overlays are applied to some or all syllables of the stem. For example, all stem-classes drop their tones to {L} in specified morphosyntactic contexts, and prosodically heavy nouns have an {HL} overlay when possessed.

3.7.1 Lexical tone patterns

3.7.1.1 At least one H-tone in each stem

All verb, noun, adjective, and numeral stems have at least one H-tone in their basic lexical form. There is no indication in the paradigms of monosyllabic verbs that any of them has a lexical /L/ melody. The important effect of this is that a morphosyntactically controlled {L} overlay on a stem is always audible. A partial exception is that /LH/-melody numerals are pronounced as L-toned in allegro speech when not phrased with a following word, e.g. *tà:nú* ‘3’ sometimes pronounced *tà:nù*.

A real exception to the constraints is that a few expressive adverbials (EAs) have /L/ melody. Four examples are in (213f), joined by iterated *gòrùm-gàràm* in (216c), all in

§8.4.6.1. These /L/-toned EAs require H-toned variants of two following monosyllabic morphemes that are otherwise <HL>- or L-toned: *kɔ́* for copula *kɔ̂* ‘be’, which makes EAs predicative, and *ká*^{n} for *kà*^{n}, which follows some EAs in adverbial function. EAs, which have various phonological idiosyncracies, are somewhat autonomous prosodically. They are generally not subject to tonosyntactic operations.

3.7.1.2 Lexical tone melodies of verbs

In the bare stem and in the closely related perfective, the basic lexical melodies for verb stems are /H/ and /LH/, the choice being predictable if the stem begins with an obstruent (voiceless requires /H/, voiced requires /LH/) and lexical if it begins with a sonorant or no consonant. There are two complications to this. First, an archaic verb *jê* ‘take away, convey’, etymologically a two-verb chain, has /HL/ melody. Second, there is a large class of nonmonosyllabic verbs that end in a short high vowel i/u in the bare stem, and which add a final L-tone in this form, so /H/ becomes /HL/ and /LH/ becomes /LHL/. These verbs are prosodically heavy, or (in the case of *CvCv*) treated as though heavy, so the final L is semi-predictable. The final L-tone is also absent from the imperative, which ends in a nonhigh vowel.

The facts are summarized in (22).

(22) Syllabic shape and lexical tone melodies of verbs

melody	comment
a. *Cv*	
/H/	only *ó* ‘give’, *nú* ‘go in’, *tí* ‘send’, *gí* ‘say’
/LH/	only *ɔ̌* ‘see’ (treated as *ɔ́-* in some inflections)
b. *Ce/Cv:* (irregular)	
/LH/	only *yě* ‘go’, presuffixal *yǎ:*-
/HL/	only *jê* ‘take away’, presuffixal *jâ:-*
c. *Cv:*, also prosodically light *CvCv* with final nonhigh vowel in bare stem	
/H/	required with C_1 = voiceless obstruent some with C_1 = sonorant or zero
/LH/	required with C_1 = voiced obstruent some with C_1 = sonorant or zero
d. *CvCv* with final high vowel in bare stem	
treated as light like (c), final i matches preceding i	
/H/	e.g. *pír*^{n}*í* ‘milk (a cow)’
treated as heavy like (e), final high vowel unrelated to preceding vowels	
/HL/	e.g. *pórì* ‘say’
/LHL/	e.g. *gǔŋ̀* < /gǔŋù/ ‘remove’
e. *Cv:Cv and other heavy stems with final high vowel in bare stem*	
/HL/	required with C_1 = voiceless obstruent some with C_1 = sonorant or zero a few loanwords with C_1 = voiced obstruent

/LHL/	usual with C_1 = voiced obstruent some with C_1 = sonorant or zero

The association of /H/ and heavy /HL/ melodies with initial voiceless obstruent, and conversely of /LH/ and heavy /LHL/ with initial voiced obstruent (depressor consonant), is robust for verbs at the lexical but not surface level. The lexical melody of a verb is regularly erased by morphotononological overlays controlled by suffixes, e.g. *bìrɛ́* 'do' with initial voiced obstruent and the "correct" /LH/ melody, but imperative *bírɛ́*. Nouns and other non-verb stems show no effects of depressor consonants at any level.

3.7.1.3 Lexical tone melodies for unsegmentable noun stems

For uncompounded and unpossessed common nouns, the normal lexical tone melodies are /H/ and /LH/. That is, final falling /HL/ and /LHL/ are virtually nonexistent in simple common nouns (see below for exceptons). This distinguishes common nouns from other word types that do include stems with final falling tone, including proper nouns, numerals, inflected verb forms, and particles (e.g. *nî* 'here'). Most other Dogon languages including closely related Jamsay have plenty of nouns with /HL/ and /LHL/ melody. It is clear that TgK has flattened final */…HL/ to /…H/ in common nouns, though usually not elsewhere.

A difficulty in studying nominal tones is the thin line between being compounded and simple, and between being reduplicated and simple. Tonal patterns, notably the position of tone breaks, suggest that many nouns that only occur in one form are nonetheless analysed by native speakers as containing either a compound break or a reduplicant.

The lexical melodies are exemplified in (23).

(23) Lexical melodies for morphologically simple noun stems

a. /H/

í:^{n}	'child'
tógú	'shed'
lásírí	'couscous'

b. /LH/

ɲɛ̌	'woman'
gìr^{n}*í*	'house'
dɛ̀:r^{n}*ɛ́*	'rest'
pùnǎy^{n}	'flour'
òsóró	'earth'

c. [for /HL/ and one case of /HLH/, see below]

There is no issue regarding the tone break in the /H/ stems, but the issue is problematic for the /LH/ stems; see §3.7.1.6-7, below.

Unlike common nouns (i.e. those that denote masses or sets of individuals), personal names and toponyms may have /HL/ melodies. There is considerable variation in the pronunciation of personal names like 'Seydou' and 'Fanta', which occur in all Malian languages in various tonal forms. In TgK they sometimes have melodies ending in H (like common nouns), and sometimes have final L (as in several neighboring languages). The list of local village names in §1.2 shows several with /HL/ and /LHL/ melodies. Among morphologically complex common nouns, {LH}-{L} is notably present in *àr^{n}á-ỳ^{n}* 'boy' and *ɲɛ̌-ỳ^{n}* 'girl', which end in a reduced form of 'child' as compound final (§4.1.2, §5.1.7).

In the infrequent /HL/ noun like *ɔ́^{n}sà^{n}* 'cemetery' that is not transparently compounded, one suspects nonetheless that it originated as a compound and is still treated prosodically as a compound. Compare Jamsay cognate *ɔ̀w^{n}ɔ̀-sǎy^{n}*.

/HL/ and /LHL/ adverbs, including some that are rather noun-like, are well attested. For example, 'last year' is *nàŋúr^{n}ù*, and 'day after tomorrow' is *yògò* ^{L}*-dɛ́r^{n}ɛ̀* (with *yògó* 'tomorrow').

I know of one partially /HLH/ noun that does not appear to be compounded. '(Non-boiling) kettle' (used to carry water) is *sátàlá* for some speakers, at least in the combination *sátàlá mà* 'my kettle'. However, the noun is also heard variously as *sátálá* or *sátàlà*, i.e. with /H/ or /HL/ melody. With 'it is' clitic I recorded *sátàlà=ỳ* 'it is a kettle'. The noun is found in several languages in the region, including Bambara, and variant melodies may be due to multiple (re-)borrowing across language boundaries.

Overall, then, final-falling melodies /HL/ and /LHL/ are very restricted for unpossessed, uncompounded noun stems. However, the combination of an /H/-toned noun with the (generally atonal) 'it is' clitic *=y* appears with final-falling tone pattern under some conditions; see (313c-e) in §11.2.1.1.

3.7.1.4 Lexical tone melodies for adjectives and numerals

Uncompounded adjectives have the same lexical choice between /H/ and /LH/ as uncompounded common nouns. See §4.5.1, below, for a long list.

kùrújù functions as an adjective or compound final (the two categories are not always distinguishable) with rare /LHL/ melody. It denotes the occasional cow-pea or roselle seed that is too hard to use for food, e.g. for cow-peas *nì:* ^{L} *kùrújù*. It may itself be composite at least historically, cf. adjective *kùrú* 'thick (liquid, e.g. honey)'.

Numerals have a wider range of melodies than adjectives and common nouns. Attested melodies are /H/ (*pɛ́rú* '10'), /LH/ (*nǎy* '4'), /HL/ (*sɔ̂:* '7'), and /LHL/ (*sìlâ:* '8').

3.7.1.5 Tone-Component location for verb stems

CvCvCv and *Cv:Cv* stems are the most useful for identifying tone-break locations.

/LH/ and /LHL/ stems, i.e. those with an initial L-tone segment, show the break from L to H as close as possible to the left edge. A trisyllabic example is /LHL/ bare stem *yɔ̀rú-gì* 'slacken' with {LH}-toned imperative *yɔ̀rú-gɔ́*. A *Cv:Cv* example is /LHL/-toned *mɔ̌:ǹ* 'assemble' and its {LH}-toned stem in imperfective *mɔ̌:nɔ́-ɲú*.

Aside from 'take away', most of whose forms are based on *jâ:-*, a final L-tone occurs only on the final syllable of stems ending in a short high vowel, and even for them only in the bare stem and perfective. This applies to heavy /LHL/-toned verb stems (*Cv:Cv*, *CvCvCv*), as seen just above in *yɔ̀rú-gì* and *mɔ̌:ǹ*. In the other suffixed forms, and in the imperative, these verbs lose the final L-tone, shifting from /LHL/ to {LH}.

For /HL/-toned *CvCvCv* stems, which likewise lose the final L-tone in most inflected forms but show it in the bare stem and perfective, the tone break can be after the first or second syllable. The data in §10.1.3.9 show a strong correlation of *Cv́Cv̀Cv̀* with C_3 = rhotic as in *pínì-r^{n}ì* 'open (door)', and of *Cv́Cv́Cv̀* with C_3 = other than rhotic.

3.7.1.6 Tone-break location for bitonal noun stems

Here we focus on uncompounded, underived /LH/-toned common nouns. There is of course no tone break in the other common melody for such nouns, namely /H/. Angled brackets indicate contour tones in specific syllables, so *Cv̀Cv̌:* is represented as L.<LH>.

For monosyllabic /LH/ nouns, the break is of course within the single syllable: *mɔ̌* 'gum arabic', *dɛ̌*^{n} 'waterjar', *dɔ̌y*^{n} 'pestle', *bǐn* 'belly'. It should be noted that *CvC* is not a completely regular shape for nouns; *dɔ̌y*^{n} is probably an old compound ending in 'child', and *bǐn* still varies with bisyllabic *bìní*.

For nonmonosyllabic stems, it is advisable to begin by separating off apparent *Cv-* reduplications, or equivalently by disregarding the tone of the initial syllable. For example, rather than treating *Cv̀-Cv́Cv́* and *Cv̀-Cv̀Cv́* as L.H.H and L.L.H, respectively, with a lexical choice of tone-break location, it makes more sense to treat them as reduplicated derivatives of ordinary bisyllabic /H/ and /LH/ stems, respectively, i.e. as L-/H/ and L-/LH/ including the hyphen. The tone breaks then unproblematic phonologically. Examples are in (24). For a fuller list and more discussion, see §4.1.4.

(24) Nouns with L-toned reduplicant

a. *Cv-Cv*	
L-H	
gɛ̀-gɛ́	'jaundice'
L-<LH>	
ɲù-ɲǔ	'cold weather'
b. *Cv-Cv:*	
L-H	
dè-dé:	'father' (dialectal variant *dèdě:*)
kò-kó:	'scab'; 'slough(n)' (Jamsay *kògó*)
L-<LH>	
kò-kǒ:	'(fish) scale; (tree) bark' (Jamsay *kì-kǒw*)
c. *Cv-CvCv*	
L-H.H	
kù-kúmó	'smoke'
L-L.H	
kà-kàrá	'armpit'

Other bisyllabic and trisyllabic /LH/ nouns, including nominal compound finals, are illustrated in (25). Any longer (i.e. quadrisyllabic) stem is likely to behave tonally like a compound.

(25) Morphologically simple /LH/-toned nouns and compound finals

a. *CvCv*	
L.H	
nàŋá	'cow'
dònó	'cat'
gìr^{n}*í*	'house'
àr^{n}*á*	'man'

gùjú	‘skin’
gù^{n}sá^{n}	‘plain (topography)’
L.<LH>	
final i̊^{n}	
mùɲǐ^{n}	‘Mossi (person)’
gùrǐ^{n}	‘Gourou (person)’
other	
[none]	
c. *Cv:Cv*	
L.H	
là:rá	‘fields next to the village’
tà:rá	‘collective hunt’
dɛ̀:ŋɛ́	‘earthenware pot’
gè:jé	‘thin cotton thread’
gɛ̀:mɛ́	‘shard’
wò:mí	‘pancake-like cake’
bà:ɲá	‘eating bowl’
bɔ̀:nɔ́	‘shoulderbag’
sùgùrù^{L}-jè:lé	‘earring’
L.<LH>	
[none]	
d. *CvCvC, CvCv:*	
L.H	
bàsá:^{n}	‘bassam (fabric)’
ràsá:	‘sneaker’ (<Rasta[farian])
kèpí:	‘cap’ (Fr *képi*)
sàpó:	‘sailor’s hat’ (Fr *chapeau*)
bùtɔ́:^{n}	‘button’
sì^{n}gɔ́m	‘chewing gum’
L.<LH>	
pùnǎy^{n}	‘flour, powder’
mòtǎm	‘scorpion’
e. *CvCCv and Cv:CCv*	
L.H	
làmpá^{n}	‘lamp’ (loanword)
àndá^{n}	‘tiny fly sp.’
pàrní	‘fritters’ (<Bambara)
pɔ̀rsɔ́^{n}	‘poison’
pà:ndé	‘thick cotton thread’
kògò^{L}-tɔ̀:ŋɔ́	‘chicken’s drinking trough’
f. *CvCvCv*	
L.H.H	
initial a(^{n}) possibly segmentable (§4.1.7)	
àtégú	‘wrestling’
àségú	‘sneeze’
àlɛ́gú	‘loincloth’

àndáŋú	‘soft millet cakes’
other	
kùmúr^{n}ú	‘baobab seed’
kògújó	‘cough’
kàgújá	‘drooling’
nùmɔ̀^{L}-kàséré	‘ring finger’
kɛ̀nɛ̀^{L}-pèrúgé	‘hiccups’
lèmúr^{n}ú	‘citrus fruit’
sèŋér^{n}é	‘sifting residue’
dògóró	‘mortar’
kɛ̀pɛ́lú	‘hot chili pepper’
sùkɔ́rɔ́	‘sugar’
gàmù^L kàr^{n}íy^{n}á	‘watermelon (cooking)’
sàdíŋɛ́	‘vegetable garden’
òmóró	‘small-mouthed waterskin’
bùtélú	‘bottle’
L.L.H	
initial a(^{n}) possibly segmentable (§4.1.7)	
àpàlá	‘soft millet cakes’
Cv̀CùCú *(like trisyllabic verbal noun)*	
kɛ̀rùgú	‘gap between front teeth’
sèbùgú	‘heart of palm’
sɛ̀mùr^{n}ú	‘rags, tatters’
pùsàrú	‘crushed millet’
jɔ̀ŋùr^{n}ú	‘short-handled pick-hoe’
tògùrú	‘basket with square base’
other	
kà^n-kɛ̀rùwɛ́	‘sideburns’
ì^{n}sìr^{n}í	‘urine’
tìŋìr^{n}í	‘baobab fruit’
pìrìgí	‘wide-brimmed hat’
bòlòsí	‘cotton fabric’
àrùkó	‘boubou (robe)’
pòrùkɛ́	‘long boubou’
nàmàsá	‘banana’
lɛ̀-lìgìjí	‘slashing earth (not in rows)’
bàràdá	‘tea keetle’
L.L.<LH>	
gɔ̀nɔ̀sɔ̌^{n}	‘slave-snatcher’

Observe that both L.L.H and L.H.H, and one case of L.L.<LH>, are present. This suggests that TgK does not favor separation of an /LH/ melody from the segmental representation of uncompounded, unreduplicated trisyllabic nouns. The issue of where the break would occur in /HL/ in trisyllabic common nouns is moot since this tone pattern is confined to prosodically heavy possessed nouns (and to personal and place names).

3.7.1.7 Tone-break location for tritonal noun stems

Because the {HL} sequence is restricted to prosodically heavy possessed nouns, and to personal and place names, the melody /LHL/ is largely absent. The other tripartite pattern, /HLH/, is rare even in other Dogon languages (a few examples in Toro Tegu and Ben Tey).

In the frozen expression *kǎwrù bè:* ‘excuse me!’, also found in e.g. Jamsay, the initial word is /LHL/ but its status as a noun is not completely transparent. In any event, it has only three moras so there is no suspense as to where the tones will occur.

3.7.2 Grammatical tone patterns

The lexical tone melodies of verbs, nouns, adjectives, numerals, and even demonstratives are frequently erased by superimposed tone overlays in specifical grammatical contexts. For verbs, the relevant contexts are morphological (word-level), as tone overlays are controlled by certain suffixes. For nouns, adjectives, and numerals, the most significant contexts are syntactic, as words to the left or right (not always adjacent) control tones on targeted words.

Word- or phrase-level tonosyntactic superscripts ^{L}, ^{HL}, and ^{H} are placed at the left or right edge of the targeted word, or of the (bracketed) targeted phrase, “pointing” in the direction od the controller (C). So, if T is the target, I write C ^{L}T and T^{L} C for left-to-right controllers (possessors) and right-to-left controllers of {L} overlays, respectively. If a noun is arguably targeted from both the left and the right, and we cannot determine which controller is active, double superscripts can be used: C_1 ^{L}T^{L} C_2. A local tone component that is realized only at the phonological edge of the target (e.g. its final mora) is indicated by a + mark in the superscript, so that T^{L+H} C indicates that the target has word- or phrase-level {L} overlay plus a final H-tone component.

As an example, in *[[[să^{n} bè]* ^{HL}*ínà:]* ‘their (own) mother’ from (64), *ìnǎ:* ‘mother’ shows an {HL} overlay controlled by the preceding possessor, erasing the lexical tone, so the superscript is on the left of the target. In *[ìsì gɛ̀^{n}]*^{L} *már^{n}á* ‘(a) big black dog’ (137d), the final adjective *már^{n}á* controls tone-dropping on the bracketed two-word target domain, so the superscript is on the right.

Superscripts are also used in nominal compounds, though here the notion of “controller” is less clearly applicable. For example, in *[pàrà-[gò:-rò]]*^{L}*-bírɛ́* ‘harvest-work’, *pàrà-[gó:-ró]* ‘harvest season’ is tone-dropped to {L} as compound initial. To avoid clutter, such word-internal superscripts are often omitted from text transcriptions. This is even more so for suffix-stem tonomorphology in verbs.

Tonosyntactic superscripts are not phonetic diacritics (like downstep marks). The tones on the syllables of the targeted word(s) are already marked as H, L, or whatever, by the usual accent diacritics. The superscripts are simply there to help the reader identify the tonosyntactic processes that have applied to produce these surface tones.

3.7.2.1 Grammatical tones for verb stems

Tone overlays on verb stems are generally morphological (word-level) rather than syntactic in nature.

The imperfective negative does not cast an overlay over the entire verb stem, instead it merely lengthens the final vowel and adds a final L-tone element to it (to give it a falling tone). Thus *págâ:-rò* ‘will not tie’ from *págá*, but *dàgâ:-rò* ‘will not leave’ from *dàgá*, preserving the distinction between verbs with initial H- and initial L-tones.

The perfective negative suffix *-lí*, on the other hand, controls stem-wide tone-dropping on the verb, so the lexical melody is erased. Thus *pàgà-lí* 'did not tie' and *dàgà-lí* 'did not leave', with no difference in stem tones.

The perfective (positive) preserves lexical tones.

In the imperative, lexically /LH/-toned prosodically light (*Cv̌:* and *Cv̀Cv́*) stems become {H}-toned, merging with lexical *Cv́:* and *Cv́Cv́*.

Further tonal changes occur in focalized clauses and in relative clauses.

3.7.2.2 Grammatical tones for noun stems

Nouns are subject to three morphosyntactically controlled tone overlays.

The first is tone-dropping to {L} controlled by a following modifying adjective or demonstrative, or due to function as head NP of a relative. Tone-dropping is phonologically simple: all H-tones drop to L. See chapter 6 for interactions of nouns with adjectives and demonstratives, and chapter 14 for head NPs in relative clauses.

The second is a possessed-noun overlay that is controlled by a preceding (but not following) possessor. The preceding possessor may be a pronoun (other than 1Sg) or a nonpronominal NP. The lexical melody of the possessed noun is erased, replaced by {H} if the stem is light and {HL} if it is heavy (three or more moras). Two high-frequency monosyllabic nouns have {L} as possessed-noun contour. See §6.2.1 for details.

The possessed-noun overlay and tone-dropping do not conflict in relative clauses, since possessors of a relative head NP are restructured into appositional forms that do not interact with the head NP tonally. However, the possessed-noun overlay and tone-dropping do potentially conflict in combinations like [possessor [noun adjective]], where the noun is in theory subject to an {H} or {HL} possessed-noun overlay from the possessor to the left, but to tone-dropping controlled by the adjective to the right. In this case, the possessor wins out; indeed, the adjective as well as the noun are subject to the possessed-noun overlay, which is always {HL} in this case (§6.2.2).

For the {L}+H pattern on certain types of NP including a numeral, see §3.7.2.4 below.

The third context where a noun is subject to tonal overlays is in compounds. For the most part, this involves either tone-dropping the initial to {L}, or an {H} or {HL} overlay on the final like that of possessed nouns.

3.7.2.3 Grammatical tones for adjectives

Adjectives undergo the same tonal processes as nouns, insofar as they can occur in word strings that can be targeted by tonosyntactic controllers.

3.7.2.4 Grammatical tones for numerals

Word-internal tone-dropping occurs on numeral stems before ordinal suffix *-nìr*^{n}*í* (§4.6.2.2).

There are some unusual tonal changes on numerals as parts of composite numeral expressions. First, numerals modifying a preceding 'hundred' or 'million' are tone-dropped, see §4.6.1.4. Second, decimal terms ('20', etc') involve contracted forms of *pɛ́rú* '10' as initial. This appears as <LH>-toned *pɛ̌-* before an L-tone and in *pɛ̌-lɔ́y* '20'), and as L-toned *pɛ̀-* before other H-tones (§4.6.1.3).

In the sequence [noun (adjective) numeral], the numeral (like the preceding words) is subject to tone-dropping controlled by a preceding possessor NP, or by a following demonstrative or relative-clause verb. This tone-dropping fits the pattern seen in several other Dogon languages.

However, TgK also shows an {L}+H overlay on target domains that include a numeral when the target domain is combined with certain additional elements (possessor, demonstrative, 'all'). This takes the form of {L} spread over the target domain, except for a single final-syllable or final-mora H-tone. See §6.2.1.5 and §6.6.1 for details.

3.7.2.5 Grammatical tones for demonstratives

The two basic demonstrative stems, proximate *nɔ́:* 'this' and near-distant *yɔ́:* 'that (near you)' are lexically /H/-toned (§4.4.1.2). This is how they appear in isolation, and in the combination N-Dem, e.g. *gìr*^{n}*í* 'house', *gìr*^{n}*ì* ^{L} *yɔ́:* 'that house' (where the demonstrative controls tone-dropping on the noun).

However, when the NP that includes the demonstrative is more complex (i.e. morpho-syntactically heavier), the demonstrative drops to L-tone. The tonosyntactic treatment of the NP as a whole depends on whether a numeral and/or a possessor are present, since these elements can require an {L}+H tone pattern preceding a tone-dropped demonstrative. For details and examples see §3.7.3.5 and §6.1.4. With a prenominal possessor, Poss-N-Dem appears with the regular possessed-noun overlay on the noun, and with tone-dropped demonstrative. An example is (128b) in §6.2.2. However, this could be marked up tonosyntactically either as Poss ^{HL}N ^{L}Dem, with {H} overlay on prosodically light possessed noun and with separately tone-dropped demonstrative, or as Poss ^{HL}[N Dem], with the demonstrative as part of the possessor's target domain, triggering the {HL} overlay for prosodically heave possessed NP.

3.7.3 Tonal morphophonology

Having discussed lexical tone melodies, and grammatical (mostly stem-wide) tone overlays, we now consider the more purely phonological side of tonology, including tone sandhi.

3.7.3.1 Autosegmental tone association

It is possible in some Dogon languages to consider stem-level tone patterns (lexical melodies or overlays) to be ontologically separate from segmental strings. In this analysis, a stem would consist of a string of consonants and vowels, organized into syllables and moras, plus a melody or overlay like {H}, {L}, {LH}, or {HL}. This will work if there is a mechanical way to associate the elements of the bitonal patterns {LH} and {HL} onto the segmental strings.

For nouns, this will not work cleanly because, as shown in §3.7.1.6 above, both L.L.H and L.H.H occur as tone sequences for trisyllabic stems. Some of the relevant cases can be explained away as e.g. *Cv-CvCv* reduplications or compounds, taking the final element as an /H/- or /LH/-toned bisyllabic. However, there remains a residue of unsegmentable trisyllabics of both L.L.H and L.H.H types.

For verbs too, separation of tones from segmental strings is problematic. The very fact that verbal melodies /H/, /LH/, /HL/, and /LHL/ correlate fairly well with the heaviness of stems, and with their initial consonants (§3.7.1.2, above), points to a deep rather than superficial integration of their segmental and tonal structures.

In Jamsay, the entire melody of a verb stem, /H/ or /LH/, is reapplied to its suffixal derivatives. In TgK, the onset (H or L) is preserved under suffixal derivation, but the derived stems are prosodically heavy and so fall into the class with final high vowel {*i u*}. These stems have a final L-tone, so /H/ and /LH/ input stems have {HL} and {LHL} outputs, respectively. See especially the reversive derivatives in §9.1.

3.7.3.2 Phonology of H(H…)L and H(L…)L tone overlays

H.(L…)L is favored over H.(H…)L in {HL} tone overlays.

The possessed noun overlay. is H.L.L rather than H.H.L for trisyllabic stems, as in *[X tɔ́gɔ̀rɔ̀]* 'X's namesake', see §6.2.1.2. With quadrisyllabic nouns, {HL} is manifested as H.H.L.L, but I think this is because the default prosodic treatment of quadrisyllabics is as compounds of two bisyllabic stems; see (124) in §6.2.1.2.

Verbs with final high vowel, including suffixal derivatives of *CvCv* stems, have H.L-L rather than H.H-L patterns when the stem is lexically /H/, as in *págá* 'tie', reversive *págì-rì* 'untie', see §9.1.

Bahuvrihi compounds are not relevant here since their second elements do not have {HL} tone in TgK.

3.7.3.3 Atonal-Morpheme Tone-Spreading

Most affixes, clitics, and subordinating particles have intrinsic tones, so there is limited scope for a rule accounting for the tones of intrinsically atonal morphemes.

However, verbal derivational suffixes like reversive *-rv-* get their tone (high in most inflected forms) by spreading from the preceding verb stem, subject to possible erasure by tone overlays controlled by inflectional categories.

The postvocalic allomorph *=y* of the 'it is' clitic (§11.2.1.1) is atonal, acquiring its tone by spreading from the syllable that it forms part of. Thus *fántà=ỳ* 'it's Fanta', *ú=ý* 'it's you-Sg'. See also Contour-Tone Stretching (§3.7.4.2).

3.7.3.4 Tone polarization

Tonal dissimilation of two morphemes, by which one adopts the tone opposite to that of the adjacent morpheme, is not a regular process in TgK. However, the copulas *kɔ̀* (nonhuman), *wɔ̀* (human singular), and *wè* (human plural) shift to H-tone when preceded by an all-{L}-toned expressive adverbial, such as those listed in (213f) in §8.4.6.1. Example: *sɔ̀y kɔ́* 'it is oily'. Since expressive adverbials are the only word-class that allow /L/ as a lexical melody, this tonal polarization is rather limited.

The other place in the grammar where a kind of tonal polarization occurs is in decimal numerals. These all begin in a form of *pɛ́rú* '10' that has undergone *rv*-Deletion to *pɛ-*. The tone is <LH>, hence *pɛ̌-,* in *pɛ̌-lɔ́y* '20' and whenever followed by an L-tone, as in *pɛ̌-tà:nù* '30'. (Cognates of *lɔ́y* '2' are mostly /LH/-toned, so '20' was originally not exceptional.) However, the tone seemingly polarizes to L before an H-tone, as in *pɛ̀-kúré:* '60'. This could, however, be analysed as merger of the final H-tone of *pɛ̌-* with the following H-tone.

3.7.3.5 Postnominal-Determiner Tone-Lowering

A demonstrative (*yɔ́:*, *nɔ́:*) is dropped to L-tone (^{L}*yɔ̀:*, ^{L}*nɔ̀:*) in certain types of NP. Under more limited conditions, a postnominal pronominal possessor of the type [Pron *kè*] drops its tones, e.g. 2Sg *ú kè* becoming ^{L}*[ù kè]*. A key analytical issue is whether the tone-lowering is triggered by the presence of a tonal definite (§4.4.1.1), overt or covert, on the preceding word.

Postnominal-Determiner Tone-Lowering affects both demonstratives and [Pron *kè*] possessors when the preceding string ends in a numeral and has {L}+H overlay. Demonstratives are also tone-lowered in the combination Poss-N-(Adj-)Dem with a prenominal possessor, in the combination N-(Adj-)Poss-Dem with a postposed pronominal possessor, and optionally in the combination N-Adj-Dem (or [N-N]-Dem with a compound noun). Demonstratives are also tone-lowered at the end of a relative clause. I will illustrate with demonstratives and return to postposed pronominal possessors in (30) below.

An example with a numeral adjacent to the demonstrative, but with no possessor, is (26). The overlay {L}+H is applied to the N-Adj-Num sequence, with only the final syllable H-toned. The demonstrative is tone-dropped. For more examples of this type see (152a-d).

(26)	*[gìr^{n}ì*	*màr^{n}à*	*kùré:]*$^{L+H}$	^{L}*yɔ̀:*
	[house	big	six]$^{L+H}$	^{L}NearDist
	‘those six big houses’			

The same tonal structure is present even when the noun is omitted: *kùré:* $^{L+H}$ ^{L}*yɔ̀:* ‘those six’ (compare *kúré:* ‘six’). Such omission is rare (§6.1.2).

There is an alternative output with {L}-toned preceding string ending with the numeral, plus H-toned (not tone-dropped) *yɔ́:* or *nɔ́:*. See *[nàpὲ lɔ̀y]* ^{L} *yɔ́:* ‘those two uses (just described)’ in (153) in §6.5.2. An interesting speculation is that the more common tone-dropped version, as in (26), occurs when the numeral is marked by the tonal definite (final L-tone). Even when the tonal definite is itself otherwise covert, it could trigger Postnominal-Determiner Tone-Lowering. Conversely, The idea would be that the L-tone of the tonal locative spreads rightward into the demonstrative, replacing its H-tone. Conversely, if the tonal definite is absent, the final determiner remains H-toned in this model

There is evidence both for and against this analysis. On the positive side, it gives us a simple, direct way to account for the tonal differences between (26) and (153). When the pre-demonstrative word is a lexically /H/-toned adjective, as in (28b) below, the second syllable of the adjective drops to L-tone before L-toned demonstrative. In (28b), *már^{n}á* ‘big’ surfaces as *már^{n}à* $^{+L}$ ‘big’, the correct form for a tonal definite, before demonstrative ^{L}*yɔ̀:*. See also (29b) where the final element is *sâ:^{n}* ‘all’.

On the neutral side, there are many examples where the tonal locative that supposedly triggers Postnominal-Determiner Tone-Lowering is covert, including all cases where the pre-demonstrative word is a numeral. Phonological explanations can be given for its covertness, but it does make the analysis less than transparent.

On the negative side, I can find no independent evidence that e.g. (26) is semantically definite while e.g. (153) is semantically indefinite. A definiteness opposition would be at best subtle, at worst completely redundant, in an NP containing a demonstrative. Secondly, when the demonstrative is plural (*nɔ́: nà*, *yɔ́: nà*), tone-lowering is noticeably less common than when it is singular. This suggests that the prosodic weight of the demonstrative is one of the conditioning factors, further weakening the correlation with definiteness. Finally, in some examples the demonstrative is tone-dropped but a preceding H-toned word does not show the expected final-syllable tone-dropping, even in phonological contexts that would allow it. This happens when the pre-demonstrative word is a possessed noun with {H} overlay, like ^{H}*gírⁿí* ‘house’ in (27a) below.

I am fairly sure that the tonal definite (or its predecessor, an overt L-toned definite morpheme, cf. Jamsay *kùⁿ*) played some role historically in Postnominal-Determiner Tone-Lowering. However, the fact that the tonal definite is now often covert in pre-demonstrative position has muddied the waters, and there are signs that Postnominal-Determiner Tone-Lowering is in the process of decoupling from definite marking. So I will sit on the fence regarding this issue as this section proceeds.

Examples with a prenominal possessor but without a numeral are (27a-b, d-e). In (27a), the noun is realized with bisyllabic H.H tones (^{H}*gírⁿí*), so there is clearly no tonal definite (terminal L-tone). The fuller version of (27c) does have a numeral, but due to Adjective-Numeral Inversion it is not adjacent to the demonstrative. The two variants of (27d) could be explained by presence versus absence of the tonal definite as described above, although the tonal definite itself is not overt. One can likewise argue for a covert tonal locative in (27e).

(27) a. *sè:dú* ^{H}*gírⁿí* ^{L}*yɔ̀:*
S ^{H}house ^{L}NearDist
‘that house of Seydou’s’

b. *sè:dú* ^{HL}*kɛ́gɛ̀rɛ̀* ^{L}*yɔ̀:*
S ^{HL}saddle ^{L}NearDist
‘that saddle of Seydou’s’

c. *sè:dú* ^{HL}*[gírⁿí* *(kùrè:)* *màrⁿà]* *yɔ́:*
S ^{HL}[house (six) big] $^{(L)}$NearDist
‘those (six) big houses of Seydou’
(after Adjective-Numeral Inversion)

d. *[ú* ^{L}*kè]* *kɛ́gɛ́rɛ̀*$^{+L}$ */ gìrⁿí* ^{L}*nɔ̀:*
or: *[ú* ^{L}*kè]* *kɛ̀gɛ̀rɛ̀*^{L}*/ gìrⁿì* ^{L} *nɔ́:*
[2SgPoss ^{L}Poss] saddle^{+L}/house$^{(L)}$ $^{(L)}$Prox
‘this saddle of yours-Sg’

e. *[ú* ^{L}*kè]* *[gìrⁿì*^{L} *gàrá]* ^{L}*nɔ̀:*
[2SgPoss Poss] [house^{L} big] ^{L}Prox
‘this big house of yours-Sg’

In (27a-b), the possessor clearly controls the overlay on the noun, so the tonosyntactic formula is Poss $^{H(L)}$N ^{L}Dem. However, the adjective ‘big’ and, if present, the inverted numeral ‘six’ in (27c) show the {L}+H overlay, i.e. broad {L} overlay plus a single final-syllable H-tone. We cannot determine where the L-tone portion of the possessor-controlled {HL} overlay ends and where the demonstrative-controlled {L}+H begins. When a preposed possessor contains possessive *kè*, there is no possessor-controlled overlay (27d-e), but the presence of the possessor allows the noun to surface with its lexical tones before a tone-dropped demonstrative.

(28a) below has a possessor at the beginning and a numeral that is adjacent to the demonstrative. The {HL} overlay controlled by the possessor and the {L}+H overlay controlled by the demonstrative target the same intervening N-Adj-Num. Presumably the {H} tone on ‘house’ is due to the possessor, and the {L}+H on the numeral is due to the demonstrative, but we cannot determine which element controls the {L}-tone on the adjective ‘big’. This is arguably a case of double control. (28b) has a preposed possessor with *kè* and an inverted numeral that is separated from the demonstrative by an adjective. The adjective preserves its lexical melody and controls tone-dropping on the preceding string.

(28)	a.	*sè:dú*	^{HL}*[gír^{n}í*	*màr^{n}à*	*kùré:]*$^{L+H}$	^{L}*yɔ̀:*	
		S	^{HL}[house	big	six]$^{L+H}$	^{L}NearDist	
		‘those six big houses of Seydou’					
	b.	*[ú*	^{L}*kè]*	*[gìr^{n}ì*	*kùrè:]*^{L}	*már^{n}à*$^{+L}$	^{L}*yɔ̀:*	*nà*
		[2SgPoss	^{L}Poss]	[house	six]^{L}	big^{+L}	^{L}NearDist	Pl
		‘those six big houses of yours-Sg’					

A demonstrative is also tone-lowered after a postposed possessor. The set of postposed possessors consists of 1Sg *mà* on the one hand, and pronominal possessors of the form [Pron *kè*]. All of these postposed possessors end in an L-tone, so if there is a tonal locative it is covert. An example is *gìr^{n}í mà* ^{L}*yɔ̀:* ‘that house of mine’, (132b) in §6.2.3, where the final demonstrative is tone-dropped after 1Sg *mà*.

Universal quantifier *sâ:^{n}* does not undergo tone-lowering. In (29a) and other examples of the sequence [N-…-Num]$^{L+H}$-‘all’, ‘all’ requires an {L}+H overlay on the numeral-final string, just as demonstratives do. One could argue that a covert tonal definite occurs at the end of the numeral, and that this rather than ‘all’ is what controls {L}+H, but in this combination the tonal locative is otherwise covert. (29b), with an adjective rather than a numeral preceding ‘all’, does have a tonal definite, audible with /H/-melody adjectives like *már^{n}á* ‘big’. *sâ:^{n}* ‘all’ maintains its tones throughout (29a-c), which weakens the tonosyntactic parallelism between ‘all’ and the final demonstratives in (28a-b).

(29)	a.	*[sè:dú*	^{L}*kè]*	*[gìr^{n}ì*	*kùré:]*$^{L+H}$	*sâ:^{n}*
		[S	^{L}Poss]	[house	six]$^{L+H}$	all
		‘all six houses of Seydou’				
	b.	*[ú*	^{L}*kè]*	*gìr^{n}ì*^{L}	*már^{n}à*$^{+L}$	*sâ:^{n}*
		[2SgPoss	^{L}Poss]	house^{L}	big^{+L}	all
		‘all six of your big houses’ = ‘all six big houses of yours’				
	c.	*ú*	^{HL}*kɛ́gɛ̀rɛ̀*	*sâ:^{n}*		
		2SgPoss	^{HL}saddle	all		
		‘all of your saddles’				

When the demonstrative occurs after an unpossessed compound noun or an unpossessed N-Adj sequence, these forms may keep their regular tones. In this case, the demonstrative is tone-dropped: *gìr^{n}ì* ^{L} *már^{n}á* ‘big house’, *gìr^{n}ì* ^{L} *már^{n}á* ^{L}*yɔ̀:* ‘that big house’; *ɲù:* ^{L}*-[kí-kíjí]* ‘millet grain spike’, *ɲù:* ^{L}*-[kí-kíjí]* ^{L}*yɔ̀:* ‘that millet grain spike’. In alternative pronunciations like *[gìr^{n}ì màr^{n}à]*^{L} *yɔ́:* ‘that big house’, the demonstrative keeps its H-tone, and controls {L} on the preceding sequence.

A demonstrative that follows the verb of a relative clause (a type of heavy NP) is tone-dropped, see §14.1.12.

Tone-dropping also applies to pronominal possessors following a numeral or numeral-adjective string, cf. §3.7.3.7. In (30a), the possessor (elsewhere *ú* ^{L}*kè*, *ɛ́mɛ́* ^{L}*kè*) drops tones, compare the parallel version with a demonstrative in (30b). The tones of *már^{n}à*$^{+L}$ suggest that the tonal definite is present in both examples; see discussion of (147b-c) in §6.4.2.

(30) a. *[pèjù* *kùrè:]*^{L} *márⁿà*$^{+L}$ ^{L}*[ù / ɛ̀mɛ̀* *kè]*
[sheep six]^{L} big^{+L} ^{L}[2SgPoss/ 1PlPoss Poss]
'your/our six big sheep'

b. *[pèjù* *kùrè:]*^{L} *márⁿà*$^{+L}$ ^{L}*yɔ̀:*
[sheep six]^{L} big^{+L} ^{L}NearDist
'those six big sheep'

3.7.3.6 Numeral as tonosyntactic catalyst for postnominal possessor

In the preceding section, many of the examples show not only the tone-dropping of the demonstrative, but also the appearance of an H-tone on the final syllable of an otherwise {L}-toned postnominal modifier (adjective or numeral) or modifier string.

Since these two phenomena often go together, it is tempting to think that the underlying H-tone of the demonstrative jumps to the preceding syllable. If so, we would need a morphophonological tone-displacement rule.

This is rejected here as a synchronic analysis. First, when the demonstrative drops its tone when directly following a noun, there is no change in the noun's tones. This is true even when the noun ends in an L-tone, as in *sè:dú* ^{HL}*kɛ́gɛ̀rɛ̀* ^{L}*yɔ̀:* 'that saddle of Seydou's', (27b) in the preceding section. The same is true when the tone-dropped demonstrative follows L-toned 1Sg possessor *mà*, as in *gìrⁿí mà* ^{L}*yɔ̀:* 'that house of mine', (132b) in §6.2.3. A second reason is that H-tone movement rules at word boundaries in languages of this zone (e.g. Songhay) generally work left-to-right and generally take the form of spreading rather than displacement, e.g. HLL becomes HHL, not LHL.

I show in §6.2.3 that all pronominal possessors, postnominal 1Sg *mà* as well as the various preposed possessors, are optionally restructured as postnominal possessors of the form [Pron ^{L}*kè*], when this is licensed by a postnominal modifier (adjective or numeral). If the last postnominal modifier preceding any such postnominal possessor is a numeral, we get an {L}+H overlay on the string including the noun and numeral; see the following section for this type of overlay.

The postposed possessor does not control tones when the final postnominal modifier is an adjective instead of a numeral. In this case, the possessor has no effect on the internal tonosyntax of the N-Adj combination. The schema is therefore [[N^{L} Adj] Poss], where the adjective is tonally free, but (as usual) controls {L} on the noun. See (133a-b) in §6.2.3 for examples involving adjectives *gàrá* 'big' and *kélú* 'cold'.

Since the postnominal possessor is a controller in [N (Adj)]^{L} Num^{L+H} Poss] but not in [[N^{L} Adj] Poss], I identify the numeral as a catalyst that allows the otherwise dormant possessor to control tones on the possessed NP.

(31) Numeral as catalyst for postnominal possessor

> The presence of an immediately preceding numeral allows a following postnominal pronominal possessor, whether 1Sg *mà* or any [Pron ^{L}*kè*] combination, to target the numeral itself and any preceding words in the NP (noun, adjective).

The notion of catalyst implies that a) the postnominal possessor has a natural tendency to function as tonosyntactic controller, but b) it is prevented from doing so in other contexts. (a) is reasonable, since preposed possessors do control tone overlays on following possessed NPs, and more generally because tonosyntactic control is correlated with reference restriction.

All possessors, regardless of linear position, are reference restrictors. (b) is reasonable since postnominal possessors, unlike preposed possessors, was originally appositional: X [Pron ^{L}*kè*] meant "X, Pron's thing." Appositionally juxtaposed elements are not tightly linked prosodically, so there could have been no tonosyntactic interaction between them. As they gradually become more tightly linked, the latent, semantically-grounded tendency for [Pron ^{L}*kè*] to control tone overlays on the preceding words only needed a catalyst to be activated.

The question remains as to why numerals, but not adjectives, became capable of catalysing the tonosyntactic power of postnominal possessors. The existence of a similar {L}+H overlay, with numerals as catalysts, in Donno So and Toro So indicates that this overlay developed long ago, and probably first in N-(Adj-)Num-Dem combinations, later spreading to N-(Adj-)Num-Poss combinations. If the unmarked linear order at that time was adjective before numeral, an {L}+H overlay with the final H just before the demonstrative would have been primarily associated with numerals, not adjectives, and could have generalized from there.

However, how current native speakers "understand" these tonosyntactic constructions is unclear.

3.7.3.7 {L}+H overlay on numeral-final string

When any NP ending in a numeral is successfully targeted by a following controller, the resulting overlay is {L} throughout the target domain, except for a single H-tone that appears on the final syllable of the adjective or numeral. This {L}+H overlay is a constructional tonosyntactic pattern that cannot be modeled compositionally, i.e. by applying any set of one-on-one controller-target formulae in any order or subject to any reasonable hierarchical constraints. Not only is the {L}+H overlay *sui generis*, some elements that can (jointly) control it do not show tonosyntactic control power elsewhere. This is the case with universal ('all') quantifiers, see (154c) in §6.6.1, and with postposed pronominal possessors.

Examples involving a numeral and a possessor are in (32). Because the numeral also licenses optional restructuring of all pronominal possessives into a type ending in [Pron *kè*], there are two alternative ways to express any phrase like 'my six houses' (32a-b) or 'your-Sg six houses' (32c-d). Whenever a postnominal possessor (1Sg *mà*, or any [Pron *kè*] combination) follows a numeral (32a-b,d), the entire phrase is subject to {L}+H, with just a final-syllable H-tone. If the possessor would normally begin with an H-tone, it is tone-dropped, e.g. *ú kè* 'your(s)' becoming ^{L}*[ù kè]* in (32d). When the possessor precedes the noun (always possible except for 1Sg possessor), we get the usual possessor-controlled overlay, with {H} or {HL} on the noun depending on its weight (mora count), and with {L} on any following words (32c).

(32) a. *[gìr^{n}ì* *kùré:]*$^{L+H}$ ^{L}*[ì^{n}* *kè]*
[house six]$^{L+H}$ ^{L}[1SgPoss Poss]
'my six houses' (restructured)

b. *[gìr^{n}ì* *kùré:]*$^{L+H}$ *mà*
[house six]$^{L+H}$ 1SgPoss
[= (a)] (unrestructured)

c. *ú* ^{HL}*[gír^{n}í* *kùrè:]*
2SgPoss ^{HL}[house six]
'your-Sg six houses' (unrestructured)

d.	*[gìr^{n}ì*	*kùré:]*$^{L+H}$	^{L}*[ù*	*kè]*
	[house	six]$^{L+H}$	^{L}[2SgPoss	Poss]

[= (c)] (restructured)

We also observe the {L}+H overlay when a demonstrative follows a numeral (with or without a possessor) (33a-b), or when a demonstrative follows a possessed NP ending in an adjective (33c). The demonstrative itself undergoes Postnominal-Determiner Tone-Lowering (§3.7.3.5 above). This combination of {L}+H overlay plus Postnominal-Determiner Tone-Lowering occurs when the demonstrative is not followed by plural *nà*. When this plural morpheme is present, the output is (non-tone-dropped) *yɔ́: nà* and the final H-tone on the numeral is absent; see (144a-b) in §6.4.2. In (33a), where there is also a preposed possessor, the sequence N-Adj-Num is targeted by both the possessor and the demonstrative, at its left and right edges, respectively. In particular, in (33a) 'house' has the {H} overlay controlled by the possessor, 'six' has the {L}+H overlay controlled by the demonstrative, and the intervening {L}-toned adjective 'big' could be analysed as part of either the {HL} overlay controlled by the possessor (on a multi-word target) or the {L}+H controlled by the demonstrative. In effect, 'big' is doubly condemned to drop its tones.

(33)	a.	*sè:dú*	^{HL}*[gír^{n}í*	*màr^{n}à*	*kùré:]*$^{L+H}$	^{L}*yɔ̀:*
		S	^{HL}*[house*	*big*	*six]*$^{L+H}$	^{L}*NearDist*

'those six big houses of Seydou'

b.	*[gìr^{n}ì*	*màr^{n}à*	*kùré:]*$^{L+H}$	^{L}*yɔ̀:*
	[house	*big*	*six]* $^{L+H}$	^{L}*NearDist*

'those six big houses'

c.	*sè:dú*	^{HL}*[gír^{n}í*	*(kùrè:)*	*màr^{n}á]*$^{L+H}$	^{L}*yɔ̀:*
	S	^{HL}*[house*	*(six)*	*big]* $^{L+H}$	^{L}Dem

'those (six) big houses of Seydou'
(numeral shown in position after Adjective-Numeral Inversion)

More subtly, the {L}+H overlay occurs when the definite marker is added. However, the definite marker in question is itself just a final tone element L, so the combination ends up as {L}+H+L, realized syllabically as L.(L…).<HL> with a final falling tone. See (58) in §4.4.1.1 and discussion there.

The semantic aspect of the analysis is clouded by the fact that the universal quantifier *sâ:*^{n} 'all' also controls the {L}+H overlay on a preceding numeral-final sequence, but *sâ:*^{n} does not drop its own tones; see (29a) above. This is a TgK innovation, to judge by the fact that, in Donno So, only determiners (not 'all') control the {L}+H overlay. In TgK, {L}+H is no longer strictly associated with determiners. It may be in the process of generalizing to NPs of the formal type N-…-Num-X, where X is not tightly restricted semantically. The diachronic catalyst for the generalization to 'all' may have been the tonal definite (floating L-tone), which is covert (inaudible) after a rising tone, facilitating reanalysis.

Under limited conditions, the {L}+H overlay can occur on a numeral-final string with a possessor in the form [X *kè*] that appears before rather than after this string. [X *kè*] form is typical of restructured possessed NPs, arguably derived transformationally from underlying regular possessed NPs with postnominal pronominal possessor. The restructuring occurs when the possessum is the head of a relative, but it also happens in main clauses when the possessor is a reflexive (pro-)noun, see *[sǎ*^{n} ^{L}*kè] [ùr*^{n}*ì: lɔ̌y]*$^{L+H}$ '(Seydou saw) his own two children' (644b) in §18.1.3.1. The explanation for this is that a preposed [X *kè*] possessor does not control the usual {H} or {HL} overlay on the possessum, so the {L}+H overlay applies to the numeral-final string, as though it were followed by a determiner or postposed possessor.

The facts can be summarized as (34).

(34) Constructional tonosyntax of numeral-final strings

a) a string ending in a numeral (Num, N-Num, N-Adj-Num) is subject to an {L}+H overlay when followed directly by a possessor, by an unpluralized demonstrative, by the tonal definite, or by *sâ:*^{n} 'all', or when preceded by an [X *kè*] possessor and not subject to any other tone overlay;
b) if the {L}+H overlay is applied, a post-numeral possessor or (unpluralized) demonstrative, but not *sâ:*^{n} 'all', drops its own tones if not already L-toned (like 1Sg *mà*);
c) in the sequence Poss-N-(Adj-)Num-Dem, the {L}+H overlay controlled by the (unpluralized) demonstrative combines with the {H} or {HL} overlay controlled by the preposed possessor, so the noun is targeted by the possessor, the numeral is targeted by the demonstrative, and an adjective (if present) is ambiguously or doubly targeted.

For the interaction of {L}+H with Adjective-Numeral Inversion, see also §6.4.2.

The combination of tone-dropping of the pronominal possessor and the appearance of a final H-tone on the otherwise {L}-toned numeral-final string could appear to reflect the simple phonological jumping of the H-tone onto the right edge of the preceding word, e.g. /…kùrè: yɔ́:/ becoming *…kùré: yɔ̀:* in (33a) above. This is very likely the diachronic source of the {L}+H pattern, but it does not work synchronically. Specifically, 1Sg postposed possessor *mà* is always L-toned, but it controls the same {L}+H pattern on preceding numeral-final strings as do H-toned possessors, as seen in (32b) above.

3.7.4 Low-level tone rules

3.7.4.1 Contour-Tone Mora-Addition

This process does not occur in TgK, where vowels are not lengthened to accomodate contour tones. There are many *Cv̌* stems with short vowels and <LH> tone; see §3.7.1-2. A functional element of this shape is reflexive object *sǎ*^{n} (§18.1.1). It is harder to find *Cv̂* stems, but this is only because {HL}-toned stems of any length are generally disallowed among verbs, common nouns, and adjectives. There is one *Cv̂* verb (*jê* 'take away'), and some functional elements like plural-subject perfective suffix *-sɛ̂*^{n} (§10.2.1.1), recent perfect *jɛ̂* (§10.2.1.3), and postpositions *kû*^{n} 'on', *kâ*^{n} 'at the edge of', and *bû*^{n} 'beside' (§8.2.3-4,7).

3.7.4.2 Contour-Tone Stretching

This rule, more visible in other Dogon languages such as Jamsay, takes inputs of the shape *Cv̂* or *Cv̌* plus an atonal suffixed or encliticized *-C* (a sonorant), and stretches the arc of the contour tone so that the terminal rise or fall is mainly heard on the final sonorant. In TgK most final sonorants have been lost, either in stems or including consonantal suffixes and clitics. So there is not much need for this rule.

However, the (atonal) ‘it is’ clitic allomorph *=y* can be added to a monosyllabic noun with <LH> tone, e.g. *kɔ̌*^{n} ‘daba (hoe)’. I write the result as *kɔ̌*^{n}*=ý*^{n} for purposes of structural clarity, but a phonetically more accurate transcription would be *kɔ̀*^{n}*=ý*^{n}, with the arc of the <LH> tone spread out over the syllable.

3.7.4.3 Rightward H-Spreading

The spreading of an H-tone element to subsequent syllables, erasing or displacing prior L-tones, is not a common process in TgK. For example, the {HL} overlay on heavy nouns controlled by a preceding possessor is realized as H.L.L on a trisyllabic noun and as H.L on a heavy bisyllabic noun, and remains so even when the noun is followed by an {L}-toned postposition. Thus noun *sí:nɛ́* ‘knife’, {HL} possessed form $^{\text{HL}}$*sí:nɛ̀* in e.g. *ɛ́mɛ́* $^{\text{HL}}$*sí:nɛ̀* ‘our knife’, and no further tonal change in PP *[ɛ́mɛ́* $^{\text{HL}}$*sí:nɛ̀] bè]* ‘with our knife’.

There is some apparent H-tone spreading in phonologically similar environments in relative clauses, where a verb that otherwise ends in an H.L syllable sequence shifts this to H.H before a terminal element (usually L-toned) such as plural *nà*. For example, imperfective relatives have L-toned suffix *-jù* (versus main-clause H-toned *-jú*), but the suffix goes back to *-jú* when followed by a terminal element: *ɲùnú-gó-jú* ‘ruins’ in main clause, in relative clause *ɲùnú-gó-jù* when clause-final but e.g. plural *ɲùnú-gó-jú nà*. This looks superficially like Rightward H-Spreading in other African languages, where H.L.L shifts to H.H.L as the H-tone pushes as far to the right as it can without eliminating the L-tone.

However, this phonological pattern is not matched elsewhere in TgK morphology, and I am dubious about positing a morphologically restricted rule of this type that would apply only to relative-clause predicates. TgK has a number of other constructions where a final H-toned syllable of a word drops to L-tone to indicate a grammatical category: the tonal locative of some nouns (§8.2.1), the tonal definite of many nouns and other non-verb stems (§4.4.1.1), and tonal topical nouns (§19.1.1). Since relative clauses in Dogon languages are semantically restrictive, a specific connection with the tonal definite is likely. In this interpretation, there is no Rightward H-Spreading process. Rather, the alternation involves presence versus absence of definite marking.

The postposition *kû*^{n} ‘on’ or ‘over’ is related to the noun *kú*^{n} ‘head’ (historically it may be a tonal locative). The 1Sg form is *kú*^{n} *mà*, identical to ‘my head’. Similarly *gírè* ‘in front of’ but *gíré mà* ‘in front of me’ and so forth for some other /HL/-toned postpositions. However, it may be that the 1Sg form is added, not to the /HL/-toned postposition, but to an /H/-toned noun related to the postposition (*kú*^{n} ‘head’, *gíré* ‘front’). Evidence for this comes from the /HL/-toned postposition *dógò* ‘behind’, whose 1Sg form *dògó mà* has the /LH/ melody of the related noun *dògó* ‘rear (area)’. So it may be that the relevant postpositions get their {HL} overlay only when following a (possessor-like) NP or pronoun, i.e. when final within a PP. Again, the evidence for positing Rightward H-Spreading is weak.

3.7.4.4 Stranded-Tone Re-Linking

A tone may be stranded due to the deletion of the vowel it was previously associated with. The processes that can strand a tone are Apocope and Syncope (vowel-deletion rules affecting short high vowels in some medial and some final positions), and *rv*-Deletion which deletes the second syllable of some *CvCv* stems (mostly verbs) before a suffix.

The stranded tone re-links to the left. When the tone of the deleted vowel is identical to that of the preceding syllable, no audible change occurs. For example, from *pórì* ‘say’ we expect imperfective *póró-jú*, but since this stem is subject to *rv*-Deletion the actual result is *pó-jú*. We could laboriously derive this from /póró-jú/, becoming /póH-jú/ with H = unlinked H-tone, becoming *pó-jú* by merger of the first two H-tones. Or we could just take *póró* as having a single stem-level H-tonal autosegment, with no relocation required on the deletion of the second syllable. However, when the stem is /LH/-toned, as in *gàrá* 'pass', the H-tone element does re-link to the left when the second syllable is deleted, resulting in an <LH> tone in e.g. imperfective *gǎ-jú*.

Similar examples involving Apocope of a word-final /u/ are bare stem *wáǹ* 'shallow-fry' from /wánù/, and verbal noun *dɔ̀ẃ-∅* 'going up' from /dɔ̀w-ú/.

Syncope is less common in TgK, but in cases like imperative *dǎn-gá* 'fix, make good' from /dànú-gá/ we get the same leftward re-linking.

3.7.4.5 Nonfinal Contour-Tone Simplification (*Cv̂* or *Cv̌* to *Cv́*)

Nonfinal *Cv* syllables within a word cannot carry a contour tone (except for initial-syllable <LH>, see below). In TgK the simplification is from either *Cv̂* or *Cv̌* to *Cv́*.

A *Cv̂C* word is occasionally followed by the 'it is' clitic (§11.2.1) in the form *=i:*. This clitic is atonal, getting its tone in part by spreading from the left. It is difficult to find such combinations, given the absence of lexically /HL/-toned common nouns. However, an /HL/-toned postposition like *bîn* 'in' can be followed by the clitic, in an abstract sense indicating the topic of discourse (not the location of a specific object). In (35b), we see that the /HL/ melody of *bîn* is split, with the H-tone remaining on the postpositional vowel and the L-tone realized on the clitic. This is because *bín=ì:* is initially (re-)syllabified as /bî.nì:/. While the syllable *bîn* can easily accomodate an {HL} overlay, a nonfinal *Cv* syllable cannot, so the syllable simplifies its tone to H. There is no loss of lexical tone-melody information, since the clitic has acquired the L-tone part of /HL/ by spreading.

(35) a. *gìr*^{n}*í bîn* 'in the house'

b. *[gìr*^{n}*í bín]=ì:*
[house in]=it.is 'in the house'
'It is (i.e. we are talking about) in the house'

<LH> tones are allowed on initial syllables of nonmonosyllabic words, as in *gǎ-jú* cited in §3.7.4.4 above. So for <LH> tones the disallowed position is not "nonfinal" but "medial" (i.e. neither initial nor final).

A final <LH> tone on a short vowel is possible for a stem (other than a verb) in isolation (36a). Addition of a suffix and/or clitic to a noun may reposition the stem-final *Cv̌* syllable as word-medial, which triggers a corrective tone change. The relevant combination is that with the 'it is' clitic, which (for certain nouns) is preceded by singular suffix *-n*. In (36b), /dɔ̀gɔ̌ní:/ has been tonally reshaped as *dɔ̀gɔ́ní:*, with the disallowed medial *Cv̌* syllable simplified from <LH> to H-tone.

(36) a. *dɔ̀gɔ̌*^{n} 'Dogon person'

b. *nɔ́: dɔ̀gɔ́-n=í:*
Prox Dogon-Sg=it.is
'(He/She) is a Dogon'

The tonal simplification does not apply to combinations involving plural *bè* or postpositions: *dɔ̀gɔ̌*^{n} *bè* ‘Dogon people’, *dùwɔ̀lɛ̌*^{n} *bè* ‘with a mirror’.

Monosyllabic stems retain, though subtly, the full /LH/ melody in this construction: *jɔ̌*^{n} ‘dye-er, member of dye-er caste’, *jɔ̌-n=í:* ‘(he/she) is a dye-er’. The initial L-tone segment is difficult to hear, but is (subtly) audible when an H-tone precedes, as in *wó jɔ̌-n=í:* ‘he/she is a dye-er’ with 3Sg subject *wó*. The difference between *dɔ̀gɔ̌*^{n} and *jɔ̌*^{n} is that shifting the <LH> tone to H-tone would completely erase the L-tone in the lexical melody in *jɔ̌*^{n}, but not in *dɔ̀gɔ̌*^{n}.

In cases where a *Cv̀rv́* or *Cv̀r*^{n}*v́* verb stem with lexical /LH/ melody undergoes *rv*-Deletion before a suffix, the /LH/ tone is reconstituted on the surviving *Cv* syllable, as the delinked H-tone element joins the L-tone element to its left (see the previous section). For example, *gàrá* ‘pass, go past’ forms imperfective *gǎ-jú*. In this context, my assistant did normally articulate the <LH> tone, in spite of the phonetic difficulty in doing so. Again, the simplification of <LH> tone to H fails to apply when it would totally erase part of the lexical melody.

There are also a few (underlyingly) nonmonosyllabic verbs like *gǔŋ̀* (for /gǔŋù/) ‘take out, remove’, an archaic causative of *gǒ:* ‘go out’, that retain the <LH> tone on the first syllable. An example is imperfective *gǔŋɔ́-ɲú*.

3.7.4.6 Downstep (*H ꜜH*)

In TgK, downstep (symbol ꜜ before the affected word) is not the result of compressing underlying HLH into HꜜH, as in some other languages of the area. It is used opportunistically to differentiate the pitches of two adjacent {H}-toned words, and it helps mark certain constructions. In both respects, it facilitates the listener’s parsing of the speech signal. However, it is unclear whether downstep is a full-fledged phonological phenomenon in TgK.

Phonetically, a downstepped H-tone is a mid tone. The phonation type is the same as for a normal H-tone, so it still sounds like singing, unlike the case with L-tones. A downstepped bisyllabic ꜜHH has level pitch; the entire stem is lowered. A subsequent {H}-toned word or particle, as in H ꜜHH H, can revert to a higher pitch level.

Downstep is most conspicuous when the two words in question are lexical stems (nouns, adjectives, verbs). It is less common, or less conspicuous, when one of the elements is a monosyllabic functional element (pronoun, particle, etc.). Downstep is of particular importance in connection with the constructions in (37), though it applies to other combinations of {H}-toned words.

(37) a. bahuvrihi compound
     b. possessor plus possessed noun

In the most common subtype of bahuvrihi (“Blackbeard”) compound, the initial is a noun with its lexical tones (i.e. usually /H/ or /LH/), and the final is an adjective with {H} overlay (§5.2.1.1). The tables are perfectly set for downstep. Consider the four-way tonal opposition in (38); the bahuvrihi is (38d).

(38) a. *gìré* *má*
     eye ReflPoss
     ‘(one’s) own eye’ (as in ‘He sold his own eye’)

b. *gìré* *mà*
eye 1SgPoss
‘my eye’

c. *gìrè*^{L} *mǎ*
eye^{L} dry/hard
‘hard eye’

d. *gìré-*ꜜ^{H}*má*
eye-^{H}dry/hard
‘stubborn’ (“hard-eyed”), bahuvrihi compound

In (38a), the /LH/-toned noun ‘eye’ is followed by an H-toned monosyllabic functional morpheme, which is unaffected by downstep. The result is L.H-H. In (38b), the same noun is followed by an L-toned 1Sg possessor morpheme, resulting in L.H-L. In (38c), the noun drops tones before the adjective, which happens to be <LH>-toned, so L.L-<LH>. The bahuvrihi in (38d) uses the same lexical stems as in (38c), but changes the tones to L.H-H, which becomes L.H-ꜜH by downstep.

Nouns preceded by a possessor are subject to a possessor-controlled overlay, which is {H} for prosodically light stems (one or two vocalic moras) and {HL} for heavy stems (three or more moras), except for two nouns that exceptionally become {L}-toned. Since common nouns and adjectives end in an H-tone, there are abundant opportunities for downstep. It is most consistent when the possessed noun has the {H} overlay and is preceded by an H-final nonpronominal possessor (39a). Downstepping may occur after an H-toned pronominal possessor, but it is not consistent (39b). Downstepping is not regular on a heavy possessed noun that carries the {HL} possessor-controlled overlay (39c). It is also not usual when an otherwise {H}-toned stem (39a) adds a local L-tone at the right margin (to mark definiteness or location) (39d).

(39) a. *sè:dú* ꜜ^{H}*gír*^{n}*í*
S ^{H}house
‘Seydou’s house’

b. *ú* (ꜜ) ^{H}*gír*^{n}*í*
2SgPoss ^{H}house
‘your-Sg house’

c. *sè:dú* ^{HL}*túŋùr*^{n}*ù*
S ^{HL}stool
‘Seydou’s stool’

d. *sè:dú* ^{H}*gír*^{n}*ì*$^{+L}$
S ^{H}house.Loc^{+L}
‘at Seydou’s house’ (compare (a))

These data suggest that downstep is not a fully grammaticalized process of the sort typically considered to be tonosyntax. Were it systematic, we would expect double downstep in recursive (stacked) possessives, as the higher of two downstepped possessed nouns resets the pitch ceiling against which the pitch of the lower possessed noun is calculated, resulting in a descending arpeggio. What actually happens is that downstep is preferentially realized on the last possessed noun in the string. So ‘uncle’ is clearly downstepped in (40a), spoken in isolation, but not in (40b), where the downstep is reserved for the following possessed noun (‘house’).

(40) a.

sè:dú	$^{\downarrow H}$*níɲí*
S	^{H}uncle

‘Seydou’s maternal uncle’

b.

[sè:dú	^{H}*níɲí]*	$^{\downarrow H}$*gír*^{n}*í*
[S	^{H}uncle]	^{H}house

‘Seydou’s uncle’s house’

When the higher possessed noun is heavy and therefore has {HL} overlay (described in the next section below), or when the higher possessed NP otherwise ends in an L-tone (NP ending in plural *bè*), the lower possessed noun is still downstepped in comparison to the earlier H-tone. Example: *ú* ^{HL}*ínà:* ‘your-Sg mother’ (from *ìnǎ:* ‘mother’), *[ú* ^{HL}*ínà:]* $^{\downarrow H}$*níɲí* ‘your-Sg mother’s maternal uncle’. The pitch of the downstepped H-toned $^{\downarrow H}$*níɲí* is higher than that of the L-toned preceding syllable. The pitch of $^{\downarrow H}$*níɲí* is also higher than that of a following L-tone (41a), and lower than that of a following H-tone (41b). The phonetic transcriptions use the mid-tone diacritic [x̄] to represent the intermediate pitch of the downstepped H.

(41) a.

[[ú	^{HL}*ínà:]*	$^{\downarrow H}$*níɲí]*	*bàg-ɛ̂*
[[2SgPoss	^{HL}mother]	^{H}uncle]	fall-Pfv

‘Your-Sg mother’s maternal uncle saw me.’
(phonetic [úínà:nīɲībàgɛ̂])

b.

[[ú	^{HL}*ínà:]*	$^{\downarrow H}$*níɲí]*	*má*	^{L}*ɔ̀-ɛ̀*
[[2SgPoss	^{HL}mother]	^{H}uncle]	1SgObj	^{L}see-Pfv

‘Your-Sg mother’s maternal uncle saw me.’
(phonetic [úínà:nīɲīmáɔ̀ɛ̀])

It is not always possible to hear a downstepped H-tone, in either an {H}- or an {HL}-toned word, after an L-tone, as with ‘uncle’ in (41a-b). In recorded texts, the downstepped word sometimes sounds {L}-toned to my ear. However, in more deliberate speech it is clear that the downstepped H (with its “sung” phonation) is distinct from L-tone even in this context.

Another kind of downstep, akin to clause-level downdrift, is seen with *sá*^{n}. This morpheme occurs after the verb in perfective subject relatives, and is therefore usually at the end of a full clause. The H-tone is clear after /H/-toned verbs, but when *sá*^{n} follows a verb that has the L-toned *-ɛ̀:* extension, I hear the combination as *-ɛ̀:* ^{L}*sà*^{n} when it is not closely followed by another element. However, the H-tone reappears (*-ɛ̀: sá*^{n}) when such an element is present, as in plural-subject *-ɛ̀: sá*^{n} *nà* (§14.1.9.1).

3.8 Intonation contours

3.8.1 Phrase and clause-final terminal contours (→)

Like other Dogon languages, speakers of TgK make extensive use of pitch and duration modifications on the final syllable of clauses and other intonation groups. This is most typical on the nonfinal clause (or other constituent) in a parallelistic sequence. Prolongation of the final syllable (represented by →) is particularly common in narrative and in the more enthusiastic segments of conversation.

Morphemes that are often (but not obligatorily) prolonged in this way include *bè* 'and' used in serial conjunctions, as in open-ended lists (§7.1.3), *mà* yes-no question particle (§13.2.1.1) or disjunctive 'or' §7.2.1), and imperfective *-jô:*, the form used in parallel imperfective constructions (§10.2.2.3). *fú→* 'all' is usually prolonged.

3.8.2 Clause-final tone-dropping of predicates (downdrift, defocalization)

Verbs and other predicates tend to drop to {L} tones, or at least to a pitch level otherwise typical of {L}-toned words, when preceded by other constituents (other than just pronominal clitics). This is a reflection of the natural downdrift of pitch over an intonation group, favored by the defocalization of the predicate when preceded by other overt constituents. This tone-dropping is not obligatory, and is often blocked when a particle follows the verb or other main predicate.

In texts, I have transcribed such words as {L}-toned when I hear no H-toned syllables. However, it is possible that the "tone-dropping" in this case is not complete, and that subtle distinctions in pitch or even phonation can alert native listeners to phonological tone. The basic point is that tone distinctions are greatly weakened at the end of a normal clause.

Details will be given in the chapters on verbs and other predicates.

3.8.3 Adverbs and particles with lexically specified prolongation (→)

Intonational prolongation of the final syllable is baked into certain adverbial and grammatical lexical items.

This includes expressive adverbials such as *dɛ́w*^{n}*→* 'straight' and *dɛ́y*^{n}*→* 'separate, apart, distinct'. In these two cases, the final semivowel is prolonged. Many expressive adverbials are presented in §8.4.6.

Adjectives can be made into expressive adverbials by prolonging a final vowel, sometimes alongside a segmental change. This is typical of adjectival predicates (§11.4.1.2).

3.8.4 Dying-quail intonational effect ∴

Both conjuncts ('X and Y'), or just the first, in a conjoined NP are characterized by the dying-quail intonation, involving prolongation and (if ending on an H-tone) slow pitch decline. See §7.1.1 and §15.2.2.4.

4 Nominal, pronominal, and adjectival morphology

4.1 Nouns

4.1.1 Simple nouns and plural *bè* ~ *mbè*

There is no affixal marking of intrinsic nominal categories (human/animate versus inanimate, singular versus plural). A NP consisting of a bare noun stem can be interpreted as singular, or as indefinite plural. A (specific) plural is expressed by a particle *bè*, sometimes heard as *mbè* after a nasal syllable. Prost writes this as "be" alternating with "we". Homophones of plural *bè* are conjunction particle *bè* which follows each conjoined NP (§7.1.3) and instrumental-comitative postposition *bè* (§8.1.2).

(42)	gloss	unmarked	(specific) plural
a.	'sheep'	*péjú*	*péjú bè*
	'dog'	*ìsí*	*ìsí bè*
	'snake'	*lú:ró*	*lú:ró bè*
	'thing'	*ɔ̀jɔ́*	*ɔ̀jɔ́ bè*
b.	'man'	*àr^{n}á*	*àr^{n}á bè*
	'woman'	*ɲɛ̌*	*ɲɛ̌ bè*
	'blacksmith'	*jɛ́mɛ́*	*jɛ́mɛ́ bè*
	'house'	*gìr^{n}í*	*gìr^{n}í bè*
	'person'	*nǎ*	*nǎ bè*
	'cow'	*nàŋá*	*nàŋá bè*
c.	'Dogon person'	*dɔ̀gɔ̌^{n}*	*dɔ̀gɔ̌^{n} bè*
	'Fulbe person'	*púlɛ́:^{n}*	*púlɛ́:^{n} bè*

Although there is no synchronic suffixation for number or human/animate category, there are many nouns with human reference that end in a nasalized vowel that probably reflects an original suffix, compare Jamsay singular *-n* and plural *-m* for ordinary human nouns (except kin terms). In addition to 'Dogon person' and 'Fulbe person' in (42c) above, further examples are *gùrǐ^{n}* 'Gourou person', *tɛ́lɛ́^{n}* 'Tellem person', and *sɛ́:gí^{n}* 'Segem person (carpenter caste)'. The nasalization can no longer be easily segmented, and it is questionably audible in the presence of a preceding nasal, as with *tèŋǐ(^{n})* 'Tengou person'. It is also subject to possible confusion with reduced forms of *-í:^{n}* 'child' as compound final (§5.1.7). See §3.4.2 for more examples and discussion.

A vestigial human singular suffix *-n* does survive when followed by the 'it is' clitic, see (315) in §11.2.1.1. However, it is optional, has no obvious function, it seems to function somewhat as a linker, and it has spread to some other combinations involving the 'it is' clitic, for example *ɲǎ̂ŋ-n=ì:* 'it is how?' (417c) in §13.2.6. Another, indirect vestige of nasal suffixes is the synchronically opaque *ɲ/y* alternation in 'woman' and related forms (§4.1.2, §5.1.8). The difference between *ɲɛ̌* 'woman' as simple noun, and the variant *yɛ̀* in some compounds and other constructions, makes sense diachronically only if the noun is assumed to have formerly ended in a nasal suffix. Compare Jamsay noun *ɲɛ̌-n* ‘woman’ and compound initial *yà*. The diachronic evolution of ‘woman’ was something like *yɛ̀-nú → *y^{n}ɛ̀-nú (backward nasalization-spreading, cf. Toro Tegu *y^{n}à-r^{n}ú*) → *ɲɛ̌-n* (as in Jamsay) → *ɲɛ̌* (TgK).

As noted in §3.4.1, short-voweled *Cv* and long-voweled *Cv:* are clearly distinguished in TgK noun stems. *Cv* noun stems are quite numerous, and include some original verbal nouns of the type that appears as *Cv̌-y* in e.g. Jamsay.

Some kin terms still show alternations including a form with final nasalized *ɛ́:^{n}*. With ‘(man’s) sister’, for example, my assistant (inconsistently) replaced the post-possessor form *lárá* with *lárɛ́:^{n}* in the plural, see ‘Seydou’s sisters’ in (43c).

(43) ‘(man’s) sister’

a. unpossessed

làrá	‘a sister’
làrá	‘sisters’

b. with 1Sg possessor (postposed)

làrá mà	‘my sister’
làrá mà bè	‘my sisters’

c. with preposed possessor

sè:dú ^{H}*lárá*	‘Seydou’s sister’
sè:dú ^{H}*lárɛ́:^{n} bè*	‘Seydou’s sisters’
sè:dú ^{H}*lárá bè*	"

With *ɛ̀gɛ́* ‘husband’, on the other hand, nasalized ^{H}*ɛ́gɛ́:^{n}* is the regular post-possessor form, singular as well as plural: *wó* ^{H}*ɛ́gɛ́:^{n}* ‘her husband’, compare *ɛ̀gɛ́ mà* ‘my husband’ with postposed possessor.

4.1.2 Irregular nouns (‘woman’, ‘child’, ‘person’, ‘thing’)

‘Woman’ (*ɲɛ̌*), ‘man’ (*àr^{n}á*), ‘thing’ (*ɔ̀jɔ́*), and ‘person’ (*nǎ*), see the preceding section), present no synchronic irregularities as nouns. However, ‘child’ along with its human derivatives has a suppletive plural form.

(44)	gloss	singular	plural
a.	‘child’	*í:^{n}*	*úr^{n}í:*
b.	‘boy’	*àr^{n}á-ỳ^{n}*	*àr^{n}á-*^{L}*ùr^{n}ù (bè)*
	‘girl’	*ɲɛ̌-ỳ^{n}*	*ɲɛ̌-*^{L}*ùr^{n}ù (bè)*

Singular ‘child’ *í:^{n}* is distinguished by vowel length from the 1Sg pronoun *í^{n}*. ‘Child’ is desyllabified to *-ỳ^{n}* in (44b). In other compounds, *-í:^{n}* is sometimes pronounced in unreduced form, and sometimes contracts with a stem-final vowel (§5.1.7, below).

ɲɛ̌ ‘woman’ shows the effect of diachronic backward nasalization-spreading from original suffixed forms (cf. Jamsay singular *ɲɛ̌-n* ‘woman’, plural *ɲɛ̌-m*), compare *yɛ̀-* as compound initial (§5.1.8). Another case of *y → *ɲ* before another nasal is *ɲá-má* ‘let’s go!’ (285a) in §10.6.2.1, hortative of *yɛ̌* ‘go’.

4.1.3 ‘So-and-so’ (*àmá:n*)

àmá:n ‘is used as a variable over personal names in generalized contexts, cf. English *So-and-so*, French *un tel*, Arabic *fulaan-*, and the like. For the possibility of segmenting it as *à-má:n*, see §4.1.7 below.

4.1.4 Initial *Cv-* reduplication in nouns

A number of nouns (and adverbs) appear to have an initial *Cv-* reduplication, with both the consonant and the vowel quality (and, usually, tone) copied from the stem. The vowel of the reduplicant is short, even when based on a long vowel in the stem. In the great majority of cases, the stem does not occur elsewhere (to my knowledge) in unreduplicated form, so the segmentability of the reduplicant is not transparent.

In a couple of examples, there is in fact language-internal evidence for segmenting the reduplicant. For *nù-nùŋú* ‘sun’, the comparison is with *nùŋù ná:* ‘daybreak’. For *pú-púgɔ́* ‘out of shape(adj)’, the related verb *pú:gù* ‘get out of shape’ hints at segmentability. For *dù-dùgí*^{n} ‘sorceror’, the comparison is with verb *dùgó* and its cognate nominal *dúgó*, which co-occur in the combination *dúgó dùgó* ‘cast spells’. Tones are commented on below.

(45) *Cv*-reduplicated nouns (except *CvCv*)

a. noun stems

H-toned reduplicant and /H/-toned base	
gó-góró	‘padlock’
gú-gúrú	‘grass, herbaceous plants’
kí-kíjí	‘grain spike’ (usually a compound final)
wó-wóró	‘outhouse for bathing’
ɲɛ́-ɲɛ́r^n*ɛ́*	‘air, breeze’
nɔ́-nɔ́:r^n*ɔ́*	‘scar(n)’
L-toned reduplicant and /LH/-toned base	
kò-kǒ:	‘scale (of fish)’; ‘tree bark’ (Jamsay *kì-kǒw*)
kò-kǒ:	‘scab’; ‘slough(n)’ (Jamsay *kògó*)
ù-ʔùgɔ́	‘steam; hot weather’
nɛ̀-nɛ̀ŋɛ́	‘groin’
kà-kàrá	‘armpit’
dɛ̀-dɛ̀gú	‘patience’
gù-gùjú	‘giant pouched rat’
kɔ̀-kɔ̀jú	‘viper’
tɔ̀-tɔ̀jú	‘calf (of leg)’
bɔ̀-bɔ̀rú	‘sediments (in liquid)’
kì-kìyé	‘edible winged termite’
kà-kàlá	‘secrecy, stealth’
kà-kàrá^n	‘noisy bustard sp.’ (onomatopoeic)
sù-sùlɛ́^{n}	‘branch used as whip’
nɔ̀-nɔ̀:r^n*ɔ́*	‘spider’s web’
tù-tù:rú	‘young man’s horn’

as above, with nasalized vowel in reduplicant

sɔ̀^{n}*-sɔ̀nɔ́*	‘sand’
tɔ̀^{n}*-tɔ̀r*^{n}*ɛ́*	‘bell’
kɛ̀^{n}*-kɛ̀r*^{n}*ɛ́*	‘courser (bird)’

L-toned reduplicant and /H/-toned base

dè-dé:	‘father’ (dialectal variant *dè-dě:*)
bà-bá:	‘grandfather’
nà-ná:	‘grandmother’
tè-té:	‘kite (hawk)’
tò-tó:	‘tin can’; ‘jewelry box’
kè-ké:	‘craziness’
kɛ̀-kɛ́:	‘beetle’
tà-tágá	‘joking, kidding(n)’
kì-kíjí	‘bat (mammal)’
kù-kúmó	‘smoke’
tɔ̀-tɔ́gú	‘gecko’
pì-pírí	‘butterfly’
tì-tírí	‘errand, mission’

as above, with nasalized vowel in reduplicant

kɛ̀^{n}*-kɛ́w*^{n}*ɛ́*	‘mosquito’
gɔ̀^{n}*-gɔ́r*^{n}*ɔ́*	‘honey ant (*Camponutus*)’

H-toned reduplicant, L-toned onset of base

base is {L}

té-tèrè:	‘miracle’
té^{n}*-tèŋè*	‘zorilla (mammal)’, variant of *téŋé*

b. nominal compound initials and finals

H-toned reduplicant and /H/-toned base

lù:rò^{L}*-[kú-kúrú]*	‘puff adder’ (*lú:ró* ‘snake’)

L-toned reduplicant and /LH/-toned base

kɛ̀nɛ̀^{L}*-[là-làgá]*	‘spleen’ (cf. *kɛ́nɛ́* ‘heart/liver’)
nùmɔ̀^{L}*-[sà-sàgá]*	‘small bracelet’ (“hand-jewel”)

L-toned reduplicant and /H/-toned base

mɔ̀^{L}*-[kà-kárá]*	‘loud laughter’ (“laugh-[onomatopoeia]”)
nùmɔ̀^{L}*-[tɔ̀-tɔ́gú]*	‘elbow’ (“hand-…”)
kà:^{L}*-[tò-tógó]*	‘praying mantis’ (“grasshopper …”)
pùnày^{nL}*-[sɔ̀-sɔ́rɔ́]*	‘flour that sticks to mortar’ (“flour-…”)

compound initial (tones dropped)

àrùkò^{L}*-[ɲè-ɲèrè]*^{L}*-jǎ*	‘type of boubou (robe)’
[dì-dì]^{L}*-kɛ́:dú*	‘tickling(n)’

compound final (tones dropped)

ò:gú ^{L}*pò-pòrò*	‘outbreak of watery sores’ (“sweat …”)

c. adjective stems

H-toned reduplicant and /H/-toned base

wɔ́-wɔ́rú	‘fast (in action)’

L-toned reduplicant and /H/-toned base

pɔ̀-pɔ́:	‘innocent’
jò-jó:	‘much, many’

d. other stem-class	
kà:ná sà-sày	‘right now’ (*kà:ná* ‘now’)

In the list above, two further phonological points arise. First, when the stem begins with a vowel, the reduplicant is limited to a copy of this vowel, the two being separated by a hiatus-marking phonetic glottal stop: *ù-ʔùgɔ́* ‘steam’.

Secondly, when the stem is of the type *TvNv* with an initial nonnasal consonant *T* and a medial nasal consonant *N*, the vowel of the reduplicant is nasalized in some cases, resulting in *Tvⁿ-TvNv*. Nasalization was heard in *sɔ̀ⁿ-sɔ̀nɔ́* ‘sand’, *tɔ̀ⁿ-tɔ̀rⁿɛ́* ‘bell’, *gɔ̀ⁿ-gɔ́rⁿɔ́* ‘honey ant’, *kɛ̀ⁿ-kɛ́wⁿɛ́* ‘mosquito’, and *kɛ̀ⁿ-kɛ̀rⁿɛ́* ‘courser’. However, *kù-kúmó* ‘smoke’ was heard without reduplicant nasalization. Based on this fragmentary information, it is possible that labial *m* behaves differently from coronal nasals in this respect.

Of the nouns in (45) above, *té-tèrè:* ‘miracle’ has the most puzzling tonal pattern. Cognates (e.g. Jamsay and Najamba *tè:ré*, Yanda-Dom *tèrè*) suggest an unreduplicated proto-form like *tè(:)ré. It is possible that TgK *té-tèrè:* reflects a fully iterated immediate proto-form *tèré-tèré, with the second syllable lost by *rv*-Deletion (§3.5.3.2).

Reduplicated nouns consisting of two *Cv* syllables are problematic because it may be impossible to determine whether they represent *Cv-* reduplication or full-stem iteration (on which see below, §4.1.6). Indeed, since *CvCv* is the most basic stem-shape in the language, while short-voweled *Cv* is marginal, the *CvCv* cases could also be interpreted (by native speakers) as unsegmentable.

The *CvCv* stems that are candidates for reduplicative status are in (46).

(46) *CvCv* reduplicated stems

stem	possessed	gloss
a. L(-)<LH>		
ɲù-ɲǔ	$^{\mathrm{HL}}$*ɲú-ɲù*	‘cold weather’
yà-yǎ $^{\mathrm{L}}$*nà:*	$^{\mathrm{HL}}$*yá-yà* $^{\mathrm{L}}$*nà:*	‘woman who has just given birth’
compound finals		
pɔ̀ŋɔ̀$^{\mathrm{L}}$*-[jà-jǎ]*	—	‘fonio greens’
tùwò$^{\mathrm{L}}$*-[tà-tǎ]*	—	‘stone shelf’
b. L(-)H		
bɔ̀bɔ́	$^{\mathrm{H}}$*bɔ́bɔ́*	‘Bobo (ethnicity)’
nɔ̀nɔ́	$^{\mathrm{H}}$*nɔ́nɔ́*	‘Guinea worm’
gɛ̀gɛ́	$^{\mathrm{H}}$*gɛ́gɛ́*	‘jaundice’
pùⁿ-púⁿ	$^{\mathrm{HL}}$*púⁿ-pùⁿ*	‘shrub (*Calotropis*)’
mɛ̀-mɛ́ⁿ	$^{\mathrm{HL}}$*mɛ́-mɛ̀ⁿ*	‘ant’
compound final		
àrⁿù$^{\mathrm{L}}$*-kɛ̀ⁿkɛ́ⁿ*	—	‘ant sp. (*Messor*)’, cf. *àrⁿú* ‘rain’
c. H(-)H		
tɛ́tɛ́	$^{\mathrm{H}}$*tɛ́tɛ́*	‘arrogance’
nɛ́nɛ́	$^{\mathrm{H}}$*nɛ́nɛ́*	‘person of low caste’; ‘latch’
tɛ́tɛ́	—	‘bland-tasting, lightly sugared or salted’
jú-jú	$^{\mathrm{HL}}$*jú-jù*	‘judge’ (French *juge*)
júⁿ-júⁿ	$^{\mathrm{HL}}$*júⁿ-jùⁿ*	‘mud-dauber wasp’

The most interesting feature in this list is the L-<LH> tone pattern of *ɲù-ɲǔ* ‘cold weather’ and similar forms, including the final in *pɔ̀ŋɔ̀*^{L}*-[jà-jǎ]* ‘fonio greens’. Such a tone pattern is unattested with unreduplicated bimoraic *CvCv* nouns, see (24) in §3.7.1.6. This suggests a reduplication, e.g. *ɲù-ɲǔ*, where the base *-ɲǔ* has an /LH/ melody that must be realized on its single mora, as with many unreduplicated monomoraic nouns like *mɔ̌* ‘gum arabic’ and *dɛ̌*^{n} ‘waterjar’. If this analysis is accepted, its conclusion might be extrapolated to the other cases.

As shown in §6.2.1, unsegmentable *CvCv* stems have an {H} overlay controlled by a preceding possessor. By contrast, morphologically composite stems beginning with *Cv-Cv…* or *Cv Cv…* have an {HL} overlay with the H-tone on the initial syllable. This suggests that the tone of possessed forms of arguably reduplicated *CvCv* stems might show how native speakers analyse these forms. This does not work for compound finals or for adjectives, which cannot occur at the left edge of the possessed noun, but it does work for simple nouns. As (46) indicates, we get an {HL} possessed-noun overlay for the two testable cases with L.<LH> pattern (‘cold weather’, ‘woman who has …’), for the two testable nouns with final nasalized vowel (‘ant’, ‘mud-dauber wasp’), and for ‘judge’, but not for the other testable cases.

pìpàlá ‘square fan’ is a regional word, probably from Bambara (with *f* replaced by *p*), and does not fit the vocalism of the TgK *Cv-* reduplicative pattern.

4.1.5 Final reduplication in nouns

This pattern is not well represented in TgK, but I can cite *kà:*^{L} *pɔ̀gɔ̀rɔ̀-pɔ́* ‘grasshopper sp. (*Oedaleus*)’, with *kǎ:* ‘grasshopper’. There are final-reduplicated cognates of various forms denoting the same species in other Dogon languages.

kàŋkǎ: ‘louse’ may have originated as a noun with final reduplication (cf. Nanga *kɔ̀rɔ̀ŋ-kɔ̃̌:*). However, it is now probably segmented by native speakers, if at all, as {L}-toned compound initial form of *ká*^{n} ‘mouth’ plus *kǎ:* ‘grasshopper’.

For final multiple reduplications in expressive adverbials, as in *dɔ̀r*^{n}*ɔ́nɔ́nɔ́* ‘foul-smelling’, see (219) in §8.4.6.1 and cross-references there.

4.1.6 Nouns with full-stem iteration

A fair number of nouns have a frozen iterative form, i.e. with two parts that are more or less identical segmentally and metrically, aside from possible changes in vowel quality and/or tone. In some cases the base occurs elsewhere in simple form with a related but distinct sense. This full-iteration type is distinguishable from the *Cv-* reduplications discussed above (§4.1.4) when both base and reduplicant are at least bisyllabic, but the two converge and are indistinguishable in the case of $C_1v_1C_1v_1$ nouns or compound finals such as *sù*^{n}*sú*^{n} and *ɲà*^{L} *dɛ́*^{n}*-dɛ̀*^{n} in (47b).

(47) Fully iterated nouns (and compound elements)

a. no tonal or vocalic difference
[none]

b. tonal difference but no vocalic difference
{*L*} *then* {*H*}

bɔ̀mbó^{n}	‘candy’ (French *bombon*)

sù^{n}*sú*^{n}	‘worm, grub’
ò:ɲò^{L}*-pù*^{n}*pú*^{n}	‘whirlwind’ (with *ó:ɲó* ‘wind’)
kùrsà-kúrsá	‘itchy skin disease’
yùgù-yúgú	‘used clothing market’ (regional word)
pùsù-púsú	‘push-cart’ (French *pousse-pousse*)
wèrè-wéré	‘swift (bird)’
gɔ̀dɔ̀-gɔ́dɔ́	‘wood-hoopoe (bird)’
{*L*} *then* {*LH*}	
gàŋ-gǎn	‘crack, gap’ (cf *gân* ‘between’)
{*H*} *then* {*L*}	
ɲà^{L} *dɛ́*^{n}*-dɛ̀*^{n}	‘empty lot’ (with *ɲá* ‘ground’)
c. vocalic difference but no tonal difference	
bírìgì-bárùgù	‘bric-à-brac’
pú:jù-pá:jù	‘lung(s)’
d. vocalic and tonal differences	
{*H*} *then* {*L*}	
tígí-tàgù	‘shoulderblade’
kírí-kòrò	‘mussel shell’
{*L*} *then* {*H*}	
àrùkò^{L} *yìlɛ̀-yálá*	‘type of boubou (robe)’
tèŋè-táŋá	‘dancers on stilts’
gùrùmà^{L}*-[dìŋè-dáŋá]*	‘hoopoe (bird)’

The vocalic differences, where they exist, involve the sequences *i…a* (*bírìgì-bárùgù*), *i…o* (*kírí-kòrò*), *e…a* (*tèŋè-táŋá*), *u…a* (*pú:jù-pá:jù*), *i/i…a/u* (*tígí-tàgù*), and *i/e…a/a* (*dìŋè-dáŋá*) The basic principle, as in English freezes based on nonsense syllables (*ping-pong*, *riffraff*), is that a perceptually light vowel quality on the left corresponds to a perceptually heavier vowel quality on the right, with perceived weight based primarily on the second formant as seen in spectrograms. i has the highest F2, while vowels in the *u-o-ɔ-a* belt have low F2. See also the comments on occasional vowel symbolism in sets of related verbs (§3.4.7).

More questionable cases are *gɔ̀ɲú-gɔ́ɲɔ́r*^{n}*ɔ́* ‘giant millipede’, where the *u* in the second syllable is difficult to account for, and the apparently reduplicated final in the bird name *búrgú-tútù* ‘coucal’, which could be onomatopoeic.

The frozen iterated stems in (47) above should be distinguished from look-alike agentive compounds, each consisting of an {L}-toned form of the cognate nominal plus the {H}-toned form of the verb stem, e.g. *jìŋ*^{L}-^{H}*jíŋé* ‘protector’; see §5.1.5. However, the iterated stems with {L} then {H} tone in (47b,d) could possibly be interpreted by native speakers as frozen agentives, at least where the noun denotes a human agent of an activity, as with ‘dancers on stilts’.

kú:kúbú ‘machete blade’ (French *coupe-coupe*) has likely mutated from *kùbù-kúbù (cf. Jamsay *kùbù-kúbù* and similar quadrisyllabic counterparts in other Dogon languages) but is no longer transparently reduplicated.

Full iteration is also common in onomatopoeias (§8.4.7.1), in adjectival intensifiers, in other expressive adverbials, see (216) in §8.4.6.1, and in derived distributives especially from numerals (§8.4.7.2).

4.1.7 Frozen initial *à-* or *àN-* in nouns

As in some other Dogon languages, TgK has a number of nouns that arguably begin with a prefix-like element *à-* or *àN-* (with an underspecified nasal that assimilates to the position of a following consonant, or is heard as nasalization of the *a*). In some cases there is some actual evidence for segmentation, as when a word-family includes both prefixed and unprefixed forms. In other cases the segmentation is speculative. Even in the clearer cases, the function of the prefix cannot be determined.

The relevant forms are grouped together as (48), with brief comments about related forms.

(48) Prefix *à-* or *àN-*

a. word-family has forms with and without prefix
à-tégú tégé 'stand on tiptoes; (goat) stand on hind legs' (cognate nominal plus verb)
àn-dáŋú dàŋá 'fry large soft millet cakes'
à-mámú màmá 'bite one's lower lip'
bà:gà^{L} *à-gɔ́gú* and *bà:gà*^{L} *gɔ́gú* (containing *bá:gá* 'stick'; the terms denote two types of shepherd's staff, each having a hooked or curved end, while *à-gɔ́gú* also has a fork for easy gripping at the other end)
àŋ-gɔ̀:ní^{n} and *gɔ̀:ní*^{n} (two types of poles for knocking fruits off trees, *àŋ-gɔ̀:ní*^{n} having a metal hook at the end)
àm-béŋú 'hide-and-seek (game)', obscurely related to *báŋ* 'secret(adj)' and related forms

b. other possible cases
fauna terms
àŋgùŋùr^{n}*ú* 'giant tortoise'
àndǎ^{n} 'tiny fly sp.'
pèlè^{L}*-ásé:nú* 'namaqua dove (*Oena*)', cf. *pélé* 'dove'
other cultural vocabulary
àlɛ́gú 'loincloth'
àpàlá (synonym *àn-dáŋú*) 'meal with large, soft millet cakes'
àtémú 'customary rite'
àtí: 'bird trap'
àpà:rɛ́ 'mechanism (of musket)'
àjírí 'traditional wrestling'
other
à^{n}*só:ŋó* 'bowlegged person'
àségú 'sneeze(n)'

Perhaps *àmá:n* 'So-and-so' (§4.1.3) belongs here. *à*^{n}*sá:rá* 'white person' does not, at least etymologically, as it derives from *ànàsá:rá by syncope. It is ultimately from the Arabic word for 'Nazarene'.

It is not clear whether *ŋ̀kúrú* 'mouse', beginning with a (weakly) syllabic nasal (§3.3.8.1), is segmentable.

4.1.8 Vocatives of kin terms

A noun (especially a personal name or kin term), or a second person pronoun, can function as a vocative.

For ‘father’, the usual tone is *dè-dé:* (dialectally also *dè-dě:*) when not preceded by a possessor, and ^{HL}*dé-dè:* with the regular {HL} tone overlay when preceded by a possessor. A special vocative pronunciation was observed: *dè-dê:* ‘hey father!’, with falling tone on the second syllable.

The other examples of this vocative tone pattern were similar reduplicative kin terms: *bà-bá:* ‘grandfather’ with vocative *bà-bâ:*, and *nà-ná:* ‘grandmother’ with vocative *nà-nâ:* .

‘Mother’ has no tonally distinctive vocative. *ìnǎ:* is both the unpossessed form of the noun and the vocative.

4.2 Derived nominals

4.2.1 Suffix *-gú* or *-ɲí* with {H} overlay

A handful of deverbal nominals have a suffix *-gú* and a stem-wide {H} overlay. The known examples are in (49). They form a fairly natural class semantically (transitions between presence/visibility and absence/invisibility).

(49) Suffix *-gú*

form	gloss	related verb
a. celestial bodies		
númú-gú	‘sunset’	*nùmó* ‘(sun) set’
túmú-gú	‘(sun/moon-)rise’	*túmó* ‘(sun, moon) rise’
b. other		
tɔ́rú-gú	‘beginning’	*tɔ́rɔ́* ‘begin’
yá:-gú	‘going (departure)’	*yě* (*yǎ:-)* ‘go’
yɛ́rú-gú	‘coming (arrival)’	*yɛ̀rɛ́* ‘come’
gó:-gú	‘going out’	*gǒ:* ‘go out, exit’

This minor deverbal nominal is distinct tonally and semantically from the (nonhuman) characteristic derivative in *-gú* with {L}-toned stem (§4.2.3).

In the introduction to §5.1, a compound including the archaic nominal *ɲí:-ŋí* ‘eating’, from verb *ɲí:* ‘eat (meal)’, is mentioned. The relationship, if any, between this *-ŋí* and other nominalizations (such as that with *-gú*) is unclear.

4.2.2 Deadjectival extent nominals with reduplication and suffix *-ná*

A number of adjectives, notably those relating to measurable (scalar) spatiotemporal properties, have a nominal derivative with a suffix *-ná* following an {L}-toned form of the adjective (with final *u* in the case of two or three relevant bisyllabic stems) including an initial *Cv-* reduplication. The known forms are in (50).

(50) Extent nominals

form	gloss	related adjective
wà-wàgù-ná	‘distance’	*wàgá* ‘distant’
wò-wòrù-ná	‘depth’	*wóró* ‘deep’
gù-gùrù-ná	‘length’	*gùrú* ‘long’ (also ‘tall’)
wà-wà:-ná	‘width; thickness’	*wá:* ‘wide, thick’
tè-tèrè-ná	‘speed’	*tèré ‘speedy’*

tè-tèrè-ná ‘speed’ (and ‘speediness’) is unusual in not shifting the final stem-vowel to *u*.

For ‘tallness, height’ I recorded an underived noun *géné*. It is at best distantly and obscurely related to the adjective *gùrú*, compare English *stature* or French *taille*.

4.2.3 Characteristic denominal derivative (*-gú*, *-gí*^{n} after {L} overlay)

In this derivation, which functions as a noun or adjective, a noun denoting a characteristic of certain objects or people, such as a personality trait or a medical condition, is followed by a suffix *-gú* (nonhuman) or *-gí*^{n} (human). The noun drops its tones. The construction is fairly productive. The characteristic derivatives gleaned from the working dictionary are in (51).

(51) Characteristic derivative

a. nonhuman	
bà:gà^{L} *kìrɛ̀*^{L}*-gú*	‘staff (*bá:gá*) with one forked end (*kírɛ́*)’
sìyè^{L}*-gú*	‘plump (animal)’, cf. *síyé* ‘(animal) fat’
b. human	
bàrɛ̀:^{L}*-gí*^{n}	‘left-handed person’ (unrelated to adjective for ‘left (hand/foot)’)
pàŋà^{L}*-gí*^{n}	‘authority, government’, cf, *pàŋá* ‘power’
nùr^{n}*ù*^{L}*-gí*^{n}	‘sick person’, cf. *nùr*^{n}*ú* ‘disease’
ò:rò^{L}*-gí*^{n}	‘cripple, paraplegic’, cf. *ó:ró* ‘being crippled’
jɔ̀ŋɔ̀^{L}*-gí*^{n}	‘leper’, cf. *jɔ́ŋɔ́* ‘leprosy’
nàm^{L}*-gí*^{n}	‘impoverished person’, cf. verb *nám-gì-* ‘become poor’
bò:mò^{L}*-gí*^{n}	‘idiot, stupid person’, cf. *bò:mó* ‘stupidity’
lìwɛ̀^{L}*-gí*^{n}	‘cowardly (person)’, cf. *lìwɛ́* ‘fear(n)’
wàlà^{L}*-gí*^{n}	‘lazy’, cf. *wàlá* ‘laziness’
[àmà-sɔ̀gɔ̀]^{L}*-gí*^{n}	‘pitiable (person)’, cf. *àmà*^{L}*-sɔ̀gɔ́* ‘pity’ (compound with *àmá* ‘God’)
kɔ̀r^{n}*ì:*^{L}*-gí*^{n}	‘glutton’, cf. *kɔ̀r*^{n}*í:* ‘intestine’
pùgà:rù^{L}*-gí*^{n}	‘poorly behaved (person)’ (*púgá:rú*)

The (denominal) nonhuman characteristic *-gú* with an {L}-toned stem should be distinguished from a minor deverbal nominalization with *-gú* after an {H}-toned stem (§4.2.1).

4.2.4 Verbal nouns (*-ú* ~ *-í* ~ *-∅*)

The productive verbal noun formation replaces the stem-final vowel of a nonmonosyllabic verb stem by *-ú*, with the remainder of the verb stem {L}-toned. We get *-í* instead of *-ú* when the preceding syllable has an *i*-vowel.

Monosyllabic stems instead have *-∅*, with <LH> tone on the stem vowel. The monosyllabic verbal noun *Cv̌-∅* corresponds to the Jamsay type *Cv̀-ý*, reflecting the usual TgK loss of final semivowels.

The /u/ for nonmonosyllabics is usually deleted (apocopated) after an unclustered semivowel or nasal {*w w^n y m n ɲ ŋ*} in bimoraic *CvCv* stems whose penult has a non-high vowel. Apocope is optional in *Cùw-ú*, but it is hard to hear the difference between bisyllabic and apocopated monosyllabic in this case. When the /u/ is deleted, its H-tone is stranded, and re-links to the left (3.7.4.4), resulting in an <LH> tone on the surviving syllable. Where typographically possible, I write this with a separate acute accent on the sonorant, for example *Cv̀ḿ-∅* rather than *Cv̌m-∅*. This is not (mainly) for phonetic reasons, rather to to clarify the morphology by indicating that the H-tone has re-linked from the right. For *l*, the accented form *ĺ* exists but creates problems of recognition and linespacing, so I write *Cv̌l-∅*.

Mediopassive suffix *-î:* is reduced to *-í* which may then be zeroed by apocope (52d).

(52) Verbal nouns

stem	verbal noun	gloss
a. monosyllabic		
ó	*ǒ-∅*	‘give’
yě	*yě-∅*	‘go’
jê	*jě-∅*	‘take away’
ɲí:	*ɲǐ-∅*	‘eat meal’
gǒ:	*gǒ-∅*	‘go out’
ká:^{n}	*kǎ^n-∅*	‘shave’
b. nonmonosyllabic (without Apocope)		
CìC-í from CiCv		
sígɛ́	*sìg-í*	‘remain’
tíŋɛ́	*tìŋ-í*	‘speak’’
kígìrì	*kìgìr-í*	‘go back’
CùC-ú from CuCv		
núŋɔ́	*nùŋ-ú*	‘sing’
kúwɔ́	*kùw-ú* ~ *kùẃ-∅*	‘eat meat’
Cv̀C-ú from other CvCv with medial obstruent/liquid		
bàgá	*bàg-ú*	‘fall’
bɛ̀rɛ́	*bɛ̀r-ú*	‘get’
pâl	*pàl-ú*	‘pick (fruit)’
súnú-gì	*sùnù-g-ú*	‘take down’

c. nonmonosyllabic (with Apocope)

medial semivowel

dɔ̀wɔ́	*dɔ̀ẃ-∅*	‘go up’
tɛ́w^{n}*ɛ́*	*tɛ̀ẃ*^{n}*-∅*	‘eat (by crunching)’
bìyɛ́	*bìý-∅*	‘bury’

medial nasal

pémé	*pèḿ-∅*	‘slurp’
nɔ̌:-m̀	*nɔ̀:-ḿ-∅*	‘cause to drink’
bɔ̌:ǹ	*bɔ̀:ń-∅*	‘pamper’
dɔ̀ɲɔ́	*dɔ̌ɲ-∅*	‘butt with head’
sá:ŋì	*sà:ŋ́-∅*	‘settle down’

d. Mediopassive

final short *i* *after* *CiC-*

dìg-î:	*dìg-í*	‘follow’
ìm-î:	*ìm-í*	‘lie down’
dìw-î:	*dìw-í*	‘lean on’

final short *u* *after* *CuC-* *other than* *Cuw-*

túŋ-í:	*tùŋ-ú*	‘kneel’

final zero after other *CvC-* *with final semivowel/nasal*

bòm-î:	*bòḿ-∅*	‘carry on back’
dɛ̀ŋ-î:	*dɛ̀ŋ́-∅*	‘sit’
ɲɛ̀ŋ-î:	*ɲɛ̀ŋ́-∅*	‘circulate’
sɔ́ŋ-ì:	*sɔ̀ŋ́-∅*	‘carry on shoulder’
yày-î:	*yàý-∅*	‘play (board game)’
dùw-î:	*dùẃ-∅*	‘carry’

A variant of -*ú* used in parallelistic passages is *-í→*, with intonational prolongation.

(53) *[yɔ́:* *wɔ̀*^{n}*]* *sàjù*^{L}*-[dìg-í→],* *ɲù:*^{L}*-[pòr-í→]*
[NearDist Top] bird^{L}-[drive.out-**VblN**], millet^{L}-[grow.spike-**VblN**]
ɛ́mɛ́ *[yɔ́:* *nà* *sâ:*^{n}*]* *pór-ɛ̀:-sɛ̂*^{n}
1PlSbj [NearDist Pl all] say-Pfv-PlSbj
‘As for that, we have talked both (about) driving birds out and about the development of millet grain spikes.’ (2011.1a.08)

A suffix *-lé* used in one type of verb iteration (§11.6.5) is a possible vestige of an older verbal noun formation, cf. Najamba and Yanda Dom *-lé*.

4.2.5 Instrument nominals

There is no widely used instrumental-nominal derivation, to judge by the absence of candidates in my working lexicon. The tool ‘file’ is *dì:sí*, unrelated to the corresponding action verb *nɛ̀r*^{n}*ɛ́* ‘file, scrape with a file’ (also ‘hone [blade]’). Likewise, ‘bellows (blacksmith’s blower)’ is *ùjú*, unrelated to verb *píyé* ‘blow’. New expressions can be created for modern functional appliances and tools, using verbal nouns with incorporated object as adjectives, as in *màsù* ^{L} *ɲù:*^{L}*-nɔ̌w*^{n}*-∅* ‘machine^{L} millet^{L}-grind-VblN’, denoting a modern grinding device (‘mill’).

‘Scrubber (for bathing)’ is *pŭ:* which oddly seems to have diverged phonologically from the cognate verb *bùwɔ́* ‘scrub (one’s body, in bathing)’. The noun has a variant pronunciation *fŭ:*, whose *f* suggests loanword status. The verbal noun of *bùwɔ́* is *bŭw-∅*, phonetic [bŭ:]. The cognate noun and verb in some other Dogon languages are more transparently related (e.g. Perge *pŭw* and verb *púwɔ́*).

See also the compounds in §5.1.11.

4.2.6 Uncompounded agentives

I know of no uncompounded agentive nominals, with the possible exception of *dáná* ‘hunter’, cf. verb *dànà* ‘hunt’. See the agentive compounds, typically including a generic object as the initial, in §5.1.5.

4.3 Pronouns

4.3.1 Basic personal pronouns

The pronominal categories are first person (1Sg and 1Pl), second person (2Sg and 2Pl), third human (3Sg and 3Pl), nonhuman (with no obligatory number distinction), and logophoric (LogoSg and LogoPl). The logophoric “pronoun” is the most nounlike of these forms. Antecedents for logophorics are third person referents, less often second person (§18.2.1). There are also transpersonal reflexive markers for nonsubject categories (§18.1), but they are bound morphemes outside of the regular pronominal system.

The independent, accusative, and preverbal subject pronouns are identical in form, except that 1Sg has a special accusative *má*. This category also has other forms of the shape *mv* with variable vowel, including postnominal possessor *mà* (§6.2.3) and *mí-* in the ‘it’s me’ form.

Subject-pronominal suffixation on the verb (or other predicate) is very limited. In all AMN (aspect-mood-negation) categories the singular-subject category is unmarked. Depending on the particular AMN category, the plural-subject category is either unmarked (converging with the singular) or has a marked suffix used equally for 1Pl, 2Pl, and 3Pl. Subject-pronominal suffixation is therefore limited to at most a singular/plural opposition, with no marking of person (first, second, third). Because of this, either clause-initial independent pronouns in subject function (in main clauses) or preverbal subject pronouns (in non-subject relative clauses) are needed to determine the pronominal-subject category.

(54) Personal pronouns

			subject		
	indep.	accusative	preverbal	suffixed	‘it’s __’
1Sg	*íⁿ*	*má* [!]	*íⁿ*	*-∅*	*mí=ýⁿ*
				(for *mí=ý* see below)	
1Pl	*ɛ́mɛ́*	*ɛ́mɛ́*	*ɛ́mɛ́*	[marked]	*ɛ́mɛ́=́:*
2Sg	*ú*	*ú*	*ú*	*-∅*	*ú=ý*
2Pl	*é*	*é*	*é*	[marked]	*é=ý*

3HumSg	*wó*	*wó*	*wó*	*-∅*	*wó=ý*
3HumPl	*bé*	*bé*	*bé*	[marked]	*bé=ý* ~ *bé=ː́*
Nonh	*kó*	*kó*	*kó*	*-∅*	*kó=ý*
LogoSg	*ɛ̀nɛ́*	*ɛ̀nɛ́*	*ɛ̀nɛ́*	*-∅*	*ɛ̀nɛ́=ː́*
LogoPl	*ɛ̀nɛ́ bè*	*ɛ̀nɛ́ bè*	*ɛ̀nɛ́ bè*	[marked]	*ɛ̀nɛ́ bè=ỳ* (~ *ɛ̀nɛ́ bè=ː̀*)

'It's me [focus]' is phonetic [mí:] and could be transcribed as *mí=ý*^{n} parallel to 2Sg *ú=ý* etc. or as *mí=ː́* parallel to 1Pl *ɛ́mɛ́=ː́*. It could also be taken as unsegmentable *mí:* on the grounds that it is the only irregular focused pronoun, i.e. it is not directly derived from the corresponding independent (and preverbal subject) form. See discussion of (317c) in §11.2.1.1 for possible evidence in favor of *mí:* .

In possessives (for kin terms as well as alienable nouns), a pronominal possessor normally precedes the possessed NP and takes the same form as in the independent, accusative, and preverbal-subject series just illustrated. The exception is 1Sg alienable possessor, which is L-toned *mà* following (not preceding) the possessed NP, see §6.2.3 below. If the noun has an additional modifier, any pronominal possessor can be postnominal, in combination with particle *kè* (originally 'thing' in apposition to the possessed noun X), as in *X [ú kè]* 'your-Sg X', see (133-4) in §6.2.3.

4.3.2 Personal pronouns as complements of postpositions

For all categories except 1Sg, the form of a pronoun used before a postposition is the same as in independent, accusative, and preverbal subject functions as detailed just above.

For 1Sg, we have dative *má=ǹ* 'to/for me' (§8.1.1). The more noun-like spatial postpositions show 1Sg possessor *mà* following the noun-like element, as in *kú*^{n} *mà* 'on me, over me, on my head' (§8.2.3) and several similar examples. The morpheme *gí:*^{n} ~ *gì:*^{n} 'like', which does not pattern as a true postposition, has 1Sg *má gí:*^{n} 'like me' (§8.4.1). Similarly, purposive 'because of me' is *má gɛ̂:* (§8.3.1.1).

4.4 Demonstratives

4.4.1 Demonstrative pronouns and definite morphemes

The resources in TgK for expressing discourse definiteness are these:

(55) a. tonal definiteness marking (final L-tone on noun)
b. preposed *kó* (§4.4.1.3) 'that (same)'
c. postposed near-distant demonstrative *yɔ́:* 'that (just mentioned)' (§4.4.1.2)

kó and *yɔ́:* are stronger discourse deictics and are usually best translated by 'that' in the discourse-internal sense. Of the two, *yɔ́:* is appropriate when the referent in question has just been mentioned, while *kó* can dredge up an older discourse referent.

4.4.1.1 Tonal definite (final L-tone)

Weak discourse definiteness, as when an entity is referred to several times after its initial introduction, is typically expressed tonally. However, a noun or NP that already ends in an L- or <HL>-toned syllable) cannot audibly distinguish definite from indefinite in this fashion. This applies to heavy possessed nouns with {HL} overlay, to NPs with plural *bè*, and to a few numerals with /HL/ or /LHL/ melody.

Examples of tonal definites are in (56). Recall that all uncompounded common nouns and adjectives (as opposed to proper nouns), and some numerals, are lexically /H/- or /LH/-toned, i.e. their melodies end in an H-tone. This makes it possible to audibly distinguish the definite form by adding a final L-tone element at the right edge. In (56a), we see that a final H-toned *Cv* syllable becomes L-toned if there is at least one preceding H-toned syllable, but <HL>-toned if there is no preceding H-tone. We also see that a final <LH>-toned syllable becomes <LHL> regardless of how many syllables the stem has. In the transcription, superscript $^{+L}$ indicates a local (not word-level) tone at the right edge. This superscript is not a phonetic diacritic and can be disregarded in pronunciation; it merely indicates that the final L-tone is a morphological add-on.

(56)	noun/NP	definite	gloss
	a. bisyllabic and longer stems		
	H.(H…).H to H.(H…).L		
	sí:nɛ́	*sí:nɛ̀* $^{+L}$	‘knife’
	túŋúr^{n}*ú*	*túŋúr*^{n}*ù* $^{+L}$	‘stool’
	hákílɛ́	*hákílɛ̀* $^{+L}$	‘mind, attention’
	úr^{n}*í:*	*úr*^{n}*ì:* $^{+L}$	‘children’
	L.(L…).H to L.(L…).<HL>		
	nùmɔ́	*nùmɔ̂* $^{+L}$	‘arm, hand’
	wòrú	*wòrû* $^{+L}$	‘field’
	nàŋá	*nàŋâ* $^{+L}$	‘cow’
	gìr^{n}*í*	*gìr*^{n}*î* $^{+L}$	‘house’
	là:rá	*là:râ* $^{+L}$	‘area near village’
	tɔ̀ŋɔ̀r^{n}*ɔ́*	*tɔ̀ŋɔ̀r*^{n}*ɔ̂* $^{+L}$	‘truth’
	L.(L…).<LH> to L.(L…).<LHL>		
	ɔ̀gɔ̌^{n}	*ɔ̀gɔ̌̂*^{n} $^{+L}$	‘chief, Hogon’
	òtě:	*òtě̂:* $^{+L}$	‘well’
	ìnǎ:	*ìnǎ̂:* $^{+L}$	‘mother’
	sìrìwé	*sìrìwê* $^{+L}$	‘folding knife’
	L.(L…).<HL> unchanged		
	àr^{n}*á-ỳ*^{n}	*àr*^{n}*á-ỳ*^{n} $^{+L}$	‘boy’
	b. monosyllabic stems		
	<H> to <HL>		
	ɛ́:^{n}	*ɛ̂:*^{n} $^{+L}$	‘soda ash’
	í:^{n}	*î:*^{n} $^{+L}$	‘child’
	dí:	*dî:* $^{+L}$	‘water’
	<LH> to <LHL>		
	ɲɛ̌	*ɲɛ̌̂* $^{+L}$	‘woman’
	nǎ	*nǎ̂* $^{+L}$	‘person’

c. compounds and noun-adjective sequences

bàrà-nɔ̀w^{n}ɔ́	*bàrà-nɔ̀w^{n}ɔ̂* $^{+L}$	‘wild animal’
yɛ̀ ná:	*yɛ̀ nâ:* $^{+L}$	‘old (=adult) woman’
X^{L} pɛ̌^{n}	*X^{L} pɛ̌^{n}* $^{+L}$	‘old X’
gìr^{n}ì pírí	*gìr^{n}ì pírì* $^{+L}$	‘big (=adult) person’
nà gàrá	*nà gàrâ* $^{+L}$	‘white house’

d. noun-numeral sequences (see discussion below)

X^{L} túnɔ́	*[X tùnɔ̂]* $^{L+H+L}$	‘one X’ (adjective)
X túrú	*[X tùrû]* $^{L+H+L}$	‘one X’ (numeral) (< *túrú*)
X tà:nú	*[X tà:nû]* $^{L+H+L}$	‘three X’s’ (< *tà:nú*)
X kúré:	*[X kùrê:]* $^{L+H+L}$	‘six X’s’ (< *kúré:*)

e. prosodically light possessed nouns with {H} overlay

X ^{H}kíné	*X ^{H}kínè* $^{+L}$	‘X’s soul, shadow’ (*kìné*)
X ^{H}áná	*X ^{H}ánà* $^{+L}$	‘X’s village’ (*àná*)

Although *àr^{n}á-ỳ^{n}* ‘boy’ does not audibly change in isolation, the distinction between unmarked and definite forms is audible when a demonstrative is added: unmarked *àr^{n}à-y^{n}* ^{L}*yɔ́:* ‘that (near-distant) child’ (demonstrative controls tone-dropping on noun), definite *àr^{n}á-ỳ^{n}* ^{L}*yɔ̀:* ‘that child’ (demonstrative is tone-dropped).

The local attachment of L-tone to the right edge is quite distinct from, say, a word-level {HL} overlay. For example, lexically /H/-toned *túŋúr^{n}ú* ‘stool’ has definite form *túŋúr^{n}ù* $^{+L}$ (56a), which happens to end up as H.H.L, but as a possessed noun with true {HL} overlay it is *[X ^{HL}túŋùr^{n}ù]* ‘X’s stool’ with H.L.L.

The subtlety lurking in these data is the tones of the noun X and the numeral in the noun-numeral sequences in (56d) above. Although the definiteness-marking local L-tone is added at the end of the numeral, the noun is also tone-dropped in that example. Moreover, the numeral itself is {L}+H-toned, as it is before a demonstrative (§6.5.2). This is therefore the {L}+H overlay (§3.7.3.7), controlled by the definite marker (as it is by demonstratives). To this is added a terminal L-tone (tonal definite), resulting in {L}+H+L. Syllabically, the output is L.(L…).<HL> for nonmonosyllabics with the falling tone realized on the final syllable, and <LHL> for monosyllabics. Examples are in (57).

(57)	unmarked	definite	gloss
a.	*ɲɛ̌ tà:nú*	*[ɲɛ̀ tà:nû]* $^{L+H+L}$	‘(the) three women’
b.	*ɲɛ̌ kúré:*	*[ɲɛ̀ kùrê:]* $^{L+H+L}$	‘(the) six women’
c.	*ɲɛ̌ sɔ̂:*	*[ɲɛ̀ sɔ̌̂:]* $^{L+H+L}$	‘(the) seven women’
d.	*ɲɛ́ tɛ́mdɛ́rɛ̀*	*[ɲɛ̀ tɛ̀mdɛ̀rɛ̂]* $^{L+H+L}$	‘a/the hundred women’

While adjectives and common nouns always end lexically in an H-tone, there are a few numerals that end in an L-tone (e.g. ‘7’, ‘hundred’). If tonal definite marking had applied to N-Num in the same manner as N-Adj, i.e. with just an incremental final L-tone, there would have been no audible difference between unmarked and definite forms in (57c-d). Indeed, there is no difference (audible to me) between unmarked and definite forms of {HL}-toned possessed nouns (no great loss since possession usually implies definiteness), or of the tonally unusual frozen compounds *àr*^{n}*á-ỳ*^{n} ‘boy’ and *ɲɛ̌-ỳ*^{n} ‘girl’.

A textual passage illustrating the use of this definite marking is (58). Here a new discourse referent is introduced as unmarked (indefinite) *yɛ̀*^{L} *ná:* ‘an old woman’. Subsequent references to her, of which only one is included in this excerpt, are in the definite form *yɛ̀*^{L} *nâ:*$^{+L}$ ‘the old woman’.

(58) *[yɔ̂-ŋ* *wó* *gɛ́-ɛ̀]*
[like.that 3SgSbj say-and.SS]
[yɛ̀^{L} *ná:]* *kéŋɛ̀rɛ̀-kéŋɛ̀rɛ̀* *mà,*
[**woman**^{L} **old**] listen-listen (§11.6.7) and.then,
î: *[î:*$^{n+L}$ ^{L}*nɔ̀:]* *jágà* *nù-nù:-lí* *wà,*
hey! [child.Def^{+L} ^{L}this] lo! Rdp-die-PfvNeg Quot,
jágà *wó* *nɔ̂-ŋ* *wó=ǹ* ^{HL}*bír-ɛ̀* *mà→* *wà,*
lo! 3SgSbj like.this 3Sg=Dat ^{HL}do-Pfv Q Quot,
[yɛ̀^{L} *nâ:*$^{+L}$*]* *gò-é:→*
[**woman**^{L} **old.Def**$^{+L}$] go.out-and.SS
‘When she (=spirit of dead girl) said (= sang) like that, **an old woman** was listening. She (=old woman) said, “wow, this child indeed did not die (naturally).” She (=old woman) asked (=wondered), had she (=the girl’s stepmother) [focus] done this to her? **The old woman** went out.’ (2011.1b.01)

The “definiteness” (i.e. ready identifiability) of a conspicuous or sole member of a set (the sun, one’s home, one’s village, etc.) does not count as discourse definiteness, even when the listener is assumed to understand the reference, and is not marked tonally as definite.

(59) a. *í*^{n} *gìr*^{n}*í* ^{L}*yà:-jù*
1SgSbj **house** ^{L}go-Ipfv
‘I am going home (=to the house).’
(can also mean ‘I am going to the village.’)

b. *nù-nùŋú* *ú* ^{L}*tɛ̀gɛ̀-jù*
sun 2SgObj ^{L}burn-Ipfv
‘The sun will burn you-Sg.’

A difficulty in parsing TgK is that the same local right-edge L-tone element can also mark tonal locatives (§8.2.1) and, less importantly, the tonal topic marker (§19.1.1). For *túnɔ́* ‘one’ (adjective), there is an audible tonal distinction between tonal definite and tonal locative. For purposes of definite marking, *túnɔ́* is treated tonosyntactically as a numeral, so the phrase gets the {L}+H overlay preceding the definite L-tone: definite *[ɲɛ̀ tùnɔ̂]*$^{L+H+L}$ ‘the one woman’. The tonal locative treats *túnɔ́* as an adjective, so the definite L-tone only affects the final syllable: *ɲà*^{L} *túnɔ̀*$^{+L}$ ‘in one (=the same) place’. For other nouns and adjectives, there is no overt difference between definite and locative tonal forms. See §8.2.1 for discussion of how the two can be identified in texts. There are some textual examples that could be parsed either way.

4.4.1.2 ‘This/that’ deictic demonstrative pronouns (*nɔ́:*, *yɔ́:*, *érú kɔ́* ~ *é kɔ́*)

Proximate *nɔ́:* ‘this’ and near-distant *yɔ́:* ‘that (over there)’ are the primary deictic categories, i.e. they can be accompanied by pointing. (For L-toned versions ^{L}*nɔ̀:* and ^{L}*yɔ̀:*, see below.)

Each has distinct singular and plural forms. ^{L}*bàŋà*, a special variant possessed form of *bàŋá* ‘owner’ (not the usual possessed form, see the end of this section) follows the demonstrative if the referent is human singular. The human plural counterpart is *nà* (compare Jamsay *nám*). I do not mark it as tone-dropped since it is always L-toned. Plural particle *bè* is usually not added to an already plural-marked demonstrative with *nà*.

For the far-distant/definite category, a structurally distinct form *érú kɔ́* is basic. It looks morphologically like a relative clause with nonhuman head (‘… that is over there’), but it is somewhat frozen and can be used with a human referent. In the far-distant sense, a human referent can be expressed by a more transparent copular relative (ending in singular *wɔ́* ^{L}*bàŋà*, plural *wé nà*), cf. (465a,e) in §14.1.9.6. In the discourse-definite sense, ‘that (same) one’ (i.e. that we were talking about before), only *érú kɔ́* has been observed even for human referents. The discourse-definite sense appears to be rare and did not occur in recorded texts. The usual definite markers in NPs are the tonal definite (weak discourse-definite), and prenominal *kó* (strong discourse-definite).

(60)

category	singular		plural
	nonhuman	human	
a. simple			
Proximate	*nɔ́:*	*nɔ́* ^{L}*bàŋà*	*nɔ́: nà*
Near-Distant	*yɔ́:*	*yɔ́* ^{L}*bàŋà*	*yɔ́: nà*
b. relative-clause type (far-distant or definite)			
either sense:	*érú kɔ́*	*érú kɔ́* ^{L}*bàŋà*	*érú kɔ́ nà*
Far-Distant sense also:		*érú wɔ́* ^{L}*bàŋà*	*érú wé nà*

In allegro speech, *érú kɔ́* may reduce to *é kɔ́*. For postnominal *kô:*, which functions like the more common prenominal discourse-definite *kó*, see the end of §4.4.1.3 below.

Combinations of the proximate demonstratives with nouns are in (61).

(61)

gloss	noun		‘this/that …’	‘these/those …’
	singular	plural		
‘stick’	*bá:gá*	*bá:gá bè*	*bà:gà*^{L} *nɔ́:* *bà:gà*^{L} *yɔ́:*	*bà:gà*^{L} *nɔ́: nà* *bà:gà*^{L} *yɔ́: nà*
‘sheep’	*péjú*	*pégú bè*	*pèjù*^{L} *nɔ́:* *pèjù*^{L} *yɔ́:*	*pèjù*^{L} *nɔ́: nà* *pèjù*^{L} *yɔ́: nà*
‘person’	*nǎ*	*nǎ bè*	*nà*^{L} *nɔ́* ^{L}*bàŋà* *nà*^{L} *yɔ́* ^{L}*bàŋà*	*nà*^{L} *nɔ́: nà* *nà*^{L} *yɔ́: nà*

The proximate and near-distant demonstratives can also be added to nouns (with or without modifiers) that are already marked for definiteness by a final L-tone added to the right edge. In this case, the noun otherwise surfaces with its lexical tones, but the demonstrative is tone-dropped. This is illustrated in (62), where the nouns are *bá:gá* ‘stick’ and *nǎ* ‘person’, whose lexical melodies appear in the definite column. See also ‘this child’ in (58) above.

(62)	unmarked	definite	gloss
a.	*bà:gà*^{L} *nɔ́:*	*bá:gà*$^{+L}$ ^{L}*nɔ̀:*	‘this stick’
	bà:gà^{L} *yɔ́:*	*bá:gà*$^{+L}$ ^{L}*yɔ̀:*	‘that (near-distant) stick’
b.	*nà*^{L} *nɔ́* ^{L}*bàŋà*	*nǎ*$^{+L}$ ^{L}*nɔ̀* ^{L}*bàŋà*	‘this person’
	nà^{L} *yɔ́* ^{L}*bàŋà*	*nǎ*$^{+L}$ ^{L}*yɔ̀* ^{L}*bàŋà*	‘that (near-distant) person’

L-toned ^{L}*nɔ̀:* and ^{L}*yɔ̀:* also occur in certain other combinations including a numeral or a possessor. The string preceding the demonstrative takes {L}+H tonal form in this case. The likely historical origin is that the H-tone of the demonstrative jumped leftward onto the final syllable or mora of the preceding string. However, this does not work clearly as a synchronic analysis. See §3.7.3.5 for details.

Demonstratives like *nɔ́:* may be used absolutely, as in ‘take this!’. As modifiers, they follow NPs consisting of a noun plus any modifying adjectives and/or a numeral. In a sequence N-Adj-Num-Dem, the demonstrative licenses optional Adjective-Numeral Inversion (§6.4.2), to N-Num-Adj-Dem, and this has implications for the tonosyntax. For more on the linear and tonal structure of the combinations, see §6.5.

The L-toned ^{L}*bàŋà* in human singular demonstratives like *nɔ́* ^{L}*bàŋà* ‘this one’ is striking. One would have expected #*nɔ́:* ^{H}*báŋá*, since the regular possessed form of *bàŋá* ‘owner’ is {H}-toned ^{H}*báŋá*, and since there are many possessive-type compounds ending in ^{H}*báŋá* (§5.1.9). The same unexpected L-toned following element occurs in *yɔ́:* ^{L}*tɔ̀gù* ‘that kind of thing’ and in *yɔ́:=ỳ* ‘it is that’ with final ‘it is’ clitic, for expected #*yɔ́:* ^{H}*tɔ́gú* (perhaps downstepped) and #*yɔ́:=ý*. Demonstrative-based manner adverbs such as *yɔ̂-ŋ* ‘like that’ also have a final L-tone.

However, these tone patterns are isolated. There is no productive tone-dropping of post-demonstrative words or clitics. For example, *yɔ́: sí:*^{n}*-kà*^{n} ‘the equivalent of that’ (i.e. ‘something like that’) has no tone-dropping or even downstep on H-toned syllable *sí:*^{n}. Therefore the irregular tone patterns in the preceding paragraph (*nɔ́* ^{L}*bàŋà*, *yɔ́:* ^{L}*tɔ̀gù*, *yɔ́:=ỳ*, *yɔ̂-ŋ*) should be viewed as synchronic vestiges of an older /HL/-toned form of the demonstrative stem. This would also allow a direct equation of *nɔ́:* and *yɔ́:* with Jamsay *núŋò* ‘this that’ and variant *yúgò* ‘this/that’.

4.4.1.3 Prenominal discouurse-definite *kó* ‘that (same)’

kó before a noun is ostensibly a nonhuman possessor pronoun. As in several other Dogon languages, however, this construction often marks the NP as strongly discourse definite (‘that [same]’), with at best an abstract, impersonal “possessor” denoting the situation, the discourse, or the like. This was observed by Prost (p. 17): “On peut parfois employer le pronom *ko* placé avant le substantif pour marquer qu’il s’agit de celui dont il est question, dont on a déjà parlé.”

The noun does take its regular possessed-noun overlay, so there is no overt difference between nonhuman possessor and discourse-definite marker. An {H}-toned possessed noun after *kó* is usually slightly downstepped, as it is following other possessors.

(63)	a. human	
	kó ^{L}*ì:*^{n}	‘the child’
	kó ^{L}*ɲɛ̀*	‘the woman’
	kó ^{H}*ár*^{n}*á*	‘the man’

b. nonhuman

kó ^{H}*gírⁿí*	'the house'
kó ^{H}*ɛ́rⁿɛ́*	'the goat'
kó ^{H}*tóŋùrⁿù*	'the stool'

My assistant also produced another construction, with {L}-toned noun as head of a relative clause whose other part is *kô:*, as in *gìrⁿì*^{L} *kô:* 'that (same) house'. The tonosyntax suggests that *kô:* is treated like postnominal demonstratives *nɔ́:* and *yɔ́:* (§4.4.1.2).

4.4.1.4 Anaphoric/logophoric demonstrative pronouns

No Jamsay-type anaphoric (e.g. logophoric) demonstrative pronoun forms occur in TgK.

4.4.1.5 *kùn* with definite locations

A morpheme *kùn* occurred twice in about an hour of recorded texts from Koporo-Pen (64a), and I was able to elicit additional examples. It seems to involve discourse definiteness, but only with respect to allative locations. (64a) occurred in the middle of a tale about a pair of twins who had been abandoned by their mother in the relevant village, but had been brought up else where (by God) and were now trying to find their mother. In (64b), 'house' (the home of the quoted speaker and the listener, i.e. his wife) is introduced in the main quotation and then referred to in the embedded quotation, which is to be spoken by the wife to the animals (who by that point will be at the couple's house).

(64) a. *[[[sǎⁿ bè]* ^{HL}*ínà:]* *dɛ̀nɛ́-ɲú* *gɛ̀:]*
[[[ReflPoss Pl] ^{HL}mother] seek-Ipfv for]
[àná kùn] *yɛ̀r-ɛ́:]* *[bé kɛ̂:ⁿ]*
[village **at.Def**] come-and.SS] [3PlSbj when.DS]
'when they came upon that (same) village in order to look for their mother, …' (2011.1b.04)

b. *bé ɛ̀nɛ́ dùw-î: gìrⁿí jê-∅ dè,*
3PlSbj LogoObj carry-MP house take.away-Pfv if,
[àrⁿá kà:ⁿ] [yɛ́ tɛ̀] ìsí dɛ̀nɛ́-dɛ̀nɛ́-dɛ̀nɛ́-dɛ̀nɛ́
[man too] [there.Def around] dog look.for-(iterated)
[[sǎⁿ ^{L}*kè]* ^{H}*gírⁿí]* *kùn]* *mɔ̌:-n-ɛ̀:* *mà*
[[ReflPoss ^{L}Poss] ^{H}house] **at.Def**] assemble-Caus-and.SS and.then,
'(He said to his wife:) When they (=wild animals) have carried and taken me to **the house**, (tell them) "the man for his part was seeking (=collecting) dogs around there and has assembled them at **his (afore-mentioned) house**, and …" ' (2011.1b.05)

c. *[káŋɛ̀ kùn]* *dɔ̌:-sɛ̂ⁿ*
[gold **at.Def**] arrive-Pfv.PlSbj
'They (=miners) reached the gold (that they were digging for).'

If indeed *kùn* is specifically a discourse-definiteness marker, it might be cognate to e.g. Jamsay definite *kùⁿ*. However, it might also be related to *kúǹ* ‘put’, cf. Jamsay stative *kùn* ‘be (put) in’. Or it could be a fusion from *kù plus dative *=ǹ*.

4.4.1.6 Possible dialectal definite morpheme

Prost (p. 17) states that the “pudyugu” dialect in the far north of the TgK zone has a postnominal determiner “ũ”, i.e. *uⁿ*. The reference is presumably to the Worou Kan language/dialect, which belongs to the same language/dialect group as TgK, and is spoken by people with the surname Poudiougo.

Whether this morpheme is related to *kùn*, or to the Jamsay definite morpheme *kùⁿ*, is unclear. In any case it may reflect the original morpheme that became the TgK tonal definite.

4.4.2 Demonstrative adverbs

4.4.2.1 Locative adverbs

The main locative adverbs are in (65). The alternation of proximate *n* and near-distant *y* in simple demonstratives recurs here in *nî* versus *yî*.

(65)

form	gloss
a. basic locational adverbs	
nî	‘here’
yî	‘over there’ (deictic)
yɛ̂	‘there’ (discourse-definite)
b. forms with *tɔ̀* ~ *tɛ̀*, location less precise	
íⁿ tɔ̀	‘(over) here’ (as opposed to ‘over there’)
yí tɔ̀	‘over there, around there’
yɛ́ tɛ̀	‘there’ (discourse-definite, nonspecific)

Discourse-definite *yɛ̂* should be distinguished from existential *yɛ́* ~ *yɔ́* (§11.2.2.1). They are likely two divergent reflexes of an original ‘there’. The existential particle is followed by L-toned variants of quasi-verbs ‘be’ and ‘have’, which may indicate that *yɛ́* ~ *yɔ́* originally had a falling tone. Synchronically, *yɛ̂* and *yɛ́* ~ *yɔ́* are distinct morphemes and may co-occur; see (328) and discussion in §11.2.2.1.

4.4.2.2 Emphatic and approximative modifiers of adverbs

The expressive adverbial *té→* ‘precisely’ is added to spatial and temporal adverbials to emphasize precise location. For example, ‘right here’ is *nî té→*, and *íyé té→* is ‘precisely today’ (French *aujourd’hui même*).

tɔ̀ ‘toward’ (§8.2.14) can be added to demonstrative adverbs to indicate approximate or nonspecific location: *ní tɔ̀* ‘around here (somewhere)’.

4.4.2.3 'Like this/that' (, ,)

In addition to combining a demonstrative with *gì:*^{n} 'like', as in *nɔ́: gì:*^{n} 'like this', there are some specialized demonstrative manner adverbs. The alternation of proximate *n* and near-distant *y* recurs in (66a).

(66)

form	gloss
a. deictic (or discourse-deictic)	
nɔ̂-ŋ	'like this'
yɔ̂-ŋ	'like that' (e.g. as just described)
b. definite	
kú:^{n}	'thus' (definite)

kú:^{n} is also very common clause-initially in the sense '(only) then (did…)'. This happens when the preceding clause denotes a necessarily prior (perhaps causal) eventuality.

For other 'like X' expressions, see §8.4.1.

4.4.3 Presentatives (*ùŋǒy*, *ùŋò* ~ *ùŋó*, *yògò*, *ègè*)

As predicate, *ùŋǒy* has presentative force ('here's …'). It also occurs in the form *ùŋò* with a following copula like *wɔ̂* or *kɔ̂* (§11.2.2.2) or a following locational quasi-verb *só* (§11.2.3), all of which begin with an H-tone (67a-d). The same segmental form, but with rising tone pattern, is *ùŋó* in (67e) before an L-tone. This suggests the possibility that *ùŋǒy* may be segmentable as *ùŋò=ý* with an H-toned form of the 'it is' clitic. The final *y* is not fully nasalized, probably because the *ŋ* is from *ŋg, preserved in some cognates like Ben Tey *úŋgòy*.

ùŋǒy occurs most often when the speaker is literally holding something out (a bag, a baby) to the addressee, i.e. in a clearly proximate context (67a). The shorter forms are normal when the referent object is not being held by the speaker.

(67) a.

[ú	^{HL}*sá:gù]*	*ùŋǒy*	—
["	*"]*	*ùŋò*	*kɔ̂*
[2SgPoss	^{HL}sack]	**here's**	be.NonhSbj

'Here's your-Sg bag.'

b.

[ú	^{HL}*dé-dè:]*	*ùŋò*	*wɔ̂*
[2SgPoss	^{HL}Rdp-father]	**here's**	be.HumSgSbj

'Here's your-Sg father.'

c.

ɛ́mɛ́	*ùŋò*	*wê*
1PlSbj	**here's**	be.HumPlSbj

'Here we are.'

d.

péjú	*[gìr*^{n}*í*	*bîn]*	*ùŋò*	*só*
sheep	[house	in]	**here's**	be

'Here's a sheep in the house.'

e. *[wó wà]* *ùŋó* *[bàrá tɔ̀]* *nú:* *^{L}yè-∅→*
[3Sg QuotSbj] **here's** [outback at] die ^{L}go.Pfv
'(She said:) "Look, he has died out (here) in the bush." ' (2011.1b.05)

Another form with similar sense, used with a following copula, is *yògò*. The spatial position in this case is near-distant, perhaps being near or in the custody of the addressee.

(68) a. *bígí* *[[ú* *^{H}júwɔ́]* *bîn]* *yògò* *só*
pen [[2SgPoss ^{H}pocket] in] **there's.NearDist** be
'There's the pen, in your pocket.'

b. *[ɲù:^{L}-tɛ̀:rɛ́* *wɔ̀^{n}]* *yògò* *kɔ̂*
[millet^{L}-heap Top] **there's.NearDist** be.NonhSbj
'(suppose that) there's a millet heap (over there)' (2011.1a.13)

The far-distant counterpart is *ègè*, again with a copula or locational.

(69) *nàŋá* *ègè* *kɔ́*
cow **there's.FarDist** be.NonhSbj
'There's the cow (over there).'

When they are combined with an overt predicate, these presentative morphemes are not themselves predicative. In this case, they function as simple adverbs. They have lexical /LH/ melody (*ùŋó*, *yògó*, *ègé*) before a verb beginning with an L-tone (70a-b). They have {L} tone (*ùŋò*, *yògò*, *ègè*) before a verb beginning with an H-tone (70c), or before another preverbal constituent such as a direct object regardless of its initial tone (70d).

(70) a. *í^{n}* *ùŋó* *yě-táŋà*
1SgSbj **here's** come-Prog
'I'm coming!' (said when one is called, cf. French *j'arrive!*)

b. *yògó* *bǐ-táŋà*
there's.NearDist do-Prog
'There he/she is (nearby), working.' (French *le\la voilà qui travaille*)

c. *ègè* *ɲí:-táŋà*
there's.FarDist eat-Prog
'There he/she is (distant), eating.'

d. *yògò* *nɔ̀w^{n}ɔ́* *jê:-táŋà*
there's.NearDist meat bring-Prog
'There he/she is (nearby), bringing the meat.'

4.5 Adjectives

As with nouns, there is no affixal marking of intrinsic categories (humanness, number) on adjectives.

4.5.1 Types of adjectives

(71) provides a fairly complete inventory of ordinary adjectives, in their postnominal modifying form. They are grouped here by segmental phonological shape. As with common noun stems, the lexical melodies are /H/ and /LH/. There is a significant set of stems ending in *u* (71a). A few adjectives have a reduplicative look (71h). *ɔ̀r^{n}ɔ́nɔ́nɔ́* 'smooth, sleek' (71j) is syntactically an expressive adverbial, see (219d) and discussion following. This is also likely for 'full' (71l), in view of its intonatonal lengthening. The remaining adjectives have shapes similar to those of nouns and verbs, with vowel-harmonic constraints applying if there are two or more syllables. The loanword *kàkî:* (71g) does not respect the vocalism rules applicable to native adjectives. For rhotic-medial *CvCv* stems, the parenthesized stative negative shows whether or not the stem is subject to *rv*-Deletion. In this sample, only *gàrá* 'big' undergoes this process (as does the verb *gàrá* 'go past').

(71) Adjectives

stem	gloss
a. bisyllabic with final *u*	
CvCu	
kélú	'cold'
ùjú	'small, slender'
ùjí^{n}	'small'
ɔ́gú	'fast'
dɔ̀ŋú	'skinny, lean'
mɔ̀ɲú	'bad, nasty'
kùɲú	'rough'
ɔ̀mú	'rotten'
yɛ́rú	'blue' (stative negative *yɛ̀rù*^{L} *= lâ*)
yɔ̀rú	'soft' (stative negative *yɔ̀rù*^{L} *= lâ*)
ɔ̀rú	'wet' (stative negative *ɔ̀rù*^{L} *= lâ*)
dùmú	'blunt (blade)'
ɲɛ́r^{n}ú	'lightweight' (stative negative *ɲɛ̀rù*^{L} *= lâ*)
gùrú	'long' (stative negative *gùrù*^{L} *= lâ*)
ɛ́lú	'sweet'
dògú	'thick'
CvCu	
yù:gú	'slow'
lɔ̀:jú	'over-ripe'
b. *Cv* and *Cv^{n}*	
kɔ̌	'decayed (wood)'
mǎ	'dry'
dɛ̌^{n}	'ripe but poorly-developed'
pɛ̌^{n}	'old'
gɛ́^{n}	'black'
sɛ́^{n}	'good'
bá^{n}	'red'

c. *Cv:*

nú:	‘hot’
sí:	‘pointed’
ɛ̌:	‘tight (rope)’
kɔ̌:	‘empty’
wá:	‘wide, spacious’

d. *CvC*

ɛ̌m	‘crowded’
ǎw^{n}	‘(animal) in good condition’
káŋ	‘big, fat’
ɲɔ̌w^{n}	‘ruined’

e. *CvCv*

dìní	‘well-fed’
pírí	‘white’ (stative negative *pìrì*^{L} *= lá́*)
kìrɛ́	‘difficult’ (stative negative *kìrɛ̀ = lá́*)
ìrɛ́	‘ripe; cooked’ (negated by verb: *ìrɛ̀-lí́*)
dègé	‘short; narrow’
sèré	‘diluted’ (stative negative *sèrè*^{L} *= lá́*)
kòró	‘unripe; raw; fresh (milk)’ (stative negative *kòrò*^{L} *= lá́*)
wóró	‘deep’
kàjá	‘fresh; undiluted’
már^{n}á	‘big, massive’ (stative negative *màr^{n}à*^{L} *= lá́*)
gàrá	‘big, adult’ (contracted stative negative *gà*^{L} *= lá́*)
dágá	‘small, young’
kàná	‘new’

f. *Cv:Cv*

nà:r^{n}á	‘easy’
kó:ró	‘useless, shiftless’

g. *CvCv:*

kàkî:	‘off-white’ (French *khaki*)

h. bisyllabic with reduplicated appearance

CvCv	
tɛ́tɛ́	‘bland’
ɲɛ́ɲɛ́	‘alive’
Cv^{n}Cv^{n}	
tɔ́^{n}tɔ́^{n}	‘sour; salty’
Cv^{n}Cv:^{n}	
sì^{n}-sí:^{n}	‘small’
Cv:Cv	
ɲí:ɲí	‘sharp’

i. trisyllabic

sɛ́mɛ́r^{n}ɛ́	‘tattered’
bóróĺú	‘viscous’
kágárá	‘bitter’

sɔ̀gɔ̀rɔ́	‘multicolored’
déméré	‘fat’
kúrúgú	‘dense’
yùgùjú	‘short, runty’

j. quadrisyllabic, with apparent final reduplication

ɔ̀r^{n}*ɔ́nɔ́nɔ́*	‘smooth, sleek’ (perhaps an expressive adverbial, cf. (219) in §8.4.6.1)

k. noun-adjective sequence, using exemplars for color categories

bèrù-ɔ̀rú	‘green’ (lit. “fresh grass”)
yɔ̀rɔ̀-pùr^{n}*ú*	‘yellow’ (lit. “néré-tree [*Parkia*] flour”)

l. expressive adverbial

jó→ ká^{n}	‘full (container)’, cf. *ká*^{n} ‘mouth; opening (of container)’ (*jó→* perhaps an expressive adverbial, cf. (214) in §8.4.6.1)

4.5.2 Distributive adjective iteration with {H}-{L} overlay

This construction has an {H}-toned first iteration of the adjectival stem, while the second and optional subsequent iterations drop to {L}, erasing the lexical melody. In the attested examples, all of which involve the adjective *dágá* ‘small’, the iterated sequence is chained to a noncognate following verb.

(72) a. *[dɛ̀r*^{n}*ɛ̀*^{L} *dágá*^{H}-^{L}*dàgà]* *[kó bínì]* *páŋá-jê:*
[crops^{L} **small**^{H}**-**^{L}**small**] [Nonh in] cross.plant-Ipfv
‘they will intersperse minor crops (among the millet)’ (2011.1a.03)

b. *[nùmɔ́ bè]* *[wàgà-tùmò*^{L} *dágá*^{H}-^{L}*dàgà-*^{L}*dàgà]*
[hand with] [mound^{L} **small**^{H}**-**^{L}**small-**^{L}**small**]
màŋá-sɛ̂^{n} *dè*
shape-Pfv.PlSbj if
‘they used to shape small round mounds (in rows) by hand and…’ 2011.1a.01

A tonally and semantically similar, but lexically frozen, iteration is *kɛ́wɛ́rɛ́-kɛ̀wɛ̀rɛ̀* ‘minor, secondary, miscellaneous (things)’.

4.5.3 Expressive adverbials with adjectival sense ‘flat’ (*pv́tv̀→*)

A set of expressive adverbials of the shape *pvtv→* with the basic sense ‘flat and wide’ and with sound-symbolic vocalism (§3.4.7) and /HL/ melody is found in TgK (73).

(73) ‘flat (and wide)’

pɔ́tɔ̀→	‘flat and wide and moderately thick, e.g. tortoise, nose’
pátà→	‘flat and wide (feet)’
pɛ́tɛ̀→	‘flat and small (e.g. hand, fan)’

4.6 Numerals

4.6.1 Cardinal numerals

4.6.1.1 ‘1’ (*túrú*, *túnɔ́*), ‘same (one)’, and ‘other’ (*pèré*)

‘1’ after a noun (or core NP) is *túrú* or *túnɔ́*. They differ in stem-class. *túrú* does not control tone-dropping on the preceding word(s), in other words it behaves like numerals ‘2’ and up. *túnɔ́* does control tone-dropping, so it functions as an adjective. Observe the tones of *péjú* ‘sheep’ in *péjú túrú* ‘one sheep’ and *pèjù*^{L} *túnɔ́* ‘one sheep, a sheep’. Likewise note the tones of *ɲɛ̌* ‘woman’ in *ɲɛ̌ túrú* ‘one woman’ and *ɲɛ̀*^{L} *túnɔ́* ‘one woman, a woman’.

Consistent with its stem-class, *túrú* is semantically a pure numeral—‘one’ as opposed to ‘two’ or ‘three’, perhaps answering a ‘how many?’ question. By contrast, *túnɔ́* is often used when a discourse referent is introduced, as at the beginning of a tale (‘there once was a little girl’). Both can also mean ‘(one and) the same’, predicating the identity of two ostensibly distinct referents: *kó túrú* ‘the same one’, *nà*^{L} *túnɔ́* ‘the same person, a single person’.

-túnɔ́ is attested in bahuvrihi compounds: *[gìrɛ̀:-ỳ*^{n}*]-túnɔ́* ‘one-eyed’.

My assistant rejected plurals #*túrú bè* and #*túnɔ́ bè*.

In recited counting sequences (‘1, 2, 3, 4, …’), the form is *tî→*.

The phrase: *nǎ: túrú, bɔ̌: túrú*, literally ‘mother one, father one’ (the other order is also common), means that the children in question are full siblings.

‘Other’ as adjective is *pèré*. Unlike *túrú*, but like *túnɔ́*, it functions as a modifying adjective. It therefore induces tone-dropping on a preceding noun or adjective: *pèjù*^{L} *pèré* ‘another sheep’ (*péjú*). The plural is *pèjù*^{L} *pèré bè* ‘other sheep-Pl’. *pèré* is also common as an adverb ‘otherwise’, ‘aside from that’, ‘elsewhere’.

4.6.1.2 ‘2’ to ‘10’

The numerals from ‘2’ to ‘10’ are in (74). For ‘2’ and ‘5’ there are slight differences between the form used after a noun and the form used in counting sequences (‘1, 2, 3, 4, …’). For ‘2’ the difference is that the vowel is lengthened in the counting form, but not after a noun or in isolation. This may reflect the influence of the preceding *tî→* ‘1’ in the counting sequence. For ‘5’ the difference is in the initial-syllable tone, which is low after a noun but high in counting or in isolation.

(74)	gloss	all-purpose	after noun	counting	isolation
	‘2’		*lɔ́y*	*lɔ́:y*	*lɔ́y*
	‘3’	*tà:nú*			
	‘4’	*nǎy*^{n}			
	‘5’		*nùnɛ́:*	*núnɛ́:*	*núnɛ́:*
	‘6’	*kúré:*			
	‘7’	*sɔ̂:*			
	‘8’	*sìlâ:*			
	‘9’	*tùwâ:*			
	‘10’	*pɛ́rú*			

‘2’ also has a reduced variant *lɔ̀:* used when phrased with pronouns: *kó lɔ̀:* ‘the two of them (nonhuman)’, *ɛ́mɛ́ lɔ̀:* ‘the two of us’. H-toned *lɔ́y* and L-toned *lɔ̀:* are both mutations from an original <LH>-toned *lɔ̌y, cf. *X lɔ̌: ságà* ‘X-two’ in compound numerals of the type ‘22’ (§4.6.1.3).

The final H-tone in ‘3’, ‘4’, and (postnominal) ‘5’ is likewise often dropped to L-tone in allegro speech, but the H-tone is heard in careful pronunciations or when phrased with a following element (such as a postposition).

A cardinal numeral has no tonal effect on preceding nouns (or adjectives), which therefore have the same tonal (and segmental) form as they have without the numeral.

4.6.1.3 Decimal multiples (‘10’, ‘20’, …) and combinations (‘11’, ‘59’, …)

The multiples of ‘10’ are given in (75). Those from ‘20’ up consist of a reduced form *pɛ̌-* of ‘10’, see *rv*-Deletion §3.5.3.2, plus the relevant single-digit numeral. The single-digit numerals that elsewhere have /LH/ melody, including ‘5’ as well as ‘3’ and ‘4’, become {L}-toned in this combination, even in careful pronunciation. The tone of *pɛ̌-* dissimilates to that of the following syllable except in ‘20’. The effect is that we have L-toned *pɛ̀-* in ‘60’ and ‘70’ and <LH>-toned *pɛ̌-* in the other combinations.

(75)	gloss	form
	‘10’	*pɛ́rú*
	‘20’	*pɛ̌-lɔ́y*
	‘30’	*pɛ̌-tà:nù*
	‘40’	*pɛ̌-này*^{n}
	‘50’	*pɛ̌-nùnɛ̀:*
	‘60’	*pɛ̀-kúré:*
	‘70’	*pɛ̀-sɔ̂:*
	‘80’	*pɛ̌-sìlâ:*
	‘90’	*pɛ̌-tùwâ:*

The archaic alternative for ‘80’ is *sùŋú*. From this an archaic combination for ‘90’ is produced: *sùŋú-pɛ́rú*.

Combinations from ‘11’ to ‘19’, ‘21’ to ‘29’, and so forth up to ‘99’ consist of the numeral for the decimal unit, then the corresponding single-digit numeral, then a final ‘-teen’ morpheme *ságà*. For ‘11’ to ‘19’, the ‘10’ stem has a variant *pɛ́rɛ̀:* . Examples: *pɛ́rɛ̀: túrú ságà* ‘11’, *pɛ́rɛ̀: tà:nú ságà* ‘13’, and *pɛ́rɛ̀: núnɛ́: ságà* ‘15’. Before *ságà*, ‘2’ has a slightly irregular form *lɔ̌:*, hence *pɛ́rɛ̀: lɔ̌: ságà* ‘12’.

‘25’ is *pɛ̌-lɔ́y núnɛ́: ságà*. This shows that ‘5’ has its {H}-toned form following a decimal numeral. ‘57’ is *pɛ̌-nùnɛ̀: sɔ̂: ságà*.

4.6.1.4 Large numerals (‘100’, ‘1000’, …) and their composites

The stems in (76) are usually noun-like morphosyntactically.

(76)		gloss	form	comment
	a.	‘hundred’	*tɛ́mdɛ́rɛ̀*	< Fulfulde
		[heard as *tɛ́mdɛ́rɛ́* before a modifying numeral]		
	b.	‘thousand’	*mùɲú*	
	c.	‘million’	*mílyɔ́*^{n}	< French

These can be followed by numerals that quantify over these larger units. The numerals ‘2’ and ‘5’ have their postnominal pronunciations, showing that ‘hundred’, ‘thousand’, and ‘million’ are morphosyntactically nouns. In the absence of a further demonstrative, *tɛ́mdɛ́rɛ̀* and *mílyɔ́*^{n} (but not *mùɲú*) induce tone-dropping on a following simple numeral.

(77)	a.	*péjú*	*tɛ́mdɛ́rɛ́*	^{L}*kùrè:*
		sheep	hundred	^{L}six
		‘six hundred sheep’		
	b.	*péjú*	*mílyɔ́*^{n}	^{L}*sɔ̀:*
		sheep	million	^{L}seven
		‘seven million sheep’		
	c.	*péjú*	*mùɲú*	*kúré:*
		sheep	thousand	six
		‘six thousand sheep’		

This difference between ‘thousand’ and the two other large numerals in tone-dropping on the following numeral is neutralized when a demonstrative is added. Now the common noun and the ‘hundred’ or ‘thousand’ term are tone-dropped (by the demonstrative), while the numeral has its normal tones.

(78)	a.	*[pèjù*	*tɛ̀mdɛ̀rɛ̀]*^{L}	*kúré:*	*yɔ́:*	*nà*
		[sheep	hundred]^{L}	six	Dist	Pl
		‘those six hundred sheep’				
	b.	*[pèjù*	*mùɲù]*^{L}	*tà:nú*	*yɔ́:*	*nà*
		[sheep	thousand^{L}	three	Dist	Pl
		‘those three thousand sheep’				

A large numeral involving hundreds or larger units can be followed by lesser numerals. The relevant common noun is often (but not always) repeated before a noninitial numeral on the order of thousands, hundreds, or ‘1-99’. This repetition can prevent confusion between e.g. ‘3210 sheep’ as in (79) and ‘3000 sheep (for) 210 (currency units)’.

(79)	*[péjú*	*mùɲú*	*tà:nú]*	*[(péjú)*	*tɛ́mdɛ́rɛ́*	^{L}*lɔ̀y]*	*[(péjú)*	*pɛ́rú]*
	[sheep	thousand	3]	[(sheep)	hundred	^{L}2]	[(sheep)	10]

‘3210 sheep’

4.6.1.5 Currency

As elsewhere in the region, the unit of currency corresponds to 5 CFA francs. It is called *bú:dú* (cf. Fulfulde *buudu*). Some of the more common combinations are often contracted, especially *bú ꜜtúrú* ‘one 5-CFA unit’. The unit *bú:dú* is used up to the million FCFA level, at which point *million* takes over (in the sense ‘one million FCFA’, not ‘5 million FCFA’).

4.6.1.6 Distributive iteration of numerals

A numeral from ‘1’ up can be iterated in distributive sense. For example, *lɔ́-lɔ́y* ‘two-two’ can mean ‘two at a time’, ‘by twos’, or ‘two each’.

(80)	a.	*ɛ́wɛ̀*$^{+L}$	*[nǎ*	*tú-túrú]*	*yě-táŋà*
		market.Loc^{+L}	[person	**one-one**]	come-Prog

‘People come to the market one at a time.’
[i.e. ‘People dribble into the market.’]

	b.	*bé*	*bɔ̀mbɔ́*^{n}	*nùnɛ́:-nùnɛ́:*	*ó-jú*
		3PlSbj	candy	**five-five**	give-Ipfv

‘They will give five candies each (=to each person).’

/túrú-túrú/ ‘one-one’ is reduced to *tú-túrú* by *rv*-Deletion (§3.5.3.2). This form is often used to suggest infrequency or wide scattering of individuals, cf. English *once in a while*. A syllable-final semivowel is dropped in the first iteration in *lɔ́-lɔ́y* ‘two-two’ and *nǎ-nǎy*^{n} ‘four-four’ (accidentally homophonous with *nǎ nǎy*^{n} ‘four people’).

Full pronunciations like *túrú-túrú* are also possible, especially in transparently distributive contexts (‘one each’) as opposed to more lexicalized functions (‘scattered, infrequent’). An example is (161a) in §6.6.3. The same section includes an example of adjective *túnɔ́-túnɔ́* ‘one each’ in distributive function.

‘Eleven-eleven’ is *pɛ́rɛ̀: túrú ságà túrú ságà*. The decimal term (‘10’, ‘20’, etc.) is not repeated if there is a following single-digit expression.

4.6.2 Ordinal adjectives

Ordinals are adjectives. They follow the relevant noun (or core NP) and control tone-dropping on it, like other modifying adjectives.

For ordinal ‘how-many-eth?’ (French *quantième*) *à:ŋà*^{L}*-nìr*^{n}*í*, see §13.2.7.

4.6.2.1 ‘First’ (*kò-kɛ̌:*) and ‘last’ (*dùnɔ́*)

The ordinal ‘first’ is *kò-kɛ̌:* . It has no phonological resemblance to a cardinal numeral ‘1’. I have hyphenated it since the two vowels are disharmonic.

The ordinal ‘last’ (i.e. final in a series) is *dùnɔ́*.

Both ‘first’ and ‘last’ are normal modifying adjectives, controlling tone-dropping on the noun.

(81) a. *nìŋìr^{n}ì*^{L} *kò-kɛ̌:*
day^{L} first
‘the first day’

b. *nìŋìr^{n}ì*^{L} *dùnɔ́*
day^{L} last
‘the last day’

An expression like *gìr^{n}ì* ^{L} *kò-kɛ̌:* ‘(the) first house’ can have a range of temporal interpretations, as in ‘after the bridge, it’s the first house on the left’, and in ‘that was the first (=oldest) house ever built in the village’. It is not, however, used in contexts like ‘I am first (in my class) in English’; this is expressed as ‘I̲ [focus] have the front in English’ (*gíré mí: sɔ́*).

4.6.2.2 Other ordinals (suffix *-nìr^{n}í*)

Other ordinals are formed by adding *-nìr^{n}í*) to the numeral, whose tones are dropped. There are irregular contractions of the base numeral to *Cv-* shape in ‘second’, ‘third’, and ‘fourth’ (82). Other forms are regular, e.g. *nùnɛ̀:*^{L}*-nìr^{n}í* ‘fifth’ and *pɛ̀rù*^{L}*-nìr^{n}í* ‘tenth’.

(82) Irregular ordinals ‘2nd’ to ‘4th’

simple numeral	ordinal	gloss of ordinal
lɔ́y	*lɔ̀*^{L}*-nìr^{n}í*	‘second’
tà:nú	*tà*^{L}*-nìr^{n}í*	‘third’
nǎy^{n}	*nà*^{L}*-nìr^{n}í*	‘fourth’

Ordinals of numerals for larger quantities are illustrated in (83). All tones are dropped before *-nìr^{n}í*.

(83) More ordinals

decimal	
[pɛ̀-lɔ̀y]^{L}*-nìr^{n}í*	‘twentieth’
decimal plus single-digit numeral	
[pɛ̀rɛ̀-tùrù-sàgà]^{L}*-nìr^{n}í*	‘eleventh’
hundred	
tɛ̀mdɛ̀rɛ̀^{L}*-nìr^{n}í*	‘hundredth’
hundred plus decimal numeral (two levels)	
[tɛ̀mdɛ̀rɛ̀ pɛ̀-lɔ̀y]^{L}*-nìr^{n}í*	‘hundred and twentieth’

4.6.2.3 Unsuffixed ordinal with ‘month’

Alongside the regular combination *ɔ̀:* ^{L} *tùwà:* ^{L}*-nìr*^{n}*í* ‘ninth month’ (e.g. of a job), from *ɔ̌:* ‘month’, there is a special form *ɔ̀:* ^{L}*túwá:* with the same literal sense but that specifically denotes ‘August’, i.e. a period just before the harvest when the granaries are often running low. The tones are different from those of the cardinal numeral combination *ɔ̌: tùwâ:* ‘nine months’.

4.6.3 Fractions and portions

‘Half’ is *péjéré* or *sâm*. With a possessor they are *[X péjɛ̀rɛ̀]* and *[X sâm]*, i.e. ‘half of X’. They are not exact fractions and may denote any significant subpart.

5 Nominal and adjectival compounds

Compounds functioning as nouns or adjectives are covered in this chapter. The word-classes of the components (the initial and the final) may be n[noun], a[djective], v[erb], num[eral], or a variable word-class (“x”). The initial and/or the final usually undergoes a tonal change versus its independent form. If “x” is a word-class type, the notation x̄ means that it keeps its independent tones, x̀ that it drops tones to {L}, x́ that it raises tones to {H}, and x̂ that it becomes {HL}-toned. For example, the (ǹ n̄) compound type consists of an initial noun with overlaid {L} followed by a noun with its regular tones. The notation ^{p}x means that the form has possessed-noun overlay, which is {H} or {HL} depending on the prosodic weight of the noun.

5.1 Nominal compounds

Nominal compounds contain (at least) two stems, usually one functioning as head and the other as modifier. Complex compounds with three or more stems can be broken down into two-part compounds in the usual hierarchical fashion; I try to bring this out using internal bracketing.

One of the longest compounds in the current lexicon is (84). The (ǹ n̄) compound *dà:gà*^{L}*-pàná* ‘supper’ consists of *dà:gá* ‘night’ (in tone-dropped form) plus *pàná* ‘food’. The compound functions (with its remaining H-tones dropped) as the initial of an (ǹ n̄) compound whose final is *ɲí:-ŋí*, an archaic nominalization of *ɲí:* ‘eat (meal)’, cf. the end of §4.2.1. This compound then functions as the initial in a possessive-type (n̄ ^{p}n) compound whose final is *tèŋé* ‘time’, which gets an {H} overlay as a bimoraic “possessed” noun.

(84) *[[dà:gà-pànà]*^{L}-^{H}*[ɲí:-ŋí]]*-^{H}*téŋé*
[[night-food]^{L}-^{H}[eat-Nom]]-^{H}time
‘dinner time’

5.1.1 Compounds of type (n̄ n̄)

In this type, both the initial and the final preserve their regular tones. I have no clear examples of this type in TgK.

5.1.2 Compounds of type (n̄ ǹ)

In this type, the final drops its tones while the initial has regular tones.

This is not a productive compound-formation pattern, but there are many multisyllabic nouns with compound-like appearance that end in an L-toned sequence like *Cv̀Cv̀*. In some cases, the initial and the final are more or less recognizable so the segmentation is clearcut (85).

(85) Transparent (n̄ ǹ) compounds with possessive-like sense

compound	gloss	components
púlɛ́:^{n}-^{L}tɛ̀rɛ̀	‘puffball’	*púlɛ́:^{n}* ‘Fulbe’, *tɛ́rɛ́* ‘penis’
wírí-^{L}pɔ̀rù	‘wild sesame’	*wírí* ‘gazelle’, *pɔ̀rú* ‘sesame’
[gɛ̀:-gí^{n}]-^{L}kɔ̀rù	‘vine (*Ipomoea*)’	*gɛ̀:-gí^{n}* ‘hungry person’, *kɔ́rɔ́* ‘hang (over a line)’
ɔ̀gɛ̌^{n}-^{L}sàjì:^{n}	‘colorful finch spp.’	*ɔ̀gɔ̀^{L}-í:^{n}* ‘wealthy person’, *sàjú* ‘bird’

These are interpretable semantically as a possessor followed by a possessed noun, e.g. the tongue-in-cheek ‘Fulbe (person)’s penis’ denoting a vaguely phallic puffball (*Podaxis*) that emerges vertically from the earth. It is possible that these compounds preserve an archaic {L} possessed-noun overlay of the sort found in several Dogon languages.

However, *àɲí:-^{L}kò:rò* ‘roselle variety’ is a variety of the cultivated plant *àɲú* ‘roselle’. *sá^{n}-^{L}gònò* ‘area where the community prays (on major religious holidays)’ consists of *sá^{n}* ‘prayer’ and *gònó* ‘pen, enclosure’.

In a number of other cases the initial and final are not recognizable, but the stem has the segmental and prosodic structure of a compound (86).

(86) Semantically opaque (n̄ ǹ) compounds

compound	gloss
ɛ́:^{n}-pùlɔ̀	‘bush (*Pergularia*)’
kɛ́lɛ́-gùgùrù	‘herb (*Commelina*)’
bùgú-tɔ̀rɔ̀	‘gray-headed sparrow’
sá:-jìnɛ̀	‘blister beetle’
dùmí:-tè:rè	‘grasshopper (*Acorypha*)’
kórú-kàjà	‘tree locust’
bádá-kùrɔ̀	‘gunpowder horn’

5.1.3 Compounds of type (ǹ n̄)

In this type, the final is a noun stem that keeps its regular tones, and functions semantically as the head. The initial drops its tones to {L} and functions as a modifier. This type is productive, though it gets competition from the possessive-type compound to be described below. In (87a), the tonal form of the noun corresponding to the initial is in parentheses in the comment.

(87) (ǹ n̄) compounds

compound	gloss	comment
a. simple (two stems)		
ìrì^{L}-ká^{n}	‘nipple’	“breast-mouth” (*írí*)
dògò^{L}-kɛ́nɛ́	‘back (body)’	“back(ward)-heart” (*dògó*)
nɛ̀nɛ̀ŋɛ̀^{L}-tárú	‘ganglion’	“groin-egg” (*nɛ̀nɛ̀ŋɛ́*)
màrùpà:^{L}-tùwó	‘rifle flint’	“rifle-stone” (*màrùpá:*)

nì:^{L}-tòló	‘cow-pea pod’	“cow.pea-pod” (*nǐ:*)

b. composite (three or more stems)

[nèŋèrè-kù^{n}]^{L}-tìmɛ́	‘kneecap’	“[knee-head]-cover”
[àr^{n}à-kù^{n}]^{L}-gìr^{n}í	‘man’s bedroom’	“[man-unmarried]-house”

In some compounds, one or both of the elements is semantically obscure, at least at the current stage of TgK lexicography.

(88) Partially obscure (ǹ n̄) compounds

compound	gloss	comment
[dògò-kɛ̀nɛ̀]^{L}-pɔ́r^{n}í	‘upper back’	“[back]-…”
à:gà^{L}-yɛ́gú	‘morning’	

A recurring issue in the study of Dogon nominal compounds is the fact that noun-adjective sequences and noun-noun compounds of the (ǹ n̄) type have the same tonal pattern and are difficult to distinguish, especially when the final element occurs in only one or two combinations.

5.1.4 Compounds with final verbal noun, type (ǹ VblN)

5.1.4.1 Verbal nouns with incorporated object

Noun-VblN compounds are a special case of the (ǹ n̄) type just described, above. The initial is a noun denoting a typical or generic object, or one whose reference is understood in context (and whose specificity is therefore backgrounded). The compound as a whole denotes a type of eventuality, or the result of an action.

(89) Compounds with abstractive verbal noun final

compound	gloss	comment
kà^{nL}-[ǒ-∅]	‘promise’	“mouth-give.VblN” (*ká^{n}*)
gìnɛ̀^{L}-[jùŋ-ú]	‘dozing’	“sleep-…VblN” (*gìnɛ́*)
gìnɛ̀^{L}-[ǎ-∅]	‘sleepiness’	“sleep-catch.VblN” (*gìnɛ́*)

In some cases, like ‘dozing’, it is not entirely clear what syntactic function the incorporated noun (here *gìnɛ́*) plays in the associated full clause type. As long as the noun is conventionally associated with the verb, it can be incorporated. This applies even to (defective) subjects in fixed subject-verb collocations like *dà:gá dě:* ‘night fall’ (§11.1.4), with verbal noun *dà:gà^{L}-[dě-∅]*.

5.1.4.2 Noun plus deverbal adjective

There are also cases where the “verbal noun” functions as an adjective modifying the noun. The modifier denotes an action that was involved in the making or modification of the object (compare English *pulled pork*, *roast beef*, *sliced bread*), and the preceding noun is the semantic head of the combination. The boundary between this and the abstractive type illustrated above is not always clear. However, to the extent possible I distinguish the adjectival examples by using a space rather than a hyphen.

(90) Compounds with adjective-like verbal noun final

compound	gloss	comment
tùwò^{L} *kàr-ú*	‘rock fracture’	“stone rip.VblN” (*tùwɔ́*)
pùr^{n}*ù*^{L} *jàŋ-ú*	‘cream of millet type’	“cream.of.millet pound.with.water.VblN”
nɔ̀w^{n}*ɔ̀ sìm-í*	‘grilled meat’	“meat grill.VblN”
pɔ̀rù yɔ̀gɔ̀rɔ̀-m-ú	‘ground sesame balls”	“sesame be.cooked-Caus-VblN”

5.1.5 Agentive and verbal-noun compounds of type (x̀ v́)

In these compounds, the verb appears in {H}-toned form as the compound final, and a representative noun (normally a typical direct object) appears in {L}-toned form as the initial. When this initial is based on a cognate nominal related to the verb, the compound superficially mimics a reduplication or iterative construction. The compound as a whole functions as an agentive. As noted in §4.2.6, above, uncompounded agentive derivatives are nonexistent.

(91) Agentive compounds

a. with cognate nominal as initial

gɔ̀:^{L}-^{H}*gɔ́:*	‘dancer’
gì:^{nL}-^{H}*gí:*^{n}	‘thief’
ɲì:r^{n}*ì*^{L}-^{H}*ɲí:*	‘assessor of fines’
sà^{nL}-^{H}*sár*^{n}*á*	‘pray-er, devout Muslim’
nùŋù^{L}-^{H}*núŋɔ́*	‘singer’
jɔ̀ŋù^{L}-^{H}*jɔ́ŋɔ́*	‘healer’
sìɲɛ̀^{L}-^{H}*síɲɛ́*	‘noisy, talkative, blabbermouth’
jà:gù^{L}-^{H}*já:gá*	‘merchant’
mànùgù^{L}-^{H}*mángá*	‘thinker; introspective person’
[tà-tàgà]^{L}-^{H}*tágá*	‘jokester’

b. with noncognate nominal as initial

ɲù:^{L}-^{H}*tɔ́:*	‘millet-harvester (who uproots stems)’
[tì-tìrì]^{L}-^{H}*yá:*	‘emissary’
pègù^{L}-^{H}*bírɛ́*	‘day-laborer’
ị̀ɲàr^{n}*à*^{L}-^{H}*ɲí:*	‘dandy, show-off’
kɛ̀ɲɛ̀^{L}-^{H}*árá*	‘(millet-)beer brewer’
sàjù^{L}-^{H}*dígɛ́*	‘one who drives off (chases away) birds’
ìwɛ̀^{L}-^{H}*dímɛ́*	‘ladies’ man’
dì:^{L}-^{H}*gɛ́rɛ́*	‘diviner of guilt who conjures images in water’
nùmɔ̀^{L}-^{H}*gɛ́rɛ́*	‘palmist (fortune-teller)’
màlà^{L}-^{H}*bírɛ́*	‘badly-behaved person’
bù:dù^{L}-^{H}*dá:ná*	‘treasurer’ (“holder of money”)

tùrà:bù^{L}-^{H}*lágá*	'Muslim fortune-teller'

c. with compound as initial

[kù^{n}*-ɔ̀:]*^{L}-^{H}*ɔ́:*	'seer'
[nùmɔ̀-sìjè]^{L}-^{H}*síjé*	'one who draws lines in sand'
[bìn-kɛ̀jɛ̀]^{L}-^{H}*kɛ́jɛ́*	'liar'

d. final includes derivational suffix

causative	
kɛ̀dùrù^{L}-^{H}*[kíw*^{n}*í-m]*	'diviner whose biceps quiver'
transitive	
kèrù^{L}-^{H}*[dígɛ́-rɛ́]*	'diviner who uses twigs'
mediopassive	
kɛ̀kɛ̀:^{L} *bɛ̀:*^{L}-^{H}*[dúw-ɛ́:]*	'dung beetle' ("beetle^{L} excrement^{L}-[carry-MP]")

These agentive compounds are distinct from verbal-noun compounds whose initial is an {L}-toned cognate nominal (or other fixed object) and whose final is a verbal noun (suffix *-ú* ~ *-í* ~ *-∅*), exemplified in the preceding section. The initial has the same {L}-toned form in both, but the finals differ both in vocalism and tones. For example, *nùŋù-núŋɔ́* 'singer' is distinct from verbal noun *nùŋù-[nùŋ-ú]* 'song singing'. The latter can also function adjectivally in the NP, as in (92).

(92) *[ɛ̀:*^{n}*-[tè-tè:]]*^{L} *nùŋù*^{L}*-[nùŋ-ú]*
[soda.ash-pot]^{L} song^{L}-[sing-VblN]
'(a/the) singing soda ash filtering pot' (2011.1b.01)

To further complicate the situation, the form that functions as the agentive compound can also serve as a compound verbal noun, though its final lacks the normal verbal-noun suffix and tones. *ɲù:*^{L}-^{H}*[dúw-ɛ́:]* is a compound agentive 'millet-carriers', but in (93a) it is the complement of 'begin', and therefore functions as a synonym of compound verbal noun *ɲù:*^{L}-^{H}*[dǔw-∅-∅]* 'millet-carrying'. (93b) is another example of an apparent compound agentive that functions as a compound verbal noun.

(93) a. *ɲù:*^{L}-^{H}*[dúw-ɛ́:]* *tɔ́rɔ́-sɛ̂*^{n}*]* *ú* *ɔ́-ɛ́*
millet^{L}-^{H}[carry-MP.**VblN**] begin-Pfv.PlSbj] 2SgSbj see-Pfv
'when you-Sg saw (=noticed) that they had begun the millet-carrying' (2011.1a.15)

b. *[kó wà]* *[pɔ̀ŋɔ̀*^{L}-^{H}*kɛ́jɛ́* *dɔ̌-ɛ̀]* *wà*
[Nonh QuotSbj] [fonio^{L}-^{H}cut.**VblN** arrive-Pfv] Quot
'(they) say "(the time for) fonio-cutting (=harvesting) has arrived." ' (2011.1a.25)

If the nominal initial of an agentive compound is itself possessed (or otherwise separately determined), it takes its independent (non-compound) form, and the otherwise {H}-toned verbal final appears with a possessed overlay, for example H.L.L if trisyllabic. So, in text 2011.1b.02, the (x̀ v́) agentive compound *sɔ̀:-kájúwá* 'affair-supervisor', i.e. '(house/business) manager' appears alongside the stacked possessor construction *[sǎ*^{n} *sɔ́:]* ^{HL}*kájùwà* '(the) supervisor of her (own) affairs'.

5.1.6 Possessive-type compounds (n̄ ^{P}n)

In some compounds, the tone patterns are the same as those of a possessive construction (cf. English *childs play*, *menswear*). The “possesssor” precedes the “possessed” element and has its regular tones. As described in §6.2.1, the possessed nouns is subject to tonal changes (^{P}n). In TgK, there are two productive possessor-controlled overlays, {HL} for heavy (trimoraic or longer) stems and {H} for light stems.

(94) Possessive-type compounds

cpd	gloss	components
a. light compound final, with {H}-tone		
dí: ^{H}*ɲá*	‘low ground’	“water ground”
búgú ^{H}*ɛ́:*^{n}	‘gunpowder soda ash’	“gunpowder soda.ash”
ɲɛ́: ^{H}*áw*^{n}*á*	‘bush (*Waltheria*)’	“fire parent-in-law”
kɔ́nú ^{H}*ségú*	‘cotton basket’	“cotton basket”
b. heavy compound final, with{HL}-tone		
jǎ ^{HL}*sá:gù*	‘burlap’	“fibre sack”
gùjú ^{HL}*yɔ́:wɔ̀*	‘goatskin waterbag’	“skin waterbag”
máná ^{HL}*yɔ́:wɔ̀*	‘rubber waterbag’	“plastic waterbag”
kɔ́nú ^{HL}*tógùrù*	‘cotton basket’	“cotton basket”
púlɛ́:^{n} ^{HL}*súgúrú-jé:lè*	‘spiral earring’	“Fulbe’s ear-…”

5.1.7 Compounds with *í:*^{n} ‘child’ and variants

-í:^{n} ‘child’ is a transparent final, pronounced without contraction, in (ǹ n̄) compounds like those in (95). In this form it is common with human and inanimate reference. It is also used in this form with terms for juvenile animals (but not for the most common livestock animals). The human compounds are pluralized, as expected, with the suppletive *-úr*^{n}*í:* ‘children’. The semantic nuance is indicated by italicized subheadings in (95). For the inanimates, the common feature is that the entity denoted by the compound is a small object associated in some way with a larger one. *tìmɛ̀-í:*^{n} occurs twice with different senses (‘fruit of tree’, ‘sapling’).

(95)

compound	gloss	initial
a. human		
literal ‘child of X’		
làrà^{L}*-í:*^{n}	‘sister’s child’	*làrá* ‘sister’
ɔ̀gɔ̀^{L}*-í:*^{n}	‘rich person’	*ɔ̀gɔ̌*^{n} ‘chief’, *ɔ̀gɔ́* ‘chiefhood’
member of a set		
sɔ̀tɔ̀rɔ̀^{L}*-í:*^{n}	‘man in his prime’	*sɔ́tɔ́rɔ́* ‘set of men in their prime’
jɛ̀ŋɛ̀^{L}*-í:*^{n}	‘twin’	*jɛ̀ŋɛ́* ‘pair of twins’
b. animal		
sɔ̀^{nL}*-í:*^{n}	‘colt’	*sɔ̌*^{n} ‘horse’
tòrù^{L}*-í:*^{n}	‘piglet’	*tórú* ‘pig’

*jɔ̀ⁿtùrù*ᴸ*-í:ⁿ*	'young donkey'	*jɔ̀ⁿtúrú* 'donkey'
c. inanimate		
unit		
*sɛ̀wɛ̀*ᴸ*-í:ⁿ*	'sheet of paper'	*sɛ́wɛ́* 'paper'
small but significant part of an object or assemblage		
*ɔ̀ⁿsàⁿ*ᴸ*-í:ⁿ*	'small burial pit'	*ɔ́ⁿsàⁿ* 'cemetery'
*nùmɔ̀*ᴸ*-í:ⁿ*	'finger'	*nùmɔ́* 'hand, arm'
*gìrè*ᴸ*-í:ⁿ*	'eyeball'	*gìré* 'eye(s')'
*kàrà*ᴸ*-í:ⁿ*	'spinning whorl'	*kárá* 'spinning gear'
*dìŋɛ̀:*ᴸ*-í:ⁿ*	'necklace jewel'	cf. *kɔ̀rɔ̀-dìŋɛ̌:* 'necklace'
*kɔ̀ⁿ*ᴸ*-í:ⁿ*	'daba blade'	*kɔ̌ⁿ* 'daba (hoe)'
small but significant adjunct to larger object		
*[ɲù:-nà:]*ᴸ*-í:ⁿ*	'round grindstone'	*ɲù:*ᴸ*-ná:* 'flat stone to grind on'
*àrⁿù*ᴸ*-í:ⁿ*	'lightning jolt'	*àrⁿú* 'rain'
plant product		
*kɛ̀nɛ̀*ᴸ*-í:ⁿ*	'pit (of any fruit)'	*kɛ́nɛ́* 'heart'
*kɔ̀nù*ᴸ*-í:ⁿ*	'cotton seed'	*kɔ́nú* 'cotton'
*jɔ̀wɔ̀*ᴸ*-í:ⁿ*	'onion bulb'	*jɔ̀wɔ́* 'onion'
*ɲù:*ᴸ*-í:ⁿ*	'millet grain'	*ɲú:* 'millet'
*ùmùrⁿù*ᴸ*-í:ⁿ*	'tamarind seed'	*ùmùrⁿú* 'tamarind'
*òrùwò*ᴸ*-í:ⁿ*	'jujube pit'	*òrùwó* 'jujube'
*tìmɛ̀*ᴸ*-í:ⁿ*	'fruit of tree'	*tìmɛ́* 'tree'
diminutive		
*dɛ̀ⁿ*ᴸ*-í:ⁿ*	'small waterjar'	*dɛ̌ⁿ* 'waterjar'
*tìmɛ̀*ᴸ*-í:ⁿ*	'sapling'	*tìmɛ́* 'tree'

In some cases, a stem-final short vowel does vanish, by vv-Contraction (§3.5.7.2). This happens with several of the most common livestock terms (96a), but also with a few plant-product terms (96b).

(96)	compound	gloss	initial
	a. animal		
	*nàŋ*ᴸ*-í:ⁿ*	'calf'	*nàŋá* 'cow'
	*ɛ̀rⁿ*ᴸ*-í:ⁿ*	'goat kid'	*ɛ̀rⁿɛ́* 'goat'
	*pèj*ᴸ*-í:ⁿ*	'lamb'	*péjú* 'sheep'
	*kòg*ᴸ*-í:ⁿ*	'chick'	*kògó* 'chicken'
	b. plant		
	*pɔ̀r*ᴸ*-í:ⁿ*	'sesame seed'	*pɔ̀rú* 'sesame'
	*ɛ̀:r*ᴸ*-í:ⁿ*	'(a) peanut'	*ɛ́:rɛ́* 'peanut(s)'
	*mɛ̀:n*ᴸ*-í:ⁿ*	'wild date pit'	*mɛ́:nɛ́* 'wild date (*Balanites*)'

Some other nouns look like frozen compounds of the type illustrated above, where the initial element does not occur separately. Examples: *kɔ̀rⁿí:* 'small intestine', *gɛ́rⁿí:* 'gear, equipment'.

All of the preceding cases end in a long *í:ⁿ*, making the connection with the noun *í:ⁿ* 'child' obvious, even if a final short vowel has been lost. However, there are also many nouns that end in *y*^{n}, *í*^{n}, or some other short nasalized vowel, in descending order of transparent segmentability.

(97)

compound	gloss	initial
a. human		
ɲɛ̌-ỳ^{n}	‘girl, daughter’	*ɲɛ̌* ‘woman’
àr^{n}*á-ỳ*^{n}	‘boy, son’	*àr*^{n}*á* ‘man’
	(tonally distinct from	
b. inanimate		
tùwɛ̌-y^{n} ~ *tùwɛ̌:*^{n}	‘small stone’	*tùwɔ́* ‘stone’
gìrɛ̌-y^{n} ~ *gìrè*^{L}*-í:*^{n}	‘eyeball’	*gìré* ‘(two) eyes’
[further reduced in *gìrè*^{n}*-túnɔ́ báŋà* ‘one-eyed person’)		

Some further nouns that may contain a trace of a frozen *-ý^{n}, or which may have become secondarily associated with the current compound type, include *gàrí*^{n} ‘kidney’, *dùwɔ̀lɛ̌*^{n} ‘eyeglasses’, *ì*^{nL}*-bǎy*^{n} ‘newborn baby’, *pùnǎy*^{n} ‘flour, powder’, *dɔ̌y*^{n} ‘pestle’, *tà:lɛ̌:*^{n} ‘proverb’. The situation is complicated by a phonological convergence with nouns ending in a nasalized vowel that reflects an original human number suffix, see §4.1.1.

5.1.8 ‘Man’ (*àr*^{n}*á*), ‘woman’ (*ɲɛ̌*, *yǎ:*, *yɛ̀*)

The uncompounded terms are *àr*^{n}*á* ‘man’ and *ɲɛ̌* ‘woman’. As adjectives, for ‘male’ we get *àr*^{n}*á* ‘male’, while for ‘female’ we get *yǎ:* for nonhuman or abstract referents and *ɲɛ̌* for humans. The latter also appears as final in some compounds.

ɲɛ̌ ‘woman’ takes variant forms as a compound initial, and as a noun in some fixed noun-adjective collocations. A recurrent form is *yɛ̀* (98b). The *ɲ/y* alternation is due to (diachronic) backward nasalization-spreading, see discussion in §4.1.2.

(98) Compounds with ‘woman’

a.	*yà:*^{L} *kú*^{n}	‘unmarried (or divorced) woman’
	ɛ̀gɛ̀^{L}*-yǎ:*	‘(woman’s) co-wife’ (*ɛ̀gɛ́* ‘husband’)
	tìrɛ̀^{L} *yǎ:*	‘kin on mother’s side’
b.	*yɛ̀*^{L} *kàná*	‘newlywed woman’ (“new woman”)
	yɛ̀^{L} *ná:*	‘old woman’
	yɛ̀^{L} *gàrá*	‘oldest woman’, ‘senior co-wife’
	yɛ̀^{L} *dágá*	‘junior co-wife’
	yɛ̀^{L}*-lǎ*	‘betrothal (of a girl, at birth)’
c.	*ɲɛ̀*^{L}*-nì:ní*	‘act of taking bride to her husband’
	ɲɛ̀^{L}*-gɔ̀rú*	‘wedding’
	ɲɛ̌-ỳ^{n}	‘girl’ (“woman-child”)
	àwà^{L} *ɲɛ̌*	‘mother-in-law’ (i.e. female in-law)
	gùnɔ̀^{L} *ɲɛ̌*	‘female slave’

Cf. also *yà:jú* ‘religious marriage’.

'Man' is more regular in compounds and noun-adjective combinations. However, *àr^{n}á* reduces in form in the combination *à^{nL} kàná* 'newlywed man'. 'Boy' is *àr^{n}á-ỳ^{n}*.

5.1.9 Compounds with 'owner' (n̄ ^{H}*báŋá*)

bàŋá 'owner (of possession), master (of slave)', in {H}-toned "possessed" form, occurs in many compounds with preceding NPs simple and complex. The initial has its usual tones. The sense may be fairly literal, as in (99a). The construction is also used to describe the physical or personality type of a person (99b), or to define a person by reference to an affliction or other characteristic (99c).

(99) 'Owner' compounds

compound	gloss
a. possession	
gìr^{n}í ^{H}*báŋá*	'house-owner, head of house(hold)', hence (with a possessor) 'spouse'
tó:ró ^{H}*báŋá*	'fetish (idol) owner'
b. physical or personality type	
jám ^{H}*báŋá*	'dynamic one (in sports)'
hákílɛ́ ^{H}*báŋá*	'quick learner'
tɛ́tɛ́ ^{H}*báŋá*	'arrogant person'
[gìrè^{L} mǎ] ^{H}*báŋá*	'nosy person'
c. affliction or other defining characteristic	
sùkɔ̀rɔ̀-nùr^{n}ú ^{H}*báŋá*	'diabetic person'
kù^{n}-lèrú ^{H}*báŋá*	'mildly crazy person'
[tɔ̀^{n} bàjú] ^{H}*báŋá*	'hunchback'

For {L}-toned ^{L}*bàŋà* in singular demonstratives (*nɔ́* ^{L}*bàŋà*, *yɔ́* ^{L}*bàŋà*), likely reflecting original falling-toned forms of the demonstrative, see (60) in §4.4.1.2.

5.1.10 Loose and tight compounds with *ná:* ('authentic', 'entire')

One can think of *ná:* as either a modifying adjective, or as a final in an {ǹ n̄) compound; the two constructions are tonally indistinguishable. I will write it with a space, as for noun-adjective combinations. In (100) the main semantic patterns are represented. The sense 'mother' may underlie some of these senses, especially (100b).

(100) Combinations with *ná:*

a. 'old (person)', especially female	
yɛ̀^{L} ná:	'old woman'
àn^{L} ná:	'old man' (synonym *àr^{n}à^{L} gàrá*)

b. ‘adult female (domestic animal)’

nàŋà^{L} *ná:*	‘(female) cow’
ɛ̀r^{n}*ɛ̀*^{L} *ná:*	‘nanny-goat’
pèjù^{L} *ná:*	‘ewe’

c. ‘entire plant’ (for any tree, shrub, or herb)

ɔ̀rɔ̀^{L} *ná:*	‘baobab tree’
màŋgòrò^{L} *ná:*	‘mango tree’

d. primary, prototypical, or large member of a set

àrùkò^{L} *ná:*	‘large boubou’
pɔ̀nù^{L} *ná:*	‘baggy pants (to knees)’
ɛ̀:rɛ̀^{L} *ná:*	‘groundnut’ (*ɛ́:rɛ́* ‘peanut or groundnut’)
tògù^{L} *ná:*	‘main palaver shed (of a village)’
gì^{L} *ná:*	‘extended family’ (*gìr*^{n}*í* ‘house’)
dùŋù^{L} *ná:*	‘elephant’ (cf. *dùŋ*^{L}*-yàrá* ‘lion’)
lù:rò^{L} *ná:*	‘rock python’ (prototypical snake)

e. larger of two paired objects

ɲù:^{L} *ná:*	‘flat stone for grinding on’

Occasionally a noun lends itself to two of these senses. In (100e), *ɲù:*^{L} *ná:* denotes a flattish, slightly concave stone on which one grinds millet (*ɲú:*) holding a small round stone in one’s hand. This smaller stone is called *[ɲù:-nà:]*^{L}*-í:*^{n}, literally ‘child of *ɲù:*^{L} *ná:*’, see §5.1.7. *ɲù:*^{L} *ná:* has a second sense, denoting the prototypical cultivar of millet, in contrast to various other cultivars. A special combination *ɲù:*^{L} *gɔ̌*^{n} is used in the sense ‘(entire) millet plant’, avoiding additional ambiguity of *ɲù:*^{L} *ná:* .

For nonprototypical or nonuseful species closely associated with an important or useful species (‘false jujube’, etc.), a miscellany of ad hoc devices are used. Examples are in (101).

(101)	term	gloss	literal sense
a.	*tǎ:* ^{HL}*órùwò*	‘false jujube’	“hyena’s jujube”
b.	*àɲù-bàlèmbá*	‘wild roselle’	“roselle-??”
c.	*ɛ̀:rɛ̀-múɲúr*^{n}*ú*	‘peanut’	“peanut/groundnut-???”

(101a) illustrates the use of a nonhuman animal possessor. “Hyena’s jujube” is the tree *Ziziphus mucronata*, whose fruits resemble those of true jujube (*Ziziphus mauritiana*) but are not eaten. ‘Wild roselle’ is *Hibiscus cannabinus* (including the former *H. asper*), which resembles the cultivated food plant roselle (*H. sabdariffa*) but is used, if at all, only for cordage fiber. In (101c), unmodified *ɛ́:rɛ́* subsumes peanut (*Arachis hypogaea*) and groundnut (*Vigna subterranea*), with the latter still treated as primary. The endings *-bàlèmbá* and *-múɲúr*^{n}*ú* in (101b-c) are opaque to a native speaker. *-bàlèmbá* improbably resembles *bálémbá* ‘champion’. *-múɲúr*^{n}*ú* may be a variant of *mùɲǐ*^{n} ‘Mossi’ (ethnic group of central Burkina Faso), perhaps crossed with the final of *ɲà:-múɲúr*^{n}*ú* ‘dream(n)’. For the Mossi connection compare Jamsay *mùɲù-ɛ́:rɛ́* ‘peanut’, literally “Mossi-peanut/groundnut”.

5.1.11 Natural-species compounds with medial *-nà:-*

The attested examples are in (102), in descending order of analysability. The tonal sequence is consistently *x̀-nà:-x́*.

(102)	compound	gloss	related form
	tɔ̀gù-nà:-tɔ́gú	‘woodpecker’	verb *tɔ́gɔ́* ‘(woodpecker) peck deeply (wood)’
	bàjù-nà:-bájú	‘wind scorpion’	verb *bàjá* ‘pull’ (said to drag its testicles)
	kɛ̀m-nà:-kɛ́m	‘earwig (insect)’	*kɛ̌*^{n} ‘pointed instrument (e.g. awl)’ (insect has a forked tail)
	kà: sèrù-nà:-sérú	‘grasshopper (*Acrida*)’	

Of possible relevance is *nì:-kùmàkú*^{n} ‘black-and-white cow-pea’, with *nǐ:* ‘cow-pea’. The final element might be segmented as *kù*^{n}*-mà-kú*^{n}. In fact, my assistant volunteered a connection with *kú*^{n} ‘unmarried’. One could alternatively connect it with *kú*^{n} ‘head’, thinking of the respective black and white tips.

5.1.12 Instrumental relative compounds (‘oil for rubbing’)

In a construction that has some resemblance to a relative clause, the head noun is {L}-toned and is followed by an imperfective relative verb form. This verb has the same stem tones as in ordinary imperfective relatives (when clause-final tone-dropping has not applied), except that the imperfective suffix is H-toned (indicated by $^{+H}$ superscript). /LH/-toned verb stems do not drop tones, as they often (but not always) do in ordinary imperfective relatives. Prosodically light /LH/-toned verbs (*Cv̌*, *Cv̌:* and *Cv̀Cv́*) are raised to {H}.

Unlike the Jamsay counterpart, which includes a generic 3Pl subject, TgK has no pronominal subject. If the head noun is not the logical direct object of the verb, the direct object may be specified, with its lexical tones, as with *ɲú:* ‘millet’ in (103b).

(103)	compound	gloss	verb
	a. without a separate object		
	bimoraic lexically /LH/-toned verb		
	dì:^{L} *nɔ́:-ɲú*$^{+H}$	‘drinking water’	*nɔ̌:* ‘drink’
	kòrò^{L} *bá-ɲú*$^{+H}$	‘trough for tapping’	*bàr*^{n}*á* ‘beat (tomtom)’
	ɲà^{L} *gó:-jú*$^{+H}$	‘exit, place to go out’	*gǒ:* ‘go out’ (2011.1b.05)
	[sɔ̀: pèrè]^{L} *bí-jí*$^{+H}$	‘something else to do’	*bìrɛ́* ‘do’ (2011.1a.02)
	mediopassive /LH/-toned verb		
	dì:^{L} *ìn-ɛ́:-ɲú*$^{+H}$	‘water for bathing’	*(dí:) ìn-î:* ‘bathe’
	ɔ̀jɔ̀^{L} *dɔ̀m-ɛ́:-ɲú*$^{+H}$	‘thing to wait for’	*dɔ̀m-î:* ‘wait for’ (2011.1a.04)
	b. with a separate object		
	gɔ̀:^{L} *ɲú: kúnɔ́-ɲú*$^{+H}$	‘granary for storing millet’	*kúǹ* ‘put’ (2011.1a.16)

The construction is productive and is not limited to a few lexicalized combinations.

(104) a.

bà^{n}^{L}	*jùgɔ́-má-ɲú*$^{+H}$
manner^{L}	know-Caus-Ipfv.Rel^{+H}

‘the way (=so that) (they) make it known’ (2011.1a.23)

b.

[[sɔ̀:^{L}	*pèrè]*^{L}	*bí-jí*$^{+H}$*]*	*kɔ̀:-rɔ́*
[[thing^{L}	other]^{L}	do-Ipfv.Rel^{+H}]	be.NonhSbj-Neg

‘there is nothing else to do’ (2011.1a.02) (*bìrɛ́*)

In another construction, which involves a direct object distinct from the head of the compound along with a transitive verb, the head is {L}-toned and is followed by a compound adjective consisting of an {L}-toned direct-object noun and a verbal noun with suffix *-ú* or variant (§4.2.4). In effect, the object/VblN combination functions as a compound adjective modifying the initial {L}-toned noun.

(105)

compound	gloss	components
lɔ̀gɔ̀^{L} *[gìr*^{n}*ì*^{L} *tàr-ú]*	‘earth for replastering’	*gìr*^{n}*í* ‘house’, *tárá* ‘replaster’
lɔ̀gɔ̀^{L} *[pàr*^{n}*ɛ̀:*^{L} *tɛ̌w-∅]*	‘earth for bricks’	*pàr*^{n}*ɛ́:* ‘mud brick’, *tɛ́wɛ́* ‘shape, mold (bricks)’

There is, finally, an archaic pattern with *nɔ̌:* ‘drink’ as compound final in bare-stem form (106). This pattern has not been found with other verbs.

(106)

compound	gloss	components
kàjù^{L}*-nɔ̌:*	‘calabash for drinking’	*kàjú* ‘calabash’
dɔ̀^{L}*-nɔ̌:*	‘waterjar for drinking’	*dɛ̌*^{n} ‘waterjar’

5.1.13 Other phrasal compounds

[bɔ̀:-ý^{n}*]-[kó:-rò]* ‘grasshopper sp. (*Diabolocatantops*)’ is so named because a person whose father is still alive should not eat it. It contains a contracted variant of *bɔ̀:-í:*^{n} ‘father’s child’ and a variant of *kô:-rò* ‘doesn’t eat (meat)’.

pùr^{n}*í:-mà:-ɲǎ:* ‘click beetle (family Elateridae)’ is based on the phrase *pùr*^{n}*í: mà→ ɲǎ:* ‘cream of millet or (grain-based) meal’. The insect is said to inform people who are outside the village what they will find for dinner on returning home. The medial *-mà:-* is derived from the ‘or’ disjunction and should not be confused with *-nà:-* in iterated flora-fauna terms (§5.1.11).

àntànú-má-gòrò-múŋúr^{n}*ú* ‘grasshopper sp. with humped pronotum (*Humbe*)’ is understood to contain *àntànú* ‘name of third son’, a variant of *gòró mà* ‘my nape’, and a form related to the verb *mùŋúr*^{n}*ì* ‘(bump) develop (on head)’.

5.1.14 Unclassified nominal compounds

The Prophet Muhammad is referred to as *àmá [tì-tìrì]*^{L}-^{H}*yá:* ‘God’s envoy’. The second word, *[tì-tìrì]*^{L}-^{H}*yá:* ‘emissary’, is based on *tì-tírí* ‘important errand, mission’ and the verb *yě* (*yǎ:-*) ‘go’. Oddly, *[tì-tìrì]*^{L}-^{H}*yá:* does not have possessed-noun overlay after *àmá*.

5.2 Adjectival compounds

5.2.1 Bahuvrihi (“Blackbeard”) compounds

Bahuvrihi compounds are like English *two-headed* or *redhead* (*red-headed*). They describe an entity, often a person or animal, by reference to an attribute that consists of a noun (such as a body part) and either a modifying adjective or a numeral. Bahuvrihis can be nouns (*redhead*) or adjectives (*red-headed*).

5.2.1.1 With adjectival compound final (n̄ á) or (ǹ ā)

These bahuvrihis are of the type *[head-red]*, where the final is an adjective directly modifying the referent of the initial, and the combination describes a salient or defining feature of the overall referent.

In one subtype, illustrated in (107), the initial has its regular tones, so (as always with common nouns) it ends in an H-tone. The final has overlaid {H} tone whether it is lexically /H/ or /LH/, but it is downstepped. I show downstep in (107), symbol ꜜ, but usually omit the symbol in textual transcriptions since it is not phonemic. For more nuances on downstep in bahuvrihis and elsewhere see §3.7.4.6.

(107) Initial with regular tones

a. final {H} from lexical /H/

kɔ̀gɔ̀rɔ̀^{L} *dùrɛ̌ⁿ-*ꜜ^{H}*báⁿ*	“fish tail-red” (*Hydrocynus*)
*gùjú-*ꜜ^{H}*gɛ́ⁿ*	“skin-black” (‘African’)
nà^{L} *kɛ́nɛ́-*ꜜ^{H}*gɛ́ⁿ*	“person heart-black” (‘evil person’)
*kírⁿí-*ꜜ^{H}*sí:*	“nose-pointed” (‘with pointed tip/nose’)
nà^{L} *bǐn-*ꜜ^{H}*márⁿá*	“person belly-big”
nà^{L} *gìyé-*ꜜ^{H}*kágájú*	“person body-rough” (‘rough-skinned’)
ɲɛ̀-ỳⁿ^{L} *gìré-*ꜜ^{H}*má*	“girl eye-dry/hard” (i.e. ‘stubborn’)

b. final {H} from lexical /LH/ (*yɔ̀rú*, *ɛ̌:*, *dègé*)

*gìyé-*ꜜ^{H}*yɔ́rú*	“body-soft” (‘person with soft skin’)
*gìyé-*ꜜ^{H}*ɛ́:*	“body-hard”
*nùmɔ́-*ꜜ^{H}*dégé*	“hand-short” (‘short-armed’)

In another type, somewhat less common, an {L}-toned noun is followed by a lexical-toned adjective (108). We could take these to be (ǹ n̄) compounds with the adjective as head. They also have the same tones as the underlying noun-adjective sequence would have, with the noun tone-dropped before a modifying adjective.

(108) Initial tone-dropped

a. final with lexical /LH/

kùwɔ̀^{L}*-gɔ̀nú*	“foot-crooked” (‘knock-kneed’)
kùwɔ̀^{L}*-yù:gú*	“foot-slow” (‘slow-moving’)

b. final with lexical /H/

kùwɔ̀^{L}*-ɔ́gú*	“foot-fast” (‘fleet-footed’)
kà^{nL}*-ɲɛ́r*^{n}*ú*	“mouth-lightweight” (‘person who can’t keep a secret’)

5.2.1.2 With numeral compound final (n num)

When the compound final in a bahuvrihi is a numeral, the compound has the same tone that it would have as an independent noun-numeral sequence. For ‘2’ through ‘10’ this means that both the noun and the numeral show lexical tones. For ‘1’, the adjectival *túnɔ́* is used, so the noun drops tones. The compound as a whole usually functions as an adjective, with a preceding tone-dropped noun. (109) illustrates the pattern using ‘person’ and ‘cow’ as the modified nouns.

(109) Bahuvrihi with numeral as final

a. initial is tone-dropped before adjectival numeral

nà^{L} *gìrɛ̀*^{nL}*-túnɔ́*	‘one-eyed person’

b. initial and numeral final have lexical tones

nàŋà^{L} *gìré-tà:nú*	‘three-eyed cow’
nàŋà^{L} *kú*^{n}*-lɔ́y*	‘two-headed cow’
nàŋà^{L} *kú*^{n}*-kúré:*	‘six-headed cow’

6 Noun Phrase structure

6.1 Organization of NP constituents

The core NP consists of the noun (whether simple or compound) and any following modifying adjectives.

6.1.1 Linear order

The order of elements is shown schematically in (110).

(110) possessor NP (except 1Sg pronoun)
- core NP
    - *noun*
    - *adjective(s)*
- numeral [optionally inverts with adjective if possessed/determined]
- NP-final elements (determiners and non-numeral quantifiers)
    - *postnominal pronominal possessor* (pronoun plus *kè*, or 1Sg *mà*)
    - *tonal definite*
    - *demonstrative*
    - *plural* (*bè* or *nà*)
    - *'all'* (*sâ:*^{n})

Plural *bè* is generally omitted where redundant, i.e. with nonsingular numerals and with 'all'. The schema omits *wò→* 'each, all', which follows a noun-adjective combination but does not readily co-occur with the following elements (except in special senses).

1Sg possessor *mà* normally follows a numeral (N-Num-*mà*). My assistant accepted as grammatical an alternative order N-*mà*-Num, but indicated that it was dispreferred. The two have quite different tonosyntactic implications; see (126a-b) in §6.2.1.5.

Examples showing the regular linear ordering are in (111).

(111)	NP	gloss	components
	péjú	'sheep-Sg'	N
	péjú bè	'sheep-Pl'	N Pl
	pèjù^{L} *már*^{n}*á*	'big sheep-Sg'	N Adj
	sè:dú ^{HL}*[péjú màr*^{n}*à]*	'Seydou's big sheep-Sg'	Poss N Adj
	[pèjù màr^{n}*à]*^{L} *gɛ́*^{n}	'big black sheep-Sg'	N Adj1 Adj2
	[pèjù màr^{n}*à]*^{L} *gɛ́*^{n} *bè*	'big black sheep-Pl'	N Adj1 Adj2 Pl
	pèjù^{L} *már*^{n}*á kúré:*	'6 big sheep'	N Adj Num
	[pèjù màr^{n}*à kùré:]*$^{L+H}$ *mà*	'my 6 big sheep'	N Adj Num Poss
	[pèjù kùrè:]^{L} *már*^{n}*á mà*	" " (inverted)	N Num Adj Poss
	pèjù^{L} *már*^{n}*à*$^{+L}$ *sâ:*^{n}	'all the big sheep'	N Adj 'all'
	[pèjù màr^{n}*à]*^{L} *yɔ́: nà*	'those big sheep'	N Adj Dem Pl
	[pèjù már^{n}*à]*$^{+L}$ ^{L}*yɔ̀: nà*	" "	N Adj (Def?) Dem Pl

	péjú mà ^{L}*yɔ̀:*	‘that sheep-Sg of mine’	N Poss Dem
	[pèjù màr^{n}*à kùré:]*$^{L+H}$ ^{L}*yɔ̀: nà*	‘those 6 big sheep’	N Adj Num Dem
	[pèjù kùrè: màr^{n}*à]*^{L} *yɔ́: nà*	" " (inverted)	"
	[pèjù màr^{n}*à kùré:]*$^{L+H}$ ^{L}*yɔ̀: nà sâ:*^{n}	‘all those 6 big sheep’	N Adj Num Dem ‘all’
	sè:dú ^{HL}*[péjú màr*^{n}*à kùrè:]*	‘Seydou’s 6 big sheep’	Poss N Adj Num
or:	*sè:dú* ^{HL}*[péjú kùrè: màr*^{n}*à]*	" " (inverted)	Poss N Num Adj

Parenthesized “(inverted)” in the gloss column, after ditto marks, means that optional Adjective-Numeral Inversion (§6.4.2) has applied.

In addition to linear order, the morphosyntax of NP also involves tonosyntactic processes and the apparent “bifurcation” break point for NPs functioning as relative-clause heads. In TgK there is no suffixal marking of humanness or animacy of the sort found in e.g. Jamsay or Najamba.

6.1.2 Headless NPs (absolute function of demonstratives, etc.)

Demonstratives and the universal quantifier ‘all’ readily occur in absolute function, without a preceding noun (112a-b).

Cardinal numerals are elicitable without a noun, as in *kùré:*$^{L+H}$ ^{L}*yɔ̀:* ‘those six’. However, in texts they normally co-occur with at least a semantically light noun, e.g. *nǎ* ‘person’, or with nonhuman pronoun *kó* in possessor function (112c-d).

(112) a. *í*^{n} *nɔ́:* ^{L}*ɛ̀w-ɛ̀*
1SgSbj Prox ^{L}buy-Pfv
‘I bought this.’

b. *í*^{n} *sâ:*^{n} *(fú→)* ^{L}*ɛ̀w-ɛ̀*
1SgSbj all (all) ^{L}buy-Pfv
‘I bought all (=everything).’

c. *í*^{n} *[kó* ^{HL}*kúrè:]* ^{L}*ɛ̀w-ɛ̀*
1SgSbj [NonhPoss ^{HL}six] ^{L}buy-Pfv
‘I bought six (of them).’

d. *[kó tɛ́mdɛ́rɛ̀]* ^{L}*ɔ̀nɔ̀*
[NonhPoss hundred] ^{L}give.Imprt
‘Give me one hundred (of them).’

Modifying adjectives may be used absolutely when the noun is understood or indeterminate. As with numerals, this is not common.

(113) *wó* *bá*^{n} ^{L}*ɛ̀w-ɛ̀*
3SgSbj red ^{L}buy-Pfv
‘He/She bought (a/the) red one.’

For a textual example see ‘red’ and ‘white’ in (668) in §19.1.2.

6.1.3 Apparent bifurcation (in relatives)

When a NP functions as head of a relative clause, it (seemingly) divides into two parts. The noun along with a possessor, an adjective, and/or a numeral (if present) remains intact inside the relative clause. In TgK, unlike most Dogon languages, a possessor changes its form in this combination.

The apparent bifurcation point is between the inner string Poss-N-Adj-Num and the set of late-NP elements that follow the verb of the relative clause: demonstrative pronouns, plural *bè* or *nà*, universal quantifiers (‘all’), and discourse-functional (DF) elements. These late-NP elements can be referred to collectively as the coda of the relative construction.

A more revea;omg analysis is that the relative clause is really just part of a NP of the type Poss-N-Adj-Num-Poss-**Rel**-Det-‘all’-DF, and that the string to the left of the relative moves into the relativization site, leaving the final elements (determiners, ‘all’, discourse-function elements) in their original position. For the details, see chapter 14.

6.1.4 Internal bracketing and tone-dropping (unpossessed NP)

This section considers tonosyntactic effects relevant to the internal structure of unpossessed NPs in functions other than relative-clause head. Certain elements (possessors, adjectives, demonstratives, relative clauses) are reference restrictors, and impose a tone overlay on the noun and on any intervening words. Of these, all except possessors are postnominal, so they target a domain (including the noun) to their left. Addition of a possessor significantly complicates both the “regular” morphosyntax and the tonosyntax. Possessors may be prenominal or postnominal, and they may be simple (identical in form to an ordinary NP) or they may be followed by a possessive morpheme *kè*. These choices have consequences for the tonosyntax.

This section considers unpossessed NPs, and works from the inside out. At the center is the core NP consisting of the noun (simple or compound) and any modifying adjectives. An NP may consist entirely of a core NP with no further material (N, N-Adj, or N-Adj1-Adj2). In this case, the final word in the core NP preserves its lexical tones, while preceding words beginning with the noun are tone-dropped to {L}. Recall that the lexical melody of a noun or adjective must contain an H-tone (§3.7.1.3-4), so tone-dropping is always audible.

(114) Core NP

a. N (with lexical tones)

péjú	‘sheep’
àr^{n}á	‘man’

b. N^{L} Adj

pèjù^{L} *már^{n}á*	‘big sheep’
pèjù^{L} *gɛ́^{n}*	‘black sheep’
àr^{n}à^{L} *mɔ̀ɲú*	‘bad man’
àr^{n}à^{L} *gàrá*	‘old man’

c. [N Adj1]^{L} Adj2

[pèjù màr^{n}à]^{L} *gɛ́^{n}*	‘big black sheep’ (or: *[pèjù gɛ̀^{n}]*^{L} *már^{n}á*)
[àr^{n}à gàrà]^{L} *mɔ̀ɲú*	‘bad old man’

In (114c), it cannot be scientifically proven whether the final adjective controls tone dropping on both preceding words, or whether tone-dropping applies cyclically, each time affecting only the word immediately to the left of the controlling word. My tonosyntactic notation is based on the noncyclical interpretation: [N Adj1]^{L} Adj2. The cyclical version might be represented schematically as [N$^{\cancel{L}}$ Adj1]^{L} Adj2, with strikethrough on the leftmost superscript, reflecting an initial cycle with [N^{L} Adj1].

The core NP may be extended by adding a cardinal numeral (this is sometimes called "NumP"). The core NP and the numeral are tonosyntactically autonomous, each keeping its own tones. Therefore the core NP preceding the numeral (115a-c) has exactly the same form it had in (114) above.

(115) numeral plus core NP

a. N Num
péjú kúré: 'six sheep'

b. N^{L} Adj Num
[pèjù^{L} *már*^{n}*á] kúré:* 'six big sheep;

c. [N Adj1]^{L} Adj2 Num
[pèjù màr^{n}*à]*^{L} *gɛ́*^{n} *kúré:* 'six big black sheep'

The NP-coda elements are determiners (demonstratives, definite), plural, 'all', and DF markers like Topic ('as for') and 'only'. Of these, only demonstratives (§4.4.1.2) are full-fledged tonosyntactic controllers, imposing obligatory tone-dropping on a preceding noun (116a). However, when certain other elements are combined with the N-Dem combination, a more complex tonosyntactic processes take place. If the demonstrative is immediately preceded by an adjective (116b), the output appears to depend on whether the tonal definite is present.

If the demonstrative stem is *nɔ́:* (proximate) or *yɔ́:* (near-distant), the demonstrative is "optionally" tone-dropped. Arguably the floating L-tone of the tonal definite is the trigger for the tone-dropping, but the tonal definite itself is not always independently audible. In (116b), *pèjù* ^{L} *már*^{n}*à* $^{+L}$ ^{L}*nɔ̀:* 'this big sheep' does have an L-tone on the final syllable of 'big' (otherwise *már*^{n}*á*), which can be taken as the tonal definite. However, if we replace *már*^{n}*á* 'big' with an /LH/-melody adjective like *dògú* 'heavy', the result is *pèjù*^{L} *dògú* ^{L}*nɔ̀:* 'this heavy sheep'. One can argue that this is underlyingly /dògú+L/, and that the floating L is inaudible on the adjective for phonological reasons (no <HL>-toned syllable can occur in this position), but that this covert L-tone is responsible for the L-toned demonstrative *nɔ̀:*, as is the overt L-tone in *pèjù*^{L} *már*^{n}*à*$^{+L}$ ^{L}*nɔ̀:*.

In the alternative versions in (116b), *[pèjù màr*^{n}*à / dògù]*^{L} *nɔ́:*, the final demonstrative retains its lexical H-tone, the preceding N-Adj string is tone-dropped en bloc, and there is no sign (direct or indirect) of the tonal definite.

When the string preceding the demonstrative ends in a numeral, a special constructional {L}+H tone overlay occurs on the N-…-Num string, and the demonstrative is again tone-dropped, this time with no evidence that the tonal definite is involved (16c-d). This is schematized as [(N) Num]$^{L+H}$ ^{L}Dem.

(116) core NP (and numeral) plus demonstrative

a. N^{L} Dem

pèjù^{L} *nɔ́:*	‘this sheep’
àr^{n}*à*^{L} *[nɔ́:* ^{L}*bàŋà]*	‘this man’

b. N^{L} Adj^{+L} ^{L}Dem, or [N Adj]^{L} Dem

pèjù^{L} *már*^{n}*à*$^{+L}$ / *dògú* ^{L}*nɔ̀:*	‘this big/heavy sheep’

or:

[pèjù màr^{n}*à* / *dògù]*^{L} *nɔ́:*	‘this big/heavy sheep’

c. Num^{L+H} ^{L}Dem

proximate and near-distant

kùré:$^{L+H}$ ^{L}*nɔ̀:*	‘these six’ (< *kúré:*, *nɔ́:*)
pɛ̀rú$^{L+H}$ ^{L}*yɔ̀:*	‘those ten over there’ (< *pɛ́rú*, *yɔ́:*)

far-distant

pɛ̀rú$^{L+H}$ *érú kɔ́ nà*	‘those three sheep’ (far-distant)

d. […Num]$^{L+H}$ ^{L}Dem

proximate and near-distant

[pèjù kùré:]$^{L+H}$ ^{L}*nɔ̀:*	‘these six sheep’

far-distant

[pèjù pɛ̀rú]$^{L+H}$ *érú kɔ́ nà*	‘those three sheep’ (far-distant)

The far-distant demonstrative, which has quite distinct morphology and is not included in (116), is not tone-dropped.

The plural morpheme is *bè* when added to a core NP. It is generally omitted, because redundant, in NPs that include a nonsingular numeral or an ‘all’ quantifier. Demonstratives (and relative clauses) have a distinct plural marker *nà*. Plural morphemes *bè* and *nà* have no tonal effect on preceding words in the NP. Since both *bè* and *nà* are L-toned, we would not be able to hear tone-dropping were it to occur on them.

(117) NP with plural morpheme

a. N Pl

péjú bè	‘sheep-Pl’
àr^{n}*á bè*	‘men’

b. Dem Pl

nɔ́: nà	‘these’
érú wé nà	‘those’ (human, far-distant)

c. N Dem Pl

pèjù^{L} *nɔ́: nà*	‘these sheep’
àr^{n}*à*^{L} *érú wé nà*	‘those men’ (far-distant)

Universal quantifiers (‘all’) follow demonstratives and (if present) a plural morpheme. The common ‘all’ form is *sâ:*^{n}. When added to a core NP with no intervening numeral, it is tonosyntactically inert; neither the ‘all’ word nor the core NP changes its tones. However, when a numeral precedes *sâ:*^{n} (118c), we get a constructional tone overlay similar to that schematized in (116d) above. Though *sâ:*^{n} itself keeps its tones, the preceding numeral and any preceding words beginning with the noun have the {L}+H overlay. Tone-dropping also applies to the nonhuman pronoun *kó* that is often used as a default complement when the numeral is not accompanied by a noun.

(118) NP with universal quantifier

a. N 'all'	
péjú sâ:^{n}	'all of the sheep'
b. N^{L} Adj 'all'	
pèjù^{L} *már*^{n}*á sâ:*^{n}	'all the big sheep'
c. [… Num]$^{L+H}$ 'all'	
[kò kùré:]$^{L+H}$ *sâ:*^{n}	'all six (of them)'
[pèjù kùré:]$^{L+H}$ *sâ:*^{n}	'all six sheep'

The {L}+H overlay is also found when a string ending in a numeral is followed by a pronominal possessor such as 1Sg *mà*, see (126a-b) in §6.2.1.5 below.

For *wò→* 'each', see §6.6.3, below.

6.2 Possessives

A nonpronominal NP possessor always precedes the possessum. A pronominal possessor precedes the possessed NP in some cases, and follows it in others. There is no genitive linker between possessor and possessum.

For pronominal possessors, there are two constructions. In the most common type, a pronoun with no special possessive marker directly precedes the possessed noun, except that the 1Sg possessor form is *mà* after the possessed noun and any modifying adjective or numeral. I refer to this mix of postposed 1Sg *mà* and various preposed pronominal possessors as the nonappositional possession construction. It is found with alienably as well as inalienably possessed nouns. In the other type, which is generally optional but fairly common with alienably possessed nouns (especially those of complex structure, for example including a numeral), the possessed noun and any modifying adjective or numeral is followed by the sequence of a pronominal possessor and *kè* 'possession, (sb's) thing'. Since *kè* is in apposition to the possessed noun, e.g. 'house [my thing]' for 'my house', I refer to this as the appositional possession construction, even though the original appositional character has been partially eroded over time. To summarize so far, we have nonappositional [PronP X] except for [X 1SgPoss], and appositional [X [Pron *kè*]], where X is the possessed noun and any modifying adjective or numeral.

When the possessor precedes the possessum (as with all nonpronominal possessors, and with pronouns other than 1Sg in the nonappositional construction), the possessor controls a tonal overlay, {HL} on a heavy or composite possessum or {H} on a light uncompounded possessum. The possessor itself retains its regular tonal form. When the possessor follows the possessum, the latter keeps its regular tones.

6.2.1 Tonal changes on possessed NPs after a possessor

I refer to the tone overlay controlled by a preceding possessor as the possessed-noun or possessor-controlled overlay. However, the target domain of the overlay is not limited to a word, rather it comprises the (possessed) noun plus any modifying adjectives and numerals. I begin here, however, with the possessed forms of ordinary nouns and of noun-noun compounds.

Prosodically light (one or two moras) unsegmentable nouns have {H} as the possessed overlay, while prosodically heavy and all morphologically composite nouns have {HL} as the overlay, with the H limited to the first syllable. {L} as possessed-noun overlay is attested with two monosyllabic stems. In all cases, the possessed-noun overlay erases the lexical melody.

Downstep is usual when the possessor-controlled overlay is {H} but not {HL}. Downstep can be removed under certain conditions, and it does not appear to be a matter of phonological tone.

6.2.1.1 Possessed-noun {H} for prosodically light simple nouns

Prosodically light noun stems are those of one or two moras, i.e. *Cv*, *Cv:*, and *CvCv* stems. If the stem is already lexically /H/-toned, there is no phonological change, but (phonetic) downstep is common (119a). If the stem is lexically /LH/-toned, the change to a flat {H} overlay is audible (119b). I therefore attribute {H} to both lexically /H/- and /LH/-toned nouns when possessed.

(119) {H} overlay for unsegmentable, prosodically light possessed noun

noun	possessed	gloss
a. stem of 1-2 moras, lexically /H/-toned, no audible change		
ká^{n}	^{H}*ká*^{n}	'mouth'
kú^{n}	^{H}*kú*^{n}	'head'
ɲá	^{H}*ɲá*	'area, zone'
bɛ́:	^{H}*bɛ́:*	'excrement'
tém	^{H}*tém*	'strap'
níɲí	^{H}*níɲí*	'maternal uncle'
péjú	^{H}*péjú*	'sheep'
kɛ́nɛ́	^{H}*kɛ́nɛ́*	'liver'
b. stem of 1-2 moras, lexically /LH/-toned		
Cv		
nǎ	^{H}*ná*	'person'
bɛ̌	^{H}*bɛ́*	'beard'
sɔ̌^{n}	^{H}*sɔ́*^{n}	'horse'
dǐ^{n}	^{H}*dí*^{n}	'hip'
ɲɛ̌	^{H}*ɲɛ́*	'wife, woman'
Cv:		
nǐ:	^{H}*ní:*	'paternal aunt' (variant)
tɛ̌:	^{H}*tɛ́:*	'honey'
dɛ̌:^{n}	^{H}*dɛ́:*^{n}	'elder same-sex sibling'
ɛ̀r^{n}*ɛ́*	^{H}*ɛ́r*^{n}*ɛ́*	'goat'

CvCv		
àwá	^{H}*áw*^{n}*á*	‘in-law’
tɔ̀gú	^{H}*tɔ́gú*	‘race, category’
gìr^{n}*í*	^{H}*gír*^{n}*í*	‘house’
tùwó	^{H}*túwó*	‘stone’
nɔ̀w^{n}*ɔ́*	^{H}*nɔ́w*^{n}*ɔ́*	‘meat’

One kin term with *CvCv:*^{n} shape (including a frozen diminutive morpheme) is also {H}-toned when possessed (120a). It has three moras, but is treated as though *CvCv*, suggesting that the length of the final vowel is disregarded for purposed of weighing. For another kin term, the possessed form has a slight segmental change, adding a contracted form of the diminutive morpheme (120b).

(120) {H} overlay for *CvCv:*^{n} kin terms

noun	possessed	gloss
a. *CvCv:*^{n}		
sùgɛ̌:^{n}	^{H}*súgɛ́:*^{n}	‘younger same-sex sibling’
b. with segmental change (diminutive ending)		
ɛ̀gɛ́	^{H}*ɛ́gɛ́:*^{n}	‘husband’

{H}-toned possessed nouns are usually downstepped after a nonpronominal possessor ending in an H-tone. For more on downstep, see §3.7.4.6. Because it is a somewhat elusive phenomenon, I am reluctant to treat it as fully grammatical, and usually I do not mark it in phonological transcriptions.

Possessed nouns, like other nouns, are subject to the addition of a final L-tone to mark weak discourse-definiteness (tonal definites, §4.4.1.1) or location (tonal locatives, §8.2.1). Since the nouns considered in this section are prosodically light, the resulting {H}+L mimics a true /HL/ melody, i.e. bisyllabic H.L and monosyllabic <HL>. Downstep does not usually apply to {H}+L-toned definite possessed nouns. Example: *ú* $^{\downarrow H}$*gír*^{n}*í* ‘your-Sg house’ (with downstep), but tonal definite or tonal locative *ú* ^{H}*gír*^{n}*ì*$^{+L}$ (without downstep).

The ‘it is’ clitic *=y* requires the {HL} pattern on a preceding possessum. Again, this results in removal of downstep on the onset. For a monosyllabic vowel-final stem, the only syllable is <HL>-toned, as in *ú* $^{\downarrow H}$*ká*^{n} ‘your-Sg mouth’ becoming *[ú* ^{H}*ká*^{n}*]=ỳ*^{n} ‘it is your mouth’. Bisyllabic stems shift from H.H to H.L, as in *ú* $^{\downarrow H}$*gír*^{n}*í* ‘your-Sg house’ becoming *[ú* ^{H}*gír*^{n}*ì]=ỳ*^{n} ‘it is your house’. It is possible that this tonal pattern reflects the presence of the tonal definite (final L-tone) before the clitic.

6.2.1.2 Possessed-noun {HL} for heavy and complex nouns

Prosodically heavy nouns are those of three or more vocalic moras, specifically including *Cv:Cv* and *CvCvCv*. The lexical distinction between /H/ and /LH/ melodies is erased, but this time the overlay is {HL}, with the tone break at the first syllable boundary. This is shown in (121), using nouns that are not treated as composite (morphemically or prosodically). There is usually no downstep with the {HL} overlay.

(121) {HL} overlay for prosodically heavy possessed noun

noun	possessed	gloss
a. stem of 3 moras, /H/-toned		
Cv:Cv		
á:ɲú	^{HL}*á:ɲù*	‘vein’
bá:gá	^{HL}*bá:gà*	‘stick’
yɔ́:wɔ́	^{HL}*yɔ́:wɔ̀*	‘well bag’
CvCvCv		
tɔ́gɔ́rɔ́	^{HL}*tɔ́gɔ̀rɔ̀*	‘person with the same name’
kɛ́gɛ́rɛ́	^{HL}*kɛ́gɛ̀rɛ̀*	‘saddle’
báŋár^{n}á	^{HL}*báŋàr^{n}à*	‘shin’
b. stem of 3 moras, /LH/-toned		
Cv:Cv		
gě:w	^{HL}*gê:w*	‘belch(ing)’ (< /gè:wú/)
CvCv:		
òtě:	^{HL}*ótè:*	‘well (for water)’
pòlí:	^{HL}*pólì:*	‘pulley’
pàr^{n}ɛ́:	^{HL}*pár^{n}ɛ̀:*	‘brick’
ìnǎ:	^{HL}*ínà:*	‘mother’
CvCvC		
mòtǎm	^{HL}*mótàm*	‘scorpion’
Cv:CvC		
tà:bǎl	^{HL}*tá:bàl*	‘table (selling stand)’
CvCvCv		
sɛ̀rùwɛ́	^{HL}*sɛ́rùwɛ̀*	‘spur’
ì^{n}sìr^{n}í	^{HL}*í^{n}sìr^{n}ì*	‘urine’
kògújó	^{HL}*kógùjò*	‘cough’

Of course, many prosodically heavy stems are composite in one sense or other: a) one can identify at least one of the composite morphemes; b) the noun appears to contain an initial *Cv*-reduplication; or c) the noun can be divided into two segments each of a shape like *CvC* or *CvCv* and has a tone pattern compatible with noun-noun compound status. There are also a very small number of *CvCv* nouns that are arguably composite.

Reduplicated nouns are in (122). Most are *Cv-Cv:* kin terms (122b) and *Cv-CvCv* or similar nouns (122c). They have the {HL} possessed-noun overlay characteristic of heavy stems. More interestingly, there are a handful of reduplicated $C_1v_1C_1v_1$ stems that also have {HL}, diverging from the morphologically simple *CvCv* nouns in (119) in the preceding section, which have {H} after a possessor. In fact, the possessed overlay can be used as a test for reduplicated status of $C_1v_1C_1v_1$ nouns. There are a number of such nouns that fail this test and can therefore be taken as morphologically unreduplicated (the repetition of syllables being accidental); contrast (122a) with (46b) in §4.1.4, above.

(122) {HL} overlay for nouns with initial *Cv*-reduplication

noun	possessed	gloss
a. behave like *Cv-Cv* (all known examples)		
ɲù-ɲǔ	$^{\text{HL}}$*ɲú-ɲù*	‘cold weather’
yà-yǎ nà:	$^{\text{HL}}$*yá-yà* $^{\text{L}}$*nà:*	‘woman who has just given birth’
jú-jú	$^{\text{HL}}$*jú-jù*	‘judge’ (French *juge*)
b. *Cv-Cv:*		
dè-dé:	$^{\text{HL}}$*dé-dè:*	‘father’
nà-ná:	$^{\text{HL}}$*ná-nà:*	‘grandmother’
bà-bá:	$^{\text{HL}}$*bá-bà:*	‘grandfather’
c. *Cv-CvCv*		
gú-gúrú	$^{\text{HL}}$*gú-gùrù*	‘grass’
nɛ̀-nɛ̀ŋɛ́	$^{\text{HL}}$*nɛ́-nɛ̀ŋɛ̀*	‘groin’

Composite noun stems of the more classic type also have the {HL} overlay when possessed, but the position of the tone break depends on the prosodic structure as well as on the compound break. If the initial is prosodically light, i.e. *Cv*-, *Cv:*-, or *CvCv*-, the H-tone component of {HL} continues to the end of the initial, while the final is {L}-toned (123a-c). If the initial is prosodically heavy, the tone break occurs at the first syllable boundary, as it would without the final (123d-f). In both types, the initial gets {H} or {HL} overlay in the usual way based on its weight, and the final is {L}-toned.

(123) {HL} overlay for compound nouns

noun	possessed	gloss
a. *Cv-* initial		
bɛ̀-sɛ́:	$^{\text{HL}}$*bɛ́-sɛ̀:*	‘father’s younger brother’
kà^{n}-gɔ̀ŋùr^{n}ú	$^{\text{HL}}$*ká^{n}-gɔ̀ŋùr^{n}ù*	‘rim’
ɲɛ̀ gàrá	$^{\text{HL}}$*ɲɛ́ gàrà*	‘old(est) woman’ (fused N-Adj)
gù^{n}sá^{n}	$^{\text{HL}}$*gú^{n}sà^{n}*	‘full outback’
b. *Cv:-* initial		
bɛ̀:-gɛ̀rɛ́	$^{\text{HL}}$*bɛ́:-gɛ̀rɛ̀*	‘side’
ì:^{n} sóŋúr^{n}ú	$^{\text{HL}}$*í:^{n} sòŋùr^{n}ù*	‘elder of two young children’
c. *CvCv-* initial		
tírí-wɛ́	$^{\text{HL}}$*tírí-wɛ̀*	‘grandchild’
níɲí-w^{n}ɛ́	$^{\text{HL}}$*níɲí-w^{n}ɛ̀*	‘sister’s child’
làrà-í:^{n}	$^{\text{HL}}$*lárá-ì:^{n}*	‘sister’s child’
jɛ̀ŋɛ̀-í:^{n}	$^{\text{HL}}$*jɛ́ŋɛ́-ì:^{n}*	‘twin sibling’
ɔ̀gɔ̀-ɲɔ̌	$^{\text{HL}}$*ɔ́gɔ́-ɲɔ̀*	‘camel’
gìr^{n}ì-dú	$^{\text{HL}}$*gír^{n}í-dù*	‘courtyard’, ‘family’
pèlè-gúmó	$^{\text{HL}}$*pélé-gùmò*	‘pigeon’

d. *Cv:Cv-* initial		
pú:jù-pá:jù	^{HL}*pú:jù-pà:jù*	‘lungs’
e. *CvCv:-* initial		
òtè:-ká^{n}	^{HL}*ótè:-kà*^{n}	‘edge of well’
òtè:-sùŋú	^{HL}*ótè:-sùŋù*	‘well rope’
f. *CvCvCv-* initial		
ì^{n}*sìr*^{n}*ì-jógó*	^{HL}*í*^{n}*sìr*^{n}*ì-jògò*	‘bladder’
bìrìgì-tìmé	^{HL}*bírìgì-tìmè*	‘omasum’

There are a number of stems that cannot be segmented into recognizable initial and final stems, but that have prosodic shapes and/or other phonological features consistent with compounds. It appears that they are treated as compounds for purposes of determining the possessed-noun overlay. The segmentation is clear in the case of ‘harvesting knife’ (124c) because of ATR disharmony. However, compound-like tonal patterning seems to apply even to *kùnúgóró* ‘head’ (124c). Its unpossessed L.H.H.H tone pattern, and comparison with synonym *kù*^{n} ^{L}*-kɛ́nɛ́*, point to a segmentation as *kù* ^{L}*-núgóró*, whose regular possessed form should then be #^{HL}*kú-nùgòrò*, compare (123a) above. Instead, its possessed form is ^{HL}*kúnúgòrò*, which is consistent with a compound break in the middle (unpossessed *kùnú-góró*). I conclude that the default prosodic treatment of quadrisyllabics is as compounds of two bisyllabic stems. This is suggested by the bracketing in the “possessed” column in (124a-c). The alternative would be to revise the model for phonological realization of {HL} overlay (§3.7.3.2), so that quadrisyllabics with this overlay appear in H.H.L.L form, instead of having the break as close as possible to the left edge.

(124) Multisyllabic nouns arguably treated prosodically as compounds

noun	possessed	gloss
a. *CvCCv* with unusual CC cluster		
ɔ̀mjɔ́^{n}	^{HL}*ɔ́mjɔ̀*^{n}	‘low ground’
b. *CvCvCv:*		
màrùpá:	^{HL}*[márú]pà:*	‘rifle, musket’
c. *CvCvCvCv*		
àrùsɛ̀gɛ́	^{HL}*[árú]sɛ̀gɛ̀*	‘animal’
wògòtóró	^{HL}*[wógó]tòrò*	‘cart’
dɔ̀gɔ̀tɔ́rɔ́	^{HL}*[dɔ́gɔ́]tɔ̀rɔ̀*	‘doctor’
kùnúgóró	^{HL}*[kúnú]gòrò*	‘head’
kárábárá	^{HL}*[kárá]bàrà*	‘calabash box’
disharmonic vocalism		
pòrùkɛ́wɛ́	^{HL}*[pórú]kɛ̀wɛ̀*	‘harvesting knife’

The restriction of the {HL} overlay to prosodically heavy possessed nouns, specifically not including lighter *Cv:* and *CvCv* stems, is unusual from a comparative Dogon perspective. However, the {HL} pattern does appear on light stems that function as postpositions (particularly spatial ones), as in postposition *bɔ́rɔ̀* ‘under’ from noun *bɔ̀rɔ́* ‘rear’, and on some toponyms like the village name *báw*^{n}*à* ‘Bawa’. However, one might argue that such forms contain the final L-tone of the tonal locative. The historical connection between possessed-noun overlays, postpositional tones, and tonal locatives of ordinary nouns, remains to be worked out.

6.2.1.3 Possessed-noun {L} for two monosyllabic nouns

Finally, there are two important monosyllabic noun stems that have {L} overlay after a possessor (125). Both are human nouns that have kinship senses when possessed.

(125) {L} possessed-noun overlay

noun	possessed	gloss
a. stem /H/-toned		
í:^{n}	^{L}*ì:*^{n}	‘child’
b. stem /LH/-toned		
ɲɛ̌	^{L}*ɲɛ̀*	‘woman, wife’

Contrast *ú* ^{L}*ì:*^{n} ‘your-Sg child’ and *ú* ^{L}*ɲɛ̀* ‘your wife’, showing {L}-toned possessed nouns, with the {H}-toned possessed nouns in e.g. *ú* ^{L}*dɛ́*^{n} ‘your waterjar’ (lexical *dɛ̌*^{n}), *ú* ^{L}*ló* ‘your medication’ (*lǒ*), *ú* ^{L}*bɔ́*^{n} ‘your-Sg tomtom’ (*bɔ̌*^{n}), and *ú* ^{L}*té* ‘your-Sg tea’ (*té*).

Historically, *kè* in pronominal possessives like *ú kè* ‘your(s)’, originated as an L-toned possessed form of the noun ‘thing’ (cognates still mean ‘thing’ in several Dogon languages). However, this is opaque synchronically, since *ɔ̀jɔ́* is the current word for ‘thing, object’, and I gloss *kè* simply as ‘Poss’.

Another likely vestige of an originally more widespread possessor-controlled {L} overlay is the small set of {L}-toned terminal elements found at the end of certain relative clauses. Some of these are tone-dropped forms of common nouns, used in resumptive fashion at the end of relative clauses (§14.1.7).

6.2.1.4 Downstep in possessed noun

In most cases the possessor itself (e.g. noun, noun-adjective, pronoun) ends in an H-tone. As noted above, most possessed nouns begin with an H-tone, and may be entirely {H}-toned. Phonetically, the final H of the possessor and the H of the possessed can approximate a tonal terrace, in the sense that there is no sharp pitch discontinuity at the word boundary. This is typical with pronominal possessors, which are monosyllabic and H-toned. Therefore *ú* ^{H}*gír*^{n}*í* ‘your-Sg house’ (*gìr*^{n}*í*) and *wó* ^{H}*nú:* ‘his/her death’ (*nǔ:*) show at most a slight divergence in pitch between the possessor and the possessed noun, so the {H} overlay of the possessed noun is clearly heard. The best frame for identifying the few nouns with {L}-toned possessed-noun overlay is therefore following a pronominal possessor. The sharp pitch break in *ú* ^{L}*ì:*^{n} ‘your-Sg child’ or in *wó* ^{L}*ɲɛ̀* ‘his wife’ show that these possessed nouns are genuinely {L}-toned.

However, with nonpronominal possessors, there is a noticeable pitch drop between the final H of the possessor and the H of the possessed noun, as in *ámír*^{n}*í* ^{H}*gír*^{n}*í* ‘(a/the) chief’s house’ and *ɲɛ̌* ^{H}*nú:* ‘a woman’s death’. I have been taking this to be a matter of phonetic realization, but one could argue that it should be formally reflected in the transcription as downstep, e.g. *ámír^{n}í* $^{\downarrow H}$*gír^{n}í*.

6.2.1.5 {L}+H tone pattern for possessor-numeral combinations

In §6.1.4 above I showed that strings ending in a numeral have an {L}+H overlay when followed by a demonstrative or by the 'all' quantifier within the same NP; see (116c-d) and (118c). The targeted string is entirely {L}-toned except for a single H-tone on the final syllable (or, for monosyllabic numerals, the final mora).

The same {L}+H overlay applies to N-(Adj-)Num strings in combination with a postposed possessor. The only possessor that is regularly postnominal is the 1Sg possessor form *mà*. In (126a), the 1Sg possessor immediately follows the noun and precedes the numeral, which is grammatical but dispreferred. In this ordering, there are no tonosyntactic interactions, so the noun and the numeral show lexical tone melodies. By contrast, in (126b), the same clause is rephrased with the preferred N-Num-Poss linear order, and the {L}+H pattern is observed, applying to the entire N-Num string. Therefore 'children' is L-toned and the numerals have rising tone in (126b).

(126)	a.	*ú*	*[úr^{n}í:*	*mà*	*lɔ́y* / *kúré:* / *sɔ̂:]*	^{L}*ɔ̀-ɛ̀*
		2SgSbj	[children	1SgPoss	two / six / seven]	^{L}see-Pfv
		'You-Sg saw my two / six / seven children.' (dispreferred linear order)				

	b.	*ú*	*[[ùr^{n}ì:*	*lɔ̌y* / *kùré:* / *sɔ̌:]*$^{L+H}$	*mà]*	^{L}*ɔ̀-ɛ̀*
		2SgSbj	[children	two / six / seven]$^{L+H}$	1SgPoss]	^{L}see-Pfv
		[= (a)]				

See also (644c-d) in §18.1.3.1, and (32a-b) in §3.7.3.7.

6.2.2 Treatment of modifiers following the possessed noun

When an adjective modifies the possessed noun, the noun-adjective combination (i.e. the core NP) is subjected, as a unit, to the {HL} possessed-noun overlay. As shown in (127), the possessed noun itself appears with its regular possessed-noun overlay, {H} or for heavy stems {HL}, and the following adjective is tone-dropped. In other words, the overlay is always {HL} for a N-Adj possessum, but the break from H to L occurs no later than the word boundary.

(127)	a.	*sè:dú*	^{HL}*[gír^{n}í*	*gàrà]*
		S	^{HL}[house	big]
		'Seydou's big house' (*gìr^{n}í*, *gàrá*)		
	b.	*sè:dú*	^{HL}*[ná*	*mɔ̀ɲù]*
		S	^{HL}[person	bad]
		'Seydou's bad person (=kinsman)' (*nǎ*, *mɔ̀ɲú*)		
	c.	*sè:dú*	^{HL}*[túŋùr^{n}ù*	*dàgà]*
		S	^{HL}[stool	small]
		'Seydou's small stool' (*túŋúr^{n}ú*, *dágá*)		

A numeral following the noun (or the core NP) is also normally included in the domain of the {HL} overlay, and therefore appears in tone-dropped form, as in (128a) with *kúré:* 'six'. The same tonal pattern occurs when a demonstrative follows the noun, as in (128b), with L-toned form of *yɔ́:* 'that' (near-distant). However, it is unclear whether the demonstrative drops its tones because it is part of the target domain of the possessor-controlled {HL} overlay, as suggested by the bracketing in (128b), or because of Postnominal-Determiner Tone-Lowering (§3.7.3.5), which would call for a revised bracketing. The 'all' quantifier does not drop its tones in this position and is therefore clearly not part of the domain targeted by the possessor (128c).

(128) a. *sè:dú* $^{\text{HL}}$*[gír^{n}í* *kùrè:]*
Seydou $^{\text{HL}}$[house six]
'Seydou's six houses'

b. *sè:dú* $^{\text{HL}}$*[gír^{n}í* *yɔ̀:]*
Seydou $^{\text{HL}}$[house NearDist]
'that house of Seydou's'
[alternative mark-up *sè:dú* $^{\text{HL}}$*gír^{n}í* $^{\text{L}}$*yɔ̀:* with separately tone-dropped Dem]

c. *sè:dú* $^{\text{H}}$*gír^{n}í* *sâ:^{n}*
Seydou $^{\text{H}}$house all
'all Seydou's houses'

However, when the numeral has scope over a compound-like possessor-possessed combination that functions like a common noun, the numeral is not subject to tonosyntactic control of the possessor. In (129), *sì:^{n}ká^{n}* 'equivalent' gets the {HL} possessor-controlled overlay, but *lɔ́y* 'two' does not.

(129) *[[[gɔ̀:$^{\text{L}}$* *yǎ:]* $^{\text{HL}}$*sí:^{n}-kà^{n}]* *lɔ́y* *bà→]* $^{\text{L}}$*bè:-jù*
[[[granary$^{\text{L}}$ female] $^{\text{HL}}$equivalent] two up.to] $^{\text{L}}$put-Ipfv
'They put (=build) (the male granary) (as) two female granary equivalents (=twice the size of the female granary).' (2011.1a.17)

6.2.3 Pronominal possessors

We begin with possessed NPs not containing a quantifier. In the 1Sg only, the possessor is expressed by a postnominal morpheme *mà* (for H-toned *má* see below). The possessed noun has its regular tones, as in unpossessed contexts. For the other pronominal categories, the possessor precedes the possessed noun and controls the same {HL} or {H} possessed-noun overlay that was illustrated above for nonpronominal possessor NPs. Thus *gìr^{n}í* 'house' has its lexical tone in (130a) but has {H} overlay, optionally with a further final L-tone to mark definiteness, in (130b). There is no genitive morpheme after such preposed possessors.

(130) a. possessor follows possessed noun
1Sg *gìr^{n}í* *mà*

b. possessor precedes possessed noun
1Pl *ɛ́mɛ́* $^{\text{H}}$*gír^{n}í* (definite *ɛ́mɛ́* $^{\text{H}}$*gír^{n}ì$^{\text{+L}}$*, etc.)
2Sg *ú* $^{\text{H}}$*gír^{n}í*

2Pl	*é*	^{H}*gír*^{n}*í*
3Sg	*wó*	^{H}*gír*^{n}*í*
3Pl	*bé*	^{H}*gír*^{n}*í*

The same constructions are used with all possessed nouns, alienable or inalienable. Thus *péjú* 'sheep' in *péjú mà* 'my sheep-Sg' and *wó* ^{H}*péjú* 'his/her sheep-Sg' is treated like *dè-dé:* 'father' in *dè-dé: mà* 'my father' and *wó* ^{HL}*dé-dè:* 'his/her father'.

1Sg possessor *mà* follows the core NP, which may include a postnominal adjective (131a). It precedes the universal quantifiers *sâ:*^{n} and *fú→*, which are NP-final here as elsewhere. For its position relative to cardinal numerals, see (134) below and accompanying discussion.

(131) a. *gìr*^{n}*ì*^{L} *már*^{n}*á* *mà*
house^{L} big 1SgPoss
'my big house'

b. *gìr*^{n}*í* *mà* *sâ:*^{n}
" " *fú→*
house 1SgPoss all
'all (of) my houses'

Before instrumental-comitative postposition *bè*, but not before plural *bè*, the 1Sg possessor form shifts to H-tone: *[ɲɛ̌ má] bè* 'with my wife', contrast *ɲɛ̌ mà bè* 'my wives' (lit. "my women"). I did not observe this tone shift before other postpositions: *[ɲɛ̌ mà] gírì* 'in front of my wife', dative *[ɲɛ̌ mà]=ǹ* 'to my wife'.

When a demonstrative modifies a possessed noun, Postnominal-Determiner Tone-Lowering (§3.7.3.5) applies. The demonstrative undergoes tone-dropping and does not control tones on the possessed noun or its modifiers. This applies whether the possessor precedes or follows the possessed noun. For example, near-distant *yɔ́:* drops tones in (32a-b). The H.H tones of 'house' in (132a) show that there is no tonal definite.

(132) a. *ú* ^{H}*gír*^{n}*í* ^{L}*yɔ̀:*
2SgPoss ^{H}house ^{L}NearDist
'that house of yours-Sg'

b. *gìr*^{n}*í* *mà* ^{L}*yɔ̀:*
house 1SgPoss ^{L}NearDist
'that house of mine'

If the pronominally possessed noun is directly followed by a modifier (adjective or cardinal numeral), the modifier licenses an optional restructuring. In the restructured version, all pronominal possessors are expressed by postnominal [Pron *kè*], where *kè* derives from a noun meaning 'thing' still found in several other Dogon languages. This was originally an appositional construction of the type [house [your thing]] 'your house', with 'thing' in apposition to 'house'. The L-tone of *kè* was attributable then to a possessor-controlled overlay, while 'house' was unaffected tonosyntactically by the possessor. The appositional nature of the construction has been weakened, and under some conditions (see below) the postnominal possessor can control overlays on the preceding noun (and its immediate modifiers). *kè* will be glossed simply as "Poss" in interlinears.

If the licensing modifier is an adjective, the sequence begins with the regular [N^{L} Adj] pattern found in unpossessed core NPs. The adjective controls {L} on the noun. The only clearly constructional change is that the pronominal drops its tones. If the adjective is /H/-toned, it shows a final L-tone in this construction, arguably the tonal definite, as in *kélù* $^{+L}$ from *kélú* ‘cold’ in (133a). I do not hear any tonal change in /LH/-toned adjectives, but this is probably because the expected final falling tone in the definite (*gàrâ* $^{+L}$ ‘the big one’) is flattened in the middle of an NP as an H-tone while its final L-toned element is absorbed by the L-toned possessor.

(133)	a.	*dì:*^{L}	*kélù* $^{+L}$	^{L}*[ù*	*kè]*
		water^{L}	cold $^{+L}$	^{L}[2SgPoss	Poss]
		‘your-Sg cold water’			
	b.	*gìr^{n}ì*^{L}	*gàrá*	^{L}*[ù*	*kè]*
		house^{L}	big	^{L}[2SgPoss	Poss]
		‘your-Sg big house’			

When the licensing modifier is a numeral, with or without a preceding adjective, the constructional {L}+H overlay applies to the string ending in the numeral before [Pron *kè*] possessors. The numeral functions as the catalyst (§3.7.3.6) that unleashes the tonosyntactic control power of the possessor. The possessor itself drops to L-toned, by Postnominal-Determiner Tone-Lowering. (134) shows the unrestructured and restructured options for pronominally possessed N(-Adj)-Num. All of the restructured forms are in the central column.

(134)	possessor prenominal		possessor postnominal	possessor
a. possessor always follows [N Num]				
			[N Num]$^{L+H}$ ^{L}*[ì^{n} kè*]	1Sg
		or	[N Num]$^{L+H}$ *mà*	
b. possessor precedes or follows [N Num]				
	ú ^{HL}[N Num]	or	[N Num]$^{L+H}$ ^{L}*[ù kè*]	2Sg
	wó ^{HL}[N Num]	or	[N Num]$^{L+H}$ ^{L}*[wò kè*]	3Sg
	ɛ́mɛ́ ^{HL}[N Num]	or	[N Num]$^{L+H}$ ^{L}*[ɛ̀mɛ̀ kè*]	1Pl
	é ^{HL}[N Num]	or	[N Num]$^{L+H}$ ^{L}*[è kè*]	2Pl
	bé ^{HL}[N Num]	or	[N Num]$^{L+H}$ ^{L}*[bè kè*]	3Pl

The schema [N Num]$^{L+H}$ ^{L}[Pron *kè*] in (134a-b) is exemplified in (135e) below and in (32a,d) in §3.7.3.7 above. Adding an adjective, the slightly more elaborate [N Adj Num]$^{L+H}$ ^{L}[Pron *kè*] is exemplified in (147a) below.

The construction with postposed pronominal plus *kè* is also occasionally attested with simple possessed nouns, as in ‘my sleep’ in (591) in §17.3.2 and ‘my child’ in (624b) in §17.6.1.1.

Infrequently, a pronominal possessor with *kè* precedes rather than follows the possessed noun. This happens mainly with nonhuman *kó* ^{L}*kè* ‘its’ as in *[kó* ^{L}*kè]* ^{HL}*sóŋòrò* ‘its (i.e. that) cleverness’ in (637) in §17.6.5 and as in *[kó* ^{L}*kè]* ^{HL}*téŋé-bɔ̀^{n}* ‘the name of its time (season)’ in (136) in §6.2.5. It is also fairly common with reflexive possessor *sǎ^{n}* ^{L}*kè*, as in (644a,c).

However, preposed *[X ^{L}kè]* is regular, for nonpronominal as well as pronominal possessor X, when the possessed noun functions as head of a relative (§14.1.3).

6.2.4 Inalienable possession (kin terms)

There is no systematic morphosyntactic distinction between possessed forms of kinship terms and body parts on the one hand, and possessed forms of ordinary (alienable) nouns on the other.

For example, *dè-dé:* 'father' occurs in *dè-dé: mà* 'my father' and *wó* ^{HL}*dé-dè:* 'his/her father', parallel to alienable *gìr^{n}í mà* 'my house' and *wó* ^{H}*gír^{n}í* 'his/her house'.

Prost (p. 27) states that the 1Sg possessor form for three kin terms is of the type *[í^{n} X]* in the dialect that he described (that of Pel). The stems involved are glossed 'elder brother', 'younger brother', and 'comrades'. My assistant (from Koporo Pe) gave the regular *[X mà]* 1Sg possessor form for these nouns ('my X').

6.2.5 Recursive possession

A possessed NP may itself function as a possessor. The internal structure of the possessor has no systematic effect on the form (including tones) of the possessed NP. Therefore 'house' and 'mother' in (135a-e) have the same overlay they would have after any other preposed possessor.

(135) a. *[dè-dé: mà]* ^{H}*gír^{n}í*
[Rdp-father 1SgPoss] ^{H}house
'my father's house'

b. *[ú* ^{HL}*dé-dè:]* ^{H}*gír^{n}í*
[2SgPoss ^{HL}Rdp-father] ^{H}house
'your-Sg father's house'

c. *[dè-dé: mà]* ^{HL}*ínà:*
[Rdp-father 1SgPoss] ^{HL}mother
'my father's mother'

d. *[sè:dú* ^{HL}*dé-dè:]* ^{HL}*ínà:*
[S ^{HL}Rdp-father] ^{HL}mother
'Seydou's father's mother'

e. *[ùr^{n}ì:^{L} lɔ̌y]$^{L+H}$* ^{L}*[í^{n} kè]]* ^{H}*gír^{n}í*
[children^{L} two]$^{L+H}$ ^{L}[1SgPoss Poss]] ^{H}house
'the house of my two children'

In some cases where the logic points to recursive possession, TgK prefers to treat the two final elements as a compound. In (136a), the logical sense is [the name of [the time of [that one]], but it is realized as [[that one('s)] time-name].

(136) *ou bien* *lě* *ɲàŋ-ɛ̂* *dè,* *[wárú* ^{L}*dɔ̀:]*
or.else planting take-Pfv if, [weeding ^{L}arrive]
[[kó ^{L}*kè]* ^{HL}*téŋé-bɔ̀^{n}]* *ɲǎŋ* ^{L}*gì-jù*
[[Nonh ^{L}Poss] ^{HL}time-name] how? ^{L}say-Ipfv
‘Or from the planting to the first weeding, what do they call the name of that time (=season)?’ (2011.1a.32)

6.3 Noun plus adjective

6.3.1 Noun plus regular adjective (core NP)

Nouns may be followed by one or more modifying adjectives. In the sequences [N Adj] and [N Adj1 Adj2], only the final word retains lexical tones. The preceding words are tone-dropped (137b-d).

(137) a. *ìsí*
‘dog’

b. *ìsì*^{L} *már^{n}á*
dog^{L} big
‘(a) big dog’

c. *ìsì*^{L} *gɛ́^{n}*
dog^{L} black
‘(a) black dog’

d. *[ìsì* *gɛ̀^{n}]*^{L} *már^{n}á*
[dog black]^{L} big
‘(a) big black dog’

túrú ‘one’ is not treated as a modifying adjective. Like other cardinal numerals, it has no tonal effect on a preceding noun: *ìsí túrú* ‘one dog’.

A noun, with any following modifying adjectives, constitutes the core NP. Plural *bè* ~ *mbè* (§4.1.1) is added to the end of the core NP (138b).

(138) a. *ìsí*
‘dog’

b. *ìsì*^{L} *már^{n}á* *mbè*
dog^{L} big Pl
‘big dogs’

c. *[ìsì* *gɛ̀^{n}]*^{L} *már^{n}á*
[dog black]^{L} big
‘a big black dog’

6.3.2 Adjective *gàmá* ‘certain (ones)’, ‘some’

The adjective *gàmá* is used in generalized contexts to denote a subset or an individual belonging to a common category. In its singular form it can also be used to denote a portion of a mass. Like other adjectives, it controls tone-dropping on a preceding noun.

The plural is *gǎm ná* (pointing to earlier *gàmá ná) or *gàmà ná*. It may be used with human and nonhuman referencts. It is probably cognate to Jamsay *gàmà-nám*, which, however, is strictly human. A similar morpheme has plural function in *érú kɔ́ nà* ‘the others’. A construction with parallel clauses is typical. The noun is optionally omitted in the second of two parallel clauses.

(139) a. *[ɲɛ̀*^{L} *gǎm ná] músɔ́rɔ́ págá-jù,*
[woman^{L} **certain** Pl] shawl tie-Ipfv,
[gǎm ná] músɔ́rɔ́ págâ:-rè
[**certain** Pl] shawl tie-Ipfv.PlSbj
‘Some women wear shawls, some do not.’

b. *[gìr*^{n}*ì*^{L} *gǎm ná] wɔ̀r-ê,*
[house^{L} **certain** Pl] collapse-Pfv
[gǎm ná] wɔ̀rɔ̀-lí
[**certain** Pl] collapse-PfvNeg
‘Some houses collapsed, others did not.’

c. *[sùkɔ̀rɔ̀*^{L} *gàmá] yùw-ɛ̂, gàmá yùwɔ̀-lí*
[sugar^{L} **some**] spill-Pfv, **some** spill-PerfNeg
‘Some sugar spilled, some did not.’

See also (366c), (503), (617b), and (685).

gàmá or *gǎm-ná* can also mean ‘maybe’ or ‘sometimes’ in adverbial function, as in (153), (197c), and (261). The fuller combination *tèŋè*^{L} *gàmá* ‘some time(s)’ is also possible. The sequence *gàmá: dè* with the ‘if’ particle means ‘it may be that …’ or ‘it sometimes happens that …’.

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

There is considerable freedom in the ordering of two or more adjectives. Thus *gɛ́*^{n} ‘black’ and *már*^{n}*á* ‘big’ can occur in either order: *[gìr*^{n}*ì gɛ̀*^{n}*]*^{L} *már*^{n}*á* or *[gìr*^{n}*ì màrà]*^{L} *gɛ́*^{n} ‘big black house’. From texts I can cite a few examples like *[tìmɛ̀ nà:]*^{L} *gàrá* ‘big tree’, from *tìmɛ́* ‘tree, wood’, *ná:* ‘main, principal’, and *gàrá* ‘big’.

6.3.3.2 Adjectival and other intensifiers

Intensifiers are used, often in conjunction with an ordinary adjective (or noun, or verb), to intensify or exaggerate. They may or may not correspond one-to-one to ordinary stems. Compare lexicalized collocations like *brand new* and *dead drunk* in English. Most of the TgK intensifiers are unrelated phonologically to the corresponding ordinary term, or to other vocabulary, but there are a few exceptions. Many intensifiers are iterated, and many morphologically simple ones show the final prolongation (→). These features are typical of expressive adverbials, and most intensifiers belong to this word class.

In (140), the "normal word" in the middle column is the adjective, noun, or verb that is closest in meaning to the intensifier.

(140) Intensifiers

intensifier	normal word	gloss
a. denoting abundance		
púnów^{n}→	*pìré*	'(having) flowers'
túy→	*pùrùgí^{n}*	'dust'
túy→	*ɲà^{L}-púrúgú*	'mist, fog'
b. denoting extremity of a quality (derived from a normal word)		
final -i→		
dɔ̀ŋ-í→	*dɔ̀ŋɔ́*	'emaciated'
final reduplication (discussion and more forms in (219) in §8.4.6.1)		
kèrélélé	*kélú*	'cold'
yàgájájá	*kágájú*	'coarse, rough'
c. denoting extremity of a quality (noncognate to normal words)		
iterated		
/H/-/H/		
dáŋ-dáŋ	*már^{n}á*	'stocky'
jɛ́y-jɛ́y	*bèrù-ɔ̀rú*	'green'
"	*yɛ́rú*	'blue'
jáŋ-jáŋ	*bò:mó*	'stupid'
kán-kán	*mǎ*	'hard'
pán-pán	*tɔ́^{n}-tɔ́^{n}*	'sour'
tɛ́n-tɛ́n	*jó→*	'full (container)'
"	*ɛ̌:*	'tight (tomtom hide)'
táy^{n}-táy^{n}	*dògú*	'heavy'
béré-béré	*kàná*	'new'
bɔ́dɔ́-bɔ́dɔ́	*yɔ̀rú*	'soft', 'supple'
jɔ́tɔ́-jɔ́tɔ́	*ɔ̀rú*	'wet'
déré-déré	*sí:*	'pointed'
jáŋá-jáŋá	*nú:*	'hot'
kúdú-kúdú	*dègé*	'short, not long (object)'
kɛ́dú-kɛ́dú	*dègé*	'short, not tall (person)'
púgɔ́-púgɔ́	*ɲɛ́r^{n}ú*	'lightweight'
sɔ́gú-sɔ́gú	*kúrúgú*	'dense (forest)'
yégé-yégé	*dúwɔ́*	'overloaded'
tér^{n}éw^{n}-tér^{n}éw^{n}	*ɛ̌:*	'tight (rope)'
tɛ́r^{n}ɛ́w^{n}-tɛ́r^{n}ɛ́w^{n}	*jó→*	'full (container)'
lɔ́:rúŋ-lɔ́:rúŋ	*ɔ̀mú*	'rotten, spoiled'
/LH/-/L/		
sěy-sèy	*súmɔ́*	'cleaned up completely'
lǒy-lòy	*ká:^{n}*	'clean-shaven (head)'

tɛ̀gú-tɛ̀gù	*kíw^{n}í*	‘shivering’
tègé-tègè	*píríí*	‘white’
sìlɛ̌^{n}-sìlɛ̀^{n}	*gɛ́^{n}*	‘black’
/LH/-/LH/		
wàjá-wàjá	*téŋ-ì:*	‘clear, pure (liquid)’
/H/-/L/		
jɔ́y^n-jɔ̀y^n	*bá^n*	‘red’
táy-tày	*dògó*	‘used up, depleted’
non-iterated		
/H/		
péw	*dògó*	‘finished’
pɛ́n	*kòró*	‘unripe’
kɔ́:r^{n}ɔ́	*ì^n-bǎy^n*	‘(newborn) baby’
/LH/		
pɛ̀rú	*kágárá*	‘bitter’ (*pɛ̀rú* = tree *Khaya senegalensis*, has bitter-tasting medicinal bark)
non-iterated, with final prolongation		
/H/		
kɔ́y^n→	*már^{n}á*	‘oversized (teeth)’
kɛ́w^n→	*ùjú*	‘tiny (eyes)’
kɛ́y^n→	*ùjú*	‘tiny (moon)’
pɔ́rí→	*ɛ̌:*	‘tight (garment)’
sólów→	*gùrú*	‘long’, ‘tall’
kɔ́ɲɔ́y^n→	*dɔ̀ŋɔ́*	‘emaciated’
/LH/		
tǎy^n→	*ɛ́lú*	‘sweet (sugary)’
"	*tɔ́^{n}-tɔ́^{n}*	‘salty’
bùrí→	*már^{n}á*	‘oversized (eyes)’
yù:rí→	*yɔ̀rú*	‘loose-fitting (garment)’
/L/		
bà^n→	*ɔ̀mú*	‘rotten (smelling)’

Adverbial *sɛ̂y^n* ‘a lot, very, well’ is related in form to *sɛ́^{n}* ‘good’, but now has a wide range of abstract senses.

Adjective *sɛ̌y-sɛ̀y* ‘clean’ has the same form as some of the intensifiers in (140c), but it can directly modify a noun: *ɔ̀jɔ̀ sɛ̌y-sɛ̀y* ‘clean thing’.

See also *léw^n* ‘(exactly/just) one’ (§19.4.2).

6.3.3.3 ‘Good to eat’ (*má*)

A morpheme *má* is added to an {L}-toned form of a verb to form a complement to predicative ‘be good’. Segmentally, but not tonally, the combination with *má* is identical to the (singular) hortative form of the verb, since the hortative suffix does not control tone-dropping on the verb stem (§10.6.2.1, below).

In (141b), the topic-like subject (‘meat’, ‘hairdo’) of the higher sentence functions as direct object of the subordinated verb (‘eat’, ‘look at’). There are no further constituents. In (141c), however, the topical NP (‘ax’) is marked as instrumental, and the ‘good to VP’ expression includes a distinct incorporated direct object as compound initial (‘tree’).

(141) a. *nɔ̀wⁿɔ́* *[kùwò*^{L} *má]* *sɛ́ⁿ* *kɔ̂*
meat [eat.meat^{L} for] good be.NonhSbj
'Meat is good to eat.'

b. *[ɲɛ̌* ^{HL}*kúⁿ-mùn]* *[gɛ̀*^{L} *má]* *sɛ́ⁿ* *kɔ̂*
[woman ^{HL}head-braiding] [look^{L} for] good be.NonhSbj
'The woman's hairdo is good to look at (=is pretty).' (*gɛ̀rí*)

c. *[gùrɔ́* *bè]* *[tìmɛ̀-kɛ̀jɛ̀*^{L} *má]* *sɛ́ⁿ* *kɔ̂*
[ax with] [tree-cut^{L} for] good be.NonhSbj
'An ax is good for cutting wood with.'

An embedded agent ('Meat is good for men to eat') is not possible. A dative PP can be preposed to the entire construction to translate such sequences.

The *má* in the 'good to eat' construction is somewhat comparable to the *má* morpheme in nonsubject relative clauses that have the same subject as the main clause (§18.1.3.2). This analysis would make sense if e.g. 'meat' in (141a) were treated syntactically as the subject (not the object) of the lower-clause. Since the 'good to eat' construction does not allow the expression of specific agents ('meat is good for us to eat'), there is some hope that a connection can be justified. However, the 'good to eat' construction does not have relative-clause form.

6.4 Core NP plus cardinal numeral

6.4.1 Ordinary N-(Adj-)Num sequences

A cardinal numeral follows the core NP, i.e. a noun with or without modifying adjectives. The numeral does not interact tonally with the core NP, except that the lexically /LH/-toned numerals '3' through '5' may omit the final pitch rise and surface with apparent /L/ tones, see §4.6.1.2. I do not consider this to be tonosyntactic as such. Examples with 'dog' are in (142). '3' is lexically *tà:nú*.

(142) a. *ìsí* *tà:nù*
dog three
'dog'

b. *[ìsì*^{L} *márⁿá]* *tà:nù*
[dog^{L} big] three
'three big dogs'

Inanimates and human nouns have the same pattern: *gìrⁿí tà:nù* 'three houses', *ɲɛ̌ tà:nù* 'three women', *púlɛ́:ⁿ tà:nù* 'three Fulbe (people)'.

Cardinal numerals may be followed by determiners, pronominal possessors, or *sâ:ⁿ* 'all', triggering an {L}+H overlay.

6.4.2 Adjective-Numeral Inversion

A sequence N-Adj-Num is optionally inverted to N-Num-Adj in the presence of another NP-internal modifier. The modifier in question may be one of the usual reference restrictors that also trigger tonosyntactic operations (possessor, demonstrative, relative clause). It may also be the tonal definite or the universal quantifier *sâ:^{n}* 'all'. In the presence of any such modifier, the inverted construction is common and is spontaneously produced in elicitation from French cues. However, inversion is not obligatory, and every inverted example has an uninverted counterpart that is at least accepted by informants. In the absence of any such modifier, a plain N-Adj-Num sequence is not inverted; inverted examples are not spontaneously produced and are not readily accepted by informants.

When inversion does occur, its tonosyntactic consequences are masked in cases where the entire sequence is subject to a tone overlay imposed by an external ("higher") controller. This is the case with relative head NPs, since the relative clause equally tone-drops an N-Adj-Num or an N-Num-Adj sequence (143a-b). The lexical forms of the bracketed stems are *péjú* 'sheep'*,* *már^{n}á* 'big', and *kúré:* 'six'. The numeral is bolded in the interlinears.

(143) a. *[pèjù* *màr^{n}à* *kùrè:]*^{L} *í^{n}* ^{H}*dár^{n}-ɛ́*
[sheep big **six**]^{L} 1SgSbj ^{H}kill-Pfv.Rel
'the six big sheep that I killed (slaughtered).'

b. *[pèjù* *kùrè:* *màr^{n}à]*^{L} *í^{n}* ^{H}*dár^{n}-ɛ́*
[sheep **six** big]^{L} 1SgSbj ^{H}kill-Pfv.Rel
[= (a)]

A plural demonstrative can likewise tone-drop N-Adj-Num and N-Num-Adj equally (144a-b).

(144) a. *[pèjù* *màr^{n}à* *kùrè:]*^{L} *yɔ́:* *nà*
[sheep big **six**]^{L} NearDist Pl
'those six big sheep.'

b. *[pèjù* *kùrè:* *màr^{n}à]*^{L} *yɔ́:* *nà*
[sheep **six** big]^{L} NearDist Pl
[= (a)]

For alternative tonal treatments of such combinations, see (148a-b) below.

Similarly, a preposed possessor controls {HL} on both N-Adj-Num or N-Num-Adj sequence (145a-b), so again the internal tonosyntactic structure of the three-word sequence is masked.

(145) a. *sè:dú* ^{HL}*[péjú* *màr^{n}à* *kùrè:]*
Seuydou ^{HL}[sheep big **six**]
'Seydou's six big sheep).'

b. *sè:dú* ^{HL}*[péjú* *kùrè:* *màr^{n}à]*
Seydou ^{HL}[sheep **six** big]
'the six big sheep-Sg that I killed (slaughtered).'

However, a postposed possessor like 1Sg *mà* does not control a tone overlay on preceding words other than numeral-final strings. In (146a-b), addition of the final *mà* has no tonal effects; the noun is tone-dropped by the adjective in (146a). (146c) shows the N-Adj-Num pattern which is required in the absence of an external reference restrictor. When 1Sg possessor *mà* is added to (146c), the output is either the uninverted (146d) or the (preferred) inverted (146e), and these two do not show the same tonosyntactic pattern. In (146d), the N-Adj-Num sequence as a whole shows an {L}+H overlay. This suggests that the presence of an immediately preceding numeral allows the postposed possessor to control a tone overlay on the entire preceding string. In other words, the numeral functions as a tonosyntactic catalyst (§3.7.3.6). By contrast, in the (preferred) inverted version (146e), *mà* has no tonal effect; the adjective controls tone-dropping on the preceding words, but the adjective itself is tonally free.

(146)	a.	*pèjù*^{L}	*már^{n}á*	*(mà)*	
		sheep^{L}	big	(1SgPoss)	
		'(my) big sheep-Sg'			
	b.	*péjú*	*kúré:*	*(mà)*	
		sheep	**six**	(1SgPoss)	
		'(my) six sheep'			
	c.	*pèjù*^{L}	*már^{n}á*	*kúré:*	
		sheep	big	**six**	
		'six big sheep'			
	d.	*[pèjù*	*màr^{n}à*	*kùré:]*$^{L+H}$	*mà*
		[sheep	big	**six**]$^{L+H}$	1SgPoss
		'my six big sheep.'			
	e.	*[pèjù*	*kùrè:]*^{L}	*már^{n}á*	*mà*
		[sheep	**six**]^{L}	big	1SgPoss
		[= (d)]			

A pronominal possessor other than 1Sg usually precedes the possessed NP. However, when the possessed NP is N-Adj-Num, the pronominal possessor optionally follows the string, in a different form including a morpheme *kè*. In this case, inversion is optional (but frequent), the {L}+H overlay applies to uninverted [N Adj Num]$^{L+H}$ (147a), the possessor has no tonal effect on inverted [N Num]^{L} Adj (147b), and the possessor (elsewhere 1Sg *ú kè*, 1Pl *ɛ́mɛ́ kè*, etc.) is tone-dropped. When the adjective follows the numeral, a lexically /H/-toned adjective usually shows the final L-tone characteristic of the tonal definite (147b). An /LH/-toned adjective does not (147c), but this is arguably for phonological reasons. Examples with *sâ:*^{n} 'all' usually lack a tonal definite and bring out more clearly the tonosyntactic interaction between numeral and adjective. (147d) shows inverted N-Num-Adj-'all' and is the preferred ordering. It shows tonosyntactic control by the adjective of the N-Num sequence. Uninverted (147e) with N-Adj-Num-'all' is also acceptable. It shows the {L}+H overlay typical of numeral-final strings.

(147)	a.	*[pèjù*	*màr^{n}à*	*kùré:]*$^{L+H}$	^{L}*[ù / ɛ̀mɛ̀*	*kè]*
		[sheep	big	**six**]$^{L+H}$	^{L}[2SgPoss / 1PlPoss	Poss
		'your-Sg/our six big sheep.'				

b. *[pèjù* *kùrè:]*^{L} *már*^{n}*à*$^{+L}$*/ démérè*$^{+L}$ ^{L}*[ù / ɛ̀mɛ̀* *kè]*
[sheep **six**]^{L} big^{+L}/fat^{+L} ^{L}[2SgPoss/ 1PlPoss Poss]
'your/our six big/fat sheep' (in part repeated from 30a)

c. *[pèjù* *kùrè:]*^{L} *dòjú / sɔ̀gɔ̀rɔ́* ^{L}*[ù / ɛ̀mɛ̀* *kè]*
[sheep **six**]^{L} heavy/multicolored ^{L}[2SgPoss/ 1PlPoss Poss]
'your-Sg/our six heavy/multicolored sheep'

d. *[pèjù* *kùrè:]*^{L} *már*^{n}*á / dòjú* *sâ:*^{n}
[sheep **six**]^{L} big / heavy all
'all six big/heavy sheep'

e. *[pèjù* *màr*^{n}*à / dòjù* *kùré:]*$^{L+H}$ *sâ:*^{n}
[sheep big / heavy **six**]$^{L+H}$ all
[=(d)]

Furthermore, the examples with final plural demonstrative given above as (144a-b) are optionally modified by omitting the plural morpheme *nà* following the demonstrative. In this case, the unpluralized demonstrative is tone-dropped and {L}+H overlay appears on the [N Adj Num]$^{L+H}$ sequence (148a) but not on inverted [N Num]^{L} Adj (148b). In the latter example, the final L-tone on the adjective, pointing to the tonal definite, follows the pattern seen in (147b).

(148) a. *[pèjù* *màr*^{n}*à* *kùré:]*$^{L+H}$ ^{L}*yɔ̀:*
[sheep big **six**]$^{L+H}$ ^{L}NearDist
'those six big sheep.'

b. *[pèjù* *kùrè:]*^{L} *már*^{n}*à*$^{+L}$ ^{L}*yɔ̀:*
[sheep **six**]^{L} big ^{L}NearDist
[= (a)]

The tonal definite (a final L-tone) by itself also requires {L}+H overlay on a numeral-final string. The combination of this {L}+H with the L of the tonal definite itself results in a rather complex {L}+H+L, expressed with a final <HL>-toned syllable (149a). If the adjective is final in the (uninverted) string, the tonal definite merely adds a final L-tone on the adjective (149b).

(149) a. *[pèjù* *màr*^{n}*à* *kùrê:]*$^{L+H+L}$
[sheep big **six**]$^{L+H+L}$
'the six big sheep.'

b. *[pèjù* *kùrè:]*^{L} *már*^{n}*à*$^{+L}$
[sheep **six**]^{L} big-Def^{+L}
[= (a)]

6.5 Noun plus determiner

6.5.1 Prenominal discourse-definite *kɔ́*

On this construction, see §4.4.1.3.

6.5.2 Postnominal demonstrative pronouns

The demonstrative pronouns, which can be used absolutely as complete NPs (150a) or can follow a noun, core NP, core NP plus numeral, were described in §4.4.1.2.

(150) *nɔ́:* *yɔ́:*
Prox receive.Imprt
'Take this!'

Demonstratives occur in the positional slot following that of cardinal numerals. A demonstrative may follow a core NP (noun, or noun plus adjective) plus any numeral. When a demonstrative follows a core NP, the noun and any adjective are tone-dropped (151a-b). In the combination N-Adj-Dem, an alternative is to keep the lexical tone on the adjective, except that an /H/-toned adjective ('big') shows a final L-tone (likely the tonal definite), and drop the tone of the demonstrative (151c). A /LH/-toned adjective ('heavy') does not show the final L-tone, but a final L-tone element (as in /dògû$^{+L}$/) might have been absorbed by the following L-toned demonstrative.

(151) a. *bà:gà*^{L} *nɔ́:*
stick^{L} Prox
'this stick' (*bá:gâ*)

b. *[bà:gà* *màr*^{n}*à / dògù]*^{L} *nɔ́:*
[stick big / heavy]^{L} Prox
'this big/heavy stick' (*bà:gà*^{L} *már*^{n}*á*, *bà:gà*^{L} *dògú*)

c. *[bà:gà* *már*^{n}*à*$^{+L}$ */ dògú]* ^{L}*nɔ̀:*
[stick big^{+L} / heavy] ^{L}Prox
(=b)

When demonstrative *nɔ́:* 'this' or *yɔ́:* 'that' follows a string ending in a numeral, the constructional {L}+H overlay (§3.7.3.5) is usually applied to that string, in which case the demonstrative itself undergoes Postnominal-Determine Tone-Lowering (^{L}*nɔ̀:*, ^{L}*yɔ̀:*).

(152) a. *kùré:*$^{L+H}$ ^{L}*nɔ̀:*
six^{L+H} ^{L}Prox
'these six sticks' (*kúré:*)

b. *[bà:gà* *kùré:]*$^{L+H}$ ^{L}*nɔ̀:*
[stick six]$^{L+H}$ ^{L}Prox
'these six sticks' (*bá:gá kúré:*)

c. *[bà:gà* *màr^{n}à* *kùré:]*$^{L+H}$ ^{L}*nɔ̀:*
[stick big six]$^{L+H}$ ^{L}Prox
‘these six big sticks’ (*bà:gà*^{L} *már^{n}á kúré:*)

d. *[sɔ̀:* *lɔ̌y]*$^{L+H}$ ^{L}*yɔ̀:*
[thing two]$^{L+H}$ ^{L}NearDist
‘those two things (=techniques)’ (2011.1a.21) (*sɔ̌: lɔ́y*)

Forms of other numerals in this {L}+H overlay include *tùrú*$^{L+H}$ ‘1’, *sɔ̌:*$^{L+H}$ ‘7’, *sìlá:*$^{L+H}$ ‘8’, *tɛ̀mdɛ̀rɛ́*$^{L+H}$ ‘100’, and *mùɲú*$^{L+H}$ ‘1000’, all of which can be substituted for *kùré:*$^{L+H}$ in (152a-c) and for *lɔ̌y*$^{L+H}$ in (152d).

The tonal definite also triggers the {L}+H overlay; see (56d) in §4.4.1.1.

I have one textual example where the {L}+H overlay fails to apply, and we get [N Num]^{L} Dem. The preceding *kó kà:^{n}* ‘it too’, perhaps treated as a possessor, may have influenced this output.

(153) *háyè* *gàmá* *[kó* *kà:^{n}]*
well some [Nonh too]
[[nàpɛ̀ *lɔ̀y]*^{L} *yɔ́:]* *kó=ǹ* *yɔ́* *kɔ̀*
[[**use** **two]**^{L} **NearDist**] Nonh=Dat Exist be.NonhSbj
‘Well, sometimes, that too (=cow-peas), those two uses (just described) exist for them (cow-peas).’ (2011.1a.30)

An alternative analysis, likely correct historically but debatable synchronically, is that the L-toned final demonstratives in (152a-d) reflect an (otherwise inaudible) tonal definite attached after the numeral, and that the tonal definite is absent in (153).

6.6 Universal and distributive quantifiers

6.6.1 ‘All’ (*sâ:^{n}*, *fú→*)

As in many Dogon languages, there are multiple options for the universal quantifier ‘all’. The two main forms in TgK are *sâ:^{n}* and *fú→*, which are added to mass nouns (154a), to quantifiable nouns with plural reference (154b), to NPs ending in a numeral (154c), and to NPs containing a determiner (154d). *sâ:^{n}* is more common and stylistically neutral, while *fú→*, which can be prolonged intonationally, is more emphatic.

(154) a. *nɔ̀w^{n}ɔ́* *sâ:^{n}*
nɔ̀w^{n}ɔ́ *fú→*
meat all
‘all (of) the meat’

b. *[ɲɛ̌* *bè]* *sâ:^{n}*
[ɲɛ̌ *bè]* *fú→*
[woman Pl] all
‘all (of) the women’

c.	*[pèjù*	*kùré:]*$^{L+H}$	*sâ:*^{n}	
	[pèjù	*kùré:]*$^{L+H}$	*fú→*	
	[sheep	six]$^{L+H}$	all	

‘all six sheep’

d.	*[gìr*^{n}*ì*	*kùré:]*$^{L+H}$	^{L}*yɔ̀:*	*sâ:*^{n}
	[gìr^{n}*ì*	*kùré:]*$^{L+H}$	^{L}*yɔ̀:*	*fú→*
	[house	six]$^{L+H}$	^{L}DistSg	all

‘all six of these houses’

Two tonosyntactic issues arise in (154). In (154c), the N-Num string gets the {L}+H overlay; see also (644c-d) in §18.1.3.1. This suggests that the ‘all’ quantifier has the same latent tonosyntactic control power as determiners and postnominal possessors, and that the latest power is activated by the numeral as catalyst. Alternatively, we could posit an otherwise inaudible tonal definite attached to the numeral, in which case the ‘all’ quantifier has nothing to do with the {L}+H overlay.

In (154d), the demonstrative (elsewhere H-toned *yɔ́:*, §4.4.1.2) has dropped its tones in tandem with the {L}+H overlay on the preceding numeral, as it would without the final ‘all’ quantifier. Again, one might alternatively posit a tonal definite attached to the numeral and argue that this triggers tone-lowering of the demonstrative.

With plural pronouns (1Pl *ɛ́mɛ́*, 2Pl *é*, 3Pl *bé*), both *fú→* and *sâ:*^{n} are again possible. However, the common ‘all’ form for pronouns is *wò→* (for whose other functions see§6.6.3). When *fú→* is used with a pronoun, it follows *wò* (not prolonged), showing that *fú→* is really an intensifying adverbial. However, the more prosaic *sâ:*^{n} can be added directly to the pronoun.

(155)	a.	*ɛ́mɛ́*	*wò→*	
		1Pl	all/each	

‘all of us’

	b.	*ɛ́mɛ́*	*wò*	*fú→*
		1Pl	all	all

[=(a), emphatic]

	c.	*ɛ́mɛ́*	*sâ:*^{n}
		1Pl	all

[=(a)]

If the plural pronoun is quantified by a cardinal numeral, the pronoun functions as possessor of the numeral, as in English *all three of us*. The numeral therefore appears with {HL} or {H} possessed-noun overlay.

(156)	*[bé*	^{HL}*tá:nù]*	*sâ:*^{n}
	[bé	^{HL}*tá:nù]*	*fú→*
	[3PlPoss	^{HL}three]	all

‘all three (of them)’

6.6.2 ‘All’ (^{L}*dày*^{n})

L-toned ^{L}*dày*^{n} ‘all’ occurs at the end of a NP. This is a special use of the noun *dǎy*^{n} ‘outer limit’, hence ‘maximum’. The tones suggest that ^{L}*dày*^{n} was originally a possessum in this construction, presumably back when {L} was a viable possessor-controlled overlay.

(157) *[ɲù:*^{L} *ɔ́gú* ^{L}*dày*^{n}*]* *sàjú* ^{L}*jɔ̀gɔ̀-jù,*
[millet^{L} fast ^{L}**limit**] bird ^{L}peck-Ipfv
‘On the other hand, birds will peck (=eat) fast all the (=early) millet.’ (2011.1a.07)

The various ‘all’ quantifiers frequently co-occur. *dày*^{n} is followed by *sâ:*^{n} ‘all’ in (158). The co-occurrence is evidence that there isn’t much difference in meaning.

(158) *ɲù:*^{L}*-tɛ̌:* *kún-ɛ̀:-sɛ̂*^{n} *dè,*
millet^{L}-big.heap put-Pfv-PlSbj if,
[[wòrù^{L} *ú* *sá* ^{L}*dày*^{n} *sâ:*^{n}*]*
[[field^{L} 2SgSbj have ^{L}**limit** **all**]
kólóm-ɛ̀:] *gɛ̀rɛ́-sɛ̂*^{n} *dè*
go.around-and.SS harvest-Pfv.PlSbj if
‘When (you) had made the big heap, you-Sg would go around all of the fields that you had and cut off the grain spikes.’ (2011.1a.09)

As an NP-final L-toned element, ^{L}*dày*^{n} is well-suited to occur as a terminal element in relative clauses (§14.1.13) and in conjunctions (§7.1.4).

6.6.3 ‘Each, every, all’ (*wò→*)

The distributive quantifier *wò→* is L-toned. It follows a noun (or core NP) in the latter’s usual tonal form: *nǎ wò→* ‘each person’, *gìr*^{n}*í wò→* ‘each house’. It is used in classic distributive contexts like (159a), where individuals from one set are paired with a quantity from another set. In other cases, like (159b), there is no sharp semantic distinction between distributive ‘each’ and universal ‘all’.

(159) a. *[àr*^{n}*á* *wò→]* *ɲú:* *[sà:gù*^{L} *túnɔ́]* ^{L}*bɛ̀r-ɛ̀*
[man each] millet [sack^{L} one] ^{L}get-Pfv
‘Each man received one sack of millet.’

b. *gámúr*^{n}*ú* *[nǎ* *wò→* *kù*^{n}*]* *tàŋà-lí*
distribution [person each on] pass-PfvNeg
‘The distribution didn’t get to each (=all) of them.’

wò→ has a more partitive sense in (160), since it is attached to a pronoun denoting the entire set.

(160) *[ɛ́mɛ́* *wò→]* *[sà:gù*^{L} *túnɔ́-túnɔ́]* ^{L}*bɛ̀-jù*
[1Pl each] [sack^{L} one-one] ^{L}get-Ipfv
‘Each of us will get one sack.’

Further examples are in (161). In (161b) the complement of 'each' contains a nonsingular numeral.

(161) a. *[gìr^{n}ì^{L}-dú* *túrú* *wò→]=ǹ*
[household one each]=Dat
[ɲù:^{L}-sá:gú *túrú-túrú]* ^{L}*ò-jù*
[millet^{L}-sack one-one] ^{L}give-Ipfv
'(We) will give one sack of millet to each household.'

b. *[gìr^{n}ì^{L}-dú* *lɔ́y* *wò→]=ǹ*
[household two each]=Dat
[sá:gú *túrú]* ^{L}*ò-jù*
[millet-sack one-one] ^{L}give-Ipfv
'(We) will give one sack of millet to each two households.'

wò→ also has other functions. It can sometimes be translated as adverbial 'together' (§18.3.2).

6.6.4 'Any' (*pɔ̂^{n}*)

The adjective *pɔ̂^{n}* controls tone-dropping on a preceding noun. It is most common in negative and irrealis contexts, where it can be translated as '(not) any'. Typical combinations include *nà^{L} pɔ̂^{n}* '(not) any person, no-one', *ɔ̀jɔ̀^{L} pɔ̂^{n}* '(not) any thing, nothing', and *ɲà^{L} pɔ̂^{n}* '(not) any place, nowhere', but *pɔ̂^{n}* can be added to any countable common noun.

(162) a. *[nà^{L}* *pɔ̂^{n}]* *[[tògù^{L}* *ná:]* *kâ^{n}]* *kɔ̀:-rɔ́*
[person^{L} **any**] [[shelter^{L} main] in.front] be.NonhSbj-Neg
'There is no-one in front of the main palaver shelter.'

b. *[[bìrɛ̀* *pèrè]^{L}* *pɔ̂^{n}]* *kɔ̀:-rɔ́*
[[work(n) other]^{L} **any**] be.NonhSbj-Neg
'There is no other work.' (2011.1a.04)

pɔ̂^{n} is not the common 'all' quantifier in positive clauses, but it does occur occasionally in texts (163).

(163) *hé:-hà:-hé:* *[nà^{L}* *pɔ̂^{n}]* *bé* *pó-jù$^{+L}$*
[person^{L} **all**] 3PlSbj say-Ipfv.Rel^{+L}
'he-ha-he, all the people said (=made a hubbub).' (2011.1b.01)

6.6.5 Universal and distributive quantifiers with negation

In (164), it is implied that some of the people did come. That is, the negation has wide scope, including the quantifier. Schematically it is [not [∀x [x came]].

(164) *[nǎ* *sâ:^{n}]* *yè-lâ:*
[person all] come-PfvNeg.PlSbj
'Not all of the people came.'

To reverse the scope relationship, a form of the NP directly incorporating (emphatic) negation is used, compare English *nobody*.

(165) *[nà*^{L} *pɔ̂*^{n}*]* *yè-lâ:*
[person^{L} not.any] come-PfvNeg.PlSbj
'None of the people came.'

Similar negative NPs include *ɔ̀jɔ̀*^{L} *pɔ̂*^{n} 'nothing' and *ɲà*^{L} *pɔ̂*^{n} 'nowhere'.

6.7 Accusative absent (except for 1Sg object)

There is no accusative marker for nouns functioning as direct objects. 'Dog' and 'woman' are not case-marked in (166).

(166) a. *í*^{n} *[ìsì*^{L} *yɔ́:]* *lág-ɛ̀*
1SgSbj [dog^{L} NearDist] hit-PerfSg
'I hit (=struck) that dog (over there).'

b. *í*^{n} *ɲɛ̌* *ɔ́-ɛ̀*
1SgSbj woman see-PerfSg
'I saw the woman.'

The 1Sg pronoun has two stems, *í*^{n} in subject and prenominal possessor functions, otherwise *má* with some allomorphic variation depending on the precise function (postnominal possessor *mà*, focus form *mí-*, *má* before postpositions). *má* without a postposition functions, for practical purposes, as an accusative form for this pronoun, as in (41b) and (189a). Other pronominal categories have no special accusatives (§4.3.1).

7 Coordination

7.1 NP coordination

7.1.1 NP conjunction (‘X and Y’) by final dying-quail intonation (*.∴*)

The dying-quail intonational effect, consisting of variable prolongation of the final syllable combined with pitch fall (audible when the word in question ends in a high tone), is expressed by symbol *.∴*, with ".&" in interlinear glosses. In TgK the prolongation is usually briefer than its counterpart in Jamsay. The intonational effect may apply to both conjuncts, or it may be limited to the first conjunct.

(167) a. *ú.∴* *mí.∴*
2Sg.& 1Sg.&
‘you-Sg and I’ (*ú*, *mí*)

b. *[àr^{n}á* *bè.∴]* *[ɲɛ̌* *bè]*
[man Pl.&] [woman Pl(.&)]
‘men and women’ (Pl *bè*)

c. *wó* *[ɲú.∴* *ɛ̀mɛ́.∴]* *ɲí-ỳ^{n}*
3SgSbj [millet.& sorghum.&] eat.meal-Pfv
‘He/She ate the millet and sorghum’

d. *àr^{n}á.∴* *[wó* ^{H}*ɲɛ́.∴]*
man.& [3SgPoss ^{H}woman.&]
‘a man$_{x}$ and his$_{x}$ wife’ (2011.1b.05)

In (167d), ‘man’ does not bind a reflexive possessor in ‘his wife’, so the coindexation is not explicitly marked (§18.4).

Plural conjuncts ending in plural *bè* usually show little or no audible dying-quail effect, at least in common phrases like *[ɲɛ̌ bè] [àr^{n}á bè]* ‘women and men’. This combination is sometimes difficult to distinguish from the *[X bè] [Y bè]* conjunction construction (§7.1.3).

For the occasional use of dying-quail intonation to conjoin two (backgrounded) clauses, see §15.2.2.4.

7.1.2 *kù^{n}.∴* in NP conjunctions

One or more of the NPs in a conjunction may be followed by *kù^{n}.∴*, heard as a protracted [kû:(:)^{n}] or low-pitched [kù:(:)^{n}], instead of adding *.∴* directly to the NP conjunct. This is a stylistic device, used especially in long lists with an incantational flavor.

(168) a. *péjú* *kùⁿ∴,* *nàŋá* *kùⁿ∴,* *ɛ̀rⁿɛ́* *kùⁿ∴,*
sheep **and.&**, cow **and.&**, goat **and.&**,
[sâːⁿ *fú→]* *jɛ́-ɛ̀ː-sɛ̀ⁿ*
[all all] bring-Pfv.PlSbj
'They brought the sheep, the cows, the goats—everything.'

b. *gɛ́rⁿîː* *[wó* *ᴸkè],* *sɛ́rⁿɛ̀ndɛ́* *kùⁿ∴,* *kárábárá∴,*
baggage [3SgPoss ᴸPoss], jewel **and.&,** calabash.box**.&**
[kó *wò* *pú→]* *yɛ̂* *ᴸdàg-ɛ̀*
[Nonh all all] there.Def ᴸleave-Pfv
'(They) had left her baggage, (such as) the jewel and the calabash box.'
(2011.1b.03, excerpt from a longer list of things left)

7.1.3 Serial NP conjunction of type *[X bè] [Y bè]*

A construction with parallel final *bè* (arguably related to plural *bè*, but cf. also instrumental *bè*) is also found in conjunctions. In (169a) the conjoined NPs define the beginning and ending points of a time range. In English we would just say *fifteen or twenty days after* …, but the Togo Kan construction emphasizes the existence of the two possibilities. (169b) is a more typical example involving a potentially open-ended list of entities (here, activities) that exist or are possible. Intonational prolongation (*→*) is typical but not required.

(169) a. *[ɲúː* *nɛ́ː]* *[[[nìŋìrⁿí* *[pɛ́rɛ̀ː* *[núːnɛ́ː* *ságà]]]* *bè],*
[millet now] [[[day [ten [five plus]]] **and**],
[[nìŋìrⁿí *pɛ̌-lɔ́y]* *bè]]* *dɔ̌-ɛ̀* *dè*
[[day ten-two] **and**]] arrive-Pfv if
'When the millet reaches (somewhere) between fifteen and twenty days (after sprouting), …' (2011.1a.03)

b. *[nùŋù-bárⁿá* *bínì],*
[dry.season in]
gìrⁿìᴸ-[tàr-ú] *bè→,*
houseᴸ-[replaster-VblN] **and**,
gɔ̀ːᴸ-[ùj-ú] *bè→,*
granaryᴸ-[build-VblN] **and**,
háyɛ̀ *gìrⁿìᴸ-[ùj-ú]* *bè→,*
well houseᴸ-[build.VblN] **and**,
sɔ̌ː *[tɔ̀gú* *dɛ́yⁿ-dɛ́yⁿ-dɛ́yⁿ]*
thing [kind apart-apart-apart]
'In the dry season, there is replastering walls, and there is building granaries, and there is building houses, many different kinds of things (=activities).'
(2011.1a.33)

7.1.4 *ᴸdàyⁿ* 'limit' in conjunctions

ᴸdàyⁿ, an L-toned form of *dǎyⁿ* '(outer) boundary, limit', can be added after the final conjunct. It has something of the flavor of English *along with* or *as well as* as an alternative to *and*. For *ᴸdàyⁿ* in the sense 'all' see §6.6.2 above.

(170) *[pɔ̀ŋɔ́.:* *[gù-gùrù*^{L} *síg-ɛ́]* ^{L}*dày*^{n}*]*
[fonio.& [Rdp-grass^{L} remain-Pfv] ^{L}**limit**]
[kó *yɛ̌-ɛ̀:* *sǎ*^{n} *gòjó-jú]*
[NonS go-and.SS ReflObj distinguish-Ipfv]
'The fonio (a grain crop) as well as the weeds that remain have gone and become distinguishable.' (2011.1a.24)

7.2 Disjunction

7.2.1 'Or' (*mà→*) as disjunctive particle with NPs

As generally in Dogon languages (and other languages in the region), there is no clear difference between the disjunction 'or' and the polar interrogative morpheme, which requires a choice between positive and negative assertions. In TgK, both the disjunction and the interrogative have the form *mà→*, frequently with intonational prolongation.

In a disjunction, both coordinands are overt, and both are followed by the 'or' morpheme.

(171) *[láyɛ́* *bè]* *[péjú* *mà→]* *[ɛ̀r*^{n}*ɛ́* *mà→]* *dár*^{n}*á*
[Feast.of.Ram with] [sheep **or**] [goat **or**] kill.Imprt
'At the Feast of the Ram, slaughter-2Sg (either) a sheep or a goat!'

7.2.2 Clause-level disjunction

It is possible to use the disjunction with clauses, though it is difficult to construct contexts where the interrogative reading of *mà→* is ruled out.

(172) *[í*^{n} *bàmàkɔ́* *yǎ:-jú* *mà→]*
[1SgSbj B go-Ipfv **or**]
[nî *sígɛ́-jú* *mà→]*
[here stay-Ipfv **or**]
dɔ̀ŋɔ̀r^{n}*ɔ̀* *mó:tì* *yǎ̂:-rò*
on.other.hand M go-IpfvNeg
'Either I will go to Bamako or (I will) stay here, on the other hand I won't go to Mopti.'

As expected, it was not possible to elicit a disjunction of two imperatives. The cue 'work, or leave!' was rendered as (173), with only an implied disjunction.

(173) *[bírɛ́* *bǐ-jí* *dè]* *bírɛ́,*
[work(n) do-Ipfv if] work.Imprt,
[bǐ̂:-rò *dè]* *yǎ:*
[work-IpfvNeg if] go.Imprt
'If (you) are going to work, (then) work! If (you) are not going to work, go!'

8 Postpositions and adverbials

Postpositions include dedicated morphemes used only as postpositions, with L-toned *Cv̀* shapes (*nì*, *bè*), and a number of noun-like postpositions with /HL/ tones, in most cases still transparently relatable to nouns that have /H/ or /LH/ melody.

I have found a few tonal locatives in the form of {HL}-toned nouns, but the pattern is not productive (§8.2.1). In effect, the pattern is largely limited to spatial postpositions themselves.

Dative, instrumental, and (basic) locative postpositions are distinct forms.

8.1 Dative and instrumental

8.1.1 Dative (*nì*, *=ǹ*)

Dative postposition *nì* is often reduced to a cliticized *=ǹ* after a noun ending in a vowel. The irregular 1Sg dative is *má nì* or cliticized *má=ǹ*. There are no other morphological irregularities.

A homophonous clitic *=ǹ* is occasionally found in clause-initial pronouns in topic-switching function. The 1Sg form for that clitic is *í*^{n}*=ǹ* (§19.1.8), showing that the two clitics are distinct.

The dative is standard for the indirect object of ‘give’, ‘show’, and ‘say’, see (298-9) in §11.1.1.2 for examples. The dative can also be used for a range of other indirect objects and beneficiaries.

(174) a.

X	*[Y*	*nì]*	*sàgú*	*kún-ì*
X	[Y	**Dat**]	trust(n)	put.Pfv-3SgSbj

‘X entrusted (something) to Y.’

b.

àr^{n}*ú*	*má=ǹ*	*sɛ́*^{n}	*kɔ̀*
rain	1Sg=**Dat**	good	NonhSbj

‘Rain is good for me (e.g. as a farmer).’
or: ‘Rain pleases me.’

8.1.2 Instrumental-comitative (*bè*)

The postposition *bè* has instrumental sense (‘by means of, using’), and can also be used (e.g. with human complement) in comitative sense. A common combination is *pàŋá bè* ‘by (means of) force’. For *ìŋé bè* ‘by means of what?’, i.e. ‘how?’, see §13.2.3. Examples involving instruments are in (175a-c). In (175d), a transporting vehicle is treated as an instrument. The 1Sg form is *má bè* ‘with me’, in comitative sense (175e).

(175) a.

í^{n}	*nɔ̀w*^{n}*ɔ́*	*[sí:nɛ́*	*bè]*	^{L}*kɛ̀j-ɛ̀*
1SgSbj	meat	[knife	**with**]	^{L}cut-Pfv

‘I cut-Past (the) meat with a knife.’

b. *bé* *dá:gól* *[sɔ́múr*^{n}*ú* *bè]* ^{L}*sɛ̀m-ɛ̀*
3PlSbj courtyard [broom **with**] ^{L}sweep-Pfv
'They swept the courtyard with a broom.'

c. *í*^{n} *ɲú:* *[kɔ̌*^{n} *bè]* ^{L}*wàr-ɛ̀*
1SgSbj millet [daba **with**] ^{L}do.farm.work-Pfv
'I farmed millet using a daba (=hoe).'

d. *wó* *bàmàkɔ́* *[ká:rú* *bè]* ^{L}*yè-y*
3SgSbj B [bus **with**] ^{L}go-Pfv
'He/She went to Bamako with (=in) the bus.'

e. *ú* *[[má* *bè]* *àjírí* *á:]* *bɛ̌-jú*
2SgSbj [[1Sg **with**] wrestling catch] get-Ipfv
'Can you-Sg wrestle with me?'

Homophones of postposition *bè* are the plural particle *bè* in NPs (§4.1.1) and the conjunction particle *bè* which follows both/all conjoined NPs (§7.1.3).

1Sg possessor *mà* (following the possessum) raises its tone in instrumental or comitative *[X má] bè* 'with my X', but not before plural *bè*, where we get *X mà bè* 'my Xs'. Thus *[ɲɛ̌ má] bè* 'with my wife' versus *ɲɛ̌ mà bè* 'my wives'.

8.2 Locational postpositions

8.2.1 Tonal locatives

There is no locative form expressed solely by a tonal change for e.g. unpossessed 'house/home' (*gìr*^{n}*í*), 'field' (*wòrú*), 'well' (*òtě:*) or 'village' (*àná*). These nouns have rising tone melodies, with an H- or <LH>-toned final syllable. They are common complements of motion verbs like 'go', with no further morphology, and take regular postpositions like *bínì* 'in, inside' in other constructions.

By contrast, *ɛ́wɛ́* 'market', *dá:rá* 'area outside (a home)', *gìr*^{n}*ì-ká*^{n} 'doorway' ("house-mouth"), *tògù ná:* 'main palaver shelter', *géné* 'height', and the possessed nouns *X* ^{H}*áná* 'X's village', *X* ^{H}*gáná* 'X's country', and *X* ^{H}*gír*^{n}*í* 'X's house' do have a tonal locative somewhat like that in Jamsay. A local L-tone is added to the right edge, leaving the tones of previous syllables unaffected. This is best seen in transparent compounds like 'doorway', and in noun-adjective combinations like 'main palaver shelter'. Superscripted $^{+L}$ indicates addition of a local L-tone at the right edge (176a-b), in some cases (176c-d) on top of a possessor-controlled {H} overlay.

(176) a. *í*^{n} *ɛ́wɛ̀*$^{+L}$ *yǎ:-jú*
1SgSbj market.**Loc**$^{+L}$ go-Ipfv
'I am going to (the) market.'

b. *wó* *mótó* *gìr*^{n}*ì*^{L}*-kâ*$^{n+L}$ ^{L}*ìgì-rì*
3SgSbj motorcycle house^{L}-mouth.**Loc**$^{+L}$ ^{L}stop-Tr.Pfv
'He/She stopped the motorcycle in front of the house.'

c. *wó* *[ɛ́mɛ́* ^{H}*ánà*$^{+L}$*]* ^{L}*yè-y*
3SgSbj [1PlPoss ^{H}village.**Loc**$^{+L}$] ^{L}go-Pfv
‘He/She went to our village.’

d. *wó* *[sǎ*^{n} ^{H}*gír*^{n}*ì*$^{+L}$*]* ^{L}*yè-y*
3SgSbj [ReflPoss ^{H}house.**Loc**$^{+L}$] ^{L}go-Pfv
‘He/She went home.’

The form of *gìr*^{n}*ì*^{L}*-kâ*$^{n+L}$ in (176b) is different from that of e.g. *tùwó kâ*^{n} ‘at the edge of the rock (=mountain)’. The {L} overlay shows that *gìr*^{n}*ì*^{L}*-* is a compound initial, so *gìr*^{n}*ì*^{L}*-kâ*$^{n+L}$ must be the tonal locative of the compound *gìr*^{n}*ì*^{L}*-ká*^{n}. By contrast, the lexical tone of *tùwó* is heard in *tùwó kâ*^{n}, so this has to be analysed as postposition *kâ*^{n} ‘at the mouth of’ following the noun *tùwó*.

The adjective *túnɔ́* ‘one’ (§4.6.1.1) has a tonal locative in the combination *ɲà*^{L} *túnɔ̀*$^{+L}$ ‘in one place, in a single (=the same) place’.

A difficulty in parsing texts in TgK, unlike Jamsay, is that the same local addition of an L-tone at the end of a noun (or NP) can also mark definiteness (§4.4.1.1). There is also a similar final tone (or pitch) drop on one type of topical NP, §19.1.1. These are probably all cases where an original L-toned morpheme *Cv̀ has been segmentally deleted, leaving behind a floating tone that has docked on the noun. In certain textual occurrences, it is difficult or impossible to determine whether location or definiteness is marked. I identify tonal locatives by the general context, including the absence of mentions of the referent in the immediately preceding discourse (so it can’t be construed as discourse-definite), and by the absence of a spatiotemporal postposition that would have been used with other nouns that lack a tonal locative.

(177) a. *wó* *bǎ:rì* *[yɛ̀*^{L} *nâ:*$^{+L}$*]*
3SgSbj go.around [woman^{L} old.Def^{+L}]
[ɛ̀nɛ́ ^{H}*gír*^{n}*ì*$^{+L}$*]* *yɛ̀rɛ́* *pám-ɛ́:* *wà*
[LogoPoss ^{H}house.**Loc**$^{+L}$] come lie.low-MP.Imprt Quot
‘(She said to him:) (Just) circle around and come and stay out of sight at my, (i.e.) at the old woman’s, house!’ (2011.1b.01)

b. *[àná* ^{H}*ná* *sâ:*^{n}*]* *ɛ̀:*^{nL}*-[tè-té:]*
[village ^{H}person all] soda.ash-[filtering.pot]
[tògù^{L} *nâ:*$^{+L}$*]* *mɔ̌:-nɔ́* *wà*
[shelter^{L} main.**Loc**$^{+L}$] gather-Caus.Imprt Quot
‘(He) said: “all people of the village, gather the soda-ash filtering pots in the main palaver shelter!” ’ (2011.1b.01)

c. *[ɛ̀nɛ́* *[nǎ* ^{H}*gíyè*$^{+L}$*]* *nɔ́-nɔ́:r*^{n}*ɔ́* *yɛ́* *sò* *dè]*
[LogoSbj [person ^{H}body.**Loc**$^{+L}$] Rdp-scar Exist be.on if]
[[[kó ^{L}*bàŋà]* ^{H}*gír*^{n}*ì*$^{+L}$*]*
[[[Def ^{L}owner] ^{H}house.**Loc**$^{+L}$]
ɛ̀nɛ́ *ɛ̀gɛ́* *yǎ̀:-rò]* *wà*
LogoSbj husband go-IpfvNeg] Quot
‘(She) said: “if there are any scars in (=on) a person’s (=man’s) body, I won’t go to the fellow’s house in marriage (=I won’t marry him).” ’ (2011.1b.02)

8.2.2 ‘In, on’ (basic locative) (*bîn* ~ *bínì*)

The common locative postposition is *bîn* ~ *bínì* ‘in, inside’, following a noun or pronoun denoting an enclosing container or area (waterjar, house, field). It is related to the noun *bìní* ~ *bǐn* ‘belly’.

(178) a. *wó* *[gìr^{n}í* *bîn]* *yɛ́* ^{L}*ùmò*
3SgSbj [house **in**] Exist ^{L}lie.down.Stat
‘He/She is lying down in the house.’

b. *í^{n}* *dí:* *[dɛ̌^{n}* *bîn]* *kún-ì*
1SgSbj water [waterjar **in**] put-Pfv
‘I put (=poured) the water in the waterjar.’

c. *bé* *[[[sǎ^{n}* *bè]* ^{H}*wórú]* *bîn]*
3PlSbj [[[ReflPoss Pl] ^{H}field] **in**]
wárú *wǎ-téŋè*
farming do.farm.work-Prog.PlSbj
‘They do farm work in their field.’

As with all locationals, allative or ablative directionality is expressed by an accompanying directional verb like ‘go out’ or ‘go in’. However, ‘go to X’ is expressed with no postposition on X (even in cases like ‘house’), since X functions here as a destination rather than as an enclosing space (179d).

(179) a. *wó* *[gìr^{n}í* *bîn]* *nú-ỳ^{n}*
3SgSbj [house **in**] go.in-Pfv
‘He/She went into the house.’

b. *wó* *[àná* *bîn]* ^{L}*gò-è*
3SgSbj [village **in**] ^{L}go.out-Pfv
‘He/She went out of (=left) the village.’

c. *wó* *[dí:* *bîn]* *bàgá* ^{L}*nù-ỳ^{n}*
3SgSbj [water **in**] fall ^{L}go.in-Pfv
‘He/She fell into the water.’

d. *wó* *gìr^{n}í* ^{L}*yè-ỳ*
3SgSbj house ^{L}go-Pfv
‘He/She went home.’

bîn can be used with certain temporal expressions, though they are most often uttered without a postposition since their function in the clause is usually obvious. *bîn* is optional in (180a), but would sound awkward in (180b-c).

(180) a. *ɛ́mɛ́* *[dà:gá* *(bîn)]* *dàná* *dàná-ɲú*
1PlSbj [night **(in)**] hunt(n) hunt-Ipfv
‘We will go on a hunt at night.’

b.	*bé*	*ɛ̀wɛ̀*^{L}*-níŋírⁿí*	^{L}*yè-jì*
	3PlSbj	market^{L}-day	^{L}come-Ipfv

‘They will come (on) market day.’

c.	*nùŋù*^{L}*-bár*^{n}*á*	*ɛ́mɛ́*	*[sǎ*^{n}	*bè]*	*dɛ̌:r*^{n}*ɛ́-mí-ɲí*
	dry.season	1PlSbj	[ReflObj	Pl]	rest-Caus-Ipfv

‘In the dry season, we rest (ourselves)’.

Likewise, an overt locative adposition is not used with place names.

(181)	*í*^{n}	*kɔ̀mpɛ́*^{n}	*wɔ̂*
	1SgSbj	Koporo-Pen	be.HumSgSbj

‘I am in Koporo-Pen (village).’

8.2.3 ‘On X’ and ‘over X’ (*kû*^{n})

The postposition *kû*^{n} ‘on’ or ‘over’ is related to the noun *kú*^{n} ‘head’. The 1Sg form is *kú*^{n} *mà*, identical to ‘my head’.

The postposition can indicate position on a supporting surface (‘on X’), including vertical surfaces where appropriate (a lizard or insect clinging to a wall). This postposition often co-occurs with verbs that add nuances to the topography, such as *nàŋà* ‘be up on (a horizontal surface)’, *wàwà* ‘be lying on one’s belly (on a horizontal or vertical surface)’, and their transitive counterparts (182a-c). The senses ‘on (a surface)’ and ‘on the head of (a person)’ may converge in cases like (182d), where ‘on me’ is normally understood to mean ‘on my head’, but ‘on me’ can also be used when the stone fell on some other part of the body (e.g. while the referent was lying down). The semantic extension to an abstract burden in (182e) is unsurprising.

(182)	a.	*kù*^{nL}*-kúwó*	*[tà:bǎl*	*kû*^{n}*]*	^{L}*nàŋà*
		hat	[table	**on**]	^{L}be.up.on.Stat

‘The hat is on the table.’

b.	*kɛ̀:ŋú*	*[gó:*	*kû*^{n}*]*	^{L}*wàwà*
	agama	[wall	**on**]	^{L}lie.on.belly.Stat

‘The agama lizard is on (the vertical surface of) the wall.’

c.	*í*^{n}	*bàràdá*	*[ɲ:ɛ́:*	*kû*^{n}*]*	*ná:n-ì*
	1SgSbj	tea.kettle	[fire	**on**]	put.up.on-Pfv

‘I put-Past the tea kettle (up) on the fire (=on the burner).’

d.	*tùwó*	*[kú*^{n}	*mà]*	*bág-ɛ̀*
	stone	[**on**	1Sg]	fall-Pfv

‘The stone fell on me.’

e.	*[gìr*^{n}*í*	^{H}*dúwɔ́]*	*[ú*	*kû*^{n}*]*	^{L}*nàŋà*
	[house	^{H}load]	[2Sg	**on**]	^{L}be.up.on.Stat

‘The burden of (financial responsibility for) the household is on you-Sg.’

The postposition is also used in the sense ‘over, above’, indicating a vertical relationship to a reference object over an intervening space.

(183)	a.	*sàjú*	*[àná*	*kû^{n}]*	*kír-é:-táŋà*
		bird	[village	**over**]	fly-MP-Prog

‘The bird is flying over the village.’

b.	*sùŋú*	*[lɔ̀gɔ́*	*kû^{n}]*	*bàjá*	*tánú-gá*
	rope	[mud	**over**]	pull	pass-Caus.Imprt

‘Stretch-2Sg out the rope above the mud!’

Finally, *kû^{n}* can mean ‘about, on the subject of X’, with reference to speech or thought.

(184)	*[é*	*nɛ́:]*	*[lɛ̌*	*kû^{n}]*	*pèré*				
	[2Pl	now]	[slashing	**on**]	otherwise				
	[[sɔ̀:	*pèrè]^{L}*	*tíŋɛ́*	*é*	^{L}*bɛ̀-jù]*	*yɔ́*	*kɔ̀*	*mà*	
	[[thing	other]^{L}	speak	2PlSbj	^{L}get.Ipfv.Rel]	Exist	be.NonhSbj	Q	

You-Pl now, concerning planting, is there additionally another topic that you-Pl can talk (about), aside from all those things (already said)?’ (2011.1a.01)

8.2.4 ‘At the edge of X’ (*kâ^{n}*)

The noun *ká^{n}* ‘mouth’ (also ‘rim’ e.g. of a waterjar, well, etc.) corresponds to postposition *kâ^{n}* ‘at the edge of’. Typical complements are ‘mountain’, ‘water (pond)’, ‘well’, and ‘village’.

(185)	a.	*ɛ́mɛ́*	*[tùwó*	*kâ^{n}]*	*yɛ̌-∅*	*dè,*
		1PlSbj	[rock	**at.edge.of**]	go-Pfv	if,
		[sǎ^{n}	*bè]*	^{L}*dɛ̀:r^{n}ɛ̀-mì-ɲù*		
		[ReflObj	Pl]	^{L}rest-Caus-Ipfv		

‘We’ll go to the edge of the mountain, then we’ll rest.’

b.	*dí:*	*kâ^{n}*
	water	**at.edge.of**

‘at the edge of the water (pond, etc.)’

8.2.5 ‘On top of X’ (*árà*)

This postposition means ‘on top of X, on the highest part of X’. The reference object is something of considerable height that requires climbing or mounting: roof, tree, donkey, cart. The related noun *árá* occurs in the adverbial phrase *árá kû^{n}* ‘up on top’, ‘up above’.

(186)	a.	*í^{n}*	*[kùmɔ̀rú*	*árà]*	*dɔ̀wɔ́-jú*
		1SgSbj	[roof	**on.top.of**]	go.up-Ipfv

‘I will go up on (top of) the roof.’

b.	*[gɛ́r^{n}í:*	*[í^{n}*	^{L}*kè]]*	*[wògòtóró*	*árà]*	*ná:ná*
	[gear	[1SgPoss	^{L}Poss]]	[cart	**on.top.of**]	put.up.on.Imprt

‘Put-2Sg my baggage up on the cart!’

8.2.6 ‘Beside X’ (*bɛ́:-gɛ̀rɛ̀*)

One postposition meaning ‘beside, next to’ is *bɛ́:-gɛ̀rɛ̀*. It indicates proximity, normally on a horizontal plane. The 1Sg form is *bɛ̀:*^{L}*-gɛ̀rɛ́ mà* ‘next to me’. The postposition is related to the noun *bɛ̀:*^{L}*-gɛ̀rɛ́* ‘side, flank’, also ‘zone, vicinity’. *bɛ̀:-gɛ̀rɛ́* can also be used adverbially in the sense ‘at/to the side’ with unspecified reference object.

(187) a. *í*^{n} *[wògòtóró bɛ́:-gɛ̀rɛ̀] wɔ̀*
1SgSbj [cart **beside**] be.Hum
‘I am next to the cart.’

b. *túŋúr*^{n}*ú [dɛ̌*^{n} *bɛ́:-gɛ̀rɛ̀] bɛ́:*
stool [waterjar **beside**] put.Imprt
‘Put-2Sg the stool next to the waterjar!’

Cf. noun *bɛ̀rɛ̀-gɛ̀rɛ́* ‘side of body (at ribs), flank’.

8.2.7 ‘Beside X’ (*bû*^{n})

Another ‘beside X’ expression is *[X bû*^{n}*]*. X denotes one or more persons or objects (e.g. a tree) that define a space that another entity can be in. The 2Sg combination is *ú bû*^{n}, while 1Sg is *bǔ*^{n} *mà* with <LH> tone.

(188) a. *háyɛ̀ ámír*^{n}*í [[gɔ́:*^{n} *bɛ̀] bù*^{n}*] yɛ̌-ɛ̀:*
well chief [[griot Pl] **beside**] go-and.SS
‘Well, the chief went in among the griots (bards) (and …).’ (2011.1b.01)

b. *wó [[tìmɛ́* ^{L}*yɔ̀:] bû*^{n}*] wɔ̀*
3SgSbj [[tree ^{L}NearDist] **beside**] be.HumSgSbj
‘He/She is next to that tree.’
(variant: *[[tìmɛ̀ yɔ́:] bû*^{n}*]*)

8.2.8 ‘In front of’ (*gírè*)

The postposition ‘in front of’ is *gírè*. The 1Sg form is *gíré mà*. The postposition is related to the noun *gíré* ‘front’, as in adverbial *gíré tɔ̀* ‘in front, ahead’. The stem can be a compound final, as in *ìr*^{n}*ì-gíré* ‘incisor’ (“front tooth”).

Prototypical uses of the postposition are spatial. The reference object should have a front side (face), such as a person, animal, or vehicle.

(189) a. *wó [nǎ wò→] gírè] má* ^{L}*dɔ̀-ɛ̀*
3SgSbj [person all] **in.front.of**] 1SgObj ^{L}insult-Pfv
‘He/She insulted me in front of all the people.’

b. *wó [mòbílí gírè]* ^{L}*ùmò*
3SgSbj [vehicle **in.front.of**] ^{L}lie.down.Stat
‘He/She is lying down in front of the (motor) vehicle.’

gírè is not used in contexts like ‘He’s sitting in front of (=on the near side of) that tree’ (from a given vantage point). The usual way to express this would be with *bɛ́:-gɛ̀rɛ̀* ‘beside, next to’, disregarding the speaker’s visual line.

‘In front of the house’ is expressed as ‘at the doorway’, see tonal locative *gìr^{n}ì* ^{L}*-kâ^{n}* in §8.2.1, above.

8.2.9 ‘Behind X’ (*dógò*), ‘after X’ (^{H}*dógó ní:*)

‘Behind X’ in the spatial sense is *X dógò*. The 1Sg form is *dògó mà* ‘behind me’. The noun *dògó* ‘rear (area)’ occurs in e.g. adverbial *dògó tɔ̀* ‘in the rear, in back’ with *tɔ̀* (§8.2.14). It is also possible to use *[X* ^{H}*dógó] tɔ̀* as a PP, instead of *X dógò*, in the sense ‘behind X, at the rear of X’ or ‘after X’. *[X* ^{H}*dógó] tɔ̀* treats *dògó* as possessed noun and therefore requires its {H}-toned form.

(190) a. *[ɛ́mɛ́* ^{H}*gír^{n}í] [ɛ́wɛ́ dógò] kɔ̀*
[1PlPoss ^{H}house] [market **behind**] be.NonhSbj
‘Our house is behind the market.’

b. *mòtǎm [ú dógò] yɔ́ kɔ̀*
scorpion [2Sg **behind**] Exist be.NonhSbj
‘There’s a scorpion behind you-Sg.’

c. *[tìmɛ́ dógò] bàŋ-ɛ́:*
[tree **behind**] hid-MP.Imprt
‘Hide-2Sg (yourself) behind a tree!’

d. *[[pùr^{n}ú* ^{H}*dógó] tɔ̀] [jǎ:ǹ-∅ dè]*
[[cream.of.millet ^{H}**after**] at] [boil-Pfv if]
[ɲǐ-∅ kà:^{n}] ^{L}*bìr-ɛ̀:-jù*
[eat-VblN also] ^{L}do-MP-Ipfv
‘After (=in addition to) cream of millet, boiling and eating (bissap roselle fruits) is also possible.’ (2011.1a.27)

Temporal ‘after X’ is expressed by a related construction *[X* ^{H}*dógó ní:]*. Here ^{H}*dógó* can be analysed as the possessed form of noun *dògó* ‘rear’. The 1Sg form is *[dògó mà] ní:* ‘after me’. This leaves *ní:* as the real postposition here, but it does not have the /HL/ tone of other *Cv:* postpositions, and the syntax is nontransparent.

(191) a. *í^{n} [ú* ^{H}*dógó ní:] ɲǎ: ɲí:-ɲí*
1SgSbj [2Sg ^{H}**rear** **after**] meal eat.meal-Ipfv
‘I will eat after you-Sg.’

b. *í^{n} àná [kèrɛ́* ^{H}*dógó ní:] yǎ:-jú*
1SgSbj village [festivity ^{H}**rear** **after**] go-Ipfv
‘I will travel after the festivities.’

8.2.10 ‘Under X, at the base of X’ (*bɔ́rɔ̀*)

‘Under’ or ‘at the base of’ as postposition is *bɔ́rɔ̀*, related to a noun *bɔ̀rɔ́* ‘rear end’ (which has a range of vaguely obscene senses rather like *ass* in English). *bɔ̀rɔ́* is also adverbial ‘below’. As compound final, *-bɔ̀rɔ́* means ‘lower or rear (part of)’, as in *sùgùrù*^{L}*-bɔ̀rɔ́* (“lower ear”) ‘earlobe’, *kà*^{nL}*-bɔ̀rɔ́* (“lower mouth”) ‘lower lip’, *ìr*^{n}*ì*^{L}*-bɔ̀rɔ́* ‘lower teeth’, and *màrùpà:*^{L}*-bɔ̀rɔ́* ‘butt end of rifle’.

The 1Sg form is *bɔ̀rɔ́ mà* ‘under me’, identical to ‘my rear end’.

(192) a. *tàgá [tà:bǎl bɔ́rɔ̀] sò*
shoe [table **under**] be
‘The shoes are under the table.’

b. *ɛ́mɛ́ [máŋgóró bɔ́rɔ̀] dɛ̀ŋ-ɛ́:-má-ỳ*^{n}
1PlSbj [mango **under**] sit-MP-Hort-PlSbj
‘Let’s sit under the mango (tree).’

c. *jɔ̀wɔ́ [dɛ̌*^{n} *bɔ́rɔ̀] bé:*
onion [waterjar **under**] put.down.Imprt
‘Put-2Sg the onions down under the waterjar!’

d. *[gàmà*^{L} ^{H}*ná] [jɔ̀ŋùr*^{n}*ú bè] [kó bɔ́rɔ̀]*
[some^{L} ^{H}person] [hoe Inst] [Nonh **under**]
tɔ̀-tɔ́:-lé tɔ́:-jú
Rdp-slash-Iter slash-Ipfv
‘Some people keep slashing (lightly) around its base (underside and roots of peanut plants).’ (2011.1a.21) (for verb iteration see §11.6.5)

A different ‘under’ postposition, *jô:*, is said to occur in some other TgK dialects (e.g. Pel, Koporo-Na).

8.2.11 ‘Between’ (*gân*)

The ‘between’ postposition is *gân*. It is added to a NP or pronoun denoting a plurality, so there is no 1Sg form as such, though the 1Sg pronoun may occur in a conjoined NP that serves in its entirety as the complement of the postposition (193c).

(193) a. *ɛ́mɛ́ gân*
1Pl **between**
‘between us’

b. *[[àr*^{n}*á bè.˙.] [ɲɛ̌ bè.˙.]] gân*
[[man Pl.&] [woman Pl.&]] **between**
‘between men and women’

c. *[ú.˙. mí.˙.] gân*
[2Sg.& 1Sg.&] **between**
‘between you-Sg and me’

There is an adverb *gàn-nɔ̂n* ‘somewhere (in the area)’.

8.2.12 ‘Among X’ (*kɛ́nɛ̀*)

kɛ́nɛ̀ is related to the noun *kɛ́nɛ́* ‘liver (and heart)’, which can be used abstractly to denote the seat of the emotions. As a postposition, it translates as ‘among X’, where X denotes some collectivity. There is no 1Sg form. In some contexts, *kɛ́nɛ̀* functions as a partitive, for example in sentences like ‘Among my cows, how many (cows) died?’, see §13.2.7, below.

(194)	a.	*[ɛ́mɛ́*	*kɛ́nɛ̀]*	*wó*	*gá:rá*	^{HL}*ɔ́gù*
		[1Pl	**among**]	3SgSbj	more	^{HL}fast

‘He/She is the fastest (person) among us.’

b.	*[[é*	^{HL}*gɛ́r*^{n}*ì:]*	*kɛ́nɛ̀]*	*dɛ̀nɛ́*	*gɛ̀rɛ́*
	[[2PlPoss	^{HL}gear]	**among**]	look.for	look.Imprt

‘Search among (=through) your-Pl baggage (=bags)!’

8.2.13 ‘From X to Y’ (*bà→*, *fó→*)

There are no ablative or allative postpositions in a strict sense, since directionality is expressed by verbs. The slightly emphatic postposition-like particle *bà→* ‘all the way’ (with L-tone) can follow a term denoting either the starting point, with verb ‘go out’ as in (195a), or the endpoint, with a verb like ‘go’ or ‘come’.

bà→ competes in part with preposed *fó→* ‘all the way to, until’, but the latter has a mainly temporal sense.

(195)	a.	*bé*	*[mó:tì*	*bà→]*	*jɔ̀wɔ́*	^{L}*y-ɛ̀-ɛ̀:*
		3PlSbj	[Mopti	**all.the.way**]	run	^{L}go-Pfv.PlSbj

‘They ran all the way to Mopti.’

b.	*[bé*	*[mó:tì*	*bà→]*	*gò-é:]*
	[3PlSbj	[Mopti	**all.the.way**]	go.out-and]
	[jɔ̀wɔ́	*bàɲgàrá*	^{L}*y-ɛ̀-ɛ̀:]*	
	[run	Bandiagara	^{L}go-Pfv.PlSbj]	

‘They ran all the way from Mopti to Bandiagara.’

c.	*yé*	*ɛ́mɛ́*	*yǎ:-jú*	*[fó→*	*dà:gá*	^{L}*dɛ̀-ɛ̀]*
	going	1PlSbj	go-Ipfv	[**until**	night	^{L}night.fall-Pfv]

‘We kept walking until night fell.’

8.2.14 Combinations with *tɔ̀* ~ *tɛ̀* ‘toward’ (*síyɛ́ tɛ̀*, *ágá tɔ̀*)

For most nouns, ‘towards X’ is expressed as *[[X síyɛ́] tɛ̀]*, variant *[[X síwɛ́] tɛ̀]*, with an {H}-toned possessed form of *sìyɛ́* ~ *sìwɛ́* ‘side’ followed by a postposition *tɛ̀*.

Similarly, ‘about X, concerning X’ (as in the context of the subject of a discussion) can be expressed as *[X* ^{H}*ágá] tɔ̀]*, where *ágá* is again {H}-toned as a possessed noun, and is slightly contracted segmentally from noun *àrgá* ‘side, zone’.

There are a number of high-frequency expressions where *tɔ̀* ~ *tɛ̀* is added to a simple noun, without *síyɛ́*, producing an adverbial phrase (generally spatial). The known cases are in (196). Overall *tɔ̀* is the less marked of the two allomorphs, while *tɛ̀* is used only after a form ending in *ɛ*. Note especially *gíré tɔ̀* 'ahead'.

(196) Noun plus

form	gloss	based on
a. after noun		
kú^n tɔ̀	'on top'	*kú^n* 'head'
dògó tɔ̀	'in the rear'	*dògó* 'rear'
gíré tɔ̀	'ahead'	*gíré* 'front'
dá:rá tɔ̀	'outside'	*dá:rá* 'area outside'
b. after demonstrative		
ní tɔ̀	'this way, around here'	*nî* 'here'
yí tɔ̀	'that way, over there'	*yî* 'over there'
yɛ́ tɛ̀	'around there (definite)'	*yɛ̂* 'there (definite)'
ɛ́ tɛ̀	"	
c. after pronoun		
í^n tɔ̀	'over here'	*í^n* 1Sg pronoun

For *yǎ: tɔ̀* 'whereabouts?, around where?' see §13.2.4.

Some combinations with *tɔ̀* can also be used as complex postpositions. In this case, the noun-like element preceding *tɔ̀* is treated tonally as possessed by the preceding NP. For example, from adverbial phrase *dògó tɔ̀* 'in the rear' we get *[gìr^{n}í ^{H}dógó] tɔ̀* 'behind (=at the rear of) the house.'

8.3 Complex relational postpositions

8.3.1 Purposive and causal postpositions

8.3.1.1 Purposive 'for' (*gɛ̂:*, *gì*, *gà*)

In a prospective purposive sense, both *dógò* 'after' (§8.2.9, above) and true purposive *gɛ̂:* ~ *gì* can be used (197a). *gɛ̂:* ~ *gì* also occurs in retrospective causal sense (197b). Of the two variants, *gɛ̂:* is more common in texts.

(197) a.

ɛ́mɛ́	*[tɛ̌:*	*dógò]*	*^{L}yɛ̀r-ɛ̀*
"	*["*	*gɛ̂:]*	^{L} "
1PlSbj	[honey	**for**]	^{L}come-Pfv

'We came for (the) honey.'

b.

bɛ́	*[àr^{n}ú*	*gɛ̂:]*	*^{L}jɔ̀w-ɛ̀*
3PlSbj	[rain	**for**]	^{L}run-Pfv

'They fled because of the rain.'

c. *háyɛ̀ [ɛ̀:rɛ̀*^{L} *ná:] gàmá [yɔ́: gì]* ^{L}*lɛ̀:-jù*
well [peanut^L main] some [NearDist **for**] ^{L}slash-Ipfv
‘Well, that [as just described] is why (they) sometimes slash (=plant) groundnuts.’ (2011.1a.19)

The 1Sg form is *má gɛ̂:* ‘because of me’.

The phrase ‘for God’, in the sense ‘in the name of God’ (i.e. as an act of charity, without recompense) is expressed by *àmá gɛ̂:* ~ *àmá gì*.

(198) *í*^{n} *[àmá gɛ̂:] ú bǎ-jú*
" *[* " *gì]* " "
1SgSbj [God **for**] 2SgObj help-Ipfv
‘I will help you-Sg for (=in the name of) God.’

Another, rather isolated form *ámà gà* is used in requests made in desperation (‘For God’s sake, help me!’).

gɛ̂: and *gì* are related to quotative verb *gí* ‘say’ (§11.3.1.2). *gɛ̂:* can be analysed as a variant of the original combination of *gí* with same-subject anterior subordinator (§15.2.2.1). The regular form of this combination is *gí-ɛ̀:* (as in ‘he said …, and then left’), but a variant *gɛ́-ɛ̀:* (often reduced to *gɛ́-ɛ̀*) is the only form observed in texts. The only phonologically similar form that I know of is *tɛ́-ɛ̀:* (often shortened to *tɛ́-ɛ̀*) related to a specialized chaining verb *tí* ‘do first’ (§15.2.2.5, (§15.1.6.3).

For *gɛ̀:*, *gì*, and *g-î dè* in purposive clauses, see §17.6.1.

8.3.1.2 Causal ‘because of’ (*sógò*)

[X sógò] means ‘because of X’. The attested examples involve motivation rather than inference or impersonal physical causation. *kó sógò* ‘because of that’, hence ‘so, therefore’, typically describes the motives of human action. A gloss ‘considering X’ or ‘in view of X’ could also work. A textual example is (199).

(199) *[í*^{n} *wɔ̀*^{n}*] [kìrɛ́ sógò]*
[1Sg Top] [hardship **because.of**]
[í:^{n} *kɔ́: bɛ̌̃:-rò]*
[child raise get-IpfvNeg]
‘As for me, because of hardship (=neediness), (I) can’t raise a child.’ (2011.1b.04)

For causal *sògò* after a clause, see §17.6.5. For *[X sógò]* ‘than X’, i.e. ‘in comparison to X’, in adjectival comparatives, see §12.1.2.2.

8.3.2 Source (*númɔ̀*)

Related to the noun *nùmɔ́* ‘hand, arm’ is an /HL/-toned postposition *númɔ̀*, compare English *at the hand(s) of*. It forms PPs that express the (human) source of something transferred. Typical verbs associated with this PP type include ‘receive’, ‘buy’, and ‘request’.

(200)	a.	*í*^{n}	*nàŋá*	*[ú*	*númɔ̀]*	^{L}*yɔ̀w-ɛ̀*
		1SgSbj	cow	[2Sg	source]	^{L}receive-Pfv

‘I received a cow from you-Sg.’

	b.	*í*^{n}	*wògòtórò*	*[sè:dú*	*númɔ̀]*	^{L}*ɛ̀w-ɛ̀*
		1SgSbj	cart	[S	source]	^{L}buy-Pfv

‘I bought a cart from Seydou.’

	c.	*í*^{n}	*[sè:dú*	*númɔ̀]*	*bú:dú*	*gɛ̀ŋ-ɛ̂*
		1SgSbj	[S	source]	money	request-Pfv

‘I asked Seydou for some money.’
[=‘I requested some money from Seydou.’]

In (200c), one can also use dative *nì* with Seydou.

8.4 Other adverbs (or equivalents)

8.4.1 Similarity (*gí:*^{n} ~ *gì:*^{n} ‘like’, *gá*: ‘something like’, *sì:*^{n}*-ká*^{n} ‘equal’)

gí:^{n} ‘like, similar to’ can follow and have scope over a complement (NP or adverb). It is H-toned, except as indicated below. The 1Sg form is *má gí:*^{n} ‘like me’. The 1Sg form and the H-tone suggest that the ‘like’ morpheme is not a typical postposition.

(201)	a.	*wó*	*[má*	*gí:*^{n}*]*	*tìŋɛ́*	*tíŋɛ́-ɲú*
		3Sg	[1Sg	**like**]	talk(n)	speak-Ipfv

‘He/She speaks like me.’

	b.	*[nɔ̀w*^{n}*ɔ́*	*gí:*^{n}*]*	*kɔ̀*
		[meat	**like**]	be.NonhSbj

‘It’s like meat.’

	c.	*íyé*	*[yá:*	*gí:*^{n}*]*	*kɛ́:-jú*
		today	[yesterday	**like**]	be.NonhSbj-Ipfv

‘Today will be like yesterday.’

In *nɔ́:* ^{L}*gì:*^{n} ‘like this’, the particle is L-toned. I also hear it as L-toned clause-finally, with the clause as its complement. One could argue that examples like (202), and others like it in chapter 14, consist of a headless relative clause (with omitted head *bà*^{n} ^{L} ‘way, manner’) followed by ^{L}*gì:*^{n} in the role of an L-toned terminal noun functioning as a synonym of the head (§14.1.7).

(202)	*kó*	*dág-à→ —,*	*ɔ́mɔ́-ɲú*	^{L}*gì:*^{n}
	NonhSbj	a.little—,	rot-Ipfv.Rel	^{L}**like**

‘(It’s) like it rots a little.’ (2011.1a.25)

For ‘like this/that’ using demonstrative stems, see §4.4.2.3.

The possessed noun *gá:* after a noun X means ‘something like X’, ‘something along the lines of X’, ‘X or something similar’, etc.

(203) *é* *[gìr^{n}í* *bîn]* *[jɔ̀ŋùr^{n}ú* ^{H}*gá:]* *yɛ́* *sò* *mà→*
2PlSbj [house in] [hoe ^{H}**like**] Exist have Q
'Do you-Pl have anything like a hoe at home?'

It is possible, but uncertain, that this *gá:* is connected with optional *gá:* sandwiched between verb iterations (§11.6.5), and with *gá:* in the second part of parallel constructions (§19.2.2).

There is a noun *sì:^{n}-ká^{n}* 'match, equal, equivalent', often possessed: *[X* ^{HL}*sí:^{n}-kà^{n}]* 'a match for X, an equivalent to X'. For the sense 'approximately' see §9.4.3.1 below. A possessive *[X* ^{HL}*gí:^{n}-kà^{n}]* is also attested, meaning 'something similar to X, the likes of X'.

8.4.2 Extent (*gàr-á→* or *sɛ̂y^{n}* 'a lot', *jò-jó→* or *jó:* 'many', *dág-à→* 'a little')

Adverbial 'a lot, considerably, to a great extent' is *gàr-á→* or *sɛ̂y^{n}*.

One form of the quantifier 'much, many' (also used absolutely without an overt noun) is an optionally reduplicated (or iterated) expressive adverbial *(jò-)jó→*. In this form, it is not an adjective and does not induce tone-dropping even when it follows a noun that it apparently has scope over: *péjú jó→* 'lots of sheep'. Compare the verb *jǒ:* 'be numerous, abound'.

An adjectival variant *jó:* without exaggerated lengthening, and with tone-dropping of the noun, is attested in *tèŋè*^{L} *jó:* 'many times, often', *nìŋìr^{n}ì*^{L} *jó:* 'many days, often', and *dèŋ*^{L} *jó:* 'many spots, places', *ɲà*^{L} *jó:* 'many areas, many lands'. The nouns here are *tèŋé, nìŋìr^{n}í, děŋ*, and *ɲá*.

For 'a little', *dág-à→* is used adverbially ('to a limited extent' or 'somewhat'). The NP 'a little' (as in 'they gave me a little') is either the same *dág-à→* or a related form *dàg-î^{n}→* (frozen compound with diminutive ending, §5.1.7).

For the morphology of *gàr-á→* and *dág-à→*, see (351d-e) in §11.4.1.2.

8.4.3 Specificity

8.4.3.1 'Approximately' (^{HL}*sí:^{n}-kà^{n}*, *mâ:*)

To express an approximate numerical count, possessed noun ^{HL}*sí:^{n}-kà^{n}* can be used (204). The unpossessed form is *sì:^{n}-ká^{n}* 'match, equivalent', mentioned above at the end of §8.4.1.

(204) *í^{n}* *[[péjú* *pɛ̌-nùnɛ̀:]* ^{HL}*sí:^{n}-kà^{n}]* *sà*
1SgSbj [[sheep fifty] ^{HL}**equivalent**] have
'I have roughly fifty sheep.'

For an approximate time, whether time of day or seasonal, the construction *[X téŋé] bè* is used. *téŋé* is the possessed form of *tèŋé* 'time', so the construction translates literally as 'with the time of X'.

(205) *[mìdí:* ^{H}*téŋé]* *bè*
[noon ^{H}**time**] with
'around noon' (French *midi*)

mâ: (with long vowel, but no exaggerated prolongation as with interrogative or disjunctive *mà→*) is used with quantities.

(206) a. *[kó* *[[nìŋìr^{n}í* *nǎy^{n}]* *mâ:]* *dɔ̀:]* *[kó* *tɔ́:-jú]*
[Nonh [[day four] **approx**] arrive] [NonhSbj sprout-Ipfv]
‘Then (when) roughly four days have arrived (=elapsed), it (=fonio) will sprout.’
(2011.1a.23)

b. *ɛ́mɛ́* *[[kìlòmɛ́trí* *túrú]* *mâ:]* *yé* *yà:-jù*
1PlSbj [[kilometer one] **approx**] walking go-Ipfv
‘We will walk (=hike) around one kilometer.’

For approximate location, see also §4.4.2.2, above.

8.4.3.2 ‘Exactly’ (*té→*, *já:tì*)

With a preceding quantity expression or an NP identifying an individual, the expressive adverbial *té→* means ‘exactly, precisely’.

dâŋ is used with numbers and locations. In (207) it indicates that the time frame is more or less the minimum for groundnuts to bear fruit. *dâŋ* and iterated *dâŋ-dâŋ-dâŋ* can also mean ‘right up against, flush against (e.g. a wall).’

(207) *[[nìŋìrí* *pɛ̀-sɔ̂:* *dâŋ]* *dɔ̀:-lí* *dè]* *[í:^{n}* *kúnɔ̂:-rò]*
[[day ten-seven **exactly**] arrive-PfvNeg if] [child put-IpfvNeg]
‘Unless exactly seventy days have arrived, they (=groundnuts) won’t put out children (fruits)?’

For adverb *já:tì* see §19.5.2.

8.4.4 Evaluation

8.4.4.1 ‘Well’ and ‘badly’

Adverbial senses ‘well’ and ‘badly’ are often expressed by adding a modifying adjective ‘good’ or ‘bad’ to an object, such as a cognate nominal. Thus ‘X sings well’ is expressed as ‘X sings good song(s)’. However, there is an expressive adverbial *sɛ̂y^{n}→* (with falling pitch) ‘well’, compare adjective *sɛ́^{n}* ‘good’.

‘Bad’ and ‘badly’ are usually translated as negations of ‘good’ and ‘well’. *mɔ̀ɲú* ‘bad’ can also be used, but it tends to have more specific senses like ‘nasty, evil (person)’.

(208) a. *wó* *sɛ̂y^{n}→* *bírɛ́* *bǐ-jú*
3SgSbj **well** work(n) do-Ipfv
‘He/She works well.’

b. *wó* *[bìrɛ̀*^{L} *sɛ́^{n}]* ^{L}*bì:-rò*
3SgSbj [work(n)^{L} **good**] ^{L}do-IpfvNeg
‘He/She works badly.’ (lit. “… does bad work”)

8.4.4.2 ‘Proper, right’ (*jâ:^{n}*)

jâ:^{n} kɔ̀ means ‘it is right, proper’, in the context of social norms.

8.4.5 Spatiotemporal adverbs

8.4.5.1 Temporal adverbs

Some of the major temporal adverbs are in (209).

(209)	a.	*íyé*	‘today; nowadays’
		íyé=ǹ	‘again’ (§19.3.1)
		pílé-m-ɛ̀:	‘again’ (§19.3.1)
		yá:	‘yesterday’
		íyé tà:-nɛ́	‘day before yesterday’
		kà:ná	‘now, at present’
		nɛ́: wɔ̀^{n}	‘now’ (discourse marker)
	b.	*yògó*	‘tomorrow’
		yògò-dɛ́r^{n}ɛ̀	‘day after tomorrow’
		yògò-dɛ̀:^{n}-tî:	‘second day after tomorrow’ (third from today)
	c.	*gà:rú*	‘last year’
		nàŋúr^{n}ù, yògó ^{HL}náŋùr^{n}ù	‘next year’
		nɔ́:w^{n}ɔ́	‘this year’

8.4.5.2 ‘First’ (*lá:*, *tí→*)

Adverbial *lá:* ‘first(ly)’, implying a following eventuality even if it is not overtly expressed, is exemplified in (210).

(210)	*mí*	*lá:*	*yě-∅*	*dè,*	*[ú*	^{L}*kè]*	*dògó*	^{L}*yɛ̀rɛ̀*
	1Sg	**first**	go-Pfv	if,	[2Sg	^{L}Top]	behind	^{L}come.Imprt

‘I will go first, then as for you-Sg, come-2Sg behind!’

Adverbial *tí→* ‘to begin with, to start off, first off, first of all, firstly’ has a similar sense, and often co-occurs with *lá:* .

(211)	*maintenant*	*ɛ́mɛ́*	*tí→,*	*[lɛ̌*	*kû^{n}]*	*lá:*	*tɔ́rɔ́-jú*
	now	1PlSbj	**firstly**,	[planting	on]	**first**	begin-Ipfv

‘Now to start off, we’ll begin first (talking) about planting.’ (2011.1a.01)

A number of clause subordinators also emphasize the chronological sequence of an eventuality with respect to another. This includes the pseudo-conditional *dè* in (210).

8.4.5.3 Spatial adverbs

Some of the key spatial adverbs are in (212).

(212)	a.	*árá kû*^{n}	'on top, above, up'
		bɔ̀rɔ́	'below, down'
	b.	*dù-dágá*	'east'
		tɛ̀ŋ-dágá	'west' (cf. Tengou, Dogon group)
		nɔ̀ŋɔ̀-dìgí	'south'
		tɔ̀rɔ̀-dìgí	'north' (cf. *tɔ́rɔ́* 'mountain' in other Dogon languages)
	c.	*dògó kû*^{n}	'back, backward'
		dògó tɔ̀, dògó	'in the rear'
		gíré tɔ̀	'forward; in front'

gíré in *gíré tɔ̀* 'in front, ahead' is distinct tonally from *gìré* 'eye'.

Adjectives 'left' (*nànà*) and 'right' (*ɲǎ:*) can be added to body-part terms ('arm/hand', 'leg/foot'), but do not seem to have been traditionally used for abstract directions. *ɲǎ:* is distinct in form from *ɲí:* 'eat (meal)'.

8.4.6 Expressive adverbials

Expressive adverbials are a class of stems that function as adverbs with various verbs ('go', 'fall', etc.), as predicates with a copula 'be X' (positive *kɔ̀* etc., negative *kɔ̀:-rɔ́* etc.), or as predicates with an active copula (e.g. *kɛ́:* 'become.Nonhuman'). Except for stem-iteration they typically have no morphology and do not participate in derivational or compounding morphology. They are not subject to overlays controlled by other words. They cannot function directly as postnominal adjectival modifiers, but a relative clause can be formed with the adverbial plus a copula in relative-clause form. Most expressive adverbials are not related phonologically to stems in regular classes (nouns, verbs, adjectives), but there are exceptions.

A large sample of expressive adverbials is presented in this section, organized mainly by phonological form. Most intensifiers for adjectives and other stems listed in §6.3.3.2 also belong to the class of expressive adverbials and are not re-listed here. A few important adverbials have their own subsections below.

8.4.6.1 Types of expressive adverbial

The adverbials in (213) are not iterated and do not show intonational prolongation of the final syllable. Of interest is the existence of some entirely {L}-toned adverbials (213f), given that every noun, verb, adjective, and numeral stem has at least one H-tone element (§3.7.1.1).

A predicative element that often combines with each EA, either a copula (nonhuman *kɔ̂* or human singular *wɔ̂*) or a verb ('go', 'put', 'fall', etc.), is included in parentheses after the gloss, but the forms given do not exclude other possibilities.

(213) Expressive adverbials (non-iterated, not prolonged)

a. /H/, onomatopoeic

póp	‘landing powerfully’ (*bàgá* ‘fall’)
tɔ́tú	‘plopping (sth soft landing)’ (*bàgá* ‘fall’)

b. /H/, not onomatopoeic

sí:	‘(sharply) pointed’ (*kɔ̂*)
gúɲɛ́y^n	‘(walk) with a swagger, with elbows out’ *(yě* ‘go’)
páyáw	‘well-lit’ (*kɔ̂*)
kólów^n	‘in a circle’ (*kɔ̂*)
káɲáw^n	‘shriveled (calabash)’ (*kɔ̂*)
bɔ́lɔ́w	‘brick-shaped; long-necked’ (*kɔ̂*)
sɛ́r^n*ɛ́nɛ́*	‘long and thin, tall and thin’ (*kɔ̂*, *wɔ̂*)
with final -í:	
sɔ́ɲúg-í:	‘smelling like raw meat or fish’ (*kɔ̂*)

c. /HL/

dûm	‘(land) with a thud’ (*súgó* ‘go down’)
púrɛ̀:y	‘(go out) suddenly’ (*gǒ:* ‘go out’, *kír-ì:* ‘fly away’)

d. /LH/

pǐm	‘(pass by, run away) in a flash’, cf. iterated variant below (*gàrá* ‘pass’)
pǔy	‘(sth) shoot out’ (*gǒ:*)
sǔy	‘bursting in, (entering) abruptly’ (*nú* ‘go in’)

e. /LHL/

dùrô:	‘backwards’ (many combinations)

f. {L}, with H-toned *kɔ́*

sɔ̀y	‘oily’ (*kɔ́*)
wùrùjà	‘(tree) having many fruits (heavy with fruits)’ (*kɔ́*)
kùbàw	‘dominant, towering (tree)’ (*kɔ́*)
gìyàw	‘shady (tree)’ (*kɔ́*)

The EAs in (214) show intonational prolongation, or at least a final long vowel.

(214) Expressive adverbials (intonationally prolonged)

a. /H/

onomatopoeic	
sɛ́→	‘(grain) pouring out noisily’
other	
sɛ́^{n}→	‘(staring) wide-eyed’ (*gɛ̀r-î:* ‘look’)
pó→	‘gaping, wide open (door)’ (*kɔ̂*)
sá^n→	‘clear (sky)’ (*kɔ̂*)
kɛ́w^n→	‘silent (person), calm (place)’ (also iterated *kɛ́*^{n}*-kɛ́w*^{n}) (*kɔ̂*, *wɔ̂*)
léw^n→	‘placed on top (e.g. on one’s head or on a rock)’ (*kɔ̂*)

sáy→	‘conspicuously visible’ (*kɔ̂*)
gúní→	‘globular, ball-shaped’ (*kɔ̂*)
jéwgé→	‘teetering’, ‘badly placed’ (*kɔ̂*)

b. /LH/

with final í→ (sometimes segmentable)

gɛ̀gí→	‘tilted’ (*kɔ̂*)
sɛ̀rí→	‘sticking out (e.g. leg)’ (*kɔ̂*)
bàmí→	‘rickety, shakily positioned’ (*kɔ̂*)
"	‘tilted’ (*kɔ̂*)
yùgùj-í→	‘disheveled, furry’ (*kɔ̂*), from adjective *yùgùjú*

other

kǒ:→	‘empty’ (*kɔ̂*)
kɔ̌y^{n}*→*	‘(e.g. teeth, horn) sticking out’ (*kɔ̂*)
yɛ̌w→	‘(eyes) slightly open’ (*kɔ̂*)
sɛ̌y→	‘(head, tip) sticking out (a little)’ (*kɔ̂*)
sǔy→	‘(e.g. lips) projecting out’ (*kɔ̂*)

c. /HL/

sû→	‘pointing downward’ (*kɔ̂*)
bɔ́dɔ̀→	‘fat and clumsy’ (*wɔ̂*)

d. /LHL/

kú^{n} *dǒ̂→*	‘(walking) with head high’ (with *kú*^{n} ‘head’) (*wɔ̂*)

e. two-part

/H/-/H/

yó→ gó→	‘ajar, slightly open (door)’ (*píné* ‘shut’)

Related to this prolongation type is a set of EAs that are derived from adjectives by adding *-í→* or an allomorph such as lengthening of the final vowel, along with tonal changes in some cases: *dòg-í→* ‘heavy’, *wàg-á→* ‘far (away)’. See §11.4.1.2 for examples and discussion. There are also a few similar adverbials derived from verbs (215). These are essentially identical to the corresponding same-subject anterior subordinating form in *-ɛ:* ~ *-e:* ~ *-i:* (§15.2.2.1), but they can be used predicatively with copulas.

(215) Expressive adverbials derived from verbs

bìn-é→	‘inverted’ (verb *bìné*) (*kɔ̂*)
gɔ̀m-ɛ́→	‘(eyes) wide open’ (verb *gɔ̀mɔ́*) (*kɔ̂*)
wàr^{n}*-ɛ́→*	‘(tree roots, vine) spreading on ground’ (verb *wàr*^{n}*-î:*) (*kɔ̂*)

Finally, the EAs in (216) involve stem iteration. In most cases the stem is not attested elsewhere. (216) is organized around the phonological relationship (vocalism, tone pattern) between the two (or three) parts of the iteration.

(216) Iterated expressive adverbials

a. no vocalic or tonal change

kɛ́-kɛ́	‘(e.g. door) flush (with frame)’ (short stem makes segmentation questionable) (*kɔ̂*)
dɛ́^{n}-dɛ́^{n}	‘rebalanced’ (*kɔ̂*)
tá:^{n}-tá:^{n}	‘(walking) with legs separated’ (*kɔ̂*)
dáŋ-dáŋ	‘side by side’ (*kɔ̂*)
kán-kán	‘motionless, playing dead’ (*kɔ̂*)
lêw-lêw	‘dripping’ (verb *léwé*)
yɛ́l-yɛ́l	‘flapping in the wind’ (*kɔ̂*)
sáy^{n}-sáy^{n}	‘blazing (sun)’ (*kɔ̂*)
tɔ̂ŋ-tɔ̂ŋ	‘dotted, spotted’ (*kɔ̂*)
kɛ́w-kɛ́w ~ *kɛ́-kɛ́w*	‘equal’ (*kɔ̂*)
dégé-dégé	‘slowly, gently’ (cf. *dègé* ‘short’) (many combinations)
káɲá-káɲá	‘feeling fine’
séwè-séwè	‘(walk) silently’ (*yɛ̌* ‘go’)
mùɲó-mùɲó	‘hastily, unceremoniously’
sùrɔ́-sùrɔ́	‘in a heap’
tɔ́ŋù-tɔ́ŋù	‘dotted, spotted’
wàlgá-wàlgá	‘bouncing’ (*bìrɛ́* ‘do’)
sóròy-sóròy	‘slippery (hard to hold)’ (*kɔ̂*)
túgɔ̀w^{n}-túgɔ̀w^{n}	‘lukewarm’
pádà:w-pádà:w	‘galloping (fast)’ (*jɔ̀wɔ́* ‘run’)
tábàrà-tábàrà	‘blotched, with large spots’ (*kɔ̂*)

b. tonal change only

/H/-{L}

dó:ró-dò:rò	‘shining, gleaming’ (*kɔ̂*)

/LH/-{L}

pǐm-pìm	‘running at top speed’ (iteration of *pĭm*) (*jɔ̀wɔ́* ‘run’)
hǎl-hàl	‘quivering (like dog’s tongue)’ (*bìrɛ́* ‘do’)
bɛ̌y-bɛ̀y	‘flickering (light)’ (*kɔ̂*)

{L}-/LH/

bàlà-bàlá	‘(cook) hastily’ (*bìrɛ́* ‘do’)

c. vocalic change only

high or mid-height vowel to a

tì:^{n}-tà:^{n}	‘holding, restraining’, in (617c)
séwè-sáwà	‘groping along’ (*yɛ̌* ‘go’)
wìré-wàrá	‘staggering, stumbling’ (*yɛ̌* ‘go’)
sólù-sálù	‘walking stiffly’ (*yɛ̌* ‘go’)
tígì-tágù(-tígì)	‘(walking) clumsily (like an infant)’ (*yɛ̌* ‘go’)

as above, but all L-toned, with kɔ́

gòrùm-gàràm	‘crooked (with sharp bends)’ (*kɔ́*)

d. vocalic and tonal change

{L}-/H/, mid-height vowel to a

jèlè-jálá	‘dangling, waving’ (*kɔ̂*)

/LH/-{L}, high vowel to a

jùgú-jàgù	‘swaying (like elephant)’ (*bìrɛ́* ‘do’)
jìgí-jàgù	‘fidgeting’, ‘lumbering along’ (*bìrɛ́* ‘do’)

e. based on uniterated adjective

ɔ́gú-ɔ́gú	‘fast, quickly’, cf. adjective *ɔ́gú* ‘fast’

See also the somewhat similar iterated onomatopoeias in §8.4.7.1 below.

These iterated EAs, mostly unrelated to simple stems, should be distinguished from distributive iterations of common nouns, which have a different grammar. A distributive sense can be expressed by repeating the cognate verb (217).

(217) *í^n* *tĭ^n* *sùrɔ́* *súr-ɛ̀:* *súr-ɛ̀:*
1SgSbj firewood pile(n) **pile.up-SS.Ant** **pile.up-SS.Ant**
dág-ɛ̀
leave-Pfv
‘I put the firewood in (several) piles and left (it).’

Or a plural NP, rather than the simple noun, can be repeated in a conjoined NP construction (218).

(218) *[àrùsɛ̀gɛ́ bè] [[kùrɔ́ bè] [kùrɔ́ bè]] yǎ:-téŋè*
[animal Pl] **[[herd Pl] [herd Pl]]** go-Prog.PlSbj
‘The (wild) animals travel in herds.’

The EA *ɔ́gú-ɔ́gú* ‘rapidly, quickly’ is transparently related to the adjective *ɔ́gú* ‘rapid, speedy’.

There are a small number of EAs formed by multiple final *Cv* reduplication. They are given in (219), which includes repeats of two adjectival intensifiers from (140b) in §6.3.3.2. Note the alternations of *g* with *j*, *r* with *l*, and *r*^{n} with *n*, where in each case the first consonant occurs in C_2 (once in C_3) position and is followed by at least two repetitions switching to the related second consonant.

(219) a. C_2 and later *C* ’s = *j*

kùjújújú	‘dragging forcefully’ (*kɔ̂*)

b. C_2 = *g*, repeated as *j*

yàgájájá	‘very coarse, rough’ (*kágájú* ‘coarse’)

c. C_2 (or C_3) = *r*, repeated as *l*

yègérélélé	‘blinding (light)’ (*kɔ̂*)
kèrélélé	‘very cold’ (*kélú* ‘cold’)

d. C_2 = *r*^{n}, repeated as *n*

nàr^{n}ánáná	‘lean (meat); gooey (meat, as from an old cow)’ (*kɔ̂*)
dɔ̀r^{n}ɔ́nɔ́nɔ́	‘foul-smelling (urine, dirty clothes)’ (*kɔ̂*)
ɔ̀r^{n}ɔ́nɔ́nɔ́	‘smooth, sleek’

Like most pure adjectives, and unlike most EAs, *ɔ̀r^{n}ɔ́nɔ́nɔ́* ‘smooth, sleek’ has a paired inchoative verb *ɔ́r^{n}ínì*. However, *ɔ̀r^{n}ɔ́nɔ́nɔ́* is syntactically an adverbial rather than an adjective, as shown by its negative predicate, *ɔ̀r^{n}ɔ́nɔ́nɔ́ kɔ̀:-rɔ́* ‘it isn’t smooth’, and by its relative-clause form as a modifier, *gùjù*^{L} *ɔ̀r^{n}ɔ́nɔ́nɔ́ kɔ́* ‘smooth skin, skin that is smooth’.

These iterative EAs should be distinguished, at least in principle, from look-alike compound agentives including a cognate nominal. Some examples of these agentives are in (91a) in §5.1.5. For example, *sìɲɛ̀-síɲɛ́* ‘noisy’ is simply an agentive compound based on *síɲɛ́ síɲɛ́* ‘make noise’ consisting of a verb and preceding cognate nominal.

It is not easy to distinguish adverbs (including EAs) from verb stems that are specialized to occur only nonfinally in direct verb chains, in the bare-stem form. For example, *bàná* in *bàná gǒ:* ‘get out of the way, dodge’ (*gǒ:* ‘go out’), and *tɔ́rɔ́* in e.g. *tɔ́rɔ́ dɔ̌:* ‘move over’ (*dɔ̌:* ‘arrive’), can be taken either as adverbs or as specialized verb stems based on current data.

Adverbial *jè-sɛ́* ‘breaking into a run’, which can be used with verb *jɔ̀wɔ́* ‘run’, contains the noun *jé* ‘running, race’.

tɔ́^{n}-tɔ́^{n}-tɔ́^{n} ‘foul-smelling (e.g. fart, fox secretion)’ is tentatively taken to be an iterated EA, but the base *tɔ́^{n}-tɔ́^{n}*, which is attested in senses like ‘salty’ and ‘sour’) is already iterated (or a *Cv-* reduplication).

Other elements showing final prolongation (as for EAs) that are discussed elsewhere in the grammar are: *fú→* ‘all’ (§6.6.1), *wò→* ‘each, all’ (§6.6.3), *(jò-)jó→* ‘many’ (§8.4.2), *té→* ‘exactly’ (§8.4.3.2), *pó→* ~ *fó→* ‘all the way to’ and *bà→* ‘all the way to/from’ (§8.2.13), *tâŋ-tâŋ* ‘here and there, scattered’ (§8.4.7.3), and ‘flat’ adverbials like *pátà→* (§4.5.3).

A morpheme *kà^{n}* is attested after certain EAs. Like copula *kɔ̂*, it shifts to H-tone after a completely {L}-toned adverbial. Examples: *pɛ́tɛ̀→ kà^{n}* ‘squared, having flat sides’, *kúrɔ́ sɔ́gú-sɔ́gú kà^{n}* ‘(tree) with dense foliage’, *dɛ́w^{n} kà^{n}* ‘straight (road)’, *gòrùm-gàràm* ^{H}*ká^{n}* ‘crooked (stick)’, *yùgùj-í→ kà^{n}* ‘woolly, furry’. The form with *kà^{n}* (^{H}*ká^{n}*) functions as an NP-internal modifier rather than as a predicate.

(220) *bà:gà*^{L} *[pɛ́tɛ̀→* *kà^{n}]* *má=ǹ* ^{L}*jɛ̀:rɛ̀*
stick^{L} [flat.sided **Adj**] 1Sg=Dat ^{L}bring.Imprt
‘Bring-2Sg me a flat-sided (rectangular) stick!’

8.4.6.2 Expressive adverbial plus {H}-toned perfective

An expressive adverbial (EA) or onomatopoeic interjection can occur in a construction of the type [EA Subj ^{H}Perf], with a subject pronominal and an {H}-toned perfective verb. Cf. English *plop went the duck.* The verbs in (221a-b) elsewhere appear as *ùŋúr-ì* ‘got up’ and *bàg-ɛ̂* ‘fell’, or they occur clause-finally in {L}-toned form.

(221) a. *pǎm* *wó* ^{H}*úŋúr-í*
up.abruptly 3SgSbj ^{H}get.up-Pfv
‘He got up abruptly’ (=‘he shot up’) (2011.1b.03)

b. *póp* *wó* ^{H}*bág-ɛ́*
thud 3SgSbj ^{H}fall-Pfv
‘He fell down with a thud.’

8.4.6.3 ‘Straight’ (*dɛ́wⁿ→*)

The expressive adverbial *dɛ́wⁿ→* is used to denote straight, direct, unmediated trajectories (motion, path, line of sight). It can be used predicately with a copula (222b); in this case, the intonational prolongation is reduced and may be absent.

(222)	a.	*ɛ́mɛ́*	*[íyé*	*nî*	*gǒ:]*	*dɛ́wⁿ→*	*bàmàkɔ́*	*ᴸyà:-jù*
		1PlSbj	[today	here	leave]	**straight**	B	ᴸgo-Ipfv
		‘We’ll go today straight from here to Bamako.’						

b.	*ójú*	*dɛ́wⁿ(→)*	*kɔ̂*
	road	**straight**	be.NonhSbj
	‘The road is straight (direct).’		

This EA has an iterated variant *dɛ́ⁿ-dɛ́wⁿ* ~ *dɛ́wⁿ-dɛ́wⁿ* ‘straight (direction)’.

8.4.6.4 ‘Apart, separate’ (*dɛ́yⁿ→*)

This expressive adverbial means ‘apart, separate’ in a physical sense, or ‘distinct, not the same’ more abstractly. Since there is generally a parallelistic context, with two or more individuals or groups distinguished or separated, a reduplicated form is common (223b).

(223)	a.	*[ɛ́mɛ́*	*wò]*	*dɛ́yⁿ→*
		[1Pl	all]	**apart**
		‘We are not all the same.’		

b.	*[ɲɛ̌-ùrⁿù*	*bè]*	*[àrⁿá-ùrⁿù*	*bè]*	*dɛ́ⁿ-dɛ́yⁿ*	*bé:*
	[woman-children	Pl]	[man-children	Pl]	**Rdp-apart**	put.Imprt
	‘Place-2Sg the girls and the boys apart (separated)!’					

8.4.6.5 ‘Always’ (*já-wò→*), ‘never’ (*nánà*)

The ‘always’ or ‘every day’ adverb is *já-wò→*. It is apparently constructed from an otherwise unattested noun *já* presumably meaning ‘time’ or ‘day’, plus *wò→* ‘each, every’.

The ‘never’ adverb is *nánà*, used with a negative predicate. However, experiential perfect ‘never’ as in ‘I have never seen an elephant’ can be expressed directly by the experiential perfect negative verb form, see §10.2.3.2, below.

(224)	a.	*íⁿ*	*já-wò→*	*nî*	*yɔ́*	*wɔ̀*
		1SgSbj	**always**	here	Exist	be.HumSgSbj
		‘I will always be here.’				

b.	*íⁿ*	*nánà*	*té*	*nɔ̌:-rò*
	1SgSbj	**never**	tea	drink-IpfvNeg
	‘I will never drink tea.’			

8.4.7 Reduplicated (iterated) adverbials

8.4.7.1 Iterated (fully repeated) onomatopoeias

Iterated onomatopoeic forms are displayed in (225), arranged by syllabic shape and vocalic changes. They can be bi- or tripartite. They are usually made predicative by adding a verb like *bìrɛ́* ‘do, make’.

(225) Iterated onomatopoeias

a. *Cv-Cv(-Cv)*	
kɛ́^{n}-kɛ́^{n}-kɛ́^{n}	[ringing sound]
b. *Cv:-Cv:*	
shift to a in second iteration	
cî:^{n}-câ:^{n}	[chirping sound of small birds]
hó:-hà:-hó:	‘loud chatter’
c. *CvCv-CvCv(-CvCv)*	
shift to a in second iteration	
kòró-kàrà-kòró	[rattling or creaking sound]
e. *Cv:C-Cv:C*	
tà:b-tà:b	[sound of walking through grass]
f. *CvCv(:)C-CvCv(:)C*	
kárà:w-kárà:w	[sound of crunching bones]

8.4.7.2 Distributive adverbials from iterated numerals

Distributives are formed from numerals by iteration. The iteration is more or less complete for simple numerals, but the first iteration is subject to some phonological attrition. In *tǎ^n-tǎ:n* ‘three by three’, the first element looks rather like a *Cv-* reduplication rather than an iteration. In *lɔ́-lɔ́y* ‘two by two’ and *nǎ-nǎy^n* we have a similar result, but the loss of stem-final *y* in the first iteration is also found in iterated adverbials. *tú-túrú* ‘one by one’ could reflect *rv-*Deletion from a full iteration, or it could be another *Cv*-reduplication. Most of the other stems are clearly iterated.

(226) Distributive of numerals

numeral	gloss	distributive (‘one by one’, etc.)
a. ‘1’ to ‘4’, possible *Cv*-reduplications		
túrú	‘	*tú-túrú*
lɔ́y	‘	*lɔ́-lɔ́y*
tǎ:n	‘	*tǎ^n-tǎ:n*
nǎy^n	‘	*nǎ-nǎy^n*

b. ‘5’ to ‘10’, clearly full iterations

nùnɛ́:	‘	*nùnɛ́:-nùnɛ́:*
kúré:	‘	*kúré:-kúré:*
sɔ̂:	‘	*sɔ̂:-sɔ̂:*
sìlâ:	‘	*sìlâ:-sìlâ:*
tùwâ:	‘	*tùwâ:-tùwâ:*
pɛ́rú	‘	*pɛ́rú-pɛ́rú*

Morphologically complex numerals iterate enough material to get the point across. From *pɛ̌-tà:nù* ‘30’ we get *pɛ̌-tà*^{n}*-tà:n* ‘30 by 30’. From *pɛ́rɛ̀: lɔ́ ságà* ‘12’ we get *pɛ́rɛ̀: lɔ́ ságà*’ *lɔ́ ságà* ‘12 by 12’.

The distributive can be used in a range of contexts involving separation into units or clusters, or pairing members or subsets of one set with those of another.

(227)	a.	*bɛ́*	*tú-túrú*	*yɛ̀r-ɛ̀*
		3PlSbj	**one-one**	come-Pfv

‘They came one by one.’ (= ‘They dribbled in.’)

b.	*ɛ́mɛ́*	*[nǎ*	*wò→=ǹ]*	*sá:gú*	*lɔ́-lɔ́y*	*gàmár*^{n}*á-ɲú*
	1PlSbj	[person	each=Dat]	sack	**two-two**	distribute-Ipfv

‘We’ll distribute two sacks (of grain) to each person.’

8.4.7.3 ‘Scattered, here and there’ (*tâŋ-tâŋ*)

This adverbial indicates scattered, low-density distribution.

(228)	*ɛ́:rɛ́*	*[ɛ́mɛ́*	^{L}*kè]*	*tâŋ-tâŋ*	*kɔ̂*
	peanut	[1SgPoss	^{L}Poss]	**here.and.there**	be.NonhSbj

‘Our peanut (plants) are scattered (not common).’

9 Verbal derivation

The productive suffixal derivations for deriving a verb from another verb are the reversive (‘un-…’) with suffix *-rv* and the causative with any of several suffixes (most productively *-mv*). “v” indicates a variable short vowel. Many verbs (e.g. of stance and of holding) occur in a suffixed mediopassive form (bare stem ends in suffix *-ì:* or *-î:*) that may co-exist with a corresponding transitive form. Adjectives generally have an intransitive inchoative (‘become ADJ’) and a transitive factitive (‘make something ADJ’).

The only combinations of two derivational suffixes are those with a final causative suffix added to a reversive, a mediopassive, or an inchoative stem. Often, but not always, the factitive of adjectives is just the causative of the corresponding inchoative stem.

9.1 Reversive verbs (*-rv, -r*^{n}*v*)

Reversive verbs, which are common in Dogon languages, have a semantics similar to *un*-verbs in English (*untie, unbend*). They presuppose that an initial action (tying, bending) previously took place, and the current action reverses the process, returning the object (theme) to its original position. Reversives generally preserve the valency of the corresponding underived verb. Among the more interesting simple/reflexive semantic pairings are ‘shut’/’open’ and ‘forget’/’remember’, though the latter is slightly obscured by a phonological irregularity.

The reversive is derived from the simple verb by a suffix *-rv*, which can be nasalized to *-r*^{n}*v* after a nasal syllable (v represents a vowel). The distinction between /H(L)/ and /LH/ toned verb stems is respected. All clear reversives are of the (trimoraic) prosodic types *Cv:-rv* or *CvCv-rv*. By virtue of having these (heavy) shapes, all reversives belong to the class of verbs with final L-toned high vowel {*i u*} in the bare stem (and related perfective forms). This presupposes that the input simple stem is *Cv:* or *CvCv*.

All reversives from my working dictionary are listed in (229).

(229) Reversives

input	gloss	Reversive	gloss
a. *Cv:-rv* from *Cv:*			
[none attested]			
b. like (a) but with nasalized *-r*^{n}*v*			
/H/-toned			
tɔ́:^{n}	‘roll on (turban)’	*tɔ́:-r*^{n}*ì*	‘unroll (turban)’
c. *CvCv-rv* from *CvCv*, second input syllable not nasal			
/H/- and /HL/-toned			
pɛ́gɛ́	‘insert (blade)’	*pɛ́gì-rì*	‘remove (blade)’
págá	‘tie’	*págì-rì*	‘untie’
sɔ́gɔ́	‘lock’	*sɔ́gì-rì*	‘unlock’

kíwé	‘put hide cover on’	*kíwì-rì*	‘remove hide cover from’
kɔ́l-ì:	‘be caught (in tree)’	*kɔ́lì-rì*	‘become uncaught, get free’
tág-ì:	‘put on (shoe)’	*tágì-rì*	‘take off (shoe)’
kúw-ì:	‘put on (hat)’	*kùwì-rì-*	‘take off (hat)’
/LH/-toned			
dὲwέ	‘cover up’	*dὲwú-rù*	‘uncover, reveal’
dìgé	‘join (objects)’	*dìgí-rì*	‘de-couple (objects)’
wɔ̀bɔ́	‘sag’	*wɔ̀bí-rì*	‘spring back up (after sagging)’

d. like (c), but with nasalized *-r^{n}v* after a nasal syllable

/H/-toned			
sónù	‘comb’	*sɔ́nì-r^{n}ì*	‘undo (braids)’
óŋó	‘crumple’	*óŋù-r^{n}ù*	‘uncrumple’
sáŋá	‘put (fence)’	*sáŋì-r^{n}ì*	‘unfence’
píné	‘close (door)’	*pínì-r^{n}ì*	‘open (door)’
kúw^{n}-ì:	‘shut (eyes)’	*kúw^{n}ù-r^{n}ù*	‘open (eyes)’
tímέ	‘cover with lid’	*tímì-r^{n}ì*	‘remove lid from’
níŋ-ì:	‘become tangled’	*níŋì-r^{n}ì*	‘become untangled’
/LH/-toned			
dɔ̀ŋɔ́	‘prop up’	*dɔ̀ŋí-r^{n}ì*	‘un-prop, remove prop from’

e. like (c-d), but with unnasalized *-rv* after nasal syllable

etymologically *CvNCv*, see discussion below*			
téŋé	‘hobble (animal)’	*téŋì-rì*	‘un-hobble (animal)’
nóŋ-ì:	‘be stuck (in tree)’	*nóŋì-rì*	‘become unstuck, get free’
bìné	‘turn inside-out’	*bìní-rì*	‘put back on right (garment)’
dùŋó	‘stop up (hole)’	*dùŋú-rù*	‘re-open (stopped up hole)’
mìné	‘roll up (mat), fold’	*mìní-rì*	‘unroll (mat), unfold’
mùnó	‘bundle, rumple’	*mùnú-rì*	‘unbundle’
etymologically *CvNv*, perhaps rehaped by analogy to the preceding*			
mùŋó	‘tie (knot)’	*mùŋú-rù*	‘untie (knot)’

f. *Cvrv* stem with reversive *Cv-lì* (see *rv*-Deletion, §3.5.3.2)

/H/-toned			
tárá	‘affix, stick on’	*tá-lì*	‘remove (sth affixed)’
/LH/-toned			
gòró	‘cover (opening)’	*gǒ-lì*	‘remove cover from (opening)’

g. irregular

change in vowel-harmonic class			
tóŋó-	‘pull up (pants)’	*tɔ́ŋì-r^{n}ì*	‘let back down (pants)’
CvCv reduced to Cv:- before suffix			
náŋá	‘forget’	*ná:-r^{n}ì*	‘remember’
irregular from Cvyv			
bìyέ	‘bury’	*bí-lì*	‘disinter’
		[Prost: “bille”]	

The cases in (229e), where the reversive suffix unexpectedly fails to nasalize even though it follows a nasal syllable, usually reflect proto-forms where the stem had a voiced homorganic nasal-stop cluster (*nd, *mb, *ŋg) that was later reduced to just the nasal. The reversive was therefore originally of the type *CvNDv-rv*, so the suffix was not in a nasalizing environment. For *bìné* ‘turn inside-out’ compare Nanga *bìndé*. For *téŋé* ‘hobble (animal, i.e. by tying a rope around its legs)’, compare Perge (dialect of Jamsay) *tɔ́ŋgɔ́*. For *nóŋ-ì:* ‘(e.g. stone, stick) be stuck in tree’, compare Nanga *nóŋgí-yé*. For *dùŋó* ‘stop up (hole)’, compare Najamba *dùŋgí* ‘fill up (pit, well)’. *mìné* ‘roll up (mat)’ and *mùnó* ‘bundle, rumple’ form a set with close semantic and phonological relationships (cf. the discussion of vowel symbolism in §3.4.7); relevant cognates include Nanga *mùndó* ‘rumple’, and Bankan Tey *m̀bùndó* ‘rumple’ and *mìndé* ‘roll up (mat)’. However, for *mùŋó* ‘tie (knot)’ the comparative data currently known to me point to an unclustered medial *ŋ, and cognate reversives do have a nasalized suffix. Perhaps this reversive verb has been reshaped in TgK by analogy to one or more of the just-mentioned examples, notably the ‘roll up’ and ‘bundle, rumple’ forms, which also begin with *m* and have a medial nasal.

In (229f) we see that a *Cvrv* verb combines with reversive *-rv* as *Cv-lv*, with *l* instead of *r*, perhaps reduced from an earlier *Cvl-lv Similar phenomena, reflecting difficulties in combining rhotics with laterals, occur in reversives in other Dogon languages.

A nominal based on a reversive is *kà^{n}-[págá-rá]* ‘Ramadan (fasting month)’, literally “mouth-[tie-Reversive]” with an overlaid compound overlay, cf. *ká^{n}* ‘mouth’ and *págì-rì* ‘untie’ (imperative *págá-rá*).

Simple (underived) stems that are not of *Cv:* or *CvCv* shapes do not have morphological reversives, but they can express the notion of reversal by being chained with a following verb *gǔŋ̀* ‘take out, remove’. For example, *lɛ́gìrì* ‘slide in, insert (into a crack, under a hat, etc.)’ is already a trisyllabic stem ending in *ri*, so the only way to express a reversive is by using the verb-verb chain *lɛ́gìrì gǔŋ̀* ‘slide back out, remove (something inserted)’.

Another syntactic mechanism, useful when the simple verb denotes a form of pressure rather than impact, is to chain it with *dàgá* ‘leave’ (in the sense ‘desist’). Example: *kóró dàgá* ‘un-surround’ (i.e. desist from surrounding something).

Since the reversive suffix is so productive, there are few underived verbs with reversive semantics, i.e. that function as suppletive reversives for phonologically unrelated verbs. *pó:rì* ‘(knot) become undone’ is compatible with reversive form, but the simple verb *pó:* has unrelated senses (‘scoop out’ etc.), so for practical purposes *pó:rì* is a lexical reversive. *sɔ́nì* ‘(braids) become undone’ is also semantically reversive. Ironically, it has an apparent reversive derivative *sɔ́nì-r^{n}ì* ‘untwist (fibers of a simple cord)’ that functions as suppletive reversive of the phonologically unrelated verb *nǎ:* ‘make (simple cord, by twisting fibers)’. This is an example of how a simple verb and its reversive can decouple semantically over time.

In addition to the verbs recognized here as reversives, TgK has dozens of other verbs with shapes like *Cv:rv* and *CvCvrv* (and nasalized *Cv:rˆnv* and *CvCvrˆnv*) that are compatible in form with the reversive derivation. A few of these may have originated as reversives. However, in many cases the final rhotic syllable cannot be segmented as a suffix. In other cases, it is segmentable, but the final *-rv* has a different function, opposing a transitive valency to a mediopassive; see §9.3.1.

9.2 Deverbal causative verbs

9.2.1 Productive suffixed causative (*-mv*)

The productive causative is with a suffix *-mv*, where “v” is a short high vowel. In the bare stem, the usual pronunciation is *-m̀*, from /-mv̀/, with the vowel apocopated and with its L-tone shifted onto the suffixal nasal. Before *-m̀*, the input stem has its usual /H/ or /LH/ tone, and the vocalism associated with the imperative, the imperfective, and other forms (other than the bare stem or its perfective).

Examples are in (230). Unless otherwise noted the sense of the derivative is within the standard range of causative senses, ranging from coercion (e.g. ‘X jump’ > ‘Y cause X to jump’) to facilitation (‘X spend the night’ > ‘Y have/let X spend the night’). The mediopassive suffix is realized as *-ɛ́:-* before the causative suffix but is occasionally dropped (230f).

(230) Causative *-m̀*

input	gloss	causative	comment
a. from *Cv* and *Cv:*			
/H/-toned			
nú	‘go in’	*nú-m̀*	‘put inside’
kɔ́:^{n}	‘weep’	*kɔ́:*^{n}*-m̀*	also written *kɔ́:-m̀* ; used with nominal *kɔ̌*^{n}
pɛ́:^{n}	‘get old’	*pɛ́:*^{n}*-m̀*	also written *pɛ́:-m̀*
ɲí:	‘eat (meal)’	*ɲí:-m̀*	‘feed’; with noun *ɲǎ:*
ná:	‘spend night’	*ná:-m̀*	‘have (sb) spend the night’
/LH/-toned			
bɛ̌:	‘defecate’	*bɛ̌:-m̀*	used with nominal *bɛ̌:*
nɔ̌:	‘drink’	*nɔ̌:-m̀*	‘give drink to (sb), have (animals) drink’, formerly also ‘make a blood sacrifice to (a fetish)’
b. from *CvCv*, type with stable vocalism or mediopassive form			
/H/-toned			
árá	‘(baby) suckle’	*árá-m̀*	‘nurse, give suck to’
kúwó	‘eat (meat)’	*kúwó-m̀*	‘give meat to’
/LH/-toned			
wàrá	‘do farm work’	*wàrá-m̀*	e.g. ‘have (animal) plow’
ɲàŋá	‘pick up’	*ɲàŋá-m̀*	
jùgɔ́	‘recognize’	*jùgɔ́-m̀*	e.g. ‘X introduce (=present) Y to Z’
c. from *CvCv*, type with final L-toned {*i u*} in bare stem and perfective			
/H/-toned			
kíw^{n}*í*	‘tremble’	*kíw*^{n}*í-m̀*	
/LH/-toned			
mìr^{n}*í*	‘swallow’	*mìr*^{n}*í-m̀*	
/LHL/-toned			
gǔŋ̀	‘remove’	*gǔŋɔ́-m̀*	
Cvrv stems subject to rv-Deletion			
pórì	‘say’	*pó-m̀*	
gɛ̀r-í:	‘look’	*gɛ̌-m̀*	
gàrá	‘pass by, go past’	*gǎ-m̀*	in: *dàgá gǎ-m̀* ‘let through, allow to pass’, see also *gǎ:-ǹ* (232e)
bìrɛ́	‘do’	*bǐ-m̀*	‘cause to do’
Cvrv stems not subject to rv-Deletion			
árá	‘suckle’	*árá-m̀*	‘(woman) nurse (baby)’

d. from *Cv:Cv*

/H/-toned

pá:m̀	‘understand’	*pá:má-m̀*	‘advise’
ná:-r^{a}ì	‘remember’	*ná:-r^{n}á-m̀*	‘remind’ (reversive)
wɛ́:jù	‘be accustomed’	*wɛ́:jɛ́-m̀*	‘accustom (sb, to sth)’

/LH/-toned

yǔ:gì	‘be slow’	*yǔ:gɔ́-m̀*	
wǒ:ŋù	‘boil [intr]’	*wǒ:ŋó-m̀*	
dɛ̌:r^{n}ì	‘cease’	*dɛ̌:r^{n}ɛ́-m̀*	‘let (sb) rest’ (noun *dɛ̀:r^{n}ɛ́*)

e. from *CvCvCv*

/H/-toned

sɛ́mìr^{n}ì	‘be in tatters’	*sɛ́mɛ́r^{n}ɛ́-m̀*
kígìrì	‘go back’	*kígéré-m̀*
kúrúgù	‘be dense’	*kúrúgó-m̀*

/LH/-toned

bùgújù	‘be muddied’	*bùgújó-m̀*
gɛ̀míɲì	‘become dirty’	*gɛ̀míɲɛ́-m̀*
yɔ̀gúrì	‘become pulpy’	*yɔ̀gɔ́rɔ́-m̀*
mèŋírì	‘be small balls’	*mèŋéré-m̀*

f. from mediopassive, cf. ‘look’ in (c) above

MP morpheme absent in causative (rare)

kír-ì:	‘jump’	*kíré-m̀*

MP morpheme present in causative (productive)

bàr^{n}-î:	‘become red’	*bàr^{n}-ɛ́:-m̀*

g. irregular

líwɛ́	‘be afraid’	*lí:rɛ́-m̀*	‘frighten, scare’
jɔ̀wɔ́	‘run’	*jǒ-m̀*	‘drive (vehicle)’

The final high vowel of the causative is audible in some suffixed forms. It is heard as *i* in imperfective *-mí-ɲú* (plural-subject *-mí-ɲí*) and perfective negative *-mì-lì*, but as *u* (lengthened to *u:*) in imperfective negative *-mû:-rò* (plural-subject *-mû:-rè*). It is difficult to choose between /-mi/ and /-mu/ representations, since each of these forms has a biased phonological environment (palatoalveolar consonant, following syllable with *i* versus *o* in the primary singular-subject form, even the labial *m*). There may be dialectal variation; in a recorded tale (2011.1b.04), imperfective negative variant *-mâ:-rò* was heard. Other suffixed inflected forms, the imperative, and the agentive, apocopate or syncopate the vowel.

There are no apparent restrictions on the prosodic shape of the derived causative stem (unlike the case with the reversive). Causative suffix *-m̀* may be added to a reversive stem: *ná:r^{n}á-m̀* ‘cause to remember, remind’. It may be added to a suffixally derived (or simple) deadjectival inchoative verb to produce a corresponding factitive: *ɛ́rú-lɛ́-m̀* ‘cause to be happy’. (230f) shows that the suffix can be added to the mediopassive suffix.

As with other verbs, a verbal noun from a causative can be used as a compound final or modifying adjective specifying the manner of production. Thus *pɔ̀rú* ‘sesame’, *pɔ̀rù-[yɔ̀gɔ̀rɔ̀-mú]* ‘balls of cooked and pounded sesame seeds’.

Deadjectival factitives with the same causative suffix are illustrated in §9.5, below. Often the causative suffix follows an inchoative suffix in these forms.

9.2.2 Minor causative suffixes (*-gv̀*, *-ŋv̀*, *-nv̀*)

A small number of verbs have an archaic causative in *-gv̀* ~ *-ŋv̀*. For some, a productive causative with *-m̀* is also elicitable. The archaic causatives may have specialized meanings. The strange metathesis-like changes in *dàní-gì*, *súnú-gì*, and *ɲùnú-gù* have counterparts in their cognates in other Dogon languages and are undoubtedly ancient. The mediopassive suffix is not retained before *-gv̀* ~ *-ŋv̀*. All known examples are in (231).

(231) Causative *-gv̀*, *-ŋv̀*

input	gloss	causative	gloss/comment
a. *-gv̀*			
consonantism preserved			
wòró	‘(well) cave in’	*wòrí-gì*	‘cause to cave in’
káwá	‘be separated’	*káw(ú)-gù*	‘separate [tr]’
mòr-î:	‘be lost’	*mòrí-gì*	‘cause to be lost’
lóró	‘be punctured’	*lórí-gì*	‘puncture’
Cvgv becomes Cvnv-gv			
dàg-î:	‘be done well’	*dàní-gì*	‘make/do (sth) well’; ‘get ready [intr, tr]’
súgó	‘go down’	*súnú-gì*	‘take down; unload’
Cvŋv becomes Cvnv-gv			
táŋá	‘X become Y’	*tánú-gù*	‘Z transform X into Y’
Cvwv becomes Cvnv-gv			
ɲɔ̀w^n*ɔ́*	‘be ruined’	*ɲùnú-gù*	‘ruin [tr]’
Cv: (< *Cvwo*) becomes Cvnv-gv*			
gìnɛ́ ɲǔ:	‘wake up [intr]’	*ɲùnú-gù*	‘wake (sb) up’
b. *-ŋv̀*			
regular			
sá:^{n}	‘disperse’	*sá:*^{n}*-ŋì*	‘cause to disperse’; also written *sá:-ŋì*
irregular (archaic)			
gǒ:	‘go out’	*gǔŋ̀ (gǔŋù)*	‘take out, remove’ (not clearly segmentable)

Perhaps of this type is *dɔ̀rú-gù* ‘bail out, ransom’, compare the second element in the collocation *dògó dɔ̀rɔ́* ‘back up, retreat’ (*dògó* ‘back[ward]’).

Some of the basic verbs of motion and stance have causative-like transitive counterparts with suffix *-nv̀*. Several verbs translatable as ‘put, set, lay’ are of this type. The known cases are in (232). The phonological relationships are often nontransparent.

(232) Causative *-nv̀*

input	gloss	causative	gloss/comment
a. phonologically regular			
dɔ̌:	‘arrive’	*dɔ̌:-ǹ*	‘take to the endpoint’
bǎ:	‘learn’	*bǎ:-ǹ*	‘teach, instruct’

b. minor consonantal irregularity

tɔ́:nù	‘melt [intr]’	*tɔ́:r^{n}ù-nì*	‘melt [tr]’

c. *(C)vmv* becoming *(C)u:-n(i)*

ìm-î:	‘lie down’	*ú:-ǹ*	‘lay, put down (large object)

d. *Cvŋv* becoming *Cv:-n(ì)*

dὲŋ-î:	‘sit’	*dǎ:-ǹ*	‘put down, set (e.g. container)’
náŋá	‘be on (wall)’	*ná:-ǹ*	‘put up on (wall)’

e. *Cvrv* becoming *Cv:-nì*

gàrá	‘pass by, go past’	*gǎ:-ǹ*	‘take past’, cf. *gǎ-m̀* (230c)
mɔ̀r^n-î:	‘assemble [intr]’	*mɔ̌:-ǹ*	‘assemble [tr]’

f. irregular (phonology very obscure)

dɔ̀wɔ́	‘go up’	*dân*	‘cause to go up’

For transitive suffix *-rv*, which is sometimes causative-like in sense, see §9.3.1, just below.

9.3 Passive and transitive

9.3.1 Mediopassive *-i:* ~ *-ε:-* versus transitive -*rv* ~ -*r^{n}v*

A number of verb stems occur in a contrasting pair of suffixed forms. One has mediopassive *-i:*, which is realized word-finally as *-î:* after L-toned *Cv̀C-* and as *-ì:* after H-toned *Cv́C-*. It becomes *-ε:-* before another suffix, and in the imperative. The paired form has transitive suffix *-rv*, with nasalized variant *-r^{n}v* after a nasal syllable. These labels are rough; most morphological mediopassives are intransitive but some are transitive, in which case the corresponding morphological transitive is doubly transitive. However, in all cases the mediopassive denotes some kind of state.

Typical semantic categories of verbs with this distinction are a) stance verbs like ‘sit’; b) verbs of holding and carrying; c) verbs of donning and wearing garments; and d) deadjectival verbs. The latter are covered in §9.5, below.

Mediopassive/transitive pairs are illustrated in (233).

(233) Mediopassive *-i:* and paired transitive -*rv* ~ -*r^{n}v*

form	gloss	comment
a. stance, position		
túŋ-ì:	‘X kneel’	
túŋì-r^{n}ì	‘Y cause X to kneel’	
ìg-î:	‘X stand; X stop’	
ìgí-rì	‘Z erect X; Z stop X’	
wàw-î:	‘(bird, quadruped) lie down on belly’	
wàwí-rì	‘carry (child) with its belly on one’s shoulder’	

b. holding/carrying

bòm-î:	‘X carry (child) on back’
bòmí-rì	‘Z help X carry (child) on back’
dìw-î:	‘lean (on sth)’, ‘be up close to (sth)’
dìwí-rì	‘carry at one’s side or at one’s abdomen’
dùw-î:	‘X carry Y on head’
dǔ:-rì	‘Z load X’, ‘Z have X carry Y on head’

c. wearing garments

dùg-î:	‘X (woman) gird oneself (with a wrap)’
dùgí-rì	‘Y gird X (with a wrap)’
tág-ì:	‘X put on shoes’
tágì-rì	‘Y put shoes on X’
kúw-ì:	‘X put on a hat’
kúwì-rì	‘Y put a hat on X’

d. other

ìn-î:	‘X bathe’ (with noun *dí:* ‘water’)
ìnì-rì	‘Y bathe X’ (with the same noun *dí:*)
bàŋ-î:	‘X hide (self)’
bàŋú-r^{n}*ù*	‘Y hide X’
lɛ́g-ì:	‘X slip itself into (narrow space)’
lɛ́gì-rì	‘Y slip X into (narrow space)’

In (234), the unsuffixed stem functions as the transitive counterpart to the suffixed mediopassive. In the last two sets there there is also a transitive form with *-rì* suffix.

(234) Unsuffixed stem versus mediopassive *-i:*

gòró	‘X cover Y (with blanket)’
gòr-î:	‘Y cover self (with blanket)’
jèré	‘X hang Y (on a hook or nail)’
jèr-î:	‘Y be hanging; Y cling to’
mìnɛ́	‘X fold Y, X roll up Y’
mìn-î:	‘X be rolled up’
bàrá	‘X expand Y’
bàr-î:	‘Y expand’
dìgɛ́	‘join, link (objects)’
dìg-î:	‘(objects) be joined’; ‘follow’
dìgí-rì	‘cause to follow; arrange (in order)’

tíwé	‘(sb) support oneself on (e.g. walking cane)’
tíw-ì:	‘X (e.g. stick) be leaning against (e.g. wall)’
tíwì-rì	‘Y lean X (against sth)’

Some of these mediopassives have a corresponding causative that obviates the need for a transitive with *-rv* ~ *-r^{n}v*.

Examples of mediopassives that are (to judge from present lexicographical data) without a paired transitive are in (235). Further lexical study may remove some of them from the list.

(235) Unpaired mediopassives

form	gloss
a. /H/-toned	
tɔ́r^n-ì:	‘squat’; ‘(bird) alight’
pɔ́n-ì:	‘put on one’s pants’
síw-ì:	‘put on (boubou)’
túw-ì:	‘freeze’ ‘(milk) form a film’
tár-ì:	‘endure, be able to stand’
téŋ-ì:	‘(water) become clear’
téw-ì:	‘bow and place hands on knee’
téŋ-ì:	‘balance (load) on head’
ɛ́r-ì:	‘escape’
hámp-ì:	‘chew (tobacco)’
kír-ì:	‘jump’ (with noun *kìrí*)
síy-ì:	‘wear (garment)’ (variant *síw-ì:*)
sár^n-ì:	‘become lost’
kíj-ì:	‘X encounter, meet Y’
nóŋ-ì:	‘(stone, stick) be caught (in tree)’
kɔ́l-ì:	‘(garment) be hooked or caught (in tree)’
níŋ-ì:	‘become tangled’
pár-ì:	‘rub in (oil, lotion)’
nɔ́w^n-ì:	‘go to sleep’ (with noun *gìnɛ́*)
sɔ́ŋ-ì:	‘carry (child) on both shoulders’
tár-ì:	‘(e.g. lizard) be on wall’
tón-ì:	‘calm down’
níŋ-ì:	‘become tangled’
kɔ́r-ì:	‘sort by category’
sáw^n-ì:	‘be in oversupply’
b. /LH/-toned	
dɛ̀ŋ-î:	‘sit’
wàr^n-î:	‘(vine) spread out’
wɔ̀r^n-î:	‘(vine) twist itself around’
dàg-î:	‘become good, turn out well’
bɔ̀r-î:	‘(wedding, festival) be held’
dìn-î:	‘hold (in hands)’
ɲɛ̀ŋ-î:	‘circulate [intr]’
dàr-î:	‘carry Y on shoulder’
mɔ̀r^n-î:	‘assemble [intr]’ (cf. causative *mɔ̌:-ǹ*)

dɔ̀m-î:	‘wait for’
dìm-î:	‘worship’
yày-î:	‘play (board game)’, with noun *kɔ̀rɔ́*

There are also many trisyllabic stems ending in a syllable *rv* that is possibly segmentable, but in the absence of a paired mediopassive we cannot clearly determine the function of the ending. An example is *gɛ̀gí-rì* ‘(bowl) tilt to the side’, compare adverbial *gɛ̀gí→* ‘tilting’. Another is seen in the phrase (cognate nominal plus verb) *tìgɛ́ tígìrì* ‘(griot) call out the names of ancestors’. In a transitive pair like *yìgé* ‘shake (off)’ and *yìgí-rì* ‘jiggle, shake’, the absence of a valency change makes analysis difficult.

Representative singular- and plural-subject inflected forms of a mediopassive verb are in (236). Note the variation between *-i:* and presuffixal (and imperative) *-ɛ:-*.

(236) Inflected forms of mediopassive ‘sit’

	Sg	Pl
perfective	*dɛ̀ŋ-î:*	*dɛ̀ŋ-ɛ̂:-sɛ̂*^{n}
perfective negative	*dɛ̀ŋ-ɛ̀:-lí*	*dɛ̀ŋ-ɛ̀:-lâ:*
imperfective	*dɛ̀ŋ-ɛ́:-ɲú*	*dɛ̀ŋ-ɛ́:-ɲú*
imperfective negative	*dɛ̀ŋ-ɛ̂:-ró*	*dɛ̀ŋ-ɛ̂:-ré*
imperative	*dɛ̀ŋ-ɛ́:*	*dɛ̀ŋ-ɛ́:-ỳ*

9.3.2 Passive suffix (*-mv̀*)

The only morphological passives recorded are *bɛ̌-m̀* ‘be obtainable, available’ from transitive *bɛ̀rɛ́* ‘get, obtain’, and *ɔ̌-m̀* ‘be seen, be (easily) visible’ from *ɔ̌:* ‘see’.

The suffix is phonologically indistinguishable from the productive causative suffix, but it is sharply limited lexically. The application of *rv*-Deletion in *bɛ̌-m̀* is regular (§3.5.3.2).

There is a more general construction meaning ‘be VERB-able’ using mediopassive *bìr-î:* ‘be done’, see §17.3.12.

9.4 Ambi-valent verbs without suffixal derivation

Given its rich derivational morphology (including mediopassive/transitive pairs), and the very frequent use of default objects (cognate nominals or other conventional objects), ambi-valent verbs are not typical of TgK. In general, one doesn’t ‘sweep’, one ‘sweeps the ground’; one doesn’t ‘eat’, one ‘eats a meal’, and so forth.

9.5 Deadjectival inchoative and factitive verbs

Adjectival concepts like ‘sweet’ and ‘red’ constitute word-families including an adjective (used in modifying and predicative function), an inchoative verb ‘X become ADJ’, and a factitive (causative) verb ‘Y make X ADJ’. The factitive is often a morphological causative of the inchoative; in other cases the factitive is identical in form to the inchoative.

This section describes the morphological relationship between the adjective and the inchoative verb. This relationship varies from case to case, and it is usually not possible to show that either is derived morphologically from the other. This is probably because inchoative verbs are (for the most part) subject to the usual phonological constraints on verb-stem shapes, while adjectives are not. An interesting exception to this is that when the adjective has an initial voiced obstruent and begins with an H-tone, this tone is carried over into the inchoative, although verbs otherwise require an L-initial melody on stems beginning in voiced obstruents. The examples of this are *gɛ́-ǹ* 'become black' and *déméré-ǹ* 'become fat'.

(237) Adjectives and their inchoatives

ADJ	'become ADJ'	'make ADJ'	gloss
a. Inchoative unsuffixed			
factitive -nv̀			
jó→	*jǒ:*	*jǒ:-ǹ*	'full'
ɛ̌:	*ɛ́:*	*ɛ́:-ǹ*	'tight'
factitive -gv̀			
yɔ̀rú	*yɔ̀rɔ́*	*yɔ̀rú-gì*	'soft, supple'
gɔ̀nú	*gɔ̀nɔ́*	*gɔ̀nú-gù*	'bent, curved'
factitive -mv̀			
ɛ̌m	*ɛ́mɛ́*	*ɛ́mɛ́-m̀*	'cramped'
káŋ	*káŋá*	*káŋá-m̀*	'big'
ǎw^{n}	*áw*^{n}*á*	*áw*^{n}*á-m̀*	'in good condition'
yù:gú	*yǔ:gì*	*yǔ:gɔ́-m̀*	'slow'
factitive also unsuffixed			
pɔ̀:nú	*pɔ́:ǹ*	*pɔ́:ǹ*	'fermenting (earth)'
factitive unattested			
kúrúgú	*kúrúgù*	—	'dense (forest)'
b. Inchoative *-nv̀*			
factitive -nv́-mv̀			
wá:	*wá:-nì*	*wá:-ná-m̀*	'wide'
dègé	*dègí-nì*	*dègí-nɛ́-m̀*	'short; narrow'
dògú	*dògú-nì*	*dògú-nɔ́-m̀*	'heavy'
gɛ́^{n}	*gɛ́-ǹ*	*gɛ́-nɛ́-m̀*	'black'
ùjú	*újú-nì*	*újú-nɔ́-m̀*	'small; slender'
pírí	*pírí-nì*	*pírí-nɛ́-m̀*	'white'
wóró	*wórú-nì*	*wórú-nɔ́-m*	'deep'
ɲɛ́r^{n}*ú*	*ɲɛ́r*^{n}*í-nì*	*ɲɛ́r*^{n}*í-nɛ́-m̀*	'lightweight'
mɔ̀ɲú	*mɔ̀ɲú-nù*	*mɔ̀ɲú-nɔ́-m̀*	'bad'
factitive also -nv̀-			
ɛ́lú	*ɛ́lí-ní*	*ɛ́lí-ní*	'sweet, good-tasting'
déméré	*déméré-ǹ*	*déméré-ǹ*	'fat'
factitive unattested			
ɛ́:ŋú	*ɛ́ŋ-nì*	—	'near' (verb: 'approach')
gàrá	*gàrí-nì*	—	'big; thick'
már^{n}*á*	*már*^{n}*ì-nì*	—	'massive, stout'
gùrú	*gùrú-nì*	—	'tall'

inchoative unattested

wàgá	—	*wàgí-nì*	‘distant’

c. Inchoative *-ŋv̀*

mǎ	*mǎ:-ŋ̀*	*mǎ:-ŋá-m̀*	‘dry; hard’

d. Inchoative *-lv̀* (after rhotic), *-rv̀*

ɔ́gú	*ɔ́gù-rù*	—	‘fast’
àɲá	*áɲì-r^{n}ì*	*áɲá-r^{n}á-m̀*	‘almost ripe’
kélú	*kérì-lì*	*kérí-lé-m̀*	‘cold’

e. Inchoative with mediopassive *-i:* (§9.3.1)

bá^n	*bàr^n-î:*	*bàr^n-ɛ́:-m̀*	‘red’
nú:	*núw^n-ì:*	*núw^n-ɛ́:-m̀*	‘hot’
ɔ̀rú	*ɔ́r-ì:*	*ɔ́rí-gì*	‘wet’

The adjective ‘good’ is *sɛ́^{n}*. It has a suppletive inchoative *dàg-î:* ‘be good, be suitable’, with factitive *dàní-gì* ‘make good; repair’.

Inchoatives with *-gì*, arguably denominal (cf. the following section), are *bò:mí-gì* ‘become stupid’ from *bò:mó* ‘stupid’ (also noun ‘stupidity’), and *nám-gì* ‘become poor (indigent)’ from noun or adjective *nàm-gí^n* ‘impoverished (person)’.

No morphological inchoative or factitive verb was elicitable for *kàná* ‘new’. The construction used is with ‘become’ and ‘transform, cause to become’ verbs: *kàná táŋá* ‘become new’ and *kàná tánì-gì* ‘make (sth) new’. Similarly with *pèré* ‘other’.

9.6 Denominal verbs

There are no productive processes for converting nouns into verbs. There are many word families including both a noun and a verb; see the list of cognate nominals in §11.1.5.2. However, it is usually not possible to derive one from the other, except when the nominal has the form of a verbal noun.

Verb *pó:-ǹ* ~ *pó:-nù* is related to noun *pǒ:* ‘greeting’, which also occurs in the collocation *pǒ: kúǹ* ‘put (=make) a greeting’.

Noun *dúwɔ́* ‘load, burden’ is related to verb *dùw-î:* ‘carry (sth) on one’s head’.

Noun *tìgɛ́* ‘family name’ is relate to verb *tígì-rì* ‘(griot) call out names of ancestors’.

Verb *bàw^{n}úr^{n}ù* ‘wound’ and noun *bár^{n}úw^{n}á* ‘wound, injury’ are related. Most languages in the zone have *barmɛ* (omitting any tones).

9.7 Obscure verb-verb relationships

ná: ‘spend night’ is obscurely related to *ná:-w^{n}á* ‘greet in the morning’, see §19.7.

10 Verbal inflection

10.1 Inflection of regular indicative verbs

Inflected indicative verbs are followed by an aspect-mood-negation (AMN) suffix, which (minimally) distinguishes perfective/imperfective and positive/negative. There is only very limited pronominal-subject inflection on verbs; some categories have only one form used for all subject categories, while the others express a binary distinction between singular and plural subject forms; see summary in §10.3.1, below.

Especially for nonmonosyllabic stems, the AMN suffixes have a slightly different morphophonology for a) stems ending in a high vowel {*i u*}, and b) stems ending in any nonhigh vowel.

Imperatives and hortatives are treated separately, see §10.6.

10.1.1 Suffixes versus chained auxiliary verbs

Because verbs have the same phonological form before certain inflectional suffixes that they have in nonfinal position in chains, the question arises whether the inflectional suffixes in question are treated morphosyntactically as (auxiliary) verbs, rather than suffixes. In the morphology, we want to see to what extent the verb stem interacts phonologically with the inflectional morpheme. In the syntax, we want to see if any other element can intervene between the two.

The imperfective suffix *-jú* nasalizes to *-ɲú* after a nasal syllable in the stem, so this suffix is not a candidate for separate verb status. The imperfective negative interacts phonologically with the stem, lengthening its final vowel and giving it a falling tone. The perfective negative suffix controls tone-dropping on the stem. Several rhotic-medial *CvCv* stems reduce to *Cv-* in all three of these categories by *rv*-Deletion (§3.5.3.2). So there is good evidence that these are suffixal rather than auxiliary categories.

Therefore the only real candidates for auxiliary-verb status are recent perfect *jɛ̂* and experiential perfect *-tɛ́-jɛ̀*. A reasonable case can be made for a word boundary between at least *jɛ̂* and the verb stem.

Before recent perfect *jɛ̂*, the verb either has its bare stem form (as in direct chains), or a form with intervening *-ɛ̀:*, depending on the phonological shape of the verb stem. Thus *págá jɛ̂* 'has finished tying', and *nú-ɛ̀: jɛ̂* 'has finished going in'. Since there is a same-subject anterior subordinator *-ɛ:* (of variable tone) used in chain-like constructions, overall there is a clear affinity between the recent perfect and two major types of verb chain. Furthermore, *rv*-Deletion does not apply to the stem in this combination: *bìrɛ́ jɛ̂* 'has finished doing', compare e.g. imperfective *bǐ-jú* 'will do'.

Since experiential perfect *-tɛ́-jɛ̀* arguably includes a variant of the recent perfect morpheme *jɛ̂*, compare experiential perfect negative *tɛ̀-lí* (but see below for conflicting evidence), *-tɛ́-jɛ̀* has the look of an auxiliary verb. However, unlike *jɛ̂* by itself, *-tɛ́-jɛ̀* does induce *rv*-Deletion of the stem, as in *nǎ-tɛ́-jɛ̀* 'has given birth' from *nàr^{n}á*. So the morphological tests suggest that *jɛ̂* might be a separate word while *-tɛ́-jɛ̀* is a suffix complex, and I will hyphenate (or not) accordingly.

The syntactic test of whether an inflectional suffix is treated like an ordinary chain-final verb is in nonsubject relatives and other subordinated clauses that allow or require a pronominal subject immediately before the final verb. If the inflectional morpheme counts as the final verb of a chain, the subject pronoun should intervene between the verb stem and the inflectional morpheme. The data show that the latter is the case. (238a) illustrates this for the recent perfect, (238b) for the experiential perfect.

(238) a. *ɲà:*^{L} *ɲí:* *í*^{n} ^{H}*jɛ́*
meal^{L} eat.meal **1SgSbj** ^{H}RecPf.Rel
'the meal that I have finished eating.'

b. *ànà*^{L} *yǎ:* *í*^{n} ^{H}*tɛ́-jɛ́*
village^{L} go **1SgSbj** ^{H}ExpPf-RecPf.Rel
'(a/the) village that I have (once) gone to'

So if we prioritize syntactic evidence over morphological, we must conclude that both *jɛ̂* and *tɛ́-jɛ̀* are auxiliary verbs, unlike the other inflectional categories. In the case of *tɛ́-jɛ̀*, the contraction of a preceding *Cvrv* stem to *Cv-* suggests that it is subsequently fused into a single word with the stem, justifying the initial hyphen in *-tɛ́-jɛ̀*.

Incidentally, (238b) provides evidence against interpreting the *-jɛ̀* formative in experiential perfect *tɛ́-jɛ̀* as identical to the recent perfect morpheme. If *tɛ́-jɛ̀* were itself a chain ending in auxiliary *jɛ̂*, the preverbal 1Sg subject pronoun in (238b) would have been placed between *tɛ́* and *jɛ́* (the latter in H-toned relative-clause form). Instead, the pronoun precedes the undivided relative form *tɛ́-jɛ́*.

10.1.2 Overview of indicative categories

The basic inflectional categories for active indicative verbs are those in (239).

(239) a. perfective positive system
    simple perfective
    recent perfect
    experiential perfect

b. imperfective positive system
    imperfective
    progressive

c. perfective negative system
    perfective negative
    experiential perfect negative

d. imperfective negative system
    imperfective negative
    progressive negative

Statives do not distinguish perfective from imperfective and are therefore treated separately (§10.4).

10.1.3 Verb stem shapes

The **bare stem** is used here as a citation form and might be taken as the “psychologically real” lexical form, though this could be contested in view of the modifications undergone by stems before AMN suffixes.

For native Dogon verb stems beginning with a voiced stop {*b d g*}, the lexical melody is /LH/ (monosyllabic *Cv̌:*, bisyllabic *Cv̀Cv́*, etc.). For those beginning with a voiceless obstruent {*p t k s*}, the lexical melody is /H/ (monosyllabic *Cv́:*, bisyllabic *Cv́Cv́*, etc.). Stems with initial sonorant, and vowel-initial stems, have a lexical choice between /LH/ and /H/. The lexical melody is observed in the bare stem and in some AMN inflections. The correlation of initial consonant with lexical melody applies only to verbs (i.e. not to nouns or adjectives), and even for verbs it is overridden by overlays controlled by some AMN suffixes (and in the unsuffixed imperative category).

It is useful to distinguish verbs whose bare stem ends in a high vowel {*i u*} from those whose bare stem ends in any nonhigh vowel {*e ɛ a ɔ o*}. However, the high-final-vowel verbs have allomorphs with a final nonhigh vowel, the choice of form depending on the morphological environment. The distinction between the two types of verbs is less useful for monosyllabic verbs (*Cv*, *Cv:*), most of which show no vowel-quality alternations.

See chapter 9 for discussion of verb-stem derivation (causative, reversive, inchoative, factitive). For purposes of this chapter on verbal inflection, derived and underived verbs can be treated alike unless otherwise noted.

10.1.3.1 *Cv* and *Cv:* verb stems

The following is a complete inventory of known monosyllabic verb stems. The lexical melody may be /H/ or /LH/, and for irregular ‘take away’ (240d) it is /HL/. The lexical tone is often overridden by suffixally controlled overlays. Stative quasi-verbs like *wɔ̀* ‘be (somewhere)’ are excluded from the list. Note the vowel-length pair *nú* ‘go in’ versus *nú:* ‘die’, and the tonal minimal pair *ná:* ‘spend night’ versus *nǎ:* ‘make rope’.

(240)	stem	gloss	comment
	a. short oral vowel; see also (d) below		
	ó	‘give’	imperative *ɔ́-nɔ́*
	nú	‘go in’	simple perfective *nú-ỳ*^{n}
	tí	‘send’, ‘do first’	see §15.1.6.3, §15.2.2.5
	b. long nasal vowel		
	/H/-toned		
	ká:^{n}	‘shave’	
	sá:^{n}	‘disperse [intr]’	
	pá:^{n}	‘(pond, well) dry up’	
	tɛ́:^{n}	‘fold up (rope)’	
	ɛ́:^{n}	‘(woman) get married to (man)’	
	pɛ́:^{n}	‘get old’	
	sí:^{n}	‘urinate’	with noun *ì*^{n}*sìr*^{n}*í*
	kɔ́:^{n}	‘weep’	with noun *kɔ̌*^{n}
	kɔ́:^{n}	‘(gun) fire’	
	tɔ́:^{n}	‘(milk, urine) fill up’	

tɔ́:^{n}	‘coil up’; ‘roll up’	
sú:^{n}	‘douse (fire)’	
tú:^{n}	‘measure’	

/LH/-toned

wǎ:^{n}	‘brandish’	
gǎ:^{n}	‘twist’	
dɛ̌:^{n}	‘get tired’	
jǐ:^{n}	‘fart’	with noun *jí:*^{n}
gǐ:^{n}	‘steal’	

c. long oral vowel (regular)

/H/-toned

á:	‘catch’	
ná:	‘spend the night’	
ká:	‘hone, sharpen (blade)’	
ká:	‘harvest (after main harvest)’	with noun *kèrù-ká*
lá:	‘step on (slime)’	
lá:	‘(parents) engage (girl) to be married’	
lá:	‘lay claim to (land)’	
sá:	‘sneeze’	with noun *àségú*
tá:	‘avoid, respect (a taboo)’	
tá:	‘taste’	
tá:	‘(bone) be fractured’	
tá:	‘shoot (arrow)’; ‘snap (finger) against’; ‘(wasp) sting’	
tá:	‘wage (war)’	
wá:	‘(tool handle) be broken’	
ɛ́:	‘become tight’	
kɛ́:	‘pick out (lice)’	
lɛ́:	‘make slash in earth (to sow)’	
tɛ́:	‘weave’	
sɛ́:	‘trim’	
ɲí:	‘eat (meal)’	
ɲí:	‘fine (someone)’	
mí:	‘become fine (powdery)’	
ɔ̌:	‘see’	
pɔ́:	‘inform on’	with noun *pɔ̀-pɔ́:*
pɔ́:	‘strip off’	
kɔ́:	‘(larva) bore through (stem)’; ‘(wood) be worm-eaten’	
kɔ́:	‘scoop (with ladle)’	
kɔ́:	‘raise (young)’	
sɔ́:	‘take a handful’	
tɔ́:	‘(plant) sprout’	
tɔ́:	‘uproot (millet)’	
tɔ́:	‘snap finger’	with noun *kárú*
tɔ́:	‘set (date)’	
tɔ́:	‘take out (daily provisions)’	
tɔ́:	‘quarrel, squabble’	with noun *àr*^{n}*à*^{L}*-tɔ̌:*
tó:	‘turn one’s back’	with noun *dògó*
tó:	‘break (with hammer)’	

só:	'dip (briefly)'	
só:	'(wind) come up'	
pó:	'remove (sediment)'	
nú:	'die'	
/LH/-toned		
jǎ:	'dig'	
bǎ:	'learn'	
bǎ:	'be enough', 'be equal to'	
bǎ:	'heal, recuperate'	
dǎ:	'tell (proverb)'	
dǎ:	'signal to stop'	with noun *nùmɔ̀*^{L}*-dá*
mǎ:	'shape (pottery)'	
jǎ:	'dig'	
nǎ:	'make rope (with rolling motion)'	
bě:	'put down, lay'	
bɛ̌:	'defecate'	with noun *bɛ́:*
jɛ̌:	'scoop (with shovel)'; 'lift out (coals)'	
mǐ:	'be ground'	
bɔ̌:	'unsheathe'	
nɔ̌:	'drink'; 'smoke (tobacco)'	
mɔ̌:	'laugh'	with noun *mɔ́*
dɔ̌:	'arrive'	
jǒ:	'overflow', 'become full'	
gǒ:	'go out'	
wǒ:	'eat (crushed millet with water)'	
ɲǔ:	'wake up'	with noun *gìnɛ́*

d. long oral vowel except *Ce* in bare stem and simple perfective

yě	'go'	*yǎ:-* in other forms
jê	'take away'	*jâ:-* in other forms

nú 'go in' and *nú:* 'die' have partially homophonous paradigms, namely in inflectional categories where *Cv* is lengthened to *Cv:* . As shown by these verbs, along with *ɲí:* 'eat (meal)', there is no prohibition of high vowels, and for these monosyllabic stems the high vowel is stable throughout the AMN paradigm.

10.1.3.2 Irregular *Cv* and *Cv:* stems

ó 'give' has irregular imperative *ɔ́-nɔ́* but is otherwise regular.

nú 'go in' has simple perfective *nú-ỳ*^{n} but is otherwise regular.

The most important irregularities among monosyllabics are those with 'go' and 'take away' (*yɛ̀rɛ́* 'come' and *jɛ̌:rì* 'bring' are bisyllabic). For 'go' the bare stem is *yě* and the simple perfective is *yě-ỳ*, while other forms are based on a stem-variant *yǎ:-* subject to regular modifications (imperative *yǎ:*, imperfective *yǎ:-jú*, imperfective negative *yǎ̂:-rò*, perfective negative *yà:-lí*).

For 'take away', the short gloss I use for the verb that expresses 'convey (sth, somewhere)' or 'remove (sth, from here)', the bare stem is *jê*, with a lexical falling tone not otherwise found in monosyllabic bare stems, and the simple perfective is *jé-ỳ*. Other forms are based on *jâ:-* (imperative *jâ:*, imperfective *jâ:-jù*, imperfective negative *jâ:-rò*, perfective negative *jà:-lí*). This verb is irregular in many Dogon languages. It began as a verb-verb chain with a transitive verb ‘take’ followed by intransitive ‘go’. ‘Bring’ (TgK *jɛ̌:rì*) had a similar chain structure (‘take’ plus ‘come’). The original combinations are best preserved in Donno So.

10.1.3.3 Bisyllabic stems

All non-monosyllabic stems end in a short vowel. Bisyllabics may be *CvCv*, *CvCCv*, or *Cv:Cv*. The initial *C* position may be unfilled (*vCv*, etc.).

The basic division is between stems that end in a high vowel (in the bare stem) and those that end in a nonhigh vowel. However, the high-final-vowel stems do have a form ending in a mid-height vowel {*e ɛ o ɔ*} before several of the AMN suffixes.

10.1.3.4 Bisyllabic stems with final nonhigh vowel

For the nonhigh-final-vowel verbs, the attested vocalic sequences are illustrated in (241). Any nonhigh vowel quality may be repeated (241a). If the first vowel is high, the following vowel must be harmonic to it with respect to front/back and rounded/unrounded features and must be mid-height, not *a* (241b). These restrictions apply to native Dogon vocabulary, not necessarily to recent loanwords.

(241) *CvCv* stem with final nonhigh vowel

stem	gloss
a. identical non-high vowels	
tɛ́wɛ́	‘shoot’
téré	‘pound (in mortar)’
áŋá	‘cross (arms)’
dɔ̀wɔ́	‘go up’
bògó	‘(dog) bark’
b. high vowel followed by mid-height vowel	
pídé	‘swell’
dìgɛ́	‘drive out’
újɔ́	‘build’
súgó	‘go down’

10.1.3.5 Bisyllabic stems with final high vowel

The other major class of bisyllabic verbs is characterized by a final L-toned high vowel /ì/ or (if the verb has a rounded vowel) /ù/ in the bare stem, and by a simple perfective suffix *-ì*. The short high vowel can apocopate after /l/ and after nasals. In other AMN categories, these verbs have a **presuffixal stem** that is indistinguishable from the stem shape of a nonhigh-final-vowel verb, including the vowel-sequence restrictions. In particular, stems with initial-syllable *u* have a lexical choice between *o* and *ɔ* for the final vowel, and those with initial-syllable *i* have a lexical choice between *e* and *ɛ* for the final vowel. It is therefore not always possible to predict the presuffixal form from the bare stem, or vice versa, which forces us to use double citation forms, e.g. *kúǹ\\kúnɔ́-* ‘put’ (bare stem *kúǹ*, presuffixal *kúnɔ́-*), especially in the lexicon. Note in particular the opposition between *sí:rɛ́-* ‘cook (meal)’ and *sí:ré-* ‘point at’ in (242a), which merge as *sí:rì* in the bare stem.

(242) Bisyllabic stem with final high vowel (in bare stem)

bare stem	presuffixal	gloss
a. high vowels, final vowel shifting to mid-height		
kúǹ	*kúnɔ́-*	‘put’
wírì	*wírɛ́-*	‘whistle’ (with noun *wìrɛ̌^{n}*)
kírì	*kíré-*	‘jump’
kílì	*kílɛ́-*	‘be resolved’
pí:rì	*pí:ré-*	‘puff up (cheek)’
sí:rì	*sí:rɛ́-*	‘cook (meal)’
sí:rì	*sí:ré-*	‘point at’
sú:rù	*sú:ró-*	‘lower (head)’
ú:-ǹ	*ú:-nɔ́-*	‘make lie down’
b. high vowels, no shifts		
kíw^{n}í	*kíw^{n}í-*	‘tremble’
sír^{n}ì	*sír^{n}í-*	‘cut off (strip)’
pír^{n}ì	*pír^{n}í-*	‘pinch’, ‘milk (a cow)’
mìr^{n}ì	*mìr^{n}í-*	‘swallow’
c. initial nonhigh vowel		
pâl (</pálù/)	*pálá-*	‘pick (fruit)’
pôl	*póló-*	‘break up (bread)’
sá:ŋì	*sá:ŋá-*	‘let out (a yawn)’
bǎ:rì	*bǎ:rá*-	‘send’
mɔ̌:-ǹ	*mɔ̌:nɔ́-*	‘assemble’
pɛ́:gù	*pɛ́:gɛ́-*	‘break apart’
gɛ̌:rì	*gɛ̌:rɛ́-*	‘whisper’ (with *gɛ́:rú*)

10.1.3.6 Contracting and non-contracting *Cvrv* and *Cvr^{n}v* stems

A further complication is that a number of important bisyllabic verbs ending in a rhotic {*r r^{n}*} plus short vowel undergo contraction before several AMN suffixes, resulting in the deletion of the rhotic and the stem-final vowel. The stem’s melody is reapplied to the remaining syllable. The stems in question are a subset of *Cvrv* and *Cvr^{n}v* stems, plus one *Cv:rv* verb (‘bring’). Other verbs of the same shapes do not contract. Contraction does not apply to any trisyllabic or longer stem. The split between contracting and noncontracting bisyllabic stems cuts across the division between high-final-vowel and nonhigh-final-vowel verbs. The imperfective form illustrates the difference in contraction (243).

(243) Contracting and noncontracting rhotic-medial bisyllabic verbs

bare stem	imperfective	gloss
a. noncontracting		
írɛ́	*írɛ́-jú*	‘ripen’
kɛ́rɛ́	*kɛ́rɛ́-jú*	‘bite’
tɔ́rɔ́	*tɔ́rɔ́-jú*	‘begin’
téré	*téré-jú*	‘pound (in mortar)’
túró	*túró-jú*	‘gather up’
túró	*túró-jú*	‘emit (spit)’
kírì	*kíré-jú*	‘jump’
lórì	*lóré-jú*	‘become pregnant’
bǎ:rì	*bǎ:rá-jú*	‘send’
b. contracting (all known examples)		
bìrɛ́	*bǐ-jú*	‘do’
nàr^{n}á	*nǎ-ɲú*	‘give birth’
dàr^{n}á	*dǎ-jú*	‘kill’
yɛ̀rɛ́	*yɛ̌-jú*	‘come’ [irregular]
bàrá	*bǎ-jú*	‘help’
bàrá	*bǎ-jú*	‘gather (into pile)’
gàrá	*gǎ-jú*	‘go past’
bɛ̀rɛ́	*bɛ̌-jú*	‘get’
pórù	*pó-jú*	‘say’
jɛ̌:rì	*jê:-jú*	‘bring’ [irregular]

For contracting verbs, the contraction occurs before (underlyingly) syllabic suffixes beginning with a consonant, of which {*t j l m n w*} can be cited. The main ones are the imperfective (shown above), experiential perfect (*-tɛ́-jɛ̀*), progressive (*-táŋà*), perfective negative (*-lí*), prohibitive (*-lé*), causative *-m̀* (underlying *-mv̀* with an underspecified high vowel), different-subject ‘while’ subordinator *-nì* ~ *-ǹ*, and progressive negative *-wɔ̀-rɔ́*. From *bàrá* ‘gather’, typical forms are *bǎ-tɛ́-jɛ̀* ‘has (once) gathered’, *bǎ-táŋà* ‘is gathering’, *bà-lí* ‘did not gather’, *bǎ-lé* ‘don’t gather!’, *bǎ-m̀* ‘cause to gather’, *bǎ-ǹ* ‘while (DS) gathers’, *bǎ-wɔ̀-rɔ́* ‘is not gathering’. Imperfective negative *-rò* induces contraction but then applies its vowel-lengthening power to the remaining *Cv-* of the stem: *bǎ̂:-rò* ‘does/will not gather’.

Contraction does not occur in bare stem *bàrá*, perfective *bàr-ɛ̂* ‘gathered’, imperative (positive) *bárá* (plural-subject *bárá-ỳ*), verbal noun *bàr-ú*, or agentive *tì^n-bárá* ‘firewood-gatherer’, none of which fit the phonological conditions for contraction (following syllabic *C*-initial suffix).

10.1.3.7 Verbs with *-i:* in bare stem and perfective only

The irregularity of *gɛ̀r-î:* ‘look’ is that the bare stem and the simple perfective consist of what looks like a suffixed mediopassive form *gɛ̀r-î:*, while other suffixed forms are based on /gɛ̀rɛ́/, showing the same morphophonology as e.g. *bɛ̀rɛ́* ‘get’. All of the forms with /gɛ̀rɛ́/ are subject to *rv*-Deletion (§3.5.3.2).

(244) ‘look’

a.	*gɛ̀r-î:*	bare stem
	gɛ̀r-í-ì	perfective
	gɛ̀r-í-∅	verbal noun
b.	*gɛ̀-lí*	perfective negative
	gɛ̌-jú	imperfective
	gɛ̌̂:-rò	imperfective negative

I know of two other verbs with a similar limited distribution of the mediopassive suffix: *bɔ̀r-î:* ‘(event) take place’ (§11.2.5.3) and *líw-ì:* ~ *líy-ì:* ‘fear, be afraid’ (§11.2.5.4).

10.1.3.8 Verbs with *-ɛ:* except in in bare stem and perfective

The paradigm of the verb in (245) is structurally the inverse of that for ‘look’ (preceding section). That is, the mediopassive (MP) suffix is present in forms other than the bare stem and perfective. This is the only verb known to me that has this paradigm.

(245) ‘be courageous/energetic’

a.	*mǎn*	bare stem
	mǎn-ì ~ *mǎǹ-∅*	perfective
b.	*màn-ɛ̀:-lí*	perfective negative
	mán-ɛ́:-ɲú	imperfective
	mán-ɛ̂:-rò	imperfective negative

10.1.3.9 Trisyllabic stems

All known trisyllabic stems end in a high vowel in the bare stem. They therefore pattern morphophonologically with the high-final-vowel bisyllabics described in the preceding section. Specifically, they have a shape *CvCuCu* *CvCuCi* in the bare stem (to which -*ì* is added to form the simple perfective).

The main tonal division, as for other verb shapes, is between those with initial H-tone and those with initial L-tone. In the bare stem, the *CvCvCv* sequence is heard with H.L.L or H.H.L tone, for the H-initial type. The choice between H.L.L and H.H.L correlates almost perfectly with another split in these verbs, concerning whether the medial vowel remains high in the presuffixal stem, or shifts to the same vowel as in the final syllable in this stem (246a), The L-initial type, corresponding to /LH/ verbs with shorter shapes, is realized as L.H.L in the bare stem.

As usual, an initial voiceless obstruent requires one of the H-initial melodies, an initial voiced obstruent requires L-initial melody, and other stems (those beginning with a sonorant, or with no vowel) are split lexically into H-initial and L-initial types.

There are two subtypes with regard to vocalism of the presuffixal stem, cutting across the tonal opposition. In one, the medial and final vowels are identical and non-high. My examples of this subtype involve a rhotic consonant in the final syllable (*CvCvrv*, *CvCvr*^{n}*v*), one case with *l* after metathesis of *lv-r* to *rv-l*, and one case of *CvCvnv* In the other subtype, the medial vowel remains high in the presuffixal form, while the final vowel appears as one of the mid-height vowels. My examples of this subtype have a final syllable beginning with a non-rhotic consonant; the attested consonants are {*g j n ɲ l w*} with *g* and *j* accounting for a sizeable percentage. The consonant of the final syllable is indicated (*"with g"* etc.) in (246).

(246) Trisyllabic verb with final high vowel in bare stem

bare stem	presuffixal	gloss
a. H.L.L and H.H.L tone patterns		
H.L.L, *identical non-high medial and final v's before suffixes*		
with r		
kígìrì	*kígéré-*	'return'
pɛ́gìrì	*pɛ́gɛ́rɛ́-*	'remove (blade)'
áwìrì	*áwárá-*	'lay out (mat)'
sáwùrù	*sáwárá-*	'lay (brick mortar)'
pɔ́gùrù	*pɔ́gɔ́rɔ́-*	'(hair) be disheveled'
sɔ́gù-rù	*sɔ́gɔ́-rɔ́-*	'unlock'
pɔ́wùrù	*pɔ́wɔ́rɔ́-*	'wave (torch)'
úgùrù	*úgóró-*	'bake'
with r^n		
sáɲùr^{n}ù	*sáɲár^{n}á-*	'replaster (wall)'
sáŋìr^{n}ì	*sáŋár^{n}á-*	'(lightning) flash'
sáŋì-r^{n}ì	*sáŋá-r^{n}á-*	'un-fence'
kúmùr^{n}i	*kumɔ́r^{n}ɔ́-*	'be rekindled'
kúw^{n}ù-r^{n}ù	*kúw^{n}ɔ́-r^{n}ɔ́-*	'open (eyes)'
símìr^{n}ì	*símɛ́r^{n}ɛ́-*	'go back down (slope)'
pínì-r^{n}ì	*pínɛ́-r^{n}ɛ́-*	'open (door)'
H.H.L, *identical non-high medial and final v's before suffixes*		
with n		
íwínì	*íwɛ́nɛ́-*	'like, love'
H.H.L, *medial vowel remains high before suffixes*		
with g		
pírígì	*pírígé-*	'be near death'
tánú-gù	*tánú-gá-*	'transform'
súnú-gù	*súnú-gó-*	'take down'
ɔ́rí-gì	*ɔ́rú-gɔ́-*	'soften'
kúrúgù	*kúrúgó-*	'be dense'
ámúgù	*ámúgá-*	'hold on chest'
pójúgù	*pójúgó-*	'crush'
with j		
lígíjì	*lígíjé-*	'mix (by stirring)'
lúgújù	*lúgújó-*	'poke around'
púgújù	*púgújó-*	'mash'
kógújù	*kógújó-*	'cough'
with a nasal		
kúmúɲù	*kúmúɲɔ́-*	'blink'
pírí-nì	*pírí-nɛ́*	'become white'
ɔ́r^{n}ínì	*ɔ́r^{n}únɔ́-*	'become smooth'
ɲɛ́r^{n}í-nì	*ɲɛ́r^{n}í-nɛ́-*	'become lightweight'

with a semivowel		
kájúwù	*kájúwá-*	‘pay attention’
with a lateral		
súrúlù	*súrúló-*	‘pour back and forth’
with l (after metathesis)		
kérí-lì	*kérí-lé-*	‘become cold’ (*kélú*)

b. L.H.L tone pattern

L.H.L, identical non-high medial and final v’s before suffixes		
with r		
yùgúrì	*yùgɔ́rɔ́-*	‘foam up’
wɔ̀gúrù	*wɔ̀gɔ́rɔ́-*	‘take (sth) out or off’
ùŋúrì	*ùŋóró-*	‘get up, arise’
bɔ̀gúrù	*bɔ̀gɔ́rɔ́-*	‘turn over (earth)’
wɛ̀gírì	*wɛ̀gɛ́rɛ́-*	‘rub (eye)’
gɛ̀gírì	*gɛ̀gɛ́rɛ́-*	‘tilt (sth)’
ìgírì	*ìgɛ́rɛ́-*	‘stop (sb)’
bìní-rì	*bìné-ré*	‘put (garment) on right’
dògúrù	*dògóró-*	‘face upward’
with r^n		
jɔ̀ŋír^n*ì*	*jɔ̀ŋɔ́r*^{n}*ɔ́-*	‘do spot-sowing’
wàɲúr^n*ù*	*wàɲár*^{n}*á-*	‘bubble up’
L.H.L, *medial vowel remains high before suffixes*		
with g		
ɲùnú-gù	*ɲùnú-gó-*	‘ruin’
ɲùnú-gù	*ɲùnú-gó-*	‘awaken’ [note homonymy]
bùrúgù	*bùrúgó-*	‘revive’
wòrúgù	*wòrúgó-*	‘unbuild, take apart’
bìlígì	*bìlígɛ́-*	‘do magic tricks’
jàrígì	*jàrígá-*	‘criticize’
gɔ̀nú-gù	*gɔ̀nú-gɔ́-*	‘make crooked’
with j		
bùgújù	*bùgújó-*	‘shake off’
with a nasal		
dògí-nì	*dògú-nɔ́-*	‘become heavy’
gàrí-nì	*gàrú-ná-*	‘become thick, big’
dɛ̀gí-nì	*dɛ̀gí-nɛ́-*	‘become narrow’
mɔ̀ɲú-nù	*mɔ̀ɲú-nɔ́-*	‘be bad’

10.2 Positive indicative AMN categories

10.2.1 Perfective positive system (including perfect)

There is an unsuffixed simple perfective (§10.2.1.1), a suffixed recent perfect (§10.2.1.3), and a suffixed experiential perfect (§10.2.1.2). The “suffixes” are arguably auxiliary verbs. That the latter two belong in the perfective system is shown by their negatives, which include the perfective negative; see §10.2.3.1, below. The simple perfective has a reduplicated variant (§10.2.1.5). There is also a periphrastic combination that I call the perfect of continuing possession (§10.2.1.4).

10.2.1.1 Simple perfective (*-ɛ/-e/-i*, *-sɛ̂ⁿ*, *-ɛ̀:-sɛ̂ⁿ*)

The transcribed forms below show the tones heard in isolation or in very simple sentences with only a pronominal subject preceding. At the end of longer clauses, these simple perfectives (like other inflected verb forms) are often heard with {L} tones.

For plural subjects (1Pl, 2Pl, and especially with human reference 3Pl), the simple perfective optionally adds a suffix *-sɛ̂ⁿ* to the stem. If the stem-final vowel of a nonmonosyllabic stem is lexically high, it is replaced by an augment *-ɛ̀:-*. The same vowel quality may extend to a preceding vowel (if medial in a trisyllabic stem).

For singular subjects (nonhuman plurals are treated as singular for this purpose), the simple perfective ends in *-ɛ* ~ *-e* for verbs whose bare stem (otherwise) ends in a non-high vowel, and in *-i* for stems ending in a high vowel {*u i*} (or *-∅* after Apocope of a high vowel). Plural subjects also optionally use this form when a plural pronoun or NP occurs in subject position.

Stems ending lexically in a non-high vowel are exemplified in (247). Singular *-ɛ* ~ *-e* replaces a final non-high vowel {*o ɔ a ɛ e*} for nonmonosyllabics, and forms a kind of diphthong with the final non-high vowel of a monosyllabic (which is shortened). The choice between *-ɛ* and *-e* depends on the vowel-harmonic class of the stem, whereby {*ɔ a ɛ*} stem vocalism requires *-ɛ*, {*o e*} stem vocalism requires *-e*, and high vowels are neutral (§3.4.6). Since {*ɛ ɔ a*} vocalism is more common than {*e o*} vocalism in lexical verb stems, the suffix allomorph *-ɛ* is more common than *-e*.

Verb stems ending lexically in a non-high vowel have the shapes *(C)v* ('give'), *Cv:*, and *CvCv*. If the stem is /H/-toned, *-ɛ* ~ *-e* is L-toned. If the stem is /LH/-toned, *-ɛ* ~ *-e* is <HL>-toned.

The plural suffix *-sɛ̂ⁿ* is added directly to the bare stem for these verbs, except in *ɔ́-ɛ̀:-sɛ̂ⁿ* 'they give' (the only *Cv* stem in the set), which has the *-ɛ̀:-* augment.

(247) Simple perfective of verbs with final nonhigh vowel, except *Ce-*

bare stem	simple perfective singular	 plural	gloss
a. /H/ toned monosyllabics, *Cv* (only known example)			
ó	*ó-è*	*ɔ́-ɛ̀:-sɛ̂ⁿ*	'give' [irregular]
[*ó-è* shortens to *ô-∅* before *dè* 'if']			
b. /H/ toned monosyllabics, long-voweled *Cv:* (all known examples)			
á:	*á-ɛ̀*	*á:-sɛ̂ⁿ*	'catch'
ná:	*ná-ɛ̀*	*ná:-sɛ̂ⁿ*	'spend night'
kɔ́:ⁿ	*kɔ́ⁿ-ɛ̀ⁿ*	*kɔ́:ⁿ-sɛ̂ⁿ*	'weep'
pɛ́:ⁿ	*pɛ́ⁿ-ɛ̀ⁿ*	*pɛ́:ⁿ-sɛ̂ⁿ*	'get old'
c. /LH/ toned monosyllabics, *Cv:* (all known examples)			
singular perfective <LHL> toned			
ɔ̌:	*ɔ̌-ɛ̀*	*ɔ̌:-sɛ̂ⁿ*	'see'
singular perfective <LH> toned			
jǎ:	*jǎ-ɛ̀*	*jǎ:-sɛ̂ⁿ*	'dig'
nɔ̌:	*nɔ̌-ɛ̀*	*nɔ̌:-sɛ̂ⁿ*	'drink'
dɔ̌:	*dɔ̌-ɛ̀*	*dɔ̌:-sɛ̂ⁿ*	'arrive'
bǎ:	*bǎ-ɛ̀*	*bǎ:-sɛ̂ⁿ*	'learn'

bǎ:	*bǎ-ɛ̀*	*bǎ:-sɛ̂^{n}*	‘be enough’
gǒ:	*gǒ-è*	*gǒ:-sɛ̂^{n}*	‘go out’

singular perfective <LH> toned, e to ɛ in plural

bě:	*bě-è*	*bɛ̌:-sɛ̂^{n}*	‘put down’

[*bɛ̌:-sɛ̂^{n}* homophonous with ‘(they) defecated’]

d. /H/ toned bisyllabics, *CvCv*

téré	*tér-è*	*téré-sɛ̂^{n}*	‘pound’
págá	*pág-ɛ̀*	*págá-sɛ̂^{n}*	‘tie’
újɔ́	*új-ɛ̀*	*újɔ́-sɛ̂^{n}*	‘build’
tɛ́wɛ́	*tɛ́w-ɛ̀*	*tɛ́wɛ́-sɛ̂^{n}*	‘shoot’
súgó	*súg-è*	*súgó-sɛ̂^{n}*	‘go down’

e. /LH/ toned bisyllabics, *CvCv*

dɔ̀wɔ́	*dɔ̀w-ɛ̂*	*dɔ̀wɔ́-sɛ̂^{n}*	‘go up’
yɛ̀rɛ́	*yɛ̀r-ɛ̂*	*yɛ̀rɛ́-sɛ̂^{n}*	‘come’
yɔ̀wɔ́	*yɔ̀w-ɛ̂*	*yɔ̀wɔ́-sɛ̂^{n}*	‘accept’
ɲàŋá	*ɲàŋ-ɛ̂*	*ɲàŋá-sɛ̂^{n}*	‘pick up’
dìgɛ́	*dìg-ɛ̂*	*dìgɛ́-sɛ̂^{n}*	‘drive out’
bògó	*bòg-ê*	*bògó-sɛ̂^{n}*	‘(dog) bark’

Occasional segmental homophony between the 3Sg simple perfective and the bare stem, viz., among /LH/ toned nonmonosyllabics ending lexically in {*ɛ e*} such as ‘drive out’ in (247e), is resolved by tones and by position (the bare stem occurring nonfinally in a verb chain).

The two somewhat irregular *Ce-* verbs (§10.1.3.1) are in (248).

(248) Simple perfective of *Ce* stems

bare stem	perfective		gloss
	singular	plural	
jê (jâ:-)	*jé-ỳ*	*jɛ́-ɛ̀:-sɛ̂^{n}*	‘take away’
yě (yǎ:-)	*yě-ỳ*	*yɛ̌-ɛ̀:-sɛ̂^{n}*	‘go’

[*jé-ỳ* and *yě-ỳ* shorten to *jê-∅* and *yě̂-∅* before *dè* ‘if’]

Monosyllabic stems with high vowel, and *CiCi* bisyllabics, are illustrated in (249). These verbs have a final high vowel that does not shift to a mid-height vowel before suffixes such as the imperfective. They have a perfective *-ỳ* (monosyllabic) or *-í* ~ *-ì* (bisyllabic), so in the perfective they have morphological affinities to the (mostly heavier) stems with changeable final high vowel to be described later. This is especially so with the *Cv* stems in (249a), which show the *-ɛ̀:-* augment before the plural suffix.

(249) Simple perfective of stems with fixed final high vowel

bare stem	perfective		gloss
	singular	plural	
a. /H/ toned *Cv*			
[*-ỳ* dropped before *dè* 'if', e.g. *nû-∅ dè*]			
nú	*nú-ỳ*^{n}	*nú-ɛ̀:-sɛ̂*^{n}	'go in'
tí	*tí-ỳ*	*tí-ɛ̀:-sɛ̂*^{n}	'do first'
gí	*gí-ỳ*	*gí-ɛ̀:-sɛ̂*^{n}	'say'
b. /H/ toned monosyllabics, long voweled (all known examples)			
[*-ỳ* not dropped before *dè* 'if', e.g. *nú-ỳ*^{n} *dè*]			
ɲí:	*ɲí-ỳ*^{n}	*ɲí:-sɛ̂*^{n}	'eat'
nú:	*nú-ỳ*^{n}	*nú:-sɛ̂*^{n}	'die'
c. *CiCi* stems			
CíCí with -ì			
pír^n*í*	*pír*^{n}*-ì*	*pír*^{n}*í-sɛ̂*^{n}	'milk (a cow)'
CìCí with -í			
mìr^n*í*	*mìr*^{n}*-í*	*mìr*^{n}*í-sɛ̂*^{n}	'swallow'

'Go in' and 'die', whose bare stems differ in vowel length, have the same (singular-subject) *nú-ỳ*^{n} but differ in the plural-subject form. Before *dè* 'if', *nú-ỳ*^{n} 'went in' shortens to *nû-∅*, but *nú-ỳ*^{n} 'died' does not shorten.

The remaining large class of verbs is those of *CvCv* or heavier shapes with a changeable final high vowel. The final high vowel is heard in the bare stem and in the perfective (singular-subject). The perfective always ends in *-ì*, while the bare stem may end in *ù* or *ì*, with variation between the two for some stems. Since /u/ is more prone to Apocope than /i/, sometimes the alternation is heard as final zero (i.e. final consonant) in the bare stem versus *-ì* in the perfective.

All heavy stems (three vocalic moras or more) belong to this class. Also belonging to this class are *CvCi* stems with an initial-syllable vowel other than *i*.

(250) Simple perfective of stems with changeable final high vowel

bare stem	Perfective		gloss
	Sg	Pl	
a. *CvCv* (not *CiCi*)			
[*-ì* may apocopate before *dè* 'if', e.g. *kúǹ-∅ dè*]			
/HL/-toned			
pâl	*pál-ì*	*pál-ɛ̀:-sɛ̂*^{n}	'pick (fruit)'
kúǹ	*kún-ì*	*kún-ɛ̀:-sɛ̂*^{n}	'put'
pórù	*pór-ì*	*pór-ɛ̀:-sɛ̂*^{n}	'say'
/LHL/-toned			
gŭŋ̀	*gŭŋ-ì*	*gŭŋ-ɛ̀:-sɛ̂*^{n}	'take out'
[*gŭŋ-ɛ̀:-sɛ̂*^{n} can be realized as [gŭŋɛ̂:sɛ̂^{n}]]			

b. *Cv:Cv*

[*-ì* may apocopate before *dè* ‘if’, e.g. *bǎ:r̀-∅ dè*]

/HL/-toned

pó:ǹ	*pó:n-ì*	*pó:n-ɛ̀:-sɛ̂*^{n}	‘greet’

/LH/-toned

bǎ:rì	*bǎ:r-ì*	*bǎ:r-ɛ̀:-sɛ̂*^{n}	‘send’
jǎ:nì	*jǎ:n-ì*	*jǎ:n-ɛ̀:-sɛ̂*^{n}	‘cook in pot’
mɔ̌:-ǹ(ù)	*mɔ̌:n-ì*	*mɔ̌:n-ɛ̀:-sɛ̂*^{n}	‘assemble’
jɛ̌:rì	*jɛ̌:r-ì*	*jɛ̌:r-ɛ̀:-sɛ̂*^{n}	‘bring’

c. trisyllabic

with changeable final and medial vowels (in other categories)

ùŋúrù	*ùŋúr-ì*	*ùŋúr-ɛ̀:-sɛ̂*^{n}	‘get up’
kígìrì	*kígìr-ì*	*kígɛ̀rɛ̀-sɛ̂*^{n}	‘return’
áwìrì	*áwìr-ì*	*áwɛ̀rɛ̀-sɛ̂*^{n}	‘lay out (mat)’
pɔ́wùrù	*pɔ́wìr-ì*	*pɔ́wɛ̀rɛ̀-sɛ̂*^{n}	‘(hair) be disheleved’

with fixed medial high vowel and changeable final vowel

kógùjù	*kógúj-ì*	*kógúj-ɛ̀:-sɛ̂*^{n}	‘cough’
pírìgì	*píríg-ì*	*píríg-ɛ̀:-sɛ̂*^{n}	‘be near death’
súnù-gù	*súnú-g-ì*	*súnú-g-ɛ̀:-sɛ̂*^{n}	‘take down’

d. Mediopassive *-i:* [note the orthography]

ìg-î:	*ìg-í-ì*	*ìg-ɛ́-ɛ̀:-sɛ̂*^{n}	‘stand’
tág-ì:	*tág-ì-ì*	*tág-ɛ̀-ɛ̀:-sɛ̂*^{n}	‘put on shoes’

[bare stem *-i:* and perfective *-i-i* are homophonous]

All of these verbs take the extended plural-subject form *-ɛ̀:-sɛ̂*^{n}, as do *Cv* stems with high vowel, see (249a) above.

Plural-subject suffix *-sɛ̂*^{n} is optional. Verbs that do not take the augment *-ɛ̀:-* before *-sɛ̂*^{n} therefore have two forms, a grammatically unmarked form (required for singular subject and optional for plural subject), and an optional, grammatically marked plural-subject form. Verbs that take the augment *-ɛ̀:-*, on the other hand, have three forms. The grammatically unmarked form is required for singular subject. For plural subject, the optional fully marked form is *-ɛ̀:-sɛ̂*^{n}, but when the plural-subject suffix *-sɛ̂*^{n} is omitted, the augment *-ɛ̀:* often remains. It therefore can itself function as a (perfective positive) plural-subject marker. For example, perfective ‘got up’ is *ùŋúr-ì* for singular (occasionally plural) subject, and either *ùŋúr-ɛ̀:-sɛ̂*^{n} or just *ùŋúr-ɛ̀:* for plural subject.

The distinction in (250c) between trisyllabic stems whose medial vowel is subject to shift between high and nonhigh (from one category to another), and those with fixed medial high vowel, is irrelevant to the perfective.

Mediopassive verbs have a perfective *-i-i*, homophonous to (but here orthographically distinguished from) the bare stem with suffix *-i:*, as in *já jày-í-ì* ‘he/she had a fight’ (with cognate nominal *já*). The plural-subject form is *já jày-ɛ̂:-sɛ̂*^{n} ‘they had a fight’.

Sample paradigms including the preverbal subject pronouns are in (251).

(251) Pronominal paradigm (simple perfective)

category	‘go down’	‘pick (fruit)’
1Sg	*í*^{n} *súg-è*	*í*^{n} *pál-ì*
1Pl	*ɛ́mɛ́ súgó-sɛ̂*^{n}	*ɛ́mɛ́ pál-ɛ̀ː-sɛ̂*^{n}
2Sg	*ú súg-è*	*ú pál-ì*
2Pl	*é súgó-sɛ̂*^{n}	*é pál-ɛ̀ː-sɛ̂*^{n}
3Sg	*wó súg-è*	*wó pál-ì*
3Pl	*bé súgó-sɛ̂*^{n}	*bé pál-ɛ̀ː-sɛ̂*^{n}
Nonh	*kó súg-è*	*kó pál-ì*

The plural-subject form *-sɛ̂*^{n}, like perfective participial *sá*^{n} in relative clauses, undoubtedly reflects an original perfective suffix *-so- or *-sa- (perhaps combined with another morpheme). This category is called perfective-2 or resultative in some of my other Dogon grammars. The suffix is related to the ‘have’ quasi-verb that appears in TgK as *sà* (§11.5.1).

Prost describes a “passé composé” which has singular-subject “sa” corresponding to plural-subject *-sɛ*^{n}, e.g. “wo yɛrɛ sa” ‘he has come’. For Prost, this category is distinct from the unsuffixed perfective (“passé simple”). However, he also notes that the common singular-subject form is that of the passé simple, while the common plural-subject form is that of the passé composé, so the difference between Prost’s description (pp. 40, 49, 59) and mine is less great than initially appears.

10.2.1.2 Experiential perfect ‘have ever’ (*-tɛ́-jɛ̀*)

The (positive) experiential perfect is expressed by adding *-tɛ́-jɛ̀* (invariant for subject number). There is syntactic evidence that this is an auxiliary verb that can be separated from the preceding verb (by a preverbal subject pronominal in a nonsubject relative); see §10.1.1. However, this conflicts with morphophonological evidence that it is suffixal rather than a separate word; namely, rhotic-medial *CvCv* stems undergo *rv*-Deletion (§3.5.3.2) before *-tɛ́-jɛ̀*, but not in verb-chains: *bìrɛ́* ‘do’, experiential negative *bǐ-tɛ́-jɛ̀* ‘has (ever) done’. One can reconcile the two findings by suggesting that it starts out as a separate word (auxiliary) but then merges with the verb as a suffix (complex).

With one minor exception (‘see’), the stem before *-tɛ́-jɛ̀* has the same segmental and tonal form as before imperfective *-jú*. Thus *nú-tɛ́-jɛ̀* ‘has (ever) gone in’, *kígéré-tɛ́-jɛ̀* ‘has (ever) gone back’ (from *kígìrì*), *ɲùnú-gó-tɛ́-jɛ̀* ‘has (ever) ruined’. ‘See’ is <LH> toned in *ɔ̌-tɛ́-jɛ̀* ‘has (ever) seen’, but H-toned in imperfective *ɔ́-jú* ‘sees, will see’.

(252) a. *í*^{n} *íː*^{n} *nǎ-tɛ́-jɛ̀*
1SgSbj child give.birth-**ExpPf-RefPf**
‘I have (at least once) given birth.’ (*nàr*^{n}*á*)

b. *ɛ́mɛ́ yí kó kúnɔ́-tɛ́-jɛ̀*
1PlSbj there NonhObj put-**ExpPf-RecPf**
‘We have (at least once) put it in there.’

This category can be translated as 'have (ever) VERB-ed'. It is especially common with 'see' (i.e. something unusual), 'go' (i.e. to a distant place) and similar verbs denoting events that create a permanent state (such as a memory).

The (positive) form is *-tɛ́-jɛ̀*, invariant for subject number. It is tempting to interpret this as the combination of a stem-like element *(-)tɛ́* plus recent perfect *jɛ̂*, rather than as a perfective *tɛ́j-ɛ̀* (from a putative stem *tɛ́jɛ́*), since *tɛ́-jɛ̀* agrees with recent perfect *-jɛ̂* in not distinguishing singular from plural subject, whereas a stem *tɛ́jɛ́* should have a plural-subject form #*tɛ́jɛ́-sɛ̂ⁿ*, compare *tɛ́wɛ́-sɛ̂ⁿ* 'they shot'. However, the syntactic evidence (from nonsubject relative clauses) fails to confirm the analysis of *(-)tɛ́-jɛ̀* as *(-)tɛ́* plus the recent perfect auxiliary, since no other element can intervene between them; see §10.1.1, above.

(253) a. *íⁿ* *[dùŋù*^{L} *ná:]* *ɔ̌-tɛ́-jɛ̀*
1SgSbj [elephant] see-**ExpPf-RecPf**
'I have (in my life) seen an elephant.'

b. *ɛ́mɛ́* *[dùŋù*^{L} *ná:]* *ɔ̌-tɛ́-jɛ̀*
1PlSbj [elephant] see-**ExpPf-RecPf**
'We have (in our lives) seen an elephant.'

The category is common in questions ('have you ever …?). It is also common with negation ('have never …'), see §10.2.3.2, below.

10.2.1.3 Recent perfect (*jɛ̂*)

The auxiliary verb (see below) *jɛ̂* added to the main verb produces a recent perfect translatable as 'already/just VERB-ed' or as 'have (just) finished VERB-ing'. There is no morphological distinction between singular and plural subjects.

The form taken by the verb before *jɛ̂* is either the bare stem (as in direct verb chains), or a form with suffix *-ɛ̀:* (as in same-subject anterior chains), depending on the form of the stem. The suffix *-ɛ̀:* is found with the few *Cv* stems, and with verbs whose bare stem ends in a high vowel, including all stems heavier than bimoraic *CvCv* (254). This morphology suggests that *jɛ̂* could be interpreted as an auxiliary verb, to which a preceding VP can be chained. The syntactic evidence in §10.1.1, above, also supports the auxiliary-verb analysis.

(254) Recent perfect of stems with lexical stem-final high vowel

bare stem	recent perfect	gloss
a. *Cv* stems		
ó	*ɔ́-ɛ̀: jɛ̂*	'give'
nú	*nú-ɛ̀: jɛ̂*	'go in'
b. stem-final fixed vowel		
final nonhigh vowel		
á:	*á: jɛ̂*	'catch'
ɔ̌:	*ɔ̌: jɛ̂*	'see'
nɔ̌:	*nɔ̌: jɛ̂*	'drink'
bìrɛ́	*bìrɛ́ jɛ̂*	'do'
yɛ̀rɛ́	*yɛ̀rɛ́ jɛ̂*	'come'

págá	*págá jɛ̂*	‘tie’
súgó	*súgó jɛ̂*	‘go down’

CiCi

pír^{n}í	*pír^{n}í jɛ̂*	‘milk (a cow)’
mìr^{n}í	*mìr^{n}í jɛ̂*	‘swallow’

c. *Ce/Ca:* stems (irregular)

jɛ̂ (jâ:-)	*jɛ́-ɛ̀: jɛ̂*	‘take away’
yɛ̌ (yǎ:-)	*yɛ̌-ɛ̀: jɛ̂*	‘go’

d. stem-final high vowel, *Cv:*

ɲí:	*ɲí: jɛ̂*	‘eat’
nú:	*nú: jɛ̂*	‘die’

e. stem-final changeable high vowel (including all heavy stems)

pâl	*pál-ɛ̀: jɛ̂*	‘pick (fruit)’
jɛ̌:rì	*jɛ̌:r-ɛ̀: jɛ̂*	‘bring’
gǔŋ̀	*gǔŋ-ɛ̀: jɛ̂*	‘take out’
mɔ̌:-ǹ	*mɔ̌:n-ɛ̀: jɛ̂*	‘assemble’

trisyllabic with changeable medial and final vowels

kígìrì	*kígèr-ɛ̀: jɛ̂*	‘return’

trisyllabic with fixed medial high vowel

súnúgù	*súnúg-ɛ̀: jɛ̂*	‘take down’

jɛ̂ has a vowel and tone that are compatible with perfective morphology. It could therefore be transcribed as *j-ɛ̂*, though I do not do this in practice. One argument against this analysis is that the usual plural-subject perfective form with *-sɛ̂^{n}* is not used.

A typical perfective-like example is (255a). The imperfective *jɛ́-jú* ‘will have finished (doing), will have already (done)’ is less common, but attested in clause-final {L}-toned form (255b).

(255) a. *[wàrù^{L} gɛ̂$^{n+L}$] wàrá jɛ̂ dè, kó kà:^{n}*
[farming^{L} black.Def^{+L}] do.farming **RecPerf** if, Nonh too
‘When (you) have finished doing the black farming, (there is) that (other) one too.’ (2011.1a.04)

b. *ú wá: [kó kû^n] tò-tó: bà^n-lí dè,*
2SgSbj be.early [Nonh on] tin.can beat-PfvNeg if,
nɛ́:, sàjú sâ:^{n} jɔ̀gɔ́ ^{L}jè-jù
now, bird all peck ^{L}**RecPf**-Ipfv
‘If you-Sg don’t beat (=bang) tin cans at them (=birds) early, the birds will have already finished pecking (=eating) all (of the fast millet).’ (2011.1a.07)

Pronominal-subject categories are distinguished by clause-initial pronouns (256). There is no distinct plural-subject suffixed form of the verb.

(256) Pronominal paradigm (recent perfect)

category	‘go down’	‘pick (fruit)’
1Sg	*í^{n} súgó jɛ̂*	*í^{n} pál-ɛ̀: jɛ̂*
1Pl	*ɛ́mɛ́ súgó jɛ̂*	*ɛ́mɛ́ pál-ɛ̀: jɛ̂*
2Sg	*ú súgó jɛ̂*	*ú pál-ɛ̀: jɛ̂*
2Pl	*é súgó jɛ̂*	*é pál-ɛ̀: jɛ̂*
3Sg	*wó súgó jɛ̂*	*wó pál-ɛ̀: jɛ̂*
3Pl	*bé súgó jɛ̂*	*bé pál-ɛ̀: jɛ̂*

10.2.1.4 Perfect of continuing possession (*-ɛ:* ~ *-e:* ~ *-i:* plus *sâ*, plural *sɛ̂*)

Another perfect, attested once in a text, ends in a same-subject anterior subordinated verb with suffix *-ɛ:* ~ *-e:* ~ *-i:* plus the ‘have’ quasi-verb *sá* in <HL>-toned form *sâ*. The plural-subject form is *sɛ̂*, the negation is *sà:-rá* (plural *sɛ̀:-rɛ́*).

In (257), from an animal tale, Fly reports to his mistress the reason given by Crowned Crane as to why he has a strange cowry shell stuck on his forehead. The perfect sense seems rather literal: ‘stuck it on and (still) has it’.

(257) *[[[dìmé* ^{L}*kè]* *yɔ́:]* *ɛ̀nɛ́* *[ìɲàr^{n}á* *gɛ̂:]*
[[[forehead ^{L}Poss] NearDist] LogoSbj [elegance for]
tár-ɛ́: *sâ]* *wà*
affix-**and.SS** **have**] Quot
‘(It) said, (he says) he has stuck that of (=on) his forehead for showing o)ff.’ (2011.1b.02

10.2.1.5 Reduplicated perfective *(Cv̀-…-è/ɛ̀/ì*)

A form consisting of the simple perfective with overlaid {HL} stem tone, plus initial L-toned *Cv̀-* reduplication, e.g. *dà-dág-ɛ̀* from *dàg-ɛ̂* ‘left (sth)’, was elicited. My assistant suggested that the reduplicated form was used in contexts of factual uncertainty. For example, hearing a child outside the house who has begun to weep, one might say *là-lág-è* ‘(someone) hit him/her’, hypothesizing something that may have happened.

Further examples of the form are in (258). Vowel-initial stems have a phonetic glottal stop at the hiatus point between the reduplicant vowel and the initial base vowel.

(258) Reduplicated perfective

regular	redup Pfv	bare stem	gloss
a. *Cv*			
lexically /H/			
ó-è	*ò-ʔó-è*	*ó*	‘give’
nú-ỳ^{n}	*nù-nú-ỳ^{n}*	*nú*	‘go in’

lexically /HL/			
jé-ỳ	*jè-jé-ỳ*	*jé*	'take away'
lexically /LH/			
ɔ̌-ɛ̀	*ɔ̀-ʔɔ́-ɛ̀*	*ɔ̌:*	'see'
yě-ỳ	*yè-yé-ỳ*	*yě*	'go'
b. *Cv:*			
lexically /H/			
ɲí-ỳ^n	*ɲì-ɲí-ỳ*^{n}	*ɲí:*	'eat (meal)'
á-ɛ̀	*à-ʔá-ɛ̀*	*á:*	'catch'
lexically /LH/			
nɔ̌-ɛ̀	*nɔ̀-nɔ́-ɛ̀*	*nɔ̌:*	'drink'
c. bisyllabic ending in fixed vowel			
lexically /H/			
pág-ɛ̀	*pà-pág-ɛ̀*	*págá*	'tie'
pír^n*-ì*	*pì-pír*^{n}*-ì*	*pír*^{n}*í*	'milk (a cow)'
lexically /LH/			
dàg-ɛ̂	*dà-dág-ɛ̀*	*dàgá*	'leave'
mìr^n*-í*	*mì-mír*^{n}*-ì*	*mìr*^{n}*í*	'swallow'
d. bisyllabic ending in changeable high vowel			
lexically /H/			
pór-ì	*pò-pór-ì*	*pórù*	'say'
lexically /LH/			
gǔŋ-ì	*gù-gúŋ-ì*	*gǔŋ̀*	'take out'
bǎ:r-ì	*bà-bá:r-ì*	*bǎ:rì*	'send'
c. trisyllabic			
lexically /H/			
súnú-g-ì	*sù-súnú-g-ì*	*súnú-gì*	'take down'
lexically /LH/			
ɲùnú-g-ì	*ɲù-ɲúnú-g-ì*	*ɲùnú-gì*	'ruin'

10.2.2 Imperfective positive system

There is a basic imperfective used in habitual-present and in future contexts, and a progressive that denotes actions that are in progress at the moment of speaking (or other reference point).

10.2.2.1 Imperfective (positive) (*-jú* ~ *-ɲú*, *-jí* ~ *-ɲí*)

The unmarked imperfective form is characterized by a suffix whose basic form is *-jú*. It is normally H-toned but is L-toned in *jâ:-jù* 'takes away' with the only lexically /HL/-toned verb. (L-toned *-jù* also occurs in relative clauses, §14.1.9.2.)

There is an optional plural-subject form *-jí*, so it is possible to distinguish e.g. *yě-jú* (singular) from *yě-jí* (plural) 'come(s)'. However, the distinction between singular and plural is even less reliably marked in this category than elsewhere, due to the lax articulation of word-final short high vowels combined with the fronting effect of alveopalatal *j*. Readers of my Togo Kan texts should not rely on the transcriptional distinction between *-jú* and *-jí*. Prost gives the plural-subject form as “dye,” i.e. *-jé*.

The suffix nasalizes to *-ɲú* ~ *-ɲí* after a nasal syllable. In *ɲí:-ɲí* ‘eat (meal)’, the suffixal vowel is regularly heard as *i* even for singular subject. This particular type of Nasalization-Spreading (§3.5.1.1) is distinctive to the imperfective suffix, and does not apply to other *j*-initial verb suffixes. There are some synchronically nasal syllables that etymologically were nonnasal, and these do not shift the suffix from *-jú* ~ *-jí* a to *-ɲú* ~ *-ɲí*. An example is *téŋé-jú* ‘blocks, cuts off’ or ‘hobbles (an animal)’, whose stem reconstructs as *téŋgé (Ben Tey and Pergue *téŋgé*).

This category is used for the habitual present (‘every year he gives me a sheep’) and for the future (‘he will give me a sheep tomorrow’), but not (specifically) for progressive aspect.

The suffix preserves lexical tones of the stem. For stems ending in final high vowel in the bare stem and perfective, except for lexical *CiCi*, the stem takes its usual presuffixal form with final nonhigh vowel.

For stems ending lexically in a nonhigh vowel, and for monosyllabic stems, the suffix is added to the bare stem. This is also the case for lexical *CiCi*, see ‘milk [a cow]’ in (259c). For other bisyllabic stems with final lexical high vowel, the suffix is added to a form of the stem ending in a nonhigh vowel that harmonizes with the first stem vowel. If the first vowel is nonhigh, its quality is copied, but if the first vowel is high, we get final *o* corresponding to *u* and final *e* corresponding to *i* (259d). Trisyllabic stems ending lexically in a high vowel, with H.L.L tone pattern, harmonize both the medial and final vowels with the first vowel in the same fashion (259e).

Rhotic-medial bisyllabic stems divide into contracting and non-contracting types. The latter are grouped with other regular *CvCv* stems. The contracting stems form *Cv́-jú* (*Cv́-ɲú*) for /H/ toned stems, *Cv̌-jú* (*Cv̌-ɲú*) for /LH/ toned stems (259f).

(259) Imperfective of stems with lexical stem-final high vowel

bare stem	imperfective	gloss
a. short-voweled *Cv* stems		
lexically /H/-toned		
ó	*ó-jú*	‘give’
nú	*nú-ɲú*	‘go in’
tí	*tí-jú*	‘send’
lexically /LH/-toned shift to {H}		
ɔ̌:	*ɔ́-jú*	‘see’
b. long-voweled *Cv:* stems		
lexically /H/-toned		
á:	*á:-jú*	‘catch’
ɲí:	*ɲí:-ɲú, ɲí:-ɲí*	‘eat’
nú:	*nú:-ɲú*	‘die’
lexically /LH/-toned shift to {H}		
nɔ̌:	*nɔ́:-ɲú*	‘drink’
yě (yǎ:-)	*yá:-jú*	‘go’
jǐ:^{n}	*jí:*^{n}*-ɲú*	‘fart’
lexically /HL/, only example		
jê (jâ:-)	*jâ:-jù*	‘take away’ [irregular]

c. bisyllabic stems with fixed final vowel (including *CiCí*)

lexically /H/-toned		
págá	*págá-jú*	‘tie’
súgó	*súgó-jú*	‘go down’
pír^{n}í	*pír^{n}í-ɲú*	‘milk (a cow)’
lexically /LH/-toned		
dàgá	*dàgá-jú*	‘leave’
bàgá	*bàgá-jú*	‘fall’
mìr^{n}í	*mìr^{n}í-ɲú*	‘swallow’

d. bisyllabic stems with changeable high vowel

lexically /HL/-toned, Cv́Cv̀ and Cv́:Cv̀		
pâl	*pálá-jú*	‘pick (fruit)’
kírì	*kíré-jú*	‘jump’
kúǹ	*kúnɔ́-ɲú*	‘put’
pó:ǹ	*pó:nó-ɲú*	‘greet’
lexically /LHL/-toned, Cv̌Cv̀ and Cv̌:Cv̀		
gǔŋ̀	*gǔŋɔ́-ɲú*	‘take out’
mɔ̌:-ǹ	*mɔ̌:-nɔ́-ɲú*	‘assemble’

e. trisyllabic stems

lexically /H/-toned, changeable medial and final vowels		
kígìrì	*kígéré-jú*	‘return’
áwùrù	*áwárá-jú*	‘lay out’
lexically /LH/-toned, changeable medial and final vowels		
súnú-gù	*súnú-gó-jú*	‘take down’
lexically /LH/-toned, fixed medial high vowel		
ɲùnú-gù	*ɲùnú-gó-jú*	‘ruin’

f. contracting rhotic-medial stems

regular		
bìrɛ́	*bǐ-jú*	‘do’
gàrá	*gǎ-jú*	‘go past’
dàr^{n}á	*dǎ-ɲú*	‘kill’
bɛ̀rɛ́	*bɛ̌-jú*	‘get’
pórù	*pó-jú*	‘say’
irregular		
yɛ̀rɛ́	*yɛ̌-jú*	‘come’
jɛ̌:rì	*jê:-jù*	‘bring’

Paradigms are in (260).

(260) Pronominal paradigm (imperfective)

category	‘go down’	‘pick (fruit)’
1Sg	*í^{n} súgó-jú*	*í^{n} pálá-jú*
1Pl	*ɛ́mɛ́ súgó-jú (-jí)*	*ɛ́mɛ́ pálá-jú (-jí)*

2Sg	*ú súgó-jú*	*ú pálá-jú*
2Pl	*é súgó-jú (-jí)*	*é pálá-jú (-jí)*
3Sg	*wó súgó-jú*	*wó pálá-jú*
3Pl	*bé súgó-jú (-jí)*	*bé pálá-jú (-jí)*
Nonh	*kó súgó-jú*	*kó pálá-jú*

10.2.2.2 Reduplicated imperfective (*Cv̀-…-jú*)

The imperfective with suffix *-jú* (*-ɲú*) can co-occur with an initial L-toned reduplication. There is no change in the tones of the stem itself when the reduplicant is added. The reduplicated form is used only with future time reference ('I will go down', 'I intend to go down'), while the unreduplicated form can be used in either present or future time contexts. Further study may show that verb-focalization is part of the sense.

Examples with verbs that have an initial lexical L-tone element that is preserved in this form: *ɲù-ɲùnú-gó-jú* 'will ruin', *dà-dàgá-jú* 'will leave (sth)'. Examples with verbs that have an initial lexical H-tone element: *pà-págá-jú* 'will tie', *ò-ʔó-jú* 'will give'.

10.2.2.3 Paired alternative imperfective (*-jô:*, *-jê:*)

A form with suffix *-jô:*, plural-subject *-jê:*, occurs frequently in the first of two parallel imperfective clauses denoting alternative possibilities (e.g. 'sometimes we do it this way, sometimes we do it that way'). Both clauses are therefore somewhat irrealis, and translations with 'might VP' are often appropriate. Adverb *gàmá* 'sometimes' may be present.

The suffix *-jô:* can be added directly to a verb stem, or to a verb-chain ending *bɛ̀rɛ́* 'get, obtain' in the sense 'be able to' (§17.5.1.1), forming *bɛ̌-jô:*, plural-subject *bɛ̌-jê:* . The form of the stem is the same as before imperfective *-jú* and allomorphs (§10.2.2.1 above). Thus *bǐ-jô:* 'can do', *áwárá-jô:* 'can lay out', *pír^{n}í-jô:* 'can milk (a cow)', mediopassive *kíj-ɛ́:-jô* 'can coincide (with)'.

A good example of paired imperfectives is (261). The first imperfective has *-jô:* and the second has *-jú*. One could also translate loosely with 'might' instead of 'sometimes'.

(261)	*é→*	*kɛ́jɛ́*	*kɛ́jɛ́*	*gàmá*	*[ká^{n}*	*túrú*	*wò→],*
	yes	cut	cut	sometimes	[row	one	each],

gàmá	*[[ɲù:^{L}-jùrɔ́*	*túrú]*	*bè]*	*kíj-ɛ́:-jô:,*
sometimes	[[millet^{L}-pile	one]	Inst]	coincide-MP-**Ipfv**,
gàmá	*[[ɲù:^{L}-jùrɔ́*	*lɔ́y]*	*bè]*	*kíj-ɛ́:-jú*
sometimes	[[millet^{L}-pile	two]	Inst]	coincide-MP-**Ipfv**

'Yes, (they) keep cutting (millet grain spikes), sometimes each row, sometimes it (=each row) coincides with (=corresponds to) one millet pile, sometimes it coincides with two millet piles.' (2011.1a.12)

In (262), the verb (*dùw-ɛ́:*) of the second clause looks vaguely perfective in form, but this is because the second of two paired imperfectives optionally omits imperfective *-jú*.

(262) *[[ɲà*^{L} *túnɔ̀*$^{+L}$*]* *wɔ́-ní:]* *dùw-ɛ́:-jô:,*
[[place^{L} one.Loc^{+L}] be.HumSgSbj-while.SS] carry-MP-**Ipfv**,
kó-kòlò-m̀ *bá-bàrà* *jɛ̌:r-ì* *dè]* *dùw-ɛ́:*
Rdp-go.around Rdp-gather bring-Pfv if] carry-MP
'(You) carry (it) (from) one place (in one method), (and) you carry (it) after (you) have gone all over and gathered it (from the small piles) and brought it (in the other method).' (2011.1a.12)

It is possible to have more than one nonfinal *-jô:* (plural *-jê:*) clause, plus a final simple imperfective clause. In (263), the speaker is describing the various crops that can be planted in millet fields after the millet sprouts.

(263) *[bìrɛ̀*^{L} *pèré]* *yɔ́* *kɔ̀,*
[work^{L} other] Exist be.NonhSbj,
pɔ̀ŋɔ́ *wǎ-jê:→,* *[ɛ̀:rɛ̀*^{L} *ná:]* *lɛ́:-jê:→,*
fonio do.farm.work-**Ipfv.PlSbj**, [nut^{L} primary] plant-**Ipfv.PlSbj**,
[ɛ̀:rɛ̀^{L} *múɲúr*^{n}*ú]* ^{L}*lɛ̀:-jù*
[nut^{L} Mossi] ^{L}plant-**Ipfv**
'There is other work. (The people) grow fonio [a grain], they plant groundnuts, and/or they plant peanuts.' (2011.1a.18)

It is also possible for the first of the parallel imperfective clauses to be positive while the second is negative (264).

(264) *[gàmà*^{L} ^{H}*ná]* *bǐ-jê:,*
[certain^{L} ^{H}person] do-**Ipfv.PlSbj**,
[gàmà^{L} ^{H}*ná]* *bǐ:-rè*
[certain^{L} ^{H}person] do-**IpfvNeg.PlSbj**
'Some people might do (them), some (other) people might not do (them).' (2011.1a.31)

10.2.2.4 Delayed future (*-jà sâ*)

Prost (p. 50) described a distant future ("futur éloigné"), e.g. "lagadyasa" 'he will hit', including the 'have' quasi-verb. This was recognized by my assistant, who explained that it involves an action that is due to be carried out but that is delayed (for example, by other business). A free translation with 'eventually' or with 'sooner or later' seems to work for most examples.

The 'have' quasi-verb, *sá* or plural-subject *sé*, is <HL>-toned in this construction (*sâ*, *sê*). It is preceded by an entirely {L}-toned word consisting of the verb stem and *-jà*. Segmentally, the verb form with *-jà* is identical to that used in the 'before VP-ing' construction (*rv*-Deletion is applicable to relevant stems in both). However, in the 'before' construction the *-jà* suffix requires an {H}- rather than an {L}-toned stem (§15.4.2). For example, *dɔ̀r*^{n}*ɔ́* 'sell' has delayed future *dɔ̀*^{n}*-jà sâ*, but in the 'before' construction its subordinated form is *dɔ́*^{n}*-jà*.

(265) a. *í*^{n} *gìr*^{n}*í* *ùjɔ̀-jà*^{L} ^{HL}*sâ*
1SgSbj house build-**Fut**^{L} ^{HL}have
'I will eventually build a house.'

b. *àr^{n}ú* *yè-jà*^{L} ^{HL}*sâ*
rain come-**Fut**^{L} ^{HL}**have**
'Rain will eventually come.'

c. *í^{n}* *gìr^{n}í* *bɛ̀-jà*^{L} ^{HL}*sâ*
1SgSbj house get-**Fut**^{L} ^{HL}**have**
'I will eventually get a house.'
(said by someone who has so far searched in vain)

d. *[gàm*^{L} ^{H}*ná]=ǹ* *[kìrɛ̀*^{L} *dágá]* *yè-jà*^{L} ^{HL}*sâ*
[certain^{L} ^{H}person]=Dat [hardship^{L} small] come.**Fut**^{L} ^{HL}**have**
'a small crisis (i.e. food shortage) will eventually come for some people.'
(2011.1a.19)

10.2.2.5 Progressive (*-táŋà*, *-téŋè*)

Suffix *-táŋà* creates a progressive form for singular subject ('I am working'), though it also competes with the imperfective for habitual present. It is added to the bare stem of monosyllabic verbs (266a) and of longer stems ending in a lexical nonhigh vowel (266b). *ɔ̌:* 'see' is H-toned and short: *ɔ́-táŋà*. However, *Cv̌:* stems do not shift to {H}. For nonmonosyllabic stems ending in a lexical high vowel, the final vowel harmonizes with the first stem vowel (266c), and if the latter is non-high this change extends to the medial vowel in trisyllabics (266d). *rv*-Deletion applies to the relevant bisyllabic stems (266e).

The optional (but frequent) plural-subject form is *-téŋè*.

(266) Progressive

bare stem	progressive	gloss
a. monosyllabic		
Cv́		
ó	*ó-táŋà*	'give'
nú	*nú-táŋà*	'go in'
Cv́:		
á:	*á:-táŋà*	'catch'
ɲí:	*ɲí:-táŋà*	'eat'
nú:	*nú:-táŋà*	'die'
Cv̌:		
ɔ̌:	*ɔ́-táŋà* [!]	'see'
nɔ̌:	*nɔ̌:-táŋà*	'drink'
jǎ:	*jǎ-táŋà*	'dig'
irregular		
jê (jâ:-)	*jâ:-tàŋà* [!]	'take away' [irregular]
[for *jê:-táŋà* see 'bring', below]		
b. nonmonosyllabic stems with fixed final vowel		
/H/-toned		
págá	*págá-táŋà*	'tie'
súgó	*súgó-táŋà*	'go down'

pírⁿí	*pírⁿí-táŋà*	‘milk (a cow)’
/LH/-toned		
dɔ̀wɔ́	*dɔ̀wɔ́-táŋà*	‘go up’
mìrⁿí	*mìrⁿí-táŋà*	‘swallow’

c. bisyllabic stems with changeable final high vowel

pâl	*pálá-táŋà*	‘pick (fruit)’
kúǹ	*kúnɔ́-táŋà*	‘put’
gǔŋ̀	*gǔŋɔ́-táŋà*	‘take out’
mɔ̌:-ǹ	*mɔ̌:nɔ́-táŋà*	‘assemble’

d. trisyllabic stems with final lexical high vowel

with variable medial and final vowels		
kígìrì	*kígéré-táŋà*	‘return’
áwùrù	*áwárá-táŋà*	‘lay out’
with fixed medial high vowel		
súnú-gù	*súnú-gó-táŋà*	‘take down’

e. rhotic-medial stems subject to *rv*-Deletion

yɛ̀rɛ́	*yɛ̌-táŋà* [!]	‘come’ [irregular]
	[expandible as *yɛ́ yɛ̌-táŋà*	
jɛ̌:rì	*jê:-tàŋà* [!]	‘bring’ [irregular]
pórù	*pó-táŋà*	‘say’
bìrɛ́	*bǐ-táŋà*	‘do’
gàrá	*gǎ-táŋà*	‘go past’
dàrⁿá	*dǎⁿ-táŋà*	‘kill’
bɛ̀rɛ́	*bɛ̌-táŋà*	‘get’

f. Mediopassive

kír-ì:	*kír-é:-táŋà*	‘jump’

The progressive is unusual among suffixally marked inflections in that it can be combined with the otherwise defective locational-existential ‘be’ quasi-verbs (§11.2.2.2): *wɔ́-táŋà* (human singular), *wé-téŋè* (human plural). These quasi-verbs are otherwise stative (aspectless), but can be made progressive (durative) in this manner.

The paradigm is (267). The pronouns are clause-initial.

(267) Pronominal paradigm (progressive)

category	‘go down’	‘pick (fruit)’
1Sg	*íⁿ súgó-táŋà*	*íⁿ pálá-táŋà*
1Pl	*émɛ́ súgó-téŋè*	*émɛ́ pálá-téŋè*
2Sg	*ú súgó-táŋà*	*ú pálá-táŋà*
2Pl	*é súgó-téŋè*	*é pálá-téŋè*
3Sg	*wó súgó-táŋà*	*wó pálá-táŋà*
3Pl	*bé súgó-téŋè*	*bé pálá-téŋè*

Nonh	*kó súgó-táŋà*	*kó pálá-táŋà*

10.2.2.6 Reduplicated progressive (*Cv̀-…-táŋà*)

A reduplicated form of the progressive was elicited, with the usual L-toned reduplicant and with no change in the form of the regular progressive. Examples: *sù-súgó-táŋà* 'is going down', *dɔ̀-dɔ̀wɔ́-táŋà* 'is going up'. There seems to be no systematic difference in sense between the regular and reduplicated forms.

10.2.3 Negation of active indicative verbs

Morphologically distinct negative forms are found for the perfective, the experiential perfect, the recent perfect, the imperfective, and the progressive.

Stative verbs, and defective (stative) quasi-verbs, have their own negative clitics, singular-subject *=lá* and plural-subject *=lé*, with no aspectual distinction. See §10.4 and §11.4.2, below.

10.2.3.1 Perfective negative (*-lí*, *-lâ:*)

The perfective negative is formed by adding singular-subject *-lí* or plural-subject *-lâ:* to a tone-dropped form of the verb stem. There are no exceptions to the tone-dropping feature for this category. The perfective negative suffixes are also added to the experiential perfect and recent perfect suffixes, demonstrating that these latter categories belong to the larger perfective system.

Nonmonosyllabic stems ending in a lexical high vowel harmonize noninitial stem vowels with the first stem vowel (268d-e). Contracting rhotic-medial stems undergo the contraction (268f).

(268) Perfective negative

bare stem	perfective negative		gloss
	singular	plural	
a. short-voweled monosyllabics (all known examples)			
ó	*ò-lí*	*ò-lâ:*	'give'
nú	*nù-lí*	*nù-lâ:*	'go in'
b. long-voweled monosyllabics			
á:	*à:-lí*	*à:-lâ:*	'catch'
ná:	*nà:-lí*	*nà:-lâ:*	'spend night'
nɔ̌:	*nɔ̀:-lí*	*nɔ̀:-lâ:*	'drink'
gǒ:	*gò:-lí*	*gò:-lâ:*	'go out'
kɔ́:ⁿ	*kɔ̀:ⁿ-lí*	*kɔ̀:ⁿ-lâ:*	'weep'
ɲí:	*ɲì:-lí*	*ɲì:-lâ:*	'eat'
nú:	*nù:-lí*	*nù:-lâ:*	'die'
jê (jâ:-)	*jà:-lí*	*jà:-lâ:*	'take away' (irregular)

c. nonmonosyllabic stems with fixed final vowel

píné	*pìnè-lí*	*pìnè-lâ:*	‘shut (door)’
págá	*pàgà-lí*	*pàgà-lâ:*	‘tie’
dìgɛ́	*dìgɛ̀-lí*	*dìgɛ̀-lâ:*	‘drive out’
pír^{n}í	*pìr^{n}ì-lí*	*pìr^{n}ì-lâ:*	‘milk (a cow)’
mìr^{n}í	*mìr^{n}ì-lí*	*mìr^{n}ì-lâ:*	‘swallow’

d. bisyllabic stems with changeable final high vowel

pâl	*pàlà-lí*	*pàlà-lâ:*	‘pick (fruit)’
kúǹ	*kùnò-lí*	*kùnò-lâ:*	‘put’
mɔ̌:-ǹ	*mɔ̀:nɔ̀-lí*	*mɔ̀:nɔ̀-lâ:*	‘assemble’

e. /HL/-toned trisyllabics, H.L.L and H.H.L types

with changeable medial and final vowels

kígìrì	*kìgèrè-lí*	*kìgèrè-lâ:*	‘return’
áwùrù	*àwàrà-lí*	*àwàrà-lâ:*	‘lay out (mat)’

with fixed medial high vowel

súnúgù	*sùnùgò-lí*	*sùnùgò-lâ:*	‘take down’

f. contracting rhotic-medial stems

yɛ̀rɛ́	*yè-lí*	*yè-lâ:*	‘come’ [irregular]
jɛ̌:rì	*jè-lí*	*jè-lâ:*	‘bring’ [irregular]
bìrɛ́	*bì-lí*	*bì-lâ:*	‘do’
gàrá	*gà-lí*	*gà-lâ:*	‘go past’
dàr^{n}á	*dà^{n}-lí*	*dà^{n}-lâ:*	‘kill’
bɛ̀rɛ́	*bɛ̀-lí*	*bɛ̀-lâ:*	‘get’
pórù	*pò-lí*	*pò-lâ:*	‘say’

Sample paradigms are (269).

(269) Pronominal paradigm (perfective negative)

category	‘go down’	‘pick (fruit)’
1Sg	*í^{n} sùgò-lí*	*í^{n} pàlà-lí*
1Pl	*ɛ́mɛ́ súgó-lâ:*	*ɛ́mɛ́ pàlà-lâ:*
2Sg	*ú sùgò-lí*	*ú pàlà-lí*
2Pl	*é súgó-lâ:*	*é pàlà-lâ:*
3Sg	*wó sùgò-lí*	*wó pàlà-lí*
3Pl	*bé súgó-lâ:*	*bé pàlà-lâ:*
Nonh	*kó sùgò-lí*	*kó pàlà-lí*

For a reversed tone pattern with H-toned verb and L-toned perfective negative suffix in focalized clauses, see (403) in §13.1.1.

10.2.3.2 Experiential perfect negative (*tὲ-lí, tὲ-lâ:*)

The experiential perfect (*tέ-*), see §10.2.1.2 above, has a common negative counterpart with regular perfective negative suffixal morphology. The forms are *tὲ-lí* for singular subject, *tὲ-lâ:* for plural subject. The preceding verb also drops its tones to {L}, which does not occur with ordinary verb chains when the final verb is negated (§15.1.4).

(270) a. *í^{n}* *[dùŋù*^{L} *ná:]* *ɔ̀:*^{L} *tὲ-lí*
1SgSbj [elephant] see^{L} **ExpPf-PfvNeg**
‘I have never seen an elephant.’

b. *έmέ* *[dùŋù*^{L} *ná:]* *ɔ̀:*^{L} *tὲ-lâ:*
1PlSbj [elephant] see **ExpPf-PfvNeg.PlSbj**
‘We have never seen an elephant.’

10.2.3.3 Recent perfect negative (*jὲ-lí*, *jὲ-lâ:*)

The negative counterpart of recent perfect *jɛ̂* is formed by adding the regular perfective negative suffixes *-lí* and plural-subject *-lâ:* to it. The preceding verb is not tone-dropped. These details strengthen the argument for taking *jɛ̂* as a chained auxiliary verb (rather than as a suffix).

Negation is generally found in the sense ‘have finished VP-ing’.

(271) a. *í^{n}* *ɲǎ:* *ɲí:* *jὲ-lí*
1SgSbj meal eat **RecPf-PfvNeg**
‘I haven’t finished eating the meal.’

b. *έmέ* *ɲǎ:* *ɲí:* *jὲ-lâ:*
1PlSbk meal eat **RecPf-PfvNeg.PlSbj**
‘We haven’t finished eating the meal.’

c. *έmέ* *tέ* *nɔ̌:* *jὲ-lâ:*
1PlSbj tea drink RecPf**RecPf-PfvNeg.PlSbj**
‘We haven’t finished drinking the tea.’

d. *ɲá* *[nέ:* *wɔ̀^{n}]* *gàr-á→* *mǎ:-ŋ-ὲ:* *jὲ-lí*
place [now Top] a.lot dry-Inch-and.SS **RecPf-PfvNeg**
‘the earth hasn’t (yet) completely finished drying’

10.2.3.4 Imperfective negative (*-rò*, *-rè*)

The imperfective negative is expressed by suffixing *-rò* for singular subject, *-rè* for plural subject. The rhotic is not nasalized after a nasal syllable. The suffixes are added to a form of the verb ending in a long <HL>-toned vowel. Otherwise the lexical tone is preserved, and *Cv̌:* (i.e. <LH>) stems appear as *Cv̌̂:-rò* with bell-shaped <LHL> toned stem. ‘See’ has *ɔ̂:-rò* instead of #*ɔ̌̂:-rò*, based on /ɔ́-/ as in imperfective *ɔ́-jú* and some other inflected forms, rather than on the bare stem *ɔ̌*.

Nonmonosyllabic stems (other than causatives) ending in a lexical high vowel harmonize medial vowels with the first stem vowel (272c-d). Contracting rhotic-medial verbs contract (272e). Causative *-m̀*, which does not alter the vocalism of the preceding stem, becomes *-mû:-rò* (272e), parallel to monosyllabic *nû:-rò* ‘doesn’t go in’ or ‘doesn’t die’.

(272) Imperfective negative

bare stem	imperfective negative	gloss
a. monosyllabic		
ó	*ô:-rò*	‘give’
nú	*nû:-rò*	‘go in’
ɔ̌:	*ɔ̂:-rò* [!]	‘see’
á:	*â:-rò*	‘catch’
nɔ̌:	*nɔ̌̂:-rò*	‘drink’
ɲí:	*ɲî:-rò*	‘eat’
nú:	*nû:-rò*	‘die’
yě (yǎ:-)	*yǎ̂:-rò*	‘go’ [irregular]
jê (jâ:-)	*jâ:-rò*	‘take away’ [irregular]
b. bisyllabic stems with fixed final vowel		
págá	*págâ:-rò*	‘tie’
súgó	*súgô:-rò*	‘go down’
dàgá	*dàgâ:-rò*	‘leave’
pīr^{n}*í*	*pír*^{n}*î:-rò*	‘milk (a cow)’
mìr^{n}*í*	*mìr*^{n}*î:-rò*	‘milk (a cow)’
c. bisyllabic stems with final changeable high vowel		
pâl	*pálâ:-rò*	‘pick (fruit)’
kírì	*kírê:-rò*	‘jump’
kúǹ	*kúnɔ̂:-rò*	‘put’
gǔŋ̀	*gǔŋɔ̂:-rò*	‘take out’
mɔ̌:-ǹ	*mɔ̌:nɔ̂:-rò*	‘assemble’
d. trisyllabic stems		
with changeable medial and final vowels		
kígìrì	*kígérê:-rò*	‘return’
áwùrù	*áwárâ:-rò*	‘lay out’
with fixed medial high vowel		
súnúgù	*súnúgô:-rò*	‘take down’
e. rhotic-medial stems subject to *rv*-Deletion		
yɛ̀rɛ́	*yɛ̌̂:-rò*	‘come’ [irregular]
jɛ̌:rì	*jê:-rò*	‘bring’ [irregular]
pórù	*pô:-rò*	‘say’
bìrɛ́	*bǐ̂:-rò*	‘do’
gàrá	*gǎ̂:-rò*	‘go past’
dàr^{n}*á*	*dǎ̂:*^{n}*-rò*	‘kill’
bɛ̀rɛ́	*bɛ̌̂:-rò*	‘get’

f. causative
jùgɔ́-m̀ *jùgɔ́-mû:-rò* ‘inform’, ‘distinguish’

Sample paradigms are in (273).

(273) Pronominal paradigm (imperfective negative)

category	‘go down’	‘pick (fruit)’
1Sg	*í*^{n} *súgô:-rò*	*í*^{n} *pálâ:-rò*
1Pl	*ɛ́mɛ́ súgô:-rè*	*ɛ́mɛ́ pálâ:-rè*
2Sg	*ú úgô:-rò*	*ú pálâ:-rò*
2Pl	*é súgô:-rè*	*é pálâ:-rè*
3Sg	*wó súgô:-rò*	*wó pálâ:-rò*
3Pl	*bé súgô:-rè*	*bé pálâ:-rè*
Nonh	*kó súgô:-rò*	*kó pálâ:-rò*

The imperfective negative likely reflects contraction of an original suffix or suffix complex *-(C)v̀ro with the stem. Compare progressive negative *-wɔ̀-rɔ́*, discussed below.

10.2.3.5 Variant imperfective negative (*-jǎ:*, *-já:*)

Prost (p. 50) described another category that he describes as “négatif intentionnel,” giving as example “lagadyaa” ‘il n’est pas pour frapper’ with plural-subject variant “lagadjee,” cf. verb *lágá* ‘hit’.

My assistant recognized the form after some reflection. One relevant construction is that with parallel positive and negative imperfective verbs, with *-jǎ:* or plural-subject *-jě:* expressing the negation (instead of the usual imperfective negative *-rò*). The juxtaposition indicates uncertainty as the agent hesitates. That is, the positive and negative events are in the mind of the agent (274).

(274) a. *wó* *lágá-jú* *làgà-jǎ:*
3SgSbj hit-Ipfv hit-**IpfvNeg**
‘He/She is undecided (hesitant) whether to hit.’

b. *bé* *lágá-jú* *làgà-jě:*
3PlSbj hit-Ipfv hit.**IpfvNeg.PlSbj**
‘They are undecided (hesitant) whether to hit.’

By itself, a similar form with H-toned *-já:* or plural-subject *-jé:* can be used in cases like (275), where the speaker in effect expresses surprise at the addressee’s hesitation in carrying out an action.

(275) *ú* *má* *làgà-já:*
2SgSbj 1SgObj hit-**IpfvNeg**
‘(How come) you-Sg don’t hit me?’

10.2.3.6 Progressive negative (*-wɔ̀-rɔ́* ~ , *-wè-ré*)

A negative version of the progressive is expressed by *-wɔ̀(:)-rɔ́* for singular subject and *-wè(:)-ré* for plural subject. At the end of a noninterrogative clause they are pronounced with L-tones, i.e. as *-wɔ̀(:)-rɔ̀* and *-wè(:)-rè*. The shortened {L}-toned forms *-wɔ̀-rɔ̀* and *-wè-rè* are common.

These forms are based on *wɔ̀:-rɔ́* 'is not (somewhere)' and its plural *wè:-ré* 'are not (somewhere)', i.e., the (stative) negative forms of locational quasi-verb *wɔ̀* (plural *wè*) 'be (somewhere)' (§11.2.2.2). I have occasionally heard the long vowel in the progressive negative, but only in elicitation.

The stem preserves its lexical melody. Nonmonosyllabic stems ending in a high vowel harmonize the medial vowels with the initial vowel (276c-d). Contracting rhotic-medial stems contract (276e).

(276) Progressive negative

bare stem	progressive negative		gloss
	singular	plural	
a. monosyllabic			
ó	*ó-wɔ̀-rɔ́*	*ó-wè-ré*	'give'
nú	*nú-wɔ̀-rɔ́*	*nú-wè-ré*	'go in'
ɔ̌:	*ɔ̌-wɔ̀-rɔ́*	*ɔ̌-wè-ré*	'see'
á:	*á:-wɔ̀-rɔ́*	*á:-wè-ré*	'catch'
nɔ̌:	*nɔ̌:-wɔ̀-rɔ́*	*nɔ̌:-wè-ré*	'drink'
ɲí:	*ɲí:-wɔ̀-rɔ́*	*ɲí:-wè-ré*	'eat'
nú:	*nú:-wɔ̀-rɔ́*	*nú:-wè-ré*	'die'
yě (*yǎ:-*)	*yǎ:-wɔ̀-rɔ́*	*yǎ:-wè-ré*	'go' (irregular)
jê (*jâ:-*)	*jâ:-wɔ̀-rɔ́*	*jâ:-wè-ré*	'take away' (irregular)
b. bisyllabic stems with fixed final vowel			
págá	*págá-wɔ̀-rɔ́*	*págá-wè-ré*	'tie'
súgó	*súgó-wɔ̀-rɔ́*	*súgó-wè-ré*	'go down'
dàgá	*dàgá-wɔ̀-rɔ́*	*dàgá-wè-ré*	'leave'
pír^{n}*í*	*pír*^{n}*í-wɔ̀-rɔ́*	*pír*^{n}*í-wè-ré*	'milk (a cow)'
mìr^{n}*í*	*mìr*^{n}*í-wɔ̀-rɔ́*	*mìr*^{n}*í-wè-ré*	'swallow'
c. bisyllabic stems with changeable final high vowel			
pâl	*pálá-wɔ̀-rɔ́*	*pálá-wè-ré*	'pick (fruit)'
kúǹ	*kúnɔ́-wɔ̀-rɔ́*	*kúnɔ́-wè-ré*	'put'
gǔŋ̀	*gǔŋɔ́-wɔ̀-rɔ́*	*gǔŋɔ́-wè-ré*	'take out'
mɔ̌:-ǹ	*mɔ̌:nɔ́-wɔ̀-rɔ́*	*mɔ̌:nɔ́-wè-ré*	'assemble'
d. trisyllabic stems			
with changeable medial and final vowels			
kígìrì	*kígéré-wɔ̀-rɔ́*	*kígéré-wè-ré*	'return'
áwùrù	*áwárá-wɔ̀-rɔ́*	*áwárá-wè-ré*	'lay out'
with fixed medial high vowel			
súnúgù	*súnúgó-wɔ̀-rɔ́*	*súnúgó-wè-ré*	'take down'

e. rhotic-medial stems subject to *rv*-Deletion

irregular verbs			
yɛ̀rɛ́	*yé-wɔ̀-rɔ́*	*yé-wè-ré*	‘come’
jɛ̌:rì	*jé-wɔ̀-rɔ́*	*jé-wè-ré*	‘bring’
other			
pórù	*pó-wɔ̀-rɔ́*	*pó-wè-ré*	‘say’
bìrɛ́	*bǐ-wɔ̀-rɔ́*	*bǐ-wè-ré*	‘do’
gàrá	*gǎ-wɔ̀-rɔ́*	*gǎ-wè-ré*	‘go past’
dàr^{n}*á*	*dǎ*^{n}*-wɔ̀-rɔ́*	*dǎ*^{n}*-wè-ré*	‘kill’
bɛ̀rɛ́	*bɛ̌-wɔ̀-rɔ́*	*bɛ̌-wè-ré*	‘get’

f. mediopassive

kír-ì:	*kír-é:-wɔ̀-rɔ́*	*kír-é:-wè-ré*	‘jump’

There is a suffixal distinction between singular and plural subject (277). Since the suffixes are based on ‘not be’ quasi-verbs, there is also a human/nonhuman distinction.

(277) Pronominal paradigm (progressive negative)

category	‘go down’	‘pick (fruit)’
1Sg	*í*^{n} *súgó-wɔ̀-rɔ́*	*í*^{n} *pálá-wɔ̀-rɔ́*
1Pl	*ɛ́mɛ́ súgó-wè-ré*	*ɛ́mɛ́ pálá-wè-ré*
2Sg	*ú úgó-wɔ̀-rɔ́*	*ú pálá-wɔ̀-rɔ́*
2Pl	*é súgó-wè-ré*	*é pálá-wè-ré*
3Sg	*wó súgó-wɔ̀-rɔ́*	*wó pálá-wɔ̀-rɔ́*
3Pl	*bé súgó-wè-ré*	*bé pálá-wè-ré*
Nonh	*kó súgó-kɔ̀rɔ̀*	*kó pálá-kɔ̀rɔ̀*

10.2.3.7 Reduplicated progressive negative (*Cv-…-wɔ̀-rɔ́*)

It was possible to elicit a reduplicated form of the progressive negative. The reduplicant is the usual L-toned *Cv̀-*, and there is no change in the form of the imperfective negative stem or suffix. The limited data do not suggest a systematic difference in meaning. Example: *sù-súgó-wɔ̀-rɔ́* ‘is not going down’.

10.3 Pronominal paradigms for non-imperative verbs

10.3.1 Subject pronominal suffixes

There are no full suffixal paradigms for pronominal subject of verbs. Some verbal inflectional categories have a binary distinction between an unmarked singular-subject form (1Sg, 2Sg, 3Sg) and a marked plural-subject form (1Pl, 2Pl, and especially human 3Pl). Even this binary distinction is not rigorous, as the unmarked form is often heard when a plural subject NP is expressed earlier in the clause.

The relevant data for the inflectional categories are summarized in (278), repeating information given in the relevant sections above.

(278) category	singular	plural	Sg = Pl
a. perfective system (positive)			
simple perfective	*-ɛ̀* ~ *-è*	*-sɛ̂*^{n}	
recent perfect	—	—	*jɛ̂*
experiential perfect	—	—	*-tɛ́-jɛ̀*
b. imperfective system (positive)			
imperfective	*-jú* ~ *-ɲú*	*-jí* ~ *-ɲí*	
progressive	*-táŋà*	*-téŋè*	
c. negative			
perfective negative	*-lí*	*-lâ:*	
experiential perfect negative	*tɛ̀-lí*	*tɛ̀-lâ:*	
imperfective negative	*-rò*	*-rè*	
progressive negative	*-wɔ̀-rɔ́*	*-wè-ré*	

The distinctively plural-subject suffixes are idiosyncratic to each category. Historically, *-sɛ̂*^{n} is probably an old 3Pl form of a perfective or resultative suffixal category based on the quasi-verb 'have'. In the perfective negative, *-lâ:* reflects an old 3Pl form of *-lí*, but segmentation is no longer transparent in Togo Kan. The progressive negative forms are parasitic on negative forms of stative quasi-verb 'be (somewhere)'.

10.3.2 Nonhuman versus 3Sg subject

In most verbal inflectional categories, the verb form used with nonhuman pronoun *kó*, and with nonhuman subject NPs, is the same as the 3Sg form used for humans.

In the progressive negative, the fact that forms of 'not be (somewhere)' are used means that nonhuman and (human) 3Sg are distinct; see §11.2.2.2.

10.4 Derived stative form of verbs (reduplicated and unreduplicated)

Some verbs additionally have a derived stative form that does not mark aspectual categories. The verbs in question also occur in the full range of (active) AMN categories with mediopassive suffix *-i:* ~ *-ɛ:-* (§9.3.1). The stative form denotes a static position or other state, rather than the event of taking that position. The mediopassive suffix is absent in the stative.

The stative verb has an initial *Cv-* reduplication in simple positive utterances that have no preceding element that could be interpreted as focalized. In practice, any locational expression counts as "focalized" for this purpose, and is therefore followed by the unreduplicated form of the stative. In the absence of a focalized constituent, the stative is either reduplicated or provided with existential proclitic *yɛ́* (§11.2.2.1), but not both.

All attested statives are of *(C)vCv* shape omitting the reduplicant. The final vowel in the stative is a non-high vowel, either copying the first vowel quality (in the cases of *a* and mid-height vowels) or at least harmonizing with it in backness and rounding (in the cases of high vowels). In the reduplicated form, the initial syllable of the stem is H-toned, while the reduplicant and the final syllable are L-toned. In the defocalized form following a locational, and before the stative negative, the stem is {L}-toned.

The reduplicant takes the form *Cv-* with a copy of the first two stem segments if the stem is of the shape *CvTv* with nonnasal consonant *T* (*Cv-CvTv*). If the initial consonant position is unfilled and the medial consonant is oral, the reduplicant takes the form *v-*, with a glottal stop separating the two vowels (*v-ʔvTv*). The reduplicant vowel is nasalized if the stem begins with no consonant or with a nonnasal consonant, but has a medial nasal. Specifically, *TvNv* becomes *Tv*^{n}*-TvNv*, and *vNv* becomes *v*^{n}*-ʔvNv*.

Negation is by stative negative *=lá* (plural-subject *=lɛ́*) added to the tone-dropped, unreduplicated stative form.

The forms in (279) show representative singular-subject forms. Verbs with *CɛC-i:* mediopassive vocalism shift to *CaCa* in the stative ('circulate', 'sit'). 'Lie down' shifts from *ìm-î:* to *umo* (279d); for the vocalism compare archaic causative *ú:-ǹ* 'lay, put down (large object)' (232c).

(279) Derived stative form of verbs (singular subject)

stem	gloss	stative reduplicated	 unreduplicated	 negative
a. *Cv-* reduplicant				
ɲɛ̀ŋ-î:	'circulate'	*ɲà-ɲáŋà*	*X ɲàŋà*	*ɲàŋà=lá*
wìw-î:	'flip [intr]'	*wì-wíyè*	*X wìyè*	*wìyè=lá*
kɔ́r-ì:	'hang [intr]'	*kɔ̀-kɔ́rɔ̀*	*X kɔ̀rɔ̀*	*kɔ̀rɔ̀=lá*
mɔ̀r^{n}*-í:*	'be together'	*mɔ̀-mɔ́r*^{n}*ɔ̀*	*X mɔ̀r*^{n}*ɔ̀*	*mɔ̀r*^{n}*ɔ̀=lá*
b. *v-* reduplicant				
ìg-î:	'stand'	*ì-ʔígɛ̀*	*X ìgɛ̀*	*ìgɛ̀=lá*
c. *CvN-* reduplicant				
dɛ̀ŋ-î:	'sit'	*dà*^{n}*-dáŋà*	*X dàŋà*	*dàŋà=lá*
pìn-í:	'be shut'	*pì*^{n}*-pínɛ̀*	*X pìnɛ̀*	*pìnɛ̀=lá*
bàŋ-î:	'hide [intr]'	*bà*^{n}*-báŋà*	*X bàŋà*	*bàŋà=lá*
túŋ-ì:	'kneel'	*tù*^{n}*-túŋò*	*X tùŋò*	*tùŋò=lá*
d. *v*^{n}*-* reduplicant				
ìm-î:	'lie down'	*ù*^{n}*-ʔúmò*	*X ùmò*	*ùmò=lá*

The corresponding plural-subject form has *e* replacing the final vowel of the singular stative. For some stems the vocalic difference from singular to plural extends to the first stem syllable, and (therefore) to the reduplicant. Specifically, the mutations described above for verbs like 'sit' and 'lie down' in the singular-subject stative are undone in the plural, which is therefore directly based on the (nonstative) stem. Only reduplicated forms are shown in (280), but the unreduplicated and negative plural-subject forms have the same vocalism as the singular. Some stems do not usually take human subjects for semantic reasons and are omitted.

(280) Stative form of verbs (singular versus plural subject)

stem	gloss	stative	
		singular	plural
a. final vowel to *e*, no other difference			
bàŋ-î:	‘hide [intr]’	*bà*^{n}*-báŋà*	*bà*^{n}*-báŋè*
ìg-î:	‘stand’	*ì-ʔígɛ̀*	*ì-ʔígè*
túŋ-ì:	‘kneel’	*tù*^{n}*-túŋò*	*tù*^{n}*-túŋè*
b. first vowel also different			
dɛ̀ŋ-î:	‘sit’	*dà*^{n}*-dáŋà*	*dɛ̀*^{n}*-dɛ́ŋè*
ɲɛ̀ŋ-î:	‘be restless’	*ɲà-ɲáŋà*	*ɲɛ̀-ɲɛ́ŋè*
ìm-î:	‘lie down’	*ù*^{n}*-ʔúmò*	*ì*^{n}*-ʔímè*

10.5 Post-verbal temporal particles

10.5.1 Past clitic absent

There is no past clitic or suffix comparable to *=bɛ-* and similar forms in other Dogon languages.

10.6 Imperatives and hortatives

10.6.1 Imperatives and prohibitives

The sections below focus on morphology. Imperatives, prohibitives, and hortatives mark addressee plurality on the verbs. For the syntax see §10.6.3.

10.6.1.1 Positive imperatives (imperative stem, plural addressee *-ỳ*)

The imperative stem is used without further suffixation as the singular-addressee positive imperative (‘go!’). Adding a suffix *-ỳ* (note the low tone) to the same stem produces the plural-addressee positive imperative.

The imperative stem is sometimes identical to the bare stem, but this is not systematic. Nonmonosyllabic verbs whose bare stem ends in a high vowel show the non-high vowel variant in the imperative. In addition, prosodically light (up to two vocalic moras) /LH/- and /LHL/-toned verbs shift to {H} tone in the imperative stem. The exception is *yě* ‘go’, which has imperative *yǎ:*. The vowel shift *e* → *a* also occurs in the semantically corresponding transfer verb *jê* ‘take away’, which has imperative *jâ:*. There is no vowel shift for ‘come’ or ‘bring’. Prosodically heavy /LH/-toned verbs preserve the initial L-tone. Two verbs, *ó* ‘give’ and *pórì* ‘say’, have irregular imperative stems with a *-nɔ́* formative.

(281) Imperative (singular addressee)

bare stem	imperative	gloss
a. monosyllabics, /H/ and /HL/ toned		
/H/-toned		
nú	*nú*	‘go in’
á:	*á:*	‘catch’
ɲí:	*ɲí:*	‘eat’
/HL/-toned (only example, irregular)		
jê (jâ:-)	*jâ:*	‘take away’ [irregular]
irregular		
yě (yǎ:-)	*yǎ:*	‘go’
b. nonmonosyllabic stems with fixed final vowel, /H/-toned		
págá	*págá*	‘tie’
súgó	*súgó*	‘go down’
pír^{n}í	*pír^{n}í*	‘milk (a cow)’
c. nonmonosyllabics with changeable final vowel		
bisyllabic		
pâl	*pálá*	‘pick (fruit)’
kírì	*kíré*	‘jump’
kúǹ	*kúnɔ́*	‘put’
gǔŋ̀	*gǔŋɔ́*	‘take out’
trisyllabic, with changeable medial and final vowels		
kígìrì	*kígéré*	‘return’
áwùrù	*áwárá*	‘lay out’
trisyllabic, with fixed medial high vowel		
súnú-gù	*súnú-gó*	‘take down’
ɲùnú-gù	*ɲùnú-gó*	‘ruin’
mediopassive		
ìg-î:	*ìg-ɛ́:*	‘stand up; stop’
kír-ì:	*kír-é:*	‘fly’
irregular (partial mediopassive morphology)		
gɛ̀r-í:	*gɛ̀rɛ́*	‘look’
causative		
jìgé-m̀	*jìgé-m(ú)*	‘churn (butter)’
d. /LH/-toned stems shift to {H}		
nɔ̌:	*nɔ́:*	‘drink’
gǒ:	*gó:*	‘go out’
yɛ̀rɛ́	*yɛ́rɛ́*	‘come’
bìrɛ́	*bírɛ́*	‘do’
dàr^{n}á	*dár^{n}á*	‘kill’
gàrá	*gárá*	‘go past’
bɛ̀rɛ́	*bɛ́rɛ́*	‘get’
mìr^{n}í	*mír^{n}í*	‘swallow’

e. /LHL/-toned stems shift to {LH}

gǔŋ̀	*gǔŋɔ́*	‘take out’
mɔ̌:-ǹ	*mɔ̌:-nɔ́*	‘assemble’
yɔ̌:rù	*yɔ̌:rɔ́*	‘roast on fire’
jɛ̌:rì	*jɛ̌:rɛ́*	‘bring’
ɲùnú-gù	*ɲùnú-gó*	‘ruin’
wɔ̀gúrù	*wɔ̀gɔ́rɔ́*	‘take (sth) out or off’

f. irregular imperatives with final *-nv́*

ó	*ɔ́-nɔ́*	‘give’
pórù	*pɔ́-nɔ́*	‘say’
gí	*gí-nɛ́*	‘say’

The plural-addressee form is phonologically unremarkable. Examples of singular/plural pairs are in (282).

(282)

gloss	imperative (positive)	
	singular addressee	plural addressee
‘go’	*yǎ:*	*yǎ:-ỳ*
‘come’	*yɛ́rɛ́*	*yɛ́rɛ́-ỳ*

Since the 1Sg pronoun is the only NP with accusative marking in direct objects function, the syntactic issue of the case-marking of imperative direct object NPs is usually moot. However, 1Sg accusative *má* is found in imperatives: *má págá* ‘tie me up!’.

10.6.1.2 Prohibitives (*-lé*, plural addressee *-lé-ỳ*)

The negative of the imperative, i.e. the prohibitive, is characterized by a suffix *-lé*. The same plural-subject *-ỳ* seen above with imperatives is added to this to produce plural-addressee prohibitive *-lé-ỳ*.

The stem takes the same form segmentally as in the imperative (and some other inflections), except for a few verbs with irregular imperative and/or irregular prohibitive. /LH/-toned stems preserve the initial L-tone.

Contracting *Cvrv* and *Cvr*^{n}*v* stems contract to *Cv-* before the prohibitive suffix. Vowel shifts occur in stems of basic motion/transfer verbs, *e* → *a* for ‘go’ and ‘take away’ (283a), and *ɛ* → *e* for ‘come’ and ‘bring’. *jɛ̌:rì* ‘bring’ and *yɛ̀rɛ́* ‘come’ also undergo *rv*-Deletion, resulting in *jê:-lè* and *yě-lé* in (283e). Because of the vowel shifts, *yě-lé* is the prohibitive of *yɛ̀rɛ́* ‘come’, not of *yě* ‘go’.

(283) Prohibitive

bare stem	prohibitive	gloss
a. monosyllabics, /H/ and /HL/ toned		
/H/-toned		
nú	*nú-lé*	‘go in’
ó	*ó-lé*	‘give’
á:	*á:-lé*	‘catch’

ɲí:	*ɲí:-lé*	‘eat’

/HL/-toned (only example), vowel shift

jê (jâ:-)	*jâ:-lè*	‘take away’

irregular

yě (yǎ:-)	*yǎ:-lé*	‘go’

b. nonmonosyllabic stems with fixed final vowel, /H/-toned

págá	*págá-lé*	‘tie’
súgó	*súgó-lé*	‘go down’
pír^{n}í	*pír^{n}í-lé*	‘milk (a cow)’

c. bisyllabic and heavy stems with changeable final vowel

bisyllabic

pâl	*pálá-lé*	‘pick (fruit)’
kírì	*kíré-lé*	‘jump’
kúǹ	*kúnɔ́-lé*	‘put’
gǔŋ̀	*gǔŋɔ́-lé*	‘take out’

trisyllabic with changeable medial and final vowels

kígìrì	*kígéré-lé*	‘return’
áwùrù	*áwárá-lé*	‘lay out’

trisyllabic with fixed medial high vowel

súnú-gù	*súnú-gó-lé*	‘take down’

d. /LH/-toned mono- and bisyllabics

nɔ̌:	*nɔ̌:-lé*	‘drink’
gǒ:	*gǒ:-lé*	‘go out’
bàgá	*bàgá-lé*	‘fall’
mìr^{n}í	*mìr^{n}í-lé*	‘swallow’
mɔ̌:-ǹ	*mɔ̌:nɔ́-lé*	‘assemble’

e. rhotic-medial bisyllabics subject to *rv*-Deletion

regular

bìrɛ́	*bǐ-lé*	‘do’
gàrá	*gǎ-lé*	‘go past’
bɛ̀rɛ́	*bɛ̌-lé*	‘get’
pórù	*pó-lé*	‘say’
dàr^{n}á	*dǎ^{n}-lé*	‘kill’

with irregular vowel shift

yɛ̀rɛ́	*yě-lé*	‘come’
jɛ̌:rì	*jê:-lè*	‘bring’

f. trisyllabic and longer /LH/ or /LHL/ stems

with fixed medial high vowel

ɲùnú-gù	*ɲùnú-gó-lé*	‘ruin’

with changeable medial and final vowels

wɔ̀gúrù	*wɔ̀gɔ́rɔ́-lé*	‘take (sth) out or off’

Examples of singular/plural-addressee pairs are in (284).

(284)

gloss	bare stem	prohibitive	
		singular addressee	plural addressee
‘drink’	*nɔ̌:*	*nɔ̌:-lé*	*nɔ̌:-lé-ỳ*
‘take out/off’	*wɔ̀gúrù*	*wɔ̀gɔ́rɔ́-lé*	*wɔ̀gɔ́rɔ́-lé-ỳ*

For the prohibitive verb form in ‘lest’ clauses, a kind of negative purposive clause, see (625a-b) in §17.6.1.1, below.

Prohibitive *-lé* is grammatically and morphophonologically distinct from the *-lé* used in a verb-iteration construction, see §11.6.5. The latter controls an {H} overlay on the verb stem, and does not show the segmental contractions (*rv*-Deletion, contracted forms for ‘come’, ‘bring’, and ‘take away’) that occur in the prohibitive.

10.6.2 Hortatives

10.6.2.1 Positive hortatives (*-má*, plural addressee *-má-ỳ*^{n})

First-person (inclusive) hortatives are structured morphologically like imperatives, as though addressed only to the listener. There is accordingly a morphological distinction between a singular-addressee first-person hortative, as in ‘let’s (me and you-Sg) go!’, and a plural-addressee first-person hortative, as in ‘let’s (all three of us) go!’. The hortative suffix is *-má*, used without further affixes for singular addressee. Unlike the morpheme *má* used in ‘good to eat’ type expressions (§6.3.3.3), hortative *-má* does not control tone-dropping on the verb stem.

The plural-addressee counterpart is *-má-ỳ*^{n}, with the same plural-addressee suffix seen in imperative and prohibitive forms.

The morphophonology including tonology is similar to that described just above for the prohibitive, including the vowel shifts for basic motion/transfer verbs (285a). ‘Bring’ also adopts the tonal form of its antonym ‘take away’. ‘Go’ additionally shifts initial *y* to *ɲ*, resulting in *ɲá-má*, likely from *yá-má via *y^{n}á-má by (diachronic) backward nasalization-spreading.

(285) Hortative (positive)

bare stem	hortative	gloss
a. monosyllabics, /H/ and /HL/ toned		
/H/-toned		
ó	*ó-má*	‘give’
nú	*nú-má*	‘go in’
á:	*á:-má*	‘catch’
ɲí:	*ɲí:-má*	‘eat’
/HL/-toned (only examples)		
jê (jâ:-)	*jâ:-mà*	‘take away’
jɛ̌:rì (jê:-)	*jê:-má*	‘bring’
irregular		
yě (yǎ:-)	*ɲá-má*	‘go’

b. *CvCv* with fixed final vowel, /H/-toned

págá	*págá-má*	‘tie’
súgó	*súgó-má*	‘go down’
pír^{n}*í*	*pír*^{n}*í-má*	‘milk (a cow)’

c. stems with changeable final vowel

bisyllabic

pâl	*pálá-má*	‘pick (fruit)’
kírì	*kíré-má*	‘jump’
kúǹ	*kúnɔ́-má*	‘put’
gǔŋ̀	*gǔŋɔ́-má*	‘take out’

trisyllabic with changeable medial and final vowels

kígìrì	*kígéré-má*	‘return’
áwùrù	*áwárá-má*	‘lay out’

trisyllabic with fixed medial high vowel

súnú-gù	*súnú-gó-má*	‘take down’

d. /LH/-toned mono- and bisyllabics

nɔ̌:	*nɔ̌:-má*	‘drink’
gɔ̌:	*gɔ̌:-má*	‘go out’
dɔ̀wɔ́	*dɔ̀wɔ́-má*	‘go up’
mìr^{n}*í*	*mìr*^{n}*í-má*	‘swallow’

e. rhotic-medial bisyllabics subject to *rv*-Deletion

regular

bìrɛ́	*bǐ-má*	‘do’
dàr^{n}*á*	*dǎ-má*	‘kill’
gàrá	*gǎ-má*	‘go past’
bèrɛ́	*bɛ̌-má*	‘get’
pórù	*pó-má*	‘say’

irregular rhotic-syllable truncation and vowel shift

yèrɛ́	*yě-má*	‘come’

f. trimoraic and longer /LH/ or /LHL/ stems preserve lexical tone

mɔ̌:-ǹ	*mɔ̌:nɔ́-má*	‘assemble’

trisyllabic with fixed medial high vowel

ɲùnú-gù	*ɲùnú-gó-má*	‘ruin’

trisyllabic with changeable medial and final vowels

wɔ̀gúrù	*wɔ̀gɔ́rɔ́-má*	‘take (sth) out or off’

In (286), the interviewer suggests moving to another topic. There is only one addressee, so *-má* rather than *-má-ỳ*^{n} is used.

(286)

nɛ́:	*kà:ná*	*yɔ́:*	*[ɲú:*	^{L}*kè]=*̀	*là:*	*mà,*
now	now	NearDist	[millet	^{L}Poss]=it.is	tagQ	Q,

maintenant	*ɛ́mɛ́*	*dágà→*	*[ɛ́:rɛ́*	^{L}*kè*	*kà:*^{n}*]*	*dágà→*	*tíŋɛ́-má*
now	1PlSbj	a.little	[peanut	^{L}Poss	also]	a.little	**speak-Hort**

‘(Up to) now, that (=what we have discussed) is for millet, right? Now let’s talk a little about peanuts.’ (2011.1a.18)

10.6.2.2 Hortative negative (*-m-lé*, plural addressee *-m-lé-ỳ*)

The negation of the hortative is by a suffix complex *-m-lé*, presumably containing prohibitive suffix *-lé*. The stem vocalism is as in the positive hortative. Again the plural-addressee form adds a suffix *-ỳ*.

(287) Hortative negative

bare stem	hortative negative	gloss
a. monosyllabics, /H/ and /HL/ toned		
/H/-toned		
ó	*ó-m-lé*	‘give’
nú	*nú-m-lé*	‘go in’
á:	*á:-m-lé*	‘catch’
ɲí:	*ɲí:-m-lé*	‘eat’
/HL/-toned (only examples)		
jê (jâ:-)	*jâ:-m-lè*	‘take away’
jɛ̌:rì (jê:-)	*jê:-m-lè*	‘bring’
irregular		
yě (yǎ:-)	*yǎ:-m-lé*	‘go’
b. *CvCv* with fixed final vowel,/H/-toned		
págá	*págá-m-lé*	‘tie’
súgó	*súgó-m-lé*	‘go down’
pír^{n}í	*pír^{n}í-m-lé*	‘milk (a cow)’
c. stems with changeable final vowel		
bisyllabic		
pâl	*pálá-m-lé*	‘pick (fruit)’
kúǹ	*kúnɔ́-m-lé*	‘put’
gǔŋ̀	*gǔŋɔ́-m-lé*	‘take out’
trisyllabic with changeable medial and final vowels		
kígìrì	*kígéré-m-lé*	‘return’
áwùrù	*áwárá-m-lé*	‘lay out’
trisyllabic with fixed medial high vowel		
súnú-gù	*súnú-gó-m-lé*	‘take down’
d. /LH/-toned monosyllabics and *CvCv*		
nɔ̌:	*nɔ̌:-m-lé*	‘drink’
gǒ:	*gǒ:-m-lé*	‘go out’
dɔ̀wɔ́	*dɔ̀wɔ́-m-lé*	‘go up’
mìr^{n}í	*mìr^{n}í-m-lé*	‘swallow’
e. rhotic-medial stems subject to *rv*-Deletion		
regular		
bìrɛ́	*bǐ-m-lé*	‘do’
dàr^{n}á	*dǎ^n-m-lé*	‘kill’
gàrá	*gǎ-m-lé*	‘go past’
bɛ̀rɛ́	*bɛ̌-m-lé*	‘get’

pórù	*pó-m-lé*	‘say’
irregular rhotic-syllable truncation and vowel shift		
yɛ̀rɛ́	*yě-m-lé*	‘come’

f. heavy /LH/ or /LHL/ stems preserve lexical tone

mɔ̌:ǹ	*mɔ̌:nɔ́-m-lé*	‘assemble’
trisyllabic with fixed medial high vowel		
ɲùnú-gù	*ɲùnú-gó-m-lé*	‘ruin’
trisyllabic with changeable medial and final vowels		
wɔ̀gúrù	*wɔ̀gɔ́rɔ́-m-lé*	‘take (sth) out or off’

g. mediopassive

kír-ì:	*kír-é:-m-lé*	‘jump’

10.6.3 Syntactic status of second-person subject in imperatives

The “subject” of a regular second person imperative is covert, except for the plural *-ỳ* in the imperative verb itself. The fact that such agreement occurs could be taken as evidence that the presence of a 2Sg or 2Pl subject in imperative clauses is recognized by the morphosyntax.

When the imperative verb is chained to another verb or VP (in which case it is understood that the imperative force applies to the entire chain), the nonfinal verb appears either in bare-stem form (to create a direct chain) or in a pseudo-conditional clause with *dè* ‘if’. Both direct chains and pseudo-conditionals elsewhere (i.e. with indicative final verb) require same subjects in the two clauses. This suggests that the interclausal syntax can detect imperative subjects and verify the sameness (i.e. coindexation), or at least non-disjointness, of the subjects of two chained verbs. Examples with imperatives are in (288).

(288) a.

dɔ̀wɔ́	*súgó*
go.up	go.down.Imprt

‘Go up and come-2Sg (back) down!’
(direct chain)

b.

[dɔ̀w-ɛ̂	*dè]*	*súgó*
[go.up-Pfv	if]	go.down.Imprt

‘Go up and come-2Sg (back) down!’
(pseudo-conditional)

Likewise for plural subject imperative: *dɔ̀wɔ́ súgó-ỳ* or *[dɔ̀w-ɛ̂ dè] súgó-ỳ*.

However, there is a glaring syntactic difference between imperative subjects and other subjects, viz., the inability of imperative subjects to serve as antecedents for anaphors, specifically reflexives. In indicative (289a), a second person subject (like any subject) requires that a coindexed clausemate object appear as the reflexive morpheme *sǎⁿ*. The imperative version, however, shows a regular 2Sg object pronominal, as one would get with a referentially disjoint subject.

(289) a.

ú	*sǎⁿ*	*kɛ́j-ɛ̀*
2SgSbj	Refl	cut-Pfv

‘You-Sg cut-Past yourself.’

b. *ú* *kɛ́jɛ́*
2SgObj cut.Imprt
'Cut-2Sg yourself!'

c. *ú* *kɛ́jɛ́-lɛ́*
2SgObj cut-Proh
'Don't-2Sg cut yourself!'

Likewise for plural subject: indicative *é [sǎⁿ bè] kɛ́jɛ́-sɛ̂ⁿ* 'you-Pl (have) cut yourselves' but imperative *é kɛ́jɛ́-ỳ* 'cut yourselves!'.

So, on the one hand, the morphology of the imperative verb itself recognizes the difference between singular and plural addressee, and (arguably) the interclausal syntax can detect imperative subjects and verify their referential identity. On the other hand, the (mostly) clause-internal anaphora system is unable to recognize an imperative subject.

In addition to reflexive *sǎⁿ*, there is a same-subject subordinating connector *má* in relative clauses, functioning as another anaphoric element. This too is disallowed in imperatives, showing again that the imperative addressee does not function as a referential subject in anaphora. The crucial examples are non-imperative (471b) versus imperative (471c-d) in §14.1.10.

The syntax of hortative subjects differs from that of imperatives. Hortatives agree with imperatives in the morphology of the verb itself, and in the use of same-subject bare stems (direct chains and pseudo-conditionals). However, hortatives normally show a clause-initial 1Pl subject *ɛ́mɛ́* (290a-b), which is omitted under the same conditions as in indicatives, whereas imperatives cannot have an initial 2Sg or 2Pl pronoun except in vocative function. In addition, hortative subjects (1Pl) are perfectly good antecedents for reflexives (290c).

(290) a. *ɛ́mɛ́* *dɔ̀wɔ́* *súgó-má-ỳⁿ*
1PlSbj go.up go.down-**Hort-PlSbj**
'Let's (three or more) go up and come (back) down!'
(direct chain)

b. *ɛ́mɛ́* *[dɔ̀wɛ́* *dè]* *súgó-má-ỳⁿ*
1PlSbj [go.up-Pfv if] go.down-**Hort-PlSbj**
[=(a)]
(pseudo-conditional)

c. *ɛ́mɛ́* *[sǎⁿ* *bè]* *kɛ́jɛ́-má-ỳⁿ*
1PlSbj [ReflObj Pl] cut-**Hort-PlSbj**
'Let's (three or more) cut ourselves!'
(reflexive object)

The conclusion is that imperative and hortative verbs index addressee number, that indicatives and hortatives have full-fledged referential subjects, but imperatives are treated as lacking referential subjects.

The shaky syntactic status of imperative subjects may be compared with that of (pseudo-)subjects in fixed subject-verb collocations of the 'night fell' type (§11.1.4).

10.6.4 Imperative and hortative verbs with non-second person subject

10.6.4.1 Imperative with third person subject

This construction is used in wishes and imprecations of the type 'may God VERB X'. The verb is in imperative form.

(291) a.

àmá	*ú*	*bárá*
God	2SgObj	help.**Imprt**

'May God assist you.'

b.

àmá	*bá:sí*	*pógó*
God	trouble	brush.off.**Imprt**

'May God brush off any trouble!' (2011.1a.01)

The imperative verb here is invariant in unmarked (elsewhere singular-subject) form, though the preverbal subject NP may be plural (292). This restriction was also noted by Prost, who called the non-second person imperative the "subjonctif" (p. 56).

(292)

[àr^{n}à^L	*gàrá*	*bè]*	*ú*	*bárá*
[man^L	big	Pl]	2SgObj	help.**Imprt**

'May the old people assist you.'

A similar construction is used in jussives of the type 'Tell them to come!' (§17.1.5.1, below).

10.6.4.2 Imperative with implied first person singular subject

The imperative verb form is also used in utterances expressing uncertainty whether the addressee (or someone else who sent the addressee) wants the speaker to do something. For 1Sg subject, the usually accusative form *má* is used; for other nouns and pronouns there is no difference between subject and object morphology.

(293)

má	*yéré*	*má*
1SgAcc	come.**Imprt**	Q

'(Do you want) me to come?'

10.6.4.3 Hortative with second or third person subject

The hortative can occur with a third person subject (294a) in wishes. With a second person subject, it gives the addressee permission to do something that he/she wishes. For example, (294b) could be used in a context where the speaker knows that the addressee is anxious to go.

(294) a.

[pèré	*yɔ́*	*kɔ̀*	*dè]*	*[kó*	*^{L}ɲà-mà]*
[other	Exist	be.NonhSbj	if]	[NonhSbj	^{L}go-**Hort**]

'If there is another (tale), may it go (=proceed)!'

b. *[ú* ^{L}*kè]* *ɲá-má*
[2Sg ^{L}Topic] go-Hort
‘You-Sg may go (now).’

11 VP and predicate structure

11.1 Regular verbs and VP structure

11.1.1 Verb types (valency)

There is no overt case-marking of nonpronominal subjects or objects (§6.7), but the distinction between them is clear. There is a clause-initial subject position, especially for nonpronominal subject NPs including pronouns. There is optional subject-number agreement on verbs (§10.3.1). In nonsubject relatives, a preverbal pronominal proclitic expressing the subject is required (§14.1.8). However, not all subjects and not all objects are created equal.

11.1.1.1 Defective or absent subjects

Covert (virtual) second person subjects of imperatives constitute an analytical problem. Morphologically, the presence of a (covert) subject appears to be indexed by the distinction between singular and plural subject forms on the verb itself: *yɛ́rɛ́* ‘come-2Sg!’, *yɛ́rɛ́-ỳ* ‘come-2Pl!’. Likewise, the interclausal syntax seems to recognize imperative subjects as being coindexed (“same subject”) or at least non-disjoint in verb/VP chains, allowing the use of direct chains (§15.1) and of pseudo-conditionals (§15.2.2.6). However, the clause-internal syntax fails to recognize the imperative subject as an antecedent for reflexives, unlike (referential) subjects in indicative clauses (including first and second person pronouns), and even unlike hortative subjects. So there is an apparent mismatch between the imperative-verb morphology and the clausal and interclausal syntax. The solution is that imperative and hortative verbs mark addressee (rather than subject) number. Imperatives have no true subjects, while indicatives and hortatives do have 1Pl subjects (as well as singular or plural addressee). See §10.6.3 for examples and discussion.

In indicative sentences, true subject NPs are clause-initial. However, there is a construction with a fixed collocation of a noun and a verb, including meteorological expressions similar to English *day broke* or *night fell*, along with emotional expressions involving *kɛ́nɛ́* ‘heart’. Here the apparent subject (‘night’, ‘heart’) does not display full subject qualities and follows rather than precedes adverbs. This raises the possibility that these clauses may be subjectless. There are also cases (‘get angry’, ‘have a bloody nose’) that have both a fixed noun (‘heart’ or ‘nosebleed’) with defective subject properties and a true subject. These defective subjects, like imperative subjects, take the “same-subject” subordinator in chains, though this may simply mean that the two subjects are not disjoint. It is not possible to test them for anaphoric-antecedent properties. See §11.1.4 for examples and discussion.

11.1.1.2 Objects

In main clauses, object NPs follow subject NPs and some adverbial elements. Subjects, but not objects, have limited agreement in the verb, in the form of an optional marking of plurality of subject (295a). Because this agreement does not distinguish pronominal person categories, independent pronouns in subject position are common (295b).

(295) a. *[àr^{n}á bè] [ɛ́wɛ́ bîn] ɲɛ̌ ɔ̌:-sɛ̂^{n}*
[man Pl] [market in] woman see-Pfv.PlSbj
'The men saw the woman in the market.'

b. *ɛ́mɛ́ yá: bú:dú bɛ̀rɛ́-sɛ̂^{n}*
1PlSbj yesterday money get-Pfv.PlSbj
'We got the money yesterday.'

The simple transitive construction exemplified in (295) is typical for impact transitives like 'hit' and perception verbs like 'see'. It is also valid for verbs of carrying and holding, although they are morphologically mediopassive in form, like *bòm-î:* 'carry (child, on back)', which occurs in stative form in (296).

(296) *í^{n} [sǎ^{n} ^{L}ì:^{n}] bómò*
1SgSbj [ReflPoss ^{L}child] carry.on.back.Stat
'I am carrying my child (on my back).'

As in other Dogon languages there are many conventionalized objects, including cognate nominals, that have limited independent reference. For examples see §11.1.5.1-2, below.

Motion verbs like 'go' have locational complements, typically expressed by spatial adverbial phrases or by place names. In (297), the destination is expressed by a tonal locative.

(297) *í^{n} ɛ́wɛ̀$^{+L}$ yǎ:-jú*
1SgSbj market.Loc^{+L} go-Ipfv
'I am going to (the) market.'

'Give' and 'show' each have a direct object (theme) without case-marking, and a dative indirect object (298).

(298) a. *wó má=ǹ [tɛ́mdɛ́rɛ́ lɔ̀y] ^{L}ò-è*
3SgSbj 1Sg=Dat [hundred two] ^{L}give-Pfv
'He/She gave me 200.'

b. *í^{n} [ú ^{H}súgɛ́:^{n}]=ǹ [pèjù^{L} már^{n}á] tó:ró-jú*
1SgSbj [2SgPoss ^{H}younger.sib]=Dat [sheep^{L} big] show-Ipfv
'I will show a big sheep to your-Sg younger (same-sex) sibling.'

'Say' also has a direct-object (theme) when the quotation is resumed as a noun, pronoun, or 'what?' interrogative. In any case, the original addressee is expressed as a dative indirect object.

(299) *ú=ǹ ìŋé ^{L}pòr-ì*
2Sg=Dat what? ^{L}say-Pfv
'What did he/she say to you-Sg?'

'Put' and 'take out' verbs have a direct-object (theme) and a locational expression denoting the relevant container or containing space. The locational expression does not indicate directionality (‘to X’, ‘from X’), which is the responsibility of the verb. Therefore both (300a) and (300a) have static locative ‘in the house’ as locationals.

(300) a. *ɛ́mɛ́* *dɛ̌ⁿ* *[gìrⁿí* *bîn]* *kún-ɛ̀:-sɛ̂ⁿ*
1PlSbj waterjar [house in] put-Pfv.PlSbj
‘We put-Past the waterjar in the house.’

b. *ɛ́mɛ́* *dɛ̌ⁿ* *[gìrⁿí* *bîn]* *gúŋ-ɛ̀:-sɛ̂ⁿ*
1PlSbj waterjar [house in] take.out-Pfv.PlSbj
‘We took the waterjar out of the house.’

11.1.2 Valency of causatives

With the productive causative in *-m̀*, the embedded subject appears in dative form. This applies to embedded intransitive as well as transitive clauses. If the embedded clause is transitive, its direct object undergoes no change as part of causative clause union. (301e) is an example of a causative based on a transitive verb, with both a surface direct object and a dative.

(301) a. *wó* *àrⁿá=ǹ* *dɛ̀ŋ-ɛ́:-m̀-∅*
3SgSbj man=**Dat** sit-MP-**Caus**-Pfv
‘He/She had/made/let the man sit.’

b. *wó* *má=ǹ* *ɲǎ:* *ɲí:-m-ì*
3SgSbj 1Sg=**Dat** meal eat.meal-**Caus**-Pfv
‘He/She had/made/let me eat (a meal).’

c. *wó* *má=ǹ* *í:ⁿ* *píné-m̀-∅*
3SgSbj 1Sg=**Dat** child shut-**Caus**-Pfv
‘He/She made me shut up (=imprison) the child.’

d. *íⁿ* *ú=ǹ* *gǒ:-mí-ɲú*
1SgSbj 2Sg=**Dat** go.out-**Caus**-Ipfv
‘I will make you-Sg go out.’

e. *[bàrá* *ᴸyè]* *kèrú* *wó=nì* *túró-m̀-∅* *dè*
[outback ᴸgo] stem **3Sg=Dat** gather.up-**Caus**-Pfv if
‘(step-mother) would go into the bush, making her (=girl) go into the bush to collect (millet) stalks, (then…).’ (2011.1b.01)
[for ᴸ*yè* see §15.1.6.1]

This valency does not apply to frozen and irregular causatives, which are treated like ordinary transitives. Thus *ɲùnú-gì* ‘damage (sth)’, *súnú-gì* ‘take down’, *gǔŋ̀* ‘take out’, and *ú:-ǹ* ‘lay, put down’ take simple NP and pronominal objects, including 1Sg accusative *má*.

11.1.3 Verb Phrase

The notion of VP is most useful in the grammar in connection with chaining, especially same-subject loose chaining with a subordinator like *-ní:* 'while.SS' (§15.2.1.4). The concept of VP is also useful in connection with anaphoric pronouns that have clausemate subjects as antecedents (chapter 18).

11.1.4 Fixed subject-verb collocations

Tightly-knit subject-verb collocations are not widespread, but are fairly typical of temporal expressions (in a broad sense: time of day, weather, seasons), and emotional expressions. Some collocations whose first element has subject-like qualities are in (302).

(302) Subject-verb collocations

a. temporal

dà:gá dɛ̌:	'night fall(s)' (only known use of verb *dɛ̌:*)
pàrá gǒ:	'cloudy weather go out' (= 'be autumn')
ɲù-ɲǔ nú	'cold season enter' (= '… begin')
àr^{n}ú lɔ́wɔ́	'rain fall' *(lɔ́wɔ́* elsewhere 'carve, chop out')

b. emotional

[X ^{H}kɛ́nɛ́] kɔ́:^{n}	'X's heart weep' (='be sad')
X kɛ́nɛ́ párá	'X heart rub on [lotion]' (='be angry')

c. body function

X kìr^{n}ì^{L}-nɛ́ gǒ:	'[X's nose] bleed, X have a bloody nose'

However, the "subject" status of the nominals here is not full-fledged. True subjects are clause-initial in normal main clauses, preceding adverbials. By contrast, the fixed subject-like nominals in (302a) follow setting adverbials. Compare (303a-b) with true subjects to (303c), which has a subject-like nominal, showing different linear orders in spite of sharing an adverb and a verb.

(303) a.

í^{n}	*[nɛ́:*	*wɔ̀^{n}]*	*^{L}gò-è*
1SgSbj	**[now**	**Top]**	^{L}go.out-Pfv

'I have gone out now.'

b.

péjú	*[nɛ́:*	*wɔ̀^{n}]*	*^{L}gò-è*
sheep	**[now**	**Top]**	^{L}go.out-Pfv

'The sheep-Sg has gone out now.'

c.

[nɛ́:	*wɔ̀^{n}]*	*pàrá*	*^{L}gò-è*
[now	**Top]**	cloudy.weather	^{L}go.out-Pfv

'The cloudy weather has gone out (=it is autumn).'

The situation is particularly striking for 'X's nose bleed(s)', which appears to have two distinct subjects. *[kìr^{n}ì-nɛ́] gǒ:* by itself makes sense as a subject plus intransitive verb: '[nose-blood] go out'. However, there can also be another subject NP denoting the person (or animal), and the two are separated if an adverb is present. In (304), ‘nose-blood’ is what ‘goes out’, but the human is the full-fledged subject, even to the extent of determining plural-subject agreement on the verb ‘go out’ (304b). See also the ‘get angry’ construction in (306b) below.

(304) a. *sè:dú* *yá:* *kìr^{n}ì^L-nɛ́* ^{L}*gò-è*
S yesterday **nose^L-blood** ^{L}go.out-Pfv
‘Seydou had a bloody nose yesterday.’

b. *ɛ́mɛ́* *yá:* *kìr^{n}ì^L-nɛ́* *gǒ:-sɛ̂^{n}*
1PlSbj yesterday **nose^L-blood** go.out.Pfv.**PlSbj**
‘We had bloody noses yesterday.’

If ‘nosebleed’ in (304) is a pseudo-subject, ending up in an adverb-like position, one could extrapolate this to cases like ‘cloudy weather’ in (303c). From this perspective, (303c) has no true subject NP.

To be sure, same-subject past anterior subordinator *-ɛ:* (§15.2.2.1) can be used in two-clause sequences like (305) with fixed subject *pàrá*, but it could be debated whether *-ɛ:* requires true referential coindexation or whether it is an unmarked subordinator used whenever the two subjects are not clearly disjoint.

(305) *pàrá* *nú-ɛ̀:* ^{L}*gò-è*
cloudy.weather go.in-SS ^{L}go.out-Pfv
‘Cloudy weather (=rainy season) came in and went out.’

Regarding the emotion expressions with *kɛ́nɛ́* ‘heart’ (more accurately ‘liver-heart complex’) in (302b), there is a structural difference between ‘heart weep’ and ‘heart rub.on’. In the first, ‘heart’ is a possessed noun, as seen clearly in the 1Sg combination *kɛ́nɛ́ mà* ‘my heart’. However, it still follows setting adverbs (306a). In ‘heart rub.on’, if indeed *párá* in this collocation is the verb ‘rub on (e.g. lotion)’, ‘heart’ is not treated as a possessed noun. Instead, there is a separate subject denoting the person (306b), as in the ‘nosebleed’ examples above. If the subject is plural, the verb may agree with it (306c).

(306) a. *íyé* *[kɛ́nɛ́* *mà]* *kɔ́^{n}-ɛ̀*
today **[heart** **1SgPoss]** weep-Pfv
‘My heart wept.’ (=‘I was sad.)

b. *í^n* *íyé* *kɛ́nɛ́* *pár-ɛ̀*
1SgSbj today **heart** rub.on-Pfv
‘I got angry today.’

c. *ɛ́mɛ́* *íyé* *kɛ́nɛ́* *párá-sɛ̂^{n}*
1PlSbj today **heart** rub.on-**Pfv.PlSbj**
‘We got angry today.’

11.1.5 Fixed verb-object combinations

11.1.5.1 Verb and noncognate noun

Examples of fixed phrases consisting of a verb and a noncognate object verb are in (307).

(307) Verb-object combinations

a. noun carries main activity sense, verb is semantically light

àségú sá:	‘sneeze’ (*sá:* ‘answer, speak up’)
kɔ̀mɔ́ tá:	‘wage war’ (*tá:* ‘shoot’)
sá^{n}-lìgì á:	‘perform ablutions’ (*á:* ‘catch’)
óŋó sá:ŋì	‘yawn’ (*sá:ŋù* ‘stretch, spread’)
óŋó dǎ:rì	‘yawn’ (cf. *dǎ:rì* ‘dare’)
ò:gú tɔ́rɔ́	‘sweat’ (*tɔ́rɔ́* ‘hatch’ or ‘begin’)

b. noun carries main activity sense, verb not attested elsewhere

gìnɛ́ nɔ́w^{n}-ì:	‘go to sleep’
ì^{n}sìr^{n}í sí:^{n}	‘urinate’
tà:lɛ̌:^{n} dǎ:	‘say a proverb’

c. verb carries main activity sense

gìré kúmùɲù	‘blink’ (*gìré* ‘eyes’)
ká^{n} lúgó	‘rinse out one’s mouth’ (*ká^{n}* ‘mouth’)
dí: ìn-î:	‘bathe, take a bath’ (*dí:* ‘water’)

11.1.5.2 Formal relationships between cognate nominal and verb

The collocations in this section are between a verb and a cognate nominal that functions as default direct object. In some cases the verb seems to be lexically primary and the cognate nominal adds little to the meaning. In other cases the noun has an independent meaning and the verb appears to be parasitic on it.

As an example, consider the data in (308). The collocation with cognate nominal in (308a) is the common expression for the act by which a farmer turns over a little earth with a slash of the pick-hoe (French *pioche*), after which a second person (often a child or woman) drops seeds into the disturbed earth and tamps it down with his/her feet. The pick-hoe slashing is the central action in planting seeds, and the phrase in (308a) is the loose translation of ‘plant, sow’ (French *semer*). There are, however, some more specialized planting techniques that are described by noncognate collocations (308b).

(308)	a.	*lɛ̌ lɛ́:*	‘slash earth in field to sow’
	b.	*lɛ̀^{L}-lìgìjí lɛ́:*	‘make slashes irregularly (not in rows)’
		[bínígí bè] lɛ́:	‘sow (seeds) in a pit with manure’
		lɛ̀^{L}-lɔ̀nìr^{n}í lɛ́:	‘oversow (seeds) widely’

The collocations in (308) involve underived nouns and verbs of closely similar segmental shapes, generally differing (if at all) only in tones and/or (for nonmonosyllabics) in final vowel (even after factoring out mediopassive *-i:* on some verbs). These differences are partially ascribable to the very strict constraints on lexical tones and on vocalism that apply to verb stems but not to nouns. For example, initial voiced obstruents force an /LH/ melody on verbs but not on nouns, and nonmonosyllabic verbs have tight restrictions on vowel sequences.

However, there are also a number of cases where the noun has one of the shapes *Cv̌*, *Cv̌C* with final sonorant, or *Cv̀Cú*, which are segmentally and tonally identical to the corresponding verbal noun with suffix *-ú* or (monosyllabic) *-∅* (§4.2.4, above). On the other hand, there are also many cognate nominals that have the segmental form of a verbal noun, but that (unlike verbal nouns) are /H/-toned, namely *Cv́*, *Cv́C* with final sonorant, *Cv́Cú*, *Cv́:Cú*, and *Cv́Cv́Cú*.

(309) Verbs and simple cognate nominals

a. verb and noun monosyllabic	
noun Cv̌ with short vowel (verbal noun?)	
kɔ̌^{n} kɔ́:^{n}	‘weep’
noun Cv́ with short vowel	
mɔ́ mɔ̌:	‘laugh’
noun with long vowel	
bɛ́: bɛ̌:	‘defecate’
gí:^{n} gǐ:^{n}	‘commit theft’
gɔ́: gɔ̌:	‘dance a dance’
jí:^{n} jǐ:^{n}	‘fart’
dɔ̌: dɔ̌:	‘make an insult’
noun with long vowel, vowel-quality shift	
ɲǎ: ɲí:	‘eat meal’
b. verb bisyllabic, noun monosyllabic	
noun Cv̌ (divergent in vocalism from verbal noun)	
sǒ sɔ́wɔ́ [!]	‘give an injection’
noun Cv́, verb CvCv with medial {y r r^{n}}	
já jày-î:	‘have a fight’
sá^{n} sár^{n}á	‘pray’
tǐ^{n} tír^{n}í	‘go get firewood’
bɔ́^{n} bɔ̀r^{n}ɔ́	‘convoke, send out a summons’
noun Cv̌C with final sonorant (verbal noun?)	
bɛ̌n bɛ̀nɛ́	‘go swimming’
noun Cv́C with final sonorant	
jɛ́w jɛ̀wɛ́	‘utter a curse’ (cf. *sǎ^{n} jɛ̀wɛ́* ‘take an oath’)
mɔ́m mɔ̀mɔ́	‘carry out second round of weeding’
gɛ́ŋ gɛ̀ŋɛ́	‘beg, do pleading’
c. verb and noun bisyllabic	
CvCv with noun Cv̀Cú (verbal noun?)	
dàbú dàbá	‘tell fortunes’
mùŋú mùŋó	‘tie a knot’
jàtú jàtá	‘do a calculation’
gɛ̀rú gɛ̀rɛ́	‘do the harvest’
nɔ̀ŋú nɔ́ɲɔ́	‘copulate’
bàdú bàdá	‘hold a meeting’

jàmú jàmá	‘betray, break a promise’
tɔ̀ŋú tɔ́ŋɔ́	‘do writing’
ìmú ìm-î:	‘lie down, go to bed’
CvCv with noun Cv́Cú	
ɛ́nú ɛ́nɛ́	‘tell a story’
nɛ́ŋú nɛ̀ŋɛ́	‘squeeze out’
jáŋú jàŋá	‘engage in studies’
tógú tógó	‘have a chat’, cf. *dà:gà*^{L}*-tógú tógó* ‘have a night-chat’
sɛ́gú sɛ́gɛ́	‘pay dues, ante’
núŋú núŋɔ́	‘sing a song’
tɛ́rú tɛ́rɛ́	‘clear (a field, with an axe)’
jɔ́gú jɔ̀gɔ́	‘(bird) eat by pecking’
wárú wàrá	‘do farm work’ (cf. *wɔ̀rú* ‘field’)
dúrú dùró	‘let out a groan’; ‘thunder’
bógú bògó	‘(dog) bark’
jɔ́ŋú jɔ̀ŋɔ́	‘perform healing’
CvCv with noun CvCi	
kìrí kír-ì:	‘take a jump’
ìrí íré	‘stutter’
ìjí íjé	‘(quadruped) buck’
jíŋí jìŋé	‘take sides, support one side’
jíɲí jìɲé	‘emit an odor’
ɲíní ɲìné	‘breathe’
CvCv with noun ending in nonhigh vowel	
tìŋɛ́ tíŋɛ́	‘speak’, cf. *[tìŋɛ̀*^{L} *báŋú] tíŋɛ́* ‘speak secret words’, *tìŋɛ̀*^{L}*-kɛ́rú tíŋɛ́* ‘tell a joke’
bírɛ́ bìrɛ́	‘do work’
síɲɛ́ síɲɛ́	‘make noise’
pár^n*ɛ́ pár*^{n}*ì*	‘tell a riddle’
sìjé síjé	‘draw lines’
gúrɔ́ gùrɔ́	‘vomit’
sùrɔ́ súrɔ́	‘make a heap’
kɛ̀rɛ́ kɛ́n-ì: [!]	‘have fun’
tùnɔ́ túnɔ́	‘compete’
dúwɔ́ dùw-î:	‘bear a burden, take responsibility for’
dùwɔ́ dùwɔ́	‘(blacksmith) do forging’
sùw^n*ɔ́ súw*^{n}*ɔ́*	‘(skin of dates) become wrinkled’
dúgó dùgó	‘cast spells’
lùgó lúgó	‘count (numbers)’
tàgá tág-ì:	‘put on shoes’
CvCv with noun ending in mid-height nasalized vowel	
wìrɛ̌^{n} *wírì*	‘give out a whistle’
sìjɛ̌^{n} *síjɛ́*	‘blow a horn (or a whistle)’
CvCCv	
jántɛ́ jántì	‘be kidding’
Cv:Cv with noun Cv́:Cú	
wá:jú wá:jù	‘preach, give a sermon’
já:gú jǎ:gù	‘do business’
gá:nú gǎ:ǹ	‘pester’
gɛ́:rú gɛ̌:rì	‘whisper’

Cv:Cv with noun Cv́:Cí	
jí:rí jǐ:rì	‘have a discussion or debate’
Cv:Cv with noun ending in non-high vowel	
tì:rɛ́ tí:rì	‘make small bunches’
sí:ŋé sí:ŋì	‘sob’

d. verb and noun trisyllabic

CvCvCv with noun Cv́Cv́Cú or syncopated Cv́CCú	
dáwrú dàwírì	‘cast spells’
bógúrú bògírì	‘(male animal in rut) bellow’
járúgú jàrígì	‘make a criticism’
gɔ́ŋúr^{n}ú gɔ̀ŋúr^{n}ù	‘take a stroll’
CvCvCv with noun ending in non-high vowel	
kàgújá kágùjì	‘clear one’s throat’
sílígá sílígì	‘make an exchange’
bílígá bìlígì	‘do magic tricks’
dùgɔ̀rɔ́ dùgírì	‘mock, poke fun’
jɔ́ŋɔ́r^{n}ɔ́ jɔ̀ŋír^{n}ì	‘do spot-sowing’, ‘oversow’
kòjúgó kójùgù	‘cough’ (variant *kòjúgó kógùjù*)

A few of the forms in (309) above have additional irregularities, flagged by “[!]” after the collocation. An irregular shift between [+ATR] and [-ATR] is found in *sǒ sɔ́wɔ́* ‘give an injection’ (compare *sɔ̌w-∅*, regular verbal noun of *sɔ́wɔ́*). An irregular consonantal shift occurs in *kɛ̀rɛ́ kɛ́n-ì:* ‘have fun’.

In a significant number of further cognate collocations, the noun and verb differ morphologically. In *tìgɛ́ tígìrì* ‘(griot) call out the names of ancestors’, the verb probably has (or originally had) a derivational suffix *-rv* (§9.1, §9.3.1). In most cases, however, the verb is morphologically simple while the noun is morphologically complex in one of the following ways: a) it begins with an arguably segmentable *à(N)-* morpheme of unclear function (§4.1.7); b) it has an initial reduplication (§4.1.4); or c) the noun is compound (or is a noun-adjective combination) and the verb is cognate to only one of the stems (usually the final). The data in (310) are organized around these morphological categories.

(310) Verbs and morphologically complex cognate nominals

a. noun with initial *à-* or *àN-*

noun à(N)Cv́Cú	
àn-dáŋú dàŋá	‘fry large soft millet cakes’
à-tégú tégé	‘stand on tiptoes’
à-mámú màmá	‘bite one’s lower lip’

b. noun with apparent initial *Cv-* reduplication

pɔ̀-pɔ́: pɔ́:	‘accuse’

c. only the final element of compound noun is cognate to the verb

compound final -Cv́	
kèrù^L-ká ká:	‘harvest millet (after the main harvest)’
nùmɔ̀ -dá dǎ:	‘signal to stop’
compound final -Cv:	
kù^{nL}-ɔ̌: ɔ̌:	‘see (foretell) the future’

kìnè^{L}*-ɔ̌: ɔ̌:*	‘tell fortunes in a seance’
àr^{n}*à*^{L}*-tɔ̌: tɔ́:*	‘have a fight (verbally)’
dògò^{L}*-tɔ̌: tɔ́:*	‘take down (wrestler) by tripping from outside’
nìɲìr^{n}*ì*^{L}*-tɔ̌: tɔ́:*	‘set a date/deadline’
nùmɔ̀^{L}*-jɛ̌: jɛ̌:*	‘take handful (of food) in hand’
compound final -Cv̌C with final sonorant (verbal noun?)	
ìmì-kǎm kámá	‘take down (wrestler) by falling backward’
compound final -Cv́C with final sonorant	
kùwɔ̀^{L}*-séw séwé*	‘walk on tiptoes’
compound final -Cv́Cú	
à:gà^{L}*-yɛ́gú yɛ̀gɛ́*	‘(herder) get up early’
tɔ̀rɔ̀^{L}*-bájú bàjá*	‘tie a sliding knot’
mɔ̀^{L}*-kɛ́rú kɛ́rɛ́*	‘smile broadly’
gìrè^{L}*-bɛ́mú bɛ̀mɛ́*	*‘frown’*
compound final -Cv́Cí	
kùwɔ̀^{L}*-díɲí dìɲé*	‘take down (wrestler) by tripping from inside’
gɔ̀ŋɔ̀^{L}*-díɲí dìɲé*	‘(wrestlers) hold each other chest to chest’
[ɲà:^{L} *pírí] píré*	‘cook meal with flour dumplings’ (*pírí* ‘white’)
compound final -CvCv with final non-high vowel	
bìn^{L}*-kɛ́jɛ́ kɛ́jɛ́*	‘say sth false’
ɲù:^{L}*-sìwé síwé*	‘lay the second layer of millet spikes’
nùmɔ̀^{L}*-sìjé síjé*	‘draw lines (in sand)’
kà^{nL}*-tìŋé tíŋé*	‘utter magic spells’
kù^{nL}*-kúwó kúw-ì:*	‘put on hat’
ɲù:^{L}*-sùrɔ́ súrɔ́*	‘make small harvest pile’
kùwɔ̀^{L}*-tàŋá táŋá*	‘take a step’
compound final -Cv́Cv́Cú	
ɲà:^{L}*-múɲúr*^{n}*ú mùɲúr*^{n}*ù*	‘have a dream’

d. only initial element of compound noun is cognate to verb

tùrɔ̀^{L}*-dí: túrɔ́*	‘spit’ (*dí:* ‘water’)
jè^{L}*-tùnɔ́ jɔ̀wɔ́*	‘run a race’ (*tùnɔ́* ‘comparison’, *jé* ‘act of running’, *jɔ̀wɔ́* ‘run’)

After factoring out the noncognate material on the noun, the verbs and cognate nominals in (310) are generally consistent with the phonological patterns noted in (309) above. For example, *àndáŋú dàŋá* ‘fry large soft millet cakes’ can be compared to collocations with *Cv́Cú* nominala in (309c). One broad difference is that the collocations in (310), more so than those in (309), tend to have lexically dominant nominals. For example, the verb *tɔ́:* occurs in three distinct collocations in (310c), essentially just repeating the respective compound finals without adding much to the meaning. One consequence of the independent status of the nouns in (310) is that very few have the rising tone and segmental form of true verbal nouns.

11.1.5.3 Grammatical status of cognate nominal

The relationship in form and sense between the verb and the cognate nominal often makes the latter redundant, essentially a pro-forma or default object, as in ‘dance a dance’. In cases like ‘dance’, one can also have more specific objects (‘dance a jig’), whereas with ‘whistle (=give out) a whistle’ or ‘dream (=have) a dream’ there may be no such alternatives.

In any event, the cognate nominal can function syntactically as a true object NP, and it can be modified. The collocations vary as to the propensity of the nominal to be directly modified by an adjective, numeral, or demonstrative. An example that only occasionally shows NP-internal modification is *gúrɔ́ gùrɔ́* 'vomit (=emit) vomit'. The adverb 'a lot' in (311a) and the adverbial phrase 'three times' in (311b) do not form part of the NP with *gúrɔ́*, although it would have been syntactically possible to say '… vomited [much vomit]' or '… emitted [three vomits]'. However, *gúrɔ́* basically means 'vomit(n)', and it can be modified adjectivally, e.g. with 'red (brown)' in (311c).

(311) a. *wó* *gúrɔ́* *gàr-á→* ^{L}*gùr-ɛ̀*
3SgSbj **vomit(n)** a.lot ^{L}**vomit**-Pfv
'He/She vomited a lot.'

b. *wó* *[kúwɔ́* *tǎ:n]* *gúrɔ́* ^{L}*gùr-ɛ̀*
3SgSbj [time three] **vomit(n)** ^{L}**vomit**-Pfv
'He/She vomited three times.'

c. *wó* *[gùrɔ̀*^{L} *bá*^{n}*]* ^{L}*gùr-ɛ̀*
3SgSbj [**vomit(n)**^{L} red] ^{L}**vomit**-Pfv
'He/She vomited red (or brown) vomit.'

On the other hand, in a collocation like *sìjé síjé* 'draw lines', the nominal denotes a bounded unit and therefore lends itself to quantification as well as to other forms of modification (312).

(312) a. *wó* *[sìjé* *tǎ:n]* ^{L}*sìj-è*
3SgSbj [**line** three] ^{L}**draw**-Pfv
'He/She drew three lines.'

b. *wó* *[sìjè*^{L} *gùrú]* ^{L}*sìj-è*
3SgSbj [**line**^{L} long] ^{L}**draw**-Pfv
'He/She drew a long line.'

11.2 'Be', 'become', and other statives

11.2.1 'It is' clitics

11.2.1.1 Positive 'it is' (*=y*, *=ì:*, *=:*, *=∅*)

The 'it is' clitic may be added to a pronoun or any other NP, singular or plural, to create an identificational predicate. Its function is to identify a referent that is physically present, or that has been introduced into the discourse. This referent may appear as a topicalized NP just before the 'it is' clause, but it is often omitted by virtue of being mutually understood.

The segmental form of the clitic is *=y* after a vowel in most cases, and *=ì:* after a consonant except *y*. The *=y* variant can be nasalized after a nasal syllable. The clitic is segmentally zero (*=∅*) after *y*, as in *X sày=∅* 'it is X only'. The semivowel in the first variant is sometimes barely audible or is dropped entirely, reflecting the general tendency of TgK to delete word-final semivowels. It is regularly heard as simple vowel lengthening after front mid-height vowel in a few combinations: 1Pl pronoun *ɛ́mɛ́=:́* 'it is us', *bè=:* with plural marker. With rare exceptions, the consonant-final cases are human nouns. For an extra *-n* suffix, see (315) at the end of this section.

The tones are as follows for an unpossessed vowel-final stem. A short-voweled <LH>-toned monosyllabic (*Cv̌*) is raised to H-tone, hence *Cv́=ý* (313b). An /H/-toned nonmonosyllabic shifts to {HL}, realized on a trisyllabic as H.H.L, i.e. with only the final syllable L-toned, hence *Cv́Cv́Cv̀=ỳ* (313c). There no tonal change for a bimoraic or longer /LH/ stem (L.H, L.L.H, or long-voweled monosyllabic <LH>), hence *Cv̀(Cv̀)Cv́=ý* and so forth. A noun or NP already ending in an L-toned syllable (which can be a NP with plural *bè*, an /HL/-toned proper noun, or a heavy possessed noun) likewise undergoes no change, hence *…Cv̀=ỳ* (313a).

The clitic itself is partially atonal, often getting its tone by spreading from that of the syllable it cliticizes to. However, it is L-toned after a long H-toned vowel (313d). It is also L-toned when directly added to any possessed noun stem. The regular possessor-controlled overlays are {H} for prosodically light stems and {HL} for heavy stems, so the L-tone on the enclitic is noticeable only after the {H}-toned type (§6.2.1.1). If X represents the prenominal possessor, monosyllabic possessed *[X Cv́]* and *[X Cv́:]* have 'it is' forms *[X Cv́]=ỳ* and *[X Cv́:]=ỳ*, respectively. Bimoraic bisyllabic possessed *[X Cv́Cv́]* has an 'it is' form *[X Cv́Cv̀]=ỳ*, whose entire second syllable is L-toned (313e).

(313) 'It is' clitic after vowel-final stems and NPs

noun or NP	gloss	'it is …'
a. no tone change		
noun or NP with final L-toned syllable		
fántà	(woman's name)	*fántà=ỳ*
ɲɛ̌ bè	'women'	*[ɲɛ̌ bè]=:*
ú $^{\text{HL}}$*tógùrù*	'your-Sg basket'	*ú* $^{\text{HL}}$*tógùrì=ỳ*
/LH/-toned stem, bimoraic or longer		
gɔ̌:	'granary'	*gɔ̌:=ý*
àr^{n}á	'male'	*àr^{n}á=ý^{n}*
	(differs tonally from *àr^{n}á-ỳ^{n}* 'boy', (97a) in §5.1.7)	
tùwó	'stone'	*tùwó=ý*
tògùrú	'basket'	*tògùrí=ý*
b. *Cv̌* to *Cv́=ý*		
ɲɛ̌	'female'	*ɲɛ́=ý^{n}*
nǎ	'person'	*ná=ý^{n}*
jǎ	'flexible branch'	*já=ý*
mɔ̌	'gum (resin)'	*mɔ́=ý^{n}*
c. /H/-toned nonmonosyllabic to {HL} *=ỳ*		
túŋúr^{n}ú	'stool'	*túŋúr^{n}ì=ỳ^{n}*
lú:r^{n}ó	'snake'	*lú:r^{n}ò=ỳ^{n}*
d. final H-toned long vowel (*…Cv́:*)		
í:^{n}	'child'	*í:^{n}=ỳ^{n}*
tò-tó:	'tin can'	*tò-tó:=ỳ*

e. {H}-toned possessed nouns (*X* ^{H}*Cv́*, *X* ^{H}*Cv́:*, *X* ^{H}*Cv́Cv́*)

ú ^{H}*ká*^{n}	‘your-Sg mouth’	*[ú* ^{H}*ká*^{n}*]=ỳ*^{n}
ú ^{H}*bɛ́:*	‘your-Sg excrement’	*[ú* ^{H}*bɛ́:]=ỳ*
ú ^{H}*gír*^{n}*í*	‘your-Sg house’	*[ú* ^{H}*gír*^{n}*ì]=ỳ*^{n}

The clitic is common with pronouns. *kó=ý* ‘it is it’ is used like English *that’s it*, either as an identification with a discourse-definite object, or to mark the end of a time-limited activity or situation.

The semivowel *y* is audible after all 2nd and 3rd person pronouns. After 1Pl *ɛ́mɛ́* there is no *y*, just lengthening of the final vowel to *ɛ́mɛ́=:́* (314c). 3Pl pronoun *bé* and the plural particle *bè* in nonpronominal NPs likewise just lengthen their final vowel. The 1Sg form is phonetic [mi:], which could be marked up as *mí=ý*^{n}, as *mí=:́*, or as *mí:*, see discussion following (54) in §4.3.1 and discussion of (317c) below. The *y* is clear after *u* in the 2Sg pronoun (314a), but nonmonosyllabic nouns ending in *Cu* often combine with *=y* as monophthongized *Ci=y* (indistinguishable from *Ci=:*).

(314) a. *ú=ý*
2Sg=it.is
‘It’s you-Sg.’

b. *wó=ý*
3Sg=it.is
‘It’s him/her.’

c. *ɛ́mɛ́=:́*
1Pl=it.is
‘It’s us.’

d. *mí=ý*^{n} (alternatively transcribable as *mí=:́* or *mí:*)
1Sg=it.is
‘It’s me.’

Nonhuman *kó=ý* ‘it’s it’ is commonly used like English *that’s it!*, for example confirming the correctness of an interlocutor’s pronunciation.

If the predicate is a human singular noun other than a personal name like ‘Fanta’ (313a), a kin term, or the noun *nǎ* ‘person’, a human singular suffix *-n* is often but not always present before the clitic. This suffix optionally appears after 1Sg possessor *mà* before the clitic. When *-n* is present, the ‘it is’ clitic takes its postconsonantal form *=i:*, whose tones are similar to those for postvocalic *=y* (H-tone after a single H-toned syllable, L-tone after an L-tone or after two H-toned syllables). Historically, the suffix *-n* is a vestige of the once general human singular suffix *-n(u). Its synchronic status is obscure, and one might argue that the *n* is now part of an allomorph of the clitic. Or one might write *-ni=:*, since the segmentation is not transparent.

(315) a. *jɛ́mɛ́-n=ì:*
blacksmith-HumSg=**it.is**
‘It’s (or: He/She is) a blacksmith.’ (*jɛ́mɛ́*)

b. *gɔ̀:*^{L}*-*^{H}*gɔ́:-n=í:*
dance(n)^{L}-^{H}dance.Agent-HumSg=**it.is**
‘It’s (or: He/She is) a dancer.’

c. *sùgɛ̌:*^{n} *mà-n=ì:*
mà=ỳ^{n}
younger.sib 1SgPoss(-HumSg)=**it.is**
‘It’s (or: He/She is) my younger same-sex sibling.’

d. *í:*^{n}*-n=ì:*
child-HumSg=**it.is**
‘It’s (or: He/She is) a child.’

e. *ɲɛ̀*^{L} *dègé-n=í:*
woman^{L} short-HumSg=**it.is**
‘It’s (or: He/She is) a short woman.’

f. *nɔ́:* *à*^{n}*sá:rá-n=ì:*
Prox white.person-HumSg=**it.is**
‘This is a white person’

For the tonal adjustment in *dɔ̀gɔ́-n=í:* ‘(it’s) a Dogon’, from *dɔ̀gɔ̌*^{n} ‘Dogon (person)’, see §3.7.4.5.

Singular *-n* can be added to some but not all kin terms (most of which, in Jamsay, do not allow number-marking suffixes except in special contexts). ‘Mother’ and ‘father’ terms normally do not occur with *-n*.

(316) *[ú* ^{HL}*ínà:]=ỳ*^{n}
[2SgPoss ^{HL}mother]=**it.is**
‘It’s (or: He/She is) your-Sg mother.’

NPs ending in *sày* ‘only’ have no audible ‘it is’ clitic, but a phonologically zero ‘it is’ is presumably present in examples like (317a). For any pronoun other than 1Sg, the ‘it is only you/us/him/her/them’ form has no ‘it is’ clitic on the pronoun, so it must be on the ‘only’ word, as in (317b). However, the 1Sg form is phonetic [mí:] with long vowel even in this construction (317c), which suggests that this may now be an unsegmentable form.

(317) a. *dɔ̀gɔ̌*^{n} *bè* *sày=∅*
Dogon Pl only=**it.is**
‘It’s only the Dogon-Pl.’

b. *ú* *sày=∅*
2Sg only=**it.is**
‘It’s only you-Sg.’

c. *mí=ý*^{n} *sày=∅*
1Sg=it.is only=**it.is**
‘It’s only me.’

The ‘it is’ predicate is not suffixally conjugated (to mark the “subject” that is being identified). A “subject” NP or pronoun may appear clause-initially. It is best considered to be a topical NP.

(318) a. *í^{n}* *fántà=ỳ*
1Sg Fanta=**it.is**
‘I am Fanta.’

b. *sè:dú* *dù-dùgí^{n}-n=ì:*
Seydou sorceror-Sg=**it.is**
‘Seydou is a sorceror.’

11.2.1.2 ‘It is not’ (*=y=lò*, *=i:=lò*)

By adding negative *=lò* to the positive ‘it is’ clitic, we get the negative counterpart.

(319) a. *sè:dú=ý=lò*
Saydu=**it.is=Neg**
‘It isn’t Seydou.’

c. *fántà=ỳ=lò*
Fanta=**it.is=Neg**
‘It isn’t Fanta.’

c. *ɛ́mɛ́=:́=lò*
1Pl=**it.is=Neg**
‘It isn’t us.’

d. *nɔ́:* *tùwɔ́=ý=lò*
ProxSg stone=**it.is=Neg**
‘This isn’t a stone.’

e. *[nɔ́:* *nà]* *[ɲɛ̌* *bè]=:̀=lò*
[Prox Pl] [woman Pl]=**it.is=Neg**
‘These are not women.’

The postconsonantal allomorph *=i:* of the ‘it is’ clitic appears with H- rather than L-tone in this combination.

(320) *gɔ̀:^{L}-^{H}gɔ́:-n=í:=lò*
dance^{L}-^{H}dance.Agent-Sg=**it.is=Neg**
‘It isn’t (or: He/She is not) a dancer.’

To negate an NP ending in ‘only’ (*sày*), the combination *sǎy lò* is used.

(321) *[dɔ̀gɔ̌^{n}* *bè* *sǎy]=lò*
[Dogon Pl only]=**Neg**
‘It isn’t only the Dogon-Pl.’

For *lò mà* as rhetorical tag question (*n'est-ce pas?*), see §13.2.1.2.

11.2.1.3 'It is' clitic in complement of 'become' and 'transform'

The verb *táŋá* 'become, turn into' and its causative *tánú-gù* 'transform, convert' take complements consisting of a NP plus the 'it is' clitic (§11.2.5.2).

(322) a.

[sámá	*kà:ⁿ]*	*pèré*	*nɛ́:*	*ná=ýⁿ*	*táŋ-ɛ̀*
[S	also]	other	now	person=**it.is**	become-Pfv

'Sama too became a (full-grown) person.' (2011.1b.02)

b.

ná=ýⁿ	*tán-g-ɛ̀:*	*mà*
person=**it.is**	become-Caus-and.SS	and.then

'(God) made them into people (=adults).' (2011.1b.04)

c.

dùwɔ́	*sǎⁿ*	*ná=ýⁿ*	*tán-g-ɛ̀:*	*mà*
vulture	ReflObj	person=**it.is**	become-Caus-and.SS	and.then

'Vulture turned itself into a human.' (2011.1b.02)

11.2.2 Existential and locative quasi-verbs and particles

11.2.2.1 Existential (*yɛ́* ~ *yɔ́*)

A particle *yɛ́* (for assimilated variant *yɔ́*, see below) is used with the 'have' quasi-verb and other statives, including derived statives. It is disallowed in negative clauses (323b), in relative clauses (§14.1.9.6), after a focalized constituent (§13.1), and with reduplicated forms of verbs such as derived statives (§10.4).

With **'have'** it is obligatory in positive main clauses without a focalized constituent (323a). Its absence from negative clauses is illustrated in (323b).

(323) a.

íⁿ	*[gìrⁿí*	*túrú]*	*yɛ́*	*sà*
1SgSbj	[house	one]	**Exist**	have

'I have a house.'

b.

íⁿ	*gìrⁿí*	*sà:-rá*
1SgSbj	house	have-Neg

'I don't have a/any house.'

yɔ́ with (irregular) vocalic assimilation occurs before locational-existential 'be' quasi-verbs (with human *wɔ̀* or nonhuman *kɔ̀*, which are L-toned in this combination). It is required in an unfocalized positive sentence if no specific locational is given. If there is a locational, *yɔ́* is optional, and when present it tends to emphasize existence ('there is a bird in the house') rather than simple localization ('the bird is in the house'). For more on 'be' quasi-verbs, see the following section.

(324) a.

ú	*nî*	*yɔ́*	*wɔ̀*
2SgSbj	here	**Exist**	be.HumSgSbj

'You-Sg are here.'

b. *ú* *nî* *wɔ̀:-rɔ́*
2SgSbj here be.HumSgSbj-Neg
'You-Sg are not here.'

In addition to defective stative quasi-verbs like *sà* 'have' and *sò* 'be in', *yɛ́* is also common with unreduplicated variants of positive **statives** derived from regular verbs (§10.4).

(325) *nɛ́:* *[sǎⁿ* *^{L}kè]* *yɛ́* *^{L}tɔ̀rⁿɔ̀*
now [Refl ^{L}Top] **Exist** ^{L}perch.Stat
'Now as for him(-self), (he) was (still) perched (on the tree)' (2011.1b.02)

The reduplicated variants of these statives omit *yɛ́*.

Existential *yɛ́* is also attested in texts twice with **progressive** verbs (suffix *-táŋà*, plural-subject *-téŋè*). The example in (326a) was part of the response to a question about which techniques for planting fonio (grain) are practiced in Togo country. The context for (326b) has more of a presentative ('here's …') flavor.

(326) a. *[kó* *bîn]* *[lɛ̌* *lɛ́:-jú* *kà:ⁿ]* *yɛ́* *bì-téŋè*
[Nonh in] [planting plant-Ipfv also] **Exist** do-**Prog.PlSbj**
'They also (in fact) practice planting (fonio seeds) on that (disturbed earth surface).' (2011.1a.01) (*bìrɛ́* 'do')

b. *ìⁿtâyⁿ* *ìg-ɛ́:* *wà* *ìg-ɛ́:* *ìg-ɛ́:,*
my.friend stand-MP.Imprt Quot (repeats)
[[sɔ̀:^{L} *túnɔ́]* *[íⁿ* *tɔ̀]* *sɔ́:* *yɛ́* *pó-táŋà]*
[[thing^{L} one] [here around] thing **Exist** say-**Prog**]
'(He said:) "My friend, stand (=wait)! Something is saying something over here." ' (2011.1b.

A presentative context is also apparent in (327), with a regular imperfective verb, which is uttered (in a tale) as a warning of impending danger.

(327) *[ɲɛ̌-ỳⁿ* *wà]* *[[[kó* *bɔ́rɔ̀]* *^{L}nù]* *wà]*
[girl QuotSbj] [[[Nonh under] ^{L}go.in.Imprt] Quot]
[gɔ̀:nɔ̀-sɔ̌ⁿ *yɛ́* *yě-jú* *gà]*
[raider **Exist** come-**Ipfv** beware]
'She (=step-mother) told the girl, "go in (=hide) under it (=pile of stalks) quickly, (since) raiders are coming!" ' (2011.1b.01)

This highly grammaticalized existential particle is probably related historically to *yɛ̂* (§4.4.2.1), a discourse-definite 'there' adverb that typically occurs in immediate preverbal position. It is compatible with any verb, active or stative, positive or negative. It refers back to a location established in prior discourse. The falling tone of *yɛ̂* 'there' might even explain (historically) why the quasi-verbs are L-toned after existential *yɛ́*. However, if the existential particle evolved out of a 'there' adverb, it did so long ago, since it occurs as a specialized existential particle with statives like 'be' and 'have' in many Dogon languages. In TgK, care must be taken to distinguish the two in texts. In (328), the two actually co-occur, with the 'there' adverb preceding the existential particle.

(328) *[àɲí: kà:^{n}], íyé=ǹ [kó kɛ́nɛ̀] yɛ̂ yɛ́ sò*
[roselle also], again [Nonh among] **there** **Exist** be.in
‘Roselle too, it is also (included) there among those.’ (2011.1a.18)

11.2.2.2 Locational(-existential) copula (*wɔ̀*, *kɔ̀*, negative *wɔ̀:-rɔ́*, *kɔ̀:-rɔ́*)

As in Jamsay and Yorno So, the locational (and existential) ‘be (somewhere)’ predicate distinguishes human from nonhuman forms. Both are phonologically related to pronouns (human 3Sg *wó*, human 3Pl *bé*, nonhuman *kó*). These forms can be used with or without an explicit locational expression. The human/nonhuman opposition is generally maintained in locational senses (‘be present’, ‘be here’), but the nonhuman form is generalized in existential contexts (‘there exists’, ‘there is none’). These copulas are also used as auxiliaries to make adjectives predicative (§11.4.1.1).

The forms are summarized in (329). Those in the ‘be present’ column include existential *yɔ́* ~ *yɛ́*, which is used as a default complement in unfocalized positive utterances. Here the copula is L-toned, even e.g. before *dè* ‘if’ (*yɔ́ wɔ̀ dè* ‘if he/she is present’). The vowel of the existential particle assimilates to the copula in the front/back feature (but not in ATR). The central ‘be at X’ column shows forms used after a marked locational expression (e.g. a postpositional phrase). Here the tone is falling, in careful speech styles. In allegro speech, the copula is often heard with low pitch. The second column from the right shows forms used after expressive adverbials, which again normally have a falling tone, reflecting the syntactic relationship between expressive adverbials and locational expressions. However, the copula becomes H-toned in relative clauses (rightmost column). It also becomes H-toned after an /L/-toned expressive adverbial, see (213f) in §8.4.6.1 and (332b) in §11.2.2.2.

(329) Locational-existential copulas

	‘be present’	‘be at X’	‘be (adverbial)’	relative
Human Sg	*yɔ́ wɔ̀*	*X wɔ̂*	*wɔ̂*	*wɔ́*
Human Pl	*yɛ́ wè*	*X wê*	*wê*	*wé*
Nonhuman	*yɔ́ kɔ̀*	*X kɔ̂*	*kɔ̂*	*kɔ́*

Examples with existential *yɔ́* ~ *yɛ́* are in (330).

(330) a. *sè:dú yɔ́ wɔ̀*
Seydou Exist **be.HumSgSbj**
‘Seydou is present.’

b. *péjú yɔ́ kɔ̀*
sheep Exist **be.NonhSbj**
‘(A) sheep is present.’

c. *ɲɛ́: yɔ́ kɔ̀*
fire Exist **be.NonhSbj**
‘(A) fire is present.’

	d.	*[ɲɛ̌*	*bè]*	*yɛ́*	*wè*	
		[woman	Pl]	Exist	**be.HumPlSbj**	
		‘(Some) women are present.’				

Either the ‘be present’ or the shorter ‘be (somewhere)’ forms are also used after explicit locationals. The ‘be present’ forms tend to have an existential flavor, establishing the existence of a discourse referent, as in ‘there is some money in the village’ as opposed to ‘the money is in the village’ (which specifies the location of an already understood referent). Examples are in (331a-c). Some common nouns denoting locations like *gìr*^{n}*í* ‘house’ (= ‘at home’) and ‘village’ (‘in the village, in town’) may appear without explicit determiners or postpositions.

(331)	a.	*i*^{n}	*àná*	*wɔ̂*		
		í^{n}	*àná*	*yɔ̂:*		
		1Sg	village	(Exist-)**be.HumSgSbj**		
		‘I am in (the) village.’ (*yɔ̂:* contracted from *yɔ́ wɔ̀*)				
	b.	*[àr*^{n}*á*	*bè]*	*gìr*^{n}*í*		*wê*
		[àr^{n}*á*	*bè]*	*gìr*^{n}*í*	*yɛ́*	*wè*
		[man	Pl]	house	Exist	**be.HumPlSbj**
		‘(Some/The) men are in the house (= at home).’				
	c.	*bú:dú*	*àná*		*kɔ̂*	
		bú:dú	*àná*	*yɔ́*	*kɔ̀*	
		money	village	Exist	**be.NonhSbj**	
		‘(Some/The) money is in the village.’				

For the use of these copulas in adjectival predicates, see §11.4.1.1-2 below.

Copulas with expressive adverbials, most of which have no other way to become predicates, are in (332). A few EAs are /L/-toned, see (213f) and (216c), and these require H-toned *kɔ́* (332b) by a minor Tone Polarization process (§3.7.3.4).

(332)	a.	*mǎ:-ŋ-ɛ̀:*	*káɲáw*^{n}	*kɔ̂*	
		dry-Inch-SS.Ant	shriveled	**be.NonhSbj**	
		‘(The calabash) having dried, it is shriveled.’			
	b.	*sǎ*^{n}	*nàr*^{n}*-ɛ́:*	*wùrùjà*	*kɔ́*
		wild.grape	give.birth-SS.Ant	heavy.with.fruits	**be.NonhSbj**
		‘The wild-grape tree (*Lannea*), having borne (fruits), is heavy-laden with fruits.’			

Negative counterparts are in (333). There is no morphological distinction between the forms used in the general sense ‘be absent, not exist’ and those used in ‘not be (in a place)’ with a locational, or ‘not be’ with an adverbial. This is because existential *yɔ́* ~ *yɛ́* is incompatible with negation. One can detect a negative element *-rv́* with variable vowel (due to assimilation), cf. *sà:-rá* ‘not have’.

(333) ‘Be absent’, ‘not be (somewhere)’

Human Sg	*wɔ̀:-rɔ́*
Human Pl	*wè:-ré*
Nonhuman	*kɔ̀:-rɔ́*

Further examples of negative copulas are in (334).

(334) a. *ɲɛ́:* *kɔ̀:-rɔ́*
fire **be.NonhSbj-Neg**
‘Fire is absent.’ = ‘There is no fire.’

b. *í^n* *àná* *wɔ̀:-rɔ́*
1SgSbj village **be.HumSgSbj-Neg**
‘I am not in the village (= in town).’

c. *[ɲɛ̌* *bè]* *wè:-ré*
[woman Pl] **be.HumPlSbj-Neg**
‘(The) women are absent (= not here).’ = ‘There are no women.’

Although *wɔ̂* and *kɔ̂* are stative quasi-verbs, and normally do not take aspectual marking, they can combine with progressive *-táŋà* when they are used to make an expressive adverbial conjugatable (335). Before *-táŋà* the copula is H-toned.

(335) *àr^{n}á-ỳ^n* *kɛ́w^n→* *wɔ́-táŋà*
man-child silent **be.HumSgSbj-Prog**
‘The young man was silent.’ (2011.1b.03)

11.2.2.3 Inchoative ‘become’ (*kɛ́:*, *wɛ́:*) related to ‘be (somewhere)’ quasi-verbs

The (stative) locational-existential copulas (*kɔ̀*, *wɔ̀*, *wè*) described above do not combine with aspectually marked inflectional categories and have no imperative or hortative.

There are, however, alternative stems, nonhuman *kɛ́:* and human *wɛ́:*, that are conjugated like ordinary active verbs. Representative forms, all quite regular, are in (336). There are also causative derivatives, e.g. *kɛ́:-m̀* ‘cause (sth) to become (adverbial)’.

(336) Forms of active copulas

	HumSg	HumPl	NonhSg	NonhPl
perfective	*wɛ́-ɛ̀*	*wɛ́-ɛ̀:-sɛ̂^{n}*	*kɛ́-ɛ̀*	*kɛ́-ɛ̀:-sɛ̂^{n}*
perfective negative	*wɛ̀:-lí*	*wɛ̀:-lâ:*	*kɛ̀:-lí*	*kɛ̀:-lâ:*
imperfective	*wɛ́:-jú*	*wɛ́:-jí*	*kɛ́:-jú*	*kɛ́:-jí*
imperfective negative	*wɛ̂:-rò*	*wɛ̂:-rè*	*kɛ̂:-rò*	*kɛ̂:-rè*
imperative	*wɛ́:*	*wɛ́:-ỳ*	*kɛ́:*	*kɛ́:-ỳ*

The active copula forms are used to “conjugate” expressive adverbials, which have no other way to combine with AMN inflections. Most instances of active copulas in my data involve adverbials.

(337a) shows the (static) copula, and (337b) an aspectually marked active (i.e. dynamic) copula. The active copula is glossed 'become' in interlinears.

(337) a. *tìmɛ́* *gègí→* *kɔ̂*
tree tilted **be.NonhSbj**
'The tree is tilted.'

b. *tìmɛ́* *gègí→* *kɛ́:-jú*
tree tilted **become.Nonh**-Ipfv
'The tree will tilt (become tilted).'

Active copulas can also be used with locational expressions (338b), which however are much more common with stative copulas (338a)

(338) a. *wó* *gìr^{n}í* *yɔ́* *wɔ̀*
3SgSbj house Exist **be.HumSgSbj**
'He/She is at home.'

b. *wó* *gìr^{n}í* *wɛ́:-jú*
3SgSbj house **become.HumSgSbj**-Ipfv
'He/She will be at home (e.g. tomorrow).'
'He/She should be (=probably is) at home.'

kɛ́: and *wɛ́:* have no precise cognates in other Dogon languages known to me. An intransitive verb 'stay, remain' with forms like *bě:* (Jamsay), *bɛ̌:* (Yorno So), and *bìyɛ́* (Yanda Dom) is used in several of the languages to make EAs into dynamic (nonstative) predicates. I conjecture that TgK split *bě: or *bɛ̌: into human *wɛ́:* and nonhuman *kɛ́:* on the model of copulas *wɔ̂* and *kɔ̂*, which already function as (stative) auxiliaries with EAs in many Dogon languages. TgK does use *bɛ̌:* as an auxiliary, but in factitive (i.e. causative) sense with EAs derived from adjectives (§11.4.4).

11.2.2.4 Perfective copulas (*kí-ì*, *wí-ì*) 'be'

The nonhuman active copula *kɛ́:* can be used as a simple predicate without an adverbial to mean '(something) happen, take place'. In this sense, the perfective form *kɛ́-ɛ̀* given above is replaced by *kí-ì* 'it happened, it took place'. There is no change in other inflectional categories, as shown by perfective negative *kɛ̀:-lí* 'it didn't happen' and imperfective *kɛ́:-jú* 'it does/will happen'.

kí-ì can also function as a nonfinal chained verb in the phrase *kí-ì bɛ̀-jù* 'it is possible, it can/could happen'. Imperfective *kɛ́:-jú* seems to have a dubitative modal sense ('might happen' or 'might be the case'). Thus *[ú kè] kɛ̀:-jù* 'it might be yours-Sg' versus *[ú kè] kí-ì* 'it's (definitely) yours-Sg'.

The human counterpart of *kí-ì* is *wí-ì*. In (339) the sense is clearly 'remain'.

(339) *nɛ́:* *[gɔ̌:* *bínì]* *nǎ* *nû-∅* *dè,*
now [granary in] person go.in-Pfv if,
nɛ́: *[dá:rá* *tɔ̀]* *nǎ* *wí-ì* *dè, …*
now [outside at] person **be.HumSgSbj**-Pfv if, …

‘Now, someone goes inside the granary, now someone (else) remains outside, (and …)’ (2011.1a.16)

Compare *sí-ì* as a special form of *sà* ‘have’ (§11.5.2).

11.2.3 Positional statives (*sò* ‘be in’, *nàŋà* ‘be on’, *wàwà* ‘be on’)

The most important of the more specific positional statives are those in (340). The enclosed entity with *sò* may be dry (e.g. grain) or liquid.

(340) Positional statives

	gloss	positive	negative
a.	‘be in (container)’	*yɛ́ sò*	*sò:-ró*
b.	‘be (put) up on (horizontal surface)’	*yɛ́ nàŋà*	*nàŋà=lá*
c.	‘be on (vertical surface)’ ‘be flat on one’s belly’	*yɛ́ wàwà*	*wàwà=lá*

nàŋà and *wàwà*, but not *sò,* are morphologically parallel to regular derived stative verbs (§10.4). They (therefore) also have reduplicated variants without *yɛ́*, viz., *nà-náŋà* and *wà-wáwà*, and they have {HL}-toned unreduplicated variants *náŋà* and *wáwà* after a locational. *wàwà* corresponds to a regular mediopassive verb *wàw-î:* ‘lie down on one’s belly’.

nàŋà is historically related to the archaic causative *ná:-ǹ* ‘put up on (wall)’, (232d) in §9.2.2. *sò* ‘be in’ corresponds functionally to ‘be in’ quasi-verbs in related languages that have initial *t* (Tomo Kan and Toro So *tò*, Donno So *tò:*, Tommo So *tô*), but whether TgK *sò* is a mutation from *tò is unclear.

11.2.4 ‘Know’ and ‘want’

11.2.4.1 ‘Know’ (*í:*^{n} *wɔ̂*, negative *ínɛ́*)

‘Know’ is a transitive predicate consisting of uninflected *í:*^{n} (homophone of ‘child’) plus a copula: human singular *wɔ̂* or human plural *wê*. It translates French *savoir* and *connaître*. It can take an NP object, as in (341a-b). (341b) illustrates how a relative clause can be used to translate an English embedded interrogative.

(341) a.

í^{n}	*sè:dú*	*í:*^{n}	*wɔ̂*
1SgSbj	S	**know**	be.HumSgSbj

‘I know Seydou (man’s name).’

b.

[ɲà^{L}	*wó*	^{H}*yé]*	*í:*^{n}	*wɔ̂*
[place^{L}	3SgSbj	^{H}go.Pfv.Rel]	**know**	be.HumSgSbj

‘I know the place (=I know where) he/she went.’

Prepausally, *wɔ̂* is heard with low pitch in this combination, but if another word follows in the same (prosodic) phrase the initial H-tone component is clear.

The negative counterpart is the irregular *ínɛ́* 'not know', with no copula and no plural-subject agreement.

(342)

ɛ́mɛ́	*bàmàkɔ́*	*ínɛ́*
1PlSbj	B	**not.know**

'We do not know (=are not familiar with) Bamako (city).'

For factive clausal complements of 'know' see §17.2.1, below.

A semantically similar regular verb *jùgɔ́* means 'recognize (the identity of)'. The cognate noun *júgɔ́* means 'knowledge'.

11.2.4.2 'Want' (*ìyɛ́*)

In clause-final position after a NP object, the usual form of the positive 'want' predicate is an {L}-toned *ìyɛ̀*. When pronounced in isolation, with a pronominal object, or before polar interrogative *mà*, fuller forms are heard: singular-subject *ìyɔ̂:*, plural-subject form *ìyê:* . These variants contain contracted versions of copulas *wɔ̀* and plural *wè*, suggesting that the lexically basic form of the predicate is *ìyɛ́*.

(343) a.

ú	*ìŋé*	^{L}*ìyɛ̀*
2SgSbj	what?	^{L}**want**

'What do you-Sg want?'

b.

ɛ́mɛ́	*kògò*^{L}*-tárú*	^{L}*ìyɛ̀*
1PlSbj	chicken^{L}-egg	^{L}**want**

'We would like some (chicken) eggs.'

c.

í^{n}	*kó*	*ìyɔ̂:*
1SgSbj	NonhObj	**want**

'I want it.'

d.

í^{n}	*nɔ́:*	^{L}*ìyɛ̀*
1SgSbj	Dist	^{L}**want**

'I want that (pointing).'

The negative counterpart is *ìyɛ̀*^{L}*=lá* 'not want', optional plural-subject form *ìyɛ̀*^{L}*=lé*. The noun from the same word-family is *ìyɛ́* 'wanting, desire'.

For clausal complements of 'want', see §17.3.6, below.

A semantically closely related verb is *dɛ̀nɛ́* 'seek, look for' (cf. Jamsay *dɛ̀nɛ́* 'want').

11.2.5 Morphologically regular verbs

11.2.5.1 'Remain' (*sígɛ́-*)

'Remain, stay' is *sígɛ́*, a regularly inflected verb. In relative clauses it is common in the sense '(the) remaining (ones)'. Unlike (noncognate) synonyms in other Dogon languages, 'remain' is not used in TgK to make expressive adverbials into dynamic predicates (‘become ADV’). See §11.2.2.3.

11.2.5.2 ‘Become’ (*táŋá*), ‘transform’ (*tánú-gù*)

‘X become Y’, where Y is a NP, is expressed by the verb *táŋá* following the relevant ‘it is’ predicate (§11.2.1.3). There is a transitive counterpart ‘Z transform/convert X into Y’ with the verb *tánú-gù* (§9.2.2).

(344)	a.	*wó*	*à^{n}sá:rá-n=ì:*		*^{L}tàŋ-ɛ̀*
		3SgSbj	white.person-HumSg=it.is		^{L}**become**-Pfv
		‘He/She has become a white person.’			
	b.	*í^{n}*	*à^{n}sá:rá=ý*	*wó*	*^{L}tàn(u)-g-ì*
		1SgSbj	white.person=it.is	3SgObj	^{L}**become-Caus**-Pfv
		‘I transformed him/her into a white person.’			

táŋá *^{L}yè-∅ dè* ‘if (it happens that)’ in conditional antecedent clauses, following an inflected clause (§16.1.3.1), is historically related but is grammatically specialized. *^{L}yè-∅* is the perfective form of ‘go’ used before *dè* ‘if’.

Progressive suffix *-táŋà* (§10.2.2.5) may or may not be related historically.

11.2.5.3 ‘Take place’ (*bɔ̀r-î:*)

An event (concert, hunt, holiday) can be said to ‘take place’ using the verb *bɔ̀r-î:* (simple perfective). The *-î:* is the mediopassive suffix. Other inflected forms are based on /bɔ̀rɔ́-/ without the mediopassive suffix, hence *bɔ̌-jú* ‘will take place’, *bɔ̀-lí* ‘did not take place’, and *bɔ̌:-rò* ‘will not take place’. The morphology, only slightly irregular, is the same as that for *gɛ̀r-î:* ‘look’ (§10.1.3.7) and *líw-ì:* ~ *líy-ì:*) ‘fear’ (§11.2.5.4, just below).

11.2.5.4 ‘Fear, be afraid’ (*líw-ì:* ~ *líy-ì:*)

The ‘X fear Y’ (i.e. ‘X be afraid of Y’) verb has a basically regular paradigm based on stem *líwɛ́* ~ *líyɛ́*, e.g. imperfective *líwɛ́-jú* ~ *líyɛ́-jú*. However, the bare stem and the simple perfective are *líw-ì:*, with a variant *líy-ì:* that is sometimes heard as *lî:* . This limitation of an apparent mediopassive suffix *-i:* to the bare stem and simple perfective is a feature shared with *gɛ̀r-î:* ‘look’ (§10.1.3.7) and *bɔ̀r-î:* ‘take place’ (§11.2.5.3, above).

Stative forms of this verb have not been observed. Perfective forms are used with present reference: *í^{n} líw-ì:* ‘I was afraid’ or ‘I am afraid (=have become afraid)’.

The noun ‘fear’ is *lìwɛ́*. The irregular causative ‘X scare Y, X make Y afraid’ is *lí:-rɛ́-m̀*, including an apparent transitive suffix *-rv-* (§9.3.1) preceding the causative suffix.

(345)	a.	*í^{n}*	*kì-kíjí*	*líwɛ́-jú*
		1SgSbj	bat	**fear**-Ipfv
		‘I am afraid of bats.’		

b. *ú* *úr^{n}í:* *lí:-rɛ́-mí-ɲú*
2SgSbj children **fear-Caus**-Pres
‘You-Sg frighten (the) children.’

For clausal complements of ‘be afraid (to VP)’, see §17.3.10.

11.3 Quotative verb

11.3.1 ‘Say’ verbs

These conjugatable verbs are often omitted in favor of quotative particle *wà*. This particle occurs at the end of a quoted clause, and also at the end of a subject or vocative NP; see §17.1.3-4.

11.3.1.1 *pórù* ‘say, speak’

One common verb meaning ‘say, speak’ is *pórù* (perfective *pór-ì*). It is subject to *rv*-Deletion (§3.5.3.2) before most suffixes, e.g. imperfective *pó-jú*. The imperative is irregular: *pɔ́-nɔ́* ‘say!’. The *-nɔ́* formative, see (281f) in §10.6.1.1, occurs elsewhere only in the imperatives of ‘give’ (*ɔ́-nɔ́*) and the other ‘say’ verb (§11.3.1.2 just below).

The basic meaning of *pórù* is ‘speak’. It can accompany a quotation (346c), but often it takes a nominal complement (‘that’, ‘anything’, ‘what?’) functioning as a pro-form resuming a quotation (346a-b), or describing a topic discussed (346d). It is also common in relative clauses (346e).

(346) a. *wó* *[ú* *nì]* *ìŋé* ^{L}*pòr-ì*
3SgSbj [2Sg Dat] what? ^{L}**say**-Pfv
‘What did he/she say to you-Sg?’

b. *[ɔ̀jɔ̀*^{L} *pɔ̂^{n}]* *pò-lí*
[thing^{L} none] **say**-PfvNeg
‘He/She didn’t say anything.’

c. *[bé* *wà],* *sàjú* *dígɛ́* *pó-jê:*
[3PlSbj QuotSbj], bird chase.Imprt **say**-Ipfv
‘They (=people) may tell them (=children) to drive away the birds, …’ (2011.1a.07)

d. *jír^{n}íŋɛ́* *pór-ɛ̀:-sɛ̂^{n},*
rainy.season speak-Pfv-PlSbj,
ɛ́mɛ́ *[nùŋù-bár^{n}á* ^{L}*kè* *kà:^{n}]* *dág-à→* *pór-ɛ̀:-sɛ̀^{n}*
1PlSbj [dry.season ^{L}Poss also] a.little **speak**-Pfv-PlSbj
‘(We) have spoken about the rainy season. We have also spoken a little about the dry season.’ (2011.1a.33)

e. *[[á:r^{n}ɛ́:* *í^{n}* *pó-jú$^{+H}$]* *gì:^{n}]*
[[previously 1SgSbj **say**-Ipfv.Rel^{+H}] like]
‘as I was saying previously’ (2011.1a.06)

For perfective *pór-ì* after a chained verb in the sense ‘immediately’, see §15.1.9.

11.3.1.2 *gí* ‘say’

Another ‘say’ verb is *gí* (perfective *g-î* and plural *gí-ɛ̀:-sɛ̂^{n}*, imperfective *gí-jú*, irregular imperative *gí-nɛ́*). It is more of a pure quotative than *pórù*, and it typically follows a quoted segment. In (347a), the ‘say’ verb is itself embedded in a quotation, hence the following quotative particle.

(347) a. *yɔ́:* *[[ɛ̀nɛ́* *bè]* ^{HL}*ínà:]=lò* *gí-ɛ̀:* *wà*
NearDist [[Logo Pl] ^{HL}mother]=not.be **say**-Pfv.3Pl Quot
‘(people said:) “they (=twins) said, that one is not their mother.” ’ (2011.1b.04)

b. *á:r^{n}ɛ́:* *ú* *[pɔ́^{n}-ɛ̀^{n}* *dè]* ^{L}*gì-lì*
previously 2SgSbj [decompose-Pfv if] ^{L}**say**-PfvNeg
‘Didn’t you-Sg say previously (=just now), “when it has decomposed”?’ (2011.1a.25)

c. *kó,* *[ɛ̀:rɛ̀^{L} -wɔ̀rú* ^{H}*áɲú]* ^{L}*gì-jì*
Nonh, [peanut^{L}-field ^{H}roselle] ^{L}**say**-Ipfv.PlSbj
‘that, (they) call (it) “peanut-field’s roselle.” ’ (2011.1a.26)

The very common same-subject anterior form is normally pronounced *gɛ́-ɛ̀(:)*. The more regular *gí-ɛ̀:* was also elicited, but it did not occur in this function in texts, perhaps because it is homophonous with the rather common plural-subject perfective form *gí-ɛ̀:* ‘we/you-Pl/they said’ as in (347a) above. Examples of *gɛ́-ɛ̀(:)* are in (348).

(348) a. *yɔ̂-ŋ* *wó* *gɛ́-ɛ̀*
like.that 3SgSbj **say-and.SS**
[after a song] ‘When she said (= sang) like that, …’ (2011.1b.01)

b. *[[î:$^{n+L}$* ^{HL}*ínà:]* *mɔ̀r-ɛ́-ɛ̀:* ^{L}*yè-∅]*
[[child.Def^{+L} ^{HL}mother] be.lost-MP-and.SS ^{L}go-Pfv]
gɛ́-ɛ̀, *wó* *yɔ̂-ŋ*
say-and.SS, 3SgSbj like.that
î:$^{n+L}$ *[bàrá* *jɛ́-ɛ̀:]* *tɛ́:r-ɛ̀:* *mà*
child.Def^{+L} [outback convey-and.SS] burn-and.SS and.then
‘(He said:) “on the grounds that the child’s mother was lost (=died), you took the child like that into the bush and burned it, …” ’ (2011.1b.01)

This verb is also the source of purposive postpositions *gɛ̂:* and *gì* (§8.3.1.1), and of *gɛ̀:*, *gì*, and *g-î dè* in purposive clauses (§17.6.1). Purposives involve mental activity (planning), and since thought can be treated as though spoken out loud in quotatives, the connection between purposive morphemes and ‘say’ makes sense. For example, ‘he came here for the honey’ can be rephrased as ‘saying/thinking “honey” he came here’, and ‘he sat down in order to eat’ can be rephrased as ‘saying/thinking “I/he will eat” he sat down’.

For *gí-ǹ dè* ‘when, after’ (different subject), see §15.2.2.10.

For the form of the quoted material, see §17.1.

11.4 Adjectival predicates

This section treats predicates consisting of an adjective stem (in more or less the same form as in modifying function) plus a copula or stative negative clitic.

For deadjectival inchoative and factitive verbs with senses like ‘become heavy’ and ‘make (sth) heavy’, and with regular verbal inflectional morphology, see §9.5.

11.4.1 Positive adjectival predicates

11.4.1.1 Simple adjective stem plus copula

An adjective can function as a positive predicate when combined with a locational-existential copula (§11.2.2.2). The copula is optionally omitted.

(349) a. *[sùŋù^{L} nɔ́:] gùrú (kɔ̂)*
[rope^{L} Prox] **long** (**be.NonhSbj**)
‘This rope is long.’

b. *[ú ^{H}dɛ́:^{n}] ɔ́gú (wɔ̂)*
[2SgPoss ^{H}elder.sib] **fast** (**be.HumSgSbj**)
‘Your older (same-sex) sibling is fast.’

c. *[ú ^{H}dɛ́:^{n} bè] ɔ́gú (wê)*
[2SgPoss ^{H}elder.sib Pl] **fast** (**be.HumPl**)
‘Your elder (same-sex) siblings are fast.’

11.4.1.2 Adverbial extension of adjective stem (e.g. *-í→*) plus copula

The predicative construction with overt copula favors the use of the adverbial extension *-í→* or allomorph thereof (interlinear gloss “-Adv”) with stems that allow it, like *dògú* ‘heavy’. The extension is absent when the adjective is an NP-internal modifier (350a). When the adjective is predicative, the form with the adverbial extension (350b) and that without the morpheme (350c) are grammatical. This syntactic behavior is typical of expressive adverbials (§8.4.6), as is the fact that the adverbial extension cannot be used before stative negative *=lá* (see the following section).

(350) a. *nà^{L} dògú*
person^{L} heavy
‘a heavy person’

b. *í^{n} dòg-í→ wɔ̂*
1SgSbj heavy-**Adv** **be.HumSgSbj**
‘I am heavy.’

c. *í^{n} dògú wɔ̂*
1SgSbj heavy **be.HumSgSbj**
[= (b)]

Some adjectives do not allow the adverbial extension. For those that do, the form taken by the extension depends on the phonological form of the adjective. It was possible to elicit adverbial forms from the adjectives listed in the left-hand column of (351) below. Several adjectives with final high vowel {*u i*}, ranging from *CvCv* to longer shapes, allow the adverbial extension in the form *-i→*, and preserve the lexical tone (351a-b). Some monosyllabic stems with final nonhigh vowel add *-y→* (351c). Bisyllabic *Cv̀Cv́* stems with final nonhigh vowel lengthen that vowel and keep the /LH/ melody (351d), but similar stems with lexical /H/ melody have an extended form with {HL} pattern (351e). Two stems with *a*-vowel have a final falling-tone (351f). One *C*-final stem is attested with *-i→* as the extension, keeping the lexical /LH/ melody but spreading it over the two syllables of the extended form (351g). All of the adverbial forms in (351) occur with a following stative or dynamic copula, positive or negative (e.g. nonhuman *kɔ̀* 'be', negative *kɔ̀:-rɔ́* 'not be', dynamic *kɛ̂:* 'become'). Some can also be used as nonpredicative adverbs ('far away' etc.).

(351) Adverbial extension of predicative adjective

a. stem ends in *u* or *i*, /LH/ melody

dògú	*dòg-í→*	'heavy'
ɔ̀mú	*ɔ̀m-í→*	'rotten'
ùjú	*ùj-í→*	'slender'
yù:gú	*yù:g-í→*	'slow'
kúrúgú	*kúrúg-í→*	'dense'

b. stem ends in *u* or *i*, /H/ melody

yɛ́rú	*yɛ́r-í→*	'blue'
pírí	*pír-í→*	'white'

c. monosyllabic with final nonhigh vowel

gɛ́^{n}	*gɛ́*^{n}*-y*^{n}*→*	'black'
bá^{n}	*bá*^{n}*-y*^{n}*→*	'red'
mǎ	*mǎ-y*^{n}*→*	'dry'
ɛ̌:	*ɛ̌:-y→*	'tight'

d. *Cv̀Cv́* stem with /LH/ melody and final non-high vowel

gàrá	*gàr-á→*	'big', also adverbial 'a lot, greatly' (§8.4.2)
wàgá	*wàg-á→*	'far, distant'
dègé	*dèg-é→*	'short'
sèré	*sèr-é→*	'diluted'
kìrɛ́	*kìr-ɛ́→*	'difficult'

e. *Cv́Cv́* with final L-toned non-high vowel in extension

dágá	*dág-à→*	'small', also adverbial 'a little' (§8.4.2)
már^{n}*á*	*már*^{n}*-à→*	'big'
wóró	*wór-ò→*	'deep'

f. others whose extension ends with falling tone

wá:	*wá-à→*	'wide'
nà:r^{n}*á*	*nà:r*^{n}*-â→*	'easy'

g. *CvC*		
ɛ̌m	*ɛ̀m-í→*	‘crowded’

11.4.2 Negative adjectival and stative predicates (*=lá*, *=lɛ́*)

The stative negative clitic *=lá* (plural subject *=lɛ́*) is added to an {L}-toned form of the adjective to form a negative predicate. The adverbial extension described above does not occur before the stative negative. This is because the extensions are adverbials rather than adjectives syntactically, and can only be “inflected” via copulas.

(352) a. *sùŋú* *gùrù*^{L} *=lá*
rope long^{L}=**StatNeg**
‘The rope is not long.’

b. *dògù*^{L} *=lá*
heavy^{L}=**StatNeg**
‘He/She/It is not heavy.’ (#*dòg-ì→ =lá* rejected)

11.4.3 Emphatic reduplicated adjectival predicate (Rdp^{L}-^{HL}Adj)

An emphatic adjectival predicate (‘be very ADJ’, ‘be too ADJ’) is formed from the adjectival stem by superimposing an {HL} overlay, and adding an L-toned reduplicative syllable similar in form to reduplications of inflected verbs. The {HL} overlay suggests a connection with comparative forms of adjectives, which has the same overlay (*nà:r*^{n}*á* ‘easy’, comparative *ná:r*^{n}*à* ‘easier’).

(353) *[[nùmɔ́ bè] kè-*^{HL}*kégù] [bàj-ú gɔ̌:-rò]*
[[hand Inst] **Rdp-**^{HL}**hard**] [pull-VblN go.out-IpfvNeg]
‘(The earth) is too hard for (uprooting peanut plants) by hand. Pulling (peanut plants) doesn’t come out (=doesn’t work).’ (2011.1a.21)

The form of the reduplication is further exemplified in (354).

(354)

gloss	adjective	reduplication
a. monosyllabic		
‘dry, hard’	*mǎ*	*mà-mây*^{n}
b. bisyllabic		
‘sweet’	*ɛ́lú*	*ɛ̀-ʔɛ́lù*
‘heavy’	*dògú*	*dò-dógù*
‘easy’	*nà:r*^{n}*á*	*nà-ná:r*^{n}*à*
c. trisyllabic		
‘bitter’	*kágárá*	*kà-kágàrà*
‘dense’	*kúrúgú*	*kù-kúrùgù*

A speaker rejected a (further) reduplication of already lexically reduplicated *tɔ́*^{n}*-tɔ́*^{n} ‘sour’ or *sì*^{n}*-sí:*^{n} ‘small’. Neither has the final falling tone pattern of the reduplications in (354).

11.4.4 Factitive adjectival predicates (*bě:*)

Transitive verb *bě:*, also used elsewhere as a simple transitive ‘put (down)’, can be used as an auxiliary with EAs, both underived (355a) and those derived from adjectives (355b). The sense is factitive: ‘X cause Y to be EA/Adj’. With an ATR shift, *bě:* has plural-subject perfective form *bɛ̌:-sɛ̂*^{n}, which is homophonous to ‘(they) defecated’. Confusion is unlikely since ‘defecate’ always co-occurs with cognate nominal *bɛ́:* ‘excrement’.

(355) a. *kúwɔ́* *sèrí→* *bě-è*
foot sticking.out.foot(EA) **put**-Pfv
‘It (patas monkey) held its foot out (showing the sole).’
(thought to be a gesture of contempt)

b. *lɛ́:-lɛ́:-lɛ́:-lɛ́:* *ká*^{n}*,*
slash-slash-slash-slash narrowly,
ɛ̀m-í→ *ɛ̀m-í→* *bɛ̌:-sɛ́*^{n} *dè, …*
crowded-**Adv** crowded-**Adv** **put**-Pfv.PlSbj if, …
‘They make slashes (with the daba), closely spaced, and make (them) crowded together.’ (2011.1a.18)

11.5 Possessive predicates

11.5.1 ‘Have’ (*sà*, *sè*)

This is another stative quasi-verb, allowing no perfective/imperfective distinctions. The forms are in (356). In the positive combinations, *yɛ́* is the same existential morpheme found (with a phonological disguise) in the locational construction ‘be (somewhere)’, §11.2.2.2, above.

(356)	singular subject	plural subject
‘have’	*yɛ́ sà* [for *sâ*, *sê* without *yɛ́*, see below]	*yɛ́ sè*
‘not have’	*sà:-rá*	*sè:-ré*

The existential morpheme *yɛ́* is always present in positive ‘X has Y’ constructions in elicitation, but it is disallowed in negative counterparts. Examples are in (357).

(357) a. *í*^{n} *gìr*^{n}*í* *yɛ́* *sà*
1SgSbj house Exist **have**
‘I have a house.’

b. *ɛ́mɛ́* *nàŋá* *jó→* *yɛ́* *sè*
1PlSbj cow many Exist **have.PlSbj**
‘We have lots of cows.’

c. *í*^{n} *súgɔ́rɔ́* *sà:-rá*
1SgSbj sugar **have-Neg**
‘I don’t have any sugar.’

d. *ɛ́mɛ́* *péjú* *sè:-ré*
1PlSbj sheep **have-Neg.PlSbj**
‘We don’t have any sheep.’

These predicates may be used in past-time contexts.

(358) *í*^{n} *kòkɛ̌:* *gìr*^{n}*í* *yɛ́* *sà*
1SgSbj formerly house Exist **have**
‘I had a house (in the past).’

For relative clauses with positive *sá* or negative *sà:-rá*, see §14.1.9.6. The existential morpheme is absent in such relatives.

Under some conditions the existential particle is omitted even in positive main clauses, and in this case the quasi-verb takes <HL> tones (*sâ*, plural *sê*). This happens systematically in the delayed future construction with *-jà sâ* (§10.2.2.4). In the regular ‘have’ construction it is attested in texts (but not in elicitation) in examples with a heavy NP as object, as in (687a) in §19.4.1.

11.5.2 Special form of ‘have’ (*sí-ì*)

§11.2.2.4 described special variants of the locational-existential quasi-verbs *wɔ̀* and *kɔ̀*, namely *wí-ì* and *kí-ì*. The special variants are used under limited conditions as perfectives, or chained to a following imperfective form of *bɛ̀rɛ́* ‘get’ in the sense ‘it is possible, it could happen’.

There is a parallel form *sí-ì* for the ‘have’ quasi-verb. It too is attested with ‘get’ (359).

(359) *[kó* ^{L}*ì:*^{n}*]* *há:jɛ̀* *sí-ì* *bɛ̌:-rò*
[NonhPoss ^{L}child] need(n) have-Pfv get-IpfvNeg
‘There is no need (for) its fruits.’ (2011.1a.20)

11.5.3 ‘Belong to’ predicates (*[X kè]=:̀*)

Any alienably possessable noun may occur as the subject (or topic) of a ‘belong to’ predicate, which identifies the owner. The NP or pronoun denoting the owner is followed by possessive *kè=:̀* . It contains the ‘it is’ clitic and a noun-like element (etymologically ‘thing’) denoting the possessed item. The negation with *=lò* (360d) is shared with the ‘it is’ clitic.

(360) a. *gìr*^{n}*í* *[ǎ:* ^{L}*kè]=:̀*
house [who? ^{L}**Poss**]=it.is
‘(The) house belongs to whom?’

b. *[í*^{n} ^{L}*kè]=:̀*
[1SgPoss ^{L}**Poss**]=it.is
‘It (= house) is mine.’ = ‘It belongs to me.’

c. *péjú* *[sè:dú* ^{L}*kè]=:̀*
sheep [Seydou ^{L}**Poss**]=it.is
'(The) sheep-Sg belongs to Seydou.'

d. *[í^n* ^{L}*kè]=:̀=lò*
[1SgPoss ^{L}**Poss**]=it.is=Neg
'It isn't mine.'

11.6 Verb iteration

TgK is quite rich in verb-iteration patterns, found particularly in narratives and with expressive functions in conversation. In addition to the phrasally self-contained iterations in the sections below, see also §15.1.5 for a construction involving iterated {HL}-toned verbs followed by a motion verb.

11.6.1 Iteration of inflected verb forms

An inflected verb form may be iterated one or more times. This is typical of imperfective-system verbs (imperfective, progressive). It emphasizes duration, naturally enough. In narrative it indicates that a particular state continues for a long time (until the next dramatic event).

The subtype in (361a) with preverbal subject pronoun could be interpreted as a headless adverbial relative, or as a focus construction. This does not seem possible for the subtype in (361b) with omitted (though referentially specific) subject pronoun.

(361) a. *[yɔ̂-ŋ* *wó* ^{L}*bì-jù]* *[wó* ^{L}*bì-jù]* *[wó* ^{L}*bì-jù]* *[wó* ^{L}*bì-jù]*
[like.that **3SgSbj** **^{L}do-Ipfv**] **(iterations)**
dùwɔ́
vulture
'She went on doing like that (until) Vulture …' (2011.1b.02)

b. *[bé* ^{L}*lɔ̀:]* *yɔ̂-ŋ* ^{L}*yè-jù,*
[3Pl ^{L}two] like.that ^{L}come-Ipfv,
yɔ̂-ŋ *bǐ-táŋà* *bǐ-táŋà* *[íyé* ^{L}*kè]* *yɛ̌-ɛ̀:* *mà*
like.that **do-Prog** **do-Prog** [today ^{L}Top] go-and.SS and.then
'The two of them (girl and step-mother) were coming like that. (She) kept doing that. This time, …' (2011.

11.6.2 Simple iteration of bare verb stems (self-chaining)

Very often a verb stem is iterated in bare stem form. In other words, a verb is directly chained to itself.

In (362a-c), one or more iterations precede a final inflected form of the same verb. I usually hyphenate the iterations in bare-stem form, but separate a final inflected form.

(362) a. *kɛ́jɛ́-kɛ́jɛ́-kɛ́jɛ́-kɛ́jɛ́-kɛ́jɛ́* *kɛ́jɛ́-sɛ́ⁿ* *dè*
cut-cut-cut-cut-cut cut-Pfv.PlSbj if
'when (they) have cut and cut' (2011.1a.09)

b. *kûǹ-kûǹ-kûǹ* *kúǹ-∅* *dè*
put-put-put put-Pfv if
'if/when he/she has put and put' (*kúǹ-∅* is for *kún-ì*)

c. *nɔ̌:-nɔ̌:-nɔ̌:* *nɔ́-ɛ̀* *dè*
drink-drink-drink drink-Pfv if
'if/when (he/she) has drunk and drunk'

In this case, when the final inflected form requires the augment *-ɛ̀:-*, i.e. for certain types of verb stem before perfective plural-subject *-sɛ̂ⁿ*, the augment also appears on the otherwise uninflected nonfinal occurrences. Examples where this happens, like (363), mimic those with same-subject anterior subordinator, see the preeding section.

(363) *kún-ɛ̀:* *kún-ɛ̀:* *kún-ɛ̀:* *kún-ɛ̀:-sɛ́ⁿ* *dè*
put-Pfv **put-Pfv** **put-Pfv** **put-Pfv** if
'if/when they have put and put'

Likewise, when the final iteration is itself in same-subject anterior subordinating form, with suffix *-ɛ̀:* or allomorph (§15.2.2.1), the suffix can be repeated on the nonfinal iterations. This is sometimes used in narrative to denote extended duration of a state, before the narrator has formulated the following clause (so "same-subject" may not always turn out to be correct).

(364) a. *jé* *jɔ̀w-ɛ́:* *jɔ̀w-ɛ́:* *[fó→* *dɛ̌ⁿ-ɛ̀ⁿ]*
run(n) run-**and.SS** run-**and.SS** [until get.tired-Pfv]
'He ran and ran until he was weary.'

b. *bé* *ɲǎ:* *ɲí-í:* *ɲí-í:*
3PlSbj meal eat.meal-**and.SS** eat.meal-**and.SS**
[ɲá→ *[[sǎⁿ* *bè]* *^{H}bín]* *^{L}jò:-n-ì]*
[until [[ReflPoss Pl] ^{H}belly] ^{L}be.full-Caus-Pfv]
'They ate and ate until they had filled their bellies (=were satisfied).'

c. *[ɲù:^{L}-dúgɔ́* *kà:ⁿ]* *[ɲá* *wò→]*
[fly also] [place all]
tɔ́rⁿ-ɛ̀: *tɔ́rⁿ-ɛ̀:* *gàr-ɛ̂* *dè*
perch-and.SS **perch-and.SS** go.past-Pfv if
'Fly too (=for his part) would perch all over (their bodies) and keep going, …' (2011.1b.02)

d. *[kùⁿ^{L}-kénè$^{+L}$* *^{L}yɔ̀:]* *lágèr-ɛ̀:* *lágèr-ɛ̀:* *lágèr-ɛ̀:,*
[head.Def^{+L} ^{L}NearDist] **shed-and.SS** **(iterations)**
[yɔ́: *ɲɛ̌:rⁿɛ́-táŋà* *mà]*
[NearDist suffer-Prog and.then]
'That head (of hers) was shedding its hair. That (woman) was suffering, …' (2011.1b.02)

The iterated verb may also be in bare stem form nonfinally in a chain. In this case all of the iterations can be in the bare stem form (365). See the sections below for more complex iteration constructions.

(365) a. *ɛ́mɛ́* *gú-gúrù*$^{+L}$ *dàr^{n}á-dàr^{n}á* ^{L}*dàgà-jù*
1PlSbj grass.Def^{+L} **kill-kill** ^{L}leave-Ipfv
'we keep killing the weeds and (we) leave them' (2011.1a.02)

b. *[dɛ̀r^{n}ɛ́* *wàrá-wàrá-wàrá-wàrá-wàrá* *gàr-á→* *bě:]*
[crops **do.farming-do.farming-…** a.lot put]
[bé *gí-ǹ* *dè]*
[3Pl say-and.DS if]
'after they had kept farming the crops a lot (=for a long time) and had let it (=field) rest' (2011.1b.05)

11.6.3 Verb iteration with initial reduced to one syllable (reduplication)

At several points in the recordings, the first member of a simple verb iteration (two tokens of the stem) is reduced in form, the result resembling *Cv-* reduplication.

In (366a-d), the second iteration has its lexical segmental and tonal form, e.g. *-kámá* in (366a), but an initial-syllable long vowel is shortened (366d). The first iteration is reduced to one syllable, heard with H-tone if the stem is /H/ (366a,d), and as <LH> if the stem is /LH/ (366b-c). The stems in question have a medial nasal or rhotic, and the forms in (366) are phonologically similar to iterative distributives that have undergone *rv*-Deletion (§3.5.3.2), like *tú-túrú* 'one (by) one' (§4.6.1.6).

(366) a. *é* *ká^{n}-kámá* ^{L}*dàgà-jù*
2Pl **toss-toss** ^{L}leave-Ipfv
you-Pl keep tossing and leaving (them)' (2011.1a.19)

b. *[[bìrɛ̀*^{L} ^{H}*síg-ɛ́]* *nà]*
[[work(n)^{L} ^{H}remain-Pfv.Rel] Pl]
bà^{n} *mɔ̌-[mɔ̀r^{n}-î:],*
manner **assemble-[assemble-MP]**,
jú: ^{L}*kè,* *[bà^{nL}* *bé* ^{H}*bír-ɛ́]* *gì:^{n}*
millet ^{L}Poss, [manner^{L} 3PlSbj ^{H}do-Pfv.Rel]] like
'the (same) way they (=people) kept getting together to do the jobs that remained (for) millet' (2011.1a.25)

c. *[gàm*^{L} ^{H}*ná]* *[[kó* ^{H}*dógó]* *tɔ̀]*
[some^{L} ^{H}person] [[Nonh ^{H}after] around]
[gàmá *kèrú* *bǎ-bàrá* *mɔ̌:-n-ɛ̀:-sɛ̂^{n}* *dè]*
[some stem **gather-gather** assemble-Caus-Pfv-PlSbj if]
'Some people, after that, they sometimes keep gathering the stems together, …' (2011.1a.31)

d. *tɛ́-tɛ́rɛ́* *tɛ́:rɛ́-jú* *bè→*
chop-chop burn-Ipfv and
'there is chopping and burning the small bushes, (and)…' (2011.1a.01)

In (367), two verbs are iterated in a special prosodic pattern with H-toned *Cv́-* first iteration and {L}-toned unreduced second iteration. Except for the syllabic reduction of the first iteration, this is remniscent of a minor distributive iteration of adjectives (§4.5.2).

(367) a. *[[ɲà*^{L} *túnɔ̀*$^{+L}$*]* *wɔ́-ní:]* *dùw-ɛ́:-jô:,*
[[place^{L} one.Loc^{+L}] be.HumSgSbj-while.SS] carry-MP-Ipfv
[kó^{H}*-*^{L}*[kòlò-m̀]* *bá*^{H}*-*^{L}*bàrà*
[**go.around**^{H}**-**^{L}[**go.around**-Caus] **gather**^{H}**-**^{L}**gather**
jɛ̌:r-ì *dè]* *dùw-ɛ́:*
bring-Pfv if] carry-MP
'(You) carry (it) being in one place (in one method), (and) you carry (it) after (you) have gone all over and gathered it (from the small piles) and brought it (in the other method).' (2011.1a.12) (*kóló-m̀*, *bàrá*)

b. *ɛ́mɛ́* *[[ɲú:* *kɛ́nɛ̀]* *gù-gùrù*^{L} ^{H}*só]*
1PlSbj [[millet among] grass^{L} ^{H}be.in.Rel]
kó *kó*^{H}*-*^{L}*kò:jù* *dǎ*^{n}*-jê:*
NonhObj **dig.up**^{H}**-**^{L}**dig.up** kill-Ipfv
'We might keep digging up (with a daba) and killing the (old) weeds that are among the millet (sprouts), (and) …' (2011.1a.02) (*kó:jù*)

c. *bé* *gǔŋ-gǔŋ* *sú*^{H}*-*^{L}*sù:rù* *tí-táŋà*
3PlObj take.out-take.out **move.down**^{H}**-**^{L}**move.down** send-Prog
'(from his perch on top of the tree he) kept sending them (=the children) down away from (there)' (2011.1b.02) (*sú:rù*)

11.6.4 Iteration with presuffixal vocalism of verb stem

There is also an example in the texts involving iterated verbs that are chained to a different inflected verb ('gather'), and that have presuffixal vocalism (368). This vocalism is clear in *ú:-nɔ̀*, but ambiguous in *gɛ̀rɛ́*.

(368) *gɛ̀rɛ́* *gɛ̀rɛ́-sɛ́*^{n} *dè,*
cut.off **cut.off**-Pfv.PlSbj if,
ɲù:^{L} *-jùrɔ́* *ú:-nɔ̀* *ú:-nɔ̀* *ú:-nɔ̀* *gàrá-sɛ́*^{n} *dè,* …
millet^{L}-pile **lay** **lay** **lay** gather-Pfv.PlSbj if, …
'(you) will cut off grain spikes and gather and lay them in several small piles …' (2011.1a.12)

My assistant suggested that the presuffixal vocalism may be an idiosyncrasy of certain speakers, and he preferred *ú:-ǹ* (bare stem, or possibly perfective) instead of *ú:-nɔ̀*. Note that *ú:-nɔ̀* has the same tones as *ú:-ǹ*, and that *ú:-nɔ̀* with these tones does not correspond to any normal inflected form (contrast imperative *ú:-nɔ́*). So I take (368) to be a stylized expressive construction that has developed out of an original iterative chain.

11.6.5 Verb iteration of type [verb$_{1}^{H}$*-lé (gá:)* verb$_{1}$-(inflection)]

Another iteration type involves one instance of the verb stem with {H} overlay followed by suffix *-lé*, then optional *gá:*, then a second occurrence of the verb stem in whatever inflection is appropriate in the larger sentence. Additional iterations of the bare stem may be added between the two. It appears that some speakers use *gá:* while others do not.

This construction is attested in contexts involving demonstrations of how a continuous or repetitive action is performed (e.g. in teaching a child, or showing a foreigner, how to use a hoe). For *gá:* in constructions describing parallel alternative eventualities, see §19.2.2. More doubtful is a connection with possessed noun *gá:* meaning ‘something like X’ (with possessor X), see §8.4.1.

The suffix *-lé* in this construction is distinct from prohibitive suffix *-lé*, which does not impose an {H} overlay on the stem (§10.6.1.2). However, the two *-lé* forms are homophonous after lexically /H/-toned stems, e.g. *á:* ‘catch’. The idiosyncratic segmental changes (for ‘come’, ‘bring’, and ‘take away’) that apply to prohibitive suffix *-lé* (*yě-lé*, *jê:-lè*, *jâ:-lè*) do not occur in this construction, hence *yérɛ́*^{H}*-lé (gá:) yèrɛ́* ‘keep coming (like this)’. These three verbs, however, do not appear to be widely used in this iterative construction. Verbs like *bìrɛ́* ‘do’ do not undergo *rv*-Deletion in the iterative construction; compare prohibitive *bǐ-lé* ‘don’t do!’ with iterative *bírɛ́*^{H}*-lé (gá:) bìrɛ́* ‘do (like this)’.

(369) a. *[ɲú: ^{L}yɔ̀:] tɔ́-ɛ̀ dè, pílé-m̀ gɛ̀-gɛ̀rɛ́-jú,*
[millet ^{L}NearDist] sprout-Pfv if, again Rdp-cut.off-Ipfv,
[gɛ́rɛ́^{H}-lé ^{L}gɛ̀rɛ̀-jù]
[**cut.off^{H}-Iter** ^{L}cut.off-Ipfv]
[kó ^{H}bɔ́^{n}] gɛ̀r-ú gí-jí
[NonhPoss ^{H}name] cut.off-VblN say-Ipfv.PlSbj
‘When (they) have hacked down that millet, they will also (=subsequently) cut off the grain spikes (with a knife). They keep cutting off the grain spikes. They call it “cutting off (the grain spikes).” ’ (2011.1a.09)

b. *[gàmà^{L} ^{H}ná] [mómó^{H}-lé mòmó mòm-ê dè]*
[some^{L} ^{H}person] [**uproot^{H}-Iter** uproot uproot-Pfv if]
[kámá-kámá ^{L}dàgà-jù]
[throw-throw ^{L}leave-Ipfv]
‘Some people thoroughly uproot (all the weeds, by hand) and toss and leave (them).’ (2011.1a.20)

The *-lé* suffix in the iterative construction probably reflects an original verbal noun suffix (cognates in Najamba-Kindige and Yanda Dom).

11.6.6 Verb iteration of type [verb$_{1}$-Pfv *mà→ é→* verb$_{1}$-Pfv]

In another type of iteration, expressing definitiveness (rather than repetition) of the denoted event, two identical perfective verbs are juxtaposed. The first is followed by *mà→* (yes-no interrogative, also the ‘or’ disjunction), and this is separated from the second occurrence by *é→* ‘yes’. The construction therefore contains a miniature question-answer sequence.

(370) a. *gɛ̀rɛ́-sɛ́^{n} dè, gɛ̀r-ɛ́:*
cut.off-Pfv.PlSbj if, cut.off-and.SS
[nɛ́: gɛ̀r-ú dòg-ê mà→ é→ dòg-ê dè], …
[now cut.off-VblN **end-Pfv** **Q** **yes** **end-Pfv** if], …
'When (they) had cut off the grain spikes, they cut them off and then, when the cutting off was well and truly finished, …' (2011.1a.09)

b. *kún-ì mà→ é→ kún-ì*
put-Pfv Q yes put-Pfv
'(he/she) (had) definitively put'

c. *kún-ɛ̀:-sɛ́^{n} mà→ é→ kún-ɛ̀:-^{L}sɛ̀^{n}*
put-Pfv-PlSbj Q yes put-Pfv-^{L}PlSbj
'(they) (had) definitively put'

11.6.7 Verb iteration plus *mà*

In textual passage (371), the verb 'listen' is iterated and followed by *mà*. The vocalism of 'listen', elsewhere [+ATR] *kéŋìrì* (imperative *kéŋéré*) but here mixed-ATR, suggests that this is an iterative variation on *kéŋɛ̀r-ɛ̀: mà* 'listened and …' (same subject anterior). For the non-iterative version see §15.2.2.2.

(371) *[yɔ̂-ŋ wó gɛ́-ɛ̀]*
[like.that 3SgSbj say-and.SS]
[yɛ̀^{L} ná:] kéŋɛ̀rɛ̀-kéŋɛ̀rɛ̀ mà,
[woman^{L} old] **listen-listen** and.then,
î: … wà,
hey! … Quot,
'When she (=spirit of dead girl) said (= sang) like that, an old woman was listening. She (=old woman) said, wow!…' (2011.1b.01)

12 Comparatives

12.1 Asymmetrical comparatives

12.1.1 Asymmetrical comparatives without *gá:rá* ‘more’

12.1.1.1 Predicative adjective with *là* ‘than’ and comparandum

In positive adjectival predicates (‘be long’), the adjectival stem may be extended with adverbial *-i→* (or variant), and it is often followed by a copula. In negative adjectival predicates, the extension is absent and the adjective, in {L}-toned form, is followed by stative negative clitic *=lá*. See §11.4.1.2 for positive and §11.4.2 for negative predicates.

In one common positive comparative adjectival predicate construction (‘be longer than X’), the adjectival stem follows the comparandum (‘than X’), which has the form *X là*. There is no copula, and no final extension on adjectives like *dògú* ‘heavy’, so the construction is rather tight (almost compound-like) and is not merely a regular adjectival predicate plus a comparandum (372).

(372) a. *wó [má là] gùrú*
3SgSbj [1Sg **than**] long
‘He/She is longer (=taller) than I (am).’

b. *tùwó [ú là] dògú*
#dògú kɔ̂
#dòg-í: kɔ̂
stone [2Sg **than**] heavy
‘The rock is heavier than you-Sg (are).’

The adjective may drop its tones (to *gùrù*, *dògù*, etc.), especially at the end of a fairly long clause with no following particle. This is parallel to tone-dropping in verbs in this position.

The negative counterpart is illustrated in (373). The adjective takes its usual negative predicative form, {L}-toned with following stative negative clitic. Here the only difference between the comparative and the regular construction is the addition of the comparandum.

(373) *tùwó [ú là] dògù*^{L}*=lá*
stone [2Sg **than**] heavy^{L}=StatNeg
‘The rock is not heavier than you-Sg (are).’

A slightly different construction for positive adjectival comparatives involves the addition of *sìgɛ́* ~ *sìgɛ̀* ‘more’. In this case, the predicate is identical to the regular (noncomparative) adjectival predicate. Specifically, a copula is often present, and adjectives like ‘heavy’ may take their extended adverbial form (374).

(374) *tùwó [ú là] sìgɛ́ dòg-í: kɔ̂*
stone [2Sg **than**] **more** heavy-Adj be.NonhSbj
‘The rock is heavier than you-Sg (are).’

12.1.1.2 Verbal predicate plus *sìgɛ́* ~ *sìgɛ̀* 'more' and *là* 'than'

Any verb or other predicate can be expanded into an asymmetrical comparative by adding *sìgɛ́* 'more', preceded by a comparandum phrase *X là* 'than X'. *sìgɛ́* is often heard as {L}-toned *sìgɛ̀*, especially (by tonal dissimilation) before a verb or other word beginning with an H-tone.

The syntax of *sìgɛ́* ~ *sìgɛ̀* can be clarified by glossing it adverbially, i.e. as 'to a greater extent (than X)'. However, it directly follows the comparandum and may be prosodically bracketed with it.

The verb (or quasi-verb) has exactly the same form as in clauses without *sìgɛ́*. As usual when following one or more other nonpronominal constituents, the imperfective (positive) verbs in (375a-b) usually drop tones. Also as usual, the optional plural-subject form of the verb is allowed (375d).

(375)	a.	*wó*	*[má*	*là]*	*sìgɛ̀*	*kɛ̀ɲɛ́*	^{L}*nɔ̀ː-ɲù*
		3SgSbj	[1Sg	**than**]	**more**	millet.beer	^{L}drink-Ipfv

'He/She drinks millet beer to a greater extent than me.'
[= '… drinks more millet beer than I (do)']

b.	*í*^{n}	*[ú*	*là]*	*sìgɛ́*	^{L}*bɛ̀-jù*
	1SgSbj	[2Sg	**than**]	**more**	^{L}get-Ipfv

'I will get more than you-Sg (will).'
[tone-dropped from *bɛ̌-jú*]

c.	*í*^{n}	*[ú*	*là]*	*sìgɛ́*	*bɛ̌ː-rò*
	1SgSbj	[2Sg	**than**]	**more**	get-IpfvNeg

'I won't get more than you-Sg (will).'

d.	*bé*	*[ú*	*là]*	*sìgɛ́*	*bɛ̌ː-rè*
	3PlSbj	[2Sg	**than**]	**more**	get-IpfvNeg.PlSbj

'They won't get more than you-Sg (will).'

e.	*í*^{n}	*[ú*	*là]*	*sìgɛ̀*	*péjú*	*sà*
	1SgSbj	[2Sg	**than**]	**more**	sheep	have

'I have sheep to a greater extent than you-Sg.'
[= '… have more sheep than you (do)']

When *sìgɛ́* is followed by a positive or negative perfective verb, as in (376a-b) below, the verb gets an {HL} overlay (for more examples of this overlay see the constructions with *gá:rá* 'more' in §12.1.2). The overlay is applied in the same way as the {HL} overlay on perfective verbs after a focalized subject (§13.1.1). For trisyllabics, the tone pattern is H.L.L for positive perfective verbs, as in *gɛ̀gír-ì* 'tilted', *sìgɛ́* ^{HL}*gɛ́gìr-ì* 'tilted more (than…)'. A monosyllabic example is *gǒ-è* 'went out', *sìgɛ́* ^{HL}*gó-è* 'went out more (than…)'. See (402) for further examples with focalized subjects. For negative perfective verbs, the tone break is at the stem-suffix boundary; for examples with focalized subjects see (403).

When *sìgɛ́* is followed by an H-tone, as it always is when it precedes an {HL}-toned perfective verb, *sìgɛ́* normally surfaces with {L} tones. Synchronically this could be analysed as an {HL} overlay on the verb, followed by a low-level tone dissimilation (*sìgɛ́* → *sìgɛ̀* before H-tone). Diachronically, it could be that the final H-tone of *sìgɛ́* shifted to the right in a subset of such constructions and generalized from there.

(376a) illustrates *sìgɛ́* in a perfective positive clause. (376b) does the same for a perfective negative clause. Noncomparative clauses without *sìgɛ́* show the normal tones of the verb, without the {HL} overlay (376c-d). In (376e) the two comparanda are non-subjects.

(376) a. *í^{n}* *[ú* *là]* *sìgɛ̀*^{L} ^{HL}*bɛ́r-ɛ̀*
1SgSbj [2Sg **than**] **more**^{L} ^{HL}get-**Pfv**
'I got (=obtained) more than you-Sg (did).'

b. *í^{n}* *[ú* *là]* *sìgɛ̀*^{L} ^{HL}*bɛ́-lì*
1SgSbj [2Sg **than**] **more**^{L} ^{HL}get-**PfvNeg**
'I did not get more than you-Sg (did).'

c. *í^{n}* *ìsí* ^{L}*bɛ̀r-ɛ̀*
1SgSbj dog ^{L}**get-Pfv**
'I got a dog.'
[< *bɛ̀r-ɛ̂*]

d. *í^{n}* *ìsí* *bɛ̀-lí*
1SgSbj dog **get**^{L}-PfvNeg
'I didn't get a dog.'

e. *í^{n}* *péjú* *[ɛ̀r^{n}ɛ́* *là]* *sìgɛ̀* ^{HL}*lág-ɛ̀*
1Sg sheep [goat than] more ^{HL}hit-Pfv
'I hit-Past (the) sheep more than (I hit) (the) goat.'

There is no positive construction directly expressing the sense 'VP less than X'. This sense can be expressed using a negation of *bǎ:* 'equal' (§12.2.1, below).

12.1.2 Asymmetrical comparatives with *gá:rá* 'more'

12.1.2.1 {HL}-toned predicative adjective with *gá:rá* 'more', *sógò* 'than'

In another asymmetrical comparative construction with a predicative adjective, the adjective is preceded by *gá:rá* 'more'. The adjective itself has {HL} overlay, suggesting that *gá:rá* (or some other preverbal constituent) is treated as focal. In textual examples, *gá:rá* is sometimes omitted, so the {HL} tone on the adjective is diagnostic of this construction, as opposed to that described in §12.1.1.1. The copula, e.g. *kɔ̂* 'be (nonhuman)' as in (non-comparative) *nà:r^{n}á kɔ̂* 'it is easy', is absent. The comparandum (if overt) is expressed as *[X sógò]* 'than X', i.e. 'in comparison to X'. *sógò* implies more conceptual effort by the person doing the comparison than does *là*, and one could translate *[X sógò]* as 'in comparison to X' or 'with respect to X'. Elsewhere *[X sógò]* can also be translated 'because of X', again with emphasis on human reasoning.

The construction is exemplified in (377) with *nà:r^{n}á* 'easy' and *gùrú* 'long'. (377b) represents the type with *gá:rá* omitted. *sógò* 'than' is present in (377c).

(377) a. *[lɛ̀-kɔ̌^{n}* *bɛ̀]* *gá:rá* ^{HL}*ná:r^{n}à*
[pick.hoe with] **more** ^{HL}**easy**
'It (=planting) is easier with a pick-hoe.'

b. *[kó* *bè]* $^{\text{HL}}$*ná:r^{n}à*
[Nonh with] $^{\text{HL}}$**easy**
'It (=planting) is easier with it (pick-hoe).' (2011.1a.01)

c. *[kɔ̌^{n}* *sógò]* *lɛ̀-kɔ̌^{n}* *gá:rá* $^{\text{HL}}$*gúrù*
[daba **than**] pick.hoe **more** $^{\text{HL}}$**long**
'A pick-hoe is longer than a daba (short-handled hoe).'

Monosyllabic adjectives realize {HL} as falling tone: *wá:* 'wide, spacious', *gá:rá* $^{\text{HL}}$*wâ:* 'wider'. Trisyllabic adjectives realize {HL} as H.L.L, i.e. with the tone break near the left edge: *déméré* 'fat', *gá:rá* $^{\text{HL}}$*démèrè* 'fatter'; *yùgùjú* 'short, runty', *gá:rá* $^{\text{HL}}$*yúgùjù* 'shorter, runtier'.

The *[X sógò]* comparandum is preclausal, unlike *[X là]* in the other comparative construction. This can be seen by the positions of the two 1Sg comparanda relative to the clause-initial subject pronouns in (378a-b), confirmed by the position of the nominal comparandum in (377c) above. Note also that different forms of the 1Sg pronoun are used in (378a) and (378b). Compare the difference in English between 'you are taller than I/me' and 'compared to me, you are taller'.

(378) a. *[mí:* *sógò]* *ú* *gá:rá* $^{\text{HL}}$*gúrù*
[**1Sg** **than**] 2SgSbj more $^{\text{HL}}$long
'You-Sg are taller than I (am).'

b. *ú* *[má* *là]* *(sìgɛ́)* *gùrú*
2SgSbj [**1Sg** **than**] (more) long
[=(a)]

Negation is expressed by an {H}-toned adjective followed by an L-toned form *=là* of the stative negative clitic. In effect, the {HL} overlay controlled by *gá:rá* is realized on the entire negative predicate, with the tone break at the stem-suffix boundary. This tone pattern matches that of perfective negative verbs when defocalized, see (403) in §13.1.1. Compare $^{\text{HL}}$*ná:r^{n}á=là* in (379) below with non-comparative *nà:r^{n}à*$^{\text{L}}$ *=lá* 'it is not easy', where the H-toned form of the stative negative controls tone-dropping on the adjective *nà:r^{n}á*.

(379) *kà:ná* *gá:rá* $^{\text{HL}}$*ná:r^{n}á=là*
now **more** $^{\text{HL}}$easy=**StatNeg**
'It is not easier now (than before).'

12.1.2.2 {HL}-toned verb plus *gá:rá* 'more' and *sógò* 'than'

The combination of *gá:rá* 'more' and *sógò* 'than' can also occur with verbs as predicates. If *gá:rá* precedes a (positive or negative) perfective verb, the verb gets the {HL} overlay (380a-b). This happens even when *gá:rá* is separated from the perfective verb by an object NP or other constituent (380c-d). In (380c), *sɔ̌^{n}* 'horse(s)' is heard as {L}-toned *sɔ̀^{n}* before the initial H-tone of the verb; this is another case of low-level tonal dissimilation, see §12.1.1.2 above for similar treatment of *sìgɛ́* 'more'. There is no tonal dissimilation with an /H/-toned noun like 'sheep' in (380d). In (380d) the two comparanda are non-subjects (temporal adverbs).

(380) a. *[ú sógò] mí: gá:rá* ^{HL}*bɛ́r-ɛ̀*
[2Sg **than**] ISg **more** ^{HL}get-**Pfv**
'I got (=obtained) more than you-Sg (did).'
[for *bɛ̀r-ɛ̂*, or tone-dropped *bɛ̀r-ɛ̀*]

b. *[ú sógò] mí: gá:rá* ^{HL}*bɛ́-lì*
[2Sg **than**] ISg **more** ^{HL}get-**PfvNeg**
'I did not get more than you-Sg (did).'
[for *bɛ̀-lí*]

c. *[ú sógò] mí: gá:rá sɔ̀*^{n} ^{HL}*bɛ́r-ɛ̀*
[2Sg **than**] ISg **more** horse ^{HL}get-**Pfv**
'I got more horses than you-Sg (did).' (*sɔ̌*^{n} 'horse')

d. *[ú sógò] mí: gá:rá péjú* ^{HL}*bɛ́r-ɛ̀*
[2Sg **than**] ISg more sheep ^{HL}get-**Pfv**
'I got more sheep than you-Sg (did).'

e. *í*^{n} *[yá: sógò] íyé gáára ɔ̀jɔ́* ^{HL}*bɛ́r-ɛ̀*
1Sg [yesterday than] today more thing ^{HL}get-Pfv
'I earned more today than (I did) yesterday.'

The {HL}-toned form of the perfective verb used in these comparatives does not allow plural-subject marking. While elsewhere we find *bɛ̀r-ɛ̂* 'got' and optional plural-subject *bɛ̀r-ɛ́-sɛ̂*^{n}, the {HL} form in comparatives is always ^{HL}*bɛ́r-ɛ̀* even with plural subject (381b). Correlated with this is the fact that a subject (minimally, a pronoun) is obligatory before *gá:rá*. So the plural-subject in non-comparative (381a) can be expressed either by a clause-initial pronoun (optional, and often omitted in textual passages) or by verbal suffixation. In comparative (381b), the 3Pl subject pronoun is obligatory and the verb, which now has the {HL} overlay, cannot mark plural subject.

(381) a. *(bé) péjú bɛ̀r-ɛ̂* / *bɛ̀rɛ́-sɛ̂*^{n}
(3PlSbj) sheep get-Pfv(-PlSbj)
'They got a sheep.'

b. *[ú sógò] bé gá:rá* ^{HL}*bɛ́r-ɛ̀* (#*-sɛ*^{n})
[2Sg **than**] 3PlSbj **more** ^{HL}get-Pfv
'They got more than you-Sg (did).'

The {HL} tone does not appear on verbs other than perfective (positive and negative). The imperfective (positive) is therefore frequently subject to tone-dropping (382a), while the imperfective negative has its usual tonal shape (382b).

(382) a. *[ú sógò] mí: gá:rá* ^{L}*bɛ̀-jù*
[2Sg **than**] ISg **more** ^{L}get-Ipfv
'I will get more than you-Sg (will).'
[tone-dropped from *bɛ̌-jú*]

b. *[ú sógò] mí: gá:rá bɛ̂:-rò*
[2Sg **than**] ISg **more** get-IpfvNeg
'I will get more than you-Sg (will).'

12.1.3 {HL} overlay with other gradient quantifiers

The {HL} overlay on predicates (adjectives, perfective verbs) is found not only in comparative constructions, but also with adverbials *gàr-á→* and *sɛ̂y^{n}* 'a lot, very much', adverbial *dág-à→* 'a little, somewhat', and with numerals. In other words, the {HL} overlay occurs in constructions where the quantity (degree) of the quality or eventuality is explicitly specified. However, the {HL} overlay is used with 'a lot' and 'a little' in a more restricted range of contexts than with asymmetrical comparatives. 'A lot' and 'a little' also normally directly precede the predicate, while *gá:rá* 'more' often precedes intervening constituents such as an object NP.

For perfective verbs, compare *dàg-ɛ̂* 'left, abandoned' in (383a) and plural-subject *dàgá-sɛ̂^{n}* in (383b), where the quantity is not at issue, with invariant {HL}-toned *dág-ɛ̀* after 'a lot' or 'a little' in (383c-e).

(383) a. *í^{n} tùwó dàg-ɛ̂*
1SgSbj stone leave-Pfv
'I left a stone (there).'

b. *bé tùwó dàgá-sɛ̂^{n}*
3PlSbj stone leave-Pfv.PlSbj
'They left a stone (there).'

c. *wó gàr-á→ ^{HL}dág-ɛ̀*
3SgSbj a.lot **^{HL}leave-Pfv**
'He/She left a lot (there).'

d. *bé gàr-á→ ^{HL}dág-ɛ̀* (#*dág-ɛ̀:-sɛ^{n}*)
3PlSbj a.lot **^{HL}leave-Pfv**
'They left a lot (there).'

e. *í^{n} dágà→ ^{HL}dág-ɛ̀*
1SgSbj a.little **^{HL}leave-Pfv**
'I left a little (there).'

The {HL} overlay also appears on the verb after object NPs ending in a numeral (384a-b). Again, explicit plural-subject marking is not allowed (384b). Verbs after object NPs ending in a noun, adjective, or 'all' quantifier have their regular forms, including optional plural-subject marking (384c-e).

(384) a. *í^{n} [péjú pérú] ^{HL}dág-ɛ̀*
1SgSbj [sheep ten] **^{HL}leave-Pfv**
'I left ten sheep.'

b. *bé* *[péjú* *pérú]* ^{HL}*dág-ɛ̀* (#*dágà-sɛ̀*^{n})
3PlSbj [sheep ten] ^{HL}**leave-Pfv**
‘They left ten sheep.’

c. *bé* *[pèjù*^{L} *márⁿá]* *dàgá-sɛ̂*^{n}
3PlSbj [sheep^{L} big] **leave.Pfv**-PlSbj
‘They left a big sheep.’

d. *bé* *péjú* *dàgá-sɛ̂*^{n}
3PlSbj sheep leave.Pfv-PlSbj
‘They left a sheep.’

e. *bé* *[péjú* *sâ:*^{n}*]* *dàgá-sɛ̂*^{n}
3PlSbj [sheep all] leave.Pfv-PlSbj
‘They left all the sheep.’

My assistant did not apply {HL} to perfective negative verbs after ‘a lot’ or ‘a little’ or after a numeral. So *dàgà-lí* has its regular tonal form in (385a-c), with tone-dropped stem and H-toned suffix, in contrast to the {HL} overlay in ^{HL}*dágà-lì* in a sentence with *gá:rá* ‘more’ (385d). Explicit plural-subject marking is allowed (385b,e). The direct object ‘sheep’ precedes ‘a lot’ (385a) but follows ‘more’ (385d).

(385) a. *wó* *péjú* *gàr-á→* *dàgà-lí*
3SgSbj sheep a.lot leave-PfvNeg
‘He/She didn’t leave a lot of sheep (there).’

b. *bé* *péjú* *gàr-á→* *dàgà-lâ:*
3PlSbj sheep a.lot leave-PfvNeg.PlSbj
‘They didn’t leave a lot of sheep (there).’

c. *í*^{n} *[péjú* *pérú]* *dàgà-lí*
1SgSbj [sheep ten] leave-PfvNeg
‘I didn’t leave ten sheep (there).’

d. *[mí:* *sógò]* *wó* *gá:rá* *péjú* ^{HL}*dágá-lì*
[1Sg **than**] 3SgSbj **more** sheep ^{HL}leave-**PfvNeg**
‘He/She didn’t leave more sheep than I (did).’

e. *[mí:* *sógò]* *bé* *gá:rá* *péjú* ^{HL}*dágá-là:*
[1Sg **than**] 3PlSbj **more** sheep ^{HL}leave-**PfvNeg**
‘They didn’t leave more sheep than I (did).’

12.1.4 ‘Be better, more’ (*ìré*)

ìré is a stative quasi-verb meaning ‘be better’. The comparandum takes postposition *là* ‘than’ (386). In (386a-b), *ìré* is heard with {L}-tones because it is preceded by other constituents. The rising melody is heard in (386c-d). I know of no special plural-subject suffixal form.

(386) a. *í^{n} [wó là]* ^{L}*ìrè*
1SgSbj [3Sg **than**] ^{L}**be.better**
'I am better than he/she (is).'

b. *máŋgóró [bùyà:gú là]* ^{L}*ìrè*
mango [guava **than**] ^{L}**be.better**
'Mangoes are better than guavas.'

c. *wó ìré*
3SgSbj **be.better**
'He/She is better (than someone).'

d. *bé ìré*
3PlSbj **be.better**
'They are better.'

The negative counterpart is with *ì*^{L} *=lá* (reduced from /ìrè^{L}=lá/), containing stative negative clitic *=lá*.

(387) *í^{n} [wó là]* *ì*^{L}*=lá*
1SgSbj [3Sg **than**] **be.better**^{L}**=StatNeg**
'I am not better than he/she (is).'

The construction in (388) means '(sick person) be recovering, be (feeling) better'. Here *ìré→* is an adverb, and requires a copula.

(388) a. *bé ìré→ wê*
3PlSbj **better** be.HumPlSbj
'They are getting well.'

b. *í^{n} ìré→ wɔ̂*
1SgSbj **better** be.HumSgSbj
'I am feeling better.'

c. *ìsí ìré→ kɔ̂*
dog **better** be.NonhSbj
'The dog is getting well.'

d. *í^{n} ìré→ wɔ̀:-rɔ́*
1SgSbj **better** be.HumSgSbj-Neg
'I'm not feeling any better.'

12.1.5 'Best'

Superlatives are just a special case of the regular comparative when the comparandum denotes the whole set, although this twists the logic a bit. (389) can be used whether 'he/she' is or is not a member of the set 'us'.

(389) *wó* *[[ɛ́mɛ́* *wò→]* *là]* *ìré*
3SgSbj [1Pl **all**] **than**] **be.better**
‘He/She is better than all of us (=is the best of us).’

12.2 Symmetrical comparatives

12.2.1 ‘Be equal to’ (*bǎ:*)

The uninflectable predicative element *bǎ:* is used in contexts like ‘X is the same age as Y’ and ‘X is worth as much as Y’. It denotes a static equivalence rather than an event of closing the gap; contrast *dɔ̌:* ‘arrive, reach’ in the sense ‘become as good as’ (§12.2.4, below). *bǎ:* is followed by a copula that agrees with the subject. If the domain of comparison is specified, it takes the form of a possessed noun, like ‘price’ in (390c).

(390) a. *sè:dú* *àmàdú* *bǎ:* *wɔ̂*
S A **equal** be.HumSgSbj
‘Seydou is the same (age) as Amadou.’

b. *bɛ́* *má* *bǎ:* *wɛ́*
3PlSbj 1SgObj **equal** be.HumPlSbj
‘They are the same (age) as me.’

c. *[[sà:gù*^{L} *túnɔ́]* ^{H}*dɔ́*^{n}*]* *[[ɛ̀r*^{n}*ɛ́* *nàỳ]* ^{H}*dɔ́*^{n}*]* *bǎ:* *kɔ́*
[[sack^{L} one] ^{H}price] [[goat four] ^{H}price] **equal** be.NonhSbj
‘The price of one sack (of millet) equals the price of four goats.’
[=‘One sack is worth four goats’]

Negation is expressed by perfective negative *bà:-lí* ‘is not equal to’ for singular subject, *bà:-lâ:* ‘for plural subject.

bǎ: can also be used with non-copula negative predicate to translate ‘less than’ (391a). My assistant prefers *gí:*^{n} ‘like’ (§8.4.1) to *bǎ:* in corresponding positives that are not of the copula type (391b).

(391) a. *wó* *[má* *bà:]* *bírɛ́* *bǐ:-rò*
3SgSbj [1Sg **equal**] work(n) do-IpfvNeg
‘He/She does not do work equal to me.’
[= ‘… does less work than I (do).’]

b. *wó* *[má* *gí:*^{n}*]* *bírɛ́* ^{L}*bì-jù*
3SgSbj [1Sg **like**] work(n) ^{L}do-Ipfv
‘He/She works like me (=as much as I do).’

12.2.2 ‘As much as’ (*bà→*)

A form related to the verb *bǎ:* ‘equal’ (preceding section), but L-toned and often intonationally prolonged (like expressive adverbials) occurs directly after the comparandum in symmetrical comparatives and their negations. More generally, *bà→* means ‘up to (a limit)’; in (392b) I try to capture the nuance using ‘full’ in the free translation.

(392) a. *[kó nɛ́:] dág-à→ [[ɛ̀:rɛ̀*^{L} *ná:] bà→]*
[Nonh now] a.little [[peanut^{L} main] **as.much.as**]
sɔ́g-i→ bɛ̌:-rè
dense-Adv become-IpfvNeg
‘That now (=peanuts), to some extent it can’t be as dense (closely-spaced) as groundnuts.’ (2011.1a.20)

b. *háyɛ̀ [kó gì:] dágà→ nìŋìr*^{n}*ì*^{L}*-lùgó*
well [Nonh for] a.little day^{L}-count(n)
[[nìŋìr^{n}*í [pɛ́rɛ̀: [nú:né: ságà]]] bà→] dɔ̌-ɛ̀ dè,*
[[day [ten [five plus]]]] **up.to**] arrive-Pfv if,
kú:^{n} *tɔ́rɔ́-jú*
then begin-Ipfv
‘Well, for that (reason), (there is) counting days a little (=for a while), (anytime) once the full fifteen days have arrived (=elapsed), then they begin.’ (2011.1a.03)

In the context of time, *bà→* can (and often does) work in the opposite direction, hence a contextual reading ‘since’ or ‘(starting) as soon as’, cf. French *dès*.

(393) *háyɛ̀ [kó sógò=ː̀], [nɔ́w*^{n}*ɔ́ bà→]*
well [Nonh because]=it.is, [this.year **since**]
ú kó gíré téŋ-è dè,
2SgSbj NonhObj before block-Pfv if,
nɛ́: [gú-gúrú kà:^{n}*] [wòrú bínì] [yògó* ^{HL}*náŋùr*^{n}*ù]*
now [grass also] [field in] [tomorrow ^{HL}year]
kó gá:rá ^{HL}*írè kɛ́:-jô: , …*
NonhSbj more ^{HL}be.better become.NonhSbj-Ipfv
‘Well, it’s because of that, as early as (=even) this year, if you-Sg block it in advance (=pre-empt it), now next year the weeds should become better (=less troublesome) in the fields than that (=than otherwise), …’ (2011.1a.04)

12.2.3 ‘Same (equal)’ (*kɛ́w-kɛ́w*, *kɛ́-kɛ́w*)

‘(Exactly) equal’ (e.g. in height or some other dimension other than age) is expressed by the iterative adverb *kɛ́w-kɛ́w* or by its reduplicative variant *kɛ́-kɛ́w*. The comparanda are expressed by a conjoined NP ‘X and Y’ or some other plural NP. The domain of comparison is expressed by a noun such as ‘height’ with its lexical tones. Compare the predicate *kɛ́w kɔ̀* ‘it (= garment) fits, it is the right size (= the same size as the wearer)’.

(394) a. *[àmàdú.∴ mí.∴] géné kɛ́w-kɛ́w*
[A.& 1Sg.&] height **equal**
‘Amadou and I are (of) the same height.’

b. *[lù:rò*^{L}*-ná: ∴ sùŋú.∴] gù-gùrù-ná kɛ́-kɛ́w*
[python.& rope.&] length **equal**
‘A python and a rope are of equal length.’

Negation is with the usual stative negative, which controls tone-dropping: *kɛ̀-kɛ̀w=lá*. Unlike their Jamsay cognates, *kɛ́w* and related forms in TgK do not also function as universal quantifiers (‘all Xs’).

12.2.4 ‘Attain, equal’ (*dɔ̌:*)

dɔ̌: ‘arrive at, reach, attain’ can be used in a more abstract comparative sense ‘attain the level of (someone, in some respect)’. Although it usually describes a situation, it presupposes a process of catching up rather than a permanent equality.

(395) *kà:ná géné [sǎ^{n} ^{H}dɛ́:^{n}] dìgɛ́ dɔ̀-ɛ̀*
now **height** [ReflPoss ^{H}elder.sib] join **arrive**-Pfv
‘Now he has attained the same height as his older brother.’

For a special use of L-toned ^{L}*dɔ̀:* in a complex ‘from X to Y’ construction, see §15.5.4.

12.3 ‘A fortiori’ (*sɔ̂:*, *nɛ̀:*, *yè*, *sá:-gàrà*)

An element *sɔ̂:* , related to noun *sɔ̌:* ‘(abstract) thing, matter, issue’ but with falling tone, occurs as an ‘it is (not)’ predicate in two constructions that emphasize the impossibility of one eventuality by denying the possibility of an easier or more likely eventuality of the same type.

In one construction, the easier eventuality is negated, with *nɛ̀:* as a clause-linking form (not the same as *nɛ́:* ‘now’). I gloss it as ‘even’, but it is confined (to my knowledge) to this construction. The more unlikely or difficult eventuality follows, perhaps with some shared phrasing pruned, ending with *sɔ̂:=lɔ̀*, which contains a negative clitic *=lɔ̀* ‘it is not’ (§11.2.1.2). Compare English *not to mention* or *never mind* in similar contexts. In (396), it is presupposed that cows are much more expensive than goats.

(396) *[ɛ̀r^{n}ɛ́ bù:dù^{L} bé ɛ́wɛ́-jú] sà:-rá nɛ̀:,*
[goat money^{L} 3PlSbj buy-Ipfv] have-Neg **even**,
nàŋá (ɛ́wɛ́-jú) ^{HL}sɔ̂:=lɔ̀
cow (buy-Ipfv) **^{HL}thing**=it.is.not
‘I don’t (even) have the money to buy a goat with, never mind (the money) (to buy) a cow (with).’

In the other attested construction, the easier eventuality is negated with *yè* (with optional intonational prolongation) as the clause-final linking element. Again, I gloss it as ‘even’, but it is not the usual ‘even’ particle (on which see §19.1.9). The *yè* clause is followed by *sá:-gàrà* ‘a fortiori’ at the beginning of the (perhaps pruned) more difficult eventuality. The final element is *sɔ̂:* with (positive) ‘it is’ clitic.

(397) *í^{n} ɲú: bɛ̀-lí yè→,*
1SgSbj millet get-PfvNeg **even**,
sá:-gàrà ɛ̀mɛ́ ^{HL}sɔ̂:=ỳ
a.fortiori sorghum **^{HL}thing =it.is**
‘I didn’t even get (any) millet, never mind (any) sorghum.’

The background of (397) is that sorghum requires more rain than millet, so a poor millet harvest normally entails an even worse sorghum harvest.

13 Focalization and interrogation

13.1 Focalization

A NP or adverb in a clause may be singled out for focus, as in answers to WH-questions. In free translations, I underline the focalized constituent and add "[focus]" after it, as in 'It is you-Sg [focus] who will buy the sheep.'

Focalization is ordinarily not expressed by the form of the focalized constituent itself, except perhaps by extra prominence. As often in TgK grammar, the exception to this generalization is the 1Sg pronoun. In subject function, it is heard as [mí:] with long vowel as focalized subject, versus *í*^{n} as subject in ordinary clauses. I analyse [mí:] as *mí=ý*^{n} 'it's me'; for other options see §4.3.1 and §11.2.1.1. In the dialect described by Prost (p. 34ff.) the 'it is' clitic is added to other focalized pronouns and NPs, as in e.g. Jamsay.

Existential particle *yɛ́* ~ *yɔ́*, which is required or allowed in some stative predicates (§11.2.2.1), is systematically absent from focalized clauses. Compare (398a) with focalized (398b), and (398c) with focalized (398d). (398b,d) also illustrate the special 1Sg focalized form.

(398) a. *í*^{n} *nàŋá* *yɛ́* *sà*
1SgSbj cow Exist have
'I have a cow.'

b. *mí=ý*^{n} *nàŋá* *sà*
1Sg=it.is cow have
'It is I [focus] who have a cow.'
(*nàŋá mí=ý*^{n} *sà* is also grammatical in this sense)

c. *sè:dú* *yɔ́* *wɔ̀*
S Exist be.HumSgSbj
'Seydou is present (here).'

d. *mí=ý*^{n} *wɔ̂*
1Sg=it.is be.HumSgSbj
'It is I [focus] who am here.'

Focalization is also expressed in part by linear position. In particular, a focalized subject follows, rather than precedes, a direct object (§13.1.1, below).

Finally, the presence of a focalized non-verb constituent (NP, PP, adverb) may be indexed indirectly by tonal changes and morphological restrictions on the clause-final verb. In effect, the verb is defocalized, reflecting the backgrounding of the remainder of the entire clause after the highlighted constituent is singled out. The difference in form between a normal and a defocalized verb is most audible in clauses whose verb is immediately preceded by a focalized subject pronoun. Details on the form of defocalized verbs are given in the section on subject focalization below, but to some extent they also apply to clauses with focalized constituents other than subjects.

A more distinct focalization construction is a cleft of the type ‘[the person who bought the sheep] is X’, with a relative clause followed by an identificational ‘it is’ expression. It is useful to have this construction available, since clause-internal focalization is not always easily recognized.

I know of no syntactic mechanism for focalizing a VP (‘sweeping the courtyard is what I’m doing’). The truth value of a complete proposition can be emphasized (focalized) by using a clause-final emphatic particle (§19.5).

13.1.1 Subject focalization

The distinction between unfocalized and focalized subjects is most easily seen in transitive clauses with a nonpronominal object. The linear order in an unfocalized clause is S-O-V (399a,c). When the subject is focalized, whether pronominal or nominal, it shifts to preverbal position (399b,d).

(399) a. *ú* *írí* *yùw-ɛ̂*
~ ^{L}*yùw-ɛ̀*
2SgSbj milk $^{(L)}$spill-Pfv
‘You-Sg spilled the milk.’

b. *írí* *ú* ^{HL}*yúw-ɛ̀*
milk **2SgSbj** ^{HL}spill-**Pfv**
‘It was you-Sg [focus] who spilled the milk.’

c. *[ɲɛ̌* *bè]* *ɛ́:rɛ́* *tɛ́w*^{n}*-ɛ́-sɛ̂*^{n}
[woman Pl] peanut crunch-Pfv-PlSbj
‘The women ate the peanuts.’

d. *ɛ́:rɛ́* *[ɲɛ̌* *bè]* ^{HL}*tɛ́w*^{n}*-ɛ̀*
~ ^{L}*tɛ̀w*^{n}*-ɛ̀*
peanut **[woman** **Pl]** $^{(H)L}$crunch-**Pfv**
‘It was the women [focus] who ate the peanuts.’

Specifically, the shifted focalized subject follows preverbal constituents except pronominal direct objects and datives, which behave like proclitics to the verb. The focalized constituent follows a spatial PP in (400a), a nonpronominal direct object in (400b,c), and a nonpronominal dative in (400c). It precedes a pronominal dative PP in (400b), and a pronominal direct object in (400d).

(400) a. *[gìr*^{n}*í* *bîn]* *mí=ý*^{n} *nú-ɲú*
[house in] **1Sg=it.is** go.in-Ipfv
‘It is I [focus] who will go into the house.’

b. *bú:dú* *sè:dú* *[má* *nì]* ^{HL}*ó-è*
money **Seydou** [1Sg Dat] ^{HL}give-Pfv
‘It is Seydou [focus] who gave me the money.’

c.	*sè:dú=ǹ*	*bú:dú*	*é*	*ó-jú*
	S=Dat	money	**2PlSbj**	give-Ipfv

‘It is you-Pl [focus] who will give the money to Seydou.’

d.	*sè:dú*	*ú*	^{HL}*lág-ɛ̀*
	Seydou	2SgObj	^{HL}hit-**Pfv**

‘It is Seydou [focus] who hit you-Sg.’

If two or more verbs are more or less tightly chained (chapter 15), the focalized subject appears before the first verb (401-b).

(401)	a.	*nàŋá*	*mí=ýⁿ*	*dàrⁿ-ɛ́:*	^{HL}*dág-ɛ̀*
		cow	**1Sg=it.is**	kill-and.SS	^{HL}leave-Pfv

‘It is I [focus] who killed the cow and left it (there).’

b.	*gìrⁿí*	*mí=ýⁿ*	*újɔ́*	^{L}*bɛ̀-jù*
	house	**1Sg=it.is**	build	^{L}get-Ipfv

‘It is I [focus] who can build houses.’

A perfective verb in a clause containing a preceding focalized subject has an {HL} overlay. It is realized as H.L.L on trisyllabics. It may be obscured by clause-final tone-dropping of the verb.

To begin with perfective examples just given, the {HL} overlay has applied to the defocalized verb in (399b,d) and (400b,d). The constraint against overt plural marking is evident in the comparison of (399d) with (399c).

The overlaid {HL} is not audible for verbs whose simple perfective already has this melody in the perfective. It is audible for verbs with lexical /LH/ melody, whose perfective otherwise begins with an L-tone. The tonal distinction is relatively easy to hear when the verb is preceded by only a focalized subject pronoun. Elsewhere, the {HL} overlay is perhaps virtually present, but it is difficult to hear or entirely inaudible because of clause-final tone-dropping. Some examples of the forms with {HL} overlay are in (402).

(402) Simple perfective under defocalization (subject focus)

gloss	simple perfective	
	ordinary	defocalized
a. monosyllabic		
no reliably audible change		
‘give’	*ó-è*	^{HL}*ó-è*
‘weep’	*kɔ́ⁿ*-*ɛ̀ⁿ*	^{HL}*kɔ́ⁿ-ɛ̀ⁿ*
‘go in’	*nú-ỳⁿ*	^{HL}*nú-ỳⁿ*
audible change		
‘drink’	*nɔ̌-ɛ̀*	^{HL}*nɔ́-ɛ̀*
b. bisyllabic		
no reliably audible change		
‘shoot’	*tɛ́w*-*ɛ̀*	^{HL}*tɛ́w*-*ɛ̀*
audible change		
‘go up’	*dɔ̀w-ɛ̂*	^{HL}*dɔ́w-ɛ̀*

c. trisyllabic		
no reliably audible change		
‘return’	*kígìr-ì*	${}^{\text{HL}}$*kígìr-ì*
audible change		
‘ruin’	*ɲùnú-gì*	${}^{\text{HL}}$*ɲúnù-g-ì*

The perfective negative also shows a tone-shift. Instead of {L}-toned stem followed by H-toned suffix, as in ordinary clauses, a defocalized perfective negative verb reverses this and has {H}-toned stem and L-toned suffix. The tonal difference illustrated in (403) is audible in short clauses, but as with the other categories it tends to be neutralized at the end of longer clauses. The same tone reversal occurs in perfective negative verbs in nonsubject relative clauses, see (475) in §14.1.9.3.

(403) Perfective negative under defocalization (subject focus)

gloss	perfective negative	
	ordinary	defocalized
a. monosyllabic		
‘give’	*ɔ̀-lí*	${}^{\text{HL}}$*ɔ́-lì*
‘go in’	*nù-lí*	${}^{\text{HL}}$*nú-lì*
‘weep’	*kɔ̀:*^{n}*-lí*	${}^{\text{HL}}$*kɔ́*^{n}*-lì*
‘drink’	*nɔ̀:-lí*	${}^{\text{HL}}$*nɔ́:-lì*
b. bisyllabic		
‘shoot’	*tɛ̀wɛ̀-lí*	${}^{\text{HL}}$*tɛ́wɛ́-lì*
‘go up’	*dɔ̀wɔ̀-lí*	${}^{\text{HL}}$*dɔ́wɔ́-lì*
c. trisyllabic		
‘return’	*kìgìrè-lí*	${}^{\text{HL}}$*kígíré-lì*
‘ruin’	*ɲùnù-gò-lí*	${}^{\text{HL}}$*ɲúnú-gó-lì*

In the imperfective positive, the tonal difference between subject-focalized and unfocalized clauses is particularly hard to hear. In careful elicitation, my assistant drops the stem and suffixal tones to {L} in a defocalized imperfective. This potentially distinguishes it from the regular form, which has the lexical /H/ or /LH/ of the stem plus H-toned suffix, although the lexical tone is often obscured by clause-final tone-dropping. The best chance of hearing a distinction is with a lexically /LH/-toned stem when there is a minimum of preceding material within the clause. One can hear a tone break in the /LH/-toned stem in (404a), whereas the entire verb form in (404b) has flat pitch.

(404) a. *ú* *dɔ̀wɔ́-jú*
2SgSbj go.up-Ipfv
‘You-Sg will go up.’

b. *ú* ${}^{\text{L}}$*dɔ̀wɔ̀-jù*
2SgSbj ${}^{\text{L}}$go.up-Ipfv
‘It’s you-Sg [focus] who will go up.’

The remaining high-frequency indicative category is the imperfective negative. With a focalized subject, the stem has a tone pattern consisting of H-toned syllables ending with a terminal long <HL>-toned vowel. For lexically /H/-toned verbs, this is indistinguishable from the regular tone of the imperfective negative. For lexically /LH/-toned verbs, the absence of an initial L-tone signals that the verb is defocalized.

(405) Imperfective negative under defocalization

gloss	imperfective negative	
	ordinary	defocalized
a. monosyllabic		
no audible change		
‘give’	*ô:-rò*	$^{\text{HL}}$*ô:-rò*
‘go in’	*nû:-rò*	$^{\text{HL}}$*nû:-rò*
‘weep’	*kɔ̂:*^{n}*-rò*	$^{\text{HL}}$*kɔ̂:*^{n}*-rò*
audible change		
‘drink’	*nɔ̌:-rò*	$^{\text{HL}}$*nɔ̂:-rò*
b. bisyllabic		
no audible change		
‘shoot’	*tɛ́wɛ̂:-rò*	$^{\text{HL}}$*tɛ́wɛ̂:-rò*
audible change		
‘go up’	*dɔ̀wɔ̂:-rò*	$^{\text{HL}}$*dɔ́wɔ̂:-rò*
c. trisyllabic		
no audible change		
‘return’	*kígírê:-rò*	$^{\text{HL}}$*kígírê:-rò*
audible change		
‘ruin’	*ɲùnú-gô:-rò*	$^{\text{HL}}$*ɲúnú-gô:-rò*

Examples of the distinction are in (406). As usual, the tonal distinction is most likely to be audible in short clauses like these.

(406) a. *í*^{n} *dɔ̀wɔ̂:-rò*
1SgSbj go.up-IpfvNeg
‘I will not go up.’

b. *mí=ý*^{n} $^{\text{HL}}$*dɔ́wɔ̂:-rò*
1Sg=it.is $^{\text{HL}}$go.up-IpfvNeg
‘It’s I [focus] who will not go up.’

13.1.2 Object focalization

Because main clauses already have SOV order, if we suppose that a focalized object moves into the same preverbal position as a focalized subject, this movement is not audible. There is also no difference between the focalized and unfocalized forms of the 1Sg pronoun, whose special accusative form *má* is used in both contexts.

This leaves the form of the verb as the best hope of detecting syntactic focalization (short of extraposition). In positive clauses, the verb is regularly tone-dropped after a focalized nonsubject), and otherwise optional plural-subject marking is usually absent. However, it doesn't take much emphasis on a preverbal constituent to count as "focus" for this purpose, so the difference between unfocalized and object-focalized clauses is less conspicuous than for subjects.

In (407a), the {L} tone pattern and the absence of perfective plural-subject suffix *-sɛ̂*^{n} favor a nonsubject focus reading. In isolation the verb would be *ɔ̌-ɛ̀* or optional plural *ɔ̌:-sɛ̂*^{n}. If the subject were singular, the distinction would be much subtler phonetically, with unfocalized *ɔ̌-ɛ̀* versus defocalized ^{L}*ɔ̀-ɛ̀*. (407b-c) are object-focus negative clauses. They have the same {HL} overlay, with the break at the stem-suffix boundary, as in negative subject relatives.

(407) a. *é* *má* ^{L}*ɔ̀-ɛ̀*
2PlSbj **1SgObj** ^{L}see-Pfv
'It's me [focus] that you-Pl saw.'

b. *ú* *má* ^{HL}*ɔ́:-lì*
2SgSbj **1SgObj** ^{HL}see-PfvNeg
'It's me [focus] that you-Sg did not see.'

c. *ɛ́mɛ́* *ìŋé* ^{HL}*súnógó-là*:
1PlSbj what? ^{HL}go.down-Caus-PfvNeg.PlSbj
'What didn't we take down (=unload)?'

13.1.3 Focalization of PP or other adverb

Focalized PPs, and adverbial adjuncts more generally, may be identifiable by linear position if there is a nonpronominal object NP. Position between such an object and the verb is compatible with focalized status (408b,d,f). Of course this test is of little use with intransitive verbs like 'come', but the frequency of default objects (including cognate nominals) is advantageous in this respect. As with other focalized constituents, the form of the verb may also be useful, but since PPs are prosodically heavy their presence favors clause-final tone-dropping anyway, leaving the verb with low pitch so that tonal distinctions are difficult to hear or inaudible.

(408) a. *ɛ́mɛ́* *[dá:gólú* *bîn]* *ɲǎ:* ^{L}*ɲì:-ɲì*
1PlSbj [courtyard in] meal ^{L}eat.meal-Ipfv
'We will eat the meal in the courtyard.'

b. *ɛ́mɛ́* *ɲǎ:* *[dá:gólú* *bîn]* ^{L}*ɲì:-ɲì*
1PlSbj meal **[courtyard** **in]** ^{L}eat.meal-Ipfv
'It's in the courtyard [focus] that we will eat the meal.'

c. *ɛ́mɛ́* *íyé* *dá:gólú* ^{L}*sɛ̀mɛ̀-ɲù*
1PlSbj today courtyard ^{L}sweep-Ipfv
'We'll sweep the courtyard today.'

d.	*ɛ́mɛ́*	*dá:gólú*	*íyé*	^{L}*sɛ̀mɛ̀-ɲù*
	1PlSbj	courtyard	**today**	^{L}sweep-Ipfv

‘It’s today [focus] that we will sweep the courtyard.’

e.	*[kɔ̌ⁿ*	*bè]*	*wárú*	^{L}*wà-jù*
	[daba	with]	farming	^{L}do.farm.work-Ipfv

‘We do farm work with a daba (hoe).’

f.	*wárú*	*[kɔ̌ⁿ*	*bè]*	^{L}*wà-jù*
	farming	**[daba**	**with]**	^{L}do.farm.work-Ipfv

‘It’s with a daba [focus] that we do farm work.’

13.1.4 Focalization of postpositional complement

In (408b,d) and other relevant examples, the entire PP (or adverbial phrase) is syntactically focalized. It is not possible to focalize just the NP complement of the postposition. In other words, in TgK one says the equivalent of ‘It’s in the courtyard [focus] that we will eat’, not ‘It’s the courtyard [focus] that we will eat in’.

13.2 Interrogatives

13.2.1 Polar (yes/no) interrogatives

13.2.1.1 Simple polar interrogatives (*mà*)

The particle *mà* at the end of an indicative sentence converts it into a polar question. “Q” is the interlinear gloss.

A polar question is always implicitly a disjunction of two propositions, one perhaps unstated. In TgK, the following alternative proposition is often stated at least in pruned-down form (e.g. with NPs not overtly repeated). *mà→*, L-toned and often with intonational prolongation, occurs at the end of the first proposition. The second, if overt, follows with or without a brief pause (comma).

(409)	a.	*ú*	*yě-jú*	*mà→*	*yê:-rò*
		2SgSbj	come-Ipfv	**Q**	come-Ipfv.Neg

‘Are you-Sg coming, or not?’

b.	*ɛ́mɛ́*	*nǐ:*	*ɲí:-ɲí*	*mà→,*	*kògó*	*kúwó-jú*
	1PlSbj	cow.peas	eat.meal-Ipfv	**Q**,	chicken	eat.meat-Ipfv

‘Will we eat cow-peas, or chicken?’

c.	*wó*	*yê:-rò*	*mà*
	3SgSbj	come-Ipfv.Neg	**Q**

‘He/She isn’t coming?’

Examples like (409c) with the alternative proposition omitted may be interpreted as reductions of the fuller construction with parallel propositions in (409a-b). Therefore it is possible to equate polar interrogative *mà* with disjunctive particle *mà* ‘or’ (§7.2.1).

13.2.1.2 Rhetorical tag question with *lò mà*, *lò→*

lò mà after a statement functions as a rhetorical tag question, like French *n'est-ce pas?* Here *lò* can be identified with negative clitic *=lò* in *=y=lò* 'it is not' (§11.2.1.2). Interrogative *mà* is not intonationally prolonged or pitch-raised in this combination. There is also no pause or other notable prosodic break between the end of the statement and the *lò mà*, which has the flavor of a simple clause-final emphatic particle (cf. §19.5). In (410) I translate it (twice) as a tag question, but it could simply be disregarded in a free translation without distorting the conversational structure.

(410) *[nɛ́: wɔ̀ⁿ] [yɔ́: fú→] gàr-ɛ̂ dè,*
[now Top] [NearDist all] pass-Pfv if,
[nɛ́: wɔ̀ⁿ] ɲú: ír-ɛ̀ ɔ̌-m̀-∅ lò mà,
[now Top] millet ripen-Pfv see-Pass-Pfv **not.be** **Q**,
[nɛ́: wɔ̀ⁿ] ɲù:^{L}-sǎ: ɔ̌-m̀-∅ lò mà,
[now Top] millet^{L}-grain see-Pass-Pfv **not.be** **Q**,
[ɲù:^{L}-sǎ: ɔ̌-m̀-∅ dè]
[millet^{L}-grain see-Pass-Pfv if]
'Now, when all of that is done, now is it not (true) that the millet is visibly (=clearly) ripe? Is it not true that the millet grains are visible? When the millet grains are visible, …' (2011.1a.06)

When *mà* is absent, *lò* is optionally prolonged intonationally as *lò→*.

13.2.1.3 Tag question with *là:*, *là: mà*

là: at the end of a statement, with no pause or other marked prosodic break, functions as a tag question ('you did the work, didn't you?'). Interrogative particle *mà* is optionally added, especially when the speaker wishes to continue speaking. The statement itself may be positive (411a) or negative (411b). To a greater extent than with *lò mà*, here the questioner expects confirmation from the interlocutor, either overtly or tacitly.

(411) a. B: *[yɔ́: wɔ̀ⁿ] [lɛ̌ kè]* ***là:***
A: *[yɔ́: wɔ̀ⁿ] [lɛ̌ kè] sɔ́ⁿ-sɔ́ⁿ yà:-táŋà*
B: That is of (=for) planting, **isn't it?**
A: That is of (=for) planting, all together. (2011.1a.02)

b. *ú yǎ:-rò* ***là:*** *mà*
2SgSbj go-IpfvNeg **tagQ** Q
'You-Sg aren't going, are you?'

là: is likely related etymologically to negative morphemes, cf. 'it is not' clitic *=lò* (§11.2.1.2), and stative negative *=lá* in adjectival predicates and after stative verbs and quasi-verbs (§10.4, §11.4.2).

13.2.2 'Who?' (*ǎ:*)

This interrogative is illustrated in (412).

(412) a. *ǎ: = ỳ*
who?=it.is
‘Who is it?’

b. *ú* *ǎ: = ỳ*
2SgSbj **who?**=it.is
‘Who are you-Sg?’

c. *ǎ:* $^{\text{HL}}$*bág-ɛ̀*
who? $^{\text{HL}}$fall-Pfv
‘Who fell?’

d. *ú* *ǎ:* $^{\text{L}}$*ɔ̀-ɛ̀*
2SgSbj **who?** $^{\text{L}}$see-Pfv
‘Who(m) did you-Sg see?’

A plural *ǎ: bè* ‘who-Pl?’ was elicited, but is sparingly used. It is optional in (413).

(413) a. *é* *[ǎ:* *bè] = ỳ*
2PlSbj [**who?** Pl]=it.is
‘Who are you-Pl?’

b. *é* *ǎ: = ỳ*
2PlSbj **who?** =it.is
[= (a)]

13.2.3 ‘What?’ (*ìŋé*), ‘with what?’, ‘why?’

‘What?’ as simple NP is *ìŋé*. It is unrelated in form to other content interrogatives. The expected plural *ìŋé bè* is not used. If it were, it would be homophonous with the common interrogative ‘with what?’, see below. Instead, an iterated *ìŋé-ìŋé* is used when multiplicity is emphasized (414c). The *y* in *ìŋé = ỳ* (414b) is not fully nasalized, probably because *ìŋé* derives from *ìnjé with medial cluster (Pergue *ìnjé*, etc.).

(414) a. *ú* *ìŋé* *ɔ́-táŋà*
2SgSbj **what?** see-Prog
‘What do you-Sg see?’

b. *nɔ́:* *ìŋé = ỳ*
Prox **what?** =it.is
‘What is that?’

c. *ɛ́mɛ́* *ìŋé-ìŋé* *ɲí:-ɲí*
1PlSbj **what?-what?** eat.meal-Ipfv
‘What things will we eat?’

PPs based on ‘what?’ include purposive *ìŋé gɛ̀:* ‘why?’ and instrumental *ìŋé bè* ‘with (by means of) what?’

13.2.4 ‘Where?’ (*yǎ:* ~ *yǎ̂:*)

‘Where?’ and ‘whither?’ (= ‘to where?’) is *yǎ:* . It is pronounced *yǎ̂:* with <LHL> tones when adverbial, while *yǎ:* occurs with locational-existential quasi-verbs (‘be’), or as possessor or compound initial. *yǎ:=ỳ* ‘where is it?’ is compatible with underlying /yǎ̂:/ but probably also with /yǎ:/, which leads me to conclude that adverbial *yǎ̂:* is a tonal locative.

Following the usual Dogon pattern, locative (‘at, in’), allative (‘to’), and ablative (‘from’) senses are distinguished by accompanying verbs rather than by adpositions. In (415f), *yǎ:* is syntactically a possessor.

(415)	a.	*ú*	*yǎ̂:*	^{L}*yà:-jù*
		2SgSbj	**where?**	^{L}go-Ipfv
		‘Where are you-Sg going?’		

b.	*[ì^{n}bày^{n}-bɔ̀^{n}]^{L}-[kùn-ú]*	*yǎ:*	*kɔ̀*
	[newborn-name]^{L}-[put-VblN]	**where?**	be.NonhSbj
	‘Where is the name-giving ceremony?’		

c.	*é*	*yǎ:*	*wè*
	2PlSbj	**where?**	be.HumPlSbj
	‘Where are you-Pl?’		

d.	*yǎ:=ỳ*
	where?=it.is
	‘Where is it?’

e.	*ú*	*yǎ̂:*	^{L}*gò-è*
	2SgSbj	**where?**	^{L}go.out-Pfv
	‘Where did you come from?’		

f.	*nɔ́:*	*[[yǎ:*	^{H}*ná]*	*bè]=ỳ*
	Dist	[[**where?**	^{H}person]	Pl]=it.is
	‘Those are people of (=from) where?’			

‘Around where?’ or ‘whereabouts?’, inquiring about approximate location, can be expressed by *yǎ: tɔ̀*, cf. §8.2.14.

The morpheme *yǎ:* is also found as part of ‘which?’ and ‘when?’ interrogatives.

13.2.5 ‘When?’ (*yǎ: dógùrù*, *yǎ: téŋé bè*)

The interrogative morpheme *yǎ:* also found in the senses ‘where?’ and ‘which?’ combines with a noun denoting a time period to produce ‘when?’ interrogatives. *yǎ:* ^{HL}*dógùrù*, literally ‘(at) (the) time of which?’ is apparently preferred when the set of possible responses extends over a period of days. The alternative combination, which can be used in more constricted temporal contexts, is *[yǎ:* ^{H}*téŋé] bè*, literally ‘by means of (the) time of which?’. The nouns *dógúrú* and *tèŋé* both mean ‘(point in/period of) time’. Compound final *-dògùrú* occurs in season terms like *ò:gù-dògùrú* ‘hot season’.

(416) a. *ú* *[yǎ:* ^{HL}*dógùrù]* ^{L}*yè-jù*
2SgSbj [**which?** ^{HL}time] ^{L}come-Ipfv
'When will you-Sg come?'

b. *láyɛ́* *[yǎ:* ^{HL}*dógùr]=ì:*
Feast.of.Ram [**which?** ^{HL}time]=it.is
'When is the Feast of the Ram?'

13.2.6 'How?' (*ɲǎŋ*)

The interrogative manner adverbial is *ɲǎŋ* 'how?' (i.e. 'in what manner?'). It is unrelated in form to other content interrogatives. In predicative form, an additional *n* is added before the 'it is' clitic (417c). Compare the vestigial *-n-* suffix between some human singular nouns and the 'it is' clitic, cf. (315) in §11.2.1.1.

(417) a. *ɛ́mɛ́* *ɲǎŋ* ^{L}*bì-jì*
1PlSbj **how?** ^{L}do-Ipfv.PlSbj
'What (lit. "how") will we do?'

b. *ú* *tógú* *ɲǎŋ* ^{L}*tògò-jù*
2SgSbj shed **how?** ^{L}build.shed-Ipfv
'How are you-Sg going to build the shed?'

c. *ɲǎŋ-n=ì:*
how?=it.is
'How is it?' (common greeting)

ɲǎŋ is frequently iterated as *ɲǎŋ-ɲǎŋ*. In this form, it leaves the door open for a complex answer denoting more than one manner or method. In allegro speech style it is heard as [ɲáɲàŋ].

For 'by means of what?' see §13.2.3, above.

13.2.7 'How much/many?' (*à:ŋá*)

The content interrogative for cardinal quantities is *à:ŋá*. It has no transparent relationship in form to other interrogatives, but it has a vague resemblance to 'who?' and 'what?'. Although *à:ŋá* directly follows the NP that it has scope over (when the latter is overt), it is syntactically adverbial rather than part of that NP. The distributive iteration is in (418d). The ordinal (§4.6.2.2) is *à:ŋà*^{L}*-nìr*^{n}*í* 'how many-eth?' (Fr *quantième*).

(418) a. *ú* *súgɔ́rɔ́* *à:ŋá* ^{L}*ɛ̀w-ɛ̀*
2SgSbj sugar **how.much?** ^{L}buy-Pfv
'How much sugar did you-Sg buy?'

b. *bé* *péjú* *à:ŋá* *s-è*
3PlSbj sheep **how.many?** have-PlSbj
'How many sheep do they have?'

c. *úr*^{n}*í:* *à:ŋá* ^{L}*yè-ɟì*
children **how.many?** ^{L}come-Ipfv.PlSbj
‘How many children will come?’

d. *kɔ́gɔ́rɔ́* *à:ŋá-à:ŋá* *dɔ̌*^{n}*-téŋè*
fish **how.much?-how.much?** sell-Prog.PlSbj
‘How much (each) are they selling fish for?’

e. *à:ŋá=ỳ*^{n}
how.many?=it.is
‘How many (of them) are there?’

f. *[nàŋá* *[í*^{n} ^{L}*kè]]* *kɛ́nɛ̀,* *nàŋá* *à:ŋá* ^{L}*nù-y*
[cow [1SgPoss ^{L}Poss]] among, cow **how.many?** ^{L}die-Pfv
‘Among my cows, how many cows died?’

An optional extended variant *à:ŋá bà:* ends with an element that my assistant associates with plurality, cf. plural morpheme *bè* in NPs. For an example, see (421) in §13.2.10, below.

13.2.8 ‘Which?’ (*yǎ:-kɔ́*)

The ‘which?’ interrogative adjective is *yǎ:-kɔ́*. It is heard as *yǎ:-kɔ̀* in combination with the ‘it is’ clitic (419a). Compare *yǎ:* ‘where?’ and its derivative ‘when?’. *yǎ:-kɔ́* can function predicatively (419a) or as a modifying adjective. In the latter case, a preceding noun drops tones as before other adjectives (419b). In (419d) *yǎ:-kɔ̀* becomes an {L}-toned compound initial.

(419) a. *[gìr*^{n}*í* *[ú* ^{L}*kè]]* *yǎ:-kɔ̀=ỳ*
[house [2SgPoss ^{L}Poss]] **which?**=it.is
‘Your-Sg house is which (one)?’

b. *ɛ́mɛ́* *[[gìr*^{n}*ì*^{L} *yǎ:-kɔ́]* *bîn]* ^{L}*nà:-ɲì*
1PlSbj [[house^{L} **which?**] in] ^{L}spend.night-Ipfv.PlSbj
‘Which house will we sleep in?’

c. *[nàŋà*^{L} *ú* ^{L}*dɔ̀-ɲù]* *yǎ:-kɔ̀=ỳ*
[cow^{L} 2SgSbj ^{L}sell-Ipfv] **which?**=it.is
‘Which of your-Sg cows are you selling?’
[lit. “The cow that you are selling, it is which?”]

d. *kó* *[[yà:-kɔ̀]*^{L}*-tɔ̀gí]=:̀]*
NonhSbj [[**which?]**^{L}-type]=it.is
‘What type (of roselle) is it?’ (2011.1a.26)

With encliticized postposition *nì* (e.g. in dative function), the form is *yǎ:-kɔ́=ǹ*.

13.2.9 'Whatchamacallit?' (*ɔ́jɔ̀→*)

ɔ́jɔ̀→, an intonational modification of the noun *ɔ̀jɔ́* 'thing', is used as a 'whatchamacallit?' form when the speaker is trying to recall a word or name.

When the word or phrase being searched for is a predicate, the phrasing is *ɔ̀jɔ̀*^{L}*-bìrí bìrɛ́* 'do whatchamacallit?. This consists of noun *ɔ̀jɔ́* 'thing', verb *bìrɛ́* 'do', and an alternative cognate nominal for the verb (compare the usual cognate nominal, *bírɛ́* 'work').

13.2.10 Embedded interrogatives

The elicitation frame here is 'I don't know' plus an embedded interrogative.

The favored construction replaces the interrogative content word ('who?', 'what?', 'where?', etc.) by the corresponding semantically light noun ('person', 'thing', 'time', etc.), as head of a relative clause. For example, 'I don't know who will go' is expressed as 'I don't know the person who will go' (420a).

(420) a. *í*^{n} *[nà*^{L} *yǎ:-jú]* ^{L}*ìnɛ̀*
1SgSbj [**person**^{L} go-Ipfv] ^{L}not.know
'I don't know who will go.'
[lit. "I don't know [the person who will go]."]

b. *í*^{n} *[ɔ̀jɔ̀*^{L} *ɛ́mɛ́ ɲí:-ɲí]* ^{L}*ìnɛ̀*
1SgSbj [**thing**^{L} 1PlSbj eat.meal-Ipfv] ^{L}not.know
'I don't know what we will eat.'

c. *í*^{n} *[ɲà*^{L} *ɛ́mɛ́ ná:-ɲú]* ^{L}*ìnɛ̀*
1SgSbj [**place**^{L} 1PlSbj spend.night-Ipfv] ^{L}not.know
'I don't know where we will spend the night.'

d. *í*^{n} *[bàmàkɔ́ tèŋè*^{L} *ɛ́mɛ́ yǎ:-jú]* ^{L}*ìnɛ̀*
1SgSbj [B **time**^{L} 1PlSbj go-Ipfv] ^{L}not.know
'I don't know when we will go to Bamako.'

e. *í*^{n} *[tùwó árà] bà*^{nL} *ɛ́mɛ́* ^{L}*dɔ̀wɔ̀-jù]* ^{L}*ìnɛ̀*
1SgSbj [stone on.top.of] **manner**^{L} 1PlSbj ^{L}go.up-Ipfv] ^{L}not.know
'I don't know how we will go up the mountain.'

This construction does not apply to polar (yes-no) interrogatives. It is also not available for 'how many?' in the absence of a corresponding abstract noun ('quantity'). It is also awkward when the head NP is the complement of a postposition. In all these cases, the complement has the form of an unembedded interrogative clause, ending with interrogative particle *mà(→)* (421).

(421) a. *í*^{n} *[bé yɛ̀r-ɛ́-sɛ̂*^{n} *mà→]* ^{L}*ìnɛ̀*
1SgSbj [3PlSbj come-Pfv.PlSbj **Q**] ^{L}not.know
'I don't know whether they have come.'

b. *í^{n} [[nǎ à:ŋá bà:] yǎ:-jú mà] ^{L}ìnɛ̀*
1SgSbj [person how.many Pl] go-Ipfv **Q**] ^{L}not.know
'I don't know how many people will go.'

c. *í^{n} [ɛ́mɛ́ [ànà^{L} yǎ:-kɔ́=ǹ] yǎ:-jú mà] ^{L}ìnɛ̀*
1SgSbj [1PlSbj [village^{L} which?=Dat] go-Ipfv **Q**] ^{L}not.know
'I don't know which village we will go to.'

d. *í^{n} [bé [ìŋé gɛ̀:] yɛ̌-ɛ̀: ma→] ^{L}ìnɛ̀*
1SgSbj [3PlSbj [what? for] go-Pfv.PlSbj **Q**] ^{L}not.know
'I don't know why they went.'

14 Relativization

14.1 Basics of relative clauses

The following features characterize TgK relative clauses.

- the verb of the relative clause retains its basic inflectional category (aspect and negation);
- verbs in subject and nonsubject relatives are partially distinguished, primarily by tones;
- suffixal plural-subject marking (as in main clauses) is allowed in relatives wherever it is expressed by vocalic mutations in the regular suffix, but perfective plural-subject *-sɛ̂*^{n} is not allowed in relatives;
- there are no participial or relative morphemes as such, except that a perfective relative morpheme *sá*^{n} follows the verb in perfective positive subject (and, less often, nonsubject) relatives;
- the inner portion of the head NP, maximally noun, adjective, and numeral, occurs inside the relative clause in the relativization site, where it can have any grammatical function, but both the noun-adjective sequence and the numeral are simultaneously tone-dropped;
- the linear order of adjective and numeral is optionally inverted in the head NP when both are present (§6.4.2);
- if the head NP contains a possessor, the possessor is restructured as an appositional possessive (‘X’s thing’) preceding the head NP, which now has the same form as an unpossessed head NP;
- if the possessor itself is the head NP (‘the man whose house collapsed’), both the possessor NP and the possessed NP are tone-dropped;
- if the NP complement of a postposition is the head NP, both the head NP and the postposition are tone-dropped;
- demonstratives, plural *bè*, and ‘all’ quantifiers that are logically part of the head NP are separated from it and are positioned after the verb (bifurcation);
- in nonsubject relatives, a subject that denotes a specific referent is obligatorily expressed as a pronoun immediately before the verb, even if the subject is also expressed as a full NP in clause-initial position;
- the relative clause proper may be followed by an {L}-toned form of a noun that resumes or agrees with the head NP, namely human singular *bàŋá* ‘owner’, plural *nǎ*, and spatiotemporal nouns like *nìŋìr*^{n}*í* ‘day’ and *děŋ* ‘place’;
- in the absence of such an {L}-toned terminal element, in some inflectional categories (but not perfective or stative positive), the inflectional suffix itself drops to L-tone if not already L-toned, and the preceding stem shifts from /LH/ to {H}-tone; this happens in the imperfective positive (subject and nonsubject relatives), and in the perfective and imperfective negative (nonsubject relatives only); one can argue that the suffixal L-tone is related to the L-tone of terminal elements described just above;
- there is a special same-subject morpheme *má* used when the subject of a nonsubject (e.g. object) relative is coindexed with the subject of the main clause.

14.1.1 Coordinated relatives with a shared head

It is not possible to conjoin two relative clauses with a shared head. Instead, the first clause is expressed in the appropriate chaining or subordinated form, so that only the final clause is relativized. For example, in (422) the initial 'spend night' clause has pseudo-conditional form, so only the 'pass' clause is relativized as such.

(422) *í^{n}* *[yèrì^{n}*^{L} *[nî* *[dà:gá* *túrú]*
1SgSbj [guest^{L} [here [night one]
^{HL}*ná-ɛ̀* *dè]* *gǎ-jú]* *ìyɛ̀*
^{HL}spend.night-Pfv if] pass-Ipfv] want
'I love a visitor who spends (=stays for) one night, then moves on.'

14.1.2 Tone-dropping in an unpossessed NP as head of relative clause

The NPs whose form in main clauses is shown in the left-hand column of (423) appear in the form shown in the middle column when they function as heads of relatives. Underlining in the middle column indicates tone-dropping that is specifically due to the relative clause, disregarding the tone-dropping of the noun in (423b) that already applies in the nonrelative form. In (423d), the order of the modifyng adjective and the numeral is also optionally inverted.

(423) Tone-dropping in unpossessed head NP in relative clauses

regular	relative head	gloss
a. noun		
péjú	*pèjù*^{L}	'(a/the) sheep'
b. noun plus adjective		
pèjù^{L} *már^{n}á*	*[pèjù màr^{n}à]*^{L}	'(a/the) big sheep'
c. noun plus numeral		
péjú kúré:	*[pèjù kùrè:]*^{L}	'six sheep'
d. noun plus adjective plus numeral		
[pèjù^{L} *már^{n}á] kúré:*	*[pèjù kùrè: màr^{n}à]*^{L}	'six big sheep'
or:	*[pèjù màr^{n}à kùrè:]*^{L}	

Examples of these NPs as relative heads are in (424). (424d) shows Adjective-Numeral Inversion (§6.4.2), which is common but not obligatory in relative-clause heads.

(424) a. *pèjù*^{L} *í^{n}* ^{H}*dár^{n}-ɛ́*
sheep^{L} 1SgSbj ^{H}kill-Pfv.Rel
'the sheep-Sg that I killed (slaughtered).'

b. *[pèjù* *màr^{n}à]*^{L} *í^{n}* ^{H}*dár^{n}-ɛ́*
[sheep big]^{L} 1SgSbj ^{H}kill-Pfv.Rela
'the big sheep-Sg that I killed (slaughtered).'

c.	*[pèjù*	*kùrè:]*^{L}		*í*^{n}	^{H}*dár*^{n}*-ɛ́*
	[sheep	six]^{L}		1SgSbj	^{H}kill-Pfv.Rel
	‘the six sheep-Sg that I killed (slaughtered).’				
d.	*[pèjù*	*kùrè:*	*màr*^{n}*à]*^{L}	*í*^{n}	^{H}*dár*^{n}*-ɛ́*
	[sheep	six	big]^{L}	1SgSbj	^{H}kill-Pfv.Rel
	‘the six big sheep-Sg that I killed (slaughtered).’				

The tonosyntactic brackets and superscripts in (424) are based on the assumption that the relative clause enforces tone-dropping on the entire head NP. Alternatively, one could first allow regular tonosyntax to apply, as in the left-hand column of (423), then have the relative clause complete the tonosyntactic operation by tone-dropping those words that were not already tone-dropped.

14.1.3 Addition of a possessor NP to a relative-clause head NP

A possessed NP functioning as relative-clause head is restructured as an appositional possessive of the type *[[X* ^{L}*kè] Y]* ‘(the) Y of X’, literally ‘[X’s thing] Y’ with Y in apposition to ‘thing’; see §14.1.3. This applies both to nonappositional possessed NPs, elsewhere *[X* $^{(H)L}$ *Y]* except for 1Sg possessor *[Y mà]*, and to appositional possessed NPs of the form *[Y [X* ^{L}*kè]]*. In other words, the distinction between appositional and nonappositional possessive constructions is neutralized in relative-clause head function. The restructuring also applies equally to possessed kin terms (classic inalienables) and to other possessed NPs. In relative-clause head NP function, the combination including ^{L}*kè* precedes rather than follows the main possessed NP.

Since *kè* is already L-toned we cannot determine if it would have been tone-dropped by the relative clause. The possessor NP itself (X in the formulae above) has its regular form (tonally and otherwise).

(425) Restructuring of possessed NP functioning as relative-clause head

regular	head NP	gloss
a. pronominal possessor		
dɛ̌:^{n} *mà*	*[í*^{n} ^{L}*kè] dɛ̀:*^{nL}	‘my elder same-sex sib’
gìr^{n}*í mà*	*[í*^{n} ^{L}*kè] gìr*^{n}*ì*^{L}	‘my house’
gìr^{n}*í* ^{L}*[ì*^{n} *kè]*	" "	"
ú ^{H}*ísí*	*[ú* ^{L}*kè] ìsì*^{L}	‘your-Sg dog’
b. nonpronominal possessor		
sè:dú ^{H}*gír*^{n}*í*	*[sè:dú* ^{L}*kè] gìr*^{n}*ì*^{L}	‘Seydou’s house’

The possessor in this appositional construction has no tonal effect on the possessum. That is, there are no tonosyntactic-island effects by which a possessor-possessum combination has its tones locked, so that a relative clause or a demonstrative cannot effect tone-dropping within the island.

Instead, in TgK the possessum as head of a relative undergoes tone-dropping (and optional reordering of adjective and numeral) in exactly the same way that it would have without the possessor. The relationship between regular and relative-head forms of possessums, using ‘Seydou’ as possessor, is shown in (426). As before, underlining indexes tone-dropping due specifically to the relative clause (from the perspective of an unpossessed NP in its regular form). If we remove *[sè:dú* ^{L}*kè]* from the middle column, there would be no change in the possessum.

(426) Tone-dropping in possessed head NP in relative clauses

regular	relative head	gloss
a. noun		
sè:dú ^{H}*péjú*	*[sè:dú* ^{L}*kè] pèjù*^{L}	‘S’s sheep-Sg’
b. noun plus adjective		
sè:dú ^{HL}*[péjú màr*^{n}*à]*	*[sè:dú* ^{L}*kè] [pèjù màr*^{n}*à]*^{L}	‘S’s big sheep-Sg’
c. noun plus numeral		
sè:dú ^{HL}*[péjú kùrè:]*	*[sè:dú* ^{L}*kè] [pèjù kùrè:]*^{L}	‘S’s 6 sheep’
d. noun plus adjective plus numeral		
sè:dú ^{HL}*[péjú màr*^{n}*à kùrè:]*		‘S’s 6 big sheep’
	[sè:dú ^{L}*kè] [pèjù màr*^{n}*à kùrè:]*^{L}	
or:	*[sè:dú* ^{L}*kè] [pèjù kùrè: màr*^{n}*à]*^{L}	

While true (referential) possessors have not been found directly preceding relative heads, the definite morpheme *kó* (originally possessive ‘its’ and still controlling a possessive-type overlay on the following noun) is attested in a relative head. The phrase *kó* ^{H}*báŋá*, originally ‘its (=that one’s) owner’ can mean ‘the fellow, the chap’, denoting a nonspecific discourse referent. Both words are tone-dropped as relative head in (427).

(427)

[[kò	*bàŋà]*^{L}	*sɔ̌:*	*yɔ̌:-rò]*
[[**Def**	**owner**]^{L}	thing	accept-IpfvNeg.Rel]

‘the guy who wouldn’t accept the thing’ (2011.1a.15)

14.1.4 Restrictions on the head noun in a relative clause

A personal pronoun may not directly head a relative. Instead, we get an autonomous relative clause containing ‘person’ or ‘owner’, with the pronoun on the margins in apposition.

(428)

ɛ́mɛ́	*[nà*^{L}	*nî*	*yɛ̀rɛ́*	*sá*^{n}	*nà]*
1PlSbj	[**person**^{L}	here	come	Pfv.Rel	Pl]

(ɛ́mɛ́)	*yɔ̀wɔ̀-lâ:*
(1PlSbj)	accept-PfvNeg.PlSbj

‘We (the people) who have come here do not agree.’

14.1.5 Relative clause with conjoined NP as head

NPs are conjoined by juxtaposition, with dying-quail intonation (final syllable prolonged, with declining pitch unless already L-toned), see §7.1.1. It is possible for the conjoined NP as a whole to function as head NP of a relative. In this case, both conjuncts are subject to tone-dropping (unlike the usual situation in Jamsay, for example). The dying-quail intonation persists, but since the nouns are now {L}-toned the only audible effect of this intonation is prolongation. The verb can be morphologically plural, and the relative-clause final plural morpheme *nà* is used, even in (429b) where the conjuncts are individually singular.

(429)	a.	*[àr^{n}á∴*	*ɲɛ̌∴]*	*já*	*jày-ɛ́-ɛ̀ː-sɛ̂^{n}*		
		[man.&	woman.&]	fight(n)	fight-MP-Pfv-PlSbj		
		‘A man and a woman had a fight (squabble).’					
	b.	*[àr^{n}à→*	*ɲɛ̀→]^{L}*	*já*	*jày-ɛ́-ɛ̀ː*	*sá^{n}*	*nà*
		[man.&	**woman.&]^{L}**	fight(n)	fight-MP	Pfv.Rel	Pl
		‘the man and the woman who had the fight’					

Expressions with double plural *bè* like ‘men and women’ in (430a) that usually do not have an audible dying-quail effect also undergo tone-dropping as relative head (430b). It is not possible to determine whether plural *bè*, which is already L-toned, would have undergone tone-dropping.

(430)	a.	*[àr^{n}á*	*bè]*	*[ɲɛ̌*	*bè]*	*já*	*jày-ɛ́-ɛ̀ː-sɛ̂^{n}*
		[man	Pl]	[woman	Pl]	fight(n)	fight-MP-Pfv-PlSbj
		‘The men and the women had a squabble.’					
	b.	*[[àr^{n}à*	*bè]*	*[ɲɛ̀*	*bè]]^{L}*		
		[[man	**Pl]**	**[woman**	**Pl]]^{L}**		
		já	*jày-ɛ́-ɛ̀ː*	*sá^{n}*	*nà*		
		fight(n)	fight-MP-Pfv	Pfv.Rel	Pl		
		‘the men and the women who had a fight’					

14.1.6 Headless relative clause

Elicitation attempts suggested that headless relatives are not readily allowed. At least a semantically light head noun (‘person’, ‘thing’, ‘place’, etc.) appeared in elicited examples, even in most adverbial relatives. However, a relative clause with no overt internal head is possible in adverbial clauses, see §15.5.3.

14.1.7 Resumptive {L}-toned element after relative

In this construction, which appears to occur chiefly in temporal, spatial, and manner adverbial clauses, the head NP (‘time’, ‘place’, ‘manner’ or the like) occurs as usual inside the relative clause, but a resumptive copy in {L}-toned form also appears after the relative clause (i.e. after the verb). The {L} tone pattern suggests that the copied noun may have originally been treated (tono-)syntactically as “possessed,” but synchronically this is less apparent in TgK than in the other Dogon languages that allow such resumptive copies, since the common possessor-controlled overlays in TgK are {H} and {HL}, with {L} limited to two common nouns (§6.2.1.3). So TgK native speakers are free to reanalyse the construction in other ways, possibly as a surface-y copying process (since the clause-internal head noun is also tone-dropped).

Examples with 'day' are in (431). For more examples of this general pattern see §15.3 (temporal adverbial clauses), §15.5.1 (spatial adverbial clauses), and §15.5.2 (manner adverbial clauses).

(431)	a.	*[nìŋìr^{n}ì^{L}*	*ú*	^{H}*yɛ́rɛ́]*		^{L}*nìŋìr^{n}ì*
		[**day**^{L}	2SgSbj	^{H}come.Pfv]		^{L}**day**
		'(on) the day when you-Sg came'				
	b.	*[nìŋìr^{n}ì^{L}*	*yɛ̀rɛ́*	*ú*	^{L}*bɛ̀-jù]*	^{L}*nìŋìr^{n}ì*
		[**day**^{L}	come	2SgSbj	^{L}get-Ipfv]	^{L}**day**
		'(on) the day when you-Sg can come'				

I have one elicited example, (432), with the same meaning as (431b), where a **linking morpheme** *mà* appears between the verb and the resumptive copy.

(432)	*[nìŋìr^{n}ì^{L}*	*yɛ̀rɛ́*	*ú*	^{L}*bɛ̀-jù]*	*mà*	^{L}*nìŋìr^{n}ì*
	[**day**^{L}	come	2SgSbj	^{L}get-Ipfv]	**(link)**	^{L}**day**
	'(on) the day when you-Sg can come'					

In Jamsay, where *mà* is the alienable possessive morpheme, its regular presence before the resumptive copy confirms the synchronic nature of the construction as possessive: "(the) day of [the day when you can come]." In TgK, by contrast, it is difficult to assign a function to this infrequently occurring *mà*, or to determine its connection (if any) to the use of H-toned *má* connecting a nonsubject relative to a main clause with a shared subject (§14.1.10). It can hardly be directly equated to 1Sg possessor *mà*, unless the latter is taken as a default possessor.

The adverbial relative type with copied head noun is structurally parallel to a relative type with a postverbal {L}-toned noun or particle that agrees with, but is not lexically identical to or synonymous with, the internal head. This includes relatives with postverbal ^{L}*bàŋà* 'owner' for singular human head, *nà* for plural head, or ^{L}*dày^{n}* 'all'. Examples of all three are in (442b-d) in §14.1.9.1. Also belonging here are manner adverbial relatives ending in ^{L}*gìː^{n}* 'like', since *gíː^{n}* 'like' is rather noun-like; see (202) in §8.4.1.

Postpositions can be added to the relative clause plus {L}-toned final element.

(433)	a.	*[nà^{L}*	*yɛ̀rɛ́*	*sá^{n}*	*bàŋà]=ǹ*
		[person^{L}	come	Pfv.Rel	owner]=**Dat**
		'to the person who came'			
	b.	*[nà^{L}*	*yɛ̀rɛ́*	*sá^{n}*	*nà]=ǹ*
		[person^{L}	come	Pfv.Rel	Pl]=**Dat**
		'to the people who came'			

However, in (450f) in §14.1.9.2, a postposition *bè* is added to the postverbal noun, and in this construction instead of {L}-toned ^{L}*tèŋè* time' we find {H}-toned ^{H}*téŋé*, which is the regular tone overlay for a possessed *CvCv* noun. This is an indication that this noun retains something of its original syntactic character as a possessed noun. Compare (205) in §8.4.3.1.

14.1.8 Preverbal subject pronominal in relative clause

When the head NP is other than the subject of the relative clause, the subject must be expressed by an immediately preverbal proclitic subject pronoun, provided that it denotes a specific referent (434b). It has the same form as a clause-initial subject pronoun in a main clause (434a). In particular, the 1Sg form is *í^{n}* in both cases. The subject pronoun is required even when a fuller subject NP has already appeared clause-initially (434c).

(434) a. *í^{n}* *yá:* *péjú* *dàr^{n}-ɛ̂*
1SgSbj yesterday sheep kill-Pfv
'I killed (=slaughtered) a sheep yesterday.'

b. *yá:* *pèjù^{L}* *í^{n}* *^{H}dár^{n}-ɛ́*
yesterday **sheep^{L}** 1SgSbj ^{H}kill-Pfv
'the sheep-Sg that I killed yesterday'

c. *sè:dú* *yá:* *pèjù^{L}* *wó* *^{H}dár^{n}-ɛ́*
S yesterday **sheep^{L}** 3SgSbj ^{H}kill-Pfv
'the sheep-Sg that Seydou killed yesterday'

In main clauses, verbs are optionally marked for plurality of subject. In relative clauses, it would seem to be unnecessary to mark plurality in the verb since this information is already given elsewhere in the clause. In nonsubject relatives, as just indicated, an overt subject proclitic is obligatory. In subject relatives, the subject normally appears as a tone-dropped overt head NP, and (for human heads) plurality is marked by clause-final particle *nà*. However, plural-subject marking within the verb itself does occur in relatives. This is clearly the case with (perfective and imperfective) negative verbs, and with the progressive, all of which express subject plurality by vocalic mutations. It may also be the case with the imperfective (positive), but the difficulty of distinguishing *-ju* from plural-subject *-ji* (with H- or L-tones) makes this less certain. On the other hand, in the perfective (positive), the plural-subject suffix *-sɛ̂^{n}* is not used in relatives, most likely because it occupies the same slot as the (perhaps historically related) perfective relative *sá^{n}* found chiefly in subject relatives. So main clause (435a) loses its *-sɛ̂^{n}* suffix in relatives (435b).

(435) a. *bé* *yá:* *péjú* *dàr^{n}á-sɛ̂^{n}*
3PlSbj yesterday sheep kill-Pfv.PlSbj
'They killed (=slaughtered) a sheep.'

b. *yá:* *pèjù^{L}* *bé* *^{H}dár^{n}-ɛ́* (#*dàr^{n}á-sɛ̂^{n}*)
yesterday **sheep^{L}** 3PlSbj ^{H}kill-Pfv
'the sheep-Sg that they killed yesterday'

14.1.9 Relative-clause verb

The following sections describe the form of the verb in relative clauses. The primary inflectional categories in main clauses (perfective/imperfective, positive/negative) are maintained in relative clauses. Given the general lack of suffixal morphology for nouns and pronouns in TgK, it is difficult to determine whether the verb in a relative clause is basically a verb or an adjective.

(436) is a brief summary of the data for the main inflectional categories that are given in more depth in the following sections. There are additional tonal changes on the stems from main clause to relative clause, except in the imperfective negative.

(436) Relative-clause verb (S = subject relative, NS = nonsubject relative)

category	relative clause	main clause
perfective	*sá*^{n} (S) *-ɛ* ~ *-e* ~ *-i* (NS)	*-ɛ* ~ *-e* ~ *-i*, plural *sɛ̂*^{n} ~ *sɛ̀*^{n}
imperfective	*-jú* ~ *-jù*	*-jú*, plural *-jé*
perfective negative	*-lí*, plural *-lâ:*	*-lí*, plural *-lâ:*
imperfective negative	*-rò*, plural *-rè*	*-rò*, plural *-rè*

14.1.9.1 Positive perfective-system verbs in relative clauses

The suffixed plural-subject perfective forms in *(-ɛ̀:)-sɛ̂*^{n} that occur in main clauses are not possible in relative clauses.

In perfective nonsubject relatives, the perfective has its regular form segmentally, but with an {H} tone overlay. Nonsubject relatives from verbs whose perfectives end in {*-e* ~ *-ɛ*) are exemplified in (437). The corresponding main-clause perfective form is shown in parentheses. Since the main-clause plural-subject suffix *-sɛ̂*^{n} is not allowed in relatives, these verbs cannot be marked for plurality.

(437) Perfective nonsubject relatives with final -*é* ~ *-έ*

a.	*nà*^{L}	*í*^{n}	^{H}*ɔ́-έ*	*nà*
	person^{L}	1SgSbj	^{H}see-**Pfv.Rel**	Pl

‘the people that I saw’ (*ɔ̌-ɛ̀*)

b.	*nàŋà*^{L}	*í*^{n}	^{H}*pág-έ*
	cow^{L}	1SgSbj	^{H}tie-**Pfv.Rel**

‘the cow that I tied’ (*pág-ɛ̀*)

c.	*tùwò*^{L}	*í*^{n}	^{H}*dág-έ*
	stone^{L}	1SgSbj	^{H}leave-**Pfv.Rel**

‘the stone that I left’ (*dàg-ɛ̂*)

d.	*[ɔ̀jɔ̀*	*gɛ̀:]*^{L}	*bé*	^{H}*dág-έ*
	[thing	for]^{L}	3PlSbj	^{H}leave-**Pfv.Rel**

‘the thing (=reason) for which they have abandoned (it)’ (2011.1a.15) (*dàg-ɛ̂*)

e.	*[úɲúr*^{n}*ú*	*[ú*	^{HL}*hákìlɛ̀],*	*ɲà*^{L}	^{H}*dɔ́-έ*
	[question	[2SgPoss	^{HL}mind],	place^{L}	^{H}arrive-**Pfv.Rel**

‘a question where your-Sg mind has arrived’ (2011.1a.17) (*dɔ̌-ɛ̀*)

f.	*ɲà*^{L}	*í*^{n}	^{H}*náŋ-έ*	*kà:*^{n}
	place^{L}	1SgSbj	^{H}forget.**Pfv.Rel**	also

‘any place (=topic) that I have forgotten’ (2011.1a.17) (*náŋ-ɛ̀*)

g.	*[bà^{nL}*	*bɛ́*	^{H}*bír-ɛ́]*	*gì:^{n}*
	[manner^{L}	3PlSbj	^{H}do-**Pfv.Rel**]	like

‘the (same) way they did’ (2011.1a.25) (*bìrɛ́*)

h.	*[núŋù*	*ɲà^{L}*	*kó*	^{H}*gó-é*	*kà:^{n}]*	^{L}*ìnɛ̀*
	[song	place^{L}	NonhSbj	^{H}go.out-**Pfv.Rel**	even]	^{L}not.know

‘(They) didn’t even know where the song came from’ (2011.1b.03) (*gǒ-è*)

Nonsubject relatives with verbs whose perfective ends in a high vowel are in (438). Again, suffix *-sɛ̂^{n}* is not allowed, but the augment *-ɛ̀:* that in main clauses precedes *-sɛ̂^{n}* can indicate subject plurality (438c).

(438) Perfective nonsubject relatives with final high vowel

a.	*bà^{nL}*	*í^{n}*	^{H}*pór-í*
	manner^{L}	1SgSbj	^{H}speak-**Pfv.Rel**

‘the way I spoke’ (2011.1a.02) (*pór-ì*)

b.	*jó→*	*ɲà^{L}*	*ú*	^{H}*mɔ́:-n-ú*
	a.lot	place^{L}	2SgSbj	^{H}assemble-Caus-**Pfv.Rel**

‘the place where you-Sg have gathered together a lot (of it)’ (2011.1a.11) (*mɔ̌:-n-ù*)

c.	*nɛ́:*	*[sɔ̀:*	*jò:]^{L}*	*ɛ́mɛ́*	^{HL}*pór-ɛ̀:*
	now	[thing	many]^{L}	1PlSbj	^{HL}speak-**Pfv.PlSbj.Rel**

‘the many things that we have spoken of’ (2011.1a.32)

A more systematic presentation of the verb forms is (439).

(439) Verbs in perfective nonsubject relative clauses

main clause	nonsubject relative	gloss
a. monosyllabic with *-e/-ɛ*		
/HL/ to {H}		
ó-è	^{H}*ó-é*	‘give’
á-ɛ̀	^{H}*á-ɛ́*	‘catch’
/LHL/ to {H}		
ɔ̌-ɛ̀	^{H}*ɔ́-ɛ́*	‘see’
nɔ̌-ɛ̀	^{H}*nɔ́-ɛ́*	‘drink’
b. monosyllabic with *-y*		
/HL/ to {H}		
ɲí-ỳ^{n}	^{H}*ɲí-ý^{n}*	‘eat (meal)’
nú-ỳ^{n}	^{H}*nú-ý^{n}*	‘go in’
/HL/ to {H}, no -y		
jé-ỳ	^{H}*jé*	‘take away’
/LHL/ to {H}, no -y		
yě-ỳ	^{H}*yé*	‘go’

c. bisyllabic

/HL/ to {H}		
pág-ɛ̀	^{H}*pág-έ*	'tie'
/LHL/ to {H}		
dàg-ɛ̂	^{H}*dág-έ*	'leave'
/LHL/ to {H}		
gǔŋ-ì	^{H}*gúŋ-∅*	'take out'
bǎ:r-ì	^{H}*bá:r-í*	'send'

d. trisyllabic

/HL/ to {H}		
súnú-g-ì	^{H}*súnú-g-í*	'take down'
/LHL/ to {H}		
ɲùnú-g-ì	^{H}*ɲúnú-g-í*	'ruin'

As shown just below, a morpheme *sá*^{n} is obligatory in perfective subject relatives. Rarely, a perfective nonsubject relative includes this morpheme after the verb, which has bare-stem form. The only nonsubject example I have, (440), occurred in elicitation, in a spatial adverbial clause (§15.5.1) with a following tone-dropped terminal noun ('place').

(440) *[[nàŋá ɲà*^{L} *bàgá sá*^{n}*]* ^{L}*dèŋ] yǎ:*
[[cow place^{L} fall **Pfv.Rel**] ^{L}place] go.Imprt
'Go-2Sg to the place where the cow fell!'
(also *[nàŋá ɲà*^{L} *bág-έ]* ^{L}*dèŋ]*)

In perfective subject relatives, the verb is followed by perfective relative *sá*^{n}. This and same-subject *má* are the only specifically relative morphemes in any inflectional category. *sá*^{n} is obscurely related to perfective plural-subject morpheme *-sɛ̂*^{n}, and (even more distantly) to the 'have' quasi-verb *sà* (and variants). Care should be taken to distinguish perfective relative *sá*^{n} from universal quantifier *sâ:*^{n} 'all' (long vowel) and from reflexive *sǎ*^{n} (<LH> tone).

Cv: and most *CvCv* stems add *sá*^{n} to the bare stem, which always ends in an H-tone. Lexical tones, /H/ versus /LH/, are respected.

(441) Perfective subject relatives, *sá*^{n} added to bare stem

a. *nà*^{L} *yὲrέ sá*^{n}
person^{L} come Pfv.Rel
'the person who came'
(less often extended as: *nà yὲrέ sá*^{n} *bàŋà*)

b. *nà*^{L} *yὲrέ sá*^{n} *nà*
person^{L} come Pfv.Rel Pl
'the people who came'

c. *tùwò*^{L} *bàgá sá*^{n}
stone^{L} fall Pfv.Rel
'the stone that fell (off)'

d.

kà:ná	*[ɲù:*^{L}	*kàná]*	*yɛ̀r-ɛ́:*	*ɛ́mɛ́*	*tɛ́mɛ́*	*sá*^{n}
now	[millet^{L}	new]	come-and.SS	1PlObj	find	Pfv.Rel

'Now the new (kind of) millet that came and found us (=that was introduced recently)' (2011.1a.07)

e.

àr^{n}*à-ùr*^{n}*ù*^{L}	*ɲɛ̌*	*ɲàŋá*	*sá*^{n}	*nà*
boy^{L}	woman	take	Pfv.Rel	Pl

'boys who have taken a woman' (i.e. married men) (2011.1a.14)

For the plural *sá*^{n} *nà*, another speaker gave a variant *sé nà*, with *e*-vowel marking plurality, as in several verban inflectional suffixes.

Verbs whose bare stem and (main-clause) perfective end in a high vowel, including all heavy stems (trimoraic and longer) as well as some *CvCv* stems, plus all extra-short *Cv* stems, have *-ɛ̀: sá*^{n} regardless of subject number (442a-e). Compare plural-subject perfective *-ɛ̀: sɛ̂*^{n} for the same verbs (with the same tones), and plural-subject *-ɛ̀:* in perfective nonsubject relatives. Prepausally, *-ɛ̀: sá*^{n} is heard as *-ɛ̀: sà*^{n}. with the L-tone extended into the particle (442a), but the H-tone is restored (*-ɛ̀: sá*^{n}) when there is a following L-toned terminal element (442b-e).

(442) Perfective relatives, *-ɛ̀: sà*^{n} (*-ɛ̀: sá*^{n} before terminal element)

a.

nà^{L}	*kó*	*pór-ɛ̀:*	*sà*^{n}
person^{L}	NonhObj	say-Pfv	Pfv.Rel

'the person who said that'

b.

[sàjù^{L}	*kír-ɛ̀:*	*sá*^{n}*]*	*dày*^{n}
[bird^{L}	fly-Pfv	Pfv.Rel	all

'all the birds that flew away'

c.

[nà	*gìr*^{n}*í*	*ɲùnú-g-ɛ̀:*	*sá*^{n}*]*	^{L}*bàŋà*
[person^{L}	house	be.ruined-Caus-and.SS	Pfv.Rel]	^{L}owner

'the person who ruined the house'

d.

[nà^{L}	*gìr*^{n}*í*	*ɲùnú-g-ɛ̀:*	*sá*^{n}*]*	*nà*
[person^{L}	house	be.ruined-Caus-and.SS	Pfv.Rel]	Pl

'the people who ruined the house'

e.

[nà^{L}	*yɔ́:*	*pór-ɛ̀:*	*sá*^{n}*]*	^{L}*bàŋà*
[person^{L}	NearDist	say-and.SS	Pfv.Rel]	^{L}owner

'the person who said that'
(*pór-ì* rejected in this context)

Table (443) presents the verb forms more systematically.

(443) Verbs in perfective subject relative clauses

regular	in subject relative	bare stem	gloss
a. *Cv* with *-ɛ̀: sà^n* (~ *sá^n*)			
lexically /H/			
ó-è	*ó-ɛ̀: sà^n* (~ *sá^n*)	*ó*	‘give’
nú-ỳ^n	*nú-ɛ̀: sà^n* (~ *sá^n*)	*nú*	‘go in’
lexically /HL/			
jé-ỳ	*jɛ́-ɛ̀: sà^n* (~ *sá^n*)	*jé*	‘take away’
lexically /LH/			
yě-ỳ	*yɛ̌-ɛ̀: sà^n* (~ *sá^n*)	*yě*	‘go’
b. *Cv:* with bare stem plus *sá^n*			
lexically /H/			
ɲí-ỳ^n	*ɲí: sá^n*	*ɲí:*	‘eat (meal)’
á-ɛ̀	*á: sá^n*	*á:*	‘catch’
lexically /LH/			
ɔ̌-ɛ̀	*ɔ̌: sá^n*	*ɔ̌:*	‘see’
nɔ̌-ɛ̀	*nɔ̌: sá^n*	*nɔ̌:*	‘drink’
c. bisyllabic ending in nonhigh vowel, with bare stem plus *sá^n*			
lexically /H/			
pág-ɛ̀	*págá sá^n*	*págá*	‘tie’
lexically /LH/			
dàg-ɛ̂	*dàgá sá^n*	*dàgá*	‘leave’
d. bisyllabic ending in high vowel, with *-ɛ̀: sà^n* (~ *sá^n*)			
lexically /H/			
pór-ì	*pór-ɛ̀: sà^n* (~ *sá^n*)	*pórù*	‘say’
lexically /LH/			
gǔŋ-ì	*gǔŋ-ɛ̀: sà^n* (~ *sá^n*)	*gǔŋ̀*	‘take out’
bǎ:r-ì	*bǎ:r-ɛ̀: sà^n* (~ *sá^n*)	*bǎ:rì*	‘send’
e. trisyllabic, with *-ɛ̀: sà^n* (~ *sá^n*)			
lexically /H/			
súnú-g-ì	*súnú-g-ɛ̀: sà^n* (~ *sá^n*)	*súnú-gì*	‘take down’
lexically /LH/			
ɲùnú-g-ì	*ɲùnú-g-ɛ̀: sà^n* (~ *sá^n*)	*ɲùnú-gì*	‘ruin’
f. mediopassive			
kír-ì:	*kír-ɛ̀: sà^n* (~ *sá^n*)	*kír-ì-ì*	‘jump’

As in other inflectional categories, the verb of a perfective relative clause may be immediately followed by an {L}-toned terminal element. The common ones are human singular ^{L}*bàŋà*, plural ^{L}*nà*, ^{L}*dày^n* ‘all’, near-distant demonstrative ^{L}*yɔ̀:*, and {L}-toned nouns (‘day’, ‘place’, etc.) in spatiotemporal and manner adverbial clauses. The one restriction is that human singular ^{L}*bàŋà* is generally omitted after *sá^n* in subject relatives, see (441) above. An informant grudgingly accepted *sá^n* ^{L}*bàŋà* as grammatical but I have no examples from texts or free elicitation. However, its plural *sá*^{n} *nà* is regular. Examples with terminal elements are in (444).

(444) a.

nà^{L}	*í*^{n}	^{H}*súnú-g-í*	*nà*
person^{L}	1SgSbj	^{H}go.down-Caus-Pfv.Rel	Pl

‘the people that I brought down’

b.

nà^{L}	*í*^{n}	^{H}*súnú-g-í*	^{L}*yɔ̀:*
person^{L}	1SgSbj	^{H}go.down-Caus-Pfv.Rel	^{L}NearDist

‘that person that I brought down’

c.

[nìŋìr^{n}*ì*^{L}	*í*^{n}	^{H}*yɛ́r-ɛ́]*	^{L}*nìŋìr*^{n}*ì*
[day^{L}	1SgSbj	^{H}come-Pfv.Rel]	^{L}day

‘the day when I came’

Except in spatiotemporal and manner adverbials like (444c), there is no default terminal element after a nonsubject (e.g. object) relative with nonhuman head NP, though for such nouns plurality is optionally expressed by *nà* as for humans.

The experiential perfect (*-tɛ́-jɛ̀*) can also be relativized. A subject relative is in (445).

(445)

[nà^{L}	*bàmàkɔ́*	*yǎ:-*^{H}*tɛ́-jɛ́]*	^{L}*bàŋà*
[person^{L}	B	go-^{H}ExpPerf-RecPerf]	^{L}owner

‘a person who has (ever) gone to Bamako’

For a nonsubject relative, see (238b) in §10.1.1, where the position of the preverbal subject pronoun immediately before *-tɛ́-jɛ́* provides evidence that the latter is a chained auxiliary verb (*tɛ́-jɛ́*), at least as far as the syntax is concerned.

Example (238a) in §10.1.1 is a relative based on the recent perfect with *jɛ̂* (which appears in relatives as *jɛ́*). Again, the position of a subject pronoun shows that *jɛ̂* is a chained auxiliary verb. However, my assistant was generally reluctant to produce relatives including *jɛ́*, preferring to express the relevant senses with the perfective.

14.1.9.2 Positive imperfective-system verbs in relative clauses

In texts, most imperfective relatives are nonsubject relatives. This is because imperfective subject relatives compete with simple and compounded agentives (§4.2.6, §5.1.5).

As in main clauses, it is difficult to consistently hear the distinction between singular-subject *-jú* ~ *-ɲú* and plural-subject *-jí* ~ *-ɲí*, so my transcriptions should not be relied on in this matter.

In imperfective nonsubject relatives, the verb has the same segmental form as in main clauses (except that no plural-subject marking is allowed). However, imperfective suffix *-jú* ~ *-ɲú* drops to L-toned form *-jù* ~ *-ɲù* in a relative clause, at least in lexically /H/-toned verbs, whose main-clause imperfectives (stem plus suffix) are entirely {H}-toned. In (446), note the L-toned suffix. Since this tone change is confined to the rightmost syllable, I indicate it by superscript $^{+L}$.

(446) Nonsubject imperfective relatives, /H/-toned stem

a. *ɛ̀:rɛ̀*^{L}*-[bùgùj-ú]* *bé* *pó-jù*$^{+L}$
peanut^{L}-[turn.over.earth-VblN] 3PlSbj say-**Ipfv.Rel**$^{+L}$
'what they say (=call) "turning over (earth) for peanuts" '(2012.1a.20)

b. *ɲà*^{L} *í*^{n} *pó-jù*$^{+L}$
place^{L} 1SgSbj speak-**Ipfv.Rel**$^{+L}$
'the place (=topic) that I am speaking (=asking about) ' (2011.1a.02)

c. *[[ɛ̀:rɛ̀*^{L}*-wòrú* *bîn]* *bé* *páŋá-ɲù*$^{+L}$*]*
[[peanut^{L}-field in] 3PlSbj cross.plant-**Ipfv.Rel**$^{+L}$]
[kó *[[yà:-kɔ̀]*^{L}*-tɔ̀gí]=ɛ̀:]*
[NonhSbj [[which?]^{L}-type]=it.is]
'What they cross-plant in the peanut field, what type (of roselle) is it?' (2011.1a.26)

d. *[tògùrú* *bîn]* *bé* *kúnɔ́-ɲù*$^{+L}$
[basket in] 3PlSbj put-**Ipfv.Rel**$^{+L}$
'(the way) they put (millet) in a basket' (2011.1a.13)

e. *ú=ǹ* *ùɲùr*^{n}*ù*^{L} *í*^{n} *úɲúr*^{n}*ɔ́-ɲù*$^{+L}$
2Sg=Dat question^{L} 1SgSbj inquire-**Ipfv.Rel**$^{+L}$
'the question that I will ask of you-Sg' (2011.1a.29)

f. *nɛ́:* *pùr*^{n}*ú* *[kó* *bè]* *bé* *téré-jù*$^{+L}$
now cream.of.millet [Nonh with] 3PlSbj pound-**Ipfv.Rel**$^{+L}$
'(the type) such that they pound (and cook) cream of millet with it (they call it …') (2011.1a.27)

g. *nì*^{L} *[wòrú* *bîn]* *bé* *páŋá-ɲù*$^{+L}$
cow.pea^{L} [field in] 3PlSbj crossplant-**Ipfv.Rel**$^{+L}$
'the cow-peas that they cross-plant in the field, …' (2011.1a.29)

Clause-final word-level tone-dropping does not seem to be common in relative forms of /H/-toned verbs, but it does occur in (447), with a monosyllabic verb stem.

(447) *[kɛ̌:* *bà→]* *[sɔ̀*^{nL} *nǎ* ^{L}*à:-jù]* *yɔ́* *kɔ̀*
[formerly] [horse^{L} person ^{L}catch-Ipfv] Exist be.NonhSbj
'Formerly, there were horse(-men) who captured people.' (2011.1b.01) (< *á:-jú*)

When such an imperfective relative verb is followed by an {L}-toned terminal element, the suffix is raised to H-toned *-jú* ~ *-ɲú* (448). See also (450) below.

(448) a. *[nà*^{L} *bé* *lágá-jú*$^{+H}$*]* ^{L}*bàŋà*
[person^{L} 3PlSbj hit-**Ipfv.Rel**$^{+H}$] ^{L}owner
'the person who(m) they will hit'

b. *[núŋú* *ɲà*^{L} *wó* *núŋɔ́-ɲú*$^{+H}$*]* ^{L}*dèŋ*
[song place^{L} 3SgSbj sing-**Ipfv.Rel**$^{+H}$] ^{L}place
'the place where he sings'

c. *[ɲú:* *bà*^{nL} *é* *lɛ́:-jú*$^{+H}$*]* *gì:*^{n}
[millet manner^{L} 2PlSbj slash.earth-**Ipfv.Rel**$^{+H}$] like
'like the way you-Pl slash (=plant) millet' (2011.1a.30)

d. *[bà*^{nL} *wó* *pó-jú*$^{+H}$*]* *gì:*^{n}
[manner^{L} 3SgSbj say-**Ipfv.Rel**$^{+H}$] like
'the way she was saying' (2011.1b.03

A possible historical explanation for the final-syllable tone alternations is that the final L-tones in (446) above were generalized from the tonal definite, and that the terminal elements in (448) were incompatible with such definite marking. But this cannot be extended to perfective positive relative verbs (which end in H-tones), or even to other imperfective forms (see below), so it will not work as a general synchronic analysis.

The tonal treatment of imperfective relative verbs from lexically /LH/-toned stems is more variable. There are two basic treatments, one of which is also subject to two further contingent modifications, for a total of four output possibilities.

The first treatment is to keep the /LH/ melody for verb stems of more than two moras, followed by an H-toned imperfective suffix regardless of syntactic context. Prosodically light /LH/-toned stems (*Cv̌*, *Cv̌:*, *Cv̀Cv́*) get an {H} overlay, plus the same H-toned suffix. This pattern is consistently found with (subjectless) instrumental relative compounds with senses like 'oil for rubbing' and 'something to do', see §5.1.12 for examples.

The second treatment applies to ordinary imperfective relatives clauses, i.e. those with more or less referential subjects. This pattern differs from that just described for instrumental relative compounds only in that the imperfective suffix is L-toned. Prosodically light /LH/-toned stems (*Cv̌*, *Cv̌:*, *Cv̀Cv́*) shift to /H/, as in instrumental relative compounds (and as in main-clause imperfectives), while heavier stems (three or more moras) have their lexical /LH/ melody.

In (449) we see the unmodified melody, with /LH/- or (prosodically light) {H}-toned stem plus L-toned suffix. This is the usual output for prosodically heavy verb stems in imperfective relatives not followed by an {L}-toned terminal element (449a-c). In my data, prosodically light (up to two moras) /LH/-toned stems are always tone-dropped except in very short relative clauses as in (449d-e) with just a head noun and a pronominal subject.

(449) a. *ɲà*^{L} ^{L}*yè* *wògòtóró* *bé* *ɲùnú-gó-jù*$^{+L}$
place^{L} ^{L}go cart 3PlSbj be.ruined-Caus-**Ipfv.Rel**$^{+L}$
'the place where they ruin carts'

b. *ɲà*^{L} ^{L}*yè* *é* *mɔ̌:-nɔ́-ɲù*$^{+L}$
place^{L} ^{L}go 2PlSbj assemble-Caus-**Ipfv.Rel**$^{+L}$
'the place where you-Pl go and assemble (them)' (2011.1a.12)

c. *ɲà*^{L} *[ɲà*^{L} *túnɔ̀*$^{+L}$*]* *bé* *mɔ̌:-nɔ́-ɲù*$^{+L}$
place^{L} [place^{L} one.Loc^{+L}] 3PlSbj assemble-Caus-**Ipfv.Rel**$^{+L}$
'the place where they collect (the roselle) in one spot' (2011.1a.28)

d. *ɲà*^{L} *bé* ^{H}*nɔ́:-ɲù*$^{+L}$
place^{L} 3PlSbj ^{H}drink-**Ipfv.Rel**$^{+L}$
'the place where they drink'

e. *lò:tù*^{L} *bé* ^{H}*dágá-jù*$^{+L}$
hair.crest^{L} 3PlSbj ^{H}leave-**Ipfv.Rel**$^{+L}$
'the crest that they leave (in braiding hair)' (2011.1b.03)

(448) above showed that a following {L}-toned terminal element induces the imperfective suffix to shift back to H-tone. Further examples of this are (450a-b). The same tone pattern occurs before a universal quantifier (450c), same-subject *má* (450d), or a postposition (450f).

(450) a. *[gìr*^{n}*í* *bà*^{n}^{L} *kó* ^{H}*yé-jú*$^{+H}$*]* ^{L}*dàwùrù*
[house manner^{L} NonhSbj ^{H}come-**Ipfv.Rel**$^{+H}$] ^{L}solution
'the solution (=technique) by which it (=millet) will come to the houses' (2011.1a.13) (*yé-jú* from *yɛ̀rɛ́*)

b. *[bà*^{n}^{L} ^{H}*wá-jú*$^{+H}$*]* ^{L}*dày*^{n}
[manner^{L} ^{H}do.farming-**Ipfv.Rel**$^{+H}$] ^{L}limit
'the same way (you) farm groundnuts' (2011.1a.20) (stem *wàrá*)

c. *dà:gà*^{L} ^{H}*dɛ́:-jú*$^{+H}$ *wò→*
night^{L} ^{H}night.fall-**Ipfv.Rel**$^{+H}$ each
'(on) each night that fell' (2011.1a.15) (stem *dɛ̌:*)

d. *[[ú* *gɔ́-ɲú*$^{+H}$ *má]* ^{L}*dày*^{n}*]*
[[2SgSbj be.able-**Ipfv.Rel**$^{+H}$ Rel.SS] ^{L}limit]
'all that (=as much as) you-Sg could (carry) of it (=millet)' (2011.1a.13) (for *má*, see §14.1.10) (stem *gɔ̀r*^{n}*ɔ́*)

e. *[ɛ́:rɛ́* *bà*^{n}^{L} *bùgújó-jú*$^{+H}$*]* *gì:*^{n}
[peanut/groundnut manner^{L} turn.over-**Ipfv.Rel**$^{+H}$] like
'the (same) way (they) turn over (earth) (for) nuts' (2011.1a.23)

f. *[gú-gúrú* *bé* *mòmó-jú*$^{+H}$*]* ^{H}*téŋé]* *bè*
[grass 3PlSbj uproot-**Ipfv.Rel**$^{+H}$] ^{H}time] with
'at the time when they are uprooting the weeds' (2011.1a.20)

On the other hand, an /LH/-toned verb often appears in imperfective relatives in tone-dropped form (451). This is the usual output for prosodically light /LH/-toned stems (*Cv̌:*, *Cv̀Cv́*) in the absence of a terminal {L}-toned element, though it is also attested before *gì:*^{n} 'like' and (possessed) *gí:*^{n}*-kà*^{n} 'something like' (451e-f). Since clause-final tone-dropping of imperfective (and other) verbs also happens in main clauses, and since it is optional (though frequent) in both main and relative clauses, I regard this as a lower-level tone-dropping process.

(451) Nonsubject imperfective relative, {L}-toned from lexical /LH/

a.	*wárú*	*bà*^{n} ^{L}	^{L}*wà-jù*
	farming	manner^{L}	^{L}do.farming-**Ipfv.Rel**

‘the way one does farming’ (2011.1a.01) (*wǎ-jú* from *wàrá*)

b.	*ɲú:*	*[sǎ*^{n}	^{H}*jám]*	*bà*^{n}^{L}	*kó*	^{L}*bɛ̀-jù*
	millet	[ReflPoss	^{H}peace]	manner^{L}	NonhSbj	^{L}get-**Ipfv.Rel**

‘Millet, the way it gets its well-being’ (2011.1a.04) (*bɛ̌-jú* from *bɛ̀rɛ́*)

c.	*ɲà*^{L}	*úɲùr*^{n}*ù*	*ú*	^{L}*bɛ̀-jù*
	place^{L}	ask	2SgSbj	^{L}**get-Ipfv.Rel**

‘a place (=topic) that you can ask about’ (2011.1a.17)
(*bɛ̌-jú* imperfective of *bɛ̀rɛ́*)

d.	*sàjú*	*bé*	^{L}*dìgɛ̀-jù*
	bird	3PlSbj	^{L}chase.out-**Ipfv.Rel**

‘as they drive the birds away’ (headless) (2011.1a.07) (*dìgɛ́-jú*)

e.	*[ùr*^{n}*ì:*^{L}	*dág-à→*	*sɔ̌:*	^{L}*jùgɔ̀-jù]*	^{HL}*gí:*^{n}*-kà*^{n}
	[children^{L}	a.little	thing	^{L}know-**Ipfv.Rel**]	^{HL}sth.like

‘(those) children who have something like awareness (=maturity)’ (2011.1a.07)
(*jùgɔ́-jú*)

f.	*[àɲù*^{L}	*jǎ:ǹ*	*bé*	^{L}*nɔ̀:-ɲù]*	*gì:*^{n}
	[roselle^{L}	boil	3PlSbj	^{L}drink.Ipfv.**Rel**]	like

‘the roselle that they boil and drink’ (2011.1a.27) (*nɔ̌:*)

g.	*[ɔ̀jɔ̀*^{L}	*ɛ́mɛ́*	^{L}*dàgà-jù]*	*kɔ̀:-rɔ̀*
	[thing^{L}	1PlSbj	^{L}leave-**Ipfv.Rel**]	be.NonhSbj-Neg

‘There is nothing that we are omitting.’ (2011.1a.32)

Given this analysis, I conclude that the basic imperfective relative forms for /LH/-toned verb stems are {LH}-toned heavy stem and {H}-toned light stem, plus L-toned suffix. Representative examples for both /H/- and /LH/-toned verbs are in (452).

(452) Verbs in imperfective nonsubject relatives

bare	imperfective relative	gloss
a. monosyllabic		
lexical /H/ to {H}+L		
ó	*ó-jù*$^{+L}$	‘give’
á:	*á:-jù*$^{+L}$	‘catch’
ɲí:	*ɲí:-ɲì*$^{+L}$	‘eat (meal)’
lexical /LH/ to {H}+L		
ɔ̌:	*ɔ́-jù*$^{+L}$	‘see’
nɔ̌:	*nɔ́:-ɲù*$^{+L}$	‘drink’
lexical /HL/ to {HL}+L		
jê (jâ:-)	*jâ:-jù*$^{+L}$	‘take away’

b. bisyllabic

lexical /H/ to {H}+L		
págá	*págá-jù*$^{+L}$	'tie'
lexical /HL/ to {H}+L		
wáǹ	*wáná-ɲù*$^{+L}$	'fry in oil'
lexical /LH/ to {H}+L		
dàgá	*dágá-jù*$^{+L}$	'leave'
dàr^{n}*á*	*dá-ɲù*$^{+L}$	'kill' (*rv*-Deletion)
lexical /LHL/ to {LH}+L		
gǔŋ̀	*gǔŋɔ́-ɲù*$^{+L}$	'take out'
bǎ:rì	*bǎ:rá-jù*$^{+L}$	'send'
mɔ̌:ǹ-∅	*mɔ̌:nɔ́-ɲù*$^{+L}$	'assemble [tr]'

c. trisyllabic

lexical /HL/ to {H}+L		
súnú-gì	*súnú-gó-jù*$^{+L}$	'take down'
lexical /LHL/ to {LH}+L		
ɲùnú-gì	*ɲùnú-gó-jù*$^{+L}$	'ruin'

An imperfective nonsubject relative can be followed by *wò→* 'each, every'. The sense is 'every time (that …)', i.e. 'whenever …'. Examples are (453a-b) and (450c) above. As in (450c), the L-toned final element induces a shift of the imperfective (relative) suffix back to H-tone.

(453) a. *[ìsí* *bà*^{nL} *ú* *lágá-jú*$^{+H}$ *wò→]*
[dog manner^{L} 2SgSbj hit-**Ipfv.Rel**$^{+H}$ each]
[ú ^{L}*kɛ̀rɛ̀-jù]*
[2SgObj ^{L}bite-Ipfv]
'Every time you-Sg (will) hit the dog, it will bite you.'

b. *ú* *yé-jú*$^{+H}$ *wò→*
2SgSbj come-**Ipfv.Rel**$^{+H}$ each
'each time that you-Sg come' (2011.1a.12)

Examples of imperfective subject relatives are in (454). I can see no systematic difference in the form of verb between subject and nonsubject relatives. The basic form of the verb, with L-toned imperfective suffix and with prosodically light /LH/-toned verb stems raised to {H}, is exemplified in (454a-b). In (454c), the suffixal tone is obscured by the dying-quail conjunction intonation. The imperfective suffix shifts to H-tone before an {L}-toned terminal element in (454d), and before a tightly phrased main-clause verb in (454e). The verbs in (454f-h) are tone-dropped.

(454) a. *gìr*^{n}*ì*^{L} *bágá-jù*$^{+L}$
house^{L} fall-**Ipfv.Rel**$^{+L}$
'a house that will fall'

b. *[nà*^{L} *nî* *ètě:* *já:-jú]* *nà*
[person^{L} here well build-**Ipfv.Rel**$^{+H}$] Pl
'the people who will build a well here'

c. *dúwɔ́* *nà*^{L} *gɔ́-ɲú*$^{+H}$ *.:*
load(n) person^{L} be.able-**Ipfv.Rel**$^{+H}$.&
'(some) people who could handle the load, and …' (2011.1a.13)

d. *[nà*^{L} *kó* *ɲùnú-gó-jú*$^{+H}$*]* ^{L}*bàŋà*
[person^{L} NonhObj be.ruined-Caus-**Ipfv.Rel**$^{+H}$] ^{L}owner
'a person who will ruin it'

e. *ú* *[[[sǎ*^{n} ^{H}*dúwɔ́]* *bè]* *dàg-ɛ́ː-jú*$^{+H}$*]*
2SgSbj [[[ReflPoss ^{H}load] with] be.suited-MP-**Ipfv.Rel**$^{+H}$]
pág-ɛ̀ *dè*
tie-Pfv if
'when you-Sg had tied up (the quantity) that was matched to your load' (2011.1a.13)

f. *[[nà*^{L} *[kó* *bínì]* *bíré* ^{L}*bì-jù]* *tú-túrú]*
[[person^{L} [Nonh in] work(n) ^{L}do-**Ipfv.Rel**] one-one]
yɔ́ *kɔ̀*
Exist be.NonhSbj
'There are a few people who work in that (way).' (2011.1a.31)

g. *[nà*^{L} *yě* ^{L}*bɛ̀-jù]* *kɔ̀ː-rɔ̀,*
[person^{L} go ^{L}get-**Ipfv.Rel**] be.NonhSbj-Neg
'there was no-one who could go (out)' (2011.1b.05)

h. *[sɔ̀*^{nL} *nǎ* ^{L}*àː-jù]* *yɔ́* *kɔ̀*
[horse^{L} person ^{L}catch.**Ipfv.Rel**] Exist be.NonhSbj
'There were horse(-men) who captured people.' (2011.1b.01)
(< *áː-jú*)

My assistant did not approve of relatives based directly on the progressive (*-táŋà*). The imperfective relative examples given above are often used in the full range of imperfective, including progressive and habitual as well as future, contexts. However, it is possible to combine *-táŋà* with a following copula, which can be relativized, as in (455). In nonsubject relatives, a subject pronominal is required (455c-d).

(455) a. *[nà*^{L} *súgó-táŋà]* ^{H}*wɔ́*
[person^{L} go.down-Prog] ^{H}**be.HumSgSbj.Rel**
'the person who is going down'

b. *[[nà*^{L} *súgó-téŋè]* ^{H}*wé]* *nà*
[[person^{L} go.down-Prog ^{H}**be.HumPlSbj.Rel**] Pl
'the people who are going down'

c. *[ɲà*^{L} *súgó-táŋà]* *[wó* ^{H}*wɔ́]*
[place^{L} go.down-Prog] [3SgSbj ^{H}**be.HumSgSbj.Rel**]
'the place where he is going down'

d.	*[ɲà*^{L}	*súgó-téŋè]*	*[bé*	^{H}*wé]*
	[place^{L}	go.down-Prog.PlSbj]	[3PlSbj	^{H}**be.HumPlSbj.Rel**]

‘the place where they are going down’

14.1.9.3 Negative perfective-system verbs in relative clauses

The perfective negative in main clauses has an {L}-toned stem followed by H-toned suffix *-lí*. The form used in relatives is segmentally identical. The perfective negative, unlike positive categories, allows plural-subject marking (*-lâ:*).

In subject relatives, the form of the verb is also tonally identical to the main-clause form. A plural-subject example is (456e).

(456) a.	*[nà*^{L}	*yè-lí]*	^{L}*bàŋà*
	[person^{L}	come-**PfvNeg.Rel**	^{L}owner

‘(a/the) person who did not come’

b.	*ìsì*^{L}	*bógú*	*bògò-lí*
	dog^{L}	barking	bark-**PfvNeg.Rel**

‘the dog that didn’t bark’

c.	*nà*^{L}	*[sǎ*^{n}	^{H}*náŋá]*	*pàgà-lí]*	^{L}*bàŋà*
	person^{L}	[ReflPoss	^{H}cow]	tie-**PfvNeg.Rel**]	^{L}owner

‘someone who didn’t tie up his cow’

d.	*[nà*^{L}	*[tù-tù:rû*$^{+L}$	^{L}*yɔ̀:]*
	[person^{L}	[horn.Def^{+L}	^{L}NearDist]
	ɛ́g-ɛ́:	*yà:-lí]*	^{L}*bàŋà*
	hear-and.SS	go-**PfvNeg.Rel**]	^{L}owner

‘a person who heard that horn and didn’t go (to the fields)’ (2011.1a.15)

e.	*[nà*^{L}	*[ɔ̀jɔ̀*^{L}	*pɔ̂*^{n}	*dàgà-lâ:]*	*nà*
	[person^{L}	[thing^{L}	any]	leave-**PfvNeg.PlSbj.Rel**]	Pl

‘people who didn’t leave anything’

f.	*[sɛ̂y*^{n}	*bàr*^{n}*ùw*^{n}*à-lí]*	^{L}*dày*^{n}
	[very.well	be.wounded-**PfvNeg.Rel**]	^{L}limit

‘any (one) that were not (already) thoroughly (=badly) wounded’ (2011.1b.05)

In contrast to main clauses and to subject relatives, in a nonsubject perfective negative relative the stem is H-toned. The suffix is L-toned (*-lì*, plural *-là:*) phrase-finally (457a-c). The tone reversal also occurs in perfective negative verbs with focalized subjects, see (403) in §13.1.1, and apparently with focalized nonsubjects, see (407b) in §13.1.2.

(457) a.	*nàŋà*^{L}	*í*^{n}	^{HL}*págá-lì*
	cow^{L}	1SgSbj	^{HL}tie-**PfvNeg.Rel**

‘the cow that I didn’t tie up’

c. *ɔ̀jɔ̀*^{L} *wó* ^{HL}*ɲúnú-gó-lì*
thing^{L} 3SgSbj ^{HL}be.ruined-Caus-**PfvNeg.Rel**
‘something that he/she didn’t ruin’

d. *ɲà*^{L} *[ɔ̀jɔ̀*^{L} *pɔ̂*^{n}*]* *ɛ́mɛ́* ^{HL}*dágá-là:*
place^{L} [thing^{L} any] 2PlSbj ^{HL}leave-**PfvNeg.Rel**
‘a place where we didn’t leave anything’

The tone of the suffix to *-lí*, plural *-lâ:*, before an L-toned terminal element (458).

(458) a. *[àndì:*^{L} *í*^{n} ^{H}*yá:-lí]* ^{L}*àndì:*
[year^{L} 1SgSbj ^{H}go-**PfvNeg.Rel**] ^{L}year
‘the year when I didn’t go’

b. *[[jùgɔ́* *mà]* *ɲà*^{L} ^{H}*dɔ́:-lí]* ^{L}*dày*^{n}
[[knowledge 1SgPoss] place^{L} ^{H}arrive.**PfvNeg.Rel**] ^{L}limit
‘whereever my knowledge has not reached’ (2011.1a.31)

b. *[àr*^{n}*ú* *nìŋìr*^{n}*ì*^{L} ^{H}*lɔ́wɔ́-lí]* ^{L}*nìŋìr*^{n}*ì*
[rain day^{L} ^{H}rain.fall-**PfvNeg.Rel**] ^{L}day
‘the day when it didn’t rain’

The experiential perfect negative, which includes the perfective negative suffix, can also be relativized.

(459) *[nà*^{L} *bàmàkɔ́* *yà:*^{L}*-tɛ̀-lí]* ^{L}*bàŋà*
[person^{L} B go^{L}**-ExpPerf-PfvNeg.Rel**] ^{L}owner
‘(a/the) person who has never been to Bamako’

14.1.9.4 Negative imperfective-system verbs in relative clauses

The verb takes the same imperfective negative form segmentally as in main clauses, but undergoes a tonal change in nonsubject relatives. As in the perfective negative, plural-subject marking is allowed.

Subject relatives are in (460). The verb has the same tones as in main clauses. This construction is especially common in double negations with *kɔ̀:-rɔ́* ‘does not exist’ like (460f). A plural-subject example is (460c).

(460) a. *[ɲɛ̀*^{L} *nî* *yɛ̌:-rò]* ^{L}*bàŋà*
[woman^{L} here come-**IpfvNeg.Rel**] ^{L}owner
‘a woman who does not come here’

b. *[nà*^{L} *ɔ̀jɔ́* *ɲùnú-gô:-rò]* ^{L}*bàŋà*
[person^{L} thing be.ruined-Caus-**IpfvNeg.Rel**] ^{L}owner
‘someone who doesn’t ruin things’

c. *[nà*^{L} *ɔ̀jɔ́* *ɲùnú-gô:-rè]* *nà*
[person^{L} thing be.ruined-Caus-**IpfvNeg.PlSbj.Rel**] Pl
‘people who don’t ruin things’

d. *[nà*^{L} *ɔ̀jɔ́* *dàgâ:-rò]* ^{L}*bàŋà*
[person^{L} thing leave-**IpfvNeg.Rel**] ^{L}owner
‘someone who doesn’t abandon things’

e. *[nà*^{L} *sɔ̌:* *yɔ̂:-rò]* *jò-jô:*
[person^{L} thing accept-**IpfvNeg.Rel**] Rdp-be.many.Stat
‘The people who didn’t accept the thing (=consent) are many.’ (2011.1a.15)

f. *[sɔ̀:*^{L} *[yɛ̀r-ɛ̂* *dè]* *gǎ:-rò]* *kɔ̀:-rɔ̀*
[thing^{L} [come-Pfv if] pass-**IpfvNeg.Rel**] be.NonhSbj-Neg
‘There is nothing (=no crisis) that comes and doesn’t pass.’ (2011.1b.03)

g. *[dúwɔ́* *nà*^{L} ^{H}*gɔ́-ɲú.:.]*
[load person^{L} ^{H}be.able-Ipfv.Rel.&]
[gɔ̌:^{n}*-rò* *kà:*^{n}*]* *yɔ́* *kɔ̀*
[be.able-**IpfvNeg-Rel** also] Exist be.NonhSbj
‘There were (some) people who could handle the load and also (some) who could not handle (it).’ (2011.1a.13) (*gɔ̀r*^{n}*ɔ́*)

Nonsubject relatives are in (461). /LH/-toned verbs merge with /H/-toned verbs. The stem syllables are therefore H-toned except for the <HL>-toned long vowel before *-rò* (plural *-rè*).

(461) a. *nàŋà*^{L} *bé* *pír*^{n}*î:-rò*
cow^{L} 3PlSbj milk-**IpfvNeg.Rel**
‘a cow that they do not milk’

b. *[nìŋìr*^{n}*ì*^{L} *í*^{n} *yâ:-rò]* ^{L}*nìŋìr*^{n}*ì*
[day^{L} 1SgSbj go-**IpfvNeg.Rel**] ^{L}day
‘the day when I will not go.’

c. *[nìŋìr*^{n}*ì*^{L} *[ɔ̀jɔ̀*^{L} *pɔ̂*^{n}*]* *wó* *ɲúnú-gô:-rò]*
[day^{L} [thing^{L} any] 3SgSbj be.ruined-Caus-**IpfvNeg.Rel**]
^{L}*nìŋìr*^{n}*ì*
^{L}day
‘the day when he/she will not ruin anything’

d. *ɔ̀jɔ̀*^{L} *í*^{b} *dágâ:-rò*
thing^{L} 1SgSbj leave-**IpfvNeg.Rel**
‘something that I will not leave’

14.1.9.5 Stative verbs (positive and negative) in relative clauses

In main clauses, a positive stative verb has a reduplicated form *Cv̀-Cv́Cv̀*, which is reduced to {L}-toned *Cv̀Cv̀* following a locational or other nonpronominal constituent (§10.4). In a relative clause, the form is *Cv́Cv́*.

Subject relatives are in (462).

(462) a. *[àrⁿà*^{L} *[ɛ́* *tɛ̀]* ^{H}*ígɛ́]* ^{L}*bàŋà*
[man^{L} [there.Def around] ^{H}stand.**Stat.Rel**] ^{L}owner
‘the man who is sitting there’

b. *[ɲɛ̀*^{L} *[ɛ́* *tɛ̀]* ^{H}*úmɔ́]* ^{L}*bàŋà*
[woman^{L} [there.Def around] ^{H}lie.down.**Stat.Rel**] ^{L}owner
‘the woman who is lying down over there’ⁿ

c. *[dɛ̀ⁿ*^{L} *[tógú* *bɔ́rɔ̀]]* ^{H}*dáŋá*
[waterjar^{L} [shelter under]] ^{H}sit.**Stat.Rel**
‘the waterjar that is sitting under the shelter’

Nonsubject relatives are in (463).

(463) a. *àrⁿá* *ɲà*^{L} *wó* ^{H}*dáŋá*
man place^{L} 3SgSbj ^{H}sit.**Stat.Rel**
‘(there) where the man is sitting’

b. *tǔⁿ* *[gɔ̀: = ǹ]*^{L} ^{H}*kɔ́rɔ́*
boubou [wall=Dat]^{L} ^{H}be.hanging.**Stat.Rel**
‘the wall on which the boubou (garment) is hanging.’

c. *sàjú* *[tìmɛ̀ = ǹ]*^{L} ^{H}*tɔ́rⁿɔ́*
bird [tree=Dat]^{L} ^{H}perch.**Stat.Rel**
‘the tree on which the bird is perched’

The regular stative negative is of the form *Cv̀Cv̀*^{L} *= lá* in main clauses. It can be used without change in subject relatives (464a-b), but the stem is {H}-toned in nonsubject relatives (464c). Plural-subject marking is allowed, as in other negative categories. Plurality is expressed by stem vocalism in (464b).

(464) a. *[àrⁿà*^{L} *dàŋà*^{L} *= lá]* ^{L}*bàŋà*
[man^{L} sit.Stat^{L}=**StatNeg.Rel**] ^{L}owner
‘the man who is not sitting’

b. *[nà*^{L} *dèŋè*^{L} *= lá]* *nà*
[person^{L} sit.Stat.**PlSbj** ^{L}=**StatNeg.Rel**] Pl
‘people who are not sitting’

c. *[ná* *ɲà*^{L} *wó* *dáŋá = lá]*
[person place 3SgSbj sit.Stat=StatNeg.Rel]
‘the place where the person is not sitting’

14.1.9.6 Other predicates (‘be’, ‘have’, ‘be in’, ‘it is’, adjective) in relatives

The locational-existential quasi-verb (‘be [somewhere]’) occurs in positive and negative forms in relative clauses. The human forms are generally followed by *bàŋà* ‘owner’ (singular) or by plural *nà*. The ‘be’ quasi-verb has H-tone in relatives. The negative quasi-verbs have their usual *Cv̀:-rv́* shape (465c).

(465) a. *[nà*^{L} *bàmàkɔ́* ^{H}*wɔ́]* ^{L}*bàŋà*
[person^{L} B ^{H}**be.HumSgSbj.Rel**] ^{L}owner
'the person who is in Bamako'

b. *tùwò*^{L} *bàmàkɔ́* ^{H}*kɔ́*
stone^{L} B ^{H}**be.NonhSbj.Rel**
'the stone that is in Bamako'

c. *[nà*^{L} *bàmàkɔ́* *wè:-ré]* *nà*
[person^{L} B **be.HumPlSbj-Neg.Rel**] Pl
'the people who are not in Bamako'

d. *[[bìrɛ̀* *pèrè]*^{L} ^{H}*kɔ́]* *yǎ:-kɔ̀=ỳ*
[[work^{L} other]^{L} ^{H}**be.NonhSbj.Rel**] which?=it.is
'The other work that exists, which (=what) is it?' (2011.1a.18)

e. *ùr*^{n}*ì:*^{L} *gìr*^{n}*í* ^{H}*wé* *nà*
chldren^{L} house ^{H}**be.HumPlSbj.Rel** Pl
'children who are (staying) at home' (2011.1a.07)

Relativization of 'have' clauses is illustrated in (466). The form of 'have' in relatives is *sá*, negative *sà:-rá*. Existential *yɛ́* is absent from this construction.

(466) a. *àr*^{n}*à*^{L} *nàŋá* ^{H}*sá*
man^{L} cow ^{H}**have.Rel**
'a man who has a cow'
(also: *àr*^{n}*à nàŋá sá bàŋà)*

b. *ɲà*^{L} *péjú* *í*^{n} ^{H}*sá*
place^{L} sheep 1SgSbj ^{H}**have.Rel**
'a place where I have a sheep'

c. *[nà*^{L} *bú:dú* *sà:-rá]* ^{L}*bàŋà*
[person^{L} money **have-Neg.Rel**] ^{L}owner
'a person who has no money'

d. *[nà*^{L} *sà:-rá]* *kɔ̀:-rɔ́*
[person^{L} **have-Neg.Rel**] be.NonhSbj-Neg
'There is nobody who doesn't have (a granary).' (2011.1a.16)

The 'be in' quasi-verb can also be relativized on (467). It takes the form *só*. Subject relatives are common, as in (467a), but a nonsubject relative is also attested (467b).

(467) a. *[sâ:*^{n} *fú→]* *[wòrû*$^{+L}$ *bîn]*
[all all] [field.Def^{+L} in]
ɲù:^{L} ^{H}*só* ^{L}*dày*^{n}
millet^{L} ^{H}**be.in.Rel** ^{L}limit
'all the millet that was in the field' (2011.1a.11)

b. *bínígí* *ɲà*^{L} ^{H}*só*
manure place^{L} ^{H}**be.in.Rel**
‘a place where (some) manure is’ (2011.1a.29)

It is not normal to relativize on a positive ‘it is’ clitic form, since e.g. ‘a person who is a Dogon’ is always rephrased as ‘a Dogon’. However, it is possible to relativize on the corresponding negation (468).

(468) *í*^{n} *[nà*^{L} *[dɔ̀gɔ́n=í:* *lò]]* *dɛ̀nɛ́-táŋà*
1SgSbj [person^{L} [Dogon=it.is **Neg.Rel**] look.for-Prog
‘I’m looking for someone who is not a Dogon.’

An adjectival predicate may also occur in a relative. Instead of a prolonged form of the adjective plus a ‘be’ quasi-verb, the adjective is bare and in {H}-toned form. It may be compared to the comparative form (‘be taller’ etc.), which however has {HL} overlay. Compare ^{H}*ná:r*^{n}*á* (469a) with *nà:r*^{n}*-á→ kɔ̂* ‘it is easy’ and with ^{HL}*ná:r*^{n}*à* ‘(is) easier’ (stem *nà:r*^{n}*á*). A negative adjectival predicate does not change its form from main clause to relative (469c).

(469) a. *ɲù:*^{L}*-[dǔw-∅-∅]* *bà*^{nL} *dág-à→* ^{H}*ná:r*^{n}*á*
millet^{L}-[carry-MP-VblN] manner^{L} a.little ^{H}**easy.Rel**
‘the way (=in such a way that) carrying the millet (to the houses) after that is fairly easy’ (2011.1a.12)

b. *[jɛ̀ŋɛ̀*^{L}*-úr*^{n}*ì:*$^{+L}$ *bè]* *bà*^{nL} *bé* ^{H}*sɛ́*^{n}
[twin^{L}-children.Def^{+L} Pl] manner^{L} 3PlSbj ^{H}good.**Rel**
‘(Because of) how handsome the twins were?’ (2011.1b.04)

c. *bìrɛ̀*^{L} *kìrɛ̀*^{L}*=lá*
work^{L} difficult^{L}=**StatNeg.Rel**
‘a job that is not difficult’

14.1.10 Same-subject *má* connecting nonsubject relative to main clause

Consider the examples in (470). Here the subject of a nonsubject relative is coindexed to the subject of the main clause. The key morpheme is *má* following the verb, which has bare-stem form. There is no (other) pronominal subject pronoun in the relative clause. In effect, *má* is an anaphoric pronoun (requiring an antecedent) similar to reflexive *sǎ*^{n}. Like the reflexive, *má* is transpersonal, so it can be coindexed to any (nonimperative) subject, including first and second person pronouns. A similar *má* can occur as a transpersonal reflexive possessor (§18.1.3.2).

(470) a. *í*^{n} *[pèjù*^{L} *ɛ́wɛ́* *má]* *jê:-jù*
1SgSbj [sheep^{L} buy **Rel.SS**] bring-Ipfv
‘I will bring the sheep-Sg that I bought.’

b. *sè:dú* *[pèjù*^{L} *dàgá* *má]* *jê:-jù*
S [sheep^{L} leave **Rel.SS**] bring-Ipfv
‘Seydou$_{x}$ will bring the sheep-Sg that he$_{x}$ left.’

c. *ú* *[[nìŋìrⁿì*^{L} *yὲrέ* *má]* ^{L}*nìŋìrⁿì]* *yǎ:-jú*
2SgSbj [[day^{L} go **Rel.SS**] ^{L}day] go-Ipfv
‘You-Sg will go on the (same) day that you have come.’

The ability of a higher-clause subject to bind a lower-clause subject in a relative clause with *má* (470a-c) is paralleled by the ability of a higher-clause subject to bind a lower-clause subject in a factive clause (as complement of ‘know’), using transpersonal reflexive sǎⁿ (§18.1.4).

As usual, a supposed covert second person imperative subject fails to bind the anaphoric element. Compare indicative (471a-b), which have *má*, to the imperatives in (471c-d), which instead have a nonreflexive 2Sg preverbal pronoun in the relative clause.

(471) a. *íⁿ* *[sɔ̀:*^{L} ^{H}*íyέ* *má]* ^{L}*bì-jù*
1SgSbj [thing^{L} ^{H}want.Rel **Rel.SS**] ^{L}do-Ipfv
‘I do what I want.’

b. *ú* *[pèjù*^{L} *dàgá* *má]* *jἕ:r-ì* *mà*
2SgSbj [sheep^{L} leave **Rel.SS**] bring-Pfv Q
‘Did you-Sg bring the sheep that you left?

c. *[pèjù*^{L} *ú* ^{HL}*dág-ὲ]* *jἕ:rέ*
[sheep^{L} **2SgSbj** ^{HL}leave-Pfv.Rel] bring.Imprt
‘Bring-2Sg the sheep that you left!’

d. *[sɔ̀:*^{L} *ú* ^{H}*íyέ]* ^{L}*bìrὲ*
[thing^{L} **2SgSbj** ^{H}want.Rel] ^{L}do.Imprt
‘Do-2Sg what you want!’

The verb before *má* is in bare-stem form. For example, ‘sell’ appears as *dɔ̀rⁿɔ́ má*, with bare stem *dɔ̀rɔ́* rather than perfective *dɔ̀rⁿ-έ*. However, the L-tone at the end of /HL/- and /LHL/-toned heavy stems like *ɲùnú-gù* ‘ruin, damage’ becomes H-toned (472).

(472) *wó* *[gìrⁿì*^{L} *ɲùnú-gú*$^{+H}$ *má]* ^{L}*ὲw-ὲ*
3SgSbj [house^{L} be.ruined-Caus^{+H} **Rel.SS**] ^{L}buy-Pfv
‘He bought the house that he ruined.’

jê má with ‘take away’ is pronounced with a downstep on the *má* morpheme.

In (473a), the relative clause is imperfective, denoting an event expected to follow that of the main clause. Negative relatives clauses are illustrated in (473b) (imperfective) and (473c) (perfective). In (473b), the final L-tone element of the imperfective negative suffix is carried over to *má*, which is heard as *mà*.

(473) a. *íⁿ* *[pèjù*^{L} ^{H}*έwέ-jú* *má]* ^{L}*ɔ̀-ὲ*
1SgSbj [sheep^{L} ^{H}buy-Ipfv **Rel.SS**] ^{L}see-Pfv
‘I saw the sheep-Sg that I will buy.’

b. *íⁿ* *[pèjù*^{L} *έwε̂:-rò* *mà]* ^{L}*ɔ̀-ὲ*
1SgSbj [sheep^{L} buy-IpfvNeg **Rel.SS**] ^{L}see-Pfv
‘I saw the sheep that I will not buy.’

c. *í*^{n} *[pèjù*^{L} *ɛ̀wɛ̀-lí* *má]* ^{L}*ɔ̀-ɛ̀*
1SgSbj [sheep^{L} buy-IpfvNeg **Rel.SS**] ^{L}see-Pfv
‘I saw the sheep that I did not buy.’

A textual example with suppletive stative ‘not know’ as predicate is (474).

(474) *[kó* ^{HL}*níŋìr*^{n}*ì]* *[kɛ̀ɲɛ́* *nɔ̌-ɛ̀* *dè]*
[Def ^{HL}day] [beer drink-Pfv if]
[[gɔ̀:^{L} *ínɛ́* *má]*
[[dance(n)^{L} not.know **Rel.SS**]
gɔ̌:-ní:] ^{L}*nà:-ɲù*
dance-while.SS] ^{L}spend.night-Ipfv
‘That day, when they had drunk millet beer, they would spend the night dancing (wild) dances that they didn’t know.’ (2011.1b.03)

Another textual example is (475).

(475) *[[ú* *gɔ̌-ɲú* *má]* ^{L}*dày*^{n}*]* *pág-ɛ̀* *dè*
[[2SgSbj be.able-Ipfv **Rel.SS**] ^{L}limit] tie-Pfv if
‘You-Sg would tie up (=bundle) all that (=as much as) you-Sg could (carry) of it (=millet)’ (2011.1a.13)

Historically, it is possible that *má* in its various anaphoric functions originated as a special use of the homophonous 1Sg pronoun form. In several western Dogon languages, including Najamba, 1Sg pronominal-subject suffix *-m* doubles as logophoric subject suffix in quotations.

14.1.11 Relative clause involving verb- or VP-chain

Any direct chain can be relativized on. The nonfinal verbs have the same form they have in normal chains with final inflected verb. The final verb has the appropriate relative-clause form. (476a) is a subject relative. In non-subject relatives like (476b), the preverbal subject pronoun is placed directly in front of the final verb.

(476) a. *[nà*^{L} *bàgá* *súgó* *sá*^{n}*]* ^{L}*bàŋà*
[person **fall** **go.down** Pfv.Rel] ^{L}owner
‘the person who fell down’

b. *[ɲà*^{L} *bàgá* *í*^{n} ^{H}*súg-é]* ^{L}*dèŋ*
[place^{L} **fall** 1SgSbj ^{H}**go.down**-Pfv] ^{L}place
‘the place where I fell down’

yě ‘go’ and *yɛ̀rɛ́* ‘come’ are idiosyncratically tone-dropped as nonfinal chained verbs, when directly preceding the H-toned preverbal subject pronoun (477a). The tone-dropping does not occur before an intervening nonpronominal element (477b).

(477) a. *ɲà*^{L} ^{L}*yè* *é* *mɔ̌:-nɔ́-ɲù*
place^{L} $^{\mathbf{L}}$**go** 2PlSbj assemble-Caus-Ipfv
‘the place where you-Pl go and assemble (them)’ (2011.1a.12)

b. *nìŋìr*^{n}*ì*^{L} *yèrɛ́ /yě* *ɲă:* *wó* *ɲí:-ɲù*
day^{L} **come/go** meal 3SgSbj eat.meal-Ipfv
'the day when he/she will come/go and ate a meal'

14.1.12 Demonstratives following the verb

My assistant had no difficulty placing a morphologically simple demonstrative pronoun after the verb of the relative clause, semantically modifying the head NP. In this construction, with near-distant *yɔ́:* or proximate *nɔ́:*, the verb undergoes no additional tonal changes, but the demonstrative itself usually drops tones (as it does following a numeral). However, there was one textual example (478d) where we would have expected *kɔ́* ^{L}*yɔ̀:*, but where the actual output was *kɔ̀*^{L} *yɔ́:* . In this instance, the demonstrative controls tone-dropping on the verb (or, here, a locational-existential quasi-verb). The difference may involve presence of a tonal definite (L-tone) at the end of the verb or quasi-verb in (478.a-c) and its absence in (478d), but the discourse context of (478d) doesn't fit this well. The presence of the tonal definite is very difficult to identify when it is not NP-final.

(478) a. *pèjù*^{L} *ú* ^{H}*ɛ́w-ɛ́* ^{L}*yɔ̀:*
sheep^{L} 2SgSbj ^{H}buy-Pfv.Rel ^{L}**NearDist**
'that sheep over there that you-St bought'

b. *mòtàm*^{L} *nî* *núw-ɛ̀:* *sá*^{n} ^{L}*nɔ̀:*
scorpion^{L} here go.in Ppl.Pfv ^{L}**Prox**
'this scorpion who has come in here'

c. *[gù-gùrù*^{L} *nɛ̀w*^{n}*ɛ́* *sɔ̀:-ró]* ^{L}*yɔ̀:* ^{L}*dày*^{n}
[grass^{L} value be.in-Neg.Rel] ^{L}**NearDist** ^{L}limit
'all those weeds in which there is no value' (2011.1a.24)

d. *ɲù:*^{L}*-tɛ̀:rɛ́* *[găm* ^{H}*ná* ^{L}*kè]* *már*^{n}*-à→* *kɔ̂,*
millet^{L}-heap [some ^{H}person ^{L}Poss] big-Adv be.NonhSbj,
[găm *ná* ^{L}*kè]* *ùjú* *kɔ̂,*
[some person ^{L}Poss] small be.NonhSbj,
maintenant *[már*^{n}*-à→* ^{L}*kɔ̀* *yɔ́:* *nà*
now [big-Adv ^{L}be.NonhSbj.Rel **NearDist** Pl]
'some millet heaps were big, some (others) were (relatively) small. Now those that were big, …' (2011.1a.13)
(regular relative-clause form is *kɔ́*)

My assistant was not comfortable with similar combinations involving the far-distant demonstratives, which are more complex morphologically to begin with, and relatively uncommon in texts.

14.1.13 Universal quantifier 'all' (^{L}*dày*^{n}) following the verb

My assistant had difficulty adding *sâ:*^{n} (and *fú→*) 'all' directly after the verb of a relative clauses. This is not surprising given the near-homophony of the more common of these two quantifiers, namely *sâ:*^{n}, with the participial morpheme *sá*^{n} used in perfective subject relatives.

Instead, the intended sense is usually expressed by adding ^{L}*dày*^{n} after the verb (479a-b). This is the most noun-like of the 'all' quantifiers, being a special use of the L-toned form of the noun *dǎy*^{n} 'outer limit'. It therefore fits the pattern of L-toned nouns as terminal elements in relatives. Once ^{L}*dày*^{n} or any other terminal element, such as plural *nà*, has been added after the verb, *sâ:*^{n} 'all' may pile on (479b-c).

(479) a. *[[pèjù*^{L} *ú* ^{H}*dɔ́*^{n}*-lí]* ^{L}*dày*^{n}*]* *jɛ́:rɛ́*
[[sheep^{L} 2SgSbj ^{H}sell-PfvNeg] ^{L}**limit**] bring.Imprt
'Bring all the sheep-Pl that you didn't sell.'

b. *[[àr*^{n}*ú* *gìr*^{n}*ì*^{L} ^{H}*ɲúnú-g-í]* ^{L}*dày*^{n}*]*
[[rain house^{L} ^{H}be.ruined-Caus-Pfv] ^{L}**limit**]
sâ:^{n} *dǎn-gá-jú*
all be.good-Caus-Ipfv
'We will fix up all the houses that the rain damaged.' (*dànú-gì*)

c. *[nà*^{L} *[sǎ*^{n} *bè]* ^{HL}*lámpɔ̀*^{n}*]* *tɔ́jɔ́* *sá*^{n} *nà]* *sâ:*^{n}
[person^{L} [ReflPoss Pl] ^{HL}tax] pay Pfv.Rel Pl] **all**
'all the people who have paid their taxes'

14.1.14 Evaluative adjective following the verb

Adjectives normally remain with the internal portion of the head NP. However, I have one textual example (480a) suggesting that if a mini-relative-clause functions is lexicalized as a kind of common noun (denoting an open set), in the fashion of agentive nominals, an evaluative adjective can follow it. In this case, the entire relative clause is tone-dropped.

The context for (480a) is that a childless old woman has no-one to take care of her. The evaluative adjective 'good' effectively modifies 'care-giver', i.e. someone who is not 'good' in general but rather good at care-giving. Without 'good' the relative clause would have appeared as (480b).

(480) a. *nɛ́:* *pèré*
now furthermore
[[nà *sà*^{n} *dìn-ɛ̀:-ɲù]*^{L} *sɛ́*^{n} *kà:*^{n}*]*
[[person ReflObj hold-MP-Ipfv]^{L} **good** even]
^{L}*sà:-rà*
^{L}have-Neg
'Now furthermore she$_{x}$ didn't even have a good person to take care of her(-self)$_{x}$.' (2011.1b.04)

b. *nà*^{L} *sǎ*^{n} *dìn-ɛ́:-ɲú* *kà:*^{n}
person^{L} ReflObj hold-MP-Ipfv even
'even anyone to take care of herself'

Note that *sǎ*^{n} (reflexive object) as well as *dìn-ɛ́:-ɲú* (phrase-finally: *dìn-ɛ́:-ɲù*) is tone-dropped in (480a) under the control of the postverbal adjective. 'Person' is the head NP so it is tone-dropped anyway. Elicited examples show that the adjective forces tone-dropping on the entire mini-relative clause (redundantly in the case of the head NP). Compare (481a) with an adjective to (481b) with no adjective, observing the tones of the preparticipial words. ^{H}*páná* in (481b) has possessed-noun {H} overlay.

(481) a. *[nà [sà^{n} pànà] bì-jù]*^{L} *sɛ́^{n} kà:^{n}]*
[person **[ReflPoss meal] make-Ipfv]^{L}** good even]
'(even) a good person to cook her meals'

b. *nà*^{L} *[sǎ^{n}* ^{H}*páná] bǐ-jú kà:^{n}]*
person^{L} **[ReflPoss** ^{H}**meal] make-Ipfv** even]
'(even) anyone to cook her meals'

14.2 Subject relative clause

In this and the following sections I bring together the details described individually in the preceding sections, to illustrate what a complete relative clause looks like.

In a subject relative, like other relatives, the core NP (plus any numeral) that functions as relative head appears internally in the relative clause but undergoes tone-dropping. If the head NP is (human) plural, a plural morpheme *nà* is added after the verb (and perfective participiail *sá^{n}* if present). Other than this there is no agreement with the (subject) head NP; in particular, there is no additional preverbal subject pronoun.

(482) a. *[ì:^{n} bàgá sá^{n}] yǎ: wɔ̀*
[**child^{L}** fall Ppl.Pfv] where? be.HumSgSbj
'Where is the child who fell?'

b. *[ùr^{n}ì:*^{L} *bàgá sá^{n} nà] yǎ: wè*
[**children^{L}** fall Ppl.Pfv Pl] where? be.HumPl
'Where are the children who fell?'

c. *[ìsì*^{L} *ú kɛ́rɛ́ sá^{n}] yǎ: kɔ̀*
[**dog^{L}** 2SgObj bite Ppl.Pfv] where? be.NonhSbj
'Where is the dog that bit you-Sg?'

Adjectives and numerals that are part of the head NP remain with it, inside the relative clause, and are subject to relative-clause tone-dropping. However, any demonstrative, free plural particle, universal quantifier, or discourse-function particle (like 'only') that would normally be part of the head NP appears after the verb. If the overall NP is plural, plural *nà* appears after demonstrative (483d), while universal quantifier *sâ:^{n}* follows *nà* (483e). Demonstratives are tone-dropped regardless of whether plural *nà* is present (483c-d).

(483) a. *[[ì:^{n} sì^{n}-sì:^{n}]*^{L} *bàgá sá^{n}] yǎ: wɔ̀*
[**[child small]^{L}** fall Ppl.Pfv] where? be.HumSgSbj
'Where is the small child who fell?'

b. *[[ùr^{n}ì: kùrè:]*^{L} *bàgá sá^{n} nà] yǎ: wè*
[**[children six]^{L}** fall Ppl.Pfv **Pl**] where? be.HumPlSbj
'Where are the six children who fell?'

c. *[ì:*^{nL} *bàgá* *sá*^{n} ^{L}*yɔ̀:]* *gɛ̀rɛ́*
[**child**^{L} fall Ppl.Pfv ^{L}**NearDist**] look.at.Imprt
'Look at that child who fell!'

d. *[ùr*^{n}*ì:*^{L} *bàgá* *sá*^{n} ^{L}*yɔ̀:* *nà]* *gɛ̀rɛ́*
[**children**^{L} fall Ppl.Pfv ^{L}**NearDist** **Pl**] look.at.Imprt
'Look at those children who fell!'

e. *[ùr*^{n}*ì:*^{L} *bàgá* *sá*^{n} *nà* *sâ:*^{n}*]* *bàw*^{n}*ɛ́r*^{n}*ɛ̀-sɛ̂*^{n}
[**children**^{L} fall Ppl.Pfv **Pl** **all**] be.wounded-Pfv.PlSbj
'All of the children who fell are hurt (wounded).'

If the head NP is possessed, only prenominal possessors with *kè* are allowed. Even the 1Sg possessor, which is elsewhere postnominal *mà*, must be restructured to *í*^{n} *kè* and shifted to prenominal position. These possessors are not subject to relative-clause tone-dropping; that is, they constitute tonosyntactic islands. The remainder of the head NP is subject to tone-dropping as though the possessor were not present.

(484) a. *[[ú* ^{L}*kè]* ^{L}*ì:*^{n} *bàgá* *sá*^{n}*]* *bǎw*^{n}*r*^{n}*ì*
[[**2SgPoss** ^{L}**Poss]** ^{L}child fall Ppl.Pfv] be.wounded.Pfv
'Your child who fell was hurt (wounded).'

b. *[í*^{n} ^{L}*kè]* ^{L}*ì:*^{n} *bàgá* *sá*^{n}*]* *yǎ:* *wɔ̀*
[**1SgPoss** ^{L}**Poss]** ^{L}child fall Ppl.Pfv] where? be.HumSgSbj
'Where is my child who fell?'

c. *[sè:dú* ^{L}*kè]* ^{L}*ì:*^{n} *bàgá* *sá*^{n}*]* *yǎ:* *wɔ̀*
[**Seydou** ^{L}**Poss]** ^{L}child fall Ppl.Pfv] where? be.HumSgSbj
'Where is Seydou's child who fell?'

14.3 Object relative clause

In an object relative clause, the subject is expressed by a preverbal pronoun even if also expressed clause-initially by a nonpronominal NP. The head NP undergoes the usual tone-dropping. The verb has the form it would have in a main clause with singular subject, and does not agree with a plural subject. If the head NP is plural, plural morpheme *nà* occurs after the verb. Before *nà*, a final L-tone on the verb is raised to high, as in ^{H}*lág-ɛ́* in (485c).

(485) a. *[sè:dú* *ì:*^{nL} *wó* ^{HL}*lág-ɛ̀]* *bǎw*^{n}*r*^{n}*ì*
[Seydou **child**^{L} **3SgSbj** ^{HL}hit-Pfv.Rel] be.wounded.Pfv
'The child who(m) Seydou hit was hurt.'

b. *[ì:*^{nL} *bé* ^{HL}*lág-ɛ̀]* *bǎw*^{n}*r*^{n}*ì*
[**child**^{L} **3PlSbj** ^{HL}hit-Pfv.Rel] be.wounded.Pfv
'The child who(m) they hit was hurt.'

c. *[sè:dú* *ùr*^{n}*ì:*^{L} *wó* ^{H}*lág-ɛ́* *nà]*
[Seydou **children**^{L} **3SgSbj** ^{H}hit-Pfv.Rel Pl]
bàw^{n}*ɛ́r*^{n}*ɛ̀-sɛ̂*^{n}
be.wounded-Pfv.PlSbj
'The children who(m) Seydou hit were hurt.'

d. *[nàŋà*^{L} *í*^{n} ^{HL}*dɔ́r*^{n}*-ɛ̀]* *nɔ́:* *kó=ỳ*
[**cow**^{L} **1SgSbj** ^{HL}sell-Pfv] Prox Nonh=it.is
'The cow that I sold, this is it.'

e. *nɔ́:* *[nàŋà*^{L} *í*^{n} ^{HL}*dɔ́r*^{n}*-ɛ̀]=ỳ*^{n}
Prox [**cow**^{L} **1SgSbj** ^{HL}sell-Pfv] =it.is
'This is the cow that I sold.'

14.4 Possessor relative clause

In this construction, the possessor itself undergoes tone-dropping as the head of the relative clause. In (486a-c), the tone-dropping actually applies both to the possessor and to the possessed noun (double tone-dropping).

(486) a. *[[[nà* *gìr*^{n}*ì]*^{L} *bàgá* *sá*^{n}*]* ^{L}*bàŋà]*
[[[**person** **house**]^{L} fall Pfv.Rel] ^{L}owner]
yǎ: *wɔ̀*
where? be.HumSgSbj
'Where is the person whose house fell?' (*nǎ*, *gìr*^{n}*í*)

b. *[[[nà* *nùmɔ̀]*^{L} *bàwɛ́r*^{n}*-ɛ̀:* *sá*^{n}*]* *nà]*
[[[**person** **hand**]^{L} be.injured-then.SS Pfv.Rel] Pl]
yǎ: *wè*
where? be.HumPlSbj
'Where are the people whose hands were hurt?' (*nǎ*, *nùmɔ́*)

c. *[nà* *kɔ̀rɔ̀]*^{L} *pɛ́-pɛ́y* *ú* *ínɛ́*
[**person** **meaning**]^{L} at.all 2SgSbj not.know.Rel
'someone whose meaning (=background) you-Sg don't know at all' (2011.1b.02) (*nǎ*, *kɔ́rɔ́*)

In elicitation, my assistant had some difficulty with the tones of the possessed noun, and I also recorded a variation on (486b) with clearly audible lexical tones on the possessed noun 'foot'. It is possible that (487) represents an alternative syntax with 'foot' treated as an adverb, not phrased with 'cow' ('X was injured on the foot').

(487) *[nàŋà*^{L} *kúwɔ́* *bàwɛ́r*^{n}*-ɛ̀:* *sà*^{n}*]*
[**cow**^{L} **foot** be.injured-then.SS Pfv.Rel]
yǎ: *kɔ̀*
where? be.NonhSbj
'Where is the cow whose foot was hurt?'

The inconsistency of the data may be partially due to the ambiguity of ^{L}*bàŋà* in e.g. (486a). The literal sense of *bàŋá* is 'owner'. Whereas a final ^{L}*bàŋà* in most relative clauses merely specifies human singular head NP, in possessor relatives the literal sense may well be activated. Indeed, examples like (488) are difficult to understand without taking ^{L}*bàŋà* literally. Note that in the reading 'the owner of [the roof that collapsed]', 'roof' is quite properly {L}-toned since it is now the head NP of the relative, while ^{L}*bàŋà* has the usual {L}-toned form for a terminal element in a relative clause.

(488) *[[kù^{n}-mɔ̀rù^{L} wɔ̀ró sá^{n}] ^{L}bàŋà]*
[[**roof**^{L} collapse Pfv.Rel] ^{L}**owner**]
yǎ: wɔ̀
where? be.HumSgSbj
'Where is the owner of the house that collapsed?'

The double tone-dropping (i.e. of possessor and possessed) in (486) is nevertheless syntactically defensible, though not typical in other Dogon languages. We will see another case of double tone-dropping in the next section, on relativization involving postpositions.

14.5 Relativization on the complement of a postposition

When the NP complement of a postposition is relativized on, both the NP itself and the postposition are subject to tone-dropping. In each example in (489), the complement NP ('person', 'people', 'house') is audibly tone-dropped in the familiar fashion. The postpositions *kû^{n}* 'on' (489a) and *bîn* 'in' (489c) have also audibly dropped from /HL/ to {L} tone. The dative postposition (489b) is already L-toned; we can assume that it is (vacuously) tone-dropped by comparing it to the other postpositions.

(489) a. *[kù^{n}-mɔ̀rú [nà kù^{n}]^{L} wɔ̀ró sá^{n}] ^{L}bàŋà*
[roof [**person on**]^{L} collapse Ppl.Pfv] ^{L}owner
'the person on whom the roof collapsed (=fell)'

b. *[bú:dú [nà=ǹ]^{L} í^{n} ^{H}ó-é] nà*
[money [**person=Dat**]^{L} 1SgSbj ^{H}give-Pfv.Rel] Pl
'the people to whom I gave the money'

c. *[[gìr^{n}ì bìn]^{L} ú nú-ỳ^{n}] [gìrí mà]=ỳ^{n}*
[[**house in**]^{L} 2SgSbj go.in-Pfv.Rel] [house 1SgPoss]=it.is
'the house that you-Sg have entered, it's my house'
[based on example from Prost, p. 94]

d. *[nɛ́: wɔ̀^{n}] [[là:rù gɛ̀:]^{L}*
[now Top] [[**lowly.one for**]
[àná bîn] jàtâ:-rò [bé ^{H}wé]
[village in] count-IpfvNeg [3PlSbj ^{H}be.HumPl.Rel]
yɛ̀r-ɛ́:
come-and.SS
'Now when [the lowly person (=the mother) whom they (=people) in the village did not think highly of] came, …' (2011.1b.04) (*là:rú* 'lowly person', purposive *gɛ̂:*)

e. *[[ɔ̀jɔ̀ bè]*^{L} *ɲú:* ^{L}*dùw-ɛ̀:-jù]*
[[**thing** **with]**^{L} millet ^{L}carry-MP-Ipfv.Rel]
pèré dɛ́y^{n}*→ kɔ̀:-rɔ̀*
other apart be.NonhSbj-Neg
Otherwise there was nothing else by means of which (one) could carry millet.' (2011.1a.13)

f. *[ɔ̀jɔ̀ gɛ̀:]*^{L} *bé* ^{H}*dág-ɛ́*
[thing **for]**^{L} 3PlSbj ^{H}leave-Pfv.Rel
'the thing (=reason) for which they have abandoned (it)' (2011.1a.15)

g. *[[ɔ̀jɔ̀=nì]*^{H} *jê] [[ɔ̀jɔ̀=nì]*^{L} *ó-jú*$^{+H}$*]*
[**[thing=Dat]**^{L} convey] [[thing=Dat]^{L} give-Ipfv.Rel^{+H}]
'anything (i.e. livestock) in the houses (=village) to take (=convey) it (=millet) and give it to' (2011.1a.22)

15 Verb (VP) chaining and adverbial clauses

By "chain" is meant a sequence of verbs, VPs, or clauses that denote two or more eventualities (sequenced or simultaneous), or that describe a single eventuality as a composite of two or more co-events. Adverbial clauses ('at the time when …') are closely related to this concept. Conditionals are treated separately in chapter 16, but there is some overlap with sequential chaining. The complement clauses in chapter 17 involve more specific grammatical interaction with the main clause, e.g. when the latter contains a control verb like 'begin (to VP)' or when the subordinated clause functions as a purposive clause.

A **direct chain** of verbs or VPs is one whose nonfinal verbs occur in the bare stem form, without an explicit subordinating morpheme. Typically, the components of direct chains denote co-events of a more or less unified eventuality. In TgK, direct verb chains are rather limited, because of the productivity of subordinators, especially the same-subject subordinator *-ɛ:* (§15.2.2.1, below). Chain-like sequences involving explicit subordination, are **loose chains**.

15.1 Direct chains (without chaining morpheme)

A distinction must be made between those direct chains that can occur in any aspectual context, and those that only occur in imperfective contexts due to restrictions on the same-subject anterior subordinator *-ɛ:* .

The aspectually versatile type of direct chain, functioning much like a compound denoting a single complex eventuality, and used in perfective as well as imperfective contexts, is exemplified (490). In cases like *tá: gɛ̀r-î:* 'taste', the need for a chain may not be so much the complexity of the event as the need to avoid confusion, given the fact that *tá:* 'taste' has homonyms (*tá:* 'shoot, sting'; *tá:* 'avoid taboo').

(490) Direct verb chains (in any aspectual context)

chain	gloss	components
jǔ:rù lɛ́:	'(2 farmers) sow in unison (in parallel rows)'	*jǔ:rù* 'put side by side', *lɛ́:* 'slash (earth) to sow seeds'
bàgá súgó	'fall down'	*bàgá* 'fall (out)', *súgó* 'go down'
bàjá gǔŋ	'pull (sth) off'	*bàjá* 'pull', *gǔŋ* 'remove'
tá: gɛ̀r-î:	'taste (sth)'	*tá:* 'taste' (with several homonyms), *gɛ̀r-î:* 'look at, consider'
kámá súnú-gì	'throw (sth) down'	*kámá* 'throw', *súnú-gì* 'take down'
kámá tí	'throw (sth) away'	*kámá* 'throw', *tí* 'send'
dèmé ná:-ǹ	'push (sth) up'	*dèmé* 'push', *ná:-ǹ* 'put up'
wá: tɔ́:	'hack (sth) down early'	*wá:* 'be/do early, on time', *tɔ́:* 'hack down (millet stems)'

Certain verbs are particularly common in chains. Some clearly retain their basic lexical sense in the chain. For example, *gǔŋ̀* ‘remove, take out’ occurs as final verb in numerous combinations like ‘pull off’ in (490), generally combining with a preceding verb specifying the manner of action (cf. English particles *out*, *off* and *away* in phrasal verbs).

A possible specialized element is *tí*, which as simple transitive verb means ‘send’, and which occurs as the final in *kámá tí* ‘throw (far) away’, i.e. horizontally as opposed to ‘throw down’ or ‘throw up’. The simple sense ‘send (e.g. money or a letter)’ is generally expressed as *bǎ:rì* or *bǎ:rì tí* ‘send’ (§16.1.3.2). *tí* occurs in what appears to be a three-part chain, *dàgá tí gàrá* ‘pass (sb, e.g. in a race)’, with *dàgá* ‘leave’ and *gàrá* ‘pass’. Here, however, we may be dealing with a homonymous morpheme or semantic offshoot *tí* that indicates a chronological divergence; see *t-î dè* (§16.1.3.2), L-toned ^{L}*tì* (§15.1.6.3), and *tɛ́-ɛ̀(:)* (§15.2.2.5).

If a stem occurs only as a nonfinal verb in chains, or develops a divergent sense in this position, it is difficult to identify it as a verb, rather than as an autonomous adverb. This is the case with *tɔ́rɔ́*, which seems to mean something like ‘(move) over, (move) a short distance’ in *tɔ́rɔ́ gǔŋ̀* ‘move, displace (sth)’ with *gǔŋ̀* ‘remove’ and in *tɔ́rɔ́ dɔ̌:* ‘move over (a little), budge; come near, approach’ with *dɔ̌:* ‘arrive, reach’. There is no obvious connection with the verb(s) *tɔ́rɔ́* ‘begin’, ‘resharpen (blade)’, ‘(egg) hatch’.

Because ‘go and come (back)’ expresses a sequence of bounded events, it does not qualify as an aspectually versatile direct chain, so we get *yɛ́-ɛ̀: yɛ̀rɛ́* with the same-subject subordinated form of ‘go’ (contrast Jamsay direct chain *yǎ: yɛ̀rɛ́*).

Co-events can also be expressed in other ways. In (491), ‘run’ is expressed as a noun ‘running’ which functions as complement of an instrumental postposition.

(491)	*wó*	*[jé*	*bè]*	^{L}*nù-y*
	3SgSbj	[running	**with**]	^{L}go.in-Pfv

‘He/She ran in.’
‘He/She came in on the run.’

For cases where the final verb is specialized in chain-final function as a kind of control verb, e.g. ‘get, obtain’ in the sense ‘be able to’, see §17.5.

In imperfective contexts, those chains that are expressed in perfective contexts using the same-subject anterior subordinator *-ɛ:* can be expressed in either of two ways: a) direct chains, or b) pseudo-conditionals with the first clause ending in *dè*. As a result, any verb-verb combination, even one that cannot be expressed as a direct chain in perfective contexts (e.g. in narrative sequences), can appear as a direct chain when the final clause is imperfective (including progressive), imperative, or hortative.

15.1.1 Verbal noun of directly chained verbs

Two chained verbs may combine into a verbal noun. The final verb has its regular verbal-noun form (§4.2.4). The nonfinal verb functions as compound initial and is {L}-toned: *bàgá súgó* ‘fall down’, verbal noun *bàgà*^{L}*-[sùg-ú]* ‘falling down’.

15.1.2 Presence of AMN suffix in nonfinal verb in direct chains

In general, AMN (aspect-mood-negation) marking is not allowed on nonfinal verbs in direct chains. However, ^{L}*tì* ‘do first’ (in L-toned form) and the related *tɛ́-ɛ̀(:)* occur medially in chains, and function roughly as perfective markers for the preceding verb (§15.1.6.3, §15.2.2.5).

Adverbial clauses regularly do specify the temporal relationship between the subordinated and main clauses. Progressive *-táŋà* can occur in adverbial clauses (§15.2.1.1). Other subordinators likewise distinguish a sequential ('and then') from a concurrent ('while') temporal relationship between two juxtaposed clauses.

15.1.3 Linear position and arguments of directly chained verbs

In normal direct chains where the two (or more) verbs denote co-events, they are usually either all intransitive or all transitive, with the same subject and (if relevant) object.

The chained verbs normally occur together, following the subject and any other constituents. For intransitive chains, this applies to the subject and to adverbial elements (492).

(492) *sè:dú* *[sɔ̀^{n}-sɔ̀nɔ́* *kû^{n}]* *bàgá* *súg-è*
Seydou [Rdp-sand on] **fall** **go.down**-Pfv
'Seydou fell down in the sand.'

For a transitive chain, the (nonpronominal or pronominal) object also precedes both directly chained verbs.

(493) a. *í^{n}* *jɔ̀^{n}túrú* *bàjá* *gǔŋ-ì*
1SgSbj donkey **pull** **remove**-Pfv
'I pulled out the donkey.'

b. *ɛ́mɛ́* *ú* *bàjá* *gǔŋɔ́-ɲú*
1PlSbj 2SgObj **pull** **remove**-Ipfv
'We will pull you-Sg out.'

The verbs in a direct chain are, however, separated by a preverbal subject pronominal in relative clauses and related constructions.

(494) a. *[ɲà*^{L} *bàgá* *wó* ^{H}*súg-é]* ^{L}*dèŋ*
[place^{L} **fall** 3SgSbj ^{H}**go.down**-Pfv.Rel] ^{L}place
'the place where he/she fell down'

b. *[nìŋìr^{n}ì*^{L} *ú* *bàjá* *í^{n}* ^{H}*gúŋ-ú]* ^{L}*nìŋìr^{n}ì*
[day^{L} 2SgObj **pull** 1SgPoss ^{H}**remove**-Pfv.Rel] ^{L}day
'the day (when) I pulled you-Sg out' (for ^{H}*gúŋ-í*)

It was initially difficult to elicit chains of verbs with valency mismatches, but a textual example with an intransitive ('come') followed by a transitive ('find, encounter') shows that a pronominal object specifically associated with the second verb is positioned next to it (495a). My assistant provided a follow-up example showing that a nonpronominal object also occurs in this position (495b).

(495) a. *[pàrà-[gò:-rò]]*^{L}*-bíré* *yèré* *kó* ^{L}*tèmè-ɲù*
[harvest]^{L}-work(n) **come** NonhObj ^{L}**encounter**-Ipfv
‘The harvest work will come and find it (still there).’ (2011.1a.07)

b. *[pàrà-gò:rò]*^{L}*-bíré* *yèré* *ɲú:* ^{L}*tèmè-ɲù*
[harvest]^{L}-work(n) **come** millet ^{L}**encounter**-Ipfv
‘The harvest work will come and find the millet (still there).’

15.1.4 Negation of direct verb chains

Only the final verb in a chain may be morphologically negated. The negation has scope over the entire chain. Only the final verb undergoes whatever tonal changes are required by the negative inflectional suffix.

(496) *wó* *bàgá* *sùgò-lí*
3SgSbj fall go.down-**PfvNeg**
‘He/She did not fall down.’

15.1.5 Iterated {HL}-toned verbs plus a final motion verb

To indicate the cooccurrence of a backgrounded activity with a motion event (‘go’, ‘come’, ‘go up’, etc.), the backgrounded activity verb is iterated once (after a cognate nominal or other constituents). Both occurrences have {HL} overlay and no inflection. The {HL} applies to lexically /LH/ verbs like *dègé* ‘lick’ (497e) as well as to /H/-toned verbs. Nonmonosyllabic stems whose bare form ends in a high vowel, like *wírì* ‘whistle’ (497c), have the vocalic form with final mid-height vowel as in the imperative and various suffixed forms. The motion verb follows the iterated activity verb, but need not be adjacent to it, as shown by the intervening constituents in (497b-c).

(497) a. *wó* *[ɲǎ:* *ɲî:*$^{HL\text{-}HL}$*ɲî:]* ^{L}*yèr-è*
3SgSbj [meal **eat**$^{\mathbf{HL\text{-}HL}}$**eat**] ^{L}come-Pfv
‘He/She came (while) eating.’

b. *wó* *[núŋú* *núŋɔ̀*$^{HL\text{-}HL}$*núŋɔ̀]* *árà*$^{+L}$ *dɔ́w-è*
3SgSbj [song **sing**$^{\mathbf{HL\text{-}HL}}$**sing**] top.Loc^{+L} go.up-Pfv
‘He/She went up (while) singing.’

c. *wó* *[wìrě*^{n} *wírè*$^{HL\text{-}HL}$*wírè]* *ɲá* ^{L}*sùg-è*
3SgSbj [whistling **whistle**$^{\mathbf{HL\text{-}HL}}$**whistle**] ground ^{L}go.down-Pfv
‘He/She came down (while) whistling.’

d. *wó* *[kìr*^{n}*í* *kóŋòrò*$^{HL\text{-}HL}$*kóŋòrò]* ^{L}*yè-y*
3SgSbj [bone **gnaw**$^{\mathbf{HL\text{-}HL}}$**gnaw**] ^{L}go.Pfv
‘He/She went (while) gnawing on a bone.’

e. *wó* *[nùmɔ́* *dégè*$^{HL\text{-}HL}$*dégè]* *súg-è*
3SgSbj [hand **lick**$^{\mathbf{HL\text{-}HL}}$**lick**] go.down-Pfv
‘She came down licking her hand.’

15.1.6 Nonfinal L-toned *Cv̀(:)* verb stems in chains

Like ‘go’ and ‘do first’ (see below), *gí* ‘say’ has an L-toned form ^{L}*gì* in similar contexts in purposive clauses (§17.6.1.2).

15.1.6.1 Nonfinal L-toned ^{L}*yè* ‘go’ in chains

An L-toned form of *yě* ‘go’ occurs nonfinally in chains, directly following another verb. Motion as such need not be involved. Rather, the construction implies some time lapse between the event denoted by the final verb(s) in the chain and the preceding event.

(498) a. *… bɔ̀gɔ́r-ɛ̀:-sɛ́*^{n} *dè,*
… turn.over-Pfv-PlSbj if],
pá→ ^{L}*yè* *kó* *í:*^{n} ^{L}*nà-ɲù,*
until ^{L}**go** NonhSbj child ^{L}give.birth-Ipfv,
kó ^{L}*yè* *í:*^{n} *nàr*^{n}*-ɛ̂* *dè, …*
NonhSbj ^{L}**go** child give.birth-Pfv if, …
‘… you-Pl turn over (weeds), until eventually they go and bear fruits. When they have gone and borne fruits, …’ (2011.1a.30)

b. *[[bàrà*^{L} *wàgá]* ^{L}*yè]* *kíj-ì:* *dǎn-g-ɛ̀:-sɛ́*^{n} *dè*
[[outback^{L} distant] ^{L}**go**] meet prepare-CausPerf-PlSbj if
‘(when) they would go and meet in the distant bush and prepare (=plan)’ (2011.1b.03)

15.1.6.2 Nonfinal imperative ^{L}*yà:* ‘go’ in chains

In (499), the phrase with ^{L}*yà:→* is freely translated ‘as soon as (X) went’. It resembles ^{L}*yà:* in parallel constructions (§15.2.1.5), but the sense of the passage suggests rather a connection with imperative *yǎ:* ‘go!’.

(499) *[íyé* ^{L}*kè]* *dè-dê:*$^{+L}$ ^{L}*yà:→,*
[today ^{L}Top] Rdp-father.Def^{+L} ^{L}**go**.Imprt,
íyé=ǹ *ɛ̀:*^{n} ^{L}*-[tè-tê:]*$^{+L}$ *tégìr-ì* *dè*
again soda.ash^{L}-[Rdp-filtering.pot].Def^{+L} filter-Pfv if
‘This time, as soon as the father went, again the (step-)mother filtered (the soda ash) (with) the soda-ash filtering pot.’ (2011.1b.01)

For a different construction with doubled final ^{L}*yà:*, see §15.2.1.5.

15.1.6.3 Nonfinal L-toned ^{L}*tì* ‘do first’ in chains

tí ‘do first’ (i.e. finish doing one thing before starting on another) is also attested in the form *té-ɛ̀(:)* as a perfective linker between two chained verbs denoting sequenced events (§15.2.2.5), and in the combination *t-î dè* with similar functions (§16.1.3.2). In (500), it has unsuffixed form, with L-tone, again as a perfective linker. The point of the passage is that the villagers (in the past) would complete carrying one person's millet from the fields to his home before beginning to do the same for another person.

(500) *[wó* ^{L}*kè]* *dògò-lí,*
[3SgPoss ^{L}Poss] be.finished-PfvNeg,
dàgá ^{L}*tì* *[ɲù:*^{L} *pèré]—* *dùw-ɛ̂:-rè*
leave ^{L}**do.first** [millet^{L} other]— carry-MP-IpfvNeg.PlSbj
'(If) (the millet) of that one was not finished (=completely transported), they didn't leave it and then carry any other millet.' (2011.1a.13)

tí 'send' or 'cause to move away' in verb chains, see (490) in §15.1, may be an accidental homonym of *tí* 'do first', or they may have diverged from a single ancestral verb.

Jamsay perfective positive inflectional suffix *-tì-* and its Ben Tey match *-tî-*, used mainly with transitive verbs, are related. Jamsay also allows *tí* (H-toned) as a perfective-like linker in chains.

15.1.7 Inflected form of *yě-* 'go' as final member of chain

In the form ^{L}*yè-∅*, a reduced form of perfective *yě-ỳ* 'went', the 'go' verb occurs in certain combinations that need not involve even incidental motion. The phrases in (501) are common.

(501) a. *táɲá* ^{L}*yè-∅* *dè*
become ^{L}**go**-Pfv if
'if it happens that …' (discussed in §16.1.3.1)

b. *náŋá* ^{L}*yè-∅*
forget ^{L}**go**-Pfv
'(he/she) forgot'

c. *lɔ́gɔ́* ^{L}*yè-∅*
overflow ^{L}**go**-Pfv
'it was too much (extreme)' (2011.1a.22)

táɲá 'become' does not combine with 'go' in its basic sense, cf. *tímɛ́=ý*^{n} *táɲ-ɛ̀* 'he became (turned into) a tree'. 'Forget' and 'overflow' (in the sense 'be too much') combine with 'go' only in the perfective positive. Thus *nàŋà-lí* 'did not forget', *náŋá-ɲú* 'will forget', *lɔ́gɔ́-jú* 'will be too much', etc.

As in English (*X went and died*), 'go' often occurs with 'die' and its euphemisms and with semantically related verbs like 'pass'. In the textual examples in (502a-b), no motion was involved. In (502c-d), motion is already indicated by the preceding chained verb 'go out'.

(502) a. *mòr-ɛ́-ɛ̀:* ^{L}*yè-∅*
be.lost-MP-and.SS ^{L}**go**-Pfv
'(she) was lost' (euphemism for 'died') (2011.1a.01)

b. *yɔ̂-ŋ* *yɛ̂* *nú:* ^{L}*yè-∅*
like.that there **die** ^{L}**go**-Pfv
'In that way she died there?' (2011.1b.02)

c. *[yɔ́* ^{L}*bàŋà]* *gǒ:* ^{L}*yè-∅*
[NearDist ^{L}owner] **go.out** ^{L}**go**-Pfv
‘That one went away.’ (2011.1b.02)

d. *lɛ̌* *gàrá* ^{L}*yè-∅*
planting **pass** ^{L}**go**-Pfv
‘the planting (season) has passed’ (2011.1a.02)

In these combinations, the final ‘go’ verb is particularly common in the perfective (positive). However, it can also occur in other forms. (503) is imperfective.

(503) *[ú* *wàr-ɛ̂* *dè]*
[2SgSbj do.farming-Pfv if]
[[ɲù:^{L} *gàmá]* ^{L}*dày*^{n}*]* *nú:* ^{L}*yà:-jù*
[[millet^{L} some] ^{L}limit] **die** ^{L}**go-Ipfv**
‘If you-Sg farm (=weed) (too early), most of the millet will go and die.’ (2011.1a.03)

Even perfective ^{L}*yè-∅*, though it is reduced in form and meaning, still patterns as an inflected chain-final verb stem. It has a plural-subject form ^{L}*y-ɛ̀* with short vowel, compare the full form *yɛ̌-ɛ̀:(-sɛ̂*^{n}*)* ‘(they) went’.

(504) *[ɛ̀nɛ́* *bè* *wɔ̀*^{n}*]* *[náŋá* ^{L}*y-ɛ̀]* *wà*
[Logo Pl Top] [forget ^{L}**go-Pfv.PlSbj**] Quot
‘(They said:) “As for us, we forgot (the rendez-vous).” ’ (2011.1b.03)

Something very similar to this chain-final perfective ^{L}*yè-∅* with bleached sense was undoubtedly the historical source of Jamsay perfective suffix *-yè* ~ *-yà* with motion verbs and statives.

15.1.8 Chaining with *jíjɛ̀* ‘(go) along with’

The invariant form *jíjɛ̀* ‘along with’ seems to function as a transitive verb in nonfinal position in a chain with a motion verb. The context is that the subject of the motion verb is taking along a dependent person (such as a child or a visitor), an animal, or e.g. a tool. The 1Sg object form *má* preceding *jíjɛ̀* (505b) suggests a possible analysis of *jíjɛ̀* as a transitive verb (limited to nonfinal position in chains) rather than a typical spatial postposition. One could alternatively argue that *jíjɛ̀* is a postposition like dative *nì*, which also follows 1Sg *má*. In the perfective, ‘go’ takes the reduced form ^{L}*yè-∅* described in the preceding section (505c).

(505) a. *[î:*$^{n+L}$ *jíjɛ̀]* *yǎ:*
[child.Def^{+L} **along.with**] **go**.Imprt
‘Go-2Sg with the child!’ (= ‘Take the child with you!’)

b. *[má* *jíjɛ̀]* ^{L}*yɛ̀r-ɛ̀*
[1Sg **along.with**] ^{L}**come**-Pfv
‘(He/She) came with me (=brought me along).’

c. *[lɔ̌:*$^{+L}$ *ɛ́:*^{n} *bàr-ɛ́:* *mà]*
[aunt.Def^{+L} soda.ash gather-and.SS and.then]
[gìr^{n}*í* *jíjɛ̀* ^{L}*yè-∅]*
[house **along.with** ^{L}**go-Pfv**]
'The step-mother gathered up the soda ash (=burned stalks) and took it home with her.' (2011.1b.01)

15.1.9 Chaining with final perfective of *pórù* 'say'

In this construction, a final perfective *pór-ì* 'said' (§11.3.1) is added to a verb. The sense is not quotative, rather it indicates that the event in question immediately followed the preceding event. The construction is attested once in a text, involving a character transformed into a bird, perched on a tree, who could fly off very quickly. A more colorful translation like 'flew off in a flash' might be appropriate.

(506) *[yɔ̂-ŋ* *wó* *gɛ́-ɛ̀]* *[bàjí*^{n} *yě* *pór-ì]*
[like.that 3SgSbj say-and.SS] [B **go** **say-Pfv**]
'When he had said (=sung) like that, Baji immediately went away.' (2011.1b.02)

Following a 'before' clause, *yě pór-ì* 'said' (plural-subject *yě pór-ɛ̀:*) has a perfect reading: 'has/had (already) gone away'.

(507) a. *wó* ^{H}*yé-jà,* *í*^{n} *yě* *pór-ì*
3SgSbj ^{H}come-before, 1SgSbj **go** **say-Pfv**
'By the time he/she came, I had gone (away).'

b. *bé* ^{H}*yé-jà,* *ɛ́mɛ́* *yě* *pór-ɛ̀:*
3PlSbj ^{H}come-before, 1PlSbj **go** **say-Pfv**
'By the time they came, we had gone (away).'

My assistant did not accept this construction with verbs other than 'go'.

15.2 Adverbial clauses with overt chaining or subordinating morpheme

15.2.1 Imperfective and durative subordinated clauses

In addition to the constructions described in the following subsections, see the imperfective complements of perception verbs like 'see' and 'find' in §17.2.2.2, and the iterated {HL}-toned verbs and a final motion verb in §15.1.5, above.

15.2.1.1 Progressive adverbial clause (*-táŋà*, plural *-téŋè*)

Time-of-day verbs like *ná:* 'spend the night' and *dɛ̀gɛ́* 'spend the day', along with *tɔ́w*^{n}*ɔ́* 'do for a long time', can combine with a subordinated progressive clause (508a-c) whose verb has inflectional suffix *-táŋà*. The optional plural-subject form *-téŋè* can be used when the subject is plural (508a). My assistant favors this construction, rather than that with *-ní:* (see just below, §15.2.1.2) when the temporally concurrent main clause is perfective.

(508) a. *bé* *[gɔ́:* *gɔ̌:-téɲè]* ^{H}*nà-ɛ̀*
3PlSbj [dance(n) dance-**Prog.PlSbj**] ^{H}**spend.night**-Pfv
'They spent the night dancing.'

b. *wó* *[ɲǎ:* *ɲí:-táŋà]* *tɔ́w*^{n}*-ɛ̀*
3SgSbj [meal eat.meal-**Prog**] **do.long.time**-Pfv
'He/She took a long time to eat.'

c. *bé* *[ɲǎ:* *ɲí:-táŋà]* *tɔ́w*^{n}*ɔ́-sɛ̂*^{n}
3PlSbj [meal eat.meal-**Prog**] **do.long.time**-Pfv.PlSbj
'They took a long time to eat.'

15.2.1.2 Different-subject 'while' clause (*-nì* ~ *-ǹ*)

A backgrounded clause denoting an activity simultaneous to that of the main clause, but with a disjoint subject, has suffix *-nì* ~ *-ǹ* on the verb. When combined with *dè* 'if/when', the actions can be sequenced rather than simultaneous, but the clause with *-nì* ~ *-ǹ* still denotes an imperfective action, as in (509c). See also the construction *kó kɔ́-ǹ dè* (§15.4.1.1).

(509) a. *í*^{n} *bírɛ́* *[ɲǎ:* *é* *ɲí:-nì]* ^{L}*bì-jù*
1SgSbj work(n) [meal 2PlSbj eat.meal-**while.DS**] ^{L}do-Ipfv
'I will work while you-Pl eat.'

b. *[bírɛ́* *é* *bǐ-nì]*
[work(n) 2PlSbj do-**while.DS**]
í^{n} *gìnɛ́* ^{L}*nɔ̀w*^{n}*-ɛ̀:-ɲù*
1SgSbj sleep(n) ^{L}sleep-MP-Ipfv
'While you-Pl work, I will sleep.'

c. *[hâl* *ɲú:* *bé* *dùw-ɛ́:-ǹ]*
[even millet 3PlSbj carry-**while.DS**]
[hâl *fó→* *dà:gá* ^{L}*dɛ̀-ɛ̀]*
[even even night ^{L}night.fall-Pfv]
[nùŋú *ná-ɛ̀* *kà:*^{n}*]*
[sun spend.night-Pfv even]
'even if they are carrying the millet while night has fallen, even while (the next) day has broken, …' (2011.1a.13)

d. *[é* *nɛ́:]* *[ɛ̀:rɛ̀*^{L} *ná:]* *gǔŋ̀* *é* *ɲí:-nì* *dè,*
[2Pl now] [peanut^{L} main] take.out 2PlSbj eat-**while.DS** **if**,
ɲú: *kú:*^{n} ^{L}*gò:-jù*
millet then ^{L}go.out-Ipfv
'You-Pl now, you are taking out (=harvest) groundnuts and eating them (for a period of time), then (eventually) the millet comes out.' (2011.1a.19)

Forms of this suffix with various verb-stem shapes and tones are in (510). The stem takes its usual presuffixal form, and preserves its lexical tones. The vowel of *-nì* is frequently apocopated, resulting in *-ǹ*. *rv*-Deletion usually applies to *Cvrv* and *Cvr*^{n}*v* stems (510d). A connection between this suffix and the dative postposition *nì*, which also often apocopates, is phonologically reasonable but makes no sense semantically.

(510) Different-subject (DS) 'while' subordinator (variant *-ǹ* not shown)

bare stem	DS	gloss
a. *Cv*		
regular		
ó	*ó-nì*	'give'
nú	*nú-nì*	'go in'
gí	*gí-nì*	'say'
irregular		
yě	*yǎ:-nì*	'go'
jé	*jâ:-nì*	'take away'
b. *Cv:*		
/H/-toned		
ká:^{n}	*ká:*^{n}*-nì*	'shave'
kɔ́:^{n}	*kɔ́:*^{n}*-nì*	'weep'
ná:	*ná:-nì*	'spend night'
nú:	*nú:-nì*	'die'
tú:^{n}	*tú:*^{n}*-nì*	'measure'
/LH/-toned		
bě:	*bě:-nì*	'put down'
gǐ:^{n}	*gǐ:*^{n}*-nì*	'steal'
gǒ:	*gǒ:-nì*	'go out'
jǎ:	*jǎ:-nì*	'dig'
jɛ̌:	*jɛ̌:-nì*	'scoop'
c. *CvCv* except with medial rhotic		
/H/-toned		
págá	*págá-nì*	'tie'
pínɛ́	*pínɛ́-nì*	'shut (door)'
súgó	*súgó-nì*	'go down'
/LH/-toned		
bògó	*bògó-nì*	'(dog) bark'
bàgá	*bàgá-nì*	'fall'
dɔ̀wɔ́	*dɔ̀wɔ́-nì*	'go up'
d. *Cvrv*, *Cvr*^{n}*v* usually shortens to *Cv-*		
rv-Deletion applies		
bàr^{n}*á*	*bǎ-nì*	'beat (tomtom)'
dɔ̀r^{n}*ɔ́*	*dɔ̌-nì*	'sell'
gɛ̀r-î:	*gɛ̌-nì*	'look'
yɛ̀rɛ́	*yě-nì*	'come'
rv-Deletion fails to apply		
téré	*téré-nì*	'pound'

e. *Cv:Cv*

/HL/-toned

sí:rì	*sí:rɛ́-nì*	‘cook (meal)’
sí:rì	*sí:ré-nì*	‘point at’
ú:-ǹ	*ú:-nɔ́-nì*	‘lay down’

/LHL/-toned

bǎ:rì	*bǎ:rá-nì*	‘send’

f. *CvCvCv*

/HL/-toned

kígìrì	*kígéré-nì*	‘return’
kógújù	*kógújó-nì*	‘cough’
úgùrù	*úgóró-nì*	‘bake’

/LHL/-toned

ɲùnú-gù	*ɲùnú-gó-nì*	‘ruin’
wɛ̀gírì	*wɛ̀gɛ́rɛ́-nì*	‘rub (eye)’

g. Mediopassive *CvC-i:*

/HL/-toned

kír-ì:	*kír-é:-nì*	‘jump’

/LHL/-toned

dìw-î:	*dìw-é:-nì*	‘lean on’

15.2.1.3 Same-subject ‘while’ clause (*jɛ̀*)

This *jɛ̀* is distinct from recent perfect *jɛ̂* and variants (§10.2.1.3). It is attested with a following motion verb, so the basic context is ‘go (along) VP-ing’. The verb is in its bare stem as in chains. Mediopassive verbs have the *-ɛ:* ~ *-e:* suffix allomorph.

(511) a.

[nà^{L}	*pɔ̂^{n}],*	*[lìgìjí→*	*wàrá*	*jɛ̀]*	^{L}*yà:-lè*
[person^{L}	all],	[in.disorder	do.farm.work	**while.SS**]	^{L}go-Proh

‘Nobody must go working (the fields) in disorder (randomly).’

b.

[dí:	*nǒ:*	*jɛ̀]*	^{L}*yè-y*
[water	drink	**while.SS**]	^{L}go-Pfv

‘He/She drank water while going (walking).’

c.

yɔ̂-ŋ	*[bé*	*wò→]*	*[wùrúdúdú-wùrúdú-wùrúdú*
like.that	[3Pl	all]	noisily
dùw-ɛ́:	*jɛ̀]*	*gò-ó:*	*mà, …*
carry-MP	**while.SS**]	go.out-and.SS	and.then,

‘Like that they all came out (of the bush) carrying (it) noisily, …’ (2011.1b.05) (*gò-ó:* for *gò-é:*)

d.

[kùnúgóró	*pôl*	*pôl*	*jɛ̀]*	^{L}*gà-jì*
[head	cut.off	cut.off	**while.SS**]	^{L}go.past-Ipfv

‘(They) keep breaking (=cutting) off the heads (=grain spikes) and moving on (from one plant to another).’ (2011.1a.10)

Compare Ben Tey subordinator *-jɛ̀→* indicating continuing action.

15.2.1.4 Same-subject ‘while’ clause (*-ní:*)

With a time-of-day verb (*ná:* ‘spend the night’, *dɛ̀gɛ́* ‘spend the day’), my assistant preferred a complement with suffix *-ní:* on the verb, instead of the progressive construction described above, when the temporally enclosing main verb is imperfective.

For verbs like *jǎ:nù* ‘boil (sth)’ whose bare stem ends in a short high vowel, the vocalism of the stem is that of the imperative and other suffixed forms, with a non-high final vowel. The form of the verb stem is identical to that with different-subject ‘while’ subordinator *-nì* as described just above.

-ní: can be reduced to *-n* in allegro speech or in high-frequency combinations. See *yé yǎ:-n* ‘while walking’ in (625b) in §17.6.1.1.

The time-of-day construction is illustrated in (512a-b).

(512) a.	*ɛ́mɛ́*	*[tɛ́*	*jǎ:ná-ní:]*	*dɛ̀gɛ́-jú*
	1PlSbj	[tea	boil-**while.SS**]	**spend.day**-Ipfv

‘We (will) spend the day making tea.’

b.	*ɛ́mɛ́*	*gɔ́:*	*gɔ̌:-ní:]*	$^{\text{L}}$*nà:-jù*
	1PlSbj	dance(n)	dance-**while.SS**]	$^{\text{L}}$**spend.night**-Ipfv

‘We will spend the night dancing.’

For a textual example of *gɔ̌:-ní:* ‘while dancing’, see (474) in §14.1.10.

In (513) the verb plus *-ní:* is iterated and followed by *dè* ‘if/when’.

(513)	*yǎ:-ní:*	*yǎ:-ní:*	*dè,*	*mhm,*
	go-**while.SS**	go-**while.SS**	**if**,	uh-huh,
	bé=ǹ	*sá-ɛ̀*	*dè—*	
	3Pl=Topic	reply-Pfv	if—	

‘While they were going, uh-huh, they for their part spoke up—’ (2011.1b.05)

15.2.1.5 Parallel construction ($\text{Verb}_1^{\text{HL}}$ $^{\text{L}}$*yà:*, $\text{Verb}_2^{\text{HL}}$ $^{\text{L}}$*yà:*)

This construction is used to indicate that two activities are simultaneous or interspersed rather than being carried out in a strict chronological sequence. The *yà*: segments are uninflected, and a synchronic connection with the ‘go’ verb is tenuous (motion is not a necessary feature of the activities). I will gloss $^{\text{L}}$*yà:* noncommitally as ‘while’ in interlinears. For another construction with final $^{\text{L}}$*yà:*, see §15.1.6.2.

The two verbs take their presuffixal vocalic form, with an {HL} overlay on the final two syllables (or the single syllable of a monosyllabic stem). The verbs are otherwise uninflected, as the construction is used in narrative contexts where the referents and time frame are already clear. A subject NP is possible but not required.

In (514a), the point is that some farmers do not pile up all the millet grain spikes in the fields (over several days of the harvest) before carrying them home, rather they carry some home each day after cutting them off. In (514b), note that the object nouns (‘water’, ‘meal’) have their regular tones; this distinguishes the present construction from a purposive-clause type with {HL} overlay on the verb but also with L-toned object nouns (in compound-initial form), see §17.6.2.

(514) a. *kà:ná* *[gàmà* ^{H}*ná]*
now [certain ^{H}person]
[gérɛ̀^{HL} ^{L}*yà:* *dúw-ɛ̀*^{HL} ^{L}*yà:],*
[**cut.off**^{HL} ^{L}**while** **carry-MP**^{HL} ^{L}**while**]
[gérɛ̀^{HL} ^{L}*yà:* *dúw-ɛ̀*^{HL} ^{L}*yà:],*
[**cut.off**^{HL} ^{L}**while** **carry-MP**^{HL} ^{L}**while**]
[kó *kà:*^{n}*]* *kà:ná* *yɔ́* *kɔ̀*
[Nonh also] now Exist be.NonhSbj
'Nowadays, some people, (they do) cutting off (millet grain spikes) and carrying (them, to the houses) at the same time, cutting off and carrying. That too exists (=is done) nowadays.' (2011.1a.09)

b. *[dí:* *nɔ̂:*^{HL} ^{L}*yà:]* *[ɲǎ:* *ɲî:*^{HL} ^{L}*yà:]*
[water **drink**^{HL} ^{L}**while**] [meal **eat.meal**^{HL} ^{L}**while**]
'drinking water and eating food at the same time'

c. *kó* *í:*^{n} *kúnɔ̀*^{HL} ^{L}*yà:,* *pìyé* *bágà*^{HL} ^{L}*yà:*
NonhSbj child **put**^{HL} ^{L}**while,** flower **fall.off**^{HL} ^{L}**while**
'It (=peanut plant) puts out fruits and the flowers fall off (at the same time).' (2011.1a.20)

The mediopassive suffix (elsewhere *-î:* or *-ɛ́:-*) is reduced to *-ɛ̀*, as in *dúw-ɛ̀* ^{HL} from *dùw-î:/dùw-ɛ́:* 'carry' in (514a).

Trisyllabic verbs have the partial {HL} overlay on the penult and the final, but preserve the lexical tone on the first syllable. The tonal effect is that only a final L-tone is superimposed: *yègérɛ̀*$^{+L}$ ^{L}*yà:* from *yègírì* 'winnow (by shaking)'.

There are no irregularities among the verbs that do show irregularities in several other forms: *jɛ́:rɛ̀*^{HL} ^{L}*yà:* ('bring'), *jâ:*^{HL} ^{L}*yà:* ('take away'), *yérɛ̀*^{HL} ^{L}*yà:* ('come'), *yâ:*^{HL} ^{L}*yà:* ('go').

It is also possible to have a single *yà:* clause, as long as it is followed by another clause or clauses that denote another prolonged activity.

(515) *bé* *gérɛ̀*^{HL} ^{L}*yà:,*
3PlSbj **cut**^{HL} ^{L}**while,**
[súrɔ́ *[ɲà*^{L} *túnɔ̀*$^{+L}$*]* ^{L}*mɔ̀:-nɔ̀]*
[pile.up [place^{L} one.Loc^{+L}] ^{L}assemble-Caus.Imprt
[súrɔ́ *[ɲà*^{L} *túnɔ̀*$^{+L}$*]* ^{L}*mɔ̀:-nɔ̀]*
[pile.up [place^{L} one.Loc^{+L}] ^{L}assemble-Caus.Imprt
'As they cut off the grain spikes, (they) must gather and pile (them) in one spot, (they) must gather and pile (them) in a (=another) spot (and so forth).' (*gɛ̀rɛ́*) (2011.1a.12)

15.2.1.6 Parallel construction (Verb$_1$.Imprt ^{L}Verb$_2$.Imprt)

Another parallel construction, used in narrative to describe two simultaneous actions that continue in time, has the verb of the first clause in (singular) imperative form, hence HHtoned for *Cv̀Cv́* stems. The second verb is also imperative in form but {L}-toned, as often for verbs at the end of a clause or longer construction, especially in such parallelistic contexts.

(516) a. *[wó bájá]* *[dè-dé:* *[íⁿ tɔ̀]* *^{L}bɔ̀rⁿɔ̀]*
[3SgSbj **pull.Imprt**] [Rdp-father [around here] ^{L}**call.Imprt**]
[wó bájá] *[dè-dé:* *^{L}bɔ̀rⁿɔ̀]*
[3SgSbj **pull.Imprt**] [Rdp-father ^{L}**call.Imprt**]
[wó bájá] *[dè-dé:* *^{L}bɔ̀rⁿɔ̀]*
[3SgSbj **pull.Imprt**] [Rdp-father ^{L}**call.Imprt**]
[dè-dé: wɔ̀ⁿ] …
[Rdp-father Top] …
'She was pulling while the father (=crane) was calling (from) over here (on the other side), she kept pulling while the father kept calling. The father, …'
(2011.1b.02) (*bàjá*, *bɔ̀rⁿɔ́*)

b. *[wó yɛ̀gɛ́rɛ́]*
[3SgSbj **winnow.Imprt**]
[dè-dé: kògújó ^{L}kògùjò]
[Rdp-father cough(n) ^{L}**cough.Imprt**]
'she kept winnowing while father kept coughing'

15.2.1.7 'Until getting tired' (*fó→ dɛ́ⁿ-ɛ̀ⁿ*)

This phrase, or its variant with *pá→* instead of *fó→*, can be added to a clause with progressive suffix, denoting an extended activity. It means literally 'until (I, you, …) got tired', but it mainly emphasizes the temporal extent and intensity of the activity.

(517) *[íⁿ núŋú núŋɔ́-táŋà] [fó→ dɛ́ⁿ-ɛ̀ⁿ]*
[1SgSbj song sing-Prog] [**until** **get.tired**-Pfv]
'I sang until (I) got tired.' (or: 'I wore myself out singing')
'I sang for a very long time.'

dɛ́ⁿ-ɛ̀ⁿ can also directly follow a same-subject anterior verb form (§15.2.2.1). In this case it is subject to clause-final tone-dropping (518).

(518) *[[ɛ̀nɛ́ bè] [íⁿ tɔ̀] [nà^{L} pɔ̂ⁿ]*
[[LogoSbj Pl] [here at] [person^{L} all]
pór-ɛ̀: ^{L}dɛ̀ⁿ-ɛ̀ⁿ] gíré gɔ̀:-lâ:
say-**and.SS** ^{L}**get.tired-Pfv**] forward go.out-PfvNeg.PlSbj
'(They said:) every one of us over here has spoken until (we) got tired, (but) (we) haven't made progress.' (2011.1b.04)

15.2.1.8 Chains with *-ɛ̀:* plus locational-existential quasi-verb

In the construction exemplified by (519), a verb with same-subject anterior form (*-ɛ̀:* or variant) is followed by a subject pronoun and an <HL>-toned form of the appropriate 'be' quasi-verb (human singular *wɔ̂*, human plural *wê*, nonhuman *kɔ̂*). This is the tonal form of such quasi-verbs in adverbial function (11.2.2.2). The sequence can function as background to a following foregrounded event.

(519) a. *[[kɔ̌ⁿ nɔ̂-ŋ dìn-ɛ́-ɛ̀:] íⁿ wɔ̂]*
[daba like this hold-MP-**and.SS**] 1SgSbj **be.HumSgSbj**]
[má ᴸà-ɛ̀]
[1SgObj ᴸcatch-Pfv]
'I was holding the (stolen) daba like this and they caught me.'

b. *[[kɔ̌ⁿ nɔ̂-ŋ dìn-ɛ́-ɛ̀:] ɛ́mɛ́ wɛ̂]*
[[daba like this hold-MP-**and.SS**] 1PlSbj **be.HumPl**]
[ɛ́mɛ́ ᴸà-ɛ̀]
[1PlObj ᴸcatch-Pfv]
'We were holding the (stolen) daba like this and they caught us.'

15.2.2 Anterior clauses

In the constructions described under the "anterior" rubric, the time interval associated with the subordinated clause precedes that associated with the following main clause.

15.2.2.1 Same-subject past anterior (*-ɛ:* ~ *-e:* ~ *-i:*)

The subordinating suffix *-ɛ:* ~ *-e:* ~ *-i:* (usually *-ɛ:*) is added to a clause (really a VP) with the same subject as the main clause. The two events are chronologically sequenced. Normally the entire event sequence has taken place in the past. My assistant did not accept this construction with a following imperative, preferring a direct verb chain (520b).

(520) a. *íⁿ [dɛ̌ⁿ jɛ̌:r-ɛ̀:] dǎ:n-ì*
1SgSbj [waterjar bring-**and.SS**] put.down-Pfv
'I brought the waterjar and put it down.'

b. *dɛ̌ⁿ jɛ̌:rì dá:ná*
waterjar bring put.down.Imprt
'Bring-2Sg the waterjar and put it down!'

The pseudo-conditional or future anterior with *dè* is also possible with imperatives and more generally with ongoing or future event sequences, leaving *-ɛ:* ~ *-e:* ~ *-i:* in connection with past event sequences.

Forms of this subordinator with stems representing different shapes and tone melodies are in (521). For the combination of *-ɛ:* ~ *-e:* ~ *-i:* with a clause-final morpheme *mà*, see the following section.

(521) Same-subject (SS) anterior subordinator

bare stem	SS	gloss
a. *Cv*		
no vocalic change		
ó	*ó-ɛ̀:*	'give'
tí	*tí-ɛ̀:*	'send'
	[for *tɛ́-ɛ̀:* ~ *tɛ́-ɛ̀* see §15.2.2.5]	
gí	*gí-ɛ̀:*	'say'
	[for *gɛ́-ɛ̀:* ~ *gɛ́-ɛ̀* see §11.3.1.2, §8.3.1.1]	
nú	*nú-ɛ̀:*	'go in'
Ce harmonizing to Cɛ-ɛ:		
yě	*yɛ̌-ɛ̀:*	'go'
jé	*jɛ́-ɛ̀:*	'take away'
b. *Cv:* with nonhigh vowel		
[+ATR], stable		
gǒ:	*gò-é:*	'go out'
[+ATR], harmonizing to [-ATR]		
bě:	*bɛ̀-ɛ́:*	'put down'
[-ATR] or low vowel		
ná:	*ná-ɛ́:*	'spend night'
ká:^{n}	*ká*^{n}*-ɛ́:*	'shave'
jǎ:	*jà-ɛ́:*	'dig'
jɛ̌:	*jɛ̀-ɛ́:*	'scoop'
kɔ́:^{n}	*kɔ́*^{n}*-ɛ́:*	'weep'
c. *CvCv* , /H/-toned		
[+ATR]		
súgó	*súg-é:*	'go down'
téré	*tér-é:*	'pound'
[-ATR]		
págá	*pág-ɛ́:*	'tie'
pínɛ́	*pín-ɛ́:*	'shut (door)'
d. *CvCv*, /LH/-toned		
[+ATR]		
bògó	*bòg-é:*	'(dog) bark'
[-ATR]r		
yɛ̀rɛ́	*yɛ̀r-ɛ́:*	'come'
dɔ̀wɔ́	*dɔ̀w-ɛ́:*	'go up'
bàgá	*bàg-ɛ́:*	'fall'
e. *Cv:* with high vowel		
nú:	*nú-í:*	'die'
tú:^{n}	*tú*^{n}*-í:*	'measure'
gǐ:^{n}	*gì*^{n}*-í:*	'steal'

f. *Cv:Cv*

sí:rì	*sí:r-ɛ̀:*	‘cook (meal)’
sí:rì	*sí:r-ɛ̀:*	‘point at’
ú:-ǹ	*ú:n-ɛ̀:*	‘lay down’
bǎ:rì	*bǎ:r-ɛ̀:*	‘send’’

g. *CvCvCv*

kígìrì	*kígɛ̀r-ɛ̀:*	‘return’
kéŋìrì	*kéŋɛ̀r-ɛ̀:*	‘listen’
úgùrù	*úgɛ̀r-ɛ̀:*	‘bake’
kógújù	*kógúj-ɛ̀:*	‘cough’
wɛ̀gírì	*wɛ̀gɛ́r-ɛ̀:*	‘rub (eye)’
ɲùnú-gù	*ɲùnú-g-ɛ̀:*	‘ruin’

h. Mediopassive *CvC-i:*

gɛ̀r-î:	*gɛ̀r-ɛ́-ɛ̀:*	‘look’
dìw-î:	*dìw-ɛ́-ɛ̀:*	‘lean on’
kír-ì:	*kír-ɛ́-ɛ̀:*	‘jump’
tág-ì:	*tág-ɛ̀-ɛ̀:*	‘jump’

The vowel quality is [-ATR] *-ɛ:* for *Cv* stems, regardless of lexical ATR quality. It is also *-ɛ:* for all heavy stems, i.e. *Cv:Cv*, mediopassive *CvC-i:*, and trisyllabic stems. For the trisyllabics the [-ATR] value extends backward from the suffix to the medial syllable, if this syllable has a mid-height vowel, but it does not affect a [+ATR] vowel in the first syllable hence *kígɛ̀r-ɛ̀:* from *kígìrì* ‘return’ (which is lexically [+ATR] as seen in imperative *kígéré*), and *kéŋɛ̀r-ɛ̀:* from *kéŋìrì* ‘listen’. For bimoraic *Cv:* and *CvCv* stems, on the other hand, the suffix agrees with the lexical ATR value of the stem, so we get *-e:* or *-ɛ:* depending on the stem. The allomorph is *-i:* after *Cv:* verbs with high vowel (521e). The phonology is not entirely transparent, but one way to explain the difference between *Cv* and *Cv:* stems is to argue that *-ɛ̀:* is appended to the former, but fuses with the second mora of the latter, with the ATR value of this second mora dominating that of the suffix. How this analysis would explain the difference between *CvCv* and heavier stems is left to the reader.

The vocalism of a verb plus *-ɛ:* ~ *-e:* ~ *-i:* suffix is very close to that of the simple perfective form (§10.2.1.1), apart from the vowel length. The only clear difference in vocalism is for ‘give’, which has simple perfective *ó-è* but SS subordinated form *ó-ɛ̀:* . Given that the clause with SS *-ɛ:* denotes an antecedent eventuality, so there is also a semantic connection with perfectivity. This suggests that the SS *-ɛ:* form is segmentally a variant of the simple perfective with the final vowel (or semivowel *-y*) lengthened.

The tone of the suffix is also variable. It is always L-toned after a *Cv* stem or after a heavy stem (*Cv:Cv*, trisyllabic); in these combinations the stem itself has its lexical melody. For bimoraic (*Cv:* and *CvCv*) stems, the suffix is H-toned, while the lexical tone is expressed on the first syllable. The tones again show considerable similarity to those of the simple perfective, but there are tonal divergences between the two forms for some *Cv* stems, and a systematic tonal divergence in the /H/-toned *Cv́:* stems (simple perfective *Cv́-ɛ̀* etc., but SS subordination form *Cv́-ɛ́:* etc.).

15.2.2.2 Simple inflected verb plus *mà* 'and then'

TgK *mà* may be related historically to Jamsay *mèy^{n}* ~ *mày^{n}*, but the syntax of the two is rather different.

Clause-final *mà* 'and then' is attested once after a simple perfective verb.

(522)

[kɛ̌: bà→	*nɛ́:],*	*kà:ná*		
[long.ago	now],	now		
[pàrà-[gò:-rò]]^{L}*-bírɛ́*		*dòg-ê*	*mà,*	
[harvest]^{L}-work(n)		end-**Pfv**	**and.then**,	
[sɔ̀:^{L}	*[ɲǎŋ*	*mà→]]*	^{HL}*sí:^{n}-kà^{n},*	
[thing^{L}	[how?	Q]]	^{HL}equivalent,	
[àr^{n}á-ùr^{n}ù	*bè]*	*fête*	*kún-ɛ̀:-sɛ̂^{n}*	*dè*
[man-children	Pl]	festival	put-Pfv-PlSbj	if

'In the old days, now when the autumn work (=harvesting) was finished, or something of that sort, the young men would put (=hold) a festival.' (2011.1b.03)

mà is also attested once after a progressive verb.

(523)

[yɔ́:	*ɲɛ̌:r^{n}ɛ́-táŋà*	*mà]*	
[NearDist	suffer-**Prog**	**and.then**]	
[yɔ̂-ŋ	*yɛ̂*	^{L}*nù-y]*	*wà*
[like.that	there	^{L}die-Pfv]	Quot

'That (woman) was suffering, like that she died there, they say.' (2011.1a.02)

More often, this *mà* is used after another subordinator or in stylistically marked verb iterations. For *mà* after same-subject anterior *-ɛ:* ~ *-e:* ~ *-i:* see §15.2.2.3 just below, and for *mà* after *kɛ̂:^{n}* ~ *kɛ́r^{n}ɛ̀* see §15.2.2.8. For relevant iterative constructions see §11.6.6-7.

15.2.2.3 Same-subject anterior *-ɛ:* ~ *-e:* ~ *-i:* plus *mà*

The suffix *-ɛ:* ~ *-e:* ~ *-i:* (see preceding section) may also be followed by *mà* (cf. Prost pp. 52, 87). In data freely elicited from my primary informant, *-ɛ:* ~ *-e:* ~ *-i:* was used without this morpheme. However, in narrative texts, examples both with and without *mà* are common. The examples of this combination suggest close coordination of the events in the two clauses, which in some cases are co-events (aspects of a single event). *mà* is also optionally added to the different-subject anterior subordinator *kɛ̂:^{n}* ~ *kɛ́r^{n}ɛ̀* (§15.2.2.8). I gloss it 'and.then' in interlinears.

(524) a.

[lɔ̌:$^{+L}$	*ɛ́:^{n}*	*bàr-ɛ́:*	*mà]*
[aunt.Def^{+L}	soda.ash	gather-**and.SS**	**and.then**]
[gìr^{n}í	*jíjɛ̀*	^{L}*yè-∅]*	
[house	go.with	^{L}go-Pfv]	

'The step-mother gathered up the soda ash (=burned stalks) and took it home with her.' (2011.1b.01)

b. *[nǎ:*$^{+L}$ *tɛ́w-ɛ́:* *mà]*
[mother.Def^{+L} shoot-**and.SS** **and.then**]
[[kó ^{H}*dêŋ*$^{+L}$*]* *yɛ̂* ^{L}*dàr*^{n}*-ɛ̀]*
[[NonhPoss ^{H}place.Loc^{+L}] there ^{L}kill-Pfv]
‘He shot the (step-)mother in that place (=on the spot) and killed (her) there.’ (2011.1b.01)

c. *[yɛ̂* *kɛ̀dúrú* *tár-ɛ́:* *mà],*
[there cowry affix-**and.SS** **and.then**]
gǒ: *yɛ̂* ^{L}*yè-∅*
go.out there ^{L}go-Pfv
‘He stuck a cowry shell there (over the scar), and left (home) to go there.’ (2011.1b.02)

15.2.2.4 Conjoined background perfectives with dying-quail (*.∴)*

In the textual passage (525), two clauses with perfective verbs each drawn out by dying-quail intonation (symbol *.∴*, interlinear gloss “.&”, see §7.1.1) function as background to a third clause. Both backgrounded clauses are also resumed by PPs (indented).

(525) *jír*^{n}*íŋɛ́* *súg-è.∴,*
rainy.season go.down-**Pfv.&**,
[[[jìr^{n}*ìŋɛ̀*^{L}*-[sùg-ú]* ^{H}*dógó]* *tɔ̀]*
[[[rainy.season^{L}-[go.down-VblN] ^{H}rear] at]
[wárú *gǒ:-sɛ̂*^{n}*.∴],*
[farm.work go.out-**Pfv.PlSbj.&**],
[wárú ^{H}*dógó]* *tɔ̀,*
[farm.work ^{H}rear] at,
nɛ́: *[kó* *wà]* *[pàrá* *gǒ-è]* *gì-jù*
now [NonhSbj QuotSbj] [autumn go.out-Pfv] say-Ipfv
‘(Suppose) the rainy season has come down (=begun), (so it is) after the coming down of the rainy season; and (they) have gone out (to the fields) (for) the first weeding, (so it is) after the first weeding; they now say “autumn (=harvest season) has gone out (=is happening).” ’ (2011.1a.32)

Another example from the same text is (526), where *gǒ-è.∴* is heard as [gòê:(:)] with final falling pitch.

(526) *kà:ná,* *jír*^{n}*íŋɛ́* *súg-è.∴,*
now rainy.season go.down-**Pfv.&,**
pàrá *gǒ-è.∴,* *pàrá* *gǒ-è.∴,*
autumn go.out-Pfv.&, autumn go.out-**Pfv.&**,
[kó ^{H}*dógó* *ní:]* *[nɛ́:* *ìŋé* ^{L}*bì-jù]*
[Nonh ^{H}rear after] [now what? ^{L}do-Ipfv]
‘Now, (suppose) the rainy season has come down (=begun), and the autumn has gone out, the autumn has gone out, (then) after that what do (they) do now?’ (21.1a.33)

This construction should not be confused with the same-subject anterior construction with *-ɛ:* ~ *-e:* ~ *-i:* (preceding sections). Confusion could easily arise when the perfective verb to which dying-quail intonation applies ends in L-toned *-ɛ̀* ~ *-è*, so that the only audible effect of this intonation is prolongation of the vowel. In (525-6), note that *súg-è*.·., phonetic [súgè:(:)] is based on {HL}-toned perfective *súg-è* 'he/she/it went/came down', and is therefore clearly distinct from {H}-toned same-subject anterior *súg-é:* 'went down and …'. In addition, plural-subject perfective *-sɛ̂*^{n} can occur in the conjoined perfective construction, as in *gǒ:-sɛ̂*^{n}.·. in (525), pronounced [gǒ:sɛ̂^{n}:(:)]. By contrast, the same-subject anterior form does not allow plural-subject marking.

15.2.2.5 Perfective linker between two chained verbs (*tɛ́-ɛ̀:* ~ *tɛ́-ɛ̀*)

tɛ́-ɛ̀: (often reduced to *tɛ́-ɛ̀*) is the same-subject anterior form of *tí* in the sense 'do first' (the verb can also mean 'send'). The irregular vocalism diverges from the more regular *tí-ɛ̀:* from *tí* 'send', but it does have a vocalic match in purposive *gɛ̂:* from *gí* 'say' (§8.3.1.1). Other forms related to *tí* are L-toned ^{L}*tì* nonfinally in a verb chain (§15.1.6.3) and *t-î dè* (§16.1.3.2).

Inserting *tɛ́-ɛ̀(:)* makes it clear that the event denoted by the VP to the left was completed (perfective) before the time of the following event. In (527) *tɛ́-ɛ̀* is followed by the final main-clause verb.

(527)	*[[kú*^{n}	*mà]*	*ká:*^{n}	*tɛ́-ɛ̀]*	^{L}*gò-è*
	[[head	1SgPoss]	shave	**do.first-SS.Ant**]	^{L}go.out-Pfv

'He shaved me, then left.'
'Having (first) shaved me, he left.'

In (528) *tɛ́-ɛ̀* is followed by another anterior subordinated clause ('come').

(528)	*[[àɲú*	*bɔ́rɔ̀]*	*bé*	*dàgá*	*tɛ́-ɛ̀]*	*yɛ̀r-ɛ́:*	*mà, …*
	[[roselle	under]	3PlObj	leave	**do.first-and.SS**]	come-and.SS	and.then,

'She left them under a roselle bush and then came (home), …' (2011.1b.04)

There is a verb *tɛ́:* 'weave', but it is probably not connected to this linking element *tɛ́-ɛ̀(:)* in verb chains.

15.2.2.6 (Pseudo-conditional) future anterior (*dè*)

As Prost already astutely noted (p. 67 and *passim*), there are two distinct constructions with *dè* 'if'. One construction is a conventional conditional antecedent clause, with clause-final *dè* 'if' as in 'if he comes, I will see him'. The antecedent and the consequent are both ordinary main clauses (except for *dè* at the end of the antecedent), with their own independent subjects. The antecedent denotes a possible future eventuality, the consequent an eventuality that is causally or otherwise dependent on the realization of the antecedent. The verb of the antecedent clause is often, but need not be, aspectually perfective. Either or both of the clauses may be negative. See §16.1 on conditionals.

The other construction is a **pseudo-conditional** chain requiring a (positive) perfective verb before *dè* and a chronological sequence of eventualities. In the great majority of cases, the subjects of the two clauses are coindexed. Unlike the case with same-subject anterior subordinator *-ɛ:*, which is used under these same conditions when the entire chain is perfective, the pseudo-conditional construction is used when the entire chain is imperfective. Therefore the *dè* clause is followed by a clause denoting an eventuality that is in progress, recurrent, or not yet actualized, and it is at least implied that the first eventuality is included in this time perspective. The final clause may be imperative or hortative as well as imperfective indicative. Prost aptly dubs the pseudo-conditional verb the “participe futur antérieur.” Examples are in (529).

(529) a. *wó* *[dɔ̀w-ɛ̂* *dè]* *súgó-jú*
3SgSbj [go.up-Pfv **if**] go.down-Ipfv
‘He/She will go up and (then) come (back) down.’

b. *ɛ́mɛ́* *[yě-∅* *dè]* *yě-má-ỳ^{n}*
1PlSbj [go **if**] come-Hort-Pl
‘Let’s (three or more) go and come (back)!’

c. *[dɛ̌^{n}* *dǎ:ǹ-∅* *dè]* *yǎ:*
[waterjar put.down-Pfv **if**] go.Imprt
‘Put-2Sg the waterjar down and (then) go!’

d. *bé* *[já-wò→* *yɛ̀rɛ́(-sɛ̂^{n})* *dè]*
3PlSbj [always come-Pfv(.PlSbj) **if**]
[[sǎ^{n} ^{H}*gír^{n}ì*$^{+L}$*]* *yǎ:-téŋè*
[[ReflPoss ^{H}house.Loc^{+L}] go-Prog.PlSbj
‘Every day he/she comes here and (then) goes (back) home.’

See also (185a) in §8.2.4.

The verb before *dè*, in both conditional and pseudo-conditional constructions, triggers Apocope (here really a kind of Syncope) on a final perfective *-ì* after an unclustered sonorant, thus *dǎ:ǹ-∅* for *dǎ:n-ì* in (529c). For monosyllabic verbs whose perfective forms are trimmed before *dè*, see (560) in §16.1.2.

Prost stated that the pseudo-conditional *dè*, unlike conditional antecedent *dè*, cannot combine with an explicit plural-subject verb form. I find that this is usually the case, but that pseudo-conditional *dè* can occasionally take a plural-subject perfective verb (529d). Because the pseudo-conditional requires that the subjects in the two clauses be the same, plural-subject marking in the *dè* clause is redundant. Since plural-subject marking is optional anyway, this redundancy probably accounts for any statistical differences between conditional and pseudo-conditional clauses.

Likewise, Prost’s claim that the pseudo-conditional clause must share a subject with the following clause is not completely correct. While the majority of examples do follow this pattern, it is possible to switch subjects as long as the chronology is maintained and there is a close connection between the two eventualities. See (210) in §8.4.5.2.

The pseudo-conditional with *dè* competes with the direct-chain construction, where the nonfinal clause ends in a verb in bare-stem form. All examples with pseudo-conditional *dè* can be rephrased as direct chains. This applies to the examples in (529), which can be rephrased with direct chains *dɔ̀wɔ́ súgó-jú*, *yě yě-má-ỳ^{n}*, *dǎ:ǹ yǎ:*, *yɛ̀rɛ́ … yǎ:-téŋè*. If there is any difference in meaning, it is probably that the *dè* form puts a little more emphasis on the chronological sequence (‘…, then …’).

The converse is not true, i.e. many direct verb chains cannot be freely replaced by pseudo-conditionals, even when the entire sequence is imperfective. This is because the co-events denoted by the verbs in some direct chains are not chronologically sequenced, as in *bàjá gǔŋ* ‘pull off’ (‘pull’ plus ‘remove’), whose co-events are synchronized.

Special cases of the pseudo-conditional are *t-î dè* (§16.1.3.2) with the perfective of *tí* ‘do first’, and *g-î dè* in purposive clauses (§17.6.1.3) with the perfective of *gí* ‘say’.

15.2.2.7 Different-subject anterior clause (*kɛ̂:*^{n} ~ *kɛ́r*^{n}*ɛ̀* ~ *kɛ́-ɛ̀:*)

We now consider clause combinations involving disjoint subjects. In the construction illustrated in (530), the first clause does include a same-subject subordinator *-ɛ̀:* (§15.2.2.1), but the coindexation extends only to a following mini-clause (or chained verb) with an obligatory pronominal subject and a verb-like form *kɛ̂:*^{n} or its less common variant *kɛ́r*^{n}*ɛ̀*. This form is not attested in other contexts; I will gloss it as ‘when.DS’ (DS = different subject). It is followed by a normal main clause with a disjoint subject.

(530) a.	*[sè:dú*	*nú-ɛ̀:]*	*[wó*	*kɛ̂:*^{n}*],*	*í*^{n}	*gǒ-è*
	[S	go.in-**and.SS**]	[3SgSbj	**when.DS**],	1SgSbj	go.out-Pfv

‘When Seydou came in, I went out.’

b.	*[ɛ́mɛ́*	*nú-ɛ̀:]*	*[ɛ́mɛ́*	*kɛ̂:*^{n}*],*	*bé*	*gǒ-è*
	[1PlSbj	go.in-**and.SS**]	[3SgSbj	**when.DS**],	3PlSbj	go.out-Pfv

‘When we came in, they went out.’

c.	*[sùŋú*	*bàj-ɛ́:]*	*[í*^{n}	*kɛ̂:*^{n}*],*	*pál-ì*
	[rope	pull-**and.SS**]	[1SgSbj	**when.DS**],	snap-Pfv

‘When I pulled (on) the rope, it snapped.’

d.	*[í*^{n}	*bú:dú*	*[[sǎ*^{n}	$^{\text{HL}}$*dé-dè:]*	*númɔ̀]*	*gɛ̀ŋ-ɛ́:]*
	[1SgSbj	money	[[ReflPoss	$^{\text{HL}}$Rdp-father]	source]	request-**and.SS**]
	[í^{n}	*kɛ̂:*^{n}*],*	*[ɛ̀nɛ́*	*ô:-rò]*	*wà*	
	[1SgSbj	**when.DS**],	[LogoS	give-IpfvNeg]	Quot	

‘When I asked my father for some money, he said he wouldn’t give it (=he refused).’

e.	*[yɛ̂*	*yɛ̌-ɛ̀:]*	*[wó*	*kɛ̂:*^{n}*],*
	[there	go-**and.SS**]	[3SgSbj	**when.DS**]
	[nɛ́:	*wɔ̀*^{n}*]*	*ɲù:*$^{\text{L}}$*-dúgɔ́*	$^{\text{L}}$*t-ì*
	[now	Top]	fly	$^{\text{L}}$send-Pfv

‘When he (=Crane) had gone there, now she (=girl) sent Fly (to inspect him).’ (2011.1b.02)

Prost (p. 86) comments that this construction is common in narratives: a new event is expressed as a perfective clause, then the same event is repeated as a background clause using the construction with *kɛ́r*^{n}*ɛ̀*, then the next new event is expressed.

kɛ̂:^{n} ~ *kɛ́r*^{n}*ɛ̀* is likely derived from a subordinated form of *kár^{n}á ‘do’ or ‘be done’, a verb that is not present in this TgK dialect but is reported by Prost. The verb is common in e.g. Jamsay in similar different-subject constructions.

However, some TgK speakers (perhaps those that use *bìrɛ́* instead of *kár*^{n}*á* as the ‘do’ verb?) appear to be in the process of merging (or confusing) *kɛ̂:*^{n} ~ *kɛ́r*^{n}*ɛ̀* with *kɛ́-ɛ̀:*, the same-subject anterior form of *kɛ́:* ‘become’ (nonhuman). See (531c) below for an example with *kɛ́-ɛ̀:* .

15.2.2.8 Different-subject *kɛ̂:^{n}* ~ *kɛ́r^{n}ɛ̀* plus *mà*

The different-subject anterior construction (preceding section) may be extended by adding a particle *mà*. This particle is also optionally used in same-subject anterior clauses (§15.2.2.3).

(531) a. *kà:ná* *[sɛ̀rí* *yɛ̀r-ɛ́:]* *[kó* *kɛ̂:^{n}* *mà],*
now [plow come-**and.SS**] [NonhSbj **when.DS** **and.then**]
[sɛ̀rí *bè]* *kárá-sɛ́^{n}* *dè,*
[plow Inst] rip-Pfv.PlSbj if,
íyé=ǹ *ɲú:* *[kó* *kû^{n}]* *kú:^{n}* *^{L}nàmà-ɲù*
again millet [Nonh on] then ^{L}step.on-Ipfv
'Now that the plow has come, they rip up (the earth) with the plow, (then) again they (drop seeds and) step on that in that way (=as described before).' (2011.1a.01)

b. *[kà:ná* *nɛ́:]* *[àsɛ̀gɛ́* *nɛ́:]* *[á:r^{n}ɛ́:* *là]*
[now now] [animal now] [formerly than]
sìgɛ́ *jó→* *kɛ́-ɛ̀:* *[kó* *kɛ̂:^{n}* *mà],*
more many be.NonhSbj-**and.SS** [NonhSbj **when.DS** **and.then**]
[ɛ̀:rɛ̀^{L}-kúrɔ́ *nɛ́:]* *dǔw* *dùw-í-ì* *dè, …*
[peanut^{L}-leaf now] carry carry-MP-Pfv if, …
'Now that (livestock) animals have become more numerous than formerly, (the people) keep carrying the peanut leaves (=greens), (and …)' (2011.1a.22)

c. *[nɛ́:* *wɔ̀^{n}]* *gú-gúrú,* *[ú* *gɛ̀r-ɛ́-ɛ̀:]*
[now Top] grass, [2SgSbj look-MP-**and.SS**]
[ú *kɛ́-ɛ̀:* *mà],*
[2SgSbj **become.NonhSbj-and.SS** **and.then**]
[pɔ̀ŋɔ́.·. *[gù-gùrù^{L}* *sígɛ́]* *^{L}dày^{n}]*
[fonio-& [grass^{L} remaining] ^{L}limit]
[kó *yɛ̌-ɛ̀:* *sǎ^{n}* *gòjó-jú]*
[NonhSbj go-and.SS ReflObj distinguish-Ipfv]
'Now the weeds, when you have looked, (you see that) the fonio and the remaining weeds have gone and become distinguishable.' (2011.1a.24)

Example (531c) uses *kɛ́-ɛ̀:* instead of *kɛ̂:^{n}*, as mentioned in the preceding section. (531b) has one example of each, but in this case the occurrence of *kɛ́-ɛ̀:* preserves the regular meaning of *kɛ́:* ('become' with adverb).

15.2.2.9 Different-subject 'after' clause (*-ǹ dè*)

This construction involves *-ǹ* (different-subject 'while' subordinator, §15.2.1.2) and *dè* 'if/when'. The temporal sense is closer to that of *dè* than to that of *-ǹ* by itself. In this combination, the function of *-ǹ* is to express the disjointness of the subjects of the subordinated and main clauses.

In addition to *gí-ǹ dè* (§15.2.2.10) and *kó kɔ́-ǹ dè* (§15.4.1.1), there are four other textual examples. All clearly involve subject switches. The construction requires a preverbal subject pronominal. In (532d) the *ǹ dè* clause is postposed to the main clause.

(532) a. *[gú-gúrú mòm-é:] [ú dɔ̀mɔ́-ǹ dè],*
[grass uproot-and.SS] [2SgSbj wait-**DS** **if**],
pɔ̀ŋɔ́ írɛ́-jú
fonio ripen-Ipfv
‘After uprooting (=weeding) weeds, you-Sg will wait, (until) fonio ripens.’ (2011.1a.25)

b. *[sɔ̌: yɔ̂-ŋ] [sɔ̀:*^{L} *kɛ́wɛ́rɛ́-kɛ̀wɛ̀rɛ̀] [ɛ́mɛ́ bǐ-ǹ dè],*
[thing like.that] [thing^{L} minor] [1PlSbj do-**DS** **if**],
pá→ àr^{n}*ú* ^{L}*lɔ̀wɔ̀-jù*
until rain(n) ^{L}rain.fall-Ipfv
‘Things like that, we do minor things (=tasks) like that, until the (heavy) rain falls.’ (2011.1a.02) (verb *bìrɛ́* ‘do’)

c. *ɲú: [wó nɔ̀w*^{n}*ɔ́-ǹ dè],*
millet [3SgSbj grind-**DS** **if**],
[nɛ́: wɔ̀^{n} *nɛ́:] ɲɛ̌-ỳ*^{n}*,*
[now Top now] girl,
[ɛ̀:^{nL}*-[tè-tê:] lêw*^{n}*-lêw*^{n} *pó=ní:]*
[soda.ash^{L}-[Rdp-filtering.pot] drip-drip say=while.SS]
núŋú ^{L}*tɔ̀rɔ̀-jù*
singing ^{L}begin-Ipfv
‘After she (=step-mother) ground millet, then the girl, as the soda-ash filtering pot made dripping sounds, was beginning a song.’ (2011.1b.01) (the dead girl was resurrected as the singing pot)

d. *[ɛ̀nɛ́ wà]*
[Logo QuotSbj]
[[ɔ́gù-ɔ́gù yî bɛ́: bɛ̌-ɛ̀ dè] ^{L}*yè-jù wà]*
[[quickly over.there shit defecate-Pfv if] ^{L}come-Ipfv Quot]
[bɛ́ yǎ:-ǹ dè]
[3PlSbj go-**DS** **if**]
‘(Hare said:) “I will defecate quickly over there and will come (join you) after you-Pl have gone.” ’ 2011.1b.05

15.2.2.10 *gí-ǹ dè* ‘when, after’ (different subject)

In this construction, a clause ending in a bare stem is followed by a pronominal subject and *gí-ǹ dè*. The latter is composed of *gí* ‘say’ (also the basis for purposive morphemes), *-ǹ* (elsewhere different-subject ‘while’ subordinator), and *dè* ‘if, when’, but the combination is rather frozen. The construction is often used like an English perfect.

The extent to which speech or thought is explicit or even alluded to varies. In (533a), the point is that groundnuts are harvested early and are a useful crisis food as one waits for the main staple (millet) to ripen, but there is no specific reference to the farmers’ thought process. In (533b), the ‘they’ in ‘they sang’ probably includes both the twins and the people (the song itself is a back-and-forth Q-and-A session), so it is treated as a different subject. In (533c), *gí* ‘say’ has its literal sense (it follows a song attributed to Hare). Instead of a clause, it is preceded by *yɔ̂-ŋ* ‘like that’, resuming a quoted song that the narrator has just finished.

(533) a. *[gàm* ^{H}*ná]=ǹ* *[kìrɛ̀*^{L} *dágá]* *yè-jà*^{L} ^{HL}*sâ,*
[some ^{H}person]=Dat [hardship small] come-Fut ^{HL}have,
[kó yɛ̀rɛ́] *[kó gí-ǹ dè],*
[NonhSbj come] [**NonhSbj say-while.DS if**],
dògùrù^{L} *ɲú:* *gó:*^{H}*-jà,*
time^{L} millet go.out^{H}-Fut,
[ɛ̀:rɛ̀^{L} *ná:]* *lá:* ^{L}*gɔ̀:-jù*
[nut^{L} main] first ^{L}go.out-Ipfv
'A small crisis (i.e. food shortage) will eventually come for some people. When (and because) that (=crisis) has come, before millet comes out (=ripens in the field), groundnuts come out first.' (2011.1a.19)
[*yè-jà*^{L} ^{HL}*sâ* §10.2.2.4, *gó:*^{H}*-jà* §15.4.2]

b. *[nɛ́:* *bé* *yɛ̌-ɛ̀:-sɛ̂*^{n} *dè]*
[now 3PlSbj go-Pfv-PlSbj if]
[[bé *yɛ̂* *yɛ̌]* *[bé* *gí-ǹ* *dè]],*
[[3PlSbj there go] [**3PlSbj say-while.DS if**]],
bé *wà*
3Pl QuotSbj
'If they (=twins) went (somewhere else), when they had gone there, (they sang), "hey you (people), …" ' (2011.1b.04)

c. *jɔ̀w*^{n}*ɔ́* *yɔ̂-ŋ* *wó* *gí-ǹ* *dè,*
hare like.that **3SgSbj say-while.DS if**,
[tǎ: *sá-ɛ̀* *dè]*
[hyena reply-Pfv if]
'When Hare had spoken (=sung) like that, Hyena replied: …' (2011.1b.05)

15.2.3 'Since …' clauses (*gì:*^{n})

The clause-final particle *gì:*^{n} creates 'since …' clauses, specifying an interval that began with the specified event and is understood to continue to the present. This clause type requires a clause-medial subject pronoun, even if the subject is also expressed by a clause-initial nonpronominal NP. This is a feature of subject relatives (§14.1.8), as also in imperfective complements of perception verbs (§17.2.2.2). The verb of the 'since' clause has the {H}-toned form characteristic of perfective verbs in nonsubject relatives.

The verbs whose regular perfective differs segmentally from the (nonsubject relative) form used in the 'since' construction are shown in (534). For segmentally similar but tonally distinct reductions before *dè* 'if', see (560) in §16.1.2.

(534) Form of singular-subject perfective before *gì:*^{n} 'since'

bare stem	perfective		gloss
	regular	before *gì:*^{n}	
a. with *-ỳ*			
yɛ̌	*yɛ̌-ỳ*	*yé gì:*^{n}	'go'
jé	*jé-ỳ*	*jé gì:*^{n}	'take away'
nú	*nú-ỳ*^{n}	*nú gì:*^{n}	'go in'

b. with *-è*
ó *ó-è* *ó gì:^{n}* ‘give’

Examples of *gì:^{n}* ‘since’ are in (535). That the verb has an {H} tone overlay is shown by comparison with regular perfectives like *yɛ̀r-ɛ̂* ‘came’ and *ɲùnú-g-ì* ‘ruined’.

(535) a. *nî íⁿ* *^{H}yɛ́r-ɛ́* *gì:^{n},* *máŋgóró* *ɔ̀:-lí*
here 1SgSbj ^{H}come-**Pfv** **since**, mango see-PfvNeg
‘Since I came here, I haven’t seen a mango.’

b. *bàmàkɔ́* *ú* *^{H}yé* *gì:^{n},*
B 2SgSbj ^{H}go.**Pfv** **since**,
námà *nî* *àr^{n}ú* *lɔ̀wɔ̀-lí*
up.to.now here rain rain.fall-PfvNeg
‘(Ever) since you-Sg went to Bamako, it hasn’t rained here.’

c. *sè:dú* *péjú* *wó* *^{H}dár^{n}-ɛ́* *gì:^{n},*
S sheep 3SgSbj ^{H}kill-**Pfv** **since**,
[ɛ́mɛ́ *^{H}bín]* *^{L}jò-è*
[1PlSbj ^{H}belly] ^{L}be.full-Pfv
‘Since Seydou slaughtered the sheep, our bellies have been full (=we have eaten well).’

d. *tè^{L}-gɛ́r^{n}í:* *ú* *^{H}ɲúnú-g-í* *gì:^{n},*
tea^{L}-gear 2SgSbj ^{H}be.ruined-Caus-**Pfv** **since**,
ɛ́mɛ́ *té* *bè-lâ:*
1PlSbj tea get-PfvNeg.PlSbj
‘Since you-Sg ruined the tea-kettle, we haven’t had any tea.’

e. *[ì^{n}táy^{n}* *mà]* *bé* *^{H}yé-ɛ́:* *gì:^{n},*
[friend 1SgPoss] 3PlSbj ^{H}go-**Pfv.PlSbj** **since**,
í^{n} *[kɛ̀nɛ̀^{L}-kɔ̌^{n}* *bè]* *wɔ̀*
1SgSbj [heart^{L}-weeping with] be.HumSgSbj
‘Since my friends went (=left), I have been sad.’

f. *tùwó* *kó* *^{H}bág-ɛ́* *gì:^{n},*
stone NonhSbj ^{H}fall-**Pfv** **since**,
í^{n} *yé* *yà:-lí*
1SgSbj there.Def go-PfvNeg
‘Since the rock fell (off), I haven’t gone there.’

It was possible to elicit a negative example (536). The stem and perfective negative suffix are both included in the overlaid {H} tone.

(536) *nɔ̀w^{n}ɔ́* *wó* *^{H}bé-lí* *gì:^{n},*
meat 3SgSbj ^{H}get-**PfvNeg** **since**,
[kɛ̀nɛ̀^{L}-párú *bè]* *wɔ̀*
[anger with] be.HumSgSbj
‘Since he didn’t get any meat, he has been angry.’

This construction can also be used to translate 'since X' where X is a noun phrase or adverbial phrase. This requires an overt verb, 'go out' (537a) or 'pass' (537b). (537a) is syntactically interesting in that the adverb 'yesterday' does not correspond to a nonhuman subject pronoun *kó* similar to that coindexed with 'Feast of the Ram' in (537b).

(537) a.

yá:	^{H}*gó-é*	*gì:ⁿ,*	*íⁿ*	*ɲǎ:*	*ɲì:-lí*
yesterday	^{H}go.out-**Pfv**	**since**,	1SgSbj	meal	eat.meal-PfvNeg

'I haven't eaten (a meal) since yesterday.'

b.

láyɛ́	*kó*	^{H}*gár-ɛ́*	*gì:ⁿ,*
Feast.of.Ram	NonhSbj	^{H}pass-**Pfv**	**since**,
àrⁿú	^{L}*lɔ̀wɔ̀-lì*		
rain	^{L}rain.fall-PfvNeg		

'Since the Feast of the Ram (passed), the rain hasn't fallen.'

15.2.4 'Until…' clauses

Simple 'until' (without a 'from' phrase) can be expressed with clause-initial expressive adverbial *pá→* or *fó→* 'until, all the way to'.

(538)

[sɔ̀:^{L}	*kɛ́wɛ́rɛ́-kɛ̀wɛ̀rɛ̀]*	*ɛ́mɛ́*	*bǐ-ǹ*	*dè,*
[thing^{L}	minor-minor]	1PlSbj	do-while.DS	if,
pá→	*àrⁿú*	^{L}*lɔ̀wɔ̀-jù*		
until	rain(n)	^{L}rain.fall-Ipfv		

'We do minor things (tasks), until eventually the (heavy) rains come.' (2011.1a.02)

15.3 Noun-headed temporal clause ('the time when …')

Nouns denoting a time or time interval, especially *tèŋé* and less often *dógúrú*, can function as head of a relative clause. They are {L}-toned like any relative-clause head NPs. Such relative clauses can be made into explicit temporal adverbial clauses ('at the time when …') by adding a postposition such as *bè* 'with'. (539a) illustrates with an {L}-toned form of *tèŋé* 'time'. For a similar case based on *dógúrú* 'time' see (533a) in §15.2.2.10.

Other temporal nouns with meanings like 'day' and 'year' can also function as relative-clause heads. In an adverbial clause, the noun 'day' is repeated, still in {L}-toned form, after the clause proper, as a kind of external relative-clause head in addition to the clause-internal head (§14.1.7). If the verb is perfective, it is {H}-toned in the double 'day' construction (539b). 'Year' does not show the doubling, keeps the regular {HL} overlay on a perfective verb, and does not require a postposition (539c).

(539) a.

[tèŋè^{L}	*nùrⁿú*	*ú*	*á:-jú*$^{+H}$*]*	*bè,*
[**time**^{L}	sickness	2SgObj	catch-Ipfv.Rel^{+H}]	with,
íⁿ	*bàmàkɔ́*	*wɔ̀*		
1SgSbj	B	be.NonhSbj		

'At the time when you were getting sick, I was in Bamako.'

b.

[nìŋìr^{n}ì^{L}	*ú*	^{H}*yɛ́r-ɛ́]*	^{L}*nìŋìr^{n}ì,*
[**day^{L}**	2SgSbj	^{H}come-Pfv.Rel]	^{L}day,
nî	*àr^{n}ú*	*lɔ́w-ɛ̀*	
here	rain	rain.fall-Pfv	

‘The day you-Sg came, it rained.’

c.

kǎ:	*àr^{n}à-kùjù*^{L}	*kó*	^{H}*yɛ́r-ɛ́,*
grasshopper	**year^{L}**	NonhSbj	^{H}come-Pfv.Rel,
ɛ́mɛ́	*[pàrà-gò:rò]*^{L}*-bírɛ́*	*bì-lâ:*	
1PlSbj	[autumn]^{L}-work	do-PfvNeg.PlSbj	

‘The year the locusts came, we didn’t do the harvest.’
(also *yɛ́r-ɛ̀*$^{+L}$ with topic intonation)

15.4 Reverse anteriority clause ‘before …‘

Efforts to elicit ‘before …’ clauses were unsuccessful when the subjects of the main and adverbial clauses were the same. In this case, my assistant translated them with conditional or pseudo-conditional clauses, ending in *dè* ‘if/when’. For example, ‘we’ll do some farm work before going to the market’ was rendered as ‘if/when we have done farm work, (then) we’ll go to the market’.

It was not difficult to elicit a distinctive ‘before …‘ clause when the subjects of the two clauses were disjoint. See below.

15.4.1 Based on perfective negative

15.4.1.1 *kó kɔ́-ǹ dè*

The construction in (540) involves a perfective negative clause (‘planting did not arrive’), framed by *kó kɔ́-ǹ dè* ‘if it is (there)’. A semi-literal paraphrase is ‘if/when/while it was the case that [planting had not (yet) arrived], …’. The construction is common in texts.

(540)

maintenant	*[ɛ́mɛ́*	*gánà*$^{+L}$*],*		
now	[1PlPoss	country.Loc^{+L}],		
[lɛ̌	*dɔ̀:-lí]*	*[kó*	*kɔ́-ǹ*	*dè],*
[planting	arrive-PfvNeg]	[**NonhSbj**	**be.NonhSbj-while.DS**	**if**],
ɛ́mɛ́	*ìŋé*	*lá:*	^{L}*bì-jì*	
1PlSbj	what?	first	^{L}do-Ipfv	

‘Now (here) in our country, (even) before planting (time to plant) has arrived, what do we do first?’ (2011.1a.01)

A variation on this is in (541), where *kó kɔ́-ǹ dè* frames a state including positive and negative propositions.

(541)

nɛ́:	*wɔ̀^{n},*	*àr^{n}ú*	*lɔ́w-ɛ́:*		*mà,*
now	Top,	rain(n)	rain.fall-and.SS		and.then,
ɲá	*[nɛ́:*	*wɔ̀^{n}]*	*gàr-á→*	*mǎ:-ŋ-è:*	*jɛ̀-lí,*
earth	[now	Top]	a.lot	dry-Inch-and.SS	finish-PfvNeg,
ɲá	*bùŋùr^{n}ù-bàŋùr^{n}ù*	*[kó*	*kɔ́-ǹ*		*dè],*
earth	variably	[**NonhSbj**	**be.NonhSbj-while.DS**		**if**]

[[kó ^{HL}*wágàtù]* *bè]* ^{L}*wà-jù*
[[NonhPoss ^{HL}time] with] ^{L}do.farming-Ipfv
‘Now, when it has rained, (when) the earth hasn’t (yet) completely finished drying, (they) work (the field) at that time. They work (the field) at that (time).’ (2011.1a.23)

15.4.1.2 *kó kɔ́ bè*

A slightly distinct construction with final *bè* (instrumental or similar) is seen in (542). I interpret the construction as a relative clause, plus a postposition.

(542) *[sɛ̀rí* *yè-lí]* *[[kó* ^{H}*kɔ́]* *bè],*
[plow come-PfvNeg] **[[NonhSbj** $^{\mathbf{H}}$**be.NonhSbj.Rel]** **with]**,
[nùmɔ́ *bè]* *[wàgà-tùmò*^{L} *dágá-*^{L}*dàgà-*^{L}*dàgà]*
[hand with] [mound^{L} small-^{L}small-small (§4.5.2)]
màŋá-sɛ́^{n} *dè, …*
make.ball-Pfv.PlSbj if, …
‘Before the plow came (=was introduced), they shaped small round mounds (in rows), …’ (2011.1a.01)

15.4.2 With delayed future *-jà*

An {H}-toned verb stem with delayed future suffix *-jà* (§10.2.2.4) occurs at the end of the clause, which may contain *dógúrú* ‘time’ in {L}-toned form as relative head. The literal translation is therefore “(at) the time when … was going to happen (eventually).” The head noun is occasionally omitted as in (543c). A subject pronoun is required immediately preceding the verb.

(543) a. *[[ú* ^{HL}*dé-dè:]* *dògùrù*^{L} *wó* *yé*^{H}*-jà],*
[[2SgPoss ^{HL}Rdp-father] time^{L} 3SgSbj come^{H}**-before**]
í^{n} *yě-jú*
1SgSbj come-Ipfv
‘I’ll come (=I’ll be back) before your father comes (here).’

b. *àr*^{n}*ú* *dògùrù*^{L} *kó* *súgó*^{H}*-jà,*
rain time^{L} NonhSbj go.down^{H}**-before**,
ɛ́mɛ́ *[tógú* *bɔ́rɔ̀]* *nú-má-ỳ*^{n}
1PlSbj [shed under] go.in-Hort.PlSbj
‘Let’s go under the shed before the rain comes down.’

c. *àr*^{n}*ú* *kó* *yé*^{H}*-jà,*
rain NonhSbj come^{H}**-before**,
ɛ́mɛ́ *[tógú* *bɔ́rɔ̀]* *nú-ɛ̀:*
1PlSbj [shed under] go.in-Pfv.PlSbj
‘We went under the shed before the rain came.’

d. *dògùrù*^{L} *bé* *dɔ́wɔ́*^{H}*-jà,* *bé* *á:*
time^{L} 3PlSbj go.up^{H}**-before**, 3PlObj catch.Imprt
‘Catch-2Sg them before they go up!’

'Before X', where X is a NP denoting a time, can also be translated using this construction with the verb *dɔ̌:* 'arrive' (544a). If X denotes a human or other enduring entity, the logic is different (denoting priority relations) and the postposition *gírè* 'in front of' is pressed into service (544b).

(544) a.

íⁿ	*[láyɛ́*	*dɔ́:*^{H}*-jà]*	*bàmàkɔ́*	*yǎ:-jú*
1SgSbj	[Feast.of.Ram	arrive^{H}-**before**]	B	go-Ipfv

'I will go to Bamako before the Feast of the Ram.'

b.

[àrⁿà^{L}	*gàrá*	*bè]*	*ɲǎ:*
[man^{L}	big	Pl]	meal
[[úrⁿí:	*bè]*	*gírè]*	*ɲí:-ɲí*
[[children	Pl]	**in.front**]	eat-Ipfv

'The adult men eat before ("in front of") the children.'

Forms of *-jà* with representative verbs are in (545), with the bare stem and imperfective for comparison. The {H}-tone overlay before *-jà* is evident in (545b) with lexical /LH/-tone, but the two irregular /HL/-toned stems ('take away', 'bring') in (545d) are not audibly affected. The *j* of *-jà* does not become *ɲ* after a nasal syllable as it does in imperfective *-jú* ~ *-ɲú*, see 'go in' (545a). *rv*-Deletion applies to contracting stems before both suffixes (545c).

(545) Forms of *-jà* 'before'

bare stem	imperfective	'before' with *jà*	gloss
a. lexically /H/-toned			
nú	*nú-ɲú*	*nú*^{H}*-jà* [núⁿdʒà]	'go in'
ó	*ó-jú*	*ó*^{H}*-jà*	'give'
téré	*téré-jú*	*téré*^{H}*-jà*	'pound'
kígìrì	*kígéré-jú*	*kígéré*^{H}*-jà*	'go back'
b. lexically /LH/-toned			
gǒ:	*gǒ:-jú*	*gó:*^{H}*-jà*	'go out'
dàgá	*dàgá-jú*	*dágá*^{H}*-jà*	'leave'
ɲùnú-gì	*ɲùnú-gó-jú*	*ɲúnú-gó*^{H}*-jà*	'ruin'
c. rhotic-medial *CvCv* subject to *rv*-Deletion			
yɛ̀rɛ́	*yɛ̌-jú*	*yɛ́*^{H}*-jà*	'come'
bìrɛ́	*bǐ-jú*	*bí*^{H}*-jà*	'work'
dàrⁿá	*dǎ-ɲú*	*dáⁿ*^{H}*-jà*	'kill'
d. irregular			
v̌: to v́-			
ɔ̌:	*ɔ́-jú*	*ɔ́*^{H}*-jà*	'see'
Cě to Cǎ:-			
yě	*yǎ:-jú*	*yá:*^{H}*-jà*	'go'
presuffixal Cv̂:-			
jê	*jâ:-jù*	*jâ:*^{H}*-jà*	'take away'
jě:rì	*jê:-jù*	*jê:*^{H}*-jà*	'bring'

The simple delayed future has the same *-jà* suffix and the same segmental form of preceding verb stems, but it has {L}- rather than {H}-toned stem, and it is followed by *sâ* 'have' (§10.2.2.4).

15.5 Spatial and manner adverbial clauses

15.5.1 Spatial adverbial clause ('where …') (*ɲà*)

The {L}-toned form of noun *ɲá* 'area, ground' is very common as relative-clause head denoting a place. The relative clause is optionally followed by an {L}-toned form *dèŋ* related to *dèŋú* 'place' (§14.1.7). In (546a-b), the NP containing the relative clause functions as an argument. In (546c) it is a true adverbial clause, creating a setting, although there is no locative postposition.

(546) a.

[[nàŋá	*ɲà*^{L}	*bàgá*	*sá*^{n}*]*	^{L}*dèŋ]*	*yǎ:*
[[cow	**place**^{L}	fall	Pfv.Rel]	^{L}**place**]	go.Imprt

'Go-2Sg to the place where the cow fell!'
(also *[nàŋá ɲà*^{L} *bág-ɛ́]* ^{L}*dèŋ]*)

b.

[ɲà^{L}	*ɲǎ:*	*ɛ́mɛ́*	*ɲí:-ɲí]*	*wàg-á→*	*kɔ̀*
[**place**^{L}	meal	1PlSbj	eat-Ipfv]	far.away	be.NonhSbj

'The place where we are going to eat is far away.'

c.

[[ɲà^{L}	*ɛ́mɛ́*	*ná-ɛ̀]*	^{L}*dèŋ]*
[[**place**^{L}	1PlSbj	spend.night-Pfv]	^{L}**place**]

[ɔ̀jɔ̀^{L}	*pɔ́*^{n}*→]*	*kɔ̀:-rɔ́*
[thing^{L}	nothing]	be.NonhSbj-Neg

'There is nothing (there) where we spent the night.'

15.5.2 Manner adverbial clause ('how …') (*bà*^{n})

The usual head noun of a manner relative is *bà*^{nL}, an {L}-toned and slightly reduced variant of *bàŋú* 'way, manner'. The relative clause may be followed by {L}-toned ^{L}*gì:*^{n}, cf. particle *gí:*^{n} 'like' (§8.4.1).

(547) a.

[[bírɛ́	*bà*^{nL}	*í*^{n}	*bǐ-jí]*	^{L}*gì:*^{n}*]*
[[work(n)	**manner**^{L}	1SgSbj	do-Ipfv]	^{L}**manner**]

[wó	*kà:*^{n}*]*	*kú:*^{n}	^{L}*bì-jì*
[3Sg	also]	likewise	^{L}do-Ipfv

'The way I work is how he/she too works.

b.

[ɲǎ:	*bà*^{nL}	*ú*	*ɲí:-ɲí]*
[meal	**manner**^{L}	2SgSbj	eat.meal-Ipfv]

má=ǹ	*sɛ̀*^{nL} *=lá*
1Sg=Dat	good^{L}=StatNeg

'The way you-Sg eat doesn't please me.'

The verb of the *bà*^{n} clause is occasionally followed by *nɔ̀*, which appears to be related to demonstrative *nɔ́:* 'this'.

(548) *[ɛ̀nɛ́* *dìn-î:* *bɛ̌:-rò]* *wà,*
[LogoSbj hold-MP get-IpfvNeg] Quot,
[bà$^{n\text{L}}$ *nî* *ɛ̀nɛ́* *wɔ́* *nɔ̀]*
[**manner**$^{\text{L}}$ here LogoSbj be **manner**]
'saying (=thinking) "I can't keep them, (considering) the situation I am in." ' (2011.1b.04)

15.5.3 Headless adverbial clause as spatiotemporal or manner clause

15.5.3.1 Omission of redundant clause-internal head

My assistant did not accept headless relatives as adverbial clauses in elicitation. However, the implied internal head, such as 'time' in (549), can be omitted as long as the external {L}-toned noun was present after the relative verb.

(549) *[[[àr*^{n}*ú* *∅* *lɔ́wɔ́-jú*$^{+\text{H}}$*]* $^{\text{L}}$*tèŋè]* *bè]*
[[[rain **(time)** rain.fall-Ipfv.Rel$^{+\text{H}}$] $^{\text{L}}$**time**] with]
[wàrù-wárá *bè]=ǹ* *sɛ́*^{n} *kɔ̀*
[farmer Pl]=Dat good be.NonhSbj
'In the times when it rains, the farmers are pleased.'

Alternatively, if the postposition *bè* 'with' follows the relative clause, so that the latter's adverbial nature is clear, a headless relative can function as a vaguely temporal clause (550).

(550) *[músá* *∅* *bé* *á:-jú]* *bè,*
[M **(time)** 3PlSbj arrest-Ipfv.Rel$^{+\text{H}}$] **with**,
í^{n} *bàmàkɔ́* *wɔ̀*
1SgSbj B be.HumSgSbj
'When they arrested Mousa, I was in Bamako.'

15.5.3.2 Headless adverbial relative clause plus topic *wɔ̀*^{n}

Topic *wɔ̀*^{n} may follow a headless relative clause in a construction translatable as 'when/after …', describing a backgrounded situation that sets the stage for a new event. Most textual examples involve perfective relatives (551).

(551) a. *[bàrà*$^{\text{L}}$*-nɔ̀w*^{n}*ɔ́* *bè]* *wó* *kúwó* *jɛ̂,*
[outback$^{\text{L}}$-meat Pl] 3SgObj eat.meat RecPf,
bé $^{\text{H}}$*kúw-é* *wɔ̀*^{n}*,*
3PlSbj $^{\text{H}}$eat.meat-**Pfv.Rel** **Top**,
kìné *yî* $^{\text{L}}$*gò-è*
soul there.NearDist $^{\text{L}}$go.out-Pfv
'The wild animals ate her up. When they had eaten her up, (her) soul went away from there.' (2011.1b.03)

b. *nɛ́:* *[ɛ̀:^{n}-[tè-tê:]* *sâ:^{n}]* *tɔ̂n-tân* *tɔ̂n-tân tɔ̂n-tân* *tɔ̂n*
now [soda.ash-[filtering.pot] all] (sound)
[kó ^{H}*tɔ́r-ɛ́* *wɔ̀^{n}],*
[**NonhSbj** ^{H}begin-**Pfv.Rel** **Top**]
[[[é kɔ̂] ^{L}*bàɲà]* *kà:^{n}]* *tɔ́r-ɛ̀*
[[that.FarDist] ^{L}HumSg] also] begin-Pfv
'Now all the soda-ash filtering pots, when they began to go "plop, plop," that one (of hers) too began (to sound).' (2011.1b.01)

c. *nɛ́:* *gɛ̀r-ú* ^{H}*dɔ́-ɛ́* *wɔ̀^{n},*
now cut-VblN ^{H}arrive-**Pfv.Rel** Top,
[nɛ́: *wɔ̀^{n}]* *[dɛ̀r^{n}ɛ̀^{L}* *é* ^{H}*kún-ú* *wɔ̀^{n}],*
[now Top] [crops^{L} **2PlSbj** ^{H}put-**Pfv.Rel** **Top**],
[kó *wà]* *[gùŋ-ú* *dɔ̌-ɛ̀]* ^{L}*gì-jù*
[Nonh QuotSbj] [take.out-VblN arrive-Pfv] ^{L}say-Ipfv
'Now when (time for) cutting (millet/sorghum) has arrived, now as for the crops that you-Pl have put (=planted), they say "the (time for) taking out (=harvesting) has arrived." ' (2011.1a.32)

There is one textual example with a reduplicated imperfective relative, denoting a state just prior to the intended action, which in fact was stymied (552).

(552) *kún-ɛ̀:* *gò-gó:-jú$^{+H}$* *wɔ̀^{n},*
put-and.SS **Rdp**-go.out-**Ipfv.Rel^{+H}** **Top**,
[ɲà^{L} *gó:-jú$^{+H}$]* *kɔ̀:-rɔ̀*
[place^{L} go.out-Ipfv.Rel^{+H}] be.NonhSbj-Neg
'As they put (it) down and were about to go out (of the house), (they found) there was no way out.' (2011.1b.05)

15.5.4 'From X, until (or: all the way to) Y' (*ɲàŋá*, ^{L}*dɔ̀:*)

The verbs *ɲàŋá* 'take, pick up' (bare stem form as in a chain) and ^{L}*dɔ̀:* 'arrive' combine to form two-clause constructions denoting the beginning and endpoints of a time span. Both *ɲàŋá* and ^{L}*dɔ̀:* are chained to a preceding verb denoting the relevant event type. The image is of an event chronologically bounded by an act of 'picking up' (something) at the beginning and by an endpoint. Compare the Jamsay construction of similar meaning with the cognate verb *yàŋá* 'take'.

In both clauses, there is a subject pronominal immediately preceding the verb. The pronoun is obligatory unless there is no specific subject. It appears even if it simply resumes a nonpronominal subject that has already been presented. The substantive verb of the first clause has the form of a (singular-subject) perfective, therefore ending in {*ɛ e*) for many verbs, but it has an {H} overlay. This is followed by *ɲàŋá* 'take', or by a conditional perfective *ɲàŋ-ɛ̂ dè* 'if (it) takes'. The verb of the second clause takes the form of either the bare stem (as in chains) or less often the verbal noun, but again it has {H} overlay. It is followed by ^{L}*dɔ̀:* 'arrive', in an uninflectable {L}-toned form of the bare stem.

For example, *gǒ:* 'go out' takes {H}-toned form *gó-é* before *ɲàŋá* instead of the usual perfective *gǒ-è* 'went in' in the first clause, and *gó:* before *dɔ̀:* in the second. *dèŋ-î:* 'sit' appears as *déŋ-í-í* (from perfective *dèŋ-í-ì*) in the first clause, and either *déŋ-í:* (from bare stem *dèŋ-î:*) or *déŋ-∅* (from verbal noun *děŋ-∅*) before *dɔ̀:* in the second clause.

ɲàŋ-ɛ̂ dè is exemplified in (553). This example also ends in a second 'take' verb (cf. English *how long does it take?*).

(553) *[ɛ̀:rɛ̀^{L} ná:] dà, [bé ^{H}lɛ́-ɛ́] ɲàŋ-ɛ̂ dè,*
[peanut^{L} primary] Top, [**3PlSbj** ^{H}slash.**Pfv**] **take-Pfv** **if**,
[kó ^{H}tɔ́:] ^{L}dɔ̀:,
[**NonhSbj** ^{H}sprout(v)] ^{L}**arrive**,
[nìŋìr^{n}í à:ŋá] ɲàŋá ^{L}bɛ̀-jù
[day how.many?] **take** ^{L}get-Ipfv
'As for groundnuts, starting from (when) they have slashed (=planted), until it sprouts, how many days can it take?' (2011.1a.19)

Further elicited examples are in (554). My assistant preferred simple *ɲàŋá* to the conditional *ɲàŋ-ɛ̂ dè*. In (554a), 1Sg subject *í^{n}* (in both clauses) shows that the independent, not possessor, pronoun is used. This example also shows *yé* from bare stem *yě* 'go' in the second clause. In (554b), the first clause illustrates the immediate preverbal position of the subject pronoun. In the second clause, *kó* is an object pronoun, the (unspecified, nonspecific) subject being omitted. (554c) is inside a quotation.

(554) a. *[nî í^{n} ^{H}yɛ́r-ɛ́] ɲàŋá,*
[here 1SgSbj ^{H}come-**Pfv**] **take**,
[[í^{n} ^{H}yé] ^{L}dɔ̀:] [dí: ìn-ɛ̀:-lí]
[[**1Sg** ^{H}**go**] ^{L}**arrive**] [water bathe-MP-PfvNeg]
'From the time that I came here until I went, I did not bathe.'

b. *[àr^{n}ú gìr^{n}í kó ^{H}núnú-g-í] ɲàŋá,*
[rain house **NonhSbj** ^{H}be.ruined-Caus-**Pfv**] **take**,
[kó ^{H}dánú-g-ú] ^{L}dɔ̀:]
[[**NonhSbj** ^{H}be.fixed-**Caus**] ^{L}**arrive**]
[ɛ́mɛ́ gìnɛ́ nɔ̀w^{n}-ɛ̀:-lâ:]
[1PlSbj sleep(n) sleep]
'From the time the rain damaged the house, until when (they) fixed it, we didn't sleep (well).'

c. *[[bé wà] [bé ^{H}nár^{n}-ɛ́] ɲàŋá]*
[[3Pl QuotSbj] [**3PlSbj** ^{H}give.birth-**Pfv**] **take**]
[[bé ^{H}nú:] ^{L}dɔ̀:] [mɔ̀ɲú wè]
[[**3PlSbj** ^{H}die] ^{L}**arrive**] [bad be.HumPlSbj]
'(quotation:) From the time they are born (lit.: "they [i.e. mothers] give birth to them"), to the time they die, they are evil.'

This construction can also be used with NPs rather than clauses, provided the NPs denote temporally bounded actions. This is the case with cognate nominals and semantically similar nouns, as in (555). Here the interviewer informs the interviewee that the questions to come will cover every aspect of farming. *wárú* primarily denotes working with the daba, especially in the middle of the rainy season. The clause with *lɛ̌* 'slashing' (i.e. striking the earth with a pick-hoe before dropping seeds into the hole) may be a rephrasing of the first clause with *wárú*, since *lɛ̌* more accurately represents the kick-off for the millet-farming season.

(555) *wárú* *ɲàŋ-ɛ̂* *dè,* *lɛ̌* *ɲàŋ-ɛ̂* *dè,*
farm.work **take-Pfv** **if,** slashing **take-Pfv** **if,**
[pàrà-gò:rò]^{L}*-bírɛ́* ^{L}*dɔ̀:,*
[harvest]^{L}-work(n) ^{L}**arrive**,
[kó ^{H}*sɔ́:]* *ú=ǹ* *úɲɔ́r*^{n}*ɔ́-ɲú* *gɛ́-ɛ̀*
[NonhPoss ^{H}matter] 2Sg=Dat ask-Ipfv Purp
'From farming with the daba (and) from slashing (=planting) to autumn work (=harvesting), so that I may ask you-Sg about that topic' (2011.1a.01)

A variation on this is (556). Here the eventuality denoted by the second clause has begun but has not ended. The first clause is structured as above. The second clause has a possessed compound verbal noun ('its putting out child[ren]') as subject. This is followed only by ^{L}*dɔ̀:* . The verb *dɔ̌:* is often translatable as 'arrive', but more strictly it denotes reaching the entrance, as when a visitor arrives in a courtyard but does not (yet) enter the house, or when e.g. the rainy season is just about to begin. So logically one might have had two occurrences of the verb in (556), one H-toned inside the second clause ('arrive' = 'begin') and the second L-toned and outside and after the clause ('until').

(556) *maintenant* *[kó* ^{H}*tɔ́-ɛ́]* *ɲàŋ-ɛ̂* *dè,*
now [**NonhSbj** ^{H}sprout-**Pfv**] **take-Pfv** **if,**
[[ì:^{nL}*-[kùn-ú]* *[kó* ^{L}*kè]]* ^{L}*dɔ̀:],*
[[child^{L}-[put.VblN] [Nonh ^{L}Poss]] ^{L}**arrive**],
[nìŋìr^{n}*í* *à:ŋá]* *ɲàŋá* ^{L}*bɛ̀-jù*
[day how.many?] take ^{L}get-Ipfv
'Now, from the time that it has sprouted, until (the time when) its putting (out) fruits arrives (=begins), how many days can it take?' (2011.1a.19)

15.6 Past time constructions

The absence of a past morpheme associated with verbs (like inflectable verbal clitic *=bɛ-* in several Dogon languages, or like Jamsay postverbal particle *jì:*^{n}) means that the expression of past-time categories is challenging in TgK.

15.6.1 Perfect with *gàrá* ^{L}*yè* (^{L}*y-ɛ̀*) 'pass'

The verb *gàrá* 'pass by, go past' is used with a following ^{L}*yè* (plural-subject ^{L}*y-ɛ̀*) to form a perfect with any preceding VP. The ^{L}*yè* (^{L}*y-ɛ̀*) appears to be a reduced form of the perfective of 'go'. The full perfective form is *yě-ỳ* (plural *yě-ɛ̀:-sɛ̂*^{n}), but reduced forms occur in some constructions (§15.1.6.1, §15.2.2.6, §15.2.3), *yě-ỳ* is also reduced to *yě* before *dè* 'if'. In *gàrá* ^{L}*yè-∅*, the ^{L}*yè-∅* sounds rather like a clitic, but note that *rv*-Deletion does not apply as it does in *gàrá* before most suffixes.

(557) a. *dògùrù*^{L} *ɲá* *bé=ǹ* *í*^{n} *tóró*^{H}*-jà,*
time^{L} place 3Pl=Dat 1SgSbj show^{H}-before,
bé *wàrá* *gàrá* ^{L}*y-ɛ̀*
3PlSbj do.farm.work **pass** ^{L}**go-Pfv.PlSbj**
'Before I could show them the place (field), they had (already) cultivated (it).'

b. *dɔ̀gɔ̀tɔ̀rɔ̀*^{L}*-gìr*^{n}*í* *í*^{n} *dɔ́:*^{H}*-jà,*
doctor^{L}-house 1SgSbj arrive^{H}-before,
wó *nú:* *gàrá* ^{L}*yè-∅*
3SgSbj die **pass** $^{\mathbf{L}}$**go-Pfv**
‘Before I could get to the hospital, he/she had (already) died.’

16 Conditional constructions

16.1 Conditional antecedent with *dè* ‘if’

16.1.1 Simple *dè*

Clause-final *dè* functions as the ‘if’ particle in the usual type of conditional antecedent clause, denoting a possible eventuality that would entail a second eventuality. Usually both eventualities are in the future, and the unmarked logical relation is one of cause-and-effect. In this case, the antecedent clause is perfective in form, and the consequent is imperfective (or a deontic modal category such as imperative). *dè* is L-toned, but it is subject to an optional pitch rise due to nonterminal intonation effects.

The antecedent clause precedes the consequent clause. The consequent may omit subject and object NPs repeated from the antecedent and may therefore be reduced to a verb.

(558)	a.	*í*^{n}	*ɛ́wɛ̀*$^{+L}$	*mɛ̌:*	*ɔ̌-ɛ̀*	*dè,*	*ɛ́wɛ́-jú*
		1SgSbj	market.Loc^{+L}	salt	see-Pfv	**if**,	buy-Ipfv

‘If I see (=find) some salt in the market, I’ll buy (some).’

b.	*ú*	*péjú*	*[bàrá*	*bîn]*	*bɛ̀r-ɛ̂*	*dè,*
	2SgSbj	sheep	[bush	in]	get-Pfv	**if**,
	nî	*jɛ̌:rɛ́*				
	here	bring.Imprt				

‘If you-Sg get (=find) a sheep out in the bush, bring it here!’

c.	*já-wò→*	*bírɛ́*	*bǐ-jí*	*dè,*	*dɛ̌:*^{n}*-ɲú*
	always	work(n)	do-Ipfv	**if**,	get.tired-Ipfv

‘If (you-Sg) work every day, (you’ll) get tired (=wear yourself out).’

Though often translated with ‘if’, the TgK particle *dè* can also be used when the antecedent eventuality is considered certain to happen, or when it denotes a recurring eventuality. In such contexts, ‘when’ or ‘after’ is a more apt free translation.

(559)	*ɛ́mɛ́*	*wárú*	*dág-à→*	*wàrá-sɛ́*^{n}	*dè]*
	1PlSbj	farming	a.little	do.farm.work-Pfv.PlSbj	**if**]
	kú:^{n}	*ɛ́wɛ̀*$^{+L}$		^{L}*yà:-jù*	
	then	market.Loc^{+L}		^{L}go-Ipfv	

‘When/After we have done a little farm work, then we’ll go to the market.’

For pseudo-conditional *dè*, in future anterior subordinated clauses (first of two clauses denoting sequenced events in the future), see §15.2.2.6.

16.1.2 Reduced form of simple perfective of *Cv* verb before *dè*

The verb in the antecedent clause of a typical future-oriented conditional ('if he comes, I'll give him the millet') is normally perfective, either simple perfective (positive) or perfective negative.

There are no morphological irregularities involving the perfective negative, or the plural-subject form of the simple perfective, in this construction. However, the (positive) singular-subject form of the simple perfective has slightly reduced forms for monomoraic *Cv* verbs before *dè*.

(560) Form of singular-subject perfective before *dè* 'if'

bare stem	perfective		gloss
	regular	before *dè*	
a. with *-ỳ*			
yě	*yě-ỳ*	*yě-∅ dè*	'go'
jé	*jé-ỳ*	*jê-∅ dè*	'take away'
nú	*nú-ỳ*^{n}	*nû-∅ dè*	'go in'
b. with *-è*			
ó	*ó-è*	*ô-∅ dè*	'give'

Segmentally identical but tonally distinct reductions of the perfective suffix *-ỳ* ~ *-ì* occur before ^{L}*gì:*^{n} 'since', which requires an {H}-toned verb; see (534) in §15.2.3.

Cv: stems, even though some of them have regular perfective forms of similar *Cv-y* and *Co-e* shapes, are not reduced. Thus *ɔ̌-ɛ̀ dè* ('see'), *nú-ỳ*^{n} *dè* ('die').

Bisyllabic stems with perfective in *-ì* (homophonous to the bare stem) often lose the *-i* before *dè*, but this is not obligatory and only occurs after an unclustered sonorant. When the *-ì* is lost in this way, the stranded L-tone can be heard (in careful pronunciation) on the now word-final sonorant. I therefore attribute this to the phonological rule Apocope (§3.5.5). Example: perfective *dǎ:-n-ì* 'put down, set', combined with *dè* as *dǎ:-n-ì dè* ~ *dǎ:-ǹ dè*.

16.1.3 Extensions of *dè*

In addition to the extensions covered below, which (like *dè* itself) function as conditionals or temporal sequencing devices, some other combinations covered elsewhere may be mentioned.

g-î dè is used in some purposive clauses, as an alternative to *gè:* . These forms are based on *gí* 'say'. See §17.6.1 for examples and discussion.

-ǹ dè is the combination of different-subject 'while' subordinator *-ǹ* and *dè* 'if, when'. See §15.2.2.9-10.

16.1.3.1 *táŋá yè-∅ dè* 'if it happens that …'

An extended variant … *táŋá yè-∅ dè* 'if it happens that …' is also found (compare Jamsay *táŋà: dè*). It contains *táŋá* 'become, turn into' and a reduced form of perfective *yě-y* 'went', which elsewhere drops the suffixal semivowel before *dè* to result in *yě-∅ dè* 'if (he/she) went'.

(561) *[[ú* *bíré* ^{L}*bì-jù]* *táŋá* ^{L}*yè-∅* *dè],*
[[2SgSbj work(n) ^{L}do-Ipfv] **become** ^{L}**go-Pfv** **if**]
í^{n} *ú* ^{L}*bà-jù*
1SgSbj 2SgObj ^{L}help-Ipfv
'If (it happens that) you-Sg do some work, I'll help you.' (*bàrá*)

TgK *táŋá yè-∅ dè* undoubtedly reveals the origin of the contracted Jamsay equivalent *táŋà: dè*, whose tones and vowel length are anomalous synchronically.

16.1.3.2 *t-î dè* (temporal sequencing)

An extension *t-î dè* emphasizes the temporal sequencing of the antecedent and consequent eventualities. Since the chronology is more relevant than the cause-and-effect relationship, I will gloss *tí* as 'do first' in interlinears and analyse *t-î dè* as containing its simple perfective form, with the usual loss of final *-ỳ* before *dè*. Because of the chronological emphasis, *t-î dè* may be considered a special case of the pseudo-conditional construction with *dè* following a perfective verb (§15.2.2.6). Consistent with this, my examples of *t-î dè* involve future time contexts.

The stem *tí* is found elsewhere in TgK grammar as a linker in verb chains (§15.1.6.3) and in the form *té-è:* in a variant of the same-subject subordination construction (§15.2.2.5). Jamsay and Ben Tey cognates are mentioned at the end of §15.1.6.

(562) a. *wó* *[să*^{n} ^{H}*gír*^{n}*ì*$^{+L}$*]* *ɲă:* *ɲí:* *t-î* *dè]*
3SgSbj [ReflPoss ^{H}house.Loc^{+L}] meal eat **do.first-Pfv** **if**]
yĕ-jú
come-Ipfv
'He will eat at his home before coming (here).'
or: 'He will eat at his home, then come (here).'

b. *[bíré* *bìré* *t-î* *dè]* *ɲă:* *ɲí:*
[work(n) do **do.first-Pfv** **if**] meal eat.Imprt
'Do-2Sg the work before you-Sg eat!'
[lit. "After doing the work, eat a meal!"]

TgK verb *tí* 'send', which occurs mainly in the verb-chain *bă:rì tí* 'send', along with its cognates in other Dogon languages, may be historically related to the grammatically specialized *tí* in *t-î dè* and *té-è:*, or they may be accidental homonyms. Synchronically in TgK, the two can co-occur: *[bă:rì tí t-î dè] yéré* 'send (it) and then come!'.

16.1.4 'Unless' antecedent

An ordinary negative antecedent can express 'unless' as well as other nuances.

(563) *ú* *wáru* *wǎ:-rò* *dè,*
2SgSbj farming do.farm.work-**IpfvNeg** **if**,
àbádá *ɲǎ:* *ɲî:-rò*
never meal eat-IpfvNeg
'If you-Sg don't do farm work, you'll never eat.'
= 'Unless you-Sg do farm work, you'll never eat.'

16.2 Alternative 'if' particles

16.2.1 'Even if …' (*… kà:^{n}*, *hâl … kà:^{n}*)

Replacing clause-final *dè* by *kà:^{n}* 'also, even', with or without clause-initial *hâl* 'even, all the way to', expresses the sense 'even if'. Usually the antecedent eventuality is unlikely to happen, and if it did it would not affect the consequent. In (564c) there is also a regular 'if' clause.

(564) a. *hâl* *wó* *nî* *yɛ̀r-ɛ̂* *kà:^{n},*
even 3SgSbj here come-Pfv **even**,
ɲǎ: *ɲî:-rò*
meal eat.meal-IpfvNeg
'Even if he/she comes here, he/she won't eat (here).'

b. *hâl* *àr^{n}ú* *lɔ́w-ɛ̀* *kà:^{n},*
even rain(n) rain.fall-Pfv **even**,
í^{n} *bàrá* *yǎ:-rò*
1SgSbj bush go-IpfvNeg
'Even if it rains, I won't go to the bush (= the fields).'

c. *í:^{n}* *kà:ná,* *[wó* ^{HL}*ínà:]* *wɔ̀:-rɔ́* *kà:^{n},*
child now, [3SgPoss ^{HL}mother] be.HumSgSbj-Neg **even**,
í:^{n} *ú=ǹ* *dàgá* *té-è* *dè,*
child 2Sg=Dat leave do.first-Pfv **if**,
pèré *[[ú* ^{L}*ì:^{n}]* *gì:^{n}]* *wó* *dìn-ɛ́:* *dɔ̀ŋɔ̀r^{n}ɔ̀*
other [[2SgPoss ^{L}child] like] 3SgObj keep-MP.Imprt otherwise
'A child now, even if its mother is absent (=dead), if/when an (orphaned) child is left to you (=in your charge), keep (=treat) it like your (own) child anyway.' (2011.1b.01)

For *kà^{n}* in counterfactual conditionals, see §16.4, below.

16.2.2 'As soon as …' (*dè fú→*)

Addition of *fú→* 'all' (§6.6.1, above) after the clause-final 'if' particle *dè* can add a nuance of immediacy to the sequencing of the antecedent and the consequent eventualities.

(565) a. *ámírⁿí ùŋúr-ì dè fú→,*
chief get.up-Pfv **if** **all**,
ɛ́mɛ́ ɲǎ: ɲí:-ɲí
1PlSbj meal eat.meal-Ipfv
‘As soon as the chief gets up, we’ll eat.’

b. *íⁿ bú:dú bɛ̀r-ɛ̂ dè fú→,*
1SgSbj money get-Pfv **if** **all**,
ú=ǹ tɔ́jɔ́-jú
2Sg=Dat pay-Ipfv
‘As soon as I get the money, I’ll pay you-Sg.’

16.2.3 ‘As long as …‘ (*táⁿ fú→*)

táⁿ here is borrowed from French (*tant que*). It is combined with *fú→* ‘all’.

(566) *[nìŋìrí pɛ̀-sɔ̂: ᴸyɔ̀:] dɔ̀:-lí táⁿ fú→,*
[day ten-seven ᴸNearDist] arrive-PfvNeg **as.long** **all**,
[[kó í:ⁿ] ɲǐ-∅ bìr-ɛ̂:-rò]
[[NonhPoss child] eat-VblN do-MP-IpfvNeg]
kân kɔ̂
considered be.NonhSbj
‘As long as those seventy days haven’t arrived (=elapsed), its fruits are considered to be inedible.’ (2011.1a.19)

16.2.4 ‘Suppose that …‘ (*sà*)

A clause-final particle *sà* is used in suppositional conditional antecedents. In the interview-style recorded texts, *sà* is often used by the interviewer at the beginning of a complex question shifting from the previous issue to a new one.

(567) a. B: *nɛ́: ɲù:-dǔw tɔ́rɔ́-sɛ́ⁿ lò, …*
A: *é→*
B: *… [bàrá bîn], [ɲù:ᴸ-tè:rɛ́ wɔ̀ⁿ] yɔ́ kɔ̀ sà, maintenant*

B: Now they had begun carrying the millet, right?
A: Yes.
B: In the bush, suppose there were some big heaps (of millet grain spikes). …
[beginning of long speech turn ending with a new question]

b. *maintenant [ɲú: wɔ̀ⁿ] dùw-ɛ́:-sɛ̂ⁿ* ***sà,***
[ɲú: sâ:ⁿ] dùw-ɛ́: gìrⁿí jě:r-è:-sɛ̂ⁿ,
maintenant gìrⁿí jě:r-è:-sɛ̂ⁿ dè,
[ɲú: dà] yǎ: ᴸbè:-jù
Now **suppose that** (they) have carried the millet,
they have carried and brought all of the millet to the houses.
Now when (they) have brought (it) to the houses,
as for the millet, where do (they) put it?’ (2011.1a.16)

This *sà* is distinct from H-toned clause-final *sá*, an emphatic found widely in Malian languages (but absent from my TgK data) and probably derived from (African) French *ça* ‘that’. It is also distinct from *sà* and tonal variants ‘have’.

16.3 Willy-nilly and disjunctive antecedents (‘whether X or Y …‘)

In a ‘whether or not’ conditional, the two alternative antecedents are juxtaposed without the final *dè* ‘if’. The construction is really a conjunction of the two antecedents, and has the dying-quail intonation (prolongation and pitch drop) typical of NP conjunction (§7.1.1). If (as often) the two alternative antecedents are positive and negative counterparts, the dying-qual intonation is expressed only on the positive clause, which precedes the negative with no pause (568a). If the two antecedents have distinct predicates, both have dying-quail intonation (568b).

(568) a. *àr*^{n}*ú* *lɔ́w-ɛ̀.˸.* *lɔ̀wɔ̀-lí,*
rain rain.fall-**and.SS** rain.fall-**PfvNeg**
ɛ́mɛ́ *bàrá* *yǎ:-jí*
1PlSbj bush go-Ipfv.PlSbj
‘Whether it rains or not, we’re going to the bush (=fields).’

b. *dí:* *kélú* *kɔ̂.˸.,* *nú:* *kɔ̂.˸.,*
water **cold** be.NonhSbj.&, **hot** be.NonhSbj.&,
í^n *nɔ̌:-ɲú*
1SgSbj drink-Ipfv
‘Whether the water is cold or hot, I will drink (it).’

16.4 Counterfactual conditional (*kà:*^{n})

In a counterfactual, it is implied that the antecedent eventuality did not in fact occur in the past, so the causal chain between antecedent and consequent was broken. The antecedent ends in *kà:*^{n} ‘also, even’ rather than *dè*. We have seen *kà:*^{n} in ‘even if’ antecedents (§16.2.1). The consequent is imperfective in form, as with other types of conditional.

(569) a. *kǎ:* *yè-lí* *kà:*^{n}*,*
grasshopper come-PfvNeg **even**,
pàrà-gó:ró *dàg-ɛ́:-jú*
harvest be.good-MP-Ipfv
‘If the locusts hadn’t come, the harvest would have turned out well.’

b. *wó* *nî* *yɛ̀r-ɛ̂* *kà:*^{n}*,* *í*^{n} *wó* *dǎ-ɲú*
3SgSbj here come-Pfv **even**, 1SgSbj 3SgObj kill-Ipfv
‘If he/she had come here, I’d have killed him/her.’

17 Complement and purposive clauses

17.1 Quotative complement

The inflectable 'say' verbs are *pórì* and *gí* (§17.1.2).

The quotative particle *wà* is in common use at the end of quoted clauses (§17.1.3). It is also commonly inserted after the subject of a quoted clause (§17.1.4).

Imperative verb forms appear as such in quotations. Hortatives, which are structurally a subtype of imperative, likewise occur in quotations (§17.1.5).

Quoted clauses have logophoric pronouns corresponding to original first person pronouns; see §18.2 below.

17.1.1 Direct versus indirect in quotative complements

Most discourse is indirect in the sense that some conversion of deictics is observed, most prominently the replacement of original first person pronouns by logophoric pronouns. Most quoted speech and thought is indirect. However, the distinction between direct and indirect is not pervasive, since a) TgK aspect categories (unlike English tense) are not recomputed; b) imperative and hortative forms are retained; and c) there is no 'that' complementizer.

17.1.2 'Say that …' with inflectable 'say' verb (*pórì*, *gí*)

The inflectable 'say' verbs are *pórì* and *gí*, see §11.3 for discussion of their forms (including irregularities). *pórì* is very common in elicitation, *gí* is more common in texts.

pórì can take NP as well as clausal complements.

(570) a.

wó	*ìŋé*	^{L}*pòr-ì*
3SgSbj	what?	^{L}**say**-Pfv

'What did he/she say?'

b.

[ɔ̀jɔ̀^{L}	*pɔ́*^{n}*→]*	*pò-lí*
[thing^{L}	nothing]	**say**-PfvNeg

'He/She didn't say anything.'

c.

[ú	*yògó*	*yě-jú*	*dè]*	*má=ǹ*	*pɔ́-nɔ́*
[2SgSbj	tomorrow	come-Ipfv	if]	1Sg=Dat	**say**-Imprt

'If you're coming tomorrow, tell me!'

d.

í^{n}	*[wó*	^{H}*gír*^{n}*ì*$^{+L}$*]*	*yèrɛ́*	*bɛ̌ː-rò]*
1SgSbj	[3SgSbj	^{H}house.Loc^{+L}]	come	get-IpfvNeg]
wó=ǹ	*pór-ì*			
3Sg=Dat	**say**-Pfv			

'I told him that I can't come to his house.'

The 'say' verb and its dative PP normally follow the quoted matter, and usually do not co-occur with an adjacent quotative *wà*, which would be rather redundant. However, a subject NP may occur at the beginning of the construction, preceding the quotation (570d).

The quoted matter may be short (e.g. a name) or one or more full sentences. Spationtemporal adverbials ('yesterday', 'here') are reset to correspond to the current deictic center. However, aspectual categories are not reset. In 'He said (ten days ago) that he would slaughter a goat the next day', 'would slaughter' is translated out as an imperfective verb, just as in the original utterance ('I will slaughter a goat tomorrow').

The most important change from the original utterance to the quoted form is the use of logophoric pronouns replacing an original 1Sg or 1Pl pronoun, when the attributed speaker is not the current speaker. See §18.2 for examples and discussion.

For jussive complements (quoted imperatives and hortatives), see §17.1.5, below.

17.1.3 Quotative particle *wà*

The uninflectable particle *wà* follows the quotation. It functions much like quotation marks in written English. It may, however, co-occur with a pre-quotation subject denoting the attributed author of the quotation, like 3Sg *wó* in (571a). In any event, there is always an attributed speaker, even if covert, and this is sufficient to trigger the use of logophoric pronouns (which are coindexed to the attributed author).

(571) a. *wó [[ɛ̀nɛ́ ^{H}ánà$^{+L}$] àr^{n}ú lɔ́w-ɛ̀] wà*
3SgSbj [[LogoP ^{H}village.Loc^{+L}] rain rain.fall-Pfv] **Quot**
'He$_{x}$ said that it rained in his$_{x}$ village.'

b. *wó ɛ̀nɛ́ yǎ:-jú wà*
3SgSbj LogoS go-Ipfv **Quot**
'He$_{x}$ says he$_{x}$ will go.'

c. *wó [sè:dú bàg-ɛ̂] wà*
3SgSbj [S fall-Pfv] **Quot**
'He/She said that Seydou fell.'

In (571a-c), the particle preserved the tones of the preceding verb, whereas clause-final position often induces tone-dropping (perhaps intonational in nature) of verbs. However, in recorded texts the tone-dropping sometimes occurs even before *wà* (572).

(572) *[ɛ̀nɛ́ ètě: yà:-jù] wà*
[LogoSbj well go-Ipfv] **Quot**
'(He) said he was going to the well.' (2011.1b.03) (*yǎ:-jú*)

When the quoted matter ends with a clause-final emphatic particle, *wà* is inserted between the predicate and the emphatic.

(573) *[bàrá bîn] [bàrà^{L}-nɔ̀w^{n}ɔ́ fú→]*
[outback in] [outback^{L}-meat all]
ɛ̀nɛ́ ^{L}bàrà wà dɛ̀
LogoObj ^{L}help.Imprt **Quot** **Emph**
'(she said:) "all (you) wild animals in the bush, help me!" ' (2011.1b.05)

Combined with quotative subject *wà* (following section), this means that there are two break points in a quotation where *wà* can be inserted: after the subject NP, and after the verb (but before emphatic particles).

Clause-final *wà* does not occur in negative or irrealis contexts like ‘He didn’t say …’ or ‘Did he say …?’. These contexts require an overt ‘say’ verb (which follows the quotation), and this makes a quotative particle unnecessary and perhaps inappropriate. Examples occur in the following section.

17.1.4 Quotative subject *wà* and allomorphs

A quoted sentence consisting of an overt subject (NP or pronoun) plus a VP can be divided into two, with one *wà* after the subject NP and a second *wà* or an inflectable ‘say’ verb after the VP (but before any emphatic particle). This division is regular with human subjects, particularly pronouns. It does not seem to apply to nonhuman subjects. I refer to the first *wà* as the **quotative subject** morpheme.

(574)	a.	*bé*	*[sè:dú*	*wà]*	*[yǎ:*	*yǎ:-táŋà*	*mà→]*	*wà*
		3PlSbj	[S	**QuotSbj**]	[where	go-Prog	Q]	**Quot**

‘They asked Seydou$_{x}$ where he$_{x}$ was going.’
(or: ‘They asked, where was Seydou going?’)

b.	*wó*	*[nǎ*	*bè*	*wà]*	*[lɛ̌*	*lɛ́:-sɛ̂^{n}]*
	3SgSbj	[person	Pl	**QuotSbj**]	[slashing	slash.earth-Pfv.3Pl]
	pór-ì	*dè,*	*bìn^{L}-kɛ́jɛ̀=y*			
	say-Pfv	if.	untruth=it.is			

‘If he says that the people have planted (the millet), it’s false.’

The 1Sg form is usually contracted from *má wà* to *má à*. The 3Sg can be contracted from *wó wà* to *wɔ́ ɔ̀*. I know of no other irregularities in form.

The quoted subject may be a pronoun, reset to conform to the deictic center of the current speech event. In other words, it need not exactly repeat the pronominal or other form used in the original utterance. In (575a), for example, 1Sg is substituted for original 2Sg.

(575)	a.	*bé*	*[má*	*à]*	*[yǎ:*	*yǎ:-táŋà*	*mà→]*	*wà*
		3PlSbj	[1Sg	**QuotSbj**]	[where	go-Prog	Q]	**Quot**

‘They asked (me) where I was going.’

b.	*bé*	*[ú*	*wà]*	*[yǎ:*	*yǎ:-táŋà*	*mà→]*	*wà*
	3PlSbj	[2Sg	**QuotSbj**]	[where	go-Prog	Q]	**Quot**

‘They are asking (you) where you-Sg are going.’
[said e.g. by an interpreter, when there is no common language]

c.	*wó*	*[sè:dú*	*wà]*		
	3SgSbj	[S	**QuotSbj**]		
	[[yɛ́	*tɛ̀]*	*bàg-ɛ̂]*	*má=ǹ*	^{L}*pòr-ì*
	[[there.Def	around]	fall-Pfv]	1Sg=Dat	^{L}**say**-Pfv

‘She said to me that Seydou has fallen over there.’

Clause-final *wà* is not used in negative or modally dubitative contexts ('he didn't say…', 'did he say…?'), which require an inflectable 'say' verb. However, quotative subject *wà* does appear after a human subject NP in such constructions.

(576) a. *ámádú [nǎ bè wà] [lɛ̌ lɛ́:-sɛ̂^{n}]*
A [person Pl **QuotSbj**] [slashing slash.earth-Pfv.PlSbj]
pò-lí
say-PfvNeg
'Amadou did not say that the people have sown (the millet).'

b. *ámádú [nǎ bè wà] [lɛ̌ lɛ́:-sɛ̂^{n}]*
A [person Pl **QuotSbj**] [slashing slash.earth-Pfv.PlSbj
pór-ì
say-Pfv
'Did Amadou say that the people have sown (the millet)?'

TgK differs from other Dogon languages that have a similar quotative-subject construction in that a homophonous and arguably identical *wà*, with the same contracted pronominal forms, is used with topicalized pronouns. For details see (666) and preceding discussion.

17.1.5 Jussive complement (reported imperative or hortative)

This section describes the form of quoted (or otherwise indirect) imperatives, prohibitives, and hortatives.

17.1.5.1 Quoted imperative

A quoted (embedded) imperative takes the regular imperative form, but in invariant singular form regardless of the original addressee number. The original addressee appears as an obligatory clause-initial pronoun followed by quotative subject (QuotSbj) particle *wà* (often reduced to *à* after 1Sg *má* or 3Sg *wó*, and contracting with them as [mâ:] and [wâ:] respectively). This clause-initial pronoun functions as a quoted vocative, with the original subject, or more likely vocative '(hey) you!', converted in accordance with the pronominal structure of the current speech event (hence often third person). Quotative *wa* (which adopts the final tone of the preceding word) may also occur at the end of the quoted clause.

The full form of the construction is exemplified by (577), which has two clearly distinct clauses.

(577) *[séydú nì] pɔ́-nɔ́, [[wó à] yɛ́rɛ́] wá*
[S Dat] say-Imprt, [[3SgSbj **QuotSbj**] come.**Imprt**] **Quot**
'Tell-2Sg Seydou to come!'
[lit: "Say to Seydou, '(hey) he, come!' "]

It is also possible to omit the overt 'say' verb (*pórì*), since the quotative particles mark the imperative clause as quoted (578a). Or the overt 'say' verb may follow the quoted segment (578b), perhaps as a kind of afterthought.

(578) a. *séydú [[má à] yɛ́rɛ́] wá*
S [[1Sg **QuotSbj**] come.**Imprt**] **Quot**
‘Seydou told me to come!’
[lit: “Seydou (said) ‘(hey) me, come!’ ”]

b. *séydú [[má à] yɛ́rɛ́] pórì*
S [[1Sg **QuotSbj**] come.**Imprt**] **say**.Pfv
‘Seydou told me to come!’
[lit: “Seydou said, ‘(hey) me, come!’ ”]

For wishes and imprecations (‘May God assist you!’) and the like, with a similar syntax except for the quotative subject marking, see §10.6.4.1, above.

The same structures are used for quoted prohibitives, which merely replace the imperative in the previous examples with a morphological prohibitive (579).

(579) *[séydú nì] pɔ́-nɔ́,*
[S Dat] say-Imprt,
[[wó à] yé-lé] wá
[[3SgSbj **QuotSbj**] come.**Proh**] **Quot**
‘Tell-2Sg Seydou not to come!’
[lit: “Say to Seydou, ‘(hey) he, don’t come!’ ”]

17.1.5.2 Quoted hortative

As explained in §10.6.2.1, above, a hortative of the type translatable as ‘let’s VP!’ is structured as an imperative, with either a singular or plural addressee as the case may be, but with a 1Pl subject. This structure is reflected in the form of an embedded hortative, which treats the original addressee(s) as the subject(s) of the hortative verb. Therefore the hortative in (580) has a 1Sg pronoun as subject, representing the original addressee.

(580) *séydú [má à] ɲá-má wá*
S [1SgSbj **QuotSbj**] go-**Hort** **Quot**
‘Seydou said to me, let’s go!’ (i.e. he suggested that he and I go)
[lit.: “Seydou (said), ‘(hey) me, let’s go!’ ”]

As with embedded imperatives, here the hortative verb is invariant in form. A plural subject can be expressed by the usual clause-initial pronoun, but the hortative verb does not take plural-addressee form (581).

(581) *séydú [ɛ́mɛ́ wà] ɲá-má wá*
S [1SgSbj **QuotSbj**] go-**Hort** **Quot**
‘Seydou said to us, let’s (all) go!’ (i.e. he suggested that he and we go)
[lit.: “Seydou (said), ‘(hey) us, let’s go!’ ”]

An embedded hortative negative is (582).

(582) *séydú [má à] yá:-m-lé wá*
S [1SgSbj **QuotSbj**] go-**Hort-Proh** **Quot**
‘Seydou said to me, let’s not go!’ (i.e. he suggested that he and I not go)
[lit.: “Seydou (said), ‘(hey) me, let’s not go!’ ”]

17.2 Factive (indicative) complements

Factive complements have the form of main clauses, usually indicative but under some conditions polar interrogative. The factive clause may precede the entire main clause, including its subject, or it may be inserted between the subject and the verb of the main clause.

With verbs like ‘see’ and ‘hear’, a distinction must be made between factive complements that describe an inferred situation (‘I saw that he was tired’), and imperfective complements that describe an ongoing event (‘I saw him fall[ing] out of a tree’).

17.2.1 ‘Know that …‘ factive complement

For the predicate *í:^{n} wɔ̂* ‘know’, including a copula, see §11.2.4.1, above.

A clausal complement has the form of a main clause. If ‘know’ is positive, the complement is a normal indicative clause, positive or negative as the case may be. If ‘know’ is negated, questioned, or otherwise non-assertive, the complement takes the form of a polar interrogative (§13.2.1). In English, ‘Does Seydou know that his house has fallen?’ has a presupposition absent from ‘Does Seydou know whether his house has fallen?’, but in TgK (583b) is used whether or not the current speaker knows whether the house has fallen.

(583)	a.	*[í^{n}*	*yɛ̌:-rò]*	*[wó*	*í:^{n}*	*wɔ̂]*
		[1SgSbj	come-**IpfvNeg**]	[3SgSbj	**know**	be.HumSgSbj]

‘He/She knows that I am not coming.’

b.	*sè:dú*	*[[sǎ^{n}*	*^{H}gír^{n}í]*	*bàg-ɛ̂*	*mà]*	*í:^{n}*	*wɔ̂*
	S	[[ReflPoss	^{H}house]	fall-**Pfv**	Q]	**know**	be.HumSgSbj

‘Does Seydou know that his house has fallen?’
‘Does Seydou know whether his house has fallen?’

17.2.2 ‘See (find, hear) that …‘ complement

17.2.2.1 Factive complement of ‘see’ and ‘hear’

‘See’ can take a factive complement, in the form of a main clause, when the emphasis is on the agent’s inference of an eventuality based on visual and perhaps other evidence, rather than on direct observation of the eventuality (584a-b). This construction is also usual with ‘hear (a report)’ (584c) and ‘find (a situation)’ (584d). A nonpronominal subject of the factive clause is not resumed by a preverbal proclitic pronoun (584b,d).

(584)	a.	*[ú*	*kìlɛ̀-lí]*	*í^{n}*	*ɔ́-táŋà*
		[2SgSbj	be.done-PfvNeg]	1SgSbj	**see**-Prog

‘I see that you-Sg are not done (=are not ready).’

b.	*í^{n}*	*[[sǎ^{n}*	*^{H}súgɛ́:^{n}]*	*dɛ̌-ɛ̀^{n}]*	*ɔ̀-ɛ̀*
	1SgSbj	[[ReflPoss	^{H}younger.sib]	be.tired-Pfv]	**see**-Pfv

‘I saw that my younger sibling was tired.’

c. *[ú   yɛ̀r-ɛ̂]   [í^{n} ɛ́g-ɛ̀]*
[2SgSbj   come-Pfv]   [1SgSbj   **hear**-Pfv]
'I heard that you-Sg had come.'

d. *í^{n} yɛ̌-ɛ̀:   [[sǎ^{n} $^{\text{HL}}$í^{n}tày^{n}]   nùnú-ɲú]   tɛ́m-ɛ̀*
1SgSbj   go-and.SS   [[ReflPoss $^{\text{HL}}$friend]   be.sick-Ipfv]   **find**-Pfv
'I went (there) and found that my friend was sick.'

17.2.2.2 Imperfective complement of 'see' and 'hear'

In this context, the agent of 'see' or 'hear' directly perceives an event, rather than inferring a situation. The subject of the perception verb appears either before the complement (585a) or after it, next to the perception verb (585b-c).

Two syntactic details show that the complement is structured as a subject relative clause, suggesting that e.g. (585a) translates literally as "I saw [the child who was falling]." First, the verb of the complement ends in an L-toned version of otherwise H-toned imperfective suffix *-jú* or (plural) *-jí*. The L-toned version is the form that occurs in relative clauses, arguably reflecting a tonal definite (§14.1.9.2). Second, even when the subject of the complement is expressed as a nonpronominal NP, a preverbal subject pronominal is required. Note 3Sg *wó* in (585a,c) and 3Pl *bé* in (585b), agreeing with the clause-initial subject NP. This too is a feature of relative clauses (§14.1.8). Compare the syntax of 'since' clauses with *gì:^{n}* (§15.2.3).

(585) a. *í^{n} [í:^{n} [[tímɛ́   árà] $^{\text{L}}$gò:]   wó   bàgá-jù$^{+\text{L}}$]*
1SgSbj   [[child   [tree   on.top] $^{\text{L}}$go.out   **3SgSbj**   fall-**Ipfv.Rel**$^{+\text{L}}$]
$^{\text{L}}$ɔ̀-ɛ̀
$^{\text{L}}$**see**-Pfv
'I saw (a/the) child fall(-ing) out of a tree.'

b. *[[ɲɛ̌   bè]   já   bé   jàyá-jì$^{+\text{L}}$]*
[[woman   Pl]   squabble(n)   **3PlSbj**   squabble-**Ipfv.PlSbj.Rel**$^{+\text{L}}$]
í^{n} ɛ́g-ɛ̀
1SgSbj   **hear**-Pfv
'I heard the women squabble/squabbling.'

c. *[í:^{n} ú   wó   lágá-jù$^{+\text{L}}$]   í^{n} $^{\text{L}}$ɔ̀-ɛ̀*
[child   2SgObj   **3SgSbj**   hit-**Ipfv.Rel**$^{+\text{L}}$]   1SgSbj $^{\text{L}}$**see**-Pfv
'I saw the child hit(ting) you-Sg.'

17.3 Nominalized and non-factive imperfective complements

Some main-clause verbs, such as 'finish [VP-ing]' and 'consent [to VP]', control a VP complement whose verb is in verbal-noun or other nominal form. Others take imperfective clauses as complements, or switch between verbal nouns and imperfectives.

17.3.1 Structure of verbal noun clause

A verbal noun in its regular abstractive function can be bracketed with clausemate complements. A simple direct-object noun, or other noun regularly associated with the verbal action (e.g. 'night' in 'night fall'), is readily incorporated as an {L}-toned compound initial, as in (586). See §5.1.4 for more examples and discussion.

(586) *í^{n} gìr^{n}ì^{L}-[ùj-ú] kíl-ì*
1SgSbj **house**^{L}-[build-**VblN**] finish-Pfv
'I have finished the house-building.'
(= 'I have finished building the house.')

It is not possible to incorporate multi-word object NPs as compound initials in this manner. When the noun is modified by an adjective, the noun-adjective combination has its regular tones, as in a main clause. This means that the adjective has its lexical melody, and controls tone-dropping on the noun (587a). Likewise, adding a quantifier such as a numeral, or adding a possessor, prevents compound formation, and the object NP has its usual main-clause tonal form (587b-c). Pronouns and adverbials likewise resist incorporation (587d-e). The 1Sg pronoun *má* in (587d) is accusative in form and expresses an object, not a possessor.

(587) a. *í^{n} [[pèjù^{L} már^{n}á] pɔ̌-∅] kíl-ì*
1SgSbj [[sheep^{L} big] skin-**VblN**] finish-Pfv
'I have finished skinning (and butchering) the big sheep.'

b. *í^{n} [[gìr^{n}í lɔ́y] ùj-ú] kíl-ì*
1SgSbj [[house two] build-**VblN**] finish-Pfv
'I have finished building two houses.'

c. *í^{n} [[sǎ^{n} ^{H}péjú bè] dɔ̀r^{n}-ú] kíl-ì*
1SgSbj [[ReflPoss ^{H}sheep Pl] sell-**VblN**] finish-Pfv
'I have finished selling my sheep-Pl.'

d. *wó [má gɛ̀r-ú] kíl-ì*
3SgSbj [1SgObj look.at-**VblN**] finish-Pfv
'He/She has finished looking at me.'

e. *wó [nî sɛ̀m-ú] kíl-ì*
3SgSbj [here sweep-**VblN**] finish-Pfv
'He/She has finished sweeping here.'

When a morphologically simple demonstrative (*nɔ́ː*, *yɔ́ː*) is part of an object NP in a verbal-noun complement, two seemingly distinct constructions occur. In one, the NP has its main-clause form, with tone-dropped noun and H-toned demonstrative (588a). In the other, the noun shows its lexical melody, while the demonstrative drops tones. One interpretation of this tone-dropping is that the demonstrative, but not the associated noun, has been incorporated as compound initial into the verbal noun (588b). Alternatively, the L-toned demonstrative is not incorporated at all, rather it has undergone Postnominal-Determiner Tone-Lowering under the influence of an otherwise covert tonal definite on the noun (588c). This would make (588c) structurally parallel to (588a).

(588) a. *í^{n}* *[[gɔ̀:*^{L} *nɔ́:]* *tàr-ú]* *dàg-ɛ̂*
1SgSbj [[wall^{L} **Prox**] replaster-**VblN**] leave-Pfv
'I have ceased (=abandoned) replastering this wall.'

b. dispreferred mark-up, see (c)
í^{n} *[nɔ̀w^{n}ɔ́* *yɔ̀:*^{L}*-[kɛ̀j-ú]]* *kíl-ì*
1SgSbj [meat **NearDist**^{L}-[cut-**VblN**] finish-Pfv
'I have finished cutting that meat.'

c. preferred alternative mark-up of (b)
í^{n} *[nɔ̀w^{n}ɔ́* ^{L}*yɔ̀:]* *kɛ̀j-ú]* *kíl-ì*
1SgSbj [meat(.Def) ^{L}**NearDist**] [cut-**VblN**] finish-Pfv
'I have finished cutting that meat.'

As explained in chapters 6 and 14 *passim*, the complex of noun, adjective, and numeral forms a unit that remains intact when the NP functions as head of a relative clause, while demonstratives (along with plural *bè* and 'all' quantifiers) are positioned to the right of the clause-final relative verb. In a verbal-noun clause, this repositioning is not possible, since (for example) a numeral following the verbal noun would be interpreted as quantifying over events rather than over objects.

If a true subject (agent) is included with the verbal noun, it takes the form of a possessor. In (589), the entire compound verbal noun ('mango-cutting') is treated tonally as the possessed noun, with {HL} overlay. It is more difficult to elicit examples with a subject and an uncompounded verbal noun, since most such meanings are more readily expressed with a cognate nominal. This comment applies even when the verbal noun, or a homophonous form, is used as the cognate nominal, as with *nǔ:* 'death, dying' in (589b).

(589) a. *[sè:dú* ^{HL}*[máŋgòrò-[kɛ̀j-ù]]]* *sɛ̀^{n}*^{L} *=lá*
[S ^{HL}[mango-[cut.**VblN**]]] good^{L}-StatNeg
'Seydou's mango-cutting is not good.'

b. *[ámír^{n}í* ^{H}*nú:]* *[sɔ̀:*^{L} *náná]=ý^{n}*
[**chief** ^{H}death] [matter^{L} serious]=it.is
'the death of a chief is a grave matter'

17.3.2 'Prevent' (*gǎ:ǹ*) with nominal complement

The transitive verb *gǎ:ǹ* (imperative *gǎ:ná*) has a range of senses (or translations) including 'pester', 'delay', and 'obstruct'. My assistant was uncomfortable using it as a control verb, as in 'X prevent Y [from VP-ing]'. One alternative construction he offered instead was a negated causative of 'go' (590), using the causative in the permissive sense 'let Y VP'.

(590) *àr^{n}ú* *má=ǹ* *bàrá* *yà:-m-lí*
rain 1Sg=Dat the.bush **go-Caus-PfvNeg**
'The rain didn't let me go to the field(s).'

He had no trouble with *gǎ:ǹ* accompanied by a simple nominal complement denoting an action or process (591).

(591) *síɲɛ́ [gìnɛ́ [ì*^{n} ^{L}*kè]] gǎ:n-ì*
noise [sleep(n) [1SgPoss ^{L}Poss]] **obstruct**-Pfv
‘The noise obstructed my sleep (=kept me from sleeping).’

17.3.3 ‘Dare’ (*dǎ:rì*) with imperfective complement

The verb *dǎ:rì* ‘dare (to VP), have the nerve or the effrontery (to VP)’ takes a complement with imperfective verb (positive or negative). The subjects of the two clauses are coindexed.

(592) a. *dònó [[ɛ́mɛ́* ^{HL}*dá:gòl] bî:n] nú-ɲú dǎ:râ:-rò*
cat [[1PlSbj ^{HL}courtyard] in] go.in-**Ipfv** **dare**-IpfvNeg
‘The cat doesn’t dare to come into our courtyard.’

b. *ú ámír*^{n}*í dɔ̌:-jú dǎ:rá-jú*
2SgSbj chief insult-**Ipfv** **dare**-Ipfv
‘You-Sg dare to insult the chief?’

c. *ú yɛ̌:-rò dǎ:rá-jú*
2SgSbj come-**IpfvNeg** **dare**-Ipfv
‘You-Sg dare to not come?’

17.3.4 ‘Consent’ (*yɔ̀wɔ́*, *mǎ:ǹ*) with verbal-noun or imperfective complement

The sense ‘consent, agree (to VP)’ is expressed by either *yɔ̀wɔ́* (also ‘receive, accept’) or *mǎ:ǹ* (imperative *má:ná*). The complement is expressed using either a verbal noun or an imperfective verb, regardless of whether the two clauses have coindexed subjects. The subjects are coindexed in (593a) with a verbal noun, and in (593b) with an imperfective complement.

(593) a. *ámír*^{n}*í nî yèr-ú yɔ̀w-ɛ̂*
chief here come-**VblN** **consent**-Pfv
‘The chief has agreed to come here.’

b. *[àná* ^{HL}*ɔ́gɔ́-ì:*^{n}*] [[àná* ^{H}*ná]* ^{HL}*lá*^{n}*pɔ̀*^{n}*]*
[village ^{HL}rich.man] [[village ^{H}person] ^{HL}tax]
tɔ́jɔ́-jú yɔ̀w-ɛ̂
pay-**Ipfv** **consent**-Pfv
‘The rich man of the village has agreed to pay the (annual) tax for (all) the people of the village.’

The subjects are disjoint in (594). (594a) has a verbal noun complement, while (594b) has an imperfective complement.

(594) a. *[dè-dé: mà] [bàmàkɔ̀*^{L}*-[yǎ-∅] [í*^{n} ^{L}*kè]] yɔ̀w-ɛ̂*
[Rdp-father 1SgPoss] [B^{L}-[go-**VblN**] [1SgPoss ^{L}Poss] **consent**-Pfv
‘My father has consented to my going to Bamako.’

	b.	*wó*	*[ɛ́mɛ́*	*kɛ̀ɲɛ́*	^{L}*nɔ̀:-ɲù]*	*yɔ̀wɔ̀-lí*
		3SgSbj	[1PlSbj	beer	^{L}drink-**Ipfv**]	**consent**-PfvNeg

‘He/She did not consent that we drink beer.’

17.3.5 ‘Cease’ (*dàgá*) with verbal-noun complement

This is a special case of the important transitive verb *dàgá* ‘leave, abandon’. Wherever possible, a cognate nominal or other noun is used as the complement (595a). However, adding additional clause-internal constituents such as a direct object forces the use of a verbal noun clause (595b).

(595)	a.	*bé*	*wárú*	*dàgá-sɛ̂ⁿ*			
		3PlSbj	farming	**leave**-Pfv.PlSbj			

‘They have stopped farming.’

	b.	*[àⁿsà:rà*^{L}	*àrⁿá]*	*[úrⁿí:*	*bè]*	*tɔ̀:ɲ-ú*	*dàg-ɛ̂*
		[white.person^{L}	man]	[children	Pl]	tease-**VblN**	**leave**-Pfv

‘The white man has stopped teasing the children.’

17.3.6 ‘Want’ (*ìyɛ́*) with verbal-noun or imperfective complement

For the forms of the ‘want’ predicate, see §11.2.4.2.

For same-subject cases, the complement is most often a verbal noun (§4.2.4).

(596)	a.	*wó*	*[[sǎⁿ*	^{H}*ánà*$^{+L}$*]*	*yě-∅]*	*ìyɔ̂:*
		3SgSbj	[[ReflPoss	^{H}village.Loc^{+L}]	go-**VblN**]	**want**

‘She wants to go to her village.’

	b.	*íⁿ*	*[sǎⁿ*	^{H}*wórú]*	*wàr-ú*	*ìyɔ̂:*
		1SgSbj	[ReflPoss	^{H}field]	cultivate-**VblN**]	**want**

‘I want to cultivate (=do farm work) in my field.’

	c.	*ɛ́mɛ́*	*[kùⁿ*^{L}*-mɔ̀rú*	*árà]*	*dǒw-∅*	*ìy-è:*
		1PlSbj	[roof	on]	go.up-**VblN**	**want**-PlSbj

‘We would like to go up on the roof.’

	i.	*íⁿ*	*màŋgòrò*^{L}*-[pàl-ú]*	*ìyɔ̂:*
		1SgSbj	mango^{L}-[pick-**VblN**]	**want**

‘I want to pick mangoes.’

An imperfective clause is also possible as a complement (597), since the complement denotes a hoped-for future eventuality.

(597)	a.	*ú*	*nú-ɲú*	*ìyɔ̂:*	*mà*
		2SgSbj	go.in-**Ipfv**	**want**	Q

‘Do you-Sg want to come in?’

b. *í^{n}* *té* *nánà* *gɛ̌-jú* *ìyɛ̀^{L}=lá*
1SgSbj tea at.all look-**Ipfv** **want**-Neg
'I don't want (ever/at all) look at tea.'

With certain complements, such as 'eat', my asssistant prefers *dɛ̀nɛ́* 'look for, seek' as the main-clause verb (598).

(598) *ɛ́mɛ́* *íyé* *làsìrì^{L}-[ɲĭ-∅]* *dɛ̀nɛ́-ɲú*
1PlSbj today couscous^{L}-[eat-**VblN**] **seek**-Ipfv
'Today (=this evening) we'd like to eat couscous.'

Different-subject complements of 'want' are in (599). The verbal noun is "possessed" by the subject in (599a-b). In (599c), the object 'mango' functions as compound initial for the verbal noun. In (599d), where the object NP is determined and therefore cannot function as compound initial, it would appear that 'these mangoes' functions as possessor of the verbal noun.

(599) a. *í^{n}* *yògó* *[ú* *^{H}yɛ́r-ú]* *ìyɔ̂:*
1SgSbj tomorrow [2SgPoss ^{H}come-**VblN**] **want**
'I want you-Sg to come tomorrow.'

b. *í^{n}* *yògó* *[sè:dú* *^{H}yɛ́r-ú]* *ìyɔ̂:*
1SgSbj tomorrow [S ^{H}come-**VblN**] **want**
'I want Seydou to come tomorrow.'

c. *í^{n}* *yògó* *[ú* *màŋgòrò-[pǎl-∅]]* *ìyɔ̂:*
1SgSbj tomorrow [2SgSbj mango-[pick-**VblN**]] **want**
'I want you-Sg to pick mangoes tomorrow.'

d. *í^{n}* *yògó* *[ú* *[màŋgòrò^{L}* *nɔ́:]* *^{H}pál-∅]]* *ìyɔ̂:*
1SgSbj tomorrow [2SgPoss [mango^{L} Prox] ^{H}pick-**VblN**]] **want**
'I want you-Sg to pick these mangoes tomorrow.'

17.3.7 'Forget' (*náŋá*) with imperfective complement

This normally transitive verb (cf. *wó má náŋ-ɛ̀* 'he/she forgot me') can take an imperfective clause as complement. The complement denotes an action that the main-clause subject forgot to carry out.

(600) a. *wó* *[péjú* *jê:-jù]* *^{L}nàŋ-ɛ̀*
3SgSbj [sheep bring-**Ipfv**] ^{L}**forget**-Pfv
'He/She forgot to bring the sheep-Sg.'
b. *[sùgɔ́* *áwárá-jú]* *náŋá-lé*
[mat lay.out-**Ipfv**] **forget**-Proh
'Don't-2Sg forget to lay out the mats!'

This is of course distinct from a propositional complement, as in (601). Here the complement takes the form of a polar (yes-no) question. A more literal translation would be 'I forgot whether …'.

(601)

[[ìⁿtáyⁿ	*mà]*	*yě-ỳ*	*mà]*	*[íⁿ*	*náŋ-ɛ̀]*
[[friend	1SgPoss]	go-Pfv	**Q**]	[1SgSbj	**forget**-Pfv]

'I forgot that my friend had gone.'

17.3.8 Obligational 'must VP' (*kóy*)

The obligational construction is based on a hortative verb (for 1Sg or 1Pl subject), or on an imperative verb (for second or third person subject). It is followed by clause-final *kóy*.

Hortative examples are in (602). As in normal exhortations ('let's go!'), the plural-addressee hortative *-má-ỳⁿ* requires that a total of three or more persons (including the speaker) be involved.

(602) a.

má	*sɛ̀wárà*	ᴸ*ɲà-mà*	*kóy*
1Sg	S	ᴸgo-**Hort**	**must**

'I must go to Sevare (city).'

b.

má	*[sǎⁿ*	ᴴᴸ*dé-dè:]*	*bàrá*
1Sg	[ReflPoss	ᴴᴸRdp-father]	help

wárú	ᴸ*wà-mà*	*kóy*
farm.work	ᴸdo.farm.work-**Hort**	**must**

'I must help my father do farm work.'

c.

ɛ́mɛ́	*nî*	*wɛ́:-má-ỳⁿ*	*kóy*
1Pl	here	be.HumSgSbj-**Hort-PlSbj**	**must**

'We (three or more) must be (=stay) here.'

Examples with the imperative verb are in (603). As in normal imperatives, a virtual 2Sg imperative subject is disregarded for anaphoric purposes, so 'your father' in (603a) does not have the reflexive-possessor form seen in (602b), above. On the other hand, third person subjects must be represented by a 3Sg or 3Pl pronoun, even if also specified in the form of a NP (603b-c).

(603) a.

[ú	ᴴᴸ*dé-dè:]*	*bàrá*	*wárú*	*wárá*	*kóy*
[2SgPoss	ᴴᴸRdp-father]	help	farm.work	do.farm.work.**Imprt**	**must**

'You-Sg must help your father do farm work.'

b.

sè:dú	*wó*	*sɛ̀wárà*	*yǎ:*	*kóy*
S	3SgSbj	S	go.**Imprt**	**must**

'Seydou must go to Sevare.'

c.

[úrⁿí:	*bè]*	*bé*	*bàrá*	*yǎ:-ỳ*	*kóy*
[children	Pl]	3PlSbj	bush	go.**Imprt-PlSbj**	**must**

'The children must go to the bush (=to the fields).'

17.3.9 Normative 'it is right that …' (*jâ:ⁿ kɔ̀*) with imperfective complement

An example is (604). *jâ:ⁿ* is an adverbial meaning 'right, proper, normal' with reference to behavior.

(604) *[í^{n} yě-jú] jâ:^{n} kɔ̀*
[1SgSbj come-**Ipfv**] **proper** be.NonhSbj
'It's right (proper) that I come.'

17.3.10 'Fear' (*líw-ì: ~ líy-ì:*) with imperfective complement

For the forms of *líw-ì: ~ líy-ì:* 'fear, be afraid' and its causative, see §11.2.5.4. The verb can take imperfective complements (605) as well as NP objects. This construction is used when the subjects of the two clauses are coindexed ('be afraid to VP').

(605) a. *ɛ́mɛ́ dà:gá dá:rà gǒ:-jú ^{L}lìyɛ̀-jì*
1PlSbj night outside go.out-**Ipfv** ^{L}**fear**-Ipfv.PlSbj
'We are afraid to go outside at night.'

b. *í^{n} kɔ́gɔ́rɔ́ tɛ́w^{n}ɛ́-ɲú ^{L}lìyɛ̀-jù*
1SgSbj fish eat-**Ipfv** ^{L}**fear**-Ipfv
'I am afraid to eat fish.'

When the two clauses have disjoint subjects, the complement takes the form of a polar interrogative (§13.2.1.1) with imperfective aspect, as in (606).

(606) a. *lú:ró má ^{L}kèrè-jù mà→ líyɛ́-táŋà*
snake 1SgObj ^{L}bite-Ipfv **Q** **fear**-Prog
'I'm afraid that a snake will bite me.'

b. *sè:dú [nǎ bè] sǎ^{n} dɔ̌:-jú mà→ líyɛ́-táŋà*
S [person Pl] ReflObj insult-Ipfv **Q** **fear**-Prog
'Seydou$_{x}$ is afraid that the people will insult him$_{x}$.'

For the reflexive pronoun in (606b), see §18.1.4.

17.3.11 'Begin' (*tɔ́rɔ́*) with verbal-noun or purposive complement

The transitive verb *tɔ́rɔ́* 'begin', like its English counterpart, can take a range of nouns as nonclausal complements, provided they can be construed as denoting an activity. In (607), the complement is a noun ('cough') that implies the (absent) cognate verb.

(607) *wó kògújó tɔ́r-ɛ̀ dè,*
3SgSbj cough(n) **begin**-Pfv if,
wó=ǹ lǒ ɔ́-nɔ́
3Sg=Dat medication give-Imprt
'If he starts to cough, give him the medicine.'

When the complement of *tɔ́rɔ́* is clausal (i.e. when it contains a verb), there are several options for the complement. The first is to convert its verb into a verbal noun (608).

(608) a. *bé* *lɛ̌-∅* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj plant-**VblN** **begin**-Pfv.PlSbj
'They have begun planting.'

b. *bé* *[[tùwó* *árà]* *dɔ̌w-∅]* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj [[stone on.top.of] go.up-**VblN**] **begin**-Pfv.PlSbj
'They have begun to climb the mountain.

c. *bé* *gìr^{n}ì^{L}-[ùj-ú]* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj house^{L}-[build-**VblN**] **begin**-Pfv.PlSbj
'They have begun to build (a/the) house.'

d. *bé* *[[gìr^{n}í* *mà]* *ùj-ú]* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj [[house 1SgPoss] build-**VblN**] **begin**-Pfv.PlSbj
'They have begun to build my house.'

e. *bé* *má* *làg-ú* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj 1SgObj hit-**VblN** **begin**-Pfv.PlSbj
'They have begun to hit me.'

Secondly, a purposive clause with suffix *-lí* after an {L}-toned form of the verb (§17.6.3) is common as the complement of 'begin' (609).

(609) a. *bé* *péjú* *dà^{n}-lí* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj [sheep kill-**Purp**] **begin**-Pfv.PlSbj
'They have begun killing (=slaughtering) the sheep-Pl.' (*dàr^{n}á*)

b. *bé* *[búrú* *dɔ̀^{n}-lí]* *tɔ́rɔ́-sɛ̂^{n}*
3PlSbj [bread sell-**Purp**] **begin**-Pfv.PlSbj
'They have begun selling bread.'

c. *nɔ̀w^{n}ɔ́* *ɔ̀mɔ̀-lí* *tɔ́r-ɛ̀*
meat be.rotten-**Purp** **begin**-Pfv
'The meat has begun to spoil.'

d. *[wó* *^{H}kénɛ́]* *pàrà-lí* *tɔ́r-ɛ̀*
[3SgPoss ^{H}heart] be.angry-**Purp** **begin**-Pfv
'He/She has begun to get angy'

Finally, a second type of purposive complement, expressed by compound-like tonal overlays, is also attested with 'begin'. In this construction, an object nominal has {L}-toned form as a compound initial, and the verb has {HL} overlay; see §17.6.2, below.

(610) a. *í:^{n}* *[tìŋɛ̀^{L}* *^{HL}tíŋɛ̀]* *tɔ́r-ɛ̀*
child [talk(n)^{L} ^{HL}speak] **begin**-Pfv
'The child has begun to speak.'

b. *í:^{n}* *[yè^{L}* *^{HL}yâ:]* *tɔ́r-ɛ̀*
child [going^{L} ^{HL}go] **begin**-Pfv
'The child has begun to walk.'

17.3.12 ‘Be VERB-able’ (*bìr-î:*) with verbal-noun complement

Senses like ‘be drink-able’, ‘be-edible’, etc., focus on the intrinsic nature of the substance in question and some recurring actions applied to it as a consequence, rather than a particular person’s ability to apply the action. These senses are expressed by a construction consisting of the relevant NP (e.g. denoting a food), a verbal noun or similar action-denoting noun (such as a cognate nominal), and an imperfective form of mediopassive *bìr-î:* ‘be done’ (cf. *bìrɛ́* ‘do’). The positive form is *bìr-ɛ́:-jú* (611d), the negative is *bir-ɛ̂:-rò* (611a-c). The negative form, which is very common, is homophonous with transitive *bìrɛ̂:-rò* ‘does not do’. The nonspecific implied agent (‘they’, ‘people’) is not overtly indicated.

(611) a. *[kó* ^{H}*í:*^{n}*]* *ɲǐ-∅* *bìr-ɛ̂:-rò*
[NonhPoss ^{H}child] eat-VblN **do-MP-IpfvNeg**
‘Its fruits are inedible.’ (2011.1a.19)

b. *[nìŋìr*^{n}*í* *[pɛ́rɛ̀:* *[nú:nɛ́:* *ságà]]]* *dɔ̀:-lí* *dè,*
[day [ten [five plus]]] arrive-PfvNeg if,
[wárú *wɔ̀*^{n}*]* *bìr-ɛ̂:-rò*
[farming Top] **do-MP-IpfvNeg**
‘If the fifteen days had not arrived (=elapsed), farming (=weeding) was not possible.’ (2011.1a.03)

c. *[ɲú:* *ír-ɛ̀]* *pòr-ú* *bìr-ɛ̂:-rò*
[millet ripen-Pfv] say-VblN **do-MP-IpfvNeg**
‘It can’t be said that the millet has ripened.’ (2011.1a.06)

d. *[[gáw*^{n}*á* *tà:nú]* *ù:-n-ú]* *bìr-ɛ́:-jú*
[[furrow three] lay-Caus-VblN] **do-MP-Ipfv**
‘laying (them) down (by) three furrows can be done.’ (2011.1a.08)

‘Be obtainable’ and ‘be (easily) seen’ can also be expressed by a passivized verb, see §9.3.2.

17.3.13 ‘Finish’ (*kílì*) with verbal-noun complement

kílì ‘finish (VP-ing)’ takes a verbal-noun complement. The complement may include a direct object as {L}-toned compound initial.
(612) a. *ɲà:*^{L}*-[ɲǐ-∅]* *kíl-ì* *mà*
meal^{L}-[eat.meal-**VblN**] **finish**-Pfv Q
‘Have (you) finished eating?’

b. *bé* *tògù*^{L}*-[tòg-ú]* *kíl-ɛ̀:-sɛ̂*^{n}
3PlSbj shed^{L}-[build.shed-**VblN**] **finish**-Pfv
‘They have finished building the shed.’

c. *ɛ́mɛ́* *námà* *lɛ̌-∅* *kìlɛ̀-lâ:*
1Pl now sow-**VblN** **finish**-PfvNeg.PlSbj
‘We have not yet finished planting (millet).’

In (612a), the meal does not have to have been completely consumed; the subject of ‘finished eating’ has simply eaten enough and has ceased eating.

17.3.14 ‘Complete, finish’ (*dǔǹ*) plus same-subject anterior clause

dǔǹ ‘complete, finish (VP-ing),’ generally takes an NP complement. It appears to function as a kind of causative for *dògó* ‘be finished’, which occurs in contexts like ‘the sugar is finished (exhausted)’ and ‘the film is over’. While there is much overlap between *dǔǹ* and *kílì*, *dǔǹ* presupposes completion, as in ‘finish up (the food)’ in the sense ‘consume all the food’.

dǔǹ can also be combined with another verb in the same-subject anterior form (§15.2.2.1).

(613)	a.	*[gìrⁿí*	*új-ɛ́:]*	*dǔn-∅*
		[house	build-**SS.Ant**]	**complete**-Pfv

‘He/She finished (completed) building the house.’

b.	*[wó*	ᴸ*kè*	ᴸ*yɔ̀:]*	*té→*
	[3SgPoss	ᴸPoss	ᴸNearDist]	specifically
	dùw-ɛ̂:	*dǔn-ɛ̀:-sɛ́ⁿ*	*dè*	
	carry-**SS.Ant**	**complete**-Pfv-PlSbj	if	

‘when (they) have completed carrying (the millet) of that particular (person)’ (2012.1a.13)

17.4 Locative verbal noun or other nominal complement

This construction has not turned up in the TgK data as a complement clause type.

17.5 Chained-verb complement clause

In this section we consider cases where a final verb controls a preceding clause containing a verb in the bare stem form (see beginning of §10.1.3).

17.5.1 ‘Be able to, can’

17.5.1.1 *bɛ̀rɛ́* following the main verb

The verb *bɛ̀rɛ́* means ‘get, obtain’ as a simple transitive verb with NP object. When preceded by a chained VP ending in a verb in the bare-stem form, the sense is ‘can VP, be able to VP’. The subjects of the two clauses are understood to be coindexed. Less often, the chained verb takes the same-subject anterior subordinated form in *-ɛ:* ~ *-e:* ~ *-i:*, as in (614c).

(614)	a.	*ú*	*[tùwò*ᴸ	*márⁿá]*	*ɲàŋá*	*bɛ̌-jú*
		2SgSbj	[stoneᴸ	big]	**lift**	**get**-Ipfv

‘Can you-Sg lift this big rock?’

b.	*ú*	*nùnú-ɲú*	*dè,*	*àná*	*yě*	*bɛ̌:-rò*
	2SgSbj	be.sick-Ipfv	if,	village	**go**	**get**-IpfvNeg

‘If you-Sg are sick, you can’t travel.’

c.	*pɔ́^{n}-ɛ̀^{n}*	*gàr-á→*
	decompose-Pfv	a.lot

kó	*pá:m-ɛ̀:*	*bɛ̀-lâ:*
NonhObj	understand**-and.SS**	**get**-PfvNeg.PlSbj

‘(We) haven’t been able to understand very much (=fully) (the expression) “it has decomposed.” ’ (2011.1a.25)

The imperfective negative (‘doesn’t, won’t) is sometimes used in contexts where *cannot* would be used in English.

(615)	*[sɔ̀^{n}-sɔ̀nɔ́*	*kɛ́nɛ̀]*	*wárú*	*bìrɛ̂:-rò*
	[sand	among]	farming	do-**IpfvNeg**

‘(You) don’t (=can’t) farm (=grow crops) in the sand.’

There are two ways to render ‘it’s possible’. *bìr-ɛ́:-jú* means more specifically ‘it is (=can be) done’ and denotes possible actions. *kí-ì bɛ̀-jù* (ending with the imperfective of *bɛ̀rɛ́*) has a more general meaning ‘it could happen’, for example a rain tomorrow. *kí-ì* ‘it happened’ is a special perfective form of active copula *kɛ́:* ‘be (nonhuman)’, as shown by its negation.

17.5.1.2 *bɛ̀rɛ́* in respectful requests

bɛ̀rɛ́ ‘get, obtain’ occurs in ‘be able to VP’ expressions, see just above. This verb also appears in utterances like those in (616), where it adds a respectful note, as when a visitor asks to take leave of his/her host, either directly or through an intermediary. The positive version (616a) is easier to understand more or less literally in this pragmatic context, since ‘be able to’ implies the need for permission (616a). However, the use of *bɛ̀rɛ́* extends to negative contexts (616b), where a semi-literal reading makes less sense.

(616)	a.	*í^n*	*yě*	*bɛ̀rɛ́*	*ìyɔ̂:*
		1SgSbj	go	**get**	want

‘I want to (be able to) go.’

b.	*í^n*	*yě*	*bɛ̀rɛ́*	*ìyɛ̀=lá*
	1SgSbj	go	**get**	want=StatNeg

‘I don’t want to go.’

17.5.1.3 {L}-toned *bɛ̀rɛ̀*^{L} preceding the main verb

Invariant {L}-toned *bɛ̀rɛ̀* ^{L} can also precede the main verb, which then takes regular inflections. This looks like a verb chain, except that in a real verb chain *bɛ̀rɛ́* ‘get’ would have its lexical /LH/ melody. The sense is still close to ‘be able to’, but here it invokes an external situation, hence ‘(not) have the time to’ or ‘(not) have a chance (opportunity) to’, rather than ‘have the ability to’. Most textual examples are negations.

(617) a.

bɔ̀:-dí:	*bɛ̀rɛ̀*^{L}	*ɛ̀:-lí*	*dè*
root	**have.a.chance**^{L}	become.tight-PfvNeg	if

‘if the (millet) roots don’t have time to become firm’ (2011.1a.03)

b.

nɛ́:	*[ɲù:*^{L}	*gàmá],*	
now	[millet^{L}	certain],	
sàjú	*kó*	*bɛ̀rɛ̀*^{L}	*jɔ̀gɔ̂:-rò*
bird	NonhObj	**have.a.chance**^{L}	peck-IpfvNeg

‘Now (with) some (kinds of, i.e. slow-growing) millet, the birds don’t have an opportunity to peck (=eat) that.’ (2011.1a.07)

c.

[[àr^{n}*á-ùrù*	*bè*	*sâ:*^{n}*]*	*wó*	*tì:*^{n}*-tà:*^{n}*]*	
[[man-children	Pl	all]	3SgObj	holding],	
[wó	*wà]*	*[ètě:*	*bɛ̀rɛ̀*^{L}	*yǎ:-rò]*	*wà*
[3Sg	QuotSbj]	[well	**have.a.chance**^{L}	go-IpfvN]	Quot

‘All the young men held (=restrained) him, (and) said “you won’t be able to go to the well (to throw yourself in).” ’ (2011.1b.03)

d.

[[ɲú:	*má]*	*kú:*^{n}	*ír-ɛ́:]*	*[kó*	*kɛ̂:*^{n}*],*
[[millet	ReflPoss]	like.that	ripen-and.SS]	[NonhSbj	when.DS],
[dɛ̀r^{n}*ɛ́*	*má]*	*kú:*^{n}	*bɛ̀rɛ̀*^{L}	*gɛ́r-ɛ̀*	*wà*
[crops	ReflPoss]	like.that	**have.a.chance**^{L}	look-Pfv	Quot

‘His (own) millet ripened in that way and thus [focus] he was able to cut (=harvest) his (own) crops, it is said.’ (2011.1b.05)

17.5.2 ‘Help’ (*bàrá*) as {L}-toned nonfinal verb in chain

With an NP object, ‘help’ is the regular transitive verb *bàrá*, as in *má bàr-ɛ̂* ‘he/she helped me’. When the (logical) complement is clausal, the construction used is a kind of chain, with {L}-toned bare stem *bàrà* preceding the other verb, which has the contextually appropriate inflection. A direct object associated with the final verb may precede (618a) or follow (618b) the ‘help’ verb and its own direct object.

(618) a.

gìr^{n}*í*	*[má*	^{L}*bàrà]*	*újɔ́*
house	[1SgObj	^{L}**help**]	build.Imprt

‘Help-2Sg me build the house!’

b.

í^{n}	*[[sǎ*^{n}	^{HL}*dé-dè:]*	^{L}*bàrà]*	*kèrú*	^{L}*tɛ̀:rɛ̀-jù*
1SgSbj	[[ReflPoss	^{HL}Rdp-father]	^{L}**help**]	stem	^{L}burn-Ipfv

‘I will help my father burn the stems.’

Since *bàrá* also means ‘increase (e.g. price)’ and ‘add (sth)’, ‘help’ may be an over-precise gloss in (618). A literal gloss for (618a) like “adding (yourself) to me, build the house!” might help bring out the TgK syntactic structure.

17.5.3 ‘Look’ (*gɛ̀r-î:*) as final verb in chain (‘try to’)

gɛ̀r-î: ‘look (at)’ (§10.1.3.7) can combine with a preceding VP in a sense close to ‘try to VP’, particularly where volition rather than physical difficulty is the issue.

(619)	*[pɛ̀ré*	*yɔ́*	*kɔ̀*	*dè]*	*[[kó*	*túrú]*	*pórù*	$^{\text{L}}$*gɛ̀-mà]*
	[other	Exist	be.NonhSbj	if]	[[Nonh	one]	say	$^{\text{L}}$**look-Hort**]

‘If there is another (tale), let’s look and (=try to) tell one.’ (2011.1b.04)

In other contexts, ‘try to VP’ is expressed indirectly by a purposive clause with final *gɛ̀:* (§17.6.1 below). (620) is literally ‘(I) went in order to go to the market, (I) couldn’t.’

(620)	*[[ɛ́wɛ̀*$^{+\text{L}}$	*yǎ:-jú*	*gɛ̀:]*	*yɛ̌-ɛ̀:]*	*bɛ̀-lí]*
	[[market.Loc$^{+\text{L}}$	go-Ipfv	**for**]	go-and.SS]	get-PfvNeg]

‘I tried to go to the market, but I couldn’t.’

17.6 Purposive, causal, and locative clauses

In addition to explicitly purposive clauses (see below), simple clause-chaining can sometimes be translated in this fashion. This is especially the case when the chain includes a nonfinal verb of motion or of changing position (e.g. sitting down), which may be a preliminary to an intended further action (621).

(621)	*ɛ́mɛ́*	*dɛ̀ŋ-î:*	*[sǎ*^{n}	*bè]*	*dɛ̀:r*^{n}*ɛ́-má*
	1PlSbj	**sit-MP**	[ReflObj	Pl]	rest-Hort

‘Let’s sit down and rest (ourselves).’
‘Let’s sit down in order to rest (ourselves).’

17.6.1 Purposive clauses with postposition *gɛ̀:*, *gì*, or *g-î dè*

The ‘say’ verb *gí* (§11.3.1.2) is the source of purposive particles and postpositions. There is no sharp boundary between (thought-)quotative and purposive constructions. The range is from ‘saying/thinking that X’ to ‘planning/intending to X’ to ‘on the grounds that X’ to ‘in order that X’, a scale of descending foregrounding of the spoken or mental proposition. Forms that can occur after an imperfective clause in more or less purposive sense are those in (622). Compare postnominal postposition-like purposive elements *gɛ̂:*, *gì*, and (in combination with ‘God’) *gà* (§8.3.1.1).

(622)		form	comment
	a.	*gɛ̀:*	reduced from *gɛ́-ɛ̀:* ‘said’ (same-subject anterior)
	b.	*gì*	same as L-toned chained form of *gí* ‘say’
	c.	*g-î dè*	lit. “if (X) says/said”

For *gí-ǹ dè* see §15.2.2.10.

17.6.1.1 Purposive clause with $^{\text{L}}$*gɛ̀:*

This is an L-toned variant of the postnominal purposive postposition, which is usually *gɛ̂:* (§8.3.1.1), like the same-subject anterior form *gɛ́-ɛ̀(:)* ‘said (and then …)’ from which they both derive.

Purposive clauses have ^{L}*gɛ̀:* after an imperfective complement when the two clauses have the same subject, and after an imperative complement when the two clauses have disjoint subjects. The purposive clause may be positive or negative, and may or may not share a subject NP with the main clause. The purposive clause is inserted into the middle of the main clause, following the subject, preceding the verb, and variably positioned with respect to other clause-medial constituents.

In (623a-b), the purposive clause is positive and has the same subject as the main clause. Purposive ^{L}*gɛ̀:* follows an imperfective verb, which may agree with the clausemate subject in number as in a main clause. The construction is evidently derived from a 'say' construction with *gɛ́-ɛ̀(:)* that focuses on intentions rather than on a specific articulated proposition (623c). However, purposive clauses like (623a-b) do not have the preverbal subject pronoun preceding 'say' as in (623c).

(623) a. *ɛ́mɛ́ [[bàmàkɔ́ yǎ:-jí]* ^{L}*gɛ̀:] [bú:dú dɛ̀nɛ́-téɲè]*
1PlSbj [[Bamako go-**Ipfv.PlSbj**] ^{L}**for**] [money seek-Prog.PlSbj]
'We're trying to get money to go to Bamako.'

b. *í*^{n} *[[[sǎ*^{n} ^{L}*ì:*^{n}*] bàmàkɔ́ tí-jú]* ^{L}*gɛ̀:]*
1SgSbj [[[ReflPoss ^{L}child] B send-**Ipfv**] ^{L}**for**]
[bú:dú dɛ̀nɛ́-táɲà]
[money seek-Prog]
'I'm trying to get money to send my child to Bamako.'

c. *[bé nɛ́:] sâ:*^{n} *[tògù*^{L} *nâ:*$^{+L}$*]*
[3PlSbj now] all [shelter^{L} main.Def^{+L}]
ɛ̀:^{nL}*-[tè-té:] mɔ̌:-n-ɛ̀:,*
soda.ash^{L}-[Rdp-filtering.pot] assemble-Caus-and.SS,
mɔ̌:-nɔ́-ɲú [bé gɛ́-ɛ̀], [sǎ^{n} ^{L}*kè]*
assemble-Caus-Ipfv [3PlSbj **say-and.SS**], [Refl ^{L}Top]
[[ɛ̀:^{n}*-[tè-tè:]*^{L} *pèré] dǎn-g-ɛ̀:]*
[soda.ash-[filtering.pot]^{L} other] be.fixed-Caus-and.SS
[yɛ̂ jâ:-jù] [wó gɛ́-ɛ̀]
[there convey-Ipfv] [3SgSbj **say-and.SS**]
'Now all of them (=women) gathered the soda-ash filtering pots in the main palaver shelter. While they **decided** to gather (the pots), as for her(-self), she (step-mother) made another soda-ash filtering pot, **intending** to take it there.' (2011.1b.01)

In (624a-d), the purposive clause is positive but the subjects of the two clauses are disjoint. Here the verb of the purposive clause appears in imperative rather than suffixed imperfective form. The use of the imperative does not necessarily imply that an imperative-like clause was ever uttered; see (624a) with an inanimate NP.

(624) a. *dɔ̀ŋɔ̀*^{L}*-sɔ́:rɔ́ [[dí: súgó]* ^{L}*gɛ̀:]* ^{L}*kùn-ɛ̀:*
roof.gutter [[water go.down.**Imprt**] ^{L}**for**] ^{L}put-Pfv.PlSbj
'We put gutters (on the roof) so the (rain) water will come down.'

b. *íⁿ* *làmpáⁿ* *[gìrⁿí* *bîn]*
1SgSbj lamp [house in]
[[í:ⁿ *ᴸ[ìⁿ* *ᴸkè]]* *jáŋ* *jáŋá]* *ᴸgɛ̀:]*
[[child ᴸ[1SgSbj ᴸPoss]] reading read.**Imprt**] ᴸ**for**]
ᴸkùn-ì
ᴸput-Pfv
'I put a lamp in the house so that my child can read (at night).'

c. *[kó* *ᴸgɛ̀:]* *bǐ-téŋè,* *bírɛ́* *yɔ́rɔ́* *ᴸgɛ̀:*
[Nonh ᴸ**for**] do-Prog.PlSbj, work(n) be.soft.**Imprt** ᴸ**for**
'They are doing (it) for that reason. So that the work becomes soft(er).'
(2011.1a.12) [purposive clause added as afterthought]

In (625), the subjects are the same but the purposive clause is negative. In (625a-b), the verb of the purposive clause is imperfective negative, parallel to the imperfective positive in (623), above). In (625c), the verb of the purposive clause is prohibitive, and the nuance can be captured by using English 'lest' in the free translation.

(625) a. *íⁿ* *[[[úrⁿí:* *bè]* *gǎ:nâ:-rò]* *ᴸgɛ̀:]*
1SgSbj [[[children Pl] disturb-IpfvNeg] ᴸ**for**]
wàg-á→ *wɛ̂*
far be.Hum
'I go some distance away, so as not to disturb the children.'

b. *íⁿ* *[yé* *yǎ:-n* *bàgá-lé* *ᴸgɛ̀:]*
1SgSbj [going go-while.SS fall-Proh ᴸ**for**]
bá:gá *tíwé-táŋà*
stick lean.on-Prog
'I am supporting myself with a cane, so as not to fall (=lest I fall) while walking.'

In (626), the subjects are disjoint and the purposive clause is negative. Here the purposive verb is prohibitive in form.

(626) *tógú* *[àrⁿú* *nú-lé* *ᴸgɛ̀:]* *ᴸdɛ̀w-ɛ̀*
shed [rain go.in-Proh ᴸ**for**] ᴸcover-Pfv
'(We) covered the shed (with a tarp) so the rain won't leak in.'

ᴸgɛ̀: can also be used with predicative comparative adjectives, with {HL} overlay.

(627) *[nú:* *dág-à→* *kó* *ᴴᴸɔ́gù]* *ᴸgɛ̀:,*
[millet a.little NonhSbj ᴴᴸ**fast**] ᴸ**for**,
[kó *ᴸgɛ̀:]* *bǐ-téŋè*
[Nonh ᴸfor] do-Prog.PlSbj
'so that millet will be slightly faster (to ripen). For that reason (=that's why) they are doing it.' (2011.1a.01)

[kó ᴸgɛ̀:] 'for that (reason)', as in (627) is common as a resumption of a full purposive clause.

17.6.1.2 Purposive clause with *gì*

Purposive *gì* is derived from an L-toned chained form of *gí* 'say'. Similar L-toned nonfinal chained forms are attested for *tí* 'do first' and *yě* (*yǎ:-*) 'go' (§15.1.6.1,3).

gì is less common than ^{L}*gɛ̀:* as a clause-level purposive morpheme in my data. It is attested with a perfective clause in the sense 'on the grounds that' or 'considering that' (628a), and with an imperfective clause indicating an intention or purpose (628b-d).

(628) a. *kó→ [[ɲú: í:ⁿ kún-ì] gì] tɔ̂:-rè*
Nonh [[millet child put-Pfv] **for**] hack.down-IpfvNeg.PlSbj
'(They) don't hack (them) down (merely) on the grounds that millet has put (=grown) grains.' (2011.1a.08)

b. *jâŋ bè→, ànà*^{L}*-yě bè→,*
study and, village^{L}-going be,
[[já:gú jǎ:gá-jú] gì] kòlǒm-∅ bè→
[[commerce do.commerce-Ipfv] **for**] go.around-VblN and
'There is schooling, and there is traveling (for work), and there is going around (in the region) in order to do commerce.' (2011.1a.33)

c. *[dè-dé: wà] [wó wà] [íyé* ^{L}*kè],*
[Rdp-father QuotSbj] [3Sg QuotSbj] [today ^{L}Top],
[[î:ⁿ $^{+L}$ *dɛ̀nɛ́-ɲú] gì] bàrá yǎ:-lé gâ:*
[[child.Def^{+L} look.for-Ipfv] **for**] outback go-Proh warning
'She said: "Father (of the girl), definitely do not go into the bush today intending to look for the child." ' (2011.1b.01)

d. *[wó wà] [íyé* ^{L}*kè] [[bàrá yǎ:-jú] gì]*
[3Sg QuotSbj] [today ^{L}Top] [[outback go-Ipfv] **for**]
gǒ-è dè
go.out-Pfv if
'(she said:) "If you go out intending to go to the bush today, …" ' (2011.1b.01)

With nonhuman pronoun as complement, *kó gì* 'for that' can resume a fuller purposive clause.

17.6.1.3 Purposive clause with *g-î dè*

Another variant, *g-î dè*, is optionally used instead of *gɛ̀:* when the main clause is imperfective with future time reference. In form it is a pseudo-conditional based on the perfective (§15.2.2.6). These elements are roughly parallel in form to those of the 'do first' verb *tí* (*tɛ́-ɛ̀:*, *t-î dè*), see §16.1.3.2, §15.2.2.5.

Like purposive clauses with *gɛ̀:*, those with *g-î dè* normally take an imperfective complement when the main and purposive clauses have the same subject (629).

(629) a. *íⁿ* *[billet* *ɛ̀wɛ̀-jù]*^{L} *g-î* *dè]*
1SgSbj [ticket buy-**Ipfv**^{L}] **say-Pfv** **if**]
bírɛ́ *bǐ-jú*
work(n) do-Ipfv
'I will work in order to buy the ticket.'

b. *íⁿ* *[[[úrⁿí:* *bè]* *gǎ:nâ:-rò]* *g-î* *dè]*
1SgSbj [[[children Pl] disturb-**IpfvNeg**] **say-Pfv** **if**]
wàg-á→ *wɛ́:-jú*
far be.HumSgSbj-Ipfv
'I will go some distance away, so as not to disturb the children.'

When the subjects are disjoint, an imperative (or, if negative, prohibitive) verb is used (630a-b). An adjectival predicate is also possible (630c).

(630) a. *ɛ́mɛ́* *gìrⁿì*^{L}*-káⁿ* *[[mòtǎm* *gǒ:-lé]* *g-î* *dè]*
1PlSbj house^{L}-mouth [[scorpion go.out-**Proh**] **say-Pfv** **if**]
sɔ́gɔ́-jú
lock-Ipfv
'We will lock the door so the scorpion can't get out.'

b. *[dùrô:-dùrô:* *kìr-ɛ́→* *wǎ-lé]* *g-î* *dè,*
[backwards difficult-Adv do.farming-**Proh**] **say-Pfv** **if,**
nɛ́: *[nà*^{L} *pɔ̂ŋ]* ^{HL}*ɔ́jɔ̀→* ^{HL}*ɔ́jɔ̀→*
now [person^{L} all] ^{HL}thing ^{HL}thing (§13.2.9)
'… in order that you don't work (the field) with (unnecessary) difficulty in a backwards (=mixed-up) way, now each person (does) whatchamacallit, …'
(2011.1a.23)

c. *kó* *dág-à→* *pɔ́ⁿ-ɛ̀ⁿ* *dè,*
NonhSbj a.little decompose-Pfv if,
[nǎm-∅ *kó* ^{HL}*ná:rⁿà]* *g-î* *dè,*
[step.on-VblN NonhSbj ^{HL}**easy**] **say-Pfv** **if,**
kó *dág-à→* *pɔ́ⁿ-ɛ̀ⁿ* *dè,*
NonhSbj a.little decompose-Pfv if,
íyé=ǹ *ú* *nǎ* *gɛ̀ŋɛ́* *mɔ̌:-ǹ-∅* *dè*
again 2SgSbj person request assemble-Caus-Pfv if
'When it has decomposed a little, so that stomping (on it) may be easier, when it has decomposed a little, you-Sg will ask the people to assemble, …'
(2011.1a.25) ({HL} comparative form of adjective)

A full purposive clause can be resumed as *kó g-î dè* 'for that reason'.

The sequence *g-î dè* can also be a true conditional antecedent meaning 'if X says' (631).

(631) *maintenant* *[[kò* *bàŋà]*^{L} *sɔ̌:* *yɔ̌:-rò]*
now [[Def owner]^{L} thing accept-IpfvNeg.Rel]
[ɛ̀nɛ́ *tɔ́jɔ̂:-rò]* *g-î* *dè,*
[LogoS pay-IpfvNeg] **say-Pfv** **if,**

[kó	^{H}*báŋá*	^{L}*kè]*	*nɛ́:*	*ɲǎŋ*	^{L}*kɛ̀:-jù*
[Def	^{H}owner	^{L}Top]	now	how?	^{L}be.NonhSbj-Ipfv

‘Now if the guy who wouldn’t accept the thing said he would not pay (the fine), how would it be for (=what would happen to) the guy?’ (2011.1a.15)

17.6.2 Tonal purposive clauses of type (ǹ v̂) before motion verb

This construction is used with intransitive or transitive motion verbs in the main clause (‘go’, ‘send’, etc.) and with purposive complement. The subject of the purposive clause is the theme (entity in motion) in the main clause. The verb of the purposive complement has an {HL} overlay, and a preceding object (sometimes a cognate nominal or verbal noun) has the tone-dropping typical of nominal initials in (ǹ n̄) compounds. This construction has an exact counterpart in Jamsay.

(632) a.

bé	*[ámírⁿì*	*bè]*	*[tìɲɛ̀*^{L}	^{HL}*tíɲɛ̀]*	^{L}*yɛ̀r-ɛ̀*
3PlSbj	[chief	with]	**[speech^{L}**	**^{HL}speak]**	^{L}come-Pfv

‘They came (in order) to speak with the chief.’

b.

ɛ́mɛ́	*[yí*	*tɔ̀]*	*[ɲà:*^{L}	^{HL}*ɲí:]*	*ɲá-mà-ỳⁿ*
1PlSbj	[there.NearDist	toward]	**[meal^{L}**	**^{HL}eat.meal]**	go-Hort-PlSbj

‘Let’s-Pl go over there to eat (a meal).’

c.

[ɲɛ̌	*bè]*	*[dì:*^{L}	^{HL}*bájà]*	^{L}*y-ɛ̀-ɛ̀:*
[woman	Pl]	**[water^{L}**	**^{HL}pull]**	^{L}go-Pfv.PlSbj

‘The women have gone to draw water (at the well).’

d.

bàrá	*[sàjù*^{L}	^{HL}*dígɛ̀]*	*bé*	*tí-téɲè*	*mà→*
bush	**[bird^{L}**	**^{HL}chase.away]**	3PlObj	send-Prog.PlSbj	Q

‘Do (they) send them to the bush (=fields) in order (for them) to chase away birds?’ (2011.1a.07)

e.

[gàmà^{L}	^{H}*ná]*	*[yɛ́*	*tɛ̀]*	*[dɛ̀n-∅*^{L}	^{HL}*dɛ́nɛ̀]*
[certain^{L}	^{H}person]	[there.Def	around]	**[search-VblN^{L}**	**^{HL}search]**
[ɲà^{L}	*pèré]*	*yǎ:-jɛ̂:, …*			
[place^{L}	other]	go-Ipfv.PlSbj, …			

‘Some people go there (to) another place seeking (work), …’ (2011.1a.33)

This tonal purposive construction is also attested as a complement for ‘begin’, along with other purposive and verbal-noun complement constructions; see (610a-b) in §17.3.11, above.

I have one unexplained textual example that translates as a subject relative but that seems to have the bare stem and (ǹ v̂) tones of a tonal purposive clause.

(633)

[[kó	*lɔ̀:]*	*gân],*	*sɔ̀:*^{L}	^{HL}*káw-gù*
[[Nonh	two]	between],	thing^{L}	^{HL}be.distinct-Caus

‘Between those two (methods), the thing that separates (them)’ (2011.1a.12)

The tonal purposive construction should be distinguished from another construction involving an {HL} overlay on the verb. This is the parallel construction, indicating that two activities are simultaneous (or interspersed), of the form Verb_1^{HL} ^{L}*yà:*, Verb_2^{HL} ^{L}*yà:*, see §15.2.1.5. Here the {HL} applies at most to the final two syllables, and an object noun is not tone-dropped.

17.6.3 Purposive clauses with *-lí*

An alternative purposive clause has an {L}-toned verb stem followed by H-toned *-lí*. This form is homophonous with the singular-subject perfective negative, but there is no semantic connection, and purposive *-lí* has no special plural-subject form. Other constituents in the purposive clause have their usual tones. In the attested examples, the subjects of the clauses are shared.

(634) a. *bé* *[péjú* *ɛ̀wɛ̀*^{L}*-lí]* ^{L}*yɛ̀r-ɛ̀*
3PlSbj [sheep buy^{L}-**Purp**] ^{L}come-Pfv
'They came in order to buy a sheep.'

b. *bé* *bàrá* *[[sǎ*^{n} *bè]* ^{HL}*jɔ́*^{n}*tùrù]* *dɛ̀nɛ̀*^{L}*-lí]* ^{L}*y-ɛ̀-ɛ̀:*
3PlSbj bush [[ReflPoss Pl] ^{HL}donkey] look.for^{L}-**Purp**] ^{L}go-Pfv.PlSbj
'They went out into the bush to look for their donkey.'

A purposive clause with *-lí* can also be used as the complement of 'begin'; see §17.3.11, above.

17.6.4 Causal ('because') clause (*sàbù*, *sábú dè→*)

L-toned *sàbù* 'because' is the primary TgK version of a family of forms in Malian languages derived from Arabic *sabab-* 'reason'. *sàbù* can occur clause-initially or -medially.

(635) a. *[nɛ̀w*^{n}*ɛ̀*^{L} *pèré],* *yɔ́* *kɔ̀,*
[value^{L} other], Exist be.NonhSbj,
mɔ́m *sàbù* *mɔ̀mɔ̀-lâ:* *dè,*
uprooting **because** uproot-PfvNeg.PlSbj if,
ɲû:$^{+L}$ *dàg-î:* *bɛ̌:-rò*
millet.Def^{+L} be.good-MP get-IpfvNeg
'There is another value (to it). Because if (we) don't do the uprooting, the millet cannot turn out (=yield) well.'

b. *kúrɔ̀*$^{+L}$ *nánà* *á:r*^{n}*ɛ́:* *kó* *há:jɛ́* *sè:-ré,*
leaf-Def^{+L} up.to.now formerly Nonh need(n) have.PlSbj-Neg,
sàbù *[[ɔ̀jɔ̀=nì]*^{L} *jê]* *[[ɔ̀jɔ̀=nì]*^{L} *ó-jú] …*
because [[thing=Dat]^{L} convey] [[[thing=Dat] give-Ipfv] …
'The leaves (=peanut greens) they had absolutely no need for in the old days. Because (there was not) anything (i.e. livestock) in the houses (=village) to take (=convey) it and give it to.' (2011.1a.22)

sábú-dè→ is a clause-initial (or preclausal) 'because' form. In isolation, it is pronounced with {H}-toned *sábú-*; in sentential context it is often heard with lowered pitch.

(636)	*ɛ́mɛ́*	*kà:ná*	*àná*	*yě*	^{L}*bɛ̀:-rè,*
	1PlSbj	now	village	go	^{L}get-IpfvNeg.PlSbj,
	sábú-dè:		*òjù*^{L}*-ká*^{n}	*mɔ̀ɲú*	
	because		road	bad	

‘We cannot go to the village now, because the road is no good.’

When the complement is an NP rather than a clause, purposive-causal postposition *gɛ̂:* can be used in the (retrospective) sense ‘because of’ as well as in the (prospective) sense ‘for, for the purpose of’. See §8.3.1.1, above, for examples.

17.6.5 Phrase- or clause-final *sógò* ~ *sògò* ‘because (of)’

In (637), a clause ending in *sògò* ‘because’ is repeated (after an intervening thought quotation) with *gɛ̀:*, bringing out the interchangeability of the two.

(637)	*jɔ̀w*^{n}*ɔ́*	*[[kó*	^{L}*kè]*	^{HL}*sóŋòrò]*	*í:*^{n}	*wɔ̂*	*sògò,*
	hare	[[Nonh	^{L}Poss]	^{HL}cleverness]	know	be.NonhSbj	**because**,

“…”,
[thought quotation omitted]

jɔ̀w^{n}*ɔ́*	*[[kó*	^{L}*kè]*	^{HL}*sóŋòrò]*	*í:*^{n}	*wɔ̂*	^{L}*gɛ̀:,*
hare	[[Nonh	^{L}Poss]	^{HL}cleverness]	know	be.NonhSbj	^{L}**for**,
jɔ̀w^{n}*ɔ́*	*bàná*	*gǒ:*	^{L}*yè-∅*			
hare	dodge	go.out	^{L}go-Pfv			

‘Hare, since he knew (=recognized) that cunning, (thinking) “…” Since Hare knew (=recognized) that cunning, Hare got away from there.’ (2011.1b.05)

Another example of *sógò* is (638).

(638)	*ɛ́mɛ́=nì*	*[kó*	^{HL}*dó:rù]*	*gà-gárà,*
	1Pl=Dat	[NonhPoss	^{HL}fatigue]	Rdp-pass.Stat
	lɛ̀^{L}*-kɔ̌*^{n}	*ígɛ́-ní:*	*lɛ́:-jú*	*sógò,*
	pick.hoe	stand-while.SS	plant-Ipfv	**because**,
	[[kó	*bè]*	^{HL}*ná:r*^{n}*à]*	
	[[Nonh	with]	^{HL}easy]	

‘(planting with another tool) is very tiring for us. Because (with) a pick-hoe, one plants standing up. (Planting) is easier with that.’ (2011.1a.01)

18 Anaphora

Anaphoric elements, i.e. those that coindex their reference to that of an antecedent, are the reflexive *sǎⁿ*, reflexive possessor *má*, the logophoric *èné*, and the reciprocal *sàⁿ-túⁿ*.

18.1 Reflexive

18.1.1 Reflexive object (*sǎⁿ*)

Reflexive morpheme *sǎⁿ* is used when the object is coindexed with the subject. This applies to first and second as well as to third person subjects, and to cases where a subject pronoun is optionally omitted (639c). Reflexive *sǎⁿ* is unrelated in form to logophoric pronouns, and has no transparent relationship to any noun.

(639) a. *íⁿ sǎⁿ lág-ɛ̀*
1SgSbj **ReflObj** hit-Pfv
‘I hit-Past myself.’

b. *[úrⁿí: bè] [sǎⁿ bè] kɛ́jɛ́-sɛ̂ⁿ*
[children Pl] [**ReflObj** Pl] cut-Pfv.PlSbj
‘The children cut themselves.’

c. *(ú) [ìŋé ᴸgɛ̀:] [dùwɔ̀lɛ̌ⁿ bîn] sǎⁿ gɛ̀r-ì:*
(2SgSbj) [what? ᴸfor] [mirror in] **ReflObj** look.at-MP.Pfv
‘Why did you-Sg look at yourself in the mirror?’

A covert second person imperative “subject” does not qualify as antecedent (§10.6.3). Therefore (640) has 2Sg object, rather than reflexive object as in (639c). Because 2Sg *ú* occurs in non-clause-initial position in (640), it cannot be misinterpreted as a (clause-initial) subject pronoun.

(640) *[dùwɔ̀lɛ̌ⁿ bîn] ú gɛ̀rɛ́*
[mirror in] **2SgObj** look.at.Imprt
‘Look-2Sg at yourself in the mirror!’

18.1.2 Reflexive PP complement

A dative example is (641a). An example with a spatial postposition is (641b).

(641) a. *íⁿ bú:dú sǎⁿ=ǹ bǎ:r-ì*
1SgSbj money **Refl=Dat** send-Pfv
‘I sent some money to myself.’

b. *íⁿ bú:dú [săⁿ bɔ́rɔ̀] ^{L}bɛ̀r-ɛ̀*
1SgSbj money [**Refl** **under**] ^{L}get-Pfv
'I found the money under myself.'

18.1.3 Reflexive possessor

18.1.3.1 Reflexive possessor *săⁿ* (plural *săⁿ bè*)

The reflexive replaces a regular pronominal possessor when it is coindexed to the clausemate subject. The possessed noun takes its usual possessed-noun overlay, usually {HL} or {H} depending on its syllabic shape and morphological structure.

(642) a. *íⁿ [săⁿ ^{HL}dé-dè:] ɔ̀-ɛ̀*
1SgSbj [**ReflPoss** ^{HL}Rdp-father] see-Pfv
'I saw my father.'

b. *bé [[[săⁿ bè] ^{H}gírⁿí] bîn] núw-ɛ̀:-sɛ̂ⁿ*
3PlSbj [[[**ReflPoss** Pl] ^{H}house] in] go.in-Pfv.PlSbj
'They$_{x}$ went into their$_{x}$ (own) house.'

Reflexive possessor *săⁿ* is coindexed with the 2Sg subject *ú* in (643a). As mentioned above, an imperative "subject" does not bind reflexives, so in (643b) the possessor of the object is the regular 2Sg form. However, in quoted speech an imperative is associated with an overt subject, converted from second to third person, with quotative subject *wà*. This does qualify as an antecedent (643c).

(643) a. *ú [săⁿ ^{HL}kúⁿ-kùwɔ̀] yǎ: bè-è*
2SgSbj [**ReflPoss** ^{HL}hat] where? put-Pfv
'Where did you-Sg put your hat?'

b. *[ú ^{HL}kúⁿ-kùwɔ̀] má=ǹ ɔ̀nɔ̀*
[**2SgPoss** ^{HL}hat] 1Sg=Dat give.Imprt
'Give-2Sg me your hat!'

c. *[bé wà] yě [[săⁿ bè] ^{HL}ínà:] ^{L}dɛ̀nɛ̀ wà*
[3Pl **QuotSbj**] go [[**ReflPoss** **Pl**] ^{HL}mother] ^{L}seek.Imprt Quot
'(God) told them: "you-Pl go look for your mother." ' (2011.1b.04)

Reflexive *săⁿ* is treated as a noun, and always precedes the possessed NP. This creates a conflict when a possessor coindexed to a clausemate subject is allowed by the syntax to follow the possessum, as happens when the possessed noun is quantified by a numeral. Two constructions are possible in this case. In (644a), *săⁿ* occurs as a morphologically simple reflexive possessor preceding the possessed NP, which has {HL} possessor-controlled overlay. In this construction, *săⁿ* is optionally expanded as *săⁿ kɛ̀*, as in (644b), with *kɛ̀* 'possession' in apposition to the real possessum. Plural *săⁿ bè* is likewise optionally restructured as *săⁿ bè kɛ̀*. These restructured prenominal [X *kɛ̀*] possessors have different tonosyntactic properties than ordinary prenominal possessors. After a restructured [X *kɛ̀*] possessor, an N-Num possessum has an {L}+H overlay rather than the usual possessor-controlled {HL} or {H}. Elsewhere, the {L}+H overlay occurs only in before a post-numeral controller (determiner or possessor) within the same NP, so (644b) is a rare exception where the controller precedes the string. Restructured reflexive possessor *[sǎ^{n} kè]* is especially common when a universal quantifier is added (644c). In (664d), the alternative postnominal reflexive possessor *má*, see §18.1.3.2 just below, replaces preposed *sǎ^{n} kè* in (664c), but controls the same {L}+H overlay.

(644) a. *sè:dú* *[sǎ^{n}* ^{HL}*[úr^{n}ì:* *lɔ̀y]]* ^{L}*ɔ̀-ɛ̀*
S [**ReflPoss** ^{HL}[children two]] ^{L}see-Pfv
'Seydou$_{x}$ saw his$_{x}$ (own) two children.'

b. *sè:dú* *[[sǎ^{n}* ^{L}*kè]* *[ùr^{n}ì:* *lɔ̌y]$^{L+H}$]* ^{L}*ɔ̀-ɛ̀*
S [[**ReflPoss** ^{L}Poss] [children two]$^{L+H}$] ^{L}see-Pfv
'Seydou$_{x}$ saw his$_{x}$ (own) two children.'

c. *í^{n}* *[[sǎ^{n}* ^{L}*kè]* *[gìr^{n}ì* *kùré:]$^{L+H}$* *fú→]* ^{L}*dɔ̀-ɲù*
1SgSbj [[**ReflPoss** ^{L}Poss] [house six]$^{L+H}$ all] ^{L}sell-Ipfv
'I will sell all six of my houses.'

d. *í^{n}* *[[gìr^{n}ì* *kùré:]$^{L+H}$* *má* *fú→]* ^{L}*dɔ̀-ɲù*
1SgSbj [[house six]$^{L+H}$ **ReflPoss** all] ^{L}sell-Ipfv
[= (c)] (for *má* see the following section)

18.1.3.2 Reflexive possessor *má*

A less common but well-attested alternative to preposed *sǎ^{n}* is postposed H-toned *má*. It does not control tones on the possessed noun, except that when it follows a numeral it controls the same {L}+H overlay on the N-Num string in (645a) below as does *sǎ^{n} kè* in (644b) above. My assistant indicated that the reflexive possessor type with *sǎ^{n}* is more common than that with *má*, at least in his dialect, but both occur in texts recorded in his native village. Also like *sǎ^{n}*, *má* is transpersonal, so the antecedent can be first or second person (645c) as well as third (645a-b). Reflexive marking is not obligatory in possessors, so nonreflexive 1st/2nd person possessors are also possible in indicative clauses (645d-e). A nonreflexive second person possessor is obligatory in imperatives, where once again the imperative "subject" is unable to bind an anaphor (2f-g).

(645) a. *sè:dú* *[[ùr^{n}ì:* *lɔ̌y]$^{L+H}$* *má]* ^{L}*ɔ̀-ɛ̀*
S [children two]$^{L+H}$ **ReflPoss**] ^{L}see-Pfv
'Seydou$_{x}$ saw his$_{x}$ (own) two children.'

b. *dè-dê:$^{+L}$* *jágà* *[màrpá:* *má]* *lɔ́:w-ɛ̀:*
Rdp-father.Def^{+L} lo! [rifle **ReflPoss**] load-and.SS
jíjɛ̀ ^{L}*yè-∅*
take.along ^{L}go-Pfv
'Lo, the father had loaded his rifle and had brought it with him.' (2011.1b.01)

c. *ú / í^{n}* *[[ùr^{n}ì:* *lɔ̌y]$^{L+H}$* *má]* ^{L}*ɔ̀-ɛ̀*
2SgSbj/1SgSbj [children two]$^{L+H}$ **ReflPoss**] ^{L}see-Pfv
'You-Sg$_{x}$ /I saw your$_{x}$/my (own) two children.'

d. *íⁿ* *[[ùrⁿì:* *lɔ̌y]*$^{L+H}$ *mà]* ^{L}*ɔ̀-ɛ̀*
1SgSbj [children two]$^{L+H}$ **1SgPoss**] ^{L}see-Pfv
'I saw my (own) two children.'

e. *ú* *[ú* ^{L}*[ùrⁿì:* *lɔ̀y]]* ^{L}*ɔ̀-ɛ̀*
2SgSbj [**2SgPoss** ^{L}[children two]] ^{L}see-Pfv
'You-Sg saw your (own) two children.'

f. *[ú* ^{L}*[ùrⁿì:* *lɔ̀y]]* ^{L}*bɔ́rⁿɔ́*
[**2SgPoss** ^{L}[children two]] ^{L}call.Imprt
'Call-2Sg your (own) two children!'

g. *[[ùrⁿì:* *lɔ̌y]*$^{L+H}$ ^{L}*[ù* ^{L}*kè]]* ^{L}*bɔ́rⁿɔ́*
[[children two]]$^{L+H}$ ^{L}[**2SgPoss** ^{L}Poss]] ^{L}call.Imprt
[=f]

See also *ɲú: má* 'his (own) millet' and *dɛ̀rⁿɛ́ má* 'his (own) crops' in (617d).

It is possible that reflexive possessor *má* is etymologically a specialized offshoot of an original 1Sg pronominal, cf. the homophonous 1Sg object *má*. Western Dogon languages like Najamba go so far as to use the 1Sg subject suffix on verbs as a logophoric subject marker in quoted clauses. However, actual 1Sg possessor is expressed in TgK by *mà*, which is L-toned, unless followed by a postposition as in *[ɲɛ̌ má] bè* 'with my wife', which is discussed following (131) in §6.2.3. Four different ways to combine *gìré* 'eye' with a following segmental *ma* morpheme are shown in (38) in §3.7.4.6. If *má* were replaced by LK-toned *mà* in (645a), the sense would be 'Seydou saw my two children'.

Another context with a more or less anaphoric *má* is nonsubject relatives whose subject is coindexed to the subject of the higher clause. There, however, *má* is clause-final and functions much like a same-subject switch-reference subordinator. See §14.1.10 for examples and discussion.

18.1.4 Reflexive with antecedent in higher clause

A reflexive pronoun *sǎⁿ* can be used in a lower clause for a third person referent, with the antecedent being the subject of the higher clause. In (646), *sǎⁿ* is the subject of the lower clause, and is coindexed to the subject of the higher clause.

(646) *sè:dú* *[sǎⁿ* *bàgá-jú]* *í:ⁿ* *wɔ̂*
S [**ReflS** fall-Ipfv] know be.HumSgSbj
'Seydou$_x$ knows that he$_x$ will fall.'

Compare the use of same-subject *má* in relative-clause subjects in (471) in §14.1.10.

My assistant also sometimes, but not consistently, allowed the reflexive pronoun to be used with a **nonsubject** in the lower clause, still coindexed to the higher (rather than clausemate) subject. The reflexive is used in this fashion in direct-object function in (647a-b).

(647) a. *sè:dú* *[[nǎ* *bè]* *sǎⁿ* ^{L}*dɔ̀:-jù]* *í:ⁿ* *wɔ̂*
S [[person Pl] **Refl**) ^{L}insult-Ipfv] know be.HumSgSbj
'Seydou$_x$ knows that the people are insulting him$_x$.'

b. *sè:dú [[nǎ bè] sǎ^n dɔ̌:-jú mà→] líyɛ́-táŋà*
S [[person Pl] **ReflObj** insult-Ipfv Q] fear-Prog
'Seydou$_x$ is afraid that the people will insult him$_x$.'

This use of the reflexive for nonsubjects coindexed to the higher subject is especially common in relative clauses. See the 'care-giver' examples in §14.1.14, e.g. (480a). There the reflexive object *sǎ^n* is coindexed with the higher subject (the old woman) in spite of the intervening lower-clause subject ('person').

However, this use of the reflexive is not rigorous. In (648a-b), we get the regular 3Sg pronoun although the context for the elicited examples involved coindexation with the higher subject.

(648) a. *sè:dú [í^n wó=ǹ péjú ó-jú] í:^{n} wɔ̂*
S [1SgSbj **3Sg=Dat** sheep give-Ipfv] know be.HumSgSbj
'Seydou$_x$ knows that I will give him$_x$ a sheep.'

b. *sè:dú [í^n wó lágá-jú mà→] líyɛ́-táŋà*
S [1SgSbj **3SgObj** hit-Ipfv Q] fear-Prog
'Seydou$_x$ is afraid that I will hit him$_x$.'

A reflexive object in the lower clause in (648a-b) would most readily be interpreted as coindexed with the clausemate (not high-clause) subject. This would be less of a problem in the 'caretaker' example mentioned above, since 'a good person' is nonspecific and would make little sense as the antecedent of the reflexive.

Similarly, I have not observed this use of reflexive *sǎ^n* with other than third person reference, though in its primary functions the reflexive pronoun is transpersonal, i.e. it can have any pronominal person category as antecedent. In (649), note 1Sg object *má* instead of a reflexive pronoun.

(649) a. *[[nǎ bè] má ^{L}dɔ̀:-jù] í^n í:^{n} wɔ̂*
[[person Pl] **1SgObj** ^{L}insult-Ipfv] 1SgSbj know be.HumSgSbj
'I know that the people are insulting me.'

b. *[[nǎ bè] má dɔ̌:-jú mà→] líyɛ́-táŋà*
[[person Pl] **1SgObj** insult-Ipfv Q] fear-Prog
'I am afraid that the people will insult me.'

18.1.5 Reflexive topic (*sǎ^n kè*)

sǎ^n kè, identical in form to the reflexive possessive ('one's own possession'), is used as a contrastive topic 'as for him/her(-self)'. It refers back to an NP that has been a primary topic of the passage when one or more other discourse referents are on the radar. For *kè* in topic function, see §19.1.3 below.

In (650a), the father and the mother are in the middle of a tug-of-war over their children, with father trying to send them away (in the form of birds) and mother trying to keep them there. In (650b), the stepmother has figured prominently in the narrative to this point, but 'they' (the other village women) have also made their presence felt.

(650) a. *bé gŭŋ-gŭŋ sú-sù:rù tí-táŋà,*
3PlObj take.out-take.out move.down-move.down send-Prog,
nɛ́: [săŋ ^{L}kè] yɛ́ ^{L}tɔ̀r^{n}ɔ̀,
now **[Refl ^{L}Top]** Exist ^{L}perch.Stat,
[wó bàjá-jú] [wó bàjá-jú]
[3SgSbj pull-Ipfv] [3SgSbj pull-Ipfv]
'… he kept sending them (=the children) away from (there). Now **as for him(-self)**, (he) was (still) perched (on the tree). (She) kept on pulling.' (2011.1b.02)

b. *mɔ̌:-nɔ́-ɲú [bé gɛ́-ɛ̀], [să^{n} ^{L}kè]*
assemble-Caus-Ipfv [3PlSbj say-and.SS], **[Refl ^{L}Top]**
[[ɛ̀:^{n}-[tè-tè:]^{L} pèré] dăn-g-ɛ̀:]
[[soda.ash-[filtering.pot]^{L} other] be.fixed-Caus-and.SS
'While they decided to gather (the pots), **as for her(-self)**, she (step-mother) made another soda-ash filtering pot and …' (2011.1a.01)

18.1.6 Emphatic pronouns

18.1.6.1 *sán-ɔ́:* '(by/for) oneself'

The adverbial expression form *sán-ɔ́:* is irregularly contracted from *să^{n} túnɔ́* with *túnɔ́* 'one', here in the sense 'alone, unaccompanied' (§4.6.1.1). Examples of *sán-ɔ́:* are in (651a-b).

(651) a. *wó bàrá sán-ɔ́: ^{L}yè-y*
3SgSbj bush **Refl-one** ^{L}go-Pfv
'She went to the bush (=to the fields) by herself (=alone).'

b. *í^{n} bú:dú sán-ɔ́: dìn-ɛ́:-ɲú*
1SgSbj money **Refl-one** hold-MP-Ipfv
'I will hold (=keep) the money (for) myself.'

18.2 Logophoric pronouns

18.2.1 Logophoric *ɛ̀nɛ́* for second and third person antecedent

Elicited examples involving quotations show that logophoric *ɛ̀nɛ́* is used when the quotation is ascribed to a third person (652a) or to the addressee (652b), but not to the speaker (652c). *ɛ̀nɛ́* is most systematically used with third person quoted speaker, and in cases like (652a) it cannot be omitted. By contrast, in second person subject examples like (652b) *ɛ̀nɛ́* is often omitted. The examples in (652a-b) involve *ɛ̀nɛ́* in subject function within the quoted clause.

(652) a. *wó [ɛ̀nɛ́ (wà)] yĕ-jú] wà*
3SgSbj [**LogoS** (QuotSbj)] come-Ipfv] Quot
'He$_{x}$ said that he$_{x}$ would come.'
b. *ú [ìŋé ^{L}gɛ̀:] [(ɛ̀nɛ́) yĕ-jú] ^{L}pɔ̀r-ì*
2SgSbj [what? ^{L}for] [(**LogoS**) come-Ipfv] ^{L}say-Pfv
'Why did you-Sg say that you were coming?'

c. *í^{n} nánà [(í^{n}) yě-jú] ^{L}pò-lì*
1SgSbj never [(**1SgSbj**) come-Ipfv] ^{L}say-PfvNeg
‘I never said that I was coming.’

d. *dè-dê: $^{+L}$ màrpá: ^{L}ɲàŋ-ɛ̀,*
[Rdp-father.Def^{+L}] rifle ^{L}take-Pfv,
ɛ̀nɛ́ ɲɛ̌$^{+L}$ tɛ̀-tɛ́wɛ́-jú wà
LogoS woman.Def^{+L} Rdp-kill-Ipfv Quot
‘The father picked up a rifle, saying “I will shoot (you) the woman …” ’
(2011.1b.01)

Examples with *ɛ̀nɛ́* in object function are in (653). Again, the antecedent (the quoted speaker) may be second or third, but not first, person. For second person subject the logophoric occurred in free elicitation from French cues (653b), but my assistant accepted a variant with 2Sg object pronoun that I proposed (653d).

(653) a. *wó [[má à] ɛ̀nɛ́ lág-ɛ̀] wà*
3SgSbj [[1Sg QuotSbj] **LogoObj** hit-Pfv] Quot
‘She$_{x}$ said that I (had) hit her$_{x}$.’

b. *ú [ìŋé ^{L}gɛ̀:] [[má à] ɛ̀nɛ́ lág-ɛ̀] ^{L}g-ì*
2SgSbj [what? ^{L}for] [[1Sg QuotSbj] **LogoObj** hit-Pfv] ^{L}say-Pfv
‘Why did you-Sg say that I (had) hit you?’

c. *í^{n} [[ú wà] má lág-ɛ̀] ^{L}pò-lì*
1SgSbj [[2Sg QuotSbj] **1SgObj** hit-Pfv] ^{L}say-PfvNeg
‘I didn’t say that you-Sg (had) hit me.’

d. *ú [ìŋé ^{L}gɛ̀:] [[má à] ú lág-ɛ̀] ^{L}g-ì*
2SgSbj [what? ^{L}for] [[1Sg QuotSbj] **2SgObj** hit-Pfv] ^{L}say-Pfv
[=(b)] [accepted]

18.2.2 Logophoric plural *ɛ̀nɛ́ bɛ̀* for original-utterance 1Pl pronoun

If the original utterance (by a single speaker) included 1Pl pronominals, a quotation thereof converts them to logophoric plural *ɛ̀nɛ́ bɛ̀*. In (654), Seydou is included in the group that is coming.

(654) *sè:dú [ɛ̀nɛ́ bɛ̀] yě-jú wà*
S **[LogoS Pl]** come-Ipfv Quot
‘Seydou$_{x}$ said that they$_{xy}$ were coming.’

18.2.3 Logophoric *ɛ̀nɛ́* syntactically a pronoun

As subject, *ɛ̀nɛ́* normally occurs in clause-initial position, like other NPs and pronouns (655b). Also like them, it moves to clause-medial position (following the object and other nonpronominal complements, but still preceding verbs) under focalization (655c). The test of pronominal status is whether, in a nonsubject relative, *ɛ̀nɛ́* in subject function occurs immediately before the inflected verb of the relative clause, like normal pronouns. In (655d), we see that this is the case. Therefore *ɛ̀nɛ́* occurs in the same range of linear positions as ordinary personal pronouns.

(655) a. *í^{n} nàŋá dàr^{n}-ɛ́: dág-ɛ̀*
1SgSbj cow kill-and.SS leave-Pfv
'I killed the cow and left it (there).'

b. *sè:dú [ɛ̀nɛ́ nàŋá dàr-ɛ́: dág-ɛ̀] wà*
S [**LogoS** cow kill-and.SS leave-Pfv] Quot
'Seydou$_{x}$ said that he$_{x}$ had killed the cow and left it (there).'

c. *sè:dú [nàŋá ɛ̀nɛ́ dàr^{n}-ɛ́: dág-ɛ̀] wà*
S [cow **LogoS** kill-and.SS leave-Pfv] Quot
'Seydou$_{x}$ said that it was he$_{x}$ [focus] who killed the cow and left it (there).'

d. *sè:dú [nàŋà^{L} dàr^{n}-ɛ́: ɛ̀nɛ́ dág-ɛ̀]*
S [cow^{L} kill-and.SS **LogoS** leave-Pfv]
[yǎ: kɔ̀] mà→] wà
[where? be.NonhSbj Q] Quot
'Seydou$_{x}$ said (=asked), where is the cow that he$_{x}$ killed and left?'

Logophoric *ɛ̀nɛ́* is also like ordinary pronouns in that, as possessor, it can occur in either the nonappositional construction, as in *ɛ̀nɛ́ ^{H}gír^{n}í* 'his/her house', or in the appositional construction with *kè* 'thing, possession', as in *gìr^{n}í [ɛ̀nɛ́ ^{L}kè]* 'his/her house'.

18.2.4 Logophorics in nested quotations

The occurrence of a quotation embedded in another quotation does not necessarily prevent a logophoric pronoun in the lowest quotation from being coindexed with the attributed speaker of the higher quotation. This is easiest to see when the attributed author of the lower quotation is 1Sg, which cannot be the antecedent for a logophoric. In (656), *ɛ̀nɛ́* is the object of '(I) kill (him)', and can only refer to Seydou. (656) looks like it has trimmed out a second *[má à]*, but the speaker clearly understood the context, and the second 'say' verb shows that there is an embedded lower quotation. The final quotative particle *wà* relates to the higher quotation.

(656) *sè:dú pór-ɛ̀: mà,*
S say-SS that,
[[má à] [ɛ̀nɛ́ ^{L}dà-ɲù] pór-ì] wà
[[1Sg QuotSbj] [**LogoObj** ^{L}kill-Ipfv] say-Pfv] Quot
'Seydou$_{x}$ said that I said that I would kill him$_{x}$.'

However, when both higher and the lower quotations are attributed to distinct third persons, so that both are (in theory) eligible for antecedent status for logophorics in the lower quotation, my assistant prioritized, allowing the logophoric to refer only to the attributed speaker of the lower quotation. Therefore *ɛ̀nɛ́* in (657) is coindexed with Adda (female name). The nonlogophoric 3Sg pronoun *wó* in object function might refer to Seydou, but could also refer to a third participant.

(657) *sè:dú* *pór-ɛ̀:* *mà,*
S say-SS that,
[ádà wà] *[ɛ̀nɛ́ wó* ^{L}*dà-ɲù]* *pór-ì* *wà*
[A QuotSbj] [**LogoS** **3SgObj** ^{L}kill-Ipfv] say-Pfv Quot
‘Seydou$_{x}$ said that Adda$_{y}$ said that she$_{y}$ would kill him$_{x}$.’
‘Seydou$_{x}$ said that Adda$_{y}$ said that she$_{y}$ would kill him/her$_{z}$.’

18.2.5 Non-logophoric topic-indexing function

In the absence of a coindexed quoted speaker, the logophoric pronoun is not used for the subject of a relative clause that is coindexed to the subject of the higher clause. A construction where clause-final *má* same-subject subordinator replaces the expected clause-initial subject pronoun is used instead (§14.1.10).

18.3 Reciprocal

18.3.1 Simple reciprocals (*sà*^{n}*-tú*^{n})

The basic reciprocal word is *sà*^{n}*-tú*^{n}, consisting of an L-toned form of reflexive *sǎ*^{n} plus a synchronically obscure element *-tú*^{n} that belongs etymologically to a cognate set meaning ‘companion’ (e.g. Jamsay *tɔ́:w*^{n}*ɔ́-n*). Some other Dogon languages also have a reciprocal word containing this element or a synonym.

The antecedent is normally the clausemate subject. The reciprocal may function as direct object (658a), complement of postposition such as dative (658b), or possessor of a nonsubject NP (658c). The reciprocal form can be used for any nonsingular number of interacting participants, i.e. from two up.

(658) a. *ɛ́mɛ́* *ɛ́wɛ̀* $^{+L}$ *sà*^{n}*-tú*^{n} *ɔ̀:-sɛ̂*^{n}
1PlSbj market.Loc^{+L} **RecipObj** see-Pfv.PlSbj
‘We saw each other in the market.’

b. *ɛ́mɛ́* *sà*^{n}*-tú*^{n}*=ǹ* *bú:dú* ^{L}*ò-jù*
1PlSbj **Recip**=Dat money ^{L}give-Ipfv
‘We give each other money.’

c. *bé* *[sà*^{n}*-tú*^{n} ^{H}*lárɛ́:*^{n}*]* ^{L}*ɲàŋ-ɛ̀*
3PlSbj [**RecipPoss** ^{H}sister.Pl] ^{L}marry.woman-Pfv
‘They (men) married each other’s sisters.’

18.3.2 ‘Together’ (*wɔ̀→*, *mɔ̀r*^{n}*-î:*)

To indicate that members of a nonsingular subject NP cooperate in an activity, *wɔ̀→* ‘each’ (§6.6.3) may be added to the subject NP.

(659) *bírɛ́* *[ɛ́mɛ́* *wɔ̀→]* ^{L}*bì-jì*
work(n) [1PlSbj **each**] ^{L}do-Ipfv.PlSbj
‘We will work together.’

In some other constructions, ‘together’ is expressed by a stem from the word-family including *mɔ̀r^{n}-î:* ‘assemble, come together’.

(660)	*ɛ́mɛ́*	*[ɛ́:rɛ́.·.*	*nǐ:.·.]*	*mɔ̌:-n-ɛ̀:-sɛ̂^{n}*
	1PlSbj	[peanut.&	cowpea.&]	**assemble**-Caus-Pfv.PlSbj
	‘We put-Past the peanuts and the cow-peas together.’			

18.4 Restrictions on reflexives

18.4.1 No antecedent-reflexive relation between coordinands

In a NP conjunction, the left conjunct may not function as antecedent of a reflexive possessor (or other reflexive element) in the right conjunct. In (661), there is no overt indication that ‘his’ in ‘his father’ is coindexed with ‘Amadou’.

(661)	*[àmàdú.·.*	*[wó*	^{HL}*dé-dè:]]*	*yɛ̀r-ɛ́-sɛ̂^{n}*
	[A	[**3SgPoss**	^{HL}Rdp-father]]	come-Pfv.PlSbj
	‘Amadou$_{x}$ and his$_{x}$ father came.’			

19 Grammatical pragmatics

19.1 Topic

In addition to the morphemically marked topical constituents described in the following sections, a NP often occurs by itself preclausally, followed by a pause.

(662)	*[gú-gúrù*$^{+L}$	^{L}*yɔ̀:],*	*ɲú:=nì*	*sɛ̀^{nL}=lá*
	[grass.Def^{+L}	^{L}NearDist],	millet=Dat	good^{L}=not.be
	‘Those weeds, they are not good for millet.’ (2011.1a.02)			

19.1.1 Falling tone (or pitch) on topical NP

Such unmarked, preclausal topical NPs often have a final falling tone if not already L-toned. This is systematic with topical *kô* ‘(as for) it/that’, based on the nonhuman pronoun *kó* ‘it, that’.

A similar final L-tone is also the mark of the tonal definite (§4.4.1.1) and the tonal locative (§8.2.1). It is possible that the “topical” and “definite” functions should be consolidated into one category. On the other hand, falling-tone topics tend to be paired in parallel clauses, suggesting a connection with the dying-quail intonation marking coordinands in NP conjunctions. Yet another possibility is that the finalling pitch represents a contraction of the topic particle *wɔ̀^{n}* (cliticized variant *=ẁ^{n}*) leaving a tonal trace behind.

In (663a), the demonstrative *nɔ́:* ‘this’ shows the final L-tone twice. In (663b), the relative-clause form of ‘be in’ is elsewhere H-toned *só*.

(663)	a.	*é→,*	*[kó*	^{L}*lɔ̀:]*	*[kó*	*túrú],*

yes, [Nonh ^{L}two] [Nonh one],
nɔ̂:$^{+L}$ *gìyé báⁿ-yⁿ→ kɔ̂→,*
Prox.**Topic**$^{+L}$ body red-Adv be.NonhSbj,
nɔ̂:$^{+L}$ *gìyé pír-í→ kɔ̂*
Prox.**Topic**$^{+L}$ body white-Adv be.NonhSbj
'Yes, the two of them are the same. This one, the body is red, (and) this (=other) one, the body is white.' (2011.1a.27, varieties of roselle bush)

b. *[yɔ́: bîn] [sɔ̀: pèrè]*^{L} ^{HL}*sô,*
[NearDist in] [thing other]^{L} $^{\mathbf{HL}}$**be.in.Topic**,
est-ce que ú [sâ:ⁿ fú→] mɔ̌:-ǹ,
Q 2SgSbj [all all] assemble-Caus,
tíŋɛ́ ^{L}*bɛ̀-jù*
speak ^{L}get-Ipfv
'Can you-Sg speak (about) anything else that is in it (=farming) putting all (of it) together (=summarizing briefly)?' (2011.1a.33)

19.1.2 Topic (*wɔ̀ⁿ*)

The Topic particle is *wɔ̀ⁿ* following a NP, pronoun, PP, or adverb (for subordinated clauses see below). A less common variant *wɔ̀yⁿ* is attested, especially before a pause due to hesitation, e.g. *nɛ́: wɔ̀ⁿ* varying with *nɛ́: wɔ̀yⁿ* 'now'.

The topic particle generally signals a change in topic or setting from the preceding discourse, or a reaffirmation of a topic when a switch might have been expected. The tone is copied from the final preceding tone (except as noted below).

(664) a. *[bé wɔ̀ⁿ] yǎ:-rè*
[3PlSbj **Top**] go-IpfvNeg.PlSbj
'As for them, they won't go.'

b. *[ɲɛ̌ bè wɔ̀ⁿ] yǎ:-rè*
[woman Pl **Top**] go-IpfvNeg.PlSbj
'As for the women, they won't go.'

c. *ɛ́mɛ́ yá: bíré gàr-á→ bír-ɛ̀,*
1PlSbj yesterday work(n) a.lot do-Pfv,
[íyé wɔ̀ⁿ] [sǎⁿ bè] dɛ̌:rⁿɛ́-mí-ɲú
[today **Top**] [ReflObj Pl] rest-Caus-Ipfv
'Yesterday we worked hard; as for today, we'll rest.'

The topicalized constituent might well be preclausal in many cases. However, there is evidence that this constituent is at least sometimes clause-internal. In (665a), the topicalized element is a pronominal dative, governed by the verb 'give'. In (665b), the absence of accusative marking in TgK (except for 1Sg, see below) means that the object NPs are not explicitly governed, but the absence of any pause and of resumptive object pronouns points to clause-internal position.

(665) a. *ú=ǹ gàr-á→ ó-è,*
2Sg=Dat a.lot give-Pfv,

[má=ǹ wɔ̀ⁿ] [ɔ̀jɔ̀^{L} pɔ̂ⁿ] ò-lí
[1Sg=Dat **Top**] [thing^{L} none] give-PfvNeg
‘She gave you-Sg a lot, (but) as for me, she didn’t give (me) anything.’

b. *[àrⁿá bè] á:-sɛ̂ⁿ gà→,*
[man Pl] catch-Pfv.PlSbj but,
[ɲɛ̌ bè wɔ̀ⁿ] à:-lâ:
[woman Pl **Top**] catch-PfvNeg.PlSbj
‘They took the men, but as for the women, they didn’t take (them).’

The 1Sg pronoun does distinguish subject *íⁿ* from object *má* (§4.3.1) and this distinction is maintained before the topic particle. Topical subject *íⁿ wɔ̀ⁿ* is in (666a). One would expect #*má wɔ́ⁿ* for direct object, but instead a slightly expanded form *má à wɔ̀ⁿ* occurs, contracted from *má wà wɔ̀ⁿ*. Other topical object pronominals also show *wà*, but without *wɔ̀ⁿ*. In (666b), 2Sg object *ú wà* anticipates the topic switch to 1Sg object in the following clause. Other topic forms are 3Pl *bɛ́ wà*, and contracted 3Sg *wɔ́-ɔ̀* from /wó wà/. A phonologically identical *wà* morpheme with the same contractions occurs as the quotative subject particle (§17.1.3). In (666b), note that the first clause anticipates the (contrastive) topic switch and has *wà*, though not *wɔ̀ⁿ*.

(666) a. *[íⁿ wɔ̀ⁿ] yǎ:-rò*
[1SgSbj **Top**] go-IpfvNeg
‘As for me, I won’t go.’

b. *[ú wà] gàr-á→ lág-ɛ̀,*
[2SgObj **Top**] a.lot hit-Pfv,
[má à wɔ̀ⁿ] tɔ̀wɔ̀-lí
[1SgObj **Top** **Top** touch-PfvNeg
‘He hit you-Sg a lot, (but) as for me, he didn’t touch (me).’

Topic particle *wɔ̀ⁿ* can be added to an ‘if’ clause (667).

(667) *[[ɲú: ^{L}kè] ^{H}ágá] tɔ̀, [mɔ́m gàr-ɛ̂ dè wɔ̀ⁿ],*
[[millet ^{L}Poss] ^{H}side] around, [uprooting pass-Pfv if **Top**],
[[ɲú: ^{L}kè] ^{H}ágá] tɔ̀ wɔ̀ⁿ,
[[millet ^{L}Poss] ^{H}side] around **Top**,
[ɔ̀jɔ̀^{L} dɔ̀m-ɛ́:-ɲú] ɔ̀:-lâ:
[thing^{L} wait-MP-Ipfv] see-PfvNeg.PlSbj
‘Concerning (work) of millet, when the uprooting has passed, concerning (work of) millet, (we) haven’t seen anything (else) to wait for.’ (2011.1a.04)

The topic particle can contract and cliticize in the form *=ẁⁿ*. In (668), the immediately preceding segment has introduced the two color types of roselle for making bissap beverage, and the speaker now elaborates on each of them in turn. Twice *=ẁⁿ* is added to a tonal definite.

(668) *bâⁿ$^{+L}$=ẁⁿ, kà:ná [jǎ:ǹ nɔ́:-ɲú]*
red.Def^{+L}=**Topic**, now [boil drink-Ipfv]
ú pó-jù$^{+L}$,
2SgSbj say-Ipfv.Rel^{+L},

kó *[àɲì-kɔ̀:rɔ̀*^{L} *bâ*$^{n+L}$*]* *kúní:,*
Nonh [bissap.roselle^{L} red.Def^{+L}] referring.to,
píri̋$^{+L}$ *= ẁ*^{n}*, …*
white.Def^{+L}=**Topic**, …
‘As for the red (subtype), (the one) which you-Sg were saying just now that it’s for boiling and drinking, it’s the red bissap roselle. As for the white (subtype), …’ (2011.1a.27)

If the tonal marking of topic (§19.1.1 above) is historically derived from *wɔ̀*^{n}, deleting the segments but preserving the L-tone, this cliticized contraction could represent a transitional pattern.

For *wɔ̀*^{n} at the end of headless perfective relative clauses in the sense ‘when/after …’, see §15.5.3.2.

19.1.3 Possessive *kè* in topic function

kè is familiar as a possessive marker: *[ú kè]* ‘yours’, etc., see §6.2.3. However, in texts *[X kè]* is often best translated as ‘concerning X, regarding X, as for X’ or the like, i.e. as a topical NP, often preclausal. Examples are frequent in the texts. A clearly topical example is (669).

(669) *maintenant,* *lɛ̌* ^{L}*kè,*
now, slashing ^{L}**Top**,
[lɛ̀^{L}*-kɔ̌*^{n} *bè]* *lɛ̌ = lò* *dè,* *est-ce que*
[slashing^{L}-pickhoe with] slashing=it.is.not if, Q
[[lɛ̀^{L} *pèré]* *bà*^{nL} *lɛ́:-jú*$^{+H}$*]* *yɔ́* *kɔ̀*
[[slashing^{L} other] manner^{L} slash-Ipfv.Rel $^{+H}$] Exist be.NonhSbj
‘Now, as for planting (i.e. slashing the earth), if not (=aside from) with a pick-hoe, is there any other way to plant?’ (2011.1a.01)

One can argue for a literal possessive reading in such cases, with topicality inferred from context. Compare English *on the subject/topic of X*, or constructions like this: *of the bureaucracy, he said that …* In TgK, this would imply omission of an understood ‘subject/topic’ noun and a locative postposition. Such constructions can occur overtly, see *[[ɲú: kè]* ^{H}*ágá] tɔ̀,* ‘concerning (work) of millet’ in (667) in §19.1.2. This might be the origin of the topicalizing function of *kè*.

For reflexive topic *sǎ*^{n} *kè* see §18.1.5 above.

19.1.4 Topical interrogative subject ‘what about?’ (*dà*)

A NP-final particle *dà* is attested in NPs that function as topics for a following question. A translation ‘what about X?’ with a following question roughly captures the flavor (‘What about you, are you going?’). Interlineal abbreviation is **QTop**.

There are many examples of *dà* in the interview-style recording. In (670a), *dà* is added to a near-distant demonstrative (in recent discourse-definite sense), the whole NP functioning as topic of the ‘what?’ question. The topical NP is resumed by the possessor *kó* in the interrogative clause proper. Other elicited examples like (670b) involve topical NPs that function as subjects of the interrogative clauses.

(670) a. *nɛ́:* *[gù-gùrù]*^{L}*-[kò:j-ú]* *[yɔ́:* *nà]* *dà …*
now [grass]^{L}-[dig.up-VblN] [NearDef Pl] **QTop** …
ɲú:=nì *[kó* ^{H}*nɛ́w*^{n}*ɛ́]* *ìŋé=ỳ*
millet=Dat [NonhPoss ^{H}usefulness] what?=it.is
'Now those acts [that you recently mentioned] of digging up weeds … what is their value for the millet?' (2011.1a.02)

b. *[ú* ^{H}*péjú* *dà]* *yɔ́* *kɔ̀* *mà*
[2SgPoss ^{H}sheep **QTop**] Exist be.NonhSbj Q
'Your-Sg sheep-Sg, is it there?'

c. *[ú* *dà]* *bírɛ́* *bìrɛ́* ^{L}*bɛ̀-jù* *mà*
[2Sg **QTop**] work(n) do ^{L}get-Ipfv Q
'You-Sg, can (you) do the work?'

When *dà* is used without an overt following question, a general question is implied. This can happen when the topic changes in the context of a series of questions. In (671), the interviewer switches the discussion of farming techniques from groundnuts ('main peanuts') to regular peanuts ('Mossi peanuts'). 'What about X?' captures the discourse function.

(671) *nɛ́:* *[ɛ̀:rɛ̀*^{L} *múɲúr*^{n}*ú]* *dà*
now [peanut^{L} Mossi] **QTop**
'Now, (what about) peanuts?'

My assistant declined to produce or accept examples with *dà* (as opposed to *wɔ̀*^{n}) in non-interrogative contexts, and explicitly stated that such a context is a condition for the use of the particle.

19.1.5 Topic (*kày*)

Much less common than *wɔ̀*^{n} or *dà* is *kày*. It occurred once in about an hour of recorded text, following a clause rather than an NP. In (672), it co-occurs with two tokens of *wɔ̀*^{n}.

(672) *[nɛ́:* *wɔ̀*^{n}*]* *[[pàrà-gò:rò]*^{L}*-bírɛ́=lò* *dè* *kày],*
[now Top] [[harvest]^{L}-work(n)=it.is.not if **Top**]
[[ɲú: ^{L}*kè]* *ágá]* *tɔ̀* *wɔ̀*^{n}*,*
[millet ^{L}Poss] about] around Top.
[pàrà-gò:rò]^{L}*-bírɛ́* *dɔ̀m-ɛ́:-ɲú* *[námà* *kà:*^{n}*]*
[harvest]^{L}-work(n) wait-MP-Ipfv [as.of.now also]
'Now, if it isn't (=other than) harvest work, concerning millet, we are still waiting for the harvest work.' (2011.1a.05)

kày is the regular topic particle in several other regional languages.

19.1.6 ‘Now’ (*kà:ná*, *nɛ́:*, *nɛ́: wɔ̀*^{n})

The neutral ‘now’ temporal adverb, paraphrasable as ‘at this time’ with no further pragmatic baggage, is *kà:ná* (673a). It is also used in oppositions like ‘nowadays, in the present’ (*kà:ná*) versus ‘in the old days, in the past’ (*kò kɛ́:*, *kɛ̌: bà→*, or *gíré tɔ̀*).

nɛ́: wɔ̀^{n} (with the topic particle) or just *nɛ́:* is a pragmatically sensitive ‘now’, and is more likely than *kà:ná* to occur preclausally (before the subject), as in (673b).

(673)	a.	*ɛ́mɛ́*	*bíré*	*kà:ná*	*bǐ-jú*	
		1PlSbj	work(n)	**now**	do-Ipfv	

‘We will work now.’

	b.	*[nɛ́:*	*wɔ̀*^{n}*]*	*ɛ́mɛ́*	*gìr*^{n}*í*	^{L}*yà:-jù*
		[**now**	Top]	1PlSbj	house	^{L}go-Ipfv

‘Now we’ll go home.’

	c.	*nɛ́:*	*pèré*	*yɔ́*	*kɔ̀*
		now	other	Exist	be.NonhSbj

‘Now, is there another (way)?’ (2011.1a.02)

Simple *nɛ́:* as in (673c) is usually pronounced with the same low pitch typical of clause-initial subject pronouns, and like them may be set off by a pause.

nɛ́: is also common after a clause-initial (or preclausal) topical pronoun or NP. The two elements are prosodically grouped. Again the sense of ‘now’ is pragmatic rather than referentially temporal.

(674)	*[kó*	*nɛ́:]*	*[kó*	^{H}*bɔ́*^{n}*]*	*ɲɑ̆ŋ*	^{L}*gì-jù*
	[Nonh	**now**]	[NonhPoss	^{H}name]	how?	^{L}say-Ipfv

‘That now (=what you have just mentioned), how (= what) do (they) call it?’ (2011.1a.02)

For a distinct *nɛ̀:*, see (396) in §12.3.

19.1.7 ‘Also’ (*kàr*^{n}*à* ~ *kà:*^{n})

This particle follows the NP or other constituent that it highlights. It is not normally clause-final (after the verb), even when the translation suggests that it has clausal scope, except when the clause itself is an argument of a higher main clause. Instead, the particle is attached to some preverbal constituent, whether a cognate nominal as in (675e) or some other nominal as in (675f). The particle may follow 1Sg subject or object forms (675a-b) as the sentence requires.

(675)	a.	*ú*	*bàmàkɔ́*	^{L}*yè-∅*	*dè,*	*[í*^{n}	*kàr*^{n}*à]*	^{L}*yà:-jù*
		2SgSbj	B	^{L}go-Pfv	if,	[1SgSbj	**also**]	^{L}go-Ipfv

‘If you-Sg go to Bamako, I’ll go too.’

	b.	*wó*	*ú*	*lág-ɛ̀*	*dè,*	*[má*	*kà:*^{n}*]*	*lágá-jú*
		3SgSbj	2SgObj	hit-Pfv	if,	[1SgObj	**also**]	hit-Ipfv

‘If he hits you-Sg, he’ll hit me too.’

c. *ú=ǹ bɔ̀^{n}bɔ́^{n} ô-∅ dè,*
2Sg=Dat candy give-Pfv if,
[má=ǹ kàr^{n}à] ó-jú
[1Sg=Dat **also**] give-Ipfv
‘If she gives you a piece of candy, she’ll give (one) to me too.’
[note: a true conditional, not a pseudo-conditional]

d. *ɛ́mɛ́ [yògó kà:^{n}] bíré ^{L}bì-jù*
1PlSbj [tomorrow **also**] work(n) ^{L}do-Ipfv
‘We’ll work tomorrow too.’

e. *ɛ́mɛ́ [dáná kà:^{n}] ^{L}dànà-ɲù*
1PlSbj [hunt(n) **also**] ^{L}hunt-Ipfv
‘We will go hunting also.’

f. *wó ɲǎ: sí:rɛ́-jú, [ɲǎ kà:^{n}] sɛ́mɛ́-ɲú*
3SgSbj meal cook-Ipfv, [ground **also**] sweep-Ipfv
‘She cooks meals, and she also sweeps (the ground).’

The particle may follow an entire PP, but is not inserted between the postposition and its complement, even where this would be logically reasonable as in (676b).

(676) a. *ɛ́mɛ́ dɛ̌^{n} [gìr^{n}í bîn] kún-ɛ̀:-sɛ̂^{n},*
1PlSbj waterjar [house in] put-Pfv.PlSbj,
[tógú bɔ́rɔ̀ kà:^{n}] b-ɛ̌:-sɛ̂^{n}
[shed under **also**] put.down-Pfv.PlSbj
‘We put waterjars in the house, and (we) placed (some) under the shed too.’

b. *nǎ [dògó mà] yɔ́ kɔ̀,*
person [behind 1Sg] Exist be,
[ú dógò kà:^{n}] yɔ́ kɔ̀
[2SgSbj behind **also**] Exist be
‘There is someone behind me, and (someone) behind you-Sg too.’

In textual example (677), the clause preceding *kà:^{n}* ‘also’ functions as subject (or theme) of the final ‘(it) exists’ predicate.

(677) *[[wàrù^L gɛ́^{n}] bínì]*
[[farm.work^L black] in]
[kú:^{n} nú-ɲú kà:^{n}] yɔ́ kɔ̀
[then go.in-Ipfv **also**] Exist be.NonhSbj
‘There is also (=it can also happen that) (you) go back in then (from time to time) during the black farming (=the first round of weeding).’ (2011.1a.03)

In many textual occurrences, ‘also’ or ‘too’ is not a felicitous English translation. Often *kà:^{n}* is used in a sense such as ‘likewise’, bringing out a pragmatic parallel or comparability rather than identity of eventuality types. In some cases it is little more than a topic-switching device.

19.1.8 'Also' (*=ǹ*)

There are occasional examples of a clause-initial (or preclausal) topic-switching phrase with a pronoun plus cltiicized *=ǹ*. The form is identical to the corresponding dative PP in the reduced (cliticized) variant of the postposition (§8.1.1), except for 1Sg, where the topical form is *íⁿ=ǹ* in contrast to the irregular 1Sg dative *má=ǹ*. There seems to be a hint of 'also, too' in the free translation.

(678) *[nɛ́: wɔ̀ⁿ] ɲɛ̌*$^{+L}$ *[bé dógò]*
[now Top] woman.Def^{+L} [3Pl behind]
tág-ɛ̀-ɛ̀: mà,
follow-MP-and.SS and.then,
yǎ:-ní: yǎ:-ní: dè, mhm,
go-while.SS go-while.SS if, uh-huh,
bé=ǹ sá-ɛ̀ dè—
3Pl=also reply-Pfv if—
'Now the woman followed behind them. While they were going, uh-huh, they for their part spoke up—' (2011.1b.05)

For *íyé=ǹ* 'again' see (685) in §19.3.1.

19.1.9 'Even' (*hâl*, *kàrⁿà* ~ *kà:ⁿ*)

There is no consistent distinction between 'X also' and 'even X'. The same *kàrⁿà* ~ *kà:ⁿ* illustrated in §19.1.7 above for 'X also' is also found in passages translatable as 'even X', hence the two translations for (679b). The phrase in question is optionally preceded by *hâl* 'all the way to, until' to force the 'even X' translation (679a). The absence of a parallel phrase in preceding discourse can also force an 'even X' translation, as with (679c).

(679) a. *[hâl àⁿsá:rá kà:ⁿ] té nɔ̌:-ɲú*
[even white.person **also**] tea drink-Ipfv
'Even the white person will drink tea.'

b. *wó dí: nɔ̌:-ɲú, írí nɔ̌:-ɲú,*
3SgSbj water drink-Ipfv, milk drink-Ipfv,
[kɛ̀ɲɛ́ kà:ⁿ] nɔ̌:-ɲú
[beer **also**] drink-Ipfv
'He drinks water, he drinks milk, he even drinks beer.'
or: 'He drinks water, he drinks milk, he drinks beer too.'

c. *[pǒ: kà:ⁿ] kùnɔ̀-lí*
[greeting **also**] put-PfvNeg
'He didn't even greet (=say hello).'

For 'even if' conditionals, see §16.2.1.

For *nɛ̀:* and *yè* in the sense '(not) even' in *a fortiori* constructions, see §12.3.

19.2 Interclausal discourse markers

19.2.1 ‘But …‘ (*gà→*)

gà→ is a ‘but’ particle, occurring at the border between two clauses that are discordant in some fashion. In TgK, *gà→* is normally pronounced at the end of the first clause, though it only makes sense when the final clause is uttered.

(680) a. *jɔ̀wɔ́ bɛ̌-jú gà→, bàŋ-î: bɛ̌:-rò*
run get-Ipfv **but**, hide-MP get-IpfvNeg
‘You-Sg can run, **but** you can’t hide.’

b. *[nɛ́: mà:-ŋà-lí dè] tɔ̂:-rè gà→,*
[now dry-Inch-PfvNeg if] hack-IpfvNeg.PlSbj **but**,
[kó mǎ:-ŋ-ɛ̀:] [tɔ̌ dɔ̌-ɛ̀]
[NonhSbj dry-Inch-and.SS-Pfv.PlSbj] hack arrive-Pfv
[kó sǎ^{n} tó:r-ì dè,
[NonhSbj ReflObj show-Pfv if,
nɛ́: kú:^{n} tɔ́:-jú dɔ̀ŋɔ̀r^{n}ɔ̀
now only.then hack-Ipfv on.other.hand
‘Now when it (=millet) has not (yet) dried out, (they) do not hack (the stems) down. **But** when that (millet grain) has showed itself as having dried (=hardened) so that (the time) to hack down (the stems) has arrived, then (they) they hack (them) down.’ (2011.1a.08)

19.2.2 ‘And/or alternatively…‘ (*gá:*)

This particle, which seems to be H-toned although in some cases it is heard with low pitch, occurs medially in the second part of a parallel construction describing alternative possibilities (e.g. alternative techniques). Specifically, it occurs after a clause-initial constituent, generally one that conveys the difference between the two parallel possibilities. The second part may include *kà:^{n}* ‘also’, especially when both alternatives in fact occur.

(681) a. *nǐ kà:^{n}, [[wòrú bínì] páŋá-ɲú] yɔ́ kɔ̀→,*
cowpea also, [[field in] crossplant-Ipfv] Exist be.NonhSbj,
[nì-bɔ́gí=ː́ gá: bɔ̀gɔ́-jú] yɔ́ kɔ̀
[cowpea-apart=Foc **and.or** grow.apart-Ipfv] Exist be.NonhSbj
‘Cow-peas too, there is cross-planting (them) in a (millet) field, (and/or) there is growing (them) separately (in their own field).’ (2011.1a.29)

b. *[[[kúwɔ́ bè] yǎ:-jú$^{+H}$] nà] yɛ́ wè,*
[[[foot Inst] go-Ipfv.Rel^{+H}] Pl] Exist be.HumPl,
[[[[ír^{n}í ^{H}sɔ́^{n}] bè] gá: yǎ:-jú$^{+H}$] nà] kà:^{n}]
[[[iron ^{H}horse] Inst] **and.or** go-Ipfv.Rel^{+H}] Pl] **also**]
yɛ́ wè
Exist be.HumPl
‘There are (people) who go on foot, and there are (people) who go on bicycles.’

This might be connected with the *gá:* that occurs in one type of verb iteration, following the first iteration of the verb (§11.6.5). A less likely connection is with possessed noun *gá:* ‘something like’ (§8.4.1).

19.2.3 ‘Otherwise …‘ (*dɔ̀ŋɔ̀r*^{n}*ɔ̀*)

Clause-final particle *dɔ̀ŋɔ̀r*^{n}*ɔ̀* occurs at the boundary between two conflicting propositional states. The *kú*^{n} particle at the beginning of the following clause in (682a), here glossed ‘lest’, is admonitive.

(682) a. *ɛ́mɛ́ bíré bǐ-má dɔ̀ŋɔ̀r*^{n}*ɔ̀, kú*^{n} *gǎ:-rò*
1Pl work do-Hort **otherwise**, lest pass-IpfvNeg
‘Let’s work, otherwise we won’t get by (=succeed).’

b. *bé yè-lâ: dɔ̀ŋɔ̀r*^{n}*ɔ̀, yɛ̀rɛ́-sɛ́*^{n} *dè,*
3PlSbj come-PfvNeg.PlSbj **otherwise**, come-Pfv.PlSbj if,
ɛ́mɛ́ bé ^{L}*làgà-jù*
1PlSbj 3PlObj ^{L}hit-Ipfv
‘They haven’t come, however if they do come, we’ll beat them up.’

See also (172), (564c), and (680b).

19.3 Pragmatic adverbs or equivalents

19.3.1 ‘Again’ (*pílé-m-ɛ̀:*, *pílé-m̀*, *íyé=ǹ*), ‘not again’ (*pèré*)

One free-standing ‘again’ adverbial is *pílé-m-ɛ̀:* . This is a same-subject subordinating form with *-ɛ̀:* (§15.2.2.1) from frozen causative *pílé-m̀* ‘do again, repeat’. Of course the following verb has the same subject as ‘do again’ in this construction.

(683) *í:*^{n} *bàg-ɛ́:, ùŋɔ́r-ɛ̀:, pílé-m-ɛ̀:* ^{L}*bàg-ɛ̀*
child fall-SS, get.up-SS, **repeat-SS** ^{L}fall-Pfv
‘The child fell, got up, and fell again.’

pílé-m̀ itself may be used as a nonfinal chained verb. It can often be translated as ‘furthermore, in addition’.

(684) *[yɔ́: wò→ sâ:*^{n} *fú→] gàr-ɛ̂ dè,*
[NearDist all all all] pass-Pfv if,
pílé-m̀ nɛ́: ɲǎŋ-ɲǎŋ bìr-ɛ̂ dè, …
do.again now how?-how? do-Pfv if, …
‘ When all those (things) have passed, what (things) do (you) do now in addition, (and …)’

The adverb *íyé=ǹ* is another ‘again’ expression. Its relationship to *íyé* ‘today’ is unclear. The *=ǹ* is likely to be the clitic *=ǹ* described in §19.1.8 rather than the dative postposition. Like *pílé-m̀*, *yé=ǹ* can be a pragmatic adverbial ‘furthermore, in addition’. (685) is from a passage about reseeding in spots where the first millet sown has not sprouted.

(685) *[gàmá tɔ́-ɛ̀]* *[gàma tɔ̀:-lí]* *dè,*
[some sprout-Pfv] [some sprout-PfvNeg] if,
ɛ́mɛ́ *íyé=ǹ* *ɲù:*^{L}*-sǎ* *sɔ́:-sɛ́ⁿ* *dè, …*
1PlSbj **again** millet^{L}-grain scoop-Pfv.PlSbj if, …
'If some has sprouted and some has not sprouted, we scoop up some millet seed again (=additionally), (and re-seed).' (2011.1a.01)

The combination of a negated verb and adverb *pèré* 'otherwise, additionally' (cf. adjective *pèré* 'other') in the sense 'on another occasion' can be translated as 'not again' (686).

(686) *íⁿ* *pèré* *bàmàkɔ́* *yǎ:-rò*
1SgSbj **otherwise** B go-**IpfvNeg**
'I won't go to Bamako again.'

The simple 'again' expressions (*pílé-m̀*, *íyé=ǹ*, *pèré*) often co-occur in the same clause.

19.4 'Only' particles

19.4.1 'Only' (*sǎy*)

sǎy 'only' follows the constituent or clause that it highlights. The 1Sg form is *mí=ýⁿ sǎy* in both subject and object function, suggesting a connection with focalization. The <LH> tone of *sǎy* is often reduced to L-tone, medially as well as prepausally.

(687) a. *íⁿ* *[tɛ́mdɛ́rɛ́* *lɔ́y* *sǎy]* ^{HL}*sâ*
1SgSbj [hundred two **only**] ^{HL}have
'I have only one hundred (currency units).'

b. *[mí=ýⁿ* *sày]* *nî* ^{L}*sìgɛ̀-jù*
[1Sg=it.is **only**] here ^{L}remain-Ipfv
'Only I remain here.'

c. *[mí=ýⁿ* *sày]* *wó* ^{L}*làg-ɛ̀*
[1Sg=it.is **only**] 3SgSbj ^{L}hit-Pfv
'He hit me only.'

Like the 'also' particle, *sǎy* is attached wherever possible to a preverbal constituent, even when the translation suggests clausal or VP scope. In (688), the particle is attached to the object noun *gìnɛ́* 'sleep' in a fixed noun-verb collocation.

(688) *wó* *bírɛ́* *bǐ:-rò,* *[gìnɛ́* *sày]* *nɔ́wⁿ-ɛ́:-ɲú*
3SgSbj work(n) do-IpfvNeg, [sleep(n) **only**] sleep-MP-Ipfv
'He doesn't work, he just sleeps.'

19.4.2 ‘Just (one)’ (*léw*^{n})

léw is a kind of intensifier for the numeral *túrú* ‘one’. It may be separated from *túrú* by other constituents.

(689) *í*^{n} *[wó túrú sǎy] [gìr*^{n}*í bîn] léw*^{n} *tɛ́m-ɛ̀*
1SgSbj [3Sg one **only**] [house in] **just.one** find-Pfv
‘I found him/her completely alone in the house.’

19.5 Phrase-final emphatics

For clause-final *sâ*, see delayed future *-jà sâ* in §10.2.2.4.

19.5.1 Clause-final *tájìrì* ‘definitely’

The noun-like element *tájìrì* ‘certainly, definitely’ is an adverb medially or at the end of a clause. It is not in a higher clause, taking another clause as complement. It indicates the speaker’s certainty about the truth or validity of the statement. In textual passage (690), it has a strong confirmational value.

(690) B: *est-ce que [kó gɛ̀:] bǐ-wè-ré*
A: *[kó gɛ̀:] bǐ-téɲè tájìri*

B: Aren’t they doing it for that reason?
A: They **definitely** do it for that reason. (2011.1a.12)

Elicited examples are in (691). They confirm that *tájìrì* is an adverb. It occurs with other adverbs like ‘tomorrow’ (in either order), in the usual adverbial position following real subject NPs (691b). It precedes low-referentiality “subjects” in fixed meteorological collocations like ‘rain’ in (691a).

(691) a. *yògó tájìrì àr*^{n}*ú lɔ́wɔ́-jú*
tomorrow **certainly** rain rain.fall-Ipfv
‘It will certainly/definitely rain tomorrow.’
[can also be ordered: *tájìrì yògó àr*^{n}*ú lɔ́wɔ́-jú*]

b. *ɛ́mɛ́ yògó tájìrì bàmakɔ́ dɔ̌:-jú*
1PlSbj tomorrow **certainly** B arrive-Ipfv
‘We will certainly arrive in Bamako tomorrow.’

19.5.2 Phrase-final *já:tì* ‘exactly’

Although this form, common in Fulfulde and several other Dogon languaeges, was elicited in TgK, it did not occur in the recorded texts.

19.5.3 Clause-final *kɔ̀y* (confirming)

This clause-final particle is used in statements that confirm the listener's expectation, or that express agreement with what the interlocutor has just said. Compare English *sure* (A: *It's hot today*. B: *It sure is*.).

The passage in (692) shows the difference between *dὲ*, which contradicts the listener's expectation, with *kɔ̀y*, which confirms it. The discussion is about harvesting millet grain spikes using a harvesting knife, either with the millet plant still standing ("up high") or previously hacked down ("on the ground").

(692) B: *yɔ́: kìrὲ = lá→*
A: *dág-à→ kìrέ→ kɔ̂* ***dὲ****, [árá kû^{n} kè] kírὲ nánà, dág-à→ —*
B: *[árá kû^{n} kè] kírὲ*
A: *[árá kû^{n} kè] kírὲ* ***kɔ̀y****, [ɲá kû^{n} kè] sógò*

B: That isn't hard (work)?
A: It **actually** is rather hard. In particular, (the method) up high is harder. Fairly—.
B: Up high is harder?
A: Up high **sure** is harder than on the ground.

Clause-final *kɔ̀y* should be distinguished from *kó = ý* 'that's it', with 'it is' clitic.

19.5.4 Clause-final *là* (surprise)

This particle is probably a variant of *n'est-ce pas?* type tag questions, which can be used rhetorically (§13.2.1.3). It is a mild emphatic that can usually be left untranslated. The textual examples involve information of some importance (e.g. clarifications) in the discourse.

In (693a), the narrator clarifies the listener's confusion about which child was referred to in a preceding clause, by revealing that there was a second child in the scene.

(693)	a.	*[[wó*	^{L}*kè]*	^{L}*ì:^{n}]*	*yɔ́*	*kɔ̀*	*là*
		[[3SgPoss	^{L}Poss]	^{L}child]	Exist	be.NonhSbj	**Emph**

'Now there was (also) a child of hers (=of the step-mother).' (2011.1a.01)

b.	A:	*háyὲ*	*kà:ná*	*[yɔ́:*	*gɛ̂:*	*mà]*	
		well	now	[NearDist		for	Q]
		[yɔ́:		^{L}*dàg-ὲ],*			
		[NearDist		^{L}leave-Pfv]			
		á:r^{n}έ:		*ɔ̀gɔ́*		*gí-jí*	*là*
		previously		chiefhood		say-Ipfv.PlSbj	**Emph**
	B:	*ɔ̀gɔ́*					
		chiefhood					

A: … Well, that is why nowadays (they) have abandoned that. In the past they said (=called it) the chiefhood.
B: Chiefhood? (2011.1a.15)

19.5.5 Clause-final *dɛ̀* (contradicting or warning)

This clause-final particle is used when the speaker believes that the proposition in the clause is not what the listener expects, or more generally to indicate surprise or urgency. It is a warning to the listener to take careful note. Compare English *actually* or clause-initial *well* when correcting the listener, and low-pitched *now* in warnings ('Don't be late now!')

(694)	a.	*é*	*[jɛ̀ŋɛ̀-ùr^{n}ì:^{L}*	*nɔ́:*	*nà]*	*sɛ́^{n}*	*wê*	*dɛ̀*
		wow!	[twin-children^{L}	Prox	Pl]	good	be.HumPlSbj	**Emph**

'(they said:) "wow, those twins are definitely handsome." ' (2011.1b.04)

b.	*[bàrá*	*bîn]*	*[bàrà^{L}-nɔ̀w^{n}ɔ́*	*fú→]*
	[outback	in]	[outback^{L}-meat	all]
	ɛ̀nɛ́	^{L}*bàrà*	*wà*	*dɛ̀*
	LogoObj	^{L}help.Imprt	Quot	**Emph**

'(He said:) "all (you) wild animals in the bush, all wild animals help me!" ' (2011.1b.05)

See the second line (first turn for A) in (692) in §19.5.3 for another example.

19.5.6 Clause-final *gà* ~ *gâ:* (warning)

A clause-final element heard as *gà* or *gâ:* occurs in warnings. I gloss it as 'beware' in interlinears.

(695)	a.	*[ɲɛ̌-ỳ^{n}*	*wà]*	*[[[kó*	*bɔ́rɔ̀]*	^{L}*nù]*	*wà]*
		[girl	QuotSbj]	[[[Nonh	under]	^{L}go.in.Imprt]	Quot]
		[gɔ̀:nɔ̀^{L}-sɔ̌^{n}	*yɛ́*	*yě-jú*		*gà]*	
		[raider	Exist	come-Ipfv		**beware**]	

'She (=step-mother) told the girl, "go in (=hide) under it (=pile of stalks) quickly, (since) raiders are coming!" ' (2011.1b.01)

b.	*[dè-dé:*	*wà]*	*[wó*	*wà]*	*[íyé*	^{L}*kè],*
	[Rdp-father	Quot]	[3SgSbj	Imprt]	[today	^{L}Top],
	[[î:^{n} $^{+L}$	*dɛ̀nɛ́-ɲú]*	*gì]*	*bàrá*	*yǎ:-lé*	*gâ:*
	[[child.Def^{+L}	look.for-Ipfv]	for]	outback	go-Proh	**beware**

'(She said:) "Father (of the girl), definitely do not go into the bush today intending to look for the child." ' (2011.1a.01)

19.6 Backchannel and uptake checks

The recorded texts are full of brief backchannel items, ranging from *mhm*-type vocalizations to *é→* 'yes', which indicate that the listener is following what the speaker is saying (or asking). In addition, the listener often repeats a clause or phrase just used by the interlocutor. It is difficult to tell when this is a request for confirmation and when it is just backchannel. In any event, the interlocutor may take it as a request for confirmation, and may repeat the phrase yet again.

(696) is the free translation of a segment with particularly dense backchannel from one interview-style text (2011.1a.06).

(696) A: …Now that (millet) has become ripe.
B: It has become ripe.
A: Yes, that has become ripe.
B: Before all that has happened, …
A: Yes?
B: … as for the millet, it can’t be said that the millet has become ripe yet.
A: It can’t be said.
B: Developing the red fuzz …
A: Developing the red fuzz.
B: Putting out fruits (=grains) …
A: Uh-huh.
B: Turning whitish …
A: Turning whitish.

On the other hand, uptake checks initiated by the speaker who holds the floor did not occur frequently in the texts. This is perhaps attributable to the particular individuals involved; that is, the speaker could assume that the listener understood more or less everything and that he would ask when anything was unclear.

19.7 Greetings

Simple time-of-day greeting sequences are summarized in (697). A is the first speaker. All of the initial greetings by A are imperative in form, with *-ỳ* for plural addressee as in normal imperatives. The ‘good morning’ phrases are retrospective, based on the verb *ná:* ‘spend the night’ and *sɛ́:w* ‘well-being’, but *ná:-w*^{n}*á* and *sɛ́: wɔ́* are irregular in form. There is no special greeting for mid-day, so the simple *pǒ:* ‘hello!’ is used then. The two afternoon/evening greetings are slightly retrospective, denoting the concurrent or just elapsed time of day (*nùnùŋú kû*^{n} ‘early afternoon’, *dàgà-nùŋú* ‘late afternoon’).

(697) a. morning to 10 AM
A: *ná:-w*^{n}*á* ‘good morning!’ (single addressee)
ná:-w^{n}*á-ỳ*^{n} ‘good morning!’ (plural addressee)

B: *sɛ́:w ná-ɛ̀ mà* [lit. “did [you] spend the night well?”]

A: *sɛ́: wɔ́*

b. mid-day
A: *pǒ:* ‘hello!’ (single addressee)
pǒ:-ỳ ‘hello!’ (plural addressee)

B: *pǒ.ː*

c. early afternoon around 1 to 4 PM
A: *[nù-nùŋú kû*^{n}*] pǒ:* ‘good afternoon!’ (single addressee)
[nù-nùŋú kû^{n}*] pǒ:-ỳ* ‘good afternoon!’ (plural addressee)

B: *pǒ.ː*

d. late afternoon to evening, around 4 to 7 PM
A: *dàgà-nùŋú pǒ:* ‘good afternoon/evening!’ (single addressee)
dàgà-nùŋú pǒ:-ỳ ‘good afternoon/evening!’ (plural addressee)

B: *pǒ∴*

e. night (after nightfall)
A: *dà:gá pǒ:* ‘good evening!’ (single addressee)
dà:gá pǒ:-ỳ ‘good evening!’ (plural addressee)

B: *pǒ∴*

e. night (at parting)
A: *já^{n} ná:-má* ‘(have a) good night!’ (single addressee)
já^{n} ná:-má-ỳ^{n} ‘(have a) good night!’ (plural addressee)

B: *àmà sɛ́^{n} bè ɛ́mɛ́ ná:-má* ‘may God’shave us spend the night with good(ness)!’

Situational greetings involving a location or the addressee’s activity, not depending on time of day, are in (698). The reply in each case is *pǒ∴*.

(698) a. *ú bírɛ̀→* (doing any work) (single addressee)
é bírɛ̀→ (doing any work) (plural addressee)
[compare noun *bírɛ́* ‘work’]

b. *bàrá pǒ:* (returning from fields) (single addressee)
bàrá pǒ:-ỳ (returning from fields) (plural addressee)
[compare noun *bàrá* ‘the bush, the fields’]

c. *ètě: pǒ:* (returning from well) (single addressee)
ètě: pǒ:-ỳ (returning from well) (plural addressee)
[compare noun *òtẽ̊:* ‘well’]

d. *ɛ́wɛ̀$^{+L}$ pǒ:* (at or returning from market) (single addressee)
ɛ́wɛ̀$^{+L}$ pǒ:-ỳ (at or returning from market) (plural addressee)
[compare noun *ɛ́wɛ́* ‘market’, tonal locative *ɛ́wɛ̀*$^{+L}$]

Greetings and wishes to departing and returning travelers are in (699). (699a) is literally ‘may God take you-Sg/Pl there with peace’, slightly distorted from *àmá [jám bè]* ‘God [with peace]’, plus the 2Sg or 2Pl pronoun and *dɔ̌:-ǹ* ‘cause to arrive’ (imperative *dɔ́:-nɔ́*). (699b) is also slightly irregular ‘God (has) brought you (back)!’, whose normal form would be (for the singular) *àmá ú jɛ̌:r-ì*.

(699) a. *àmà jâ^{n} ú dɔ́:-nɔ́* ‘bon voyage!’ (to single traveler)
àmà já^{n} bè é dɔ́:-nɔ́ ‘bon voyage!’ (to traveling group)

b. *àm-ú: jɛ̌:rɛ̀:* ‘welcome back!’ (to single returnee)
àm-é: jɛ̌:rɛ̀: ‘welcome back!’ (to returning group)

Presenting condolences to the family of a deceased person is very important in Dogon culture. In (700), A is the visitor and B, who replies, is one of the bereaved. *kár^{n}á* ‘do’ is not used in the focal TgK dialect except in formulaic phrases like this, but it is reported as a ‘do’ verb for other TgK dialects (and is common in Jamsay).

(700) A: *àmá=ǹ* *yá:pú* *kár^{n}á*
God=Dat reconciliation do.Imprt

B: *yá:pú* *kár^{n}á*

The four-part sequence (701) is uttered on major religious holidays.

(701) A: *àmá* *íyé* *tó:r-ì*
God today show-Pfv
‘God has showed today to us.’

B: *pǒ:*

A: *àmá* *nàŋúr^{n}ú* *tó:ró*
God next.year show.Imprt
‘May God show next year to us!’

B: *àmí:nà*
amen

20 Text

“Planting”

This corresponds to tape 2011.01, segment 1a. It is excerpted from a long interview-style text about farming. Recorded in Koporo-Pe in 2011. Additional texts, with TgK transcriptions and free English translations along with some notes, but without interlinear mark-up, are in a separate document.

(702) B: *dàgà-nùŋú* *pǒ:-ỳ* *[dè* *A]*
late.afternoon greeting-Pl [father A]
A: *pǒ:→*
greeting
B: Good afternoon, A [name].
A: Greetings.
[pǒ:-ỳ in plural-imperative form, addressed to two people; B uses dè ‘father’ respectfully addressing an older man]

(703) B: *ɛ́mɛ́* *íyé* *nî* *[bá:sí* *gɛ̂:]* *yè-lâ:*
1PlSbj today here [trouble for] come-PfvNeg.PlSbj
A: *àmá* *bá:sí* *pógó*
God trouble brush.away
B: We haven’t come here today because of any trouble.
A: May God brush away any trouble.
[standard sequence when a guest arrives; imperative pógó with third person subject (‘God’) in a wish]

(704) B: *wálà:,* *nɔ́:* *kà:ná* *[ɛ́mɛ́* ^{L}*kè],* *ɛ́mɛ́,* *tògò-gánà*$^{+L}$*,*
well, Prox now [1Pl ^{L}Top], 1Pl, Togo-country.Loc^{+L}
wárú *bà*^{nL} ^{L}*wà-jù,*
farming manner^{L} ^{L}do.farming-Ipfv.Rel,
wárú *ɲàŋ-ɛ̂* *dè,* *lɛ̌* *ɲàŋ-ɛ̂* *dè,*
farming take-Pfv if, slashing take-Pfv if,
[pàrà-[gò:-rò]]^{L}*-bírɛ́* ^{L}*dɔ̀:,*
[autumn-[go.out-Nom]]^{L}-work(n) ^{L}arrive,
[kó ^{H}*sɔ́:]* *ú=ǹ* *úɲɔ́r*^{n}*ɔ́-ɲú* *gɛ̀:,*
[NonhPoss ^{H}thing] 2Sg=Dat ask-Ipfv for,
maintenant *ɛ́mɛ́* *tí→,* *[lɛ̌* *kû*^{n}*]* *lá:* ^{L}*tɔ̀rɔ̀-jù,*
now 1PlSbj first, [slashing about] first ^{L}begin-Ipfv,
maintenant *[ɛ́mɛ́* ^{H}*gánà*$^{+L}$*],*
now [1PlPoss ^{H}country.Loc^{+L}]
[lɛ̌ *dɔ̀:-lí]* *[kó* *kɔ́-ǹ* *dè],*
[slashing arrive-PfvNeg] [NonhSbj be.NonhSbj-while.DS if],
ɛ́mɛ́ *ìɲé* *lá:* ^{L}*bì-jì*
1PlSbj what? first ^{L}do.Ipfv.PlSbj

B: Well, this now, as for us, we, (in) Togo country, the way (one) does farming. From farming with the daba (and) from slashing (=planting) to autumn work (=harvesting), so that I may ask you-Sg about that topic. Now first of all, we'll start with planting. Now, (here) in our country, before planting (time) has arrived, what do we do first?

[wálà: < Fr. voilà; ɛ́mɛ́ kè with possessive kè in topic function §19.1.3; gáná 'land, country' twice in tonal locative form §8.2.1; bà^{n}^{L} 'manner' head of imperfective manner adverbial relative §15.5.2; verb ^{L}wà-jù after rv-Deletion §3.5.3.2 from verb stem wàrá 'do farming' (prototypically working earth with a daba [type of hoe] with pulling motion), with cognate nominal wárú; verb lɛ́: and cognate nominal lɛ̌ 'slash (earth, with pick-hoe, to sow seeds)', hence 'plant (millet)'; [X ɲàŋ-ɛ̂ dè] [Y ^{L}dɔ̀:] 'from X to Y' with ɲàŋá 'take' and dɔ̌: 'arrive' §15.5.4; the complex initial in the compound [pàrà-[gò:-rò]]^{L}-bírɛ́ is nominalization from collocation pàrá gǒ: 'autumn go out', i.e. 'be harvest time'; kó ^{H}sɔ́: from sɔ̌: '(abstract) thing, matter, issue', {H}-toned after nonhuman "possessor" kó as discourse-definite marker §4.4.1.3; purposive gê: (postposition after NP §8.3.1.1) and ^{L}gè: (clause-final §17.6.1.1); tí→ and lá: are interchangeable adverbs 'first'; 'before' clause with perfective negative §15.4.1.1; ^{L}bì-jì one of several tone-dropped clause-final verbs, from bìrɛ́ 'do']

(705) A: *[[lɛ̌ dɔ̀:-lí] [kó kɔ́-ǹ dè]]*
[[slashing arrive-PfvNeg] [NonhSbj be.NonS-while.DS if]]
[ɛ́mɛ́ bàrà^{L}-bírɛ́ lá: ^{L}bì-jì],
[1PlSbj outback^{L}-work(n) first ^{L}do-Ipfv.PlSbj],
bàrà^{L}-bírɛ́ jìwè^{L}-[tɛ̀:r-ú] bè→,
outback^{L}-work(n) thorn^{L}-[burn-VblN] and,
gìwɛ̀^{L} dègé-dègé→,
bush^{L} small-small,
ɲù:^{L} -[kè:n-ú] ^{L}gà:nà-ɲù,
millet^{L}-[be.good-VblN] ^{L}prevent-Ipfv.Rel
tɛ́-tɛ́rɛ́ tɛ́:rɛ́-jú bè→,
chop-chop burn-Ipfv and,
[ɔ̀:rɔ̀^{L} dág-à→ ɲù:^{L}-lɛ̌ ɲùnú-gó-jú$^{+H}$]
[trash^{L} a.little millet^{L}-slashing be.ruined-Caus-Ipfv.Rel^{+H}]
tɛ́:rɛ́-jú bè→,
burn-Ipfv and,
[[yɔ́: ^{L}tɔ̀gù ^{L}dày^{n}] ɛ́mɛ́ bǐ-ǹ dè]
[[NearDist ^{L}type ^{L}limit] 1PlSbj do-while.DS if]
[pá→ ^{L}yè-∅ dè],
[until ^{L}go-Pfv if]
ɛ́mɛ́ àr^{n}ú ^{L}dɔ̀m-ɛ̀:-ɲù
1PlSbj rain(n) ^{L}wait.for-MP-Ipfv

A: Before planting (time) has arrived, we do buswork (clearing fields) first. (In) bush-work, there is burning thorns (=thorny branches), there is chopping and burning the small bushes that prevent millet from turning out well, there is burning the trash (e.g. remains of last year's stems) that damages millet-planting. We do all those sorts of thing until (the time when) we are waiting for the rain.

[jìwè-[tɛ̀:r-ú] and ɲù:-[kè:n-ú] verbal-noun compounds with incorporated object §5.1.4; conjoined series with bè 'and' §7.1.3; tɛ́-tɛ́rɛ́ reduced from iterated /tɛ́rɛ́-tɛ́rɛ́/; subject relative clauses with tone-dropped heads gìwɛ̀^{L} and ɔ̀:rɔ̀^{L} and with imperfective verbs ^{L}gà:nà-ɲù and ɲùnú-gó-jú$^{+H}$ §14.1.9.2; tɔ̀gú 'kind, type' tone-dropped to ^{L}tɔ̀gù

after demonstrative yɔ́: as possessor §4.4.1.2; ^{L}dày^{n} 'limit' meanng 'all' §6.6.2; bǐ-ǹ dè from bìrɛ́ 'do', for -ǹ dè see §5.2.2.9]

(706) B: *bon,* *nɛ́:,* *àr^{n}ú* *kà:ná,* *àr^{n}ú* *tí→* *lɔ́w-ɛ̀* *dè,*
good, now, rain(n) now, rain(n) first rain.fall-Pfv if,
é *íyé=ǹ* *ìŋé* ^{L}*bì-jì*
2PlSbj again what? ^{L}do-Ipfv.PlSbj
B: Okay. Now the rain now, when rain first falls, what do you-Pl do now?

(707) A: *àr^{n}ú* *tí→* *lɔ́w-ɛ̀* *dè,* *ɛ́mɛ́* *lɛ̀-lɛ́:-jú,*
rain(n) first rain.fall-Pfv if, 1PlSbj Rdp-slash-Ipfv,
lɛ̀^{L}*-kɔ̌*^{n} *ɲàŋá-sɛ̂*^{n} *dè,*
slashing^{L}-pick.hoe take-Pfv.PlSbj if,
ɲù:^{L}*-sǎ* *sɔ́:-sɛ̂*^{n} *dè,*
millet^{L}-seed scoop-Pfv.PlSbj if,
[bàrá ^{L}*yè]* *[wàgà-tùmò*^{L} *pɛ̌*^{n}*]* *lɛ́:-sɛ̂*^{n} *dè,*
[outback ^{L}go] [ridge^{L} old] slash-Pfv.PlSbj if,
[ɲú: *kún-ɛ̀:-sɛ̂*^{n} *dè]* *[ɛ́mɛ́* *nám-ɛ̀* *dè],*
[millet put-Pfv-PlSbj if] [1PlSbj step.on-Pfv if]
ɛ́mɛ́ *wárú* ^{L}*dɔ̀m-ɛ̀:-ɲù,*
1Pl farming ^{L}wait.for-MP-Ipfv,
á:r^{n}*ɛ́:* *yɔ̂-ŋ* *bì-téŋè*
formerly like.that do-Prog.PlSbj

A: When rain first falls, we plant. (We) take the pick-hoe, scoop up some millet seed, go to the bush (=the fields) and make slashes (with the pick-hoe) (on) the old (plowing) ridges. (We) put (=drop) the millet (seeds, in the slashes), we step (on the seeds), we (then) wait for the farming work (=weeding). (They) did like that in the old days.

[lɛ̀-lɛ́:-ju reduplicated imperfective §10.2.2.2; dè 'if/when' used repeatedly to link clauses into a chronological sequence; perfective plural-subject suffix -sɛ̂^{n} *marks the subject of these clauses as plural, but only at the end does 1Pl ɛ́mɛ́ appear overtly (since the discussion is about general farming techniques there is much switching between 1Pl, 2Pl, and 3Pl and many ambiguous passages); lɛ̀*^{L}*-kɔ̌*^{n} *and ɲù:*^{L}*-sǎ are typical noun-noun compounds with tone-dropped initial §5.1.3; bàrá* ^{L}*yè] with L-toned* ^{L}*yè 'go' medially in a verb chain §15.1.6.1]*

(708) B: *maintenant,* *kó,*
now, Nonh,
ɲû:$^{+L}$ *[hâl* *é* *lɛ́:]* *[é* *kɛ̂:*^{n}*],*
millet.Def^{+L} [even 2PlSbj slash] [2PlSbj when.DS],
[[[ɲà^{L} *gàmá]* *tɔ́-ɛ̀]*
[[[place^{L} some] sprout-Pfv]
[[ɲà^{L} *gàmá]* *tɔ̀:-lí]* *dè]*
[[place^{L} some] sprout-PfvNeg if]
[é *nɛ́:]* *[kô*$^{+L}$ *nɛ́:]* *ɲǎŋ-ɲǎŋ* ^{L}*bì-jì]*
[2Pl now] [Nonh.Topic^{+L} now] how?-how? ^{L}do-Ipfv.PlSbj],

B: Now, then, the millet, even if you-Pl have planted (it), if it has sprouted in some spots and it has not sprouted in some (other) spots, how and how (=what things) do you-Pl now do (to) that?

[kɛ̂:^{n} *in different-subject subordinated clause §15.2.2.7; parallel clauses with gàmá 'some' §6.3.2; kô*$^{+L}$ *with falling tone as topic §19.1.1]*

A: *[gàmá tɔ́-ɛ̀] [gàmá tɔ̀:-lí] dè,*
[some sprout-Pfv] [some sprout-PfvNeg] if,
ɛ́mɛ́ íyé=ǹ ɲù:^{L}*-sǎ sɔ́:-sɛ̂*^{n} *dè,*
1PlSbj again millet^{L}-seed scoop-Pfv.PlSbj if,
[ɲá ɛ́n-ì-ì] táŋá ^{L}*yè-∅ dè,*
[land get.wet-MP-Pfv] become ^{L}go-Pfv if,
[ɛ́mɛ́ jɔ́ŋɔ́r^{n}*ɔ́* ^{L}*gì-jì]*
[1PlSbj resowing ^{L}say-Ipfv.PlSbj]

A: If some has sprouted and some has not sprouted, we scoop up some millet seed again, (then) if the earth happens to get soaked (by another rain), (there is) what we call "re-sowing" (*jɔ́ŋɔ́r*^{n}*ɔ́*).

[… táŋá yè-∅ dè 'if it happens that …' §16.1.3]

(709) *[ɛ́mɛ́ yé-∅ dè] [[ɲú:∴ ɲú:∴] gân],*
[1PlSbj go-Pfv if] [[millet.& millet.&] between]
ɛ́mɛ́ lɛ̀^{L}*-ùr*^{n}*ú tɔ́:-tɔ́:-sɛ̂*^{n} *dè,*
1PlSbj slashing^{L}-hole slash-slash-Pfv.PlSbj if,
[ɲú: tú-túrú námá-námá-sɛ̂^{n} *dè],*
[millet one-one step.on-step.on-Pfv.PlSbj if]
lígé-m̀ ^{L}*dàgà-jù*
be.complete-Caus ^{L}leave-Ipfv

We go (to the fields), slash (more) holes (with the pick-hoe) in between the millet plants (that have sprouted), step on the millet (seeds, dropped into the slashes) one by one, complete (the rows of millet, i.e. filling the gaps), and leave (it).

[NP conjunction expressed by dying-quail intonation §7.1.1; tú-túrú contracted distributive iteration of túrú 'one' §4.6.1.6]

(710) B: *maintenant, lɛ̌* ^{L}*kè,*
now, slashing ^{L}Top,
[lɛ̀^{L}*-kɔ̌*^{n} *bè] lɛ̌=lò dè, est-ce que*
[slashing^{L}-pickhoe with] slashing=it.is.not if, Q
[[lɛ̀^{L} *pèré] bà*^{nL} *lɛ́:-jú*$^{+H}$*] yɔ́ kɔ̀*
[[slashing^{L} other] manner^{L} slash-Ipfv.Rel^{+H}] Exist be.NonhSbj

B: Now, as for planting (i.e. slashing the earth), if not (=aside from) with a pick-hoe, is there any other way to plant?

(711) A: *[[lɛ̀*^{L}*-kɔ̌*^{n} *té→] bè], lɛ́:=lò dè,*
[[slashing^{L}-pick.hoe exactly] with], slash=it.is.not if,
[[ɔ̀jɔ̀^{L} *pèré] bè] lɛ́:-jú]*
[[thing^{L} other] with] slash-Ipfv]
<ɛ́mɛ́—> ɛ́mɛ́=nì [kó ^{HL}*dó:rù] gà-gárà,*
1Pl=Dat [NonhPoss ^{HL}fatigue] Rdp-pass.Stat,
lɛ̀^{L}*-kɔ̌*^{n} *ígé-ní: lɛ́:-jú sógò,*
slashing^{L}-pick.hoe stand-while.SS slash-Ipfv because,
[[kó bè] ^{HL}*ná:r*^{n}*à]*
[[Nonh with] ^{HL}easy]
[ɛ́mɛ́ [lɛ̀^{L}*-kɔ̌*^{n} *bè] lɛ́:-jú]*
[1PlSbj [slashing^{L}-pick.hoe with] slash-Ipfv

B: *nɛ́: pèré yɔ́ kɔ̀*
now other Exist be.NonhSbj

A: If not with a pick-hoe specifically, planting with something else, it is very tiring for us. Because (with) a pick-hoe, one plants standing up. (Planting) is easier with that, (so) we plant with a pick-hoe.

B: Now, is there another (way)?

[the pick-hoe has a long wooden shaft so the farmer can make a light slash in the earth without having to bend over; té→ 'exactly' §8.4.3.2; "its fatigue passes (=is excessive) for us (dative)"; -ní: while' for same subject §15.2.1.4; sógò 'because' §17.6.5; {HL} overlay on adjective in a comparative §12.1.2.1]

(712) A: *pèré, [gàmà*^{L} ^{H}*ná], [dág-à→ kɔ̂ dè],*
other, [some^{L} ^{H}person], [small-Adv be.NonhSbj if]
[ú gǎ-ní: dè]
[2SgSbj pass.by-while.SS if]
[gàmá [kúwɔ́ bè] tógùj-ì dè] námá-jô:,
[some [foot with] turn.over-Pfv if] step.on-Ipfv,
[gàmá [jɔ̀ŋùr^{n}*ú bè] tɔ́-ɛ̀ dè]*
[some [hoe with] slash-Pfv if]
námá-ɲú [kí-ì ^{L}*bɛ̀-jù],*
step.on-Ipfv [be.NonhSbj-Pfv ^{L}get-Ipfv],
kó dág-à→ kɔ̂ dè]
NonhSbj small-Adv be.NonhSbj if]

A: Other than that, some people, if it (=field) is small, as you-Sg pass by (in the field), (you-Sg) could turn over some (spots of in the field) with the foot and (after sowing more seeds) step on (them). You can possibly slash some (spots) with a short-handled pick-hoe and step on (them), if it (=field) is small.

[dág-à→ kɔ̂ adjectival predicate §11.4.1.2; gǎ-ní: same-subject 'while' subordinator §15.2.1.4 with gàrá 'pass by'; -jô: variant of imperfective -jú in paired-clause construction §10.2.2.3; kí-ì bɛ̀-jù 'it may be' §11.2.2.4]

(713) B: *[yɔ́: sâ:*^{n}*] lɛ̌=ý quoi*
[NearDist all] slashing=it.is
A: *< yɔ́:— > yɔ́: lɛ̌=ý,*
NearDist slashing=it.is,
lɛ̌ sɔ́^{n}*-sɔ́*^{n} *yǎ:-táŋà kɔ̀*
slashing various go-Prog NonhSbj

B: All that (=those methods) are planting.

A: Those are planting. The various (methods of) planting are going (=being described in turn).

(714) B: *lɛ̌ est-ce que, gàmá wàgà*^{L}*-túmó ɔ̀jɔ́ bìr-ɛ̂ dè,*
slashing Q, some ridge thing do-Pfv if,
< kúwɔ́— > [kúwɔ́ bè] tógùj-ì dè,
[foot with] turn.over-Pfv if,
[bé lɛ́:-jù$^{+L}$*] [[kó kà:*^{n}*] kɔ̀:-rɔ́], …*
[3PlSbj slash-Ipfv.Rel^{+L}] [[Nonh also] be.NonhSbj-Neg], …
A: *kó kà:*^{n}*—*
Nonh also
B: *… ùrɔ̀-bɔ́n gí-ɛ̀: mà*
… plowed.field say-Pfv.PlSbj Q

A: *[kó kà:^{n}] yɔ́ kɔ̀*
[Nonh also] Exist be.NonhSbj
B: *ɔ́^{n}, [kó nɛ́:] ɲăŋ-ɲăŋ ^{L}bì-jì*
yes, [Nonh now] how?-how? ^{L}do-Ipfv.PlSbj
B: Planting. When (they) have done the thing (=turned over) some (spots) in the (plowed) ridges, when (they) have turned over (some earth), (the way) they will plant. Doesn't that too exist? …
A: That too—
B: … they call (them) plowed fields?
A: That too exists.
B: Yes, how do (they) do that now?
[bé lɛ́:-jù headless imperfective adverbial relative §15.5.3]

(715) A: *[kó kà:^{n}] ùrɔ̀^{L}-bɔ́n, [wárú ^{L}gì:^{n}],*
[Nonh also] plowed.field, [farming ^{L}like],
jɔ̀^{n}túrú kún-ɛ̀:-sɛ̂^{n} dè, wàrá-sɛ̂^{n} dè,
donkey put-Pfv-PlSbj if, do.farming-Pfv.PlSbj if,
[wàgà-tùmò^{L} kàná] nɛ́: jɔ̀rù-jă ^{L}gì-jì,
[ridge^{L} new] now (quoted) ^{L}say-Ipfv.PlSbj
[kó ^{H}bɔ̂$^{n+H}$] nɛ́: à^{n}sà:rà^{L}-[jɔ̀rù^{L}-jă] ^{L}gì-jì,
[NonhPoss ^{H}name.Def^{+H}] now white.person^{L}-… ^{L}say-Ipfv.PlSbj,
ú nɛ́:, [kúwɔ́ bè] tógùj-ì námá-jô:,
2Sg now, [foot with] turn.over-Pfv step.on-Ipfv,
A: That too, plowed fields (plowed before sowing), like cultivating (=weeding). (They) put a donkey (in the field), (they) do farm work (=make furrows with plow or daba), (they) call it "preparing the field for planting" (*jɔ̀rù-jă*). Its name now, (they) call it "white person's preparing the field for planting" (=plowing). Now you-Sg (might) turn over (some earth) with the foot (and) step on (it).
[jɔ̀rù^{L}-jă compound verbal noun based on noun-verb collocation jɔ̀rú jă: 'prepare field for planting', i.e. with ridges (or rows of mounds) and furrows, made by hand or with a plow]

(716) *[[gǎm ^{H}ná] [lɛ̀^{L}-kɔ̌^{n} bè]*
[[some ^{H}person] [slashing-pick.hoe with]
[kó kû^{n}] ìg-í-ì dè]
[Nonh on] stand-MP-Pfv if]
[wàgà-tùmò^{L} kàná] lɛ́-ɛ̀ dè,
[ridge^{L} new] slash-Pfv if,
námá-ɲú kà:^{n} íyé=ǹ yɔ́ kɔ̀
step.on-Ipfv also again Exist be.NonhSbj
Some people stand up on that (=ridges) with the pick-hoe. They slash (with the pick-hoe) (in) the new ridge (formed by the plow) and step on (it), that too exists.

(717) B: *kô$^{+L}$, [nùmɔ́ bè] bìr-ɛ́:-jú mà→,*
Nonh.Topic^{+L}, [hand with] do-MP-Ipfv Q,
ou bien [sàrú bè] ɔ̀jɔ́ ^{L}bì-jì—,
or [plow(n) with] thing ^{L}do-Ipfv.PlSbj—,
[sàrú bè] ^{L}dàn-gà-jù
[plow(n) with] ^{L}be.fixed-Caus-Ipfv

B: So, is it (=can it be) done by hand, or do they do the thing with a plow—do they carry it out with a plow?

[mediopassive bìr-ɛ́:-jú 'be done' is often translatable as 'be possible'; sàrú ~ sɛ̀rí 'plow' < Fr charrue]

(718) A: *á:r^{n}ɛ́: [gíré tɔ̀] [sɛ̀rí bè],*
formerly [before around] [plow(n) with],
[sɛ̀rí yè-lí] [[kó ^{H}kɔ́] bè],
[plow(n) come-PfvNeg] [[NonhSbj ^{H}be.NonhSbj.Rel] with],
[nùmɔ́ bè] [wàgà-tùmò dágá^{H}-^{L}dàgà-^{L}dàgà]
[hand with] [ridge small^{H}-^{L}small-^{L}small]
màŋá-sɛ̂^{n} dè,
shape(v.)-Pfv.PlSbj if,
[kó kû^{n}] ɲú: námá-téŋè,
[Nonh on] millet step.on-Prog.PlSbj,

A: In the old days, previously, with a plow— Before the plow came (=was introduced), (they) used to shape small round mounds (in rows) by hand and step on (seeds) on those (=mounds).

[gíré tɔ̀ 'forward, ahead' here means 'before, previously', for tɔ̀ see §8.2.14; 'before ...' construction with perfective negative, kɔ́ 'it is' (in relative-clause form), and instrumental bè; dágá^{H}-^{L}dàgà-^{L}dàgà iterated adjective §4.5.2]

(719) *kà:ná [sɛ̀rí yɛ̀r-ɛ́:] [kó kɛ̂:^{n} mà],*
now [plow(n) come-and.SS] [NonhSbj when.DS and.then]
[sɛ̀rí bè] kárá-sɛ̂^{n} dè,
[plow(n) with] rip-Pfv.PlSbj if,
íyé=ǹ ɲú: [kó kû^{n}] kú:^{n} ^{L}nàmà-ɲù
again millet [Nonh on] like.this ^{L}step.on-Ipfv

Now after (=since) the plow came, (they) rip up (the earth) with the plow, (then) again (they) (drop seeds and) step on that in that way (=as described before).

(720) B: *yɔ́: wɔ̀^{n} nɛ́:, gù^{n}sá^{n} bîn—,*
NearDist Top now, full.outback in—,
kó [gù^{n}sá^{n} bîn] sǎy mà→, ou bien hâl
Nonh [full.outback in] only Q, or even
[wòrù^{L} -bónó bîn] kà:^{n} ɔ̀jɔ́ ^{L}bì-jì
[field^{L}-fallow in] also thing ^{L}do-Ipfv.PlSbj

B: (As for) that now, out in the bush—, (is) that (method) only out in the bush? Or do (they) also do the thing in fields that have lain fallow (for one to three years)?

[gù^{n}sá^{n} includes the uncultivated outback, but also long-abandoned fields that have gone back to nature and/or have been grazed by livestock, in any event more remote than bàrá, which can denote any area away from villages including cultivated fields; noun wòrù^{L}-bónó, cf. verb bònó 'hoe (earth) into a small mound (with the daba)'

(721) A: *[gù^{n}sá^{n} bîn] kárá bɛ̀-mà-jô:→,*
[full.outback in] rip get-Caus-Ipfv,
[wòrù^{L}-[pù-pùró] bîn] kárá bɛ̀-mà-jô:→,
[field^{L}-[Rdp-fallow] in] rip get-Caus-Ipfv,
[ɲú: dág-à→ kó ^{HL}ɔ́gù] ^{L}gɛ̀:,
[millet a.little NonhSbj ^{HL}fast] ^{L}for,

[kó ^{L}*gɛ̀:]* *bǐ-téŋè,* *ɲú:* *kó* *gá:rá* *kà:*^{n}*,*
[Nonh ^{L}for] do-Prog.PlSbj, millet NonhObj more also,
nɛ́: ^{L}*kè:nè-jù*
now ^{L}produce-Ipfv

A: Out in the bush (you) could let it rip (=plow), in fields that have laid fallow (for one to three years) you could let it rip, so that millet will be slightly faster (to ripen). For that reason (=that's why) they are doing it. The millet, it will yield more now.

[bɛ̀-mà- from bɛ̌-m̀, causative of bɛ̀rɛ́ ; wòrù ^{L}*-[pù-pùró] is synonymous to wòrù*^{L}*-bónó (see just above);* ^{HL}*ɔ́gù* ^{L}*gɛ̀: purposive clause with {HL}-toned predicative comparative adjective* ^{HL}*ɔ́gù 'be faster'; gá:rá 'more' §12.1.2]*

(722) B: *[é* *nɛ́:]* *[lɛ̌* *kû*^{n}*]* *pèré*
[2Pl now] [slashing on] otherwise
[[sɔ̀: *pèrè]*^{L} *tíŋɛ́* *é* ^{L}*bɛ̀-jù]*
[[thing other]^{L} speak 2PlSbj ^{L}get-Ipfv.Rel]
yɔ́ *kɔ̀* *mà,* *[[yɔ́:* *nà]* *sâ:*^{n}*]* *gàr-ɛ̂* *dè*
Exist be.NonhSbj Q, [[NearDist Pl] all] pass.by-Pfv if

B: You-Pl now, concerning planting, is there additionally another topic that you-Pl can talk (about), aside from all those things (already said)?

[object relative clause with tone-dropped adjective in head NP, see sɔ̀:^{L} *pèré 'another thing' in the following segment below; 'aside from X' is phrased as 'if/when X has passed by'; bɛ̀rɛ́ means 'get, obtain' with NP complement but 'be able to, can' with a preceding chained verb §17.5.1]*

(723) A: *sɔ̀:*^{L} *pèré,* *[sɔ̀:*^{L} *kàná]* *á:r*^{n}*ɛ́:* *ɛ́mɛ́* *ínɛ́* *gà→,*
thing^{L} other, [thing^{L} new] formerly 1PlSbj not.know but,
kà:ná *ɛ́mɛ́,* *pɔ̀ŋɔ́* *gí:*^{n}*,*
now 1Pl, fonio like,
ɲá *bùgúj-ɛ̀:-sɛ̂*^{n} *dè,*
land turn.over-Pfv-PlSbj if,
[kó *bîn]* *[lɛ̌* *lɛ́:-jú* *kà:*^{n}*]* *yɛ́* *bì-téŋè*
[Nonh in] [slashing slash-Ipfv also] Exist do-Prog.PlSbj

A: Another topic, a new topic. In the past we didn't know, but now, like (=for example) fonio, they turn over the earth (all around, with a daba), they also in fact practice planting (fonio seeds) on that (disturbed earth surface).

[fonio is a cultivated grain, Digitaria exilis; bùgújù 'turn over (earth, with daba, to level it)]

(724) B: *[kô*$^{+L}$ *nɛ́:]* *ìŋé=ỳ* *[[kó* ^{H}*nɛ́w*^{n}*ɛ́]* *yǎ:-kɔ̀=ỳ*
[Nonh.Topic^{+L} now] what?=it.is [NonhPoss ^{H}value] which?=it.is
A: *kô*$^{+L}$ *ɲú:* *kó* *gá:rá* *ké:né-jú,*
Nonh.Topic^{+L} millet NonhSbj more produce-Ipfv
[[kó ^{L}*gɛ̀:]* *bǐ-téŋè]*
[[Nonh ^{L}for] do-Prog.PlSbj]
[ɲú: *kó* *gá:rá* *ké:né-jú]*
[millet Nonh more produce-Ipfv]

B: That way, what is it? Which (=what) is its usefulness?
A: That way it will yield more millet. That's why they do it. It will yield more millet.

(725) B: *[yɔ́:* *sâ:^{n}* *fú:]* *lɛ̌=ỳ*
[NearDist all all] slashing=it.is
A: *[yɔ́:* *sâ:^{n}* *fú:]* *lɛ̌=ỳ*
[NearDist all all] slashing=it.is
B: *[yɔ́:* *^{H}dógó* *ní:]* *[lɛ̀^{L}* *pèré]* *kɔ̀:-rɔ́*
[NearDist ^{H}rear after] [slashing^{L} other] be.NonhSbj-Neg
A: *[yɔ́:* *^{H}dógó* *ní:]* *[lɛ̀^{L}* *pèré],* *lɛ̀^{L}* *pèré,*
[NearDist ^{H}rear after] [slashing^{L} other], slashing^{L} other
ɛ́mɛ́ *[yɔ́:* *^{H}dógó* *ní:]* *[lɛ̀^{L}* *pèré],*
1PlSbj [NearDist ^{H}rear after] [slashing^{L} other],
pèré *jùgɔ̂:-rè*
other know-IpfvNeg.PlSbj
B: *[yɔ́:* *nà* *wɔ̀^{n}]* *nɛ́:* *kà:ná,*
[NearDist Pl Top] now now,
[é *[[yɔ́:* *nà]* *sâ:^{n}* *fú:]* *bìrɛ́-sɛ̂^{n}*
[2Pl [[NearDist Pl] all all] do-Pfv.PlSbj
A: *é→*
yes

B: All those are (methods of) planting?

A: All those are (methods of) planting.

B: After those, there is no other (method of) planting?

A: After those, another (method of planting), we don't know any other (method of) planting after those (already mentioned).

B: As for those now, you-Pl have done all those (things)?

A: Yes.

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  - in a few cognate nominals, §11.1.5.2
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- *ágá tɔ̀*, ‘about, cncerning’, §8.2.14
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- *àn-*, in a few cognate nominals, §11.1.5.2
- *à^n-* ‘man’ (in one compound), §5.1.8
- *àN-*, frozen initial in a few nouns, §4.1.7
- *à:ŋá*, ‘how much/many?’, §13.2.7
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  - *à^n-* in one compound, §5.1.8
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- *gân*, ‘between’, §8.2.11
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- *gàrá*, ‘pass by’
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Abbreviations and symbols

Abbreviations

Acc	accusative (in 1SgAcc), §6.7)
Adj	adjective
Adv	adverbial (especially derived from adjective)
Agent	agentive nominal
Ant	anterior (subordinated clause)
ATR	advanced tongue root (vowel feature)
C	consonant (in e.g. CvCv)
Caus	causative, §9.2
Char	characteristic (nominal derivative, §4.2.3)
Dat	dative, §8.1.1
Def	definite, §4.4.1.1
Dem	demonstrative
Det	determiner (demonstrative or definite)
DF	discourse-functional elements
Dimin	diminutive
Dist	distant (in NearDist and FarDist)
DS	different subject (subordinator), §15.2.1.2, §15.2.2.7-10
EA	expressive adverbial, §8.4.6, §4.5.3
Emph	emphatic (clause-final particle)
Exist	existential particle, §11.2.2.1
ExpPf	experiential perfect, §10.2.1.2
Fact	factitive (‘cause to become’ with adjective), §9.5
Foc	focus
Fut	(delayed) future, §10.2.2.4
H	high (tone)
Hort	hortative, §10.6.2
Hum	human
Ipfv	imperfective
Imprt	imperative
Inch	inchoative (‘become’ with adjective), §9.5
Inst	instrumental, §8.1.2
Iter	iteration (full reduplication)
L	low (tone)
Loc	locative
Logo	logophoric
MP	mediopassive
N	noun
(n)	noun (in interlinearl glosses)
Neg	negative
Nom	nominalization
Nonh	nonhuman
NP	noun phrase
Num	numeral
Obj	object
Poss	possessor
Pass	passive
Pfv	perfective
Pf	perfect (in ExpPf or RecPf)
Pl	plural
Poss	possessive (*kè*), §6.2.3
PP	postpositional phrase
Ppl	participle (in Ppl.Pfv, in relative clauses)
Prog	progressive
Proh	prohibitive (negative imperative)
Pron	pronoun
Prox	proximate
Proh	prohibitive
Purp	purposive
Q	question
QTop	interrogative topic (‘what about X?’), §19.1.4
Quot	quotative particle, §17.1.3

QuotSbj	quotative subject particle, §17.1.4
Rdp	reduplication
Recip	reciprocal, §18.3
RecPf	recent perfect, §10.2.1.3
Refl	reflexive, §18.1
Rel	relative clause (verb participle)
Rev	reversive (verb derivation, §9.1
Sbj	subject
Sg	singular
SS	same subject (subordinator), §15.2.1.3-4, §15.2.2.1-3
Stat	stative, §10.4 (derived), §11.2-4 (lexical)
Top	topic
Tr	transitive (verb stem, paired with mediopassive), §9.3
V	verb
(v)	verb (in interlinear glosses)
v	vowel (in e.g. CvCv)
VblN	verbal noun
VP	verb phrase

Symbols

*	reconstructed
#	ungrammatical, unacceptable, unattested
á, à, â, ǎ, ǎ̂	tones on vowels (or syllables), §3.7
x̄, x̀, x́, x̂, ^{p}x	tone changes on stem in compounds, chapter 5
/…/	a) lexical tone melody, e.g. /LH/, /H/ b) underlying or lexical representation, e.g. /gàrá/
{…}	a) tone overlay, e.g. {HL}, {H}, {L} b) enclosing any set, e.g. {*u a i*}
[…]	a) phonetic (IPA) representation, e.g. [bǔ:]
ꜜ	downstep
[…]^{L}	{L} tone overlay controlled by an element to the right, §6.1.4
[…]$^{L+H}$	like preceding but with extra H-tone on final syllable/mora
^{HL}[…], ^{H}[…]	{H} or {HL} tone overlay controlled by a possessor to the left, §6.2.1
^{L}[…]	{L} on demonstrative or numeral in certain combinations, §3.7.3.5, §4.6.1.4
→	"intonational" prolongation of final vowel or sonorant, §3.8.3
∴	dying-quail terminal intonation effect, §3.8.4
=	clitic boundary, §3.6
&	conjunction (in interlinears, e.g. X.& Y.& 'X and Y')

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