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Abbreviations

Adj	Adjective	Neg	Negative
adv	adverb(ial)	Nonh	Nonhuman
AN	aspect-negation (suffix)	NP	noun phrase
C	consonant	O	object
Caus	Causative	P	possessor (e.g. 3SgP)
Char	Characteristic	Pass	Passive
cpd	compound	Perf	Perfective
Dat	Dative	Pl	Plural
Def	Definite	PP	postpositional phrase
Dem	Demonstrative	Poss	Possessor
Emph	Emphatic	Ppl	Participle
ExpPf	Experiential Perfect	Q	question
F	falling (tone)	Quot	Quotative
Fact	Factitive	R	rising (tone)
Foc	Focus	Rdp	reduplication
H	high (tone)	Recip	Reciprocal
Habit	Habitual	RecPf	Recent Perfect
HL	high-low (tones)	Refl	Reflexive
Hort	Hortative	Reslt	Resultative
Imprt	Imperative	Rev	Reversive
Impf	Imperfective	S	subject (e.g. 3SgS)
Inch	Inchoative	Sg	Singular
Intens	Intensifier	Top	Topic
L	low (tone)	V	vowel; verb
Loc	Locative	VbIN	Verbal Noun
Logo	Logophoric	VP	verb phrase
N	noun		

1 Introduction

1.1 Dogon languages

Dogon is a family of languages spoken principally in eastern Mali, though some Dogon groups have spread across the border into Burkina Faso. As a whole, the family belongs to the vast Niger-Congo phylum, but its precise position relative to other Niger-Congo families (e.g. Mande, Gur) is very unclear at this point. The internal structure of the Dogon family is also very unclear, as is the number of mutually unintelligible languages it contains.

The French colonial administration, having little interest in small native languages, favored (macro-)ethnic over (precise) linguistic classification, hence “Dogon” rather than e.g. “Jamsay,” and labeled linguistic varieties within each such macro-ethnicity as “dialects,” a tradition maintained even in current Francophone scholarship. For similar reasons, (macro-)ethnic classification suits African governments fine. The official language policy in Mali, for example, is to equate “language” with (macro-)ethnicity, select the linguistic variety spoken in a particular focal community as standard, develop pedagogical materials in this variety, and teach it as “mother tongue” to schoolchildren and interested adults everywhere who belong to this ethnicity. In the case of Dogon, the Toro-So variety of the Sanga area was chosen as standard Dogon and is the basis of government-approved literacy efforts in the region.

Using the test of mutual unintelligibility as diagnostic, on the other hand, there are clearly many distinct Dogon languages in Mali. We do not yet have Dogon-wide data in a form that would permit demarcation of language boundaries and accurate genetic subgroupings. However, having surveyed the varieties spoken in the northern and northeastern parts of Dogon country, I can report the following as distinct languages, using the towns of Dountza and Boni (primarily Fulfulde-speaking) and Koro (Dogon and Mossi) as geographical reference points:

1. Jamsay (aka Diamsay), see below;
2. Beni, spoken in Beni and Gamni south of Dianwely Maoudé, and in Kumboy village hugging Fombori mountain between Beni and Douentza;
3. Walo, close genetically to Beni, spoken in Walo at the western end of the long Gandamiya inselberg (on the opposite side of which is Kikara, where the Songhay language Tondi Songway Kiini is spoken);
4. Nanga (naŋa), spoken in a village cluster including Anda, Soroni, Namakoro, Wakara, and Kono southwest of Beni and broadly east of the

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Tommo-So (Tombo-So) speaking zone that begins at Kasa and extends to Bandiagara;

5. Tabi-Sarinyere, spoken by the people sometimes called Tandam, east of the town Boni (which is just off the highway, between Douentza and Hombori), in several villages ringing the widely separated inselbergs of Tabi and Sarinyere, plus a few small villages and one substantial one (Koyo) on the two inselbergs framing Boni itself;

6. Najamba (= Bondu), spoken in a cluster of villages west and southwest of Douentza including Koubewel, Adia.

After the initial failure of government-supported instruction in Toro-So in Dogon villages of the Douentza-Boni zone, local groups have launched literacy programs in Jamsay and Bondu and these are now being taught in primary schools. Aside from its own mother-tongue villages, Jamsay is being taught in the Tabi area (whose people have long known Jamsay as a second language, since Mondoro is not far away). The children of Beni have been attending school in Jamsay-speaking Dianwely Maoudé, where Jamsay is of course used, pending the construction of its own school. Jamsay is slowly acquiring the status of a locally dominant “standard” Dogon in the Douentza-Boni region.

1.2 Jamsay language

In terms of population, Jamsay is the largest of all Dogon languages, with over 30,000 speakers. It is spoken in a vast triangular zone whose apexes are: 1) the area around Douentza (N 15° 00' latitude by W 2° 56' longitude), including Jamsay-speaking villages Dianwely Kessel, Dianwely Maoudé, Petaka, and Boumbam; 2) the area around Mondoro (N 14° 00' by W 1° 58') near the Burkina border east of Tabi mountain; and 3) the town of Koro (N 14° 00'=4' by W 3° 4'), also near the Burkina border but farther southwest. The Gourou dialect is spoken in a few villages near Koro, such as Kiri (on the road from Koro to Burkina). Aside from Gourou, dialectal variation within Jamsay has not been studied seriously. Initial impressions are that the dialectal variation excluding Gourou is not great. However, my Douentza-area informants spoke of distinctive local dialects such as that of Pergué (N 14° 48' by W 2° 59'), and a full survey including the Mondoro and Koro areas is desirable. My Jamsay data are chiefly from Dianwely Kessel, with some complementary lexical data on Gourou from Kiri.

The Jamsay recognize that they are newcomers, in comparison to the older Dogon in the zone, who include not only speakers of the other languages mentioned above but also some other persons who have now been linguistically Jamsay-ized while remaining conscious of their status as “owners” of the country. Prior to the Jamsay migration of perhaps a few hundred years ago,

Dogon villages were almost entirely confined to the inselbergs (tectonic mountains, often rising abruptly from the plains in the form of sheer cliffs, either cone-shaped or extending as ridges). The villages were either on the shoulders of the cliffs, or on the summits of the inselbergs—locations blessed by water sources (mountain springs) but also favored by military considerations (defences against marauding Tuaregs, Fulbe, and slave-traders). These Dogon would farm some fields in the plains, generally not far from the inselbergs, as well as some fields on the summits and some vegetable gardening near water sources. The Jamsay were the first Dogon in the area to build villages in the unprotected flat plains between the often widely separated inselbergs, and the first to fully develop fields in the plains. To defend themselves, they developed a culture of male bravado that is still in evidence today under more benign external conditions. They do not fit the stereotype of the helpless peasant, ever ready to pay tribute to foreign warlords to secure a modicum of peace.

Among Jamsay, to inquire discreetly whether a stranger (within hearing distance) understands Jamsay, the coded question is *súgù gǎñá=kǎ̀ mà̀*, literally “does the francolin (=partridge) scratch the ground?”

1.3 Environment

As noted above, much of the region is defined physically by flat plains punctuated by inselbergs. The Jamsay proper are the prototypical people of the plains, and are quite conscious of a broad cultural gap between them and the local “mountaineers” (*tǎ̀rǎ̀-m*), though some of the latter now speak Jamsay. The plains/mountain division is reinforced by periodic disputes over ownership of fields. The mountain people claim ancient ownership of the fields in the plains now farmed by the Jamsay proper, while the Jamsay point out that they were the first to clear these fields and have now farmed them for many generations. These disputes have taken on a sharper edge in recent decades, as climatic changes and desertification have cut the annual rainfall in half, making control of the most productive fields all the more critical.

Most of the Dogon (and Songhay) of the inselberg region are farmers. The principal crop is millet (*Pennisetum glaucum*). Other wet-season crops include sorghum (*Sorghum bicolor*), cow-pea (*Vigna vexillata*), sesame (*Sesamum indicum*), roselle (*Hibiscus sabdariffa* in red and green varieties), cassava (*Manihot utilissima*), peanut (*Arachis hypogaea*), and groundnut (*Vigna subterranea*). Rice is only grown in a few small pockets. The millet harvest is in October or early November and is critical to local subsistence, since the staple food is millet cake (*tô*) with baobab-leaf sauce. Since 1975, millet harvests have become unreliable due to varying combinations of poor rainfall, too much late rainfall that causes rot, and annual crop pests (flock birds such as the dioch

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Quelea quelea and the golden sparrow *Passer luteus*, grasshoppers, millet beetles *Pachnoda* spp., various larvae that bore through the stems and grain spikes, and the parasitic herb *Striga hermonthica*). During my Jamsay fieldwork in 2004, the millet crop (already in jeopardy due to below-average rainfall) was decimated by a locust invasion. However, the three subsequent harvests were normal.

Most Jamsay villages have little opportunity to farm in the dry season (“la contresaison”) since they lack access to year-round mountain springs and do not have an irrigation system fed by wells. There is accordingly an annual exodus of young men and some young women to the big cities of the south after the harvest, in search of usually menial labor (farm laborers, watchmen, maids, itinerant peddlars). The mountain people, and some other Dogon farther south with better water resources, do a moderate amount of dry-season vegetable gardening (especially onion, okra, potato, chili pepper, and native “eggplants” including *Solanum aethiopicum*, but also carrots, lettuce, and some other vegetables). These people also harvest fruits throughout the year, from fields (watermelons) or from planted orchards (mangoes, papayas, guavas, bananas, tamarinds, oranges, lemons). These are supplemented by fruits from native trees such as *Lannea microcarpa* (wild grape), *Vitellaria paradoxa* (karité), *Vitex doniana*, *Ziziphus mucronata* (jujube), and *Detarium microcarpum*.

The wet season (“hivernage”) is from June to September. There is usually no rainfall from October to May. This dry season can be divided into a cold season that peaks in January (with daily high temperatures around 20 Celsius), and an unpleasantly hot season most intense in April and May (with daily high temperatures around 45 Celsius).

Herding has traditionally been carried by other ethnic groups who mingle with the Jamsay, chiefly Fulfulde (especially cattle) and to a lesser extent Bella (sheep and goats). However, Jamsay villagers often own some livestock in addition to their fields. Cattle are typically entrusted to Fulbe, who consume or sell the milk in exchange for managing the herd. An increasing number of Jamsay are now directly involved in sheep and goat herding.

The flat plains harbor a rather modest number of wild flora and fauna species. Typical grasses of the drier plains are *Schoenefeldia* and *Eragrostis tremula*. In the cultivated fields, common wet-season weeds are grasses (*Digitaria*, *Panicum*, *Brachiaria*, *Dactyloctenium*), herbs (e.g. *Commelina forskaliae*, *Sesamum alatum*, *Cienfuegosia digitata*, various annual legumes), and trailing vines (*Ipomoea* spp., wild melon spp.). The dominant tree of the dry plains is *Acacia tortilis*; other trees commonly found in the plains include *Acacia seyal*, *Combretum glutinosum*, *Sclerocarya birrea*, *Ziziphus mauritiana* (jujube), *Balanites aegyptiaca* (wild date), and *Maerua angolensis*. There are few “forests” (depressions with dense tree and liana growth) in these plains, which therefore no longer support large mammals, though old people remember

when lions and leopards roamed the wild, feeding on gazelles, antilopes, and buffalo. In addition to birds, many of them seasonal (rainy season) or migratory (brief winter visitors), the common animals nowadays are small mammals (squirrels, mice, mongooses, and hedgehogs). Hyenas, jackals, and one gazelle are occasionally still found in a few wooded areas. Elephants, now protected, traverse the zone on their annual trek to the Gourma around Gosi. In the Jamsay-speaking zone, the forested area around Gasa is especially popular with the elephants, but they also pass through the Mondoro-Tabi corridor.

The flora and fauna of the mountains are much richer. Typical shrubs of the lower slopes, among the boulders, are *Combretum micranthum* and *Guiera senegalensis*. Higher up one finds typical inselberg trees such as the figs *Ficus abutilifolia* and *F. cordata*, and the wild grape (*Lannea microcarpa*). Montane fauna include baboons and two smaller primates, a wild cat, a hyrax (dassie), and mongooses. Many bird spp. are endemic to the mountains (stone partridge, rock pigeon, stone-chat, etc.) or nest among rocks or on cliffs and feed elsewhere (Rueppel's vulture, marabou stork, rock martin). Insectivorous bats (*Rhinopoma*, *Nycteris*, *Taphozous*) are conspicuous at twilight, and two large fruit bats (*Rousettus*, *Eidolon*) are present.

1.4 Previous and contemporary study of Jamsay

The single previous academic work on this language is a 1988 Laval University dissertation University (Quebec) by Oumar Ongoïba: "Étude phonologique du dogon, variante ħamsay (Mali)." I happened to meet the author in July 2004 in Douentza as he made a rare visit there following a death in the family. He is now teaching French in the Toronto area.

As noted above, there has been recent interest in Jamsay in connection with local literacy programs. Mr. Souleïman Ongoïba, a Douentza-based employee of the NGO Near East Foundation (NEF), played an important role in this. Because government policy favors Toro-So as the standard Dogon, there has been little support in the capital Bamako for theoretical or pedagogical research on Jamsay.

1.4.1 Fieldwork

I have been involved in fieldwork on languages of northern Mali since 1989. Publications (grammars, dictionaries, texts) have appeared for several Songhay languages, Hassaniya Arabic, and Tamashek.

Since Dogon as a whole is little-known linguistically, since the Dogon are known to be ethnographically interesting, and since I had already worked in on

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two Songhay languages in the same general eco-zone (Tondi Songway Kiini and Humburi Senni), I decided to shift to Dogon as my next fieldwork target.

I have long recognized that a large team project would be useful for Dogon, but by 2004 I had secured funding only for a solo project. I chose to focus on Jamsay, while beginning parallel work on other, as yet completely undescribed, Dogon languages of the Douentza and Boni regions.

In preparation, I spent about 9 days in summer 2003 doing rapid-fire lexicographic work on Jamsay. This permitted me to put together a rudimentary working lexicon back in the U.S. With funding for a sabbatical year secured, I began sustained fieldwork in July 2004. Though based in Douentza, during August and September 2004 I spent 4-8 days each in Dianwely Kessel (a nearby Jamsay-speaking village), Toupéré (Tabi-Sarinyere language), Beni (Beni-Walo language), Anda (Naja language), and Koubewel (Najamba = Bondu language). This allowed me to survey the languages of the region, make contacts with potential future informants and assistants, do the flora and fauna terminology (with extensive flora collecting by my assistants), and in some cases to make tape recordings.

In October and November 2004, back in Douentza, I focused on transcribing Jamsay texts, extending the lexicon, and on drafting this grammar. The work was largely completed during 2005, and polished up during a long stint in Douentza in 2006.

By 2006 I was working on a broader comparative Dogon project, with my own contribution focused on the languages mentioned above in the northern and northeastern Dogon areas. In this context I am shifting toward electronic dissemination of lexical and textual data, while continuing to publish the grammars in print form. The project is in the process of putting up a comparative Dogon website (www.dogonlanguages.com) beginning with lexical data, and the plan is to integrate textual data as time goes on.

1.4.2 Acknowledgements

The 2004-5 fieldwork focusing on Jamsay was funded by grant PA-50643 from the National Endowment for the Humanities, Research Tools program, supplementing a sabbatical from the University of Michigan. I am also grateful to the university for bridging support over the years, keeping the larger Mali linguistic project going over the years between external grants, and also for publication support funds. The Jamsay materials are being completed, and the lexical portion thereof combined with data from other Dogon languages, under a new grant (BCS-0537435) from the National Science Foundation, Linguistics Program.

2 Sketch

In this short chapter I give a selective overview of Jamsay grammar, emphasising points of typological interest. This will arm readers not previously familiar with Dogon (or West African languages generally) with sufficient grasp of the overall grammatical structure to contextualize the topical analyses of particular topics in the subsequent chapters. It should also make it easier for readers to work through phrasal and sentential examples. Phonology is not discussed here except insofar as prosodic (including tonal) patterns relate to grammar.

2.1 Prosody

Previous published and unpublished descriptions of Dogon languages have regularly commented that some form of lexical tone or accent is present, and that it is subject to grammatical modification. However, no previous study has actually analysed the prosodic system of a Dogon language.

In Jamsay, tone (lexical and grammatical) and intonation (including grammaticalized intonation patterns) play a central role. Indeed, I know of no (non-Dogon) language where prosody is so tightly integrated with the morphosyntax. Working on Jamsay has deepened my conviction that currently dominant grammatical theories, with their sharp compartmentalization of “phonology” and “syntax,” are badly misguided.

The prosodic ingredients are given in (1). H[igh] and L[ow] are the primitives of the tonal system. F[alling] and R[ising] are abbreviations for two-part contour tones <HL> and <LH>, respectively.

- (1) a. lexical tones for stems
 - combinations of H[igh] and L[ow] tonal primitives;
 - no mora can have more than one tone;
 - at least one H per stem

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- b. grammatical tones (local)
- <HL> = F[alling] tone attached to stem-final vowel (always H)
 - (unaffixed) Imperfective of verb (< floating L suffix)
 - HL, with H fused to the leftmost H in the last two syllables
 - “tonal locative” of noun
- c. grammatical tones (stem-wide)
- tone-dropping to all-L
 - noun before modifying adjective or demonstrative
 - NP-final word in NP that is head of relative clause
 - initial in some nominal compound types
 - verb before various suffixes (Negative, Verbal Noun)
 - unaffixed Perfective verb after focalized constituent
 - preverbal subject pronominal (e.g. relative clauses)
 - pronoun before some discourse-functional morphemes
 - pronominal possessor before inalienable noun
 - final in iterated verb
 - verb stem in one type of purposive clause
 - overlaid all-H contour
 - Imperative of most CvCv- and Cv:- verbs
 - final in some nominal (agentive) compound types
 - verb stem in one type of clause (‘behooves you’)
 - overlaid H(H...)L contour
 - Perfective verb in relative-clause participle
 - predicate adjective in relative clause
 - adjective after gá:rá ‘more/most’ or èjíⁿ ⇒ ‘very’
 - final in some nominal compound types
 - inalienable kin terms after possessor
 - verb in one type of purposive clause (with ‘go’ etc.)
 - overlaid H(L...)L contour
 - initial (=base) in iterated verb
- d. intonation (discourse-based)
- prolongation ⇒
 - clause-final
 - pitch-raising ↑
 - clause-final
 - prolongation with higher-than-average pitch ⇒↑
 - prolongation with pitch fall ⇒↘
 - prolongation with lower-than-average pitch ⇒↓

- e. intonation (lexicalized)
 - prolongation ⇒
 - several adverbs (some with adjective-like senses)
 - some discourse particles
 - some greetings

- f. intonation (grammaticalized)
 - dying-quail intonation ∴ (exaggerated, prolonged pitch drop)
 - end of both conjuncts in NP conjunction
 - end of word preceding universal quantifier fú:⇒ ‘all’

The contribution of tonal and intonational elements to Jamsay grammar is therefore vast. Jamsay does with prosody much of what other languages do with grammatical morphemes, or with morphosyntactic restructurings including linear movement. Three examples: 1) most pronouns (excluding suffixes on verbs) show no variation in segmental form across independent, subject, object, and possessor categories, but use tones to make some distinctions (e.g. 3Pl bé for independent, object, and alienable possessor, but bè for subject and inalienable possessor). 2) NP's X and Y are normally conjoined in Jamsay simply as [X.: Y.:], with no conjunction morpheme but with dying-quail final intonation on both conjuncts. 3) the difference between main and relative clauses is largely (though not entirely) expressed by tonal modifications. In relatives, the (internal) head is not fronted. Instead, the final word of the head NP drops its tones, a pronominal subject is expressed (in non-subject relatives) by a preverbal L-toned pronominal, and Perfective verbs have the H(H...)L tone overlay. There are also Participial suffixes, but since the form for Nonhuman head is -Ø (zero), as is the 3Sg subject form in main clauses, the Participial suffix cannot be relied on as an audible indicator of relative-clause status.

At the **lexical** level, tone is also important. Most native Jamsay words are built up with Cv and Cv: syllables, with a smattering of CvC and a few Cv:C and extra-long Cv:: syllables. Cv is monomoraic (=has one mora or syllabic weight unit), Cv: and CvC are bimoraic, and Cv:C and Cv:: are trimoraic. Each mora can have its own tonal primitive, H[igh] or L[ow], so a monomoraic syllable can be only H or L, a bimoraic syllable can be H, L, F (= <HL>), or R (= <LH>), and a trimoraic syllable can be any of the above or bell-shaped <LHL>. There are some minimal pairs such as dígé ‘bird’s leg’ versus dǐ gé ‘row’, ð:rⁿó ‘monkey’ versus ð:rⁿò ‘waterskin’, and círé ‘horn’ versus cǐré ‘hard wood’. Many word families include a noun and a related verb that differ in tone. For example, the HH-toned noun bíré ‘work’ is associated with the LH-toned verb bìré- ‘work’, and the two regularly combine in the VP bíré bìré- ‘work, do some work’.

While lexical and grammatical tones have a competitive relationship (stem-wide tonal overlays completely erase lexical tones), there is an important sense in which lexical and grammatical tones work together. The requirement that all stems have at least one H makes it possible to use stem-wide tone-dropping (to all-L) as a reliable indicator of morphosyntactic function (e.g. head of relative). The other common stem-wide tone overlay, H(H...)L, is always audible with verbs, whose lexical forms are tonally all-H or {LH}, and usually audible with nouns and other stems, since only a minority of these have lexical {HL} contours.

The all-H tone overlay is less reliably audible in Jamsay, which has many lexically all-H verb and noun stems. For example, there is an all-H overlay for imperative verbs of some shapes; it is audible for lexical {LH} but not for lexical all-H stems. However, among the various types of participle-final agentive compounds, the type with all-H final does clearly contrast with the others, which are based either on the unaffixed Perfective with H(H...)L overlaid tone or on the unaffixed Imperfective with final-syllable F-tone.

2.2 Inflectable verbs and quasi-verbs

Most if not all Dogon languages are verb-final, and this is true of Jamsay. However, the verb can be followed by clause-linking subordinators and certain discourse particles like ‘only’ with clausal scope. In addition, some normally preverbal constituents, especially adverbial phrases, are occasionally added (as afterthoughts or clarifications) after the verb, with an intervening pause.

Verb stems must respect well-defined restrictions on segmental form and lexical tones. Regular verbs end in a long vowel if monosyllabic, in a short vowel if longer. The stem-level **lexical tone pattern** of a verb can only be all-H or L(L...)H with H on the final mora.

In non-imperative, non-focalized main clauses, the verb has the basic structure (2), omitting some details.

(2) [stem - (derivational suffix)] - aspect/negation - pronominal subject

Beginning with the final element, verbs are inflected for **subject person and number** category (1Sg, 1Pl, 2Sg, 2Pl, 3Sg/Nonhuman, 3Pl); see §10.2. The 3Sg/Nonhuman suffix is -Ø. The pronominal subject suffix may be the only expression of the subject, or it may agree with an unfocalized preverbal NP. In the unaffixed Imperfective (positive), Nonhuman subject is distinguished from (human) 3Sg subject by adding quasi-verb $\text{=k}\dot{\text{d}}$ ‘be (nonhuman)’ after the regular verb stem.

Negation is also expressed by verbal suffixation; there are distinct Negative suffixes for perfective and imperfective verbs, immediately preceding the pronominal suffixes (hence verb-Neg-pronominal); see §10.1.3. Examples of positive inflected verbs are in (3.a-b), followed by examples of negative inflected verbs (3.c-d). Note the zero 3SgS suffix in (3.b).

- (3) a. yèré-n̄
 come.**Impf**-1SgS
 ‘I will come.’
- b. láyâ:-Ø
 hit.**Impf**-3SgS
 ‘He/She/It will hit.’
- c. bèrè-gó-w
 be.able-**ImpfNeg**-2SgS
 ‘You-Sg cannot.’
- d. yà:-lí:-Ø
 go-**PerfNeg**-1PlS
 ‘We did not go.’

As the interlinear glosses in (3.c-d) suggest, the verbal suffixal system marks aspect as well as negation; I refer to these as **AN** (aspect-negation) categories. The positive categories are listed in (4); the fuller treatment is in §10.1.2. The division between the two systems is justified by semantics and textual patterning. For example, the unsuffixed Perfective (in the syntactic contexts that require it) may correspond to any of several marked perfective-system categories in other contexts, and the unsuffixed Imperfective is likewise the unmarked, all-purpose imperfective-system form. Similar neutralizations occur in negative AN categories.

(4) form category

a. perfective system

[tone overlay]	unsuffixed Perfective
-tĩ-	Perfective (most action verbs)
-yè-/-yà-, -â:-	Perfective (motion and stative verbs)
-sà-	Resultative
-jè-	Recent Perfect ('have already done')
-térè-	Experiential Perfect ('have [n]ever done')
[Rdp + tone overlay]	reduplicated Perfective

b. imperfective system

[final L-tone]	unsuffixed Imperfective
-tóyò-	(marked) Imperfective
-á:rà-	Habitual
[Rdp + final L-tone]	reduplicated Imperfective

In the perfective system, the unsuffixed Perfective is the basic form used in the presence of a focalized constituent, and in relative clauses. In other (positive) clauses, there is a choice between the Perfective (-tĩ-, -yè-/-yà-, or -â:-) and the other more specialized categories listed. In the imperfective system, the unsuffixed Imperfective is the most common form, but it gets some competition from suffixally marked categories. There is a relatively low-frequency reduplicated option in both perfective and imperfective systems.

The importance of tones in distinguishing inflectional categories, and in distinguishing main from relative clauses, can be brought out by considering the verb 'fight' (5).

(5)	lexical	unsuffixed Perfective	unsuffixed Impf	Imppt
		main clause	relative clause	
	jèyé	jèyè-	jéyè-	jèyé:- (</jèyé-L/)
				jéyé

The lexical form jèyé with {LH} (i.e. rising) contour occurs as the bare stem in verb chains, and before non-Negative AN suffixes. The unsuffixed Perfective undergoes tone-dropping to all-L jèyè- in main clauses (after a focalized constituent), but has the H(H...)L overlay in relative clauses, where it appears as HL-toned jéyè-. The unsuffixed Imperfective is underlying /jèyé- L/, as a final floating L-tone follows the stem; if there is no audible pronominal

suffix, the L-tone is grafted onto the preceding H-toned vowel. If short, this vowel (now <HL>-toned) is lengthened to two moras to allow the contour tone to be expressed. Finally, the Imperative is all-H-toned *jéyé*. In other words, this CvCv- stem can appear with LH, LL, HL, LF, and HH tones. These tonal distinctions, while occasionally redundant (LL before Negative suffix), are in several cases the sole expression of the relevant morphosyntactic category.

In **negative** indicative clauses, though some suffixally marked aspects can occur, aspect tends to be reduced to a simple perfective-imperfective opposition, expressed by the portmanteau suffixes -lí- (Perfective Negative) and -gó- (Imperfective Negative); see (3.c-d), above, and §10.1.3. There is a distinct, aspectually undifferentiated Negative suffix -lá- for adjectives and some stative verbs and quasi-verbs (§11.4.3), and similar but L-toned Negative morphemes (*là*, *là*) are used in a few minor constructions (§11.2.1.3-4).

Imperative verbs (§10.4) have a distinct set of inflections for subject (2Sg [=zero], 2Pl), and special negative (i.e. prohibitive) forms, as seen in (6) with verb *yèré* ‘come’.

- (6)
- | | | |
|----|------------------|-------------|
| a. | <i>yééré</i> | |
| | come | |
| | ‘Come-Sg!’ | |
| b. | <i>yééré-ỳ</i> | |
| | come-Imprt.Pl | |
| | ‘Come-Pl!’ | |
| c. | <i>yèrè-ý</i> | <i>lây</i> |
| | come-Imprt.Pl | ImprtNeg.Pl |
| | ‘Don’t-Pl come!’ | |

There is a **Hortative** with suffix -*mí* (10.4.3).

There are also a handful of aspectually defective **quasi-verbs** meaning ‘say’, ‘be’, ‘have’, and ‘be in’ with Cv- and CvC- shapes, which are not otherwise allowable for Jamsay verb stems. The morphosyntax of the various elements is variable, and “quasi-verb” is an intentionally vague cover term. In most cases they occur with L-tone in main clauses and with H(H...)L tone in relative clauses, which aligns them formally with the unsuffixed Perfective of regular verbs. Some of the quasi-verbs are segmentally identical to AN suffixes, suggesting the possibility that the quasi-verb is really just an AN suffix added to a phonologically empty verb slot. See §11.2.2-3, §11.5.1 for the full coverage. There are also some stative stance and ‘hold’ verbs that are aspectually defective, occurring in perfective forms only (§11.2.4, §11.5.2).

The ‘say’ verb *gá:-*, quasi-verb *jè-*, and quotative particle *wa* (*wà*, *wá*) (§11.3) constitute a complex subject in Jamsay and other Dogon languages. Some clause-subordinating elements are based on the ‘say’ verb or quasi-verb (§15.2.2)

2.3 Participles

In relative clauses (and therefore in various spatio-temporal and manner clauses in relative form, as well as in various agentive compounds), the verb takes a **Participial** suffix instead of a pronominal subject suffix (§14.1.8). The Participial suffixes are Nonhuman $-\emptyset$, (human) Sg $-n$, and (human) Pl $-m$. These are the same suffixes used with most simple nouns, and with adjectives. The Participial suffix **agrees with the head** of the relative, regardless of its grammatical relation (subject, object, etc.).

The verb in a relative clause, if perfective (positive), normally appears in a special H(H...)L-toned form of the unsuffixed Perfective.

Because participial agreement is with the head rather than with the subject, in non-subject relatives some way must be found to express a pronominal subject. This is accomplished by using a set of **L-toned preverbal subject pronominal proclitics**, corresponding functionally to the subject pronominal suffixes that occur on verbs in main clauses. (These L-toned pronominals are not used in subject relatives, where the subject is indexed in the participial ending.)

Therefore the way to say ‘the place where I saw you’ can be schematized as (7).

(7) place.L 2SgO 1SgS.L see.Perf.HL-Ppl.Nonh

The head is ‘place’, so it appears with L-tone (“place.L”). Since this is a nonhuman noun, we get Nonhuman Participial suffix (“Ppl.Nonh”) on the verb. There is a 2Sg object pronominal proclitic (H-toned *ú*), and an L-toned preverbal subject pronominal proclitic (1Sg *mì*). Since the verb is perfective positive, it appears in the unsuffixed Perfective, with H(H...)L tone contour overlaid. The actual Jamsay phrase is (8).

(8) *dì:ⁿ ú mì ê:-∅*

2.4 Noun phrase (NP)

A full-sized NP could have the linear sequence (9), omitting some details.

- (9) a. possessor NP followed by mà ‘of’, or simple pronoun as possessor
 b. noun stem
 c. adjective (simple or expanded)
 d. demonstrative or ‘each, any’ quantifier
 e. numeral, Pl particle, and/or Definite particle
 f. ‘all’

The noun stem itself may be a compound. Many human nouns, and adjectives when referring to a human, take the suffix Sg -n or Pl -m. Human nouns that for one reason or another cannot take these suffixes (e.g. most kin terms) may be followed by Pl particle bé. Nonhuman nouns lack morphological number marking, but they can be followed by bé to emphasize plurality.

An example of a fairly complex NP is (10), with the head bolded in the interlinear. It consists of a possessor, a head noun, two modifying adjectives, and a Pl morpheme. ‘House’ and ‘small’ undergo tone-dropping to all L-tones (indicated by “.L” in interlinears) because each is followed by a modifying adjective. The possessor (1Sg) and the final Pl morpheme bé do not interact tonally with the head noun or with the adjectives. One can therefore bracket off an inner **core NP** defined by **tonal interaction**, as opposed to peripheral elements that have no tonal interaction with the core (**tonal independence**).

- (10) [má [ùrò dàyà píru] bé]
 [1SgP [**house.L** small.L white] Pl]
 ‘my small white houses’

More complex examples are given in §6.1; of particular interest are numerals, which do not interact tonally with preceding nouns and adjectives (§6.5), and inalienable possessors for kin terms, which force a tone overlay on the kin term itself (§6.2.2).

In addition to tonal dependence versus independence, a further issue relevant to internal NP structure is what happens when a multi-word NP functions as head of a relative. For example, if (10) is a relative head, as in (11) below, its first four words remain together (though píru drops tones to become pìrù), but Plural bé detaches itself and appears at the end of the relative clause, following the participialized verb (and, usually, Definite kùⁿ).

- (11) [má [ùrò dàyà pìrù]] númò-Ø kùⁿ bé
 [1SgP [house.L small.L **white.L**] fall.Perf.HL-Ppl.Nonh Def **Pl**]
 ‘my small white houses that fell’

There is a partial correlation, among postnominal elements in NPs, between such **detachability** and the lack of tonal interaction when adjacent. However,

the correlation is imperfect; for example, cardinal numerals have no tonal interaction with preceding nouns, but are not detachable.

Pronominal categories are 1Sg, 1Pl, 2Sg, 2Pl, 3Sg (human), 3Pl (human), and Nonhuman. They are expressed as subject-pronominal suffixes on verbs (with 3Sg and Nonhuman merged as zero in most AN categories), as proclitic-like particles preceding verbs or postpositions, and as independent pronominals. Anaphorics include a Reflexive pronoun *ì nì wⁿé* (§18.1), a set of expressions of the type ‘my/your/his head’ with reflexive-like functions (§18.1.3), and a noun-like morpheme *èné* (plural *èné bé*) that is used both for third person reflexive possessor (‘he killed **his own** dog’, §18.1.2) and, in third-person reported speech and thought, as a syntactically unrestricted logophoric pronoun coindexed with the quoted author (‘she said/thought [**she** would come]’, §18.2.1).

2.5 Postpositional phrases (PP)

Jamsay has several postpositions that follow their NP complement. There is an all-purpose postposition *lè* that can be dative, locative, or instrumental in function (§8.2.1). There are several (mostly spatial) postpositions (§8.3), like *bérè* ‘in’, and an apparent Purposive-Causal postposition *jé* that may be a special case of the defective ‘say’ verb *jè* (§8.4).

Instead of adding a postposition, certain nouns (all ending in H-tone) have a **tonal locative** formed by grafting an L-tone on at the end (§8.1, and cf. (118) and (131)). The resulting tonal locatives are ...HL from lexical ...HH, and ...(L)F from lexical ...(L)H. Examples: *úró* ‘house’, *úrò* ‘in the house’; *bòró* ‘bottom’, *bòrò* ‘at the bottom’. Some of the spatial locative postpositions are, or could have originated as, tonal locatives of nouns.

2.6 Main clauses and constituent order

As already mentioned in §2.2, Jamsay clauses are **verb-final**, except that subordinating elements may follow the verb. Temporal adverbials like *yá*: ‘yesterday’ normally occur at the beginning of the clause. However, probably reflecting real-time production glitches, in casual speech an adverbial or other constituent is occasionally “extraposed” and articulated postverbally, with a prosodic break, as an afterthought or clarification (12). Such constructions are avoided in elicited sentences.

- (12) a. dùndàṅá yèré bé tèmè-Ø [èjú bérè]
 elephant come 3PIO find.Perf.L-Ø [**field in**]
 ‘An elephant came out and encountered them, in the field.’
- b. wó ñé:-wⁿé kàrà-Ø [bé: kùⁿ]
 3SgO eat-Caus compel.Perf.L-3SgS [**excrement Def**]
 ‘He forced him to eat the excrement.’ **2004.4.4**

In main clauses, there is a pronominal-subject suffix on the verb (whether or not the subject is also expressed by a nonpronominal preverbal NP). In such clauses, pronominal subjects are outside of the scope of the linear ordering of preverbal constituents. This leaves us with objects, datives, nonpronominal subjects (expressed by noun-headed NPs), and adverbials. The regular ordering pattern is (13).

- (13) main clause (unfocalized)
1. adverbials (especially temporal) and focalized constituents
 2. nonpronominal (i.e. full-NP) subject
 3. nonpronominal dative, object, and adverbials (especially locatives)
 4. pronominal dative and object (loosely proclitic to verb)
 5. verb with pronominal subject suffix

This can be roughly summarized as **Adv-S_{NP}-X-V**, where “X” is everything else and where (unfocalized, nontopical) pronominals occur at the end of X (as proclitics to the verb). (14.a) begins with a temporal adverbial, then has a second person singular object pronoun (“2SgO”), then a verb with AN suffix (Resultative) and a 1Sg subject (“1SgS”) suffix. (14.b) illustrates subject-object ordering with nonpronominal NPs.

- (14) a. yá: ú é:-sà-m
 yesterday 2SgO see-Reslt-1SgS
 ‘Yesterday I saw you-Sg.’
- b. tí-tá: jòṅó kò:-Ø
 Rdp-hyena hare eat.Perf.L-3SgS
 ‘The hyena ate the hare.’

A **dative** usually precedes a **direct object** when both are nonpronominal (15.a), though sequencing is not completely rigid. This ordering is obligatory when both are pronominal (15.b). However, a Nonhuman object pronominal is

optionally omitted when understood, a tendency that is probably intensified in the presence of a dative pronominal (15.c).

- (15) a. [[mì dê:] lè] bú:dù ó:-sà-m
 [[1SgP.L father.HL] **Dat**] **money** give-Reslt-1SgS
 ‘I gave the money to my father.’
- b. ù-rú wó ñé:-wⁿé-m̀ⁿ
2Sg-Dat 3SgO eat-Caus.Impf-1SgS
 ‘I will feed him/her for you-Sg.’
- c. wò-rú ó:-sà-m
3Sg-Dat give-Reslt-1SgS
 ‘I gave (it) to him/her.’

The above is somewhat idealized, since it does not consider focalization or topicalization. In **focalization** (§13.1), some constituent preceding the verb functions as focus, whether or not it is overtly marked as such by Focus clitic $\equiv\tilde{y}$. If the focus is a pronominal subject, it appears as an independent pronoun, with or without $\equiv\tilde{y}$, and there is no subject pronominal on the verb. This focalized pronoun appears at or near the beginning of the clause (16).

- (16) émé nì-dí:ⁿ ì ñê:
 1Pl here lie.down.Impf
 ‘It’s we [focus] who go to bed here.’

There is also a great deal of **topicalization** in Jamsay discourse (§19.1). NPs and independent pronouns are regularly placed to the left of a sentence, usually with at least some prosodic break. The sentence proper usually has pronouns coindexed to these presentential topical NPs (17). This is especially diagnostic of topicalization in the case of objects, since a pronominal object is not used in addition to a clause-mate nonpronominal object NP. Many times, what looks at first sight like a clause-internal NP in subject or object function is actually a presentential topic.

- (17) [ì nè nùṅò-nám] [bé jùgó-m̀]
 [person Dem.L-owners] [**3PIO** know.Impf-1SgS]
 ‘Those people_x [topic], I know them_x.’

2.7 Nominalized clauses and constituent order

When the verb is nominalized, subject and object are generally expressed as possessors. This applies to Verbal Noun clauses (§17.4), and to the unusual ‘before ...’ construction (§15.2.4.2) in which the verb has a suffix *-ẁv̀* with underspecified vowel. Pronominal subjects are expressed by preverbal possessor pronominals. The basic ordering pattern is (18).

- (18) nominalized clause
1. adverbials
 2. subject (pronominal or nonpronominal), expressed as possessor
 3. dative, object (expressed as possessor or object), adverbials
 4. verb with nominalizing suffix

This can be summarized roughly as **Adv-S(Poss)-X-V**; an example is (19). The logical subject (2Sg pronoun) is expressed as a special kind of possessor only used with nominalized verbs, viz., independent pronoun (H-toned) followed by Possessive *m̀a* (which is not used after pronominals in tensed clauses). The object ‘chicken’ has normal object tone (rather than the tone typical of compound initials) since it is not immediately preverbal. It is followed by a dative pronominal (as usual, pronominals gravitate to immediate preverbal position), then the Verbal Noun of ‘give’.

- (19) *ú m̀a ɛ̀n̄é ẁò-rú ò-ý*
2Sg Poss chicken 3Sg-Dat give.L-VbIN
 ‘Your-Sg giving a chicken to her.’ **2004.3.19**

2.8 Relative clauses

In relatives (chapter 14), the verb has a participial suffix of nominal type instead of a pronominal subject suffix. There is usually an overt internal head NP whose last word undergoes tone-dropping, but the head can be in any grammatical relation. The head appears in its usual place in the sentence (there is no systematic fronting of heads). If the subject is pronominal (and not the head), it is expressed by a special L-toned preverbal subject pronominal proclitic in immediate preverbal position. This is connected with the fact that the normal morphological slot for pronominal-subject suffixes (at the end of the verb) is occupied by the participial suffix (which agrees with the head NP, not the subject). The basic order of elements is as in (20).

(20) relative clause

1. adverbials (especially temporal)
2. nonpronominal subject NP (maximally: possessor, noun, adjectives, numeral)
3. dative, object, adverbials (with pronominals last)
4. L-toned pronominal subject proclitic (in nonsubject relatives, if subject is pronominal)
5. verb with Participial suffix agreeing in nominal features with head noun (HumSg, HumPl, Nonh)
6. NP-final elements (Definite, Plural, demonstrative, ‘all’, ‘each’)

Examples involving two or three pronominals, which show rigid dative-object-subject order, are in (21).

- (21) a. nì ñì rⁿè ú mì ê:-Ø
 day.L **2SgO** **1SgS.L** see.Perf.HL-Ppl.Nonh
 ‘the day (when) I saw you-Sg’
- b. yá: dì:ⁿ é bè jâ:-Ø kùⁿ
 yesterday place.L **2PIO** **3PIS.L** convey.Perf.HL-Ppl.Nonh Def
 ‘the place where they took you-Pl yesterday’ **2004.5.2**
- c. dògùrù ù-rú wó mì ñé:-wⁿè-Ø kùⁿ
 time.L **2Sg-Dat** **3SgO** **1SgS.L** eat-Caus.Perf.HL-Ppl.Nonh Def
 ‘(at) the time when I fed him for you-Sg’

Let us consider (21.a) in detail. It begins with a temporal noun ‘day’ in L-toned form, which tells us that this noun is the head of the relative. There is then an H-toned pronominal for the object (as would be the case in a main clause), followed by an L-toned subject pronominal (which is unique to relatives and a few other subordinated clause types). The participial is based on a Perfective verb, which in relatives takes the form of an unsuffixed Perfective stem with overlaid H(H...)L tone. Since the head is Nonhuman, the Nonhuman Participial suffix -Ø is used.

In the interlinears, “.L” after a gloss or label indicates that tone-dropping has occurred, and “.HL” indicates that a H(H...)L tone contour has been overlaid. The 2Sg object (“2SgO”) pronoun here has its lexical H-tone, so the interlinear includes no (grammatical) tonal information.

The importance of pronominal tones in parsing relative clauses is brought out by comparing (22.a-b). Preverbal pronominals (if not focalized or topicalized) follow nonpronominal NPs, so 1Sg object mí in (22.a) and 1Sg

subject *mì* in (22.b) directly precede the verb. There is no structural case marking of nonpronominal NPs, so ‘white person’ has the same form as subject in (22.a) and as object in (22.b). The verb in a relative is a participle that agrees only with the head, which is here neither subject nor object, rather the noun ‘day’. So only the tonal difference between *mí* and *mì* differentiates the two sentences.

- (22) a. *nì ñì rⁿè ànsá:rá-n mí ê:-Ø*
 day.L white.person-Sg 1SgO see.Perf.HL-Ppl.Nonh
 ‘the day (when) the white person saw me’
- b. *nì ñì rⁿè ànsá:rá-n mì ê:-Ø*
 day.L white.person-Sg 1SgS.L see.Perf.HL-Ppl.Nonh
 ‘the day (when) I saw the white person’

Another typologically remarkable feature of Jamsay relatives is that the **head noun is often copied** after the main part of the relative clause, after a Possessive morpheme. In other words, relatives can be **double-headed** (with one internal and one external instance of the head noun); see §14.1.1. This expanded type can be represented schematically as (23). No intelligible literal English translation would clarify it much, but think of ‘the dog that bit me’ as something like ‘dog of [the dog that bit me]’. Neither instance of the head noun is pronominalized.

- (23) [[... [... N_x ...]_{NP} ... (SP) Verb-Ppl] Poss N_x]

The internal head NP is built around the noun N_x and may also contain a possessor, modifying adjectives, and a numeral. The noun (with no modifiers) may then be repeated after the participle, with the Possessive morpheme separating them. The internal head NP (excluding alienable possessors) undergoes tone-dropping, while the external copy has its regular lexical tone. Neither instance of the head noun is pronominalized. Thus ‘a man who comes here’ can be expressed by the construction (24), the final *mà ǎ-n* being optional.

- (24) [*à-n ní-dì:ⁿ yèré-ñ*] *mà ǎ-n*
 [**man**-Sg.L here come.Impf-Ppl.Sg] Poss **man**-Sg
 ‘a man who comes here’

2.9 Interclausal syntax

There are a number of devices for combining clauses or VPs. A few of the most common nonfinal clause and VP types are given schematically in (25). In all cases, the clause or VP as shown may be followed by a main clause.

(25)	structure	typical function
	a. chaining (§15.1)	
	[...bare verb stem]	same-subject VP's
	[...bare verb stem] mèy ⁿ	same-subject VP's
	b. conditionals (§16.1)	
	[...inflected verb] dey	antecedent 'if ...' ('when ...')
	c. adverbials (§15.2)	
	[...bare verb stem] jé mèy ⁿ	subject-switch (often)
	[...bare verb stem] gá: kân	'after ...'
	[...nominalized verb] 'in'	'before ...'
	[...Sg participle of verb]	temporal (varying by verbal aspect)
	d. quotative (§17.1)	
	[...inflected verb] 'say'	quotative (reported assertion)
	[...imperative/hortative] 'say'	jussive (reported imperative or hortative)
	e. complement (§17.3-5)	
	[...bare verb stem]	complement of 'begin', 'can', etc.
	[...Verbal Noun]	complement of 'want', etc.
	f. purposive/causal (§17.6)	
	[...L-toned verb] 'to'	purposive
	[...inflected verb] jé	purposive
	[L-object H(H...)L-verb]	purposive (with 'come', 'go', 'sit')
	sábù [...inflected verb]	'because ...'

The major clause types (main and subordinated) can be organized into the types in (26), disregarding some unique features of each construction.

(26) a. **main-clause type**

verb inflected for AN and pronominal-subject category;
 unsuffixed Perfective verb has all-L tones;
 no preverbal subject pronoun (unless topical or focalized);
 direct object not in possessor or compound-initial form.

examples:

main clause;
 quotative complement (§17.1);
 ‘because’ clause with *sábù* (§17.6.5);
 conditional antecedent clause (usually) (§16.1).

b. **infinitival type (nonfinal VP in chain)**

verb in bare stem form, or (rarely) with marked AN suffix;
 subject not expressed;
 direct object not in possessor or compound-initial form.

examples:

ordinary (symmetrical) VP chains (§15.1);
 complements of certain verbs like ‘begin’ (§17.5)

c. **relative-clause type (weakly nominalized)**

verb in participial form (Nonh -Ø, Sg -n, Pl -m);
 H(H...)L-tone overlay on unsuffixed Perfective participle;
 pronominal subject expressed by preverbal L-toned subject
 pronominal;
 direct object not in possessor or compound-initial form.

examples:

relative clause (chapter 14);
 adverbial clause in relative form with temporal, spatial, or
 manner noun as head (§15.2.4.1, §15.2.5-6);
 conditional antecedent clause (occasionally) (§16.1).

offshoots of (c) with **invariant participle**:

1. with invariant Nonhuman -Ø :
 ‘see’ complement in direct-perception sense (§17.3.4).
2. with invariant human Sg -n :
 pseudo-participial adverbial clause (§15.2.1);
 complement of ‘dare’ (§17.2).

d. **(quasi-)focalization type**

verb inflected for AN category but not for pronominal subject;
unsuffixed Perfective verb has all-L tones;
pronominal subject expressed by H-toned independent pronoun;
direct object not in possessor or compound-initial form.

examples:

focalization construction (chapter 13);
'see' complement in recognition sense (§17.3.4.2).

e. **strong-nominalization type**

verb is nominalized;
no AN categories expressed;
object expressed as compound initial or as alienable possessor;
subject expressed as alienable possessor if no object intervenes;
if object present, pronominal subject expressed as outer possessor

examples:

'before ...' construction (§15.2.4.2);
Verbal Noun clause (§17.4).

f. **compound type**

object and verb are fused into a compound of type [n̩ v̩]

example:

reduced purposive clause in compound form (§17.6.3)

3 Phonology

3.1 General

The prosodic structure, involving tone patterns and vocalic lengthening, is deeply intertwined with the morphosyntax. The segmental phonology has some intricacies, but there are few disfiguring phonological processes that make it difficult to identify stems and other morphemes in texts. Exception: Post-Sonorant Syncope (60) and the consonantal assimilation rules that it feeds can disguise the identity of (C)vCv- words and stems. An example of this is b̀èr̀é- ‘get’, Perfective Negative b̀èl-lí- (via Post-Sonorant Syncope (60) and Rhotic Assimilation (77)). In examples in later chapters, I frequently list the full form of lexical items disguised in this way in parentheses after the free translation.

There being no voiced bilabial or labiodental fricative v, I use the symbol “v” for any short vowel, “v:” for any long vowel, and uppercase “V” as the unmarked symbol for any vowel (long or short). The symbol for “syllable” is σ .

3.2 Internal phonological structure of stems and words

Syllables, metrical structures, and compounds are discussed here. For clitics, see §3.6, below.

3.2.1 Syllables

The principal importance of syllables and of their internal structure is in connection with tones, which are realized on the **nucleus** (the syllable minus the onset consonant). In addition, there are some indications of metrical structure, specifically in the initial three syllables of words (strong-weak-strong).

In **contour tones** (those that combine high and low tone components, e.g. “falling” and “rising” tones), each tone component requires at least one **mora** (=timing unit) of its own. Syllables differ in the number of moras, i.e. timing units of the nucleus.

Syllabic structure is derivable from segment strings within words. Syllables are of the types in (27) in initial, medial, and final position.

- (27) a. Cv monomoraic (=light)
- b. CvC bimoraic (=heavy)
 Cv:
- c. Cv:C trimoraic (=superheavy)
 Cv:: (= Cvvv)

The trimoraic subtype Cv:: occurs only when a bimoraic Cv: syllable is extended to allow a bell-shaped <LHL> tone to be articulated; see Contour-Tone Mora-Addition (141) in §3.7.4.1, below.

Word-initial syllables may be of the shapes in (27), and may also occur without the initial C, hence v, vC, v:, v:C, v::.

In native Dogon vocabulary, there are no **word-initial consonant sequences**. However, I can cite one Fulfulde loan of this type: ñjâ:l ‘bastard’. Since the initial nasal has its own tone, it must be regarded as syllabic.

3.2.2 Embryonic metrical structure

Many languages have stress or accent systems, which generally have at least a partially undulating, rhythmical nature (alternating stress rules, clash avoidance, etc.). Jamsay is a tone language, whose tones are important both lexically and grammatically. Unlike the case in other (non-Dogon) tone languages of the area, in Jamsay there is no “tone sandhi” across word boundaries. In native vocabulary, long words may consist entirely of metrically light, monomoraic Cv syllables. For these reasons, there is no phonetically obvious metrical structure of the sort we observe in English.

However, an **embryonic metrical structure** is manifested in various phonological rules, particularly those applying to verb stems and their suffixal derivatives (including Verbal Nouns). The core sequence involved is a stem-initial bisyllabic [$\sigma\sigma$] foot behaving metrically as a **trochee** [sw], i.e., with a metrically strong σ_1 followed by a weak σ_2 . Squared brackets demarcate metrical feet. Depending on the phonological process in question, there may be further stipulations on one or both of these syllables (e.g. as to vowel length), or a following third syllable may be required. There is no clear evidence for metrical structure in the third, fourth, and fifth syllables of long, uncompounded stems or words.

The phonological processes that are at least arguably sensitive to the initial [sw] asymmetry are those in (28). For each, I give a brief summary (often oversimplified) of the content of the process, name the morphological categories affected, and a schematic representation of the relevant structure

(with the targeted segment underlined). In the schemas, σ is used for a syllable that can be of any shape, i.e. initial (C)v(:)C and noninitial Cv(:)C, while more specific representations like (C)v (optional C plus short vowel) are used when the process requires.

- (28) a. g-Spirantization (§3.3.2)
 process: g becomes γ in C₂ position between low back vowels
 domain: all stems
 relevant structure: initial [(C)v(:)Cv]
- b. Post-Sonorant Syncope (60) (§3.5.3.2)
 process: V₂ deleted after sonorant, usually {r rⁿ}, before coronal
 domain: verbs with nonzero AN inflectional suffix
 relevant structure: initial [(C)vCv]-[σ ..., rarely [Cv:Cv]-[σ ...]
- c. Suffixal u-Apocope (67) (§3.5.4.1)
 process: final -u (VbIN suffix) deleted
 domain: Verbal Nouns
 relevant structure: [σ C-ú], rarely [σ][(σ)C-ú]
- d. Inter-Word u-Apocope (75) (§3.5.4.2)
 process: final u deleted
 domain: wide range of compounds and phrases
 relevant structure: [σ Cu]-[σ]
- e. VbIN V₂-Lenition (65) (§3.5.3.3)
 process: V₂ raised to i (or u) and often reduced to schwa
 domain: Verbal Nouns
 relevant structure: [σ Cv]-[C-ú] or the rare [σ][CvC-ú]
- f. Presuffixal V₂-Raising (§3.5.2.2)
 process: mid-height V₂ {e ϵ } or {o ɔ } raised to i or u
 domain: suffixally derived verbs (e.g. causative)
 relevant structure: [σ Cv]-[Cv-

(28.a) is a consonantal lenition that occurs at the onset of σ_2 (but not e.g. σ_3). (28.b-e) are vocalic deletions and other lenitions. (28.b,d) are strictly limited to σ_2 , (28.c) is very strongly associated with σ_2 though it applies rarely (in elicitation only) to later syllables; and (28.e) can apply equally to σ_2 or a later syllable but there are very few opportunities for it to apply to a later syllable. (28.f) is not obviously a lenition process, but since raising is associated

with lenition in (28.e) one could make a case that (28.f) too is a lenition of sorts; it applies only to σ_2 .

The relevant structures in (28.a-f) are sufficiently divergent to show that no fixed “underlying” metrical structure can account for all the data. σ_2 is always centrally involved, but the lenitions are in some cases extended to immediately following syllables. Only (28.a,d) affect stems of all word classes, while (28.b-c, e-f) apply only to verb stems (including Verbal Nouns derived from them).

If the metrical structure were better developed, one would expect some kind of undulating stress, so that e.g. a five-syllable word would have an audible organization into metrical feet, e.g. [sw][sw] σ (with extra-metrical final syllable). This is not the case.

A probably related tone-lowering occurs in the second verb stem in certain types of chains, including iterations (repetitions) of the same stem. This tone-lowering applies at the level of words (or stems), not syllables. See §15.1.1 and §16.6.2.

3.2.3 Nominal compounds

For nouns, the issue of metrical structure is complicated by the fact that essentially all nouns of four or more syllables, and some with three or even two, behave phonologically like compounds. This applies not only to transparent examples with recognizable initials and/or finals, but also to many **crypto-compound** nouns. Most quadrisyllabic crypto-compounds have a subtle, **prosodically marked juncture** in the middle, hence [$\sigma\sigma$ - $\sigma\sigma$], though this is not the only possible location. Even Fulfulde borrowings like *té:médérè* ‘hundred’ tend to be pronounced with a slight drop in pitch on the second syllable (without becoming truly L-toned), suggesting a division [té:mé][dérè]. In other words, an initial string of three or more H-toned syllables (as occurs in most Fulfulde nominal borrowings of four or more syllables) in a quadrisyllabic noun can be articulated with a hint of trochaic meter, as [sw][s...]. For crypto-compounds with odd numbers of syllables, say five, the location of the prosodic juncture is unpredictable (and perhaps motivated historically).

In the list (29) of features suggesting a compound juncture, (29.a-b) are impressionistic and would reward instrumental study, and (29.c) is subject to exceptions, while the others are categorical.

- (29) a. slight pitch drop, especially in HHHL-toned words, heard as HMHL with a drop (to “mid” tone) in V2;

- b. (slight) increase in stem-final **consonant duration**, before another consonant;
- c. **noninitial long vowel**, especially in final syllable, or in third syllable of multisyllabic noun (most long vowels are in stem-initial syllables including monosyllables);
- d. **adjacent vowels**, separately articulated (with or without intervening phonetic glottal stop);
- e. a **final short-voweled Cv** syllable is not segmentable as a stem (there are no -Cv finals) and is therefore to be grouped with the penultimate syllable;
- f. discontinuity in **vowel-harmonic** patterns, where one stem has at least one vowel from the set {e o} and the other stem has at least one vowel from the set {ɛ ɔ};
- g. discontinuity in **consonantal nasalization**, where an unnasalized {w y r} is separated only by a vowel from a preceding nasal or nasalized consonant (violating Nasalization-Spreading).

In addition to (29.e) on the lack of short-voweled Cv- finals, I can add that this shape is also very rare in initials. In addition to a few compounds beginning in yà- or yè- ‘woman’ (§5.1.11), the examples are jì-nî: ‘sleepiness’ with initial reduced from jì ré ‘eye’, bð-túmó ‘buttock’ where bð- is reduced from bðró ‘rear’, wð-túmó ‘small mound’ with initial etymologically related to wárú- ‘farm work’, and pè-díjé ‘clove’ and té:-kðγórð ‘Tribulus vine’ with both initial and final obscure. Note vocalic disharmony across the hyphen in several of these compounds (‘buttock’, ‘small mound’, ‘clove’, ‘Tribulus’).

Multisyllabic nouns beginning with two or more L-toned monomoraic C \grave{v} syllables, e.g. C \grave{v} C \grave{v} C \grave{v} C \acute{v} or C \grave{v} C \acute{v} C \acute{v} C \grave{v} quadrisyllables, may have no audible junctures (unless there happens to be a vowel-harmonic or consonantal-nasalization discontinuity). However, given (29.e) and the productivity of nominal compounds with L-toned initials, the natural break is after σ_2 , e.g. C \grave{v} C \acute{v} -C \acute{v} C \acute{v} .

Adjectives and numerals have compounds similar to those of nouns, but they are all at least reasonably transparent rather than cryptic.

3.3 Consonants

The consonantal segments are shown in (30). Those in single parentheses are now fairly common, but are associated with Fulfulde and other loanwords. Those in double parentheses are very marginal, occurring infrequently in loanwords, and/or occurring in semi-linguistic “uh-huh!” interjections like $\acute{s}^n\text{?}\acute{s}^n$ ‘no!’. Semivowels are here included in the “labial” and “alveopalatal” rows though this is oversimplifying phonetically.

(30) 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	ñ	((š))		y	y ⁿ		
velar	k	g	ŋ						
laryngeal								(h)	((?))

c is IPA [tʃ], j is [dʒ], š is [ʃ], ñ is [ɲ], y is [j].

key to columns: 1. aspirated voiceless stops (c is affricated); 2. voiced stops; 3. nasals, 4. voiceless fricatives (including sibilants); 5. laterals; 6-7. respectively oral and nasalized sonorants; 8-9. laryngeals

Major **positional restrictions** of the unparenthesized consonants in the table are summarized in (31). For clusters, see the relevant sections below.

- (31) a. **initial** position, and syllable-initially after a distinct consonant stops, nasals (except ŋ), s, l, unnasalized sonorants, and h occur freely;
 nasalized sonorants {wⁿ rⁿ yⁿ} are not allowed;
 r rare, attested in about four loanwords (e.g. rónké- ‘fail’ < Fulfulde);
 ŋ rare, attested in about four nouns like ŋátà ‘crocodile’
- b. **intervocalic** position
 no general restrictions (but Nasalization-Spreading must be respected)

c. **final** position, and more generally syllable-final position

verbs:

no final consonants (except quasi-verb *kùn-* ‘be in’);

nouns and other stems, except due to Post-Sonorant Syncope (60):

nasals (except *ñ*), semivowels, and *l* are very common;alveopalatals {*c j ñ*} are not allowed;laryngeals {*h ʔ*} are not allowed;

a few stops and fricatives are attested in interjections or recent loans.

Examples of final consonants follow. Nasals: *à-têm* ‘customs’, *tùgûn* ‘ladle’, *à-jǎŋ* ‘forked stick’. Semivowels and lateral: *dêrêwⁿ* ‘ratel (mammal)’, *à-jǎyⁿ* ‘planting in pits with manure’, *cêw* ‘all’, *tílây* ‘obligation’, *sòbòl* ‘gourd’. Stops/sibilants (rare): *lók* (intensifier for *túru* ‘one’), *kák* ‘(stop) still!’ (intensifier), *bâg* ‘ferry’ (French *bac*), *fés* (‘[not] at all’ interjection, dialectal).

3.3.1 Alveopalatals (*c, j, ñ*)

These stops require a following vowel in order to be released, and do not occur in syllable-final position except in the occasional intervocalic geminated *cc* or *jj* cluster (e.g. *wáccé-* ‘chew cud’, *híjjé-* ‘perform the pilgrimage’).

3.3.2 Voiced velar stop *g* and *g*-Spirantization (*g*→*ɣ*)

What is arguably a single phoneme *g* has two allophones, [g] (the ordinary voiced velar stop) and [ɣ] (voiced velar fricative).

The [ɣ] allophone can be analysed as a case of **spirantization** (lenition of stop to homorganic fricative). It occurs **intervocalically** in the **onset of the second syllable** of a bisyllabic stem, whenever it is flanked by any combination of back low vowels from the set {*a ɔ*}. Most cases involve *a...a* or *ɔ...ɔ*, as in *àɣá* ‘husband’, *dàɣá-* ‘leave’, *dòɣò-* ‘Dogon (compound initial)’, *wàɣà-já-* ‘cause to remain’, and *òɣò-n* ‘chief’. The combination *ɔ...a* occurs in Perfectives like *jòɣ-â:-* from *jòɣó-* ‘be shattered’. I know of no *a...ɔ* sequences within stems or in stem-suffix combinations. Note that *o* is not conducive to spirantization: *dògó-* ‘finish’ and Resultative *dòg-â:-* ‘be finished’ have unspirantized *g*, as does *kógójó-* ‘cough’. Likewise, I did not observe spirantization between *ɛ* vowels, as in *sègè* ‘skeleton’.

The **tones** of the preceding and following vowels have no effect on spirantization; thus *àɣá* ‘husband’ and its possessed form *áyà* both have [ɣ]. Likewise, **vowel-length** is irrelevant: a long flanking vowel on either side is

treated just like a short vowel, so we get spirantization in *dà:γá* [dà:γá] ‘night’ and in *dáyà* => ‘a little’.

g-Spirantization does not occur when either flanking vowel is other than {a ɔ}. This can be seen most clearly in alternations involving a single stem. For example, *dàyá-* ‘leave’ has a verbal noun *dàg-ú*, where the suffixal *u* prevents spirantization. Spirantized *γ* flanked by *ɔ*, and *g* flanked by *o*, contrast in the compound *ðγð-yógó* ‘ostrich’.

In compounds and derivatives, spirantization occurs when the *g* is in the indicated position within **any component stem**. It therefore takes place in the two paired direction terms *dù-dáyá* ‘east’ and *tèn-dáyá* ‘west’, which compete with uncompounded *dû:* ‘east’ and *těŋ* ‘west’, and in *gàn-káyá* ‘quandary’ (literally “between-squeeze”). In *kà-dàyá* ‘peer group’, the segmentation (which positions *γ* as C₂ in its morpheme) is supported by the synonym *kù:ⁿ-dàyá*. However, spirantization does not take place in *ànsà:rà-gǎ:ⁿ* ‘cashew tree’ (lit. “white.man-fig”), because the *g* of the compound final *gǎ:ⁿ* is recognizably stem-initial (cf. *gǎ:ⁿ* ‘sycamore fig tree’). In frozen compounds, spirantization is occasionally useful as a diagnostic for morphological structure, as in the plant name *té:-kðγóřð* ‘Tribulus vine’, which is morphologically segmentable although the initial and final components do not occur otherwise. Likewise (though here the argument is weaker, since circular) with place names such as *pé:-tàyà* ‘Petaka (village)’.

In trisyllabic and longer stems that are not compounded or suffixally derived, spirantization fails to affect intervocalic *g* at the onset of the third syllable: *dòrðgó-* ‘ransom [verb]’, *àlàgàrà* ‘wide boubou (garment)’. I suggested in §3.2.2, above, that there is an abstract default metrical structure for stems of two or more syllables, such that the second syllable is the weak one. Therefore in [dòrð][gó] and [àlà][gàrà] the *g* is in a strong syllable and fails to spirantize. Similarly, iterations of *g*-initial stems, as in *gðŋó-gðŋó-* ‘turn, spin’ fail to spirantize the medial *g*, and there is no spirantization across word boundaries even with tightly-knit cognate object-verb sequences like *gólóró gðlðró-* ‘snore (a snore)’ and *gó: gð:-* ‘dance (a dance)’.

(32) **g-Spirantization** (*g*→*γ*)

g→*γ* when a) it is intervocalic, b) it is flanked by low back vowels from the set {a ɔ}, and c) it is in the (metrically weak) second syllable of a stem or word.

It appears that g-Spirantization can be blocked under certain conditions. Consider the deadjectival verb *ógó-ró-* or *óγó-ró-* which can be intransitive ‘become hot (fast)’ or factitive ‘heat, make hot (or fast)’. Although flanked by spirantization-friendly vowels, this verb was heard variably with *g* or *γ*. I

interpret the unspirantized variant ɔ́ɔ- as reflecting “analogical” association with the underlying adjective ɔ́gù ‘hot, fast’.

I regard this as **incipient lexicalization** (phonemicization) of the g/ɣ opposition. This lexicalization is **asymmetrical**, since while word-families based on a simple stem with g show signs of generalizing g throughout (to judge by ‘hot’), there is no parallel generalization in word-families based on simple stems with ɣ, like dàɣá- ‘leave’, where we continue to find alternations of ɣ and g depending on vocalic environment (after suffixation).

I did not observe spirantization failure in apparently reduplicated CvCv stems: gɔ̀ɣɔ́- ‘hold oneself up (by leaning)’, gàɣá- ‘rub (soap) on one’s body’. However, more study across dialects is needed.

g-Spirantization is not always extended to new borrowings from French, e.g. from *bagarre* ‘dispute’. It does apply to Fulfulde loans, at least those that are widely used in Jamsay, e.g. tɔ́ɔ́rɔ̀ ‘namesake’.

3.3.3 Velar nasal (ŋ)

ŋ is rare word- or stem-initially: the attestations are ŋátà ‘crocodile’ (the creature is present in a few local rivers), ŋú:rⁿê: ‘livelihood’, ŋáñá:dí ‘hatred’ (<Ful, variant gáñá:dí), ŋó:ñɔ̀ ‘cake’.

ŋ is fairly common intervocally, e.g. pàŋá ‘strength’, nèŋé ‘knee’, túŋó- ‘kneel’. The homorganic clusters ŋk and ŋg are fairly common (táŋkà ‘colonial coin’ góŋgó ‘tin can’). ŋ can occur finally: jûŋ ‘hump’, bǎŋ ‘hippopotamus’.

3.3.4 Voiceless labials (p, f)

p is a well-established native consonantal phoneme.

f occurs in loanwords: mǎlfâ:ⁿ ‘rifle’, fú:⇒ ‘all’. There are dialectal variants with p instead of f (mǎlpâ:ⁿ, pú:⇒). Educated Dogon “know” that f is a mispronunciation of p. I have had informants who self-corrected their pronunciations accordingly to this “rule,” while slipping back into f in natural speech.

3.3.5 Laryngeals (h, ʔ)

h is not a native Jamsay phoneme, but it occurs stem-initially in quite a few Fulfulde loanwords: hóggò ‘animal pen’, ha:jè ‘need’ (ultimately <Arabic). It also occurs intervocally in ðⁿhɔ̀ ‘yes!’.

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ʔ occurs in ɔⁿʔɔⁿ ‘no!’, and in gú^{rú}ʔá:nà ‘Coran’ (<Arabic). It is also inconsistently heard at compound boundaries to separate vowels.

3.3.6 Sibilants (s, š)

There is no clear s/š opposition. The single native sibilant phoneme is usually pronounced s, with occasional š-like articulations especially before i. š does seem to be regular in a few borrowings: šínwâ: ‘Chinese person’ (French *chinois*), šínwá:rù ‘balm’. The only syllable-final example is the dialectal fés ‘(not) at all’ interjection.

3.3.7 Nasalized sonorants (rⁿ, wⁿ, yⁿ)

Jamsay, like several other Dogon languages, has three **nasalized sonorants**. None occurs word- or stem-initially. Within stems, all three occur intervocally, and the two nasalized semivowels may occur stem-finally. Nasalized sonorants are most common in the vicinity of back vowels such as a and ɔ, but there are no rigid constraints on compatibility with vowel qualities.

Sequences like vrⁿv have often been misanalysed in previous Dogon scholarship, and are represented in current practical orthographies as sequences of the type aⁿra with nasalized vowel followed by r then the other vowel, orthographically often “anra” or the like. However, with {rⁿ wⁿ yⁿ} the nasalization is centered on the consonant, induces phonetic nasalization of adjacent vowels in both directions, and (like nasal consonants) can spread nasalization across a vowel to a following {r w y}. See Nasalization-Spreading (48).

The phonemic status of these segments is illustrated by the oppositions in (33).

(33) a. opposition {rⁿ r n}

rⁿ : kárⁿá- ‘do’, pórⁿó- ‘blow nose’, tórⁿó- ‘squat’, ùrⁿó ‘hole’;
r : kára- ‘make incision in’, kðró ‘neck’, úrò ‘boundary’;
n : mánà ‘on’, bð:nó ‘spoil (child)’, múnó- ‘braid’.

b. opposition {wⁿ w ɲ}

wⁿ : dðwⁿó ‘totem’, kùwⁿá ‘crowned crane’, cì-céwⁿè ‘mosquito’;
w : ówó- ‘brood (on egg)’, dúwâ:w ‘blessing’, éwé- ‘buy’;
ɲ : jðɲó ‘hare’, jùɲó- ‘bob head’, dèɲé ‘anvil’.

c. opposition {yⁿ y}

yⁿ : d̥yⁿɔ́ ‘ashes’, kúyⁿɔ́ ‘squirrel’, jǎyⁿ ‘bark fiber’;
 y : ðyɔ́ ‘grass’, húyɛ́- ‘be happy’, băy ‘shin’ ;

wⁿ and yⁿ, can also occur finally, as can unnasalized w and y. Final yⁿ occurs both in simple stems like jéyⁿ ‘forked stick’, and in apocopated bisyllabic verbal nouns (whose underlying suffix -ú is often deleted after an intervocalic sonorant) like mà-ýⁿ ‘building’ (verb má:-) and gǔyⁿ-Ø ‘stealing’ (verb gùyⁿɔ́-). My examples of wⁿ are all from apocopated verbal nouns, e.g. kǒwⁿ-Ø ‘squeezing (VblN)’ (cf. verb kówⁿó-).

rⁿ, like unnasalized r, does not occur syllable-, stem-, or word-finally in lexically basic representations. When rⁿ becomes syllable-final due to Post-Sonorant Syncope (60), it assimilates to the following consonant.

Nasalized sonorants play a role in the phonological rule **Nasalization-Spreading**, both as instigators and as targets. Nasalized sonorants count as “nasal” consonants as sources of spreading to the right. In addition, within (uncompounded) stems, and in words consisting of a stem and its suffixes, underlying {r w y} is nasalized to {rⁿ wⁿ yⁿ} when separated from a preceding nasal consonant only by a vowel. For example, if N is any nasal consonant and V is any vowel (long or short), NVwV is realized as NVwⁿV. This rule accounts for the nasalized yⁿ in Verbal Noun mà-ýⁿ ‘building’ cited above (verb má:-), compare the parallel Verbal Noun p̥ð-ý ‘picking fruits’ (verb p̥ó:-).

3.3.8 Consonant clusters

Stem-internal clusters occur in a small minority of native Dogon vocabulary, and no single cluster is genuinely common. Fulfulde, which has many clusters, is the major source of borrowings, so there are quite a few clusters that are attested in Jamsay but only in a few loans. There are some apparent gaps that are best considered accidental.

Since stems (other than verbs) may be consonant-final, and the great majority of all stems are consonant-initial, clusters are common across morpheme boundaries in compounds (including many long noun stems that may have originated as compounds but are no longer transparently composite), and at word boundaries (for example, noun plus adjective combinations). Some additional clusters are created by Post-Sonorant Syncope (60).

3.3.8.1 *Initial CC clusters*

Initial clusters are largely absent. However, Fulfulde has some nouns with initial nasal-stop sequence, and of these ñjâ:l ‘bastard’ at least has found its way into Jamsay.

3.3.8.2 *Medial geminated CC clusters*

No cases of geminate ww, wⁿwⁿ, rⁿrⁿ, or ññ can be cited. From a Jamsay-internal perspective these are probably accidental gaps (i.e. if they occurred in a foreign word borrowed into Jamsay the cluster would be preserved). The absence of ww is related to the fact that the main source of loanwords, Fulfulde, has bb or gg (lexical choice) rather than #ww as its geminated counterpart of w. The attested geminates are given with one example each in (34). The number of monomorphemic stems in my working lexicon containing the cluster, counting each word-family only once, is given in parentheses. Particularly common is ll, which in some cases may reflect syncope of an original vowel.

(34) Medial geminates

bb (3):	débbàlóbbò ‘bush sp.’ (<Fulfulde ‘pretty woman’)
cc (4):	háccíllè ‘mind, intelligence’ (Fulfulde)
dd (6):	púddù ‘henna’ (regional word)
gg (4):	júggá:rè ‘vulture sp.’ (Fulfulde)
jj (3):	híjjù ‘pilgrimage to Mekka’ (Arabic via Fulfulde)
kk (7):	jákkà ‘zakat (Islamic tithe)’ (Arabic via Fulfulde)
ll (20+):	mállè ‘brown cow with black and white spots’ (Fulfulde)
mm (4):	támmà ‘a colonial coin’ (regional word)
nn (5):	júnná:jò ‘djinn, sprite’ (Arabic via Fulfulde)
ŋŋ (1):	káŋŋà ‘gold (metal)’ (regional word, perhaps < Soninke)
ññ (0):	—
pp (4):	síppè ‘description’ (Arabic via Fulfulde)
rr (3):	bárrây ‘dark brown cow’ (Fulfulde)
r ⁿ r ⁿ (0):	—
tt (11):	sáttéllè ‘bauhinea tree’ (Fulfulde)
ww (0):	—
w ⁿ w ⁿ (0):	—
yy (1):	láyyá:rù ‘Feast of the Ram’ (Fulfulde)

The marginal phonemes f, š, h, and ʔ are also unattested in geminated form.

3.3.8.3 Medial non-geminate CC clusters

It will again be noted that most of the examples are “cultural” vocabulary, whether or not the original source language is known. One example is given for each attested cluster; many of them are attested only with one or a few loanwords. It is difficult to identify the systematic (as opposed to accidental) gaps, but many of the gaps in the data involve a semivowel as first and/or second member. For purposes of clustering, w^n is combined with w and y^n with y . (There are no cases of r^n in a cluster.)

(35) Medial non-geminate clusters

a. nasal plus homorganic stop

- mb (10+): *déŋémbé:rè* ‘Zornia herb’ (Fulfulde)
- mp (5): *kúmpâm* ‘anxiety’ (<Fulfulde)
- nd (10+): *cèndò:ró* ‘bunting (bird)’
- nt (10+): *tóntè* ‘collective feast’
- ŋg (10+): *jáŋgé-* ‘study’ (Fulfulde)
- ŋk (10+): *táŋkà* ‘a colonial coin’ (regional word)

b. nasal plus nonhomorganic stop:

- mɡ (2): *jámɡâl* ‘wooer’ (Fulfulde)
- mk (2): *àlám-[kâyⁿ-kâyⁿ]* ‘Datura grain’ (crypto-compound)
- ng (0): —
- nk (1): *ɡánkò* ‘Celtis tree’

c. nasal plus nonhomorganic nasal

- nm, nñ, nŋ (0): —
- mn (10+): *nèmné* ‘scorpion’.
- mñ (5): *námñú* ‘sesame’
- mŋ (0): —
- ŋn, ŋm, ŋñ (0): —

d. nasal or liquid plus fricative or sibilant

- mf, nf, ŋf (0): —
- lf (3): *màlfâ:ⁿ* ‘rifle’ (regional)
- rf (0): —
- ms (3): *námsègè* ‘grasshopper sp.’
- ns (2): *ànsá:rá-n* (var. *ànì sá:rá-n*) ‘white person’ (<Arabic)
- ls (2): *àlsémélé* ‘epics sung with tomtoms’
- rs (6): *ɡúrsó:jè* ‘Grewia tree’

e. liquid {l r} plus stop

- lb (4): célbì ‘muzzle-guard to prevent suckling’ (Fulfulde)
 lc (0): —
 ld (2): júldâ:n ‘end-of-Ramadan holy day’ (Fulfulde)
 lg (7): pàlgú ‘channel dug for rainwater’
 lj (1): áljúmá:rè ‘Friday’ (Arabic via Fulfulde)
 lk (2): bàlkóró ‘gum tree’
 lp (3): bàlpó: ‘calabash drum’
 lt (2): áltíné:rè ‘Monday’ (Arabia via Fulfulde)
 rb (5): àlàrbá-n ‘Arab or Tuareg’ (Arabic)
 rc (5): àrcéwé ‘stirrup’ (Arabic via Fulfulde)
 rd (5): cárdù ‘silver’
 rg (10): sírgírì ‘black cow with white face and throat’ (Fulfulde)
 rj (6): cí-cérjù ‘plant sp.’
 rk (6): térkây ‘light brown cow’ (Fulfulde)
 rp (0): —
 rt (2): sártì ‘deadline’ (Arabic via Fulfulde)

f. liquid {l r} plus nasal or other liquid

- lm (5): bálmá:rè ‘cow black on top, white below’ (Fulfulde)
 ln, lŋ, lñ (0): —
 lr (0): —
 rm (8): sèrmèñém ‘fig tree sp.’
 rn (2): bérnè ‘bovine liver disease’
 rñ (3): pèrñé- ‘graze, brush against’
 rŋ (0): —
 rl (0): —

g. semivowel plus stop

- wb, wc, wg:, wj, wk:, wp (0): —
 wd (1): jáwdì ‘livestock’
 wt (3): sáwté- ‘be sick and tired of’ (Fulfulde)
 yb (1): háybé- ‘watch over’ (<Fulfulde)
 yc, yg, yp (0): —
 yd (1): séydâ:n ‘demon’ (variant; Arabic via Fulfulde)
 yj (1): yèyjê: ‘morning’
 yk (2): táyké ‘notice’
 yt (2): séytâ:n ‘demon’ (variant; Arabic via Fulfulde).

h. semivowel plus nasal

- wm (0): —
 wn (0): — (but see triple cluster wnd, below)

ym (0): —
 yn (3): màyⁿ ná- ‘take heart’

i. semivowel plus liquid

wl (2): máwlûld ‘Maouloud (holy day)’ (Arabic via Fulfulde)
 wr (3): dǎwrù ‘magical solution’
 yl (1): gàylé ‘a little’
 yr (3): bóyrì ‘porridge’.

j. semivowel plus nonhomorganic semivowel

wy (0): —
 yw (0): —

k. semivowel plus fricative or sibilant

wf (0): —
 yf (0): —
 ws (1): hàwsà- ‘Hausa’ (compound initial)
 ys (0): —

l. nasal or liquid plus semivowel {w y}

lw (1): sílwâl ‘herb sp.’
 ly (0): —
 nw (2): sínwâ: ‘Chinese person’ (<French)
 ny (0): —
 mw, my, ηw, ηy (0): —

3.3.8.4 Medial triple CCC clusters

I can cite líwndù ‘herder’s staff’ and séwndè ‘(water) spring’, both from Fulfulde. wnd is the “easiest” triple cluster one could find, with a semivowel followed by a (syllable-initial) homorganic nasal-stop cluster (arguably a prenasalized stop).

3.3.8.5 Final CC clusters

Excluding Fulfulde and French loans not in common use, like máwlûld ‘Maouloud (Muhammad’s birthday)’, there are no final clusters, except for combinations of clitic ≡ỵ (‘it’s...’) with a preceding word ending in y or yⁿ, which are heard as geminated ...y≡ỵ and (with Nasalization-Spreading)...yⁿ≡ỵⁿ, respectively.

3.4 Vowels

The vowel phonemes, omitting tones, are given in (36).

(36)	short oral	long oral	nasalized
	u	u:	u: ⁿ
	o	o:	o: ⁿ
	ɔ	ɔ:	ɔ: ⁿ
	a	a:	a: ⁿ
	ɛ	ɛ:	ɛ: ⁿ
	e	e:	e: ⁿ
	i	i:	i: ⁿ

The qualities {ɛ ɔ} and {e o} constitute **harmonic sets**; see §3.4.5, below. Minimal pairs that illustrate the phonemic oppositions are bé:- ‘take place’ versus b́é: ‘excrement’, céjé- ‘encounter’ versus céjé- ‘cut’, òròwó ‘jujube (fruit)’ versus òròwó ‘pond scum’, and gó:- ‘go out’ versus ǵó: ‘dance [noun]’.

3.4.1 Short and (oral) long vowels

Since Jamsay favors Cv and Cv: syllables, with relatively few consonant clusters (except in compounds and noun-adjective combinations), vowel length oppositions are common and are generally easy to hear. A minimal pair is jèrè- ‘harvest [verb]’ versus jè:rè- ‘bring’.

Long vowels in **nonfinal syllables** within stems (and words) are common in all word classes. Examples of short and (oral) long nonfinal vowels are given in (37).

(37)	quality	short-V ex.	gloss	long-V ex.	gloss
	u	dúdúrúm	‘trash heap’	bú:dù	‘money’
	o	bómó	‘outside’	bò:mó-	‘be stupid’
	ɔ	yòrɔ-	‘be soft’	yò:rɔ-	‘cook on fire’
	a	játé-	‘calculate’	wá:tè	‘oath’
	ɛ	séré-	‘copulate’	sé:rè	‘witness’
	e	péjé-	‘pound grain’	pé:jú	‘sheep’
	i	síñé-	‘sniffle’	sí:ɲè	‘dark grey cow’

In medial position, long vowels are uncommon (and are not possible in verb stems). Cases observed include arguably composite (e.g. reduplicated) stems

like dù-dú:rú ‘gourd’ and pù:-pá: ‘blacksmith’s bellows’, and a few loanwords (from Fulfulde) like láyyá:rù ‘Feast of the Ram’.

All verb stems of more than one syllable end in a short vowel in their basic form. Nouns, adjectives, and other stems may end in a short or long vowel (or in a consonant) regardless of the number of syllables, but final long vowels are less common than final short vowels even for nouns and adjectives if the stem has more than one syllable. Some noun stems with final long vowel are the following (note that some can be analysed as initial Ci- reduplications, as Cv:-Cv: full-stem iterations, or as beginning with semi-segmentable à-): dî-dé: ‘shield’, lì-lě: ‘fear’, ásê: ‘Saturday’ (ultimately Arabic), bà:bî: ‘rubber sandal’, bèrù-àjí: ‘billy-goat’, bàlpó: ‘calabash drum’, and bütó: ‘Mitragyna tree’. Additional cases of final long oral vowel are created by morphological rules, e.g. Imperfective verbs (type yò:rô: ‘will cook on fire’, from /yòrô-L/).

Monosyllabic stems, other than nouns and adjectives that end in a consonant, have a shape Cv: with long vowel. All monosyllabic verbs are of this type. Examples are the verbs yă: ‘go’, dǎ:- ‘insult’, and bá:- ‘learn’, and the nouns dú: ‘burden’, dě: ‘father’, and bé: ‘excrement’. No short-voweled Cv verb, noun, or adjective stems occur.

Word-final super-heavy syllables of the shape Cv:C are attested but somewhat uncommon. The final C is a sonorant (nasal, semivowel, or l), as in à-cě:ŋ ‘agama lizard’. Many if not all of these cases involve historical loss of a word-final high vowel, cf. cě:ŋú ‘agama lizard’ in some other Dogon languages. The same syllable type occurs on the surface in apocopated verbal nouns of the shape Cǎ:C-Ø associated with Cv:Cv- verbs whose final consonant is one of the relevant sonorants, e.g. ñé:-wⁿé- ‘feed’, VbIN ñě:-wⁿ-Ø ‘feeding’ (apocopated from /ñě:-wⁿ-ú/).

3.4.2 Nasalized vowels

It is necessary to distinguish vowels that are redundantly nasalized by a preceding nasal (or nasalized) consonant, and independently nasalized vowels that constitute a phonemic set. On the former see under Nasalization-Spreading, below.

The **independently nasalized vowels** are represented with a following superscripted ⁿ. They are phonetically long and are therefore also represented with the length diacritic :. Independently nasalized vowels constitute a five-, rather than a seven-vowel system. Nasalized vowels are most common in monosyllabic stems, where the vowel length could be attributed to the requirement of at least two moras. Examples are in (38).

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(38)	vowel	example	gloss
	u: ⁿ	kú: ⁿ	‘head’
	ɔ: ⁿ	gɔ: ⁿ -	‘take out’
	a: ⁿ	gǎ: ⁿ	‘fig tree’
	ɛ: ⁿ	tě: ⁿ	‘friend’
	i: ⁿ	tí: ⁿ	‘send’

There are a few cases of an independently nasalized vowel, either nonfinally or (much more often) finally in an uncompounded stem of two or more syllables. When such vowels do occur, they are phonetically long, showing that length is not simply due to minimal moraic requirements (39).

(39)	vowel	nonfinal	gloss	final	gloss
	u: ⁿ	—		bà ⁿ àk ^u : ⁿ	‘cassava’
	ɔ: ⁿ	—		—	
	a: ⁿ	—		mà ⁿ l ^f â: ⁿ	‘rifle’
	ɛ: ⁿ	—		—	
	i: ⁿ	sì: ⁿ lé	‘disease’	à-tí: ⁿ	‘bird trap’

Only final a:ⁿ is at all common in multisyllabic stems; in addition to ‘rifle’ I can also cite pùkâ:ⁿ ‘solder metal’. i:ⁿ occurs in many (synchronic or frozen) compounds ending in the compound final -î:ⁿ ‘child (of)’ (§5.1.10), e.g. sà:j-î:ⁿ ‘bird’.

Nasalized vowels contrast with combinations of vowel plus nasal consonant. The latter are exemplified by à-jǎŋ ‘forked stick’ and wǎn ‘Anogeissus tree’, whose final syllables are clearly distinct from that of e.g. màⁿl^fâ:ⁿ ‘rifle’.

In addition to the phonemically nasalized vowels described above, vowels are routinely nasalized phonetically under the influence of a preceding or following nasal (or nasalized) consonant. See the discussion of Nasalization-Spreading, below. There are no phonemic neutralizations in this context; in particular, phonetic [eⁿ] is distinguishable from phonetic [ɛⁿ], and phonetic [oⁿ] is distinguishable from phonetic [ɔⁿ]. I do not indicate this kind of low-level nasalization except in narrow phonetic transcription. Example: bǎrmérⁿè ‘injury’ is phonetically [bǎrméⁿrⁿèⁿ], while jí-jéwⁿé ‘mud-dauber wasp’ is phonetically [dʒídʒéⁿwⁿéⁿ].

3.4.3 Initial vowels

As noted above, the typical syllables of Jamsay are Cv and Cv:, while Cv:ⁿ, CvC, and Cv:C are also found. All of these are consonant-initial. However, word-initially the C position may be unfilled. For example, initial a is common in both native words and (e.g. Arabic) borrowings: ámà ‘God’, ǎ-n ‘man’, àná ‘village’, álarbá:rè ‘Wednesday’. Examples of stems beginning with other short vowels are újúró ‘ask’, ònùrⁿú ‘smooth’, ǒñó- ‘suck’, èndèkónó ‘rock hyrax (mammal)’, èjú ‘field’, and írù ‘female breast’.

Examples of initial long vowels in stems of at least two syllables: ú:ñùm ‘Cleome herb’, ò:gú ‘sweat [noun]’, ǒ:rⁿò ‘waterskin’, à:ŋá ‘how much?’, é:ñú ‘shame’, é:rè ‘peanuts’, í:rⁿé ‘iron’. Monosyllabic cases are mostly stems consisting of just a long vowel (ó:- ‘give’, á:- ‘catch’, ǔ: ‘moon, month’, é:- ‘see’, é:ⁿ- ‘weep’ and its homonym é:ⁿ- ‘get tight’), but there are also a few cases with final n : ǎ:n ‘infection’, ù:n ‘forest’, ǔ:n ‘monitor lizard’.

3.4.4 Stem-final vowels

There are no restrictions on final vowels in nouns or adjectives. For inflected verb stems, there is a constraint against final high vowels and another constraint against long vowels.

(40) Constraint against Final High Vowel in Verb Stem

An inflectable verb stem of more than one syllable may not end in a high vowel i or u. However, monosyllabic Ci:- and Cu:- are allowed.

Examples of monosyllabic high-voweled verb stems: tí:- ‘send’, nú:- ‘enter’.

(41) Constraint on Length of Final Vowel in Verb Stem

- a. In its basic (lexical) form, an inflectable verb stem of more than one syllable must end in a short vowel.
- b. Except for a handful of defective “quasi-verbs” (generally limited to the unsuffixed Perfective and to special, irregular negative forms), an inflectable monosyllable verb stem must end in a long vowel.

The quasi-verbs that do not respect (41.b) are *sà-* ‘have’, human *wà-* and nonhuman *kà-* ‘be’, and *kùn-* ‘be in’. The latter is the only verb or quasi-verb that ends in a consonant.

A verb with a final short vowel can end up having this vowel lengthened after morphological and phonological processes apply. For example, the unsuffixed Imperfective is expressed by grafting an F-tone onto the final mora of the verb, see (116) and (131), and if there is a zero pronominal (or Participial) suffix this vowel must additionally be lengthened to allow the contour tone to be articulated (Contour-Tone Mora-Addition (141)). Example: *bèrè-* ‘obtain’, *bèrê:-Ø* ‘he/she will obtain’ (/bèrê-L-Ø/ with L-tone element).

Nouns, and to a lesser extent adjectives and numerals, are treated more liberally. There are plenty of these words, including those of two or more syllables, that end in a high vowel. *u* is common in all of these word-classes: *èjú* ‘field’, *èjú* ‘good’, *pérú* ‘ten’.

It is a different matter with *i*. I have no examples of final *i* in nonmonosyllabic adjectives or numerals. There are several adjectives ending in *u*, though this vowel does shift to *i* before Sg suffix *-n* (and, for some stems, also before Pl *-m*); see §4.5.1. For nouns, uncompounded stems of more than one syllable ending consistently in short *i* are uncommon, and limited to Fulfulde borrowings: *sállíqì* ‘ablutions’, *sártì* ‘deadline’, *sírgírì* ‘black cow with white face and throat’, *wákátì* ‘time’. A few other nouns waver between final *u* and *i* (*lácírì* or *lácírù* ‘couscous’, from Fulfulde). The Fulfulde adverb *já:tì* ‘exactly’ is used to some extent in Jamsay. Excluding compounds ending in *-î:ⁿ* ‘child’, or nouns ending in *î:ⁿ* that may be suspected of having once contained this element (e.g. *kàrⁿî:ⁿ* ‘intestine’), I can cite a few cases of final long *î:*, namely *fárnî:* ‘donut’ (<Bambara), *sàrî:* ‘plow’ (<French *charrue*), *wálfî:* ‘holy man, seer’ (<Arabic), *yà:-jí:* ‘marriage’ (perhaps originally containing *yà:-* ‘woman’), *zàndàrmèrî:* ‘gendarmerie’ (<French).

Nouns of more than one syllable may end in a long vowel: *bàlpó:* ‘calabash drum’, *màlfâ:ⁿ* ‘rifle’. I have no examples of such shapes with adjectives or numerals. Final consonants are common in nouns, adjectives, and numerals: *kúsêl* ‘small piece’, *sòbòl* ‘gourd’, *jém* ‘black’, *kúróy* ‘six’. Nouns and adjectives ending in Sg *-n* or Pl *-m* greatly increase the number of cases.

3.4.5 Vocalic harmony

Although the situation is clouded somewhat by the many verbs borrowed from Fulfulde (usually with final *ε*, less often final *e*), the clearly productive sequences of vowel qualities (disregarding length) in Jamsay **verbs** of two or three syllables are those in (42).

(42) a. sequences of identical non-high vowels

ee eee
 εε εεε
 aa aaa
 ɔɔ ɔɔɔ
 oo ooo

b. harmonic high-mid vowel sequences

ie iie
 iε iie
 uo uuo
 uɔ uuɔ

All of the combinations in (42) are abundantly attested. Examples, starting with identical vowels: bisyllabic *céjé-* ‘encounter’, *dègé-* ‘lick’, *ná:ná-* ‘put up on’, *pójó-* ‘crumble’, *yò:ró-* ‘lie in wait for’; trisyllabic *cégéré-* ‘listen to’, *mèṅèrⁿé-* ‘roll between hands’, *ájárá-* ‘sew’, *sóṅórⁿó-* ‘decorate’, and *bògòró-* ‘(billygoat) bellow’. Harmonic high-low sequences: bisyllabic *círé-* ‘fly away’, *íjé-* ‘stand’, *bùgó-* ‘swim’, *dùrò-* ‘heave (spear)’; trisyllabic *jì gì ré-* ‘shake’, *dì gì -ré-* ‘align’, *jùgùró-* ‘shake, churn’, *dùgù-nó-* ‘become fat’.

Verb stems that do not fit into the identical-vowel (42.a) or harmonic-vowel (42.b) sets are a small minority. One suffixally derived type, closely related to the harmonic pattern, has a medial u flanked by identical mid-height vowels, the attested cases being $\varepsilon_ \varepsilon$ and $\text{ɔ}_ \text{ɔ}$. The examples known to me are in (43).

(43)	stem	gloss	related form
	éjú-né-	‘make good’	èjú ‘good’
	mḍñù-nó-	‘make bad’	mḍñú ‘bad’

Here an adjective ending in u has a factitive derivation (suffix -nv-) that gets its vowel quality from the first-syllable vowel. This shows that an initial-syllable unrounded mid-height vowel overrides an intervening u in determining suffixal vowel features. I have no examples involving i (no non-monosyllabic adjective ends in i).

There remain a modest number of verbs borrowed from Fulfulde involving final ε or occasionally e (44).

(44)	stem	gloss	related form or source
	a. bámbé-	‘carry (child)’	<Fulfulde
	júkké-	‘fine (sb)’	<Fulfulde
	pótté-	‘participate’	<Fulfulde
	tóryé-	‘pester’	<Fulfulde
	b. bárkíné-	‘thank’	<Fulfulde causative
	jáŋgíné-	‘teach’	<Fulfulde causative

In (44.a), the Fulfulde source is a simple verb stem. Better assimilated variants are attested in some cases: *tóryé-* has a variant *tórró-* with identical vowels; likewise, *pótté-* has a variant *póttó-*. Disharmonic mixes of mid-height vowels, notably [ɔ ε], tend to be nativized to identical-vowel sequences [ɔ ɔ] (presumably [o e] would also tend to be nativized as [o o]). However, [a ε] and [u ε] sequences in Fulfulde borrowings seem to be stable.

In (44.b), the source is a Fulfulde Causative with suffix *-in-*. The Jamsay forms have the usual final ε, resulting in a [aiε] vocalic sequence. Such stems appear to be stable phonologically in Jamsay.

The situation for verbs can be summarized in (45).

(45) **Vocalic Harmony (Verb Stems)**

Vowel sequences allowed are:

a. identical mid-height or low vowels:

[e e (e)], [ε ε (ε)], [a a (a)], [ɔ ɔ (ɔ)], [o o (o)]

b. harmonic sequence of one or more identical high vowels and a final mid-height vowel with the same [±back] and [±rounded] features:

bisyllabic [i e], [i ε], [u o], [u ɔ];

trisyllabic [i i e], [i i ε], [u u o], [u u ɔ]

c. identical mid-height vowels separated by u

[ε u ε], [ɔ u ɔ] (theoretically also [e u e], [o u o])

d. some other combinations with final ε

[a ε] in deadjectival verbalizations with *-nv-* suffix;

[a ε], [a i ε], [u ε], and marginally [ɔ ε] in borrowings

Noun, adjective, and numeral stems are subject to a looser set of harmonic principles. Combinations of a and/or u with mid-height vowels (front or back) are common: noun à-légù ‘front part of loincloth’, adjectives bùkâm ‘lukewarm’ and

Nouns have more flexible harmonic constraints. Combinations of a, i, and/or u occur in e.g. tì nì ñú ‘Dichrostachys tree’ and bíbárú ‘wooden post above door’. Vowel a and/or a high vowel {i u} may co-occur with a mid-height vowel, as in àdúrⁿó ‘world’, bísôm ‘acacia tree’, bòròdíyà ‘banana’, cámbôl ‘nasal disease’, cèntègú ‘lunch’. Therefore the only harmonic principle generally respected by nouns is that in (46).

(46) **Vocalic Harmony (Noun Stems)**

Distinct mid-height vowels from the set {e e o o} do not co-occur within (uncompounded) stems

Aside from some poorly assimilated Fulfulde and French borrowings, the apparent counterexamples to (46) are nouns (generally of three or more syllables) that probably originated as compounds. In a case like èndèkónó ‘rock hyrax (mammal)’, an original segmentation *èndè-kónó, with harmony applying within the initial and within the final but not across the division, is probably still valid synchronically even though the initial and the final do not occur separately. Likewise, in a stem like wò-túmó ‘small mound’, aside from a weak synchronic connection to tímó ‘stone’, the very fact that we get o and o together suggests a break wò-túmó, even though the initial is not synchronically recognizable (or glossable).

Lexical **adjectives** show less variation than nouns. Aside from monosyllables (e.g. jó: ‘many’), and longer stems with identical vowels (e.g. kàná ‘new’), there are many adjectives with one mid-height vowel {e e o} (I can cite no example with o) plus u (èjú ‘good’, érù ‘sweet’, mǎñú ‘bad’). There is also one trisyllabic adjective with [o u u] (ònrⁿú ‘smooth’)

3.5 Segmental phonological rules

All phonological rules other than tonal (and other prosodic) processes are described here.

3.5.1 Trans-syllabic consonantal processes

3.5.1.1 *Nasalization-Spreading*

Within an unsegmentable stem, the constraint (47) is applicable.

- (47) a rhotic or semivowel must be nasalized if it is immediately preceded by a nasal or nasalized segment N, or if it is separated from a preceding N only by a vowel

Examples: noun $n\grave{o}w^n$ ‘meat’, adjective $m\check{a}y^n$ ‘dry’, numeral $n\check{u}:y^n$ ‘five’, verb $n\grave{a}r^n\acute{a}$ - ‘bear [a child]’. The loanword $s\acute{i}nw\hat{a}$: ‘Chinese’ (Fr. *chinois*) is not affected. With respect to native vocabulary, I am aware of one exception (for some speakers): $d\acute{e}m\acute{e}r\acute{e}$ ‘stout, thick’, dialectally $d\acute{e}m\acute{e}r^n\acute{e}$. This can be reconstructed as $*d\acute{e}mb\acute{e}r\acute{e}$, where the original b prevented Nasalization-Spreading from the *m to the *r (cf. cognates like Walo $d\acute{o}mb\acute{u}r\acute{o}$).

The constraint also applies to combinations of a verb stem with AN and/or pronominal-subject suffix(es), and of any word plus Focus or ‘it is’ clitic $\equiv\grave{y}$. To implement this constraint, I posit a rule of Nasalization-Spreading working from left to right. It may be repeated until the end of the word (including a clitic, if present) is reached. The rule does not apply to a sequence like ... η kawa, because here the η is separated from the potential target w by a nonnasal consonant k.

Within **compounds**, there is no spreading of nasalization from the initial to the final. Thus $n\grave{a}\eta\grave{a}-y\check{a}$: ‘cow’ (“bovine-female”) has unnasalized y. It likewise fails to apply across word-boundaries, even within tightly-knit phrases such as [noun + adjective], e.g. $n\grave{a}\eta\grave{a} w\grave{a}l-g\acute{u}$ ‘lazy cow’.

However, derivational suffixes (e.g. Causative allomorph -wv- and Reversible -rv-), pronominal-subject suffixes (e.g. 1Pl -y and 2Sg -w), and clitic $\equiv\grave{y}$ ‘it is’, are all eligible targets for spreading. Examples: Reversible -rv- ($p\acute{a}y\acute{a}-r\acute{a}$ - ‘untie’) becomes - r^n v- in $n\acute{a}\eta\acute{a}-r^n\acute{a}$ - ‘remember’; 2Sg subject suffix -w ($p\acute{a}y\acute{a}-w$ ‘you-Sg tie’) is nasalized to w^n in $n\acute{a}\eta\acute{a}-w^n$ ‘you-Sg forget’; and Focus or ‘it is’ clitic $\equiv\grave{y}$ ($b\acute{e}r\acute{e}\equiv\grave{y}$ ‘it’s a stick’) is nasalized to $\equiv\grave{y}^n$ in $t\grave{u}m\acute{o}\equiv\grave{y}^n$ ‘it’s a stone’. The clitic can also directly follow a nasalized consonant, and of course it is nasalized here as well, as in $\check{y}y^n\equiv\grave{y}^n$ ‘it’s a starling’. Double application (recursion) is observed in $n\acute{a}\eta\acute{a}-r^n\acute{a}-w^n$ ‘you-Sg remember’ from / $na\eta a-rv-w$ /.

The following section on consonantal metathesis includes discussion of suffixal derivatives like $s\acute{u}g\acute{o}$ - ‘go down’, causative $s\acute{u}n\acute{u}-\eta\acute{o}$ - ‘take down’. These are somewhat opaque, but one possibility is this: Causative allomorph - $n\acute{v}$ - would regularly produce / $s\acute{u}g\acute{u}-n\acute{o}$ -/ (see Suffixal Vowel-Spreading, §3.5.2.1), which could become / $s\acute{u}n\acute{u}-g\acute{o}$ -/ by metathesis. One further

modification would be needed: an extension of Nasalization-Spreading to convert /g/ to ŋ after a syllable beginning in n.

In the lexicon, I can find no unsegmentable stems with a Nvgv sequence (N = any nasal or nasalized consonant), except for the ñùgú, which denotes a cultivated vegetable. There are many stems with a sequence NvN(v), e.g. nàŋá ‘cow’, mǔŋ ‘knot’, ómóŋó- ‘be puffed up’, ñà:ŋà-èñé ‘bird sp.’ (with èñé ‘chicken’). It seems, then, that *Nvgv to Nvŋv may have been an authentic historical shift, whose most obvious synchronic residue is in the handful of suffixally derived verbs like súnú-ŋó-. Though the derivation of such forms is no longer transparent, I will include /g/ to ŋ in the formulation of the rule (48).

(48) **Nasalization-Spreading**

Within a verb stem, inflected verb form, or suffixal derivative of a verb, a consonant from the set {r w y g} separated from a preceding nasal or nasalized consonant only by a vowel, or directly following it, is nasalized to {rⁿ wⁿ yⁿ ŋ}

3.5.1.2 *Consonantal metathesis in suffixal derivatives of verbs*

A comparatively small set of stems show unusual consonantal changes in suffixal derivatives, either verb-to-verb or verbalizations of adjectives.

First, there are some alternations with inputs with **medial rhotic** r or rⁿ. Several adjectives have an inchoative and/or factitive verbalization (§9.6) with n...-rⁿ. The examples known to me (49.a) include all known bisyllabic adjectives with medial r (539.d), except for one (yðrú ‘soft’) that has a morphologically different type of verbalization (yðrð-gó-, 538.b) so the alternation can be described as productive. In the one case where the adjective has a long vowel (‘bitter’), this vowel is shortened in the derivative. Many adjectives end in u, but in the verb the u is overwritten by Suffixal Vowel-Spreading (§3.5.2.1). In addition to these cases where an adjective with medial r has a suffixally derived verbalization with n...rⁿ, there is one simple verb with medial rⁿ that has the same n...rⁿ output in a suffixal derivation, namely the reversive (49.b).

(49) r or rⁿ to n...rⁿ

a.	gloss	adjective	inchoative/factitive (§9.6)
	‘fresh, soft & moist’	ðrú	ónó-r ⁿ ó-
	‘long’	gùrú	gùnù-r ⁿ ó-
	‘sweet, sharp’	érù	éné-r ⁿ é-
	‘bitter’	jé:rù	jènè-r ⁿ é-
	‘big’	gàrá	gànà-r ⁿ á-
b.	gloss	verb	reversive (§9.1)
	‘roll up (pants)’	mì r ⁿ é-	mì nì -r ⁿ é- ‘unroll’ (525.b)

The usual inchoative-factitive derivational suffix is -n^v- (§9.6). This suggests for (49.a) an underlying r...n sequence that undergoes **metathesis** to n...-r, which then feeds Nasalization-Spreading to produce the observed n...-rⁿ.

However, it is hard to see how this could apply to (49.b). Since the regular Reversive suffix is -rv- (or -rⁿv- after Nasalization-Spreading), mì nì -rⁿé- from mì rⁿé- looks more like a **dissimilation** (/rⁿ/ becoming n before another rⁿ) than like a metathesis. This forces us to consider assimilation and dissimilation as a possible alternative analysis even in (49.a). A metathesis XY to YX is sometimes indistinguishable from the sequence of a progressive assimilation XY to XX followed by a regressive dissimilation of XX to YX). One could also consider the possibility that an output constraint, favoring n...r (and n...rⁿ) but disfavoring #r...n and #r...r (along with #rⁿ...n and #rⁿ...rⁿ) is at work, so that details of the implementation rules are less important than the output patterns.

Two Cvr^v- or Cvrⁿv- inputs, and one Cvⁿv- input, have causatives of the form C^v:-n^v- (50).

(50) vrv or vⁿv to v:n

	gloss	simple verb	causative
a.	‘pass by’	gàrá-	gà:-ná-
	‘come together’	mòr ⁿ ó-	mò:-nó-
b.	‘sit down’	dì ñé-	dè:-né-

The long vowels in the causatives suggest that an original *C^vC₂v̄-C^v- lost its C₂, with the resulting VV-cluster contracting to a long vowel. Both -r^v- and -n^v- are attested as minor allomorphs of the Causative suffix. The phonology is

therefore particularly obscure here. The simplest solution is to take the suffix as -nv- and allow lexically idiosyncratic deletion of C₂. If the suffix were instead taken to be underlying -rv-, more complex derivations would be needed. In (50.a), taking the underlying forms of the causatives as /gàrà-rá-/ and (after Nasalization-Spreading) /mòrⁿɔ-rⁿá-/ would suggest a **dissimilation** of the suffixal /r/ to the stem-medial rhotic, or perhaps a bidirectional shift of r...-r and rⁿ...-r to n...-n. In either case, this would be followed by idiosyncratic deletion of the stem-medial C₂ and contraction of the resulting sequence of identical vowels.

Possible analogues to (50.a) in nominal morphology are the cases of ǎ-n ‘man’ (cf. plural àrⁿ-úm) and î-n ‘child’ (cf. plural úrⁿ-ùm), where an original medial *rⁿ seems to have been lost. But for ‘child’ there is also a nonhuman counterpart î:ⁿ that clouds the picture (§4.1.2). One adjective has a similar alternation: gàrá ‘big, adult’, human Sg gàrí-n or contracted gǎ-n (cf. plural gàrú-m), see §4.5.1. In all three of these nominal and adjectival cases, only the form with Sg suffix -n is contracted, not the form with Pl -m. Note that causatives gà:-ná- and mò:-nó- (50.a) also have a suffix (Causative allomorph -nǎ-) with n. It would seem that the sequence ...rvnv or ...rⁿvnv is disfavored, perhaps for articulatory reasons.

There are also some possible metatheses involving Cvjv- and Cvgv- (including Cvyy-) inputs. In (51), input j corresponds to a g...-j sequence in the output. There is a minor Causative allomorph -gǎ-, making a metathesis analysis possible (underlying j...-g surfacing as g...-j). Two cases are attested, one a deverbial causative and the other a denominal inchoative or factitive.

(51) j to g...j

	gloss	simple verb	causative	gloss
a.	‘be left over’	wàjá-	wàǎ-já-	‘cause to be left over’
	gloss	noun	inchoative/factitive	
b.	‘craziness’	wéjè	wègè-jé-	‘become/make crazy’

There is one case of input Cvŋv- and three of input Cvgv- whose derivative has a n...-ŋ sequence (52). The attestations are three deverbial causatives and one deadjectival inchoative or factitive. Deverbial causatives and deadjectival verbs are closely connected formally.

(52) g or ŋ to n...ŋ

	gloss	input	derivative	gloss
a.	‘become’	táŋá-	táná-ŋá-	‘transform’
b.	‘go down’ ‘be finished’	súgó- dògó-	súnú-ŋó- dònò-ŋó-	‘take down’ ‘put a stop to’
c.	‘distant’	wàǵá	wànà-ŋá-	‘go/take far away’

While these cases are less than transparent, I incline to take the suffix here as underlying /-nǵ-/ , which is attested as a minor Causative allomorph and as a fairly productive deadjectival verbalizer (§9.2, §9.6). If so, underlying /n...ŋ/ metathesizes to n...ŋ in (52.a). Similarly, underlying /g...n/ metathesizes in (52.b-c) to /n...g/. The /g/ then surfaces as ŋ, by Nasalization-Spreading (48).

The cases of possible metathesis covered in this section can be summarized in (53), but the qualms voiced above should be kept in mind.

(53) **Metathesis in Suffixally Derived Verbs**

a.	/r...-n/	>	n...-r ⁿ (via /n...-r ⁿ /)
b.	/j...-g/	>	g...-j
c.	/ŋ...-n/	>	n...-ŋ
	/g...-n/	>	/n...-g/ (eventually n...-ŋ)

The two metatheses in (53.c) are closely related, since ŋ and g (including ǵ) are the two voiced velar consonants.

Again, these metatheses are lexically restricted rather than productive. Note, for example, that /Cvŋv-nǵ-/ materializes as Cv:-nǵ- in the case of dǐŋé- ‘sit down’, causative dè:-né- ‘make sit’ (50.b), but as metathesized Cvnv-ŋǵ- as in táŋá- ‘become’, causative táná-ŋá- ‘transform’ (52.a).

3.5.2 *Vocalism of suffixally derived verbs*

The major derived verb categories are expressed by adding a suffix with unspecified vowel (Reversible -rǵ-, Causative -wǵ- and other allomorphs, pseudo-causative -wǵ̀) to the input stem (which is usually a verb, occasionally an adjective or a noun).

These derivatives must respect the constraints on verb stems described above: stem must end in a non-high short vowel, and the stem-wide vocalism must involve either identical vowels or an acceptable harmonic sequence.

To account for the derived verbs in terms of traditional phonological rules, we assume that the suffixal vowels are underspecified, and recognize the processes in (54).

- (54) a. Suffixal Vowel-Spreading
b. Presuffixal V₂-Raising

The two processes must be ordered as given.

For the tones of suffixally derived verbs, which are generally predictable from the tones of the input simple verbs, see §3.7.3.1, below.

3.5.2.1 Suffixal Vowel-Spreading

When the input verb stem has a single vowel quality throughout, most of the derivational suffixes just copy this vowel quality (except for monosyllabic high-vowel stems Cu:- and Ci:-). Simple causative examples are in (55); many similar examples involving causatives, reversives, and pseudo-causatives are given throughout Chapter 9.

(55)	input	gloss	derivative	gloss
	a. táyá-	‘put on shoes’	táyá-wá-	‘put shoes on (sb)’
	b. nǔ:-	‘drink’	nǔ:-w ⁿ ó-	‘give drink to’

Inflected verb stems, however, are subject to a **constraint against stem-final high vowels** (i u}, except in monosyllabic Ci:- or Cu:- (ní:- ‘sleep’, nú:- ‘enter’); see (40). This applies to the final vowel of underived verbs, and to the suffixal vowel of a derived verb.

This requires an adjustment to the vowel-spreading rule, whereby i and u stem-vowel qualities are copied onto suffixes as e and o, respectively. Thus nú:- ‘enter’ has a causative nú:-wⁿó- ‘make enter’, not #nú:-wⁿú-, and ní:- ‘sleep’ (used in the phrase jì-nî: ní:- ‘sleep’) has a causative ní:-wⁿé-, not #ní:-wⁿí-.

An additional issue is posed by inchoative and/or factitive derivatives of adjectives ending in short u (there are no adjectives of more than one syllable ending in i). In some cases, the u is retained in the derivative, but is disregarded in determining suffixal vowel quality, which is based instead on the first-syllable vowel (56.a). In other cases, in addition to this, the u is replaced by a copy of the first-syllable vowel in the derivative (56.b-d).

54 *Phonology*

(56)	gloss	adjective	inchoative/factitive
a.	‘good’ ‘bad, ugly’	èjú mǎñú	éjú-né- mǎñù-nó-
b.	‘hot, fast’	ógù	ógó-ró-, óyó-ró-
c.	‘fresh; soft & moist’ ‘long’ ‘sweet, sharp’	òrú gùrú érù	ónó-r ⁿ ó- gùnù-r ⁿ ó- éné-r ⁿ é-
d.	‘sleek’	ònr ⁿ ú	ónór ⁿ ó-

For metathesis in (56.c), see §3.5.1.2. The derivative in (56.d) has apparently lost one syllable, making it difficult to model phonologically (is the suffix underlying /-n^v-/, triggering another metathesis, or /-r^v-/ ?).

The rule applicable to vowels can be formulated as (57). The heart of the process is (57.b). (57.a) is a pre-derivational modification of the input, while (57.c) is a modification of the output to make it conform to a constraint on final vowels of verb stems.

(57) **Suffixal Vowel-Spreading**

- a. In some (but not all) adjectives ending in u, before a verbalizing suffix the u is replaced by a copy of the first-syllable vowel (e.g. ógù becomes /ógò/ as input to derivation); this precedes (b).
- b. In suffixally derived inflectable verb stems (reversive, causative, pseudo-causative, passive, deadjectival), the unspecified short vowel of the suffix adopts the quality features of (the underlying form of) the preceding vowel, except that noninitial u in the input, if still present after (a), is disregarded.
- c. To satisfy the constraint (40) against stem-final high vowel in nonmonosyllabic verb stems, suffixal i and u that have spread to the suffix by (a) are immediately converted into the nearest non-high vowels, e and o respectively.

3.5.2.2 *Presuffixal V₂-Raising*

There is a further problem in bisyllabic (but not longer) stems, when the input has a high vowel in the first syllable, and a mid-height vowel (with the same frontness value) in the second syllable, so that the vowel sequence is from the set [i e], [i ε], [u o], and [u ɔ]. In this case, the vowel of the second input syllable determines the features of the suffixal vowel. However, the second input syllable then raises its own vowel to become identical to the first-syllable vowel. The four input patterns just mentioned therefore have suffixal derivatives with vowel sequences [i i e], [i i ε], [u u o], and [u u ɔ], respectively.

(58)	input	gloss	derivative	gloss
	a. píté-	‘be inflated’	pítí-wé-	‘inflate’
	b. jì mné-	‘become blind’	jì mnì -w ⁿ é-	‘make blind’
	c. kúnó-	‘put’	kúnú-w ⁿ ó-	‘allow to put’
	d. jùgó-	‘know’	jùgù-wó-	‘inform’

Consider now cases where a bisyllabic input stem has a first-syllable high vowel, and a second-syllable mid-height vowel with the opposite backness and rounding features, i.e. a sequence from the set [i o], [i ɔ], [u e], and [u ε]. These sequences do not occur in native Jamsay bisyllabic verb stems because of harmonic pressures. The only testable cases are therefore half-assimilated verbs borrowed from Fulfulde that have [u ε] sequences. From júkké- ‘fine (sb)’, a causative júkké-wé- (not #júkkí-wé-) ‘cause to fine’ was elicited. The failure of the second-syllable ε to raise to i shows that the raising only applies within bisyllabic stems that respect harmony.

(59) **Presuffixal V₂-Raising**

In bisyllabic verb stems, if the first syllable has a high vowel, and the second syllable has a mid-height vowel with the same backness and rounding features, hence [i e], [i ε], [u o], or [u ɔ], when a verbal derivational suffix (including the pseudo-causative) is added, the [+high] feature spreads from the first-syllable vowel to the second-syllable vowel, resulting in [i i] and [u u].

Rule (59) can be thought of as a simple implementation of constraints on vowel sequences in trisyllabic verbs, whereby e.g. [i i e] is allowed while e.g. [i e e] is not. Alternatively, lexical vowel sequences like [i e] could be attributed to a distinct autosegmental tier, and then mapped separately onto

(underived) CvCv- and (suffixally derived) CvCv-Cv- to produce CiCe- and CiCi-Ce-, respectively.

3.5.3 Vocalic rules sensitive to syllabic or metrical structure

3.5.3.1 *Epenthesis*

Epenthesis (insertion of a “helping” vowel) is not widespread in Jamsay. However, there are occasions where a consonantal suffix or clitic is added to a stem or word ending in a consonant. Since final consonant clusters are not allowed, something must give.

3.5.3.2 *Post-Sonorant Syncope (verbs)*

There are a number of processes that have in common the effect of weakening or deleting a short vowel in the environment #(C)vC₂_C₃v, i.e., in a second syllable (counting from the left) when the short vowel is flanked by single consonants. The flanking consonants as well as the metrical position are important factors in how these rules work. These processes are applicable only to verbs (and their Verbal Nouns).

One process applies to (C)vC₂v verb stems when followed by a suffix-initial coronal consonant. It has some similarity to the Inter-Word u-Apocope (75), see §3.5.4.2 (below), but it applies to all vowel qualities and has some other distinguishing features. As a productive process, the rule can be summarized as (60). Some lexically restricted extensions are considered below.

(60) **Post-Sonorant Syncope (verbs)**

A short vowel is deleted (syncopated) if...

- a) it is in the metrically weak second syllable of a (C)vCv stem; and
- b) it is preceded by a (coronal) rhotic {r rⁿ}; and
- c) it is followed by a suffix-initial coronal {t d n s l r} or y, or by Linker tí (§15.1.16); and
- d) the first syllable of the (C)vCv stem has a short vowel

Condition (60.a) relates to the comments about abstract metrical structure in §3.2.2, above. Condition (60.d) is less a dynamic process than a constraint on Post-Sonorant Syncope designed to prevent adverse consequences, since syncopating the second vowel of (C)v:Cv would create a superheavy syllable. The inclusion of suffix-initial y as a conditioning factor for verbs only in (60.c)

is interesting, but also somewhat circular, since the suffix in question (Perfective -yè-/yà-) is itself an allomorph that can only be added to a bisyllabic stem if this is a syncopating rhotic-medial stem (the suffix can also be added to Cv:- monosyllabic stems, §10.1.2.3).

While Post-Sonorant Syncope (60) is almost always implemented in conversational speech, in formal elicitation I have recorded unsyncopated variants with suffixes other than Perfective -yè-/yà-.

Most examples involve AN suffixes. However, the syncope process can also occur when a verb is followed by Linker tí in a verb- or VP-chain (§15.1.16), as in ... kán tí mèy↑ ‘make ... (and ...)’ from kárⁿá- ‘do, make’.

The process does not apply in nominal compounds: t̄r̄ð-t̄ùmó ‘mountain boulder’.

Post-Sonorant Syncope (60) feeds two other rules that disguise the identity of an underlying rhotic. **Derhoticization** (§3.5.5.1) converts rⁿ (which cannot occur syllable-finally) to n. **Rhotic Assimilation** (77) (§3.5.5.2) assimilates r totally to the following coronal consonant, resulting in a geminate, as already seen in (60), above. Therefore the outputs are nC from underlying /rⁿvC/, and geminate C: from underlying /rvC/, where C is the coronal. Note that e.g. tt resulting from Post-Sonorant Syncope (60) can only reflect /rt/, since syncope does not apply between underlying t’s: játè játé-t̄i-Ø ‘he did a calculation’.

Post-Sonorant Syncope also feeds Rhotic-Cluster Lateralization (79).

Examples of Post-Sonorant Syncope (60) are gǎy-yà ‘pass.Perf’ from stem gàrá- and yèl-lí- ‘not come.Perf’ from stem yèré- (see next paragraph). There are many such (C)vC₂v- verbs with r or rⁿ as C₂, and there are plenty of coronal-initial AN (aspect-negation) suffixes that can follow them (Perfective -t̄i-, Resultative -sà-, Recent Perfect -jè-, Experiential Perfect -térè-, Imperfective -t̄óȳð-).

In the case of yèré- ‘come’, Post-Sonorant Syncope (60) is irregularly accompanied by a change in vowel quality from ε to e. Thus unsuffixed Imperfective yèrê:-Ø ‘he/she will come’, Imperfective Negative yèrè-gó-Ø ‘he/she will not come’, but suffixed Perfective yěy-yà-Ø ‘he/she came’, yèl-lí-Ø ‘he/she did not come’, etc. No similar vocalic change occurs with e.g. bèré- ‘get’.

The phonological scope of Post-Sonorant Syncope (60) seems to be expanding, but in a lexicalized way. One expansion is in the direction of **including nasal n** along with {r rⁿ} as the preceding consonants that licence syncope. While most Cvⁿv- stems do not allow syncope, the important verb kúnó- ‘put’ does optionally syncopate before the same coronal-initial suffixes: kúnó-t̄i- or kún-t̄i- ‘put.Perf’. This may have been suggested by the phonologically (and semantically) similar verb kúrⁿó- ‘put on, wear (garment)’, which regularly syncopates like other Cvⁿv- stems: Perfective kún-t̄i ‘wore’. Because of Derhoticization, the syncopated forms of kúnó- ‘put’ and of kúrⁿó-

‘wear’ are homophonous as [kún-]. There is no compelling practical need to distinguish ‘put (object)’ from ‘put on, wear (garment)’, which overlap lexically in many languages (English *put* and *put on*, French *mettre*).

Syncopated variants were also occasionally observed with únó- ‘**put down**’ (Perf ún-tì- varying with únó-tì-) and múnó- ‘braid’ (Imperfective mún-tóyò-). Note that kúnó-, únó-, and múnó- share a segmental shape (C)uno- with u in the first syllable. I did not observe syncope with e.g. náná- ‘chase away’, páná- ‘butcher’, sáná- ‘undo braids’, or píné- ‘shut (door)’.

A second extension is in the direction of allowing the first stem syllable to have a **long vowel**. There is one Cv:rv- verb that syncopates, namely jè:ré- ‘**bring**’. The verb appears in syncopating suffixal environments as /jër-/ , which invariably undergoes Rhotic Assimilation (77), as in Perfective jět-tì- (likewise jès-sà-, jèl-lí-, etc.). The **long vowel is shortened and raised** from ε: to e. It may be that the central irregularity is that jè:ré- is shortened in syncopating environments; this then undergoes regular Post-Sonorant Syncope (60). However, there is no shortening of jè:ré- in e.g. Imperfective Negative jè:rè-gó-, i.e. where the suffix does not begin with a coronal. The lexicalization of syncope for jè:ré- ‘bring’ is demonstrated by the failure of the homonym jè:ré- ‘criticize’ to syncopate: jět-tì- ‘bring-Perf’ versus jè:ré-tì- ‘criticize-Perf’. The other case like jè:ré- is the combination of Habitual AN suffix -á:rà- with following (stative) Negative -lá- (§11.4.3). A form like bé:-rà-lá-Ø ‘it doesn’t happen’ optionally syncopates to bê:-l-lá-Ø.

There is one other (optionally) syncopating verb that has both medial n (like kúnó- ‘put’) and a long vowel (like jè:ré- ‘bring’), namely m̀d̀: -nó- ‘**bring together**’ (also ‘gather, assemble’). For example, syncopated Perfective m̀d̀:-n-tì- varies freely with unsyncopated m̀d̀:-nó-tì-. Unlike jè:ré-, m̀d̀:-nó- **does not shorten its long vowel** when it syncopates. m̀d̀:-nó- is the causative of m̀d̀:ⁿó- ‘come together’ (50.a), which of course also syncopates.

Extended exemplification of regular and irregular Post-Sonorant Syncope (60) with verb-suffix combinations is given in (61), using Perfective allomorphs -tì- or -yà-. Rhotic Assimilation (77) is also seen in (61.a-b), and Derhoticization is at work in (61.c).

(61)	gloss	basic form	Perfective
	a. Cvrv-		
	‘clap’	péré-	pét-tì - [pét:i]
	‘cook’	síré-	sít-tì - [sít:i]
	‘groan’	dùró-	dűt-tì - [dűt:i]
	‘find’	bèré-	běs-sà- [běs:à]
	‘get pregnant’	lóró-	lój-yà- [lój:à]

‘come’	yèr ⁿ é-	yěy-yà- [jěj:à]
‘pass’	gàr ⁿ á-	gǎy-yà- [gǎj:à]
‘go up’	ùr ⁿ ó-	ǔy-yà- [ǔj:à]

b. exceptional cases with long vowel (Cv:Cv-)

‘bring’	jè:r ⁿ é-	jět-tì- [dʒět:i]
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c. with /rⁿ/

‘beat (drum)’	bàr ⁿ á-	bǎn-tì-
‘summon’	bòr ⁿ ó-	bǒn-tì-
‘sell’	dòr ⁿ ó-	dǒn-tì-
‘swallow’	mì r ⁿ é-	mǐn-tì-
‘cry out in joy’	sír ⁿ é-	sín-tì-
‘(rain) fall’	mì r ⁿ é-	mǐy ⁿ -y ⁿ à-
‘assemble’	mòr ⁿ ó-	mǒy ⁿ -y ⁿ à-

d. exceptional case with medial n (Cvⁿv-)

‘put’	kún ⁿ ó-	kún-tì-
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e. exceptional case with long vowel and medial n (Cv:nv-)

‘bring together’	mò:-n ⁿ ó-	mǒ:n-tì- (or: mò:-n ⁿ ó-tì-)
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Post-Sonorant Syncope (60) does not apply when C_2 is a consonant (even a sonorant) other than a rhotic, aside from the few cases of n just mentioned. In particular, if C_2 is l , syncope does not occur: kálá-tì- ‘park.Perf’, sálá-tì- ‘pray.Perf’. Likewise, if C_2 is non-coronal, syncope does not apply before a coronal C_3 , hence gòṅṅ-tì- ‘spin.Perf’. With the exception of jè:rⁿé- ‘bring’, the rule does not apply to Cv:Cv- stems or to trisyllabic stems even if all other factors are favorable: gà:rⁿá-tì ‘mix.Perf’, jì:rⁿé-tì- ‘mix.Perf’, sógóró-tì- ‘(unseen object) make a noise.Perf’, gàmàrⁿá-tì- ‘divide.Perf’.

However, there is a single bisyllabic verb with a medial velar nasal that undergoes optional syncope when the suffix (or pronominal subject clitic) also begins with a velar. The verb is táṅá- ‘happen’, and the triggering morpheme is either Imperfective Negative -gó- or (in the unaffixed Imperfective) Nonhuman subject pronominal =kò.

- (62) a. táṅá=kò = táṅ=kò ‘it will happen’
 b. tàṅà-gó-Ø = tàṅ-gó-Ø ‘it will not happen’

Since the flanking consonants in táṅ=kò and tàṅ-gó-Ø constitute homorganic (velar) nasal-stop pairs, there is a clear similarity between this and

examples involving coronals in (61), especially *kún-tî* - in (61.d). Syncope does not occur when the suffix begins in a non-velar C, such as 3Pl *táŋá-bà*.

I have been unable to find examples of Post-Sonorant Syncope (60) involving **labials**. The candidates would be verbs like *kámá-* ‘toss (cowries)’ with 3Pl subject suffix *-bà*. However, informants insisted on e.g. imperfective *kámá-bà* ‘they toss (cowries)’, and I never heard syncopated forms of the type *#kám-bà*.

Another context where Post-Sonorant Syncope (60) occurs is in suffixal derivation of verbs, when Reversive suffix *-rv-* is added to a *Cvrv-* stem (there is also one example involving a *Cvrⁿv-* stem). Here the output of Syncope is modified by yet another CC-cluster adjustment, this time /rr/ (or /rⁿr/) appearing as ll, see **Rhotic-Cluster Lateralization** (§3.5.5.3, below). In (63.a), the unsyncopated form of the Reversive is illustrated. In (63.b), we see Post-Rhotic Syncope and Rhotic-Cluster Lateralization. For more on reversives, see §9.1.

(63)	input	gloss	Reversive	gloss
	a. <i>páyá-</i>	‘tie’	<i>páyá-rá-</i>	‘untie’
	b. <i>píré-</i>	‘get stuck’	<i>píl-le-</i>	‘get unstuck’
	<i>kóró-</i>	‘hang up, hook’	<i>kól-ló-</i>	‘unhook’
	<i>màrⁿá-</i>	‘be lost’	<i>màl-lá-</i>	‘be recovered’

Some apparent cases of syncope can be explained in other ways. For example, if *tém-né-* ‘make (sth) wet’ is interpreted as the causative of *témé-* ‘become wet’, syncope must be assumed. However, *tém-né-* is more reasonably explained as a direct verbalization from adjective *tém* ‘wet’.

3.5.3.3 *VblN V₂-Lenition*

This process is most clearly observable in the Verbal Noun (suffix *-ú* replacing the stem-final vowel, with L-tone on the preceding syllables). In fairly careful speech, we get *i* for front vowels, and *u* from back vowels including *a*. The tendency is to generalize *u* to all cases. However, it is difficult to distinguish *i* from *u*, since a common pronunciation in allegro speech is as *ə* (schwa). Examples are in (64).

(64)	gloss	verb stem	VbIN	
			careful style	allegro style
a.	‘become white’ ‘trim (branch)’	píní-r ⁿ é- léréwé-	pì nì -r ⁿ -ú lèrì w-ú	[pì nèr ⁿ ú] [lèrèwú]
b.	‘make soft & moist’ ‘inflate’	ónó-r ⁿ ó- ómóηó-	ònù-r ⁿ -ú òmùη-ú	[ònèr ⁿ ú] [òmèηú]
c.	‘untie’	páyá-rá-	pàgù-r-ú	[pàgèrú]
d.	‘cause to snore’	gòlòrò-wó-	gòlùrù-w-ú	[gòlèrèwú]

A medial front vowel is targeted in (64.a), a back vowel is targeted in (64.b), and a is the target in (64.c). (64.d) is a rare quadrisyllabic Verbal Noun, based on the causative of a trisyllabic stem. The rule is formulated as (65).

(65) **VbIN V₂-Lenition**

In a tri- or quadrisyllabic verbal noun, medial-syllable vowels are raised to high vowels, with front {i e ε} becoming i, and back {u o ɔ a} becoming u ; the tendency is to generalize u ; in allegro speech the high vowel is centralized and lenited to schwa.

A similar vocalic lenition sometimes takes place with bisyllabic adjectives (and participles) ending in Sg -(i)n or Pl -(u)m (e.g. tèm-ín ‘wet-Sg’ and tèm-úm ‘wet-Pl’, or dòη-ín ‘lean-Sg’ and dòη-úm ‘lean-Pl’), when followed by the postconsonantal clitic allomorph ≡î: or ≡î: ‘it is’ (§11.2.1). Thus for ‘it is wet ones’ I recorded tèm-óm≡î: with schwa-like vowel, and for ‘it is a lean one’ I heard dòη-óm≡î:. When a suffixal i follows homorganic y, as in pèyⁿ-ín ‘old-Sg’, it is hard to hear any trace of the i with the clitic, the combination being pronounced pèyⁿ-n≡î: or something very close to it. With tap r, I heard the plural participle gárù-m ‘those who carry out cousinhood (joking relationship)’ with the clitic as gárè-m≡î: or even as gâr-m≡î:, with no clearly articulated vowel after the tap. For re-linking of stranded tones in examples such as the last two, see §3.7.4.5.

3.5.4 Deletion of final u (u-Apocope)

3.5.4.1 *Suffixal u-Apocope (Verbal Nouns)*

Final u in bisyllabic words is subject to deletion. The deletion of a word-final vowel is called **apocope**. The process is somewhat ragged, and it is necessary to distinguish the way it works in isolated words from the way it works at word boundaries.

At **word-level**, apocope as a synchronic process is visible in the **Verbal Noun** of bisyllabic verb stems with unclustered medial sonorant C (specifically, a nasal or semivowel). Again we see that the second syllable is the metrically weak position. The VblN suffix in the relevant cases is -ú, requiring L-tone on the preceding stem. Here we observe variation between e.g. bisyllabic $C\check{v}(:)C_2\text{-ú}$ and apocopated $C\check{v}(:)C_2\text{-}\emptyset$. The rising LH tone sequence is preserved in the form of the R-tone of the surviving syllable in the apocopated variant. Apocope is not affected by the length of the preceding vowel. Consider the data in (66).

(66)	gloss	verb stem	VblN
a.	‘adorn’	sáŋá-	sàŋ-ú, sǎŋ- \emptyset
	‘drag’	bùmó-	bùm-ú, bǔm- \emptyset
	‘pound with water’	jàŋá-	jàŋ-ú, jǎŋ- \emptyset
	‘massage’	m̀d̀ŋó-	m̀d̀ŋ-ú, m̀ǎŋ- \emptyset
	‘put up on’	ná:ná-	nà:n-ú, nǎ:n- \emptyset
b.	‘recuperate’	bàyá-	bày-ú, bǎy- \emptyset
	‘rob’	g̀ỳy ⁿ ó-	g̀ỳy ⁿ -ú, g̀ǔy ⁿ - \emptyset
	‘rot’	óyó-	òy-ú, ǒy- \emptyset
c.	‘buy’	éwé-	èw-ú, ǎw- \emptyset
	‘greet in A.M.’	ná:-w ⁿ á-	nà:-w ⁿ -ú, nǎ:-w ⁿ - \emptyset
d.	‘park’	kálá-	kàl-ú
	‘knock down’	jára-	jàr-ú
	‘summon’	b̀d̀r ⁿ ó-	b̀d̀r ⁿ -ú
	‘suck’	ḍñó-	ḍñ-ú

e.	‘tie’ ‘swear (oath)’ ‘card (cotton)’	páyá- wá:té- há:sé-	pàg-ú wà:t-ú hà:s-ú
f.	‘lift’ ‘agree’	íllé- háwré-	ìll-ú hàwr-ú
g.	‘inform’ ‘shout’ ‘arrange’	jùgù-wó- ká:gíné- dànàṅá-	jùgù-w-ú kà:gì n-ú dànùṅ-ú

In (66.a), C₂ is a nasal (other than ñ, which does not occur word-finally). In true verbal-noun function, both apocopated and full variants are generally elicitable, though in some cases a high-frequency verbal noun has in practice generalized the apocopated variant. In (66.b), we see a similar pattern with C₂ = y or yⁿ. In (66.c) C₂ is w or wⁿ; here it is difficult to distinguish e.g. Cŷw from Cwú phonetically, since a word-final semivowel is articulated almost like a vowel, especially when R-tone is present. (The same is true of nouns like dǎyⁿ ‘boundary, limit’ with a vowel-semivowel syllabic nucleus and R-tone.) In (66.d), we see that liquids and ñ do not allow apocope at word-level. For the rhotics and ñ this is explainable as reflecting constraints against word-final position for these consonants, but l does occasionally occur word-finally, as in hâl ‘until’. (66.e-f) show that apocope does not occur after obstruents, or after a consonant cluster. Apocope likewise does not occur at the end of trisyllabic Verbal Nouns (66.g), where the final syllable is not in a metrically weak position. Instead, the medial vowel is weakened and raised to u, often with schwa-like articulation. On this, see VblN V₂-Lenition (65).

(67) **Suffixal u-Apocope (VblN)**

Word-final u is optionally deleted in bisyllabic Verbal Nouns after an unclustered nasal (other than ñ) or semivowel.

3.5.4.2 *Inter-Word u-Apocope*

In addition to these word-internal examples, there are frequent instances of u-Apocope at **word boundaries**, when the following word is C-initial. These instances of apocope have a **syncope-like flavor**, since the environment for deletion is of the type vC_#Cv straddling the word boundary #. u-Apocope is not obligatory in these cases. When it does occur, **Stranded-Tone Re-Linking** may be necessary (often resulting in an R- or F-tone on the pre-apocope

syllable, §3.7.4.5, below). Moreover, the specific flanking consonants play a role. I will describe two basic subtypes, then discuss morphosyntactic restrictions on them.

In one subtype, u at the end of a bisyllabic word is apocopated **between velar stops**. In (68.a), the noun tògú ‘kind’ is followed by kâ:ⁿ ‘each’. In (68.b), sàgú ‘entrusting (someone)’ is followed by gá:- ‘say’.

(68)	full form	apocopated	gloss
a.	tògú kâ: ⁿ	tǒg kâ: ⁿ	‘each kind’ 2004.3.1
b.	sàgú gá:-	sǎg gá:-	‘say words of entrusting’ 2004.3.11

A common source of the relevant phonological environment is the combination of a noun with following Definite kùⁿ. Example: tógù kùⁿ ‘the (same) shed’, often apocopated to tóg kùⁿ.

This apocope does not occur in the final syllable of a **trisyllabic** noun: yùrùgú ‘fox’, yùrùgù kâ:ⁿ (not #yùrùg kâ:ⁿ) ‘each fox’. This suggests that metrical factors are at work (§3.2.2, above).

Another construction favorable to u-Apocope between velars is the predicate adjective construction with Nonhuman subject, e.g. [ADJ=kò] ‘it is ADJ’. Optional u-Apocope is observed with ógù ‘fast’ before velar stop, hence óg=kò ‘it is fast’ (phonetic [ók:kò]). Similarly, ò:gú gó:-yè-m ‘I sweated’ (noun ò:gú ‘sweat’, gó:-yè-m ‘I went out’) is often apocopated to ò:g gó:-yè-m.

The sequence /gk/ produced by apocope in some of the examples above, e.g. (68.a), is frequently pronounced kk (i.e. [k:]).

While the apocopated vowel is normally u, I have also recorded jùg-gó-w ‘you-Sg do not know’ as a variant of jùgò-gó-w. The high-frequency combination jùgò- ‘know’ and Imperfective Negative -gó- can also be idiosyncratically contracted to jò:-gó-, so this verb is not a reliable guide to regular phonology.

Apocope of u between homorganic stops (or nasals) at a word boundary is uncommon when the consonants are not velars. I have noticed no instances involving labials. The noun bú:dù ‘riyal (currency unit)’ tends to reduce to bú:d before a numeral beginning with a stop or nasal (not necessarily homorganic). These are high-frequency combinations, several of which can be considered to be names of coins. Examples: bú:d nǔ:yⁿ ‘five riyals’ and bú:d pèrú ‘ten riyals’. Apocope between palatoalveolars is uncommon, but I can cite gǔj-jêm ‘black-skinned’ as a variant of gùjú-jêm (a bahuvrihi compound), and [cèj-Ø]-[cèj-ú] as a variant of [cèj-ù]-[cèj-ú] ‘for cutting’, a compound (used as an adjective) consisting of an iterated VblN of céjé- ‘cut’.

The second major subtype is an inter-word counterpart to Post-Sonorant Syncope (60), a process that applies word-internally as it was formulated above.

In the inter-word counterpart, a bisyllabic word loses its final u if this is preceded by an unclustered r. Elsewhere rⁿ patterns phonologically like r, but this time it does not; informants rejected apocope of words ending in ...rⁿu. For example, contrast èrⁿú=kò ‘it is plump’ with the very common ér=kò (from éru) ‘it is sweet’. Were ...rⁿu to apocope, it would be realised as ...n by Derhoticization (§3.5.5.1), as it is word-internally after Post-Sonorant Syncope (60). Speakers seem to resist Derhoticization in inter-word cases.

The most frequent cases of ...ru subject to apocope at a boundary are 2nd and 3rd person **dative pronominals** ending in -rú, when followed directly by a verb. Apocope is most common when the verb begins with another coronal, but I have several textual examples where the u is apocopated before a non-homorganic consonant. 3Sg Dative wò-rú becomes wǒ-r before t in (69.a), a very common result, but (69.b) shows that the same 3Sg Dative form apocopates at least occasionally to wǒ-r before g, and (69.c) shows a similar apocope of yì rú ‘garment, clothes’ before b.

- (69) a. [bèr-î:ⁿ nè] wǒ-r tímé-sà-Ø
 [goat-child now] 3Sg-Dat resemble-Reslt-3SgS
 ‘A small goat resembles it (=scorpion).’ (wò-rú)
- b. sèllè-lú:-Ø wǒ-r gá-wè
 be.healthy-PerfNeg-2SgS 3Sg-Dat say.Impf-2SgS
 ‘You-Sg will tell her that you’re sick.’ (wò-rú) **2004.3.3**
- c. cín dǝyǝ-m yǐr bět-tóyǝ-bà
 thus Dogon-Pl **clothes** get-Impf-3PlS
 ‘That [focus] is how Dogon people get clothes.’ (yì rú, bèré-)
2004.3.14

In (69.a), wǒ-r is actually pronounced [wǒt] with r assimilated to the initial t of the following word, though (for the sake of morphemic transparency) I transcribe the pre-assimilation form.

Apocope does not occur with **trisyllabic** stems. For example, I have never observed apocope with dógúru ‘time’, hence dògùrù kâ:ⁿ (not #dògùr kâ:ⁿ) ‘each time’.

The two dative pronominals not ending in -rú are 1Sg mǐ-n and 1Pl èmǐ-n. These were probably once *mǐ-rú and *èmǐ-rú, or rather (with Nasalization-Spreading) *mǐ-rⁿú and *èmǐ-rⁿú. If so, for these first person datives, the original apocopated variants mǐ-n and èmǐ-n, with n replacing the disallowed syllable-final rⁿ by Derhoticization (76), have now generalized.

Adjectival predicates with Nonhuman subject (§11.4.a) provide additional cases of apocope after the rhotic: ðrú ‘fresh’ and predicative ðr=kò ‘it is fresh’;

érù ‘sweet’ and predicative ér=kò ‘it is sweet’. Note that k is not homorganic to r. The relationship of this type of u-Apocope to Post-Sonorant Syncope (60) is brought out by the failure of long-voweled jé:rù ‘bitter’ and of trisyllabic ònùⁿú ‘smooth, sleek’ to apocopate: jé:rú=kò ‘it is bitter’, ònùⁿú=kò ‘it is smooth’. For the tones in ér=kò and jé:rú=kò see Rightward H-Spreading (§3.7.4.4).

In compounds, the boundary between the initial and the final is usually treated as a word boundary phonologically. Inter-Word u-Apocope (and Rhotic Assimilation (77)) may become lexicalized in common combinations. An example is bèn-ná: ‘she-goat’, cf. bèrú ‘goat’.

Having described the two major subtypes of Inter-Word u-Apocope, I now consider the morphosyntactic environments in which they regularly occur (70). It should be noted that no inflected verb, or bare verb stem, ends in u (see §3.4.4), so no combinations beginning with a verb are candidates for apocope.

- (70)
- a. compound
 - b. [word + verb]
 - c. [noun/adjective + adjective]
 - d. [noun/adjective/numeral + numeral]
 - e. [noun/adjective/numeral + NP-final morpheme]
 - f. [noun/adjective/numeral + quasi-verb]
 - g. [noun/adjective/numeral + discourse-particle]
 - h. [inalienable possessor noun + possessed noun]

Examples of (70.a-e), in sequential order, are in (71). Bear in mind that except in well-established compounds, Inter-Word u-Apocope is an optional process; unapocopated variants are not shown here. The transcription is nearly phonetic, but at true word boundaries I do not indicate the frequent assimilation of word-final r to a following coronal, e.g. in yĩr té:ré- (71.b), which is usually heard as [jĩt:é:ré] with [t:].

- (71)
- | | | |
|------------------|-----------------------------------|----------------|
| a. compound | bèrú ‘goat’, ná: ‘body’ | bèn-ná: ‘goat’ |
| b. [word + verb] | bè-rú ‘3Pl-Dative’, té:ré- ‘show’ | bě-r té:ré- |
| | yĩ rú ‘garment’, té:ré- ‘show’ | yĩr té:ré- |
| | tá rú ‘egg’, tá r-á- ‘lay’ | tár tá r-á- |

- c. [noun/adjective + adjective]
 b̀erú ‘goat’, c̀eté ‘runty’ b̀er c̀eté
 píru ‘white’, nà:rⁿá ‘easy’ ... pí r nà:rⁿá
 bóru ‘(sb’s) uncle’, túmnó ‘one, sole’ mì b̀or túmnó (‘my ...’)
- d. [noun/adjective/numeral + numeral]
 b̀erú ‘goat’, túru ‘one’ b̀er túru
 dùgu ‘fat’, kúróy ‘six’ ... dũg kúróy
 péru ‘ten’, tã:n ‘three’ pét-tà:n (‘thirty’)
 túru ‘one’ (distributive iteration) tút-túru (‘one by one’)
- e. [noun/adjective/numeral + NP-final morpheme]
 t̀ogú ‘kind’, kâ:ⁿ ‘each, any’ t̀og kâ:ⁿ
 dùgu ‘fat’, kâ:ⁿ ‘each, any’ ... dùg kâ:ⁿ
 dùgu ‘fat’, kùⁿ Definite ... dũg kùⁿ
- f. [noun/adjective/numeral + quasi-verb]
 ógu ‘fast’, k̀ò ‘be (nonhuman)’ óg=k̀ò
- g. [noun/adjective/numeral + discourse-particle]
 bóru ‘(sb’s) uncle’, nè ‘now’ [mì b̀on] nè (‘my ...’)
- h. [inalienable possessor noun + possessed noun]
 bóru ‘(sb’s) uncle, tírwè-n ‘grandchild’ [... b̀or] tírwè-n

Regarding (71.d), complex numerals are compound-like sequences subject to (morphophonological) lexicalization. In decimal terms (‘10’ to ‘90’), which begin with péru- ‘ten’, apocope occurs in pét-tà:n ‘thirty’ but not in pèrù-sũyⁿ ‘seventy’. What may be happening here is that numerical adjacency (as reinforced by out-loud recitation) is the mother of phonological similarity. ‘70’ shares an aversion to apocope with the ‘60’, ‘80’, and ‘90’, while ‘30’ shares a receptivity to apocope with ‘20’, ‘40’, and ‘50’. These two subseries of decimal terms also differ in tones (§4.7.1.3).

The strongest aversion to apocope is at the boundary between two NPs (excluding the case where the first is an inalienable possessor). Apocope between ‘uncle’ and ‘shed’ was therefore rejected in (72). Contrast this with (71.h), above, where the same [mì bóru] ‘my uncle’ does apocopate when it functions as inalienable possessor, i.e. as a kind of loose compound initial.

- (72) [mì bóru] t̀ogù t̀ogó-tì-Ø
 [1SgP.L **uncle.HL**] shed build.shed-Perf-3SgS
 ‘My paternal uncle built a shed.’

My assistant also rejected apocope between ‘one’ and ‘show’ in (73), although some other cases of [word + verb] do apocopate, as indicated above.

- (73) [úró túrú] té:ré-tì-Ø
 [house **one**] show-Perf-3SgS
 ‘He/She showed one house.’

The problem here may be that túrú ‘one’ is bracketed with ‘house’. In the other cases where a word apocopates directly before a word, it is a cognate nominal, a simple noun, or a dative pronominal; all of these are liable to function either like compound initials or like (pronominal) proclitics.

My assistant also rejected apocope before discourse marker sǎy ‘only’, and before sà- ‘have’ (in the negative form sà:-rá-, which can directly follow an object noun). Therefore he did not accept apocope in (74), even in sentences where the elements shown are presumably bracketed together.

- (74) a. bè-rú sǎy
3PI-Dat only
 ‘only to them’
- b. [mì bórù] sǎy
 [1SgP.L **uncle.HL**] only
 ‘only my uncle’
- c. yì rú sà:-rá-m
garment have-Neg-1SgS
 ‘I have no clothing.’

So the rule, leaving out some fine-print detail in the discussion above, can be summarized as (75).

(75) **Inter-Word u-Apocope**

Final u in a bisyllabic compound initial, in a bisyllabic word immediately preceding a verb, in a bisyllabic word followed by a ‘be’ quasi-verb, or in a bisyllabic nonfinal word in a phrase, is optionally deleted, primarily...

...between velar stops

or: ...after r, especially before a coronal

3.5.5 Local consonant cluster rules

3.5.5.1 *Derhoticization (/rⁿ/ to n)*

When /rⁿ/ is immediately followed by a coronal C, the /rⁿ/ appears as n. This is consistent with the absence of #rⁿC clusters.

(76) **Derhoticization**

/rⁿ/ → n before C or word-finally

The rule is needed to account for cases where Post-Sonorant Syncope (60) (§3.5.3.2, above) has deleted a short vowel after rⁿ before a coronal. Thus d̄rⁿɔ- ‘sell’, Perfective d̄ñ-tĩ -, Perfective Negative d̄ñ-lí.

The only other combination where /rⁿ/ is clustered with a following consonant, at any stage in derivations, is when the same Post-Sonorant Syncope rule (60) applies before y. This is handled not by Derhoticization, rather by Rhotic Assimilation (77).

I know of no cases where /rⁿ/ is clustered with a following consonant other than a coronal or y, at any stage in derivations.

t̄ñ-Ø ‘(fire-)wood’, in form a Verbal Noun, cf. cognate noun-verb sequence t̄ñ-Ø t̄rⁿé- ‘go in search of firewood’, shows that rⁿ also shifts to n when word final. Other verbs reject Suffixal u-Apocope (67) in such cases and therefore avoid the problem. There are a few nouns and adjectives with a final n that historically reflects word-final *rⁿ, e.g. bán ‘red’; compare cènè bán ‘anger’ (originally ‘red heart’) with the associated verb (cènè) bàrⁿá- ‘(heart) anger (sb)’.

3.5.5.2 *Rhotic Assimilation*

With a few exceptions in borrowings, such as bérnè ‘bovine liver disease’ and cárdù ‘silver’, both immediately from Fulfulde, clusters of r plus a coronal are converted to geminated versions of the second consonant. The process is obligatory in verbal morphology, where the clusters are produced by Post-Sonorant Syncope (60). The gemination also applies, commonly but not obligatorily, across nominal compound boundaries and to a lesser extent in interword combinations.

A variant of this rule, limited to verbal morphology, assimilates a rhotic to a following y, except that the resulting geminate semivowel preserves the nasality feature of the rhotic.

(77) **Rhotic Assimilation**

- a. in verbal morphology, often also in compounds and between words:
 $/rC_x/ \rightarrow C_xC_x$ (C_x = coronal consonant, not a rhotic)
- b. in verbal morphology only:
 $/ry/ \rightarrow yy$
 $/r^n y/ \rightarrow y^n y^n$

Example of (77.a) in verbal morphology: *bèré-* ‘get’ has AN-inflected forms Perfective *bět-tí-*, Resultative *bēs-sà-*, and Perfective Negative *bèl-lí-*. Parallel cases with nasalized r^n instead of r undergo Derhoticization (to n) rather than Rhotic Assimilation; see just above.

As an example of (77.a) in compounds, note *bèn-ná:* ‘goat’, cf. *bèrú* ‘goat’. An exception is *pèr-sûyⁿ* ‘seventy’, where *pérú* ‘ten’ loses its final u by apocope, but the r fails to assimilate to the s .

Interword examples of (77.a): *tárú tárá-* ‘lay egg’, with $ú$ optionally apocopated (the result usually pronounced *tát tárá-*); distributive iteration *túrú túrú* ‘one by one’, usually pronounced *tút túrú*; 3PI dative *bè-rú* plus verb *bè-rú té:ré-* ‘show to them’, often apocopated and assimilated as *bě-t té:ré-*.

Examples of (77.b), which occurs only with verbs that take Perfective allomorph $-yà/-yè$, are *gàrá-* ‘pass by’, Perfective *găy-yà-*, and *màrⁿó-* ‘come together’, Perfective *măyⁿ-yⁿà-*. In the latter, it is reasonable to assume that Nasalization-Spreading (48) first converts $/r^n \dots y/$ to $/r^n \dots y^n/$.

3.5.5.3 *Rhotic-Cluster Lateralization (/rr/ → ll)*

The regular Reversive suffix is $-rv-$ (§9.1). When this is added to a (C)rvr-stem, Post-Sonorant Syncope (60) should result in #Cvr- $rv-$. Instead, we get Cv l - $lv-$ (78).

(78)	input	gloss	reversive	gloss
	<i>gòró-</i>	‘cover’	<i>gòl-ló-</i>	‘uncover’
	<i>kóró-</i>	‘hang up’	<i>kól-ló-</i>	‘take down (sth hanging)’
	<i>píré-</i>	‘get stuck’	<i>píl-lé-</i>	‘get unstuck’

It is not clear, historically or synchronically, whether the shift to l preceded or followed Syncope. I know of no native Jamsay stem or word-form with the sequence $\dots rvr \dots$, i.e., with two rhotics separated by a short vowel, though loans like *súrá:rè* ‘act of pacifying’ (<Fulfulde) are tolerated. (r is also absent

word-initially in native vocabulary.) It is therefore possible that original *...rvr... shifted one or both rhotics to *l prior to the syncope of the vowel. Alternatively, it is possible that Syncope occurred first, and the shift was from the geminate cluster *rr (a trill) to ll. In fact, the phonetic difference between rr (a trill) and rvr can be difficult to hear unless the vowel quality differs from that of the preceding vowel. In the absence of decisive evidence, I formulate the rule as applying after Syncope.

(79) **Rhotic-Cluster Lateralization**

at the boundary between a verb stem and a derivational suffix:

/rr/ → ll

Rule (79) does not apply outside of verbal morphology. I know of no native stem with geminated rr (or rⁿrⁿ), but Fulfulde loanwords yárré- ‘agree, consent’, tórró- ‘pester’, and bárrây ‘dark brown cow’ are recorded and have stable rr. Clearly (79), which has little phonetic motivation, is morphologized.

I have two reversives based on Cvrⁿv- stems. From màrⁿá- ‘(sth) be lost’ we get màl-lá- ‘(sth lost) be recovered’. However, from mìrⁿé- ‘roll up (pants)’ the reversive is mìñî-rⁿé- ‘unroll’, where the (dissimilatory?) shift of rⁿ to n obviates Post-Sonorant Syncope.

3.5.6 Vowel-vowel and vowel-semivowel sequences

3.5.6.1 Hiatus between adjacent vowels

Jamsay is remarkable in that most vowel-vowel sequences that come together at boundaries do not contract. This is emblematic of the strong tendency of stems to be phonologically autonomous vis-à-vis adjacent stems or words, except for categorially controlled tonal overlays.

Examples of VV combinations at boundaries that do not contract are: possessor pronoun plus noun, e.g. má ì jú ‘my dog’ or wó è jú ‘his/her field’; object or subject pronoun plus verb, e.g. kó é:-sà-m ‘I saw it’ or kó mì ê:-Ø ‘when I saw it’; noun plus verb, e.g. pé:jú ó:- ‘give a sheep’ or síñè áyá- ‘hear noise’; and noun plus adjective, e.g. màṅgòrò érù ‘a sweet mango’.

Most nominal compounds show the same avoidance of contraction. Examples are gàsègè-úrú ‘herd (lit. “house”) of sheep and goats’ and tí rè-àrⁿá ‘male ancestor’. See, however, the following section on VV-Contraction.

3.5.6.2 *VV-Contraction*

Contraction of adjacent vowels does occur in the cases in (80).

- (80)
- in non-monosyllabic Verbal Nouns with suffix -ú (§4.2.2.1)
 - in a subset of compounds with final -î:ⁿ ‘child’ (§5.1.10)
 - when C₂ in a CvC₂v stem is idiosyncratically deleted
 - when 3Pl subject -ba deletes b after a Negative -Cv- AN suffix
 - adjective followed by Augment -í: or -: (§4.5.3)
 - copular ‘it is’ quasi-verb or Focus clitic ≡î: (§11.2.1)
 - verb stem plus Habitual AN suffix -á:rà- (§10.1.2.11)

In **Verbal Nouns** (§4.2.2.1) based on stems of more than one syllable, the suffix is -ú. Example: ìjé- ‘stand’, Verbal Noun ìj-ú. The suffixal vowel is subject, in some bisyllables, to Suffixal u-Apocope (67), and if it survives that rule it may be deleted at phrasal level by Inter-Word u-Apocope (75). Since all verbs that can take this suffix end in a short vowel, I assume a contraction (81).

- (81) v + -ú > -ú

In some, but not all, **compounds** where final -î:ⁿ ‘child’ (§5.1.10) is added to a stem ending in a vowel, this vowel is deleted. In other combinations with this final, both vowels are pronounced. Compound initials before -î:ⁿ undergo tone-dropping in either case. Examples of deletion after a recognizable compound initial are in (82); fortunately, they give a good range of stem-final vowel qualities.

(82)	noun	gloss	compound	gloss	comment
	ìjù	‘dog’	ìj-î: ⁿ	‘puppy’	also ìjù-î: ⁿ
	námñú	‘sesame’	námñ-î: ⁿ	‘sesame seed’	
	nàṅá	‘cow’	nàṅ-î: ⁿ	‘calf’	
	àñú	‘roselle’	àñ-î: ⁿ	‘roselle seed’	
	èñé	‘chicken’	èñ-î: ⁿ	‘chick’	
	tájù	‘basket’	tàj-î: ⁿ	‘small basket’	

The process can be summarized as (83).

- (83) v + -î:ⁿ > î:ⁿ

Non-contraction is observed in a larger number of examples, e.g. *jàràwà-î:ⁿ* ‘blade of hoe’, *jì rè-î:ⁿ* ‘eyeball’, *nùmò-î:ⁿ* ‘finger’, and *jòṅḡ-î:ⁿ* ‘young hare’ (the initials are ‘hoe’, ‘eye’, ‘hand’, and ‘hare’, respectively).

A number of nouns ending in *î:ⁿ* are probably **frozen compounds** whose initial is no longer identifiable. In cases like *kàrⁿî:ⁿ* ‘bamboo’ and *àsàrî:ⁿ* ‘sedge sp.’, if they are in fact etymologically compounds they must have involved VV-Contraction (since rhotics are not found stem-finally).

Idiosyncratic **C₂-Deletion** occurs in a handful of CvCv verb stems in specific suffixed derivational or inflectional forms. The full set of examples known to me is in (84).

(84)	stem	gloss	contracted form	category
a.	<i>jùgó-</i>	‘know’	<i>jò:-gó-</i> [alongside <i>jùgò-gó-</i>]	Impf Negative
b.	<i>gàrà-</i>	‘pass by’	<i>gà:-ná-</i>	causative
	<i>mòrⁿó-</i>	‘come together’	<i>mò:-nó-</i>	causative
	<i>dì ṅé-</i>	‘sit down’	<i>dè:-né-</i>	causative

jò:-gó- is a high-frequency form used in e.g. ‘I don’t know’. The three cases in (84.b) are somewhat specialized causatives in which C₂ is irregularly deleted (§9.2). For the two cases where the flanking vowels are not identical, ‘know’ and ‘sit down’, the quality of the second vowel survives in the contracted vowel. In these two cases, the first vowel in the underived form is a high vowel, followed by a mid-height vowel.

Tone is orthogonal to this particular contraction process, since the tones in the contracted forms are independently predictable. Stem-tones are always dropped before Imperfective Negative *-gó-* (84.a). Causatives based on LH-toned inputs regularly have LLH tones, so after contraction of the first two syllables we would expect LH as seen in (84.b).

The contraction process may be summarized as in (85). (85.a) states the obvious: that two vowels of identical quality form a long vowel of the same quality. (85.b) accounts for the cases involving nonidentical input vowels seen in (84.a-b).

(85)	a.	$v_x + v_x > v_x:$
	b.	$v_1 + v_2 > v_2:$ [+high] [-high]

A somewhat similar problem arises in verbal morphology, when 3Pl subject suffix *-ba* obligatorily loses its *b* after Perfective Negative *-lí-* or Imperfective Negative *-gó-*. The results are *-l-á* and *-j-é*, respectively, as in *yà:l-á* ‘they did not go’ and *yà:j-é* ‘they will not go’. The deletion of *b* does not occur after positive AN suffixes or after verb stems: *yǎ:-yè-bà* ‘they went’, *yà:-bà* ‘they went’ (defocalized unsuffixed Perfective). There is also no deletion of *b* with 2Pl subject suffix *-be*.

The immediate underlying form for *-l-á* is either */-lí-bá/* or */-lú-bá/* after Atonal-Morpheme Tone-Spreading (137) (§3.7.3.5). For the possible u-vowel, compare Perfective suffix *-tî-*, but 3Pl *-tù-bà* (§10.1.2.3, §10.2.1). With the idiosyncratic loss of */b/*, the shift of */í-á/* (or */ú-á/*) to *-á* is straightforward (86.a). However, to get Imperfective Negative *-gó-* to its 3Pl form *-j-é* requires a less obvious contraction of */ó-á/* to *-é*. Here the output *e* combines the height features of *o* with the *[-round]* feature of *a*. This in turn entails fronting, since the only Jamsay vowel satisfying these height and rounding features is *e* (86.b).

- (86) a. $v_1 + v_2 > v_2$ (*-l-á*)
 [+high] [+low]
- b. $v_1 + v_2 > v$ (*-j-é*)
 [**-high**] [-high]
 [**-low**] [+low] [-low]
 [+round] [**-round**] [-round]
 [+back] [**+front**]

There is a suffixal **Augment** with adjectives (§4.5.3), realized as *-í:* after a consonant or a short *u*, and as vowel lengthening (*-:*) after non-high vowels (no adjective ends in short *i*). Examples: *pírú* ‘white’, augmented *pír-í:*; *wóró* ‘deep’, augmented *wóró-:*. All of the inputs involving a final non-high vowel happen to end in H-tone; I tried, but failed, to elicit an augmented form of a bahuvrihi compound *kó:-kórò* ‘fresh-footed’ to take advantage of the overlaid H(H...)L tone of the final adjective (here *kòró* ‘fresh’). There is no parallel elsewhere in Jamsay to the *-:* variant that could give us guidance as to how it should be analysed phonologically. One could argue for */-í:/* as the underlying basic form in all cases, but the realization as *-:* after non-high vowels diverges from the contraction pattern seen in compounds of *-î:ⁿ* (above), where we get output *-î:ⁿ* even after a non-high short vowel. One could therefore recognize two allomorphs of the Augment, *-í:* and *-:*, where the latter is modeled as underlying *-v̇* (underspecified vowel, long or short). The contraction process can then be summarized as (87).

- (87) a. u + -í: > -î:
 b. v₁ + v₂ > v₁:
 [-high] [undersp]

The ‘**it is**’ clitic (also the Focus morpheme), whose phonology is covered in detail just below (and cf. §11.2.1, §13.1), has allomorphs ≡ÿ (with variant ≡ÿⁿ by Nasalization-Spreading) and ≡î: (with variant ≡î: after final F-tone). Of interest here is the fact that the vocalic allomorph occurs after a consonant or a short u, and in the latter case the u disappears: tógù ‘shed’ and tóg≡î: ‘it’s a shed’; tárú ‘egg’ and tár≡î: ‘it’s an egg’. The tone of the deleted /u/ is a factor in the output tone, as this tone amalgamates with those of the clitic. <HHL> simplifies regularly to <HL>, while <LHL> reduces idiosyncratically in this clitic to <L>; see Clitic <LHL>-Reduction (§3.7.4.7, below).

- (88) a. ú + ≡î: > ≡î:
 b. ù + ≡î: > ≡î:

There are two V-initial **AN suffixes** on verbs that contract with a preceding verb. The **Habitual** suffix could be represented either as /-á:rà-/ or as /-árà-/; I cite it as -á:rà-. It never occurs after a consonant, so it always undergoes contraction with the final vowel of the verb stem (which is long in monosyllabic stems, otherwise short). Monosyllabic stems like nǎ:- ‘drink’ and dé:- ‘carry’ combine with -á:rà- to give e.g. nǎ:-rⁿà- and dé:-rà-, so here the suffix-initial vowel is effectively obliterated. By contrast, when -á:rà- is added to a non-monosyllabic stem, the stem-final (and necessarily short) vowel is obliterated: bî ré- ‘work’ and dǎγó- ‘finish’ have suffixed forms bî r-á:rà- and dǎγ-á:rà-. In (89.b), v₁ is understood to be a short vowel.

- (89) a. v₁: + á(:) > v₁:
 b. v₁ + á(:) > a:

There is also a **Perfective** allomorph -â:- with clearly long vowel. It is not used after monosyllabic stems, but it behaves like -á:rà- with nonmonosyllabic stems: dǎγó- ‘finish’, Perfective dǎγ-â:-.

The various VV-Contraction subrules considered above do not converge onto a single formalization. The data are summarized in (90).

(90) **VV-Contraction**a. **length** (when both input vowels are clearly short)

output vowel is ...

... short (VbIN -ú, 3Pl -ba)

... long (C₂-Deletion)b. **quality** features (when v₁ and v₂ diverge)

output vowel has quality features of ...

... v₂ (VbIN -ú, 'child', C₂-Deletion, 'it is', -í: Augment allomorph, AN suffix after nonmonosyllable, 3Pl -ba after high vowel)... v₁ (-: Augment allomorph, AN suffix after monosyllabic)... height features from v₁, backness and rounding features from v₂ (3Pl -ba after mid-height vowel)c. **tones** (when v₁ and v₂ diverge)

output vowel has tone of ...

... v₂ (VbIN -ú, 'child', -í: Augment)... amalgam of v₁ and v₂ ('it is')

I view the C₂-Deletion cases as the purest play on VV-Contraction phonology. It is largely unsullied by the “functional” factors (preservation of morphemic information) that complicate the suffixal and clitic cases. Fortunately, the C₂-Deletion cases provide useful evidence about both length and quality features. However, C₂-Deletion affects only four verb stems, and the process sheds no light on the contraction treatment of front-back or disharmonic input-vowel combinations, nor on tones.

3.5.7 Local vowel-consonant interactions

3.5.7.1 /i/ > u before labial

The pronominal-subject suffixes -ba (3Pl), -be (2Pl), and -m (1Sg) induce a shift from preceding Perfective allomorph -tì- to -tù-, and of preceding Perfective Negative -lí- to -lú-. In the case of -be, the shift is optional (probably because of the front vowel e). The same shift applies before 2Sg -w, but in this case the /uw/ sequence must undergo Monophthongization (see just below).

For the full paradigms of -tì- and -lí- see §10.2.3.

Plural suffix -m favors a preceding u-vowel in adjectives, especially in comparison with Singular -n (§4.5.1). However, in many cases the u- before

Plural -m is the final segment of the lexical stem (231.b). When the stem is C-final we can simply recognize a suffixal allomorph -um. Therefore, it is not clear that the u is actually derived from some other vowel quality. The plural noun úrⁿ-ùm ‘children’ (Sg î-n ‘child’) is also suggestive, but synchronically irregular.

3.5.7.2 Monophthongization (/iy/ to i:, /uw/ to u:)

This phonetically natural process converts tautosyllabic homorganic vowel-semivowel sequences into long vowels. It applies within suffix clusters, and within conjugated forms of the ≡y ‘it is’ clitic.

The clearest case of Monophthongization is in combinations of high-voweled AN suffixes with 1Pl subject -y or 2Sg subject -w. A portion of the paradigm of Perfective allomorph -tî-, extracted from §10.2.3, is given in (91).

(91)	3Sg	-tî-Ø	
	1Sg	-tù-m	
	1Pl	-tî:-Ø	(< -tî-y)
	2Sg	-tù:-Ø	(< -tù-w)

There is a parallel set of forms for Perfective Negative -lí- (3Sg -lí-Ø, 1Sg -lú-m, 1Pl -lí:-Ø, 2Sg -lú:-Ø). -tî- and -lí- are the only two high-voweled AN suffixes.

3Sg -tî-Ø and -lí-Ø with underlying zero pronominal suffix (3Sg) suggest that the basic forms of the suffixes are -tî- and -lí-. A shift /i/ to u occurs before a labial consonant in 1Sg -tù-m and -lú-m. Given 1Pl subject suffix -y and 2Sg subject suffix -w, we expect 1Pl Perfective #-tî-y and 2Sg #-tù-w (assuming that w patterns as a labial along with m and b). That Monophthongization takes place in the 2Sg forms, hence -tù:-Ø and -lú:-Ø, is shown by (92), where -lú:-Ø is followed by the Focus clitic.

(92)	sèllè-lú:-Ø≡y
	be.healthy-PerfNeg-2SgS≡Foc
	‘it is (that) you are not healthy (= ‘sick’)

The Focus or ‘it is’ clitic has postvocalic and postconsonantal allomorphs, and here we have the **postvocalic** allomorph ≡y. If the word were treated phonologically as ending in #...-lú-w, we would have gotten #...lú-w≡î: with the postconsonantal clitic allomorph ≡î: (§3.6.1, §11.2.1). We cannot use this clitic test for 1Pl -tî:-Ø and -lí:-Ø, since the “postvocalic” clitic allomorph ≡y also happens to be used after word-final y. However, the 1Pl forms are

pronounced with long *i*; and the forms are obviously parallel to the 2Sg ones, so I transcribe *-tì:-Ø* and *-lí:-Ø*.

In addition, when the ‘it is’ clitic is conjugated (§11.2.1.2), among the pronominal-subject forms after a consonant (other than *y*) are 1Sg $\equiv\hat{u}m$, 2Sg $\equiv\hat{u}:$, and 1Pl $\equiv\hat{i}:$. As shown in §11.2.1.2, the 1Sg form is derived as follows: $/\equiv\hat{i}:-m/ > / \equiv\hat{m}/ > \equiv\hat{u}m$. The 2Sg and 1Pl are likewise, at the stage corresponding to $\equiv\hat{u}m$, representable as $/\equiv\hat{u}w/$ and $/\equiv\hat{i}y/$, and require only Monophthongization to produce the correct outputs.

(93) Monophthongization

In a tautosyllabic homorganic vowel-semivowel sequence within a suffix sequence or within a conjugated clitic, the semivowel vocalizes and becomes the final mora of a long vowel:

iy > *i:*
uw > *u:*

Monophthongization does not apply across a clitic boundary, i.e. in the sequence ...*i* $\equiv\hat{y}$, as in *wákátì $\equiv\hat{y}$* ‘it is (a) time’. The rule is not applied after a *Ci:-* or *Cu:-* verb, as in *tí:-y* ‘we will send’ or *nú:-wⁿ* ‘you-Sg will enter’. (There are no nonmonosyllabic verb stems ending in *i* or *u*, so the only relevant verbs are monosyllabic.) Likewise, conjugated predicate adjectives like *gùrù-w* in *yǎ:-jǐn gùrù-w* ‘how are you-Sg tall?’ do not monophthongize.

In these cases, I should qualify “does not apply” by explaining that the rule does not apply systematically, though in allegro speech I am often unable to hear the difference between e.g. *iy* and *i:* word-finally. However, when *nú:-wⁿ* ‘you-Sg will enter’ is followed by the ‘it is’ (or Focus) clitic, the latter has its postconsonantal allomorph (94). This shows that there is a real difference between monophthongized and un-monophthongized homorganic vowel-semivowel sequences.

(94) *nú:-wⁿ $\equiv\hat{i}:$* *là:* *dèy*
enter.Impf-2SgS=**it.is** Neg if
‘unless you-Sg will go in’

3.6 Cliticization

The clearest case of cliticization is $\equiv\hat{y}$ (allomorph $\equiv\hat{i}:$) ‘it is’ (§11.2.1), also used as a Focus marker (§13.1). It can be added to any of a wide variety of words and phrases, but shows phonological interactions (both tonological and segmental)

with the word it is attached to, in contrast to the phonological autonomy of particles, pronouns, and the like.

In certain morphosyntactic contexts, the ‘be’ quasi-verbs k̀̀ (nonhuman) and ẁ̀- (human) behave phonologically like clitics, though here the interactions with the preceding word are tonological only.

The symbol ≡ is used for the boundary between a clitic and a preceding word. In the case of k̀̀ and ẁ̀-, I will use this symbol only in those morphosyntactic contexts where they appear to function as clitics.

3.6.1 Phonology of ≡̀̀ clitic

The clitic meaning ‘it is’, also used as a Focus clitic, has the primary allomorphs in (95), subject to further modification by phonological rules.

- (95) after consonant or short u after other vowel or y (yⁿ)
 ≡̀̀: (≡̀̀:) ≡̀̀̀

The **nonsyllabic allomorph** ≡̀̀̀ is always L-toned. The only further phonological modification that it can undergo is Nasalization-Spreading, which converts it to ≡̀̀̀ⁿ after another yⁿ, after a nasalized vowel, or at the end of a syllable beginning with a nasal or nasalized consonant. In the cases of ...y≡̀̀̀ and ...yⁿ≡̀̀̀, the final semivowel is audibly prolonged. Examples of ≡̀̀̀ and ≡̀̀̀ⁿ are in (96). Note that the final syllable (including the clitic) has <LHL> tone in ỳ̀̀:lě̀̀̀y≡̀̀̀ and à̀̀̀ⁿà̀̀̀k̀̀̀ỳ̀̀̀≡̀̀̀ⁿ.

- | (96) | gloss | without clitic | with clitic (‘it is ...’) |
|---|-------------------|--|--|
| a. unnasalized, postvocalic or after y | | | |
| | ‘house’ | úró | úró≡̀̀̀ |
| | ‘mongoose’ | sě̀̀: | sě̀̀:≡̀̀̀ |
| | ‘small bowl’ | pé:rè | pé:rè≡̀̀̀ |
| | ‘woman’s wrap’ | ỳ̀̀:lě̀̀̀y | ỳ̀̀:lě̀̀̀y≡̀̀̀ |
| | ‘duty’ | tílây | tílây≡̀̀̀ |
| b. nasalized, postvocalic or after y ⁿ | | | |
| | ‘boubou (robe)’ | à̀̀̀ ⁿ à̀̀̀k̀̀̀ỳ̀̀̀ ⁿ | à̀̀̀ ⁿ à̀̀̀k̀̀̀ỳ̀̀̀ ⁿ ≡̀̀̀ ⁿ |
| | ‘water’ | ní: | ní:≡̀̀̀ ⁿ |
| | ‘usefulness’ | nèw ⁿ é | nèw ⁿ é≡̀̀̀ ⁿ |
| | ‘soldering metal’ | pùgâ: ⁿ | pùgâ: ⁿ ≡̀̀̀ ⁿ |

For ‘soldering metal’, see Contour-Tone Stretching (143) (§3.7.4.2, below).

The **syllabic allomorph** $\equiv\hat{i}$: is subject only to tonal modifications. Modifications affecting a preceding stem-final contour-toned syllable are covered below under Contour-Tone Stretching (143) and Final-Tone Resyllabification (148). The one idiosyncratic feature of $\equiv\hat{i}$: is that, for this clitic only, Final-Tone Resyllabification (148) pushes the L-tone component of a preceding C-final F-toned syllable through to the end of the clitic (or at any rate deletes the usual H-toned onset of the clitic). The clitic therefore appears as $\equiv\hat{i}$: after such stems (97.c).

(97)	gloss	without clitic	with clitic ('it is ...')
a. postconsonantal, stem ends in simple H- or L-toned syllable			
	'deaf one'	mú:mò-n	mú:mò-n $\equiv\hat{i}$:
	'spleen'	cènè-pá:lám	cènè-pá:lám $\equiv\hat{i}$:
	'root'	bòrò-cé:ŋ	bòrò-cé:ŋ $\equiv\hat{i}$:
b. postconsonantal, stem ends in R-toned syllable			
	'monitor lizard'	ǔ:n	ù:n $\equiv\hat{i}$:
	'pants'	pǎn	pǎn $\equiv\hat{i}$:
	'chief, Hogon'	òyǎ-n	òyǎ-n $\equiv\hat{i}$:
c. postconsonantal, stem ends in F-toned syllable			
	'thicket'	û:n	ú:n $\equiv\hat{i}$:
	'memorial feast'	pídâ:w	pídâ:w $\equiv\hat{i}$:

In the **conjugated** forms of the clitic, which combine the clitic with a following pronominal-subject suffix, some idiosyncratic phonological contractions take place. In combination with 1Sg -m, 2Sg -w, and 1Pl -y, the clitic allomorphs $\equiv\hat{y}$ and $\equiv\hat{i}$: are segmentally deleted, but their tone survives as the tone of the previously atonal pronominal suffix. An example is postvocalic 1Sg form $\equiv\hat{m}$ from / $\equiv\hat{y}$ -m/. See §11.2.1.2 for details.

3.6.2 'Be' quasi-verbs (kò, wò-) and kùn- 'be in' as clitics

In their primary function as existential or locational quasi-verbs, kò 'be (nonhuman)' and wò- 'be (human)' show no special phonological interactions with the preceding word, and I do not take them to be cliticized. There are, however, three constructions where they do interact phonologically with the preceding word. These are listed in (98), along with a mention of the relevant phonological interactions

- (98) a. [adjective + ‘be’] (positive adjectival predicate, §11.4.1)
 —tonal interaction (Rightward H-Spreading, §3.7.4.4)
- b. [unsuffixed Imperfective verb + Nonhuman \equiv kɔ̃] (§10.1.1, §10.1.2.8)
 —L-tone of Imperfective realized on kɔ̃ (Tone-Grafting (131), §3.7.3.3)
- c. [Existential yé + ‘be’] (positive existential predicate, §11.2.2.1)
 —idiosyncratic rounding assimilation (yɔ̃ \equiv kɔ̃, yɔ̃ \equiv wɔ̃-)

In (98.b), kɔ̃ is parallel in function to the human pronominal-subject suffixes like 1Sg -m and 2Pl -be. For syntactic reasons, kɔ̃ cannot be taken as a suffix like -m or -be (for example, kɔ̃ but not pronominal suffixes occurs in participles based on these unsuffixed Imperfective verbs).

The rounding assimilation that shifts Existential yé to yɔ̃ also takes place before kùn- ‘be in’, hence yɔ̃ \equiv kùn- (§11.2.3), so I treat this combination as cliticized also.

Perhaps sà- ‘have’ is also a clitic, but I can identify no concrete phonological interactions between it and a preceding word.

3.7 Tones

Monomoraic Cv syllables with short vowel can be either H[igh] or L[ow] in tone but cannot have contour tones. Bimoraic CvC and Cv: syllables can be H, L, F[alling] = <HL>, or R[ising] = <LH>. Trimoraic Cv:: (note the double length mark) and Cv:C syllables can be H, L, F, R, or bell-shaped <LHL>. All **contour tones** are readily analysable as sequences of H and L **tone components**. Each such component must be linked to one or more moras.

Bell-shaped tones occur in a handful of noun stems, and is audible as such only when a nominal suffix (Sg -n or -m) is present to carry the final L-tone segment. Bell-shaped tones are also produced by combining a final R-tone on a monosyllabic verb stem with a grafted-on L-tone in the unsuffixed Imperfective, or a final R-tone with the ‘it is’ or Focus clitic in its nonsyllabic allomorph \equiv ɔ̃.

Angled brackets <...> indicate contour tones on a single syllable, though I will often use the convenient labels F and R as short for <HL> and <LH>, respectively. Without angled brackets, sequences like HF, RL, LLLH, and HL are to be interpreted as indicating one tone (contour or simple) per syllable, so that LLLH is understood to be a tone pattern for quadrisyllabic stems or words.

Curly brackets as in {H} and {LH} represent independent tone sequences that are mapped onto stems in the autosegmental analysis proposed below.

3.7.1 Lexical tone patterns

3.7.1.1 *At least one H-tone in each stem*

The most important generalization is that all stems have **at least one high or contour tone**. In other words, there is always at least one high-toned component. This constraint applies to the basic lexical form of verb, noun (including adverb), adjective, and numeral stems. It also applies, I believe, to quasi-verbs wó- ‘be’ and sá- ‘have’, though these are nearly always heard in L-toned form (wò-, sà-). The only direct evidence for underlying H-tones in such quasi-verbs is from lexical-stem pseudo-participial clauses, e.g. wó-n ‘being’ (918) and sá-n ‘having’ (919), see §15.2.1.3. H-toned forms are also basic for personal pronouns, since their L-toned counterparts are limited to preverbal subject function, inalienable possessor function, and combinations with a few particles and universal quantifiers.

(99) **Constraint Against All-L-Toned Stems**

A verb (including quasi-verb), noun, adjective, numeral, or pronoun stem may not be all-L in its basic lexical form.

Importantly, this insures that **tone-dropping**, by which the entire stem shifts to L-tone, always has an audible effect. Tone-dropping is widely used in Jamsay morphosyntax: with nouns (as relative-clause heads, or before adjectives); with adjectives (before other adjectives); with pronominals (as preverbal subjects in relative and other subordinated clauses, as inalienable possessors, and before some discourse markers); and with verbs (e.g. before Negative suffixes or when AN categories are defocalized). Tone-Dropping also plays an important role in relative clauses.

Below, I will suggest a reformulation of constraint (99), in the context of an autosegmental interpretation of Jamsay tones, to the effect that the basic lexical form of each stem has **exactly one H tone-component**. This in turn will raise the possibility that some Jamsay stems are all-L lexically, but are supplied by a default H-tone in order to satisfy the exactly-one-H-tone constraint (§3.7.1.5).

3.7.1.2 Lexical tone patterns for verbs

For **verb** stems, at the level of the basic lexical form there are only two possible tonal patterns for any given CV-structure: a) all H-tones, b) all L-tones except for a single H-tone on the final mora, i.e., L(L...)H. We will see below that the **initial consonant** has interesting correlations tonal contour, a specific feature of verbs. A few examples for each syllable count will now be given.

Regular monosyllabic verbs have the shape (C)v:- and may be R- or H-toned. R: yǎ:- ‘go’, wǎ:- ‘kill’. H: gá:- ‘say’, gó:- ‘go out’, and tí:- ‘send’. A rare minimal pair is ná:- ‘spend night’ versus nǎ:- ‘make (rope)’.

Bisyllabic verbs may be HH or LH. HH: péré- ‘strike (match)’, kára- ‘rip’, káwǵá- ‘separate’. LH: gǒjǒ- ‘treat differently’, gǒró- ‘cover with blanket’, jè:ré- ‘bring’, dǒmnó- ‘console’. A rare minimal pair is ùgǒ- ‘bake in oven’ versus úgǒ- ‘extinguish’.

Trisyllabic verbs (derived or underived) may be HHH or LLH. HHH: émé-wⁿé- ‘make spacious’, éǵérⁿé- ‘restrain’, kǎǵárⁿá- ‘shine’. LLH dǐ gǐ -rè- ‘align’, dǒrǒgǒ- ‘ransom’, gǎmàrⁿá- ‘divide’.

Quadrisyllabic verbs are rare, being limited to infrequently occurring causatives of trisyllabic verbs, e.g. HHHH kǎǵárⁿá-wⁿá- ‘cause to shine’, LLLH gǒlǒrǒ-wǒ- ‘cause to snore’. I know of no five-syllabled inflectable verb stems, though the quadrisyllabic verbs just mentioned may occur in the pseudo-causative nominal form (in ‘before ...’ clauses) with a further suffix -wǎ.

Tabulations based on a working lexicon containing some 720 monomorphemic regular verbs are given in (100). Since the length of the final vowel depends on syllable count (monosyllables have a long vowel, others end in a short vowel), and since there are no final syllables ending in a consonant, only syllable count and tone are considered.

(100)	tone pattern	#	% of syllable-count type
	a. monosyllabic (C)v:-		
	H	63	76
	R	20	24
	<i>total</i>	83	
	b. bisyllabic (C)vCv-, (C)v:Cv-, (C)vCCv-		
	all-H	287	59
	LH	196	41
	<i>total</i>	483	

c. trisyllabic (C)vCvCv-, etc.		
all-H	65	64
LLH	36	36
<i>total</i>	<i>101</i>	

The percentage of all-H-toned verbs has been increased by the large and increasing number of bi- and trisyllabic **Fulfulde verbs** borrowed into Jamsay. These verbs, often ending in ϵ and often showing medial consonant clusters, have all-H tone in their basic forms: júkké- ‘fine’, jáŋgíné- ‘teach’ (with Fulfulde Causative -in-), and many others.

There are important interactions between **tone and (preceding) consonant quality** (for verbs but not other stems). For the **monosyllabic** verbs of shape (C)v:, I found that H-tone correlated very strongly with absence of initial consonant (5/5), with C = voiceless stop including c (24/25), and with C = voiceless fricative including h and sibilants (9/9). The one case of R-tone after voiceless stop was a defective verb pǒ:- used (as a verb) in greetings. R-tone correlated with C = semivowel (5/6), the exception being wé:- ‘flip over’. H and R tones were evenly distributed with C = nasal (5 H, 3 R), and with C = voiced stop including j (15 H, 11 R). A correlation of H-tone with C = l, the only liquid that occurs in word-initial position, is suggestive (4/4).

For nonmonosyllabic verbs, the choice is between all-H and {LH}, the latter requiring an initial-syllable L-tone. As one might expect, even leaving out suffixal derivatives of monosyllabic stems, the C of the first syllable is the key to consonant-tone correlations. I checked the (C)v(:)Cv- stems, excluding suffixal derivatives from monosyllabic stems. All-H tone contour is categorically predictable when C₁ is a voiceless stop {p t c k}; I found some 130 all-H stems versus zero LH. Likewise, all 50 Cv(:)Cv- stems beginning with voiceless fricative {s f} have all-H contour. Initial l is another strong predictor of all-H contour, with 18 all-H versus one LH (lègǎ- ‘tease’). On the other hand, when C₁ is a voiced stop {b d j g} I recorded 130 LH stems versus only 9 all-H stems, and the latter are probably all Fulfulde borrowings, e.g. gá:jé- ‘converse’ (note the noncanonical a... ϵ vocalism). Likewise, when C₁ is a semivowel {w y} I found 32 cases of LH, and the 8 instances of all-H are probably all borrowings, except perhaps for wéré- ‘be wild’. A nasal C₁ favors LH but only statistically, with 36 LH stems versus 14 all-H; of the latter, 3 are probable Fulfulde loans. All Cv(:)Cv- beginning with h (11) and r (1) are all-H, but these are all from Fulfulde. For vCv- with no initial consonant, I count 7 LH contours versus 33 HH. In the absence of an initial C, one might suspect that the intervocalic medial C would play a role, but I can see no correlation of this C with tone. Overall, then, there is a striking correlation between initial C and stem tone. If Fulfulde borrowings are factored out, there is a very strong

correlation of all-H with initial voiceless stop, voiceless fricative, or l. There is likewise a strong correlation of LH with initial voiced stop or semivowel.

The role of voiced consonants, and particularly of voiced stops, as **depressor consonants** has been widely discussed, though there are running arguments about whether depressor C's have a phonological L-tone feature associated with them, or whether there is a perhaps very brief local register transition from depressor to following vowel. In the case of Jamsay, the point I would make is that the difference between H- and R-toned monosyllabics is clearly phonological (and tonal). For example, when a (rising) LH-toned bisyllabic verb has a derivational suffix, the derivation has LLH tone contour regardless of C₂. Therefore the stem-initial L-tone component, though correlated with (say) an initial voiced stop, spreads into the second syllable in a manner inconsistent with a local phonetic effect in the first consonant-vowel transition.

The correlations described in this section between stem-tone contour and initial consonant relate only to the basic lexical form of the verb stem. All verbs are subject to overlaid tonal contours in the unsuffixed Perfective (all-L, except {HL} in relative clauses) and in participial compounds. In such cases, the initial consonant of the stem, and the lexical tone, are disregarded.

3.7.1.3 *Lexical tone patterns for unsegmentable noun stems*

For **nouns**, a wider range of possibilities is present. To begin with, there is no strong correlation of stem tone contour with initial C. In word-families involving a verb stem and a segmentally identical cognate nominal, the verb normally follows the tone patterns described above (hinging largely on the initial C), while the noun often diverges. Examples of cognate nominal followed by its associated verb, with tonal differentiation, are gó: gǔ:- 'dance a dance', bé: bě:- 'defecate, have a shit', bíré bíré- 'do a job, work', and bègèrè bègèrè- 'belch, emit a burp'. More examples can be found in (627) in §11.1.6.1.

Monosyllabic noun stems, which have two or more moras, can be H, F (<HL>), or R in their basic (i.e. unpossessed) form. H: bé: 'excrement', dón 'price', bí:ⁿ 'Sclerocarya tree', cé:ŋ 'root'; R: dè: 'father', bèn 'tomtom', dí:ⁿ 'place', gǔ:n 'pot cover'; F: dô: 'Striga herb', jê: 'swaying', û:n 'thicket'. The rare bell-shaped <LHL> type is attested in gǔ:ⁿ-n 'member of drum-beating griot caste', a stem that requires Sg -n Pl -m suffix.

Fulfulde noun borrowings of up to three syllables are predominantly H(H)L if the stem ends in a short vowel, H(H)F if the stem ends in a bimoraic syllable. In other words, these borrowings are H-toned except for one final L-toned mora: dáwrù 'fortune-telling', éndâm 'kinship', dó:rá:jì 'a breed of

sheep', dórówôl 'whip'. Fulfulde borrowings of more than three syllables are usually also pronounced in this fashion. Alternatively, they can be treated as (crypto-)compounds, as in déŋémbé:rè or: déŋém-bé:rè 'Zornia herb'. In the crypto-compound form, there may be a slight pitch drop (but not all the way to L-tone) or other subtle prosodic cue at the end of the compound initial.

A tabulation based on about 1000 apparently monomorphemic noun stems yields the numbers in (101) and other tables below. I exclude obvious compounds, compound initials and finals, and suffixal derivatives (Verbal Nouns). For inalienable nouns, only the basic lexical form (used in absolute function) is considered. Human nouns requiring a suffix (Sg -n or Pl -m) are classified by their shape minus the suffix, although when such a noun ends in a contour-tone syllable the suffix is needed to permit expression of both (or all three) tone components.

The tabulations will feed into the autosegmental analysis to follow.

(101) Monosyllabic Nouns

shape	tone type	#	% of shape	comment
Cv	H	1	25	cé 'possession'
	F	1	25	î-n 'child'
	R	2	50	ă-n 'man', ñě-n 'woman'
	<i>total</i>	<i>4</i>		
(C)v:	H	20	37	
	F	14	25	
	R	20	38	
	<LHL>	1	2	requires suffix -n, -m
	<i>total</i>	<i>55</i>		
(C)vC	H	22	22	
	F	20	20	
	R	56	57	
	<LHL>	0		
	<i>total</i>	<i>98</i>		
(C)v:C	H	4	25	
	F	6	38	
	R	6	38	
	<LHL>	0		[see under Cv:]
	<i>total</i>	<i>16</i>		

Bisyllabic noun stems ending in a short vowel can easily be HH, HL, or LH. Examples: HH *béré* ‘stick’, *dá:ŋá* ‘water jar’; HL *pé:rè* ‘small bowl’, *búgù* ‘gunpowder’; LH *bàtá* ‘box’, *bè:rú* ‘nightjar’. A bimoraic first syllable makes RL also possible: the instances noted are *sámna* ‘soap’, *dǎwrù* ‘strategem’, *sǒ:rò* ‘young’, *cě:rù* ‘cowry’, *ǎ:rⁿǎ* ‘waterskin’, and *sě:rⁿè* ‘something amorphous’ (‘soap’ and ‘strategem’ may reflect trisyllabic *C^vC^vC^v etyma). A human noun that takes Sg -n and Pl -m suffixes has LR contour in four cases: *ǎǎ-n* ‘chief, Hogon’, *sǎǎ-n* ‘chief’s subordinate’, *sùrgǎ-n* ‘weaver (caste)’, and *dǎǎ-n* ‘Dogon’.

A minimal trio (HH, LH, HL) is *é:rè* ‘peanuts’, *è:rè* ‘Boscia bush’, and Fulfulde loanword *é:rè* ‘white cow with black spots’. Two more minimal pairs are LH *ǎ:rⁿǎ* ‘monkey’ versus RL *ǎ:rⁿǎ* ‘waterskin’, and HH *círⁿé* ‘nose’ versus LH *cìrⁿé* ‘bone’.

A tabulation is given in (102). In addition to the exclusions mentioned above, Cì- reduplications are omitted. In this and the following tabulations, the abstract tone contour (not divided by syllables) is given in {...} on the left. For example, in the first group of examples in (102), for shape (C)vCv, contour {LH} can be realized syllabically as either LH or LR (the latter equivalent to L<LH>).

(102) Bisyllabic Nouns (short-vowel-final)

shape	tone type	#	% of shape	comment
(C)vCv				
{H}	HH	56	19	
{HL}	HL	61	21	includes several loanwords
{LH}	LH	172	59	
	LR	2	1	requires suffix -n, -m
	<i>total</i>	<i>291</i>		
(C)v:Cv				
{H}	HH	26	24	
{HL}	HL	45	41	includes many loanwords
	FL	0		
{LH}	LH	34	32	
	RH	0		
	LR	4	4	
{HLH}	FH	0		
{LHL}	RL	0		
	<i>total</i>	<i>109</i>		

(C)vCCv				
{H}	HH	8	14	
{HL}	HL	37	64	includes many loanwords
	FL	0		
{LH}	LH	10	17	
	RH	0		
	LR	1	2	requires suffix -n, -m
{HLH}	FH	0		
{LHL}	RL	2	4	
	<i>total</i>	58		
(C)vCCCv				
{HL}	HL	2	100	loanwords
	all others	0		
	<i>total</i>	2		
(C)v:CCv				
{H}	HH	0		
{HL}	HL	2	67	
{LH}	LH	1	33	
	all others	0		
	<i>total</i>	3		

If the second syllable of a bisyllabic noun stem has more than one mora, that syllable may have a contour tone R or F. Examples involving final Cv: syllables: HH dí-dé: ‘shield’ (only HH example, arguably a reduplication); HF jámâ: ‘crowd’, jípî:ⁿ ‘Maerua tree’; LF pùgâ:ⁿ ‘soldering metal’, màlfâ:ⁿ ‘rifle’; LH bàlpó: ‘calabash’, pù:-pá: ‘bellows’ (onomatopoeic); LR yèšă: ‘sister’ (only example). HR and HL are unattested.

(103) Bisyllabic Nouns (long-vowel-final)

shape	tone type	#	% of shape	comment
(C)vCv:				
{H}	HH	1	4	
{HL}	HF	7	26	4 loans; 2 possible -î: ⁿ 'child' cpds
	HL	0		
{LH}	LH	5	19	
	LR	1	4	
{HLH}	HR	0		
{LHL}	LF	13	48	7 possible -î: ⁿ 'child' cpds and 2 French loans
	<i>total</i>	26		
(C)vCCv:				
{H}	HH	0		
{HL}	HF	2	29	
	HL	0		
{LH}	LH	2	29	
	LR	0		
{HLH}	HR	0		
{LHL}	LF	3	43	
	<i>total</i>	7		
(C)v:Cv:				
{H}	HH	0		
{HL}	HF	3	38	
	HL	0		
{LH}	LH	3	38	
	LR	0		
{HLH}	HR	0		
{LHL}	LF	2	25	1 possible -î: ⁿ 'child' cpd
	<i>total</i>	8		

Roughly similar patterns occur in bisyllabic stems ending in CvC. Examples: HH gúlúm 'log'; LH kàrúm 'horse's mouth bit' (only unreduplicated example); HF pú-pûn 'colubrid snake sp.' (arguably reduplicated), céllâl 'health'; HR jí:lǔm 'leech' (only example); HL pí:lòm 'bladder', ú:ñùm 'Cleome herb' (only two HL examples); LF wíl-wíl 'giraffe' (unusual

reduplication), tùgûn ‘ladle’; LR pì nǎm ‘powder’, sǎbǎl ‘gourd with neck’, lèrěw ‘everything’.

Unaffixed HL-toned ĆC̀C̀ and ĆCC̀C̀ (with L-tone on the bimoraic final syllabic) are unattested, and Ć:C̀C̀ has only the two attestations just given. This suggests that the H-tone of the first syllable generally pushes a following L onto the stem-final mora, resulting in HF rather than HL. HL is also attested in two nominal compound finals, cènè-pá:lám ‘spleen’, cì r"è-bérùm ‘nose cartilage’. However, in such compounds one cannot exclude the possibility of a tonal overlay, and indeed HL rather than HF tone is typical of tonal overlays. The suffixed noun bárgà-n ‘left-handed person’ may also be mentioned.

Here are the tabulations for bisyllabic consonant-final nouns.

(104) Bisyllabic Nouns (consonant-final)

shape	tone type	#	% of shape	comment
(C)vCvC				
{H}	HH	6	15	
{HL}	HF	18	45	includes many loans
	HL	0		
{LH}	LH	1	3	
	LR	4	10	
{HLH}	HR	0		
{LHL}	LF	11	28	
	<i>total</i>	<i>40</i>		
(C)vCCvC				
{H}	HH	0		
{HL}	HF	6	75	loanwords
{LH}	LR	1	13	
	all others	0		
{LHL}	LF	1	13	
	<i>total</i>	<i>8</i>		
(C)v:CvC				
{H}	HH	1	10	
{HL}	HF	3	30	
	HL	2	20	
{LH}	LH	0		
	LR	2	20	

{HLH}	HR	1	10	
{LHL}	LF	1	10	
	<i>total</i>		<i>10</i>	
(C)vCv:C				
{H}	HH	0		
{HL}	HF	3	75	
{LHL}	LF	1	25	
	all others	0		
	<i>total</i>		<i>4</i>	
(C)vCCv:C				
{H}	HH	0		
{HL}	HF	3	100	loanwords
	all others	0		
	<i>total</i>		<i>3</i>	
(C)v:CCvC, (C)v:Cv:C [unattested]				

Trisyllabic nouns with final short vowel can have the following tone patterns: HHH (béjéré ‘shroud’), HHL (kópórò ‘colonial coin’), LHL (jèṅjérⁿè ‘tamarind seed’), LLH (ègèjé ‘sneeze’), marginally RLL, and possibly LHH. RLL is attested in the borrowing mǎṅgòrò (or mǎṅgòlò) ‘mango’. LHH is attested only in àdúrⁿó ‘world of the living’ (<Arabic) and à-kóró ‘(water) well’. It is possible that à- is segmentable as a prefix in these examples, which would reduce these two cases to the uncontroversial bisyllabic HH.

A tabulation for trisyllabic nouns ending in a short vowel is in (105). Data are spotty for some shapes.

(105) Trisyllabic Nouns (short-vowel-final)

shape	tone type	#	% of shape	comment
(C)vCvCv				
{H}	HHH	27	28	
{HL}	HHL	20	20	
	HLL	0		
{LH}	LLH	36	37	
	LHH	2	2	both with à..., 1 loan
{HLH}	HLH	0		
{LHL}	LHL	11	11	
	<i>total</i>		<i>98</i>	

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(C)v:CvCv					
{H}	HHH	0			
{HL}	HHL	5	100		all loanwords
	all others	0			
	<i>total</i>	5			
(C)vCv:Cv					
{H}	HHH	1	6		
{HL}	HHL	10	59		many loanwords
{LH}	LLH	2	12		all loanwords
{LHL}	LHL	4	24		all loanwords
	all others	0			
	<i>total</i>	17			
(C)v:Cv:Cv					
{H}	HHH	0			
{HL}	HHL	3	100		all loanwords
	all others	0			
	<i>total</i>	5			
(C)vCCvCv					
{H}	HHH	0			
{HL}	HHL	11	50		loans
{LH}	LLH	4	18		
	LHH	4	18		
{LHL}	LHL	2	9		
	RLL	1	5		loan ('mango')
	all others	0			
	<i>total</i>	22			
(C)vCCvCCv					
{H}	HHH	0			
{HL}	HHL	5	83		loans
{LHL}	LHL	1	17		loan
	all others	0			
(C)vCCv:Cv					
{H}	HHH				
{HL}	HHL	12			loans
{LH}	LLH	1			
	LHH	1			loan

Trisyllabic nouns with final long vowel can also have a final F (in theory, also R, but no examples). In fact, final F occurs in all known examples, again supporting the view that an H-tone pushes a following L-tone to the final mora. The full set of known examples: LLF àsarí:ⁿ ‘sedge sp.’, bànàkû:ⁿ ‘cassava (manioc)’, ñàmàkû: ‘ginger root’ (the latter two from Bambara); HHF só:-[pú:-pâ:] ‘Sesbania shrub’ (internal segmentation non-transparent).

(106) Trisyllabic Nouns (long-vowel-final)

shape	tone type#	% of shape	comment
(C)vCvCv:			
{LHL}	LLF 3	100	2 loans, 1 frozen -î: ⁿ cpd
	all others 0		
	<i>total</i> 3		
(C)v:Cv:Cv:			
{H}	HHH 0		
{HL}	HHF 1	100	
	all others 0		
	<i>total</i> 1		

(C)vCv:Cv:, (C)v:CvCv: unattested

Final F and R are also possible with trisyllabic stems ending in a CvC syllable. Examples of the attested tone patterns: HHH dúdúrúm ‘trash heap’ (only example), HHF dórówôl ‘whip’, HLF pí-pì lîm ‘butterfly’ (arguably reduplicated); LHF kàrákâw ‘wooden bed’ (only example, probably a frozen compound *kàrá-kâw, cf. Fulfulde karga ‘wooden bed’ and other regional cognates), LLH sàyàráw ‘gravel’, LLF bàràwîn ‘lever’ (only example), RLF sěrměñěm ‘fig tree sp.’ (only example, quadrisyllabic variant sěruměñěm), LLR ì jùbăy ‘ground’. As usual when there is a bimoraic final syllable, HHL is very rare, I can cite only sáppérùm ‘tree sp.’

(107) Trisyllabic Nouns (consonant-final)

shape	tone type	#	% of shape	comment
(C)vCvCvC				
{H}	HHH	1	6	
{HL}	HHF	5	28	4 probable loans
	HHL	0		
	HLL	0		
{LH}	LLH	5	28	
	LLR	4	22	
	LHH	0		
{HLH}	HHR	0		
	HLH	0		
	HLR	0		
{LHL}	LLF	1	6	
	LHF	1	6	probable frozen cpd
{HLHL}	HLF	1	6	
{LHLH}	LHR	0		
	<i>total</i>	<i>18</i>		
(C)vCCvCvC				
{H}	HHH	0		
{HL}	HHL	1	25	
{HLHL}	HLF	2	50	
{LHLH}	RLF	1	25	
	all others	0		

(C)vCv:CvC, (C)vCCv:CvC, etc. unattested

Quadrissyllabic and longer nouns that are not obviously compounded are in most cases at least arguably crypto-compounds in the sense that there is a break point in the middle. A scan of the data in the 1000-noun sample brings out no new patterns, except for a problematic ...HLL stem (where we would expect ...HHL): *kórukàjà* ‘tree locust’. To the previous examples of ...HL with final bimoraic syllable, add quadrissyllable *sàmàlówòn* ‘marabou stork’.

The most important point about the statistical data is the support they give for the view that stem-level tone contours (i.e. not all-H) tend strongly to compress the tone-component transitions toward the right edge of the stem. See also Rightward H-Spreading (150) (§3.7.4.4, below). However, there is a bit of wiggle room as to whether a final CvC syllable is realized with L or with F tone in a {...HL} contour, thus HF versus HL for {HL}-contour (C)v:CvC nouns

(104). In addition, there are some choices in tone syllabification for {...LH} contours, such as LLH versus LLR for {LH} with (C)vCvCvC stems (107), and LLH versus LHH in (C)vCCvCv stems (105).

3.7.1.4 Lexical tone patterns for adjectives and numerals

Adjectives resemble mono- and bisyllabic nouns in their patterning. Examples: monosyllabic H wá: ‘spacious’ and jém ‘black’; F âyⁿ ‘slightly bitter’ and tôm ‘cold’; R đõŋ ‘lean, emaciated’ and sǐ: ‘pointed’; bisyllabic HH pírú ‘white’; HL érù ‘sweet’ (or ‘sharp’); LH kàná ‘new’ and gàrá ‘big’. Overall the LH (including R) type is the most common pattern for adjectives. Bisyllabic adjectives end in short vowels, so there are no final contour tones. See the list (231) in §4.5.1.

Numerals are similar tonally to adjectives. Monosyllabic examples: R lěy ‘two’; F sũyⁿ ‘seven’. The absence of H-toned monosyllables is probably an accidental gap, since there is only a small inventory of numerals. Bisyllables: HH pérú ‘ten’, HL gá:rà ‘eight’, LH mùñú ‘thousand’. Most (uncompounded) bisyllabic numerals end in short vowels, except for HH kúróy ‘six’, so there are no compound tones on final syllables (except in the French loan mílyô:ⁿ ‘million’).

The data for mono- and bisyllabic stems, in their basic lexical forms, can be summarized in (108). A check √ indicates that the pattern is attested, while a dash — indicates that it is not.

(108)		verb	noun	adjective	numeral
	a. monosyllabic				
	H	√	√	√	—
	R	√	√	√	√
	F	—	√	√	√
	b. bisyllabic				
	HH	√	√	√	√
	HL	—	√	√	√
	LH	√	√	√	√
	LF	—	√	—	—
	RL	—	√	—	—
	LR	—	√	—	—

3.7.1.5 *Default final H, or autosegmental mapping?*

Given the Constraint Against All-L-Toned Stems (99), one could consider the possibility that one or another of the attested lexical tone patterns is a default, applied to underlying L-toned stems in order to satisfy the constraint. I do not favor this (pure) constraint-satisfaction model, but if I did I would suggest final-mora H-tone as the default. In this view, which I will call the **default-final-mora-H** analysis, verbs with (monosyllabic) R, bisyllabic LH, trisyllabic LLH, and so forth, are reinterpreted as having no lexical H-tone, with the final mora secondarily acquiring H-tone to satisfy the constraint. The same would apply to nouns, adjectives, and numerals that have L-tone up to a final H-toned mora.

Possible evidence for this applicability of the default-final-mora-H approach to nouns is provided by a small number of human nouns that normally (and in some cases exclusively) occur with Sg -n or Pl -m. The stems in question have a final R-tone in these suffixed forms, and the suffixal nasal is required to permit expression of the H-tone component of R (i.e., <LH>). The four known examples are ðʏǎ-n ‘chief, Hogon’, sàʏǎ-n ‘chief’s subordinate’, dðʏǎ-n ‘Dogon (person)’, and sùrgǎ-n ‘weaver’ (plurals ðʏǎ-m, sàʏǎ-m, dðʏǎ-m, sùrgǎ-m). ‘Chief’ has an unsuffixed form ðʏó ‘leader (e.g. of animal pack)’, with final H-tone replacing R-tone, and ‘Dogon’ has an unsuffixed form dðʏó meaning ‘Dogon language’, while ‘chief’s subordinate’ and ‘weaver’ do not occur without suffixes. In the default-final-mora-H analysis, these stems are underlying all-L /ðʏǎ/, /sàʏǎ/, /dðʏǎ/, and /sùrgǎ/, and the final mora secondarily acquires H-tone, for example in unsuffixed ðʏó and in suffixed ðʏǎ-n.

A theoretical objection to this argument is that e.g. unsuffixed ðʏó ‘leader’ can also be derived from /ðʏǎ/ by a simple tone rule converting R to H tone on a final monomoraic syllable; see Final-Cv R-to-H Reduction (154), §3.7.4.6, below.

Additional grist for this debate comes from tonal relationships between underived and suffixally derived stems; see below, §3.7.3.1.

In the sections that follow, I will suggest an **autosegmental model** for Jamsay tone, while acknowledging the existence of a few counterexamples to the rules proposed. In its strongest form, an autosegmental model of tone separates the **segmental tier** from the **tonal tier**. Strictly speaking, the segmental tier must itself be organized into syllables, moras, and feet, but since these are derivable from the segment string I will speak loosely of these as elements of the segmental tier.

A stem, or a word, consists of non-null strings of segments and of **tone-components**. Curly brackets {...} will be used for strings of H and L components at stem or word level. For example, úró ‘house’ consists of uro at the segmental level and {H} at the autosegmental level, while its tonal locative úró

‘at the house’ has the same segments but a bitonal {HL} tone pattern. Both the segmental and tonal tiers may be morphemically complex.

For this model to work perfectly, there must be rigorous **association** processes that connect the tone components H and L to the correct syllables and/or moras. These processes are easy to formulate when the tonal tier is monotonal, i.e. just {H}, since of course in this case the H component will associate to all syllables (and moras) at the segmental level; i.e., it will spread throughout the stem or word. The rules are also easy to formulate when the number of tone components, the number of syllables, and the number of moras all converge, for example bitonal {LH} for a CvCv stem. Complications arise with bi- or trimoraic syllables, since now the association rules must decide whether to associate tone components with syllables or with moras. The challenges increase to the extent that the number of tone components is mismatched with the number of relevant segmental-tier units (syllables or moras). For Jamsay, no pure autosegmental model will work perfectly for all word-classes. However, it is possible to develop a model that works well for verbs, and that helps explain statistically important patterns for nouns.

3.7.1.6 *Tone-Component location for bitonal noun stems*

Trisyllabic stems are especially revealing with respect to tonal patterns; for tabulations see (105-7), above. With a few exceptions (some of them questionable), the transitions between unlike tone components occur **as close as possible to the right edge of the stem**, in many cases allowing the initial tone component to spread over two or more syllables. For example, with final short vowel (105), stem- or word-level pattern {HL} is realized syllabically as HHL, {LH} is realized as LLH (except for a few LHH cases), and {LHL} is realized as LHL. With final long vowel (106), {HL} appears as HHF while {LHL} appears as LLF, i.e., the final L-tone element is confined to the second mora of the final syllable. With a final consonant (107), {HL} is realized as HHF, {LH} as either LLH (i.e. H on final syllable) or LLR (i.e. H on final mora), {LHL} as LLF or LHF (one example of each), and {HLHL} as HLF (one example).

It is useful to probe into the distinction between **L(L)H and L(L)R** in bi- and trisyllabic stems ending in a bimoraic syllable. Since R is short for <LH>, the difference between L(L)H and L(L)R is that the final H-tone component occupies the entire final syllable in L(L)H, but only the final mora in L(L)R. Consider (110), with data extracted from the tabulations given above.

(110)	L(L)H	L(L)R
a. bisyllables with final long vowel, from (103)		
	(C)vCv:	5 1
	(C)vCCv:	2 0
	(C)v:Cv:	3 0
	<i>total</i>	<i>10 1</i>
b. bisyllables with final CvC, from (104)		
	(C)vCvC	1 4
	(C)vCCvC	0 1
	(C)v:CvC	0 2
	<i>total</i>	<i>1 7</i>
c. trisyllables with final CvC, from (107)		
	(C)vCvCvC	5 4

The relevant trisyllables, all of which end in CvC, are evenly divided. However, the potential for crypto-compounding here is high, since (C)vCv- and -CvC are viable shapes for nouns (and therefore for compound initials and finals). Taking (C)vCv- as an initial (with the usual tone-dropping) would reduce the distinction to the nonproblematic one between H and R monosyllabic compound finals.

Among the bisyllables, which give us a purer play, we find a near-categorical distinction between stems with final long vowel, which overwhelmingly show L(L)H, and those that end in a CvC syllable, which strongly favor L(L)R. In the consonant-final case, the exceptional LH noun is *kàrúm* ‘horse’s bit’. The history of this noun deserves closer study when fuller comparative data are available; for now, suffice it to say that cognates like Nanga *kàrmbú* suggest that Jamsay (and Tabi-Sarinyere) may have apocopated and then resyllabified a short-vowel-final proto-form with unremarkable LH tone contour. In the vowel-final case, the exceptional LR stem is *yèsǎ:* ‘sister’, one of several inalienable kin terms whose unpossessed form is of {LH} tonal type. One wonders if the initial syllable *yè* may have once been segmentable, cf. *yà-* or *yè-* meaning ‘woman’ as frozen initial in several nouns (§5.1.11). If *yèsǎ:* is segmentable in this way, the R-toned *-sǎ:* would be unremarkable as an R-toned monosyllabic compound final.

All in all, there is considerable support for the following summary (with some unexplained exceptions) for uncompounded {LH} nouns: the H-tone component is realized on the **final mora in CvC-final** bisyllabic or longer stems, on the **final syllable in long-V-final** bisyllabic or longer stems, and (ambiguously) on the final syllable or the final mora of bisyllabic or longer stems ending in a

short vowel. Instead of three processes to choose from, there are really just two, and the choice between them is indeterminate in one set of examples.

3.7.1.7 Tone-Component location for tritonal noun stems

We now consider tritonal sequences. Nouns with more than three tones are almost certainly crypto-compounds.

The two logically possible tritonal sequences are of course **{HLH}**, which includes HLH and other trisyllables and both FH (= <HL>H) and HR (= H<LH>) bisyllables, and **{LHL}**, which includes LHL and other trisyllables and both RL (= <LH>L) and LF (= L<HL>) bisyllables. As it happens, {HLH} is virtually nonexistent in Jamsay noun (or other) stems; I can cite only jí:lǔm ‘leech’ (HR bisyllable). I am tempted to suggest a crypto-compound here, and indeed both Cv:- and -CvC are reasonable shapes for compound segments, but an H-R tone contour would be unusual for a nominal compound, so I recognize jí:lǔm as a genuine unsegmentable {HLH} noun.

Disregarding this exception, a further constraint on lexical tones has emerged (111). In fact, this constraint can be formulated to as to replace the constraint against all-L-toned stems (99) (§3.7.1.1).

(111) **One H-Tone Autosegment Per Stem**

Each stem, in its basic lexical form, is associated with an autosegmental tonal sequence that contains exactly one H-tone component (which may be preceded and/or followed by one L-tone component)

As a result, the only viable tritonal sequence is {LHL}. From the tabulations given above, the data in (112) can be drawn together.

(112)	tones	#	comment
a.	monosyllabic, from (101)		
	<LHL>		
	Cǔ:-	1	requires suffix: Sg -n, Pl -m
b.	bisyllabic, from (102-4)		
	RL		
	CǔCCǔ	2	

LF		
	C̃C̃C̃:	13
	C̃CC̃:	3
	C̃:C̃:	2
	C̃C̃C̃	11
	C̃C̃C̃:C	2
	C̃CC̃C̃	1

c. trisyllabic, from (105)

LHL		
	C̃C̃C̃C̃	11
	C̃C̃C̃:C̃	4
	C̃CC̃C̃C̃	2
RLL		
	C̃CC̃C̃C̃	1 ‘mango’

These data make the positioning of the three tone components (LH) fairly easy to describe. The second L of {LHL} associates to the final mora. The initial L and H usually associate, if possible, in such a way that they are **separated by a syllable boundary**. This is seen in C̃:C̃:, C̃CC̃C̃, and C̃C̃C̃:C̃, all of which involve shapes with more than three moras, so a priori there is a choice as to where to locate the break between the initial L and the H (it did not have to be at a syllable boundary). CvCCv and Cv:Cv, however, are trimoraic, so when this shape has {LHL} tones, the output is C̃CC̃C̃ or C̃:C̃ with the initial LH expressed on the bimoraic first syllable. The alternative would have been to put the syllable break after the first L, resulting in #/C̃CC̃C̃/ or #/C̃:C̃:/, which could then lengthen the final vowel to accommodate the contour tone. But this would then be learned and lexicalized as C̃CC̃C̃: or C̃:C̃:, there being no evidence for an underlying final short vowel.

The autosegmental analysis for verbs and nouns (adjectives, numerals, and adverbials are noun-like) can be summarized as (113). As indicated in detail above, it is something of an idealization as applied to nouns.

(113) Autosegmental Model of Lexical-Stem Tones

- a. tones are on a separate tier with no pre-associations
- b. tones for verbs:
 - monotonal {H}
 - bitonal {LH}

tones for nouns (etc.):

- monotonal {H}
- bitonal {HL}, {LH}
- tritonal {LHL}, rarely {HLH}

- c. associate monotonal {H} to entire stem;
 associate final H (preceded by L) to the ...
- i. ... **final mora** (monosyllables, nonmonosyllabic ...CvC, tritonal ...Cv:, all verbs)
 - ii. ...**final syllable** (bitonal nonmonosyllabic ...Cv:)
 - iii. ...final syllable = final mora (nonmonosyllabic ...Cv)
- associate final L (preceded by H) to the **final mora**;
 in tritonal contours, associate the first two tone components so that they are separated by a **syllable boundary**

It remains to be seen whether the autosegmental association rules given here for basic forms of stems also work for overlaid stem-wide grammatical tone contours, or for stem-final grammatical tone modifications (tonal locatives, unsuffixed Imperfectives). For example, is the H(H...)L tone overlay another case of {HL}, or does it have different properties? This and related matters will be addressed below, after an initial rapid survey of the types of grammatical tones applicable to various word-classes.

3.7.1.8 Tones of clause-final particles

Particles that occur at the end of clauses (or subordinated VPs) include those in (114).

- (114) a. dey (dèy, déy, dé) ‘if’, chapter 16;
 b. mèyⁿ (méyⁿ) ‘and’ (VP-chains), §15.1.14;
 c. Quotative ga (gá, gà), §17.1.5;
 d. Quotative wa (wá, wà), §17.1.3;
 e. Purposive lé, lè, §17.6.1;
 f. interrogative or disjunctive ma (má, mà), §7.2, §13.2.1.1.

Of these, at least dey, wa, and ma behave as **lexically atonal** when clause-final. In this position, they acquire a tone by **spreading** from the final tone of the preceding word; see Atonal-Morpheme Tone-Spreading (137). However, clause-final morphemes are highly subject to intonational raising and/or prolongation (symbols ⇒ and ↑), which can obscure the tones (§3.8.1).

In addition, when such a particle combines with a following particle or clitic, the two may form a prosodic unit independent of the preceding word. This is especially notable for *dey*, which appears as *dé* ‘if’ in the combinations *dé ké*, *dé nè*, regardless of the tone of the preceding word (§16.1.3); see also H-toned *déy* before quasi-verb *kò* ‘it is’ (arguably cliticized) in (225), and before *kárⁿà* ‘even’ in (467.c). These data suggest that the ‘if’ particle is H-toned *dé(y)* when nonfinal in the clause, and atonal *dey* (subject to spreading) when clause-final.

meyⁿ is heard variably with high or low pitch. Since the particle always follows a bare verb stem, which must end in an H-tone, the L-toned variant in particular cannot be explained by tone-spreading. I take *mèyⁿ* with **L-tone to be basic**. The variant with high pitch is probably due to intonational raising rather than to lexical or grammatical tone. Since *mèyⁿ* links one verb or VP to a following VP, it lends itself to clause-final pitch raising. I therefore transcribe the high-pitched pronunciation as *mèyⁿ↑*.

Quotative *ga*, which is much less common than Quotative *wa*, sometimes seems to obey Atonal-Morpheme Tone-Spreading (137), but *gá* seems to occur in the special context of verb chaining where spreading is not involved; see §17.1.5 for more details and examples.

Purposive *lé* and *lè*, apparently related to the all-purpose (e.g. dative) postposition of the same form(s), occur in a number of purposive (and closely-related) clause types (§17.6.1). In one construction (§17.6.1.1), the bare verb stem drops tones but is followed by H-toned *lé*. In a second type (§17.6.1.2), the verb is inflected and has unsuffixed Imperfective form (hence ends in an L-toned segment), followed by L-toned *lè*. In a third (§17.6.1.3), the uninflected verb stem raises tones to all-H, followed by H-toned *lé*. In the second and third types (but not in the first), the tone of *le* is carried over from the preceding tone.

In its function as a postposition (dative, locative, or instrumental) with NP complement, we also get variation between *lé* and *lè*. Here, however, H-toned *lé* is used only in a modest number of fixed adverbial phrases (448), while *lè* is the default, occurring in all other combinations regardless of preceding tone (§8.2.1-2). This H-toned *lé* does not require stem-wide H-tone overlay on the noun, but does require a final H-tone on it; in particular, a {HL} stem tone contour becomes all-H before *lé* (448.c). There seems to be some kind of tonal assimilation here, but it is difficult to determine directionality: which form (the stem, or *le*) is the first to develop an H-tone before spreading it to the other?

Interrogative *ma* is subject to Atonal-Morpheme Tone-Spreading (137). Since it usually follows a verb, and since most inflected verbs end in an L-tone component, it often appears as *mà*, but is subject to intonational prolongation and pitch raising (§13.2.1.1). When it does follow an H-tone (e.g. after a negative verb), it is consistently H-toned *má*, see e.g. (136.d), below. This interrogative morpheme may be morphemically identical to disjunctive particle *ma*,

which is especially vulnerable to intonational modification, making it very difficult to tease out a phonological tone in specific examples (§7.2).

3.7.2 Grammatical tone patterns

Grammatically controlled modifications of lexical tones are of two kinds: **Tone-Grafting** (to the end of the stem), see (116), (118), and (131) below, and **stem-wide tone overlays**. Grafting does not erase lexical tones, while overlays do. There are many overlaid tone contours in Jamsay morphosyntax, while grafting is limited to the tonal locative of nouns (§8.1) and to the unsuffixed Imperfective of verbs (§10.1.2.8).

Overlays themselves are of two kinds. In one, the overlay on the stem is automatically triggered by a **following suffix**. In the other, the overlay is controlled **syntactically**, though of course this too represents a kind of dependence on the presence of other elements.

The beauty of the lexical tones, with at least one H-tone element in every regular noun, verb, adjective, and numeral stem (§3.7.1), is that one can always audibly express a morphosyntactic category by converting all tones in the stem to L (**tone-dropping**). This happens systematically with nouns (before a modifying adjective or demonstrative, as head of relative clause, and as initial in some compound types), adjectives and numerals (as final word in an NP that heads a relative clause), pronouns (preverbal subject function, possessor with inalienable kin terms, preceding some particles like Topic ké), and verbs (before Negative suffix, unsuffixed Perfective after focalized constituent).

There are other tone overlays, the most common being H(H...)L, which occurs in the unsuffixed Perfective of verbs when used in relative clauses, in the final of some nominal compounds, and in possessed forms of inalienable nouns. There is an all-H overlay in imperatives of most CvCv- and Cv:- verbs, and in the final of some compounds.

It is no exaggeration to say that grammatical tone changes (along with grammaticalized intonation) are the central motor of Jamsay morphosyntax.

Below is a brief summary of the grammatical tone processes applicable to verbs, nouns, and other word-classes. It is followed by formulations of the relevant grammatical tone processes. The section on tonology will conclude with discussion of a number of low-level tone rules.

3.7.2.1 Grammatical tones for verb stems

Verbs have their pure lexical form when noninitial in verb (VP) chains. They also have this form when followed by positive, segmentally nonzero AN inflec-

tional suffixes (not including the unsuffixed Imperfective, which is expressed by a tonal grafting).

There are a number of -Cv- suffixes that derive verbs from simple verbs (reversive, causative, a few cases of passive), and in some cases from adjectives or nouns; see Chapter 9 passim for lists of examples. As noted above, simple verbs have either {H} or {LH} tone patterns, the latter with a single final H-toned mora. The same pattern is extended to the derivatives; for the phonology see §3.7.3.1, below. The derivatives, once formed, function like underived verbs as potential inputs to inflections that may induce tone changes, see below.

Tone overlays occur as indicated in (115).

(115) Tone Overlays for Inflectable Verb Stems

- a. **tone-dropping** (all-L)
 - when medial in a chain of three or more verbs (§15.1.1);
 - when nonfinal in some types of iteration (§11.6.2);
 - before Negative AN suffixes (§10.1.3);
 - before Hortative suffix -mí (§10.4.3);
 - before Verbal Noun suffix -ú or -ý (§4.2.2.1);
 - when the AN category is defocalized in a main clause, in the unsuffixed Perfective (§10.1.2.2);
 - as compound initial when final is a nominalized verb (§5.1.2-4, §5.1.8-10).
- b. **H(H...)L**
 - unsuffixed Perfective participle in a relative clause (§14.1.13);
 - (for participles as agentive compound finals, and for H-toned verb stems before Pseudo-Causative -wv̀, see under nouns (117b)).
- c. **H(L...)L**
 - as the initial occurrence in one type of iteration (§11.6.3).
- d. **all-H**
 - Imperative stem for most Cv:- and CvCv- verbs (§10.4.1);
 - (for participles as agentive compound finals, see under nouns (117c)).

Example: b̀èr̀é- ‘get’: b̀èr̀é noninitially in a chain; tone-dropped b̀èr̀è- as unsuffixed Perfective (e.g. after another focalized constituent), in Imperfective

Negative *bèrè-gó-*, and in Verbal Noun *bèr-ú* ; H(H...)L unsuffixed Perfective *bèrè-* in relative clauses; and all-H Imperative *béré*.

For the difference between the two {HL} overlays, H(H...)L and H(L...)L, see §3.7.2.3, below.

Tone-dropping may also apply at word-level, i.e. to the unit consisting of a verb plus its AN and/or pronominal suffixes. This is observable with Imperfective Negative *-gó-* and Perfective Negative *-lí-*, which (like the positive unsuffixed Perfective) may appear in a word-level L-toned form (i.e. with *-gò-* or *-lì-*) when aspect is defocalized. Similarly, participles that include lexical or grammatical H-tone components drop these tones before modifying elements that regularly force tone-dropping on a preceding modified noun, e.g. *kâ:n* ‘any, each’; see e.g. (843.a-c) in §14.1.18.

There is one Tone-Grafting process applicable to verbs.

(116) Tone-Grafting for Verbs

unsuffixed Imperfective (positive): floating (unassociated) L-tone is added as a suffix after the final segment of the verb stem (before any pronominal-subject suffix)

Inflectable verb stems are either monosyllabic *Cv̂:-* or *Cv̂:-*, or longer stems ending in *...Cv̂-*. The unsuffixed Imperfective equivalents are *Cv̂:-* (F-tone), *Cv̂:-* (<LHL> tone), and */...Cv̂-/*, respectively; the latter is lengthened to *...Cv̂:-* before a zero suffix by Contour-Tone Mora-Addition (141).

The general formula for an inflected verb is [verb + AN + pronominal-subject], where AN is an aspect-negation suffix. The pronominal suffixes themselves have no intrinsic tones. Instead, the preceding tone extends into the pronominal suffix. The same is true of nonzero Participial suffixes, which are simply the usual nominal suffixes (Sg *-n*, Pl *-m*) added to verbs. See Atonal-Morpheme Tone-Spreading (137) in §3.7.3.5, below.

3.7.2.2 Grammatical tones for noun stems

Human Sg *-n* and Pl *-m* are the only nonzero nominal suffixes. They are atonal, carrying over the final lexical tone component of the stem: *ànsá:rán* ‘a white person’, *jémè-n* ‘blacksmith’. Noun stems are therefore not subject to suffixally controlled tone overlays. For a handful of nouns, the Sg or Pl suffix allows a final R-tone (i.e. <LH>) on a stem-final short vowel to be expressed, with the suffixal nasal providing the needed extra mora; see discussion of cases like *dòyǎ-n* ‘(a) Dogon’ versus *dòyó* ‘Dogon language’ in §3.7.1.3, above.

Verbal Nouns (nominalizations of lexical verbs) have a suffixally controlled **L(L...)H** pattern, with H on the VblN suffix -ú (§4.2.2.1). The suffix is apocopated in some cases, especially with bisyllabic stems, resulting in R-toned monosyllables.

Lexical nouns, and derived nominals such as Verbal Nouns, undergo the tone overlays in (117), omitting patterns confined to unproductive compound types. Agentive participles are included as “nouns” for this purpose.

(117) Tone Overlays for Nouns

a. **tone-dropping** (all-L)

before modifying adjective or demonstrative (§6.3-4);
before *kâ:n* ‘each, any’ (§6.8.1);
as initial of some compounds (§5.1.2-4, §5.1.9-10);
as head of relative clause (§14.1.3).

b. **H(H...)L**

inalienable kin term after possessor (§6.2.2);
as final in some compound types (§5.1.5);
pseudo-causative nominalization from verb (§9.3).

c. **all-H**

as participial final in some agentive compounds (§5.1.9);
a few unaffixed deverbals (§4.2.4);

Tone-dropping is seen in *úró* ‘house’, *ùrò jém* ‘(a) black house’ with modifying adjective, and *ùrò ù ê:-Ø* ‘the house that you-Sg saw’ in a relative clause. Tone-dropping of a noun is not triggered by a following numeral or postposition: *ànsá:rá-n túrú* ‘one white man’, *jémè-n lè* ‘to/for the blacksmith’. The same noun *úró* drops its tones as a compound initial in *ùrò-díŋ-Ø* ‘neighboring family’ and *ùrò-dú:* ‘family’.

H(H...)L is seen with inalienable kin term *òwⁿó* ‘(a) parent-in-law’ in possessed forms like *ú ówⁿó* ‘your parent-in-law’. The same tonal overlay occurs in the compound final of *àná-[óyó-n]* ‘village chief’, cf. *òyó-n* ‘chief’. For the detailed phonology of the H(H...)L overlay, see §3.7.3.2, below.

The all-H contour does not apply to lexical nouns, rather to the participialized verb in agentive compounds of the type [*ǰ* *ó*-Ppl], as in *bè:rù-já:-m* ‘message deliverers’ (verb *jǎ:-* ‘convey’).

There is one Tone-Grafting process for nouns (118).

(118) Tone-Grafting for Nouns

tonal locative: L-tone added to final segment of noun

Examples: *úró* ‘house’, locative *úrò* ‘in the house, at home’; *ká:* ‘mouth’ and *kâ:* ‘in the mouth; *nùmó* ‘hand’ and *nùmò:* ‘in the hand’; *gǔ:* ‘granary’ and *gǔ:* ‘in the granary’ (<LHL> tone); *gǔn* ‘back (body)’, postposition *gǔnè* ‘behind’ (<LHL>). A fuller set of forms is given in §8.1. For the phonology, which is distinct from that in the unsuffixed Imperfective of verbs, see §3.7.3.3, below.

3.7.2.3 Grammatical tones for adjectives and numerals

Adjectival suffixation (not applicable to cardinal numerals) involves the same (human) Sg -n and (human) Pl -m suffixes just mentioned for nouns. Again the nasal consonants in these suffixes simply carry forward the tone of the preceding vowel. Examples: *pírú* ‘white’ in nonhuman *ùrò pírú* ‘white house’, human Sg *ì-n pírí-n* ‘white (light-skinned) boy’, and human Pl *ùrⁿ-ùm pírí-m* ‘white children’; *érù* ‘sweet’, Sg *érì -n*, Pl *érù-m*. Adjectives often end in a consonant, in which case the suffixes -n and -m have V-initial allomorphs -in and -um, respectively. The resulting change in syllabic structure permits contour-toned monosyllabic adjective stems to express the two tone segments in different syllables: *gǔn* ‘curved, bent’, Sg *gǔn-ín*, Pl *gǔn-úm*; *ôy* ‘rotten’, Sg *ôy-ì n*, Pl *ôy-ùm*.

Lexical adjectives undergo the **tone overlays** in (119). Most of the tone-dropping cases are the same as those for nouns, since they apply to the final word (noun or adjective) in a core NP.

(119) Tone Overlays for Adjectives

a. **tone-dropping** (all-L)

before modifying adjective or demonstrative (§6.3.3.1);

before *kâ:*ⁿ ‘each, any’ (§6.8.1);

as head of relative clause (§14.1.3);

as predicate (unsuffixed Perfective), when aspect is defocalized (§10.1.2.2);

as predicate, in comparatives (§12.1.3).

b. **H(H...)L**

in modifying (nonpredicative) function, after *gá:rá* ‘more’ (§12.1.3) in comparatives and after *èjíⁿ* ⇒ ‘very’ (§8.5.2); as final in bahuvrihi compounds (§5.2.1).

Numerals share some of these processes with adjectives. Numerals undergo tone-dropping when this is induced by the wider syntactic context, namely in NPs that head relative clauses. Numerals have an Ordinal derivational suffix *-né* that forces tone-dropping on the stem (§4.7.2.2). Numeral stems, like adjectives, can function as finals in bahuvrihi compounds and in this case take the H(H...)L tone overlay (§5.2.1.2). More interestingly, there is an unusual **tone-dissimilation** process applicable to *pérú-* ‘ten’ as initial in decimal numerals; see §3.7.3.4, below.

3.7.3 Tonal morphophonology

3.7.3.1 *Autosegmental tone association (verbs)*

The suffixal derivations (e.g. reversive, causative) involve addition of a final *-C’-* suffix, adding one monomoraic syllable to the stem (§9.1-4). A handful of lexical idiosyncracies in tone relationships are observed, but the productive tonal relationships of input to suffixal derivative are those in (120). The hyphen in the right-hand column corresponds to the stem-suffix boundary in the derivative.

(120)	input	derivative
a.	H	H-H
	HH	HH-H
	HHH	HHH-H
b.	R	L-H
	LH	LL-H
	LLH	LLL-H

In other words, if the input stem is all-H, so is the derivative. If the input stem has only a final-mora H, so does the derivative (entailing an apparent “jump” of this H-tone from the final syllable of the underived stem to the suffixal syllable). An example of the latter: *bùró-* ‘be revived’, causative *bùrù-gó-* ‘resuscitate (someone)’.

This problem can be easily resolved within either the default-final-mora-H analysis (mentioned but not endorsed in §3.7.1.5, above), or the autosegmental model that I prefer. In the former, the verbs in (120.b) are underlyingly L-toned. Both the simple stem and the derivative undergo a late rule creating an H-tone for the final mora, in order to satisfy the constraint (99) against all-L stems.

In the autosegmental model, the difference between (120.a) and (120.b) is that the autosegmental level has (lexically specified) {H} in the first case and bitonal {LH} in the second. In the latter, it is then necessary to specify that the H is **associated with** the final mora of a verb stem, as already stipulated in (113.c) in §3.7.1.7, above. The interesting point is that this association is post-derivational; that is, it applies to suffixally derived stems in the same way as to underived stems. There is no evidence for cyclical application. The derivations of *bùró-* ‘be revived’ and its causative are in (121), omitting detail about vocalism that is not relevant here.

(121)	‘be revived’	‘resuscitate’	comment
	a. <i>buro-</i> , {LH}	<i>buro-</i> , Caus, {LH}	lexical input
	b. —	<i>buru-go-</i> , {LH}	causative derivation
	c. <i>bùró-</i>	<i>bùrù-gó-</i>	tonal association

3.7.3.2 Phonology of *H(H...)L* and *H(L...)L* tone overlays

There are two {HL} tone overlays: a) the widespread *H(H...)L* and b) the more restricted pattern *H(L...)L* that occurs in the first stem in one type of verb-stem iteration. The two overlays are audibly distinct only with verbs of three or more syllables. Take, for example, *gàmàⁿá-* ‘divide, share’. The *H(H...)L* overlay is realized as HHL in the unsuffixed Perfective *gámáⁿà-* in relative clause participles. In the relevant iteration pattern, *H(L...)L* appears in the first part of (and indeed the whole of) *gàmàⁿà-gàmàⁿà*.

The existence of two distinct {HL} overlays is obviously a problem for an autosegmental approach to Jamsay tones, and perhaps to any other “phonological” approach. However, there is a clear asymmetry. *H(H...)L* occurs widely in Jamsay, turning up in multiple grammatical contexts involving all lexical word classes.

The *H(L...)L* pattern occurs in one verb-stem iteration pattern that may involve up to three L-toned stem iterations following the initial *H(L...)L* occurrence (§11.6.3). For example, a trisyllabic verb with two iterations has a tone pattern HLL-LLL-LLL. The iterations have clearly undergone tone-dropping, erasing lexical tones, but one can argue that the tone-dropping begins with the second syllable of the first occurrence, hence *H[LL-LLL-LLL]*. This,

plus the initial H-tone (which is not lexical), suffice to characterize the tones of this iteration construction. This is a unique, global tone pattern overlaid on the entire sequence of stems, not a stem-specific overlay like that for all of the H(H...)L overlays. Moreover, this iteration pattern is stylistically marked, being typical of narrative style, unlike the stylistically neutral constructions that require H(H...)L overlays.

Given that **H(H...)L** is clearly the phonologically regular instantiation of {HL} in tone overlays, the question arises whether the association rules for this overlay are the same as those for basic stems of autosegmental type {HL} as described above. The central generalization for tone-component association for stems, extracted from (113.c) in §3.7.1.7, above, is repeated here as (122).

(122) associate final L (preceded by H) to the final mora

For example, the basic lexical forms of {HL} noun stems with a final bi- or trimoraic syllable are overwhelmingly ...F rather than ...L in form. For example, the (C)vCvC segmental shape has 18 cases of lexically HF-toned (C)ʔCʔC against zero cases of HL #C)ʔCʔC, see (104) in §3.7.1.3, above. The asymmetry extends to trisyllabic stems, e.g. of shape (C)vCvCvC, where we get a total of 8 ...F stems including 5 HHF (C)ʔCʔCʔC against one ...L stem, which happens to be of shape CvCCvCvC (107).

To see whether the grammatical H(H...)L overlay is consistent with this, we must review how it applies to mono-, bi-, and trimoraic stems. To do this, we must piece together an overall picture from facts gleaned from the individual subtypes.

For inflected verb stems, the H(H...)L overlay occurs in **unaffixed Perfective participles** (in relative clauses). The input-output relations are indicated in (123). The overlay is limited to stems, disregarding pronominal-subject suffixes (which have no intrinsic tones and so will eventually acquire their surface tone by low-level rules). All inflected verb stems of more than one syllable end in a Cʔ syllable (not Cʔ: or CʔC), so we do not have a full range of syllabic types. The lexical tones of the inputs are irrelevant to the outputs so they are not indicated here.

(123)	basic form of verb	unsuffixed Perfective participle
	a. monosyllabic	
	Cv:-	Cv̂:-
	b. bisyllabic	
	Cv(C)Cv-	Cv̂(C)Cv̂-
	c. trisyllabic	
	Cv(C)CvCv-	Cv̂(C)Cv̂Cv̂-
	d. quadrisyllabic	
	Cv(C)CvCvCv-	Cv̂(C)Cv̂Cv̂Cv̂-

In the monosyllabic case, no choice of association patterns is available, since bitonal {HL} must associate its two components to the two available moras, respectively. In the non-monosyllabic cases, we cannot determine whether the final L tone-component is associated with the final syllable or with the final mora, since the two converge in every case (there are no final long vowels, or final consonants, in nonmonosyllabic verbs). The quadrisyllabic case shows that the H can extend into the third syllable from the left. Example: gòlòrò-wó- ‘cause to snore’, Perfective participle gólóró-wò-, as in dògùrò gólóró mí wò gólóró-wò-Ø ‘when he/she made me snore’. Since no known verb has more than four syllables, it appears that once the L-tone is associated with the final syllable/mora, the H-tone fills up the remainder without limit.

(Morphologically) **inalienable** kin terms have H(H...)L when possessed, in contrast to other contours, often {LH}, in absolute (unpossessed) function (§6.2.2). Representative data are in (124).

(124)	gloss	absolute	possessed
	a. monosyllabic		
	‘father’	dě:	dê:
	b. bisyllabic		
	‘husband’	àyá	áyà
	‘(man’s) sister’	yèsǎ:	yésâ:
	c. trisyllabic		
	‘(woman’s) brother’	àsàr ⁿ á	ásár ⁿ à
	‘sister’s child’	léjéwé-n	léjéwè-n
	‘grandchild’	tíríwè-n	tíríwè-n

Again, in the monosyllabic case there are no choices to be made; when possessed, the {HL} tone pattern can only be expressed using both input moras, so we get an F-toned monosyllable. In the bisyllabic cases, ‘husband’ with its monomoraic syllables can only come out as HL when possessed. However, ‘(man’s) sister’ does provide some new information: for a CvCv: stem, the H component spreads into the onset of the second syllable, resulting in a HF pattern (yéŝâ:). The trisyllabic cases do not extend the H into the third syllable, even in ‘sister’s child’ and ‘grandchild’ where the Sg -n suffix would make a HHF tone pattern phonologically possible. However, if the domain of H(H...)L is the stem, disregarding the suffix, ‘sister’s child’ and ‘grandchild’ are (C)vCvCv- stems of the same type as ‘(woman’s) brother’, and there is no reason to expect a final-syllable contour tone in the possessed form.

Modifying adjectives following **comparative** gá:râ ‘more, most’ (§12.1.3) have H(H...)L contours. Some examples are in (125).

(125)	gloss	regular form	as modifier, after gá:râ
	a. monosyllabic		
	‘black’	jém	jêṃ
	b. bisyllabic		
	‘bad’	mǎñú	móñù
	c. trisyllabic		
	‘smooth’	ònú ⁿ ú	ónú ⁿ ù

Again, the H(H...)L tone overlay applies to stems, disregarding suffixes. Thus gùrú ‘long’ has an H(H...)L form gúrù, from which (adding Sg -n) we get human Sg HL-toned gúrì -n (not HF-toned #gúrì-n).

Bahuvrihi compounds (§5.2.1) have H(H...)L finals. The tones of these finals are consistent with what we have seen so far in this section. A useful datum is that HH-toned numeral kórôy ‘six’ (note the final heavy syllable) appears as HF -kórôy in e.g. míⁿé-kúrôy ‘having six voices’. This is parallel in tonal pattern to possessed HF-toned yéŝâ: ‘sister’ mentioned above.

This leaves nominal **compounds** whose finals have H(H...)L tones. The data are consistent with what we have seen in the preceding types. Examples are in (126).

(126)	gloss	regular form	as compound final
	a. monosyllabic		
	‘load’	dú:	-dû:
	b. bisyllabic		
	‘sesame’	námñú	-námñù
	c. trisyllabic		
	‘cat’	nì-nì w ⁿ é	-ní-níw ⁿ è

To test for tone patterning with trisyllabic stems ending in a bimoraic syllabic, I elicited a term for (nonexistent) ‘bush (=wild) cassava’, with the productive initial èjú- ‘field’ or ‘bush, outback’, which is used in several ‘wild X’ terms. ‘Cassava’ is bànàkû:ⁿ (Bambara loan). The elicited compound ‘bush cassava’ came out as èjú-bánákû:ⁿ. There is a possibility that the word for ‘cassava’ is a crypto-compound (bànà-kû:ⁿ), as indeed it is in the Bambara source, so we must be circumspect about assessing this datum. However, on the face of it, èjú-bánákû:ⁿ does suggest that the H in the H(H...)L overlay may spread into the onset of a bimoraic third syllable. If so, this strongly supports the view that the H(H...)L overlay has the same set of realizations as autosegmental {HL} in lexical stems as documented above. I conclude that the **H(H...)L overlay reduces to autosegmental {HL}**.

3.7.3.3 Phonology of Tone-Grafting

There are two grammatical contexts calling for Tone-Grafting. These are the tonal locative of nouns, and the unaffixed Imperfective of verbs (§10.1.2.8). In both cases, an L-tone is grafted onto the end of the stem. However, the phonology differs subtly in the two cases.

Tonal locatives can be formed from a limited number of noun stems (§8.1.1). A few noun-like spatial postpositions are also tonal locatives in form. A tonal locative cannot be followed by a suffix, so there is no further phonology to worry about beyond the formation of the tonal locative itself.

As it happens, there are no stems with lexical ...HL or ...F tone that have tonal locatives. If they did, the tonal locative would be homophonous with the simple stem. In addition, no uncompounded noun stem of two or more syllables ending in a heavy (bi- or trimoraic) syllable has a tonal locative. As a result, the phonological range of inputs is rather limited: H- and R-toned Cv: (127.a-b), R-toned Cñn (127.c), and longer stems ending in H-toned ...Cv (127.d-e).

(127)	noun	tonal locative	comment
a.	Cý:	Cÿ:	
b.	Cÿ:	Cÿ:	Cÿ: = trimoraic Cÿÿÿ
c.	Cÿn	Cÿnn	Cÿnn = trimoraic Cÿnn
d.	...CÿCÿ	...CÿCÿ	
e.	...CÿCÿ	...CÿCÿ:	

Examples: ká: ‘mouth’ and tonal locative kâ: ‘at the mouth; gǎ: ‘granary’ and gǎ: ‘in the granary’, gǎn ‘back (body)’ and postposition gǎnn ‘behind’, úró ‘house’ and úrd ‘in the house, at home’, bǎrǎ ‘bottom’ and bǎrǎ: ‘at the bottom’.

In (127.a) and (127.d), there is no increase in moras. (127.a) goes from long H-toned vowel to long F-toned vowel. (127.d) goes from ...HH (last two syllables are H-toned) to ...HL. However, in the other three cases the final syllable grows an extra mora. In (127.b), tonal locative Cÿ: is, properly speaking, Cÿÿÿ with a bell-shaped tone requiring three moras (the extra duration is audible). (127.e) likewise goes from final monomoraic Cÿ to final bimoraic Cÿ:. In (127.c), the final n is noticeably lengthened.

These additional moras are needed to give audible expression to the central feature of tonal locatives, namely an extra L-tone grafted onto the end of the noun. To understand the phonology, it is necessary to recognize that the input Cý: in (127.a) has a single H autosegment spread over both moras of the long vowel, and that the input in (127.d) has a single H autosegment spread over (at least) the last two syllables. In these cases, the grafted L occupies the final mora, without completely erasing the existing lexical H. In (127.b-c,e), if the grafted L simply occupied the final mora, the existing lexical H would be completely erased. This is not allowed, so the only solution is to extend the final segment, creating an additional mora to accommodate the grafted L. This is taken care of by a low-level rule, Contour-Tone Mora-Addition (141), see §3.7.4.1, below.

For the **unaffixed Imperfective**, things are subtly different. The phonologically relevant typology of inputs is this: H- and R-toned Cv:-, and longer stems ending in H-toned short vowel (...Cÿ-). (The single consonant-final quasi-verb, kùn- ‘be in’, has no imperfective forms.) The input-output relationships are as in (128).

(128)	verb	unsuffixed Impf	comment
	a. ĆV:-	ĈV:-	
	b. ĈV:	ĈV̂:-	if -Ø suffix, ĈV̂:-Ø = ĈV̂V̂
	c. ...ĆV́ĆV́-	...ĈV́ĈV́-	if -Ø suffix, ...ĈV́ĈV́:-Ø
	d. ...ĈV̂ĈV̂-	...ĈV̂ĈV̂-	if -Ø suffix, ...ĈV̂ĈV̂:-Ø

Examples: tí:- ‘send’ and /tí:-/, yǎ.- ‘go’ and /yǎ:-/, páyá- ‘tie’ and /páyâ-/, jùgó- ‘know’ and /jùgô-/.

Unlike the case with tonal locatives, the **H-tone component is never deleted on the final input vowel**, even when, as in (128.c), it is part of an autosegment extending over at least the last two syllables. This is the crucial phonological difference between the unsuffixed Imperfective and the tonal locative.

The unsuffixed Imperfective is followed either by pronominal-subject suffixes (e.g. 1Sg -m, 3Sg -Ø, 3Pl -ba) or, in relative clauses, by Participial suffixes (Nonhuman -Ø, Sg -n, Pl -m). These suffixes may have the shape -Ø, -C (nasal), or -Cv, and all are atonal (they lack intrinsic tones of their own). The tone patterns of the -Ø and -C cases can be handled by simple, lower-level tone rules. With -Ø suffix, the final vowel of the unsuffixed Imperfective must be prolonged by an extra mora where necessary to permit all tone components to be expressed; this is the case in (128.b-d) but not (128.a); see Contour-Tone Mora-Addition (141), §3.7.4.1. With -C suffix, the contour tone is realized over the entire resulting bi- or trimoraic syllable; see Rightward H-Spreading, §3.7.4.4.

The atonal -Cv suffix is more interesting phonologically. The two suffixes in question are 3Pl -ba and 2Pl -be. Consider the data in (129).

(129)	gloss	lexical	3Sg Impf	1Sg Impf	3Pl Impf
	a. ‘send’	tí:-	tí:-Ø	tí:-m̂	tí:-bà
	b. ‘go’	yǎ:-	yǎ:-Ø [= yàáà-Ø]	yǎ:-m̂ [= yàá-m̂]	yǎ:-bà
	c. ‘know’	jùgó-	jùgô:-Ø	jùgó-m̂	jùgó-bà

For all three verbs in (129), the 3Pl unsuffixed Imperfective (rightmost column) expresses the grafted L exclusively on the 3Pl suffix, so the preceding syllable is H- or R-toned as per its lexical form. In the cases of (129.b-c), it would be possible to first graft the L onto the stem-final syllable, allow the L to spread to the suffixal syllable by Atonal-Morpheme Tone-Spreading (137), and

then simplify the stem-final syllable to R in (129.b) and to H in (129.c) on the grounds that these syllables do not have enough moras to express their respective contour tones, see Contour-Tone Stretching (143) (§3.7.4.2, below).

Objection: there is no purely phonological reason why /tí:-bà/ ‘they will send’ should reduce its stem tone from F to H to produce tí:-bà. We do in fact get a surface F-tone before 3Pl -bà in combination with Perfective suffix allomorph -â:- (§10.1.2.3), as in náŋ-â:-bà ‘they have forgotten’. Since a long F-toned vowel can be pronounced before a -Cv̄ suffix, I reject a derivation of H-L tí:-bà via F-L /tí:-bà/. This suggests that Tone-Grafting onto the stem-final syllable does not, as such, take place when a nonzero suffix is present; rather, the floating L initially located between the stem and the suffix attaches itself to the suffix (i.e. to the right) rather than to the stem (to the left). Thus the derivation I prefer for tí:-bà is (130.a), not (130.b). However, a derivation similar to that in (130.b) does occur when the unsuffixed Imperfective is followed by the clitic ≡k̀̀ ‘be (nonhuman)’, as in tí:≡k̀̀̀ ‘it will send’; cf. (150) and (569).

- (130) a. (preferred derivation)
 /tí:- L -ba/
 tí:-bà Tone-Grafting (onto suffix)
- b. (dispreferred derivation)
 /tí:- L -ba/
 /tí:-ba/ Tone-Grafting (onto stem)
 /tí:-bà/ Atonal-Morpheme Tone-Spreading (137)
 tí:-bà Rightward H-Spreading (150)

The Tone-Grafting processes may be summarized as (131).

(131) **Tone-Grafting**

- a. an L-tone component is positioned (as a suffix) after the stem
- b. integration:
- tonal locative:**
 this L occupies by itself the final mora, unless this would erase an existing lexical H from the entire stem, in which case the L is co-linked along with this H to the final moraic segment.
- unsuffixed Imperfective:**
 i. if a nonzero pronominal-subject suffix (necessarily atonal and monomoraic) is present, the L occupies the suffixal mora;

- if a following Nonhuman subject clitic =k̀̀ is present, the L merges with the L-tone of the clitic;
- ii. if (i) does not apply, the L occupies by itself the final mora of the stem, unless this would remove an existing lexical H from the final syllable, in which case the L is co-linked along with this H to the final moraic segment of the final syllable.

3.7.3.4 Tone-Dissimilation (decimal numerals)

Decimal numerals from ‘20’ to ‘90’ are composites of p̀́rú- ‘ten’ plus a single-digit numeral. (132) presents data; for further discussion see §4.7.1.3.

(132)	gloss	form
a.	‘10’	p̀́rú
b.	‘20’	p̀́l-l̀̀y
	‘30’	p̀́t-t̀̀:~n
	‘40’	p̀́n-ǹ̀y ⁿ
	‘50’	p̀́n-ǹ̀:y ⁿ
c.	‘60’	p̀̀r̀̀-k̀̀r̀̀óy
	‘70’	p̀̀r̀̀-s̀̀úy ⁿ
	‘80’	p̀̀r̀̀-g̀̀á:r̀̀à
	‘90’	p̀̀l-l̀̀á:r̀̀úẁ̀à (or: p̀̀l-l̀̀á:r̀̀ẁ̀à)

In ‘20’ through ‘50’, the single-digit numeral is really R-toned, though it appears as L-toned when phrase-final but preceded by a compound initial or a modified noun. In any event, these single-digit numerals (‘2’ to ‘5’) begin with an L-tone component. On the other hand, numerals ‘6’ to ‘9’ begin with an H-tone component.

The unusual feature of the decimal numerals is that the tone of p̀́rú- (reduced to p̀́r- in ‘20-50’ and in ‘90’ by Post-Sonorant Syncope (60) and then subject to assimilation), is **the opposite of the initial tone** component of the final. Since the underlying form is H-toned p̀́rú, we must recognize tone-dropping in ‘60-90’.

I know of no other tone dissimilation process in Jamsay.

(133) **Tone Dissimilation**

In decimal numerals beginning with *pérú-* ‘ten’, this morpheme drops its tones when the following single-digit numeral begins with an H-tone

3.7.3.5 *Atonal-Morpheme Tone-Spreading*

There are a number of suffixes, with no intrinsic tone, that can be added to nouns, adjectives, or verbs. The relevant phonological shapes are $-\emptyset$ (zero), $-C$ ($-n$ or $-m$, i.e. always a nasal), and syllabic $-vC$ or $-Cv$.

The **nasals** are phonologically straightforward for nouns and verbs, since the relevant stems are vowel-final and the final vowels carry tones. These tones are simply spread over the resulting bi- or trimoraic final syllable in a natural way. If the tone is simple H or L, this pure tone just spreads to the nasal. If it is a contour tone, the final tone component is realized on the nasal; see Contour-Tone Stretching (143), below.

There are two morphological combinations, however, where an atonal **syllabic suffix** is added to a tone-specified stem (134).

- (134) a. Sg $-in$ or Pl $-um$ after C-final adjective
 b. 3Pl $-ba$ or 2Pl $-be$ in inflected verb

In both cases, there are some issues involving stems with final contour tone; these will be taken care of in connection with Final-Tone Resyllabification (148). For present purposes it suffices to point out that the final tone of the stem is spread into the previously atonal suffixal syllable. This is seen most clearly when the final syllable of the unsuffixed stem is monotonal H or L. For adjectives, only H-tone occurs (135.a). For verbs, both H- and L-tones can be added (135.b-c).

- (135) a. *jém* ‘black’
 Sg *jém-ín*, Pl *jém-úm*
- b. *yà:-* ‘go’ (unsuffixed Perfective of stem *yă:-*)
 3Pl *yà:-bà*, 2Pl *yà:-bè*
- c. *yà:-gó-* ‘go’ (Imperfective Negative)
 3Pl *yà:-gó-bá*, 2Pl *yà:-gó-bé*

This process does not apply to 3Pl $-ba$ and 2Pl $-be$ in the unsuffixed Imperfective. In this case, Tone-Grafting (131) has already provided these suffixes

with a tone, by associating the L-tone (i.e. the segmentally zero morpheme expressing the unsuffixed Imperfective) with the suffixal mora (stem-L-ba > stem-bà); see (130.a).

The spreading of stem-tones onto an atonal suffix has analogues involving certain **clause-final particles**, such as conditional-antecedent particle *dèy* ‘if’ (136.a-b), interrogative *ma* (136.c-d) and quotative *wa* (136.e-f); cf. §3.7.1.8, above. The last two may combine, in the order *ma wa* (136.g-h). The tonal markings of the final particles in (136) are based on the most common pronunciation in the absence of special intonational effects. Note that the particle(s) carry forward the final tone of the preceding verb.

- (136) a. *ñǎ:* *ñé:-jè-Ø* *dèy,* ...
 meal eat-Perf-3SgS if, ...
 ‘if he/she has eaten, ...’
- b. *ñǎ:* *ñè:-lí-Ø* *déy,* ...
 meal eat-PerfNeg-3SgS if, ...
 ‘if he/she didn’t eat, ...’
- c. *ñǎ:* *ñé:-jè-Ø* *mà*
 meal eat-Perf-3SgS Q
 ‘Has he/she eaten?’
- d. *ñǎ:* *ñè:-lí-Ø* *má*
 meal eat-PerfNeg-3Sg Q
 ‘Did he/she not eat?’
- e. *ñǎ:* *ñé:-jè-Ø* *wà*
 meal eat-Perf-3SgS Quot
 ‘He/She has eaten, it is said’
- f. *ñǎ:* *ñè:-lí-Ø* *wá*
 meal eat-PerfNeg-3SgS Quot
 ‘if he/she didn’t eat’
- g. *ñǎ:* *ñé:-jè-Ø* *mà* *wà*
 meal eat-Perf-3SgS Q Quot
 ‘It was asked, has he/she eaten?’
- h. *ñǎ:* *ñè:-lí-Ø* *má* *wá*
 meal eat-PerfNeg-3Sg Q Quot
 ‘It was asked, did he/she not eat?’

Clause-final particles other than Quotative *wa* are subject to intonational modification (§3.8.1). *dey* occurs at the end of a conditional antecedent clause that is immediately followed by its consequent clause. Interrogative *ma* typically occurs in polar (yes/no) questions and is arguably identical to the ‘or’ conjunction *ma*, suggesting the possibility that questions like (136.c-d) are cut-off interrogative disjunctions: ‘Did he/she eat, or [didn’t he/she eat]’. These contexts for *dey* and *ma* lend themselves to nonterminal clause-final intonation, in the form of prolongation (\Rightarrow) and/or raising (\Uparrow), which disguise the (phonological) tone.

A further complexity is that when two such clause-final particles co-occur, they may form an autonomous prosodic unit independent of the preceding verb (and its tones). For example, (136.g-h) show verb-final tones spreading from the verb to both following particles, but in (136.g) it is also possible to raise the pitch of both particles due to intonation effects. I transcribe this as e.g. $\tilde{n}\acute{e}:-j\grave{e}-\emptyset m\grave{a}\Uparrow w\grave{a}\Uparrow$ in the case of (136.g)

The ‘if’ particle *dey* systematically appears as H-toned *dé* in the combinations *dé ké* and *dé nè*, regardless of the tone of the preceding morpheme (§16.1.3).

Clause-final intonational effects can also apply to verbs ending in 3Pl *-ba* and 2Pl *-be* (after they acquire a tone by Atonal-Morpheme Tone-Spreading) in the absence of a following particle. Moreover, when they occur in all-L-toned words, under some conditions they (and other pronominal suffixes) may “grow” a final H-tone; see §3.7.3.6, just below.

Postpositional *lè* (instrumental, dative, locative) is normally L-toned (§8.2.1). It has an H-toned variant *lé* in certain fixed combinations, always involving a preceding H-tone, suggesting that tone-spreading has applied in these combinations. However, in cases like *dójù* ‘under’, *dójú lé* ‘down below’, the preceding word itself raises its final tone. We therefore have a chicken-and-egg conundrum, and the tonal pattern of *dójú lé* does not lend itself to a simple phonological interpretation (§3.7.1.8, §8.2.2).

Likewise, there are three basically purposive clause types involving final *le*. In one, we get H-toned *lé* after tone-dropped verb, so there is clearly no tone-spreading here (§17.6.1.1). In the other two, the tone of *le* is identical to that of the preceding syllable. In one construction, the verb shifts to all-H tone, and is followed by H-toned *lé*. In the other, we get L-toned *lè* after an unaffixed Imperfective verb, which always ends in a L-toned component (final L or F syllable). In these last two constructions, *le* acquires its tone by spreading from the left (§17.6.1.2-3).

We could therefore take certain cases of *le* (but not others) to be intrinsically atonal and subject to the tone-spreading process.

(137) **Atonal-Morpheme Tone-Spreading**

a suffix or clause-final particle with no intrinsic tone acquires a tone by spreading from the final tone component of the preceding element

3.7.3.6 *Pronominal-Suffix Tone-Raising*

When an atonal pronominal-subject suffix is preceded by a verb (or verb plus AN suffix) whose final tone component is L, the suffix normally gets L-tone by Atonal-Morpheme Tone-Spreading (137).

However, in the unsuffixed Perfective, under some conditions the subject suffix can spontaneously “grow” an H-tone. When they are asked to pronounce unsuffixed Perfectives in isolation, informants frequently pronounced it with suffixal H-tone, e.g. 1Sg làyà-mí, 2Pl làyà-bé. This H-tone was not observed in texts when the unsuffixed Perfective is clause-final (as it usually is). However, when it is followed by clitic ≡ȳ ‘it is’ or some other clause-final element, the H-tone for syllabic suffixes was audible in several (though not all) textual examples (138).

- (138) a. [[kó bírɛ́] é: mɛ̀yⁿ kò-rú ỳẁẁ-**bá**≡ȳ
 [[NonhP work] see and Nonh-with accept.Perf.L-**3PIS.H**≡it.is
 là: dèy] [kó dènè-l-á]
 Neg if] [NonhO like-PerfNeg-3PIS]
 ‘Instead of seeing how it (=plow) worked and accepting it, they didn’t like it.’ **2004.3.7**
- b. [á àná] dà:ⁿ-wⁿ kâ:ⁿ
 [2SgP village] sit.Perf.L-**2SgS.H** even
 ‘even if you-Sg are sitting in your village’ **2004.3.24**
- c. [bé ðȳǎ-m] yé dà:ⁿ-bá jì:ⁿ
 [3Pl chief-Pl] Index be.sitting.L-**3PIS.H** Past
 ‘They the (colonial) leaders, they were sitting (=living) here?’
2004.4.22

See also yèrè-bá ‘they came’ in (732.d), kùnò-wⁿ ‘you-Sg put’ in (926.b), t̀j̀-**bá** ‘they paid’ in (797.d), and j̀ỳ-**bé** ‘you-Pl fight’ in (772).

What might be going on here is that, under some morphosyntactic conditions and in isolation, the Constraint Against All-L-Toned Stems (99) has come into play, this time less systematically, and at word- rather than stem-level. The principle is normally disregarded in clause-final unsuffixed Perfective

tives; see, for example, L-toned $dà:^n-bà$ and $dà:^n-y^n$ in (690.a-b) and dozens of similar examples. However, the constraint is activated in combination with clitic $\equiv\dot{y}$ or other post-verbal morpheme, and in isolation pronunciations.

The same speaker who gave (138.a), above, also raised the tone of $\equiv\dot{y}$ itself, spoken as a single word in isolation, after the zero-suffix 3Sg verb form in (139).

- (139) $y\dot{d}w\dot{d}-\emptyset\equiv\dot{y}$
 accept.Perf.L-3SgS=it.is
 ‘(instead of) he/she accepting (it)’

To model this form, one might suggest adding a floating H-tone at the end of the verb form (before the clitic), and allow the tone to be expressed audibly on the clitic (in the absence of a mora-bearing suffixal segment).

If this analysis is correct, the occasional H-toned pronominal-subject suffix (following an L-toned stem) does not represent the underlying tone of the suffix, rather is due to an inconsistently applied phonological process based on the constraint mentioned.

However, the constraint **does not affect unsuffixed Perfectives with zero (3Sg) suffix**, so e.g. $y\dot{d}w\dot{d}-\emptyset$ ‘he/she accepted’ and $dà:^n-\emptyset$ ‘he/she is sitting’ are L-toned in all environments, including in isolation; one does not hear e.g. $\#y\dot{d}w\dot{d}-\emptyset$ as an unsuffixed Perfective. This is evidence against a purely phonological interpretation, attributing the unexpected suffixal H-tones in (138) to a constraint against all-L words. This would suggest that the unexpected suffixal H-tones are instead the result of a morphologically restricted tone-dissimilation by which an atonal suffix following an all-L-toned verb may appear as H-toned.

In some textual passages, one is initially tempted to recognize a suffixal H-tone, but one senses that the pitch rise may be intonational in nature. For example, in the passage (193), the 3Pl unsuffixed Perfectives (each ending a clause) are ... $bàrà-bà$, ... $cè:^n-bà\uparrow$, ... $dè:-bà\uparrow$, and ... $dè:-bà$. The suffixal pitch is higher on the second and third of these. I attribute this as the \uparrow clause-final intonation based on my interpretation of the discourse structure of the passage. However, one could argue that the (optional) suffixal tone-raising process has shifted $-bà/$ to $-bá$ in the relevant forms.

3.7.4 Low-level tone rules

3.7.4.1 *Contour-Tone Mora-Addition*

In Jamsay, a contour tone can only be expressed in a syllable that has at least one mora for each tone component; F and R require two moras, while $\langle LHL \rangle$

requires three. There are clear cases where word-final F (i.e. <HL>) and <LHL> force addition of an extra mora on the final syllable. There are no such examples of lengthening to accommodate an R-tone, and in fact there is one apparent set of noun stems whose final R-tone simplifies to H.

Consider the unsuffixed Imperfective, and the (marked) Perfective, of *nùmó-* ‘fall’ (140). Pronominal suffixes of the form -C (nasal), -Cv, and -Ø are shown.

(140)	Imperfective	Perfective	comment
stem	/nùmó- L/	/nùmó-â:/	
1Sg	nùmó-m̀	nùm-â:-m	
3Pl	nùmó-bà	nùm-â:-bà	
3Sg	nùmô:-Ø	nùm-â:-Ø	

The Perfective has a long -â:- throughout. Phonetically, what I transcribe as 1Sg *nùm-â:-m* [numáám] has its final pitch drop actually heard on the suffixal nasal, so a minor rule Contour-Tone Stretching (143) will be needed, see just below.

The unsuffixed Imperfective stem is expressed by adding an L-tone component after the stem. I have argued above that the L is directly grafted onto a following nonzero suffix, hence 1Sg *nùmó-m̀* and 3Pl *nùmó-bà*.

The remaining form to account for is 3Sg *nùmô:-Ø*. Here the suffix is zero, so there is nothing on its right for the L to associate with. It therefore co-links with the moraic segment to its left. At this point, the o of *nùmó-* is linked to a bitonal HL sequence (*nùmô-Ø*). This cannot be pronounced as such. The solution is to add an extra mora, lengthening the final vowel to allow the contour tone to be pronounced: *nùmô:-Ø*, i.e. *nùmóð-Ø*.

There are also cases where a bimoraic long vowel with R-tone must be expanded to trimoraic to accommodate an additional grafted L-tone component, resulting in bell-shaped <LHL>. For example, R-toned *yǎ:-* ‘go’ has a 3Sg unsuffixed Imperfective composed of /yǎ:- L -Ø/. It is realized as *yǎ:-Ø*, i.e. as trimoraic *yàáà-Ø*, with a vowel that is noticeably longer than that of simple R-toned *yǎ:-*.

I formulate the basic rule as (141).

(141) **Contour-Tone Mora-Addition**

- a. A word-final monomoraic vowel with F-tone is lengthened to bimoraic.
- b. A word-final bimoraic long vowel with a bell-shaped tone (<LHL>) is lengthened further to trimoraic

This rule applies only to **word-final vowels**. Word-medially, when there are too many tone components for a syllable, we instead get Final-Tone Resyllabification (148); see §3.7.4.3, below.

Contour-Tone Mora-Addition interacts in an interesting way with **tone-dropping** processes, specifically those where one word undergoes tone-dropping under the influence of a following word. Consider, for example, short-voweled Cv- quasi-verbs like *sà-* ‘have’, *wḍ-* ‘be (Human)’, and *kḍ-* ‘be (Nonhuman)’. These have suffixed participles such as (human) Sg *sâ-n*, *wḍ-n*, and *kḍ-n* showing the {HL} contour of Perfective participles, here realized as F-tone on a monosyllable. The Nonhuman forms are underlying /*sâ-Ø*/, /*wḍ-Ø*/, and /*kḍ-Ø*/. Here the contour tone is on a single mora, so Mora-Addition applies, giving *sâ:-Ø*, *wḍ:-Ø*, and *kḍ:-Ø*. When such a participle happens to be followed by a form like *kâ:n* ‘each, any’ that forces tone-dropping, the outputs are *sâ:-Ø*, *wḍ:-Ø*, and *kḍ:-Ø*. Note that the vowels are long, although there is no longer a contour tone that requires the extra mora. In other words, we get *sâ:-Ø*, *wḍ:-Ø*, and *kḍ:-Ø* on an initial word-level cycle, and these lengthened forms are those to which inter-word tone-dropping applies. Examples are *wḍ:-Ø* in (846.b), and *sâ:-Ø* in (847). This treatment does not extend to cases where the participle is based on an Imperfective verb with Nonhuman \equiv *kḍ* ‘be’ (§10.1.2.8). This is because there is no stage in the derivation where this morpheme has F-tone. An example is *té:ré≡kḍ-Ø* in (848).

All of the examples given above for Contour-Tone Mora-Addition involve F (i.e. <HL>) or <LHL> tones. In effect, the extra mora is always added to **accommodate a final L-tone** component. This may be an accidental result of the fact that there do not happen to be any R-toned short vowels in any specific derivation. However, it is possible that R-tones fail to cause addition of a mora.

Consider *ḍḡḍ-n* ‘chief, Hogon’. This is one of the handful of bisyllabic noun stems ending in a monomoraic syllable that have a final R or F tone. The contour tone is expressible, thanks to the fact that these stems normally require a suffix, Sg -n or Pl -m, which provide the needed extra mora. However, for *ḍḡḍ-n*, there is an unsuffixed nonhuman counterpart, *ḍḡḡ* ‘leader (e.g. of animal pack)’. Parallel to the F-toned cases considered above, we might have expected #*ḍḡḡ:* with an extra mora to permit the full R-tone to be expressed, but no lengthening occurs. This suggests that a **final R-tone does not force Contour-**

Tone Mora-Addition. Instead, the R-tone is simplified to H-tone, see Final-Cv R-to-H Reduction (154) (§3.7.4.6, below).

3.7.4.2 Contour-Tone Stretching

An F-toned syllable has a pitch arc with the final mora showing the most dramatic pitch drop. has the drop in pitch (i.e. the L tone component) on the final mora of a CvC or Cv:C syllable.

This may require slightly repositioning an F-tone originally on a vowel when a tautosyllabic consonant is added. The clearest examples are when a noun (or other word) ending in a long, F-toned vowel is followed by the ‘it is’ or Focus clitic $\equiv\hat{y}$ (142).

(142)	gloss	simple form	with $\equiv\hat{y}$ clitic
	a. ‘soldering metal’	pùgâ: ⁿ	pùgâ: ⁿ $\equiv\hat{y}$ ⁿ
	b. ‘owner of X’	X bâ: ⁿ	X bá: ⁿ $\equiv\hat{y}$ ⁿ

Assuming an autosegmental analysis, the tones are on a separate tier. An HL sequence is associated with the bimoraic final syllable of each simple form in (142.a). When the clitic is added, the L component shifts to the (now syllable-final) semivowel, allowing the H component to spread rightward into the second mora of the syllable.

There is no stretching when the noun already ends in CvC, namely in Cvy, when clitic $\equiv\hat{y}$ is added. Thus tílây ‘duty, obligation’ combines with the clitic as tílây $\equiv\hat{y}$, which is pronounced just like tílây except for a prolongation of the semivowel.

In verbs, the stretching rule is needed for Sg or Pl perfective participles of monosyllabic stems. With the H(H...)L tone overlay that such participles require, monosyllabic stems have the form C \hat{v} :-. When (atonal) Sg -n or Pl -m is added, stretching applies. Example: verb á:- ‘catch’, H(H...)L unsuffixed Perfective form â:-, Sg Perfective participle â:-n (pronounced [áá \hat{n}]), Pl participle â:-m (pronounced [áám]). In the section just below on Final-Tone Resyllabification (148), I show that the latter rule precedes (and bleeds) Contour-Tone Stretching. In unsuffixed Imperfective forms with nasal suffix, e.g. á:- ‘catch’, 1Sg unsuffixed Imperfective á:- \hat{n} , I posit a floating suffixal L-tone between stem and (atonal) final suffix, hence /á:- L -n/. Although the output á:- \hat{n} is compatible with Contour-Tone Stretching, I prefer to posit an earlier rule for associating floating tones; see Tone-Grafting (131). This accounts for the difference between unsuffixed Imperfective and unsuffixed Perfective forms in Final-Tone Resyllabification (148).

There are no morphological contexts where an R-toned final syllable precedes an H-toned sonorant suffix or clitic. However, lexical stems like nũ:yⁿ ‘five’ (a phonetically better transcription would be nũ:yⁿ) do respect the stretching principle by holding off the pitch rise until the final mora.

(143) **Contour-Tone Stretching**

The final tone-component of a contour tone is associated one-to-one with the final mora of its syllable, allowing a preceding tone-component to spread through the vocalic nucleus of the syllable.

If we were to disregard R-toned lexical stems here, and confine Contour-Tone Stretching to F-tones, the rule could perhaps be merged with Rightward H-Spreading (150), see below.

3.7.4.3 *Final-Tone Resyllabification*

As we have seen, an R- or F-tone in a stem-final CvC or Cv:C syllable is articulated with the final L-tone component associated with the final C. There are a few cases, however, where a vowel-initial clitic or suffix is added. This forces resyllabification, whereby the stem-final sonorant becomes the onset of the syllable containin the clitic or suffix. For example, R-toned [CŷC] is a normal bimoraic syllable in isolation, but adding a suffix -vC forces resyllabification to [Cŷ][C-vC]. This is problematic since the first syllable is now monomoraic but carries a two-part contour tone.

The relevant morphological combinations are: a) C-final adjective plus syllabic postconsonantal suffix allomorphs, usually Sg -in and Pl -um (§4.5.1); b) any word (usually a noun) plus syllabic allomorph ≡î: of the ‘it is’ or Focus clitic (§11.2.1).

Consider first the **adjectives** in (144). Here I show both the unsuffixed stem, used in modifying function for nonhuman referents and (for any referent) as a predicate, and a suffixed Sg form for human singular referents. In (144.c) I include a long-voweled adjective, in fact the only Cv:C adjective in my lexicon. A moraic transcription showing mora-by-mora tone associations, and syllabification with brackets, are given in addition to regular transcriptions.

(144)	gloss	stem	Sg form
a.	‘firm’	déŋ = [dɛ́ŋ]	déŋ-ín = [dɛ́][ŋ-íń]
b.	‘confined’	ěm = [ɛ́m]	ěm-ín = [ɛ́][m-íń]
c.	‘cold, slow’ ‘newborn’	tôm = [tóɱ] bâ:y ⁿ = [bááɣ ⁿ]	tôm-ì n = [tó][m-ì ñ] bâ:y ⁿ -ì n = [báá][y ⁿ -ì ñ]

The suffixes are atonal (they lack an intrinsic tone). Atonal suffixes acquire their tones by Atonal-Morpheme Tone-Spreading (137), which extends the final tone of the preceding morpheme into the suffix.

Since (144.a) is all-H-toned, resyllabification in the suffixed forms requires no tonal modifications. However, in the contour-toned cases (144.b-c), resyllabification has left behind a monotonal medial syllable. The stem-final sonorant is now the onset of the word-final syllable. As syllabic onset, it is non-moraic, and the tone it brings with it to the final syllable cannot be directly expressed. However, this is moot since Atonal-Morpheme Tone-Spreading (137) has already copied the tone in question onto the nucleus of the final syllable.

Examples of postconsonantal allomorph $\hat{=}$: ‘it is’ clitic are in (145).

(145)	gloss	stem	‘it’s ...’
a.	‘like that’ ‘spleen’	cín cènɛ-pá:lám	cín $\hat{=}$: cènɛ-pá:lám $\hat{=}$:
b.	‘tomtom’ ‘cotton’	běŋ = [bɛ́ŋ] nă:m = [nàám]	běŋ $\hat{=}$: = [bɛ́][ŋ-íî] nă:m $\hat{=}$: = [nàà][m-íî]
c.	‘parasol’ ‘forest’	ílíwâl = ...[wáɪ] û:n = [úúɱ]	ílíwâl $\hat{=}$: = ...[wá][lí ì] û:n $\hat{=}$: = [úú][ŋ-ì ì]

In (145.a), the syllable preceding the clitic is monotonal H or L. Resyllabification of the stem-final consonant has no tonal effect on the stem-final syllable. In (145.b-c), on the other hand, resyllabification deprives the stem-final syllable of its second tone-component, which is relocated into the final syllable. The output $běŋ\hat{=}$: with F-toned clitic instead of $\#běŋ\hat{=}$: with final <LHL> is handled by Clitic <LHL>-Reduction (§3.7.4.7, below). For this to work, however, it is first necessary to specify that a tone component associated (after resyllabification) with a syllable-initial consonant is transferred to the nucleus of that syllable.

Of particular interest is the way resyllabification applies to relative-clause participles ending in Sg -n or Pl -m. Such a participle can have a final-syllable contour tone under two conditions. First, since all verbs end in an H-toned mora in their lexical form, the floating L-tone added to the end of the stem to form the **unsuffixed Imperfective** ends up being expressed on the suffixal nasal. Thus /á:- L -m/ ‘catch.Impf-Ppl.Sg’ with floating L-tone and Pl Participial -n is realized as á:-m̀ [áám̀]. Adding the ‘it is’ clitic ≡ÿ (postconsonantal allomorph ≡î:), we get á:-m≡î:, via the derivation (146).

- (146)
- | | | |
|----|------------------|--|
| a. | /[á:- L -m] ≡î:/ | underlying |
| b. | /á:-m̀] ≡î:/ | floating L docks on suffixal mora |
| c. | /[á:]-[m̀≡î:]/ | clitic induces resyllabification |
| d. | /[á:]-[m≡î:]/ | Final-Tone Resyllabification produces <LHL> tone on clitic |
| e. | á:-m≡î: | Clitic <LHL>-Reduction |

Consider now the **unsuffixed Perfective participle** corresponding to the unsuffixed Imperfective participle á:-m̀ just described. With H(H...)L tone overlay, we get â:-m. Although I distinguish Imperfective á:-m̀ and Perfective â:-m in transcription, they are homophonous when word-final. However, the phonological distinction is apparent when the ‘it is’ clitic is added. Whereas Imperfective á:-m̀ appears as á:-m≡î: as just seen, Perfective â:-m appears as â:-m≡î:. The derivation of this form requires that both tone components of the stem’s F-tone (i.e. <HL>) be associated with the stem vowel rather than with the suffixal nasal when the clitic induces resyllabification. This entails ordering resyllabification before Contour-Tone Stretching (143), which is therefore bled (=prevented from applying) (147).

- (147)
- | | | |
|----|--------------|--|
| a. | /[â:-m] ≡î:/ | underlying (after tone overlay) |
| b. | â:-m≡î: | clitic induces resyllabification |
| c. | " " | Contour-Tone Stretching (143) fails to apply |

We may now formulate the rule affecting the tone of a syllable-final nasal in the wake of resyllabification (148).

(148) **Final-Tone Resyllabification**

When a tone-bearing syllable-final consonant becomes syllable-initial by resyllabification, its tone shifts to the right and becomes the first tone of the nucleus of that syllable.

3.7.4.4 Rightward H-Spreading (adjective plus 'be')

The tendency for an H-tone to shift to the right, pushing an L-tone ahead of it, is also observable in combinations of **adjectives** that end in an L-toned vowel or in an F-toned bimoraic syllable, followed by $\text{=k}\delta$ 'be (nonhuman)' or $\text{=w}\delta$ - 'be (human)', which here behave phonologically as clitics. Examples with $\text{=k}\delta$ - are in (149).

(149)	gloss	form	with 'be' verb
	a. 'hot, fast'	óǵù	óǵú= $\text{=k}\delta$ (also syncopated óǵ= $\text{=k}\delta$)
	'sweet'	éǹù	éǹú= $\text{=k}\delta$ (usually syncopated éǹ= $\text{=k}\delta$)
	b. 'slow'	tôm	tóm= $\text{=k}\delta$
	c. 'bitter'	jé:rù	jé:rú= $\text{=k}\delta$

Likewise, with 'be (human)', óǵú= $\text{=w}\delta$ -Ø 'he/she is fast', etc.

This rule does not apply to the class of stems I refer to as **adverbials**, including intensifiers and expressive adverbials although these may also be used predicatively with 'be' clitics like $\text{=k}\delta$ 'it is'. For example, jóbù (variant jéǵù) 'soaking wet' is predicative in jóbù= $\text{=k}\delta$ 'it is soaking wet'; note that the H-tone does not spread.

As existential-locational quasi-verbs, $\text{k}\delta$ and $\text{w}\delta$ - induce no tonal changes on preceding words or phrases, for example locational PP's (§11.2.2.2). I do not take them to be cliticized in these functions, except when preceded by Existential yé.

(150) **Rightward H-Spreading**

An autosegmentally {HL} adjective spreads its H-tone component to its final mora before a cliticized 'be' quasi-verb $\text{=k}\delta$ or $\text{=w}\delta$ -. (The L-tone component merges with that of the quasi-verb.)

No similar process occurs e.g. when an {HL} noun is followed by Anaphoric $\text{k}\delta^n$, as we see in tógù $\text{k}\delta^n$ 'the shed' and kóǵù $\text{k}\delta^n$ 'the dust'.

3.7.4.5 *Stranded-Tone Re-Linking*

There are two distinct types of tone de-linkage that can lead to re-linking of a stranded tone. One involves tautosyllabic re-linking. The other case involves re-linking to an adjacent syllable (exosyllabic re-linking) in the wake of syncope.

Tautosyllabic re-linking occurs as the result of VV-Contraction (90). The latter is actually a hodgepodge of vaguely similar processes applying in various morphological contexts. In most cases, when /v₁-v₂/ contracts, the quality and tone features of v₂ prevail in the contracted vowel, so in some cases there is no audible trace of v₁ at all. However, there is one type of contraction where the tone of v₁ is a factor in the output tone. Repeating from (88), the outputs when a noun ending in /u/ combines with ≡î: allomorph of the ‘it is’ and Focus clitic are given in (151).

- (151) a. ...ú + ≡î: > ≡î: i.e., H≡HL > HL (=F)
 b. ...ù + ≡î: > ≡î: i.e., L≡HL > LHL (subsequently > L)

In (151.a), the H-tone of the stem-final vowel simply merges with the H-toned onset of the (F-toned) clitic. In (151.b), however, the L-tone of the stem-final vowel amalgamates with the tones of the clitic, resulting temporarily in an <LHL> tone. This bell-shaped tone is then idiosyncratically reduced, for this clitic only, to L-tone by Clitic <LHL>-Reduction (§3.7.4.7, below). The important point for the present section is that the L de-linked by the deletion of /ù/ is re-linked to the tautosyllabic clitic vowel.

Exosyllabic re-linking occurs when a monomoraic Cv syllable loses its vowel (and its only mora) by Post-Sonorant Syncope (60) or by one of the apocope rules (§3.5.4).

A **de-linked H re-links to the left**. Re-linking is vacuous when the preceding syllable already ends in an H-tone (the two H’s simply merge). However, it is audible when the preceding syllable is L-toned. This is very common in both apocope and syncope. For example, bisyllabic Verbal Nouns of the shape C̣C-ú or C̣:C-ú are subject to optional apocope when the medial C is a nasal or semivowel, the result being R-toned C̣C-Ø or C̣:C-Ø (§3.5.4.1). An example involving Suffixal u-Apocope (67) is ḍîŋ-ú ‘sitting down’ with apocopated variant ḍîŋ-Ø. An example involving Inter-Word u-Apocope (75) is 3Pl Dative bè-rú in combinations like bë-r gá-ẉ ‘you-Sg will say to them’ and bë-r ṭè:ṛè-lí-Ø ‘he/she did not show to them’. We get a similar leftward re-linking of a deleted H in connection with Post-Sonorant Syncope (60), as in ḍùró- ‘groan’, syncopated Perfective ḍüt-ṭî- (with /rt/ > tt). Leftward re-linking is independent of the tone of the following syllable, which may begin with a H or L tone (as these examples show).

There are fewer cases where an L-tone is audibly re-linked. For one thing, in adjectival cases like *érù* ‘sweet’, *ér=k̀̀* ‘it is sweet’, the /u/ deleted before the clitic is actually H-toned, as the full variant *érú=k̀̀* demonstrates; see Rightward H-Spreading (150). Clitic *k̀̀* is already L-toned so the L-tone of the syncopated final vowel of the adjective has no audible realization in such examples. However, there are some legitimate cases where an HL bisyllable does lose its final L-toned vowel, whereupon the L-tone re-links to the left. (152) shows two representative examples, without and with apocope.

- (152) a. [nì: ógù] kún-tù-bà
 " ôg " "
 [water.L **hot**] put-Perf-3PIS
 ‘They put the hot water (in).’
- b. tógù kùⁿ
 tóg "
 shed Def
 ‘the shed’

In (152.a), the HL adjective *ógù* ‘hot’ optionally loses its final vowel by Inter-Word u-Apocope (75). When this vowel is lost, we hear an F-tone on the resulting *ôg*, showing that the L has re-linked to the left. On the other hand, in (152.b), when the final vowel of *tógù* ‘shed’ is lost, it disappears without a trace. The difference between (152.a) and (152.b) correlates with the initial tone of the following word; *kún-* with H-tone, *kùⁿ* with L-tone. In other words, the de-linked L-tone is audibly realized (to the left) only when followed by an H-tone. I assume that it would also be audibly realized in the case of a word-final deletion before a pause, but there is no morphological context where an L-toned final short vowel is deleted in this context.

The formulation in (153) accounts for the audible cases of re-linking, but also allows for vacuous leftward re-linking of H to H and of L to L, where the two like tones will simply be conflated.

(153) **Stranded-Tone Re-Linking**

a. tautosyllabic.

in VV-Contraction (90) involving the ‘it is’ or Focus clitic *≡î:*, the tone of the contracted stem-final vowel amalgamates with the tones of the clitic.

b. exosyllabic

in other deletions (apocope, syncope), ...

... a stranded L re-links to the preceding syllable if followed by H-tone;

...a stranded H re-links to the preceding syllable.

Apocopated forms with re-linked tone push the envelope phonetically, since they often force speakers to articulate a contour tone on a CvC syllable ending in a stop, as with *ɔ̃g* from *ɔ̃gù* ‘hot’ in (153.a).

3.7.4.6 *Final-Cv R-to-H Reduction*

The combination of suffixed *ɔ̃ɔ̃-n* ‘chief, Hogon’ and nonhuman *ɔ̃ɔ̃* ‘leader (e.g. of animal pack’ has been mentioned above (along with *dɔ̃ɔ̃-n* ‘Dogon’ and *dɔ̃ɔ̃* ‘Dogon language’). I take the stem for ‘chief, Hogon’ to be /*ɔ̃ɔ̃-*/, with an unusual co-linking of L and H to the single mora of the final Cv syllable. When a nasal suffix (Sg -n, Pl -m) is added, the H is associated with the nasal and there are no further problems. In the unsuffixed form, one might have expected that an additional mora would be added, hence #*ɔ̃ɔ̃:* (i.e. #*ɔ̃ɔ̃ɔ̃*). Instead, the R-tone is reduced to H-tone, giving *ɔ̃ɔ̃*.

Another possible example of this process is Presentative *nùkɔ̃y* (‘here’s ___’ (§4.4.5), which has an optional, slightly irregular variant *nùkó-* in *nùkó=kɔ̃* with cliticized nonhuman ‘be’ quasi-verb. This varies with *nùkɔ̃y=kɔ̃* and with *nùkók=kɔ̃*.

Is the conversion of /*ɔ̃ɔ̃-*/ ‘chief’ to *ɔ̃ɔ̃* a quirk, or is there a productive tone-reduction rule applying to final R-toned syllables? This is difficult to determine, since few stems share all of the relevant features: monomorphemic (excludes suffixed Verbal Nouns), vowel-final, having final R-tone, and capable of occurring in an unsuffixed form. In my inventory of monomorphemic noun stems, the only bisyllabic stems of this type are ‘chief’, ‘Dogon’, and *yèsǎ:* ‘sister’. The latter belongs to the set of inalienable kin terms, most of which have lexical tones of autosegmental type {LH} with a single final-mora H. There is no reason to think that *yèsǎ:* has an underlying short final vowel, i.e. /*yèsǎ*/. In fact, the H(H...)L-toned form used after a possessor, *yésâ:* (rather than #*yésà*) demonstrates that the lexical representation has a final long vowel.

The rarity of nonmonosyllabic L...R-toned vowel-final stems suggests that this combination is out of synch with the phonological pattern of the language. This encourages me to think that the putative reduction of R-tone to H-tone in unsuffixed *ɔ̃ɔ̃* ‘chief’ is phonologically reasonable, even if no other precisely analogous alternation can be adduced.

(154) **Final-Cv R-to-H Reduction**

A short R-toned (i.e. <LH>) vowel at the end of a non-monosyllabic stem is reduced to H in the absence of a suffix.

As to why <LH> reduces to H rather than to L, note that this allows ðyó to satisfy the Constraint Against All-L-Toned Stems (99), the main effect of which is to guarantee that tone-dropping (e.g. before a modifier or as head of a relative clause) is audible.

3.7.4.7 *Clitic <LHL>-Reduction*

The ‘it is’ or Focus clitic, in the postconsonantal allomorph =í:, would be expected to surface with <LHL> tone (requiring an extra mora of duration by Contour-Tone Mora-Addition (141)) in two situations (155).

- (155) a. after Final-Tone Resyllabification (148) with R-tone
 e.g. CǎC=í: > CǎC=ǎ̀̀ (= CǎC=í í)
- b. after VV-Contraction (90) with stem-final L-tone
 e.g. Cý:Cǎ=í: > Cý:C=ǎ̀̀ (= Cý:C=í í)

In both cases, we expect <LHL> because a stem-final L-tone component has become de-linked from the stem itself and has presumably been pushed to the right. In (155.a), Final-Tone Resyllabification (148) de-links an L-tone component because, after resyllabification triggered by the clitic, the stem-final syllable now has only one mora and cannot support a contour tone. In (155.b), a stem-final L-toned short vowel is lost by contraction.

In fact, we never get a trimoraic <LHL> syllable in the ‘it is’ or Focus clitic. In the situations described, instead of <LHL> we get monotonal L. In effect, the H sandwiched between two L’s is deleted, in this clitic only (156).

- | | | | |
|-------|-------------|----------------|-------------|
| (156) | gloss | without clitic | with clitic |
| | a. ‘milk’ | êm | ém=í: |
| | b. ‘errand’ | bé:rù | bé:r=í: |

The derivations are given in (157). Brackets show syllable boundaries, and long syllabic nuclei are represented with one symbol and one tone per mora.

(157) ‘it is milk’ ‘it is an errand’ comment

[éṁ] + ≡ẏ	[béé][rù] + ≡ẏ	
[éṁ]≡íì	[béé][rù]≡íì	allomorphy and cliticization
"	[béé][r]≡íì	VV-Contraction (90), leaving de-linked L tone behind
[é][ṁ≡íì]	[béé][r≡íì]	resyllabification
[é][m≡í ìì]	[béé][r≡í ìì]	Final-Tone Resyllabification (148) (clitic now has 2 moras and 3 tones)
[é][m≡í ì]	[béé][r≡í ì]	Clitic <LHL>-Reduction

3.8 Intonation contours

3.8.1 Phrase and clause--final nonterminal contours (↑, ⇒, ⇒↑, ⇒↓)

In normal conversational speech, there is a general **downdrift** of pitch toward the end of clauses. Tonal oppositions are less important functionally in the final word or two of most clauses, and phonetic expression of tone oppositions is less clear here. For example, a negative verb form like yèrè-gó-Ø ‘he/she won’t come’ has a less prominent pitch rise (and sometimes no audible rise at all) on the final syllable when it occurs at the end of a long utterance. It can be difficult to distinguish the effects of this downdrift from those of grammatically controlled tone-dropping.

Clause-final pitch modulation, and prolongation of final syllables or segments, are used for intonational purposes in a manner familiar from other languages. For example, there are characteristic **nonterminal contours** that suggest that the utterance is not yet complete. This can be used for nonfinal elements in lists (whether these elements are words, phrases, or clauses), and for nonfinal VPs in the chains that are so characteristic of Jamsay speech.

In tape transcriptions, I use the symbols and symbol combinations in (158) at the end of intonational units (usually clauses) to indicate pitch and duration on the final syllable or segment of the unit.

(158)	⇒	prolongation with no unusual pitch change
	↑	higher-than-usual pitch with no prolongation
	⇒↑	prolongation with unusually high pitch
	⇒↓	prolongation with a gradual drop in pitch

Of course, pitch and duration are gradient rather than categorical in nature. Still, however crude these symbols are, they give some idea of how clauses and phrases are related to each other intonationally.

\Rightarrow , \uparrow , and $\Rightarrow\uparrow$ are broadly interchangeable functionally, as all can suggest that more is to come. $\Rightarrow\downarrow$ is phonetically somewhat like the dying-quail intonation (symbol \therefore) described below, but involves a higher initial pitch. It is used with *ma* (*má*, *mà*), chiefly in its function as an interrogative marker.

(159) is a portion of an extended sequence of clauses illustrating list intonation, with the final syllable of each clause lengthened, while maintaining terminal pitch at a higher than normal level. The rhetorical point is that all sorts of gear are taken to the hunt. The English equivalent would involve putting extra stress on the nouns.

- | | | | |
|-------|-------------------------------------|---------------------------------------|---|
| (159) | <i>màlfâ:</i> ⁿ | <i>jǎ:-bà</i> $\Rightarrow\uparrow$, | |
| | rifle | take.Impf-3PIS, | |
| | <i>sárú</i> | <i>jǎ:-bà</i> $\Rightarrow\uparrow$, | |
| | knife | take.Impf-3PIS. | |
| | <i>béré</i> | <i>jǎ:-bà</i> $\Rightarrow\uparrow$, | |
| | stick | take.Impf-3PIS, | |
| | [<i>mànà bè tâ:</i> ⁿ] | <i>nám</i> | <i>yǎ:-bà</i> $\Rightarrow\uparrow$, ... |
| | [slingshot] | owners | go.Impf-3PIS, ... |
- ‘They take rifles, they take knives, they take sticks, people with slingshots go, ...’

3.8.2 Adverbials and particles with lexically specified prolongation (\Rightarrow)

A number of **particles and expressive adverbs** are pronounced with exaggerated prolongation of the final segment. Most are H-toned, like *dém* \Rightarrow ‘straight’, but there are also some like *pátà* \Rightarrow ‘wide and flat’ with final L-tone.

The lexical \Rightarrow intonation is most conspicuous when the form is free of clitics, i.e., clause- or phrase-final, or is used as a free adverb. It can also be heard in attenuated form when the forms are predicative, with a following ‘be’ quasi-verb like Nonhuman \equiv *kò* ‘it is’.

A few examples are in (160) with cross-references to the relevant section. Several others are mentioned in §8.5.8.

(160)	form with ⇒	gloss
	a. expressive adverbials (§8.5.8)	
	dém⇒	‘directly, straight (to a destination)’
	sá⇒m	‘(strangle) to death’
	pá ⁿ ⇒	‘wide open’
	pó⇒	‘directly, straight (to a destination)’
	sé ⁿ ⇒	‘(looking) straight (at sth)’
	déy ⁿ ⇒	‘apart, separate(ly), distinct’
	yó⇒ gó⇒	‘negligently, carelessly, sloppily’ (cf. adverb + verb yó⇒ gó:- ‘dodge’)
	àbádá⇒	‘eternally’
	b. emphatic particles (modifying preceding NP or other phrase, §8.5.3.3)	
	té⇒	‘precisely, specifically’
	pá⇒	‘precisely’
	c. universal quantifier	
	fú:⇒, fú:	‘all; completely’ (§6.8.1)

In *dém⇒* and *déyⁿ⇒* (160.a), the final C is prolonged, and this is the usual case for C-final stems. This is the usual pattern. However, *sá⇒m* ‘(strangle) to death’ has intonational prolongation of the vowel. Another example of this minority type is *síméyⁿ⇒* ‘jutting out’.

In the case of *fú:* ‘all’, my impression is that there is a wide phonetic range ranging from ordinary Cv: articulation to a conspicuously prolonged *fú:⇒*. Obviously a universal quantifier lends itself to emphatic intonational effects, whatever its lexical form. I am less confident of intonational marking with this form than with the others, and I will often transcribe simply *fú:* unless I hear an extra prolongation that justifies *fú:⇒*.

3.8.3 Dying-quail word-final intonation (.:)

3.8.3.1 *On both conjuncts in NP conjunction*

This contour is characterized by exaggerated prolongation of the final segment (vowel or sonorant), accompanied by a protracted, slow drop in pitch lasting up to one second.

The dying-quail intonation contour reminds me of the prosodic pattern of American high-school cheerleaders calling out the letters of their school at sporting events, through their bullhorns (“give me an A::, give me a B::, ...”).

This intonation pattern occurs at the end of both conjuncts in NP conjunction (‘X and Y’), see §7.1.1. Here the dying-quail intonation is most conspicuous with conjuncts that are phonetically brief (161).

- (161) a. [wó.: kó.:]
 [3Sg Nonh]
 ‘he/she and it’
- b. [tǒy.: wàrà-nǎm-Ø.: à-jǎyⁿ.:]
 [sowing farm(verb).L-step.on-VblN planting.in.pits]
 yó=kò
 exist=be.Nonh
 ‘There is ordinary sowing (of millet), (and) plant-and-step (for marginal areas of fields), and planting in pits (with manure)’.
- 2004.3.6**

Phonetically, (161.a) is [wóòò, kóòò]. In (161.b), the final syllables of the conjuncts are phonetically [tòj̃j̃ ...nàm̀m̀m̀ ...jàj̃ⁿj̃ⁿ].

As the conjuncts become longer, the conspicuousness of the dying-quail contour typically decreases. It is still audible in most cases, but when a conjunct is heavily laden with relative clauses or other bulky material the final .: can eventually become inaudible. When a conjoined NP as a whole functions as relative-clause head, dying-quail intonation (and lexical tones) conflict with syntactically controlled tone-dropping. In this case, often the right conjunct is tone-dropped while the left conjunct keeps its dying-quail intonation, see §7.1.1.5.

Dying-quail intonation has a phonetic resemblance to two other phenomena. First, the interrogative particle *ma* (má, mà), which is often prolonged intonationally (⇒) with relatively flat pitch based on the final tone of a preceding morpheme, is occasionally heard with a slowly falling pitch when it starts out with high tone. I represent the falling-pitch case as *má*⇒↘. The overall pitch level, both at starting and endpoints, seems to me to be higher in *má*⇒↘ than in e.g. dying-quail *wó.:* in (161.a).

Secondly, there are two tonal locatives (§8.1) of stems ending in a consonant, both of which function as postpositions: *gǎǹǹ* (= *gǎńń*) ‘between’ and *gǔǹǹ* (= *gǔńń*) ‘behind’. These tonal locatives involve grafting of an extra final L-tone onto Cǎn stems, and the extra tone triggers Contour-Tone Mora-Addition (141), which here adds an extra mora to the final nasal. I have difficulty hearing the difference between the final nasal in e.g. *gǎǹǹ* ‘between’

and that in dying-quail forms like ǎ-n.: ‘man’ (as conjunct in e.g. ‘a man and a woman’). A phonetic convergence may also be favored by the fact that ‘between’ very commonly has scope over a conjoined NP, as in (162).

- (162) [ǎ-n.: ñě-n.:] mà gǎññ
 [man-Sg woman-Sg] Poss between
 ‘between a man and a woman’

Given the high expressive quality of the dying-quail intonation in such conjunctions, when combined with following gǎññ the effect is rather incantational, and this may encourage a blurring between the dying-quail intonation and the tonal-locative for nasal-final stems.

A further interesting fact about gǎññ ‘between’ is that it appears with Focus or ‘it is’ clitic =ÿ (allomorph =î:) as gàn=î:, with unlengthened nasal consonant. (For the tone shift, see Final-Tone Resyllabification (148)).

Tonal locatives involving **vowel-final stems** (the great majority, including all tonal locatives not specialized as spatial postpositions) are clearly distinct from the dying-quail forms of the same stems. The dying-quail pattern always conspicuously prolongs a final vowel, more so than even those tonal locatives where a contour tone requires addition of a mora. Some tonal locatives are simple ...HL words with short final L-toned vowel (derived from ...HH nouns), as in úrò ‘in the house’, but a dying-quail version of a ...HL stem has a noticeably lengthened final vowel, as in úró.: ‘(and) a house’ (with slowly descending pitch on the final syllable). We can therefore always detect dying-quail intonation, even when the final L-toned vowel starts off with a relatively low base pitch, which makes the dying-quail pitch arc less noticeable than with a higher starting pitch. In (163), for example, the most conspicuous phonetic cue to dying-quail intonation is the prolongation of the final u-vowels; there is also some pitch decline, but from a low starting point.

- (163) [mì bórù.:] [mì léjú.:]
 [1SgP.L Fa.Br] [1SgP.L Mo.Br]
 ‘my paternal and maternal uncles’

3.8.3.2 *Before fú: ‘all’*

fú: ‘all’ is the only morpheme that induces dying-quail intonation on the final syllable of the preceding word. In (164), fú: is NP-final.

- (164) [[à-jàyⁿ]-ùrⁿó.: fú:] lè
 [sowing.with.manure.L-hole **all**] in
 ‘in every pit (where seeds have been sown with manure)’ **2004.3.6**

When fú: follows a pronoun, it forces tone-dropping: èmè fú: ‘all of us’. There is usually no special intonation, though infrequently we do get dying-quail-like effects on the pronoun; see §6.8.1.

In (165), fú: is clause-final, with clausal scope (substituting for an ‘if’ particle, §16.2), but still imposes its intonational effect on the preceding verb. See also (209), where fú: follows a relative clause to give the sense ‘anywhere who ...’.

- (165) [dògùrù kó ù láyá-tì-Ø.: fú:]
 [time.L NonhO 2SgS.L hit.Impf-Perf-Ppl.Nonh **all**]
 ‘When you-Sg are finally done with beating it (=hide).’ **2004.3.17**

There is no special intonation associated with the other universal quantifier cêw ‘all’.

3.8.3.3 Greeting reply ó.:

The standard reply to a called-out greeting including the basic greeting word pǒ:⇒ is phonetic [ô:], i.e. [óōò], with the prolongation and slowly falling pitch of the dying-quail intonation. I am unable to determine the lexical tone since the form does not occur without this intonation, but ó.: is a possibility (ô⇒ would also work).

4 Nominal, Pronominal, and Adjectival Morphology

4.1 Nouns

In addition to the morphology of noun stems addressed in this chapter, there is a special morphosyntax of possessor-possessed combinations (including those with inalienably possessed nouns, where special tone overlays apply); see §6.2.

Nominal (and adjectival) compounds are covered in Chapter 5.

4.1.1 Simple noun stems (Sg -n, Pl -m)

Nonhuman nouns have no special morphology (unless they are compounds or the like). Most human nouns other than kin terms take a Sg or Pl suffix (166), as opposed to a separate Pl particle *bé*. The same suffixes are used with adjectives (§4.5.1), and as Participial suffixes on verbs in relative clauses where agreement is with the relative clause's head (§14.1.8).

(166) Nominal Suffixes

(zero)	Nonhuman
-n	(human) Sg
-m	(human) Pl

Examples of suffixed nouns are in (167). The human forms are sometimes, but frequently not, directly derived phonologically from the “related stem” form (a stem of the same word family). In the case of ‘European’, one can also use the unsuffixed form *ànsá:rá* in singular or collective sense, as an alternative to suffixed forms.

(167)	gloss	related stem	human Sg	human Pl
	‘deaf-mute’	<i>mú:mò</i> (adj)	<i>mú:mò-n</i>	<i>mú:mò-m</i>
	‘Dogon’	<i>dòyó</i> (‘D. language’)	<i>dòyó-n</i>	<i>dòyó-m</i>
	‘mountaineer’	<i>tóró</i> (‘mountain’)	<i>tórò-n</i>	<i>tórò-m</i>
	‘European’	<i>ànsá:rá</i>	<i>ànsá:rá-n</i>	<i>ànsá:rá-m</i>
	‘farmer’	<i>wáru wàrá-</i> (verb)	<i>wàru-wàrá-n</i>	<i>wàru-wàrá-m</i>

The phonology of the -n and -m suffixes is less transparent for nouns than for adjectives, where the nonhuman form is always available to reveal the lexical form of the unsuffixed stem. With the adjectives (§4.5, below), it is clear that -n and -m have no tone marking of their own; instead, the tone of the final syllable of the stem simply extends to the suffixal nasal.

I am aware of four suffix-taking bisyllabic noun stems that have a final contour tone on a short vowel (168). All cases involve R-tone. The nasal suffix is needed to permit expression of the second tone-component.

(168)	‘chief, Hogon’	ðyǎ-n = [ðyǎ-ń]
	‘chief’s subordinate’	sàyǎ-n = [sàyǎ-ń]
	‘Dogon’	dðyǎ-n = [dðyǎ-ń]
	‘weaver (caste)’	sùrgǎ-n = [sùrgǎ-ń]

Of these, excluding L-toned compound initials, only ‘chief’ and ‘Dogon’ (168.a) have unsuffixed nonhuman counterparts: ðyó ‘leader (e.g. of animal pack)’, dðyó ‘Dogon language’.

After a consonant-final stem, -n and -m acquire an initial vowel, usually i with Sg -in and usually u with Pl -um, though there are some alternations involving these high vowels. These extended variants are easily observed with consonant-final adjectives, and arguably with a very small number of irregular nouns (see just below).

4.1.2 Irregular human nouns (‘child’, ‘man’, ‘boy’, ‘girl’)

A few high-frequency nouns have irregular suffixal morphology. Consider first the two Sg/Pl pairs in (169).

(169)	gloss	singular	plural	related stem
a.	‘child’	î-n	úr ⁿ -ùm	î: ⁿ ‘child, seed, fruit’
b.	‘man’	ǎ-n	àr ⁿ -úm	àr ⁿ á ‘male’

Using internal reconstruction, it would appear that these are cases where an original singular *...rⁿ-in has contracted to ...n. Here the final n could segmentally reflect either the original *rⁿ of the stem (via Derhoticization (76)) or the suffixal *n. Since this ambiguity is still present, we could transcribe e.g. ‘man’ arbitrarily as ǎ-n or ǎn-Ø. The transcription ǎ-n is supported by comparison with the irregular adjective gàrá ‘big, adult’, where the suffixed singular gàrí-n has a common contracted variant gǎ-n. In the case of ‘child’, comparison with nonhuman î:ⁿ ‘child, seed, fruit’ suggests a morpheme break

in \hat{i} -n. However, the plural $\acute{u}r^n$ - $\grave{u}m$ suggests that \hat{i} -n may have contracted from e.g. $/\acute{u}r^n\text{-}\hat{i}\text{-}n/$. By analogy to the alternation of $\grave{g}\acute{a}r\acute{i}$ -n with contracted $\grave{g}\check{a}$ -n ‘big, adult’, one could argue that the contraction in \hat{i} -n from $/\acute{u}r^n\text{-}\hat{i}\text{-}n/$ involved deletion of the medial rhotic, followed by VV-Contraction (90).

There are a couple of similar cases of lexically idiosyncratic deletion of a medial rhotic in causative verb: $\grave{g}\acute{a}r\acute{a}$ - ‘pass by’ with causative $\grave{g}\acute{a}$:- $\acute{n}\acute{a}$ - (for expected $\#g\acute{a}r\acute{a}$ - $\acute{n}\acute{a}$ -) and $m\grave{d}r^n\acute{s}$ - ‘come together’ with causative $m\grave{d}$:- $\acute{n}\acute{o}$ - for expected $\#m\grave{d}r^n\acute{s}$ - $\acute{n}\acute{o}$ -). The similarity is heightened by the fact that the suffix in $^*\acute{u}r^n\text{-}\hat{i}\text{-}n$, as in the causatives just mentioned, has an n, resulting in r^nvnv or r^nvnv sequences that may have been articulatorily awkward. However, in the causative examples the contracted vowels are long, unlike the case in \hat{i} -n. In general, there are too many loose ends to permit me to endorse any clean “phonological” analysis for the set nonhuman \hat{i} :ⁿ, Sg \hat{i} -n, and Pl $\acute{u}r^n$ - $\grave{u}m$.

For ‘child’, the unsuffixed “nonhuman” form \hat{i} :ⁿ is extended to newborn human babies: \hat{i} :ⁿ $\acute{n}\acute{a}n$ - $t\grave{i}$ - \emptyset ‘she gave birth to a child’, not $\#\hat{i}$ -n $\acute{n}\acute{a}n$ - $t\grave{i}$ - \emptyset (verb $\acute{n}\acute{a}r^n\acute{a}$ -). Suffixed \hat{i} -n ‘child’ and its plural $\acute{u}r^n$ - $\grave{u}m$ therefore denote children that have passed the newborn infant stage.

Two frozen compounds of \hat{i} -n have related Sg/Pl irregularities (170).

(170)	gloss	singular	plural
	a. ‘boy’	$\acute{a}y$ - \hat{i} -n	\check{a} :- r^n - $\grave{u}m$
	b. ‘girl’	$\acute{n}\check{e}$ - \hat{i} -n	$\acute{n}\check{e}$:- r^n - $\grave{u}m$

$\acute{a}y$ - \hat{i} -n ‘boy’ consists of \hat{i} -n plus an irregular compound initial related to \check{a} -n ‘man’ (cf. adjective $\grave{a}r^n\acute{a}$ ‘male’). The more regular $\acute{n}\check{e}$ - \hat{i} -n ‘girl’ consists of \hat{i} -n plus a compound initial related to $\acute{n}\check{e}$ -n ‘woman’.

4.1.3 Use of -n and -m suffix with kin terms

A few kin terms of the (morphologically) inalienable class (§6.2.2) have suffixes when possessed (as in e.g. ‘my X’), but (in general) not in unpossessed (absolute) form (as in ‘I have no X’). The absolute and possessed forms also differ in tones and sometimes in other ways. The full list of inalienables (with absolute and possessed forms) is given in (336) in §6.2.2. An example is (171).

(171)	‘grandparent’		
	absolute	possessed Sg	possessed Pl
	$t\grave{i}$ $\acute{r}\acute{e}$	$t\acute{i}r\grave{e}$ -n	$t\acute{i}r\grave{e}$ -m

Consider now the inalienable noun in (172).

(172) ‘friend’

absolute	possessed Sg	possessed Pl
tě: ⁿ	tên	tén-ùm

Here the possessed Sg form looks as though it has added Sg -n to the bare unpossessed form (as with some other inalienable nouns). However, the possessed Pl form treats the n as part of the stem, and adds Pl -ùm to it. Since some inalienables show other unpredictable changes from unpossessed to possessed forms, I will transcribe *tên* without hyphenation.

Most inalienable kin terms lack -n and -m suffixes even when possessed. These nouns must be pluralized with postnominal Pl particle *bé* (§6.6). For example, ‘father’s sister’ is absolute *nèrⁿé*, possessed *nérⁿè* (Pl *nérⁿè bé*). The terms for ‘father’ and ‘mother’ are of this type, but they also have special H-toned suffixed forms used with presupposed but unexpressed generic possessor; these forms are presented in the rightmost two columns in (173).

(173)	gloss	absolute	poss Sg	poss Pl	suffixed Sg	suffixed Pl
	‘father’	dě:	dê:	dê: bé	dé:-n	dé:-m
	‘mother’	nă:	nâ:	nâ: bé	ná:-n	ná:-m

In textual examples, the H-toned suffixal forms generally occur after the same referents have been introduced in prior discourse in ordinary possessed form with H(H...)L tone. Note the sequence of possessed, then suffixed kin terms in (174.a-b).

- (174) a. ... *nò:-wⁿó-bà*, [[wò *nâ:*] mà *pènê:*]
 ... drink-Caus.Impf-3PIS, [[3SgP.L **mother**.HL] Poss beside]
wó *dàγá-bà*,
 3SgO leave.Impf-3PIS,
 [*ná:-n* *kùⁿ]=yⁿ *wó* *jèrê:-Ø*]
 [**mother.H-Sg** Def]=Foc 3SgO hold.Impf-3SgS
 ‘... they would excise (her). They would leave her at the side of her mother. The mother [focus] would hold her.’ **2004.3.18***

- b. [wò dē: bé] gò:rò-těwⁿ-Ø ó:-w̃, ...,
 [3SgP.L **father**.HL Pl] kola-chew-VblN give.Impf-2SgS, ...,
 [dé:m mà gò:rò-[těwⁿ-Ø]] nè ó:-w̃
 [**father.H-Pl** Poss kola-[chew-VblN]] now give.Impf-2SgS
 ‘You-Sg will give her (=the bride’s) fathers’ (=father’s and paternal
 uncles’) price of kola (=a little money); ... [intervening sentence];
 you will give the fathers’ price of kola (=a coin) now.’ **2004.3.20**

4.1.4 ‘So-and-so’ (mâ:n)

mâ:n is used like English *so-and-so* (denoting a person). It is used in generic utterances where it functions as a variable subsuming any of a number of individuals. It is common in indirect discourse, where it may represent an original vocative, or an argument of a verb. For compound hínnè mâ:n ‘such-and-such an amount’, see (251.a). In (175), the phrase with mâ:n is repeated, suggesting that more than one referent is involved.

- (175) [mâ:n mà èjú] [mâ:n mà èjú]
 “[so.and.so Poss field]” “[so.and.so Poss field]”
 ‘(They say:) ”so-and-so’s field” (and) “(another) so-and-so’s field”.’
2004.3.6

4.1.5 Frozen Ci- or Cu- reduplication in nouns

Some Jamsay nouns begin with an apparent Ci- or Cu- reduplication. There are also one or two possible cases of i- when the stem begins with a vowel: ì-àⁿá ‘being elegant’ (cf. àⁿá ‘male’ and related forms), though such an abstractive is rather isolated semantically in this set; bite also í-èⁿéwⁿě ‘Spondias tree’.

The densest concentration of reduplicated nouns is among fauna terms (especially insects, along with some birds and mammals). The most common form is L-toned Cì-, though there are a few examples of H-toned Cí-. Cù- usually replaces Cì- when the following base has a u in the first syllable, as in tù-túmúⁿú ‘termite’. A few stems fluctuate between Ci- or Cu-, or between Cì/u- and i/u-, for example ñì-ñùwⁿó or ñù-ñùwⁿó ‘cold weather’ where the alveopalatal ñ may favor the Cì- variant, and jù-jùwⁿó, jì-jùwⁿó, or ù-jùwⁿó ‘mouse’, which also has an alveopalatal consonant (j).

(176) presents the examples known to me with **L-toned** Cì-, Cù-, and ì-, the latter in (176.k). In semantic clusters (e.g. ants) where several stems have parallel reduplications, the reduplicated pattern seems fairly clear; in semantic domains with few reduplications, segmentation is less transparent. In a few

instances, the reduplication is omitted in at least some compounds, or there is a related stem (e.g. a verb) that lacks the reduplication. In these cases there is direct, specific evidence for segmentability. Within each subset, the cases with a H-tone component following the reduplicative segment precede those with a L-tone component; both tonal patterns are well represented.

(176) Cì - and Cù- nouns

form	gloss	related form or comment
a. insects/arthropods		
cì -cé:	'beetle, bug'	
kì -ká:	'grasshopper'	
gì -gôn	'honey ant'	
cì -céw ⁿ è	'mosquito'	
cì -cí:jú	'small tick sp.'	see also under (b)
tù -túmúr ⁿ ú	'termite'	
bì -bò:ró	'cricket'	variant bò:ró
cì -cèn	'Messor ant'	
mì -měn	'black ants'	
nì -nè:r ⁿ ó	'spider'	nè:r ⁿ ò-dǎ: 'spider's web'
b. birds/bats		
cì -cí:jú	'bat; swift'	see also under (a)
kì -kájà	'pigeon'	
lì -lôm	'sparrow'	
tì -téw	'hawk'	
kì -kàràw	'bustard sp.'	onomatopoeic
cì -cèr ⁿ êw ⁿ	'lapwing'	onomatopoeic
pì -pòtú	'sandgrouse'	homonym: 'mud'
c. other fauna		
tì -tá:	'hyena'	often tá:- as cpd initial
jù -jùw ⁿ ó	'mouse'	variant ù-jùw ⁿ ó, jì -jùw ⁿ ó
kì -kòjú	'viper'	
nì -nì w ⁿ é	'cat'	
d. plants and plant parts		
dì -dó:	'thorn'	
gù -gûn	'watermelon'	
cì -cè:rú	'stem'	variant cè:rú 'stem'
kì -kǒw	'pod'	variant kù-kǒw

e. body parts and similar

cì -céné	‘middle’	
kì -kírì	‘fainting fit’	
cì -cì né	‘shade’	VP cì né á:- ‘frustrate (sb)’
gì -gǒn	‘below knee’	alongside gǒn
kì -kàrá	‘armpit’	
tì -tǒjú	‘calf (of leg)’	
tì -tòwó	‘upper shoulder’	

f. verbal concepts

bì -bégè	‘hiccup’	bégé- ‘hiccup (verb)’
cì -cér ⁿ è	‘circumcision’	cèr ⁿ è-í-n ‘circumcised boy’
tì -tírù	‘mission’	verb tí:- ‘send’

g. weather, time, space

nì -núw ⁿ ó	‘daytime’	also nù-núw ⁿ ó ; núw ⁿ ó ‘fire’
jì -jàmá	‘air’	
ñì -ñùw ⁿ ó	‘cold weather’	variant ñù-ñùw ⁿ ó
nì -ní:	‘sun’	nǐ: ‘day’

h. artefacts

dì -dégè	‘statuette’	
pì -pày ⁿ sǎl	‘bronze elbow-ring’	
sì -sér ⁿ éw ⁿ é	‘rag’	
tì -tómò	‘bird trap’	variant tì -tòm
fì -fàlá	‘fan’	also pì -pàlá
kì -kǒw	‘sheath’	see also in (d)
sì -sègú	‘filtering basket’	
tù-tù:lú	‘chief’s horn’	

i. substances

kù-kùmó	‘smoke’	
pì -pètú	‘mud’	homonym: ‘sandgrouse’
sì -sǎm	‘sand’	
sù-sùr ⁿ ó	‘urine’	variant ù-sùr ⁿ ó, cf. verb sú: ⁿ -

j. human

bì -bô:-n	‘Bobo person’	ethnic group
dì -dé:	‘elder sibling’	respectful form of dèré
dù-dùgú-n	‘sorcerer’	
gù-gùy ⁿ í-n	‘thief’	verb gùy ⁿ ó- ‘steal’

k. abstractive and emotions

lì -lě:	‘fear’	verb lé:- ‘be afraid of’
ì -à ⁿ á	‘being elegant’	à ⁿ á ‘male’ or ‘arming for war’; variant ì -ñà ⁿ á

l. topography and fields

pì -pù:ró	‘old field’
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The noun-like postposition gǎnⁿ ‘between’ is related to gǐ-gǎn ‘inside corner’.

A phonologically similar Cì- reduplication occurs with inflected verbs (§10.1.2.7, §10.1.2.9).

There are somewhat fewer cases of apparent Cí- (Cú-) reduplication in nouns (177). In all cases except ‘butterfly’ (177.b), the H-toned reduplicative segment is followed by a H-tone.

(177) H-toned Cí- and Cú- reduplicated noun

form	gloss	related form or comment
a. Cí- followed by H-tone		
bí-bárú	‘slab over door’	
bí-bí:jù	‘small birds’	
cí-céjù	‘(a) cutting’	céjé- ‘cut (off)’
cí-céré	‘saddle’	
cí-cérjù	‘plant sp.’	
dí-dé:	‘shield’	
jí-jémé	‘(rock) projecting out’	
jí-jéw ⁿ é	‘mud-dauber wasp’	
kí-kájará	‘newly cleared field’	
kí-kôm	‘mistletoe’	
kí-kórù	‘dry millet stem with leaves’	
lí-ló:ró	‘cowardice’	cf. verb lé:- ‘be afraid of’

lí-ló:yó	‘fontanel’	
ní-néŋ	‘calabash holder’	
ñí-ñém	‘bridle’	
pí-pîw	‘mammal sp.’	
tí-táyá	‘arrogance’	
òr-[tí-té:ré]	‘miracle’	with òrú ‘matter’
tí-tímé	‘elevation’	cf. perhaps tèmè-kú: ⁿ ‘roof’

b. Cí- followed by L-tone
pí-pì lím ‘butterfly’

c. Cú- followed by H-tone
pú-pûn ‘harmless snake’

A few adjectival or adverbial elements seem to be reduplicated (178). For ‘wide and flat’, neither form shown is as common as the simple adverbial pátà⇒ with the same sense.

(178) Reduplicated adjectives

simple form	reduplicated variant	gloss
pátá	pí-pátá⇒ jì rè-[pì-pèrú]	‘wide and flat’ ‘hard-eyed (stubborn)’
cêw ‘all’	cì-cêw	‘same’

4.1.6 Frozen initial à- in nouns

Initial à- seems marginally segmentable in some nouns (179).

(179)	form	gloss	related form or comment
a.	à-cě:ŋ	‘agama lizard’	varies with cě:ŋ
	à-jáŋáw ⁿ á	‘forked stick’	varies with jáŋáw ⁿ á
	à-mâ:n	‘so-and-so’	varies with mâ:n
	à-líwndù, à-líwnù	‘herder’s staff’	varies with líwndù
b.	à-pàlá	‘millet-cake meal’	used with verb pàlá-
	à-bîn	—	used with verb bîné- ‘roll on ground’

à-têm	‘customs, rites’	cf. verb tēmé- ‘find’
à-góñó	‘curved staff’	cf. verb gòñó- ‘turn around’
c. à-bòn-sà:-rá	‘tree sp.’	lit. “?-name.L-have-Neg’

The most straightforward cases are those in (179.a), where variants with and without the formative co-occur. For (179.b), the evidence is that the noun has a cognate verb without the à-, hence à-pàlá pàlá- ‘cook à-pàlá’ and à-bîn bíné- ‘roll on ground’. (179.c) is a phrasal compound meaning basically ‘it has no name’, though it refers to a specific tree sp. ‘Name’ is normally H-toned bón.

Many other nouns begin with à, which may still be a segmentable formative, but they do not alternate with unprefixated forms and segmentation is often opaque. These include some terms for types of staff (stick) (180.a) and for fauna that crawl or scuttle along the ground (180.b), domains that are also represented in (179), above. There are also some Arabic loanwords (cf. Arabic Definite prefix al- and variants) that superficially resemble these (180.d), and perhaps Jamsay speakers (unaware of the etymological source) segment them.

(180)	form	gloss	comment or similar form
a.	à-jǎŋ à-góyò	‘forked stick’ ‘herder’s staff’	
b.	à-kòŋòr ⁿ ó à-dòròmbàjú	‘giant tortoise’ ‘wind scorpion’	
c.	à-jǎy ⁿ à-jéní: à-jérú à-kóró à-kúrgó à-légù à-tí: ⁿ à-wégù	‘planting in pits with manure’ (cf. jǎ: ⁿ - ‘dig’) ‘dike ridge’ ‘wrestling’ ‘well (for water)’ ‘private field’ ‘loincloth strap’ ‘bird trap’	perhaps kóró- ‘hang up’ variant à-tí:
d.	àdúr ⁿ ó ààrbá-n	‘world (of living)’ ‘Arab’	<Arabic <Arabic

4.2 Derived nominals

4.2.1 Characteristic derivative (-gú, -gí-n, -gú-m)

There is a suffixal derivative, added to a noun stem X in the sense ‘one who has X’ or ‘one who is characterized by X’. The Nonhuman form is -gú. The more common human forms are Sg -gí-n and Pl -gú-m. The preceding noun stem undergoes **tone-dropping**. Occasionally the noun stem is not attested elsewhere. The Characteristic derivative can be used as a noun, or as a modifying adjective following a noun. Examples of -gí-n are in (181).

(181)	stem	gloss	Characteristic	gloss
	a. mostly nominal			
	pâw	‘deafness’	pâw-gí-n	‘deaf mute’
	tó:jú	‘big testicles’	tò:jù-gí-n	‘one with big testicles’
	cám̀b̀òl	‘a disease’	cám̀b̀òl-gí-n	‘sufferer from this disease’
	b. mostly adjectival			
	éjè	‘cleanness’	èjè-gí-n	‘clean’
	lòỳd̀	‘filth’	l̀ỳd̀-gí-n	‘dirty’

The -gú form, in addition to being used when the referent is Nonhuman, is occasionally used with a generic human referent.

- (182) [[[à-mâ:n dè:] dáy-gú] mà m̀ó:n]=î:
 [[[?-so.and.so father.HL] wealth.L-Char]Poss gathering]=Foc
 m̀d̀n-lí :-Ø⇒
 be.together-PerfNeg.L-1PIS
 ‘We did not hold a meeting of “so-and-so’s father is a wealthy man”
 (i.e., where sons of rich men wore fancy clothing)’ (dáy, m̀r̃́-)
2004.3.24

For a few isolated cases of derivational suffix -gú added to verb stems in Verbal Noun-like function, with H-toned (not tone-dropped) stem, see §4.2.2.2, below.

4.2.2 Verbal Nouns

4.2.2.1 Regular Verbal Noun in -ú or -ý

The Verbal Noun can be used as a simple noun denoting a pure activity, and it is required in some complement-clause constructions (§17.4). For particular verbs, the Verbal Noun may also acquire special lexical senses. There are often one or more lexical nominals associated with a verb, in addition to the Verbal Noun proper.

The Verbal Noun formation is fully productive for regular verbs. It is not formed from defective quasi-verbs, or from other statives that are limited to perfective-system inflections. Therefore human ẁ- and nonhuman k̀ ‘be’, s̀- ‘have’ and its synonyms, k̀n- ‘be in’, and stative stance verbs like d̀:ⁿ- ‘be sitting’ all lack a Verbal Noun. However, the negative form s̀:rá- ‘not have’ is attested as a compound final (without derivational suffix) in the sense ‘fact of not having X’ (§5.1.4).

For all regular verbs, the Verbal noun is formed as in (183). It is **based directly on the verb stem**, with no AN or pronominal-subject suffixation. One consequence of this is that there is **no negative** VbIN.

(183)	verb shape	Verbal Noun
	a. Cv:-	C̀v-ý
	b. CvCv-	C̀vC-ú (often > C̀vC₂-Ø if C₂ = sonorant)
	c. CvCvCv-	C̀vC̀vC-ú (with high medial V)

A **monosyllabic stem** adds -ý, shortens the stem-vowel, and drops tones on the stem, erasing the lexical tone. Perhaps historically there was a *-ú suffix following an L-toned stem and epenthetic *y, hence *C̀v-y-ú. If so, the *y effectively replaced the second mora of the long vowel.

(184)	gloss	verb	VbIN
	a. ‘go out’	ǵó:-	g̀d̀-ý
	b. ‘send’	t́í:-	t̀i-ý
	c. ‘go’	yǎ:-	ỳà-ý

A **bisyllabic stem** has an H-toned suffix -ú replacing the stem-final short vowel. The first syllable of the VblN has L-tone. In the case of (C)vC₂v- and (C)v:C₂v- stems with ungeminated medial consonant, if C₂ is a sonorant other than liquids or ñ, the suffixal -ú is optionally apocopated (Suffixal u-Apocope (67), §3.5.4.1), resulting in R-toned CǃC₂-Ø and Cǃ:C₂-Ø, respectively. The vowel in this last variant is not shortened. Other bisyllabic VblN's do not allow apocope and therefore always occur with audible -ú suffix

(185)	gloss	verb	VblN
a.	'hide'	bàŋá-	bàŋ-ú or bǎŋ-Ø
b.	'gather'	bàrá-	bàr-ú
c.	'shout'	bò:nó-	bò:n-ú or bǒ:n-Ø
d.	'watch over'	háybé-	háyb-ú
e.	'give drink to'	ñð:-w ⁿ ó-	ñð:-w ⁿ -ú or ñǒ:-w ⁿ -Ø

Trisyllabic stems do not normally apocope the suffixal vowel. However, they do raise the second vowel to u (occasionally i), usually weakly articulated and schwa-like. See VblN V₂-Lenition (65).

(186)	gloss	verb	VblN
a.	'arrange'	dànàŋá-	dànùŋ-ú
b.	'make firm'	dèŋè-w ⁿ é-	dèŋùw ⁿ -ú
c.	'teach'	jàŋgíné-	jàŋgùn-ú

Quadrisyllabic verbs are rare, but one can elicit causatives like gòlòrò-wó- 'cause to snore' and their Verbal Nouns (187). Both medial vowels undergo VblN V₂-Lenition (65).

(187)	gloss	verb	VblN
	'snore'	gòlòrò-wó-	gòlùrù-w-ú

4.2.2.2 *Verbal Noun in -gú*

Aside from the regular Verbal Noun, some verbs have other nominals with similar meanings. There are three cases known to me of -gú that function somewhat like Verbal Nouns. These forms have H-tone on the stem, and therefore show no sign of the tone-dropping seen with the phonologically similar Characteristic derivational suffix -gú (human -gí-n) described in §4.2.1.

(188)	verb	gloss	nominal	gloss
	a.	yèré- ‘come’	yér-gú	‘coming (arrival here)’
	b.	bé:- ‘happen, stay’	bé:-gú	‘staying, living’
	c.	gó:- ‘go out’	yàrù-[gó:-gú]	‘season just after wet season’ (yàrú ‘clouds’)

For an example of yér-gú see (229), line 2. For bé:-gú see (700).

-gó:-gú is also attested in [nì-nì:]-[gó:-gú] ‘dawn’ (i.e. coming out of the sun), and jèrù-[gó:-gú] ‘period when harvest has begun’ (i.e. coming out of the harvest)’.

See also the H-toned trimoraic (usually trisyllabic) nominals ending in -gú or -ŋú in (189.c), below.

4.2.3 Uncompounded agentives

The majority of agentives are compounds, whose initial is e.g. an incorporated object or a cognate nominal. For discussion of such agentive compounds, see §5.1.7 and §5.1.9.

The most common uncompounded agentive is ‘hunter’: Sg dānā-ŋ, Pl dānā-m. In form, this is unsuffixed Imperfective /dānā- + L/ ‘hunt’ followed by Sg -n or Pl -m (these nominal suffixes are also used in participles, i.e., in relative clauses).

4.2.4 H-toned trimoraic deverbal nominals

Consider first the examples in (189).

(189)	verb	gloss	noun	gloss	
	a.	gòŋò-r ⁿ ó-	‘turn, rotate’	góŋó-r ⁿ ó	‘curved tapstick for tomtom’
		námá-r ⁿ á-	‘take foot off’	námá-r ⁿ á	‘tracks’
		nàr ⁿ áw ⁿ á-	‘straighten’	nár ⁿ áw ⁿ á	‘scar’
	b.	dānāŋá-	‘prepare’	dánúŋ-ú	‘preparation’
		íjí-ré-	‘make stand’	íjí-r-ú	‘tallness, length’

c.	dògó-	‘finish’	dógú-gú	‘(the) end’
	nùmó-	‘fall, (sun) set’	[nì -nì :]-[númú-ŋú]	‘sunset’
	tóyó-	‘(sun) rise’	[nì -nì :]-[tógú-gú]	‘sunrise’
			(cf. nǐ -nǐ: ‘sun’)	
d.	témé-	‘find, inherit’	témé-r ⁿ é	‘inherited customs’
e.	túmnó-	‘begin’	túmnú	‘beginning’

In (189.a), the noun is all-H-toned (regardless of the tones of the related verb). There is otherwise no affix or other segmental change. The noun denotes an entity that results from the action. See also the cognate nominals of trisyllabic stems described in §11.1.6.1, though most of the nominals in question are not all-H-toned.

In (189.b), the noun is again all-H-toned, but is segmentally consistent with a VbIN. The actual VbIN of trisyllabic verbs has LLH tone (dànùŋ-ú ‘preparing’, ìjì -r-ú ‘act of causing to stand’). The nominals dánúŋ-ú and ìjì -r-ú are therefore the result of overlaying the H-tone contour onto the VbIN. Note that the medial syllable in both the VbIN and the H-toned nominal has a high vowel; cf. VbIN V₂-Lenition (65).

In (189.c), bisyllabic CvCv- stems have trisyllabic H-toned nominals ending in a suffix -gú. If the stem-final syllable begins with a nasal, the suffix appears as -ŋú, reflecting Nasalization-Spreading (48); compare the alternation of Causative allomorphs -gǎ- and -ŋǎ- in (528).

(189.d) has an apparent suffix -rⁿ.

(189.e) is an H-toned bisyllabic, but trimoraic nominal. It is the antonym of dógú-gú in (189.c).

4.2.5 Irregular reduplicated nominal (tì -tírù)

This is an idiosyncratic deverbal nominal.

(190)	verb	gloss	noun	gloss
	tí:-	‘send (on mission)’	tì -tírù	‘mission’

4.2.6 Expressive triple iteration (kòró-kàrà-kòró, wù:-wà:-wù:)

The onomatopoeic noun kòró-kàrà-kòró ‘noise, din, hubbub’ (variant kóró-kàrà-kóró with different tones) is an interesting triple reduplication with the outer segments identical but with a vocalic and tonal change in the middle element. The tonal pattern $\bar{x}-\bar{x}-\bar{x}$ where the outer segments have their regular tone while the medial element lowers its tones resembles the $\bar{v}-\bar{v}-\bar{v}$ tonal pattern sometimes found in triple verb chains (§15.1.1). The segments have no meaning of their own.

The $\bar{x}-\bar{x}-\bar{x}$ pattern also occurs in one imitative onomatopoeia: kέ:-kà:-kέ: (sound of toad croacking)’.

A stylistically marked adverbial wù:-wà:-wù: ‘hurriedly, hastily’, attested in a tale, has $\bar{x}-\bar{x}-\bar{x}$ tone. The u-a-u vocalic sequence resembles the o-a-o sequence in kòró-kàrà-kòró and the ε-a-ε sequence in kέ:-kà:-kέ:; note especially the a-vocalism of the medial iteration. The triple iteration wù:-wà:-wù: varies with simple wù⇒, an L-toned adverbial that seems to be quasi-onomatopoeic, cf. English *whoosh!* and the like.

These iterations have some resemblance to natural-species compounds of the type X-ná:-X, where however the medial element is phonologically unrelated to the iterated X segments (§5.1.14).

4.2.7 Iteration with vocalic shift (tò:ηò-tá:ηá)

In the triple iterations (x-x-x) of the preceding section, the medial occurrence shifts to a-vocalism (kòró-kàrà-kòró, kέ:-kà:-kέ:, wù:-wà:-wù:). A similar pattern is observed in a few simple (two-part) iterations. Adverbial examples: tò:ηò-tá:ηá ‘walking with legs widely separated’ and ñòηòyⁿ-ñáηáyⁿ ‘walking stiffly’. Onomatopoeic noun: pù:-pá: ‘(a) bellows’.

Most simple nominal and adverbial iterations preserve the vocalism of the base: bèlè-bélè ‘shepherd’s hat’, jègí⇒ jègí⇒ ‘walking with a tilt’ (adverb).

4.3 Pronouns

4.3.1 Basic personal pronouns

The basic personal pronouns are those in (191). “3Sg” and “3Pl” denote specifically human third person categories, versus the Nonh[uman] pronoun (which is closely related to a demonstrative). For an alternative yé to the regular 3rd person preverbal subject pronoun, see §4.3.3, below. For 3rd person

reflexive and **logophoric** pronouns (Sg èné, Pl èné bé), which pattern morphologically like nouns, see §18.1-2.

(191)		independent	subject	dative	possessor		
		[_Verb]	[Verb-]		alienable	inalienable	
a.	1Sg	mí	mì	-m	mǐ-n	má	mì
	1Pl	émé	èmè	-y	èmě-n	émé	èmè
b.	2Sg	ú	ù	-w	ù-rú	á	ù
	2Pl	é	è	-be	è-rú	é	è
c.	3Sg	wó	wò	-Ø	wò-rú	wó	wò
	3Pl	bé	bè	-ba	bè-rú	bé	bè
							[-ba is replaced by -a or -e after a Neg suffix]
d.	Nonh	kó	ko	-Ø	kò-rú	kó	kò

Nonhuman pronominals are generally distinct from human 3Sg. However, in verbal inflection, the 3Sg subject suffix -Ø agrees with human or nonhuman referents. The exception is that in the (positive) unsuffixed Imperfective, nonhuman subject is expressed by adding cliticized =kò ‘be (nonhuman)’ to the verb stem (§10.1.2.8, §10.2.2).

The **independent** form, arguably basic morphologically, is used independently, for direct object (always preverbal), complement of postposition (other than dative), and possessor of ordinary (alienable) noun. All independent pronominals are high-toned.

Subject category is expressed either by an **inflectional suffix** (the [Verb-] column) or by a **preverbal pronoun** (the [_Verb] column). With rare exceptions (§10.2.2), the two do not co-occur. The preverbal pronoun occurs in relatives and some other subordinated clauses. The suffixed pronominal occurs in ordinary main clauses, except that subject-focus constructions (which have a focused subject pronoun or noun, usually at the beginning of the clause) have no suffix.

The (unfocalized) preverbal subject forms in (191) are segmentally identical to independents, except that the **tone is dropped** to L. The preverbal subject pronominals are therefore identical to the pronominal inalienable possessor pronominals (rightmost column). The pronominal-subject suffixes are at best loosely related to any of the other pronominal series. Note in particular that the nonsuffixal 3Pl forms are all bé (or L-toned bè) versus 2Pl é (or è), but in the pronominal-subject suffixes -be is 2Pl, while 3Pl is expressed as -ba (reducing to -e or -a after a Negative suffix). For more on the subject suffixes, see §10.2.

The **dative** has its own special series of pronominal forms in -n (1Sg and 1Pl, with rising tone) or -rú (2nd/3rd person), bearing no obvious morphological relationship to the regular Dative postposition *lè* used after noun-headed NPs. The forms ending in -rú often undergo Post-Sonorant Syncope (60) before a coronal consonant, deleting the u vowel, e.g. 3Pl Dative *bè-rú* ‘for them’ becoming /bě-r/ (with R-tone). The r then assimilates to the coronal, hence *bě-t tímé-sà* ‘it resembled them’, see Rhotic Assimilation (77). 1Sg *mǐ-n* and 1Pl *è̃mě-n* may derive historically (by apocope) from **mǐ-rⁿú* and **è̃mè-rⁿú*, see §3.5.4.

Possessor pronominals are in two series. Some kin terms take a special **inalienable** possessor series that is identical in form to the L-toned preverbal subject series; the noun itself shows a {HL} tone overlay. Example: *mǐ dē:* ‘my father’. Other nouns take H-toned **alienable** possessor pronouns (and no tone overlay). The alienable possessor series are identical to independent pronouns, except that there are special alienable possessor forms for 1Sg (*má*) and 2Sg (*á*). For more on possessive constructions, including tonal overlays, see §4.2.

There are other syntactic contexts that induce stem-wide tone-dropping (noun before modifying adjective, noun as head of a relative clause, verb stem before Negative suffix). One could therefore take the preverbal subject and inalienable-possessor forms as grammatically identical to independent pronouns, but subject to a morpho-phonological rule dropping H-tones to all-L tones on preverbal subject and inalienable possessor pronominals.

4.3.2 Demonstrative function of Nonhuman pronoun *kó*

Third person pronouns generally refer back to persons, animals, or objects already introduced into the discourse, or otherwise mutually understood. The Nonhuman pronoun *kó* is also often used, in resumptive fashion, to denote a situation previously described. Among the common combinations used in this way are *kó kùⁿ* ‘that’ (with Definite *kùⁿ*, §6.7), *kó kâ:ⁿ* ‘that too’ (with *kâ:ⁿ* ‘also’, §19.1.3), and *kò ké* ‘as for that’ (with Topic *ké*, which forces tone-dropping on a preceding pronoun, §19.1.1). *kó kùⁿ* ‘that’ is illustrated in (192).

- (192) [à̀màsád b́é] [kó dǎwrù] nú: b̀èrè-b̀à,
 [embassy Pl] [NonhP solution] enter can.Impf-3PIS,
 [kó kùⁿ] jín kán-tù-bà d̀èy, ...
 [Nonh Def] like do-Perf-3PIS if, ...
 ‘The embassies [topic], they can go into (=try to find) a solution for it (=the problem); when they have done something like that, ...’ (Fr *ambassade*, kárⁿá-) **2004.5.2**

4.3.3 Indexing pronominal (yé)

This morpheme appears occasionally in texts. There are two morphemes elsewhere in the grammar that it might be connected with, historically if not synchronically. One is Existential particle yé ‘exist’, which precedes verbs (and quasi-verbs) of existence-location and possession in positive main clauses with no focalized constituent (§11.2.2.1). The other is demonstrative yé- in the adverb yé-dì:ⁿ ‘there’ (§4.4.3.1).

In the examples relevant to the current section, yé seems to be used in contexts involving multiple referents as a kind of indexing device. If my interpretation is correct, the morpheme indexes the subject of the clause, usually plural (human or nonhuman). It precedes the verb, and may co-occur with a coindexed 3Pl or Nonh (less often 1Pl or 2Pl) subject suffix on the verb, as well as with the zero 3Sg suffix. yé may also occur in subject relative clauses.

My assistant sometimes used *les voilà* in French free sentence translations, suggesting a light **presentative** element. This presentative feature is compatible with the indexing function, as spatial positions are convenient ways to distinguish multiple discourse referents. The presentative function is one bit of evidence in favor of a connection with demonstrative yé- in yé-dì:ⁿ ‘there’. A nonproximal deictic nuance would also explain why yé as subject marker is almost always associated with third person referents.

Consider first (193).

- (193) [ì nè kâ:ⁿ] [néyⁿ ké], yèré m̀̀rⁿó
 [person.L each] [now Top], come be.together
 wó bàrà-bà, yé kó cè:ⁿ-bà↑,
 3SgO help.Perf.L-3PIS, **Index** Nonh slaughter.Perf.L-3PIS,
 [d̀̀ŋ-yàrá kùⁿ] d̀̀:-bà↑,
 [lion Def] carry.Perf.L-3PIS,
 bé [àrⁿ-ùm yé pót̀̀tè-m]
 3Pl [man-Pl.L **Index** participate.Perf.HL-Ppp.Pl]
 [ì nè bármè-m cêw],
 [person.L be.wounded.Perf.HL-Ppl.Pl all],
 [bé nè] d̀̀:-bà
 [3Pl now] carry.Perf.L-3PIS

‘Everyone_x now came together and they_x helped him (=the man who fought with the lion); **they**_x slaughtered it (=lion) and carried the lion (to the village). They_x, the men_x who_x (**they**_x) got involved, it was they_x now [focus] who carried everyone who had been wounded.’ **2004.3.2**

Aside from the unfortunate lion, this passage involves a) the man who fought the lion, and b) the crowd of people who gathered to help. The crowd

was then divided into those who were wounded (while killing the lion), and the able-bodied survivors who carried all of the bodies back to the village. There is some squishiness in the references here as the passage develops, but *yé* does appear to be used as a device to index the main group who provided assistance.

In (194), the verbs are marked for Nonhuman subject, but this refers to ‘village’ in the sense of ‘villagers (collective)’.

- (194) [[*ɛ̀nɛ̀* *mà* *à-kóró*] *kùːn*] *béː=kɔ̀*,
 [[Refl Poss well] on] live.Impf=be.Nonh,
yé *náː=kɔ̀*⇒, *yé* *dègɛ̀=kɔ̀*
Index spend.night.Impf=be.Nonh, **Index** spend.day.Impf=be.Nonh
 ‘They (=villagers) are deeply absorbed in (digging) a well; **they** spend the nights on it, **they** spend the days on it.’ **2004.4.5**

In (195), an **impersonal ‘we’** is involved in a generic activity. Therefore *yé* co-occurs with 1Pl subject suffix *-y̆*.

- (195) *dà:yá* [*àná* *bérè*] *kò* *núː-sà* *dèy*,
 night [village in] NonhS.L enter-Reslt if,
yé *láyá* *wɔ̀ː-rà-y̆*↑
Index hit kill-Habit-1PlS
 ‘If it (=snake) comes into the village a night, **we** hit and kill (it).’
2004.3.5

In (196.a-b), the subject is nonhuman and plural in sense. In (197.a-b), the subject is human plural.

- (196) a. [*kì-kɔ̀jú* *kùːn* *ké*] [*kó* *bèrêː*] *yé* *góː-rà-Ø*
 [viper Def Topic] [Nonh in] **Index** go.out-Habit-3SgS
 ‘Viper(s), **they** (often) emerge from within it (=bundle of firewood)’ **2004.3.5**
- b. [*àrːá* *kùːn*] *yé* *mì rːn-áːrːn-à-Ø*
 [rain Def] **Index** fall-Habit-3SgS
 ‘the rains are falling (in the wet season)’ **2004.3.6**

(197) a. ñě-m yé dé:-rà-bà kòy↑,
 woman-Pl **Index** carry-Habit-3PlS indeed,
 [ì nè [wòtóró lè] dé:-rà-m] jò:-Ø
 [person.L [cart with] carry-Habit-Ppl.Pl] be.many.Perf.L-3SgS
 ‘Women [topic], **they** (=some of them) certainly carry (millet, on
 their heads), (but) there are many people who carry (millet) with
 carts.’ **2004.3.6**

b. póm-pé-bà⇒ núwⁿó=kò,
 pump.Impf-3PlS die.Impf=be.Nonh,
 yé kán-tóyò-bà [kó kâ:ⁿ]
Index do-impf-3PlS [Nonh too]
 ‘They (=government workers) spray (poison), and they (crop-pest
 birds) die; **they** (=workers) do that too (periodically).’ (kárⁿá-)
2004.3.8

In a minority of textual examples, *yé* occurs with a **singular subject**. (198.a) is from a simulated formal marriage negotiation. In (198.b), Camel is physically towering over Hyena.

(198) a. [émé î-n] [[é î-n] lè], yé yèr-á:rà-Ø
 [1PIP child-Sg] [[2PIPchild-Sg] to], **Index** come-Habit-3SgS
 ‘Our child (=son) [topic], **he** has been coming to your child
 (=daughter).’ **2004.3.20**

b. wò yàṅâ:-Ø jé mèyⁿ,
 3SgS.L look.Impf-Ppl.Nonh say and,
 tí-tá: [ḍyò-ñòwⁿó kùⁿ] yé kó é:-rà-Ø
 Rdp-hyena [camel Def] **Index** NonhO see-Habit-3SgS
 ‘While he (=Hyena) was looking (for Camel, on the ground), (as
 for) Hyena [topic], Camel [topic], **he** (=Camel) was watching him
 (from above).’ **2004.4.3**

(199) is from a text about a man who fought with a leopard. The verb has 3Sg marking, but in context it seems to jointly denote the man and the animal together as they tire from their struggle.

(199) [hà:sín núṅò jín=î: dèy] yé dè:ⁿ-Ø
 [indeed Dem like=it.is if] **Index** be.tired.Impf-3SgS
 ‘indeed, as it (=struggle) continued like that, **they** (=man and leopard)
 were getting tired’ **2004.3.4**

The presentative element mentioned above is apparent in (200). Here one clause containing Presentive *nùkǒy* (§4.4.5, below), with the speaker as protagonist, is followed by a parallel clause with his companion (a slight distance away) as protagonist. The ‘here’ and ‘now’ are displaced (the text is about past adventures in Algeria).

- (200) [mí nè] nîm gàmá nî-dí:ⁿ nùkǒy bít-tóγð-m⇒,
 [1Sg now] now often here here’s! work-Impf-1SgS
 [má tówⁿó-n] nîm [ní.: [b... mà ùrò núηð]
 [1SgP companion.Sg] now [here [B Poss house.L Dem]
 tî:-n] yé bít-tóγð-Ø
 Recip-Sg] **Index** work.Impf-3SgS
 ‘Me now [topic], now I would often be here working, and my
 companion [topic], now he would be working approximately (as far
 away from me as) from here to that [deictic] house of B’s.’ (bî ré-)
2004.5.3

See also (138.c), (576), (1077), and (1174.a).

4.4 Demonstratives

4.4.1 Deictic demonstrative pronouns

4.4.1.1 ‘This/that’ (*núηð*, *nùηð-bâ:ⁿ*, *nùηð-nám*, *yúγð*)

A demonstrative (i.e. deictic or discourse-anaphoric) sense is normally expressed within an NP in either of two ways. First, there is an independent demonstrative stem *núηð* ‘this/that’ with nonhuman reference. It may be used by itself (as a syntactic NP), or it may follow a noun, functioning like a modifying adjective (with tone-dropping on the noun).

- (201) a. *núηð=ỳ*
 Dem=it.is
 ‘It’s this/that.’
- b. *èjù núηð*
 field.L Dem
 ‘this/that field’

The optional (nonhuman) plural is *núηð bé*.

For **humans**, we get the compounds in (202). In these demonstratives, *nùṅò* appears in L-toned form *nùṅò*.

- (202) a. *nùṅò-bâ:ⁿ* ‘this/that one’ (Sg)
 b. *nùṅò-nám* ‘these/those’ (Pl)

Tone-dropping is not found before *bâ:ⁿ* ‘owner’ or its plural *nám*, except in these human demonstratives and in the fairly uncommon form *tùrù-bâ:ⁿ* ‘one person, someone’ based on *túru* ‘one’ (§5.1.12). In fact, human demonstrative *nùṅò-bâ:ⁿ* ‘this/that one’ differs tonally from the productively formed compound *nùṅò bâ:ⁿ* ‘owner of that’.

In (203), for example, both the modified noun *î-n* ‘child’ and the demonstrative *nùṅò* (before *bâ:ⁿ*) appear in L-toned form.

- (203) [*î-n* *nùṅò-bâ:ⁿ*] [*dàná-n=ì:* *ké*]
 [child-Sg.L **Dem.L-owner**] [hunt.Impf-Ppl.Sg=Foc Topic]
tímé-sà-Ø
 resemble-Reslt-3SgS
 ‘That child resembles (=has almost become) a hunter [focus].’
2004.3.16

nùṅò is **deictic**, and may be accompanied by pointing or a similar gesture. In (204), two occurrences of the human singular form are used in distributive fashion, denoting two distinct referents in different (but nearby) locations. This example illustrates the intrusion of the speech-event deictic center into third-person past-time narratives, to convey a sense of immediacy (cf. the “narrative present” in English).

- (204) *wò-rú jàṅà-Ø,* *wò-rú èyⁿ-nè-Ø,*
 3Sg-Dat request.Perf.L-3SgS, 3Sg-Dat tight-Caus.Perf.L-3SgS
 [*nùṅò-bâ:ⁿ*] *wò-rú jàṅà:-Ø*
 [Dem.L-owner] 3Sg-Dat request.Impf-3SgS
 [*nùṅò-bâ:ⁿ nè*] *wò-rú éyⁿ-nê:-Ø*
 [Dem.L-owner now] 3Sg-Dat tight-Caus.Impf-3SgS
 ‘He (=farmer) pleaded with him (=Fulbe man), he (=Fulbe man) threatened him (=farmer); this one (over here) was pleading with him, this one (over here) for his part was threatening him.’ **2004.4.4**

A dialectal variant *yúḡò* (instead of *nùṅò*) is attested only rarely in my Dianwely data, but is said to be common in western dialects.

- (205) [yúgò cêw] [[jémè-n mà bíré] bérè] yó=kùn-Ø
 [Dem all] [[blacksmith Poss work] in] exist=be.in-3SgS
 ‘All that is included in the work of a blacksmith.’ 2004.3.12

4.4.1.2 ‘This’ (Proximal ní-bâ:ⁿ)

Parallel to the very common human Sg nùṅò-bâ:ⁿ ‘this/that (one)’ (202.a), a specifically Proximal ní-bâ:ⁿ is attested once in a text. As with other post-nominal demonstratives, the modified stem drops its tones.

- (206) [í⇒, [[wàrù-wàrà-n ní-bâ:ⁿ]
 [exclamation, [[farming.L-farm-Ppl.Sg.L **this.L-owner**]
 mà b́é:] ér=kò] gâ:-Ø
 Poss excrement] sweet=be.Nonh] say.Impf-3SgS
 ‘He (=Fulbe man) said, “my, this farmer’s excrement is tasty!”
 (wàrù-wárá-n, érù) 2004.4.4

For another example see line 3 of (208), below.

The Proximal element here is related to ní ‘here’ (§4.4.3.1, below).

The plural is ní-nám. I was not able to elicit a nonhuman form (other than nùṅò).

4.4.1.3 ‘This place’ (dì:ⁿ nîṅ)

The adverb nîṅ (variant nîm) is common in the sense ‘now’. A phonologically similar element nîṅ occurs as a demonstrative in the single phrase dì:ⁿ nîṅ ‘this place’ with dǐ:ⁿ ‘place’. Note that the noun drops tones before nîṅ, as it would before nùṅò ‘this, that’. It is possible that nîṅ in dǐ:ⁿ nîṅ is a vestige of a once more productive demonstrative, perhaps historically connected with nùṅò and with Proximal ní-.

4.4.2 Anaphoric demonstrative pronouns

4.4.2.1 Prenominal kò ‘that (same)’

Aside from a form of nùṅò, the other common demonstrative modifier is L-toned kò preceding the noun. This is **identical in form to the Nonhuman inalienable possessor** pronoun. Ambiguity in context is very unlikely, since the set of inalienable nouns consists largely of kin terms that rarely allow

nonhuman possessors (§6.2.2). In demonstrative function, *kò* may occur with human as well as nonhuman nouns. The syntactic distinction between demonstrative *kò* and Nonhuman possessor *kò* is brought out by the fact that demonstrative *kò* (but of course not possessor *kò*) may follow a true possessor, as in *émé kò búró* ‘our ponds’ (or: ‘those aforementioned ponds of ours’) in (260), with 1Pl *émé* in possessor function.

Unlike deictic [noun + *núnò*], the phrase [*kò* + noun] is **discourse-anaphoric**, denoting an entity that has been introduced into prior discourse or that is otherwise readily accessible to the addressee. Accordingly, it is often followed by Definite *kùⁿ*. Examples are in (207).

- (207) a. [*kó kùⁿ sógò*] [*kò kùmàndâw kùⁿ bé*]
 [Nonh Def because] [**Dem** Major **Def** Pl]
yěy-yà-bà dèy, ...
 [come-Perf-3PlS] if/when, ...
 ‘Because of that, when those (aforementioned) Majors came, ...’
2004.4.22
- b. [*tògù pó:ró*] *tógó* [*kó bèrê:*]
 [shed.L first] build.shed [Nonh in]
bè nù:-Ø [*kò tóg kùⁿ*]
 3PlS.L enter.Perf.HL-Ppl.Nonh [**Dem** shed **Def**]
úró táná-ŋá mèyⁿ níŋ yó=kò
 house become-Caus and now exist=be.Nonh
 ‘The first shed that they built and went into (to live), that (same) shed having been transformed into a house, it is still there to this day.’ (*tógù*) **2004.3.11**

The discourse-anaphoric quality is consistent with the morphological affinity between this pronominal demonstrative and the Nonhuman pronoun *kó* (in its H- and L-toned forms). This pronoun generally refers back to a previously introduced discourse referent, as is the case with the initial *kó kùⁿ* in (207.a).

4.4.2.2 ‘That (same) one’ (*kò-bâ:ⁿ*)

kò-bâ:ⁿ (or *kò-báŋà*) is parallel in form to the much more common *nùŋò-bâ:ⁿ* ‘this/that one (human)’ (§4.4.1.1, above); note the L-tone of *kò-*. It consists of pronominal anaphoric demonstrative *kò* with singular compound final *bâ:ⁿ* ‘owner’.

In one textual attestation of *kò-bâ:ⁿ*, it means ‘that (same) person’, or more colloquially ‘that guy’. It is followed by a parallel passage with a new referent denoted by deictic *nì -bâ:ⁿ* (208). Both referents are generic (exemplars).

- (208) [ú jǎ:-mè kùⁿ], [mùñú kúróy] ó:-wè,
 [2SgO convey.Impf-Ppl.Pl Def], [thousand six] give.Impf-2SgS,
kò-bâ:ⁿ làyá è:-gó-w,
Dem-owner other (time) see-*ImpfNeg-2SgS*
 [nì -bâ:ⁿ lè] [mùñú nàyⁿ] ó:-wè
[this.L-owner Dat] [thousand four] give.Impf-2SgS
 ‘Those who (supposedly) will take you-Sg (across the border) [topic], you’ll give six thousand riyals, and you won’t see that guy again (=he’ll abscond with your money). You’ll give four thousand to this (other) guy, ...’ **2004.5.6**

In (209), *kò-bâ:ⁿ* denotes a referent just introduced in the preceding clause. It is again paired with a deictic demonstrative, this time *nùṅò-bâ:ⁿ*.

- (209) [ì nè nùṅò-bá:ⁿ]=yⁿ [[wó jèjù-gùjú] lè]
 [person.L **Dem.L-owner**]=Foc [[3SgP body] in]
céllâl kô-n.: fú:, nû:-Ø,
 health be.Nonh.HL-Ppl.Sg all, go.in.Impf-3SgS,
 [[wó jèjù-gùjú] lè] *céllâl kò:-rɔ-Ø,*
 [[3SgP body] in] health be.Nonh-Neg-Ppl.Nonh,
kò-bâ:ⁿ dàyá-bà
Dem-owner leave.Impf-3PIS
 ‘That person [focus], anyone in whose body there was health (=who was able-bodied), he would be admitted (=into the colonial army); (when) there was no health in his_x (=another man’s) body, they would reject that guy_x.’ **2004.4.2**

4.4.2.3 Anaphoric/logophoric demonstrative pronouns (*ɛn-*, *ǎn-*)

Another set of demonstrative forms, used (in my data) in absolute form rather than modifying a preceding noun, is presented in (210). The human forms are parallel to Sg *nùṅò-bâ:ⁿ* and Pl *nùṅò-nám* given above.

(210)	Sg	Pl
	a. nonhuman	
	ěn-kò, ǎn-kò, ǎŋ-kò	ěn-kò bé, ǎn-kò bé, ǎŋ-kò bé
	b. human	
	èn-kò-bâ: ⁿ	èn-kò-nám

Morphologically, *ěn-kò* and its variants look like combinations of Reflexive-Logophonic *èné* (§18.1.2, §18.2) with *kò* ‘be (nonhuman)’, or perhaps with a variant of Nonhuman pronoun *kó*. Indeed, *ěn-kò* has strongly discourse-anaphoric functions somewhat comparable to those of *èné*.

In (211.a), for example, Pl *ěn-kò bé* looks back to referents introduced in the prior discourse. The same is true in (211.b) with *ǎŋ-kò*. In (211.c), Hyena (while talking to Goat) uses *ǎn-kò* to refer back to Scorpion, who had bitten Hyena shortly before in another location.

- (211) a. [bà:rù-pì nǎm kùⁿ] [wè:ré lè] kúnó-wⁿ,
 [acacia.L-powder Def] [bowl in] put.Impf-2SgS,
 [[ěn-kò bé] dì:ⁿ ù kárⁿà-Ø kùⁿ jín]
 [[**that** **PI**] manner.L 2SgS.L do.Perf.HL-Ppl.Nonh Def like
 ní: kówó kúnó-wⁿ
 water scoop put.Impf-2SgS
 ‘You-Sg will put that acacia powder (for tanning) in the bowl. Just as you did with those others (=tanning preparations), you will scoop up some water and put it (in the bowl).’ **2004.3.17**
- b. [nùmò-î:ⁿ lè] [kò fú:]
 [hand-child Dat] [Nonh.L all]
 [[kò ǎŋ-kò]=y là: dèy] kò:-ró
 [[NonhP.L **that**]=it.is Neg if] be.Nonh-Neg
 ‘For the fingers, there is nothing (=no jewelry) other than that (aforementioned) one.’ **2004.4.20**
- c. dáɣà⇒ ǎŋ-kò dì:ⁿ ní
 a.little **that** manner.L here
 [èné lè] kárⁿà-Ø
 [Logo Dat] do.Perf.HL-Ppl.Nonh
 ‘(It said:) “what little that (last) one (=Scorpion) did to me ...”’
2004.4.2

For discourse-anaphoric demonstrative adverbials $\check{\text{n}}\text{-d}\acute{\text{i}}\text{:}^{\text{n}}$ and $\check{\text{n}}\text{-l}\acute{\text{e}}$ ‘there, in that same place’, see below, §4.4.3.2.

Simple discourse-anaphoric or “given” status, functionally equivalent to Definite *the* in English, is often expressed simply by Definite $\text{k}\grave{\text{u}}^{\text{n}}$ without an overt demonstrative.

4.4.3 Demonstrative adverbs

In addition to the pure demonstrative adverbs considered below, $\text{k}\grave{\text{o}}\text{-r}\acute{\text{u}}$ ‘with it, in it, for it’ may be used as an anaphoric ‘there’ adverbial. This accounts for the fairly low text frequency of specifically discourse-anaphoric ‘there’ adverbs.

4.4.3.1 Locative adverbs with $\text{n}\acute{\text{i}}\text{-}$, $\text{y}\acute{\text{i}}\text{-}$, $\text{y}\acute{\text{e}}\text{-}$, $\text{y}\acute{\text{e}}\text{-}$

Demonstrative adverbs in (212), like other locational expressions, can be translated freely in various contexts as locative (‘in/at ...’), allative (‘to ...’), or ablative (‘from ...’). The directional sense, if any, is provided by motion verbs and is not intrinsic to the adverb.

Several of the adverbials treated here contain a form of the noun $\text{d}\acute{\text{i}}\text{:}^{\text{n}}$ ‘place’ (sense extendible to ‘manner’), but with L- or F- rather than R-tone. Others contain a suffix related to postposition $\text{l}\acute{\text{e}}$ ‘in, to’ in its H-toned form (§8.2.2). The forms based on $\text{d}\acute{\text{i}}\text{:}^{\text{n}}$ and $\text{l}\acute{\text{e}}$ are discussed further in the remainder of this section. Short forms $\text{n}\acute{\text{i}}$ and $\text{y}\acute{\text{i}}$ are listed in (212) but are analysed separately in §4.4.4, below.

(212)	a.	$\text{n}\acute{\text{i}}\text{-d}\grave{\text{i}}\text{:}^{\text{n}}$, $\text{n}\grave{\text{i}}\text{-d}\acute{\text{i}}\text{:}^{\text{n}}$	‘here’
		$\text{n}\acute{\text{i}}$	‘here’ (see §4.4.4.1, below)
		$\text{n}\grave{\text{i}}\text{-l}\acute{\text{e}}$	‘here’
	b.	$\text{y}\acute{\text{i}}\text{-d}\grave{\text{i}}\text{:}^{\text{n}}$, $\text{y}\grave{\text{i}}\text{-d}\acute{\text{i}}\text{:}^{\text{n}}$	‘here’
		$\text{y}\acute{\text{i}}$	‘here’ (see §4.4.4.2, below)
		$\text{y}\grave{\text{i}}\text{-l}\acute{\text{e}}$	‘here’
	c.	$\text{y}\acute{\text{e}}\text{-d}\grave{\text{i}}\text{:}^{\text{n}}$	‘over there’
	d.	$\text{y}\acute{\text{e}}\text{-l}\acute{\text{e}}$, $\text{y}\grave{\text{e}}\text{-l}\acute{\text{e}}$	‘there’ (anaphoric)

The ‘here’ adverbs whose most common forms are HL-toned $\text{n}\acute{\text{i}}\text{-d}\grave{\text{i}}\text{:}^{\text{n}}$ and $\text{y}\acute{\text{i}}\text{-d}\grave{\text{i}}\text{:}^{\text{n}}$ have variants with LF tones: $\text{n}\grave{\text{i}}\text{-d}\acute{\text{i}}\text{:}^{\text{n}}$ and $\text{y}\grave{\text{i}}\text{-d}\acute{\text{i}}\text{:}^{\text{n}}$. I am unable to detect any difference in meaning from the relevant elicited and textual examples.

I have found both ní-dì:ⁿ and yí-dì:ⁿ in the sense ‘here’ within the same texts. However, yí-dì:ⁿ tends toward more generalized senses (‘around here, in this area’ and discourse-based ‘here’), while ní- is more concrete. yì-lé, with postposition -lé, is also less common.

(213) is from the first minute of a text concerning the arrival of the first Jamsay settlers ‘here’ (i.e. to Dianwely or the surrounding plains). Two speakers, A (interviewer) and B (interviewee) are involved.

- (213) A. ní-dì:ⁿ yèré dó: dì ηè-bà,
here come arrive sit.Perf.L-3PlS,
 [ní-dì:ⁿ ké] èmě-n tóró gá:-rà-bà,
 [**here** Topic] 1Pl-Dat mountaineer say-Habit-3PlS,
 [émé jàmsăy bé]=y yí-dì:ⁿ [ùjùbăy kû:ⁿ]
 [1Pl Jamsay Pl]=Foc **here** [country on]
 dà:ⁿ-yⁿ, yǒ:-jì n kárⁿá mèyⁿ,
 sit.Perf.L-1PlS, how? do and,
 [jàmsày pó:ró-m] ní-dì:ⁿ yèrè-bà
 [Jamsay.L first-Pl] **here** come.Perf.L-3PlS
 ‘They came and settled here. Here, they tell us that we are among the mountaineers (original inhabitants of the zone). It’s we Jamsay [focus] who are sitting (=settled) here on the land. What did the first Jamsay do to come here?’

- B. [jàmsăy mà pó:ró-m]
 [Jamsay Poss first-Pl]
 [dì:ⁿ kárⁿá mèyⁿ yí-dì:ⁿ yérè-Ø],
 [manner.L do and **here** come.Perf.HL-Ppl.Nonh]
 ‘The first (=earliest) of the Jamsay, how (=what) they did to come here.’ **2004.3.11**

This Q&A passage contains three occurrences of ní-dì:ⁿ and two of yí-dì:ⁿ. The impression given is that ní-dì:ⁿ and yí-dì:ⁿ in particular are broadly interchangeable when denoting physical locations.

nì-lé ‘here’ is formally parallel to yì-lé (see below). It was elicited but did not occur in my texts.

yì-lé occurs in the same text about the original Jamsay settlers (214.a). Another example of yì-lé is (214.b). The interlocutor responded with ‘So you will spend the night here (yí-dì:ⁿ)?’

- (214) a. [émé nám] [yì-lé [èné bé] sùgô:-Ø]
 [1PIP people] [**here** [Refl Pl] go.down.Impf-Ppl.Nonh]
 ‘our people (=ancestors), (at the time) when they came down here
 (to the plains), ...’ **2004.3.11**
- b. òⁿhóⁿ èné [íjé ké] [yì-lé nà: lé]
 uh-huh! LogoS [today Topic] [here **spend.night.L Dat**]
 yèrè-Ø wà
 come.Perf.L-3SgS say
 ‘He said, “Uh-huh! I have come today in order to (=intending to)
 sleep here.”’ [purposive clause §17.6.1.1] **2004.4.3**

In (215), yí-dì:ⁿ ‘here’ refers abstractly to the activities mentioned in the immediately preceding discourse.

- (215) àsègè-mǎŋ-Ø jì rⁿè-bíré,
 animal.L-raise-VblN wet.season.L-work(noun),
 [émé òrú mà pàŋá ké] yí-dì:ⁿ≡yⁿ
 [1PIP matter Poss strength Topic] **here=it.is**
 ‘Raising animals and wet-season work (=millet farming), our strong
 point (=main activity) is here.’

In (216), yí-dì:ⁿ has the same recent-discourse orientation, and is contrasted with ní-dì:ⁿ, which points forward in the discourse. Both are abstract, denoting blacksmiths’ activities rather than locations. dī gé- ‘follow’ implies a (metaphorical) pathway.

- (216) [wó nò] jémè-n, [yí-dì:ⁿ bè-rú]
 [3Sg now] blacksmith-Sg, [**here** Pl-in]
 [wó jèmè-bíré],
 [3SgP blacksmith.L-work(noun)],
 ní-dì:ⁿ dī gé yǎ:=kò
 here follow go.Impf=be.Nonh
 ‘The blacksmith now, his work as blacksmith here (=as just described)
 will go forward here.’ **2004.3.12**

Another example of the recent-discourse basis of yí-dì:ⁿ is (217). gàrá- literally means ‘pass, go past’, so a locational adverb is appropriate.

- (217) [[émé à-kóró] mà wóró [kâ:ⁿ nè]]
 [[1PIP well] Poss depth [also now]]
 yí-dì:ⁿ gál-lí-Ø
here pass-PerfNeg-3SgS
 ‘(From 18 to 22 meters deep,) the depth of our wells doesn’t exceed that.’ (gàrá-) **2004.4.5**

See also yí-dì:ⁿ at the end of (287.a).

yí-dì:ⁿ may combine with bè-rú, again referring to practices just described in preceding discourse. The free translation is of the type ‘in those ways’ or ‘in ways of that type’, suggesting that this bè-rú is the dative-locative-instrumental form of postnominal Plural morpheme bé (not that of 3Pl pronoun bé). However, this use of bè-rú is routinized and its morphological structure may be less than transparent to native speakers. In addition to (218), this bè-rú occurs in the first line of (216). See also §4.4.3.3.

- (218) î-n [yí-dì:ⁿ bè-rú], dàná túmnô:-Ø
 child-Sg [**here PI-in**], hunt(verb) begin.Impf-3Sgs
 ‘A child begins hunting in those ways (just described).’ **2004.3.16**

Nonproximal yé-dì:ⁿ has a basic meaning ‘(over) there’ (219.a). In (219.b), it is repeated several times (‘over there ..., over there ..., over there ...’) in a passage using different deictic “locations” to distinguish different specializations that young hunters can adopt. Some cases of yé-dì:ⁿ in (219.b) may actually be focalized; the Focus clitic in yé-dì:ⁿ=yⁿ would be difficult to hear in tape recordings.

- (219) a. yé-dì:ⁿ [bè-rú dî:ⁿ bè bè:-Ø]
there [3Pl-with place.N 3PIS.L be.Impf-Ppl.Nonh]
 ‘There, in the place where they stayed with them.’ **2004.3.11**
- b. háyè [néyⁿ ké] cín dàná
 well [now Topic] thus hunt(noun)
 yé-dì:ⁿ gòjók túmnó=kò,
there subdivide begin.Impf=be.Nonh,
 jènèngè-kúnó-m yé-dì:ⁿ gòjók=kò⇒,
 trap.L-put.H-Ppl.Pl **there** subdivide.Impf=be.Nonh,
 dàná-n [màlfâ:ⁿ-lè]-tá:ⁿ-n
 hunt.Impf-Ppl.Sg.L [rifle.L-Inst]-shoot.H-Ppl.Sg
 yé-dì:ⁿ gòjók=kò⇒,
there diversify.Impf=be.Nonh,

[[jénéŋé kùⁿ] dò:-lí-n]
 [[trap Def] reach-PerfNeg-Ppl.Sg]
 [àtí:ⁿ dánà-m] yé-dì:ⁿ gòjókè⇒,
 [bird.trap hunt.HL-Ppl.Pl] **there** diversify.Impf=be.Nonh,
 dàná yé-dì:ⁿ gòjókè túmnókè [néyⁿ ké]
 hunt(noun) **there** diversify begin.Impf=be.Nonh [now Topic]
 ‘Well now, that’s how the hunt is beginning to diversify (into specialties); over there (hunting by) the animal trappers is different, over there (hunting by) the rifle hunters is different, over there (hunting by) the ones who, having been unable to get iron animal traps, (are) hunters with bird-traps, it is different over there; the hunt has now begun to diversify.’ **2004.3.16**

The yé- in yé-dì:ⁿ is probably related historically to yé in its function as an alternative third person subject pronoun, which has a presentative nuance (§4.3.3, above), and to Existential particle yé used chiefly with positive ‘be’ and ‘have’ quasi-verbs (§11.2.2.1).

The first morpheme in yé-lé or yè-lé is perhaps a variant of yé- just discussed, with the vowel assimilated to that of -lé (cf. H-toned postposition lé, §8.2.2). yé-lé or yè-lé is **discourse-anaphoric** in sense. In (220), a location is first introduced deictically in a quotation as yì-lé ‘here’, and is then referred to anaphorically as yè-lé ‘there’.

(220) [... [tàyà wóm] yì-lé yókè] gá,
 [... [pond.L empty] **here** exist=be.Nonh say]
 émé já: té:ré mèyⁿ, [émé yè-lé bè:-m] wà
 1PIO take show and, [1Pl **there** stay-Hort.L] say
 ‘ “... there is an empty pond here,” they said. Having taken us (there) and showed (it to us), they said that we should stay there [focus].’
2004.3.11

In (221), at the beginning of an animal tale, yè-lé likewise refers to a location already defined (by the presence of Camel).

(221) [ðyð-ñðwó [èjú lé] kó yàrà] jé mèyⁿ,
 [camel [field in] NonhO go.around.Perf.HL] say and,
 tì-tá: yè-lé òjù-kà: kó dànàŋà-Ø
 Rdp-hyena **there** road.Loc.HL NonhO coincide.with.Perf.L-3SgS
 ‘As Camel was going around in the bush (=wilderness), Hyena encountered it (=Camel) there in the road by chance.’ **2004.4.3**

Similar instances of *yè-lé* occurred in other narratives, where the first protagonist's location defines an initial deictic center, to which a second protagonist comes. Further examples of *yè-lé* are (327), (550.b), (604), (999.a), (1021.c), and the last line of (1017); more examples of H-toned *yé-lé* are (423), (563). (916.d), (1150), and the second line of (1017).

4.4.3.2 *Logophoric demonstrative adverbs*

The forms are in (222).

- (222) *ěn-dî:ⁿ* ‘there (logophoric)’
 ěn-lé, ăn-lé ‘there (logophoric)’

The stem *ěn-*, on which these adverbs are based, is related to the broadly anaphoric third person pronominal *ěné*. This pronoun is used in a range of reflexive, logophoric, and other indexing functions (§18.1.2, §8.2). We have also seen demonstrative pronoun *ěn-kò* ‘that same one’ above, §4.4.2.3. The adverbs *ěn-dî:ⁿ* and *ěn-lé* are absent from my interview-style texts but do occur in tales, where indirect quotation and logophorics abound. The adverbs do not seem to occur in ordinary impersonal contexts as discourse-anaphoric ‘there’ adverbs, for example in ‘they are living in Bamako_x, and they like it there_x’. Instead, the Jamsay forms in (222) occur in quotations, or in other contexts involving the perspective of a narrative protagonist, and are therefore essentially logophoric rather than discourse-definite adverbs. In (223), *ěn-lé* is used, instead of the simple discourse-anaphoric demonstrative adverb *yé-lé* or variant *yè-lé* (212.d), because the location of the sting is presented from the perspective of the much-suffering hyena.

- (223) [kó ná: kùⁿ], [bèr=î: nè] wǒ-r tímé-sà-Ø,
 [NonhP body Def], [goat=Foc now] 3Sg-Dat resemble-Reslt-3SgS
 [tám-Ø kùⁿ] ɛ̀jɪⁿ⇒ ěn-lé wǒ-r lógó-sà-Ø
 [kick-VblN Def] extremely **there** 3Sg-Dat be.extreme-Reslt-3SgS
 ‘Its (=goat’s) body [topic], the goat there looked like it (=scorpion).
 (The pain from) the sting (of the scorpion) was unbearable for him
 (=Hyena) there (where it had stung him).’ (wò-rú twice) **2004.4.2**

4.4.3.3 *Emphatic/Approximative modifiers of adverbs*

Demonstrative adverbs can be made insistent by adding an **emphatic** adverbial: *nì-dî:ⁿ té:té*: ‘right here’. For *té=>* and its variants see §8.5.3.3.

An **approximative** sense can be expressed by adding *bè-rú*, as in *nì-dí:ⁿ* *bè-rú* ‘(somewhere) around here’. See discussion of (218), above.

‘On this (=the near) side of X’, where X is a well-known locational reference such as a village, mountain, or river, can be expressed as ‘before you reach X’ (224). For the ‘before ...’ construction see §15.2.4.2.

- (224) [má èjú] [jówⁿlè mà [á dɔ:-wò lé]] kò
 [1SgP field] [Dianwely Poss [2SgP reach.H-Caus.L in]] it.is.Nonh
 ‘My field is (located) before you reach (=on this side of) Dianwely.’

‘On the far side of X’ (‘just beyond X’) can be expressed as ‘if/when you have gone past X’ (225).

- (225) [má èjú] [jówⁿlè gǎy-yà-w déy] kò
 [1SgP field] [Dianwely pass-Perf-2SgS if] it.is.Nonh
 ‘My field is on the far side of Dianwely.’ (gàrá-)

‘Here and there’ denoting a scattering rather than dense concentration can be expressed as *đí:ⁿ đí:ⁿ lè*, with *đí:ⁿ* ‘place’ in distributive iteration, followed by postposition *lè* in locative function.

4.4.4 Shortened or enclitic deictic adverbials

4.4.4.1 ‘Here’ (*ní*)

An element *ní*, which appears to consist of the same morpheme that begins *ní-dí:ⁿ* ‘here’ (212.a), occurs in certain combinations and constructions as a kind of enclitic. It is sometimes best left untranslated, but it does have at least a weak proximal sense ‘here’.

One combination is with *íjé*, whose basic sense is ‘today’: *íjé ní* ‘today, nowadays’. This is an alternative to the more common *íjé nè* ‘today, up to now’ or ‘again’ (with *nè* assimilated from *nè* ‘now’). Another is *ní-jì n* ‘like this, in this way’, though this is much less common than *cín* (same gloss).

ní is also attested immediately after L-toned heads of relative clauses. The most common examples are spatiotemporal adverbial clauses in relative-clause form, though examples without *ní* outnumber those with *ní*. Adverbial-clause heads often followed by *ní* are *dògùrù* ‘time (when ...)’ and *dì:ⁿ* ‘place (where ...)’ or ‘manner (whereby) ...’. (226.c-d) show *ní* after non-adverbial relative heads. In (226.e), *ní* follows *hâl* ‘until’.

- (226) a. [dògùrù ní kò já:jé=kò-Ø] lè
 [time.L **here** NonhS.Lrest.at.night.Impf=be.Nonh-Ppl.Nonh] in
 ‘at the time when they (=animals) stop to rest for the night’
2004.3.8
- b. [dì:ⁿ ní èmè dâ:ⁿ-Ø] lè
 [place.L **here** 1PIS.L sit.Perf.HL-Ppl.Nonh in]
 ‘in this place here where we are sitting (=living)’ **2004.3.11**
- c. mí [ì nè ní dâ:ⁿ-n]
 1Sg [person.L **here** sit.Perf.HL-Ppl.Sg]
 ‘I who am sitting here’ **2004.3.16**
- d. [cì-cèn ní ù ê:-Ø]
 [Rdp-ant.sp..L **here** 2SgS.L see.Impf-Ppl.Nonh]
 jǎ:ⁿ-sà-bà dèy
 dig-Reslt-3PIS if
 ‘if they excavate (the nest of) the black ants (*Messor* sp.) that you-
 Sg see here.’ **2004.4.28** (ê:-Ø could also be Perfective)
- e. hâl ní gó: mùñúrⁿò yǎ: mérⁿé,
 until **here** leave south go and,
 hâl yàǵá mèy↑ yǎ: mèy↑ [gàn núǵò fú:]
 until take and go and [zone.L Dem all]
 ‘Leaving here and going south (to Burkina), from one end to the
 other, the whole zone’ **2004.4.28** (mérⁿé §15.1.14)

One could argue that ní is a **second-position enclitic**, hence dògùrù=ní and so forth. I will leave this open since there is no special phonological interaction with the preceding element.

In (227), ní occurs between a two-word head NP and a participle in a subject relative. Again, it is arguably a second-position enclitic, but hosted by a multi-word constituent rather than a single phonological word.

- (227) [tì wⁿè dùgù] ní íjè-Ø
 [tree.L long.L] **here** stand.Perf.HL-Ppl.Nonh
 ‘the tall tree that is standing here’ **2004.4.15**

Though often enclitic-like, ní can be used independently (including clause-initial cases) as first member of a conjunction of the literal type ‘here and X’ in the sense ‘(the distance) from here to X’. In this, case ní is pronounced with dying-quail intonation ní:., i.e. as something like phonetic [ní ǽ ǽ]. This

coordinated construction appears in line 2 of (228.a), and in (228.b). (228.a) also includes, in line 4, a rare case of clause-initial ní not in a coordination construction, where ní-dì:ⁿ or nì-dì:ⁿ is much more usual.

- (228) a. èjù-nòwⁿó é:-jè-bà dèy,
 field.L-meat see-RecPf-3PIS if,
 [ní.: [èjù-nòwⁿó kùⁿ.:]] mà gǎnⁿ,
 [**here** [field.L-meat Def]] Poss between,
 [tì wⁿè kâ:ⁿ] [émé gǎnⁿ] kùn-ó,
 [tree.L each] [1PIP between] be.in-Neg,
 ní íjí-ré gó:-yè-m dèy [kâ:ⁿ nè]
here move go.out-Perf-1SgS if [too now]
 émé é:≡kò
 1PIO see.Impf≡be.Nonh
 ‘When they have just seen the wild animal, (they each say):
 “between here (=where I am) and the wild animal, no trees are
 between us, (so) if I move out here (into the open), it will see us.”’
2004.3.16

- b. [ní.: [b... mà ùrò núṅò] tî:-n]
 [**here** [B... Poss house.L Dem] Recip-Sg]
 ‘roughly (the distance) from here to that (deictic) house of B’s’
2004.5.3

4.4.4.2 ‘Here’ (yí)

A structurally parallel form yí ‘here’ functions as an occasional shortened version of yí-dì:ⁿ ‘here’ (212.a). In (229), we get first yí-dì:ⁿ and then yí, with no clear difference in deictic context.

- (229) [dì:ⁿ kárⁿá mèyⁿ yí-dì:ⁿ yérè-Ø],
 [manner.L do and **here** come.Perf.HL-Ppl.Nonh]
 [[[ùjùbày núṅò] lé pá⇒] mà émé yér-gú ké]
 [[[country.L Dem] in Emph] Poss 1PIP coming Topic]
 [jòwⁿlè pǔyⁿ] gó: mèyⁿ yí yèrè-y, ...
 [Dianwely.L old] go.out and **here** come.Perf.L-1PIS, ...
 ‘The first of the Jamsay, what they did to come here. Having
 (originally) come to this very area, we (then) left Old Dianwely and
 came here (to the present-day Dianwely).’ **2004.3.11**

4.4.5 Presentatives (nùkǒy, nùkó)

The presentative demonstrative is nùkǒy. It may be predicative by itself (230.a), may be used with a following existential ‘be’ quasi-verb (230.b-c), and (somewhat like French *voici* or *voilà*) may be used adverbially (230.d-e). When it is followed by cliticized =kǒ ‘it is’, the y and k optionally combine irregularly to form kk or just k (230.b). With human ‘be’ quasi-verb =wǒ-, the y of nùkǒy is optionally deleted (230.c).

- (230) a. mǒtó nùkǒy
 motorcycle **here’s!**
 ‘Here’s the motorcycle!’ **2004.4.25**
- b. nùkók=kǒ (variants nùkó=kǒ and regular nùkǒy=kǒ)
here’s!=it.is.Nonh
 ‘There it is!’
- c. nùkǒy=wǒ-Ø (variant nùkó=wǒ- **2004.4.27**)
here’s!=be.Hum-3SgS
 ‘There he/she is!’
- d. nùkǒy gǒ: gǒ:-rà-bà
here’s! dance(noun) dance-Habit-3PIS
 ‘There they dance!’ (Fr *Les voilà qui dansent!*)
- e. nùkǒy yǒr-á:rà-Ø
here’s! come-Habit-3SgS
 ‘Here he/she comes!’
- f. [dǐ:ⁿ nùkǒy lǒ] èmǐ-n tǒ:rǒ-bà
 [place **here’s!** to] 1Pl-Dat show.Perf.L-3PIS
 ‘They showed us, here’s a place.’ **2004.3.11**

4.5 Adjectives

Within NPs, adjectives are post-nominal modifiers. When final in the NP, they take ordinary nominal endings: Nonhuman -Ø for nonhuman, (human) Sg -n (postconsonantal -in), and (human) Pl -m (postconsonantal -um). I omit the -Ø suffix in my transcriptions and interlinears, and I label the two human suffixes as simply Sg and Pl.

Rarely, the head noun of an NP is omitted and an adjective occurs alone (§6.1.2). This is distinctly atypical of Jamsay discourse, and the only examples were elicited.

In the cases of *gàrá* ‘big, adult’ and *làyá* ‘other’, the fact that the basic form has a final vowel inclines me to segment the (irregular) suffixal forms as e.g. singular *gàrí-n* and *làyí-n*.

4.5.1 Underderived adjectives

(231) presents the unsuffixed and suffixed forms of the basic, underderived adjectives that are known to me. Most adjectives have a primary sense applicable to objects, but most may also be applied to humans (often in extended senses). For those that cannot (‘dense’, ‘pointed’, etc.), blanks are shown for Sg and Pl.

(231) Adjectives

gloss	bare	Sg	Pl
a. Cv: stems (vocalism stable)			
‘many, full’	jó:	jó:-n	jó:-m
‘pointed’	sǐ:	—	—
‘spacious’	wá:	wá:-n	wá:-m
b. two or more syllables, ending in u (shifting to i before Sg -n)			
‘good’	èjú	èjí-n	èjú-m
‘fat, thick’	dùgú	dùgí-n	dùgú-m
‘heavy’	dùjú	dùjí-n	dùjú-m
‘sweet; sharp’	érù	érí -n	érù-m
‘plump’	èr ⁿ ú	èr ⁿ í-n	èr ⁿ ú-m
‘sterile (woman)’	—	gúnì -n	gúnù-m
‘long, tall’	gùrú	gùrí-n	gùrú-m
‘bitter’	jé:rù	jé:ri -n	jé:rù-m
‘coarse’	kùñú	kùñí-n	kùñú-m
‘dense’	kùrgú	—	—
‘undiluted’	kùrú	kùrí-n	kùrú-m
‘bland (meal)’	mètú	—	—
‘bad, ugly’	mòñú	mòñí-n	mòñú-m
‘smooth, sleek’	ònùr ⁿ ú	ònùr ⁿ í-n	ònùr ⁿ ú-m
‘hot, fast’	ógù	ógì -n	ógù-m
‘fresh’	òrú	òrí-n	òrú-m

‘crooked’	pì rì gù	pì rì gí-n	pì rì gù-m
‘crooked’	pònùṅú	—	—
‘unflavored’	sèlbú	—	—
‘thin’	ùñú	ùñí-n	ùñú-m
‘soft (skin)’	yòrú	yòrí-n	yòrú-m

c. two or more syllables, ending in u (shifting to i before Sg -n and Pl -m)

‘blind’	jì mnú	jì mní-n	jì mní-m
‘white’	pírú	pírí-n	pírí-m

d. two or more syllables, ending in a stable non-high vowel

‘half-ripe’	àñá	àñá-n	àñá-m
‘runty’	cèté	cèté-n	cèté-m
‘small, young’	dáyá	dáyá-n	dáyá-m
‘ripe, cooked’	ì ré	ì ré-n	ì ré-m
‘new’	kàná	kàná-n	kàná-m
‘unripe, raw’	kòró	kòró-n	kòró-m
‘easy, cheap’	nà:r ⁿ á	nà:r ⁿ á-n	nà:r ⁿ á-m
‘flat’	pété	pété-n	pété-m
‘weak, diluted’	sèré	sèré-n	sèré-m
‘young’	sò:rò	sò:rò-n	sò:rò-m
‘fast’	téré	téré-n	téré-m
‘same, single’	túmnó	túmnó-n	túmnó-m
‘distant’	wàyá	wàyá-n	wàyá-m
‘deep’	wóró	wóró-n	wóró-m

e. final a shifting to high vowel before suffixes, or contracting

‘big, adult’	gàrá	gàrí-n, gǎ-n	gàrú-m (gàrí-m)
‘other’	làyá	làgí-n	làgú-m

f. ending in y or yⁿ (suffixes sometimes just -n, -m)

‘half-bitter’	ây ⁿ	ây ⁿ -n, áy ⁿ -ín	ây ⁿ -m, áy ⁿ -úm
‘newborn’	bây ⁿ	bây ⁿ -ín	bây ⁿ -ùm
‘tight’	ěy ⁿ	ěy ⁿ -n, èy ⁿ -ín	ěy ⁿ -m, èy ⁿ -úm
‘short’	gǒy ⁿ	gǒy ⁿ -n, gòy ⁿ -ín	gǒy ⁿ -m, gòy ⁿ -úm
‘dry, hardened’	mǎy ⁿ	mǎy ⁿ -n, mày ⁿ -ín	mǎy ⁿ -m, mày ⁿ -úm
‘respectable’	nínáy ⁿ	nínáy ⁿ -n	nínáy ⁿ -m
‘living’	ñéy ⁿ	ñéy ⁿ -n	ñéy ⁿ -m
‘rotten’	ǒy	ǒy-n, òy-ín	ǒy-m, òy-úm
‘old’	pěy ⁿ	pěy ⁿ -n, pèy ⁿ -ín	pěy ⁿ -m, pèy ⁿ -úm, pèy ⁿ -ím
‘small’	těy ⁿ	těy ⁿ -n, tèy ⁿ -ín	těy ⁿ -m, tèy ⁿ -úm

g. ending in w 'separate'	kăw	—	—	[cf. (833)]
h. ending in nasal				
'red'	bán	bán-ín	bán-ím, bán-úm	
'lukewarm'	bùkâm	bùkâm-ì n	bùkâm-ùm	
	[variant búgàm-bùgàm]			
'firm'	déŋ	déŋ-ín	déŋ-úm	
'lean'	dǒŋ	dǒŋ-ín	dǒŋ-úm	
'blunt, dumb'	dǔm	dùm-ín	dùm-úm	
'confined'	ěm	èm-ín	èm-úm	
'nearby'	é:ŋ	é:ŋ-ín	é:ŋ-úm	
'curved, bent'	gǒn	gòn-ín	gòn-úm	
'black'	jém	jém-ín	jém-úm	
'difficult, costly'	năm	nàm-ín	nàm-úm	
'sour, salty'	nôm	nóm-ì n	nóm-ùm	
'lightweight'	ñén	ñén-ín	ñén-ím, ñén-úm	
'not skinny'	ǒm	òm-ín	òm-úm	
'crispy'	pèrúm	—	—	
'wet'	těm	tèm-ín	tèm-úm	
'cold, slow'	tôm	tóm-ì n	tóm-ùm	
'empty, innocent'	wóm	wóm-ín	wóm-úm	

Sg -n and Pl -m are also used with many human nouns (§4.1.1, above). The phonology of the suffixes is more transparent with adjectives, since there is almost always a directly comparable unsuffixed nonhuman form. The suffixes take the form -n and -m after V-final stems (231.a-d). In non-monosyllabic stems, final u normally shifts to i before Sg -n (231.b).

Two adjectives shift final u to i not only before Sg -n but also before Pl -m (231.c). These are precisely the two bisyllabic u-final adjectives whose first syllable has i, so there is a minor progressive assimilation going on here. Note that trisyllabic (pì rì gú 'crooked' (231.b), with not one but two i-vowels, does have u in the Pl (pì rì gú-m). This is another instance where metrical considerations (the difference between the "weak" second syllable and the "strong" third syllable) plays a role, see §3.2.2.

Low and mid-height vowels are normally stable (231.d). However, gàrá 'big' and làyá 'other' have presuffixal forms ending in a high vowel. gàrá also has an optional, irregular contraction in the singular to gǎ-n (231.e). We also get nonsyllabic -n and -m after the only bisyllabic y-final stem (nínáyⁿ 'respectable'), and frequently (as a variant) after monosyllabic y-final stems, except bâ:yⁿ 'newborn', the one relevant stem with a long vowel (231.f). The one w-final adjective, kăw 'separate' (231.g), has no human forms; they are

provided by a verbal participle containing the Perfective suffix (Sg káw-â:n ‘one who has separated’). Nasal-final stems (231.h) always have syllabic suffixal allomorphs, Sg -in and Pl -um (occasionally varying with -im).

The suffixes are atonal, so the tone of the suffixed forms is predictable from that of the unsuffixed stem. As a monosyllabic [CvC₂] stem is resyllabified in the suffixed forms to [Cv][C₂-v...], a contour tone on the stem-syllable is divided into components, with the tone component originally associated with C₂ now realized on the second syllable. For example, R-toned nǎm ‘difficult’, i.e. /nǎm/, has Sg nǎm-ín, and F-toned tǒm ‘cold’, i.e. /tǒm/, has Sg tǒm-ìn. H-toned adjectives simply spread the H to the suffixal syllable. The relevant tone rules are Atonal-Morpheme Tone-Spreading (137) and Final-Tone Resyllabification (148).

Many “adjectival” senses applied primarily to humans are expressed by simple nouns with Sg -n or Pl -m (Sg mú:mǎ-n ‘deaf one’), or by nouns (and adjectives) with Characteristic suffix -gí-, as in Sg tòm-gí-n ‘hunchbacked’, cf. tóm ‘hump in person’s back’ (§4.2.1).

Some other forms function as adjectives but do not show the suffixal morphology illustrated above. One word for ‘blue’ is bǔlǎ-búló, cf. the borrowed noun bǔlǎ or búlà ‘blue dye’. An unaffixable adjective meaning ‘young’ is gǎylé. It can also be adverbial (‘a little’). These adjectives do not take the -n and -m endings typical of true adjectives.

‘Impotent man’ is expressed as à-n ànárⁿà-n. This begins with ǎ-n ‘man’ (plural àrⁿ-úm points suggests an original singular *àrⁿ-ín or the like). The adjective ànárⁿà-n is less than transparent, but perhaps contains the same noun plus a Negative morpheme (cf. Negative -rǎ- in quasi-verbs like sà:rǎ- ‘does not have’). The sense would then be something like ‘a man who is not a man’, and indeed this phrasing for ‘impotent man’ is observed (more transparently) in other nearby Dogon languages.

4.5.2 Iterated derived adjectives

There is no productive derivational reduplication or iteration that produces adjectives. However, I can cite the noun síñè ‘noise’ and the adjective síñè-síñú ‘noisy’, as in cè: síñè-síñú ‘noisy thing(s)’. In form, síñè-síñú looks like a VbIN (síñ-ú) with a cognate nominal as L-toned compound initial, but it is best not to over-analyse such a form.

4.5.3 Suffixal Augment -í: or -: after adjective stem

When an adjective ending in a consonant or short vowel is followed by a cliticized ‘be’ quasi-verb $\equiv w\delta-$ or $\equiv k\delta$, or by the verb $bé:-$ ‘be, remain’, it has two variants, one with and one without an augment -í: or -: (i.e. vowel-lengthening). The allomorphs are distributed as indicated in (232).

- (232) a. -í: after consonant or short u
 b. -: after other short vowel {i e ε a o o}

There are no adjectives ending in short i. I was not able to elicit augmented forms for the few monosyllabic Cv: adjectives. Examples that do have the augment are in (233), with Nonhuman $\equiv k\delta$ ‘be’.

(233)	gloss	unaugmented	augmented
a.	‘fat’	dùgú $\equiv k\delta$	dùg-í: $\equiv k\delta$
	‘black’	jém $\equiv k\delta$	jém-í: $\equiv k\delta$
	‘hot’ (ógù)	ógú $\equiv k\delta$	óg-í: $\equiv k\delta$
	‘white’	pírú $\equiv k\delta$	pír-í: $\equiv k\delta$
b.	‘separate’	kăw $\equiv k\delta$	kàw-í: $\equiv k\delta$
	‘rotten’	ǒy $\equiv k\delta$	òy-í: $\equiv k\delta$
c.	‘half-bitter’ (ây ⁿ)	áy ⁿ $\equiv k\delta$	áy ⁿ -í: $\equiv k\delta$
d.	‘small’	dáyá $\equiv k\delta$	dáyá-: $\equiv k\delta$
	‘big’	gàrá $\equiv k\delta$	gàrá-: $\equiv k\delta$
	‘flat’	pété $\equiv k\delta$	pété-: $\equiv k\delta$
	‘fast’	téré $\equiv k\delta$	téré-: $\equiv k\delta$
	‘distant’	wàyá $\equiv k\delta$	wàyá-: $\equiv k\delta$
	‘deep’	wóró $\equiv k\delta$	wóró-: $\equiv k\delta$

The adjectival augment is distinct tonally from clitic $\equiv í:$ ‘it is’ (or Focus marker), an allomorph of $\equiv y$ (§11.2.1). In addition, the ‘it is’ clitic appears as $\equiv y$ after {e ε a o o}.

My assistant suggested that there is a semantic distinction between forms with and without the augment. He indicated that the augmented form emphasized permanence (234.a), while the shorter form was neutral as to time reference and therefore did not exclude a transient-quality reading (234.b). (234.c) illustrates use with a human subject.

- (234) a. jém-í:≡kò
 black-**Aug**=be.Nonh
 ‘It is (permanently) black.’
- b. jém≡kò
 black≡be.Nonh
 ‘It is (permanently or temporarily) black.’
- c. jém-í:≡wò-m
 black-**Aug**=be.Hum-1SgS
 ‘I am black.’

One adjective is attested only in the -í: form with following ‘be’ quasi-verb. It has no counterpart as simple modifying adjective; instead, a relative clause including ‘be’ is required. There is a related noun yàkà-yákà ‘cheap, lightweight metal’.

- (235) a. yák-í:≡kò
 insubstantial-**Aug**=be.Nonh
 ‘It (=e.g. metallic object) is insubstantial (lightweight, cheap).’
- b. ì nè yák-í:≡wó-n≡ì:
 person.L insubstantial-**Aug**=be.Hum.HL-Ppl.Sg=it.is
 ‘He/She is an inconsequential (=good-for-nothing) person.’

4.6 Participles

Participles are nominalized verb forms used in relative clauses. They lack pronominal-subject suffixes, but do take a nominal suffix agreeing with the head noun in humanness and (for humans) number: Nonhuman zero, human Sg -n, human Pl -m. These are of course the same suffixes seen above with ordinary nouns and with adjectives.

For examples and further discussion of participles, see Chapter 14.

4.7 Numerals

4.7.1 Cardinal numerals

Cardinal numerals may function as NPs, or may modify a noun, in which case they follow the noun (and any adjectives or demonstratives). Except where

specifically stated below (adjective *túmnó* ‘one’, ordinals), numerals do not function as adjectives, and therefore do not induce tone-dropping on a preceding modified noun. See §6.1 for fuller discussion and examples.

4.7.1.1 ‘One’, ‘same (one)’, and ‘other’

The **numeral ‘1’** is *túrú*. This form is used in counting, and as a postnominal modifier to denote a single unit (in an unmarked context, as in answering a ‘how many?’ question): *úró túrú* ‘one house’. Unlike other numerals, which do not take -n and -m suffixes, *túrú* often takes (human) Sg suffix -n when modifying a human noun: *dǝṽǝ-n túrú-n* ‘one Dogon’. *túrú* is also used in the iterated distributive *tút-túrú* (syncopated from /*túrú-túrú*/) ‘one by one, one at a time’ (§4.7.1.6, below).

In the form *túrú*, this numeral behaves like other numerals in requiring that a preceding modified noun show its **lexical tones**. However, for paired body parts (‘hand’, ‘foot’, ‘eye’, etc.), there is an alternative construction with **HL-toned** *túrù* and **all-L tone** for the noun, as for nouns preceding ordinary adjectives: *èné mà nùmò túrù* ‘one of his hands (*nùmó*)’.

túrú is not generally also used in the fashion of French *un(e)* and English *a(n)* or *some* as an indefinite article, e.g. to introduce a new discourse referent. Likewise, informants rejected plural #*túrú-m* ‘ones’, with or without a preceding plural noun.

Another form, perhaps historically related to *túrú* in some way, is the **adjective** *túmnó*, which can be glossed (in context) with preceding noun X as ‘(a) single X’, ‘(only) one X’, or ‘the same X’. Here the pragmatic nuance is more emphatic, denying the possibility that a second X is relevant, or that the original X has been replaced by another X.

The adjective ‘**other**’ is *làyá*. It can be used either in the sense of ‘additional’ (as in ‘I already own one house, and want to buy another’), or in the sense ‘alternative’ (as in ‘I don’t like my current house, I’m going to sell it and buy another one’). As a pragmatic sentence-adverb with no modified noun, *làyá* is common in the sense ‘furthermore’ or ‘in addition’.

When a pair of entities or other nonsingular set has already been introduced as a discourse referent, contrastive sequences of the type ‘one went, the other (one) stayed here’ can be expressed by repeating the numeral ‘one’ in a parallelistic construction (236).

- (236) *íné-m lèy, [kó ñǎ: kùⁿ] ...*
 person-Pl two, [NonhP meal Def] ...
 [í nè túmnó-n] kó dè:-Ø,
 [person.L **one**-Sg] NonhO carry.Impf-3SgS,

[kò ní: kùⁿ], [é íné-n túrú] dè:-Ø
 [NonhPwater Def], [2PIP person-Sg **one**] carry.Impf-3SgS
 ‘Two people, the food [topic], one person will carry it; the water, the other one of you-Pl will carry (it).’ **2004.5.1**

4.7.1.2 ‘2’ to ‘10’

The numerals from ‘2’ to ‘10’ are shown in (237).

(237) gloss	form
‘2’	lěy (lěy)
‘3’	tǎ:n (tǎ:n)
‘4’	nǎy ⁿ (nǎy ⁿ)
‘5’	nǔ:y ⁿ (nǔ:y ⁿ)
‘6’	kúróy
‘7’	sûy ⁿ
‘8’	gá:rà
‘9’	lá:rúwà (or: lá:rwà)
‘10’	pérú

The lexical R-tone of numerals ‘2-5’, though heard in isolation (238.a), drops to L-tone in normal speech when the numeral is NP-final and follows a noun or other head (238.b). The R-tone is still heard in careful pronunciation in elicited examples. The modified noun preceding the numeral has its regular tones; there is no tone-dropping before a cardinal numeral. If Definite kùⁿ is added, the R-tone is generally audible even in modifying function (238.c).

- (238) a. lěy é:-sà-m
 two see-Reslt-1SgS
 ‘I saw two (of them).’
- b. [úró lěy] é:-sà-m
 [house **two**] see-Reslt-1SgS
 ‘I saw two houses.’
- c. [úró lěy kùⁿ] é:-sà-m
 [house **two** Def] see-Reslt-1SgS
 ‘I saw the (same) two houses.’

The fact that both the noun and the numeral show their lexical tones suggests a syntactically **appositional** structure (§6.9). Further support for this comes from the fact that when a [noun + numeral] combination is head of a relative clause, the noun and the numeral undergo tone-dropping in parallel (§14.1.3).

4.7.1.3 *Decimal units ('10', '20', ...) and combinations ('11', '59', ...)*

Decimal units (multiples of '10') are in (239). *péru* '10' is repeated from above. The other decimal terms are compounds with *péru*- 'ten' as the initial and the relevant single-digit numeral from '2' to '9' as the final. (One could think of them as noun-numeral combinations with 'ten' as the noun, but the tone patterns in '60' through '90' are not regular for noun-numeral sequences.)

The final numeral in each term for '20' through '90' has its regular form. The initial 'ten' stem is subject to **tone-dissimilation** (§3.7.3.4), taking (or rather keeping) the form *péru*- before a numeral beginning in L-tone ('20-50') and the form *pèrù*- before one beginning in H-tone ('60-90'). This initial also undergoes Post-Sonorant Syncope (60) before a coronal (except in '70'), and the syncope feeds Rhotic Assimilation (77), resulting in cross-morpheme geminates *ll* ('20', '90'), *tt* ('30'), and *nn* ('40', '50'). '20-50' reflect the usual dropping of tone from R to L of '2-5' numerals in phrase-final position.

(239)	gloss	form
	'10'	<i>péru</i>
	'20'	<i>pél-lèy</i>
	'30'	<i>pét-tà:n</i>
	'40'	<i>pén-nàyⁿ</i>
	'50'	<i>pén-nù:yⁿ</i>
	'60'	<i>pèrù-kúróy</i>
	'70'	<i>pèrù-sûyⁿ</i>
	'80'	<i>pèrù-gá:rà</i> (for <i>dòyò-sũŋ</i> see below)
	'90'	<i>pèl-lá:rúwà</i> (or: <i>pèl-lá:rwà</i>)

The decimal numerals follow a modified noun in the same way as do simple numerals: *úró pél-lèy* 'twenty houses'.

Combinations of decimal numeral D as just given in (239) plus single-digit numeral S have the form [D [S *sáyà*]]. The morpheme *sáyà* is not otherwise used in the language, but based on the structure of the combinations it can be thought of as meaning 'plus' or 'remainder'. In '11' through '19', *péru* 'ten' is modified slightly to *péré*, and does not undergo Post-Sonorant Syncope (60),

see (240.a). Because the decimal numeral D is not phrase-final, if it ends in a numeral ‘2-5’ we often hear its R-tone (240.b-c). The same is true (often, but not always) of a numeral ‘2-5’ immediately preceding *sáyà*, such as the second *tǎ:n* in (240.c).

- (240) a. *péré* [túru sáyà]
 ten [one **plus**]
 ‘eleven’
- b. *pén-nǔ:yⁿ* [lá:rúwà sáyà]
 ten-five [nine **plus**]
 ‘fifty-nine’
- c. *nǐ:* [pét-tǎ:n tǎ:n sáyà]
 day [ten-three three **plus**]
 ‘thirty-three days’

4.7.1.4 *Large numerals (‘100’, ‘1000’, ...) and their composites*

Larger numerals are based on the stems in (241), which can be followed by modifying numerals.

- (241) gloss form
- a. ‘hundred’ *sǔŋ* (archaic)
 " *té:médérè = té:mdérè = té:méndérè = té:médè*
 (<Fulfulde)
- b. ‘thousand’ *mùñú*
 ‘million’ *mílyô:ⁿ* (<French)

The archaic term *sǔŋ* seems to be fading from use. In traditional Dogon counting, there is a tradition whereby ‘80’ replaces ‘100’ as the basis for counting, particularly with money (see below). Thus *dòyò-sǔŋ* ‘(the) Dogon hundred’ is an alternative term for ‘80’.

The higher numerals in (242) are nouns and can be followed by other numerals to generate larger composite numerals. However, the different **levels** (million, thousand, hundred, 1-99) are separated into distinct sub-phrases. This does not usually affect such numerals when used in counting, so that no modified noun occurs. For example, in [[*té:médêr nǔ:yⁿ*] *pél-lèy*] ‘five hundred twenty’ there is no prosodically marked break, and the R-tone of *nǔ:yⁿ*

‘five’ is preserved due to the following numeral. However, when the modified noun is present, a complex numeral can be broken up.

In one construction, a **modified noun is repeated** at each level, and each segment has its own intonation contour (242).

- (242) [pé:jú mùñú lèy] [pé:jú té:médêr nù:yⁿ]
 [sheep thousand two] [sheep hundred five]
 [pé:jú pé:l-lèy]
 [sheep ten-two]
 ‘two thousand, five hundred, (and) twenty sheep’

In the other possible construction, the modified noun is not repeated, but the numerals from different levels are overtly **conjoined**, with the “dying-quail” final intonation described in §3.8.3 at the end of each sub-phrase (243).

- (243) [pé:jú mùñú lèy.:.] [té:médêr nù:yⁿ.:.] [pél-lèy.:.]
 [sheep thousand two] [hundred five] [ten-two]
 ‘two thousand, five hundred, (and) twenty sheep’

4.7.1.5 Currency

Numerals with values of one hundred or more are most commonly used in connection with **currency**. As in all languages of the region (except French), currency amounts are expressed in terms of the unit sometimes known as the riyal (real). This was originally a valuable colonial silver franc, but it is now equated with the smallest coin in circulation, the 5 franc CFA coin, worth (in 2007) about one U.S. cent. Therefore ‘500 CFA’ (prior to 2005 a banknote, thereafter a coin) is expressed as ‘100 riyals’. The term for ‘riyal’ in Jamsay, borrowed from Fulfulde, is bú:dù (plus a quantifier), often shortened to bú:d before a numeral, as in bú:d túrú ‘one riyal’.

Without a quantifier, bú:dù means ‘money’. A more authentic, but now less common, term for ‘money’ is cě:rù, whose primary sense is ‘cowry shell’ (now decorative, but long ago used as a kind of currency).

For very large currency amounts, the French borrowing mílyô:ⁿ is used, denoting one million (not five million) francs. One million francs CFA is a sum that most villagers would never see in cash, though a well-constructed house in a town like Douentza can go for upwards of ten million (in 2007).

4.7.1.6 *Distributive numerals*

Numerical distributivity is expressed by **iterating** (=completely repeating) the numeral. In context, distributives can be glossed adverbially as ‘in groups of N’, ‘N apiece’ (e.g. price per commodity unit), ‘N at a time’, and so forth, where N is the iterated numeral. Simple numerals ‘2-5’ with lexical R-tone keep this tone in the first segment, but drop it to L-tone in normal speech style in the second segment if it is phrase-final.

- (244) lěy-lěy yèrè-bà
two-two come.Perf.L-3PlS
 ‘They came two at a time (by twos).’

Other representative distributives are tút-túrú ‘one by one, individually, one at a time’, hence by extension ‘scattered, occasional, (a few) here and there’, and kúróy-kúróy ‘six by six’.

In decimal units ‘20’ and up, the compound initial ‘ten’ is optionally omitted in the repetition: pél-lěy pél-lěy or pél-lěy-lěy ‘twenty by twenty’. Similar reductions occur in more complex numerals.

An unusual construction including Nonhuman pronoun kó (perhaps in possessor function) and an apparent prefix à- appeared in a passage about earring types, from an elderly female speaker. The construction was only half-understood by my younger assistant (245).

- (245) [sùn núṅò] [à-tâ:n kó tǎ:n]
 [ear.L Dem] [?-three.HL NonhP three]
 ‘This ear (here), in three places’

4.7.2 *Ordinal adjectives*

Ordinals are true adjectives (unlike cardinal numerals), and therefore induce tone-dropping on a preceding modified noun. They take Sg -n and Pl -m if the reference is to humans.

4.7.2.1 *‘First’ (pó:ró, tí⇒, lá:) and ‘last’ (dùmnó)*

For **‘first’**, the most common form is pó:ró (human Sg pó:ró-n). As a true ordinal, it induces tone-dropping on the preceding noun, as in other noun-adjective combinations.

- (246) [kó bì rɛ pó:ró]
 [NonhP work.L **first**]
 ‘its first work’ **2004.3.17**

For temporal adverbial pó:ró ‘first; previously; in the old days’, and adverbial lá: ‘first’ and reduplicated lá:lá:, see §8.5.7.1. For pragmatic adverbial tí⇒ ‘first, to begin with’, see §19.3.1.

The ordinal ‘**last**’ is dùmnó (Sg dùmnó-n). dùmnó is also a noun meaning ‘end’.

4.7.2.2 Other ordinals (suffix -né)

For numerals above ‘1’, ordinals are expressed by adding a suffix -né. The preceding numeral (including composite numerals like ‘eleven’) drops to L-tone within a level, but if there is a mix of levels (with elements from two or more of the sets ‘1-99’, hundreds, thousands, and/or millions), tone-dropping does not cross the phrasal boundary separating two levels. Thus tone-dropping affects the simple numerals in (247.a-b,d), and the tripartite but single-level numeral in (247.c), but it affects only the final part of the complex numeral in (247.e), where ‘hundred’ retains its normal tone.

For tă:n ‘three’, the ordinal is the slightly irregular tà-y-né.

- | (247) | form | gloss |
|-------|--------------------------------------|-------------|
| | a. single-digit numeral | |
| | lèy-né | ‘second’ |
| | tày-né | ‘third’ |
| | này ⁿ -né | ‘fourth’ |
| | kùròy-né | ‘sixth’ |
| | pèn-né | ‘tenth’ |
| | b. decimal | |
| | pèl-lèy-né | ‘twentieth’ |
| | c. decimal plus single-digit numeral | |
| | pèrè tùrù sàyà-né | ‘eleventh’ |

d. hundred

tè:mèdèrè-né ‘hundredth’

e. hundred plus ‘1-99’ numeral (two levels)

té:médérè pèl-lèy-né ‘hundred and twentieth’

4.7.3 Fractions and portions

There are no terms denoting precise numerical fractions of the type ‘half’, ‘(one) third’, and the like. The relevant sense is communicated pragmatically by expressions based on a noun such as gójò ‘part, division’ (of an object) or kùrú ‘(somebody’s) portion, share’, or the adjective gàmá ‘certain (one(s), of a group), some (of a mass)’ (special human Pl gàmà nám).

- (248) a. [mǎngòlò mà gójò]=y mǎ-n ò:-Ø
 [mango Poss half]=Foc 1Sg-Dat give.Perf.L-3SgS
 ‘He/She gave me a portion (e.g. half) of the mango.’
- b. [má kùrú] bèl-lú-m [[bú:dù kùⁿ] mà bèrê:]
 [1SgP share] get-PerfNeg-1SgS [[money Def] Poss in]
 ‘I didn’t get my (rightful) share of (lit.: in) the money.’ (bèrê-)
- c. [ì jù gàmá] céré=kò
 [dog.L certain] bite.Impf=be.Nonh
 ‘Some (but not all) dogs bite.’

5 Nominal and Adjectival Compounds

5.1 Nominal compounds

The combinations noun plus adjective, and noun plus demonstrative (núŋò), require tone-dropping on the noun (§6.1.4). This is suggestive of compounding, since the initials in some noun-noun compound types also drop their tones. In this section, I discuss phenomena that are more obviously compounds in nature.

A number of formulae for tone patterns are distinguished in the sections below, using “x” for a compound initial of variable word-class, “a” for adjective, “n” for noun, “v” for verb, and Ppl (as usual) for Participial suffix. A macron (e.g. in “ \bar{x} ”) means that the constituent in question **retains the same tones** that it has in isolation. A grave accent (“ \grave{x} ”) means that all tones in the relevant constituent are **dropped to low**. An acute accent (“ \acute{x} ”) means that all tones are **raised to high**, and a circumflex (“ \hat{x} ”) denotes an **overlaid H(H...)L** stem-wide tone pattern.

5.1.1 Compounds of type (\bar{x} \bar{n})

In this type, **both initial and final preserve their regular tones**. The only tightly constructed compounds of this type in common use are those with final $b\grave{a}:^n$ ‘owner’ of (or its Pl $n\grave{a}m$), see §5.1.12. There is also a tree name $y\grave{d}r\acute{o}-s\grave{a}m\grave{n}\grave{a}$ (*Albizia*), which is literally ‘soap of $n\acute{e}r\acute{e}$ tree’ ($y\grave{d}r\acute{o}$ ‘ $n\acute{e}r\acute{e}$ ’, $s\grave{a}m\grave{n}\grave{a}$ ‘soap’).

In some of the remaining examples, the “compound” [X Y] seems to be logically equivalent to a possessive construction [X $m\grave{a}$ Y] with the possessor X in descriptive or partitive function. When the final is a noun like ‘day’ or a measuring unit like ‘liter’, Possessive $m\grave{a}$ seems to be generally omitted, resulting in a rather loose compound-like sequence.

- (249) a. $b\grave{o}n-k\grave{u}n-\emptyset$ $n\acute{i}-\eta\acute{i}r^{\text{a}}\acute{e}$
name.L-put-VblN Rdp-day
‘the day of the name-giving ceremony’ **2004.3.19**
- b. [$n\grave{u}\eta$ $s\grave{e}r\acute{e}$] $l\acute{i}:t\acute{u}r\grave{u}$ $t\acute{u}r\acute{u}$
[oil.L liquid] liter one
‘one liter of liquid oil’ **2004.3.20**

When tone-dropping applies to such a compound, it **affects all of its components in parallel**. For example, the compound in (249.b), above, appears as relative-clause head with all-L tones in (250). This is consistent with the behavior of noun-numeral combinations, and of inalienable possessor-noun sequences, whose components also undergo parallel tone-dropping in relative-clause head function (§6.1.4, §14.1.3).

- (250) [[nùŋ sèrè li:tùrù tùrù]
 [[oil.L **liquid.L**] **liter.L** **one.L**]
 ù-rú mǐ ô:-Ø kùⁿ] yókòkò
 2Sg-Dat 1SgS.L give.Perf.HL-Ppl.Nonh Def] where?
 ‘Where is the one liter of liquid oil that I gave you?’

In (251.a), the noun substitute *mâ:n* ‘such-and-such’ is used as a kind of **partitive** for the preceding noun. This can be expanded further by preposing a noun denoting a unit of counting, in which case all three nouns have their individual tones (251.b).

- (251) a. hínnè mâ:n
 amount such-and-such
 ‘such-and-such an amount’ **2004.3.20**
- b. nǐ: hínnè mâ:n
 day amount such-and-such
 ‘such-and-such a number of days’

In (252), we see that *nǐ:*, *hínnè*, and *mâ:n* drop their tones in tandem, when the phrase is followed by a demonstrative. This suggests that (251.b), above, is a nonhierarchical structure morphosyntactically, similar to appositional constructions, with all three elements subject to simultaneous externally-induced modification.

- (252) [nǐ: hínnè mà:n] núŋò
 [**day.L** **amount.L** **such-and-such.L**] Dem
 ‘that such-and-such a number of days’ **2004.3.20**

5.1.2 Compounds of type (\grave{x} \bar{n})

In this highly productive pattern, the **compound initial drops its tones to all low**, symbolized by the grave accent on \grave{x} . The **compound final has its normal tones**. This is the same tone sequence we get with [noun + adjective] sequences,

but the two constructions differ in head-modifier ordering. In the compound construction, **the final is the logical head**, denoting the referent, while the initial characterizes this referent in some manner (location, ethnicity, salient feature, or the whole with reference to a part).

- (253) a. t̀̀r̀̀d̀̀-ń̀̀ě-m
 mountain.L-woman-Pl
 ‘mountain women’ (women from villages in the hills, t̀̀r̀̀d̀̀)
2004.3.3
- b. t̀̀eŋ̀̀e-ń̀̀ě-m
 Tengou.L-woman-Pl
 ‘Tengou women’ (women of the Dogon division Teŋou, t̀̀eŋ̀̀e)
2004.3.3
- c. ẽń̀̀e-bé:
 chicken.L-excrement
 ‘chicken excrement’ (ẽń̀̀e) **2004.3.17**
- d. m̀̀alf̀̀a:ⁿ-gó:
 rifle.L-dance
 ‘rifle dance (=hunter’s dance)’ (m̀̀alf̀̀a:ⁿ) **2004.3.20**
- e. t̀̀i wⁿẽ-b̀̀d̀̀r̀̀ó
 tree.L-base
 ‘tree root(s)’ (t̀̀i wⁿẽ) **2004.3.27**
- f. k̀̀ù:ⁿ-ǹ̀ù:ⁿó
 head.L-pain
 ‘flu with headache’ (k̀̀ù:ⁿ) **2004.3.27**

An uncharacteristic **partitive** sense is seen in (254).

- (254) s̀̀ùk̀̀d̀̀r̀̀d̀̀-k̀̀i lô:
 sugar.L-kilo
 ‘a kilo of sugar’ **2004.5.1**

5.1.3 Compounds with final Verbal Noun, type (x̣ ñ)

A VblN can take an “incorporated object” or similar nominal complement as a compound initial. In such cases, the initial is L-toned, has generic sense, and is

unmodified. The VblN has its normal tones. The construction therefore belongs to the more general type [x̣ n̄] described in the preceding section §5.1.2. An alternative construction, used with a more general range of NP types, is the possessive construction [NP mà VblN]. Both occur in the passage in (255).

- (255) bé nùmò-bíré, [bà:ñà-lǒw-Ø],
 3PIP hand.L-work(noun), [bowl.L-carve-VblN],
 [màná: mà lǒw-Ø], ...
 [mortar Poss carve-VblN], ...
 ‘Their trade (=occupation), carving wooden bowls, (and) the carving of
 wooden mortars, ...’ (bà:ñá, lǒwó-) **2004.3.15**

Many compounds with final VblN have specialized senses (256).

- (256) a. dǐ:ⁿ-nà-ýⁿ
 place.L-spend.night-VblN
 ‘(animals’) place for spending the night’ (dǐ:ⁿ, ná:-) **2004.3.16**
- b. jè:n ní:-kùn-Ø=í:
 gear.L water.L-put-VblN=it.is
 ‘It is gear (=bags) for putting water (in).’ (jè:n, ní:, kúnó-)
2004.3.16
- c. gò:rò-těwⁿ-Ø
 kola.L-chew-VblN
 ‘chewing kola nuts; price of kola (small gift of money)’ (gò:rò,
 těwⁿé-) **2004.3.20**
- d. cì nè-yǎŋ-Ø
 shadow.L-look-VblN
 ‘mirror’ (cì-cì né, yǎŋá-) **2004.3.20**
- e. nùwⁿò-dǐŋ-Ø
 death.L-sit.down-VblN
 ‘mourning period, wake’ (nùwⁿó, dǐ ŋé-) **2004.3.21**

A compound with final Verbal Noun followed by dǐ:- ‘arrive (at), reach’ often means ‘(the age of) VP-ing’, denoting a maturation stage or similar milestone. In (257), the underlying phrase is [àyà-úrò] táŋá- ‘(bride) move to husband’s house’, with a tonal locative úrò ‘in the house’ (§8.1).

- (257) [nîŋ ké] ñě-n [àɣà-ùrò]-tǎŋ-Ø
 [now Topic] woman-Sg [husband.L-house.L]-transfer-**VbIN**
 dɔ:-yà-Ø dèy
reach-Perf-3SgS if
 ‘Now, when the woman attains the age for moving to her husband’s
 house (i.e., for consummating a long-since arranged marriage), ...’
2004.3.20

In (258), the Verbal Noun is itself **iterated** within the compound. The leftmost occurrence is treated as a compound initial and takes L-tone.

- (258) a. cèm-[tà-yⁿ]-[tà-ýⁿ]
 pointed.object.L-[shoot-VbIN]-[shoot-VbIN]
 ‘arrow(s) (and bow)’ **2004.3.2**
- b. cè:-[wɔ-y]-[wɔ-ý]
 thing-[kill-VbIN]-[kill-VbIN]
 ‘lethal weapons (things that kill)’ **2004.3.2**

In (259), removing the ‘it is’ clitic, the long word is cèj-Ø-cèj-ú (syn-copated from cèj-ù-cèj-ú. This in turn is the regular Verbal Noun of cèj-ú cėjé-, with cėjé- ‘cut’ preceded by its own Verbal Noun (in the fashion of a cognate object). The compound initial cèj-ú- has shifted to L-tone (cèj-ù-), and has lost its suffixal vowel by Inter-Word u-Apocope (75). The combination cèj-Ø-cèj-ú functions as an **adjective** modifying cè: ‘thing’.

- (259) [cè: cèj-Ø-cèj]≡î:
 [thing.L cut.VbIN.L-cut.VbIN]≡it.is
 ‘something for cutting (i.e., a knife)’ (from cèj-ú-cèj-ú plus ≡y)

A similar adjectival function is carried out by compounds of ní: ‘water’ and a VbIN (‘sitting’, ‘running’), modifying the noun dî:ⁿ ‘place’, in the passage (260).

- (260) jì rⁿê: [bùrò-ní: jín]
 wet.season.Loc.HL [pond.L-water like]
 [dî:ⁿ ní :-dí ŋ-Ø]≡î: là: dèy
 [place.L **water.L-sit-VbIN**]≡it.is Neg if
 [séwndè jín] [dî:ⁿ ní :-jǒw-Ø]
 [water.spring like] [place.L **water.L-run-VbIN**]
 [émé kò búró] kó sà:-rá-Ø,
 [1PIP Dem pond] NonhO have-Neg-3SgS

[émé tùmó kùⁿ] kó sà:-rá-Ø
 [1PIP stone Def] NonhO have-Neg-3SgS
 ‘Except for spots where water stands (“sits”) during the rainy season such as (seasonal) pond water, (regarding) places with running (=flowing) water such as springs [topic], our ponds don’t have any, and our stone hills don’t have any.’ **2004.4.5**

5.1.4 Compounds with final -sà:-rá ‘fact of not having X’ (x̃ n̄)

Ordinarily, a Verbal Noun cannot be formed from a quasi-verb like sà- ‘have’. However, the negative form sà:-rá- ‘not have’ (§11.5.1) can be used, without derivational suffixation, as a compound final. The tone-dropping on the initial identifies this as a compound of [x̃ n̄] tonal type, rather than as a factive complement. In (261), from a text describing how elders adjudicate disputes, tỳⁿð-sà:-rá ‘not having truth’, i.e. ‘being in the wrong’, is opposed to tỳⁿś ‘truth’, i.e. ‘being in the right’, which occur in parallel as direct objects of ‘give’. For the literal phrasing “give truth to X” and “give not-having truth to X,” cf. French *donner raison à* and *donner tort à*, respectively.

(261) [[tỳⁿś sà:-rá-n kùⁿ] lè]
 [[truth have-Neg-Ppl.Sg Def] Dat]
 [tỳⁿð-sà:-rá kùⁿ] ó:-jè-bà dèy, ...,
 [**truth-have-Neg** Def] give-RecPf-3PIS if, ...,
 [[i nè tỳⁿś bâ:ⁿ kùⁿ] lè] tỳⁿś ó: mèyⁿ †, ...
 [[person.L truth owner Def] Dat] **truth** give and, ...
 ‘When they have ruled against (“have given not-having-truth to”) the one who is in the wrong, ...; he acknowledges being in the right to the person who is in the right and ...’ **2004.5.5**

Another instance of L-toned initial plus -sà:-rá is (262).

(262) [[kó kâ:ⁿ] mà nèwⁿè-sà:-rá] èmǎ-n kò:-ró
 [[Nonh too] Poss **usefulness-have-Neg**] 1Pl-Dat be.Nonh-Neg
 ‘We have none of such uselessness (=useless things).’ **2004.4.6**

A rival expression of the semantic type ‘lack of X’ consists of the substantive noun (L-toned) plus tỳⁿ ‘lack or insufficiency’, apparently here a nominal compound final, but related to the adjective tỳⁿ ‘small’.

5.1.5 Compounds of type (\bar{x} \hat{n})

In this type of compound, the **initial has its regular tone** (I indicate this as \bar{x} with a macron indicating no change in tones). The **final is a noun with overlaid descending H(H...)L tone**. The schematic formula is therefore [\bar{x} \hat{n}], where the circumflex suggests the word-level descending tone. This has an interesting similarity to inalienable possessives (involving certain kin terms), which also have a [\bar{x} \hat{n}] tone pattern when the possessor is a (nonpronominal) noun or (other) NP (§6.2.2).

It is worth considering the possibility that there is a deep similarity between this type of compound and inalienable possession (e.g. ‘Amadou’s father’). Some other compound types described in this chapter have similar tone patterns: agentive [\bar{x} \hat{v} -Ppl] compounds (§5.1.7), and bahuvrihi [\bar{n} \hat{a}] compounds (§5.2.1).

In (263), the initial is a place name, defining the origin or residence of the person(s) denoted by the final.

- (263) a. $d\acute{o}mn\acute{o}-\bar{n}\hat{e}-m$
 D-woman.HL-Pl
 ‘the women of Domno (village)’ **2004.3.3**
 [from $n\check{e}-m$ ‘women’]
- b. $\acute{u}r\acute{o}-\acute{u}r^n-\grave{u}m$
 house-child.HL-Pl
 ‘the children of the house’ **2004.3.1**
 [from $\acute{u}r^n-\grave{u}m$ ‘children’]

Further examples are in (264). I include (264.b) (‘guitar song’), whose final is already F-toned lexically.

- (264) a. $\grave{a}n\acute{a}-\acute{o}y\grave{d}-n$
 village-chief.HL-Sg
 ‘the chief (Hogon) of the village’ ($\acute{o}y\grave{d}-n$)
- b. $k\grave{a}n\acute{n}i:^n-n\hat{u}\eta$
 guitar-song.HL
 ‘guitar song (song accompanied by native guitar)’ ($n\hat{u}\eta$) **2004.3.20**
- c. $n\grave{u}m\acute{o}-g\hat{d}$:
 hand-granary.HL
 ‘granary built by hand’ ($g\hat{d}$;) **2004.3.27**

- d. kárgù-gô:
brick-granary.HL
'brick granary' (gô:) **2004.3.27**
- e. kú:ⁿ-dú:
head-load.HL
'load carried on head' (dú:)

When tone-dropping applies to such a compound, as before a modifying adjective or demonstrative or as relative-clause head, both initial and final drop their tones. Two of the compounds in (264), above, are shown in tone-dropped form in (265).

- (265) a. kù:ⁿ-dù: mǐ dé:-rà-Ø jì:ⁿ
head.L-load.L 1SgS.L carry-Habit-Ppl.Nonh Past
'the head load that I was carrying'
- b. kònì:ⁿ-nùŋ núŋò
guitar.L-song.L Dem
'that guitar song'

This [\bar{x} \hat{n}] compound type competes directly with the [\hat{x} \bar{n}] type. More than a little arbitrariness seems evident in the division between the two sets of compounds whose initial is èjú 'field, bush' (as compound initial often 'wild X').

(266)	compound	gloss
a. [\bar{x} \hat{n}]	èjú-námñù èjú-[ní-níw ⁿ è] èjú-péllè	'wild sesame' (< námñù) 'wild cat' (< ní-ní w ⁿ é) 'wild pigeon' (< péllè)
b. [\hat{x} \bar{n}]	èjù-èr ⁿ é èjù-ìjú èjù-nàŋá	'wild goat' (= 'gazelle sp.')
		'wild dog' (= 'side-striped jackal')
		'wild cow' (= 'African buffalo')

5.1.6 Nominalized verb-verb compounds (\bar{v} \acute{v} , or \bar{v} \hat{v} \acute{v})

Compounds, functioning syntactically as nouns, that consist of two or more verb stems chained together with no word-internal indication of nominalization may be produced more or less spontaneously.

The **final verb undergoes tone-raising** to all-H in my textual examples. The **initial verb has its usual lexical tone** as in chaining. In compounds with three verbs, the **medial verb usually drops tones to all-L**, resulting in an overall schema [$\bar{v} \hat{v} \acute{v}$]. Tone-dropping on the second of three verbs also occurs in unnominalized verb chains (§15.1.1), and tone-dropping on the second and subsequent stems is also found in verb-stem iteration (§11.6.2-3).

In (267.a), for example, “sniff-look-and-shit” is a colorful made-up name for Scorpion in a tale, following an episode where Hyena sniffs Scorpion (on a dare) and then defecates after being stung. ‘Defecate’ is normally a cognate-nominal plus verb combination bé: bě:-, the verb having R-tone, but in the compound we get -bé:-bé:. In (267.b), ‘have-diarrhoea-and-be-cured’ refers to a medical treatment involving a laxative.

- (267) a. jì n̄é-yàṅà-bé:-bé: mà d̄ùró:.
sniff-look.L-excrement-defecate.H Poss tail
‘the tail of “sniff-look-and-shit”, and ...’ (bé: bě:-) **2004.4.2**
- b. sárá-báyá bè j̄d̄ṅô:-Ø
have.diarrhoea-be.cured 3PIS.L heal.Impf-Ppl.Nonh
yó=kò
exist=be.Nonh
‘There is (a manner) whereby they (=healers) heal with “have-diarrhoea-and-be-cured”’ **2004.3.27**

When tone-dropping applies to such a nominal, all of the component stems are affected: jì n̄è-yàṅà-bè:-bè: núṅd̄ ‘that “sniff-look-and-shit”’.

5.1.7 Agentive compounds of type ($\bar{x} \hat{v}$ -Ppl)

The general pattern [$\bar{x} \hat{n}$] just described is also applicable to cases where the noun **compound final is an agentive**, i.e. consists of verb stem plus Participial suffix (for humans, Sg -n or Pl -m). The formula is therefore [$\bar{x} \hat{v}$ -Ppl]. The initial is usually a (logical) direct object, but may be an instrument (269.d) or a scene-setting spatio-temporal noun (269.e). The tones of the participial verb are consistent with those of ordinary perfective relatives, but in the relevant examples the activities denoted are not limited to the past. I do not hyphenate these examples, since they are still somewhat clause-like semantically and may be preceded by ì n̄è ‘person(s) who ...’. They are less lexicalized than the [$\bar{x} \acute{v}$ -Ppl] agentive compounds described below.

- (268) a. àsègέ dígè-n
 animal follow.HL-Ppl.Sg
 ‘one who follows animals’ (dì gέ-) **2004.3.9**
- b. ì nè [kàjú wàrà-m]
 person.L [calabash farm.HL-Ppl.Pl]
 ‘people who grow gourd (plants)’ (wàrà-) **2004.3.9**
- c. ù-jùwⁿó dánà-m
 Rdp-mouse hunt.HL-Ppl.Pl
 ‘hunters of mice’ (dàná-) **2004.3.16**
- d. à-tí:ⁿ dánà-m
 bird.trap hunt.HL-Ppl.Pl
 ‘bird trappers (=bird-trap hunters)’ (dàná-) **2004.3.16**
- e. [jénéŋé dánà-n],
 [metal.trap hunt.HL-Ppl.Sg]
 [nù-núwⁿò dánà-n]=î: là:,
 [Rdp-day.Loc.HL hunt.HL-Ppl.Sg]=it.is Neg
 [dà:γá dánà-n]=î:
 [night hunt.HL-Ppl.Sg]=it.is
 ‘A trapper (=metal-trap hunter) [topic], he is not a daytime hunter,
 (rather) he is a night hunter.’ (dàná-) **2004.3.16**
- f. ñè-n [î:ⁿ nárⁿá-wⁿà-n kùⁿ]
 woman.L-Sg [child bear-Caus.HL-Ppl.Sg Def]
 ‘the woman (=midwife) who helps deliver the child’ **2004.3.19**

This compound type is productive in the sense that it can be freely applied to new object-verb combinations. The more lexicalized agentives with incorporated object (or other complement), denoting occupations or other type-defining activities, are expressed by a different agentive compound type [x́ v-Ppl] with L-toned initial and H-toned final; see §5.1.9.

For a case where the initial is itself a compound (in purposive-clause function), see àmà-sàw-kúnò yérè-m ‘those who come to give blessings’ (1082.e).

5.1.8 Verb-verb or adjective-verb compounds of type (\hat{x} \hat{v} -Ppl)

This pattern, with **H(H...)L tone on the participle and L-toned verb or adjective stem as initial**, is very rare.

The lexicalized expression in (269) denotes a caste of women from distant villages who perform certain social functions in Jamsay villages (e.g. exhorting men to be valiant in hunting). Here both initial and final are motion verbs.

- (269) yà:-yérè-m
 go.L-come.HL-Ppl.Pl
 ‘the go-and-come women (a caste)’ (yà:-, yèré-)

There are some tonally similar but nonparticipial compounds, functioning as reduced purposive clauses, that occur before the verbs ‘sit down’, ‘go’, and ‘come’. Example: ñà:-ñê: dî ɲé- ‘sit down to eat’ (ñă: ‘meal’, ñé:- ‘eat’). These are described in §17.6.3.

5.1.9 Agentive compounds of type (\hat{x} \acute{v} -Ppl)

In this type of compound, there is a bare noun with overlaid **stem-wide L-tone**, followed by a verb in participial form (Sg -n, Pl -m) but with **stem-wide H-tone**. The formula is therefore [\hat{x} \acute{v} -Ppl]. Segmentally, such agentives may be indistinguishable from productive subject relatives with overt object (agentive “Deerslayer” versus relative “one who slays deer”), but the tones are a failsafe distinguishing factor, since in ordinary subject relatives the object NP has at least one H-tone and the participle cannot be all-H tone.

Examples of agentives with **non-cognate incorporated object** (or similar complement) are in (270). I transcribe them (unlike subject relatives) as single words. The components are listed in parentheses with their lexical tones after the free translation. This agentive type is usual in connection with occupations or other regular activities that define human roles.

- (270) a. tàrà-yá:-m
 collective.hunt.L-go.H-Ppl.Pl
 ‘those who go on collective hunts’ (tàrá, yă:- ‘go’) **2004.3.3**
- b. àsègè-dígé-m
 animal.L-follow.H-Ppl.Pl
 ‘herders (who follow livestock to pasture)’ (àsègè, dî gé-) **2004.3.9**

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- c. àsègè-háybé-n
 animal.L-protect.H-Ppl.Sg
 ‘animal custodian’ (àsègé, háybé-) **2004.3.9**
- d. [tì -tì rù]-yá:-m
 [Rdp-mission.L]-go.H-Ppl.Pl
 ‘those sent on missions or errands’ (tì -tírù, yǎ:-) **2004.3.15**
- e. bè:rù-já:-m
 errand.L-deliver.H-Ppl.Pl
 ‘those who deliver messages or sent items’ (bé:rù, já:-) **2004.3.15**
- f. jènèṅè-kúnó-m
 trap.L-put.H-Ppl.Pl
 ‘trap-setters’ (jénéṅé, kúnó-) **2004.3.16**
- g. èjù-nú:-n
 field.L-enter.H-Ppl.Sg
 ‘those who (regularly) go into the bush’ (èjú, nú:-) **2004.3.16**

If the verb is regularly paired with a **cognate nominal**, the latter is the default compound initial (271).

- (271) a. gò:-gó:-n
 dance(noun).L-dance(verb).H-Ppl.Sg
 ‘dancer’ (gó:, gǒ:-)
- b. nùṅ-núṅó-n
 song.L-sing.H-Ppl.Sg
 ‘singer’ (núṅ, nùṅó-) **2004.3.20**
- c. wàrù-wárá-n
 farming.L-farm(verb).H-Ppl.Sg
 ‘farmer’ (wárú, wàrá-) **2004.4.4**
- d. bì rè-bíré-m
 work(noun).L-work(verb).H-Ppl.Pl
 ‘workers’ (bíré, bì ré-) **2004.3.15**
- e. jàṅ-jáṅá-n
 plea.L-plead.for.H-Ppl.Sg
 ‘one who pleads (begs for things)’ (jáṅ, jàṅá-)

Occasionally the **initial can be expanded** as [noun + adjective] or as [possessor + noun]. This happens when the resulting complex initial is at least somewhat lexicalized.

- (272) a. [i:ⁿ-bà:yⁿ]-íní-rⁿé-m
 [child.L-newborn.L]-bathe-Cause.H-Ppl.Pl
 ‘those who bathe the newborn child (=midwives)’ (i:ⁿ bā:yⁿ,
 ìní-rⁿé-) **2004.3.19**
- b. [àjùwò-nòwⁿò]-gámárⁿá-m
 [new.mother.L-meat.L]-divide.H-Ppl.Pl
 ‘those who divide up the meat of (=given to) the new mother’
 (nòwⁿó, gàmàrⁿá-) **2004.3.19**
- c. [bì rè-pòrbà]-bírⁿé-m
 [work(noun).L-communal.L]-work(verb).H-Ppl.Pl
 ‘those who work (=do) collective work’ (pòrbá, bí rⁿé-) **2004.3.25**

It is possible to incorporate an **instrumental PP** instead of a simple (object) noun, when the instrument is a defining element for the occupation. The post-position *lè* is already L-toned. The noun undergoes tone-dropping.

- (273) a. [mànà-lè]-tá:ⁿ-m
 [plastic.L-Inst]-shoot.H-Ppl.Pl
 ‘slingshot shooters’ (i.e., those who shoot with slingshots, mánà)
2004.3.16
- b. dànà-n [màlfâ:ⁿ-lè]-tá:ⁿ-n
 hunt-Ppl.Sg.L [rifle.L-Inst]-shoot.H-Ppl.Sg
 ‘a rifle-shooting hunter’ (màlfâ:ⁿ) **2004.3.16**

(274) is a rare case where the L-toned initial is a **chained verb**, cf. verb *yò:ró-* ‘stalk, lie in wait for’, which occurred in the immediately preceding discourse.

- (274) yò:rò-tá:-m
 stalk.L-shoot.H-Ppl.Pl
 ‘(hunters) who stalk and shoot’ **2004.3.16**

5.1.10 Compounds with -î:ⁿ ‘child of’

The human noun ‘child’ (Sg î-n, Pl úrⁿ-ùm) corresponds to nonhuman î:ⁿ, which can mean ‘child’ (of an adult animal) or just ‘juvenile (animal)’, ‘fruit’ or ‘seed’ (of plant), a small object paired with a larger object, a part of a two-part or other complex object, or a diminutive version of a normally larger object. There is ample room for semantic specialization for specific lexical items.

The initial always undergoes **tone-dropping**. When the initial ends in a short vowel, VV-Contraction (90) may occur (275.a), but more often does not (275.b). No contraction occurs after a long vowel (275.c). Of course there is no phonological change when the initial ends in a consonant (275.d).

(275) a. final short vowel of the initial is elided before -î:ⁿ

ìj-î:ⁿ
dog.L-child
‘puppy’ (< ìjú)

èñ-î:ⁿ
chicken.L-child
‘chick’ (< èñé)

àn-î:ⁿ
roselle(plant).L-child
‘roselle seed’ (< ànú)

jèn-î:ⁿ
spinning.stick.L-child
‘terre cuite weight (whorl) for holding stick used in spinning cotton’ (the assemblage is called jènè-kará)

b. no elision of final short vowel of initial

jòṅṅ-î:ⁿ
hare.L-child
‘juvenile hare’ (< jòṅṅó)

bèrè-î:ⁿ
stick.L-child
‘any of several erect herbs whose stems shed their foliage’ (< béré)

- nùmò-î:ⁿ
hand.L-child
'finger; tree branch' (< nùmó)

 - jì rè-î:ⁿ
eye.L-child
'eyeball' (< jì ré)

 - jàràwà-î:ⁿ
hoe.L-child
'metal part of hoe (excluding wooden handle)' (< járáwá)

 - tùmò-î:ⁿ
stone.L-child
'pebble; gravel' (< tùmó)

 - sèwè-î:ⁿ
paper.L-child
'amulet' (for carrying written spells; < séwè)

 - ḍḡḍ-î:ⁿ
chief.L-child
'nobility, high class' (< ḍḡḍ-n 'chief')
- c. no elision of final long vowel of initial
- [nùm-nà:]-î:ⁿ
[?-mother]-child
'small round grinding stone' (< nùm-ná: 'flat grinding stone')
- d. initial already ends in consonant
- nà:m-î:
cotton.L-child
'cotton grain(s)' (< nǎ:m)

Some no-longer-segmentable nouns ending in ...î:ⁿ may have originated as diminutive compounds with -î:ⁿ. Examples: gòrⁿî:ⁿ 'knife with curved blade', kòñî:ⁿ 'native guitar', kòrⁿî:ⁿ 'intestine', mḍtî:ⁿ 'pestle' (called 'mortar-child' in e.g. Songhay).

sà:j-î:ⁿ ‘bird’ is related to the much less common synonym sàjú. Likewise, mén ‘bracelet’ has a diminutive mèn:n-î:ⁿ. Both mèn:n-î:ⁿ and sà:j-î:ⁿ show **irregular lengthening** of the first vowel.

A special case semantically is bà:î:ⁿ ‘enemy, rival’, literally ‘father-child’ (perhaps in the sense ‘father’s child’, i.e. brother or parallel cousin). Similar compounds occur in some Songhay languages and the pattern is probably regional.

5.1.11 ‘Man’ (-àrⁿá, àrⁿá-), ‘woman’ (-yǎ:, yà:-, yè-)

As simple nouns, ‘man’ is ǎ-n (Pl àrⁿ-úm) and ‘woman’ is ñě-n (Pl ñě-m). Either can be modified by a following adjective, and either can appear as the initial in newly minted compounds: ñě-n tɛyⁿ-ín ‘small woman’, ñě-n tànùŋ-ú ‘the transfer of a bride (to her husband’s house)’.

As compound finals (or arguably modifying adjectives), we get àrⁿá ‘male’ and yǎ: ‘female’. àrⁿá is probably just the archaic form of the stem in ǎ-n, cf. the latter’s plural àrⁿ-úm (169). àrⁿá also occurs in expressions relating to male military bravado: àrⁿá lè ‘in fighting mode (armed men)’, àrⁿá-kájù ‘fearless (warrior)’.

ǎ-n and ñě-n are used, for example, to specify gender for otherwise gender-unspecified kin terms, or for ethnic terms. Consider the somewhat complex set of forms based on the kin term tì ré in (276).

(276)	a.	tì ré	‘grandparent’ (unpossessed)
		tírè-n	‘grandparent’ (possessed)
	b.	tì rè-ǎ-n	‘grandfather’ (unpossessed)
		tírè-ǎ-n	‘grandfather’ (possessed)
	c.	tì rè-ñě-n	‘grandmother’ (unpossessed)
		tírè-ñě-n	‘grandmother’ (possessed)
	d.	tì rè-àr ⁿ á	‘male ancestor’
	e.	tì rè-yǎ:	‘female ancestor, ancestress’

Here we see that the regular ‘man’ and ‘woman’ terms are used to distinguish the two genders of ‘grandparent’ (276.b-c), while the ‘male’ and ‘female’ compound finals are used in a more abstract sense ‘ancestor’ (276.d-e).

Another case of -yǎ: with human reference is àyà-yǎ: ‘(woman’s) co-wife’. This is based on áyà ‘husband; husband’s sibling’, and is therefore literally

‘husband-woman’. ‘Co-wife’ is the relationship between two women married to the same (bigamous) husband.

-àⁿá and -yǎ: compound finals are commonly used with names of animals to denote gender: ìjù-àⁿá ‘male dog’, ìjù-yǎ: ‘female dog’ (ìjú). They are used more abstractly to differentiate similar plant or insect species, or implements. The basis for the distinction is variable; in some cases -àⁿá is used with the larger or more powerful implement. béré is the general word for ‘stick’, while bèrè-àⁿá means ‘large ceiling beam’. nùmó means ‘hand’, nùmò-ì:ⁿ (“hand-child”) means ‘finger’, and nùmò-àⁿá (perhaps contracted from *nùmò-ì:ⁿ-àⁿá) means ‘thumb’.

For natural species, the ‘male/female’ distinction may be based on shape (long thin = male) or other locally relevant characteristics (informants cannot always explain why one species is ‘male’ and the other ‘female’). For example, ú:n̄ùm is the general term for herbs of the genus *Cleome*, but individual species can be distinguished as ù:n̄ùm-àⁿá and ù:n̄ùm-yǎ:, respectively. Likewise, námségè is a general term for grasshoppers of the family Catantopinae (division of Acrididae), and more precise terms are námségè-àⁿá (*Cryptocatantops*) and námségè-yǎ: (*Diabolocatantops*). Incidentally, another subcategory (applied to two less conspicuous species, *Harpezocatantops* and *Catantops*) is námségè-gùnó, i.e. “slave of námségè”.

In a number of frequent combinations, ‘woman’ appears in a special compound-initial form yà:- or yè- (variant yà-) instead of ñě-n (or L-toned ñè-n) (277).

- | | | | |
|-------|----|-------------------------|---------------------------------------|
| (277) | a. | yà:-gó: | ‘women’s dance’ |
| | | yà:-kú: ⁿ -n | ‘unmarried young woman’ |
| | | yà:-pàní-n | ‘widow’ (see variant with yè- below) |
| | | yà:-tàgú | ‘woman’s shoes’ |
| | | yà:-lògú | ‘funeral tomtom music for woman’ |
| | b. | yè-kàná-n, yà-kàná-n | ‘newly married woman’ |
| | | yè-pàní-n | ‘widow’ (see variant with yà:- above) |

Other stems that might contain a frozen compound initial of this type, but are not synchronically segmentable, include yèsǎ: ‘sister’, yà:lěy ‘woman’s wrap (garment)’, and yà:jí: ‘marriage’. yà:-là-ý ‘marriage (directly arranged by groom)’, is interpreted by my informants as having yǎ:- ‘go’ as initial (and the VbIN of -lá:- ‘choose’ as final), but perhaps the historical source was yà:- ‘woman’.

A parallel male compound initial àⁿà- is less common (278).

- (278) àrⁿà-kû:ⁿ-n ‘unmarried young man’
 àrⁿà-tǒ: tó:- ‘scold a child’ (noun plus verb)
 àrⁿà-lògú ‘funeral tomtom music for man’

Another noun, now unsegmentable, that might contain this initial historically is àrⁿàkǒyⁿ ‘boubou (man’s robe)’. The noun underlying compound initial àrⁿà- is àrⁿá, but it has a specialized sense ‘getting armed (for battle or for the bush)’, in several expressions: compound adjective àrⁿá-kájù ‘fearless’ (tones as in bahuvrihi compounds), adverbial PP àrⁿá lè ‘in fighting mode’, noun-verb combination àrⁿá ùró- ‘(men) get armed (for battle)’, nominal compound àrⁿà-nì:ñé ‘man’s gear for the bush’ (knife, etc.). There is a homonym àrⁿá ‘rain’, with compound-initial form àrⁿà-.

The regular forms for ‘man/men’ and ‘woman/women’ are used in loose compounds with Possessive mà. For example, one text distinguished ñě-m mà jòη-jǒηǒ-m ‘women (=female) healers’ from àrⁿ-úm mà jòη-jǒηǒ-m ‘men (=male) healers’. In the text it is clear that the reference is to the sex of the healers, not to that of those whom they treat (i.e. not ‘healers of women’, ‘healers of men’).

5.1.12 ‘Owner of’ (Sg bánà or bâ:ⁿ, Pl nám)

bánà or bâ:ⁿ following an NP means ‘owner of NP’ or ‘one who has NP’. It can also be used with a place name P to mean ‘person from P, resident of P’. The overall tone contour is consistent with that of (\bar{x} ñ) compounds (§5.1.5).

- (279) a. [pé:tàγà bâ:ⁿ]≡yⁿ
 [P **owner**]≡it.is
 ‘He is a resident of Petaka (village).’ **2004.3.4**
- b. ú [èjú bâ:ⁿ kùⁿ]
 2Sg [field **owner** Def]
 ‘you-Sg, the owner of the field’ **2004.3.10**

The plural counterpart of bánà (or bâ:ⁿ) is nám. This (human) Pl morpheme also occurs in gàmà-nám ‘certain ones, some (others)’ (Pl of gámá ‘a certain’, §6.3.2), and in nùηð-nám ‘those’ (§4.4.1.1).

- (280) a. cèm-[tà-yⁿ]-[tà-ýⁿ] nám
 bow-and-arrow **owners**
 ‘those who have bows and arrows’. **2004.3.2**

- b. [[kó kùⁿ] nám kâ:ⁿ nè] yó=wò-bà
 [[Nonh Def] **owners** also now] exist=be.Hum-3PlS
 ‘There are also those who are engaged in that (dry-season farming).’ **2004.3.9**
- c. à:má nám
 Amba **owners**
 ‘residents of Amba (a village)’ **2004.3.11**

In the case of úró bánà ‘house owner’ (i.e. ‘head of household’), the plural úró nám generally means ‘people of the house’ (i.e. ‘members of household’). An analytic plural úró bánà bè can be used for the sense ‘house owners’.

As noted above, both the compound final bâ:ⁿ (bánà) or Pl nám and the variable compound initial NP have their usual tones. In other words, the two elements are tonally autonomous (§6.1.4). When tone-dropping is required, either due to a following adjective or demonstrative, or externally induced (head NP of relative), both elements drop their tones (281.b-c).

- (281) a. màlfâ:ⁿ bâ:ⁿ
 rifle owner
 ‘one with a gun’
- b. màlfâ:ⁿ bà:ⁿ nùṅò-bâ:ⁿ
rifle.L owner.L Dem.L-owner
 ‘this/that one with a gun’
- c. [màlfâ:ⁿ bà:ⁿ] gô:-n.: fú:
[rifle.L owner.L] go.out.Perf.HL-Ppl.Sg all
 ‘everyone with a gun who went out (to the bush)’ **2004.3.24**

In the sense ‘(someone’s) people, relatives, ancestors’, nám is a simple, alienably possessed noun: émé nám ‘our kin, our ancestors’ (**2004.4.24**). With a preceding NP, Possessive mà is required in this sense (282).

- (282) [émé ànà núṅò] mà nám
 [1PIP village.L Dem] Poss **people**
 ‘the people of our village’ **2004.3.11**

In the sense ‘master (e.g. of slave)’, bánà is used with an **inalienable possessor**: mì bánà ‘my master’. The plural in this sense is not nám, rather bánà bé. In (283), an occasional epithet for ‘God’, a pronominal possessor

(L-toned, as for inalienable noun) takes the place of the compound initial. The phrase translates literally as ‘our Master man’.

- (283) èmè bǎŋà ǎ-n
 1PIP.L owner man-Sg
 ‘our Lord’ (= ‘God’) **2004.4.16**

In a single textual example, bǎ:ⁿ occurs at the end of a relative clause (284).

- (284) yèré nàná-m̀ bǎ:ⁿ fú:
 come drive.off.Impf-Ppl.Pl **owner** all
 ‘any one of those who come and drive off (=rustle cattle)’ **2004.4.24**

Without fú: ‘all’ (here in distributive function), the phrase yèré nàná-m̀ bǎ:ⁿ has singular reference: ‘one of those who come and ...’. In other words, the plural participle yèré nàná-m̀ ‘those who ...’ has partitive function.

bǎŋà (bǎ:ⁿ) and Pl nám also occur in a construction with L-toned initial. The examples known to me, some presented earlier, are in (285). Those in (285.a) are based either on deictic demonstrative núŋò, cf. (202), on anaphoric demonstrative ǎn-kò, cf. (210.b), on Proximal ní- (§4.4.1.2), or on discourse-definite kò ‘that (same)’, cf. §4.4.2.2. The combination with numeral ‘one’ (285.b) is not common but did occur in a text.

- (285) a. nùŋò-bǎ:ⁿ ‘this/that’ (human Sg),
 nùŋò-nám ‘these/those’ (human Pl)
 ǎn-kò-bǎ:ⁿ ‘that’ (human Sg, anaphoric)
 ǎn-kò-nám ‘those’ (human Pl, anaphoric)
 nì-bǎ:ⁿ ‘this’ (human Sg)
 nì-nám ‘these’ (human Pl)
 kò-bǎ:ⁿ ‘that (same) one’ (human Sg)
- b. tùrù-bǎ:ⁿ ‘one person, someone’ (uncommon) **2004.3.21**

For gàmà-nám ‘some, certain (ones)’, plural of gámá ‘(a) certain (one)’, see §6.3.2.

5.1.13 Loose and tight compounds with ná: (‘authentic’, ‘entire’)

The compound final -ná: is related to nǎ: ‘mother’. The connection is felt by natives and there are similar ‘mother’ compounds in other languages of the zone.

ná: is occasionally used in loose compounds of the possessive type [NP mà ná:] with Possessive morpheme mà. The sense is ‘true (authentic, genuine) X’, denoting for example the focal referent of a species term rather than a similar-looking one. For further emphasis, the construction may be iterated: [NP mà ná: mà ná:] as in (286.a).

- (286) a. [[yà:yérè-m mà ná:] mà ná: ké]
 [[go.L-come.HL-Ppl.Pl Poss **true**] Poss **true** Top]
 dómnó yó=kò⇒, gùrú yò=kò⇒, ...
 D exist=be.Nonh, G exist=be.Nonh, ...
 ‘As for the “go-come” women strictly speaking, there are some in Domno (village), some in Gourou (village), ... **2004.3.3**
- b. [ì nè gàmà-nám] [[nì: lùgó lè] mà ná:]
 [person.L certain-Pl] [[day.L count(noun) Inst] Poss **true**]
 kó jì nè-bà
 NonhO have.Perf.L-3PlS
 ‘Some people [topic], they have a true count of days (=precise schedule) for it (=tanning hides).’ **2004.3.17**
- c. [kò ké], [ñě-m mà gǎnè]
 [Nonh Topic], [woman-Pl Poss between]
 mà jóη=í: mà ná:,
 Poss healing=Foc Poss **true**,
 [ñě-m mà jòη-jóηó-m] cé=y
 [woman-Pl Poss healing.L-heal.H-Ppl.Pl] possession=it.is
 ‘That (=purging intestines of child) [topic], it is strictly a (type of) healing among (=performed by) women; it belongs to women healers.’ **2004.3.27**

The construction is sometimes used with a (possessor) pronominal, where identity is focal (287).

- (287) a. émé [jì rⁿè-bì r^è]-bír^é-m=í:
 1PIP [wet.season.L-work(noun).L]-work(verb).H-Ppl.Pl=it.is
 sǎy, [émé ná:], àsègè-mǎη-Ø jì rⁿè-bír^é,
 only, [**1PIP true**], animal.L-raise-VblN wet.season.L-work(noun),
 [[émé òrú] mà pàηá ké] yí-dì:="yⁿ
 [[1PIP matter] Poss strength Topic] here=it.is
 ‘That’s just our wet-season workers (=farmers, who often go south after the harvest). (As for) us specifically, we raise animals and do

wet-season farming. (As for) the strong point of our situation (=our main activity), it is in this area.' **2004.3.9**

- b. wó [ɛ́nɛ̀ mà ná:] j̀̀:-gó-Ø⇒
 3SgS [Logo Poss **true**] know-ImpfNeg-3SgS
 '(He said:) you don't know me truly (=you have no idea who I am).' (j̀̀gó-) **2004.4.4**

- c. [[kò màbîl] bérè ké] [kó ná:·. fú:] nêyⁿ≡yⁿ
 [[Dem vehicle] in Topic] [NonhP **true** all] blood≡it.is
 'Inside the vehicle, the whole thing was (nothing but) blood.'
2004.5.1

The 1Sg counterpart (elicited) is má ná:, with 1Sg (alienable) possessor má.

[X mà ná:] can be extended to cases where X is a VP (ending in a bare verb stem), in expressive emphatic function. In (288), the speaker admonishes a hypothetical farmer to keep working in his field even after the millet has begun to grow well.

- (288) [á èjú] [káwá mà ná:] b̀̀r̀̀-é-gó-w
 [2SgP field] [be.separated Poss **true**] be.able-ImpfNeg-2SgS
 'You-Sg can't stay away at all from your field.' **2004.3.6**

In (289), the X in [X mà ná:] is an adverbial clause with a pseudo-participle based on the lexical stem of a verb (§15.2.1.3).

- (289) yá:≡ỳ̀ dèy, [[yè-kànà]-c̀̀r̀̀ⁿèwⁿé c̀̀r̀̀ⁿéwⁿé-n déy
 yesterday≡it.is if, [[woman-new.L]-fun have.fun-**Ppl.Sg** if,
 mà ná:] wí-wô:-bà
 Poss **true**] Rdp-be.Hum.Perf.HL-3PIS
 'If it's yesterday (=if we're talking about the past), they used to really perform festivities for the newlywed bride.' **2004.3.20**

As a noun, ná: can also mean '(entire) plant', as opposed to a smaller focal part such as a fruit. In (290), the reference is to the main body of the millet plant (stem, leaves, and perhaps roots) which is laid down in the field as fertilizer after the grain-bearing ear has been harvested.

- (290) ñú: [kó ná: .: fú:] sá: únó mèyⁿ†, ...
 millet [NonhP **plant** all] cut.down lay.down and, ...
 ‘Millet, they cut down and lay (in the field) its plant (stem and all), and ...’ **2004.3.6**

Tight compounds of the form [noun-ná:], with no linking mà, are more common but are rather lexicalized. With natural-species and especially with implement terms, the usual sense is ‘authentic’ or ‘prototypical’ (291.a). In some cases, a formerly prototypical variety still called by such a compound may no longer be the most common variety. Compounds with -ná:, like the possessive type in (290), can be used to denote entirety (especially of a plant, as opposed to its fruit or other well-known part) (291.b). However, an element of authenticity may also be involved in the examples in (291.b); for example, there are some ‘false indigo’ plants in the zone, and some types of wood that resemble but do not equal cì ré (whose wood is prized by blacksmiths).

(291)	stem	gloss	compound	gloss
a.	àr ⁿ àkǒy ⁿ	‘boubou’	àr ⁿ àkǒy ⁿ -ná:	‘large boubou’
	bèrú	‘goat’	bèn-ná:	‘common goat breed’ (also ‘nanny-goat’ or just ‘goat’)
	èmé	‘sorghum’	èmè-ná:	‘a sorghum cultivar’
	é:ré	‘peanut spp.’	è:rè-ná:	‘groundnut’ (one of two types of é:ré)
	gù-gûn	‘melon(s)’	gù-gùn-ná:	‘watermelon’
	ñú:	‘millet’	ñù:-ná:	‘ordinary millet’
b.	cì ré	‘wood type’	cì rè-ná:	‘tree sp. that provides cì ré’
	gàrá	‘indigo; dye’	gàrà-ná:	‘indigo bush’

[dúró-gúrù]-[ná:-tèyⁿ] ‘long-tailed bird spp.’ is a combination of two bahuvrihi compounds, dúró-gúrù ‘long-tailed’ and ná:-tèyⁿ ‘small-bodied’.

Compounds with ná: are generally nonhuman. However, I can cite a human example with Sg suffix -n (292).

- (292) á mà òyò-ná:-n, [èn é mà céllâl] dá yá
 God chief-true-Sg, [Logo Poss health] leave.Imprt
 ‘(She will say:) “Oh God (the) true Lord, leave (me with) my health!”’
2004.4.12

5.1.14 Natural-species compounds with medial -ná:/-nà- or -gó/-gá-

Another type of compound is X-ná:/nà-X, with -ná:- or -nà- separating iterated occurrences of a morpheme X. Recall that a-vocalism is typical in the medial B element in A-B-A iterations involving nonsense stems (§4.2.6). The known examples of X-ná:/nà-X, two denoting insects and one denoting a grass, are given in (293.a-b). Also given are two fauna compounds used in hunters' jargon with a medial element -gó/-gá-, describing gaits (293.c-d).

- (293) a. jón-ná:-jórù 'blister beetle' (Meloidae) (cf. jórù 'blister')
 són-ná:-sórù 'long-nosed grasshopper' (*Acrida*)
- b. bù:ⁿ-nà-bú:ⁿ 'tall grass sp.' (*Andropogon*)
- c. dól-gó-dól 'ostrich' (cf. dól-dól 'clumsily going down a slope')
- d. jèyⁿ-gá-jèyⁿ 'ratel (honey badger)' (cf. jèñé 'lift up')

In the two insect terms (293.a), the initial has undergone Post-Sonorant Syncope (60) and Rhotic Assimilation (77). The repeated element is independently attested in one case (jórù 'blister'), but not in the other (-sórù).

For iterative adjectival compounds of the type pèyⁿ-nà:-pèyⁿ 'very old', with L-toned initial and -nà:-, see §5.1.14.

5.1.15 Instrumental relative compounds ('oil for rubbing')

The phrasal compounds in this section have the form of relative clauses (of variable degree of frozenness) with impersonal 3Pl subject, an L-toned head noun, and an unsuffixed Imperfective participle with Nonhuman Participial -Ø suffix. The L-toned head noun often represents an instrument associated with the activity, but there is no overt case-marking specifying instrumental or other function. I will refer to it as the '**oil for rubbing**' construction. An example is (294).

- (294) [[gùjù bè ì ñê:-Ø]
 [[**skin.L** **3PIS.L** lie.down.Impf-Ppl.Nonh]
 kó táná-ŋá-m̀] yó=kò
 NonhO become-Caus.Impf-Ppl.Pl] exist=be.Nonh
 'There are people who turn them (=hides) into skins for lying down
 (=sleeping on).' **2004.3.17**

That the 3Pl subject is invariant (and hence impersonal) is demonstrated by passages where the 3Pl is mis-matched to e.g. a 3Sg (295.a) or 2Sg (295.b) protagonist who would be the logical user of the item.

- (295) a. [émé à-n gǎ-n] sàrí: jè:ré gá: kân,
 [1PIP man-Sg.L old-Sg] plow bring say after,
 [àsègè kó bè wàrà-wâ:-Ø]
 [**animal.L** NonhO **3PIS.L** farm-Caus.Impf-Ppl.Nonh]
 yé sà-Ø
 exist have-3SgS
 ‘An old man of ours, after he brought a plow (to the village), he had animals for farming it (=field), (but he still didn’t use the plow)’
2004.3.7

- b. [cè: bè kàⁿà:-Ø làyá] sà:-rá-w
 [**thing.L** **3PIS.L** do.Impf-Ppl.Nonh.L other] have-Neg-2SgS
 tàṅà dèy
 happen if
 ‘If it happens that you-Sg have nothing else to do’ **2004.3.9**
 [for kàⁿà:-Ø > káⁿâ:-Ø see (321.b) and comments there]

Verbs (VPs) may be **chained** (§15.1). In (296.a), all three actions denoted by verbs are carried out using the instrument (baskets). In (296.b), only the second verb ‘put’ involves the instrument (baskets again), though admittedly ‘cut’ and ‘put’ refer to actions that are closely integrated. In other cases, a single verbal idea is expressed by a two-verb sequence, as with the borrowed French stem *utiliser* ‘use’ (not directly inflectable) plus inflectable ‘do’ in (296.c). (296.c) also shows that **a PP may be included** in the ‘oil for rubbing’ construction.

- (296) a. cè: bàrá jǎ: bè tónô:-Ø kùⁿ
 thing.L **gather deliver** 3PIS.L **dump**.Impf-Ppl.Nonh Def
 ‘what they gather, deliver, and pour out (millet ears) with (=i.e., baskets)’ **2004.3.6**
- b. céjé cè: bè kúnô:-Ø
cut thing.L 3PIS.L **put**.Impf-Ppl.Nonh
 ‘what they cut (millet ears) and put in (i.e., baskets)’ **2004.3.6**
- c. cè: [ní: lè] *utiliser* bè káⁿâ:-Ø
 thing.L [**water for**] **use** 3PIS.L **do**.Impf-Ppl.Nonh
 ‘what they use for (containing) water.’ **2004.3.13**

In the constructions given above, the imperfective verb has only one argument, represented by the L-toned noun. However, the verb may have **two arguments**, often a direct object (=patient) and an instrument, the latter being the head. In this case, the direct object immediately precedes *bè*, and takes its regular tones (i.e. it does not undergo tone-dropping). The instrumental head noun N_1 can be incorporated in either of **two ways**. First, it can be added in the form [*mà N₁*] after the remainder of the construction. This (uncommon) construction is structurally equivalent to a “headless” relative clause followed by [*mà N₁*] containing the only occurrence of the head noun, a pattern attested, but not very common, in other relative clauses; see (802) in (§14.1.1). The second construction, considerably more common, is to prepose the instrumental noun in L-toned form to the remainder of the construction, which can be thought of as a postnominal modifier (i.e., an expanded adjective). This is essentially just an expansion of the type illustrated above, with the extra direct object noun following the L-toned head.

Both the instrumental [*mà N₁*] add-on option, and the preposed L-toned instrumental option, are exemplified in (297). This is from a longer passage listing several earthenware (pottery) products made by women of the blacksmith caste. The instrumental nouns are bolded in the interlinears.

- (297) [[*ní: bè ì nê:-Ø*] *mà wè:r'é*] *bé mǎ:⇒*,
 [[water 3PIS.L bathe.Impf-Ppl.Nonh] **Poss bowl**] 3Pl build.Impf,
 [*pè:rè jì ré bè súmô:-Ø*] *bé mǎ:*
 [**small.bowl.L** eye 3PIS.L wash.Impf-Ppl.Nonh] 3Pl build.Impf
 ‘Earthenware bowls for bathing, it’s they [focus] who make them; small earthenware bowls for washing the face, it’s they [focus] who make them.’ (pé:rè) **2004.3.13**

The pattern with preposed L-toned instrumental noun, like that headed by *pé:rè* ‘small bowl’ in the preceding example, is by far the more common. Further examples are in (298). *cě:* ‘thing’ may be used a default head (298.b).

- (298) a. *kó nì :ñè jèrú bè jèrê:-Ø*
 NonhO **gear.L** harvest(noun) 3PIS.L harvest.Impf-Ppl.Nonh
 ‘the gear for harvesting it (=millet)’ **2004.3.6**
- b. *cè: ñú: kúnó bè dàrâ:-Ø*
thing.L millet put 3PIS.L sling.Impf-Ppl.Nonh
 ‘what they put millet in and sling over their shoulder (i.e., shoulder bag)’ **2004.3.6**

- c. sèyⁿ [làg-ú bè láyâ:-Ø],
axe.L [hit-VblN 3PIS.L hit.Impf-Ppl.Nonh]
 sî rù [cěⁿ-yⁿ bè cê:ⁿ-Ø]
knife.L [slaughter-VblN 3PIS.L slaughter.Impf-Ppl.Nonh]
 ‘an axe for striking (animals), a knife for slaughtering (them).’
2004.3.16
- d. [pòsòŋ tǒy bè tǒ:-Ø] éwé-w̄
 [**poison.L** sowing 3PIS.L sow.Impf-Ppl.Nonh] buy.Impf-2SgS
 ‘You-Sg will buy some poison for spreading (i.e. in powder form).’
2004.3.8

The [mà N₁] extension is (rarely) also used when there is only one NP complement. In (299), the extension may have been favored by the presence of the universal quantifier cêw, which is preferentially adjacent to the noun that it has direct scope over.

- (299) [nì: [ká: lè] bè nǒ:-Ø] mà ní: cêw
 [water.L [mouth Inst] 3PIS.L drink.Impf-Ppl.Nonh] **Poss water** all
 ‘all of the drinking water’ **2004.4.5**

The construction is stretched to its outer limits in (300), from a passage describing various items that must be offered to the bride at the time she is ceremonially transferred (in a large and boisterous parade) from her own home to her husband’s. The final ‘oil for rubbing’ is straightforward, but it is preceded by a much more complex instance of the construction.

- (300) [wó kû:ⁿ] [yì rù pì rù] bè gòró mèyⁿ
 [3SgP head.Loc.HL] [**garment.L white.L**] **3PIS.L** cover and
 [yè-kàná wó bè táná-ŋâ:-Ø kùⁿ] mà
 [woman-new 3SgO 3PIS move-Cause.Impf-Ppl.Nonh Def] Poss
 [yì rù bè gòrô:-Ø kùⁿ]
 [**garment.L 3PIS.L** cover.Impf-Ppl.Nonh Def]
 jǎ:-bè, [nùŋ bè párá:-Ø] jǎ:-bè
 take.Impf-2PIS, [**oil.L 3PIS.L** rub.on.Impf-Ppl.Nonh] take.Impf-2PIS
 ‘You-Pl will take a garment for covering her on her head with a white garment and (=while) conveying her (to her husband’s home) as a newlywed, (and) you-Pl will take oil for rubbing.’ **2004.3.20**

Instead of a simple sequence based on [noun.L object they.L VERB.Impf] (‘a garment for covering her’), the phrase headed by ‘(white) garment’ is elaborated by chaining the VP ending in ‘cover’ with a second VP denoting the

transfer of the bride. The 3Sg pronominal denoting the bride, who is the logical object of ‘cover’ as well as of ‘take (=convey)’, is expressed only in the ‘take’ VP. This gives us a schematic pattern (301) for the relevant part of (300).

- (301) [[on her head] **[garment.L white.L]** they.L cover and]
[as-newlywed **her** they.L transfer.Impf]

The two cases of L-toned preverbal 3Pl subject *bè* in this part of the construction are arguably of different natures referentially. The first, following ‘white garment’, is the impersonal and invariant 3Pl mentioned above, while the second is perhaps a regular 3Pl pronoun referring to the people accompanying the bride in the parade.

(301) is then complicated further by adding a [*mà* NP] phrase, with Possessive *mà* plus a repeat of the NP functioning as head of the relative (here, ‘white garment’, simplified to ‘garment’). Such head repetition is common in relative clauses, but all my other examples of the [*mà* NP] add-on involve just an unmodified noun following *mà* (§14.1.1). The expected form of the add-on in (300) would therefore have been just *mà yì rú* with the noun ‘garment’. However, the speaker elaborated this by including repetitions of 3Pl subject *bè*, the verb *gòró-* ‘cover’ (now in unsuffixed Imperfective rather than chained bare-stem form), and Definite *kùⁿ*. The final structure as seen in (300) is therefore (302), where the two occurrences of the head are bolded.

- (302) [[[on her head] **[garment.L white.L]** they.L cover and]
[as-newlywed her they.L transfer.Impf]]
of **[garment.L** they.L cover-*Impf*]

Though productive and expandible, as the last example shows, the construction lends itself to lexicalization, since it often denotes a common implement or container. In some cases, it seems best to write the combination as a single hyphenated word. For example, (303.a) could be parsed literally as ‘heart for fighting a fight (with)’, but has a lexicalized sense denoting a personality trait. ‘Slingshot’ (303.b) contains 3Pl subject *bè* and unmarked Imperfective *tâ:ⁿ* ‘shoot’; the initial is *mánà*, whose basic sense is ‘plastic’, most often referring to the lightweight shopping bags found in markets, though it can also mean ‘slingshot’.

- (303) a. *cènè-jéy-bè-jèyê:-Ø*
heart.L-fight(noun)-**3PIS.L**-fight.Impf-Ppl.Nonh
‘combativeness, aggressiveness’ (e.g. of cobra) **2004.3.5** (*cénè*)

- b. mánà-bè-tâ:ⁿ-Ø
 plastic.L-**3PIS.L**-shoot.Impf-Ppl.Nonh
 ‘slingshot’ (mánà)

5.1.16 Other phrasal compounds

Phrases and sentences, sometimes morphologically reduced, can be used as nouns. Some examples follow.

è:-mí-té:rè ‘time when millet begins to develop ears’ is from é- ‘see’, 1Sg mí, and té:rè- ‘show’. The “syntax” here is somewhat opaque, but it can be taken to have a literal meaning ‘see (it) and show (it) to me’. It reflects the curiosity among Jamsay farmers as to the timing of the first appearance of millet ears (seed spikes) during the growing season. Of course the ears appear first in a few plants within a field, and in one field before another field, so there is much interest in the first reports of ear development.

5.1.17 Unclassified nominal compounds

Belonging to no obvious tonal “type” of compound is the form in (304).

(304) jì ré-lì jíjù ‘bush sp.’ lit. “eye-rubbing”

This consists of jì ré ‘eye’ without tonal change, plus a final in the form of a nominal (not separately attested) that is identical segmentally to the Verbal Noun lì gǐ j-ú ‘rubbing (eyes)’.

5.2 Adjectival compounds

5.2.1 Bahuvrihi (“Blackbeard”) compounds (ñ â)

In **bahuvrihi** compounds (cf. *Blackbeard*, *blueblood*, etc., denoting persons), the initial is a noun and the final is an adjective or numeral. The compound as a whole describes a person or other entity who is characterized by the denotatum of the initial noun as modified by the adjective or numeral. The bahuvrihi can be used as an adjective (modifying a preceding noun), or as a noun (perhaps there is an implicit but unexpressed preceding noun.)

In bahuvrihi compounds, the initial noun has its **regular lexical tone**, and a **H(H...)L tone pattern** is overlaid on the adjective or numeral. The formula is therefore [ñ â], where the symbol “a” represents “adjective/numeral.” This is

the same tone pattern we see with $[\bar{x} \hat{n}]$ and agentive $[\bar{x} \hat{v}\text{-Ppl}]$ compounds (§5.1.2, §5.1.8), and in inalienable possession (§6.2.2). The H(H...)L pattern is also found in unsuffixed Perfective participles in relative clauses (§14.1.8). The bahuvrihi as a whole may be added, as an adjective (or subject relative), to a head noun denoting the actual referent of the expression.

5.2.1.1 *With adjectival compound final*

Examples of bahuvrihi compounds with an ordinary adjective as final are in (305). The initial has its regular tones. The final has the H(H...)L tone overlay. The type is productive.

(305)	gloss	nonhuman	human Sg
	‘belly-fat’ (=potbellied)	bèrè-dùgù	bèrè-dùgì -n
	‘leg-bent’ (=bowlegged)	kó:-gǔn	kó:-gǔnì -n
	‘leg-crooked’ (=knock-kneed)	kó:-pírígù	kó:-pírígì -n

Compare underived adjectives dùgú ‘fat, thick’, gǔn ‘curved, bent’, and pírígú ‘crooked’.

‘Fearless’ may be of the same type: àrⁿá-kájù (Sg -kájì -n), cf. àrⁿá ‘male’ (noun á-n ‘man’, Pl árⁿ-ùm). The abstractive noun is àrⁿà-kàjú, where -kàjú could be a frozen VblN (-kàj-ú).

A bahuvrihi compound functions prototypically as an adjective, modifying a preceding noun, which takes the usual pre-adjectival L-tone (306). It may also be used absolutely, as a noun (or headless adjective).

(306)	ì nè	[kó:-kórò-m]
	person.L	[foot-fresh .HL-Pl]
	‘fresh-footed ones’ (i.e., vigorous workers or athletes; kòró)	

5.2.1.2 *With numeral compound final*

A bahuvrihi compound can may be formed with a numeral as final, cf. English *three-cornered*. Compounds of the specific form X-túrù- based on túrú ‘one’ often mean ‘person(s) of a single (=the same) X’ (307.c), but a different semantic structure applies to e.g. ‘one-eyed’ (307.d). X-túrù- has a (human) Sg form X-túrì -n (307.d) and a Pl X-túrù-m (307.a,c).

- (307) a. [[pǝn-sǝŋ]-túrù-m] cêw
 [[**pants.L-rope**]-**one**.HL-Pl] all
 ‘all those who have one (=the same) belt cord’ (i.e., who are of the same family) **2004.3.1** (túrú, pǝn)
- b. [mírⁿé-tâ:n]
 [**voice-three**.HL]
 ‘(person) of three voices’ (man’s nickname) **2004.3.6** (tâ:n)
- c. é [î nè [mà:ká:] -túrù-m kùⁿ]
 2Pl [person.L [**door.L**]-**one**.HL-Pl Def
 ‘you-Pl who are of one door (=of the same family’ **2005.4.6** (túrú)
- d. jì ré-túrí -n
 eye-one.HL-Sg
 ‘one-eyed person’ (túrú)

The **predicative** counterpart of these constructions is exemplified in (308). It may be conjugated by adding pronominal-subject suffixes, here 3Pl. In predicative function, the numeral has its lexical tones, with no H(H...)L tone overlay, hence túrí- for ‘one’.

- (308) [úrⁿ-ùm kùⁿ∴ fú:] nǎ: túrí-bá,
 [child-Pl Def all] mother **one**-3PlS.
 [úrⁿ-ùm kùⁿ∴ fú:] bă: túrí-bá,
 [child-Pl Def all] father **one**-3PlS.
 ‘All of the children are of one (=the same) mother; all of the children are of one father.’ **2004.3.18**

5.2.2 Non-bahuvrihi noun-adjective compounds

In another type, the noun undergoes **tone-dropping**, while the adjective keeps its lexical tone. In other words, the tones are like those of simple noun-adjective sequences where the adjective modifies the noun. Here, however, a distinct referent is described, using the overt noun as exemplar.

- (309) gloss nonhuman human Sg
 ‘grass-fresh’ (=green) ðyð-ðrú ðyð-ðrí-n

5.2.2.1 *Other compound adjectives*

‘Yellow’ is expressed as *yàrò-pì rⁿé*, a special case of an existing noun-noun compound denoting a bright yellow flour made from the fruit of the *neré* tree. The human Sg form is *yàrò-pì rⁿé-n*.

‘Blue’ can be expressed either by *búlò-búló* (mentioned above) or by the compound [*yàrù-mànà*]-*jèjú*, literally ‘sky.L-body’.

There are no simple adjectives meaning ‘right’ and ‘left’. ‘Right hand’ and ‘left hand’ are expressed by compounds with initial *nùmó* ‘hand’. In *nùmò-ñǎ:* ‘right hand’ the final is *ñǎ:* ‘meal’ (one eats with one’s right hand). Considering the activity most often associated with the left hand, it is perhaps just as well that the final in *nùmò-bàná* ‘left hand’ is synchronically obscure. The forms *nùmò-ñǎ:* and *nùmò-bàná* can be added to another noun in modifying function: [*bé [tì-tòwò nùmò-ñǎ:]*] *lè* ‘on their right shoulders’ (*tì-tòwó* ‘upper shoulder’). The word for ‘left-handed person’ is the noun *bárgà-n* (Pl -m).

5.2.3 *Iterative adjectival compounds with medial -nà:-*

Some adjectives have an iterative compound pattern consisting of L-toned stem, *-nà:-*, and regular-toned stem. Example: *pěyⁿ* ‘old’, *pèyⁿ-nà:-pěyⁿ* ‘very old, ancient (person)’. The construction did not occur in texts. Direct elicitation did not permit reliable identification of the set of adjectives that allow this compound; my assistant accepted a few proposed forms but seemed hesitant in some of these cases. Since the sense of the compound is intensive (‘very ADJ’), it competes directly with other intensifying constructions, including that with *èjìⁿ* ⇒ ‘very’ and that with lexical intensifiers (§6.3.3.2).

The type *pèyⁿ-nà:-pěyⁿ* ‘very old’ is probably related to the iterative nominal compound type with *-ná:-* or *-nà-* medial, found in a handful of flora-fauna terms (§5.1.14, above). Tonally, the closest parallel is with *bù:ⁿ-nà-bú:ⁿ* ‘tall grass sp.’, of type *ǎ-nà-ǎ* (*ǎ* = L-toned, *ǎ* = lexical-toned). By contrast, *jón-ná:-jórù* ‘blister beetle’ and *són-ná:-sórù* ‘long-nosed grasshopper’ have H-toned initials and *-ná:-*.

5.2.4 *Compounds of adjective plus -lógyó ‘very’*

Among several ways of expressing ‘very A’ with A some adjective, there is a combination *A-lógyó* (with L-toned adjective). This combination is uncommon in texts, but is attested in (310).

- (310) [wàkàti [kó gǎnh] kûn-Ø kùⁿ]
 [time.L [Nonh between] be.in.HL-Ppl.Nonh Def]
 [wàkàti gùrù-lóyó=y là:-Ø↑
 [time.L long.L-very=it.is Neg-3SgS
 ‘The time that is between them, it isn’t a particularly long time.’
2004.3.6

There is some phonological and semantic similarity with -làyá (§12.2.2), but informants rejected an identification of the two.

6 Noun Phrase Structure

6.1 Organization of NP constituents

The internal structure of NPs is a function of two primary phenomena: a) linear position, and b) tonal independence. As we will see, some [X+Y] sequences of words within NPs require X to drop its tones before Y. Other such sequences allow X and Y to express their regular tones (i.e. the two are tonally autonomous). However, when an otherwise tonally autonomous [X+Y] NP is subject to syntactically controlled tone-dropped (viz., when the NP is the head of a relative), both X and Y drop tones (in parallel).

The inner portion of the NP whose elements interact with each other in terms of stem-wide tonal interactions will be called the **core NP**. This includes nouns, modifying adjectives, and inalienable possessors, but excludes numerals, universal quantifiers ('all'), and alienable possessors.

6.1.1 Linear order

NPs not headed by a pronoun, and not containing a relative clause, have the maximal structure in (311). Typically there is a noun in position (311.c), functioning as lexical head of the NP, and I will refer to this construction as a **noun-headed NP**.

(311) Order within NP (first approximation)

- a. alienable possessor (NP plus *mà*, or H-toned pronominal possessor)
- b. (b_1 and b_2 do not co-occur)
 - b_1 . discourse-definite demonstrative *kò* 'that'
 - b_2 . inalienable possessor NP, or L-toned pronominal possessor
- c. **noun** (most human nouns have overt Sg or Pl suffix)
- d. one or more modifying adjectives (if human, with Sg or Pl suffix)

- e. (e_1 and e_2 do not co-occur)
 e_1 . distributive quantifier $kâ:n$ ‘each’
 e_2 . deictic demonstrative $nú\eta\grave{o}$ ‘this/that’
- f. (for ordering within f, see below)
 f_1 . Pl $bé$ (used if noun does not mark plurality with a suffix)
 f_2 . Definite $kù^n$
 f_3 . cardinal numeral
- g. universal quantifier ‘all’ ($fú:$, $cêw$)

The distributive quantifier $kâ:n$ ‘each’ and the demonstrative $nú\eta\grave{o}$ ‘this/that’ do not co-occur, so I cannot order (e_1) and (e_2) relative to each other. In practice, $kâ:n$ ‘each’ nearly always occurs in simple NPs of the shape [noun + $kâ:n$] with no other modifiers. The combination [noun + adjective + $kâ:n$] is elicitable in the relevant sense (with tone-dropping on the adjective as well as on the noun), but uncommon, unless a further $cêw$ ‘all’ is added to insure the quantificational reading of $kâ:n$. Perhaps the tendency to avoid NP-final quantifier $kâ:n$ after an already complex NP reflects a homonym clash with $kâ:n$ ‘also, too’ (variant $kár^n\grave{a}$), which does occur freely after NPs of any shape. To be sure, $kâ:n$ ‘each’ and $kâ:n$ ‘also, too’ have different tonal effects; $kâ:n$ ‘each’ induces tone-dropping on the preceding word, while $kâ:n$ ‘also, too’ has no tonal effect.

There is some variation in ordering within (311.f) area. (f_2) and (f_3) may occur in either order. (f_1) and (f_2) may likewise occur in either order. However, (f_3) must follow (f_1) if both are present.

The two demonstratives, discourse-definite in (311.b) and deictic in (311.e), do not often co-occur, but their combination is grammatical.

Examples are in (312), with the noun heading the NP bolded. The positions in (311) that are filled in each example are listed in parentheses on the right. I use $_$ in these formulae to indicate unfilled slots, with (e) and (f) counted as one slot each. (312.a) has two adjectives in position (d).

- (312) a. $má$ $ùr\grave{o}$ $dà\grave{y}à$ $pírú$ $bé$ (a $_ c d(2) _ f_1 _$)
 1SgP **house.L** small.L white Pl
 ‘my small white houses’
- b. $bé$ $k\grave{o}$ $úr\acute{o}$ $kù^n$ $bé$ (a b c $_ _ f_2 f_1 _$)
 3PIP Dem **house** Def Pl
- or: $bé$ $k\grave{o}$ $úr\acute{o}$ $bé$ $kù^n$ (a b c $_ _ f_1 f_2 _$)
 Pl Def
 ‘those houses of theirs’

- c. ùrò èjù núṅḍò tǎ:n kùⁿ (_ _ c d e₂ f₃ f₂ _)
house.L good.L Dem three Def
- or. ùrò èjù núṅḍò kùⁿ tǎ:n (_ _ c d e₂ f₂ f₃ _)
‘these/those three nice houses’
- d. bé kò ùrò núṅḍò (a b c _ e₂ _ _)
3PIP Dem **house.L** Dem
‘that (aforementioned) house of theirs over there’
- e. úró kùⁿ bé.: fú: (_ _ c _ _ f₂ f₁ g)
house Def Pl all
‘all of the houses’
(preferred to ?...bé kùⁿ.: fú: ⇒, which however is permitted)
- f. mì yésâ: bé lèy (a _ c _ _ f₁ f₃ _)
1SgP sister.HL Pl two
‘my two sisters’
(ordering #... lèy bé was rejected)
- g. ùrò gàrà kâ:ⁿ (_ _ c d e₁ _ _)
house.L big.L each
‘each big house’ (uncommon)
(cf. the more common ùrò gàrà kâ:ⁿ ‘a big house too’)

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

Headless NPs, those where the head noun is omitted and not replaced by a personal pronoun, are (apparently) headed by another element in the NP. (For a similar omission of head NPs in relatives, see §14.1.6). The examples of headless NPs involve deictic demonstrative núṅḍò, cardinal numerals, and adjectives. One could argue that such phrases involve a zeroed noun as head.

In this **absolute** function, demonstrative núṅḍò is the most common of the bunch, since there is no other way to express (deictic) ‘this/that’. Cardinal numerals and adjectives are only occasionally absolute; much more often there is a noun, even a semantically “light” one like ‘thing’ or ‘person’.

Examples, mostly elicited, of various elements in absolute function are in (313.a-d). (313.e) has a possessor, a modifying adjective, and a numeral.

- (313) a. núṅḍò mǐ-n èl-lá-Ø
Dem 1Sg-Dat be.sweet-Neg-3SgS
‘This/That (one) [deictic] does not please me.’ (érù)

- b. lěy yǎ:-yè-Ø
two go-Perf-3SgS
 ‘Two went.’ (uncommon)
- c. bán mǐ-n ó:
red 1Sg-Dat give.Imprt
 ‘Give-Sg me a/the red one!’ (uncommon)
- d. èjú kán-tù:-Ø dèy
good do-Perf-2SgS if
 ‘if you-Sg do something good (=a good deed)’ (kárⁿá-) **2004.3.15**
- e. [má bán lèy] mǐ-n ó:
 [1SgP **red two**] 1Sg-Dat give.Imprt
 ‘Give me my two red ones!’ (uncommon)

Demonstrative *kò* arguably occurs as a one-word NP in a few examples (i.e. with zero nominal head). However, the available examples have an alternative parsing with L-toned preverbal subject pronominal *kò*, which is syntactically possible for subjects of relative clauses and some other subordinated clause types. In (314), for example, I take *kò* to be an L-toned preverbal subject, which can occur in conditional antecedent clauses (§16.1.2).

- (314) *kò* gó:-yà-Ø táṅà: dèy
NonhS.L go.out-Perf-3SgS happen if
 ‘if that (or: it) has come out’ **2004.3.9**

A possessor NP is not used in absolute fashion. A functional equivalent to e.g. English *mine*, French *le mien*, etc., has a semantically light possessed noun *cé* ‘possession’ as head. This form, presumably related to *cě*: ‘thing’, also occurs in possessive constructions of the type ‘X is Y’s possession’, i.e., ‘X belongs to Y’ (§11.5.3). *cé* is an inalienably possessed noun, requiring L-toned possessor pronominals or a possessor NP without Possessive *mà* (§6.2.1). In (315.b), ‘theirs’ denotes the girls’ excision ritual, which is parallel to the boys’ circumcision, which was described in the preceding discourse (both are referred to as “causing to drink porridge”).

- (315) a. [mì cé] ñḍwⁿḍ gó:-yè-Ø
 [1SgP.L **possession**] be.ruined exit-Perf-3SgS
 ‘Mine has been ruined.’

- b. [ñě:-rⁿ-ùm kárⁿà], àrá nò:-wⁿó-n déy,
 [female-child-Pl also], porridge drink-Caus-Ppl.Sg if,
 [bè cé kùⁿ ké⇒]
 [3PIP.L **possession** Def Topic]
 ‘The girls too, if (the elders) are to give them porridge to drink
 (=excise them), as for theirs (=the girls’ excision) [topic], ...’
2004.3.18

This construction is confined to cases where the referent object is nonhuman. Efforts to elicit a human counterpart, whether alienable (‘boss’) or inalienable (‘father’), were unsuccessful. For example, ‘his boss/father is good, mine is bad’ was always translated with the referent noun repeated e.g. (‘his boss is good, my boss is bad’).

Universal quantifiers are not used absolutely as NPs. However, both fú: and cêw can occur with a preceding Nonhuman pronoun kó (with tone dropped to kò) in the relevant sense; (316.a) illustrates this for fú:. The emphatic adverbial sóy ‘all, everything, totally’ can be used absolutely, as a kind of NP substitute (316.b).

- (316) a. [kò fú:⇒] mǎyⁿ-yⁿè-Ø
 [Nonh.L **all**] be.lost-Perf-3SgS
 ‘All (= everything) is lost!’ (màⁿá-) (likewise with kò cêw)
- b. sóy mǎyⁿ-yⁿè-Ø
all be.lost-Perf-3SgS
 ‘All (= everything) is lost!’ (màⁿá-)

6.1.3 Detachability (in relatives)

There is a distinction between those postnominal elements that remain with the NP when it functions as relative-clause head, and those that appear at the end of the relative clause (after the participle).

- (317) a. remain within head NP
 modifying adjective (except, optionally, làyá ‘other’)
 cardinal numeral

- b. appear after participle at end of relative clause
 Definite $kù^n$
 Plural $bé$ (normally)
 postnominal demonstrative ($nú\eta\delta$ and variants)
 universal and distributive quantifiers

As explained in Chapter 14, the head NP does not move out of the clause, instead, its status as relative head is signalled by tone-dropping. The relative clause ends in a participialized verb with noun-like suffixes agreeing in number and humanness with the head NP, so the entire clause is morphologically nominal. (A second copy of the head noun may appear after the relative-clause proper, following Possessive $mà$, but this is not relevant to the present point).

Examples with modifying adjectives and numerals that **remain in the head NP** are in (318).

- (318) a. $[\grave{u}r\delta \quad d\grave{a}y\grave{a}] \quad m\grave{i} \quad w\delta:-\emptyset$
 [house.L **small.L**] 1SgS.L be.Hum-Ppl.Nonh
 ‘the small house where I am’ ($\acute{u}r\acute{o}$, $d\acute{a}y\acute{a}$)
- b. $[\tilde{n}\grave{e}-m \quad k\grave{u}r\delta y] \quad y\acute{e}r\grave{e}-m \quad k\grave{u}^n$
 [woman-Pl.L **six.L**] come.Perf.HL-Ppl.Pl Def
 ‘the two women who came’

Examples with elements that appear at the end of the relative clause, **after the participle**, are in (319).

- (319) a. $b\grave{a}nd\acute{i}: \quad [m\acute{a} \quad k\grave{u}:^n] \quad n\acute{u}m\delta-m \quad k\grave{u}^n \quad b\acute{e}$
 bandit [1SgP on] fall.Perf.HL-Ppl.Pl **Def Pl**
 ‘the bandits who fell on (=attacked) me’
 (cf. $b\grave{a}nd\acute{i}: \quad k\grave{u}^n \quad b\acute{e}$ ‘the bandits’)
- b. $d\grave{i}:^n \quad n\acute{\eta} \quad n\acute{i} \quad \grave{e}n\acute{e} \quad w\delta:-\emptyset \quad n\acute{u}\eta\delta$
 place.L this here LogoS be.Hum.Perf-Ppl.Nonh.L **Dem**
 ‘(He said:) “this place where I am ...”’ **2004.4.4**
- c. $\grave{i}n\grave{e} \quad y\acute{e}r\grave{e}-n \quad k\grave{a}:^n$
 person.L come.Perf-Ppl.Sg.L **any**
 ‘anyone who came’
- d. $\grave{e}j\grave{u}-n\delta w^n\delta \quad \grave{a}:-g\acute{o}:-\emptyset.: \quad f\acute{u}:$
 field.L-meat.L catch-ImpfNeg-Ppl.Nonh **all**
 ‘every/any (kind of) animal that it (=trap) doesn’t catch’ **2004.3.16**

In cases like (320) it might seem that Pl bé stays within the head NP. However, bè here is really the L-toned 3Pl subject pronominal (used in relative clauses), and has nothing to do with the noun ì nè ‘person’ (which functions as direct object within the clause). However, there are rare examples where Pl bé does seem to remain within the head NP, in which case it (like the head noun) undergoes tone-dropping; see (849.e).

- (320) ì nè bè â:-m
 person.L 3Pl.L catch.Perf.HL-Ppl.Pl
 ‘the people whom they conscripted’ **2004.4.22**

làyá ‘other’ is an adjective that can appear either within the head NP or after the participle. My examples of the second option, however, involve somewhat frozen relatives of the ‘oil for rubbing’ type (§5.1.15) with impersonal 3Pl subject. In (321.a-c), note that làyá induces tone-dropping on the participles, which would otherwise be bà:-Ø, kàrⁿâ:-Ø, and dī ηê:-Ø. Tone-dropping applies after Contour-Tone Mora-Addition (141) (§3.7.4.1), which lengthens the stem-final short vowel in the participles of (321.b-c). (321.d) is the variant of (321.c) with làyá inside the head NP.

- (321) a. dī:ⁿ bè bà:-Ø làyá déyⁿ
 place.L 3Pl.L learn.Impf-Ppl.Nonh.L **other** separate
 ‘another place apart for (their) learning’ **2004.4.14**
- b. [cè:ⁿ bè kàrⁿâ:-Ø] làyá
 [**thing.L** 3Pl.L do.Impf-Ppl.Nonh.L] **other**
 ‘something else to do’ **2004.3.9**
- c. dī:ⁿ bè dī ηê:-Ø làyá
 place.L 3Pl.L sit.down.Impf-Ppl.Nonh.L **other**
 ‘another place (for them) to sit’
- d. [dī:ⁿ làyá] bè dī ηê:-Ø
 [place.L **other**] 3Pl.L sit.down.Impf-Ppl.Nonh
 [= (b)]

6.1.4 Internal bracketing and tone-dropping

In addition to the order of words within NP’s, we must also pay attention to tone patterns. The NP-internal combinations in (322) require the item on the left to **drop tones** to all-L. Here, the item on the left is tonally dependent on the item

to its right. This will be called **leftward tonal dependence**. “X” is any word with the core NP, excluding possessors.

(322) Tone-Dropping within NP

- a. [X + adjective] (“adjectives” includes ordinals)
- b. [X + demonstrative núŋdò]
- c. [X + kâ:ⁿ ‘each, any’]

For example, ìjú ‘dog’ has LH tone contour, but is L-toned ìjù in ìjù jém ‘black dog’, ìjù núŋdò ‘this/that dog’, and ìjù kâ:ⁿ ‘any dog’. This leftward tonal dependence is **recursive**, as in [[X + adjective] + demonstrative], which ends up as the linear sequence [X.L adjective.L demonstrative], where “.L” indexes word-level tone-dropping to all-L.

In the inalienably possessed NP (§6.2.2), if the possessor is a pronoun, both the left and right constituents (i.e. possessor and possessed) undergo tonal changes (L-toned pronominal, {HL} tone contour on noun). This is (at least arguably) **bidirectional tonal dependence**.

If the inalienable possessor is a noun-headed NP, it has its regular tones, but the following (inalienably) possessed noun has the same {HL} tonal overlay as it has after a pronominal possessor. This is **rightward tonal dependence**. Therefore “bidirectional tonal dependence” mentioned above can be decomposed into a systematic rightward dependence requiring a specific tonal overlay on the inalienably possessed noun (regardless of whether the possessor is pronominal or not), and a more limited leftward dependence (perhaps morphological in nature) affecting inalienable pronominal possessors only.

(323) [possessor + inalienable noun]

- possessor: L-toned pronominals (no change on other NPs)
- inalienable noun: H(H...)L tone (with any possessor)

For example, ‘father’ has a lexical form dē: with R-tone, but it appears with overlaid H(H...)L-tone after either a pronominal or NP possessor: mǐ dē: ‘my father’, séydù dē: ‘Seydou’s father’. In mǐ dē: ‘my father’, the pronominal appears in a form that is segmentally identical to the H-toned 1Sg pronoun mí (used as independent pronoun and in several other non-subject functions), but that has L-tone. (There is also a stem bă: ‘Dad!’, used as a vocative but also, as L-toned bà:-, as a compound initial for ‘father’.)

The **universal quantifier** fú: ‘all’ (§6.8.1) has the prosodic effects on the NP-internal item to its left indicated in (324). A preceding pronominal drops its tones to all-L. This is **leftward tonal dependence**. Rarely, the pronominal

shows dying-quail intonation (:.). When fú: follows (within the same NP) a nonpronominal word (noun, adjective, demonstrative), the latter regularly appears with final-syllable dying-quail intonation. When fú: conditions dying-quail intonation, we have **leftward intonational dependence**. In either case, fú: itself may have its own intonational lengthening (symbol \Rightarrow), but this is lexical rather than combinatorial, and also applies to fú: when it has scope over a preceding clause or non-NP constituent.

(324) Tonal/Intonational effects of fú: ‘all’

- a. pronoun: L-toned, occasionally also dying-quail intonation (:.)
- b. non-pronominal word: dying-quail intonation (:.)

Examples: pronominal kò fú: ‘all of it/them (nonhuman)’, nonpronominal ì jú.: fú: ‘all the dogs’. The 1Pl pronoun may even be **truncated** before fú:, hence èm pú: varying with èmè fú: ‘all of us’. Rarely, there is some version of dying-quail intonation with a pronoun (since the pronoun is L-toned, the audible effect is prolongation): kò.: fú: ‘all of it’.

The other universal quantifier, cêw ‘all’, almost never has an intonational or tonal effect on a preceding nonpronominal word. However, rare examples of dying-quail intonation are recorded (ñě-m.: cêw ‘all the women’). A preceding pronoun, however, drops its tones before cêw, as it does before fú: ‘all’. Thus kò cêw ‘all of it, all that’, èmè cêw ‘all of us’.

Finally, the NP-internal combinations in (325) involve no tonal change in the item on the left. In other words, the two components show **tonal independence**. There are some further distinctions that must be made, based on behavior in syntactically controlled tone-dropping contexts (325.a-c).

(325) Tonally Independent NP-internal combinations

- a. **appositional** (symmetrical), undergo tone-dropping in tandem
 - [X + cardinal numeral]
 - [X + Plural bé] (rarely)
 - [inalienable possessor + X]
- b. structure indeterminate (since they are detachable from the head noun in relatives, and since they cannot be followed by modifiers that force tone-dropping)
 - [X + Plural bé] (usually)
 - [X + Definite kùⁿ]

- c. **autonomous**; only the element on the right may undergo syntactic tone-dropping
[alienable possessor + X]

In (325.a), the left and right elements have their own tones, including at least one H-tone (except for low-level reduction of R to L in numerals ‘2-5’ under certain conditions). This is the situation when the NP occurs in a main clause in whatever function (subject, object, etc.), in isolation (e.g. as topic), or in a non-head function in a relative clause. However, when the NP functions as head of a relative clause, the NP is subject to (externally induced) **syntactic tone-dropping**. In the constructions in (325.a), this tone-dropping **applies simultaneously** to both the left and right elements. For example, in (326.a), both parts of inalienably possessed *sáydu dérè* ‘Seydou’s brother’ lose their H-tones, since this NP functions as head of a relative clause. This is parallel to the tonal treatment of *sáydu dére* in (326.b), where a modifying adjective has been added.

- (326) a. [sáydu dérè] núwⁿò-n kùⁿ
[**S.L** **brother.L**] die.Perf.HL-Ppl.Sg Def
‘the brother of Seydou who died’
(elsewhere *sáydu dérè*)
- b. sáydu dérè làgí-n
S.L **brother.L** other-Sg
‘the brother of Seydou who died’

In the constructions in (325.b), above, we cannot determine whether both elements are tone-dropped in tandem. Definite *kùⁿ* is normally L-toned anyway, making the issue of tone-dropping moot. Moreover, *kùⁿ* and (in most cases) Plural *bé* are shifted to the end of the relative clause, following the participle.

The only reliably verifiable contrast to (325.a) is therefore (325.c), viz., the combination of an alienable possessor with an alienable noun. (The great majority of nouns are alienable.) Here the possessor (a nonpronominal possessor NP followed by Possessive *mà*, or else an H-toned possessor pronominal), is completely autonomous tonally, retaining its normal tones even when the following possessed noun undergoes syntactically controlled tone-dropping (as head of a relative).

For example, in *ì jú pèrú* ‘ten dogs’, both *ì jú* ‘dog’ and *pèrú* have at least one H-tone, as they would in isolation. As relative head, this NP becomes L-toned: [ì jù pèrù] *gô:-Ø kùⁿ* ‘the ten dogs who went out’. However, *má ì jú* ‘my dog’ has a tonally independent possessor pronominal (1Sg *má*), so when *ì jú* drops its tones, e.g. before a modifying adjective, the possessor retains its

H-tone(s): má ìjù jém ‘my black dog’. A textual example showing this is (327), where nám ‘people’ but not 3Pl possessor pronominal bé drops its tones as relative-clause head.

- (327) [bé nám] yè-lé è témé-m kùⁿ
 [3PIP **people.L**] there 2PIS.L find.Impf-Ppl.PI Def
 ‘their people (=kin) whom you-PI will find there’ **2004.5.2**

For more on syntactic tone-dropping data in relatives, see §14.1.3.

6.2 Possessives

A distinction between **alienable and inalienable** possession is necessary.

Certain kin terms and similar relationship nouns that I call “inalienable” have a special morphosyntax suggestive of nominal compounding (§6.2.2, below). cé ‘possession’, a form used in certain possessed constructions only, is also inalienable (contrast the perhaps historically related alienable noun cì gé or cè: ‘thing’), as is bâ:ⁿ (or bánà) in the sense ‘master (e.g. of a slave)’.

Alienable is the unmarked case, covering all other possessed nouns, from ‘my house’ and ‘my belly’ to more abstract relationships. In some subordinated clauses with nominalized verb, an argument NP may appear in “possessor” form, and here again the form is always alienable; see e.g. §17.4.1 on Verbal Noun phrases.

6.2.1 Alienable possession (P mà Q)

The basic structure of **alienably** possessed NPs, with P as possessor and Q as head noun, is [[P mà] Q] if P is a noun or other non-pronominal NP. In this formula, P is itself potentially a complete NP, and of course recursion is possible [[P mà] Q mà] R]. The linker mà can be thought of as a Possessive postposition bracketed with the possessor, but there is no prosodic evidence for this bracketing, and mà can only be used when both P and Q are overtly expressed.

Pronominals (except Logophoric-Possessive Sg èné) have possessor forms without mà. In most cases, the form of the possessor pronominal is identical to that of the independent pronoun (1Pl émé, 2Pl é, 3Sg wó, 3Pl bé, Nonh kó). However, two pronominal categories have special alienable possessor forms (328). (For inalienable possession, see §6.2.2, below.)

- (328) category independent possessor (alienable)
- | | | |
|-----|----|----|
| 1Sg | mí | má |
| 2Sg | ú | á |

The special possessor forms are illustrated in (329).

- (329) háyè mâ:n yá: [á àsègè]
 well so-and-so yesterday [2SgP animal]
 [má èjú] ñùnù-ηó-sà-Ø
 [1SgP field] be.ruined-Caus-Reslt-3SgS
 ‘Well, So-and-so (vocative), yesterday your animal (=cow) damaged
 my field.’ 2004.3.10

NPs ending in Pl morpheme bé do not take mà (330).

- (330) [ìjú bé] úró
 [dog Pl] house
 ‘The house (= kennel) of the dogs.’

Though Pl bé can follow either a human or nonhuman noun, it is identical in form to the (human) 3Pl pronominal bé, which is used among other functions as possessor (bé úró ‘their house’). One could argue that the absence of mà after Pl bé in an NP is connected with the absence of mà after pronominal possessors (including 3Pl bé); one possibility is to treat the two bé morphemes as one and the same.

Logophoric-reflexive possessor is singular èné mà and plural èné bé.

- (331) a. [[èné mà úró] èjù-lá-Ø] wá
 [[LogoP Poss house] good-Neg-3SgS] say
 ‘He said (that) his (own) house is no good.’
- b. [[èné bé úró] èjù-lá-Ø] wá
 [[LogoP Pl house] good-Neg-3SgS] say
 ‘They said (that) their (own) house is no good.’

We have just seen that bé, either as 3Pl pronoun or as Pl morpheme in an NP, does not allow a following mà, so the lack of mà in (331.b) is not surprising. The presence of mà in (331.a) suggests that the Logophoric-Reflexive pronoun èné is morphosyntactically noun-like as opposed to being a true pronominal.

Possession, as defined by presence of *mà*, covers a wide range of semantic relationships, ranging from conventional ownership (as in several examples above), to abstract characterization (332.a), to partitive (332.b), to a classificatory relationship involving a foreign place name (332.c).

- (332) a. [jâm mà màlfá:ⁿ]≡yⁿ mà↑
 [peace **Poss** rifle]=it.is Q
 ‘Were they peaceable (=celebratory) rifle shots?’ **2004.3.20**
- b. [nùŋ bè párá:-Ø], mà bàtá túrú
 [oil.L 3PIS.L rub.Impf-Ppl.Non], **Poss** box one
 ‘one box of oil for rubbing’ **2004.3.20**
- c. [támárⁿášêk mà àná] bállá mèyⁿ
 [Tamanrasset **Poss** village] go.around and
 ‘(You) go around the town of Tamanrasset (in Algeria) and ...’
2004.5.2

The Possessive morpheme *mà* may also appear in relative clauses of the form (333), where the head noun *N_x* is repeated after the relative-clause verb. See §14.1.1 for further information and examples.

- (333) [[... [... *N_x* ...]_{NP} ... (subject pronominal) Verb] mà *N_x*]

In spite of its versatility, Possessive *mà* gets competition from various types of noun-noun compounds (Chapter 5). In many noun-noun compounds, the initial is descriptive or partitive in function, or (if the final is a Verbal Noun or agentive) it denotes a logical complement (usually a direct object). However, there are some cases where a noun-noun compound expresses something close to ownership, as in àyà-úró ‘husband-house’ (the bridegroom’s house, to which a bride is ceremonially transferred).

6.2.2 Inalienable possession

A small number of nouns that I call **inalienable** have the properties in (334). The combination of inalienable noun with a nonpronominal possessor NP behaves like one type of nominal compound (see below).

- (334) a. possessed noun has H(H...)L tonal overlay replacing lexical tones
 b. possessor expressed by:
 L-toned pronominal possessor
 or: noun-headed possessor NP (without Possessive mà)

The **L-toned possessor pronominals** are identical in form to the L-toned preverbal subject pronominals (used in non-subject relative clauses): 1Sg mî, 2Sg ù, 1Pl èmè, etc. (§4.3.1). These contrast with the H-toned possessor pronominals used with alienable nouns (1Sg má, 2Sg á, 1Pl émé, etc.). A noun-headed (nonpronominal) NP as inalienable possessor has its regular form including tones, and the Possessive morpheme mà is absent.

When preceded by a possessor NP or pronoun, the inalienable nouns themselves take a stem-wide **H(H...)L tone overlay**, realized as HHL on trisyllables, as HF on bisyllables with bimoraic final syllable, as HL on bisyllables with monomoraic final syllable, and as F on (bimoraic) monosyllables. This falling tone contour contrasts with the tone contour for the same nouns in absolute (unpossessed) position, which is usually a rising L(L...)H contour, as in ‘I have no ...’. I take the absolute form to be lexically basic. The contrast between absolute and possessed forms is exemplified by ‘father’ in (335). Two possessed examples are given, with pronominal (335.b) and nominal (335.c) possessors. Note the absence of Possessive mà in (335.c).

- (335) a. dǎ: sà:-rá-m
 father have-Neg-1SgS
 ‘I do not have a father.’
- b. mî dê:
 1SgP.L **father.HL**
 ‘my father’
- c. séydù dê:
 S **father.HL**
 ‘Seydou’s father’

The H(H...L) tone pattern is also found in the final element in **nominal compounds** of the type [x̄ n̄] (§5.1.5). In both, the leftmost constituent (possessor, compound initial) has its regular tones (except for the special series of pronominal possessors with inalienables), while the rightmost constituent has the overlaid H(H...L) tone contour. This provides tangible morphophonological evidence for an abstract grouping of the two constructions. However, the H(H...L) contour also occurs with Perfective verbs in relative clauses, where

both the head noun and any preverbal subject pronominal drop to L-tone. A grand synthesis of all of these H(H...L) constructions would be audacious.

The kin terms with inalienable morphosyntax are given in (336), below. Those not shown with Sg suffix -n do not allow -n (or Pl -m), with the consequence that they can only be pluralized by adding postnominal Pl particle bé, as in èné bé nâ: bé ‘their (Logophoric or Reflexive) mothers’.

The stems in (336.a) show **tonal but no segmental changes**. They are ordered by increasing syllable and mora count. Those in (336.b) involve a **change of final vowel** in addition to the tonal change. Those in (336.c) require a **human suffix** (Sg -n, Pl -m) when possessed, except that ‘friend’ has Sg tên (apparently with frozen *-n now part of the stem) and Pl tên-ùm. ‘Grandchild’ and ‘master’ (336.d) are already H(H...L), and ‘grandchild’ already has a human suffix, so there is no audible change in the possessed forms. (336.e) illustrates how the compound finals ǎ-n ‘man’ and ñě-n ‘woman’ are outside of the scope of the overlaid H(H...L) tone contour, which is realized on the compound initial tî rě-.

(336)	gloss	absolute	H(H...L) possessed form
a. tonal change only			
	‘father’	dě:	dê:
	‘mother’	nǎ:	nâ:
	‘husband’	àǵá	áyà
	‘elder same-sex sibling’	dèré	dérè
	‘father’s sister’	nèr ⁿ é	nér ⁿ è
	‘parent/child-in-law’	òw ⁿ ó	ów ⁿ ò
	‘(man’s) sister’	yèsǎ:	yésâ:
	‘(woman’s) brother’	àsàr ⁿ á	ásár ⁿ à
	‘sister’s child’	léjéwé-n	léjéwè-n (Pl léjéwè-m)
b. tonal and final-vowel change (to u)			
	‘mother’s brother’	lèjé	léjù
	‘father’s brother’	bòró	bórù
c. possessed form has -n (Pl -m) suffix			
	‘grandparent’	tî ré	tírè-n (Pl tírè-m)
	‘younger same-sex sibling’	òjó	ójì -n (Pl ójù-m)
	‘friend’	tě: ⁿ	tên (Pl tên-ùm)
	‘comrade’	tów ⁿ ó	tô:-n (Pl tô:-m)
		[also alienably possessed tów ⁿ ó-n and tów ⁿ ó-n ; for Reciprocal tô:-n and tô:-m, see §18.3.1]	

d. no audible change since stem already has H(H...)L contour

‘grandchild’	tíríwè-n	tíríwè-n (Pl -m)
‘master (of slave)’	báŋà	(báŋà bé)

e. compounds ending in ‘man’ or ‘woman’

‘grandfather’	tì rè-ǎ-n	tírè-ǎ-n (Pl -àr ⁿ -úm)
‘grandmother’	tì rè-ñě-n	tírè-ñě-n (Pl -ñě-m)

Of the stems that do not take a Sg -n (Pl -m) suffix in the absolute form, one (‘comrade’) has H-tone, and the others (n=13) have a rising tone contour with L-tone followed by a single H-tone component on the final mora. This latter tone pattern is well-designed to maximize the distinctiveness of the H(H...)L tone overlay in the possessed form. yèsǎ: ‘(man’s) sister’ is unique for a CvCv: noun stem in having a LR tone pattern; see (110.a) and cf. §3.7.4.6. The exceptional noun tówⁿó ‘comrade’ is also unusual in that it has both alienable and inalienable possessed forms, e.g. mì tǎ:-n alongside má tówⁿó-n ‘my comrade’.

Kin and similar relational terms that are treated as alienable include jú:rò ‘twin sibling’, î-n ‘child’ when used in the kinship sense ‘son or daughter’ (it also has non-kinship uses), ñě-n ‘woman’ in the possessed sense ‘wife’, and tóyórò ‘namesake’ (<Fulfulde). By definition, these nouns show no tone change after possessors, and take the regular H-toned pronominal possessors, including 1Sg má and 2Sg á.

báŋà ‘owner’ is usually a compound final, but it may also be used with inalienable possessor; see (283) and discussion there.

The other noun taking inalienable possessors is cé ‘**possession**’. This is a grammatically specialized noun, probably related to the regular noun cì gé or cě: ‘thing’, used in ‘whose (is it)?’ interrogatives and as a dummy NP-head with a possessor when no lexical noun is present. The latter construction is the one that is relevant here (337). cé differs from other inalienable nouns in two respects: a) it does not occur without a possessor, and b) it **does not adopt {HL}** tone contour.

(337)	form	gloss
	mì cé	‘mine’ (= ‘my possession’)
	ù cé	‘yours’
	wò cé	‘his, hers’
	èné cé	‘his, hers’ (logophoric or reflexive)

cé has a nonpronominal possessor, in normal inalienable form without Possessive mà, in (338).

- (338) [[íné-n túrú-n] cé]
 [[person.Sg one-Sg] **possession**]
 jè:ré ú tém-né bè sâ:Ø dèy
 bring 2SgO find-Caus 3PlS.L do.Perf.HL-Ppl.Nonh if
 ‘when they have brought someone’s (trouble) and foisted it on you-Sg’
2004.3.24

Recursion is of course possible with inalienable (as with alienable) possession. In recursive inalienable possession, both kin terms appear with the H(H...)L tone overlay (339).

- (339) [mî dè:] nérⁿè
 [1SgP.L father.HL] aunt.HL
 ‘my father’s aunt’

In the combination of a nonpronominal NP possessor and a following inalienable noun, both the possessed noun and the final word of the possessor NP have at least one H-tone. When the larger syntactic context requires tone-dropping, both drop their tones simultaneously to all-L, as explained above. This is a general rule that also applies to compounds with H-tones in both initial and final. For example, inalienably possessed *sâydu tèn* ‘Seydou’s friend’ drops its tones in (340.a), since it is followed by NP-internal modifiers. Likewise, when recursive inalienable possession is present, both possessed NPs drop their already overlaid H(H...)L tones. This is seen in (340.b), where the NP in question drops its tones as head of a relative.

- (340) a. sâydu tèn ì nè gǎ-n
S.L friend.L person.L old-Sg
 ‘Seydou’s elderly friend’
 b. [[mî dè:] nérⁿè] bàməkó wô-n kùⁿ
 [[1SgP.L **father.L**] **aunt.L**] Bamako be.Hum-Ppl.Sg Def
 ‘my father’s aunt who lives in Bamako’

Body parts and similar terms like ‘name’ are morphologically alienable rather than inalienable in Jamsay: *má nùmó* ‘my hand’, *má bôn* ‘my name’.

6.2.3 Independent pronoun plus mà in subordinated clause

In certain complex morphosyntactic constructions, instead of the usual simple pronominal possessor (with alienable or inalienable noun), we get an independent pronoun followed by Possessive mà. We can tell that it is an independent pronoun (H-toned), rather than an alienable possessor pronominal (also H-toned), because the 1Sg form is mí mà (not má mà) and the 2Sg form is ú mà (not á mà), these being the two pronominal categories that have distinct forms as independent pronoun and as alienable possessor.

This pattern is observable in ‘before ...’ clauses. There is a (pseudo-causative) “verb” form with suffix -wv̄, but this word is treated syntactically as a noun. If just a subject, or just an object, is expressed, the relevant NP takes (alienable) possessor form. When both a pronominal subject and any object (pronominal or not) are expressed overtly, the result is normally of type (341), **with mà even after a pronominal subject**, which takes **independent-pronoun** form). (The form of the object NP or pronoun is not at issue in the current section.) See (941-2) and discussion in §15.2.4.2.

(341) independent.pronoun(subject) mà Object verb-wv̄ ...

The same thing happens in Verbal Noun constructions, which are widely used as complements. When just a subject, or just an object, is overtly expressed, this NP takes (alienable) possessor form. When both a pronominal subject and an object (whether NP or pronominal) are expressed, we get type (342), where the subject is in the form of an **independent pronoun** followed by mà. (Again, the form of the object NP or pronominal is not directly relevant to this section.) For examples and further detail see (1048) in §17.4.1.

(342) independent.pronoun(subject) mà Object verb-VbIN ...

The constructions (341) and (342) are cases where ordinary possessor morphosyntax has broken down. In a “regular” possessive construction, a VbIN clause like ‘our seeing the dog’ would have the structure [our [dog’s see-VbIN]]. However, since either 1Pl or ‘dog’ (in the absence of the other) can directly possess the VbIN (‘our see-VbIN’ and ‘dog’s see-VbIN’), the putative [our [dog’s see-VbIN]] could create processing difficulties, so that instead of ‘our seeing the dog’ a listener might take ‘our’ as narrow-scope possessor of ‘dog’ (i.e. [[our dog]’s see-VbIN], where the dog could be either the logical subject or the logical object of ‘see’). The use of a special pronominal construction for the outer possessor (the logical subject) obviates this.

6.2.4 Recursive and embedded possession

There are plenty of examples in the texts of multiple, non-conjoined noun-headed NP (i.e. nonpronominal) possessors. Of course, the logical relationships in specific cases may require different bracketings (343).

- (343) a. [[X Poss Y] Poss Z] ‘the Z of [the Y of X]’
 b. [X Poss [Y Poss [Z]]] ‘[the Z of the Y] of X’

The type (343.a) is more typical, since it is a product of two simple possessor-possessed pairs, one of them embedded. X possesses Y, which in turn possesses Z. This applies to e.g. ‘[X’s dog]’s teeth’, and to complex kinship expressions like ‘[X’s brother]’s wife’. Examples are in (344).

- (344) a. [úró mà dá:rá] mà ì nè gǎ-n kùⁿ
 [house **Poss** clan] **Poss** person.L old-Sg Def
 ‘the oldest man in the clan of the house (=family)’ **2004.3.19**
- b. [[ù dérè] mà úrⁿ-ùm] bérè
 [[**2SgP.L** elder.sib.HL] **Poss** child-Pl] in
 ‘(from) among the children of your elder brother’ **2004.3.20**
- c. [má ì jú] mà kó:
 [**1SgP** dog] **Poss** foot
 ‘my dog’s foot (=paw)’
- d. [[[íné-m mà èjú] mà támbórò] mà bòrò-ká:]
 [[[person-Pl.L **Poss** field] **Poss** date] **Poss** debris]
 mà sèmè-[mǎ:-n-Ø]] bé⇒
Poss sweep.L-[be.together-Caus-VblN]] Pl
 ‘(and) there’s sweeping and collecting (of) the debris of date palms
 of (=in) people’s fields’ **2004.5.3** (sémé, mǎ:-nó-)
- e. [[àjùwó mà úró] mà òrú]
 [[new.mother **Poss** house] **Poss** matter]
 kò-rú wò-rú gó: dògó=kò
 Nonh-Inst 3Sg-Dat go.out finish.Impf=be.Nonh
 ‘The matter (=state) of being a new mother (in post-partum
 seclusion) is thereby ended for her.’ **2004.3.19**

The type (344.b), where the external possessor X has broad scope, is typical of situations where ‘Z of Y’ involves descriptive “possession,” perhaps

lexicalized, denoting a single entity that is possessed by X. An example would be ‘X’s [house of stone]’. A textual examples is (345), if I have interpreted it correctly.

- (345) bé [ñě-m mà [cì-cèrⁿè]-úró]
3PIP [woman-Pl **Poss** [Rdp-circumcision.L]-house]
 yó=kò jì:ⁿ
 exist=be.Nonh Past
 ‘There used to be their (=the women’s) women’s circumcision
 (=excision) house’ **2004.3.18**

6.3 Noun plus adjective

6.3.1 Noun plus regular adjective

In this combination, which applies to descriptive adjectives (‘big’, ‘black’, etc.) and to ordinals (‘third’), the noun drops its tones to all-L.

- (346) a. úró
 house
 ‘(a) house’
- b. ùrò gàrá
 house.L **big**
 ‘(a) big house’
- c. ùrò lèy-né
 house.L **two-Ord**
 ‘(the) second house’

When the noun is human singular or human plural, **both the noun and the adjective take regular number suffixation**. Plural examples are in (347).

- (347) a. ñè:-rⁿ-ùm dáyá-m
 woman-child-**Pl.L** small-**Pl**
 ‘(the) small girls’
- b. pùlò-m jó:-m
 Fulbe-**Pl.L** many-**Pl**
 ‘many (kinds of) Fulbe.’ **2004.3.10**

- c. ñè:-rⁿù-m dáyá-m
 female-child-**PI.L** small-**PI**
 ‘young girls’ **2004.4.13**

However, íné ‘person’ is used either in bare-stem form or with its regular suffixes (íné-n, íné-m) before an adjective, as it does as head of a relative clause. These forms all drop their tones in this construction.

- (348) a. ì nè-n mǎñú-n
 ì nè mǎñú-n
 person(-**Sg**).**L** bad-**Sg**
 ‘a bad person’
- b. ì nè-m mǎñú-m
 ì nè mǎñú-m
 person(-**PI**).**L** bad-**PI**
 ‘bad people’

6.3.2 Adjective gàmá ‘certain’

The adjective meaning ‘(a) certain’ or ‘some’, following a modified noun, is Sg gàmá (human or nonhuman), and special human PI form gàmà-nám. For nám in other contexts see §5.1.12.

- (349) a. [ùjùbày gàmá≡ȳ dèy]
 [country **certain**=it.is if]
 ‘if it’s (=in the case of) certain areas’ **2004.3.6**
- b. [ì nè gàmà-nám]
 [person **certain-PI]**
 ‘some (other) people’

For gàmá ‘often’ or ‘maybe’, see the discussions of temporal adverbials and of epistemic modal adverbials in §8.5.7.1 and §8.5.5.

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

Two adjectives may modify a single noun. This pattern is uncommon in texts. When the adjectives refer to distinct entities (e.g. ‘red and black shoes’, referring to the union of the set of red shoes with the set of black shoes), the noun is always repeated in Jamsay (‘red shoes and black shoes’). Therefore, in two-adjective sequences both adjectives must be valid for the referent. Where the two-adjective construction does occur, the nonfinal adjective undergoes tone-dropping, as does the head noun (350).

- (350) ì jù jèm dùgú
 dog.L black.L large
 ‘a big black dog’ (ì jú, jém)

It cannot be empirically determined whether ‘large’ in (350) forces tone-dropping on both ‘dog’ and ‘black’, or whether tone-dropping is cyclical, with ‘black’ forcing tone-dropping on ‘dog’ in an inner cycle, then with ‘large’ forcing tone-dropping on ‘black’ at the next cycle.

6.3.3.2 Adjectival intensifiers

Like other languages of the zone (e.g. Fulfulde, montane Songhay languages), Jamsay has a number of intensifiers that are used chiefly with adjectives, especially in predicative function. They do not occur in my recorded texts, but do occur in more lively conversation.

Most Jamsay intensifiers are **frozen full-stem reduplications** based on CvC or CvCv “stems” that do not occur elsewhere. Nearly all are **H-toned** throughout. An example is kújú-kújú, which is paired with jém ‘black’.

There are **two constructions**. In one, the semantically primary adjective immediately precedes the intensifier and takes **L-tones**, i.e., it is tone-dropped (351.a). The ‘be’ quasi-verb, if present, follows the intensifier. Here the adjective and intensifier behave like any two modifying adjectives in sequence. In the other construction, the ordering is the same but there is **no tonal interaction**, and the ‘be’ quasi-verb is added directly to the primary adjective (351.b). Here the intensifier patterns as a loosely attached adverbial.

- (351) a. jèm kújú-kújú=kò
 black.L black.Intens=be.Nonh
 ‘It is jet black.’

- b. jém=kò kújú-kújú
 black=it.is black.Intens
 [= (a)]

An intensifier may also be included with an modifying adjective **within an NP**. In this case the first construction illustrated above, with L-toned primary adjective, is used (352).

- (352) [ì jù jèm kújú-kújú lěy] é:-sà-m
 [dog.L black.L black.Intens two] see-Reslt-1SgS
 ‘I saw two jet black dogs.’

For the adjectives in (353), a choice between different intensifiers correlates with **distinct senses**. In (353.b), the intensifier cètèrè-cètèrè differs from most other reduplicative intensifiers in its tonal pattern. It seems to have some relationship with the adjective cèté applied to unusually short animal breeds. Still in (353.b), intensifier dáj-dáj will reappear in (354), below, with é:ŋ ‘nearby’.

(353)	gloss	regular adjective	intensifier
a.	‘hot’ ‘fast’	ógù "	jáw-jáw táw-táw
b.	‘short’ ‘short and stocky’	gǔy ⁿ "	cètèrè-cètèrè dáj-dáj
c.	‘black (matte)’ ‘black (shiny)’	gǔy ⁿ gǔy ⁿ	kújú-kújú kúw ⁿ á-kùw ⁿ à

(354) lists the other reduplicative adjectival intensifiers known to me. For pírú ‘white’, the intensifier has the same p...r consonant sequence as the adjective, but aside from this possibly fortuitous example there is no phonological relationship between adjectives and their intensifiers.

(354)	gloss	regular adjective	intensifier
	‘white’	pírú	pára-pára
	‘red’	bán	búy ⁿ -búy ⁿ
	‘rotten’	ǔy	dúy-dúy
	‘sour, salty’	nôm	póy ⁿ -póy ⁿ
	‘firm’	déŋ	kúy-kúy

‘cold’	tôm	pájá-pájá
‘dry, hardened’	măy ⁿ	káláŋ-káláŋ
‘soft’	yðrú	bódó-bódó
‘long; tall’	gùrú	sél-sél
‘cold’	tôm	pájá-pájá
‘hot (object)’	ógù	jáw-jáw, pál-pál
‘hot (sun)’	"	táw-táw
‘fast’	"	táw-táw
‘thin’	ùñú	wér ⁿ é-wér ⁿ é
‘tight’	ěy ⁿ	géŋ-géŋ, gáy ⁿ -gáy ⁿ
‘nearby’	é:ŋ	dáŋ-dáŋ
‘unripe’	kòró	péy-péy
‘new’	kàná	púl-púl

Quite different patterns are seen in (355). For ‘heavy’ and ‘fast’ (355.a), the intensifier is not in reduplicative form; I take it to be a crypto-compound ending in a three-part reduplicative final. (355.b) is similar, but involves no reduplication. In (355.c), the intensifier has interjection-like CvC form, though in one case it can be reduplicated. *kák* is used in contexts like ‘he stopped still’ or ‘she stopped in her tracks’, emphasizing abrupt and total cessation of movement.

(355)	gloss	regular stem	intensifier
a.	‘heavy’ ‘fast’	dùjú ógù	cér ⁿ é-nénéné kàjàrà-lálálá
b.	‘everything’	čêw, fú:	lèrè-gètèw⇒ (cf. lèrèw ‘everything’)
c.	‘straight’ ‘stop’ ‘red (=uncooked)’	dém⇒ íjé- bàr ⁿ á	cót, cót-cót kák jáy ⁿ , jáy ⁿ -jáy ⁿ

For ‘fat, thick’, we do not get a two-part adjective-intensifier sequence. Instead, dùgú ‘fat, thick’ is replaced by gódógóróm ‘massive’.

For the cases in (356), the elicited construction involved a **verb** (either a stative, or a transitive that denotes an action that leaves the object in a state), rather than an adjective. One of the intensifiers is reduplicative, the other not.

(356)	gloss	verb	intensifier
	‘be finished’	dògó-	péy-péy (e.g. totally depleted)
	‘be wet’	témé-	jóbù
	‘be inflated’	píté-	tém-tém (i.e. fully inflated)
	‘be clean’	éjé-	séy-sèy (fastidiously cleanly)
	‘be clear, pure’	"	wéy-wèy
	(various)	—	tál-tál, téy-tèy

tál-tál or téy-tèy (the latter with falling tone contour) are used with verbs like ‘sweep’ and ‘shave’ to emphasize completeness (e.g. the head is completely clean-shaven, the courtyard is completely swept).

Examples of the **adverbial construction** are in (357). In (357.a-b), the intensifier follows a regular inflected form. (357.c) shows that jóbù can also function as (nonverbal) predicate.

- (357) a. dòg-â:-Ø péy-péy
 be.finished-Perf-3SgS be.finished.**Intens**
 ‘It (e.g. sugar) is completely finished (=used up, depleted).’
- b. tém-â: jóbù
 be.wet-Perf-3SgS wet.**Intens**
 ‘He/She/It got soaking wet’.
- c. jóbú=kò
 wet.**Intens**=be.Nonh
 ‘It is soaking wet.’ (jóbù)

For ‘thin’, the elicited construction again involved an adjectival verb dòṅó- ‘be thin’, but this time it is chained to the intensifier, which functions as (nonverbal) predicate. The intensifier is heard as [kàⁿí:ⁿ], which I take as /kàⁿ-í:/ with the -í: morpheme often used with predicative adjectives (§4.5.3).

- (358) dòṅó mèyⁿ kàⁿ-í:≡wò-Ø
 be.thin and thin.**Intens**=be.Hum-3SgS
 ‘He/She is pencil-thin.’

6.3.3.3 ‘Other’ (làyá)

The adjective làyá ‘other’ may be added unproblematically to a noun-adjective combination (359).

- (359) sàddè èyⁿ làyá
 expenditure.L major.L **other**
 ‘other major expenditures’ 2004.3.19

One can expand ‘other’, but not within the NP. The sense ‘an X other than Y’ is expressed by a NP in the form [X.L làyá], followed (perhaps after an intervening constituent) by a negative relative clause of the type ‘that is not Y’ (360).

- (360) a. [ànà làyá] [jówⁿlè=ỳ là:-Ø]
 [village.L **other**] [Dianwely=it.is Neg-Ppl.Nonh]
 ‘a village that is not (=a village other than) Dianwely’
- b. [cè: làyá] kúnó-ỳⁿ [mǎŋgòlò=ỳ là:-Ø]
 [thing.L **other**] put.Impf-1PlS [mango=it.is Neg-Ppl.Nonh]
 ‘We’ll put (in) something that is not (=that is other than) a mango.’

When the ‘other X’ NP is expanded with a relative clause, làyá differs from other adjectives in that it can appear at the end (after the participle) or in the usual adjectival position within the internal head NP. For examples, see (321) in §6.1.3, above.

6.3.3.4 ‘Near X’, ‘far from X’

Certain morphological adjectives that can be expanded phrasally. We start with ‘near’ and ‘far’ here, then consider adjectives of evaluation in the following section. Other concepts that come to mind typologically, such as ‘be angry [at X]’ and ‘be afraid [of X]’, are expressed in Jamsay by verbs rather than by adjectives.

Both ‘near’ and ‘far’ are adjectives that can take locative-adverb complements. The complement immediately precedes the adjective.

é:ŋ ‘near’ has locative PP (or tonal locative) complements in (361). In (361.a), the adjective is followed by the ‘it is’ clitic; we infer the presence of a zero head noun with spatial sense (‘if it’s [(a place) [near (to) this place]]’). In (361.b), the adjective modifies an overt noun (‘village’), which is therefore L-toned even though separated from the adjective by the expansion of the adjectival phrase. In (361.c), the adjective is predicative.

- (361) a. [[dì:ⁿ núŋò] lè] é:ŋ=î:
 [[place.L Dem] in] **near**=it.is
 ‘it’s near (to) this place’ 2004.3.21

- b. ànà [ní: lè] ê:ŋ
 village.L [water in] near.HL
 ‘a village that is near the water’ **2004.3.21** (cf. §14.1.14)
- c. éwé [úró mà dí:ʰ] é:ŋ=kò
 market [house Poss place.Loc.HL] near=be.Nonh
 ‘The market is close to the house.’

In (362), ‘water’ rather than ‘village’ is the subject of ‘near’. The construction is actually a relative clause with ‘village’ as head. Exceptionally, ‘villages’ is treated as (human) plural here, perhaps since ‘village’ is often used in the sense ‘population of the village’.

- (362) [ànà [ní: é:ŋ-ùm]]
 [village.L [water near-Ppl.Pl]]
 ‘villages that water is near’ **2004.3.9**

‘Far’ can also take a locative complement (363).

- (363) úró [éwé lè] wàγá=kò
 house [market in] far=be.Nonh
 ‘The house is far from the market’

In (364), wàγá⇒ is an adverb ‘far away’. It has a locative-adverbial complement, separated from it by an object pronominal.

- (364) [[á jé:n] lè] kó wàγá⇒ dáγá
 [[2SgP gear] in] NonhO far.away leave.Imprt
 ‘Leave it (=rifle) far away from your (other) gear!’ **2004.4.4**

6.3.3.5 ‘Good to eat’

Adjectives of evaluation, notably éru ‘good’, can be expanded (in predicative function) by adding a preceding verb. Two constructions appear to be interchangeable. In one, the verb takes Verbal Noun form (365).

- (365) a. nò-ýⁿ ér=kò
 drink-VbIN good=be.Nonh
 ‘It’s good to drink.’ (éru)

- b. cègùr-ú é̀r=kò
listen-VblN good=be.Nonh
 ‘It’s good to listen to.’ (é̀rù)

In the other construction, the verb appears in bare-stem (infinitival) form as in verb-chains, but it takes causative form (366).

- (366) a. yàŋà-wⁿá é̀r=kò
look.at-Caus good=be.Nonh
 ‘It (=ripe millet in the field) is nice to look at’ (é̀rù) **2004.3.6**
- b. ñé:-wⁿé é̀r=kò
eat-Caus good=be.Nonh
 ‘It’s good to eat.’ (é̀rù)

6.4 Noun plus demonstrative

6.4.1 Prenominal kò

Rarely, an L-toned kò preceding a noun can be the Nonhuman L-toned inalienable possessor form, in unusual combinations like ‘its father’. Much more often, prenominal kò is a general discourse-definite ‘that (same)’ demonstrative with any noun (§4.2.2.A). Most textual examples involve alienable nouns that cannot take L-toned possessor pronominals (367).

- (367) a. kò úró
Dem house
 ‘that (aforementioned) house’
- b. kò íné-m
Dem person-Pl
 ‘those (aforementioned) people’
- c. kò nǎŋ lěy kùⁿ
Dem neighborhood two Def
 ‘those two (same) neighborhoods’ **2004.4.6**

Demonstrative kò is compatible with a preceding (alienable) possessor modifying the same noun, as in (368).

- (368) á kò úró
 2SgP **Dem** house
 ‘that (aforementioned) house of yours’

However, kò is not compatible with an inalienable possessor, suggesting that it still occurs in the same linear “slot” as such possessors (in keeping with its probable original morphemic identity to the Nonhuman inalienable possessor kò). Thus (369) was rejected by my assistant.

- (369) #ù kò dê:
 2SgP.L Dem father.HL
 #‘that (aforementioned) father of yours-Sg’
 (compare the grammatical ù dê: ‘your father’)

6.4.2 Postnominal núḡò

A **deictic** demonstrative sense ‘this, that’ is expressed by adding Nonhuman núḡò, human Sg núḡò-bâ:ⁿ, or human Pl núḡò-nám to the noun. For the forms, see §4.4.1.1. A preceding modified noun drops its tones to all-L, showing that núḡò patterns in this respect as an adjective.

- (370) a. ùrò núḡò
 house **Dem**
 ‘this/that house’ (deictic)
- b. á ñè-ì-n núḡò-bâ:ⁿ
 2SgP female-child-Sg.L **Dem.L-owner.Sg**
 ‘this girl (=daughter) of yours-Sg’ **2004.3.20**

6.5 Noun plus cardinal numeral

Cardinal numerals **do not induce tone-dropping** on a preceding noun (or other preceding NP constituent such as an adjective).

- (371) a. úró nù:yⁿ
 house **five**
 ‘five houses’

- b. [ùrò èjú] nù:yⁿ
 [house.L good] **five**
 ‘five nice houses’

In (371.b), ùrò has L-tone because it is followed by an adjective, not because of the phrase-final numeral. In (371.a-b), nù:yⁿ ‘five’ is one of the lexically R-toned numerals, which are optionally (but often) heard with L-tone when they occur the end of a phrase. The R-tone of nù:yⁿ is audible before clitics and nonfinally in phrases, as for example in (395.a-b).

When a combination like (371.a-b) functions as head NP in a relative, both the numeral and the preceding lexical-toned word **drop their tones in parallel** (§14.1.3). In general, [noun + numeral] combinations appear to be **syntactically appositional** (symmetrical) rather than hierarchical (asymmetrical).

Human nouns take their regular Pl suffix -m in combination with a cardinal numeral. Likewise, a noun with (human) Sg suffix -n keeps it before túrú ‘1’ (which itself has human Sg form túrú-n).

- (372) a. íné-m nù:yⁿ
 person-Pl **five**
 ‘five people’
- b. [ì nè-m mǎñú-m] nù:yⁿ
 [person-Pl.L bad-Pl] **five**
 ‘five bad (nasty) people’
- c. dǒyǒ-n túrú-n
 Dogon-Sg **one-Sg**
 ‘one Dogon’

When a cardinal numeral **follows a combination of noun plus demonstrative** (whether the latter is pre- or postnominal), the expression is interpreted as **nonpartitive**. That is, the group in question is either ostensibly indicated (373.a) or discourse-definite (373.b).

- (373) a. [gù-gùn núṅò nù:yⁿ] éwé-ỳ
 [Rdp-watermelon.L **Dem five**] buy.Impf-1PIS
 ‘We’ll buy those five watermelons.’
- b. [kò gù-gùn nù:yⁿ] éwé-ỳ
 [**Dem** Rdp-watermelon **five**] buy.Impf-1PIS
 ‘We’ll buy those (aforementioned) five watermelons.’

For partitive sense, an **explicit partitive** construction must be used. This construction includes an initial “locational” with a postposition such as gǎǹǹ ‘between, among’ (§8.3.12) or bèrê: ‘in’ (§8.3.3) containing the demonstrative. The noun in question is resumed within the core clause that follows (374). Compare (787.e) in §13.2.2.6.

- (374) [gù-gùn núŋ̀ò mà gǎǹǹ],
 [Rdp-watermelon.L **Dem** Poss **between**],
 [gù-gùn nù:yⁿ] éwé-ỳ
 [Rdp-watermelon **five**] buy.Impf-1Pls
 ‘We’ll buy five of those watermelons.’
 [lit., “Among those watermelons, we’ll buy five watermelons.”]

6.6 Plural (bé)

The Plural particle bé is related to 3Pl pronoun bé, and it is part of Logophoric Pl pronoun èné bé. However, bé has fairly low text frequency in Pl function in nonpronominal (i.e. noun-headed) NPs. Most native Dogon human nouns can take Sg -n and Pl -m, and the suffix preempts the need for a Plural particle. However, most inalienable kin terms do not allow Sg -n or Pl -m suffixes, and these do rely on bé to express plurality: mì yésâ: ‘my (man’s) sister’, plural mì yésâ: bé ‘my sisters’. Other examples of nouns with Pl bé are jàmsây bé ‘Jamsay (people)’ and borrowed nouns like *conseiller* bé ‘councilors’ and *aventurier* bé ‘adventurers’.

For nonhuman nouns, plurality is an optional category and is usually not expressed. However, Pl bé is available when the speaker chooses to express plurality overtly: ì jú bé ‘dogs’, versus simple ì jú ‘dog(s)’. Examples involving inanimate nouns are in (375).

- (375) a. [[kó kùⁿ] mà à-tí:] mà tǒg kùⁿ bé
 [[Nonh Def] Poss bird.trap] Poss kind Def **Pl**
 ‘those types of bird traps’ (tògú) **2004.3.16**
- b. [jè:n bè jèrê:-Ø]=ỳ⇒,
 [gear.L 3Pls.L keep.Impf-Ppl.Nonh]=it.is
 [bè:né kùⁿ bé]=ỳ
 [shoulder.bag Def **Pl**]=it.is
 ‘It’s the gear for holding, it’s shoulder bags (that they put it in).’
2004.3.17

bé may precede a cardinal numeral, or a universal quantifier (‘all’).

- (376) a. mì yésâ: bé lèy
 1SgP sister.HL Pl two
 ‘my two sisters’ (lěy)
- b. mì yésâ: bé.: fú:
 1SgP sister.HL Pl all
 ‘all (of) my sisters’

When a plural [noun + bé] sequence is combined with postposition *lè* (dative, instrumental, locative), the usual expression is [noun + *bè-rú*]. The more transparent [noun + *bé lè*] was accepted by informants in elicitation, but I did not observe it in recorded texts. *bè-rú* is identical to the 3Pl dative form ‘to/for them’.

- (377) [ñě:-rⁿ-ùm dê: bè-rú] yă:
 [female-child-Pl father.HL **Pl-Dat**] go
 [î-n kùⁿ] jàŋá-bà
 [child-Sg Def] request.Impf-3PIS
 ‘They will go and ask the girls’ fathers for the child (=the bride)’
2004.3.20

When a plural NP with *bé* is relativized, *bé* (like Definite *kùⁿ* and some other elements) normally appears **at the end of the relative** rather than after the head noun (§6.1.3). This is seen in (378), which is based on the NP *ì jú bé* ‘(the) dogs’.

- (378) ì jù gô:-Ø kùⁿ bé
 dog go.out.Perf.HL-Ppl.Nonh Def **Pl**
 ‘the dogs who went out’.

Another function of *bé* is in conjunction phrases, of the type [[X *bé*⇒] [Y *bé*⇒]] meaning ‘X and Y’ (where X and/or Y may be singular or plural). Here the vowel of *bé* is prolonged with no drop in tone (⇒), especially on the first occurrence. See §7.1.2 for discussion and examples of NP conjunctions.

6.7 Definite (*kùⁿ*)

This particle is very common at the end of nonpronominal NPs. It is similar in function to English definite *the*. In other words, it is a non-emphatic discourse-anaphoric (or otherwise definite) determiner.

Definite *kùⁿ* is common, for example, in tales where two or three animal protagonists are established as discourse referents at an early point, and are then referred to repeatedly as the action unfolds.

(379) occurs in the middle of a tale. Mouse has been previously introduced, and is reestablished as local topic by a definite NP after Cat has taken center stage briefly (probably in error). Another discourse referent, millet beer, is introduced and is subsequently referred to in definite form. The passage also contains a headless adverbial relative clause ending in *kùⁿ* ('when he went'), with scope over an unexpressed head noun like 'time', cf. (840.a) and (841.a-b).

- (379) [ní: túrú kɛ́] nì-nì wⁿé yǎ: mɛ̀yⁿ—,
 [day one Topic] Rdp-cat go and,
 [ù-jùwⁿó kùⁿ] [ɛ̀né yâ:-Ø kùⁿ]
 [Rdp-mouse **Def**] [Refl go.Perf.HL-Ppl.Nonh **Def**]
 [ní: túrú kɛ́] kòñs nò:-Ø,
 [day one Topic] millet.beer drink.Perf.L-3SgS,
 [kòñs nǎ: mɛ̀yⁿ] hâl yǎ: mɛ̀yⁿ
 [millet.beer drink and] until go and
 [kòñs kùⁿ] kó à:-Ø
 [millet.beer **Def**] NonhO catch.Perf.L-3SgS
 'One day [topic], Cat went and—, the Mouse_x, when he_x went (to the field), one day he_x drank some millet beer; he_x drank the millet beer, to the point that the millet beer grabbed him_x (=made him_x drunk).'
- 2004.4.1**

kùⁿ does not co-occur with the stronger deictic demonstratives based on *núŋò*. It may be used after a possessed noun when discourse-anaphoric status is indicated. In (380), the nose in question had been referred to as *ɛ̀né mà cíⁿé* 'my (logophoric) nose' earlier in the same text, without *kùⁿ*.

- (380) [ɛ̀né mà cíⁿé kùⁿ] lè
 [Logo Poss nose **Def**] to
 '(if it comes close) to my (aforementioned) nose' (in quotation)
- 2004.4.2**

Like Plural *bé*, when Definite *kùⁿ* has scope over the head NP of a relative clause, it appears in clause-final position, after the participle (§6.1.3). See example (378) in the preceding section.

kùⁿ is only occasionally used after human pronouns, but the combination is grammatical. Third person *wó kùⁿ* 'he/she' may be used to emphasize discourse definiteness, while 2Sg *ú kùⁿ* 'you-Sg' is used roughly like 'you there' with emphatic force.

With a nonhuman pronoun, $kù^n$ occurs in the high-frequency combination $kó\ kù^n$ ‘that’, denoting some entity or situation previously introduced into the discourse, often in a resumptive fashion (as topic of a following sentence). A good example with clear discourse context is the third line of (408). Other examples of $kó\ kù^n$ are (192), (207.a), (280.b), (484.a), and (507.a).

6.8 Universal and distributive quantifiers

6.8.1 ‘Each X’ ($kâ:^n$) and ‘all X’ ($cêw$, $fú:$, $sóy$)

Three forms are relevant here. **Distributive** quantifier $kâ:^n$ behaves like an adjective (or compound final), forcing tone-dropping on a preceding noun. It is best glossed ‘each, every’, and occurs most often in simple NP’s consisting just of [noun (+ adjective) + $kâ:^n$]. It does not co-occur with determiners (demonstratives, Definite) or with other quantifiers such as cardinal numerals. It must be distinguished from homonym $kâ:^n$ ‘also, too’ (variant $kár^nà$), which occurs freely after a wide range of NPs (and other constituents) and has no tonal effect on the preceding word (§19.1.3).

Universal quantifiers $cêw$ and $fú:$ (the latter also pronounced $pú:$ after a nasal) are more emphatic, may be glossed in context as ‘all’ or less often ‘each, every’, and occur at the end of the constituent they have scope over. $cêw$ and $fú:$ do not force tone-dropping on a preceding nonpronominal NP. However, $fú:$ does induce the **dying-quail final intonation** (symbol $∴$), i.e. prolongation and exaggerated falling tone, on the preceding word when it modifies a nonpronominal NP (§3.8.3): $ùr^nó∴$. $fú:$ ‘every hole’, roughly phonetic $[ùr^nóòò\ fú:]$. The $∴$ effect is usually omitted, but occasionally audible, in pronominal combinations, e.g. $[kò(∴)\ fú:]$ ‘all of it, everything’.

Both $cêw$ and $fú:$ force **L-tone on a preceding pronominal** (but not noun): $èmè\ cêw$ or $èmè\ fú:$ ‘all of us’. ‘Everything’ is expressed by $[kò\ cêw]$ or $[kò\ fú:]$, where $kò$ can be taken as the tone-dropped counterpart of Nonhuman pronoun $kó$, or (less likely) as the pronominal demonstrative $kò$. 1PI $émé$ is often **apocoped** before $fú:$, with the f then hardening to p after the nasal: $èm\ pú:$ ‘all of us’. $fú:$ is sometimes itself prolonged intonationally: $fú:⇒$. An elicited example is (381), where $fú:$ shifts to $pú:$ after a nasal. I have difficulty in text transcriptions determining when the intonational marking $⇒$ is justified for $fú:$, since universal quantifiers are naturally emphatic.

- (381) $úr^n-ùm∴\ pú:⇒\ yǎ:-yà-bà$
 child-Pl **all** go-Perf-3PlS
 ‘All the children went’

My assistant did not accept sentences where a “floating” *cêw* or *fú:* (in adverbial function) is separated from the relevant NP constituent by another element. Thus, ‘I gave him all the money’ is expressed with the ordering [[money Def **all**] 3Sg-Dat give.Perf.L-1Sg] ([bú:dù kùⁿ fú:] wò-rú ò:-m), rather than as #[[money Def] 3Sg-Dat **all** give.Perf.L-1Sg] (#[bú:dù kùⁿ] wò-rú fú: ò:-m) with the quantifier “floating” into preverbal position. However, a topical NP like ‘the money’ in (382) may be resumed by a pronominal plus quantifier.

- (382) [bú:dù kùⁿ] wò-rú [kò fú:] ò:-m
 [money Def] 3Sg-Dat [**Nonh.L all**] give.Perf.L-1SgS
 ‘The money, I gave him [all of it].’

íné ‘person’ requires a suffix (Sg -n, Pl -m) when unmodified, and specifically requires Pl -m before *cêw* and *fú:*, hence *íné-m cêw* and *íné-m .: fú:* ‘all people, everyone’. By contrast, this stem appears as *ì nè* without suffix (and with tones dropped) before *kâ:ⁿ* ‘each’, hence *ì nè kâ:ⁿ* ‘each person’. A possibly related quirk is that *ì nè kâ:ⁿ* is sometimes applied to nonhuman entities in the sense ‘each one’ (383).

- (383) *yà:-gò:-ná:* [kó lèy] *tùl-lá-Ø*,
 woman.L-dance.L-true [Nonh two] one-Neg-3SgS,
 [ì nè kâ:ⁿ] [èné mà tógú] *déyⁿ-déyⁿ*
 [**person.L each**] [Refl Poss kind] distinct-distinct
 ‘(Calabash dance and) the true women’s dance [topic], the two of them are not the same; each one [topic], its kind (=character) is distinct.’
 (túru) **2004.4.14**

Other human nouns keep Sg suffix -n (NB: not Pl -m) before *kâ:ⁿ* ‘each’, as in *dòyò-n kâ:ⁿ* ‘each Dogon’ and *ñè-n kâ:ⁿ* ‘each woman’.

(384) shows that all three quantifiers can be used at least loosely in **distributive** sense. The version with *kâ:ⁿ* (384.a) is clearly predominant in this context (if the noun has no other modifiers). However, if special emphasis is placed on the fact that every single person was given a sheep, a **singular countable noun** may be followed by *cêw* or by *fú:*.

- (384) a. [ì nè kâ:ⁿ lè] [pé:jú tút-túru] ò:-bà
 [person.L **each** Dat] [sheep one-one] give.Perf.L-3PlS
 ‘They gave each person one sheep.’

- b. [íné-n cêw lè] [pé:jú tút-túru] ò:-bà
 [person **all** Dat]
 [=a]
- c. [íné-n.: fú: lè] [pé:jú tút-túru] ò:-bà
 [person **all** Dat]
 [=a]

With nouns denoting unindividuated masses ('sand', 'water', 'millet'), either *cêw* or *fú:* may be used (385). *kâ:n* would only be used in unusual contexts involving individuation ('each grain of sand', etc.).

- (385) a. [kî-ká: kùⁿ] [ñú: kùⁿ cêw] ñé:-jè-Ø
 [grasshopper Def] [millet Def **all**] eat-RecPf-3SgS
 'The grasshoppers (=locusts) have eaten all of the millet.'
- b. [kî-ká: kùⁿ] [ñú: kùⁿ.: fú:] ñé:-jè-Ø
 [grasshopper Def] [millet Def **all**] eat-RecPf-3SgS
 [=a]

In the **universal quantificational** sense 'all', referring to a universe of individuals rather than a mass, *cêw* and *fú:* are used.

- (386) [úró kùⁿ.: fú:] nùm-â:-Ø
 [úró kùⁿ cêw] "
 house Def **all** fall-Perf-3SgS
 'All of the houses collapsed.'

Universal quantifiers *cêw* and *fú:* may combine with other quantifiers, such as cardinal numerals (387). In simple cases the universal quantifier is emphatic here, stressing that the predication applies to every one of the elements in the set defined by the other quantifier (387). For more complex examples, see §6.8.4, below.

- (387) [bé lèy cêw] bðrⁿâ:-Ø
 [3Pl **two all**] call.Impf-3SgS
 'He will summon both (=the two) of them.' **2004.4.6**

While *cêw* normally has scope over a preceding NP, clause, or other constituent, it has also been elicited in **adverbial function**. The distinction can be made by observing the linear order of elements in the elicited examples (388.a-b).

- (388) a. àrⁿ-ùm yérè-m cêw
 man-Pl.L come.Perf.HL-Ppl.Pl all
 ‘all (of) the men who came’
- b. àrⁿ-ùm cêw yérè-m
 man-Pl.L all come.Perf.HL-Ppl.Pl
 ‘the men who came as a totality’

(388.a) is the usual case where cêw has universal quantificational scope over ‘men who came’. In (388.b), cêw is adverbial, though it is adjacent to the head noun. Its exact sense is difficult for me to assess in the absence of textual examples. For what it may be worth, (388.b) was glossed by my assistant, in French, as *les hommes qui sont venus au complet*.

sóy ‘all, entirely’ is an emphatic adverbial that can sometimes be glossed as an NP substitute; see §8.5.8.7. For the sense ‘(not) at all’ see §19.5.4.

6.8.2 ‘No X’

When the verb is negated, kâ:ⁿ ‘each’ has a wide-scope interpretation and can be glossed ‘any’ (389).

- (389) [cè: kâ:ⁿ] bèl-lú-m
 [thing **each**] get-PerfNeg-1SgS
 ‘I didn’t get anything.’ (bèré-)

That is, [∀ X [not [I got X]]].

Even with what are ordinarily mass nouns, kâ:ⁿ may be used, arguably imposing an individuation on the mass. fú: may be added to kâ:ⁿ for emphasis, but fú: is not directly added to the noun in this wide-scope sense.

- (390) a. [ñù: kâ:ⁿ] cèjè-lú-m
 [millet **each**] cut-PerfNeg-1SgS
 ‘I didn’t cut (=harvest) any millet.’
- b. [ñù: kâ:ⁿ∴ fú:] cèjè-lú-m
 [millet **each** **all**] cut-PerfNeg-1SgS
 ‘I didn’t cut (=harvest) any millet.’

fú: or cêw may be added directly to the noun before a negated verb, but here the quantifier has narrow scope (391).

- (391) a.. [ñú:∴ fú:] cèjè-lú-m
 [millet all] cut-PerfNeg-1SgS
 ‘I did not cut (=harvest) all the millet.’
- b.. [ñú: cêw] cèjè-lú-m
 [millet all] cut-PerfNeg-1SgS
 [=a)]
- c. gàmà-nám [kò cêw] bèrè-j-é,
 some-Pl [Dem all] get-ImpfNeg-3PlS,
 bèl-l-á tájà: dèy
 get-PerfNeg-3PlS happen if
 ‘Some (tax collectors) wouldn’t get all of it (=the full amount owed by a village). If they didn’t get (it), ...’ **2004.4.22**

That is, in (391.a-b), [not [∀ X [I cut X]]].

6.8.3 [X yó⇒ X] ‘from X to X’ or ‘every/any X’

There is a somewhat archaic construction with repeated noun X flanking a morpheme yó⇒ with rhetorically exaggerated prolongation (symbol ⇒). The construction is stylistically colorful.

(392.a) illustrates this for an NP in adverbial function. árⁿà yó⇒ árⁿà is based on an archaic term for ‘year’, attested elsewhere as a compound initial and in the tonal locative form àrⁿâ: ‘in a (certain) year’. The usual term for ‘year’ is the compound àrⁿâ-kújú. In (392.b-c), the entire NP functions as head of a relative; the second X dutifully undergoes tone-dropping (392.b).

- (392) a. [árⁿà yó⇒ árⁿà] ñú: bèrè-ù dèy↑,
 [year to year.L] millet get.Impf-2SgS if,
 [ñú: ké] wá:jíbi≡y kó dõrⁿó-ùⁿ
 [millet Topic] obligation=it.is NonhO sell.Impf-2SgS
 ‘Every (single) year in which you get (=harvest) millet, (that) millet [topic], you must sell (some of) it.’ **2004.3.10**
- b. [nùwⁿó yó⇒ nùwⁿò] bèn kùn-ó-Ø,
 [death to death.L] tomtom be.in-Neg-Ppl.Nonh,
 [sún≡ì: là: dèy] [sèyàm kê:ⁿ] kò-rú kùn-ó
 [sadness=it.is Neg if] [happiness.L any] Nonh-in be.in-Neg
 ‘Every death that tomtoms are not (involved) in, (there is) only sadness, no joy (=festivity) is in them.’ **2004.3.21**

- c. [màlfâ:ⁿ yó⇒ màlfâ:ⁿ] gô:-Ø,
 [rifle to rifle.L] go.out.Perf.HL-Ppl.Nonh,
 [màlfâ:ⁿ [kó ní-ŋírⁿé] kórsó-sà-Ø]
 [rifle.L [Nonh Rdp-day] fail-Reslt-Ppl.Nonh]
 [kó bërê:] gò:-lì -Ø
 [Nonh in] go.out-PerfNeg.L-3SgS
 ‘(Of) all the rifles that went out (to the bush), no rifle among them
 that jammed went out on that day.’ (i.e., all the rifles fired properly)
2004.3.24

An example involving a longer noun stem is (393).

- (393) [cì -cèrⁿè-î-n yó⇒
 [Rdp-circumcision.L-child-Sg to
 cì -cèrⁿè-î-n],
 Rdp-circumcision.L-child-S]
 [témé-rⁿé mà bërê:] lá:-lá:≡y dèy,
 [tradition Poss in] first-first=it.is if,
 là:râ lá:râ:-Ø dèy
 defecation.place defecate.Impf if
 ‘Every just-circumcised boy, traditionally, if it’s (=if we’re talking
 about) the past, if he (=boy) was going just outside the village to
 defecate, ...’ **2004.3.18**

In a text from an elderly woman there was an occurrence of [noun + yô:], with tone-dropping on the noun. This was only half-understood by my much younger assistant. The sequence can be construed as having plural reference. One could also transcribe yó:..

- (394) [kù:ⁿ-bònó kùⁿ], [ká:lísì lè], [càrà yô: lè],
 [head.L-tie.in.row Def], [money Inst], [silver.L Pl(?) Inst],
 [kú:ⁿ kùⁿ] kó≡y bònó jǎ:-bà jì:ⁿ wà
 [head Def] Nonh=Foc tie.in.row convey.Impf-3PIS Past say
 ‘That tie-in-row-on-head (a hairstyle), with coins, with (lots of) silver
 (coins); the head, that (=coins) [focus] is what they used to string
 together (in rows) and take (to use in hairstyles), they say.’ **2004.4.19**

6.8.4 Universal quantifier combined with a numeral

To illustrate interactions between ‘all’ and numerals, consider (395).

- (395) a. [bé nǔ:yⁿ cêw] [pé:jú lěy-lěy] bèrè-bà
 [3Pl **five** **all**] [sheep **two-two**] get.Perf.L-3PlS
 ‘Each (=every one) of the five (people) got two sheep.’
- b. [íné-m nǔ:yⁿ ∴ fú: lè]
 [person-Pl **five** **all** Dat]
 [pé:jú lěy-lěy] ò:-bà
 [sheep **two-two**] give.Perf.L-3PlS
 ‘They gave two sheep to each (=every one) of the five people.’

In the English free translations, ‘each X’ has wide scope, containing the numeral phrase, e.g. “[\forall X [X get two sheep]] & [\exists five X].” In Jamsay, distributivity is expressed by iterating the numeral (§4.7.1.6). A slightly marked free translation of the type ‘All five (people) got two sheep each’ would be closer to the Jamsay construction. cêw and fú: are interchangeable in this construction. Now consider (396).

- (396) [íné-m nǔ:yⁿ cêw lè] [pé:jú túrú] ò:-bà
 [person-Pl **five** **all** Dat] [sheep **one**] give.Perf.L-3PlS
 ‘They gave one sheep to each (group of) five people.’

Here the logical structure is “[\forall G [[G get one sheep]] & [G = five persons]”. Again, fú: could be used as an alternative to cêw. A version with kâ:ⁿ was rejected.

6.9 Apposition

The sequence **core NP plus numeral** is structurally appositional, unlike other superficially similar sequences like noun plus modifying adjective (including ordinals). In the case of [NP + numeral], both the final word in the core NP and the numeral have their regular tones; in addition, the NP has its regular (human) Sg or Pl suffix, as it would in the absence of the numeral. When the NP in question is head of a relative clause, tone-dropping applies simultaneously to the final word in the core NP (the noun, or a following modifying adjective) and to the numeral. For details and examples, see §6.5, above, and §14.1.3.

Apposition is also regular when a pronoun is “modified.” When a **pronoun** (with human referent) is logically the **head of a relative**, it occurs to the left in its independent (H-toned) form, in apposition to a form of íné ‘person’ which follows. Only íné shows the tone-dropping characteristic of relative-clause heads (397). I therefore bracket íné inside the relative clause, with the pronoun outside the brackets. For more details, see §14.1.4.

- (397) a. *ú* [ì nè wárú wàrà bèrè-gó-n]
2Sg [person.L farming farm(verb) can-ImpfNeg-Ppl.Sg]
 ‘you-Sg the person who does not know how to farm’
- b. *mí* [ì nè ù jùgó-̀n]
1Sg [person.L 2SgS.L know.Impf-Ppl.Sg]
 ‘I the person whom you-Sg know’

The same type of apposition is common when a pronoun is “modified” by a **numeral**. The pronoun often appears in independent form, in apposition to a number-marked form of *íné-* ‘person’, which is directly juxtaposed to the numeral (398.a). If the numeral is *túró* ‘one’, when added to the proxy *íné-n* ‘person’ it has Sg suffix *-n* (398.b). Numerals, especially ‘one’ and ‘two’, can also be added directly to the pronoun with no suffix (398.c-d).

- (398) a. *é* [íné-m lèy]
2Pl [person-Pl **two**]
 ‘you two, the two of you’
- b. *ú* [íné-n túró-n]
2Sg [person-Sg **one-Sg**]
 ‘you-Sg alone’
- c. *ú* *túró*
2Sg **one**
 [= (b)]
- d. [émé lèy] *gámá nîm*
 [1Pl **two**] some now
 [[émé lèy] *mà gǎnh*] *mà wàyá ...*
 [[1Pl **two**] Poss between] Poss distance ...
 ‘The two of us, often now, the distance between the two of us (is ...).’ **2004.5.1**

It is possible to complicate forms like those in (398.a-b) by adding the noun *kú:*ⁿ ‘head’ to the equation. In (399), *kú:*ⁿ is the immediate complement of the numeral. The 1Pl pronoun *émé* is leftmost, followed by *íné-m*. Arguably this is a three-way apposition between the pronoun, ‘person’, and ‘head’ (note the absence of an overt Possessive morpheme between ‘person’ and ‘head’).

- (399) a. émé ínέ-m kú:ⁿ nù:yⁿ
 1Pl person **head** five
 ‘the five of us’
- b. émé [ínέ-m péré lěy sáyà]
1Pl [person-Pl ten two plus]
 ‘the twelve of us’ **2004.5.1**

Apposition between a **pronoun** and a **noun** is illustrated in (400). In (400.a), *ú* can only be analysed as an independent pronoun; contrast 2Sg possessor *á* in e.g. *á ðyǎ-n* ‘your-Sg chief’. With pronouns other than 1Sg and 2Sg (which have special alienable possessor forms), there is no morphological distinction between apposition and possession. Thus (400.b) could literally mean ‘our Dogon people’ or ‘we (the) Dogon people’.

- (400) a. *ú* ðyǎ-n
2Sg chief-Sg
 ‘you-Sg the chief’
- b. émé dðyǎ-m
1Pl Dogon-Pl
 ‘we Dogon people’ (or ‘our Dogon people’)

7 Coordination

7.1 NP coordination

There is no basic conjunctive particle ‘and’, nor even a ‘with’ postposition used in translation equivalents of conjunctions. Instead, conjuncts are simply juxtaposed, with prosodic modifications used to express conjunction. There is an ‘or’ particle *má* (and variants), also used in polar questions.

7.1.1 NP conjunction (‘X and Y’) by dying-quail final intonation

7.1.1.1 Non-iterative NP conjunction

Conjoined NPs, including pronouns, are juxtaposed without an overt conjunction. The normal articulation is with a **dying-quail** intonational ending on both conjuncts. That is, the final syllabic nucleus of each conjunct is prolonged with a slowly falling pitch (§3.8.3). Dying-quail intonation is indicated by *∴* after the relevant word, which is otherwise transcribed with its ordinary tones and vowel-length.

This intonation pattern is most conspicuous when both conjuncts are short, as in pronoun conjunction (401).

- (401) a. [wó∴ kó∴] t̂∴-n bè â∴ cêw, ...
[3Sg Nonh] Recip-Sg 3PLS.L catch.Perf.HL all, ...
‘When he and it (=lion) had seized each other, ...’ **2004.3.2**
- b. émé∴ ú∴
1Pl 2Sg
‘you-Sg and us’

In (401.a), for example, the conjunction is pronounced [wóōò, kóōò] with exaggerated lengthening and a long, arc-ing pitch decline on both conjuncts, and with an intonation break in between. This is standard for pronominal conjunctions.

A pronominal conjunction [X∴ Y∴] behaves like a nonpronominal NP. In particular, when the conjoined NP as a whole functions as (alienable) possessor,

the pronominals take their usual independent form, and the NP is followed by Possessive *mà*. (402) shows this with noun-like postposition *gǎnǎn* ‘between’.

- (402) [émé.: é.:] mà gǎnǎn
 [1Pl 2Pl] Poss **between**
 ‘between us and you-Pl’

A logophoric may be a conjunct (403).

- (403) ñě-m [ú.: [èné bé.:]] cí-cêw gá-bà
 woman-Pl [2Sg [Logo Pl]] same say.Impf-3Pl
 ‘The women will say that you-Sg and they are the same.’ **2004.3.3**
 [i.e., they will call you (a man) no better than a woman]

NPs, including simple nouns, are also conjoined in this way (404). In (404.c), the conjuncts are nouns, though elsewhere they often function adverbially.

- (404) a. àrⁿ-úm.: ñě-m.:
man-Pl woman-Pl
 ‘men and women’
- b. [tájù.: sî-sèg]≡î:
 [basket Rdp-filtering.basket]=it.is
 ‘It is (tightly woven) baskets and (coarse) filtering baskets’
2004.3.6
- c. [yá.: íjé.:] kǎw=kò
 [yesterday today] different=be.Nonh
 ‘Yesterday and today are quite different.’ **2004.3.19**

In (404.b), which ends in underlying /sî-sègú.:≡ỹ/, the contraction of stem-final *ú* and clitic *≡ỹ* to F-toned *≡î*: almost swallows up the second *∴* into-national segment.

in (405), a pronoun is conjoined to a noun. Here, as often, a conjunction phrase functions as complement of *gǎnǎn* ‘between’.

- (405) [kó.: ùjùbǎy.:] mà gǎnǎn
 [Nonh ground] Poss between
 ‘between it and the ground’ **2004.3.6**

When the second conjunct is complex, the dying-quail intonation is always still possible. However, in natural speech its expression ranges from clear to weakly audible to inaudible. In (406), the special intonation is clear in the initial conjunct (a pronoun), which suffices to characterize the construction as a conjunction, even though the expected *∴* following the longer second conjunct was not audibly realized.

- (406) ... bón bè kúnô:-Ø,
 ... name 3PlS.L put.Impf-Ppl.Nonh,
 [[kó∴ [ñě-m mà àjùwò-sǔm-Ø]
 [[Nonh [woman-Pl Poss new.mother-wash-VbIN]
 mà kù:ⁿ] èmě-n tégé
 Poss about] 1Pl-Dat speak.Imprt
 ‘(How) they bestow names (on newborns); tell-Sg us about that and
 (about) the washing of new mothers (=postpartum seclusion)!’
2004.3.19

While most conjunctions have exactly two conjuncts, the construction is **expandible** to include three or more. In (407), the speaker introduces three methods of sowing millet which he will proceed to describe in the remainder of the text.

- (407) [tǒy∴ wàrà-nǎm∴ à-jǎyⁿ] yó=kò
 [sowing farm(noun).L-step.on planting.in.pits] exist=be.Nonh
 ‘There is regular planting, “plant-and-step-on” planting (for marginal spots of the field), and planting in pits (with manure).’ **2004.3.5**

However, such sequences (especially when introducing new referents into the discourse) may take Plural *bé* after each conjunct, especially when treated as lists (§7.1.2, below).

A more complex example, where each conjunct is possessed, is (408).

- (408) [ñú: mà lórú∴], [kó ì:ⁿ-nàrⁿ-ú∴],
 [millet Poss pregnancy], [NonhP child.L-bear-VbIN]
 [kó èm-tòŋ-ú∴], [kó bò:-dè-ý∴],
 [NonhP milk.L-grow-VbIN], [NonhP fuzz.L-carry-VbIN],
 [kó kùⁿ mà kù:ⁿ] dáγà⇒ èmě-n tégé
 [Nonh Def Poss about] a.little 1Pl-Dat speak.Imprt
 ‘The millet bearing its ear (seed spike), its bearing grains, its exuding a
 milk-like liquid (from the unripe grains), and its carrying fuzz (on the
 ear), (please) tell us a little about (all) that!’ **2004.3.6**

In conjunctions of the type ‘a big dog and a small dog’, with shared noun but distinct adjectives, the noun need not be repeated (409).

- (409) [[tàm̀b̀r̀r̀ ò̀jú̀.̀.] m̀ñ̀ú̀.̀.] mà k̀àw-g-ú bé⇒
 [[date.L **good bad**] Poss be.separate-Caus-VbIN Pl
 ‘(and) there is (work) separating good and (=from) bad dates (fruit)’
2004.5.3

A conjoined NP functions as a single NP within a sentence. In (410.a), k̀ò ‘be’ has scope over the entire conjunction. The same is true of the postposition in (410.b).

- (410) a. [w̃m̀.̀ wárú̀.̀.] k̀ò
 [weeding planting] be.Nonh
 ‘It is weeding and planting’ **2004.3.6**
- b. [[èné nâ:] [èné dè:]] lè
 [[Refl mother.HL] [Refl father.HL]] **Dat**
 ‘(she said) to her mother and (to) her father’ **2004.4.16**

Verbs are not conjoined using the dying-quail prosody, but nominalized verbs denoting actions are occasionally conjoined (when functioning syntactically as nouns, e.g. as object of k̀árⁿá- ‘do’). An unusual combination meaning ‘going and coming’ is illustrated in (411); it is based on the unsuffixed verb stems with a tonal change. After factoring out the pitch fall due to dying-quail intonation, it is impossible to determine whether the first conjunct’s tone is H or F (yá: or yâ:).

- (411) [yá̀.̀ yé̀r̀è̀.̀.] k̀árⁿá=k̀ò
 [**going coming**] do.Impf=be.Nonh
 ‘It (=cobra) makes back-and-forth movements (while spitting)’ (yǎ̀-,
 yè̀ré̀-) **2004.3.5**

7.1.1.2 Ordering of conjuncts

The ordering of elements is not rigid. However, the predominant patterns are those in (412). Examples are in (413).

(412) Ordering of conjuncts

- a. pronoun precedes noun-headed (nonpronominal) NP
- b. X precedes possessed [X's Y]
- c. if both are pronouns, 1st < 2nd < 3rd

(413) a. mí.: ñě-m.:
 1Sg woman-Pl
 'me and the women'

b. á:mádù.: [wò dè:.]
 Amadou [3SgP.L father.HL]
 'Amadou and his father' (inalienable possessor)

c. á:mádù.: [wó ìjú:.]
 Amadou [3SgP dog]
 'Amadou and his dog' (alienable possessor)

d. mí.: ú.:
1Sg 2Sg
 'me and you-Sg'

e. émé.: é.:
1Pl 2Pl
 'we and you-Pl'

f. ú.: wó.:
2Sg 3Sg
 'you-Sg and he/she'

7.1.1.3 *Distributive NP iteration in conjunction form*

A noun (or NP) in generic sense may be conjoined with itself, expressing a distributive sense, roughly '(from) X to X' or 'among X's'.

(414) [àná.: àná.:], [ùjùbǎy.: ùjùbǎy.:],
 [village village], [country country],
 íné-m t̂:-n yèré mèyⁿ céjé-bà
 person.Pl Recip-Sg come and meet.Impf-3Pl
 'Village to village, country to country, people come and encounter each other' **2004.3.15**

Such iterative conjunctions often serve as complements of *gǎnh* ‘between, among’ (415), cf. §8.3.12.

- (415) [émé dǎyǎ-àná]
 [1PIP Dogon.L-village]
 [[ùrò-dú:.: ùrò-dú:.:] mà gǎnh] jéy bé:-yà-Ø,
 [[**family family**] Poss **among**] fight happen-Perf-3SgS
 [[iné-m.: iné-m.:] mà gǎnh] jéy bé:-yà-Ø dèy
 [[**person-Pl person-Pl**]Poss **among**] fight happen-Perf-3SgS if
 ‘In our Dogon villages, (when) a squabble breaks out among (extended)
 families, (or) when a squabble breaks out among people’ **2004.4.6**

7.1.1.4 Conjunction with final quantifier

Infrequently, an NP conjunction ends with a quantifier that expresses the summed cardinality of the two conjuncts. In most such examples, the quantifier is the numeral ‘two’, as in (416).

- (416) mǎ:n [[[ú: mǎ:n: lěy] mà gǎnh]
 so-and-so [[[**2Sg so-and-so two**] Poss between]
 à:-lí-Ø] jà:ⁿ-lá-Ø
 be.caught-PerfNeg-3SgS] be.right-Neg-3SgS
 ‘(They will say:) “So-and-So_x (vocative)! It is not right that things be
 bad (“not caught=accepted”) between the two (=pair) of you-Sg_x and
 So-and-So_y (=another person).’ **2004.4.6**

7.1.1.5 Conflict between dying-quail intonation and syntactic tone-dropping

The question arises whether dying-quail intonation in conjunction can survive in a morphosyntactic context that requires **tone-dropping** (i.e. flat, low pitch). The issue does not arise in connection with noun-adjective sequences, since e.g. ‘big dogs and big cats’ does not reduce (in Jamsay) to ‘big [dogs and cats]’, where the adjective has scope over a conjoined (core) NP.

When a conjoined NP functions as head NP in a relative, however, there is a potential conflict between the curvacious dying-quail intonation contour, and the tone-dropped flat pitch required by the larger morphosyntax. The issue is often avoided by using parallel relative clauses: ‘the man who was here, and the woman who was here’ (instead of ‘the man and the woman who were here’). As a result, I have no clear textual examples with conjoined NPs as relative-clause heads. However, I was able to elicit such examples.

In these elicited data, the **left conjunct** consistently kept its dying-quail contour. The treatment of the right conjunct was variable. Occasionally, it appeared with full dying-quail intonation. Much more often, the right conjunct underwent tone-dropping. When tone-dropping applied, usually there was no intonational prolongation (i.e., there was no trace of dying-quail). However, some mixed pronunciations were also observed, with intonational prolongation of a tone-dropped form. With a noun like *ñě-n* ‘woman’, the three outputs for the right conjunct would be *ñě-n.:* (full dying-quail form), *ñè-n.:* (tone-dropped but with prolongation), and *ñè-n* (tone-dropped with no prolongation).

The main clause in (417.a) appears in relative-clause form in (417.b), with three variant forms of the right conjunct. The most common pattern in my elicited data is the one with *ñè-n*. Two further examples of the construction are given in (417.c-d).

- (417) a. [*ǎ-n.:* *ñě-n.:*] *yěy-yà-bà*
man-Sg **woman-Sg** come-Perf-3PLS
 ‘A man and a woman came.’
- b. [*ǎ-n.:* *ñě-n.:*] *yérè-m* *kùⁿ*
or: [*ǎ-n.:* *ñè-n.:*] *yérè-m* *kùⁿ*
or: [*ǎ-n.:* *ñè-n*] *yérè-m* *kùⁿ*
 [**man-Sg** **woman-Sg(.L)**] come.Perf.HL-Ppl.PI Def
 ‘the man and the woman who came’
- c. [*ì jú.:* *nì-nì wⁿé.:*] *tô:-n* *cèrè-Ø*
 [**dog** **cat**] Recip-Sg bite.Perf.L-Nonh
 ‘A dog and a cat bit each other.’
- d. [*ì jú.:* *nì-nì wⁿè*] *tô:-n* *cèrè-Ø* *kùⁿ* *yókkò*
 [**dog** **cat.L**] Recip-Sg bite.Perf.HL-Ppl.Nonh Def which?
 ‘Which (=where) are the dog and the cat that bit each other?’

7.1.2 NP conjunction with *bé⇒*... *bé⇒*

An alternative mechanism for conjoining NP’s X and Y (and Z ...) is of the form (418).

- (418) [X *bé⇒*] [Y *bé⇒*] ([Z *bé⇒*] ...)

This construction is most often used when discourse referents are introduced, especially in the form of **open-ended lists**. It therefore has a more

existential flavor that the usual dying-quail intonation pattern: ‘there is X, (and) there is Y, (and) there is Z, ...’. Consistent with this, I have not observed this construction in conjunctions where both components are pronouns. However, there are some textual examples where one feels that the sense is not appreciably different from that of the dying-quail type, as in (419.a), below.

The final intonation represented by \Rightarrow involves prolongation, but maintains a steady high to mid pitch (§3.8.1-2). This differs from the falling pitch of the dying-quail conjunction pattern described above. Of the two, the type with two bé morphemes is more restricted and is less common in texts, but nonetheless well-attested.

The bé morpheme is related to Pl bé and to 3Pl pronoun bé, and I will use “Pl” in interlinears. 3Pl pronoun bé may itself be one of the conjuncts, resuming a just-mentioned referent, resulting in bé bé \Rightarrow (419.a). A conjunct may also be a plural NP of the form [noun bé], in which case we get [noun bé bé \Rightarrow], sometimes shortened to [noun bé \Rightarrow] (419.a).

- (419) a. [bé bé \Rightarrow] [bè nâ: (bé) bé \Rightarrow] mà gàn=í:
 [3Pl Pl] [3PIP.L mother.HL (Pl) Pl] Poss between=it.is
 ‘It is between them (=girls) and their mothers.’ **2004.3.18**
- b. íjé [àrá:jô: bé \Rightarrow]
 today [radio Pl]
 [cè: kó tímé-sà-Ø bé \Rightarrow]
 [thing.L NonhO resemble-Reslt-Ppl.Nonh] Pl
 kárⁿ-á:rⁿà-m yó=kò
 do-Habit-Ppl.Pl exist=be.Nonh
 ‘Today there are those who do the radio and what resembles it
 (=and so forth).’ **2004.3.20**
- c. [ì nè nùmò-bíré sà:-rá-n ké]
 [person.L hand.L-work(noun) have-Neg-Ppl.Sg Topic]
 [à-kòrò]-jà-ýⁿ bé \Rightarrow , kó bé \Rightarrow
 [well.L]-dig-VblN Pl, Nonh Pl
 [kùrⁿâ:ⁿ mà sũŋ] [àná bérè], *goudron*
 [electricity Poss cord] [village in], paved.road
 cě: kán tí mèyⁿ† mà gǎ:-n-Ø bé \Rightarrow .
 thing do Link and Poss pass-Caus-VblN Pl,
 [pòⁿsé bérè] mà lóγò mà gòⁿ-ýⁿ bé \Rightarrow
 [ditch(*fossé*) in] Poss filth Poss remove-VblN Pl
 ‘(For) someone who doesn’t have a (skilled) occupation [topic],
 there’s well-digging, there’s that (and) there’s doing something to

take electrical wires across streets in the town, and there's removing filth from (=cleaning out) the ditches, ...' **2004.5.3**

- d. [lármé kò-rú ì nè nú:-m̀],
 [army Nonh-Inst person.L enter.Perf.HL-Ppl.Pl]
 [B bé⇒], [A bé⇒]
 [B Pl], [A Pl]
 'those who enlisted in the (colonial) army, (namely) B and A
 [names of two men].' **2004.421**

The [X bé⇒] [Y bé⇒] construction is distinct from cases where one of two conjuncts happens to end in Pl bé. In this case, the dying-quail intonation (including a slow fall in pitch) is applicable to bé as well as to the other conjunct (420).

- (420) á:mádù.: [wò déré bé.:]
 A [3SgP.L elder.sibling.HL Pl]
 'Amadou and his brothers.'

7.1.3 Pronominal conjunction of type [X wó⇒y] 'X and them'

An alternative to the prosodically symmetrical [X.: Y.:] form of pronominal conjunction is a type with clitic ⇒y (§11.2.1) added to the second conjunct. The first conjunct is a plural pronoun in L-tone (1Pl èmè, 2Pl è, 3Pl bè). The second conjunct takes the invariant 3Sg form wó but has third plural reference.

- (421) a. kó⇒y [è wó⇒y] [[[pòn-sũŋ t̀ur] lá-m]
 Nonh=it.is [2Pl 3Sg=it.is] [[[pants.L-cord one.L] not.be-Ppl.Pl]
 mà ñè-m]⇒í:
 Poss woman.Pl]=it.is
 'That is, you-Pl and they (a caste of women) are not women of the same belt-cord (=extended family).' (túru 'one') **2004.3.3**
- b. èmè wó⇒y
 1Pl 3Sg=it.is
 'us and them'
- c. bè wó⇒y
 3Pl 3Sg=it.is
 'them and them'

Another example of è wó≡ỹ ‘you and they’ is (928.f).

My assistant rejected #mì wó≡ỹ ‘I and them’ (because of the singular first conjunct), and also rejected #è̃mè ú≡ỹ ‘we and you’ (second conjunct other than wó).

7.1.4 Relativization on one of two conjoined NPs.

A single conjunct may not be directly relativized on (with its tones dropped as relative head, leaving the other conjunct unaffected). However, a noun may be fronted just to the left of a conjunction phrase, its place taken by a resumptive pronoun within the conjunction. In (422), ì nè ‘person’ is coindexed with one or other of the 3Sg wó conjuncts. Note that the participle is singular.

- (422) [ì nè [wó.: wó.:] yâ:-n kùⁿ lè],
 [person.L [3Sg 3Sg] go.Perf.HL-Ppl.Sg Def with]
 wó b̀̀: nò wò kân [wó yéré] wá
 3SgO call.to 3SgS.L after [3Sg Imprt] say
 ‘He called out to the man with whom he had gone (lit., “the person who he and he went”), and said “hey you, come!”’ **2004.3.4**

My transcription assistant had misgivings about this textual example, without rejecting it outright. The original speaker may have had the same misgivings, since shortly thereafter in the same text he produced an alternative construction with bé lèy ‘the two of them’ instead of wó.: wó.:, hence ì nè [bé lèy] yâ:-n kùⁿ ‘the man with whom he had gone (lit. “the person who the two of them went”).

7.1.5 “Conjunction” of verbs or VP’s

Verbs and VPs may be combined in chain (=serial) constructions. These lack an explicit ‘and’ conjunction. See §15.1.

While verbs and VPs (as such) cannot be conjoined using the dying-quail intonation or the [... bé ⇒ ... bé ⇒] construction, a **relative clause** ending in a verb-like participle is syntactically an NP and may be conjoined. In (423), both conjuncts are of this type.

- (423) [dì:ⁿ yé-lé è yâ:-Ø.:.]
 [manner.L there 2PIS.L go.Perf.HL-Ppl.Nonh]
 [è yérè-Ø.:.]
 2PIS.L come.Perf.HL-Ppl.Nonh]
 ‘(Tell us) how you-Pl went there (=to Algeria), (and how) you came
 (back).’ **2004.5.1**

Clause-level conjunction is especially important in English within conditional antecedents, where it is important to understand that both clauses are conditions for the consequent to be realized. In Jamsay, however, one may simply juxtapose two conditional antecedent clauses ending in *dey* ‘if’ to express the intended sense.

- (424) séllé sà-m dèy, àrⁿá mì l-lí-Ø dèy,
 health have-1SgS **if**, rain fall-PerfNeg-3SgS **if**,
 yì rù sùmó-m
 clothes wash.Impf-1SgS
 ‘If I’m healthy, (and) if it doesn’t rain, I will wash the clothes.’

Subordinated clauses in nominalized form, e.g. with a Verbal Noun, may be coordinated. This occurs, for example, in complements of ‘leave’ in the sense ‘cease (doing)’ (425).

- (425) [nùŋ-nŋŋ-Ø.: gò:-gò-ý.:.] dàyá-tì-Ø
 [**song.L-sing-VbIN** **dance(noun).L-dance-VbIN**] leave-Perf-3SgS
 ‘He/She has ceased (“left”) singing and dancing.’

Higher-clause verbs like *túmnó-* ‘begin’ that take bare-stem (=infinitival) complements (§17.5.1) do not have this option. This can be circumvented by using nominals with verb-like meaning instead of clausal complements (426.a). Alternatively, if the context permits, the two or more “conjoined” lower verbs may be chained, so only the last of these is directly under the syntactic influence of the higher-level verb (426.b).

- (426) a. [é:ⁿ.: pé:ⁿ.:] túmnó-tì-Ø
 [**weeping** **crying**] begin-Perf-3SgS
 ‘He/She began to weep and cry.’
- b. [yă: yèré] túmnó-tì-Ø
 [**go** **come**] begin-Perf-3SgS
 ‘He/She began to go and come’.

7.2 Disjunction

7.2.1 ‘or’ (ma)

The disjunctive particle is phrase- or clause-final *ma*. The disjuncts may be clauses, NPs, or adverbials. Disjunctive *ma* is even more highly subject than interrogative *ma* to overlaid intonation, notably prolongation (\Rightarrow) and/or raising (\Uparrow). This makes it very difficult to determine the (phonological) tone. I assume that, like interrogative *ma*, the disjunctive particle is **atonal**. That is, it acquires its tone by spreading, from the final tone to the left, see Atonal-Morpheme Tone-Spreading (137). I will transcribe accordingly. However, intonational effects obscure these tones.

When disjunctive *ma* is grouped prosodically with the left disjunct, it normally appears in prolonged (and often high-pitched) form, i.e. as phonetic [má:]. The same form is typical when there is no clear prosodic break between the two disjuncts. On the other hand, *ma* is sometimes grouped prosodically with the right disjunct, and in this case it is sometimes heard with lower pitch. One could argue that this points to a lexical L-tone, but I regard the evidence as inconclusive.

In [noun + numeral] combinations, the noun is repeated (i.e., there is no “conjunction reduction”). For example, ‘[one or two] chickens’ is expressed as “[one chicken] or [two chickens].” See examples just below.

One might argue that disjunctive *ma* and clause-final interrogative *ma* (used especially in polar interrogatives) are morphemically identical. See §13.2.1.2 for discussion.

7.2.2 NP (and adverbial) disjunction (ma)

(427) illustrates the maximal type [[X *ma* \Rightarrow] [Y *ma* \Rightarrow]] with *ma* \Rightarrow following both disjuncts. Compare English *either ... or ...* constructions, and more relevantly French *ou ... ou ...* and other symmetrical disjunctions. Since the Focus clitic comes after the second *má*:, (427) also shows that the entire disjunction may be treated as a constituent.

- (427) a. [[dây mà \Rightarrow ↑] [nùwⁿó má \Rightarrow]]= \grave{y} ⁿ dènè:-Ø
 [wealth **or** death **or**]=Foc want.Impf-3SgS
 ‘Either wealth or death [focus] is what he wants.’

- b. [bû:d nũ:yⁿ má⇒] [bû:d pérú
 [riyal five or] [riyal ten
 má:⇒] [ñù:-sèyⁿ dáγá]
 or] [millet.L-grain.L small]
 ‘(Either) five riyals (=currency unit), or ten riyals, or a little millet grain’ (bú:dù) **2004.3.19**
- c. [ɛ̀né bé] [[íné-m pèn-nàyⁿ má] [pèn-nù:yⁿ má]
 [Logo Pl] [person-Pl ten-four or] [ten-five or]
 mà *nombre*] bèl-l-á dèy↑
 Poss number] obtain-PerfNeg.3PlS if
 ‘They themselves [topic], if they haven’t gotten the number of forty or fifty people (=police), ...’ **2004.5.5** (bèré-)

More often, there is only one disjunctive particle, located between the two disjuncts. In the case of NPs, including those with numerals, and in the case of adverbials, there is either no prosodic break between the disjuncts, or the particle is grouped prosodically with the first disjunct. In either case, the particle usually has exaggerated duration (symbol ⇒) and may also show some otherwise unexpected pitch rise (⇒↑).

The seamless construction is exemplified in (428).

- (428) a. [ɛ̀ñé túrú] má⇒ [ɛ̀ñé lèy] cê:ⁿ-Ø
 [chicken one] or [chicken two] slaughter.Impf-3SgS
 ‘He will slaughter one chicken or two chickens.’
- b. tă:n má⇒ nâyⁿ
 three or four
 ‘three or four’

Prosodic grouping with the left disjunct is apparently seen in (429). I take the first mà to be the disjunction *ma* (with L-tone spread from the left). (I interpret the second and third mà morphemes to be Possessive mà.)

- (429) [[à̀nà é:ŋ kùⁿ bérè] mà, [é pòn-sũŋ túrù-m]] mà,
 [[village.L near Def in] or, [2PIP pants-cord one-HL-Pl]] Poss
 ì nè gǎ-n mà ì nè nínáy-n, wó⇒y ú:rⁿó mèy↑
 person.L old-Sg Poss person.L respectable-Sg, 3Sg=Foc get.up and
 ‘The oldest, (most) respectable man within the nearby village or who is of the same belt cord (=kin group) as you-Pl (=people in a dispute) [topic], it’s he [focus] who will get up and ...’ **2004.4.6**

An extended disjunction is (430). There are three long relative clauses each ending in *ma* with high pitch (although phonologically L-toned due to spreading from the left) and exaggerated duration ($m\grave{a}\Rightarrow\uparrow$). Then the speaker realizes that the series is over, and begins the next intonation group with *lè* ‘with’, to make the whole disjunctive NP the complement of a postposition.

- (430) $p\grave{a}\eta\acute{a}$ $n\acute{a}m$ $k\acute{e}$, $g\acute{a}:r\acute{a}$ $b\acute{u}:d\grave{u}$ $s\grave{a}-n$ $m\grave{a}\Rightarrow\uparrow$,
 power owners Topic, more money have.HL-Ppl.Sg **or**,
 $g\acute{a}:r\acute{a}$ [$t\grave{e}g\grave{u}$ $\acute{e}r\grave{u}$] $g\grave{o}r^n\acute{o}-\grave{n}$ $m\grave{a}\Rightarrow\uparrow$,
 more [speech sweet] be.able.Impf-Ppl.Sg **or**,
 [$g\acute{a}:r\acute{a}$ $t\acute{o}y^n\acute{o}$ $t\acute{ı}m\acute{e}-s\grave{a}-\emptyset$] $t\acute{e}g\acute{e}$ $b\grave{e}r\acute{e}-\grave{n}$
 [more truth resemble-Reslt-Ppl.Nonh] speak can.Impf-Ppl.Sg
 $m\grave{a}\Rightarrow\uparrow$, $l\grave{e}$ $y\acute{a}:$ $d\grave{o}n\grave{o}-\eta\acute{o}$ $m\grave{e}y^n\uparrow$
or, with go finish-Caus and
 ‘(If the dispute reaches the government), the government people will go
 and finish (=decide) it based on who has the most money, or who is
 capable of the sweetest words, or who can speak in a way that sounds
 the most truthful.’ **2004.4.6**

The disjunctive particle *ma* **may be omitted** entirely, when parallel NPs with quantitatively adjacent numerals (e.g. ‘four’ and ‘five’) represent a range rather than a forced choice. In (431.a), note that the modified noun ‘month’ is repeated. The fact that true conjunctions (‘X and Y’) are marked either by dying-quail intonation or by final *bé* in both conjuncts makes it easier to interpret cases like (431), which lack these features, as disjunctions (‘X or Y’). Compare also colloquial English *three four months* with no audible disjunction. In (431.b), Reciprocal *tô:-n* is added to the disjunctive numeral phrase.

- (431) a. [[$\acute{e}:$ $t\acute{a}:n$] [$\acute{e}:$ $n\grave{a}y^n$] $b\grave{a}:$]
 [[month **three**] [month **four**] since]
 ‘for (a duration of) three or four months’ **2004.3.9**
- b. $k\grave{a}rg\grave{u}-\acute{ı}:^n$ [$l\grave{e}y$ $t\acute{a}:n$] $t\acute{o}:-n$ $m\grave{a}:-t\grave{u}:-\emptyset$ $d\grave{e}y$
 brick.L-child [**two three**] **Recip-Sg** build-Perf-2SgS if
 ‘when you-Sg have built (the wall) two or three bricks (high)’
2004.3.25

In (432) the disjuncts are **focalized in parallel**. The concluding *fú:* ‘all’ is a point of contact between this construction and that of disjunctive conditional antecedents (‘whether X or Y, ...’) (§16.3).

- (432) [pér=î: pél-lěy=ỵ.: fú:] ó:-w̄
 [ten=Foc ten-two=Foc all] give.Impf-2SgS
 ‘You-Sg will give (something), be it ten or twenty (riyals).’ **2004.3.20**

7.2.3 Clause-level disjunction

Clause-level ‘or’ is not easy to distinguish from clause-final interrogative *ma* (§13.2.1.1), and a case can be made that they are the same morpheme. Both are subject to intonational clause-final prolongation (symbol \Rightarrow), and both show variation in pitch (due to phonological tone-spreading, and/or due to intonation). The disjunction, however, has a greater tendency to appear with low pitch, especially when it is grouped prosodically with the second clause after an intonational break, as in (433.a).

- (433) a. [màlfâ:ⁿ nám] yă: wǒ-r tá:ⁿ ó:-bà,
 [rifle owners] go 3Sg-Dat shoot give.Impf-3PIS,
 mà \Rightarrow màlfâ:ⁿ yàŋá méy yă: tâ:ⁿ-Ø
or rifle take and go shoot.Impf-3SgS
 ‘Gun owners [topic], they will go and shoot (an animal) and give (it) to him, or else he (himself) will take the rifle and go and shoot.’
 (wò-rú) **2004.3.16**
- b. [mâ:n.: mâ:n.: lěy] èl-lá-bá àyà-m
 [so-and-so so-and-so two] sweet.L-Neg-3PIS hear.Perf.L-1SgS
 mà \Rightarrow jěy-é-tù-bà àyà-m
or fight-Perf-3PIS hear.Perf.L-1SgS
 ‘(suppose) I’ve heard that the twosome of So-and-so and So-and-so (=two people) are not sweet (=are in conflict), or I’ve heard that they have had a fight’ (érù) **2004.4.6**
- c. *garde de cercle*=î: [bé gǔn̄n̄] d̄imè,
 military.guard=Foc [3Pl behind] follow.Perf.L,
 núŋò=ỵⁿ [ɔ̀rù m̄d̄n̄ú jín] kô:-Ø mà \Rightarrow ↑
 Dem=Foc [thing.L bad like] be.Nonh.HL-Ppl.Nonh **or**
 [ɔ̀rù kàrⁿ-ú jà:ⁿ-lá-Ø jín]
 [thing.L do-VblN be.acceptable-Neg-Ppl.Nonh like]
 kô:-Ø cêw, bé d̄ayá kàrⁿà-wⁿà-gó-Ø
 be.Nonh.HL-Ppl.Nonh all, 3PIO leave do-Caus-ImpfNeg-3SgS
 ‘It was a military guard [focus] who followed behind them
 (=Malian conscripts). If that (action) [deictic] was like a bad thing,

or something that it was not right to do, he wouldn't let them do it.'
(in military training) **2004.4.22**

Disjunction at the level of VP was not observed. Efforts to elicit e.g. 'he wants [either to go away or to die]' resulted in various paraphrases (e.g. 'he wants to go away, or he wants to die') not involving VP disjunction as such.

7.2.4 'Or else' (wâl-mà)

A form wâl-mà is recorded in the sense 'or (else)'. The initial wâl- belongs to a large set of regional forms of the form wala and variants, meaning 'or', cf. Maghrebi Arabic awəlla 'or'.

- (434) [gùjú mánà], bé ì ñì -wⁿé-bà,
[skin on], 3PIO lie.down-Caus.Impf-3PIS,
kà: [kàrá mánà] bé ì ñì -wⁿè-j-é,
but [mat on] 3PIO lie.down-Caus-ImplNeg-3PIS,
wâl-mà [c'éwé mánà] bé ì ñì -wⁿé-bà
or.else [plank on] 3PIO lie.down-Caus.Impf-3PIS
'They (=elders) have them (=circumcised boys) sleep on hides, but they don't let them sleep on mats; or else they have them sleep on wooden planks.' **2004.3.18**

8 Postpositions and Adverbials

Jamsay makes use of **postpositions** for dative and spatiotemporal cases. The purest postposition, bearing no relationship to any noun, is *lè*, which has several grammatical functions. Several other postpositions are based on noun stems. These include **complex postpositions** that themselves consist of a noun plus postposition, requiring a complement in the form of a possessor (cf. English *at the back of...*). There are also some postpositions in the form of a noun with an overlaid locative H(H...)L tone melody (tonal locatives).

A **postpositional phrase** (PP) is of the basic form [NP Postposition], but it may be extended by adding a universal quantifier *cêw* or *fú:* ‘all’ (in emphatic sense), or by a particle like *kâ:*ⁿ ‘also’. (435.a) has *fú:* after a PP, in a different sense than we get when *fú:* occurs at the end of the NP complement of the postposition (435.b). (435.c) illustrates *kâ:*ⁿ ‘also’ (§19.1.3). (435.d) has *cêw* ‘all’ after a PP, and also shows how a PP can be treated like a noun, specifically as a (descriptive) “possessor” with following Possessive *mà*.

- (435) a. [àná kùⁿ] bérè.: fú:⇒
 [village Def] **in** **all**
 ‘throughout the village’
- b. [àná kùⁿ fú:] bérè
 [village Def **all**] **in**
 ‘in all the villages’
- c. [èjú lé] kó é:sà-m,
 [field in] NonhO see-Reslt-1SgS,
 [àná bérè kâ:ⁿ] kó é:sà-m
 [village **in** **also**] NonhO see-Reslt-1SgS
 ‘I’ve seen it (=bird) in the bush, and I’ve seen it in the village too.’
- d. [[[é àná kùⁿ] lè cêw]
 [[[2PIP village Def] **in** **all**]
 mà íné-m kùⁿ] bòrô:-Ø
Poss person.Pl Def] call.Impf-3SgS
 ‘He will summon the people from throughout (i.e. from both of) your-Pl villages.’ **2004.4.6**

In addition to PP's, which generally function as adverbial phrases, there are numerous lexical adverbials in Jamsay. Some of these are noun-like, e.g. words with senses like 'yesterday', which (in their adverbial function) can be thought of as covert PPs with a zero postposition, just as in English (*yesterday* for ?*on yesterday*). However, there are other adverbials of a more protean variety, not easily connected to any other stem-class. These include intensifiers associated with adjectives (§6.3.3.2), and an interesting set of expressive adverbials, some examples of which are given in §8.5.8. The intensifiers and expressive adverbials resemble regular adjectives in their ability to occur in predicative function with a following 'be' quasi-verb, but even here the similarity is superficial, in that the usual negative ('not be') counterparts are different; see §11.4.3. Adverbials, even though some have adjective-like sense (e.g. 'straight', 'tilting'), are not used in adnominal modifying function and do not take number suffixes.

8.1 Tonal locatives

8.1.1 Tonal locative of noun stem

A small number of noun stems may be used, as locative adverbs, with an extra **L-tone component grafted onto the end**, which results in a final F-toned syllable or in a ...HL contour on the final two syllables. There is no (other) postposition. In spite of the final F or HL pattern, the tone contours here are distinct from the exaggerated "dying quail" final intonation pattern (§3.8.3) that is used with conjoined NPs and for words followed by *fú*: 'all'.

The cases of tonal locative known to me, excluding similar forms confined to greetings, are listed in (436). The inputs are of the following types: ...HH (436.a), monosyllabic C^v: (436.b), ...LH (436.c), monosyllabic C^v: (436.d), and nasal-final (436.e). There are no cases where a tonal locative is formed from an (already) ...HL or ...F input noun, in which cases the tonal locative would be indistinguishable from the input.

(436)	noun	gloss	tonal locative	gloss
a.	búró	'pond'	búrò	'in the pond'
	kù: ⁿ -céné	'middle of head'	kù: ⁿ -cénè	'in middle of head'
	cì-céné	'middle'	cì-cénè	'in the middle'
	éwé	'market'	éwè	'in the market'
	nì-bár ⁿ á	'hot season'	nì-bár ⁿ à	'in the hot season'
	nì-núw ⁿ ó	'daytime'	nì-núw ⁿ ò	'in the daytime'

	ójú	‘road’	ójù	‘on the road’
	pàrà-sé:r ⁿ é	‘autumn’	pàrà-sé:r ⁿ è	‘in the daytime’
	úró	‘house’	úrò	‘at home, (to) home’
b.	ká:	‘mouth’	kâ:	‘at the mouth’
	ní:	‘water’	nî:	‘in water’
	òjù-kâ:	‘road’	òjù-kâ:	‘on the road’
	tògù-ná:	‘palaver shelter’	tògù-nâ:	‘in the palaver shelter’
c.	bòró	‘bottom’	bòrô:	‘at the bottom’
	jì rè-kùró	‘twilight’	jì rè-kùrô:	‘at dusk’
	jì r ⁿ é	‘wet season’	jì r ⁿ ê:	‘in the wet season’
	gòró	‘upper nape’	gòrô:	‘on the nape (of)’
	kòró	‘neck’	kòrô:	‘on the neck (of)’
	màná:	‘mortar’	mànâ:	‘in the mortar’
	nì :sì :r ⁿ -ú	‘dawn’	nì :sì :r ⁿ -û:	‘at dawn’
	nùmó	‘hand’	nùmô:	‘in the hand (of)’
	—	—	àr ⁿ â:	‘in a (certain) year’
			(cf. àr ⁿ â-kújú ‘year’, àr ⁿ á ‘rain’)	
d.	gǎ:	‘granary’	gǎ: (= [gǎdǎdǎ])	‘in the granary’
e.	gǎn	‘area’	gǎn̄n	‘between’
	gǎn̄n	‘back (body)’	gǎn̄n̄n	‘after, behind’

Phonologically, the tonal locative is formed by adding an L-tone at the end of the input noun, which docks on the noun’s final syllable. The only similar process is the addition of an L-tone at the end of verb stems to form the unsuffixed Imperfective stem. In interlinears, the notation “...Loc.HL” will be used. For the phonology in detail of these two formations, see Tone-Grafting (§3.7.3.3).

There is a shred of evidence to the effect that the tonal locative, at least in specific cases, may still function morphosyntactically as a postposition. See discussion following example (867), below.

Textual examples of tonal locatives are in (437).

- (437) a. mòbíl òjù-kâ: céjé-sà-y
 vehicle **road.Loc.HL** meet-Reslt-1PIS
 ‘We met the vehicle on the road.’

- b. [[èné mà kó:] lè] úrò yèrê:-Ø
 [[Refl Poss foot] Inst] **house.Loc.HL** come.Impf-3SgS
 ‘It (=corpse) will come home on its own feet.’
- c. [[é bú:rù.:] [é ñǎ:.:] [é ní:]:. cêw]
 [[2PIP bread] [2PIP meal] [2PIP water] all]
 [é kðrô:] kùn-Ø
 [2PIP **neck.Loc.HL**] be.in.L-3SgS
 ‘Your-Pl bread, your meals, and your water are all on your-Pl neck
 (=your own responsibility).’ **2004.5.1**

Ordinarily, tonal locatives may only be formed from **nouns**, rather than from modifiers such as adjectives or numerals. (For a rare exceptional case where a modifying adjective takes tonal locative form, see §8.1.3, below.) The noun must also be in **NP-final position**, i.e. not followed by an adjective, numeral, or particle (including Definite kùⁿ), with a possible exception discussed below.

In a tonal locative, the noun may be **preceded** by a possessor NP and/or a compound initial (438.a).

- (438) a. émé dðyð-úrò
 1PIP Dogon-**house.Loc.HL**
 ‘(here) in our Dogon country’ (common phrase)
- b. [ðjù-kà: núŋð] lè
 [**road** Dem] in
 ‘on this road’

The noun úró ‘house’ and its tonal locative úrò are ordinarily distinguishable. As compound initials, in the main noun-noun compound type with tone-dropping on the initial, they would both merge as ùrð-. In e.g. [àyà-ùrò]-tǎŋ-Ø ‘(bride’s) transfer to her husband’s home’, a compound ending in a Verbal Noun, the associated VP is àyà-úrò táŋá- ‘move to the husband’s home’. One could argue, therefore, that the compound initial [àyà-ùrò]- is really a tonal locative whose basic ...HL tone contour has been erased by an overlaid tone contour. Again, there is no way to demonstrate this directly.

The adverbial phrase nùmó.: nùmó.: ‘hand to hand’, cf. nùmó ‘hand’, is used with a verb like ‘give’, indicating that someone delivered something in person to the recipient (not through an intermediary). For close combat, the expression used is ‘chest to chest’, which has the same structure: gðŋó.:.

gòṅṅó: cf. gòṅṅó ‘chest’. I take these to be conjunctions of iterated nouns (e.g. ‘hand and hand’), rather than as iterations of tonal locatives.

In **situational greetings** associated with an activity or location (‘well’, ‘work’, ‘market’, etc.), the noun specifying the location in question has a tonal form consistent with that in tonal locatives. See (1185) and comments there.

Some **postpositions** are, or probably originated as, tonal locatives of nouns. In (439), the HL contour converts a noun into a postposition, with a more figurative sense than in the preceding cases. The complement takes the form of a possessor. Textual examples are in (440).

- | | | | | | |
|-------|------|------------------|--------------|------------------|-------------------------------------|
| (439) | noun | gloss | postposition | gloss | |
| | a. | kú: ⁿ | ‘head’ | kû: ⁿ | ‘on the head of; about, concerning’ |
| | b. | kòrô | ‘neck’ | kòrô: | ‘at the expense of’ |
-
- | | | | | | |
|-------|----|---|-------------------|--------------|------|
| (440) | a. | [[é bú:rù:·.], | [é ñǎ:·.], | [é ní:·.] | cêw] |
| | | [2PIP bread], | [2PIP meal], | [2PIP water] | all] |
| | | [é kòrô:] | kùn-Ø | | |
| | | [2PIP neck.Loc.HL] | be.in.Perf.L-3SgS | | |
| | | ‘Your-Pl bread, your (staple) meals, and your water are all at your own expense (lit. “on your neck”).’ | | | |
-
- | | | | | | | |
|--|----|--|----------|--------------|----|--------------------|
| | b. | [[ñě-m | mà | àjùwò-sǔm-Ø] | mà | kû: ⁿ] |
| | | [[woman-Pl Poss new.mother-wash-VblN] Poss head.Loc.HL] | | | | |
| | | èmě-n | tégé | | | |
| | | 1Pl-Dat | speaking | | | |
| | | ‘tell-Sg us about the washing of new mothers (i.e., postpartum seclusion)!’ 2004.3.19 | | | | |

For kòrô: expressing responsibility (for an expense), compare English *on the shoulders of (someone)*.

See also the discussions of locatives bérè (or bèrê:) and mánà, below.

8.1.2 [kó X] with tonal locative

The Nonhuman pronoun kó occurs in a construction [kó X] with a following noun like ‘time’ or ‘place’. The resulting phrase may be translated ‘(at) that time’, but kó here is structurally a possessor, hence ‘(at the) time of that’. The construction should be distinguished from the demonstrative phrase [kò X] with L-toned kò (§6.4.1).

The noun following *kó* has the form of a tonal locative. When the noun has H-tone in the penult, the final two syllables appear as an HL tone sequence. The other attested example involves an R-toned monosyllable, so the output is bell-shaped <LHL>. The tonal locative is applied somewhat inconsistently in these examples, so variants with lexical tones also occur. The data are in (441), the clear cases with audible differences being (441.a-b). In (441.c), the noun already has lexical HHL tones, so there is no audible change in the tonal locative.

(441)	noun	gloss	with <i>kó</i>	gloss	
	a.	dógúró	‘time’	<i>kó</i> dógúrù	‘(at) that time’
				(variant: <i>kó</i> dógúrú)	
	b.	dĩ: ⁿ	‘place’	<i>kó</i> dĩ: ⁿ	‘(at) that place’
				(variant: <i>kó</i> dĩ: ⁿ)	
	c.	wákátì	‘time’	<i>kó</i> wákátì	‘(at) that time’

A similar phrase, *kó ní-ńírⁿé* ‘(on) that day’ (or ‘at that time’), is attested several times with all-H tone on the noun; see e.g. (907.e).

8.1.3 Tonal locative of [noun + adjective]

I have one example where the tonal locative is expressed on the adjective of a [noun + adjective] combination. This is ‘a single (=the same) place’ in (442).

(442)	[á	nì :ñé :.]	[á	màlfâ: ⁿ :.	fú:]	[dĩ: ⁿ	túmnò]
	[2SgP	gear]	[2SgP	rifle	all]	[place.L	single.Loc.HL]
	‘your gear (=bag, tools) and your rifle, in a single (=the same) place’						
	2004.4.4						

The adjective is elsewhere HH-toned *túmnó* ‘sole, single’. It does not seem reasonable to explain the HL tone contour of *túmnò* in (442) as reflecting a relative clause structure.

8.2 All-purpose postposition *lè* and H-toned variant *lé*

8.2.1 L-toned *lè*

This postposition has L-tone (*lè*) in most combinations, but it occurs with H-tone in certain fixed adverbial phrases (§8.2.2, below). Its grammatical functions are summarized in (443).

(443) Functions of *lè*

- a. locative
- b. instrumental
- c. dative

In interlinears, I gloss it variably as ‘in’, Dat[ive], or Inst[rumental], depending on the context.

Locative examples are in (444).

- (444) a. [[ènⁿé mà cíⁿé kùⁿ] *lè*] dó:-yà-Ø dèy
 [[Logo Poss nose Def] **in**] arrive-Perf-3SgS if
 ‘(he said:) if it arrives in the vicinity of (=if it approaches) my nose’
- b. [gówó *lè*] kòrò-Ø
 [wall in] be.hung.Perf.L-NonhS
 ‘It (=garment) is hanging on (=against) the wall.’

Instrumental examples are in (445).

- (445) a. [béⁿé *lè*] ìjú láyá
 [stick **Inst**] dog hit.Imprt
 ‘Hit-Sg the dog with a stick!’
- b. [nîm ké] [nàṅá *lè*] wàr-á:rà-y
 [now Top] [bovine **Inst**] farm-Habit-1PIS
 ‘Nowadays, we farm (e.g. plow) with oxen.’

In some combinations, there is no clear distinction between locative and instrumental function. For example, *kó: lé* ‘(going) on/by foot’ can be construed equally well as locative (English *on foot*) or as instrumental (English *by foot*).

Dative examples are in (446). Dative here has a broad sense, ranging from recipient (of ‘say’, ‘give’, or ‘show’) to benefactive.

- (446) a. [bé nè] [bé lèy] cín [tô:-n lè] kàrⁿà-bà wà↑
 [3Pl now] [3Pl two] thus [Recip-Sg**Dat**] do.Perf.L-3PlS say
 ‘Them, those two (Camel and Hyena), that’s what they did to each other, it is said.’
- b. [wó yónkù lè] ènè-rⁿè-lí-Ø
 [3SgP soul **Dat**] be.pleasing-Inchoative-PerfNeg-3SgS
 ‘It did not please him.’ **2004.3.2**

The examples in (447) are idiomatic and difficult to fit into the categories given above.

- (447) a. [má sùn-àyá] lè
 [1SgP ear.L-hear] **in/Inst**
 ‘from (=based on) what I have heard’
- b. gúyⁿó lè
 theft **in/Inst**
 ‘stealthily, clandestinely’ **2004.5.1**
- c. [[kù:ⁿ érù] lè] gó:=kò gà↑
 [[head.L good] **in/Inst**] go.out.Impf=be.Nonh say
 ‘It comes from (=depends on) good luck.’ **2004.5.3**

Further examples: (714.a) (‘fight [against X]’, (732.c) (‘take X [to Y]’), (742.b) (‘long(er) [than X]’), (766.a) (‘give X [to Y]’), (800.a) (‘inflict damage [on/against X]’), (971) (‘show X [to Y]’), (974.d) (‘give truth [to X]’, i.e. ‘rule in favor of X’). We also get *lè* at the end of an unusual ‘before ...’ clause construction (§15.2.4.2).

Postposition *lè* is not used with pronominals, except for the Logophoric singular pronoun (chiefly in dative function): *èné lè* ‘to him/her-Logo’. Other pronominals have a special set of forms ending in *-ní* or *-rú* in dative function (and for the Nonhuman pronoun, also in locative and instrumental functions); see (191) in §4.3.1.

8.2.2 H-toned *lé*

H-toned *lé* occurs in a number of fixed deictic and other adverbial expressions (448). The preceding element is a noun or postposition. If the final two syllables of the noun show a rising tone (monosyllabic R or bisyllabic LH), as in (448.a), or if it ends in two H-toned syllables (448.b), there is no change in its tone in

the adverbial phrase. In (448.c) there are some cases where a HL-toned postposition appears to become HH in the adverbial (**tone-raising**). Some of the postpositions in (448.c) are themselves related to HH- or LH-toned nouns, shown in brackets under the postpositions. In the case of *dójú lé* ‘down below’, we could take the HH-toned noun *dójú* ‘bottom’ as direct input to the adverbial phrase, disregarding the postposition *dójù*, and relocate *dójú lé* to (448.b). However, where the noun has LH tones (*jì ré*), it makes little sense to take it as direct input to the adverbial, since the adverbial is *jírè lé* with HH-tones, not *#jì ré lé* as we would expect from (448.a).

(448)	stem	gloss	adverbial	gloss
a.	<i>àrgá</i>	‘side’	<i>àrgá lé</i>	‘on the side of’
	<i>bèrè</i>	‘belly’	<i>bèrè lé</i>	‘inside’ (cf. <i>bérè</i> ‘in’)
	<i>bòrò</i>	‘rear, base’	<i>bòrò lé</i>	‘at the rear’
	<i>cèrⁿèwⁿé</i>	‘festivity’	<i>cèrⁿèwⁿé lé</i>	‘in festivities’
	<i>èjú</i>	‘field, bush’	<i>èjú lé</i>	‘in the bush (away from village)’
	<i>gǔn</i>	‘back’	<i>gǔn lé</i>	‘behind’
	<i>nùmò-bàná</i>	‘left hand’	<i>nùmò-bàná lé</i>	‘on the left’
	<i>nùmò-ńǎ:</i>	‘right hand’	<i>nùmò-ńǎ: lé</i>	‘on the right’
b.	<i>bómó</i>	‘exterior’	<i>bómó lé</i>	‘outside’
		[contrast <i>bómó lè</i> ‘(woman) in menstrual period’]		
	<i>úró</i>	‘house’	<i>úró lé</i>	‘at home’
c.	<i>mánà</i>	‘on’	<i>máná lé</i>	‘on top, up above’
	<i>dójù</i>	‘under’	<i>dójú lé</i>	‘down below’
		[< <i>dójú</i> ‘bottom’]		
	<i>gójò</i>	‘division’	<i>gójó lé</i>	‘in divisions’
	<i>jérè</i>	‘side’	<i>jél lé</i>	‘toward’ (< / <i>jérè lé</i> /)
	<i>jírè</i>	‘in front of’	<i>jírè lé</i>	‘in front’
		[cf. <i>jì ré</i> ‘eye’]		
	<i>jì rè-dágù</i>	‘in front of’	<i>jì rè-dágú lé</i>	‘in front’

There are also some demonstrative adverbs ending in *lé* (449). For detailed discussion see §4.4.3.1-2.

(449)	<i>ěn lé, ǎn lé</i>	‘there (in that same place)’
	<i>yì-lé</i>	‘here’
	<i>yé-lé, yè-lé</i>	‘over there’

For *yǒ: lé* ‘where?’, see (793) in §13.2.2.7.

8.3 Locational postpositions

8.3.1 Locative, allative, and ablative functions

Like other languages of the region, Jamsay makes no distinction between (static) locative, allative, and ablative in its postpositions and other spatio-temporal adverbials. Instead, nondirectional locational expressions are used, while directional (i.e. allative or ablative) senses are expressed by co-occurring verbs such as *yàŋá-* ‘take’, *gó:-* ‘go out, leave’, *yèré-* ‘come’, and *yǎ:-* ‘go’. In combination with such a motion verb, any locative expression can be translated as allative (‘to...’) or ablative (‘from...’) instead of as a static locative.

See also the ‘from X, until/all the way to Y’ constructions covered in §15.2.8.

8.3.2 Simple and complex PPs

A simple PP is of the form [X Postp], where the postposition is added directly to the complement NP (cf. English *in, at*). A complex PP is of the form [X *mà* Postp], where Possessive *mà* intervenes. The postpositions used in the complex type have a (syntactic) **possessor** as complement (cf. English *in front of, ahead of*). Such postpositions probably all originated as nouns in tonal locative form. The original construction was therefore of the type *[[X’s N]-Loc] (e.g. ‘on X’s head’), where X was the possessor of the noun N, rather than the (direct) complement of the locative marker.

In spite of this historical origin, there remains the question whether complex PPs in modern Jamsay are still syntactically analysable as [[X’s N]-Loc] with an embedded possessor, or have been reanalysed so that [X *mà* Postp] with a purely formal Possessive morpheme now behaves like simple [X Postp]. It is possible to test this by observing relativization patterns. When a simple PP is relativized on, both the postposition and the final word of the complement NP undergo tone-dropping (§14.6.1). When a complex PP of the type [X *mà* Postp] is relativized on, two patterns are observed: a) both the postposition and (the last word of) the complement NP are tone-dropped; b) only (the last word of) the complement NP is tone-dropped (§14.6.2).

8.3.3 ‘in’ (bérè and bèrê:)

An explicitly locative postposition, specifying that the focal object is enclosed within the boundaries of the landmark object, takes either of the forms in (450). Both bérè, which requires a non-pronominal NP complement, and bèrê:, which can take either a pronoun or an NP as complement, are related to the noun béré ‘belly’.

- | | | |
|-------|----------------------------|-------------|
| (450) | after pronoun | after NP |
| a. | — | NP + bérè |
| b. | possessive pronoun + bèrê: | NP mà bèrê: |

The syntactically more flexible variant bèrê: has the morphosyntax of an **alienably possessed noun**. Its complement is a possessor in form: noun-headed NP plus Possessive mà, or a pronominal possessor. By comparing it to the noun béré ‘belly’, we see that it has an incremental final F-tone (as in tonal locatives), preserving the lexical L-tone of the first syllable.

- (451) a. kó bèrê:
 Nonh **in**
 ‘in it, therein’
- b. ñú: mà bèrê:
 millet **Poss** **in**
 ‘among the millet (crop in field)’
- c. [ùrò-dú: mà bèrê:],
 [family **Poss** **in**],
 [ì nè gàmà-nám] yó≡wò-bà
 [person.L some-PI] exist≡be.Hum-3PIS
 ‘Within the family, there are certain people (who will go).’

2003.3.1

By contrast, bérè is used only with noun-headed (i.e. nonpronominal) complements. With its HL tone, it may be compared to the stem-level H(H...)L overlay on tonal locatives of nouns, e.g. úrò ‘at the house, (at) home’ (§8.1, above). However, it is also similar to the compound type [x̄ ñ] (§5.1.5), and to inalienably possessed nouns (§6.2.2).

- (452) a. èjú bérè
 field **in**
 ‘in the field’
- b. [àná bérè] nú: mèyⁿ↑,
 [village **in**] enter and,
 ‘entering (into) the village, ...’ **2004.3.3**
- c. [[nì ɲè-dá:ɲá bérè]≡ȳ dèy] ñé:-w̄ⁿ
 [[sauce.L-container **in**]≡it.is if] eat.Impf-2SgS
 ‘If it (= meat) is in the sauce pot, you-Sg will eat (it).’ **2004.3.3**

I am unable to detect any semantic difference between bèrê: and bérè. The fact that only bèrê: is used with pronouns is an indication that there is little or no semantic difference.

8.3.4 ‘on; on the head of; about’ (kû:ⁿ)

This postposition is the tonal-locative (HL-tone) form of kú:ⁿ ‘head’. It may be used in a fairly literal sense, roughly ‘on the head of’, with human or animate complement, as in (453). With a noun-headed (nonpronominal) complement, Possessive mà is used.

- (453) [èjù-nòwⁿó té=>] [é kû:ⁿ] nùmó gá: kân
 [bush.L-meat exactly] [2Pl **on**] fall say after
 ‘if a wild animal had fallen on (=attacked) you-Pl’

However, even in this case the specific body part ‘head’ is not central, and a more general gloss ‘on’ or ‘onto’ is appropriate. An adversarial (or malefactive) nuance is apparent here, as it is in the following (454).

- (454) [ǎ-n mà kû:ⁿ] yǎ:-yè-bà táɲà: dèy, ...
 [man-Sg Poss **on**] go-Perf-3PIS happen if
 ‘if it happens that they (= women) have gone on (= scolded) him,’
 2004.3.3

The postposition is common in the abstract sense ‘about, concerning’, with a verb of speech or thought.

- (455) [[ñě-m mà àjùwò-sǔm-Ø] mà kùːˢ]
 [[woman-Pl Poss new.mother-wash-VblN] Poss **about**]
 èmě-n tégé
 1Pl-Dat speak.Imprt
 ‘Tell-Sg us about the seclusion (quarantine) of a new mother.’

8.3.5 ‘on’ (mánà)

This postposition means ‘on’ or ‘on top of’, specifying that the focal object is at rest, on or near the top of the landmark object. Compare the adverbial phrase *máná lé* ‘on top, up above’ (448.c).

mánà is added directly to a noun, without possessor marking. However, pronominal combinations like *má mánà* ‘on me’ show (alienable) possessor pronominals.

- (456) a. [nùwˢó kùˢ] yàŋá [ðwˢò-túm mánà]
 [corpse Def] take [burial.mound **on**]
 ná:ná-tù-bà dèy
 put-Perf-3PlS if
 ‘when they have laid the corpse on the burial mound’
- b. [níŋ ké] [nùwˢó kùˢ] [ðwˢò-túm mánà] góː,
 [now Topic] [corpse Def] [burial.mound **on**] go.out,
 [béré lé] núː-yˢɛ kùˢ jùgó-bà
 [inside in] enter-Perf Def know.Impf-3PlS
 ‘Now (because of a change in drum rhythm), they (=people within hearing distance of the cemetery) know that the corpse has come (=been lifted) off of the burial mound and has gone (=been put) inside (the grave proper).’
- c. [èné [tógù mánà] nàː-gó-Ø] wá
 [LogoS [stall **on**] spend.night-ImpfNeg-3SgS] say
 ‘(Camel said:) I won’t spend the night on top of the stall.’
- d. [[tùmó kùˢ] mánà] béré téː-né mèyˢ↑, ...
 [[stone Def] **on**] stick arrange-Caus and, ...
 ‘(They) place sticks on top of those stones, and ...’ **2004.3.6**

- e. [dɛŋɛ́ mánà] ná:nâ:-Ø⇒
 [anvil on] put.up.on.Impf-3SgS
 ‘He (blacksmith) will put it (iron to be forged) on the anvil.’
2004.3.12

(456.a-b), from the same textual passage, are further confirmation that a locational PP itself does not specify directionality of movement, but is compatible with directionality expressed by a motion verb (see beginning of this chapter).

(456.c), from a tale, involved Camel towering over Hyena’s shed, grazing on tree foliage overhead at night. Not understanding this, Hyena had just asked whether Camel was lying down to sleep all night on the shed.

mánà can be used with reference to a vertical rather than horizontal position, e.g. ‘on the wall’, when the context is otherwise suggestive of horizontal position (a surface supporting the landmark object).

- (457) [gówó mánà] yǎ:-rà-Ø
 [wall on] go-Habit-3SgS
 ‘It (=gecko lizard) walks on (the surface of) the wall.’

8.3.6 ‘close to, beside’ (dĩ:ⁿ)

This postposition is uncommon in texts. It is the tonal locative of the high-frequency noun dĩ:ⁿ ‘place’, which is also used as head noun (L-toned dĩ:ⁿ) in spatial and manner adverbials (§15.2.5, §15.2.6.1). The complement is in **possessor** form.

- (458) a. [kó wò táyⁿá jérè-Ø jé mèyⁿ],
 [NonhO 3SgS.L expose.to.sun hold.Perf.HL-Ppl.Nonh say and]
 [[wó jé:n] mà dĩ:ⁿ],
 [[3SgP gear] Poss **beside**],
 púlḏ-n yèré wó tèmè-Ø
 Fulbe-Sg come 3SgO find.Perf.L-3SgS
 ‘As he held it (rifle) out in the sun, near his gear, the Fulbe man came and encountered him.’ **2004.4.4**
- b. hâl [màlfâ:ⁿ kùⁿ] kúmó jè yèré
 until [rifle Def] hold.in.hand go.with come

[wó dǐ̀ːⁿ] d̀̀-Ø
 [3SgP **beside**] arrive.Perf.L-3SgS
 ‘until he (=Fulbe man) came up close to him holding the rifle in his hand’ **2004.4.4**

8.3.7 ‘in front of’ (jírè, jírè lé, jì r̀̀-ǎgù, kâ:)

jírè with HL tone contour, or jírè lé with H-tones, means basically ‘in front of’. Simple jírè takes a pronominal or NP complement in **possessor** form.

(459) a. [kó gũ̀ǹ] è dí̀gè-n
 [Nonh behind] 2PlS.L follow.Perf.HL-Ppl.Sg
 [é jírè] kò j̀̀wó-̀̀ǹ
 [**2PIP in.front.of**] NonhS.L run.Impf-Ppl.Sg
 ‘you have followed behind them, they are running ahead of you.’
2004.3.1 (excerpt from (914))

b. [má jírè]
 [1SgP in.front.of]
 ‘in front of me (=in my direct experience)’ **2004.3.2**

c. [mì d̀̀:] mà jírè
 [1SgP father.HL] Poss **in.front.of**
 ‘in front of my father’

There is an extended variant jì r̀̀-ǎgù with the same sense and syntax (460.a). In addition, jírè lé ‘in front’, which can also be an adverbial without overt complement (as in ‘they are walking in front’), can take a **possessor** complement (460.b). There is also a combination jì r̀̀-ǎgù lé with H-toned compound final and H-toned postposition lé (448.c).

(460) a. [má jì r̀̀-ǎgù] ù̀m̀-Ø
 [**1SgP in.front.of**] be.lying(=prone).Perf.L-3SgS
 ‘He/She is lying down (= sleeping) in front of me.’

b. [má jírè lé] d̀̀ːⁿ-Ø
 [**1SgP in.front in**] sit.Perf.L-3SgS
 ‘He/She is sitting in front of me.’

jírè may be used in a loosely temporal sense ‘before ...’ with animate complement, especially where a spatial element is also present (461).

- (461) [émé jířè] yèrè-bà
 [1PIP before] come.Perf.L-3PlS
 ‘They came here before us.’

However, there is a clausal ‘before ...’ construction with “pseudocausative” nominal (suffix -ẁ̀) and particle lé (§15.2.4.2) added to the verb ‘arrive’, and this construction is used when an explicit temporal reference point is involved.

- (462) [[má bú:dù] mà b̀̀r-ú] d̀̀né-m̀̀
 [[1SgP money] Poss obtain-VblN] want.Impf-1SgS
 [éwé mà d̀̀:-ẁ̀ lé]
 [market Poss arrive-Caus in]
 ‘I want my money before the market (day) (arrives).’

When the reference point is a dwelling, instead of jířè or variant, we get a locative form (final ...HL tone realized as F-tone) of the compound m̀̀:-ká: ‘door’ (including ká: ‘mouth’), namely m̀̀:-kâ:. Thus ‘in front of the house’ is expressed as ‘at the door of the house’ (463.a). Likewise, kâ: ‘at the mouth’ (tonal locative of ká: ‘mouth’) is used in contexts like ‘in front of (= at the mouth of) the cave’ (463.b).

- (463) a. [úró mà m̀̀:-kâ:] ǹ̀m̀̀-Ø
 [house Poss ?-mouth.Loc.HL] fall.Perf.L-3SgS
 ‘He/She fell down in front of (=at the door of) the house.’
- b. [t̀̀m̀̀- kóm kâ:] ì j̀̀-Ø
 [stone.L-hole mouth.Loc.HL] stand.Perf.L-3SgS
 ‘He/She stopped in front of the cave.’

8.3.8 ‘behind’ (gũn lé), ‘after’ (gũǹ̀)

gũn may have the spatial sense ‘behind’, where the reference position is defined by a person, object, or place. In this sense, gũn most often occurs with following lé in locative function. The complement of ‘behind’ is expressed as a **possessor**, hence requires mà after a nonpronominal NP (464.a-b).

- (464) a. [úró mà gũn lé] j̀̀- ǹ̀: ǹ̀ :-Ø
 [house Poss behind in] sleep(noun) sleep.Perf.L-3SgS
 ‘He/She slept behind the house.’

- b. [má gǔn lé] yà:-Ø
 [1SgP **behind in**] go.Perf.L-3SgS
 ‘He/She walked behind me.’

Without lé, gǔnǎn may also be used in the temporal sense ‘after’, in connection with a reference time. The complement is again expressed as a **possessor**. Expressions with human complement like ‘after us’ are understood as meaning ‘after our departure’ and the like. As a postposition without lé, gǔnǎn is in tonal locative form.

- (465) a. [émé gǔnǎn] nì-dí:ⁿ yěs-sà-bà
 [1PIP **after**] here come-Reslt-3PlS
 ‘They came here after us (=after our departure).’ (yèré-)
- b. [lá:yá:rù mà gǔnǎn], àná yǎ:-ŷ
 [Feast.of.Ram **Poss after**], village go.Impf-1PlS
 ‘After the Feast of the Ram, we’ll go on a trip.’
- c. gàmá [kó gǔnǎn]
 often [Nonh **after**]
 [[nǐ: pél-lèy] mà⇒↑ ě: t̂:-n] b́é:-bà
 [[day ten-two] of month Recip-Sg] stay.Impf-3PlS
 ‘After that they usually stay for around twenty days to a month.’
2004.5.3

gǔnǎn without lé may also be used in what appears to be spatial rather than temporal sense with the verb d̂i ǵé- ‘follow’; see (914) in §15.2.1.2. However, the difference between spatial and temporal is not sharp with ‘follow’ (compare the rough equivalence in English between *follow behind* and *follow after*).

8.3.9 ‘on the side of’ (àrgá lé)

This expression means ‘on the side of (sb, sth)’, or more broadly ‘in the vicinity of’. It can be used with human referent to mean ‘in the presence of’, or even ‘at the home of, chez’. The complement takes **possessor form**.

- (466) a. [má àrgá lé] yéré
 [1SgP **side in**] come!
 ‘Come over (here) by me!’

- b. [àná mà àrgá lé] yǎ:-m̀
 [village Poss side in] go.Impf-1SgS
 ‘I’m going (= heading) to the side (= vicinity) of the village.’

8.3.10 ‘under’ (dójù)

This postposition most often takes a simple **non-possessor NP** without Possessive mà as complement. However, mà is optionally added (467.d). Moreover, if the complement is pronominal, it must have **pronominal possessor** form. In form, dójù is compatible with a tonal locative of the noun dójú ‘bottom’.

- (467) a. tùmó [úró dójù] yó=kùn-Ø
 stone [house **under**] exist=be.in.Perf.L-3SgS
 ‘There are rocks under the house.’
- b. lù:ró [á dójù] yó=kùn-Ø
 snake [2SgP **under**] exist=be.in.Perf.L-3SgS
 ‘There is a snake under you-Sg’
 (said to someone in a tree or on a mountain slope)
- c. hâl [[úró cì-cì né] dójù] ù kún-ì n
 even [[house Rdp-shade] **under**] 2SgS.L be.in.Perf.HL-Ppl-Sg
 déy kárⁿà
 if even
 ‘(The weather is hot,) so much that even if you are under (=in) the shade of a house, ...’ **2004.3.1**
- d. tógù (mà) dójù
 shed (Poss) **under**
 ‘under (=within) the shed (=shelter)’

As (467.d) shows, dójù may be used to indicate position inside a covered structure. With human complements, it may also be used in examples like (468), where ‘under you’ means ‘hidden on your body’ (i.e. in an inside pocket).

- (468) [ɛ̀jíⁿ⇒ [á dójù] kó kúnó cé:né]
 [very [2SgP **under**] NonhO put do.well.Imprt]
 [kò tè:rè-ý] jè-Ø
 [NonhO show-ImprtNeg] say.Perf.L-3SgS
 ‘He said, “put it (=passport) well under you, and don’t show it!”’
2004.5.4

8.3.11 ‘beside’ (pènè, pènê:)

This pair of related forms is structurally similar to the pair bérè, bèrê: for ‘in, inside of’. The two variants are derived from the noun péné ‘side’. With pènè we see the stem-wide H(H...)L overlaid tone contour, and it is used only with a nonprominal NP as complement (469). pènê: has the final F-tone superimposed onto the lexical LH tone, resulting in LF word-level contour. It takes a pronominal or NP complement in **possessor** form (470).

(469) úró pènè
house **beside**
‘beside the house’

(470) a. úró mà pènê:
house Poss **beside**
‘beside the house’

b. má pènê:
1Sg **beside**
‘beside me’

8.3.12 ‘between’ (gǎn̄n, gǐ-gǎn)

‘Between X and Y’ is normally expressed as [[X.: Y.:] mà gǎn̄n], whether X and Y are independent pronouns or nonprominal NPs. In other words, ‘X and Y’, treated as a nonprominal NP, appears as the possessor (471). For the conjunction construction [X.: Y.:], see §7.1.1.

(471) a. [àrⁿ-úm.: ñě-m.:] mà gǎn̄n
[man-Pl woman-Pl] Poss **between**
‘between men and women’

b. [émé.: é.:] mà gǎn̄n
[1Pl 2Pl] Poss **between**
‘between us and you-Pl’

With referentially plural NP or pronoun, we get just [X mà gǎn̄n] as in íné-m mà gǎn̄n ‘between/among the people’, or with a pronoun [X gǎn̄n], as in émé gǎn̄n ‘between/among us’, cf. (398.d). In this construction we have normal alienable possession. An example involving partitive use (‘five among (=from) those watermelons’) is (374).

- c. [sì:nlé jé] jón jòṅó-bà táṅà: dèy
 [disease **for**] healing heal.Impf-3PlS happen if
 ‘if they (=healers) treat (people) for sickness’ **2004.3.27**

The phrase *ámà jé* means ‘for (the sake of) God’, or more freely ‘in the name of God’, as a motive for doing a good deed.

After a focalized constituent, I recorded L-toned *jè*. The relevant example is (754) in §13.1.5. Both the fact that *jé* allows Focus clitic $\equiv \dot{y}$ to attach to the complement NP, and the dropping of tones to *jè*, suggest a (perfective) verb-like status for this “postposition.”

A verb-like status is also suggested by (475), where *jé* following a noun is itself followed by *méy* ‘and’. (475) is from a text about mice traps constructed by balancing an inverted wooden bowl on a palm-leaf bowl cover, with an opening for the mouse.

- (475) ù-jùwⁿó [[kò ñǎ: kùⁿ] jé méy]
 Rdp-mouse [[Dem food Def] **for and**]
 [gũ:n kùⁿ] dī gé nú:-yⁿè-Ø táṅà: dèy, ...
 [bowl.cover Def] follow enter-Perf-3SgS happen if, ...
 ‘The mouse [topic], when it has followed along the bowl cover and has gone in (under the bowl itself) because of (=in order to get) the food, ...’ **2004.3.16**

These data suggest a connection between “postposition” *jé* (Purposive or Causal) and the defective quasi-verb *jè*- ‘say’, whose inflected forms are limited to the unsuffixed Perfective. For *jé* and *jé méy* at the end of adverbial clauses, see §15.2.2.2, especially discussion of (931.a-b).

8.5 Other adverbials (or equivalents)

In this section I describe non-PP adverbials, or functional equivalents to such adverbials in other languages. Jamsay is not rich in evaluative or modal adverbials. It has the usual range of deictic adverbials for spatial senses, and an interesting set of expressive adverbials. For pragmatic adverbials see chapter 19.

8.5.1 Similarity (‘like’)

cín means ‘thus, like that’, and is used without a complement within its own clause. Either it is accompanied by a gesture, or it refers to a preceding

description. It is often overtly focalized as clause-initial *cín=î*: ... (*that's* how ...). It may be followed by *jín* 'like'.

- (476) a. *cín jín [cè: bé:-Ø]=ỹ*
thus like [thing.L be.Perf.HL-Ppl.Nonh]=it.is
 'That's how it was.' (end of an interview segment) **2004.3.5** (*bê:-Ø*)
- b. [*tõy kùⁿ ké*] [*à-jǎyⁿ kùⁿ ké*]
 [sowing Def Topic] [planting.in.pits Def Topic]
cín=î: kárⁿá-bà
thus=Foc do.Impf-3PlS
 '(Regular) planting [topic], and the method of planting (before the rains begin) in pits with manure [topic], that's how they do them.'
2004.3.6
- c. [*bé lèy*] *cín=kò*
 [3Pl two] thus=be.Nonh
 'The two of them (=sorcerer and healer), it's thus (with them).'
2004.3.27
- c. [*bè ké*] *cín=wò-bà*
 [3Pl.L Topic] thus=be.Hum-3PlS
 'Them [topic], they are like that.' **2004.3.27**

For 'like X' with a complement, the adverbial used is *jín*, following the relevant NP or adverbial.

- (477) a. [[*jàndúru jín*] *bíré bìré*] *é ñé:-wⁿ-á:rà-m*
 [[donkey **like**] work(noun) work] 2PlO eat-Caus-Habit-1SgS
 'I work like a donkey (i.e. very hard) to feed you-Pl.'
- b. *á: jǎ: mèy↑ [bèr-ná: jín] dòrⁿó-bà*
 catch take and [goat **like**] sell.Impf-3PlS
 'They (=slave-captors) used to catch, transport, and sell (people) like goats.' **2004.3.11**

jín also occurs as second element in interrogative *yò:-jìn* 'how?' (§13.2.2.5) and deictic *ní-jìn* 'like this' (§4.4.4.1). In these combinations, it is pronounced with L-tone.

The adverbial *cí-céw* 'same' is related to universal quantifier *cêw* 'all'. It denotes identity of reference, or identity at the level of category/species. It can

be used predicatively, either in bare form (478.a) or with the usual following predicative quasi-verbs (478.b-c). It can also be used as a noun (478.d).

- (478) a. ñě-m [ú. [èné bé.]] cí-céw gá-bà
 woman-Pl [you-Sg [Logo Pl]] Rdp-same say.Impf-3PlS
 ‘The women will say to you (a man who won’t join the hunt), “you-
 Sg and us are the same”.’ (i.e. you act like a woman)
- b. cí-céw=kò
 Rdp-same=be.Nonh
 ‘They (objects) are the same’
- c. cì-cèw-lá-Ø
 Rdp-same-Neg-3SgS
 ‘They are not the same.’
- d. ǎ-n [ñě-n lè] cí-céw mà bé:
 man-Sg [woman-Sg with] Rdp-sameness Poss being
 ‘a man’s being the same as (=acting like) women.’ **2004.3.3**

8.5.2 Extent (‘a lot’, ‘a little’)

èjíⁿ⇒ ‘very, very much’ is an adverb that quantifies predicate adjectives and some other predicates. Its location is variable, suggesting that it functions as a clausal adverbial (cf. English *indeed* or *truly*). For example, it may follow or precede an adjectival predicate (479). See also §8.5.4.1, below.

- (479) a. wàlgú=kò èjíⁿ⇒
 lazy=be.Nonh **very**
 ‘It (=viper) is very lazy.’ **2004.3.5**
- b. èjíⁿ⇒ wàlgú=kò
very lazy=be.Nonh
 [=a] **2004.3.5**

èjíⁿ⇒ is less common, but grammatical, preceding a modifying adjective inside an NP (480). In this case the adjective undergoes an **H(H...)L tone overlay** (119.b). The same tone overlay applies to modifying adjectives after gá:rá ‘more’ in comparative constructions (§12.1.3).

- (480) [ùrò èjíⁿ⇒ éjù lèy] jì nè-m
 [house.L **very** good.HL two] have.Perf.L-1Sg
 ‘I have two very good houses.’ (èjú)

èjíⁿ⇒ has no effect on the tone of a predicative adjective: èjú=kò ‘it is good’, èjíⁿ⇒ èjú=kò ‘it is very good’.

The verb jó:- ‘be much, many’ can be used as a nonfinal chained verb, in which case it functions like an adverbial ‘a lot’. If the final verb is negated, the sense is ‘not much’ (481).

- (481) ñě-m jó:⇒ nù:-j-é
 woman-Pl **be.much** enter-ImpfNeg-3PlS
 ‘The women don’t enter (the house) very much.’ **2004.3.18**

The intransitive verb lóyó- ‘overflow, be excessive, be numerous’ and its causative lóyó-wó- ‘make overflow, do excessively’ are used in strong extent expressions (482). See also line 1 of (1164) and line 3 of (1257).

- (482) íné-m wǒ: mèyⁿ [hâl yǎ: lóyó-wó-Ø]
 person-Pl kill and [until go **overflow-Caus.Perf.L-3SgS**]
 ‘It (=famine) killed an awful lot of people.’ **2004.4.28**

Two antonymic adverbials meaning ‘a lot’ and ‘a little’ are irregularly derived from semantically related adjectives. Both adverbials are characterized by intonational prolongation of the final vowel. A third adverbial of similar structure means ‘far away’. ‘A lot’ and ‘far away’ have the same phonological tones as the related adjectives, but ‘a little’ has a distinctive HL tone contour.

- | (483) | adverbial | gloss | related adjective | gloss |
|-------|-----------|------------|-------------------|----------------|
| a. | gàrá⇒ | ‘a lot’ | gàrá | ‘big, old’ |
| b. | dáyà⇒ | ‘a little’ | dáyá | ‘small, young’ |
| c. | wàyá⇒ | ‘far away’ | wàyá | ‘distant’ |

These adverbials are illustrated in (484).

- (484) a. [[kó kùⁿ] mà kú:ⁿ] dáyà⇒ èmě-n tégé
 [[Nonh Def] Poss on] **a.little** 1Pl-Dat speak.Imprt
 ‘Tell us a little about it.’
- b. [kò wàrá=kò]
 [NonhS.L farm.Impf=be.Nonh]

gàrá⇒ wò-rú èl-lá-m
a.lot 3Sg-Dat be.good-Neg-Ppl.Pl
 mà ì nè gàrú-m tút-túrú yó=kò
 Poss person.L old-Pl one-one exist=be.Nonh
 ‘That it (=plow) do the farming, there are (still) a few old men here
 and there who don’t like it a lot’. (érù) **2004.3.7**

- c. ú:rⁿ-â:-Ø táṅà: dèy,
 get.up-Perf-3SgS happen if,
 wà yá⇒ yǎ: ná:kò
far.away go spend.night.Impf=be.Nonh
 ‘If it happens that they (=birds) have arisen (=flown away), they
 will go far away to spend the night’ **2004.3.8**

8.5.3 Exactitude and approximation

8.5.3.1 ‘Approximately’ (*tô:n, jín*)

Reciprocal *tô:n* (§18.3) can be used in this sense with temporal and locative expressions. In (485), it is added to a conjunction using ‘here’ and a conveniently visible house as coordinates to specify the approximate distance between two protagonists in a narrative.

- (485) [ní.: [b... mà ùrò núṅò]] *tô:n*
 [here [B Poss house.L Dem]] **Recip-Sg**
 ‘about the distance from here to that [deictic] house of B’s’ **2004.5.3**

An expression freely translatable as ‘approximately, roughly’, qualifying a numeral, occurs in (486). The expression includes the phrase ‘what reaches (=amounts to)’, but it also includes a Reciprocal element *tô:n*, suggesting that the overtly expressed numeral phrase (‘ten years’) and the actual elapse of time converge approximately.

- (486) [sàrí: kùⁿ] yé sà-Ø, [[[àⁿà-kújú pèrú]
 [plow Def] exist have-3SgS, [[[year ten]
 cè: dó:kò-Ø] *tô:n*]
thing.L reach.Impf=be.Nonh-Ppl.Nonh] Recip-Sg]

[wó nùmô:] íñé-sà-Ø
 [3SgP hand.Loc.HL] lie.down-Reslt-3SgS
 [wárú wàl-lí-Ø]
 [farming farm-PerfNeg-3SgS]

‘He had a plow. For about what added up to ten years, it lay in his hands, (but) he didn’t farm (with it).’ (wárú wàrà-) **2004.3.7**

However, approximate quantities of countable entities are more often expressed by disjunctions of the type ‘five or six X’s’. See §7.2 for examples. In (487), such a disjunction (switching from days to months in the two disjuncts) is followed by tî:-n.

- (487) [[[nĩ: pél-lèy] mà⇒↑ ě:] tî:-n] bé:-bà
 [[[day ten-two] **or** month] **Recip-Sg**] remain.Impf-3PIS
 ‘They will stay for around twenty days or a month.’ **2004.5.3**

Another ‘approximately’ construction involves jín ‘like’ in combination with disjunction ma ‘or’, in either order, following a quantified NP. This can be interpreted as an abbreviation of a phrase of the ‘five or six’ type, with two more or less adjacent quantifiers defining a range. Both the abbreviated and full versions of the disjunction type occur in (488).

- (488) [kó kàlá] [kó gá:rà mà⇒↑ jín] éwé-bè,
 [NonhP baguette] [NonhP eight **or** **like**] buy.Impf-2PIS,
 [bù:rù kàlá gá:rà jín] má⇒ éwé-bè
 [bread.L baguette eight **like**] **or** buy.Impf-2PIS
 [gà:rí mà bô:l], [bô:l nũ:yⁿ] má⇒
 [porridge.cake Poss cup] [cup five] **or**
 [bô:l kúróy jín] éwé-bè
 [cup six **like**] buy.Impf-2PIS

‘Baguette(s) of it (=bread), you-Pl will buy eight or so of them. You’ll buy either or so of them. Bowls of porridge cakes [topic], you’ll buy around five or six cups.’ **2004.5.1**

8.5.3.2 ‘Exactly’

céw-céw ‘exactly’ is used with a preceding quantifier. An example is mùñú lèy céw-céw ‘exactly two thousand (riyals)’, i.e. ten thousand CFA francs.

Reduplicated té:-té: can be used in the sense ‘precisely’ with reference to time: [mídí: lè] té:-té: ‘at 12 noon sharp’. For té⇒ and its iterated form see §8.5.3.3, below.

See also ná: in loose and tight compounds in senses like ‘the authentic X’ (§5.1.13).

8.5.3.3 ‘Specifically’ (té⇒, pá⇒, já:ti)

An adverbial té⇒ (with exaggerated prolongation represented by ⇒) is added to NPs or adverbials in the identificational sense ‘precisely’. The NP or adverbial is often but not always topicalized. The context involves narrowing down from a more general to a very exact reference. A gloss ‘specifically’ or ‘personally’ captures the nuance.

- (489) a. [émé ùjùbǎy kùⁿ] mà bèrê: té⇒ ké
 [1PIP country Def Poss] in **specifically** Topic
 ‘as for (here) in our (Dogon) country specifically, ...’ **2004.3.6**
- b. ì nè gàmà-nám⇒, èñè-bé: té⇒
 person.L certain-Pl, chicken.L-excrement **specifically**
 lúgúró-sà-bà dèy, ...
 look.for-Reslt-3PIS if, ...
 ‘Some (other) people, when they have looked for chicken excrement
 (used in tanning hides), ...’ **2004.3.17**
- c. [émé ànà kàná té⇒ kùⁿ ké],
 [1PIP village.L new **specifically** Def Topic]
 bùrò-ní: nì-dí:ⁿ⇒yⁿ èmě-n nèwⁿé-sà-Ø
 pond.L-water here=Foc 1Pl-Dat be.useful-Reslt-3SgS
 ‘Specifically (regarding) our new village (=Dianwely Kessel), pond
 water [topic], here [focus] it is useful to us.’ **2004.4.5**
- d. [[èmě-n té⇒] lè] ô:-Ø
 [[1Pl-Dat **specifically**] Dat] give.Impf-3SgS
 ‘He/She will give (it) to us specifically.’

té⇒ may be iterated as té:-té: for further emphasis, but here there is no intonational prolongation (490).

- (490) a. [[èmě-n té:-té:] lè] ô:-Ø
 [[1Pl-Dat **specifically**] Dat] give.Impf-3SgS
 ‘He/She will give (it) to us specifically.’

- b. yèyjê: [[nì-nì:]-[tógú-gú]] mà wàkàti
 morning [[sun.L]-[rising]] Poss time.L
 nújò lè] té:-té: tô:-n cèjè-y
 Dem in] **specifically** Recip-Sg meet.Perf.L-1PlS
 ‘In the morning, at precisely that moment of the sun’s rising, we
 encountered each other.’ **2004.5.1**

An **Emphatic** adverbial pá⇒ follows a topicalized NP or adverbial in some textual examples. In some examples it comes close to té⇒, and can be translated ‘X specifically’ or ‘especially X’. In other examples it means ‘the main (principal) X’, or function as an untranslatable emphatic.

- (491) a. jémè-n mà nèwⁿé pá⇒, dògò-gó-Ø àbádá⇒
 blacksmith-Sg Possvalue **Emph**, finish-ImpfNeg-3SgS never
 ‘The usefulness of a blacksmith [topic], it never ends.’ **2004.3.12**
- b. [jèmè-ně-m mà bíré pá⇒]
 [blacksmith.L-woman-Pl Poss work(noun) **Emph**]
 [bé nè] dá:ŋá mǎ:-bà
 [3Pl now] water.jar build.Impf-3PlS
 ‘The main work of blacksmith women [topic], they make (earthen-
 ware) water jars.’ **2004.3.13**
- c. dɔyò-úrò jòŋ-jóŋó-m,
 Dogon.L-house.Loc.HL healing.L-heal.H-Ppl.Pl,
 [ì nè-m jóŋ jòŋó-m kùⁿ pá⇒]
 [person-Pl healing heal.Impf-Ppl.Pl Def **Emph**],
 [cè: bè-rú lɔy=y là:-Ø],
 [thing.L 3Pl-Dat medicine=it.is Neg-Ppl.Nonh]
 [kó tǎŋ-Ø nám=kò]
 [NonhP happen-VblN] difficult==be.Nonh
 ‘Healers in Dogon country [topic], especially those who practice
 healing (as a specialty) [topic], it is difficult (=rare) for there to be
 anything (=any native plant) that is not a medicine for them.’
2004.3.27
- d. [àná céw]=ì: mòrⁿó=kò,
 [village all]=Foc be.together.Impf=be.Nonh,
 mais [émé àná bérè pá⇒],
 but [1PlP village in **Emph**],

nǒŋ à-kóró dó:=kò
 neighborhood well reach.Impf=be.Nonh
 ‘An entire village gets together (to dig a neighborhood well).
 However, in our particular village (=Dianwely Kessel) [topic], a
 neighborhood can reach (=has the ability to build) a well (by
 itself).’ **2004.4.5**

My assistant rejected pá⇒ with a pronoun, e.g. 1Pl #émé pá⇒. This is another difference between pá⇒ and té⇒.

Iterated (fully reduplicated) já:tì-já:tì can also be used to specify an individual entity. (For simple já:tì, a Fulfulde borrowing, see §19.5.1)

(492) [ú já:tì-já:tì] ú yéré wá
 [2Sg **precisely**] 2Sg come.Imprt say
 ‘He/She said that you-Sg specifically should come.’

8.5.4 Evaluation

8.5.4.1 ‘Well’ and ‘badly’

There is no dedicated adverbial meaning ‘well’ or ‘badly’. As in standard Arabic, the equivalent sense is often expressed by adding an adjective ‘good’ or ‘bad’ to a cognate object (493).

(493) [wàrù èjú] wàrà:-Ø
 [farming.L **good**] farm.Impf-3SgS
 ‘He/She farms well.’ (wárú)

Or, the evaluative adjective ‘good’ or ‘bad’ may be predicative. This is always possible since verbal nouns (and similar nominals) are abundant.

(494) [wó jów] èjù-lá-Ø
 [3SgP running] **good-Neg-3SgS**
 ‘He/She runs poorly’ (lit. “His/Her running is not good”)

Adverb èjí⇒ (§8.5.2) may have the contextual meaning ‘well’. Morphologically, one could argue that it is still connected to èjú ‘good’, but the semantic connection is weak and the morphology would be obscure.

- (495) èjɪⁿ⇒ jów jòwɔ̃:-Ø
well/much running run.Impf-3SgS
 ‘He/She runs well (or: runs a lot).’

The verb cé:né- may be intransitive ‘be well-made, well-done’ or just ‘be good’, as well as transitive ‘make good, repair’ or just ‘do well’. It occurs in constructions like ‘until it is good’, freely translatable as ‘well, thoroughly, properly’, in (496).

- (496) [ǎ-n kùⁿ] ì nì wⁿé páyá [hâl cé:n-â:-Ø dèy]
 [man-Sg Def] Refl tie [until **be.good**-Perf-3SgS if]
 ‘when the man has tied himself (=his belt) well, ...’ **2004.4.26**

8.5.4.2 ‘Appropriate, right’ (já:ⁿ)

A culturally important adverbial is já:ⁿ, which means ‘normal, appropriate, (socially) acceptable, right’ with respect to behavior. It usually appears as a predicate with Nonhuman subject (=kɔ̃) referring to the behavior, and may take a dative to specify the person or group for whom the behavior is normal.

- (497) [jáj kâ:ⁿ nè] jàŋá-bà, bè-rú já:ⁿ=kɔ̃
 [begging too now] beg.Impf-3PlS, 3Pl-Dat **normal**=be.Nonh
 ‘They (=men of ségέ-m caste) do begging also, it’s normal (=socially acceptable) for them.’ **2004.3.15**

The negative is jà:ⁿ-lá- with the usual stative Negative suffix (§11.4.3).

In (498.a), já:ⁿ and jà:ⁿ-lá- occur in parallel positive and negative relative-clause predicates. The positive form treats já:ⁿ as an adjectival predicate without the ‘be’ quasi-verb. It is therefore itself subject to the H(H...)L tonal overlay typical of participles, resulting in jâ:ⁿ-Ø. A similar construction occurs in (498.b).

- (498) a. òrù kârⁿ-ú jâ:ⁿ-lá-Ø ...
 thing.L do-VblN **normal**-Neg-Ppl.Nonh ...
 òrù kârⁿ-ú jâ:ⁿ-Ø
 thing.L do-VblN **normal**.HL-Ppl.Nonh
 ‘something that it is not right to do, ... something that it is right to do’ **2004.4.22**

- b. [[dì:ⁿ kǔn-Ø jâ:ⁿ-Ø] lè] jǎ:
 [[place.L put.VblN **normal**.HL-Ppl-Nonh] in] convey
 kúnó-bà, [dì:ⁿ kǔn-Ø jâ:ⁿ-lá-Ø cêw]
 put.Impf-3PlS, [place.L put-VblN **normal**-Neg-Ppl.Nonh all]
 [cě:rù kùⁿ] dǐ ηé jǐ:ⁿ≡kò
 [money Def] sit.down Past.Impf=be.Nonh
 ‘They will allocate (“convey and put”) (funds) where allocating is
 appropriate; wherever allocating is not appropriate, the money will
 sit down (=be held) for the time being.’ **2004.4.23**

8.5.5 Epistemic modals

The predicative noun *tílây* ‘obligation, necessity’, used in deontic modals (‘X must do’, §17.3.7), can be extended to epistemic contexts (‘certainly, definitely’) (499).

- (499) [àrⁿá mà mì rⁿ-ú] *tílây*≡ỹ
 [rain Poss fall-VblN] **necessity**=it.is
 ‘It will certainly rain.’

Possibility or uncertainty can be expressed biclausally, with the partitive noun/adjective *gàmá* ‘some’ (hence ‘sometimes, in some cases’, by extension ‘maybe’) plus *dèy* ‘if’ in the first clause (500). For *gàmá* as adjective ‘(a) certain (one)’, see §6.3.2.

- (500) [gàmá≡ỹ dèy] yèré-m̃
 [**some**=it.is if] come.Impf-1SgS
 ‘It’s possible/uncertain that I will come.’

bé:≡kò ‘it happens, it will happen’ can be used in the sense ‘it may happen that ...’, or more colloquially ‘maybe’. The factive complement (in the form of a main clause, §17.3) precedes *bé:≡kò*.

- (501) [ù-rú lóyó gàrà-gó-Ø] *bé:≡kò*
 [2Sg-Dat exceed pass-impfNeg-3SgS] **be**.Impf=be.Nonh
 ‘It won’t be too much for you, perhaps.’ **2004.3.5**
 [lit.: “it (may) happen that it won’t be ...”]

gàmá and *bé:-* are often combined (502).

- (502) a. gàmá [[é jâm] kò-rú bèrè-bè]
some [[2PIP peace] Nonh-with get.Impf-2PIP]
 bé:≡kò
be.Impf=be.Nonh
 ‘Possibly you-Pl will have peace with (=relief from) them (=birds).’
2004.3.8
- b. íjé m̀ỳⁿ↑ [kó ǹ:~wⁿó gàmá
 stop and [NonhO drink-Caus **some**
 b̀r̀è~gó-Ø] bé:≡kò
 can-**ImpfNeg-3SgS**] **be.Impf=be.Nonh**
 ‘Having stopped (with the livestock), it may be that he (=young
 herder) cannot give them drink (i.e. can’t operate a well).’ **2004.3.9**

Another construction that can be freely translated with ‘maybe’ (or ‘sometimes’) is a double conditional (antecedent and consequent first positive, then negative). For example, ‘maybe/sometimes they will rob you’ can come out as ‘if they’re going to rob you, they’ll rob you; if they’re not going to rob you, they won’t rob you’.

8.5.6 Manner

Adjectives are occasionally used like adverbs, but this may require iteration. For example, the adjective mǎyⁿ ‘dry, hardened, stiff’ has an adverbial counterpart whose minimal form is the singly iterated mǎyⁿ-m̀ỳⁿ (expandible with further L-toned iterations). It means ‘with difficulty’ as a manner adverbial. In this type of iteration, tones are often dropped on the noninitial occurrences.

- (503) d̀ỳǒ~m mǎyⁿ-m̀ỳⁿ-m̀ỳⁿ-m̀ỳⁿ sàrí: c̀èj̀è~bà
 Dogon-Pl hard-hard.L-hard.L-hard.L plow accept.Perf.L-3PIS
 ‘Dogon people accepted the plow only with great difficulty
 (=reluctance)’ **2004.3.7**

8.5.7 Spatiotemporal adverbs

8.5.7.1 Temporal adverbs

Some key **temporal adverbs** are in (504). Some of the H(H...)L toned locative adverbs described in §8.1, above, have temporal reference.

(504)	form	gloss
	íjé	'today, nowadays; up to now'
	nîm (nîŋ)	'now'
	néy ⁿ	'now'
	íjé né	'up to now; again'
	kà:ná	'just now', 'just recently'
	dôm	'as of now; (not) yet'
	yá:	'yesterday'
	yògó	'tomorrow'
	nó:	'this year'
	gà:rú	'last year'
	yògó nàŋúr ⁿ ù	'next year' (contains 'yesterday', above).
	lá:	'first' (adverb)
	lá:-lá:	'previously; long ago'
	pó:ró	'previously; long ago'
	gàmá	'often, sometimes' (also: 'maybe')
	já: (or: já: mà já:)	'always'

A few common short phrases are given in (505).

(505)	a.	dògùrù time.L 'soon'	làyá other
	b.	dògùrù time.L 'often'	gàmá certain
	c.	hâl until '(most) often'	gàmá certain

'Next (e.g. month)' and 'last (e.g. month)' are expressed with làyá 'other' or as relative clauses with appropriate aspectual marking.

(506)	a.	è: month.L 'next month'	làyá other
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- b. è: tóyó=kð-Ø
 month.L rise.Impf=be.Nonh-Ppl.Nonh
 ‘next month’ (lit., “the month/moon that will rise anew”)
- c. è: gára-Ø
 month.L pass.Perf.L-Ppl.Nonh
 ‘last month’ (lit. “the month/moon that has passed”)
- d. è: númò-Ø
 month.L fall.Perf.HL-Ppl.Nonh
 ‘last month’ (lit. “the month/moon that has fallen”)

‘**Afterwards**’ or ‘after that’ is expressed by an adverbial or conditional-antecedent clause with Nonhuman kó ‘it’, verb gára- ‘go past, pass by’ in its Perfective form gǎy-yè- (gǎy-yà-), and either (gá:) kân ‘after’ (§15.2.2.1) or dey ‘if, when’ (§16.1). (gá:) kân is exemplified in (507).

- (507) a. [kó kùⁿ] gǎy-yè-Ø kân
 [Nonh Def] pass.by-Perf-3SgS after
 ‘after that passed’ (=‘after that’) **2004.4.28** (gára-)
- b. kó gǎy-yè-Ø gá: kân
 Nonh.L pass.by-Perf-3SgS say after
 ‘after that passed’ (=‘after that’) **2004.4.28**

8.5.7.2 ‘First’ (pó:ró, lá:)

It is necessary to distinguish the pragmatic adverbial ‘first, in the first place, to begin with’, reflecting the order of elements to be presented in a discourse, with the temporal adverbial ‘first’, reflecting the order of eventualities narrated. The latter sense is relevant to this section. For the pragmatic adverbial ‘firstly’ (i.e. ‘to begin with’), see tí⇒, see §19.3.1.

pó:ró, which can also be used as an ordinal adjective ‘first’ (human Sg pó:ró-n), has adverbial function in cases like (508). (If pó:ró were an ordinal adjective here, it would be the final word in its NP, and would appear in L-toned form since this NP is the head of a relative clause).

- (508) ùrò pó:ró bè mâ:-Ø
 house.L **first** 3PIS.L build.Perf.HL-Ppl.Nonh
 ‘the house that they built first’ **2004.3.11**

pó:ró is common in texts in the sense ‘previously, earlier; in the old days’.

- (509) d̥ɔ̀ɔ̀-úrò, p̥ó:ró,
 Dogon.L-house.Loc.HL, **first**,
 ǎ:-rⁿ-ùm mà àrà-nǎ:-wⁿ-Ø cín=kò jì:ⁿ
 male-child-Pl Poss porridge-drink.Caus-VblN thus=be.Nonh Past
 ‘In Dogon country, in the old days, the circumcision (“giving porridge to drink”) of the boys was like that.’ **2004.3.18**

A form lá: is used adverbially in the sense ‘first, at first’, in connection with an event that precedes another.

- (510) a. ñù:-dǔyⁿ lá: gǔ:ⁿ-bà
 millet.L-hip **first** take.away.Impf-3PlS
 ‘They remove (=harvest) ñù:-dǔyⁿ (a fast-growing strain of millet) first.’ **2004.3.6**
- b. [[ù-jùwⁿò [úrò bérè] yàrà-Ø kùⁿ]
 [[Rdp-mouse.L[house in] go.around.Perf.HL-Ppl.Nonh Def]
 lè] lá: túmnô:-Ø
 Inst] **first** begin.Impf-3SgS
 ‘He (=young hunter) begins with the mice that go around in the house.’ **2004.3.16**

Iterated lá:-lá: competes with p̥ó:ró as an adverbial ‘previously; in the old days’.

8.5.7.3 *Spatial adverbs*

Most simple (non-postpositional) **spatial adverbs** are demonstrative adverbs (‘here’, ‘there’, etc.). They are given and discussed in §4.4.3. A number of high-frequency adverbial phrases with H-toned postposition lé are described in §8.2.2. Several tonal locatives (§8.1.1, above) have spatial reference. Other spatial adverbs are in (511).

- (511) form gloss
 wàɣá⇒ ‘far away’
 é:ŋ ‘nearby’

8.5.8 Expressive interjection-like adverbials

Described individually below are several interjection-like stems that can be used adverbially, or (with following cliticized ‘be’ quasi-verb) as predicates. I transcribe them with stem-wide H-tone, but the pitch is arguably part of the interjection-like quality of the forms. Most also have a notable prolongation of the final segment (vowel or sonorant), except when followed by a clitic. For the pronunciation see §3.8.2.

See also the adjectival intensifiers in §6.3.3.2.

In addition to the adverbials profiled below, some others with various adverb- and adjective-like senses are *dónórⁿóm*⇒ ‘somewhat elongated (like a half-full sack)’, *yùgùjí*⇒ ‘woolly, furry’, *póm*⇒ (variant *bóm*⇒) ‘thick, solid’, *pétè*⇒ ‘flat (small, longer than wide), brick-shaped’, *pátà*⇒ ‘flat and wide’, *dòní*⇒ ‘almost alongside (but one slightly behind the other)’ (e.g. two moving vehicles or quadrupeds that are almost neck and neck), *jèwⁿrⁿí*⇒ ‘on the verge of falling, perched precariously’, *jèlí*⇒ ‘teetering’, *gògì rí*⇒ (variant *gògùrí*⇒) ‘rickety, shaky’, *síméyⁿ*⇒ ‘jutting out; pointing downwards’ or ‘sloped (road)’, *cémé*⇒y ‘wrinkled’ (the syllabic nucleus, not the final y, is elongated), *díyâw*⇒ ‘stretched out’, *tényⁿ*⇒ ‘a short distance away’, *dím*⇒ ‘towering, lofty’, *sàná*⇒ (variant *sèná*⇒) ‘necessarily (as a condition)’ (859), *sá*⇒m in the combination *sá*⇒m *póró* ‘strangle to death’ (*póró* ‘squeeze, strangle’).

ñàñà-ñàñǎyⁿ⇒ ‘in clusters’ is a frozen reduplication. An adverbial with a nominal compound initial (*kúⁿ* ‘head’) is *kùⁿ-sóm*⇒ ‘(with) long head and bending forward’. Another that is dubiously analysable is *láyá-jè*⇒ ‘walking fast’, if connected with the verb *láyá-* ‘hit’ (cf. Recent Perfect -*jè-*).

Adverbials *céw*⇒ and *gám*⇒ are used with verb *bé:-* ‘stay, be’ in the sense ‘be quiet, shut up’. They are often used in imperatives. *céw*⇒ *bé:* means ‘be silent (for a moment)!’, for example to allow someone else to hear something. *gám*⇒ *bé:* means ‘shut up!’

yê⇒ occurs in the combination *yê*⇒ *yǎ:-* ‘fly a short distance’ (*yǎ:-* ‘go’). Perhaps one could alternatively transcribe *yé:*. with phonological H-tone and dying-quail intonation, which would have the same duration and pitch contour.

8.5.8.1 ‘Straight’ (*dém*⇒, *pó*⇒, *séⁿ*⇒)

One such expressive adverbial is *dém*⇒ ‘straight’, which is used as an adverb (512.a-d,f) and also (like other adverbials) as a predicate with a ‘be’ quasi-verb (512.e). The m is prolonged.

- (512) a. $dém \Rightarrow$ yǎ:
straight go.Imprt
 ‘Go-Sg straight!’
- b. éwè $dém \Rightarrow$ yà:-m
 market.Loc.HL **straight** go.Perf.L-1SgS
 ‘I went straight to the market’
- c. à-n éwè $dém \Rightarrow$ yâ:-n kùⁿ
 man-Sg.L market.Loc.HL **straight** go.Perf.HL-Ppl.Sg Def
 ‘the man who went straight to market’
- d. $dém \Rightarrow$ éwè mí jà:-Ø
straight market.Loc.HL 1SgO convey.Perf.L-3SgS
 ‘He/She took me straight to the market.’
- e. òjù $dém \Rightarrow$ kô:-Ø
 road.L **straight** be.Nonh.HL-Ppl.Nonh
 ‘a road that is straight.’
- f. [kó kùⁿ] á:-jè-bà tánà: déy nè, $dém \Rightarrow$
 [Nonh Def] catch-RecPf-3PIS happen if now, **straight**
 bé [ì nè bè â:-m kùⁿ] jíjè mèyⁿ,
 3Pl [person.L3PIS.L catch.Perf.HL-Ppl.Pl Def] go.with and,
 [[[èn é bé] ì jùbǎy] lè] yǎ:-bà mà \Rightarrow ↑
 [[[Refl Pl] land] in] go.Impf-3PIS Q
 ‘So, if they (=army recruiters) conscripted (someone), did they
 (=recruiters) take the people they had conscripted straight to their
 country (=France)?’ **2004.4.21**

The alternative is an iteration $dém-dém$ with the same meaning and usage. There is no prolongation of the final segment of either part of the iteration.

- (513) [wó gòŋó lè] $dém-dém$ dè:rè-tì-Ø
 [3SgP chest in] straight-straight aim-Perf-3SgS
 ‘He aimed straight (=took dead aim) at his chest.’ **2004.4.4**

A less common expressive adverb meaning ‘directly, straight (to a location)’ is $pó \Rightarrow$, again with intonational prolongation. Here the sense is emphatic and strictly adverbial. In (514), the protagonist has followed the tracks of a cow that ate from his field, and the incriminating tracks led directly to the camp of a Fulbe herder.

- (514) [[má èjú] bérè] gó: mèyⁿ pó⇒
 [[1SgP field] in] go.out and **directly**
 [dì:ⁿ [á gòrò] kò yérè-Ø]
 [place.L [2SgP camp] NonhS.L come.Perf.HL-Ppl.Nonh]
 nùkó=kò
 here's!≡be.Nonh
 'Look here, it (=trail) started from my field (and leads) straight to where
 it comes to your camp.' **2004.3.10**

Another expressive adverb, séⁿ⇒, is used with verb yàṅá- 'look (at)' in the sense 'look straight at', 'stare straight at'.

- (515) séⁿ⇒ mí yàṅá-tì-Ø
straight 1SgO look.at-Perf-3SgS
 'He/She looked straight at me.'

8.5.8.2 'Apart, separate' (déyⁿ⇒)

Another adverbial is déyⁿ⇒ 'apart, separate, different'. The syllabic nucleus is elongated; since the boundary between the e (which is phonetically nasalized) and the yⁿ is not sharply defined, the impression is of a syllabic nucleus that is prolonged. The simple form déyⁿ⇒ may be used when the perspective of one entity or group is taken (516).

- (516) a. déyⁿ⇒ yǎ:
apart go.Imprt
 'Go-Sg separately!'
- b. ñě-m déyⁿ≡wò-bà
 woman-Pl **apart**≡be.Hum-3PlS
 'The women are apart (i.e., different from the men).'
- c. [kò nà:m-î:ⁿ kùⁿ] déyⁿ⇒ mó:bé-bà
 [Dem cotton-child Def] **apart** keep.Impf-3PlS
 'They will keep (=save) those cotton seeds apart.' **2004.3.14**
- d. [kò fú:] mà bèn kùⁿ tògú déyⁿ⇒
 [Nonh.L all] Poss tomtom Def kind **apart**
 'The tomtom (rhythm) for each of those (=stages) is distinct.'
2004.3.21

Like *dém*⇒, *déyⁿ*⇒ may be iterated for distributive reference: *déyⁿ-déyⁿ* ‘separately’ (e.g. in separate groups).

8.5.8.3 ‘Eternally’ (*àbádá*⇒), ‘never’ (*àbádá*)

This adverb, of Arabic origin (‘never’), has the sense ‘eternally, from time immemorial’ (including at least the past and the present) in positive clauses, where the final vowel is elongated.

- (517) [nùwⁿó kɛ] àbádá⇒=kò
 [death Topic] **eternally**=be.Nonh
 ‘Death, it has been (happening) always.’ **2004.3.21**

Under the scope of a negation, *àbádá* with short final vowel means ‘(not) ever’, i.e. ‘never’. It may also be an emphatic ‘(not) at all’.

- (518) àbádá bàmàkó yà:-tè-lú-m
never Bamako go-ExpPf-PerfNeg-1SgS
 ‘I have never gone to Bamako.’

Similar forms occur in all languages in the zone.

8.5.8.4 ‘Carelessly’ (*yó*⇒ *gó*⇒)

The adverb *yó*⇒ *gó*⇒, with both syllables elongated, means ‘(done) negligently or carelessly’ (e.g. door not tightly shut).

- (519) a. *yó*⇒ *gó*⇒ pàyà-w
negligently tie.Perf.L-2SgS
 ‘You-Sg tied it carelessly (e.g. too loosely).’
- b. *yó*⇒ *gó*⇒ dà:ⁿ-Ø
negligently sit.Perf.L-3SgS
 ‘He/She is sitting poorly (e.g. precariously on the edge of a seat)’

This adverb may be related to the adverb-verb combination *yó*⇒ *gó*:- ‘dodge, get out of the way of, pull away from’. The second element is *gó*:- ‘go or come out, exit’.

8.5.8.5 'All together' (*sí-só:ⁿ, só:ⁿ-só:ⁿ*)

In addition to *sí-só:ⁿ*, which has an apparent Cí- reduplication (cf. §4.1.5), there is an iterated variant *só:ⁿ-só:ⁿ*. These adverbials may be used predicatively, with cliticized 'be' quasi-verb $\equiv w\grave{d}$ - (human) or $\equiv k\grave{d}$ (nonhuman), as in (520.a), or adverbally, as in (520.b). The adverbials may also function as part of an NP, as in (520.c), where [*n̄ě-m sí-só:ⁿ*] as a whole functions as a possessor.

- (520) a. *émé* *sí-só:ⁿ≡wḍ-y*
 1Pl **all.together**≡be.Hum-1PlS
 'We are all together.'
- b. *bé* *só:ⁿ-só:ⁿ* *yǎ:-yè-bà*
 3Pl **all.together** go-Perf-3PlS
 'They [focus] all went together.'
- c. [[*n̄ě-m* *sí-só:ⁿ*] *mà* *mó:n* *lè*]
 [woman-Pl **all.together** Poss gathering in]
 [*n̄ě-m* *mà* *mó:n*], [*ǎ-n* *mà* *kû:ⁿ*]
 [woman-Pl Poss gathering], [man-Sg Poss on]
yǎ:-yè-bà *táŋà:* *dèy*, ...
 go-Perf-3PlS happen if, ...
 'in the gathering of all the women together, (in) the gathering of the women, if it happens that they have gone on (= begun to scold) a man, ...' **2004.3.3**

8.5.8.6 'Abruptly, unceremoniously' (*sâ:w*)

sâ:w is attested in adverbial function. With *yàŋá-* 'take', the combination means 'snatch, seize, catch abruptly', denoting e.g. the snatching of prey by a hawk. In other combinations it has meanings like 'hastily, unceremoniously', in contexts like 'they left hastily'.

8.5.8.7 'All, entirely' (*sóy*)

This adverb is occasionally used as an emphatic alternative to a universal quantifier 'all' (§6.8.1). Though basically adverbial ('entirely'), and capable of occurring post-verbally as a clause-level emphatic, it may sometimes be glossed as an NP 'all, everything'.

- (521) a. sóy wò-rú ó:-tù-m
entirely 3Sg-Dat give-Perf-1SgS
 ‘I gave everything (=the whole shebang) to him/her.’
- b. ñé:-jè-bà sóy
 eat-RecPf-3PIS **entirely**
 ‘They ate everything (=they picked it clean).’

8.5.9 Reduplicated (iterated) adverbials

8.5.9.1 *Distributive adverbial iteration*

An adverbial may be iterated in distributive sense.

In (522), the entire PP including the postposition is iterated. The reference is to entities that are sorted into bundles or categories, and are acted on distributively within a short time span.

- (522) a. [gòjú lè] [gòjú lè]
 [division in] [division in]
 gòjú gàmàⁿá-sà-bà dèy↑
 division divide-Reslt-3PIS if
 ‘when they have divided them up into (several) distinct piles’
2004.3.1
- b. [kó nò] yǎ: dé: jè:r-é-w, [kò cêw]
 [Nonh now] go carry bring.Impf-2SgS [Nonh.L all]
 [tògú lè] [tògú lè]
 [kind Inst] [kind Inst]
 ‘Those (kinds of wood) [topic], you will go and carry it here; all those (things), by distinct kinds (=one kind at a time).’ **2004.3.26**

In (523), only the noun is iterated. The passage is about collective work digging neighborhood wells. There may be considerable time intervals between digging wells for different neighborhoods (there are four neighborhoods in the speaker’s village).

- (523) [nòŋ kò táŋá-sà-Ø cêw],
 [neighborhood.L NonhS.L become-Reslt-Ppl.Nonh all],
 [nǒŋ-nǒŋ lè]
 [neighborhood-neighborhood Inst]
 ‘Whatever neighborhood it may be, (it’s) by neighborhood.’ **2004.4.5**

8.5.9.2 'Scattered, here and there' (*kân-kân*)

This adverb means 'scattered, here and there', emphasizing discontinuous distribution.

- (524) a. *kân-kân=kò*
scattered=be.Nonh
'They (e.g. millet plants) are scattered here and there.'
- b. *kân-kân tò:-m*
scattered sow.Perf.L-1SgS
'I sowed (the seeds) here and there (not densely).'

9 Verbal Derivation

Derivation of a verb stem from another verb (or an adjective or noun) is by addition of a derivational suffix to the input stem. Inflectional suffixes follow the derivational suffix.

The **suffixal vowel** in the reversive, causative, and other derivatives with -CV- suffixes is an unspecified short vowel. It gets its vowel quality by feature-spreading from the preceding vowel (i.e. the final vowel of the input stem). This is true even when the preceding vowel is subsequently itself syncopated or raised to become a high vowel. For the phonology, see Suffixal Vowel-Spreading (57) (§3.5.2.1) and Presuffixal V₂-Raising (59) (§3.5.2.2).

The suffixes in question will be represented as -r \acute{v} -, -w \acute{v} -, -g \acute{v} -, -n \acute{v} -, etc., where “ \acute{v} ” represents the unspecified short vowel. This vowel is always H-toned, but this is predictable since all verb stems end in a H-toned mora.

If the input verb is all-H-toned, so is the suffixed derivative. If the input verb is of the type L(L...)H, with only the final mora high-toned, this pattern is also extended to the suffixed derivative. For example, a bisyllabic HH input corresponds to a HH-H derivative, while a LH input has a LL-H (note: not #LH-H) output. (There are a handful of counterexamples to this nonetheless robust generalization.)

This phonological relationship between input and derived verb stems lends itself to an autosegmental analysis, where input verbs may be {H} or {LH}, and these lexical contours are independently (i.e. noncyclically) applied to suffixal derivatives, with the final H in {LH} always associated with the final mora.

-r \acute{v} - and -w \acute{v} - appear as -rⁿ \acute{v} - and -wⁿ \acute{v} -, respectively, when preceded by a nasalized vowel or by a syllable beginning in a nasal or nasalized consonant, by regular application of Nasalization-Spreading (48) (§3.5.1.1).

9.1 Reversive verbs

A typical feature of Dogon languages is the reversive category; compare English *un-* in verbs like *untie* and *uncover*.

The clear cases in Jamsay known to me are given in (525).

(525)	input	gloss	reversive	gloss
	a.	páyá- ‘tie’	páyá-rá-	‘untie’

	pégé- ‘insert (blade)’	pégé-ré- ‘remove (blade)’
	sóyó- ‘lock’	sóyó-ró- ‘unlock’
	lé:- ‘attach (wrap)’	lé:-ré- ‘untie, take off (wrap)’
b.	cíné- ‘go out of sight’	cíní-r ⁿ é- ‘come back into view’
	níṅé- ‘tangle’	níṅí-r ⁿ é- ‘untangle’
	píné- ‘shut’	píní-r ⁿ é- ‘open’
	mùṅó- ‘tie (knot)’	mùṅù-r ⁿ ó- ‘untie (knot)’
	mì r ⁿ é- ‘roll up (pants)’	mì nì -r ⁿ é- ‘unroll’
c.	dòmó- ‘roll on (turban)’	dòmò-r ⁿ ó- ‘unroll (turban)’
	gònó- ‘be bent’	gònò-r ⁿ ó- ‘straighten’
	mǎ:- ‘seal up (jar)’	mà:-r ⁿ á- ‘unseal (jar)’
	mé:- ‘twist (fibers)’	mé:-r ⁿ é- ‘untwist (fibers)’
	nǎ:- ‘make (rope)’	nà:-r ⁿ á- ‘unravel (rope)’
	námá- ‘step on’	námá-r ⁿ á- ‘take foot off’
	náná- ‘forget’	náná-r ⁿ á- ‘remember’
	nónó- ‘be caught (in tree)’	nónó-r ⁿ ó- ‘unhook (sth in tree)’
	ónó- ‘crumple’	ónó-r ⁿ ó- ‘uncrumple’
	sáná- ‘fence (in)’	sáná-r ⁿ á- ‘remove fence from’
	tónó- ‘hobble (animal)’	tónó-r ⁿ ó- ‘unhobble (animal)’
d.	gòró- ‘cover (sb)’	gòl-ló- ‘uncover (sb)’
	kóró- ‘hang up’	kól-ló- ‘take down (sth hanging)’
	píré- ‘get bogged’	píl-lé- ‘get unbogged’
	tárá- ‘be stuck (to sth)’	tál-lá- ‘become unstuck’
	màr ⁿ á- ‘be lost’	màl-lá- ‘be recovered’
e.	lé:- ‘shut (door)’	líl-lé- ‘open (door)’
	dɛ̀wé- ‘cover (e.g. jar)’	dɛ̀l-lé- ‘uncover’
	bǔ:- ‘cover up, bury’	bòl-ló- ‘disinter’
f.	kówó- ‘attach hide’	kóró-wó- ‘remove hide’

For **nasalized** rⁿ in the suffix in (525.b-c), see Nasalization-Spreading (48). For ll (525.d), see Post-Sonorant Syncope (60) (§3.5.3.2) and Rhotic-Cluster Lateralization (79) (§3.5.5.3). In (525.e) we again get ll, but the phonology is more obscure (note the medial w in dɛ̀wé-, and bǔ:- may be a reflex of *bòwó- (cf. Tabi bì wá). Note that lé:- occurs in (525.a) with a regular Reversive and (in a different sense) in (525.e) with irregular Reversive líl-lé-. In (525.f), kóró-wó- appears to have **metathesized** from expected #kówó-ró-. The last

item in (525.b) shows r^n in the input and $n...r^n$ in the output; see discussion of (49) in §3.5.1.2.

The set of bisyllabic inputs in (525) shows a **limited range of medial C₂**: 3 cases of g (including γ), 4 of r , 2 of r^n , 12 with nasals, and 2 with w . A similar range is found with the $-r\acute{v}$ - allomorph of the causative (see below).

In addition to the examples given, where the reversive sense is fairly clear, there are many verbs in the lexicon whose shapes (e.g. $Cv_1Cv_1rv_1$ -, Cv_1llv_2 -) are compatible with reversive morphology. In a pair like $g\grave{a}m\acute{a}$ - ‘reduce’ alongside $g\grave{a}m\grave{a}r^n\acute{a}$ - ‘share, divide’, there is a hint of possible reversive semantics, but the relationship is not transparent. A similar case is $d\grave{a}\eta\acute{a}$ - ‘patch up’ and $d\grave{a}\eta\grave{a}r^n\acute{a}$ - ‘cut crosswise, cut (sth long) in half’. With $k\acute{o}ll\acute{o}$ - ‘take off, doff (garment)’, there is more than a hint of reversive semantics, but from $k\acute{u}r^n\acute{o}$ - ‘put on, don, wear (garment)’ we would expect reversive $\#k\acute{u}l-l\acute{o}$ rather than $k\acute{o}l-l\acute{o}$ -. It is unclear whether $t\acute{o}:-r\acute{o}$ - ‘unwind (thread)’ is directly related to $t\acute{o}:-r^n\acute{o}$ - ‘wind, coil’ (one would expect nasalized reversive $\#t\acute{o}:-r^n\acute{o}$ -). In many other cases there is no attested simplex verb, so demonstrating reversive morphological status is impossible synchronically. See also (541.a), below.

Reversive verbs, and certain other verbs denoting reversible actions that have no (audibly distinct) morphological Reversive, may be followed by $g\acute{o}:-$ ‘go out’ or by $g\acute{o}:-r^n$ - ‘take out’ depending on the sense (i.e. valency). For example, both $g\grave{d}\eta\acute{o}$ - and $g\grave{d}\eta\grave{d}-r^n\acute{o}$ - occur in the simple sense ‘encircle, surround’. The Reversive ‘dis-encircle’ (i.e. go away after having surrounded something) is always $g\grave{d}\eta\grave{d}-r^n\acute{o}$ -, but since this is ambiguous the reversive sense can be made clearer by the combination $g\grave{d}\eta\grave{d}-r^n\acute{o} g\acute{o}:-$.

9.2 Deverbal causative verbs

Before proceeding, brief mention may be given to verbs borrowed directly from **Fulfulde causatives**. These are all-H-toned verbs ending in $...in\acute{e}$ - or $...in\acute{e}$ - (the choice depends mainly on harmony with preceding vowels). These contain the Fulfulde Causative formative $-in-$ plus the $-e$ ($-e$) ending that is normal in verbs borrowed from Fulfulde.

I distinguish (deverbal) **causative**, (deadjectival) **factitive**, and **denominal** verbalizations. However, the distinctions between causative, factitive, and other transitive derivations are somewhat fuzzy, and there is much overlap in the respective morphologies. For an interesting **pseudo-causative** (actually a nominal syntactically) formed with suffix $-w\grave{v}$, see below, §9.3.

For the causative strictly speaking, there is a basic choice between **four basic suffix allomorphs** $-w\acute{v}$ -, $-g\acute{v}$ -, $-r\acute{v}$ -, and $-n\acute{v}$ -, all with an underspecified vowel v . The w and r consonants become w^n and r^n , respectively, due to Nasalization-Spreading (48) under phonologically regular conditions. One

should not confuse -rv- as a minor Causative allomorph with the productive Reversive suffix -rv-.

In most cases, the **tones** of the causative are predictable from those of the input; see §3.7.3.1. The known exceptions are in (526); all are H-toned monosyllables with LH-toned causatives. The productive Causative suffix -w'v- is represented three times (526.a); see also passive è:-w'é- 'be seen' from é:- 'see' in §9.4. Four cases (526.b) involve a less common Causative suffix allomorph -n'v-.

(526)	input	gloss	causative	gloss
a.	bé:-	'remain'	bè:-w'é-	'cause to remain'
	dé: ⁿ -	'be tired'	dè: ⁿ -w ⁿ é-	'weary (sb)'
	é: ⁿ -	'weep'	è: ⁿ -w ⁿ é-	'cause to weep'
b.	bá:-	'learn'	bà:-ná-	'teach'
	dó:-	'arrive'	dò:-nó-	'cause to arrive'
	jó:-	'be much, many'	jò:-nó-	'do much'
	mé: ⁿ -	'be ground up'	mè: ⁿ -né-	'grind up'

é:ⁿ- 'weep' in (526) has a homonym é:ⁿ- 'be tight' (variant of éyⁿé-); the latter has a tonally regular causative é:ⁿ-wⁿé- 'tighten'. (cf. adjective ěyⁿ 'tight')

The most productive of the three Causative suffix allomorphs is -w'v-. It is readily applied to new borrowings, and may be added to a wide range of stem shapes ranging from mono- to trisyllabic. Representative examples are in (527).

(527) Causatives with -wv- (or -wⁿv-)

	input	gloss	causative	gloss
a.	pá:-	'come up beside'	pá:-wá-	'put next to'
	pé:-	'weep'	pé:-w'é-	'cause to weep'
	kó:-	'eat (meat)'	kó:-wó-	'give meat to'
	yă:-	'go'	yà:-wá-	'allow to go'
b.	áyá-	'hear'	áyá-wá-	'cause to hear'
	cégé-	'be charred'	cégé-w'é-	'char'
	dègè-	'spend day'	dègè-w'é-	'have (sb) spend day'
	lójó-	'overflow'	lójó-wó-	'make overflow'
	péré-	'jump'	péré-w'é-	'cause to jump'
	táyá-	'put on shoes'	táyá-wá-	'put shoes on (sb)'

	wè:jé-	‘become accustomed’	wè:jè-wé-	‘habituate (sb)’
c.	ñé:-	‘eat (meal)’	ñé:-w ⁿ é-	‘feed’
	nǎ:-	‘drink’	nǎ:-w ⁿ ó-	‘give drink to’
	nú:-	‘enter’	nú:-w ⁿ ó-	‘make enter’
d.	ér ⁿ é-	‘be full (sated)’	ér ⁿ é-w ⁿ é-	‘make full (sated)’
	kár ⁿ á-	‘do’	kár ⁿ á-w ⁿ á-	‘cause to do’
	páŋá-	‘hold in place’	páŋá-w ⁿ á-	‘cause to hold’
e.	kúnó-	‘put’	kúnú-w ⁿ ó-	‘allow to put’
	jì mné-	‘become blind’	jì mnì -w ⁿ é-	‘make blind’
	jùgó-	‘know’	jùgù-wó-	‘inform’
	píté-	‘be inflated’	pítí-wé-	‘inflate’
	dì ŋé-	‘sit’	dì ŋì -w ⁿ é-	‘make sit’
f.	ájára-	‘sew’	ájára-wá-	‘cause to sew’

A small set of causatives is characterized by a suffix allomorph -gǎ- or (apparent) -ŋǎ-. All examples known to me are in (528).

(528) Causatives with -gv- (or -ŋv-)

	input	gloss	causative	gloss
a.	bùró-	‘be revived’	bùrù-gó-	‘revive’
b.	éré-	‘escape’	ér-gé-	‘let escape’
	káwá-	‘separate self’	káw-gá-	‘separate’
	séré	‘be diluted’	sér-gé-	‘dilute (with water)’
c.	sáy ⁿ á-	‘be spread’	sáy ⁿ -ŋá-	‘disorder, shuffle’
		(compare sáy ⁿ á-w ⁿ á- ‘spread [tr]’)		
d.	súgó-	‘go down’	súnú-ŋó-	‘take down’
	dògó-	‘be finished’	dònò-ŋó-	‘finish (sth)’
e.	ñùw ⁿ ó-	‘(sb) wake up’	ñùnù-ŋó-	‘wake (sb)’
	ñǎw ⁿ ó-	‘be damaged’	ñùnù-ŋó-, ñùnù-ŋó-	‘ruin’

In (528.a), the medial vowel has raised to high by regular Presuffixal V₂-Raising (59). In (528.b), the medial vowel is **idiosyncratically syncopated**. Summing across (528), we have the following C₂'s: 3 r, 1 w, 2 wⁿ, 1 yⁿ, 2 g.

The causatives with suffix -ŋ́- (528.d-f) are phonologically difficult, but all have a nasal in the preceding syllable, whereas there are no stems with a nasal in this position in causatives with surface -ǵ- (528.a-b). This suggests that Nasalization-Spreading (48) has converted /g/ to ŋ; see (189.c) for a similar alternation in an unproductive nominal derivation. In (528.c), sáyⁿ-ŋ́- is semantically as well as morphologically specialized, and it co-exists with a semantically and morphologically regular causative sáyⁿá-wⁿá-. Syncope to (C)vC- before the derivational suffix connects sáyⁿ-ŋ́- (528.c) to the two cases of Syncope in (528.c), reinforcing the view that -ǵ- in (528.a-b) and -ŋ́- at least in (528.c) involve the same underlying suffix allomorph.

To account for the even less transparent (528.d), consider the possibility of taking the underlying suffix allomorph to be -ń- rather than -ǵ-. (See below for more cases of -ń-.) An underlying /súgú-nó-/ (the vocalism is regular), in this analysis, undergoes metathesis of /g...-n/ to /n...-g/, then Nasalization-Spreading (48) converts the /g/ to ŋ, producing the observed consonantal sequence n...-ŋ. For the key step (metathesis), see (52) in §3.5.1.2. The same phonological pattern is seen in wàná-ŋ́ 'become/make distant', inchoative and factitive of adjective wàǵá 'distant' (§9.6, below). However, this brings to only three the set of derived verbs with this consonantal alternation, and the phonological derivation I have suggested cannot be very transparent to native speakers. A similar analysis with -ń- might work, though, for (528.e), where however the final shift would be a kind of fortition from wⁿ to ŋ.

Another phonologically difficult pattern is seen in (529).

(529)	input	gloss	causative	gloss
	wàǵá-	'be left over'	wàǵà-já-	'cause to be left over'

The same consonantal alternation is seen in noun wéjè 'craziness', denominal verb wègè-já- 'become crazy' or 'drive (sb) crazy', see §9.7, below. If the final -j́- in these two derivatives is taken to be a surface variant of allomorph -ǵ-, an allomorph seen clearly in e.g. bürù-gó- 'revive' (528.a), above, metathesis can again be posited. Thus underlying /Cǵjǵ-ǵ-/ becomes /Cǵgǵ-jǵ-/. If the vowels are from the set {a o}, the /g/ becomes ǵ by g-Spirantization (32). This accounts for wàǵà-já- in (529); see (51) in §3.5.1.2 for fuller discussion.

There are some semantically causative derivatives with a third suffix allomorph -ŕ-, identical in form to the productive Reversive suffix seen above, though the verbs in question do not have reversive derivatives. All known

examples are in (530). This -rʷ- is cognate to Tommo-So Causative -r- (Plungian 1993a:392-3).

(530) Causatives with -rv- (or -rⁿv-)

	input	gloss	causative	gloss
a.	dĩ gɛ́-	‘follow; join at ends’	dĩ gɪ̀- ^{rɛ́-}	‘align in a row’
	íjɛ́-	‘stand, stop’	íjɪ̀- ^{rɛ́-}	‘arrest, detain’
b.	jègɛ́-	‘tilt’	jègè- ^{rɛ́-}	‘cause to tilt’
c.	gòŋɔ́-	‘rotate’	gòŋò- ^{rⁿɔ́-}	‘cause to rotate’
	ì né-	‘take a bath’	ì nì- ^{rⁿɛ́-}	‘bathe (sb)’

There are no phonological irregularities. Vocalism, tones, and nasalization of /r/ to rⁿ conform to the patterns seen with other causatives. The C₂ distribution is as follows: 2 g, 1 j, 1 n, 1 ŋ. This C₂ pattern is similar to what we saw above with reversive -rʷ-.

témé- ‘find’ has a regular causative témé-wⁿɛ́- and an irregular one tém-né-. Both are used in contexts like ‘cause (e.g. problems) to find (sb)’, i.e., ‘bring (troubles) upon (sb)’. tém-né- is homophonous to the deadjectival factitive tém-né- ‘soak, make wet’, cf. adjective tẽm ‘wet’. It may be that tém-né- was resorted to for ‘cause to find’ to distinguish this causative from the common passive derivative témé-wⁿɛ́- ‘be found’ (§9.4, below).

Finally, there are a few Cʷ:-nʷ- causatives with a fourth basic suffix allomorph, -nʷ-, which is cognate to Causative -nd- in Tommo-So (Plungian 1993a:392). Two or them are based on input stems with medial r or rⁿ (531.a), one (somewhat opaque) is based on one with medial ŋ (531.b), and the two others are based on monosyllabic Cʷ:- inputs (531.c). All have LH tones, which is expectable in (531.a-b) but not in (531.c), given the input tones.

(531) Causatives with -nʷ-

	input	gloss	causative	gloss
a.	gàrá-	‘pass by’	gà:-ná-	‘take across’
	m̀d̀r ⁿ ɔ́-	‘come together’	m̀d̀:-nó-	‘bring together’
b.	dĩ ŋɛ́-	‘sit down’	dè:-né-	‘make sit’
c.	jó:-	‘be much, many’	jò:-nó-	‘do much’

dó:-	‘arrive’	dò:-nó-	‘cause to arrive’
mé: ⁿ -	‘be ground up’	mè: ⁿ -né-	‘grind up’

The *n* of the -n̄v̄- suffix seems to have had something to do with the idiosyncratic deletion of the medial rhotic in (531.a) and of the medial *ŋ* in (531.b). Some irregular nouns may have likewise lost a medial rhotic before Sg -*n*. In any event, the loss of a medial consonant creates an intermorphemic vowel sequence that must be contracted. See VV-Contraction (90) (§3.5.6.2).

The rather lexicalized gà:-ná- ‘take across’ competes with a regular causative gàrà-wá- ‘allow to go across’, with a slightly different nuance.

I suggested just above that the type súgó- ‘go down’, causative súnú-ŋó- ‘take down’ (528.d), may involve underlying suffix allomorph -n̄v̄-. We will see below that -n̄v̄- is common in deadjectival verbalizations.

9.3 Pseudo-causative “verb” (-wv̄-)

In addition to true causatives (whose productive suffix is -wv̄-), there is a phonologically similar **pseudo-causative** derivative that is used in a special type of ‘before ...’ clause, with no actual causative element in the meaning. For the syntax and many examples, see §15.2.4.2.

The “verb” in this construction is actually a **nominal** syntactically. It always ends in L-toned -wv̄, and takes **no suffixes** (whether pronominal-subject, AN, or Participial). The vocalism of the suffix (and of the preceding syllable) is accounted for by Suffixal Vowel-Spreading (57) and Presuffixal V₂-Raising (59) (§3.5.2.1-2), exactly as with the suffixally derived verbs covered elsewhere in this chapter. However, the pseudo-causative does not respect the constraints on tones applicable to the lexical forms of inflectable verb stems. Instead, regardless of input lexical tones, the entire stem has H-tones, while -wv̄ itself is L-toned. This is consistent with the H(H...)L tone overlay (§3.7.3.2).

Examples of pseudo-causative verbs used in the ‘before ...’ construction are in (532). If the input verb has a true causative, the latter is shown on the right for comparison. However, while the pseudo-causative is completely productive, many verbs have no true causative in common use. (532.a) has non-nasal monosyllabic inputs. (532.b) has monosyllabic inputs beginning with a nasal, hence -wⁿv̄- suffix by Nasalization Spreading (§48). (532.c) has bisyllabic inputs with two identical vowels. (532.d) is similar to (532.c) but also has a nasal that triggers Nasalization Spreading (48). (532.e) has bisyllabic inputs with high followed by mid-height vowel. (532.f) has trisyllabic inputs. (532.g) is based on a poorly assimilated Fulfulde borrowing with disharmonic [u ε] vowel sequence, and shows that such stems do not raise the second-syllable vowel.

(532)	gloss	basic form	pseudo-causative	true causative
a.	‘arrive’	dó:-	dó:-wò	dò:-nó-
	‘see’	é:-	é:-wè	—
	‘say’	gá:-	gá:-wà	—
	‘go out’	gó:-	gó:-wò	—
	‘send’	tí:-	tí:-wè	—
	‘go’	yǎ:-	yá:-wà	—
b.	‘enter’	nú:-	nú:-w ⁿ ò	nú:-w ⁿ ó-
	‘sleep’	ní:-	ní:-w ⁿ è	—
c.	‘come’	yèré-	yéré-wè	—
d.	‘assemble’	mòr ⁿ ó-	mó ^r ó-w ⁿ ò	mò:-nó-
e.	‘spill’	yùwó-	yúwú-wò	—
	‘stand’	íjé-	íjí-wè	íjí-ré-
	‘go down’	súgó-	súgú-wò	súnú-ḡó-
	‘sit’	dí ḡé-	díḡí-w ⁿ è	dí ḡí -w ⁿ é-
	‘know’	jùgó-	júgú-wò	jùgù-wó-
	‘be blinded’	jì mné-	jìmní-w ⁿ è	jìmní-w ⁿ é-
	‘accompany’	dì mné-	dìmní-w ⁿ è	—
f.	‘shell (nuts)’	kórówó-	kórówó-wò	—
	‘inform’	jùgù-wó-	júgú-wó-wò	—
g.	‘fine’	júkké-	júkké-wè	júkké-wé-

9.4 Passive verbs

There is no productive passive, mediopassive, or antipassive suffixal derivation. A passive sense is often conveyed by a transitive construction with a referentially vague subject, often 3Pl ‘they’, so ‘he was killed’ is expressed as ‘they killed him’ (wó wǎ:-tù-bà). This is used, for example, with nàrⁿá- ‘(woman) bear (child)’, less often ‘(man) sire (child)’, so that ‘he/she was born’ is expressed as ‘they bore him/her’ (wó nǎn-tù-bà), cf. (555.a) in §10.1.2.3, below. The “passive” construction with impersonal 3Pl subject is not common in main clauses with verbs other than ‘bear’. A similar impersonal 3Pl subject occurs in a productive participial compound type producing instrumental nominals (‘oil that they rub’ = ‘oil for rubbing’); see §5.1.15.

Since most transitive verbs have no derivational passive, they just use their ordinary stem-shape in (medio-)passive as well as transitive function. In other words, they are “ambi-valent”; see §9.5, below.

Suffixal passive derivatives are attested for a handful of common verbs (533).

- (533) a. *témé-* ‘(come and) find’ *témé-wⁿé-* ‘be found (regularly)’
 b. *bèrè-* ‘obtain’ *bèrè-wé-* ‘be obtainable (regularly)’
 c. *é:-* ‘see’ *è:-wé-* ‘be seen’
 d. *gá:-* ‘say’ *gá:-wá-* ‘be said, be sayable’

The suffix is *-wⁿé-*, identical to the productive Causative suffix. Nasalized *-wⁿé-* is of course due to Nasalization-Spreading (48). The only irregularity is the {LH} tone pattern of *è:-wé-*. Compare e.g. *bé:-* ‘remain’ but *bè:-wé-* ‘cause to remain’ (526.a) (§9.2, above).

Textual examples are in (534).

- (534) a. [*cènè-jéy-bè-jèyê:-Ø* *kùⁿ*] [*kó* *kùⁿ*]
 [combativeness Def] [Nonh Def]
kõ-r *témé-wⁿé=kò*
 Nonh-with **find-Pass.Impf=be.Nonh**
 ‘A combative spirit is regularly found with it (=cobra).’ (ko-rú)
2004.3.5
- b. *kó* *gá:rá* *jó:⇒* *bèrè-wé=kò* *jé*
 Nonh more many **get-Pass.Impf=be.Nonh** for
 ‘in order that more (millet) will be obtained’ **2004.3.6**
- c. *ú:rⁿó=kò* *dèy* *è:-wé=kò* *gà↑*
 get.up=be.Nonh if **see-Pass.Impf=be.Nonh** say
 ‘(saying) if it (=rifle) fires, it will be seen.’ **2004.3.24**
- d. [*íjé* *ké*] *làyá* *nù:-gó-Ø*
 [today Topic] other enter-ImpfNeg-3SgS
gà:-wà-gó-Ø
say-Pass-ImpfNeg-3SgS
 ‘Nowadays, by contrast, it isn’t (=can’t be) said that it won’t go in (=happen).’ **2004.4.12**

bèrè-wé- can also be used as the passive of *bèrè-* in the sense ‘can, be able to’ with VP complement (§17.4). In Jamsay, unlike English, the higher ‘can’ verb rather than the lower verb is passivized.

- (535) [kó kâ:ⁿ] tégé bèrè-wé=kò
 [Nonh too] speak **can-Pass.Impf=be.Nonh**
 ‘That too can be said.’ 2004.3.9

9.5 Ambi-valent verbs without suffixal derivation

Verbs that can be used intransitively or transitively, without suffixal derivation, are here termed “ambi-valent” (with a hyphen).

In Jamsay, the **mediopassive** type predominates. If the intransitive case frame is [X VERB], the transitive frame is [Y[X VERB]], where X is the direct object and a new agent is added. Depending on the verb, one could argue that either the transitive or intransitive verb is lexically basic. In (536.a), ‘become dirty’ is probably basic with ‘make dirty’ a semantic causative, but in (536.b), ‘do’ is arguably basic with intransitive ‘be done’ a semantic mediopassive.

- | (536) | verb | intransitive gloss | transitive gloss |
|-------|---------------------|--------------------|------------------|
| a. | lýmó-jó- | ‘become dirty’ | ‘make dirty’ |
| b. | kár ⁿ á- | ‘be done’ | ‘do’ |

In the **antipassive** type, the transitive verb is conceptually basic. The antipassive intransitive construction simply omits the object, usually because it is obvious (implied by the verb) or generic (537).

- | (537) | verb | intransitive gloss | transitive gloss |
|-------|-------|--------------------|--------------------------|
| a. | sémé- | ‘sweep (up)’ | ‘sweep (e.g. courtyard)’ |
| b. | síré- | ‘cook’ | ‘cook (a meal)’ |

The tendency in Jamsay is to have a default direct object noun, often cognate to the inflected verb. Thus in Jamsay one doesn’t “sing,” one “sings (a) song” (nûŋ nûŋó-); one doesn’t “eat,” one “eats a meal” (ñá: ñé:-); one doesn’t “work,” one “works (a) work” (bíré bì ré-); one doesn’t “stutter,” one “stutters (a) stuttering” (ím ímé-). Where semantically appropriate, these inflected verbs may also be used with more specific objects (e.g. singing a particular type of song), in which case the default object is omitted.

9.6 Deadjectival inchoative and factitive verbs

Associated with (post-nominal) adjectives there are intransitive **inchoative** verbs ‘X become ADJ’, and transitive **factitive** verbs ‘Y make X ADJ’. Examples of three-way distinctions between adjective, inchoative verb, and factitive verb are in (538).

(538)	gloss	adjective	inchoative	factitive
a.	‘hard’	dɛŋ	dɛŋɛ-	dɛŋɛ-w ⁿ ɛ-
	‘lean’	dɔŋ	dɔŋɔ-	dɔŋɔ-w ⁿ ɔ-
	‘confined’	ɛm	ɛmɛ-	ɛmɛ-w ⁿ ɛ-
	‘bent’	gɔn	gɔnɔ-	gɔnɔ-w ⁿ ɔ-
	‘dry’	mǎy ⁿ	mǎy ⁿ á-	mǎy ⁿ ǎ-w ⁿ á-
	‘rotten’	ɔy	ɔyɔ-	ɔyɔ-wɔ-
	‘old’	pɛy ⁿ	pɛ: ⁿ -	pɛ: ⁿ -w ⁿ ɛ-
b.	‘hard’	sɛ:gú	sɛ:gɛ-	sɛ:gɛ-wɛ-
	‘soft’	yɔrú	yɔrɔ-	yɔrɔ-gɔ-
c.	‘tight’	ɛy ⁿ	ɛy ⁿ ɛ-	ɛy ⁿ -nɛ-
	‘wet’	tém	témɛ-	tém-nɛ-
d.	‘ripe, cooked’	írɛ	írɛ-	írí-wɛ-
	‘coarse’	kúñú	kúñó-	kúñú-wó-

The inchoatives in (538) do not involve a -CV- suffix like those in the other verbal derivations of this chapter. There is no mechanical way to derive the inchoatives from the adjectives, or vice-versa. However, the form of the inchoatives is partially explicable in terms of basic constraints on the shape of inflectable verbs (§3.4.4-5, §3.7.1.2). The inchoative is therefore vowel-final, as are all Jamsay verb stems (except for one quasi-verb, *kùn-* ‘be in’). In (538.a-c) the final vowel of the inchoative is segmentally a copy of the vowel of the preceding syllable, even when the adjective has a different final vowel, namely u (538.b). In (538.d), the factitive predictably has a high vowel in the medial syllable (Presuffixal V₂-Raising (59)).

In (538.a,d), and in ‘hard’ (538.b), the factitive is clearly the morphological **causative of the inchoative**, with the productive Causative suffix -wⁿ- (becoming -wⁿɛ- if preceded by a syllable beginning with a nasal or a nasalized consonant).

In (538.c), on the other hand, the factitives are constructed by adding -nɛ- **to the consonant-final adjective**. It is difficult to understand the tonal patterns

if we directly compare the adjectives and the -ń- derivative. The data in (538.c) seem to show that the inchoative verb is tonally independent of the adjective, just as verbs and cognate nominals are often tonally unrelated. The factitive is consistent in these cases with the inchoative rather than with the adjective. The same is true for ‘ripe, cooked’ in (538.d).

In many other cases, I have recorded a single form used indiscriminately in both factitive and inchoative functions. The most common and versatile derivational suffix is -ń-, which appears after Cv:-, CvCv-, and CvC- stems (539.a-c).

(539)	gloss	adjective	inchoative/factitive
a.	‘pointed’ ‘spacious’	sǐ: wá:	sí:-né- wà:-ná-
b.	‘fat’ ‘heavy’ ‘good’ ‘bad’ ‘thin’	dùgú dùjú èjú mòñú ùñú	dùgù-nó- dùjù-nó- éjú-né- mòñù-nó- ùñú-nó-
c.	‘short’ ‘black’ ‘lightweight’ ‘sour’ ‘small’ ‘cold, slow’	gǒy ⁿ jém ñén nôm těy tôm	gǒy ⁿ -nó- [factitive also gǒy ⁿ -nò-w ⁿ ó-] jém-né- ñén-né- nóm-nó- těy-né- tóm-nó-
d.	‘big’ ‘long, tall’ ‘sweet, sharp’ ‘bitter’ ‘fresh’	gàrá gùrú érù jé:rù òrú	gàrà-r ⁿ á- gùnù-r ⁿ ó- éné-r ⁿ é- jènè-r ⁿ é- ónó-r ⁿ ó-
e.	‘red’	bán	bàrà-r ⁿ á-
f.	‘hot, fast’	ógù	ógó-ró-, óyó-ró- [inchoative also ógó- or óyó-]
g.	‘distant’	wàyá	wàrà-ṛ ⁿ á- [factitive also wàrà-ṛ ⁿ à-wá-]

h.	‘sleek’	ònr ⁿ ú	ónór ⁿ ó-
	‘crooked’	pònr ⁿ ú	pónó ⁿ ó-
	‘crooked’	pì rì gú	pírígé-

On the whole, these inchoative/factitive suffixes resemble the minor Causative suffixal allomorphs, although the primary Causative allomorph -w^v- is strikingly absent. If we accordingly take the factitive (i.e. semantically causative-like) function as basic, we could think of these as a special case of mediopassive-type ambi-valent verb §9.5, above).

In §3.5.1.2, I present the case that a metathesis of r...-n to n...-r, followed by automatic Nasalization-Spreading (48), is behind the strange-looking consonantal alternations pairs in (539.d). bànà-rⁿá- (539.e) is synchronically opaque, but the n in adjective bán ‘red’ derives historically from *rⁿ, so this originally involved the same type of metathesis as in (539.d).

For ‘sweet; sharp’ I also recorded a factitive with double suffix ènè-rⁿè-wⁿé- in the sense ‘make sweet or pleasant’.

wànà-ⁿjá- in (539.g), from wà^yá ‘distant’, is parallel to causative súnú-ⁿjó- ‘take down’ from intransitive súgò- ‘go down’ (528.d). These unusual consonantal alternations suggest an underlying suffix /-n^v-/, and derivations involving metathesis (§3.5.1.2) and an irregular extension of Nasalization-Spreading (48).

Inchoative/factitive ónrⁿó- from trisyllabic adjective ònrⁿú ‘sleek’ (539.h) is difficult to model phonologically, since a syllable seems to have been truncated. Alternatively, ònrⁿú could be analysed as the (regular) **Verbal Noun** (ònrⁿ-ú) of the verb ónrⁿó-, which would then be lexically basic. The same issues arises with the two stems glossed ‘crooked’.

9.7 Denominal verbs

A few verbs have a semantic and phonological connection with a **noun** or **greeting phrase**, and are at least arguably denominal (540). The suffixes are similar to those used in deadjectival verbalizations and/or to the minor Causative allomorphs: -r^v- (whence -rⁿó- by Nasalization-Spreading (48)), -j^v- (problematic), -nó-, -ⁿjó- (perhaps nasalized from -gó-)

(540)	noun	gloss	verb	gloss
a.	dú:	‘load’	dù:-r ^v -	‘load (sth)’
	tì gé	‘family name’	tì gî -r ^v -	‘(griot) chant the ancestry of (sb)’
	gà ^m á	‘a certain one’	gàmà-r ⁿ á-	‘divide, share’

- b. lóyð 'trash' lóyó-jó- 'become/make dirty'
[cf. lógójó 'toilet']
- c. pó: (greeting) pó:-nó- 'greet (sb)'
- d. nùrⁿó 'pain, injury' nùrⁿù-ηó- 'injure; be injured'
yěn 'credit' yènè-ηέ- 'extend credit'
bò:mó 'stupidity' bò:mò-ηό- 'become stupid'
(alternatively from bò:mó as adjective 'stupid')

9.8 Obscure verb-verb relationships

The verbs listed in (541) display irregular relationships. In some cases, it is questionable whether native speakers make any connections.

- (541) verb gloss related verb gloss
- a. addition of -rv-
- | | | | |
|--------------------|-------------------|------------------------|-----------------------------|
| gòηó- | 'encircle' | gòηò-r ⁿ ó- | 'encircle' |
| pégé- | 'inset (blade)' | pégé-ré- | 'slide handle over (blade)' |
| " | 'drive in (nail)' | " | 'embed (nail, in wall)' |
| pé:- | 'break off' | pé:-ré- | 'break apart' |
| sáná- | 'undo' | sáná-r ⁿ á- | 'undo' |
| sé: ⁿ - | '(day) break' | sé:-r ⁿ é- | '(day) be about to break' |
| tóyó- | 'chop tree hole' | tóyó-ró- | 'carve out cavity in' |
- b. addition of -wv-
- | | | | |
|------|---------------|---------------------------|--------------------|
| lé:- | 'fear' | lírí-wé- | 'frighten' |
| | | [cf. noun lì -lě: 'fear'] | |
| ná:- | 'spend night' | ná:-w ⁿ á- | 'greet in morning' |
- c. addition of -ηv-
- | | | | |
|--------|------------------|----------|--------------------------|
| émé- | 'pinch to hold' | émé-ηέ- | 'hold (stick) in armpit' |
| mà:ná- | 'think, believe' | mànà-ηά- | 'think, believe' |
- d. medial -gv- (apparent infix)
- | | | | |
|-------|----------------|---------|--------------|
| síré- | 'cook, boil' | sígíré- | 'cook, boil' |
| lígέ- | 'mix (bricks)' | lígíjé- | 'mix' |

9.9 “Underived” trisyllabic verbs

The following is based on a working lexicon that contains about one hundred trisyllabic verbs that are not derived suffixally from other attested verbs. The C₂/C₃ sequences in these stems are strikingly reminiscent of those seen in suffixal derivatives where C₃ is the suffixal consonant. The data can be summarized in tabular form, taking C₃ as point of departure (542).

(542)	C ₃	#	comment
a.	b	1	C ₂ = j
	n	6	all are Fulfulde causatives with -in-
b.	g	4	3 after C ₂ = r
	ŋ	10	all after C ₂ = n
c.	j	9	all after C ₂ = g
	ñ	2	both after C ₂ = n
d.	r	23	18 after C ₂ = g, 3 after C ₂ = j, 1 after C ₂ = m
	r ⁿ	16	all after nasal C ₂ including 10 C ₂ = ŋ
e.	w	20	15 after C ₂ = r, 4 after C ₂ = l, 1 after C ₂ = g
	w ⁿ	9	all after nasal/nasalized C ₂ including 7 C ₂ = r ⁿ

(542.a) is without much interest (one case of b, and six Fulfulde borrowings with n). All cases of ŋ, ñ, rⁿ, and wⁿ follow nasal or nasalized C₂. Factoring this out, we note a high incidence of r, w, j, and g (in descending order of frequency). These correspond nicely to the consonants in the derivational suffixes we have considered (-rʋ- for reversive and a few causatives, -wʋ- in causatives, some causatives in -gʋ- and -jʋ-). Moreover, the associations of these suffix allomorphs with particular C₂'s, commented on in the sections above, recur here. This suggests that most of the synchronically underived trisyllabic verbs not borrowed from Fulfulde originated as suffixal derivatives.

Strikingly absent from C₃ position in the sample of one hundred verbs are many consonants that occur as C₁ in this same set of verbs. The data for C₁ (excluding Fulfulde causatives) are: b = 8, c = 5, d = 6, g = 4, j = 6, k = 12, l = 6, m = 1, n = 2, p = 9, s = 9, t = 4, w = 6, y = 5, and zero (vowel-initial) = 11. Therefore stops {b g j} and sonorants {n w} occur both as C₁ and as C₃; stops {c d k p t}, sibilant s, sonorants {m ŋ y} occur as C₁ but not as C₃; while r (which is very rare initially) and nasalized sonorants {wⁿ rⁿ} (which cannot occur word-initially) occur as C₃ but not as C₁.

Also of interest is the very high incidence of $C_2 = g$ (28). Other C_2 's in the sample (excluding Fulfulde causatives) are $j = 5$, $l = 4$, $m = 5$, $n = 7$, $\eta = 11$, $p = 1$, $r = 18$, and $r^n = 7$.

Another, more synchronic way to look at it is that there are subtle patterns of favored consonantal sequences that apply (as constraints) to unsegmentable stems, and are enforced by allomorphic choices and phonological rules on suffixally derived stems. Except for g and j , for example, stops and affricates are very common as C_1 but very rare as C_2 or C_3 .

10 Verbal Inflection

This chapter covers inflectional categories relevant to verbs: indicative AN (aspect-negation) suffixation (§10.1), pronominal-subject suffixes (§10.2), postverbal morphemes that fine-tune the temporal values of AN suffixes (§10.3), and special imperative and hortative suffixes (§10.4).

Not covered in detail in this chapter are the following: a) defective quasi-verbs translatable as ‘be’ and ‘have’, and other defective statives; b) adjectival and nominal predicates (some of which include a quasi-verb). These are presented in Chapter 11.

10.1 Inflection of regular indicative verbs

Regular verbs in indicative function may combine with any of a range of **AN suffixes** categories expressing aspect and negation, or they may occur as unsuffixed Perfective or unsuffixed Imperfective verbs distinguished by tones. The verb (with or without an audible AN suffix) is followed by a **pronominal-subject suffix**, except in relatives and some other subordinated clauses. (In relatives, the place of the pronominal-subject suffix is taken by a Participial suffix.)

10.1.1 Tonal patterns of unsuffixed AN forms

In positive indicative clauses, the verb may or may not have a nonzero AN suffix. The two stems that lack a segmentally audible AN suffix are the **unsuffixed Perfective** and the **unsuffixed Imperfective**. (They are “unsuffixed” in the sense that they lack an AN suffix, but they are followed by pronominal-subject suffixes.) The unsuffixed Perfective is used in a restricted set of environments, and functions as a kind of unmarked, defocalized version of suffixally marked perfective-system stems. The unsuffixed Imperfective is not syntactically restricted in this way, but it does function as the most common (least marked) imperfective form.

The two unsuffixed AN stems are characterized phonologically as in (543), using mono- and trisyllabic stems to bring out the patterns (bisyllabic stems are like trisyllabics, minus the medial syllable). Recall that each verb has one of two lexical tone contours, either {LH} with just the final mora H, or all-H.

(543) bare stem (lexical form)	Ć:	Ĉ:	ĆĆĆ	C̀C̀C̀
unaffixed Perfective				
in main clause	C̀:-	C̀:-	C̀C̀C̀-	C̀C̀C̀-
in relative clause	Ĉ:-	Ĉ:-	ĆĆC̀-	ĆĆC̀-
unaffixed Imperfective				
before -Ø suffix	Ĉ:-	Ĉ:-	ĆĆĈ:-	C̀C̀Ĉ:-
before other suffix	Ć:-L	Ĉ:-L	ĆĆĆ-L	C̀C̀C̀- <i>L</i>

The unaffixed Perfective shows **tone-dropping in main clauses**, and a **H(H...)L tone overlay in relative clauses**. It therefore **erases** the lexical tonal distinction between L(L)H and all-H stems. The unaffixed Imperfective is characterized by a **final floating L-tone**. When there is no segmental pronominal or Participial suffix, this L-tone combines with stem-final H to produce F-tone (i.e. <HL>), and with stem-final R (<LH>) to produce bell-shaped <LHL> tone. When a segmentally nonzero suffix is present, the L-tone is realized on the mora-bearing segment of the suffix; see Tone-Grafting (131). The unaffixed Imperfective therefore **does not erase** lexical tones, and distinguishes the two tonal types for monosyllabic as well as for longer stems. For the final long vowel in unaffixed Imperfective ĆĆĈ:- and C̀C̀Ĉ:- before -Ø suffix, see Contour-Tone Mora-Addition (141). What I write as Ĉ:- in (543) is actually trimoraic C̀C̀C̀-, as it too has undergone Contour-Tone Mora-Addition (141).

The important thing to note from a categorial perspective is that the unaffixed Perfective and the unaffixed Imperfective are always **distinguishable from each other**, except for **monosyllabic H-toned Ć: stems in relative clauses**. In addition, the unaffixed Perfective and the unaffixed Imperfective are **always distinguishable from the bare stem**, either by bearing a nonzero pronominal-subject or Participial suffix, or (with -Ø suffix) by tones. The situation may be made clearer by boiling down (543), above, to the tone patterns in (544), below. Tones enclosed in curly brackets are associated with stem segments by regular autosegmental principles, while “+L” is an L-tone that is grafted on to the end of the stem or onto the suffix.

(544) bare stem (lexical form)	{H}	{LH}
unaffixed Perfective		
in main clause	{L}	{L}
in relative clause	{HL}	{HL}
unaffixed Imperfective	{H}+L	{LH}+L

10.1.2 Perfective and imperfective systems (positive AN categories)

Other AN categories involve audible suffixes. The full set of unaffixed and affixed (=marked) AN categories may be organized into **perfective and imperfective systems**, as shown for positive categories in (545). I should give advance warning that some of the categorial labels (Resultative, Imperfective, and Habitual) are less meaningful in Jamsay than in most languages, as will be explained in more detail below.

(545) a. perfective system (positive)

unaffixed Perfective (overlaid tones, syntactically restricted)
 Perfective -tî -, -yè-/yà-, or -â:-
 Resultative -sà-
 Recent Perfect -jè-
 Recent Perfect plus Resultative -jè-sà-
 Experiential Perfect -térè-
 Experiential Perfect plus Resultative -tés-sà-
 reduplicated Perfective (Rdp plus overlaid H(H...)L tone)

b. imperfective system (positive)

unaffixed Imperfective (final L-tone)
 Imperfective -tôyà-
 Habitual -á:rà-
 reduplicated Imperfective (Rdp plus final L-tone)

Experiential Perfect -térè- and Recent Perfect -jè- may be followed (rarely) by the Resultative suffix. With this exception, only one nonzero AN suffix is allowed. AN suffixes do not co-occur with Imperative or Hortative suffixes.

10.1.2.1 *Semantics of perfective versus imperfective aspect*

Perfective aspect is used prototypically to define the temporal space of the denoted eventuality as having been completed prior to the time of reference. The latter is normally the ‘now’ of the speech event, but is sometimes a displaced time of reference, as in a narrative with its own internal deictic center. As we will see, certain (suffixally marked) perfectives may also have a **resultative-stative** interpretation, denoting a state or situation resulting from a completed event. However, verbs like ‘want’ and ‘know’ typically occur in the imperfective.

The “classic” perfective sense may be stretched, as in many languages, to contexts where the speaker is **firmly resolved** to go into motion immediately, cf. colloquial English *I’m off* or *I’m out of here* just prior to actual motion. An example is (546).

- (546) [ɛ̀né ké] [ɛ̀né mà dǐ:ⁿ] yǎ:-yè-Ø wà
 [Logo Topic] [Logo Poss place] go-Perf-3SgS say
 ‘He said, “as for me [topic], I’m off to my place.”’ **2004.4.4**

The **imperfective** is used in connection with activities that extend beyond the time of the speech event (i.e. present or future “tense”). It is also used with reference to a displaced reference time, as in past-time narratives when a durative activity is backgrounded to another event (‘they were working in the field’), or to describe an event that post-dated the reference time (‘they were going to go away’). The Past particle *jì:ⁿ* may be added to the end of the clause in these contexts.

In simple **conditionals**, in the absence of a special temporal context the antecedent clause has a perfective-system verb, while the consequent has an imperfective verb. This applies both to hypothetical and to counterfactual conditional constructions (§16.1). However, counterfactuals make use of Past *jì:ⁿ* in both antecedent and consequent clauses.

Aspect is **neutralized** in many subordinated clause types. In verb (and VP) chains, **only the final verb** has AN and pronominal-subject inflection (§15.1). Some complement clauses are based on bare verb stems or Verbal Nouns, which do not mark aspect, or on verb-based forms with their own unique suffixes and/or tone overlays that cannot be identified with any specific main-clause AN category.

10.1.2.2 *Unaffixed Perfective with all-L or H(H...)L stem tone*

The **unaffixed Perfective** is limited to positive clauses, and competes with the marked Perfective suffixes (-tǐ-, -yà/-yè, -â:-) and from Resultative suffix -sà-.

In form, it is segmentally equivalent to the unmarked verb stem, but has one of two syntactically sensitive overlaid tone contours (547).

- | | | |
|-------|-----------------------------|---------------------------|
| (547) | construction | stem-tone |
| a. | main clause, unreduplicated | all-L (tone-dropping) |
| b. | main clause, reduplicated | H(H...)L contour overlaid |
| | relative clause | " " |

For the H(H...)L variant in relative clauses, see §14.1.13. It is the usual verb for any positive perfective-type aspect in relatives, being much more common than suffixally marked counterparts in those clauses. In main-clause verbs, overlaid H(H...)L occurs only in combination with a Cì- reduplication (§10.1.2.7, below).

In main clauses, the unsuffixed Perfective with L-tone is required when there is an **overtly focalized constituent** (548).

- (548) a. [ì jù núnò]=yⁿ làyà-m
 [dog.L that]=it.is hit.Perf.L-1SgS
 ‘It’s that dog [focus] that I hit.’
- b. yǒ:-jì n≡í: dǒyǒ-m kó cèjè-bà
 how=Foc Dogon-Pl NonhO welcome.Perf.L-3PIS
 ‘How [focus] did the Dogon receive it (=plow)?’
- c. [kì-ká:≡ỹ tò:rⁿǒ] tàṅà-Ø dèy
 [Rdp-grasshopper=Foc hatch.Perf.L] happen.Perf.L-3SgS if
 ‘if it has happened that the grasshoppers [focus] have hatched’
2004.3.8

In many other cases, this verb form occurs in the presence of a preceding constituent that is **arguably the focus**, without being overtly marked by the Focus clitic ≡ỹ (549).

- (549) a. sàrî: jè:rè-bà
 plow bring.Perf.L-3PIS
 ‘They brought (=introduced) the plow [focus].’ **2004.3.7**
- b. tàrá yǎ: bè gá: kân,
 collective.hunt go 3PIS.L say after,
 dùṅ-yàrá gò:-Ø
 lion go.out.Perf.L-3SgS
 ‘When they (hunters) had gone out to the hunt, a lion [focus] appeared.’ **2004.3.2**
- c. kô:-Ø⇒ cín mà:nà-Ø
 eat.Impf-3SgS thus think.Perf.L-3SgS
 ‘“(I) will eat,” thus [focus] he was thinking.’ **2004.4.3**

In still other cases, there is **no clause-internal focalized constituent**. For example, we can get an unsuffixed Perfective in a single-word main clause

following a chained VP (550.a), or in a simple clause containing just a pronominal object that is clearly not focal (550.b).

- (550) a. ḏḡḏ-ñḏwⁿó [máná lé] tí wⁿè-kúró á: mèyⁿ
 camel [above in] tree-leaf catch and
 t̄r̄ḏ-Ø
 strip.off.**Perf.L-3SgS**
 ‘Camel took hold of some tree leaves up above and stripped them
 off.’ **2004.4.3**
- b. [pùl̄ḏ-n àsègè-jírè-n] yè-lé yèré mèyⁿ
 [Fulbe-Sg.L animal.L-lead.H-Sg] there come and
 [wó t̄m̄è-Ø]
 [3SgO find.**Perf.L-3SgS**
 ‘(While he was working in the field,) A Fulbe herder came there
 and encountered him.’ **2004.4.4**

Narratives that recount complex episodes from the past are replete with such unsuffixed Perfectives. The AN category (perfective positive) is typically predictable in such narratives. I suspect that this is a major reason why the "defocalized" unsuffixed Perfective is common in narratives. Some degree of predictability of the verb stem's semantic content is perhaps a contributing factor. However, in cases like 'stripped them off' in (550.a), the verb denotes a new event.

After a quotation, 'say' is rather light semantically. While the basic 'say' verb gá:- has a full set of AN forms including imperfectives, there is also a common 'say' quasi-verb jè- used only in the L-toned, unsuffixed Perfective (§11.3.2).

All of this suggests that, within the perfective system, the unsuffixed Perfective in main clauses is associated with **verb defocalization**. This is an elusive concept, relevant to the grammars of many languages, but with much language-specific detail. In Jamsay it involves any one of the situations in (551).

- (551) a. the verb is part of a large **defocalized clausal residue** (when some other constituent is focalized);
- b. the **perfectivity** of the verb is **contextually predictable** and therefore defocalized (as in the middle of narratives where many events are recounted in chronological order, in perfective aspect); perhaps low information value of the verb's own content is also a contributing factor;

- c. **semantically “light”** perfective quotative verb (‘said’) after quotation.

The all-L tone pattern and the lack of overt AN suffixation can, in this light, be considered to be **iconic**.

The expanded use of the unsuffixed Perfective, albeit with a different tone pattern, in relative clauses might be interpreted as reflecting an overall reduction in focal salience of the verb and other constituents in relative clauses.

There are analogues to the L-toned unsuffixed Perfective with predicative adjectives and with negative verbs. When a predicative adjective is defocalized, it not only drops its tones, but also omits the otherwise usual cliticized ‘be’ quasi-verb (§11.4.2). With negative verbs, the regular form (not defocalized) has L-toned verb stem plus H-toned suffix (Perfective Negative -lí-, Imperfective Negative -gó-). Therefore the only audible cue to defocalization is that the tone on the suffix drops to L-tone, as seen in (748) in §13.1.2 and (751) in §13.1.3. There is no overt defocalization for positive imperfective verbs.

10.1.2.3 Marked Perfective (-tî-, -yè-/yà-, -â:-)

The suffixal (=marked) Perfective is used in positive main clauses where the verb is not defocalized. The suffixed Perfective is almost always replaced by the unsuffixed Perfective in relative clauses and related subordinated clauses.

There are two basic morphological types of Perfective (positive), one with -tî- and one with -yè-/yà- or -â:-. The first is always a classic perfective, while the second can be interpreted either as perfective in the same classic sense, or as a resultative-stative.

The choice between the two major Perfective types depends chiefly on the **transitivity** and (especially among intransitives) on the **semantic type** of the verb. The division is summarized in (552). For perception verbs, which do not readily co-occur with either Perfective suffix allomorph, see §10.1.2.4.

(552) -tî-	most transitives active intransitives
-yè-/yà-, -â:-	a few weak transitives (‘resemble’, ‘forget’) (basically intransitive) motion verbs (basically intransitive) stance verbs intransitive (inchoative) adjectival verbs other intransitive stative verbs

Examples of verbs taking -tì- are: a) classic transitives *céjé-* ‘cut’ (*céjé-tì-*), *dèné-* ‘want, love’ (*dèné-tì-*), *páyá-* ‘tie’ (*páyá-tì-*); and b) active intransitives plus weak transitives that regularly take fixed “objects” such as cognate nominals (*gólóró*) *dǎńó-* ‘snore’ (*dǎńó-tì-*), (*ní:*) *ì né-* ‘bathe’ (*ì né-tì-*), *mòw"ó-* ‘laugh’ (*mòw"ó-tì-*), *tégé-* ‘speak’ (*tégé-tì-*), *yì né-* ‘breathe’ (*yì né-tì-*), and *péré-* ‘jump’ (*pét-tì-*, but with variant *péy-yà-*).

I have no clear idea as to the origin of -tì-. It most likely has a common history with *tí* as a linker (indicating a sequential chronological relationship) among chained verbs (§15.1.16). There is some possibility of a more distant connection with the transitive verb *tí:-* ‘send’.

The choice between -yè-/yà- on the one hand and -â:- on the other is based on the phonological form of the verb, as summarized in (553). Variation between -yè- and -yà- is free; both occurred in my tapes in the speech of individual informants, and it was often difficult to distinguish them.

(553) a. -yè-/yà-

monosyllabic Cv:-

syncopating bisyllabic (C)vrv-, (C)vrⁿv- (before phonological contractions)

b. -â:-

nonsyncopating bisyllabic stems

trisyllabic and longer stems

The allomorph -yè-/yà- perhaps derives historically from *yǎ:-* ‘go’. Indeed, many of the verbs taking -yè-/yà- are motion verbs. It seems unlikely that allomorph -â:- is historically related to the phonologically similar verb *á:-* ‘catch’, but -â:- might have some historical connection to (the onset of) the Habitual suffix -á:rà- in the imperfective system.

Monosyllabic stems with -yè-/yà- include *dó:-* ‘arrive, reach’ (*dó:-yà-*), *gó:-* ‘go out’ (*gó:-yà-*), *bé:-* ‘stay, live’ (*bé:-yà-*), *ní:-* ‘sleep’ (*ní:-yⁿà-*), *ná:-* ‘pass the night’ (*ná:-yⁿà-*), and *yǎ:-* ‘go’ (*yǎ:-yà-*).

Syncopating bisyllabic stems (those of shape Cvrv- or Cvrⁿv-) that take -yè-/yà- include *yèré-* ‘come’ (*yèy-yà-*), *gàrá-* ‘pass by’ (*gǎy-yà-*), *lóró-* ‘get pregnant’ (*lóy-yà-*), *bàrⁿá-* ‘become red’ (*bǎyⁿ-yà-*), *mòrⁿó-* ‘come together’ (*mǎyⁿ-yⁿà-*), and *ùr^ó-* ‘go up’ (*ǔy-yà-*). On Post-Sonorant Syncope (60), which (with two exceptions not relevant to this section) applies only to CvCv- stems with short vowels and with medial rhotic r or rⁿ, see §3.5.3.2.

Nonsyncopating bisyllabics with -â:- include *náná-* ‘forget’ (*nánâ:-*), *tímé-* ‘resemble’ (*tímâ:-*), *nùmó-* ‘fall’ (*nùmâ:-*), *sùgó-* (*sùgâ:-*), *dì ñé-* ‘sit down’ (*dì ñâ:-*), *ì ñé-* ‘lie down’ (*ì ñâ:-*), *núwⁿó-* ‘die’ (*núwⁿâ:-*), *úrⁿó-* ‘get

up' (ú:rⁿ-â:), jòwó- 'run' (jòw-â:-), íjé- 'stand' (íj-â:-), and dònó- 'stumble' (dòn-â:-).

Trisyllabic examples are kómónó- 'became wrinkled' (kómón-â:-), náṅá-rⁿá- 'remember' = reversive of 'forget' (náṅá-rⁿ-â:-), and bànà-rⁿá- 'become red' (bànà-rⁿâ:-).

The rare combination of -yè-/-yà- or -â:- with a syntactically **transitive** verb is illustrated in (554). The few verbs in question are the very epitomes of wimpy transitivity.

- (554) a. mí tím-â:-Ø
 1SgO resemble-**Perf**-3SgS
 'He/She resembled (=came to resemble) me'
- b. ú náṅ-â:-bà
 2SgO forget-**Perf**-3PlS
 'They have forgotten you-Sg.'
- c. mí náṅá-rⁿ-â:-bà
 1SgO forget-Revers-**Perf**-3PlS
 'They remember me.'

Non-adjectival verbs denoting state-like processes, such as 'sleep', lend themselves to either the (classic) perfective or the stative-resultative reading. Thus ní:-yⁿà-Ø can mean 'he/she went to sleep' (perfective, event completed before time of reference), or 'he/she is sleeping' (stative-resultative, state continuing into the present). Motion verbs favor the straight perfective reading, though of course a completed motion event also creates a state. Thus gó:-yà-Ø 'he/she went out', contextually also '... has gone out' = '... is out, is not here'. Adjectival stative verbs also favor the perfective (in this case inchoative) reading, e.g. 'became red', but for a different reason, viz., the adjective itself is used predicatively to denote a timeless state: predicate adjective bán=kò 'it is red', intransitive perfective bànà-rⁿ-â:-Ø 'it became red' or '... has become red'.

The fact that the Perfective suffixes can differentiate transitive and (intransitive) stative verbs makes it easier to understand why Jamsay has so many ambi-valent stems that can be transitive or intransitive. For example, dómnó- 'finish' has two Perfective forms, each associated with a particular valency: dómnó-tì- in transitive function ('X finished Y'), but dómn-â:- in intransitive function ('Y came to an end'). Likewise, with an inchoative-factitive pair of deadjectival verbs, dùgù-nó-tì- must be interpreted as transitive factitive 'X fattened Y', while dùgù-n-â:- can only be intransitive inchoative 'Y became fat'.

Some textual examples are in (555).

- (555) a. \hat{i} -n wó nǎn-tù-bà dèy, ...
 child-Sg 3SgO bear-Perf-3PIS if, ...
 ‘A child [topic], when they give birth to it (=when it is born), ...’
 (nàrⁿá-) **2004.3.12**
- b. kòñó wó dàyá-tì-Ø dèy, ...
 millet.beer 3SgO leave-Perf-3SgS if, ...
 ‘when the (effects of) the beer left (=wore off on) him, ...’ **2004.4.1**
- c. [ɛné mà cíⁿé kùⁿ lè] dó:-yà-Ø dèy, ...
 [Logo Poss nose Def to] arrive-Perf-3SgS if, ...
 ‘(he said:) if it reaches (=touches) his nose, ...’ **2004.4.2**
- d. àná kòmó yǎ:-yè-Ø dèy, ...
 village war go-Perf-3SgS if, ...
 ‘when a village goes to war, ...’ **2004.3.15**
- e. ñú: ír-â:-Ø dèy, ...
 millet ripen-Perf-3SgS if, ...
 ‘when the millet has ripened, ...’ **2004.3.6**
- f. [néyⁿ ké] sáyⁿá-sáyⁿá mèyⁿ
 [now Top] scatter-scatter and
 bàṅá túmn-â:-Ø dèy, ...
 hide begin-Perf-NonhS if, ...
 ‘... (and) now, when they (animals) have scattered and have begun
 to hide, ...’ **2004.3.1**
- g. ñú: sóy nǎn-lí-Ø ñòwⁿó dòg-â:-Ø ké
 millet all bear-PerfNeg-Nonh be.ruined finish-Perf-3SgS Top
 ‘(that) all the millet has not grown (ears) and has ended up being
 ruined’ **2004.3.6**

10.1.2.4 Resultative (-sà-)

This suffix is added to a verb stem that has its regular (lexical) tones. The suffix may well have a historical connection to quasi-verb sà- ‘have’ (§11.5.1) and/or with the clause-chaining verb sâ:-Ø (§15.1.15).

I use the label “Resultative” with misgivings. This is not a classic stative resultative. That sense can be expressed by the marked Perfective (particularly the allomorphs -yè-/-yà- and -â:-). The nuance with -sà- suffix seems rather to be this: the fact that the event that has taken place is of some continuing relevance.

One empirical observation is that -sà- is the regular positive perfective-system form of **perception verbs** é:- ‘see’ and áyá- ‘hear’. These verbs cannot take Perfective -yè-/-yà- or -â:-, and informants showed considerable aversion to combining them with Perfective -tí-. Except for Experiential Perfect -térè- in the sense ‘have (n)ever seen/heard’, these verbs consistently appear with -sà- in perfective contexts. Cognitively, what distinguishes perception verbs from most other verbs is that the agent (seer, hearer) rather than the patient (object seen or heard) is altered by the act of perception. One can think of ‘X see/hear Y’ as an event that results in a cognitive state in the perceiver.

- (556) a. [kó kùⁿ kâ:ⁿ] áyá-sà-m
 [Nonh Def also] hear-**Reslt**-1SgS
 ‘That too, I heard about it (=didn’t see it myself).’ **2004.3.4**
- b. [néyⁿ kέ] ñù:-kà:-à-ý é:-sà-m
 [now Topic] millet.L-mouth.L-hold-VblN see-**Reslt**-1SgS
 ‘Now I’ve seen that the millet stem has stopped growing.’

A second observation is that -sà- is very common with active (i.e. non-stative) verbs in **conditional antecedents**, before dey ‘if’ or its syntactic equivalents. Here the “continuing” relevance of the -sà- eventuality is causal in nature, and is terminated when the contingent eventuality is brought about.

- (557) a. yá:gíné-sà-Ø⇒, yá:gè yé sà-Ø tán,
 cause.shame.to-**Reslt**-3SgS, shame(noun) exist have-3SgS only,
 yǎ: [wó kù:ⁿ] súgó-bà
 go [3SgP on] go.down.Impf-3PlS
 ‘(if) it causes (=has caused) shame, and he has (=feels) shame, they
 (=women) will go and come down hard on (=oppress) him.’
2004.3.3
- b. [sá:-sà-Ø kâ:ⁿ nè] jòwó mèyⁿ↑ tètè-lá-Ø
 [respond-**Reslt**-3SgS even now] run and be.fast-Neg-3SgS
 ‘Even if it (=viper) reacts (to being stepped on), it runs away and it
 isn’t fast.’ **2004.3.5**

-tés-sà- is from /-térè-sà-/ via Post-Sonorant Syncope (60) and Rhotic Assimilation (77). Using the same phonology, one would have expected Perfective Negative #-tèl-lí- with geminated lateral, but instead we get -tè-lí-.

The one lexical idiosyncrasy is that é:- ‘see’ has a high-frequency Experiential Perfect ét-térè- instead of #é:-térè-.

The Experiential Perfect is glossable ‘**have (ever)**’, or in connection with a negation ‘have (never)’. Though most common with perception verbs é:- ‘see’ and áyá- ‘hear’, it can also be used with e.g. motion verbs (‘I have never gone to Bamako’). The interlinear abbreviation is “ExpPf.” Examples are in (561).

- (561) a. [dùŋ-yàrá gó:-yà-Ø], áyá-tés-sà-y
 [lion go.out-Perf-3SgS], hear-**ExpPf**-Reslt-1PIS
 ká: [má jírè] gò:-tè-lí-Ø
 but [1SgP in.front.of] go.out-**ExpPf**-PerfNeg-3SgS
 ‘We heard (once) that a lion appeared (during a hunt), but one never appeared in front of me (=I never saw one myself).’ **2004.3.2**
- b. [tà:-ñùrⁿó gó:-yè-Ø] bè:-tè-lí-Ø
 [leopard go.out-Perf-3SgS] happen-**ExpPf**-PerfNeg-3SgS
 ká: [tì-tá: gó:-yè-Ø] ét-térè-m
 but [hyena go.out-Perf-3SgS] see-**ExpPf**-1SgS
 ‘It has never happened that a leopard appeared, but I did once see a hyena appear.’ **2004.3.2**
- c. [[[pé:ré yá: [bé gàsègè] nàná-jè yá:]
 [[[merely go [3PIP animal] lead.away-RecPf go]
 mà jêr] lè] àbádá kó yòwò-tè-l-á
 Poss side] in] never NonhO accept-**ExpPf**-PerfNeg-3PIS
 ‘They_x (=Jamsay) have never accepted the fact of (Fulbe) just going and driving off their_x animals and going away.’ (jérè) **2004.4.25**

10.1.2.6 Recent Perfect (-jè-)

This suffix can be translated as ‘have already (done)’ or ‘have just (done)’. The interlinear abbreviation is “RecPf”.

- (562) a. sémé-jè-Ø
 sweep-**RecPf**-3SgS
 ‘She has already swept.’

- b. ñú: nàrⁿá dógó-jè-Ø tájà: dèy
 millet bear finish-**RecPf**-3SgS happen if
 ‘if it happens that the millet has already finished bearing (seed spikes)’ **2004.3.6**
- c. [kà: dùmnó] á:-jè-Ø
 [mouth.L final] catch-**RecPf**-3SgS
 ‘It (=millet plant) has already caught its last mouth (=has stopped growing new leaves)’ **2004.3.6**
- d. nǎn-jè-Ø
 give.birth-**RecPf**-3SgS
 ‘She (=pregnant woman) has just given birth’ (nàrⁿá-)

The combination -jè-sà- including Resultative -sà- is rare, but it occurs in textual example (563). Recall that -sà- is very common in conditional antecedents.

- (563) yé-lé [ùrò-gǔn lé ké] gó:-bà,
 there [house.L-behind in Topic] go.out.Impf-3PLS,
 [ùrò-gǔn lé] bá:-jè-sà-bà dèy,
 [house.L-behind in] learn-**RecPf-Reslt**-3PLS if,
 cín tǎy íj-â:-Ø dèy,
 thus holiday stand-Perf-3SgS if,
 cín [tǎy lè] gǔ:-bà
 thus [holiday in] dance.Impf-3PLS
 ‘There, behind the house (=at the edge of the village) [topic], they (=girls) go out. When they have learned (the dance) behind the house, (then) when there is a holiday like that, they will dance in the holiday like that (=as they have learned it).’ **2004.4.14**

A verb plus -jè occasionally occurs without pronominal inflection in verb chains (564.a). Rarely, -jè is followed by mèyⁿ as part of a chain (564.b); this combination, with L-toned -jè, is audibly distinct from the much more common adverbial-clause type with bare verb stem plus H-toned jé plus mèyⁿ (§15.2.2.2).

- (564) a. hâl jàndùrù ǔj-jè
 until donkey.L go.up-**RecPf**
 èjú ù yǎi:-Ø kâ:ⁿ
 field 2SgS.L go.Impf-Ppl.Nonh even

‘even a donkey that you-Sg have mounted and (will) go (with) to the field’ (ùrǒ-) **2004.3.10**

- b. nì ñì rⁿè émé bè jâ:Ø,
 day.L 1PIO 3PIS.L convey.Perf.HL-Ppl.Nonh,
 [dà:yá tǎ:n] gá:w ná:-jè mèyⁿ
 [night three] Gao spend.night-**RecPf** and
 ‘The day when they took us (from Gao to the border), after having (just) spent three nights in Gao, ...’ **2004.5.1**

In the Dogon variety spoken in Beni, there is a verb jé- meaning ‘finish (doing)’ that is used with a preceding chained verb with a sense not far from recent perfect. This makes me suspect that Jamsay Recent Perfect -jè- might not be directly equatable to the ‘say’ quasi-verb -jè- (§11.3.2) and its relatives.

10.1.2.7 Cì-Reduplicated Perfective

A verb may occur with Cì- reduplication, in both perfective and imperfective systems. Vowel-initial stems have ì-. The same Cì- reduplication pattern occurs (less often) with imperfective verbs, which have different tones (§10.1.2.9, below). Cì- (variant Cù- before Cu:... stem) is also found with some noun stems as a (usually frozen) initial segment (§4.1.5).

The reduplicated Perfective is based on the H(H...)L form of the unsuffixed Perfective (as found in relative clauses). There is no AN suffix, but regular pronominal-subject suffixes are added. The reduplicated Perfective cì-cé:nè- ‘be well-made, be good’ has a distinctive negative form cì-cé:nè-lí- used in “willy-nilly” constructions (§16.3); see (584) in §10.1.3.3, below. The use of Perfective Negative suffix -lí- is further evidence that this reduplicated type belongs to the perfective system. No other verb is attested in this reduplicated negative form. The usual negative counterpart of the reduplicated Perfective is the (unreduplicated) Perfective Negative with L-toned stem followed by -lí-.

With **stance verbs**, the reduplicated Perfective is used for resultative-stative sense: ì-íjè- ‘be standing (=in standing position)’, dî-dâ:ⁿ- ‘be sitting (=seated)’. Likewise with ‘**shut**’ and ‘**open**’, hence píné- ‘shut’ (transitive), pí-pínè- ‘(e.g. door) be shut’.

In some textual examples the precise aspectual value of the reduplicated Perfective is difficult to determine. In most cases (perhaps all) there is an element of duration or iteration. All textual examples (excluding repeats with the same verbs) are given in (565).

- (565) a. [tì-tà:-ná: gó: kân ké] ét-térè-m,
 [hyena go.out after Top] see-ExpPf-1SgS
 [kò ké] jì-jówò-Ø [kó bèl-lí:-Ø]
 [Nonh.L Top] **Rdp-run.Perf.HL-3SgS** [Nonh get-PerfNeg-1PIS]
 ‘I once saw a hyena appear (during a hunt). That one (=hyena), it
 ran away, we didn’t catch it.’ (é:-, bèr-é-) **2004.3.2**
- b. [á wárú] cé:n-â:-Ø,
 [2SgP farming] be.good-Perf-3SgS,
 [á tòy-tòyó nè] èjú=kò, jì rⁿé kùⁿ
 [2SgP seed-sprout now] good=be.Nonh, wet.season Def
 cì-cé:nè-Ø tàṅà dèy,
Rdp-be.good.Perf.HL-3SgS happen if,
 ‘It may be (=let’s suppose) your-Sg farming work has been well
 done, your (millet) seeds have sprouted nicely, and the rainy season
 has been good’ **2004.3.6**
- c. jì rⁿé cì-cé:nè-Ø
 wet.season **Rdp-be.good.Perf.HL-3SgS**
 ñì-ñówⁿ-Ø cêw
Rdp-be.ruined.Perf.HL-3SgS all
 ‘whether the wet season has been good, or has been ruined (=poor),
 ...’ **2004.3.9**
- d. [àsègé kùⁿ] yă: kó tì-témè-wⁿ
 [animal Def] go NonhO **Rdp-find.Perf.HL-2SgS**
 ‘Animals [topic], you-Sg have gone and found them (in your
 field).’ **2004.3.10**
- e. [dì:ⁿ [ùjùbăy kùⁿ] kô:-Ø jì:ⁿ]
 [manner.L [country Def] be.Nonh.HL-Ppl.Nonh Past]
 bì-bògú-m yì-yàrà-bà
 Rdp-slave.trader-Pl **Rdp-go.around.Perf.HL-3PIS**
 ‘The way things were (then) in the country, slave-traders were
 going around.’ **2004.3.11**
- f. dògùrù kó bè pánà-Ø kùⁿ lè,
 time.L NonhO 3PIS.L skin.Perf.HL-Ppl.Nonh Def in,
 tímné dî-dáyà-w⇒,
 shut **Rdp-leave.Perf.HL-2SgS**
 táyⁿá dî-dáyà-w⇒
 expose.to.sun **Rdp-leave.Perf.HL-2SgS**

‘When they have skinned and butchered it (=cow), (when) you have closed it (=cowhide) up and left it, and you have laid it out (to dry in the sun) and left it (for a while), ...’ **2004.3.17**

- g. [ðyǎ-m kùⁿ.: fú:] mà ðwⁿð-sǎyⁿ,
 [chief-Pl Def all] Poss grave,
 [kó mà:-ká:] pì-pínè-Ø, túm
 [NonhP door] **Rdp-be.shut.Perf.HL-3SgS**, mound
 [kó mánà] yó=kò dì-déwè-Ø,
 [Nonh on] exist=be.Nonh **Rdp-be.covered.Perf.HL-3SgS**,
 [túm kùⁿ] gǎⁿ-tù-bà dèy, [mà:-ká: kùⁿ]
 [mound Def] remove-Perf-3PIS if, [door Def]
 [bèré lé] [dójú lé] pì-pínè-Ø,
 [[inside in] [under in] **Rdp-be.shut.Perf.HL-3SgS**
 [pǐn-Ø kùⁿ] píní-rⁿé-tù-bà dèy, ...
 [shut-VblN Def] shut-Revers-Perf-3PIS if, ...
 ‘The grave for all of the chiefs (Hogons) [topic]. Its entrance is (kept) sealed. There is a mound (of earth) on it, it is (kept) covered. When they remove that mound, its entrance inside, underneath, is (kept) sealed. When they open that seal, ...’ **2004.3.21**

- h. ì-áyà-y è:-lí:-Ø
Rdp-hear.Perf.HL-1PIS see-ImpfNeg-1PIS
 ‘We have (often) heard of it, but we haven’t seen it (ourselves).’
2004.4.5

One may reduplicate the locational-existential ‘be’ quasi-verb that otherwise appears only in the unsuffixed Perfective form wð-. The result is wì-wð:-. This is attested after an Imperfective verb with AN suffix -tǎyð- (566).

- (566) lúgúró-tǎyð wì-wð:-w
 look.for-Impf **Rdp-be.Hum.HL-2SgS**
 ‘You-Sg keep searching.’ **2004.3.16**

For **H-toned monosyllabic** stems, i.e (C)ý:-, there is no difference in form between the reduplicated Perfective and the reduplicated Imperfective, except in the presence of a syllabic pronominal-subject suffix. This is because the H(H...)L overlaid tone of the perfective, and the grafted-on final L-tone of the imperfective, converge phonetically as F-tone on the base stem following the Cì- reduplicative segment. In (567), we cannot directly determine whether the reduplicated Perfective with H(H...)L or the reduplicated Imperfective with grafted-on final L-tone is at hand.

- (567) [dòyò-cèrⁿèwⁿé mà sí:] jì-jô:-Ø dé
 [Dogon.L-fun Poss kind] **Rdp-be.many.Perf.HL-3SgS** Emph
 ‘Hey, there are lots of kinds of Dogon festivities!’ **2004.3.22**

When we add a syllabic suffix (3Pl -ba, 2Pl -be), however, we can distinguish the reduplicated Perfective from the reduplicated Imperfective even for (C)ŷ:- stems. For the reduplicated Perfective, the H(H...)L tone overlay applies to the stem only, and is not affected by addition of the suffix, so the result is e.g. 3Pl C₁î-C₁ŷ:-bà with F-tone on the base. For the reduplicated Imperfective, the extra L-tone component is expressed on a nonzero pronominal-subject suffix if there is one, see Tone-Grafting (131). This leaves the base with its lexical tone, in this case H, so we get e.g. 3Pl C₁î-C₁ŷ:-bà. Applying this test to jì-jô:-Ø shows that it is a reduplicated Perfective, as shown by the F-toned -jô:- in (568). This vindicates the perfective labeling in (567), above. Likewise, wì-wô:-w in (566), above, has a 2Pl counterpart wì-wô:-bè ‘you-Pl are’ with F-tone.

- (568) jì-jô:-bà
 Rdp-be.many.Perf.HL-**3PIS**
 ‘They are numerous.’

10.1.2.8 *Unaffixed Imperfective (positive)*

The **unaffixed Imperfective** is common in positive clauses denoting regularly occurring events (flanking the present time or a displaced temporal center), non-adjectival statives such as ‘know’ with present relevance, and future events. It is glossed as “.Impf” in interlinears, separated from the gloss of the verb by a period rather than by a hyphen. The category is common in texts describing routinely recurring event types (e.g. cooking techniques, annual seasonal patterns). This form gets competition from suffixally marked categories of the imperfective system, Habitual -á:rà- and (marked) Imperfective -tóyò-. The three are, to some extent, interchangeable (the category labeled “Habitual” has fairly broad imperfective functions).

The unaffixed Imperfective is formed by adding a free (i.e. floating) **L-tone** to the end of the lexical stem. If there is a nonzero pronominal-subject or Participial suffix, the L must be realized on the suffixal mora-bearing segment. In the absence of a suffixal mora, the floating L must be grafted onto the end of the verb stem (which always ends in an H-tone), resulting in a stem-final F-tone. If the F-tone at this point is associated with a monomoraic syllable (i.e. with a short vowel), this vowel is lengthened to two moras to permit audible expression of the contour tone. If the stem is monosyllabic R-toned

Cŷ:-, grafting the floating L produces a <LHL> tone, which forces lengthening of the bimoraic stem syllable to trimoraic. For the phonology see Tone-Grafting (131) and Contour-Tone Mora-Addition (141).

In relative clauses, for **H-toned monosyllabic** stems, i.e. (C)ŷ:-, there is **homophony** between participles based on the unaffixed Perfective and those based on the unaffixed Imperfective, except for nonhuman subject (on which see below). Thus â:-Ø from á:- ‘catch’, with Nonhuman Participial suffix, could be either the unaffixed Perfective with H(H...)L tone overlay, realized on a monosyllable as F-tone, or the unaffixed Imperfective with final L-tone grafted on to the lexical tone (in this case, H), again resulting in F-tone. Since the only Participial suffixes are -Ø (nonhuman), -n (Sg), and -m (Pl), there is no participle with a syllabic suffix. Therefore, for human (Sg or Pl) subject, the homophony between Perfective and Imperfective participles of (C)ŷ:- is unrelieved.

A unique attribute of the unaffixed Imperfective in both main and relative clauses is that a **nonhuman subject** pronominal is expressed by **adding cliticized** =kð ‘be (nonhuman)’ after the verb stem. This is a special case of kð, a locational-existential ‘be’ quasi-verb (§11.2.2.2). This quasi-verb is not always cliticized, but cliticized =kð is also used after predicative adjectives with nonhuman subject, as in ‘it is (big, red, etc.)’ (§11.4.1). The use of =kð to distinguish nonhuman from 3Sg subject is limited to the unaffixed Imperfective. For all other AN categories (including all suffixally marked forms of the imperfective system, and including the Imperfective Negative), verbs make no distinction between nonhuman and (human) 3Sg subject, which are jointly expressed by zero suffix on the verb. Compare the (marked) Perfective and unaffixed Imperfective of the verb ‘come’ (569).

(569)	subject	Perfective	unaffixed Imperfective
	3Sg (human)	yěy-yà-Ø	yèrê:-Ø
	Nonh	"	yèrê=kð

This =kð is morphosyntactically a **second verb**, albeit cliticized. It is not a suffix on a par with those for the human pronominal categories. This is shown by the fact that Participial suffixes are added to =kð- rather than directly to the Imperfective stem in relative clauses (§14.1.9) and related subordinated clauses. In addition, =kð is attested (though rarely) as the final element in a verb-chain of the type [... VERB mèyⁿ=kð], see (904) in §15.1.14.

Textual examples of the unaffixed Imperfective are in (570).

- (570) a. pó:ró [[nùmó lè] mà wár]=í: jùgó-ỳ
 before [[hand with] Poss farming]=Foc know.**Impf-1PIS**
 ‘In the old days, farming by hand [focus] was what we knew
 (before the advent of the plow).’ **2004.3.7**
- b. [gàsègé lè] kúnó mèyⁿ↑ wàrà-wá-bà
 [animal on] put and farm-Caus.**Impf-3PIS**
 ‘Putting it (=plow) on the animals, they farm.’ **2004.3.7**
- c. [òyò gàmá] nùwⁿ-lí-Ø kárⁿá mèyⁿ↑
 [grass.L some] die-PerfNeg-3SgS do and
 wàjá=kò
 remain.**Impf=be.Nonh**
 ‘Some grass (=weeds) have not died and still remain (there).’

10.1.2.9 *Ci-Reduplicated Imperfective*

A form consisting of the regular unsuffixed Imperfective plus initial *Ci*-reduplication is used sparingly in my texts. All examples in my corpus are given in (571), except for repeats of the same verb with no clear change in context.

- (571) a. jémè-n wó [èné mà kú:ⁿ lè]
 blacksmith-Sg 3Sg [Refl Poss head with]]
 [í:rⁿé kùⁿ] yì-yò:rò:-Ø
 [iron Def] **Rdp-heat.on.fire.Impf-3SgS**
 ‘The blacksmith [topic], he himself [focus] will heat (the iron).’
2004.3.12
- b. [néyⁿ ké] nǔŋ párá mèyⁿ↑,
 [now Topic] oil rub.in and,
 lì-láyá-bà=ỳ,
Rdp-hit.Impf-3PIS=it.is
 ‘Now [topic], they will rub oil into it (=cowhide) and they will beat
 it (over two days).’ **2004.3.17**
- c. [nó: ké] [[í-n kùⁿ] tí-táná-ŋá-bà]
 [this.year Topic] [[child-Sg Def] **Rdp-transfer-Caus.Impf-3PIS**
 dó:-yè-Ø dèy
 arrive-Perf-3SgS if
 ‘this year [topic], if the time has come for them to transfer the child
 (=bride, to her husband’s house), ...’ **2004.3.20**

- d. [kárgù-gó:]≡ỹ déy nè, tì-téwé-w̃
 [brick-granary.HL]≡it.is if now, **Rdp-make.brick.Impf-2SgS**
 ‘If it’s (going to be) a mud-brick granary now, you-Sg will make
 the bricks.’ (kárgù-gô:) **2004.3.26**
- e. [[[ɛnɛ́ bɛ́] kò tó:rù] lè] yǎ: jì-jàŋá-bà
 [[[Refl Pl] Dem fetish] to] go **Rdp-ask.Impf-3PlS**
 ‘They will go to those fetishes (=animist idols) of theirs and ask
 (=pray to) them’ **2004.3.27**
- f. nì-nòwⁿɔ̃-bà déy nè, [nùm-ná: mánà]
Rdp-crush.Impf-3PlS if now, [grinding.stone on]
 únó kó nòwⁿɔ̃-ỹⁿ
 put.down NonhO crush.Impf-1PlS
 ‘If they are going to crush it, we will put it on the large flat grinding
 stone and grind it up.’ **2004.4.7**

The textual passages in question are mostly generic descriptions of recurrent practical activities (the work of blacksmiths and other artisans, marriage customs, etc.). Therefore the reduplicated Imperfective competes in the same aspectual domain with the unaffixed Imperfective, the suffixally marked Imperfective, and the Habitual.

As noted at the end of §10.1.2.7, above, except when followed by a syllabic pronominal-subject suffix, (C)ɔ̃:- verbs (H-toned monosyllables) have the form Cì-Cɔ̃:- in both the reduplicated Perfective with overlaid H(H...)L-tone and the reduplicated Imperfective with final L-tone component grafted on. The two can be distinguished when a syllabic suffix (3Pl -ba, 2Pl -be) is added. For R-toned monosyllabic stems, and all nonmonosyllabic stems, no confusion is possible even with -Ø or -C pronominal suffix.

10.1.2.10 Marked Imperfective (-tɔ̃ỹð-)

From inspection of textual examples, it is difficult to find consistent aspectual distinctions between the unaffixed Imperfective, the form with -tɔ̃ỹð- suffix, and the form with -á:rà- suffix. However, some tendencies do emerge.

In (572), -tɔ̃ỹð- occurs in passages describing **recurrent activities**. In (572.a), note that dé:- ‘carry’ occurs both in the unaffixed Imperfective (dê:-) and the -tɔ̃ỹð- form, with no obvious difference in aspectual value.

- (572) a. [dì:ⁿ gá:rá ê:ŋ cêw], ñě-m dē:,
 [place.L more near.HL all] woman-Pl carry.Impf,
 [dì:ⁿ wàγá⇒ cêw] [[wòtóró kùⁿ] lè]
 [place.L distant all] [[cart Def] with]
 dé:-tóγð-bà, [kó nò] cín≡î: kò-rú kán-tóγð-y
 carry-**Impf**-3PIS, [Nonh now] thus≡Foc Nonh-Dat do-**Impf**-1PIS
 ‘(From) any place that is nearer (to the village), women [focus] will
 carry it (millet, in baskets on their heads); (from) any distant place,
 they (normally) **transport** it with carts; that now, thus [focus] is
 how we **do** it.’ (kárⁿá-) **2004.3.6**
- b. cín dōγð-m yĩr bět-tóγð-bà
 thus Dogon-Pl garment get-**Impf**-3PIS
 ‘That [focus] is how Dogon people **get** clothing.’ (yĩ rú, bèr-é-)
2004.3.14
- c. pó:ró yěy-yà-Ø dèy
 first come-Perf-3SgS if
 yð:-jì n≡î: kò-rú kán-tóγð-bè jì:ⁿ
 how?≡Foc Nonh-Inst do-**Impf**-2PIS Past
 ‘In the old days, when it (=smallpox) came, what did you-Pl use to
 do about it?’ (kárⁿá-) **2004.4.15**

In (573), on the other hand, the aspectual value is **close to progressive**.

- (573) a. tút-túru ín-é-m kó bã:-tóγð
 one-one person-Pl NonhO learn-**Impf**
 ‘One by one, people **have been learning** it (=use of plow).’
2004.3.7
- b. [kò kó:]≡y dūrⁿó yět-tóγð-m
 [Dem foot]≡Foc follow come-**Impf**-1SgS
 ‘Its (=cow’s) tracks are what I **have been following** coming here.’
 (yèr-é-) **2004.3.10**
- c. ... [àná mà bèrê:] yílím⇒
 ... [village Poss in] walking(adv)
 sà:j-î:ⁿ tá:ⁿ-tóγð yàrà-Ø é:-jè-w dèy
 bird-child shoot-**Impf** walk.Perf.L-3SgS see-RecPf-2SgS if
 ‘when you-Sg see (the child) **walk(ing)** around the village shooting
 birds (with the slingshot)’ **2004.3.16**

- d. [èjú lé] wárú wǎt-tóγð wò wô:-Ø
 [field in] farming farm-**Impf** 3SgS.L be.Perf.HL-Ppl.Nonh
 jé mèyⁿ
 say and
 ‘While he (=farmer) **was working** in the field(s), ...’ (wàrà-)
2004.4.4

In (574), two sentences from the same text, separated by brief intervening material (not reproduced here), seem to use -tóγð- and -á:rà- for the same time reference (present) and aspectual context (habitual). Both fragments are from passages contrasting today’s drinking from pumped water with the prior reliance on water from traditional wells.

- (574) [nì m ké] ... pòmputù-ní:=y nǎ:-tóγð-y, ...
 [now Topic] ... pump.L-water=Foc drink-**Impf**-1Pl, ...
 kà: íjé [pòmputù-ní: mà nì: éjé-sà-Ø]
 but today [pump.L-water Poss water.L be.clean-Reslt-Ppl.Nonh]
 bèré mèyⁿ [nìη ké] kó=y nǎ:-rⁿà-y
 get and [now Topic] Nonh=Foc drink-**Habit**-1PlS
 ‘Nowadays ... pump water [focus] is what we **drink**; ... but today, having gotten (access to) clean pump water, that [focus] is what we **drink**.’ **2004.4.5**

For wò- ‘be’ and its reduplicated Perfective wì-wô:- after -tóγð-, see (674.a-b) in §11.2.2.3. For uninflected -tóγð with a nonfinal verb in a chain, see (887.a) in §15.1.9.

10.1.2.11 Habitual (-á:rà-)

Since this suffix is vowel-initial, and is always added to a vowel-final stem, contraction of the two vowels must occur. Verbs of more than one syllable end in short vowels, and this short vowel is lost before the suffixal á: . Example: bìré-, Habitual bì r-á:rà-. Monosyllabic verbs preserve their vowel-quality in the contraction: dé:- ‘carry’, Habitual dé:-rà- (not #d-á:rà-). See discussion of VV-Contraction (90) in §3.5.6.2.

One can argue whether the suffix should be underlying /-árà-/ or /-á:rà-/. This is the only vowel-initial suffix used with verbs, and it always undergoes VV-Contraction.

The aspectual value of -á:rà- is not consistently distinguishable from that of the unsuffixed Imperfective or of the form with suffix -tóγð-. In the majority of

textual examples, -á:rà- occurs in connection with actions that are **recurrent, habitual, or otherwise stable** over a period of time.

- (575) a. cè: bè bì r-á:rà≡ỹ
thing.L 3PIS.L work-**Habit**≡it.is
'It's what they do (=their work).' **2004.3.3**
- b. àrⁿá kùⁿ yé mì rⁿ-á:rⁿà-Ø
rain Def Index fall-**Habit**-3SgS
'The rains are falling (in the wet season).' **2004.3.6**
- c. íjé àrⁿ-úm bé bàr-á:rà-bà
today man-Pl 3PIO help-**Habit**-3PIS
'Nowadays, the men help them (=women).' **2004.3.6**
- d. èmě-n tòrò-gǎn̄n̄ gá:r-rà-bà
1Pl-Dat mountain.L-among say-**Habit**-3PIS
'They say of us (=Jamsay) (that we are) mountaineers.' **2004.3.11**
- f. [émé í-n] [é í-n lè], yé yèr-á:rà-Ø,
[1PIP child-Sg] [2PIP child-Sg to], Index come-**Habit**-3SgS,
èné bé tègú ñòwⁿò-lí-Ø
Refl PIP speech be.ruined-PerfNeg-3SgS
'Our child (=son) has been (regularly) coming to your child
(=daughter); their words have not been bad.' **2004.3.20**
- g. [[ì nè gàmà-nám] [sàmnà dùgú]
[[person.L certain-Pl] [soap.L fat]
[péré túru sáyà] kárⁿ-á:rⁿà-m] yó=kò
[ten one plus] [do-**Habit**-Ppl.Pl] exist=be.Nonh
'There are some people who do (=give) eleven large soaps (as gifts
to their future parents-in-law)' **2004.3.20**
- h. [bùrò bán] [kó nò]
[wire.L red] [Nonh now]
nîm bè kún-á:rⁿà-Ø mà⇒↑ pó:rò
now 3PIS.L put-**Habit**-Ppl.Nonh or first
'Red wire, as for that, (do you mean) what they put on nowadays
(as hairdo ornament), or (what they used to put on) in the old days?'
(kúnó-) **2004.4.19**

In (576.a), the free translation makes the aspectual value sound more like progressive. However, the larger context ('whenever ...') distributes the activity over an indefinite time period. In (576.b), it is difficult to escape a progressive reading.

- (576) a. [gùjú kùⁿ] yé bì r-á:rà-bà
 [skin Def] Index work-**Habit**-3PlS
 '(whenever you see them sitting,) they (=caste of tanners) are working on hides'. **2004.3.17**
- b. wò yàṅâ:-Ø jé mèyⁿ,
 3SgS.L look.Impf-Ppl.Nonh say and,
 tì-tá: [ḍyḍ-ñḍwⁿḍ kùⁿ] yé kó é:-rà-Ø
 Rdp-hyena [camel Def] Index NonhO see-**Habit**-3SgS
 'While he (=Hyena) was looking (on the ground), Hyena [topic], Camel **was watching** him (from up above).' **2004.4.3**

10.1.2.12 Stative -î:

A Stative suffix -î: is attested with verbs of opening and shutting (píné- 'shut' and lé:- 'shut [door]'), along with their reversive derivatives (the regular píní-rⁿé- 'open' and the irregular líl-lé- 'open'). The form with -î: has an intransitive stative-resultative sense 'be open' or 'be shut', with a third person subject denoting 'doorway' or the like. For bisyllabic or longer verbs, the stem-final vowel contracts with the suffixal vowel, and the remainder of the stem drops its tones, so we get Cṽ(C)(Cṽ)C-î: with a L...<HL> contour, as in pì n-î: 'be shut', pì nì-rⁿ-î: 'be open', and lì ll-î: 'be open'. With a Cv: monosyllabic verb, we get Cṽyṽ (arguably Cṽî: but in one syllable) with the same contour compressed into a single <LHL> syllable, hence lè-yṽ 'be shut, (garment) be tied on'.

This Stative category stands outside of the regular perfective and imperfective systems. Verbs with this suffix behave like defective stative verbs, and are negated by adding the Negative particle là:- (3Pl là:-bà) to the positive stem. Cf. Negative là: after the 'it is' clitic, hence ≡yè là: 'not be' (§11.2.1.3), and the more versatile (stative) Negative là with short vowel (§11.2.1.4).

- (577) a. mḍ:-ká: pì nì-rⁿ-î:-Ø
 doorway shut-Revers-Stative-3SgS
 'The door is open.'

- b. pì nì -rⁿ-î:-bà
 shut-Revers-Stativ-3PIS
 ‘They (e.g. doors) are open.’

Negatives: pì nì -rⁿ-î: là:-Ø ‘it is not open’, pì nì -rⁿ-î: là:-bà ‘they are not open’.

Given its negative morphosyntax and its tone contour, it is likely that Stative -î: originated as a special case of the ‘it is’ clitic (allomorphs ≡ỹ and ≡î:), added to the Verbal Noun (§4.2.2.1, e.g. pì n-ú ‘shutting’, lè-ỹ ‘shutting’). However, this is not transparently correct as a synchronic analysis.

10.1.3 Negation of indicative verbs

10.1.3.1 *Categories expressed by negative verbs*

In both perfective and imperfective systems, there is a clear tendency to reduce the relatively complex system of positive AN categories to just two in the negative.

Perfective Negative -lí- replaces several positive forms: unaffixed and marked Perfective, Resultative, and (for the most part) the reduplicated Perfective and the Recent Perfective. Rarely, -lí- is added directly to a reduplicated Perfective, or to Recent Perfect -jè-. The only AN suffix that is regularly retained before -lí- is Experiential Perfect -térè-; the combination is pronounced -tè-lí- for expected #-tèl-lí- (§10.1.3.2).

Imperfective Negative -gó- replaces the unaffixed Imperfective and the reduplicated Imperfective. It also normally replaces the marked Imperfective and the Habitual; alternatively, their positive forms are directly followed by stative Negative -lá- (§11.4.3).

(578) a. perfective system (negative)

common:

Perfective Negative

Experiential Perfect Negative

uncommon:

Recent Perfect Negative

reduplicated Perfective Negative

b. imperfective system (negative)

common:

Imperfective Negative

uncommon:

Habitual Negative

(marked) Imperfective Negative

The relationships between positive and negative categories are summarized in (579). Details and examples are given in the following sections.

(579) positive-negative correspondences

positive

negative

a. perfective system

Perfective -tí-, -yè-/-yà-, -â:-	Perfective Negative -lí-
unsuffixed Perfective	"
Resultative -sà-	"
reduplicated Perfective	" (rarely positive form plus -lí-)
Recent Perfect -jè-	" (rarely -jè-lí-)
RecPf + Reslt -jè-sà-	" (")
Experiential Perfect -térè-	special negative form -tè-lí-
ExpPf + Reslt -tés-sà-	"

b. imperfective system

unsuffixed Imperfective	Imperfective Negative -gó-
reduplicated Imperfective	"
marked Imperfective -tóγò-	" (or add -lá- to positive form)
Habitual -á:rà-	" (or add -lá- to positive form)

For -lá- negating adjectives and defective stance and possession verbs, see §11.4.3. For là: as Negative morpheme after $\Rightarrow\dot{y}$ 'it is', see §11.2.1.3.

'Be sick' is regularly expressed as the negation of 'be healthy' (sèllé-), as in sèllè-lú:-Ø 'you-Sg are sick'.

Although the negative morpheme appears with the verb at the extreme right of the clause, it typically has **wide scope**. In (580), for example, óγóró 'quickly' is under the scope of the negation.

- (580) óγóró kò-rú yòwò-l-á
quickly Nonh-Dat accept-**PerfNeg**-3PlS
 ‘They did not quickly (=readily) accept it (=plow).’

When the clause contains a universal quantifier (‘all X’), the negation again has wide scope. When the clause includes a distributive (‘each X’) operator, the negation has narrow scope. See §6.8.2 for examples and further discussion of interactions between negative and quantificational operators.

10.1.3.2 Negation of unreduplicated perfective-system verbs

Corresponding to Perfective in -tì-, -yè-/yà-, or -â-, the unsuffixed Perfective, the Resultative in -sà-, and (usually) the Recent Perfect in -jè- and the reduplicated Perfective, there is a single unreduplicated **Perfective Negative** form with suffix -lí-. There are some phonological interactions with pronominal-subject suffixes (e.g. 2Sg -lú:-Ø, 1Pl -lí:-Ø, 3Pl -l-á, 1Sg -lú-m, see §10.2.3, below). The verb stem **drops its tones** to all-L.

Examples of positive/negative correspondences are in (581). When the negative verb is defocalized, for example in the presence of a focalized constituent, tone-dropping applies, changing -lí- to -lì- (581.d).

- | (581) | positive | negative |
|-------|---|--|
| a. | yǎ:yè-Ø
go-Perf-3SgS
‘he/she went’ | yà:lí-Ø
go- PerfNeg -3SgS
‘he/she didn’t go’ |
| b. | é:sà-m
see-Reslt-1SgS
‘I saw’ | è:lú-m
see- PerfNeg -1SgS
‘I didn’t see’ |
| c. | túmnó-tù:-Ø
begin-Perf-2SgS
‘you-Sg began’ | tùmnò-lú:-Ø
begin- PerfNeg -2SgS
‘you-Sg didn’t begin’ |
| d. | ǎ:≡yè nùmò
who?≡Foc fall.Perf.L
‘ <u>Who</u> [focus] fell?’ | ǎ:≡yè nùmò-lì
who?≡Foc fall- PerfNeg.L
‘ <u>Who</u> [focus] didn’t fall?’ |

Perfective -lí- is (marginally) compatible with Recent Perfect -jè- (582). This combination did not occur in texts.

(582) positive negative

lùgùró-jè-m ‘I have searched’ lùgùrò-jè-lú-m ‘I have not searched’

lùgùrò-jè-lú-m could be used in replying to a question containing the -jè- suffix (‘have you already searched’), where parallelism between the question and the response is called for. In other contexts, ‘I have not searched’ would appear in simple Perfective Negative form as lùgùrò-lú-m ‘I did not search’.

PerfNeg -lí- does combine readily with the Experiential Perfect (‘have not ever’). This is the usual way to express ‘never’. Here the Experiential Perfect suffix -térè- is truncated to -tè- before -lí-, resulting in -tè-lí-. The PerfNeg suffix forces L-tone on both the ExpPf suffix and the preceding verb stem. The irregularity in the form of -é:- ‘see’ with ExpPf suffix in the positive (ét-téré- instead of #é:-téré-) is carried over into the negative.

(583) positive negative

ét-térè-w ‘you-Sg have seen’ èt-tè-lú:-Ø ‘you have never seen’
 áyá-térè-m ‘I have heard’ àyà-tè-lú-m ‘I have never heard’

10.1.3.3 Negation of reduplicated perfective-system verbs

Reduplicated perfectives cannot normally be directly negated.

A reduplicated Perfective of a stative stance verb, e.g. ì-íjè- ‘be standing’, is negated by adding the usual stative Negative suffix -lá- to the unreduplicated stem, as in ìjè-lá-bá ‘they are not standing’. Likewise with adjectival verbs, e.g. reduplicated positive jì-jô:- ‘be many’, negative jò:-lá- ‘not be many’.

A reduplicated Perfective of an active verb, e.g. tí-témè-wⁿ ‘you-Sg found’, normally has a simple (unreduplicated) Perfective Negative counterpart: tèmè-lú:-Ø ‘you-Sg did not find’. However, in parallelistic positive-negative sequences, a reduplicated Perfective Negative is possible.

For reduplicated Perfective cì-cé:nè- ‘be well done, be good’, the normal negative counterpart is the simple, unreduplicated Perfective Negative, as in cè:nè-lí-Ø ‘it is not well done, it is not good’. However, for this verb there is also a parallelistic positive-negative construction, functioning as a “willy-nilly” conditional antecedent (§16.3), that adds L-toned Negative -lì- to the reduplicated Perfective stem (with no tone-dropping).

- (584) jì rⁿé cì -cé:nè-Ø
 wet.season **Rdp-be.good.Perf.HL-3SgS**
 cì -cé:nè-lì -Ø ⇒ cêw,
Rdp-be.good,Perf.HL-PerfNeg.L-3SgS all,
 ñú: sóy nà-n-lí-Ø
 [millet all] bear-PerfNeg-Ppl.Nonh
 ñòwⁿó dòg-â:-Ø ké
 be.ruined finish-Perf-3SgS Topic
 ‘Whether the wet season is good or it isn’t good, all the millet that
 hasn’t borne ears (seed spikes) by now will end up being no good.’
 (nàⁿá-) 2004.3.6

The flavor of this resembles *she loves me, she loves me not* intoned by love-sick American adolescents as they pick petals off daisies.

In elicitation, I also obtained an instance of reduplicated Perfective Negative jì-jòwò-lí-Ø ‘it didn’t run (away)’, corresponding to positive jì-jówò-Ø ‘it ran (away)’. In this case, the entire stem preceding -lí- is L-toned. Reduplicated negatives were difficult to obtain even in elicitation.

10.1.3.4 Negation of imperfective-system verbs

Corresponding to the unaffixed Imperfective in all its functions, there is an Imperfective Negative form with suffix -gó-, possibly related historically to gó:- ‘exit, go out’.

- | | | |
|-------|-------------------------|--------------------------------|
| (585) | positive | negative |
| | dèné-m ‘I want’ | dènè-gó-m ‘I don’t want’ |
| | sâ:-Ø ‘it will respond’ | sâ:-gó-Ø ‘it will not respond’ |

-gó- is also the usual negation corresponding to morphologically marked positive forms of the imperfective system, namely the Habitual in -á:rà-, the marked Imperfective in -tóyò-, and the reduplicated Imperfective. However, -á:rà- and -tóyò- may also be followed directly by (stative) Negative -lá- (§11.4.3), with **no tone-dropping** of the stem or of the inner AN suffix. This suggests that -lá- in this combination is **phonologically peripheral** to the preceding stem, unlike the case with other AN suffixes. See also discussion of (587), below.

-á:rà-lá- optionally syncopates (and undergoes Rhotic Assimilation (77)) to -â:l-lá-.

(586)	positive	negative
	bì r-á:rà-m ‘I work’	bì r-á:rà-lá-m ‘I don’t usually work’ [variant bì r-â:l-lá-m]
	yă:-tóyð-m ‘I go (often)’	yă:-tóyð-lá-m ‘I do not go (often)’

A textual example of -á:rà-lá- is (587), in a subject relative clause. The syncopated variant of bé:-rà-là-Ø would be bē:l-là-Ø. Negative -lá- in (587) drops its tone to -là- under the influence of the following kâ:ⁿ ‘any’ (§14.1.3). Note that when VERB-á:rà-lá- undergoes tone-dropping imposed by a following word, only Negative -lá- actually drops its tones, while the stem and the inner AN suffix -á:rà- retain their tones. This reinforces the view that -lá- in this construction is **phonologically peripheral** to the stem.

(587)	[kó	bèrê:]	[cè:	bé:-rà-là-Ø	kâ: ⁿ]
	[Nonh	in]	[thing.L	happen- Habit-Neg -Ppl.Nonh.L	any]
	kð:-rɔ́				
	be.Nonh-Neg				
	‘In that domain (=legal disputes), there is nothing that doesn’t happen (=i.e., anything can happen)’ 2004.3.10				

10.2 Pronominal paradigms for non-imperative verbs

10.2.1 Subject pronominal suffixes

The pronominal-subject suffixes (§4.3) are repeated here. They have no intrinsic tones except for the Nonhuman clitics used only in the positive unsuffixed Imperfective.

(588) Subject Pronominal Suffixes (indicative verbs)

1Sg	-m
1Pl	-y
2Sg	-w
2Pl	-be
3Sg	-Ø
3Pl	-ba (except -a in PerfNeg, -e in ImpfNeg)
Nonh	≡kð in Impf, otherwise = 3Sg
Nonh Pl (optional)	≡kð-bà in Impf, otherwise = 3Pl

The 3Pl allomorph *-ba* loses its *b* after Perfective Negative *-lí-* and Imperfective Negative *-gó-*. The results are the contractions *-l-á* and *-j-é*, respectively. Note that *g* shifts to alveopalatal *j* before the front vowel *e*.

The two AN suffixes with *i*-vowel, viz., Perfective *-tì-* and Perfective Negative *-lí-*, show some *i/u* alternations and some homorganic vowel-semivowel contractions in combination with pronominal subject suffixes, see just below (§10.2.3).

10.2.2 Nonhuman versus 3Sg subject

Cliticized quasi-verb $\text{=k}\delta$ ‘be.Nonh’ is added to the unsuffixed Imperfective to index a Nonhuman subject. The L-tone segment that marks Imperfective, underlyingly located between the stem proper and the $\text{=k}\delta$, is realized on the $\text{=k}\delta$ (i.e. it merges with the already low tone of the clitic). Thus *mí céré=kδ* ‘it will bite me’ from /*céré-L=kδ*/, see Tone-Grafting (131).

$\text{=k}\delta$ is syntactically and morphologically verblike rather than a typical pronominal suffix. Whereas the human subject pronominal suffixes are replaced by preverbal subject pronominals in relative clauses, $\text{=k}\delta$ remains in postverbal position in relatives, and Participial suffixes are added to it rather than to the preceding verb (§14.1.9).

$\text{=k}\delta$ is absent after verbs in AN categories (including Imperfective Negative) other than the unsuffixed Imperfective (positive). In the other AN categories, Nonhuman subject is with 3Sg subject as zero: Perfective (*yă:yè-Ø* ‘He/She/It went’, *mí cét-tì-Ø* ‘He/She/It bit me’), Resultative *-sà-* (*mí é:sà-Ø* ‘He/She/It saw me’), *-jè-* (*ńé:jè-Ø* ‘He/She/It already ate’), *-térè-* (*mí cét-térè-Ø* ‘He/She/It once bit me’), Perfective negative (*mí cèl-lí-Ø* ‘He/She/It didn’t bite me’), Imperfective Negative (*mí cèrè-gó-Ø* ‘He/She/It won’t bite me’), Habitual (*mí cèr-á:rà-Ø* ‘He/She/It bites me’), or marked Imperfective (*mí cét-tóγδ-Ø* ‘He/She/It bites me’). In interlinears, I gloss the zero suffix as “3SgS,” though “3SgS/Nonh” would be more accurate.

Occasionally there is an preverbal 3rd person or Nonhuman pronoun, apparently in subject function. In the type exemplified by (589.a), the verb *ná:yⁿè-Ø* might easily be taken as ending in 3Sg subject *-Ø*, which makes one wonder why there is also a preverbal L-toned subject pronominal *wò*. This is actually a participial construction, with Nonhuman Participial *-Ø* indexing an unexpressed nonhuman head (with a meaning like ‘time’ or ‘situation’). Therefore it is appropriate for the (non-head) subject to be expressed by an L-toned pronominal; see (974) and discussion there. In the common expression (589.b), *kδ:ró* ‘it is not (present)’ is already marked for nonhuman subject, so the preceding H-toned *kó* is redundant. One could argue that the *kó* is topical.

- (589) a. [dà:yá lèy] [wó úrò]
 [night two] [3SgP house.Loc.HL]
 wò ná:-yⁿè-Ø dèy
3SgS.L spend.night-Perf-Ppl.Nonh if
 ‘when she (=bride) has spent two nights at his house’ **2004.3.20**
- b. kó kò:-ró
Nonh be.Nonh-Neg
 ‘(Boys of the same neighborhood competing against each other,) there is none of it (=none of that).’ **2004.3.23**

10.2.3 Vowel-semivowel interactions of AN (-tì-, -lí-) and pronominal suffixes

The suffixes -tì- (Perfective) and -lí- (Perfective Negative) have a high vowel that interacts phonologically with certain suffixes. The paradigms are given in (590).

(590) category	Perfective	Perfective Negative
1Sg	-tù-m	-lú-m
1Pl	-tì:-Ø (</-tì-y/)	-lí:-Ø (</-lí-y/)
2Sg	-tù:-Ø (</-tù-w/)	-lú:-Ø (</-lú-w/)
2Pl	-tí-bé, -tù-bè	-lí-bé, -lú-bé
3Sg, Nonh	-tì-Ø	-lí-Ø
3Pl	-tù-bà	-l-á

For /i/ > u before labial {b m w}, only optionally when the labial is itself followed by a front vowel e, see §3.5.7.1.

For /iy/ to i:, and /uw/ to u:, see Monophthongization (93) (§3.5.7.2).

In a practical orthography it would make sense to transcribe -tì-y instead of -tì:-Ø, and -lú-w instead of -lú:-Ø, on grounds of morphological transparency.

10.2.4 Tones of subject pronominal suffixes

Excluding Nonhuman ≡kò in the unsuffixed Imperfective, the nonzero pronominal suffixes have **no intrinsic tones**. Instead, they acquire a tone from a preceding morpheme (including the floating L-tone that characterizes the unsuffixed Imperfective). Surface patterns are given in (591), using 1Sg -m to represent the single-C suffixes, and 2Pl -be to represent the syllabic suffixes.

(591)	final preceding tone	with 1Sg	with 2Pl
a.	...v-	...v-m	...v-bé
b.	...v- + L	...v-m̃	...v-bè
c.	...-â:-	...-â:-m [...áám̃]	...-â:-bè
d.	...v-	...v-m (occasionally ...v-m̃, ...v-bé)	...v-bè

Pattern (591.a) occurs when the pronominal-subject suffix is added to Perfective Negative -lí- or to Imperfective Negative -gó-. Thus *bèrè-gó-Ø* ‘he/she cannot’, 1Sg *bèrè-gó-m*, 2Pl *bèrè-gó-bé*. See Atonal-Morpheme Tone-Spreading (137).

(591.b) is the pattern for the unaffixed Imperfective. Examples: *bèré-* ‘get’, unaffixed Imperfective /*bèré-* + L/, hence 1Sg *bèré-m̃*, 2Pl *bèré-bè*. The floating L-tone is grafted onto (i.e. docks on) the suffixal mora; see Tone-Grafting (131).

In (591.c), the Perfective suffix allomorph -â:- has its own intrinsic F-tone (i.e. <HL>). The final L-tone component spreads to a syllabic suffix, as in 2Pl -â:-bè, again by Atonal-Morpheme Tone-Spreading (137). When -â:- is part of a trimoraic syllable including a suffixal nasal, as in the 1Sg form, the F-tone is spread out over the whole syllable; see Contour-Tone Stretching (143). Examples: 1Sg *dòg-â:-m* ‘I am finished (=have gotten thin)’, 2Pl *dòg-â:-bà*.

(591.d) is the pattern for the (all-L-toned) unaffixed Perfective, and for all remaining nonzero positive AN suffixes, all of which end in a L-tone (Perfective -tì- or -yè-/-yà-, Resultative -sà-, Recent Perfect -jè-, Experiential Perfect -térè-, Habitual -á:rà-, marked Imperfective -tɔ̀ỳd̀-). Examples: Perfective *láyá-tì-Ø* ‘he/she hit’, *láyá-tì-m* ‘I hit’, and *láyá-tì-bè* ‘you-Pl hit’; unaffixed Perfective *làyà-Ø* ‘he/she hit’, *làyà-m* ‘I hit’, and *làyà-bè* ‘you-Pl hit’.

In the unaffixed Perfective, an ostensibly L-toned pronominal-subject suffix occasionally appears with **unexpected H-tone**, although the preceding stem is entirely L-toned: *làyà-m̃* ‘I hit’, *làyà-bá* ‘they hit’ (for the more usual *làyà-m*, *làyà-bà*). This is most common when the word is pronounced in isolation, and reflects a constraint (not generally implemented in phrasal contexts) against all-L-toned words. Cf. discussion of related issues in §3.7.1.5.

10.3 Clause-final temporal particles

10.3.1 Past $jì:n$ ($jǐ:n$) and conjugatable $jǐ:n$ - ‘in the meantime’

The Past particle $jì:n$ is added after an inflected verb or other predicator. In its usual clause-final position it has L-tone. An R-toned variant is possible when it is followed by another element within the clause (see below).

The particle is especially useful after predicates that **lack aspectual marking**: adjectives and other statives, unconjugated (or conjugated) ‘it is’ clitic $\equiv y$ ‘it is’, and ‘be’ and ‘have’ quasi-verbs. It is also common after regular imperfective verbs, placing the eventuality in the past (‘used to do’, ‘was doing’).

- (592) a. $yó\equiv w\grave{o}-\emptyset$ $jì:n$
 exist \equiv be.Hum-3SgS **Past**
 ‘He/She was there.’
- b. $l\grave{a}:l\grave{a}:$ [$k\acute{o}$ $k\grave{u}^n$] $k\acute{a}r^n\acute{a}-b\grave{a}$ $jì:n$
 first-first [Nonh Def] do.Impf-3PIS **Past**
 ‘Long ago, they used to do that.’ **2004.3.8**
- c. [$k\grave{o}:\cdot$ $f\acute{u}:$] $k\grave{o}-r\equiv\acute{a}:$ $g\check{o}^n-b\grave{a}$ $jì:n$
 [Nonh.L all] Nonh-with \equiv Foc take.out.Impf-3PIS **Past**
 ‘They used to extract (=get) all that from it.’ **2004.3.12**

$jì:n$ is not common after a **perfective-system verb** in ordinary main clauses, since the time reference is already understood to be in the past. When it does occur with a perfective, it has past perfect (‘had done’) sense, and is used as background to another eventuality.

- (593) a. $n\grave{u}m-\acute{a}:-\emptyset$ $jì:n$
 fall-Perf-3SgS **Past**
 ‘He/She/It had (already) fallen.’
- b. $\check{n}\check{a}:$ $\check{n}\acute{e}:-s\grave{a}-\emptyset$ $jì:n$
 meal eat-Reslt-3SgS **Past**
 ‘He/She had (already) eaten.’

$jì:n$ is regularly used in both antecedent and consequent clauses in **counterfactual conditionals** (§16.7).

$jì:n$ may **follow the participle** in a relative clause (594). The participle has its usual suffixes such as Sg -n and Pl -m. When followed by Definite $k\grave{u}^n$,

which is common in relative clauses, the particle may appear as R-toned $j\check{i}^n$ (594.b).

- (594) a. $\dot{i}n\grave{e}$ $l\acute{a}:-l\acute{a}:$ $m\grave{i}$ $j\grave{u}g\acute{o}-m\grave{e}$ $j\grave{i}:^n$
 person.L first-first 1SgS.L know.Impf-Ppl.PI **Past**
 ‘the people whom I used to know long ago’
- b. $\grave{a}-n$ \acute{u} $b\grave{a}\eta\acute{a}-r^n\grave{a}-n$ $j\check{i}^n$ $k\grave{u}^n$
 man-Sg.L 2SgO hide-Caus.Perf.HL-Ppl.Sg **Past** Def
 ‘the man who (had) hid you-Sg’
- c. $d\grave{i}:^n$ \acute{u} $b\grave{e}$ $b\grave{a}\eta\acute{a}-r^n\grave{a}-\emptyset$ $j\grave{i}:^n$
 place.L 2SgO 3PIS.L hide-Caus.Perf.HL-Ppl.Nonh **Past**
 ‘(a place) where they (had) hid you-Sg’

There is another construction with what appears to be the same morpheme, this time in the form $j\check{i}^n-$. The preceding verb takes its regular lexical tone and is uninflectable, showing that a **verb-chain** is at hand. $j\check{i}^n-$ itself is morphologically an **unsuffixed Imperfective**, implying an R-toned lexical form $/j\check{i}:^n/$ onto which the extra L-tone of the unsuffixed Perfective is grafted to produce a bell-shaped <LHL> tone when the following pronominal or Participial suffix is zero. When the suffix is nonzero, the floating L-tone appears on the suffixal mora, by regular phonological rules; see Tone-Grafting (131), Contour-Tone Stretching (143), Atonal-Morpheme Tone-Spreading (137). That $j\check{i}^n-$ is an unsuffixed Imperfective is demonstrated by the fact that a Nonhuman subject requires a following cliticized ‘be’ quasi-verb $\equiv k\grave{o}$, a unique feature of this AN category. Other subject categories have their usual suffixal forms. The sense of this construction is ‘(does/will do) **in the meantime**’ (i.e. while waiting for an expected subsequent event)’. The time reference is to the **present or future** (with respect to the deictic center).

- (595) a. \acute{u} $b\grave{a}\eta\grave{a}-r^n\acute{a}$ $j\check{i}^n--\emptyset$
 2SgO hide-Caus **Past.Impf-3SgS**
 ‘He/She will hide you in the meantime.’
- b. \acute{u} $b\grave{a}\eta\grave{a}-r^n\acute{a}$ $j\check{i}^n-m\grave{e}$
 2SgO hide-Caus **Past.Impf-1SgS**
 ‘I will hide you in the meantime.’
- c. $d\grave{u}n-d\grave{a}\eta\acute{a}$ \acute{u} $b\grave{a}\eta\grave{a}-r^n\acute{a}$ $j\check{i}^n\equiv k\grave{o}$
 elephant 2SgO hide-Caus **Past.Impf=be.Nonh**
 ‘The elephant will hide you in the meantime.’

- d. lám̀p̀d̀ wó d̀d̀:-l̀í-n, wó dà̀yá jǐ:ⁿ-bà
 tax 3SgO reach-PerfNeg-Ppl.Sg, 3SgO leave **Past.Impf-3PIS**
 ‘(A person) whom the tax has not reached (=who is too young to
 pay the tax), they (=colonial authorities) would leave him/her alone
 for the time being.’ **2004.4.22**

There is **no negative counterpart** of the ‘in the meantime’ construction. Instead, the basic Imperfective Negative with suffix **-gó-** is used, e.g. **ú bà̀ṅà-rⁿà-gó-m** ‘I do/will not hide you-Sg’.

(596.a) is a fine textual example of the ‘in the meantime’ construction, in a **relative clause**. The protagonists are illegally in Algeria (where they risk deportation if discovered), and are waiting to get identity documents from their embassy. (596.b-c) are supplementary elicited examples with nonzero Participial suffixes. Unlike the cases in (594), where **jǐ:ⁿ** is added after a participle, in (596) **jǐ:ⁿ** is itself participialized.

- (596) a. d̀i:ⁿ ú bè bà̀ṅà-rⁿá jǐ:ⁿ-Ø
 place.L 2SgO 3PIS.L hide-Caus.Impf **Past.HL-Ppl.Nonh**
 ‘(a place) where they (will) hide you-Sg in the meantime (=while
 waiting to get a passport)’ **2004.5.2**
- b. à-n ú bà̀ṅà-rⁿá jǐ:ⁿ-ṅ kùⁿ
 man-Sg.L 2SgO hide-Caus **Past.HL-Ppl.Sg** Def
 ‘the man who hides (will hide) you-Sg in the meantime’
- c. àrⁿ-ùm ú bà̀ṅà-rⁿá jǐ:ⁿ-m kùⁿ
 man-Pl.L 2SgO hide-Caus **Past.HL-Ppl.Pl** Def
 ‘the men who (will) hide you-Sg in the meantime’

10.3.2 ‘Still’, ‘up to now’, (not) yet’ (dôm)

This particle means ‘still’, ‘up to now, so far’, or ‘as for now’ in positive utterances. It may precede or follow the verb.

- (597) [dà̀ná mà bíré]≡y yá:-tó̀ỳd̀-Ø dôm
 [hunt(noun) Poss work]≡Foc go-Impf-3SgS **still**
 ‘He (=child learning to hunt) is still going (on the “road” to learning)
 the work (=techniques) of hunting.’ **2004.3.16**

If the predicate is negated, the sense is ‘(not) yet’, equivalent logically to ‘(not) up to now’ (598).

- (598) a. [kó.: sù-sùm-bórù.:] mà lǎy,
 [Nonh millet.grub] Poss medication,
 è:-lí:-Ø dôm
 see-PerfNeg-1PlS yet
 ‘A treatment (=insecticide) for them (=millet beetles) and millet grubs, we haven’t seen it yet.’ **2004.3.8**
- b. [kò úró kùⁿ] dôm wòl-lí-Ø
 [Dem house Def] yet collapse-PerfNeg-3SgS
 ‘That (ancient) house still hasn’t collapsed.’ (wòró-) **2004.3.11**

10.4 Imperatives and Hortatives

10.4.1 Imperatives and Prohibitives

The forms of the Imperative (Imprt) depend on polarity and on addressee number. The positive Imperatives are based on the Imperative (Imprt) stem. For nearly all monosyllabic (C)v:- and short-voweled (C)vCv- bisyllabic stems, the Imperative is an **all-H-toned stem** (C)ý:- or (C)ýCý-, the shift being audible in the case of R-toned (C)ǎ:- and LH-toned (C)ǎCǎ- stems (see below for a few exceptions where the shift to all-H does not occur). Other stems, including bisyllabic long-voweled (C)v:Cv- stems, and all stems of three or more syllables, use their lexical form as the Imperative.

The Imperative stem always ends in an H-tone. The subject suffix is zero for singular, L-toned -ỳ for plural addressee. The negative imperative (i.e., **Prohibitive**) is characterized by a suffix -ý added to an L-toned form of the verb stem; lây is added if the addressee is plural.

- (599) addressee positive imperative negative (prohibitive)

Sg	Imprt stem	L-toned stem plus-ý
Pl	Imprt stem plus -ỳ	L-toned stem plus -ý lây

There is some potential for homophony between the singular Prohibitive in -ý and the 1Pl unsuffixed Perfective in -y. Both follow all-L-toned stems. The 1Pl suffix is usually L-toned after an unsuffixed Perfective, in which case there is no homophony. However, in an all-L-toned word, a nonzero pronominal-subject suffix is sometimes realized with a H-tone, especially in isolation or before a clause-final particle. For example, gò:-ý ‘don’t go out!’ is audibly distinct from gò:-y ‘we went out’ in the usual case where the latter is clause-

final and preceded by other material. However, in the contexts mentioned above, ‘we went out’ may also be heard as gò:-ý.

For monosyllabic (C)v:- stems, homophony between the singular Prohibitive in -ý and the Verbal Noun (allomorph -ý after monosyllabic stem) also threatens. However, it is avoided in that the stem vowel is shortened in the Verbal Noun but not in the plural Imperative: gò:-ý ‘don’t go out!’, but gò-ý ‘going out (VbIN)’.

The Imperative and Prohibitive forms for ‘come’ are given in (600). Note the H-tone Imperative stem yé-é-, compare the LH tone of the lexical stem yè-é-. Note also how the tones distinguish yè-é-ý (600.b) from yé-é-ỳ (600.c).

- (600) a. yé-é
 come.Imprt.H
 ‘Come!-Sg’
- b. yè-é-ý
 come.L-ImprtNeg
 ‘Don’t-Sg come!’
- c. yé-é-ỳ
 come.Imprt.H-Pl
 ‘Come!-Pl’
- d. yè-é-ý lây
 come.L-ImprtNeg ImprtNeg.Pl
 ‘Don’t-Pl come!’

Examples with a trisyllabic verb dānāṅá- ‘arrange’: dānāṅá (singular imperative), dānāṅá-ýⁿ (singular Prohibitive), dānāṅá-ỳⁿ (plural Imperative), dānāṅá-ỳⁿ lây (plural Prohibitive). Note that the (positive) imperatives retain the lexical LLH tone, since the shift from LH (or R) basic form to all-H imperative stem is confined to monosyllabic and short-voweled bisyllabic stems.

The textual examples below are singular Imperative (601.a), plural Imperative (601.b-c), singular Prohibitive (601.d-e), and plural Prohibitive (601.f). Note that in (601.a) only the final verb ‘receive’ is Imperative in form; the preceding verb yè-é has its lexical tones as an ordinary chained verb. Likewise in (601.e), where dàyá ‘leave’ is in chained rather than Prohibitive form.

- (601) a. [î-n kùⁿ] yè-é yówó
 [child-Sg Def] come receive.Imprt.H
 ‘Come receive-Sg the child (=bride)!’ (yòwó-) 2004.3.20

- b. [mâ:n mà kû:n] yǎ: yà:jí: páyá-ỳ
 [so-and-so Poss on] go marriage tie.**Imprt.H-PI**
 ‘Go-PI and tie (=contract) marriage on so-and-so (=the bride).’
 (páyá-) **2004.3.20**
- c. mí tá:n yàṅá-ỳⁿ
 1SgO shoot look-**Imprt-PI**
 ‘Shoot-PI me and look (=and you’ll see)!’ (yàṅá- with Imprt yàṅá)
2004.3.24
- d. làyá pàntè-ý
 other repeat.L-**ImprtNeg**
 ‘Don’t-Sg do it again!’ (pánté-) **2004.3.10**
- e. èjú dàyá yà:-wà-ý
 field leave go-Caus.L-**ImprtNeg**
 ‘Don’t-Sg let the animals go out into the field!’ (yà:-wá-) **2004.3.9**
- f. [yògò làyá] [tô:-n lè] pàntè-ý lây
 [day.L other] [Recip-Sg with] **repeat-ImprtNeg PI**
 ‘Don’t-PI do it (=fight) with each other another day (=in the future)!’ (pánté-) **2004.4.6**

10.4.2 Irregular {LH} imperative stems

As noted before, most monosyllabic Cv:-, and short-voweled bisyllabic (C)vCv- stems require all-H tone in the Imperative stem. Regular examples: monosyllabic jǎ:n- ‘dig’, Imperative já:n ; bisyllabic dǐ gè- ‘follow’, Imperative dígè (note the tone shifts).

A few R-toned monosyllabic or LH-toned short-voweled bisyllabic stems irregularly **preserve their lexical tones** in the Imperative stem. Those known to me are yǎ:- ‘go’, dǐ ṅé- ‘sit down’, ì ñé ‘lie down, go to bed’, and yàṅá- ‘look; pick up’. The Imperatives are yǎ: ‘go!’, dǐ ṅé ‘sit down!’, ì ñé ‘go to bed!’, and yàṅá ‘look!’

For wǎ:- ‘kill’, I recorded a special positive Imperative form wǎ: tí-, hence singular Imperative wǎ: tí ‘kill!’ with plural /wǎ: tí-ỳ/ (= wǎ: tí:-Ø). Here wǎ: appears to be the bare stem, followed (in a verb-chain construction) by tí- as the inflectable stem. This tí may be related to the Linker tí that occurs in some verb-chains with chronological-sequencing sense (§15.1.16), but the precise relationship is unclear. The corresponding Prohibitives of ‘kill’ are regular and omit tí-, hence singular wǎ:-ý ‘don’t-Sg kill!’, plural wǎ:-ý lây ‘don’t-PI kill!’.

The extra tí- in the positive Imperative is also attested in (1016.a) for the Imperative of cé:ⁿ- ‘slaughter, cut the throat of’, which of course has a lexical sense very similar to ‘kill’.

10.4.3 Hortative (-mí)

The Hortative has an H-toned suffix -mí, following a verb stem with all-L tones. The high-frequency form yà-mí ‘let’s go!’ has a short vowel, but other Cv:-verbs retain their lexical long vowel: gò:-mí ‘let’s go out!’, jà:ⁿ-mí ‘let’s dig!’, nò:-mí ‘let’s drink!’. The hortative does not occur with short-voweled Cv- or CvC- quasi-verbs (wò- ‘be’, sà- ‘have’, kùn- ‘be in’, see §11.2 and §11.5), perhaps for semantic as well as morphological reasons. Defective stance verbs like dà:ⁿ- ‘be sitting’ (§11.2.4) also lack hortatives. This is reasonable, since an exhortation to action naturally calls for an active verb subject to volitional control, as in dì ηè-mí ‘let’s sit down!’ (verb dì ηé-). I have also been unable to elicit hortatives based directly on adjectives like jém ‘black’ in predicative function, though hortatives can be elicited from inchoative verbs like jèm-né- ‘become black’, and from combinations with ‘be’ verbs like bé:-.

I transcribe e.g. yà-mí with the H-tone marker on the suffixal C. A representation yǎ-m would convey the pronunciation, given my transcription conventions, but yà-mí brings out the fact that the rising tone is determined by the suffix, not by the lexical tone of the stem.

The Hortative is distinguishable (by this tone pattern) from another suffix -m used in ‘so that ...’ and ‘had better’ clauses, with the lexical tone of the verb (§17.6.4). Hortative -mí should also be distinguished from two atonal -m suffixes, 1Sg subject -m and Pl Participial -m.

If speaker and (singular) addressee are involved, i.e. in the first person inclusive dual context, there is no further suffixation. Therefore the form in -mí is basically a **first inclusive dual** hortative, though it may extend loosely to include larger numbers (see below). The 1Pl pronoun émé is optionally preposed, which avoids any possible ambiguity with 1Sg unsuffixed Perfectives. Examples are in (602). As with the Imperative, only the final verb in a verb-chain takes Hortative form (602.a-b).

- (602) a. [dèné-wⁿ dèy] gàrá yà-mí
 [want.Impf-2SgS if] pass go-**Hort**
 ‘If you-Sg would like, let’s-Du go along (the trail)!.’ **2004.3.10**
- b. (émé) yǎ: yèrè-mí
 (1Pl) go come-**Hort**
 ‘Let’s-Du go and come!’

- c. [ì jú kùⁿ] làyà-ní
 [dog Def] hit-**Hort**
 ‘Let’s-Du hit the dog!’

At the end of a long clause, the pitch rise on -ní is sometimes not heard (603). This results in homophony between the Hortative and the 1Sg unsuffixed Perfective.

- (603) [èmě-n kó tégé] yàṅà-m
 [1Pl-Dat NonhO speak.Imprt] look-**Hort.L**
 ‘Tell-Sg it to us and let’s see!’

The same tone-dropping is observed in (604), probably due to focus on a preceding word. This example also illustrates that the -ní suffix is optionally used for more-than-dual subject, especially when dealing with general collectivities.

- (604) [émé yè-lé bè:-m] wà
 [1Pl there stay-**Hort.L**] say
 ‘They told us (=Jamsay villagers) to stay (right) there [focus].’
2004.3.11

When the speaker and at least two other persons are involved, there is a special **3+ hortative plural** with suffix -mâyⁿ, following tone-dropped stem. This is used instead of -ní, especially when the situation involves persons present in the conversational context, as opposed to broader collectivities where -ní may be used in extended sense.

- (605) yǎ: yèrè-mâyⁿ
 go come-**Hort.PI**
 ‘Let us (three or more) go and come (back)!’

The **dual negative hortative** (‘Let’s not ...!’) is morphologically the (singular) negative imperative in -ý (after L-toned stem) plus lá-m. The same -ý plus lá-mâyⁿ produces the **plural negative hortative**, used when the speaker is grouped with two or more other referents.

- (606) a. yà:-ý lá-m
 go-**ImprtNeg Neg-Hort**
 ‘Let’s (you-Sg and I) not go!’

- b. yà:-ý lá-mâyⁿ
 go-**ImprtNeg** **Neg-Hort.Pl**
 ‘Let’s (you-Pl and I) not go!’

10.4.4 Imperative and Hortative with third person pseudo-subject

The Imperative may be used with a **third-person agent**. This includes oaths (blessings and imprecations) of the type ‘may God ...!’.

- (607) a. á mà ù-rú yá:píné
 God 2Sg-Dat make.healthy.**Imprt**
 ‘May God make you well!’ (yá:píné-)
- b. á mà cíⁿé dá yá
 God nose leave.**Imprt.H**
 ‘May God leave a nose (=give long life)!’ (dà yá-) **2004.3.20**

The Hortative may likewise be used with **third-person agent**, as a kind of exhortation or indirect imperative. In (608), the subject is expressed as a nonpronominal NP (‘our village’).

- (608) [[émé à ná] tà rá yà-mí] gá-bà
 [[1PIP village] collective.hunt go-**Hort**] say.Impf-3PIS
 ‘They say, let our village (=all the villagers) go on a collective hunt.’
2004.3.1

When the subject in this construction is pronominal, it must be expressed as an **independent third-person pronoun** (3Sg wó, 3Pl bé, Nonh kó), rather than as an L-toned preverbal subject or as a pronominal-subject suffix on the verb. This is seen in (609.a). Moreover, the **reflexive-possessor construction may not be used**; if there is a direct object possessed by the relevant third person, it appears with regular third person possessor (e.g. 3Sg wó) rather than with Reflexive possessor èné mà (§18.1.2). This is illustrated in (609.b).

- (609) a. [ú yă:] [kó yèrè-mí] gá-bà
 [2Sg go.Imprt] [Nonh come.**Hort**] say.Impf-3PIS
 ‘They say, “Go, (and) may it come here!”’ (i.e. ‘go bring it!’)
2004.4.23

- b. wó [wó mǎŋgòlò] ñé:
3Sg [3SgP mango] eat.Imprt.H
 ‘Let him_x eat his_x (own) mango!’ (command)

The third person **Hortative** pseudo-subject has the same syntax (610).

- (610) a. yèré wó [wó dá:ŋá] yàŋà-ńí
 come 3Sg [3SgP water.jar] pick.up-**Hort**
 ‘May he_x come and take his_x water jar!’
- b. wó [wó mǎŋgòlò] ñè:-ńí
3Sg [3SgP mango] eat-Hort
 ‘May she_x eat her_x mango!’

So there is **no authentic third person subject** in these constructions. Instead, the third-person “subject” is best taken as an **indirect second person**, representing the imposition of the current deictic organization on an “underlying” or virtual 2Sg (or 2Pl) pronoun. The “subject” can be taken as **vocative** in function, even though the “addressee” is typically not present. Schematically, ‘(hey) you, come!’ is converted into “(hey) him, come!” In (609.b) and (610.b), the “reflexive possessor” likewise results from converting an “underlying” 2Sg (or 2Pl) possessor pronoun to third person to conform to the current deictic center. Schematically, ‘(hey) you, eat your mango!’ is converted to ‘(hey) him, eat his mango!’ Since there is no overtly reflexive marking for second person possessor (as in ‘you ate [your mango]’), there is no reflexive marking after the conversion to third person, even though a true third person construction (‘he ate [his (own) mango]’) does require an overtly reflexive possessor pronominal.

Nothing blocks Logophoric pronominalization in the same constructions, as long as the logophoric antecedent is the author of the command or wish (611).

- (611) [[èné bé] [èné bé mǎŋgòlò] ñè:-ńí] wà
 [[**Logo** Pl] [**Logo** Pl.P mango] eat-Hort] say
 ‘They_x said (to each other), “let’s_x eat our_x mangoes!”’

10.4.5 Imperative with implied first person singular subject

A first-person “imperative” is used as a query as to whether the addressee wants the speaker to do something. The presence of the interrogative particle *ma* (má, mà) at the end indicates that this is not a true, addressee-directed imperative. A

first person independent pronoun may be added at the beginning, in “topic” function.

This construction is typically used when the speaker did not clearly hear something just said, or is responding to a gesture or a plaintive look, and seeks clear(er) instructions. In local French, this is expressed with *de* plus infinitive: *d’amener le repas?* (‘shall I bring the meal?’).

- (612) a. yéré má⇒
 come.Imprt Q
 ‘Shall I come?’
 (i.e., ‘Do you want me to come?’, ‘Did you say to come?’, etc.)
- b. [má ì jú] láyá má
 [1SgP dog] **hit.Imprt** Q
 ‘Shall I hit my dog?’

That there is an authentic first person subject here is suggested by the use of reflexives. In (613), we get Reflexive ì nì wⁿé (not specified for person) as direct object coindexed with the subject.

- (613) mí ì nì wⁿé láyá má
 1Sg Refl **hit.Imprt** Q
 ‘Me [topic], shall I hit myself?’

The construction may be used with a Prohibitive (614) as well as with a (positive) Imperative.

- (614) yèrè-ý má
 come-ImprtNeg Q
 ‘Shall I not come?’

For 1Pl subject, the same “singular” Imperative forms are used, following an independent 1Pl pronoun (perhaps topical).

- (615) émé yéré má
 1Pl come.Imprt Q
 ‘Shall we come?’

11 VP and Predicate Structure

11.1 Regular verbs and VP structure

11.1.1 Verb types (forms)

Inflectable verb stems (including derivational but not AN suffixes) are predominantly of the following shapes (the initial C is optional): Cv-, CvCv-, Cv:Cv-, and CvCvCv- (rarely CvCvCvCv-). There are a modest number of CvCCv- stems of native Dogon origin, generally reflecting syncope from *CvCvCv-, and there are quite a few verbs borrowed from Fulfulde with shapes like CvCCv-. For patterns of vocalic harmony applicable to verbs, see §3.4.5.

I use the term **quasi-verbs** to denote any of a small set of predicative elements, with specialized grammatical functions, that have the extra-short shape Cv- or in one case CvC-. Several of these (jè-, sà-, wò-, kò-, kùn-) are limited to the unaffixed Perfective in positive clauses. That is, they are followed (in positive utterances) only by pronominal-subject suffixes. Except for jè-, which is positive only, the quasi-verbs also have irregular, aspectually undifferentiated negative forms.

jè- ‘say’ and sà- ‘have’ can arguably be **identified morphemically with aspectual suffixes** (Recent Perfect -jè-, Resultative -sà-). This raises the possibility that they are AN suffixes in the special case where the preceding verb-stem slot is phonologically empty.

On the other hand, wò- and kò- ‘exist’, which are differentiated as human and nonhuman, have a striking resemblance to third person pronominal wó (human singular) and kó (nonhuman), respectively. In addition, a clitic =kò is used for Nonhuman subject in the unaffixed Imperfective. This suggests that quasi-verbs wò- and kò- ‘exist’ might be pronominals, or more specifically **(imperfective) pronominal-agreement morphemes**, again following a phonologically empty verb-stem slot. kùn- ‘be in’, with its unique CvC- shape, functions (in part) as an irregular, and semantically specialized, **passive** of the common verb kúnó- ‘put’.

The morpheme-class status of all of these elements is at best ambiguous, but the issues are different in each case, hence my term of convenience “quasi-verb.” I have previously used the term in connection with similar issues in Songhay languages. Quotative wa, however, cannot directly take any verbal inflectional material and is unambiguously a particle.

(616) Cv- and CvC- quasi-verbs

	gloss or description	form(s)	reference
a.	‘say’	jè- (cf. also gá:-) wa (wá, wà) (uninflected)	§11.3.2 §17.1.3
b.	‘have’	sà-	§11.5.2
c.	‘exist, be (somewhere)’	wò- (human) kò- (nonhuman)	§11.2.2.2-5 "
d.	‘be in; be put in’	kùn- (Neg kùnó-)	§11.2.3

There is also a copula clitic ‘be’ with allomorphs $\equiv\dot{y}$ and $\equiv\dot{i}$: when uninflected (for pronominal subject), and with a set of inflected forms (§11.2.1).

Aside from quasi-verbs, the quotative particle, the copula clitic, and a few aspectually defective verbs of possession and stance, there are few irregularities in verbal morphology. A handful of verbs have minor phonological irregularities in certain suffixed AN forms (617).

(617) Phonological Irregularities

	gloss	basic form	irregularity
a.	‘come’	yèré-	/yěr-/ with e for ε when syncopated: Perf yěy-yà-, Perfective Negative yèl-lí-; contrast e.g. Imperfective Negative yèrè-gó-; see also (632.b).
b.	‘bring’	jè:ré-	syncopated form is /jěr-/ with ε: shortened and raised to e: Perfective jět-tî-, Perfective Negative jèl-lí-; contrast Imperfective Negative jè:rè-gó-.
c.	‘know’	jùgó-	optionally contracted to /jǒ:-/ before g-initial AN suffix jǒ:-gó- (varying with jùgò-gó-), compare uncontracted Imperfective jùgô-, Perfective Negative jùgò-lí-, Recent Perfect jùgó-jè-.

- d. ‘put’ kúnó- optionally undergoes irregular Post-Sonorant Syncope before coronal-initial suffix: Perfective kúnó-tì- or kún-tì-, Resultative kúnó-sà- or kún-sà-, Perfective Negative kùnò-lí- or kùn-lí-; contrast Imperfective Negative kùnò-gó-.
- e. ‘wear’ kúrⁿó- same pattern as for ‘put’ (d): Perfective kúrⁿó-tì- or kún-tì-, Resultative kúrⁿó-sà- or kún-sà-, Perfective Negative kùrⁿò-lí- or kùn-lí-; contrast Imperfective Negative kùrⁿò-gó-.
- f. ‘see’ é:- Experiential Perfect ét-térè- instead of #é:-térè-.
- g. ‘stroll’ yèré- variant yàrá-; unsuffixed Perfective participle yárà-; Reduplicated Perfective yî-yárà-.
- h. ‘arrive’ dó:- varies with dó:-.

11.1.2 Verb types (valency)

Verbs have the usual valency possibilities: intransitive, transitive, ditransitive. However, the distinction between transitive and intransitive is muddled in Jamsay by the large number of idiomatic object-verb combinations (including those with cognate nominals), and to some extent subject-verb combinations; see below, §11.1.5-6.

Intransitives that have a subject but no direct object include **stance verbs** like dī ṅé- ‘sit down’ and **atelic motion verbs** like yàná- ‘glide’.

Telic motion verbs like yǎ:- ‘go’ and yèré- ‘come’ are basically intransitive (with optional locational adverbial). They may appear to be transitive, like the first ‘go’ verb in (618), which has ‘place’ as destination.

- (618) [dì:ⁿ èné yà:-gó-Ø jì:ⁿ cêw] yǎ:-Ø
 [place.L Refl go-ImpfNeg-Ppl-Nonh Past all] go.Impf-3SgS
 ‘Places that she previously did not go to, (now) she goes.’ 2004.3.19

However, telic motion verbs, in their primary senses, often fail the crucial test of transitivity in Jamsay: they do not take object pronominals. Informants

generally rejected such proposed combinations as #kó yǎ:-yà-m ‘I went to it’, and similar constructions for ‘come’, and ‘go out’. Therefore cases like ‘place’ in (618), above, are best understood as covert adverbial PPs with the postposition omitted. Such omission is most common with place names like bàmàkó ‘Bamako’, which in most contexts are understood as adverbial in nature without an overt postposition.

In the sense ‘go/come to (sb)’ with human destination, a PP with postposition lè or its pronominal counterparts is used: mǐ-n yèrè-Ø ‘He/She came to me.’

There are, however, some **transitive uses of telic motion verbs** in non-primary senses. yǎ:- ‘go’, for example, may take an object denoting the entire trajectory rather than the destination. In (619), the pronoun kó is the object.

- (619) [kì lòmé:térè té:médè tǎ:n]
 [kilometer hundred three]
 [kǒ: lè] kó yǎ:-bè
 [foot Inst] **NonhO** go.Impf-2PlS
 ‘Three hundred kilometers, you’ll go that (distance) on foot.’ **2004.4.5**

With nú:- ‘enter’, informants again disliked pronominal objects in elicitation sessions, but the textual example (620) shows that they are possible.

- (620) [kò àná] kó ballá mèyⁿ kó nú:-bè
 [Dem village] NonhO go.around and **NonhO** enter.Impf-2PlS
 ‘that town [topic], you-Pl will go around it and enter it (by the back way).’ **2004.5.2**

Transitives include the usual verbs involving impact or creation (‘cut’, ‘knock down’, ‘hit’, and the like). ‘Have’ is expressed by transitive quasi-verbs including sà- (§11.5.1). There are some ‘put’ verbs with a direct object plus an optional locational, e.g. ná:ná- ‘put (sth) up on (sth)’. Basic perception verbs are transitive: é:- ‘see’, áyá- ‘hear’.

Defective quasi-verb kùn- ‘be in, be part of’ functions syntactically as though the sense were ‘be put in’ (cf. the high-frequency transitive kúnó- ‘put’ or ‘put in’). It requires a locational complement, as in [X bérè] yó=kùn- ‘be in X, be part of X’. An example is (621).

- (621) [[wó jèjù-gùjú] lè] cèllâl yó=kùn-Ø
 [[3SgP body] in] health exist=be.in.L-3SgS
 ‘Health is in his body.’ (=He is able-bodied) **2004.4.22**

Many verbs may be used either transitively or intransitively without overt derivational morphology; see the discussion of **ambi-valent** verbs in §9.5. One typical pattern is where the intransitive functions as a (medio-)passive of the transitive. There is no productive morphological passive, so the ambi-valent use of basically transitive verbs fills a void.

Ditransitives include ó:- ‘give’ and té:ré- ‘show’. They have a direct object for the theme and a dative indirect object for the recipient. (There is no “promotion” of the dative to direct-object status.)

11.1.3 Valency of causatives

Causatives are formed from underlying transitives, as long as the semantics make sense in at least some situation. Such causatives of transitives have **two direct objects** (622).

- (622) a. [òrð-nì ɲé ñâ:] mí ñé:-wⁿé-tì-Ø
 [baobab.L-sauce **meal.HL**] **1SgO** eat-**Caus-Perf-3SgS**
 ‘He/She made me eat the millet cakes (with baobab-leaf sauce).’
- b. kó mí ñé:-wⁿé-tì-Ø
 NonhO **1SgO** eat-**Caus-Perf-3SgS**
 ‘He/She made me eat it.’

11.1.4 Verb Phrase

It is reasonable to speak of “VP” in a broad sense as a clause minus pre-clausal topics, minus the subject NP, and minus AN inflection. This notion of subjectless VP is operative in some types of chaining, e.g. with linking particle *mèyⁿ*, and in infinitival complements as with (same-subject) ‘want’.

The linear order of preverbal constituents was discussed in §2.6. As noted there, pronominals (dative, object, and in relative clauses also subject) normally follow nonpronominal constituents unless focalized or topicalized. The normal relative order of (untopicalized, unfocalized) **nonpronominal** preverbal constituents is (623). This order is not rigid.

- (623) a. temporal locatives (e.g. ‘yesterday’)
 b. subject
 c. dative, object, other adverbials (direct object often last)

The relative order of (nontopicalized, nonfocalized) preverbal **pronominals** is (624).

- (624) a. dative
 b. object
 c. subject (L-toned subject pronominals in relative clauses)

In verb- and VP-chains, preverbal subject markers in particular occur immediately before the final verb (e.g. the participle in a complex relative construction), while dative and object pronominals may precede earlier chained verbs (in bare-stem form). For examples of these ordering patterns see §2.6.

The notion of VP is sometimes difficult to apply in **chains**, where two verbs arguably (but detabably) merge into a single “compound verb” and jointly take a single set of arguments and adverbials, or a partially overlapping set of the same. See §15.1.5 for examples. As a result, I often refrain from using brackets to demarcate VPs in chains.

11.1.5 Fixed subject-verb combinations

A number of expressions relating to time of day, seasons of the year, or weather involve a fixed subject like ‘day’ combined with a verb.

(625)	subject	verb	gloss
a.	with nĩ: ‘day’ (cf. nĩ-nĩ: ‘sun’, nĩ-núw ⁿ ó ‘daytime’)		
	nĩ:	sí: ⁿ -	‘day break’
	nĩ:	bàr ⁿ á-	‘be summer (hot season)’ (cf. bán ‘red’)
b.	other		
	pàrá	sé: ⁿ -	‘be just after the harvest’
	àr ⁿ á	mĩ r ⁿ é-	‘rain fall’ (àr ⁿ á ‘rain [noun]’)
	dà:γá	dé:-	‘night fall’ (dà:γá ‘night’)

Elsewhere, bàrⁿá- is a verb meaning ‘beat (e.g. tomtoms)’. It is also in the phrase cénè bàrⁿá- ‘be angry’ (cénè ‘heart’ as seat of emotions). The sense ‘beat’ is felt by informants to be unrelated to nĩ: bàrⁿá- ‘be summer’ (cf. ‘sun beat down’), but they do recognize a connection between the latter and ‘be angry’, and between both of these and bán ‘red’ (cf. inchoative bànà-rⁿá- ‘become red’). There is a related noun nĩ-bárⁿá ‘summer, hot season’ (with short-voweled initial morpheme). In nĩ: sí:ⁿ- ‘day break’, the verb is not attested except in this combination.

The two stems in *pàrá sé:ⁿ*- occur only with each other. There is a related noun *pàrà-sé:ⁿ* denoting the post-harvest season in question. *àrⁿá* ‘rain [noun]’ and *dà:γá* ‘night’, seen in (625.b), are also common elsewhere. The verb *dé:-* in *dà:γá dé:-* ‘night fall’ has no obvious semantic connection to *dé:-* ‘burn’ or ‘be burned’. The verb *mìrⁿé-* in *àrⁿá mìrⁿé-* ‘rain fall’ is likewise not close semantically to homonyms meaning ‘spin (cotton)’ and ‘swallow (food, drink)’.

11.1.6 Idiomatic and cognate objects

11.1.6.1 Formal relationships between cognate nominal and verb

A common feature of Jamsay lexicography is the occurrence of fixed noun-verb combinations forming what amounts to bipartite predicative lexemes. The situation resembles that of English phrasal verbs like *break down*. The noun and verb may be separated, most often by a preverbal L-toned subject pronominal in relative clauses. The noun-verb combination may also occur in the corresponding verbal noun and/or agentive derivatives.

First, in the cognate-object construction, the verb is preceded by a noun from the same word family (**cognate nominal**). This noun may be a distinct lexical item, with its own (lexically specified) tone. In (626), the noun is **segmentally identical** to a **monosyllabic** verb. As for the tones, recall from 3.7.2.1 that verbs (unlike nouns) show strong and in some cases categorical associations between the initial consonant type and either all-H or {LH} tone contour, so that e.g. voiceless stops (or absence of an initial consonant) correlate with all-H. In addition, Fulfulde borrowings generally have all-H tone for verbs, and an {HL} contour for nouns. So the tonal relationships between verbs and cognate objects are not completely unmotivated.

(626) V-final cognate nominal plus verb

noun	verb	gloss of combination
a. noun and verb both H		
<i>pé:</i>	<i>pé:-</i>	‘cry, weep’
b. noun H, verb R		
<i>bé:</i>	<i>bě:-</i>	‘defecate, take a shit’
<i>gó:</i>	<i>gǔ:-</i>	‘dance, perform a dance’
c. noun F, verb R		
<i>jí:ⁿ</i>	<i>ǰí:ⁿ-</i>	‘fart, let out a fart’

In (627), the cognate nominal is segmentally identical to a **bisyllabic** verb.

(627) V-final cognate nominal plus verb

noun	verb	gloss of combination
a. noun and verb both LH		
b̀̀yó	b̀̀y-	‘be deceptive, trick’
dàná	dàná-	‘hunt, go on a hunt’
jámá	jámá-	‘betray’ (regional, e.g. Fulfulde jamba)
jì mé	jì mé-	‘double up, have two’
j̀̀̀ó	j̀̀̀-	‘(insects) mount on top of each other’
b. noun all-H, verb LH		
bíré	bì ré-	‘work, do a job’
dùgó	dùg-ó-	‘practice sorcery’
c. noun LH, verb all-H		
èré	éré-	‘be rivals, have a rivalry’
ì jé	ì jé-	‘stand/ stop in a position’
là:rá	là:rá-	‘go behind village (to defecate)’
ǹ̀w ⁿ ó	ǹ̀w ⁿ ó-	‘(a) death occur’
pèré	pé ré-	‘jump, take a jump’
p̀̀mó	p̀̀m-ó-	‘compete, be in a race’
sì r ⁿ é	sì r ⁿ é-	‘(woman) emit cry of joy’
d. noun HL, verb LH		
dá:r ⁿ à	dà:r ⁿ á	‘thicken into syrup’
dómò	dòm-ó-	‘roll turban (on head)’
gójò	gòj-ó-	‘divide into halves’
jé:rè	jè:ré-	‘criticize’
e. noun HL, verb all-H (includes some Fulfulde borrowings)		
játè	játé-	‘do a calculation’
píllè	píllé-	‘tell a story’ (<Fulfulde)
pútò	pút-ó-	‘(e.g. tea) be foamy’
tínè	tíné-	‘make a profit’
wá:tè	wá:té-	‘swear an oath’ (<Fulfulde)

Trisyllabic stems are featured in (628).

- (628) a. noun all-H, verb LLH
 gólóró gòlòrò- ‘snore’
- b. noun LLH, verb all-H
 cèrⁿèwⁿé cérⁿéwⁿé- ‘have fun, stage festivities’
 kònòṅó kónóṅó- ‘build a conical roof’
- c. noun LHL, verb LLH
 bègèrè bègèrè- ‘belch’
- d. noun HHL, verb all-H
 érⁿéwⁿè érⁿéwⁿé- ‘tell a story’

See also the H-toned trisyllabic deverbal nominals in §4.2.4.

In several cases, a noun that functions as a cognate nominal (i.e. that is often paired with the corresponding verb) is identical in form to a **Verbal Noun** (629). When the medial consonant is a semivowel or nasal that permits Suffixal u-Apocope (67) in the Verbal Noun, this apocopated variant is de rigueur in the cognate nominal construction in most cases (629.c-d). Since the nominal is generally well-established independently as a common noun (‘lie’, ‘water channel’, etc.), I do not segment it with a hyphen as I would with a Verbal Noun.

- (629) Cognate nominal (Verbal Noun) plus verb

noun	verb	gloss of combination
a. C ₂ does not allow apocope, verb all-H		
kòrú	kóró-	‘lie, tell a lie’
pàlgú	pálgá-	‘dig a water channel’
tègú	tégé-	‘speak’
tèrú	téré-	‘chop (wood, trees)’
b. C ₂ does not allow apocope, verb LH		
gòrú	gòrò-	‘dig a ditch’
jèrú	jèrè-	‘harvest, do the harvest’
c. apocope applied, verb all-H		
pěw	péwé-	‘make an accusation’
tĩn	tír ⁿ é-	‘go gather firewood’
tóṅ	tóṅó-	‘write, do some writing’

d. apocope applied, verb LH

wǒm wòmó- ‘remove weeds (from field)’

e. monosyllabic stem (-ý VblN suffix), verb H

tǒy tó:- ‘vomit’ (for ‘sow’ see below)

A case like (629.a) but with irregular vocalic divergence is sèñú sáñá- ‘do commerce, buy and sell’.

While the nouns in (629) have both the segmental and tonal properties of Verbal Nouns and are therefore labeled as such, there are also several cases where a cognate nominal is **segmentally, but not tonally**, identical to the corresponding true Verbal Noun. If a CvC nominal has R-tone, it is included in (629) since this is the tone of Verbal Nouns. In (630), we have CvC cognate nominals with tones other than R. The most common type has an H-toned CVC nominal (630.a).

(630) C-final cognate nominal (≠Verbal Noun) plus verb

noun	verb	gloss of combination
a. noun H, verb LH		
jáj	jàŋá-	‘request, make a plea’
jéw	jèwé-	‘curse, utter a curse’
jéy	jèyé-	‘fight, engage in a fight’
mów ⁿ	mòw ⁿ ó-	‘laugh, let out a laugh’
b. noun F, verb LH		
mâŋ	màŋá-	‘make (food) into balls’
nûŋ	nùŋó-	‘sing, perform a song’
c. noun F, verb all-H		
îm	ímé-	‘stutter’
sâl	sálá-	‘pray, perform the Muslim prayer’

In (631), we have the same pattern as in (630) involving segmental identity but tonal non-identity between the cognate nominal and the true LH-toned Verbal Noun (not shown). Here, unlike (630), the medial consonant does not permit Suffixal u-Apocope (67), so we get a bisyllabic nominal (with any tone other than LR) ending in u.

(631) u-final cognate nominal (\neq Verbal Noun) plus verb

- | | | | |
|------------------------|-------|--------|---------------------------|
| a. noun and verb all-H | | | |
| | tárú | tára- | ‘lay egg’ |
| b. noun HH, verb LH | | | |
| | wárú | wàrá- | ‘do farm work (in field)’ |
| c. noun HL, verb LH | | | |
| | dúrù | dùró- | ‘groan; roar’ |
| | jírù | jì ré- | ‘take animals to pasture’ |
| | tógù | tógó- | ‘build a shed (stall)’ |
| d. noun HL, verb all-H | | | |
| | ká:gù | ká:gé | ‘give out a shout’ |
| | pérù | péré- | ‘clap, applaud’ |
| | wá:jù | wá:já- | ‘preach a sermon’ |
| e. noun LH, verb all-H | | | |
| | kògó | kógó | ‘slough off skin’ |
| f. noun and verb LH | | | |
| | bàdú | bàdá | ‘hold a meeting’ |

There are a handful of cases where a CvC (632.a) or CvCv (632.b) cognate nominal has diverged in vowel quality from the verb. Regarding (632.a), it seems that the V-final pattern of open syllables (CvCv-) is favorable to open mid-height vowels like ɔ, while the closed-syllable CvC pattern of the nominal lends itself to closed mid-height vowels like o. As for (632.b), the verb yèré- has e for ε in some AN forms (617.a).

(632) Vocalic divergence

- | | | | |
|----|------|-------|---|
| a. | tǒy | tó:- | ‘sow, plant (seeds); sow the seedstock’ |
| | jón | jòn- | ‘heal, perform healing’ |
| | jów | jòw- | ‘run, do some running’ |
| b. | yérú | yèré- | ‘come on a visit’ |

tǒy can mean ‘sowing, planting (seeds)’ as a Verbal Noun substitute, or ‘seedstock’ (grain set aside for planting in the following year). There are also true (and phonologically impeccable) Verbal Nouns tǒ-y ‘sowing’, jǒn-Ø

‘healing’, and jǒw-Ø ‘running’. These are used, for example, in Verbal Noun complements (§17.4). tǒy tó:- ‘sow (seeds)’ is distinguished from tǒy tó:- ‘vomit’ (629.e); the audible difference is o versus ɔ in the noun.

Irregular cases with segmental differences between noun and verb are in (633).

(633) Irregular

a.	gá:já:dù lár vêl	gá:jé- lár vâ-	‘have a chat’ (<Fulfulde) ‘use modern weapons’ (<Fr ?)
b.	ñǎ:	ñé:-	‘eat a meal’

In (634), the cognate nominal contains initial material not found in the verb. This may be a frozen compound initial (634.a), a reduplication (634.b), a modified noun (634.c, cf. pí rú ‘white’ and ñǎ: ‘meal’), or a perhaps segmentable initial à- (634.d).

(634) Morphologically complex cognate nominal

a.	à ⁿ à-dúrù à ⁿ á-árúwù à ⁿ à-tǒ: jì-ní: kò:-tǎŋá kò:-tógù	dùró áráwá tó: ní:- tǎŋá tógó	‘(thunder) rumble’ ‘(thunder) rumble loudly’ ‘(thunderclap) sound’ ‘sleep’ (cf. jì ré ‘eye’) ‘take a step’ ‘(horse) rear’
b.	bì-bégè	bégé-	‘hiccup’
c.	[ñǎ: pí rú]	pí ré-	‘cook the meal ñǎ: pí rú’
d.	à-pàlá à-bî n	pàlá- bîné-	‘cook the meal à-pàlá’ ‘roll on ground’

There are some cases of trisyllabic verb and nominal. Examples: álfàjára fájára ‘tell a riddle’, bídígà bì dì gé ‘do magic tricks’, tíⁿíwⁿú tíⁿíwⁿé ‘give formal counsel’, and several cases denoting noises like sógùrù sógóró ‘make a sudden noise’ and bógùrù bògòró ‘bellow’.

11.1.6.2 *Grammatical status of cognate nominal*

The status of the cognate nominal as verbal abstractive or as a more concrete noun varies from one combination to another. It may denote an event of the type expressed by the verb, or it may denote a prototypical product. In *tõy tó:-* ‘sow (seeds)’, for example, *tõy* can denote the seeds used for sowing, while in *jéy jèyé-* ‘fight, engage in a fight’, noun *jéy* has no concrete reference other than to an event of fighting itself.

In general, if the verb is capable of taking a (non-cognate) direct object, the cognate nominal functions as a **default**. Some verbs that also possess cognate nominals are illustrated in (635) with more concrete, non-cognate objects.

- (635) a. *ñú: jět-tì-Ø*
 millet harvest-Perf-3SgS
 ‘He/She harvested the millet.’ (*jèré*)
- b. *mí jèṅó-tì-Ø*
 1SgO cure-Perf-3SgS
 ‘He/She cured me.’
- c. *èmé wăt-tì-Ø*
 sorghum farm-Perf-3SgS
 ‘He/She raised sorghum.’ (*wàrá-*)
- d. [*èné mà ñù:-èjú*] *wòmó-tì-Ø*
 [Refl Poss millet.L-field] weed-Perf-3SgS
 ‘He weeded his millet field.’
- e. *kà:-ñĩyⁿ mĩ-n jàṅá-tì-Ø*
 mouth-food 1Sg-Dat ask.for-Perf-3SgS
 ‘He/She asked me for food.’

A cognate nominal is not normally found in the presence of a more concrete object. However, the two are not entirely mutually exclusive. In (636), the verb *jámá-* ‘betray’ has both an optional cognate nominal *jámá* ‘betrayal’ and a variable direct object, here ‘me’.

- (636) (*jámá*) *mí jámá-tù-bà*
(betrayal) 1SgO betray-Perf-3PlS
 ‘They betrayed me.’

My assistant preferred *mí jàmá-tù-bà* without the cognate nominal, but accepted (636) as grammatical, as did another informant. Similarly, with dative complement, the cognate nominal is optional in (637).

- (637) (jéy) mǐ-n jèyé-tì-Ø
 (fighting) **1Sg-Dat** **fight-Perf-3SgS**
 ‘He/She fought against me.’

There is an emphatic construction (‘you damn well won’t go inside’, etc.) where the verb must be accompanied by an object noun. If there is no concrete object NP, either a cognate nominal or a true Verbal Noun must be used. Some intransitives do not otherwise make use of cognate nominals, and therefore have no choice but to use their true Verbal Nouns. See §19.5.1.4.

11.1.6.3 Phrasal expansions of cognate nominals

The cognate nominal may be **expanded** into a larger NP. For example, the nominal may be descriptively modified by an adjective (638.a) or a relative clause (638.b), and/or it may be quantified by a numeral or other quantifier (638.c). I had no difficulty eliciting such examples, suggesting that the cognate nominal may denote a unit of the event type denoted by the verb.

- (638) a. [jòŋ èjú] mí jòŋó-tì-Ø
 [cure.L **good**] 1SgO cure-Perf-3SgS
 ‘He/She gave me a good cure (=cured me well).’
- b. [jèy dògò-gó-Ø] mǐ-n jèyé-tì-Ø
 [fight.L **finish-ImpfNeg-Ppl.Nonh**] 1Sg-Dat fight-Perf-3SgS
 ‘He fought a fight that doesn’t end (=a long-lasting fight) with me.’
- c. [jéy lèy] mǐ-n jèyé-tì-Ø
 [fight **two**] 1Sg-Dat fight-Perf-3SgS
 ‘He fought two fights (=he fought twice) with me.’

An (alienable) possessor may also be added to the cognative nominal. In (639.a-b), [X mà ì jé] íjé- with a possessor X has the sense ‘stand in the place (of)’, by extension ‘become like’.

- (639) a. [ú [áy-î-n bórù]]
 [2Sg [male-child-Sg uncle.HL]]
 [[áy-î-n dè:] mà ìjé] ìjé-w̃
 [[male-child-Sg father.HL] **Poss position**] **stand**.Impf-2SgS
 ‘You-Sg the boy’s paternal uncle, you will take the place of the
 boy’s father (in marriage negotiation).’ **2004.3.20**
- b. [tòy-măyⁿ mà ìjé] ìj-â:-Ø
 [seeds.L-dry **Poss position**] **stand**-Perf-3SgS
 ‘It has become like (lit. “taken the position of”) dry seeds.’ **2004.3.6**

In (640), adding a possessor to cognate nominal (VbIN) *tègú* ‘speaking, speech’ expresses the topic of discourse (the alternative would be a PP with postposition *kû:ⁿ* ‘about’). While 3Sg *wó* may be either an object or a possessor, the 1Sg counterpart is [*má tègú*] with unmistakable possessor pronominal.

- (640) [*wó tègú*] *tégé-ỳ*
 [3SgP **speech**] **speak**.Imprt.H-Pl
 ‘Speak-Pl about her!’ **2004.3.20**

A discourse-functional morpheme may be added to the cognate nominal, in topicalizing or other function. In (641), *kâ:ⁿ nè* ‘also now’ follows the cognate nominal.

- (641) [*bé àrⁿ-úm kùⁿ*], [*jáj kâ:ⁿ nè*] *jàṅá-bà*
 [3PIP man-Pl Def], [**begging too now**] **beg**.Impf-3PlS
 ‘Their (*ségé-m* caste) men, they do begging also.’ **2004.3.15**

A cognate nominal, whether alone or compounded to a Verbal Noun, may be topicalized, with a following resumptive Nonhuman pronominal that is focalized within its clause (642). Or the nominal may be directly focalized (643).

- (642) a. *sâl* [kó=ỳ *dèné-m̃*]
 prayer [Nonh=Foc want.Impf-1SgS]
 ‘Prayer [topic], that [focus] is what I like.
- b. *sâl-[sàl-ú]* [kó=ỳ *dèné-m̃*]
 prayer.L-[pray-VbIN] [Nonh=Foc want.Impf-1SgS]
 ‘Performing the Muslim prayer [topic], that [focus] is what I like.

- (643) [èjú bérè] jèr-Ø=î: jèré-bà
 [field in] **harvest-VbIN=Foc harvest.Impf-3PIS**
 ‘They will carry out the harvesting [focus] in the field.’ (jèrú) **2004.3.6**

A cognate nominal may co-occur with a distinct focalized constituent, such as a WH-interrogative.

- (644) a. [yǒ: lé] tégú tégè-Ø
 [where? in] speech speak.Perf.L-3SgS
 ‘Where [focus] did he/she speak?’
- b. mí=ȳ jèrú jèrè
 1Sg=Foc harvest(noun) harvest.Perf.L
 ‘It was I [focus] who did the harvesting.’

11.1.7 ‘Do’ or ‘be done’ (kárⁿá-)

The ‘do’ verb is kárⁿá-. It can be transitive ‘do, make’ or intransitive ‘be done, happen’. It is used as an anaphoric substitute for a more concrete verb (645.a). It also combines with an object NP or adverbial (645.b). It is used in “delocutive” VPs with an onomatopoeic or similar complement, as in (645.c). In cases like (645.b-c), it allows an otherwise unconjugatable form to be indirectly conjugated.

- (645) a. [cèr-Ø céré-bà] kárⁿá bèrè-gó-Ø
 [bite-VbIN bite.Impf-3PIS] **do** can-ImplNeg-3SgS
 ‘They (=other snakes) sting, but it (=viper) can’t do it (=sting).’
 (cèr-ú) **2004.3.5**
- b. [kó nò] cín kárⁿá mèyⁿ↑,
 [Nonh now] thus **do** and,
 ‘It (=cobra) now, (it) does like this (=raises its head) and ...’
2004.3.5
- c. mû: kárⁿá=kò wà
 (bleating) **do.Impf=be.Nonh** say
 ‘It (=billygoat) went “bleat!”’ **2004.4.17**
 [final quotative particle wà is due to occurrence in a tale]

French verbs of the *-er* conjugation are borrowed in a form ending in ê: that is treated as a noun, like ámbárkê: ‘embark’ (French *embarquer*) with kárⁿá- added to permit conjugation (646).

- (646) kò-rú [ámbarékê: kárⁿá] fàrá:nsì yà:-bà
 Nonh-Inst [embarcation do] France go.Perf.L-3PIS
 ‘With that, they embarked (by ship) and went to France.’ **2004.4.21**

However, some French borrowings are directly inflectable verbs: átáké- ‘attack’ in e.g. átáké-sà-bà ‘they attacked’.

kárⁿá- is distinct from (unnasalized) kàrà, a defective verb used with a preceding causative (§15.1.11).

11.2 ‘Be’, ‘become’, and other statives

Under this rubric I consider a range of defective verbs, quasi-verbs, clitics, and morphologically regular verb stems that have stative (and inchoative) senses, revolving around ‘be’ and ‘become’.

Defective verbs (with meanings like ‘have in one’s possession’ and ‘be sitting’) have incomplete paradigms. For example, in positive clauses they occur only in the unsuffixed Perfective (L-toned sem, no AN suffix). See §11.2.4 (stance verbs) and §11.5.2 (verbs of possession). **Quasi-verbs** are a set of morphemes with shapes Cv- and Cvn- (not otherwise allowed for verb stems) that, like the defective verbs, fail to allow aspectual suffixation. Of the quasi-verbs covered in this section (§11.2), the locational-existentials wò- and kò are arguably pronominals rather than verbs morphologically (§11.2.2.2-4), while kùn- ‘be in’ is more verb-like (cf. kúnó- ‘put in’). These quasi-verbs have special Negative forms with suffix -ŕ- (postvocalic) or -v́ (postconsonantal).

Also covered here are the morphologically regular verbs bé:- ‘remain, happen’ and táǰá- ‘become, happen’ (§11.2.6.1-2) since they verge semantically on the other ‘be’-type elements treated here. There is also a section on the expression dî gè-lá- ‘doesn’t connect’ (§11.2.5).

≡ȳ ‘it is’ and allomorphs is a pure clitic. In addition, ‘be’ and ‘be in’ quasi-verbs are cliticized to a preceding word or particle under some conditions. The criterion for recognizing clitics is any telltale phonological interaction with the preceding element (§3.6).

11.2.1 Copula clitic 'it is ...' (≡y̌, ≡î:)

11.2.1.1 Unconjugated positive forms

This important clitic is used in the 'it is Y' construction, identifying or describing a contextually understood (but unexpressed) referent, which may be concrete (a person or object) or abstract (e.g. a situation). This may be expanded into 'X is Y', where a subject (or topic) X is further identified or described. The clitic is essentially a copula, and it is functionally distinct from the 'be' quasi-verbs that are used in existential and locational functions ('there is X', 'X is [here/there]'). Most often it is unconjugated, though the "unconjugated" form could be taken as having (zero) 3Sg agreement. This subsection covers positive unconjugated forms; following subsections present overtly conjugated forms, and negative counterparts of both types. For the use of the clitic in focalization constructions, see §13.1.

The clitic may take the surface forms ≡y̌, ≡y̌ⁿ, ≡î:, and ≡î:, depending on what segment the preceding word ends in, whether the nearest consonant to the left is nasal or nasalized or not, and on what the immediately preceding tone is. The key allomorphic division is between postvocalic ≡y̌ (also used after {y yⁿ}) and postconsonantal ≡î:. For the phonology, see §3.6.1.

The 'it is Y' construction is illustrated in (647).

- (647) [ɔwⁿð-săyⁿ kùⁿ] [à-n≡î: dèy], [àrⁿà-lògú lè]
 [cemetery Def] [man-Sg=**it.is** if], [male.L-drum.style Instr]
 kó≡y̌ yă:-bà⇒, [ñě-n=î: dèy]
 Nonh=Foc go.Impf-3PIS, [woman-Sg=**it.is** if]
 [yà:-lògú lè] yă:-bà⇒
 [female.L-drum.style Instr] go.Impf-3PIS
 '(In) the cemetery, if it (=the dead person) is a man, the male drum style, that (drumstyle) is what they (=tomtom beaters) will go with; if it is a woman, the female drum style is what they will go with.' (ă-n, ñě-n)

In (647), from a general text about mortuary practices, prior discourse has made it clear that an unspecified person has died. The conditional à-n≡î: dèy might be more fully glossed as 'if (the situation is that) it is a man' or 'in the event that it is a man' (French *s'il s'agit d'un homme*). The relevant passage is followed by the parallel 'if (it is the situation that) it is a woman'. There is thus here, as often (especially in conditional antecedent contexts), an ambiguity as to whether the copula is predicated of a referential (though unexpressed) entity, or whether the copula has scope over an entire proposition, which can then be analysed as a factive complement ('it's the case that [...]'); see §17.3.

Further examples of the ‘it is Y’ construction: (392.a) and (499) (‘it’s an obligation’ = ‘must’ or ‘certainly’), (393) (‘if it’s [=if we’re talking about] the past’), (452.c) (‘if [the situation is that it’s] in the sauce pot’), (668) in §11.2.2.2 (‘if it’s [=if we’re talking about] (making) ridges’), (975) in §16.1.3 (‘if it’s [=if we’re talking about] birds’), (976) in §16.1.3 (‘it’s the truth’).

The ‘**X is Y**’ construction with two overtly expressed discourse referents is illustrated in (648). One could argue that the first NP is a presentential topic NP, in which case ‘X is Y’ is really ‘(as for) X, it is Y’, and the two-NP construction reduces to the single-NP version described above.

- (648) a. tàrà-nòwⁿó [cè: pòrbá]=ȳ
 collective.hunt.L-meat [thing.L collective]=it.is
 ‘Meat from a collective hunt is everyone’s property (=belongs to everyone).’ **2004.3.3**
- b. [î-n năn-tù-bà dèy]
 [child-Sg bear-Perf-3PIS if]
 kòn-cěj-ú [sèrèwé lè=y]
 navel.L-cut-VbIN [knife with=it.is]
 ‘When they bear a child (=a child is born), cutting the navel (=umbilical cord) is with a barber’s knife.’ (nàⁿá-) **2004.3.12**

Another example is (1010) in §17.1.5 (‘this place is my livelihood’).

An independent pronoun may be the complement of =ȳ (649). The clitic may also take a **PP** or other adverbial as its complement (650).

- (649) [wò ké] mí=ȳ là:
 [3Sg Topic] 1Sg=it.is Neg
 ‘He/She is not me.’ (for là: see §11.2.1.3, below)
- (650) [ámà jé]=ȳ dèy
 [God for]=it.is if
 ‘if it’s for (=in the name of) God (=unremunerated)’ **2004.4.5**

11.2.1.2 *Conjugated forms*

When the first argument in the ‘X is Y’ construction is expressed by a noun-headed NP, one could argue that it is a topic phrase, perhaps pre-sentential. However, it is possible to **conjugate** =ȳ to agree with a subject, showing that the first argument can in fact be grammatically part of the clause containing the clitic and the second argument. While =ȳ is the default form of the clitic, in the

conjugated system it can function as the 3Sg (including Nonh) subject form. The paradigm is given in (651). There is no specifically Nonhuman form.

(651) category	postconsonantal		postvocalic
	F-final stem	other stem	(and after y, y ⁿ)
1Sg	≡ùm	≡ûm	≡m̃
1Pl	≡î:	≡î:	≡ỹ
2Sg	≡ù:	≡û:	≡w̃
2Pl	≡î:-bè	≡î:-bè	≡ỹ-bè
3Sg	≡î:	≡î:-Ø	≡ỹ-Ø
		[≡w̃-Ø occasionally added]	
Nonh	≡î:	≡î:-Ø	≡ỹ-Ø
		[≡k̃ occasionally added]	
3Pl	≡î:-bà	≡î:-bà	≡ỹ-bà

In the **postvocalic** forms (rightmost column), we observe the ≡ỹ of the 'it is' clitic in the 2Pl, 3Sg/Nonhuman (zero suffix), and 3Pl forms. These involve simple addition of the regular pronominal-subject suffix to the postvocalic allomorph of the clitic. By contrast, the 1Sg, 2Sg, and (ambiguously) 1Pl forms are reduced to the segmental form of the pronominal-subject suffix (atonal -m, -w, -y), but acquire the L-tone of the (segmentally deleted) ≡ỹ clitic. Perhaps the historical driver of this reduction came in the 1Pl, whose original *≡ỹ-ỹ may have been the first conjugated clitic to reduce to just a consonant.

The **postconsonantal** forms show similar patterns. For the special L-toned forms used when the preceding word ends in an F-toned syllable, see Clitic <LHL>-Reduction (155) (§3.7.4.7). The F-toned conjugated clitics used after other preceding words can be taken as basic. This still leaves us with two distinct clusters. 3Sg and Nonhuman ≡î: is phonetically identical to the unconjugated clitic (postconsonantal allomorph), and may be represented as ≡î:-Ø. 3Pl ≡î:-bà and 2Pl ≡î:-bè simply add (syllabic) pronominal-subject suffixes to this.

The other cluster centers around the 1Sg and 2Sg, with 1Pl again ambiguous. 1Sg ≡ûm could be derived from /≡î:-m/ by amalgamating the tone of the clitic with the segmental form of the pronominal, hence /≡m̃/. In postconsonantal position, this requires one further step, an allomorphic vocalic extension to ≡ûm. Compare postvocalic Sg -n and Pl -m with adjectives, but postconsonantal -in and -um with -vC shape (§4.1.1). The conjugated 2Sg clitic likewise is derived as follows: /≡î:-w/ > /≡w̃/ > /≡ûw/. However, it needs a final rule, Monophthongization (93) to ≡ù:, see §3.5.7.2. The 1Pl postconsonantal form, though homophonous to the unconjugated form (and therefore also to the

3Sg and Nonhuman form), can be derived in a manner parallel to that of the 2Sg form, ending with Monophthongization: /≡î:-y/ > /≡ÿ/ > /≡îy/.

It is possible to add a cliticized form of the ‘be’ quasi-verb after ≡ÿ, instead of the conjugated forms given above. In practice, this is uncommon, and is chiefly implemented with 3Sg ≡wð-Ø, hence ...≡ÿ≡wð-Ø. In effect, this provides the 3Sg with a conjugated form of ≡ÿ that is audibly distinct from the unconjugated form. See (676) in §11.2.2.3 for ≡ÿ≡wð-Ø.

The conjugated variants undergo the same tone rules that apply to unmarked ≡ÿ. Examples with ä-n ‘man’, î-n ‘child’, their plurals àrⁿ-úm and úrⁿ-ùm, the woman’s name pàntá (singular only), and the political-party name Adema (plural), are in (652).

(652)	category	‘man/men’	‘child/children’	‘Fanta/Adema’
a.	1Sg	àn≡ûm	î-n≡ù-m	pàntá≡m̃
	2Sg	àn≡û:	î-n≡ù:	pàntá≡w̃
	3Sg	àn≡î:	î-n≡î:	pàntá≡ÿ
b.	1Pl	àr ⁿ -úm≡î:	úr ⁿ -ùm≡î:	ádémá:≡ÿ ⁿ
	2Pl	àr ⁿ -úm≡î:-bè	úr ⁿ -ùm≡î:-bè	ádémá:≡ÿ ⁿ -bè 3Pl
	3Pl	àr ⁿ -úm≡î:-bà	úr ⁿ -ùm≡î:-bà	ádémá:≡ÿ ⁿ -bà

Examples of the inflected-clitic construction are in (653).

- (653) a. [bè ké] [nù-núwⁿð:·. dà:γá:·. fú:⇒]
 [3Pl Topic] [Rdp-daytime.Loc.HL night all]
 dãná-m]≡î:-bà
 [hunt.Impf-Ppl.Pl]≡it.is-3Pl
 ‘As for them [topic], by day and by night they are hunters.’
2004.3.16
- b. [mì ké] sàl-sálá-n≡ûm
 [1Sg Topic] prayer.L-pray.H-Ppl.Sg≡it.is.1Sg
 ‘I am one who prays (=a practicing Muslim).’ **2004.4.6**
- c. à-n pàṅá sán-ì n≡û:
 man-Sg.L power have-Ppl.Sg≡it.is.2Sg
 ‘You-Sg are a powerful man.’ (sà-)
- d. [ù ké] ú [ì nè [ànà wàγá]
 [2Sg.L Topic] 2Sg [person.L [village.L far]

yǎ:-rà-n]≡û:⇒, bù:dù-lúgúró-n≡û:
 go-Habit-Ppl.Sg]≡it.is.2Sg, money.L-seeK.H-Ppl.Sg≡**it.is.2Sg**
 '(They see that) as for you [topic], you are a person who is going to
 a distant city, (and) one who is seeking money (to pay for it).'

2004.5.1

11.2.1.3 'It is not ...' (≡ȳ là:)

The great majority of textual occurrences of là: occur in the combination [X≡ȳ là:] 'it is not X', where là: negates a predication with the 'it is' clitic ≡ȳ (or allomorph). cín≡î: là: 'it is not thus' is an example. Further examples, with an NP as complement of 'it is', are in (654); see also (310), (360.a.b), (491.c), (649).

(654) a. dǎrǒ≡ȳ là:↑, èw≡î: là:
 sale≡it.is Neg, purchase(noun)≡**it.is** **Neg**
 'It (=meat from hunt) is not for selling, (and) it's not for buying.'
 (ěw) **2004.3.1**

b. [î:ⁿ kò kúnò-Ø kùⁿ]
 [child.L NonhS.L put.Perf.HL-Ppl.Nonh Def]
 [î:ⁿ èj]≡î: là:
 [child.L good]≡**it.is** **Neg**
 'The grains that it (=millet ear) has put (=has grown), they are not
 good grains.' **2004.3.8**

A very common extension of [X≡ȳ là:] 'it is not X' is the conditional antecedent clause [X≡ȳ là: dèy] 'if it is not X', with dey 'if' (§16.4). Freer translations, depending on context, can include 'unless it is X', 'other than X', 'instead of X', or 'far from (being) X'. The position of X may be filled by a sentence, NP, or adverbial. With accompanying negated clause, we get e.g. '[there is nothing] [if it is not X]', or more freely 'there is only X'. Some examples of [X≡ȳ là: dèy] are in (655); see also (392.b).

(655) a. [íné-m mǎrⁿó dè:≡ȳ là: dèy]
 [person-Pl be.togethercarry.Impf≡**it.is** **Neg** **if**]
 [íné-n túrú-n dé: gǎrⁿò-gó-Ø
 [person-Sg one-Sg carry be.able-ImpfNeg-3SgS
 'Other than people getting together and carrying (it), one person
 cannot carry (it).' **2004.3.20**

- b. cín tèmè-yⁿ
 thus find.Perf.L-1PlS
 pá=> sǎy=ỳ là: dèy
 recently only=**it.is** **Neg** **if**
 ‘That’s how we found it (=how things were in the past), a far cry
 from just recently’ **2004.3.20**
- c. [lá:-lá: kùⁿ], à-n=í: là: dèy,
 [first-first Def], man-Sg=**it.is** **Neg** **if**,
 ñě-m yà:-j-é
 woman-Pl go-ImpfNeg-2PlS
 ‘In the old days, if it was not men (=it was only men), women
 didn’t use to go.’ **2004.4.27**

With implied but unexpressed double-negative, [X=ỳ là: dèy] can mean ‘nothing if not X’, which logically reduces to ‘only (=exclusively) X’. The predilection in Jamsay for such double negations to express ‘only’ accounts for the relatively low text frequency of the ‘only’ particle sǎy (§19.4.1). In (656), for example, ‘eloping’ is not really a truth-conditional subset of ‘tying (=contracting) marriage’. The logically complete version would be ‘there was no contracting marriage; (there was no marriage) if it was not (=other than) eloping’, but the parenthesized clause is omitted.

- (656) yà:jì:-pàg-ú [gùj-Ø=í: là: dèy] kò:-ró
 marriage.L-tie-VblN [grab-VblN=**it.is** **Neg** **if**] be.Nonh-Neg
 ‘Contracting marriage (with the in-laws) didn’t happen, (there was
 nothing) unless it was eloping.’ (lit.: “contracting marriage, if it wasn’t
 eloping, there was none”) **2004.3.20**

When =ỳ has a nonzero pronominal suffix, Negative là: is **conjugated**. With nonzero pronominal suffix, both a long-voweled type with là:- and a short-voweled type with là- are attested.

Most examples have the **short-voweled** form là-. In this construction, the =ỳ clitic has the ‘it is’ (copular) function. The clitic may or may not also be conjugated. In (657), only the Negative morpheme is conjugated.

- (657) àyá [wò dè: bé]=ỳ wó ô:,
 husband [3SgP.L father.HL Pl]=Foc 3SgO give.Impf,
 [ñě-n ké] [èné mà í-n] ó: bèrè-gó-Ø,
 [woman-Sg Topic] [Refl Poss child-Sg] give can-ImpfNeg-3SgS,
 kú:ⁿ=ỳⁿ là-w
 head=**it.is** **Neg-2SgS**

'It's her fathers [focus] who give her (=bride) in marriage. The woman (=bride's mother) [topic], she cannot give her child (in marriage). You-Sg (=the woman) are not the authority.' **2004.4.11**

By contrast, in (658), both $\equiv\hat{y}$ 'it is' and the Negative morpheme are conjugated. Since $b\hat{a}:^n$ 'owner' is vowel-final, the relevant instance of $\equiv\hat{y}$ is phonologically fused with 2Sg suffix -w as $\equiv\hat{w}^n$ (then nasalized to $\equiv\hat{w}^n$).

(658) [jámá: $\equiv\hat{y}^n$] bá: $\equiv\hat{w}^n$ là-w tán
 [crowd= \equiv Foc] owner=**it.is.2SgS** **Neg-2SgS** only
 'if you-Sg are not a member of a crowd [focus], ...' (jámâ:, bâ: \equiv)
2004.3.11

The 2Pl counterpart given by my assistant is (659). He did not like a proposed version with double 2Pl marking (i.e. with $nám\equiv\hat{i}:-b\hat{e}$), suggesting that double conjugation is somewhat restricted.

(659) [jámá: $\equiv\hat{y}$] nám $\equiv\hat{i}:$ là-bè tán
 [crowd= \equiv Foc] owners=**it.is** **Neg-2PIS** only
 'if you-Pl are not members of a crowd [focus], ...'

If only the short-voweled type were found, one might use it as evidence that Negative là: was originally contour-toned. This would account for the long vowel before zero suffix, and the short vowel before a (moraic) suffix that could express the second tone component without lengthening the vowel; see Contour-Tone Mora-Addition (141).

The type with **long-voweled** là:- occurred in elicitation (660). My assistant consistently pronounced the long vowel, in contrast to the short vowel of the preceding examples. The 'it is' clitic itself is not conjugated here. I suggest that the difference between the two constructions is that in the long-voweled type, the clitic $\equiv\hat{y}$ is the Focus marker (or perhaps jointly 'it is' and Focus).

(660) a. tó:w $\equiv\hat{y}^n$ là:-bè dèy
 group=**Foc/it.is** **Neg-2PIS** if
 'if you-Pl are not (part of) a group [focus]'

b. ànsá:rá $\equiv\hat{y}$ là:-bà
 white.person=**Foc/it.is** **Neg-3PIS**
 'They are not whites [focus].'

The positive counterpart of (660.a) is tó:wⁿó≡ÿⁿ-bè dèy. (660.a) itself was volunteered by my assistant as a (polarity-reversed) paraphrase for textual example (661), where tó:wⁿó≡ÿⁿ is overtly focalized.

- (661) tó:wⁿó≡ÿⁿ bèrè-bè dèy
 group≡Foc obtain.Perf.L-2PIS if
 ‘if you-Pl have gotten (=put together) a group [focus]’ **2004.4.27**

11.2.1.4 Negative là

L-toned Negative là with short vowel is attested in (662).

- (662) bé [algérien bé] sày là
 3Pl [Algerian Pl] only Neg
 ‘They [topic], it is not only (=not all of them are) Algerians.’ **2004.5.2**

The sense here is compatible with ‘it is’ clitic ≡ÿ, but I hear no such clitic on sày (L-toned variant of sǎy ‘only’). If ≡ÿ were present, we would get sǎy≡ÿ, and the Negative would be long-voweled là:, as in (655.b), above.

L-toned là is perhaps identical morphemically to Negative lá- with statives (§11.4.3), rather than to the long-voweled là: found after ≡ÿ. If so, the tone-dropping is due to predicate defocalization, as is reasonable after a (naturally focal) ‘only’ phrase.

11.2.2 Existential and locative quasi-verbs and particles

11.2.2.1 Existential particle (yé)

This is not an inflectable verb, rather a particle (or arguably an obligatorily chained quasi-verb) that precedes a few (quasi-)verbs expressing existence/location or possession.

The Existential particle is obligatory in **positive, unfocalized main clauses predicating existence or possession**. It is not used in negative counterparts of these clauses, and it is not used when a nonpredicative constituent is focalized. The relevant positive combinations are the possessives yé sà- ‘have’ (§11.5.1), yé jì nè- ‘have possession of’ (§11.5.2), yó=kùn- ‘be in’ (§11.2.3), and the existentials yó≡wò- ‘be (human)’ and yó≡kò ‘be (nonhuman)’ (§11.2.2.4). Note that the vowel shifts to ɔ (by idiosyncratic assimilation) when the following stem has a back rounded vowel. Examples are given in the sections referred to.

In the case of *jì né-*, *yé* is used in the possessive reading, but not in the non-possessive sense 'hold'.

I interpret Existential *yé* as indicating that the existential-locational or possessive quasi-verb is **not defocused**. *yé* is absent when there is a true focalized constituent. Therefore *yé* is absent in (663), where an interrogative element functions as focalized constituent.

- (663) a. *ǎ:≡ŷ ì jú jì nè*
 who?≡Foc dog hold.Perf.L
 'Who has a dog?'
- b. [*ì ñé jé*] ì jú jì nè-wⁿ
 [what? for] dog hold.Perf.L-2SgS
 'Why do you-Sg have a dog?'

When *yé* is present, *jì né-* in the sense 'have possession of' appears in L-toned unaffixed Perfective form. The other possessive and existential-locational quasi-verbs likewise occur in main clauses only in an L-toned form (*sà-*, *wò-*, *kò-*) interpretable as unaffixed Perfective. The unaffixed Perfective for other verbs is associated with the presence of a focalized constituent. This suggests that *yé* itself functions as a **default focalized constituent**, in the absence of a "real" focus.

yé is **absent in relatives**. This may reflect the general defocalization of elements within relatives. Compare the relative clause ('those who have ...') where 'have' is without *yé* in (664) with the immediately following clause ('if you-Sg have ...') where the same 'have' quasi-verb is preceded by *yé*.

- (664) *ì nè nùmò-bíré sá-m nè,*
 person.L hand.L-work **have**.HL-Ppl.Pl now,
 nùmò-bíré yé sà-w tàṅà dèy
 hand.L-work **exist** **have**.L-2SgS happen if
 'Now (as for) those who have a manual trade [topic], if you-Sg have a manual trade, ...' **2004.5.3**

Existential *yé* may have **originated as a demonstrative element**, cf. demonstrative adverb *yé-dì:*ⁿ 'over there' (§212.c). If so, it joins English *there* (as in *there is/are ...*) and a long line of other demonstrative adverbs that have evolved into existentials. There is another preverbal particle *yé* that seems to have reference-indexing (and mild presentative) function, used with any verb (§4.3.3). This particle may also have evolved from the same demonstrative element. Perfective suffix *-yè-/-yà-* on inflected verbs (§10.1.2.3) is probably unrelated.

yé is usually immediately adjacent to the verb, but if a direct object clitic intervenes between the two, as in yé kó jèrè-bà ‘they (have) kept it’ (674.a).

11.2.2.2 Locational quasi-verbs (wɔ̀- or kɔ̀, usually without yé)

To indicate that an entity is present in some location, one may use the **quasi-verbs** whose inflected forms are given in (665). The quasi-verb wɔ̀-, which takes subject suffixes for the full range of human referents, is formally an unsuffixed Perfective in defocalized L-tone form. This could be taken as evidence that the accompanying locational expression is treated as focal, even in the absence of a Focus clitic. Suffixally marked forms of the (positive) perfective system (-tì-, -sà-, -â:-, -jè-, -térè-) are not possible. Imperfectives are extremely rare, only a single instance of wɔ̀:-tɔ̀yɔ̀- occurring in my textual corpus; see (685) in §11.2.2.5, below.

(665)	category	form
a.	1Sg	wɔ̀-m
	1Pl	wɔ̀-y
	2Sg	wɔ̀-w
	2Pl	wɔ̀-bè
	3Sg	wɔ̀-Ø
	3Pl	wɔ̀-bà
b.	Nonh	kɔ̀

The Nonh form kɔ̀ is systematically distinguished from the (human) 3Sg form wɔ̀-Ø. Animals as well as plants and inanimates and abstractives require kɔ̀ (except where animals are personified in tales). I gloss kɔ̀ as ‘be.Nonh’, and wɔ̀- as ‘be.Hum’ in interlinears, since the nonhuman/human opposition is sharp here. Indeed, there is a striking resemblance between wɔ̀- and kɔ̀, on the one hand, and the pronouns wó (human 3Sg) and kó (Nonhuman).

An H-toned form wɔ̀- for the human quasi-verb is arguably lexically basic, though it actually occurs as such only in lexical-stem pseudo-participial wɔ̀-n (§3.7.1.1, §15.1.1.3).

Examples, illustrating the regular use of these forms **with overt locational expressions**, and without yɔ̀, are in (666).

(666)	a.	dúwán	wɔ̀-m
		Douentza	be.Hum-1SgS
		‘I am in Douentza.’	

- b. [àná bérè] wò-bà
 [village in] **be.Hum-3PIS**
 'They are in the village.'
- c. [kó àrgá lè] wò-y
 [NonhP side in] **be.Hum-1PIS**
 'We are on the side of (=among) them (=animals).' **2004.3.9**

Interrogative examples **with overtly focused subject**, one with and one without a locational adverbial, are in (667).

- (667) a. ǎ:≠y nì-dí:ⁿ wò
 who?=**Foc** here **be.Hum**
 'Who is here?'
- b. ì ñé≠y kò
 what=**Foc** **be.Nonh**
 'what is there (=exists)?'

The locational 'be' quasi-verbs may be stretched to take adverbial complements that are not literally locational. In (668), the reference is to fields with mounds in rows, rather than with long furrows bounded by ridges. Postposition *lè* can mean 'in' or 'with' (§8.2.1)

- (668) [nùmó mà wò-túmó]≠yⁿ dèy jùgó-w̃
 [hand Poss ridge=it.is if know.Impf-2SgS]
 [tèṅé-tèṅé lè] kò,
 [segment-segment with] **be.Nonh**,
 [sàrí: mà wò-túmó] tèṅé sà:-rá-Ø
 [plow Poss ridge] segment have-Neg-3SgS
 'You-Sg know that if it's [=if we're talking about] (making) ridges (in the field) by hand (i.e. with a hoe), it is segment by segment (small mounds in rows); (by contrast) a plow-made ridge has no segments (=it makes a continuous furrow).' **2004.3.7**

Relative-clause examples with H(H...)L tone, as usual for unsuffixed Perfective verbs, are in (669). In the absence of a nonzero subject suffix, the vowel of *wò-* or *kò* must be lengthened (Contour-Tone Mora-Addition (141)) to accommodate the contour tone.

- (669) a. [ànà mì wô:-Ø] lè
 [village.L 1SgS.L **be.Hum**.Perf.HL-Ppl.Nonh in
 ‘in the village where I am (living)’ **2004.3.2**
- b. [èjú kùn] dî:ⁿ kô:-Ø
 [dog Def] place.L **be.Nonh**.HL-Ppl.Nonh
 ‘where the dog is’
- c. ñè-m nì-dî:ⁿ wô-m
 woman-Pl here **be.Hum**.HL-Ppl.Pl
 ‘the women who are here’
- d. lù:rò kò-rú mðñú kô:-Ø kùn
 snake.L Nonh-Dat bad **be.Nonh**.HL-Ppl.Nonh Def
 ‘a snake that is nastier than it (viper)’ **2004.3.5**

Since Existential *yé* is not used in relative clauses, the difference between locational ‘be’ and existential ‘be’ is neutralized in relatives.

A **past time frame** can be specified by adding clause-final *jì:ⁿ* (§10.3.1).

- (670) gà:rú nì-dî:ⁿ yó≡wð-Ø jì:ⁿ
 last.year here **exist=be**.Hum-3SgS **Past**
 ‘Last year he was here.’

For specifically **future time reference**, an alternative expression must be used, e.g. with a regular verb like *témé-wⁿé-* ‘be found’.

A preceding Existential *yé*, in the assimilated form *yó*, is sometimes present in locational function (671). However, the combinations *yó≡wð-* and especially *yó≡kð* are more systematically used in existential function. There is, moreover, evidence that *yó* (i.e. *yé*) is associated with the absence of a focalized preverbal constituent (§11.2.2.1). Since *wð-* and *kð* as ‘be’ quasi-verbs are already in unsuffixed Perfective form (which is used for other verbs in focalization constructions), they cannot otherwise change in form to reflect the presence of a focalized constituent.

- (671) a. úrò yó≡wð-m
 house.Loc.HL **exist=be**.Hum-1SgS
 ‘I am/was at home’ **2004.3.2**

- b. [[kó kùⁿ] nám kâ:ⁿ nè] yó=wò-bà
 [[Nonh Def] owners also now] **exist=be.Hum-3PlS**
 'There are also those who are engaged in that (dry-season farming).' **2004.3.9**

wò- and kò may also be used in other types of predication. For example, they follow adjective stems in adjectival predicates (§11.4.1, below). They can also be used with numerical predicates, as in (672).

- (672) é [ñě-m năyⁿ] wò-bè dèy,
 2Pl [woman-Pl four] **be.Hum-2PlS** if,
 é năyⁿ cêw dî gî ré-bè
 2Pl four all make.noise.Impf-2PlS
 'If you are four women, your four will make a lot of noise (pounding grain).' **2004.4.8**

11.2.2.3 Cliticized =wò- or =kò after inflected verb or 'it is' clitic

Occasionally, cliticized =wò- or =kò is found **after an inflected verb**. A distinction must be made between constructions where the verb is inflected only for a marked AN category, and those where the verb has both AN (even if zero) and pronominal-subject inflection. The distinction is not audible for 3Sg subject.

Where a verb allows both active and resultative-stative interpretations of the Perfective, the resultative-stative sense verb may be guaranteed by adding =wò- 'be' (or nonhuman =kò). Compare (673.a) with (673.b). The latter has **double pronominal-subject inflection**.

- (673) a. íj-â:-m
 stand-Perf-1SgS
 'I am standing.'
- b. íj-â:-m=wò-m
 stand-Perf-1SgS=be.Hum-1SgS
 'I am already standing.'

=wò- or =kò (or reduplicated variant) may also be used after a marked Imperfective verb with suffix -tóyò- (§10.1.2.10). In this combination, **only the 'be' quasi-verb has pronominal-subject inflection** (674). The addition of the 'be' quasi-verb emphasizes prolongation of the activity. (674.a) has Cì-Reduplicated Perfective form wì-wò:- (§10.1.2.7). (674.b-c) are follow-up

elicited examples with unreduplicated quasi-verb and with no quasi-verb, respectively. (674.d) has unreduplicated *k̀̀* (in participial form *k̀̀ŵ:-Ø*). (674.e) has a 1Pl subject.

- (674) a. àrⁿ-úm yǎ: [kó k̀̀ⁿ] m̀̀rⁿó-bà [néyⁿ ké],
 man-Pl go [Nonh Def] be.together.Impf-3PlS [now Topic],
 [dà:yá=ỳ̀ là:⇒↑] [ǹ̀-núwⁿò=ỳ̀ⁿ là:] yé
 [night=it.is Neg] [Rdp-daytime.Loc.HL=it.is Neg] exist
 kó jèrè-bà, [jǎ:ⁿ-t́ỳ̀ ŵ:-ŵ:-bà]
 NonhO hold.Perf.L-3PlS, [dig-**Impf** Rdp-**be.Hum**.HL-3PlS]
 ‘The men will get together on it (=digging well) now. It doesn’t
 matter whether it’s night or daytime, they have stuck to it, they will
 continue digging.’ **2004.4.5**
- b. jǎ:ⁿ-t́ỳ̀=ŵ:-Ø
 dig-**Impf**=**be.Hum**-3SgS
 ‘He/She keeps digging.’
- c. jǎ:ⁿ-t́ỳ̀-Ø
 dig-**Impf**-3SgS
 ‘He/She is digging.’
- d. ǹ̀: gó:-t́ỳ̀ k̀̀:-Ø
 water.L go.out-**Impf** **be.Nonh**.HL-Ppl.Nonh
 [ĵi r̂é.: ǹ̀-bárⁿá.: fú:⇒] [ní:
 [rainy.season dry.season all] [water
 d̂i:ⁿ gó:=k̀̀-Ø] k̀̀-ru k̀̀:-ró
 place.L go.out.Impf=be.Nonh.L-Ppl.Nonh] Nonh-Dat be.Nonh-Neg
 ‘(As for) water that keeps emerging (from a spring) [topic], there is
 no place where water emerges in both the rainy season and the dry
 season.’ **2004.4.5 (emended)**
- e. háyè cín=î: kó b̂t-t́ỳ̀=ŵ:-y
 well thus=Foc NonhO work-**Impf**=**be.Hum**.L-1PlS
 ‘Well, that [focus] is how we’re working on it (=government).’
 (b̀̀ r̂é-) **2004.4.23**

The first segment of Text 2 has a verb with *-t́ỳ̀* followed by participial *ŵ:-Ø* in a temporal clause, with an intervening L-toned subject pronominal. Here the *ŵ:-Ø* is clearly not cliticized to the verb with *-t́ỳ̀*.

In (675), I take $m\grave{a}r^{\text{h}}\acute{o}$ in $m\grave{a}r^{\text{h}}\acute{o}\equiv w\grave{d}-y$ to be the unsuffixed Imperfective / $m\grave{a}r^{\text{h}}\acute{o}-L$ /, whose L-tone merges with that of the quasi-verb. Again, $w\grave{d}-$ but not the main verb is inflected pronominally.

- (675) $c\acute{i}n$ $m\grave{a}r^{\text{h}}\acute{o}\equiv w\grave{d}-y$
 thus be.together.Impf=**be.Hum-1PlS**
 'That is how we (=Dogon and Fulbe) co-exist.' **2004.3.10**

Now consider (676), where 3Sg $\equiv w\grave{d}-\emptyset$ 'he/she is' added to an 'it is ...' predication with clitic $\equiv \hat{y}$ (allomorph $\equiv \hat{i}$:). Parallel examples with e.g. 1Sg $w\grave{d}-m$ 'I am' after $\equiv \hat{y}$ were elicited, but it may be that the construction is mainly used with 3Sg $w\grave{d}-\emptyset$, which lacks a nonzero subject suffix following $\equiv \hat{y}$ 'it is'. In both examples, clitic $\equiv \hat{y}$ is added to a participle in agentive function.

- (676) a. [$w\acute{o}$ $n\grave{o}$] [[$\grave{e}n\acute{e}$ $m\grave{a}$ $d\grave{o}y\grave{d}-\acute{n}\check{e}-n$]
 [3Sg now] [[Refl Poss Dogon.L-woman-Sg]
 $m\grave{a}$ $t\acute{i}-t\acute{i}$ $r\grave{u}-y\acute{a}:-n$] $\equiv \hat{i}:\equiv w\grave{d}-\emptyset$
 Poss Rdp-message.L-go.H-Ppl.Sg] \equiv **it.is=be.Hum-3SgS**
 'She (=blacksmith woman) now [topic], she is the messenger of her (freeborn) Dogon woman.' **2004.3.13**
- b. [$d\acute{a}:\acute{r}\acute{a}$ $m\grave{a}$ \acute{i} $n\grave{e}$ $g\check{a}-n$]
 [clan Poss person.L old-Sg]
 [$k\acute{o}$ $d\grave{o}n\grave{o}-\eta\acute{o}-n$] $\equiv \hat{i}:\equiv w\grave{d}-\emptyset$
 [NonhO finish-Caus.Impf-Ppl.Sg] \equiv **it.is=be.Hum-3SgS**
 'The oldest man in the clan, he will be the one to bring it (=squabble) to an end.' ($d\grave{o}n\grave{o}-\eta\acute{o}-\grave{n}$) **2004.4.6**

Actually, (676.a-b) are syntactically ambiguous, since $\equiv \hat{y}$ (and allomorph $\equiv \hat{i}$:) can also function as the Focus clitic. I do not think that $\equiv \hat{y}$ has focalizing function here, but the possibility cannot be excluded. In (677), focalization is present ($c\acute{i}n$ 'thus' is commonly focalized). I therefore do not consider (677) with $\equiv k\grave{d}$ to be parallel to the preceding examples (676/a-b) with $\equiv w\grave{d}-\emptyset$.

- (677) $l\acute{a}:\acute{l}\acute{a}:$ $c\acute{i}n\equiv \hat{i}:\equiv k\grave{d}$ $j\acute{i}:\acute{n}$
 first-first thus=**Foc=be.Nonh** Past
 'Long ago, that [focus] is how it was.' **2004.3.13**

The **negative** counterparts of the positive forms given above are based on the irregular negative stems in (678). Existential $y\acute{e}$ ($y\acute{o}$) is absent in negative sentences. $k\grave{d}:-r\acute{o}-$ is common for human as well as nonhuman reference in existential (as opposed to locational) function.

- (678) a. ẁ̀:-r̀̀- 'not be' (human)
 b. k̀̀:-r̀̀- 'not be' (nonhuman, sometimes human)

The unusual combination of lengthened first vowel and Negative -r̀̀- (instead of the usual Perfective Negative -lí-) is elsewhere observed only with 'have' (positive -s̀̀-, negative s̀̀:-rá-, §11.5.1). These quasi-verbs are limited to the perfective system, so they allow no morphological distinction between Perfective Negative and Imperfective Negative. In this respect they are like adjectival predicates, which have a single Negative (not marked for aspect) -lá-. The phonological similarity between -r̀̀- and -lá- is historically suggestive. Examples are in (679).

- (679) a. [àná bérè] àrⁿ-úm k̀̀:-r̀̀
 [village in] man-Pl **be.Nonh-Neg**
 'There are no men in the village.'
- b. úrⁿ-ùm nì-dí:ⁿ ẁ̀:-r̀̀-bá
 child-Pl here **be.Hum-Neg-3PlS**
 'The children are not here.'

k̀̀:-r̀̀ in particular is very common in double negations of the type 'any place that he didn't go, it doesn't exist' = 'he went everywhere'. In this construction, k̀̀:-r̀̀ is usually generalized to human as well as nonhuman reference: 'anyone who didn't go, he/it doesn't exist (k̀̀:-r̀̀)' = 'everyone went'. See §14.1.2.

There is no causative of ẁ̀- or k̀̀ in any sense.

11.2.2.4 Existential quasi-verbs (k̀̀, sometimes ẁ̀-) with yó

The form k̀̀, which as a locational predicator requires nonhuman reference, is often extended to human categories in the 'there is/are' construction (existential). In positive main clauses, k̀̀ is cliticized to Existential yó (assimilated from yé, §11.2.2.1).

- (680) a. [àrⁿ-ùm tàrá yà:-lú-m]
 [man-Pl.L collective.hunt go-PerfNeg-Ppl.Pl]
 [úrò b́é:-m̀] yó=k̀̀
 [house.Loc.HL stay.Impf-Ppl.Pl] exist=be.Nonh
 'There are (some) men who do not go on the collective hunt (and) who stay at home.' **2004.3.3**

For human referent, $y\acute{o}=w\grave{o}$ - is also possible but is less common in texts than $y\acute{o}=k\grave{o}$. A textual example of 3Pl $y\acute{o}=w\grave{o}$ -bà is (681). Other forms include 1Pl $y\acute{o}=w\grave{o}$ -y 'we are (here)' and $y\acute{o}=w\grave{o}$ -m 'I am (here)'.

- (681) [pùlò-m jó:-m] $y\acute{o}=w\grave{o}$ -bà
 [Fulbe-Pl.L many-Pl] exist=be.Hum-3PlS
 'There are many (kinds of) Fulbe.' **2004.3.10**

A 3Pl suffix may be added to $y\acute{o}=k\grave{o}$, producing $y\acute{o}=k\grave{o}$ -bà. This is an optional form (attested but not very common in texts), referring to a nonhuman plurality (usually animate).

- (682) a. [[émé èjù-bómó] mà bèrê:] lù:ró $y\acute{o}=k\grave{o}$ -bà
 [[1PIP brousse] Poss in] snake exist=be.Nonh-3PlS
 'In our brousse (wilderness), there are some snakes.' **2004.3.5**
- b. [cì gè ñú: ñùnù-ηó=k\grave{o}-Ø
 [thing.L millet be.ruined-Caus.Impf=be.Nonh-Ppl.Nonh
 $y\acute{o}=k\grave{o}$ -bà
 exist=be.Nonh-3PlS
 'There are things that are harmful to millet.' **2004.3.7**

The negative counterparts are again $k\grave{o}$:-ró and $w\grave{o}$:-ró-, with "Nonhuman" $k\grave{o}$:-ró- often extended to humans.

- (683) a. ñú: $k\grave{o}$:-ró
 millet **be.Nonh-Neg**
 'There is no millet.'
- b. [àná bérè] î-n $k\grave{o}$:-ró
 [village in] child-Sg **be.Nonh-Neg**
 'There is no child (=there are no children) in the village.'
- c. nì-dí:ⁿ=ȳ $w\grave{o}$:-rò-bà
 here=Foc **be.Hum.L-Neg-3PlS**
 'They are not here [focus].'

An alternative (in some contexts) to the 'be, exist' quasi-verbs is $k\acute{a}r^{\text{a}}$ - (§11.1.7), here used intransitively, in the sense 'be done, be produced', as in (684).

- (684) [yògò nàṅúrⁿù] ñú: kárⁿá=kò
 [next year] millet **be.done**.Impf=be.Nonh
 ‘Next year there will be millet.’ (lit., “... millet will be made”)

11.2.2.5 Imperfective wó:- and kó:-

The ‘be’ quasi-verbs nearly always appear in unsuffixed Perfective form: in main clauses wò- and kò, in relative-clause participles /wô-/ and /kô-/. These are readily used for present as well as past time reference.

However, a single instance of a suffixally marked imperfective wó:-tóyò- turned up in a text (685.a), and a parallel form with nonhuman kó:-tóyò- was elicited (685.b).

- (685) a. [Agadès bérè] wó:-tóyò mèyⁿ
 [A in] **be.Hum**-Impf and
 ‘while (we were) staying in Agadès (city in northern Niger)’
2004.5.5
- b. [Agadès bérè] kó:-tóyò mèyⁿ
 [A in] **be.Nonh**-Impf and
 ‘while (it was) staying in Agadès’

11.2.3 ‘Be in’ (kùn-), ‘be on’ (nà:-)

kùn-, which is limited to the unsuffixed Perfective and to its negation, is irregularly related to the (mostly) regular transitive verb kúnó- ‘put’. The latter optionally reduces to H-toned kún- by Post-Sonorant Syncope in combinations with coronal-initial suffix, hence Perfective kúnó-tì - varying with kún-tì -. The transitive stem undergoes regular tone-dropping before negative AN suffixes, one of which has coronal-initial suffix, hence Perfective Negative kùnò-lí- varying with kùn-lí-. There is also another verb, kúrⁿó- ‘wear (garment)’ that syncopates to kún-, and its syncopated forms are homophonous to those of kúnó-. In spite of the surface kùn- in transitive kùn-lí-, intransitive kùn- ‘be in’ is always easily identified, since it takes no AN suffixes except in a (stative) Negative form kùn-ó- with LH tone contour.

In relatives, the participles of intransitive kùn- are Nonhuman kùn-Ø (819), human Sg kún-ì n (467.c) and human Pl kún-ùm (688).

Existential yé regularly precedes intransitive kùn- in positive main clauses in the absence of another focalized constituent. When the two are adjacent, the

pronunciation is $y\acute{o}=k\grave{u}n-$. Based on the vocalic assimilation (rounding), I treat this combination as cliticized, cf. $y\acute{o}=k\grave{o}$ and $y\acute{o}=w\grave{o}$ - with 'be' quasi-verbs.

$k\grave{u}n-$ is usually translatable as 'be in X', 'be put in X', or 'be included in X, be a part of X'. It requires a locational complement in the X role. The usual locational is a PP with $b\acute{e}r\grave{e}$ or $b\grave{e}r\hat{e}$: 'in, inside' (686.a-c), or sometimes with the all-purpose postposition $l\grave{e}$ in locative function (686.d). In free translation, it is sometimes more idiomatic to rephrase 'X be in Y' as 'Y have X in it' or the like (686.d).

- (686) a. $\grave{e}\tilde{n}\acute{e}$ [$\grave{e}\tilde{n}\hat{e}-\grave{u}g\acute{u}$ $b\acute{e}r\grave{e}$] $y\acute{o}=k\grave{u}n-\emptyset$
 chicken [chicken.L-coop in] **exist=be.in.Perf.L-3SgS**
 'The chickens are inside the chicken coop.'
- b. [$n\grave{i}-n\grave{o}:r^n\acute{o}$ $b\grave{e}$ $g\hat{a}:-\emptyset$]
 [Rdp-spider 3PLS.L say.Perf.HL-Ppl.Nonh]
 [$k\acute{o}$ $b\grave{e}r\hat{e}$:] $y\acute{o}=k\grave{u}n-\emptyset$
 [Nonh in] **exist=be.in.L-3SgS**
 'What they call "spiders" are in it (=millet).' **2004.3.8**
- c. [$\grave{u}r\grave{o}$ $p\acute{o}:r\acute{o}$ $b\grave{e}$ $m\hat{a}:-\emptyset$]
 [house.L first(adv) 3PLS.L build.Perf.HL-Ppl.Nonh]
 [[$\grave{a}n\grave{a}$ $k\grave{a}n\acute{a}$] $m\grave{a}$ $b\grave{e}r\hat{e}$:] $y\acute{o}=k\grave{u}n-\emptyset$
 [[village.L new] Poss in] **exist=be.in.L-3SgS**
 'The house that they built first is in the new village (=Dianwely Kessel).' **2004.3.11**
- d. [[$g\grave{a}m\grave{a}-n\acute{a}m$ $m\grave{a}$ $d\acute{i}g\acute{e}$] $l\grave{e}$]
 [[certain-Pl Poss thigh] in]
 $m\grave{a}l\hat{f}\grave{a}:^n-\acute{i}:^n\equiv\grave{y}$ $k\grave{u}n-\emptyset$ $j\grave{i}:^n$
 rifle-child=Foc **be.in.L-3SgS** Past
 'Bullets [focus] were in the thighs of some (of them).' (= 'Some of them had taken bullets in the thigh.') **2004.5.1**

The phrase [$d\check{o}y^n$ $l\grave{e}$] $s\grave{i}$ r $k\grave{u}n$, literally 'knife ($s\grave{i}$ r\acute{u}) that is on the hip', is lexicalized. It denotes the mid-sized knife regularly worn by men on a sheath tied to their belt cord at the hip.

The irregular **negation** of $k\grave{u}n-$ is $k\grave{u}n-\acute{o}$ -. The LH tone contour of this form distinguishes it from (positive) $k\acute{u}n\acute{o}$ - 'put' and its unsuffixed Perfective variants $k\grave{u}n\grave{o}$ - and (in perfective relatives) $k\acute{u}n\grave{o}$ -. As usual, Existential $y\acute{e}$ is absent from negative clauses.

- (687) [kò: fú:] [[cè: pósôŋ [kó bèrê:]
 [Nonh all] [[thing.L poison [Nonh in]
 kùn-ó-Ø] kò:-ró
be.in-Neg-Ppl.Nonh] be.Nonh-Neg
 ‘Everything (now) [topic], poison is in everything.’ **2004.3.8**
 (lit.: “...a thing that poison is not in, it doesn’t exist”)

A more figurative sense ‘(sb) be subject to (taxation)’ occurs in (688), from a passage about colonial taxation. Only villagers who had attained a minimum age were subject to the annual head tax.

- (688) [à-mâ:n bé] yó=kùn-bà, [à-mâ:n bé] kùn-ó-bá,
 [so-and-so Pl] exist=**be.in.L-3PlS**, [so-and-so Pl] **be.in-Neg**,
 [[[ì nè kún-ùm] mà lám-pò] mà dǎyⁿ]
 [[[person.L **be.in.HL-Ppl.Pl]** Poss tax] Poss limit]
 dǒg-â:-Ø dèy
 finish-Perf-3SgS if
 ‘(They would say:) “So-and-so (plural) are in (=subject to) it” (and
 “So-and-so (plural) are not in it.” When the full amount of tax of (=due
 from) those who were in it was completed (=paid), ... ’ **2004.4.22**

There is no morphological causative ‘cause to be in’. Transitive kún-ó- ‘put’ fulfills this semantic function.

A similar defective verb, not very common, is nà:- ‘be (up) on (e.g. roof, tree)’. The negative form is nà:-lá- ‘not be (up) on’. Compare the regular (and very common) transitive verb ná:ná- ‘put (sth) up on (sth)’.

11.2.4 Stative stance verbs dâ:ⁿ- ‘be sitting’, ùmò- ‘be lying down’

In active senses, ‘sit down’ is dǐ ñé- and ‘lie down, go to bed’ is ì ñé-. These are basically regular verbs with complete imperfective and perfective paradigms. One shared irregularity is that both have Imperative stems that preserve the LH tone contour of the lexical form, whereas other short-voweled C̀̀C̀́ bisyllables (except yàŋá- ‘look’) have HH-toned imperatives (§10.4.1). The Imperative stems are dǐ ñé and ì ñé.

A few examples involving dǐ ñé- ‘sit down’ will illustrate its basic regularity. (689.a) contains both an unsuffixed Imperfective dǐ ñé- and a suffixal Perfective -dǐ ñ-â:-. (689.b) has an L-toned unsuffixed Perfective, while (689.c) is a Perfective Negative.

- (689) a. [bé nè] yèré dǐ ñé-bà,
 [3Pl now] come **sit.Impf-3PlS**

yèré díŋ-â:-bà tánà: dèy, ...
 come **sit-Perf-3PlS** happen if, ...
 'They (=councilors) will come and sit down. When they have come
 and sat down, ...' **2004.3.10**

b. ní-dì :ⁿ yèré dó: dì ñè-bà
 here come arrive **sit.Perf.L-3PlS**
 'Here [focus] they (=Dogon ancestors) came and settled.' **2004.3.11**

c. dì ñè-lí-Ø
 sit-PerfNeg-3SgS
 'He/She did not sit down.'

In addition to the active intransitives *dì ñé-* 'sit down' and *ì ñé-* 'lie down', there are **special stative stems**. These stems are confined to the unsuffixed Perfective and the reduplicated Perfective, and have a stative-type negation with suffix *-lá-* (§11.4.3).

In most textual examples, stative *dà:ⁿ-* '**be sitting**' (i.e. 'be seated, be in sitting position') appears in the L-toned unsuffixed Perfective *dà:ⁿ-*, with a preceding constituent (such as a locational) that might be taken as focalized.

(690) a. ní-dí:ⁿ dà:ⁿ-bà
 here **sit.Perf.L-3PlS**
 'They are sitting here [focus].'

b. [émé jàmsăy bé=ÿ]
 [1Pl Jamsay Pl]
 yí-dí:ⁿ [ùjùbăy kû:ⁿ] dà:ⁿ-yⁿ
 here [country on] **sit.Perf.L-1PlS**
 'We Jamsay, here on this land [focus] we are settled.' **2004.3.11**
 [excerpt from (213)]

c. yǎ:-dì:ⁿ dà:ⁿ-Ø
 where?-place **sit.Perf.L-3SgS**
 'Where [focus] is he/she sitting?'

d. ă:=ÿ dà:ⁿ-Ø
 who?=Foc **sit.Perf.L-3SgS**
 'Who [focus] is sitting?'

See also (138.b-c), (213), (460.b), (519.b).

In relative clauses, we get the usual H(H...)L overlaid tone on the unsuffixed Perfective, hence F-toned *dâ:ⁿ*. Examples in (69a); see also (226.c), (864.d), (866.b).

- (691) a. [[kó kùⁿ] mà kû:ⁿ] *dâ:ⁿ-m* yó=kò
 [[Nonh Def] Poss on] **sit**.Perf.HL-Ppl.Pl exist=be.Nonh
 ‘There are those (people) who sit (=rely) on that.’ **2004.3.9**
- b. [dì:ⁿ ní èmè *dâ:ⁿ-Ø* lè]
 [place.L here 1PIS.L **sit**.Perf.HL-Ppl.Nonh in]
 ‘here in the place where we are sitting (=living)’ **2004.3.11**

Reduplicated Perfective *dì-dâ:ⁿ*- is used instead of unsuffixed Perfective *dâ:ⁿ*- in main clauses when there is no focalized constituent (692).

- (692) *dì-dâ:ⁿ-bà* sǎy
 Rdp-**sit**.Perf.HL-3PIS only
 ‘They are just sitting (=seated).’

I have one attestation of *dá:ⁿ*- with Imperfective *-tóγò-*, in a chain construction (693).

- (693) [jòwⁿlè ànà pǎyⁿ] *dá:ⁿ-tóγò* mèyⁿ, ...
 [Dianwely.L village.L old] **sit**-Impf and, ...
 ‘Sitting (=dwelling) in Old Dianwely, ...’ **2004.3.11**

Unlike *dì ñé-* ‘sit down’, which takes regular Perfective and Imperfective Negative suffixes, stative *dâ:ⁿ*- is negated by adding *-lá-*, a Negative suffix used with adjectival predicates and some other statives (§11.4.3)..

- (694) *nì-dí:ⁿ* *dâ:ⁿ-lá-bá*
 here **sit**.Perf.L-Neg-3PIS
 ‘They are not sitting here [focus].’

ùmò- ‘be lying down’ (i.e. ‘be in prone position’) behaves grammatically like *dâ:ⁿ*- ‘be sitting’. It occurs in the L-toned unsuffixed Perfective when a focalized constituent is present (695.a) and (460.a), in the reduplicated Perfective in the absence of a focalizable constituent (695.b), and in the H(H...)L-toned unsuffixed Perfective in relatives (695.c). It is negated by stative Negative *-lá-* (695.d).

- (695) a. [wò nâ:]≡yⁿ ùmò wá
 [3SgP.L mother.HL]≡Foc be.lying.down.Perf.L say
 'He said, "your mother [focus] is lying down (here)".' 2004.4.1
- b. ì-úmò-m
 Rdp-be.lying.down.Perf.HL-1SgS
 'I am lying down.'
- c. ì nè úmò-n kùⁿ
 person.L be.lying.down.Perf.HL-Ppl.Sg Def
 'the person who is lying down'
- d. ùmò-lá-Ø
 be.lying.down-Neg-3SgS
 'He/She is not lying down.'

Aside from 'sit' and 'lie down', the other major stance category is 'stand'. Here the verb ìjé- is used in both active and stative senses. Stative usage is illustrated in (227) and (866.c-e). Active usage ('stand up' or 'stop, halt') is illustrated in (463.b) and (639.a-b).

dè:né- 'put down, lay; put aside, store; make or have sit' is in part an irregular and frozen causative of dîjé- 'sit down' and dà:ⁿ- 'be sitting'. In form, it is probably related to dîjé- rather than dà:ⁿ- (whose regular causative would have been #dà:ⁿ-wⁿá-); see (531.b) in §9.2). I was able to elicit no causative based directly on stative ùmò- 'be lying down'. Again, the active rather than the stative verb is input to the causative: ìñé- 'lie down', causative ìñì-wⁿé- 'cause to lie down, put to sleep'.

11.2.5 'Doesn't connect' (dîgè-lá-)

dîgè-, which as a regularly inflected verb may be transitive 'join (at ends)' or 'chase away, follow', or intransitive 'be connected (at ends)', has an idiomatic negative form with -lá-. This combination means roughly 'it is not relevant', and more loosely 'it doesn't matter'. The use of the stative Negative -lá- sets this apart from the regular transitive or intransitive verb, which has the usual Perfective Negative -lí- and Imperfective Negative -gó-.

- (696) [àná mà ùrò-gǔn] èñé gó:-yà-Ø dèy,
 [village Poss house.L-behind] chicken go.out-Perf-3SgS if,
 yì lí wé mèyⁿ↑,
 stroll and

èñé	[[má èñé]=ỹ]	dì gè-lá-Ø
chicken	[[1SgP chicken]=it.is]	be.connected-Neg-3SgS
	[[má èñé]=ỹ là:]	dì gè-lá-Ø
	[[1SgP chicken]=it.is Neg]	be.connected-Neg-3SgS
kó	běj-jè-bà	dèy, láyá-bà
NonhO	get-RecPf-3PIS	if, hit.Impf-3PIS

‘If a chicken goes outside of the village, (circumcised boys) will go around, and it doesn’t matter if (they know) “it’s my chicken” or “it isn’t my chicken,” if they get it they will hit it.’ (bèré) **2004.3.18**

This *dì gè-lá-* may be conjugated pronominally, in the sense ‘(X) doesn’t care’.

(697) [mì nâ:] cé=ỹ dì gè-lá-bá,
 [1SgP.L mother.HL] possession=it.is be.connected-Neg-3PIS,
 [ù nâ:] cé=ỹ dì gè-lá-bá
 [2SgP.L mother.HL] possession=it.is be.connected-Neg-3PIS
 ‘They don’t care whether “it belongs to my mother” or “it belongs to your mother” (=they don’t care who it belongs to).’ **2004.3.18**

This stative *dì gè-lá-*, which may take a further pronominal-subject suffix as just shown, is distinguishable from *dì gè-l-á* ‘they did not connect’ or ‘they were not connected (=they were in a dispute)’. This latter form is the 3Pl subject form of *đìgè-lí-*, the Perfective Negative of the (non-stative) verb *đìgè-*.

11.2.6 Morphologically regular verbs

In this section I treat two morphologically regular verbs with senses ‘remain, happen’ and ‘become’ that verge semantically on the ‘be’ quasi-verbs discussed above.

11.2.6.1 ‘Remain, happen’ (*bé:-*)

This regular verb may be glossed ‘remain, stay’ or ‘live, dwell’ as a continuing process (rather than as an intrinsic state), or ‘happen, occur’ with reference to states of affairs.

(698) a. [àⁿ-ùm pómúrⁿú] [úrⁿ-ùm mà bèrê:]
 [man-Pl.L Ongoiba] [child-Pl Poss in]

tàrá yà:-gó-m bé:-yà tájà: dèy ...
 collective.hunt go-PerfNeg-Ppl.Pl **remain**-Perf happen if ...
 'Among the male Ongoiba (clan) children, if there happen to be any
 left who are not on their way to the collective hunt, ...' **2004.3.3**

- b. [...], bè:-tè-lí-Ø
 [...], **happen**-ExpPf-PerfNeg-3SgS
 '(that a leopard appear) has never happened.' **2004.3.2**
- c. [lóγð sà:-rá-Ø] kò bé:-yà-Ø dèy, ...
 [dirtiness have-Neg-3SgS] NonhS.L **remain**-Perf-3SgS if, ...
 'if it (=place) remains without dirtiness' **2004.3.6**
- d. [ñě-n kùⁿ] [àⁿà-kùjú pé^r]=í:
 [woman-Sg Def] [year ten]=Foc
 [èné bé úrò] bē:-Ø kâ:ⁿ
 [Refl PIP house.Loc.HL] **remain**.Impf-3SgS even
 'The woman [topic], even if she will remain in her ("their") own
 house (=with her parents) for ten years, ...' **2004.3.20**

For bé:≡kò 'it may be that ...' with factive complement, see end of §17.3.2,
 and (501-2) in §8.5.5.

There is an infrequent nominal counterpart bé:, illustrated in (699).

- (699) ă-n [ñě-n lè] cí-céw mà
 man-Sg [woman-Sg with] Rdp-sameness Poss
 bé: kâ:ⁿ né, à:-lí-Ø
 being too now, be.caught-PerfNeg-3SgS
 'A man's and a woman's being the same, it isn't right.' **2004.3.3**

An alternative nominal is bé:-gú '(manner of) existence', cf. (188.b).

- (700) [[bé.: dɔγð-m.:] mà gǎnè mà bé:-gú
 [[3Pl Dogon-Pl] Poss among Poss **existence**
 mà kû:ⁿ èmě-n tégé
 Poss on] 1Pl-Dat speak.Imprt
 'Tell us about the way they (=Fulbe) and Dogon exist together.'
2004.3.10

There is a causative bè:-wé- 'cause to (=let) remain'.

11.2.6.2 ‘Become, happen’ (tájá-)

The verb tájá- is a basic ‘become’ verb, with nominal complement.

- (701) ðyð-í-n tájá-wⁿ dèy
 chief-child-Sg become.Impf-2SgS if
 ‘if you-Sg become a noble’ **2004.3.12**

A morphologically unusual form tájà:, with HL tone contour and long vowel, is used in the sense ‘it is/was the case that ...’ or ‘it happens/happened that ...’. The complement is a factitive complement in main-clause form (702).

- (702) [dùŋ-yàrá gó:-yà] tájà: mà ?
 [lion go.out-Perf] happen Q
 ‘Did it (ever) happen that a lion appeared?’ **2004.3.2**

The majority of occurrences of tájà: are in the combination [...] tájà: dèy ‘if it happens/happened that ...’, a high-frequency alternative to simple [...] dey ‘if ...’ as conditional antecedent clause. For more examples, see (978) in §16.1.3.

tájá- may also mean ‘cross (e.g. road)’. By extension, it may mean ‘(bride) move from her home to her husband’s home’ (accompanied by a parade of villagers).

Causative táná-ŋá- may mean ‘transform, turn X into Y’ (semantically a good semantic for ‘become’), or ‘(people) transport (bride) to her husband’s home’. In the senses ‘light (a fire)’ and ‘distribute, give to all’ I transcribe tánáŋá- without a hyphen, since the semantic relationship to tájá- here is opaque.

11.3 Quotative verb and quasi-verb

‘Say ...’, with a preceding quotation, may be expressed by the (more or less) regular verb gá:- or the defective quasi-verb jè-, which are discussed below. There is also an uninflectable clause-final quotative clitic wa (§17.1.3).

11.3.1 ‘Say’ (gá:-)

The stem that has the most features of a regular verb is gá:- (contextual variant gá-). It is the form regularly used in positive imperfective-system verbs, and in both the Perfective Negative and the Imperfective negative. The imperfective is

gâ- with short vowel, but the suffixless 3Sg is gâ:-Ø after Contour-Tone Mora-Addition (141).

- (703) a. núŋò gâ:-lí-Ø
 Dem **say**-PerfNeg-3SgS
 ‘He/She did not say that.’
- b. dɔ̃yɔ̃-m sùm-pégù gâ:-Ø yó=kò
 Dogon-Pl larva.sp. **say**.Perf.HL-Ppl.Nonh exist=be.Nonh
 ‘There exists what the Dogon people call “sumpegu”.’ **2004.3.8**
- c. núŋò gá-w̃
 Dem **say**.Impf-2SgS
 ‘You-Sg will say that.’
- d. gâ:-l-á
 say-PerfNeg-3PlS
 ‘They did not say.’

More examples of short-voweled Imperfective /gâ-/ are 3Pl gá-bà (403), 1Pl gá-ỹ (999.c), and Plural participle gá-m̃ (842).

For gâ:-lú-m ‘did I not say?’ as a backchannel-checking phrase, see §19.6.

There is a Verbal Noun gâ-ỹ ‘saying’, and a causative gá:-wá- ‘cause to say’; both are (morpho-)phonologically regular from gá:-. Long-voweled gâ:- also occurs in the bare stem used in verb chains (704).

- (704) “ ... ” gá: b̃èré-m̃
 “ ... ” say be.able.Impf-1SgS
 ‘I can say that ...’ **2004.3.7**

A form, often with 3Pl subject, of gá:- ‘say’ may follow a conditional antecedent or similar clause, with no obvious reference to an actual speech event (or thought).

A short-voweled form gá or gâ occurs at the end of some clauses, sometimes but not always with some reference to an act of speaking; see §17.1.5.

11.3.2 Perfective ‘say’ (jè-)

jè- ‘say’ is inflectable only in the (positive) unsuffixed Perfective, which accounts for its L-tone. It has the full set of (human) pronominal subject

suffixes (1Sg *jè-m*, 1Pl *jè-y*, 2Sg *jè-w*, 2Pl *jè-bè*, 3Sg *jè-Ø*, 3Pl *jè-bà*). Especially the 3Sg and 3Pl forms are often omitted in favor of Quotative particle *wa*.

The unsuffixed Perfective is associated with verb (or clause) defocalization (§10.1.2.2). One could perhaps take the quotation preceding *jè-* as the focus (when there is no other focalized constituent).

- (705) a. *ì ñé=ỳⁿ jè-w*
 what?≡Foc **say**.Perf.L-2SgS
 ‘What did you-Sg say?’
- b. [*ènέ mà èjú mà tòjó*]
 [Logo Poss field Poss compensation]
 [*hínnè má:n]=ì: jè-Ø*
 [amount such-and-such]=it.is **say**.Perf.L-3SgS
 ‘He has (just) stated that the amount of compensation of (=for damages to) his field is such-and-such an amount.’ (*mâ:n*)
2004.3.10
- c. [*jémè-n nè*] *yǒ:-jì n [í:rⁿé kùⁿ] bì rê:-Ø*
 [blacksmith-Sg now] how? [metal Def] work.Impf-3SgS
mà↑ jè-bà dèy
 Q **say**.Perf.L-3PlS if
 ‘If they say (=ask), how does a blacksmith work the iron, ...’
2004.3.12
- d. [*ú dènê:-Ø jè-Ø tán*]
 [2SgO want.Impf-3SgS **say**.Perf.L-3SgS only]
ù-rú dènέ-m
 2Sg-Dat want.Impf-1SgS
 ‘If she (=my daughter) says she loves you-Sg, then I (too) love you.’ **2004.3.20**

In a relative, we get the usual H(H...)L-toned form of the unsuffixed Perfective, namely /*jê-*/. Before zero suffix, it is automatically lengthened to *jê:-* by Contour-Tone Mora-Addition (141).

- (706) a. *cè: ù jê:-Ø*
 thing.L 2SgS.L **say**.Perf.HL-Ppl.Nonh
 ‘what you-Sg said’

- b. nì :ñè ... èmè jê:-Ø
 gear.L 1PIS.L say.Perf.HL-Ppl.Nonh
 ‘the gear that we said ...’ **2004.3.24**

One may substitute gâ:-Ø ‘said’ or tégè-Ø ‘spoke’ for jê:- in (706) without changing the sense. However, because gâ:- is an H-toned monosyllabic stem, the form gâ:-Ø is ambiguous between an unsuffixed Perfective with overlaid H(H...)L tone, and an unsuffixed Imperfective with final-syllable F-tone.

Expected 3Pl jè-bà is sometimes simplified to jè-Ø when it immediately follows another verb with 3Pl suffix (707). Perhaps this reflects an early stage of reduction from an inflectable stem to a quotative enclitic particle similar to wa.

- (707) íné-m [émé gâ:-ná bèrè-bà] jè-Ø
 person-Pl [1PIO go.past-Caus can.Impf-3PIS] say-3SgS
 ‘Some people said they could take us across (the border).’ **2004.5.5**

While H-toned inflected #jé- ‘say’ does not occur, an H-toned jé that is probably identical historically to this ‘say’ verb is common as a temporal-clause subordinator, either as simple jé or, more often, in the combination jé mèyⁿ (§15.2.2.2). In (1236) in Text 2, jé is followed by tègè-Ø ‘he spoke’ in a context where ‘he said’ would be reasonable; here it is difficult to determine whether jé should be taken as the ‘say’ verb (in H-toned bare-stem chaining form) or as the subordinator elsewhere used with mèyⁿ.

Another form that is probably related historically is Purposive-Causal postposition jé, which has some verb-like properties (§8.4). Recent Perfect suffix -jè- on verbs (§10.1.2.6) is also suggestive, but some other Dogon languages (e.g. Beni) have a phonologically similar verb meaning ‘finish (doing)’ that is closer to the semantics of the perfect, and this may be the immediate source.

11.4 Adjectival and adverbial predicates

11.4.1 Positive adjectival/adverbial predicates with cliticized ‘be’ quasi-verb

Adjectives differ in several respects from the class of stems that I refer to in this grammar as adverbials. Above all, **adjectives** allow audible suffixation for human categories (Sg -n, Pl -m) when they occur in modifying function. They also occur in various comparative constructions, some of which involve tone-contour overlays. Adverbials are invariant in form.

Our concern here is with **predicative** constructions, which treat the two alike (in positive utterances). An adjective takes invariant form; in particular, it occurs without a Singular or Plural suffix. The adjective or adverb is followed by a ‘be’ quasi-verb, which is cliticized to the adjective or adverbial. (For a different construction without quasi-verbs, used in the presence of a preceding focalized constituent, see the immediately following section below.)

In **positive** predications the ‘be’ quasi-verb for Nonhuman subject is $\equiv k\delta$. For human subject, it is based on $\equiv w\delta$ -, with a further nonzero inflectional suffix if the subject is other than 3Sg. These quasi-verbs are morphologically equatable with unsuffixed Perfectives, and therefore occur in **L-toned** (defocalized) form. However, they denote stable qualities and states. (708.a-c) are adjectival, while (708.d) is based on an adverbial.

- (708) a. $\acute{e}r \equiv k\delta$
 sweet \equiv be.NonhS
 ‘It is sweet (=it tastes good)’. ($\acute{e}r\grave{u}$)
- b. $g\grave{u}r\acute{u} \equiv w\delta$ -bà
 long \equiv be.Hum-3PIS
 ‘They are long (=tall).’
- c. $t\check{e}y^n \equiv w\delta$ -m
 small \equiv be.Hum-1SgS
 ‘I am small.’
- d. $d\acute{e}m \Rightarrow \equiv w\delta$ -Ø
 straight \equiv be.Hum-3SgS
 ‘He (=his body) is straight.’

In **comparatives**, a predicative adjective may appear clause-finally without a ‘be’ quasi-verb (and without a ‘more’ operator), but with its lexical tones. This form is conjugated for subject pronominal category, e.g. 1Sg $b\grave{e}$ -rú $g\grave{u}r\acute{u}$ -m ‘I am taller than they (are)’. For discussion and examples see §12.1.1.

11.4.2 Defocalized L-toned adjectival predicates without ‘be’

A predicative adjective may also appear clause-finally, in L-toned form without the ‘be’ quasi-verb, when it is **defocalized**. This is regular when there is an overt focalized constituent, such as a WH-interrogative. The ‘be’ quasi-verb is omitted. The defocalized L-toned bare adjective is similar in form and function

to the unsuffixed Perfective of regular verbs, which is also L-toned and morphologically simplified (§10.1.2.2).

- (709) a. wó≡ŷ gùrù
 3Sg≡Foc **long.L**
 ‘It’s he/she [focus] who is long (=tall).’ (gùrú)
- b. ǎ:≡ŷ gùrù
 who?≡Foc **long.L**
 ‘Who [focus] is long (=tall)?’ (gùrú)
- c. yók̀k̀d̀ ògù mà⇒
 which? **fast.L** Q
 ‘Which one is fast(=er)?’ **2004.4.2**
- d. yǎ:-jǐn gùrù-w
 how? **long.L-2SgS**
 ‘How are you-Sg long (=tall)?’

In (709.a-c), the subject is focalized, so there is no pronominal-subject suffix (§13.1.2). In (709.d), a non-subject constituent is focalized, so a pronominal-subject suffix is present.

The defocalized L-toned form of predicate adjectives is also used in symmetrical comparatives with jín ‘like’; see §12.2.1.

Numerals do not normally occur in this predicative form. See, however, (308).

11.4.3 Negative adjectival and stative predicates (-lá-)

The usual **negative** counterpart of ≡k̀d̀ and ≡ẁd̀- in adjectival predicates is -lá-, which (like other Negative inflectional suffixes) induces tone-dropping on the preceding stem. The ‘be’ quasi-verb is omitted.

- (710) a. èl-lá-Ø
 sweet.L-**Neg**-3SgS
 ‘It isn’t sweet (=it tastes bad).’ (érù)
- b. gùl-lá-bá
 long.L-**Neg**-3PlS
 ‘They aren’t long (=tall).’ (gùrú)

- c. jò:-lá-Ø
 many.L-Neg-3SgS
 ‘It isn’t common (or frequent).’ **2004.3.10**
- d. sî: tùl-lá-bá
 kind one.L-Neg-3PlS
 ‘The kinds are not the same.’ (túru) **2004.3.27**

This Negative -lá- should be distinguished from 3Pl Perfective Negative -l-á (arguably contracted from /-lí-bá/). It is also distinct from là:, a higher-level Negative used after clitic ≡ỵ ‘it is’ (§11.2.1.3).

-lá- is also used as an aspectually undifferentiated Negative suffix for imperfective-system verbs, when added to a verb already suffixed with -tóyò- (marked Imperfective) or -á:rà- (Habitual); see (586-7) in §10.1.3.4. It is also the only Negative suffix for stative stance verbs (‘be sitting’, ‘be standing’, ‘be lying down’), see (694) and (695.d) in §11.2.4. Similarly, it is the only Negative suffix for defective ‘have’ verbs jì nè- and jèrè-, see (717.a-b) and (718.c) in §11.5.2).

For adverbials, which only rarely take other than Nonhuman subject, the usual negation is formed with kò:-rò ‘it is not’, as in (711.a). With adjectives, this construction was elicitable, as with wò:-rò- in (711.b) but did not occur spontaneously. Either kò:-rò or wò:-rò- may drop tones, suggesting that they may be defocalized (a phenomenon associated with the unsuffixed Perfective of verbs).

- (711) a. dém⇒ kò:-rò [or: kò:-rò]
 straight be.Nonh-Neg
 ‘It isn’t straight.’
- b. tǎyⁿ wò:-rò-m
 small be.Hum-Neg.L-1SgS
 ‘I am not small.’

11.5 Possessive predicates

11.5.1 ‘Have’ (sà-)

This is another defective verb. It should be distinguished from the regular verb sá:- ‘reply’, which has a long vowel. In positive main clauses, ‘have’ occurs **only in the unsuffixed Perfective** stem sà-, and I cite it in this form. An

H-toned form *sá-* is arguably lexically basic, though it actually occurs as such only in lexical-stem pseudo-participial *sá-n* (§3.7.1.1, §15.1.1.3).

In simple possessive predications of the type ‘X have Y’, we have a straight transitive construction with the possessor as subject and the possessed entity as direct object. In positive sentences, Existential *yé* is present, preceding *sà-*. Examples of such ‘X have Y’ clauses are (295.a) and (486) among many others.

‘Have’ is used as an inflectable auxiliary with a number of nouns (often of Fulfulde or other foreign origin) that denote states or qualities. Thus ‘have nastiness’ = ‘be nasty’ and so forth. The cases in (712) show *yé* as in canonical possessive predicates.

- (712) a. *tó:kè yé sà-Ø*
nastiness exist **have-3SgS**
 ‘It (=viper) has nastiness (=is nasty/dangerous)’.
- b. *yá:gè yé sà-Ø*
shame exist **have-3SgS**
 ‘He/She has (=feels) shame’. [excerpt from (557.a)]
- c. *[[nì-nò:rⁿó kùⁿ] lè] nèwⁿé yé sà-Ø*
 [[Rdp-spider Def] with] **value** exist **have-3SgS**
 ‘With spiders, it (=insecticide) has value (=is valuable/useful).’
2004.3.8

Similar phrasing is seen in (424) (‘have health’) and (713.a-b), below.

The **Participial stem** of *sà-* is *sâ-*, with the usual H(H...)L overlaid perfective tone. With zero (Nonhuman) suffix, Contour-Tone Mora-Addition (141) applies, lengthening the vowel to two moras: *sâ:-Ø*. Other forms are human Sg *sâ-n* (430) or *sán-ì n* (653.c), and Pl *sâ-m* (713.b) or *sán-ùm*. In *sán-ì n* and *sán-ùm* variants, the *n* of *sâ-n* has been secondarily incorporated into the stem.

- (713) a. *ì jè pàŋá sâ:-Ø*
 standing.L strength **have.Perf.HL-Ppl.Nonh**
 ‘a standing that has power (=an important function)’
- b. *[ì nè tẽn sá-m]≡ì:-bà dèy*
 [person.L prudence **have.Perf.HL-Ppl.Pl]**≡it.is-3PIS if
 ‘if they are people who have prudence (=are prudent)’ (*sâ-m*)
2004.3.10

Existential *yé* is omitted in relative clauses, as shown in (430), (653.c), and (713.a-b). This is a characteristic of *yé* (§11.2.2.2, above). Further participial examples are in (714).

- (714) a. *íné-m* [dùndàjà lè] *jéyè-m*,
 person-Pl [elephant with] fight.Perf.HL-Ppl.Pl,
sǒ: ù sâ-m yó=kò
awareness 2SgS.L **have**.Perf.HL-Ppl.Pl exist=be.Nonh
 ‘People of whom you-Sg are aware who have fought with
 (=against) elephants’ **2004.3.4**
- b. *gá:rà èmǎ-n tóróyè sâ:-Ø ké*
 more 1Pl-Dat **bothering** **have**.Perf.HL-Ppl.Nonh Topic
 ‘the one (=snake) that terrorizes us the most’

Negation of *sà-* is expressed by *sà:-rá-*. This resembles the special negative forms of *wò-* and *kò* ‘be’ (*wò:-rǒ-*, *kò:-rǒ-*). All of these are aspectually unmarked.

- (715) *bú:dù sà:-rá-m*
 money **have-Neg-1SgS**
 ‘I have no money.’

See also (74.c), lines 4 and 5 of (260), and (295.b). Singular Participial *sà:-rá-n* ‘who has X’ is seen, for example, in line 1 of (261) and in (419.c), but it competes with ‘owner of X’ compounds (§5.1.12). The 3Sg subject form *sà:-rá-Ø* can be used idiomatically, with a preceding main-like clause (i.e. factive complement), in the sense ‘it doesn’t matter (much) that’; see §17.3.5. The combination of *-sà:-rá* with a preceding nominal stem forms occasional compounds of the general meaning ‘lack of X’ (§5.1.4).

No causative or pseudo-causative forms could be elicited of positive *sà-* or its negative counterpart.

11.5.2 ‘Have possession of’ verbs (*jì né-*, *jèré-*)

The verb *jì né-* is a regular verb with the full spectrum of AN stems in the sense ‘hold’ or ‘keep’. It may also be used as a verb of custodial possession, ‘have possession of’, in which case it approaches *sà-* in function but puts more emphasis on (perhaps temporary) physical possession or control. Three syntactic features characterize the possessive use of *jì né-*.

The first is that, in the sense ‘have’, the only stem used in positive clauses is **L-toned unsuffixed Perfective** *jì nè-*, even with present time reference.

The second is that *jì nè-* (like *sà-*) is preceded by **Existential** *yé* (§11.2.2.1) in positive possessive predications, if there is no (other) explicitly focalized constituent. A chained verb may intervene between *yé* and *jì nè-* (716.a). *yé* is not used before *jì nè-* with lexical tones in the sense ‘hold’.

- (716) a. [màlfâ:ⁿ yé dàrá jì nè-Ø]
 [rifle exist sling have.Perf.L-3SgS]
 tàṅà-Ø
 happen.Perf.L-3SgS
 ‘it happened that he had a rifle slung (over his shoulder).’ **2004.3.2**
 [lit., “... (that) he slung and held ...”]
- b. jó:⇒ nàṅá yé jì nè-bà
 many cow exist have.Perf.L-3PlS
 ‘They have many cattle.’ **2004.3.10**

Thirdly, in possessive function (‘have’) *jì nè-* is **negated** by adding *-lá-*, as in (717). This suffix is a stative Negative also used e.g. with adjectival predicates (§11.4.3). By contrast, as a regular verb in the sense ‘hold’, *jì nè-* has ordinary Perfective Negative and Imperfective Negative suffixes.

- (717) a. [ì nè gàmà-nám yé sà-bà⇒],
 [person certain-Pl exist have-3PlS],
 [ì nè kó jì ré-m kùⁿ kâ:ⁿ nè] jì nè-lá-bá
 [person NonhO tend.Impf-Ppl.Pl Def too now] **have-Neg-3PlS**
 ‘Some people have (=own) them (=cattle); those (others) who tend them (=cattle) do not have any (as possessions).’ **2004.3.10**
- b. jì nè-lá-m
have-Neg-1SgS
 ‘I don’t have any.’

The verb *jèré-* ‘keep, have for oneself’ is more or less interchangeable with *jì nè-*, and it has the same morphosyntax. Therefore, in the sense ‘have’, it regularly appears in the L-toned unsuffixed Perfective form *jèrè-*, preceded by Existential *yé* in positive clauses in the absence of a focalized constituent, and is negated by *-lá-* (hence *jèl-lá-*) with no *yé* (718).

- (718) a. yé kó jèrè-m
exist NonhO **have.Perf.L-1SgS**
 ‘I have it (on me).’
- b. [mí màlfâ:ⁿ yé jèrè] wà
 [1Sg rifle **exist have.Perf.L**] say
 ‘He/She says that I [focus] have a rifle.’
- c. [ì nè séwè jèl-lá-n] yé-dì:ⁿ bé: mèyⁿ
 [person.L paper **have-Neg-Ppl.Sg**] there remain and
 bíré bíré bèrè-gó-Ø
 work(noun) work can-ImpfNeg-3SgS
 ‘Anyone who has no papers (=passport) cannot live there (=in
 Algeria) and work a job.’ **2004.5..2**
- d. [sùrgǒ-n nè] [kì-kòrò-î:ⁿ cè:
 [weaver-Sg now] [Rdp-shuttle-child thing.L
 bè gâ:-Ø] yé jèrè-Ø
 3PIS.L say.Impf-Ppl.Nonh] **exist have.Perf.L-3SgS**
 ‘A weaver now [topic], he has a thing that they call a “shuttle’s
 child”.’ **2004.3.14**

11.5.3 ‘Belong to’ predicates (cé=ỳ)

The usual predication of belonging, with the property as subject, is of the form [X cé=ỳ] ‘it belongs to X’ or ‘it is X’s’. The object possessed may be expressed as a separate NP preceding the core [X cé=ỳ] unit; this NP is best taken as a presentential topic and is often set off by an intonation break. cé is presumably historically related to cě: (variant cì gé) ‘thing’. I gloss it as ‘possession’ in interlinears. It is syntactically an inalienably possessed noun (hence e.g. 1Sg mì cé=ỳ ‘it is mine’, èmè cé=ỳ ‘it is ours’, etc., with L-toned inalienable possessor pronominals). The =ỳ is the common ‘it is’ clitic. The negation is with là: (719.b), as usual for the ‘it is’ clitic (§7.2.1.3).

- (719) a. [nàṅá.: fú:] [púlò-m cé=ỳ]
 [cow all] [Fulbe-Pl **possession=it.is**]
 ‘All of the cows [topic], they belong to the Fulbe.’

- b. [kó êm] [ù cé≡y là:]
 [NonhP milk] [2SgP **possession=it.is Neg**]
 ‘Their (=cows’) milk [topic], it doesn’t belong to you-Sg.’
2004.3.10

An alternative ‘belong to’ construction is to add ≡y ‘it is’ to a possessed noun.

- (720) [kò nàŋá kùⁿ],
 [Dem cow Def],
 [émé wàrù-wárá-m mà nàŋá]≡yⁿ
 [1Pl farm(noun).L-farm-Ppl.Pl **Poss cow**]=**it.is**
 ‘Those cattle, they are the cattle of (=they belong to) us farmers.’
2004.3.10

11.6 Verb iteration

Because chains of the type [... verb₁] [... verb₂-inflection], and expanded chains like [... verb₁] [... verb₂] [... verb₃-inflection], are normal in Jamsay discourse (§15.1), two adjacent occurrences of the same verb could be taken as a special case of **chaining**, absent any special phonological or morphosyntactic distinguishing factors. This is logical enough, since verb iteration typically denotes structurally patterned and temporally closely spaced repetitions of an event type (“fall-fall” = ‘keeps falling down’), a semantic relationship shared with some non-cognate verb chains. However, repetition of a single event type lends itself to a kind of emphasis that is lacking with noniterative verb chains.

11.6.1 Symmetrical iteration (\bar{v}_1 - \bar{v}_1 -suffixes)

The unmarked, not particularly emphatic iteration pattern involves a single iteration with no tonal shift. AN and pronominal-subject suffixation appear at the end, so there is no demonstrable difference in form between iteration and chaining. The iterated verb expresses prolongation of an activity. In the schema [\bar{v}_1 - \bar{v}_1 -suffixes], the macrons indicate preservation of normal tones. For the nonfinal stem, this means lexical tones (as in chaining). For the final stem, whatever tones are appropriate for the AN suffixal category are used (e.g. tone-dropping for unaffixed Perfective).

- (721) [dójú lé] ñù:-sěyⁿ yó=kùn-Ø [kò ñú: kùⁿ]
 [under in] millet.L-grain exist=be.in.L-3SgS [Dem millet Def]
 gǔ:ⁿ-sà-bà dèy, pélgé-pélgé-sà-bà dèy
 take.out-Reslt-3PlS if, **sift.in.hand-sift.in.hand**-Reslt-3PlS if
 ‘There is millet grain in it underneath (=in the ant nest). When they
 have taken that millet out, and when they have sifted it and sifted it (in
 their hands, to remove the sand), ...’ **2004.4.28**

11.6.2 L-toned second verb ($\bar{v}_1\text{-}\hat{v}_1 \dots \bar{v}_2\text{-suffixes, } \bar{v}_1\text{-}\hat{v}_1\text{-}\bar{v}_1\text{-suffixes}$)

Consider now three-verb sequences where the first two are identical. This can be either an iterated verb followed by a different verb or VP in a chain [$v_1\text{-}v_1 \dots v_2\text{-suffixes}$], or a verb plus two iterations [$v_1\text{-}v_1\text{-}v_1\text{-suffixes}$].

The most common (though not obligatory) tone pattern is for the first and third stems to keep their lexical tones, while the **second stem drops** to all-L tone (symbol \hat{v}) (722). Another example is jǎ:-jà: in (876.a). This iterative $\bar{v}_x \hat{v}_x$ tone pattern is consistent with the tonal patterning of noniterative three-verb chains of the type [$\bar{v}_1 \hat{v}_2 \bar{v}_3\text{-suffixes}$] (§15.1.1).

- (722) a. ñě-m àrⁿ-úm nàná-nàná tàrá tí:-bà
 woman-Pl man-Pl **chase-chase.L** collective.hunt send.Impf-3PlS
 ‘The women drive (=incite) and send the men on the collective
 hunt.’ **2004.3.3**
- b. háyè èné wó jì ñé-jì ñè-jì ñé-sa jè
 well LogoS 3SgO **sniff-sniff.L-sniff**-Reslt say.Perf.L
 ‘It (=Hyena) said, “well, I have sniffed and sniffed at you-Sg”’
2004.4.2

11.6.3 Uninflected iteration of type ($\hat{v}_1\text{-}\hat{v}_1[-\hat{v}_1 \dots]$)

A more distinctive iterative pattern involves verbs with **no inflection** (AN or pronominal-subject). In the textual examples, there is no overt expression of pronominal subject (e.g. no verbal agreement with the subject, quite noticeable for categories other than 3Sg which has -Ø agreement suffix). If the iterated verb is chained with one or more following VPs, the latter have their usual inflection. The iterated verb may be preceded by non-subject constituents such as objects. The initial occurrence of the stem has overlaid **H(L...)L tone** (symbol \hat{v}). This is followed by from one to three iterated segments with **L-tone**. This stylistically colorful pattern suggests extended prolongation of an

activity (past or future). The L-toned, uninflected noninitial segments are homophonous with the unsuffixed or 3Sg subject form of the unsuffixed Perfective, but perfectivity is not expressed by the iteration, and one cannot get two back-to-back unsuffixed Perfectives within a VP.

In the examples, the lexical form of the verb(s) is given in parentheses after the free translation. In (723.b), L-toned iterations of the form *yèrè* ‘come’ are followed (after a pause) by a final normal-toned *yèré*, probably required by *mèyⁿ* ‘and’.

- (723) a. *úrⁿ-ùm kùⁿ≡ȳ [kó jélgé⇒ dé:
child-Pl Def=it.is [Nonh swinging take
té:rè-tè:rè] úrò yèré n̄:, ...
show.HL-show.L] house.Loc.HL come enter.Impf, ...
‘The children [focus] take them and wave them and keep showing
them and (then) go back home and go inside.’ (té:ré-) 2004.1.1*
- b. *[jòwⁿlè p̄yⁿ] gó: mèyⁿ,
[Dianwely old] go.out and,
yèrè-yèrè-yèrè-yèrè, yèré mèyⁿ ...
come.HL-come.L-come.L-come.L, come and ...
‘Having left Old Dianwely, (we) kept coming (here). (We) came
and ...’ (yèré-) 2004.3.11*
- c. *kó nàná láyà-làyà
NonhO chase hit.HL-hit.L
‘He (=boy) will chase it (=mouse), hitting it (over and over).’
(láyá-) 2004.3.16*
- d. ... *sánâ:-Ø sára gára kúnò-kúnò-kúnò yá:
... put.fence.Impf-3SgS pass pass put.HL-put.L-put.L go
[fútúrò mà wàkàtì núṅò] dó:-yè-Ø dèy,
[twilight Poss time.L Dem] arrive-Perf-3SgS if,
[sánâ-rⁿà]-[sánâ-rⁿà]
[fence-Revers.HL]-[fence.Revers.L]
kó d̄i gé pílwê:-Ø
NonhO follow return.Impf-3SgS
‘...he (=trapper) encloses (traps) in fences; he goes by setting (traps
within fences); then when twilight arrives, he goes back to them one
by one and removes the fences.’ (kúnó-, sánâ-rⁿá-) 2004.3.16*

- e. [kùrú kùⁿ] cín gámàrⁿà-gàmàrⁿà
 [share Def] thus **divide.HL-divide.L**
 ‘That’s how they apportion the shares.’ (gàmàrⁿá-) **2004.3.20**
- f. [màlfà:ⁿ-bĕn.:.] [màlfà:ⁿ-gó:..]
 [rifle.L-tomtom] [rifle.L-dance(noun)]
 [màlfâ:ⁿ tâ:ⁿ-tâ:ⁿ-tâ:ⁿ]
 [rifle **shoot.HL-shoot.L-shoot.L**]
 [nûŋ núŋò-nùŋò-nùŋò]
 [song **sing.HL-sing.L-sing.L**]
 ‘(There is) the hunters’ tomtom-playing and dancing, (they) shoot
 off rifles, (they) sing songs.’ (nùŋó-) **2004.3.20**

12 Comparatives

In **asymmetrical** comparatives, one comparandum is higher or lower than the other on whatever scalar criterion is being applied. Under this rubric I consider in §12.1 several constructions that are explicitly asymmetrical in positive sentences. Symmetrical comparatives are covered in §12.2; of course they may be negated, making them into semantically asymmetrical comparatives. The ‘a fortiori’ construction is presented in §12.3.

12.1 Asymmetrical comparatives

12.1.1 Conjugated adjective with dative or ‘like’ comparandum

In one asymmetrical comparative construction, used with adjectives that denote measurable qualities, the adjective is directly **conjugated with subject pronominal suffixes** (724.a-b). The negative counterpart has **stative Negative -lá-** (724.c). The comparandum is expressed by a PP with all-purpose postposition *lè* (§8.2.1), which I take to be **dative** here, or by a pronominal dative. This construction is simpler, but less common, than that with *gá:rá* ‘more’ described below (§12.1.3).

- (724) a. *mǐ-n* *gùrú-Ø*
1Sg-**Dat** long-3SgS
‘He/She is taller than I (am).’
- b. [[*ñè-n* *nì -bâ:ⁿ* *lè*] *gùrú-m*
[[woman-Sg.L this.L-owner] **Dat**] long-1SgS
‘I am taller than this woman (is).’ [*nì -bâ:ⁿ* §4.4.1.2]
- c. *bè-rú* *gùl-lá-m*
3Pl-**Dat** long.L-Neg-1Sg
‘I am not taller than they are.’ (*gùrú*)

For the symmetrical comparative type [*wó jín*] *gùrù-m* ‘I am as long (=tall) as he/she (is)’, with defocalized L-toned adjective, see (738), below.

12.1.2 Adjectival verb with direct-object comparandum

This construction is attested with an otherwise intransitive verb ‘be shiftless, good-for-nothing’ (borrowed from Fulfulde) that does not correspond to a morphologically simple adjective. In the comparative construction, the verb is used transitively, with the comparandum expressed as direct object.

- (725) [cè: wó já:sé-sà-Ø.: fú:] kò:ró
 [thing.L **3SgO** be.shiftless-Reslt-Ppl.Nonh all] be.Nonh-Neg
 ‘Lo!, a farmer [topic], there is nothing more shiftless than him.’
2004.4.4

12.1.3 ‘More, most’ (gá:rá)

A more explicit comparative or superlative is characterized by the adverbial gá:rá ‘more, most’. This is the most common and syntactically versatile asymmetrical comparative construction. In the absence of an explicit ‘than X’ constituent, the unmarked interpretation is superlative ‘most’.

When gá:rá has scope over a following modifying (i.e. non-predicative) adjective, the latter takes **H(H...)L tone**, indicated as “.HL” in interlinears. The adjective has its **regular suffix**, which is audible in the case of human Sg -n or human Pl -m. The combination of gá:rá plus adjective has the same **tone-dropping effect** on the preceding noun as would the adjective alone.

- (726) a. lì-lù:rò gá:rá mǒñù
 Rdp-snake.L **more** bad.HL
 ‘the nastiest (=most dangerous) snake’ (mǒñù) **2004.3.5**
- b. ì nè gá:rá gúri -n
 person.L **more** long.HL-Sg
 ‘the tallest person’ (gùrú, Sg gúri-n)
- c. ñà: gá:rá érù
 meal.L **more** sweet.HL
 ‘the tastiest meal’ (érù)
- d. gá:rá ónúⁿù
 more smooth.H
 ‘the smoothest, sleekest (thing)’ (ònúⁿú)

When a second adjective is added, gá:rá must be repeated (727).

- (727) lì-lù:rò [gá:rá dúgù] [gá:rá mǒñù-Ø]
 Rdp-snake.L [more big.HL] [more bad. HL]
 ‘the biggest, nastiest snake’ (dùgù, mǒñú)

For a similar H(H...)L tone overlay, see (480) in §8.5.2, where èjⁿ ⇒ ‘very’ imposes this contour on a following modifying adjective. Of course ‘more ADJ’ and ‘very ADJ’ are semantically very close.

When the adjective is **predicative**, it appears in **L-toned** rather than H(H...)L-toned form, and without any Sg or Pl suffix. The L-tone is perhaps an indication of aspectual defocalization, as in the unsuffixed Perfective of verbs (§10.1.2.2). In addition, a **pronominal subject is expressed only by an independent pronoun**, and there is **no inflected ‘be’ quasi-verb** following the adjective.

- (728) a. kó gá:rá èjù
 Nonh more good.L
 ‘That [focus] is better (=preferable).’ 2004.5.1
- b. mí gá:rá èjù
 1Sg more good.L
 ‘I am better.’

In (729), the adjective is predicative in function but has H(H...)L tone contour as ê:ŋ (cf. regular lexical form é:ŋ). This may be because the predicative adjective (‘near’) is separated from gá:rá ‘more’ by intervening material. My assistant accepted a variation with L-toned è:ŋ.

- (729) [dù-dùgù-m kùⁿ.:] [jòŋ-jóŋó-m kùⁿ.:]
 [Rdp-sorcerer-Pl Def] [healing.L-heal.H-Ppl.Pl Def]
 mà gǎnè gá:rá, [tô:-n lè] ê:ŋ,
 Poss between more [Recip-Sg Dat] near.HL,
 [tô:rù-gù-m.: jòŋ-jóŋó-m.: mà gǎnè] sógò
 [fetish-Char-Pl healing.L-heal.H-Ppl.Pl Poss between] than
 ‘Sorcerers and healers are closer (=more similar) to each other than animists (fetish-worshippers) and healers are (to each other).’ 2004.

In (730), gá:rá is **used with a noun** ǎ-n ‘man’, in the sense ‘more of a man’. The text is about a caste of griots who beat war-drums and encourage fighters to be valiant. The noun has its lexical tone.

- (730) ... [gá:rá ǎ-n] táná-ŋá-m̀
 ... [**more** man-Sg] become-Caus.Impf-Ppl.Pl
 ‘those who transform (any fighter whom they follow) into more of a man’ **2004.3.15**

gá:rá ‘more’ may also be used as an adverb, with logical **scope over a VP** (731).

- (731) a. [émé d̀i:ⁿ núŋ̀ò lè]
 [1PIP place.L Dem in]
 gá:rá èmǎ-n tóróyè sâ:-Ø ké, ...
more 1Pl-Dat pestering(noun) have.HL-Ppl.Nonh Top ...
 ‘In our (=Dogon) country, the one (snake) that most afflicts us (is ...)’ **2004.3.5**
- b. ì nè gá:rá [[kó löy.:] [kó sì:ⁿlé] jó:⇒
 person.L **more** [[NonhP medicine] [NonhP disease] much
 jùgó-m̀ kùⁿ
 know.Impf-Ppl.Pl Def
 ‘the people who know the most about “its medicine” and “its disease” (i.e. who know which plants work medicinally on which diseases)’ **2004.3.27**

In the asymmetrical ‘more X’ construction, the comparandum often appears with *sógò* ‘(rather) than’ or ‘instead of’. My assistant felt that the sense ‘instead of’ was basic, but there are some textual examples where the contextual sense is closer to an English asymmetrical comparative. For other uses of this particle and of a perhaps related particle *sógòn*, see §17.6.6.

When it takes a pronoun as its complement, *sógò* requires the **L-toned pronominal** series, which elsewhere occurs in inalienable possessor and in relative-clause subject functions (§6.2.2, §14.1.7), hence 1Sg *m̀i sógò* ‘instead of me’, 3Sg *ẁò sógò* ‘instead of him/her’ (732.a), etc. *sógò* has no tonal effect on preceding nouns, adjectives, numerals, or verbs (including participles). *sógò* is exemplified after an NP in (732.b), and after clauses with inflected verbs in (732.c-d).

- (732) a. [ẁò sógò] [ẁò déré] gùrù-Ø
 [3Sg.L **instead.of**] [3SgP.L brother.HL] **long.L-3SgS**
 ‘His brother is taller than he (is).’
- b. [ñǎ-n kùⁿ] ú dènê:-Ø,
 [woman-Sg Def] 2SgO want.Impf-3SgS,

[èné áyà kùⁿ sógò] ú gá:rá dènê:-Ø
 [ReflP husband.HL Def **than**] 2SgO **more** want.Impf-3SgS
 ‘The woman loves you-Sg, she loves you more than (she loves) her husband.’ **2004.3.20**

- c. [[ì nè ínέ-m jǎ:-m kùⁿ] lè]
 [[person.L person-Pl convey.Impf-Ppl.Pl Def] to]
 émé jǎ̀-Ø sógò, ì né=ÿⁿ
 1PIO convey.Impf-3SgS **instead.of**, Refl=Foc
 [[ènέ mà nám] lè] dém⇒ émé jà: dèy,]
 [[Logo Poss people] to] straight 1PIO convey.Perf.L if,]
 èné [kó gá:rá èjù] mà:nâ:-Ø wà
 LogoS [Nonh **more** good.L] think.Impf-3SgS say
 ‘He said he thought that, instead of him(-self) taking us to persons who transport people (professionally), if he himself [focus] took us straight to his own kin, that [focus] would be better.’ **2004.5.1**
- d. [kó dàyá tí yèrè-bá] sógò,
 [Nonh leave Link come.Perf.L-3PlS] **instead.of**,
 [nùwⁿó jò:] gá:rá nà:rⁿà-Ø
 [death be.many.Perf.L] **more** easy.L-3SgS
 ‘Rather than them leaving it (=lion) and coming (home), it is easier (=preferable) that there be many deaths (of people while killing the lion).’ **2004.3.2**

12.1.4 ‘Surpass’ (gàrá-)

gàrá- is elsewhere a motion verb ‘pass by, go past’. It is also used in the sense ‘surpass, exceed’. Because of its short vowel, I am skeptical of an etymological connection between gàrá- ‘pass; surpass’ and gá:rá ‘more’.

- (733) [nùmò-làg-ú túrú jín] gàrà-gó-Ø
 [hand-hit-VblN one like] **pass**-ImpfNeg-3SgS
 ‘It (=viper) does not exceed (=get longer than) around one elbow span (distance from elbow to fingertip).’ **2004.3.5**

12.1.5 ‘Be better, more’ (ì ré)

ì ré- ‘be better/more than’ is a defective stative verb used in the **unsuffixed Perfective only**, but with no restriction to past time. The comparandum is

expressed as a **dative**. When not chained to a following VP, *ì ré-* takes subject pronominal suffixes (734.a). It occurs in participial form (734.d). Like other defective stative verbs ('be', 'have'), it is negated with *-lá-* without aspectual specification (734.b). The default sense is 'X be better than Y'.

- (734) a. *mǐ-n* *ì ré-bá*
 1Sg-Dat **be.better**-3PlS
 'They are better than I (am).'
- b. *mǐ-n* *ì rè-lá-bá*
 1Sg-Dat **be.better.L-Neg**-3PlS
 'They are not better than I (am).'
- c. *ǎ:≡ŷ* *mǐ-n* *ì rè*
 who?≡Foc 1Sg-Dat **be.better.L**
 'Who [focus] is better than I (am)?'
- d. *à-n* [*á:mádù* *lè*] *ì ré-n* *kò:-ró*
 man-Sg.L [A Dat] **be.better**-Ppl.Sg be.Nonh-Neg
 'There is no man who is better than Amadou.'

In combination with another VP describing the basis for comparison the sense may be 'be/do ... more than' or 'be/do ... better than'. 'More than' is the sense in (735).

- (735) a. *mǐ-n* *ì ré* *ñǎ:* *ñê:-Ø*
 1Sg-Dat **be.more** meal eat.Impf-3SgS
 'He/She eats more than I do.'
- b. *ù-rú* *ì ré* *pàŋá* *sà-m*
 2Sg-Dat **be.more** strength have.L-1SgS
 'I'm stronger than you-Sg (are).'
- c. *mǐ-n* *ì ré* *bé:-bà*
 1Sg-Dat **be.better** stay.Impf-3PlS
 'They will remain (=will be) better than I (will be).'

Adverbial 'better' is expressed by chaining *ì ré* to a following verb or VP, as in (736a.b).

- (736) a. mǐ-n ì ré gó: gǔ:-Ø
 1Sg-Dat **be.better** dance(noun) dance.Impf-3SgS
 ‘He dances better than I (do).’
- b. wò-rú ì ré gó: gǔ:-m̀
 3Sg-Dat **be.better** dance(noun) dance.Impf-1SgS
 ‘I dance better than he/she (does).’

A dative with ì ré may also have a normal indirect-object sense, hence ‘be better for (=please) X’.

- (737) [bì r̀è ì ñé]=ỹⁿ mǐ-n ì r̀è
 [work.L what?]=Foc 1Sg-Dat **be.better.L**
 ‘What work (=course of action) is best for me?’ **2004.4.6**

With lengthened final vowel, and with kárⁿá- ‘do, make’, we get a combination ì ré: kárⁿá- ‘improvement happen’ (for example, a sick person is recovering).

12.2 Symmetrical comparatives

Symmetrical comparatives equate the scalar positions of the two comparanda. Some of them occur most often under negation, the overall construction then functioning as an asymmetrical comparison.

12.2.1 Predicative adjective with jín ‘like’

One semantically symmetrical comparative involves jín ‘like’ following the comparandum. A following predicative adjective is regularly L-toned (defocalized) in this combination. Pronominal-subject inflection is added directly to the predicate adjective, with no ‘be’ quasi-verb.

- (738) a. [mí jín] gùr̀ù-Ø
 [1Sg like] long-3SgS.L
 ‘He/She is as long (=tall) as I am’
- b. [wó jín] gùr̀ù-m
 [3Sg like] long-1SgS.L
 ‘I am as long (=tall) as he/she (is).’

12.2.2 ‘(Not) particularly’ (-làyá)

A construction of the type [ADJ_x-làyá ADJ_x-Neg] is used with adjectives to mean ‘it’s not very (not particularly) ADJ’. There is no overt comparandum, and the construction merely emphasizes that the entity in question is only moderately characterized by the quality. -làyá is invariant, while the negated second adjective may be conjugated. Since it is part of a bipartite construction, it is difficult to gloss -làyá precisely; I use ‘so.much’ in interlinears.

- (739) a. gùl-làyá gùl-lá-Ø
 ‘long-so.much long.L-Neg-3SgS
 ‘It (snake) is not particularly long’ (gùrú) **2004.3.5**
- b. gùl-làyá gùl-lá-m
 ‘long-so.much long.L-Neg-!SgS
 ‘I am not particularly long (=tall)’ (gùrú)

-làyá resembles compound final -láyó ‘very’ (§5.2.4), but informants rejected a direct identification.2.4

12.2.3 ‘Equal; be as good as’ (bǎ:-)

bǎ:- can function as a transitive verb meaning ‘suffice, be enough for (sb)’, in a full range of perfective and imperfective forms: mí bǎ:=kò ‘it’s enough for me’, mí bà:-gó-Ø ‘it isn’t enough for me.’

A homophone (or specialized offshoot) of this verb is used in comparatives, in the perfective system only, in the sense ‘be as much as, equal’. It competes with dó:- (dó:-) ‘approach, attain’ in this sense; see §12.2.4, below. Unlike the quasi-verbs and other stative verbs that are confined to the perfective system, bǎ:- takes regular perfective system suffixes, including Resultative -sà- and Perfective Negative -lí- (rather than stative Negative -lá-). However, the perfective forms are used for any time frame, and no morphologically imperfective forms occur. For example, Imperfective Negative #bà:-gó- (in the relevant sense) was rejected.

bǎ: may be chained to a following VP that expresses the substance of the comparison. In the absence of such a VP, the default interpretation is ‘be as good as’. In most examples, bǎ: occurs in negative clauses (‘not equal X’ = ‘be/do less than X’), but it may occur in positive clauses as well (740.d).

- (740) a. [ě̀n d̂e:] b̂a:-lí-Ø
 [LogoP father.HL] **equal**-PerfNeg-3SgS
 ‘He is not as good as his father.’ (ě̀nÉ)
- b. [lí -lù:rò [cín b̂a:] èmè l̂e:-gó-Ø
 [Rdp-snake.L [thus **equal**] 1PIS.L fear-ImpfNeg-Ppl.Nonh
 [k̂a:ⁿ n̂e]] yó=kò
 [also now]] exist=be.Nonh
 ‘There are also some snakes that we do not fear to that extent.’
2004.3.5
- c. [ú b̂a:] ñ̂a: ñ̂e:-gò-m
 [2Sg **equal**] meal eat-ImpfNeg.L-1SgS
 ‘I eat less than you-Sg [focus] do.’
- d. lù:rò-[jì -jùwⁿó] k̂i-kòjú b̂a:-sà-Ø
 snake-[Rdp-mouse] Rdp.viper **equal**-Reslt-3SgS
 ‘The spitting cobra is the equal of the viper.’

Adding a negative existential such as kò:-ró ‘there is none’ to a relative clause with b̂a:- creates a stylistically colorful, double-negative superlative.

- (741) a. [k̂i-kòjú ĉe: b̂a:-sà-Ø k̂a:ⁿ k̂e]
 [Rdp-viper thing.L **equal**-Reslt.L-Ppl.Nonh any Top]
 kò:-ró
 Nonh.be-Neg
 ‘There is nothing (=no other snake) that equals the viper (in lethality).’ **2004.3.5**
- b. [ĉe: [kó b̂a:] èmè l̂e:-Ø k̂a:ⁿ]
 [thing.L [Nonh **equal**] 1PIS.L fear.Impf-Ppl.Nonh.L any]
 kò:-ró
 be.Nonh-Neg
 ‘There is nothing that we fear as much as (we fear) it (=cobra).’
2004.3.5
- c. [ŝòm k̂uⁿ],
 [horse Def],
 [[kó b̂a:] ĉi ĝè dáwl̂e ŝa:-Ø] kò:-ró
 [[Nonh **equal**] thing.L value have.HL-Ppl.Nonh] be.Nonh-Neg
 ‘The horse [topic], there is nothing that is so valuable as it.’
2004.4.25

12.2.4 ‘Attain, equal’ (dó:-, dǒ:-)

dǒ- (dǒ:-) ‘arrive (at), reach, attain’ can be used in the sense ‘equal, attain the level of’ in comparatives. It is common in the negative (‘it does not equal X’) and in polar questions (‘does it equal X?’). However, it can be used in positive clauses; (742.a) has a negative followed by a positive.

- (742) a. [ě̀n dē:] dǒ:-gó-Ø
 [LogoP father.HL] **reach**-ImpfNeg-3SgS
 gà: [ě̀n dé̀rè] dǒ:-Ø
 but [LogoP brother.HL] **reach**.Impf-3SgS
 ‘He is not as good as his father, but he’s as good as his elder brother.’
- b. [kì -kǒjú lè] gùrú⇒,
 [Rdp-viper Dat] long
 [lù:rò-[ù-jùwⁿó] kùⁿ] dǒ:-gó-Ø
 [snake.L-[Rdp-mouse] Def] **reach**-ImpfNeg-3SgS
 ‘It (snake sp.) is longer than a viper, but it doesn’t reach (the length of) a cobra.’ 2004.3.5

12.3 ‘A fortiori’ (yé :.)

A particle yé :. can be used between the two clauses in this construction. Both clauses have ordinary AN inflections. The second clause ends in ma, which I take to be the disjunction ‘or’ (it might alternatively be understood as the polar interrogative morpheme, to the extent that these two are distinguishable).

- (743) a. ú:rⁿó bè̀rè-gó-m yé :.
 get.up can-ImpfNeg-1SgS **a.fortiori**
 gó: gǒ:-m̀ mà
 dance(noun) dance.Impf-1SgS or
 ‘I can’t get up, much less can I dance.’
- b. [wó ì jú] bà:-lú:-Ø yé :.
 [3SgP dog] equal-PerfNeg-2SgS **much.less**
 [wó t̀èg]≡î: mà
 [3SgP speak-VblN]≡it.is or
 ‘You are not as good as his dog, not to speak of (being as good as) himself.’ (t̀ègú)

This was the ‘a fortiori’ construction that I recorded several times in elicitation. However, in one textual passage *sógòn* (elsewhere ‘because of’) seems to mean ‘a fortiori’; see (1099) in §17.6.6.

13 Focalization and Interrogation

13.1 Focalization

Focalization is a fundamental process in Jamsay morphosyntax, but it is somewhat elusive. In the usual case, an NP or adverbial is highlighted (focused), whereupon the remainder of the clause and in particular the verb is automatically **defocalized**. I distinguish a **marked** focalization construction from an **unmarked** one, based on the form of the highlighted constituent itself.

In both marked and unmarked constructions, verbs in the perfective positive appear in the **unsuffixed Perfective** form, with stem-wide L-tone, rather than in a form with overt Perfective suffix. Perfective Negative and the Imperfective Negative verbs also show stem-wide L-tone (including the AN suffix) in focalization constructions. This **tone-dropping** may be interpreted iconically as a prosodic manifestation of **verb defocalization**. No tone-dropping applies to the unmarked Imperfective, or to any verb with overt positive AN suffixation.

In subject focalization, there is **no pronominal-subject suffix** on the verb (the subject is always expressed overtly earlier in the sentence). In all types of non-subject focalization, the usual pronominal-subject suffix appears on the verb.

In the **marked construction**, in addition to the aforementioned defocalization of perfective verbs, the focalized constituent hosts the **Focus clitic** $\equiv\hat{y}$, or its allomorph $\equiv\hat{i}$: (sometimes $\equiv\hat{i}$: after tone sandhi). This clitic is also added to NPs and other constituents in the ‘it is’ (i.e., copula) construction (§11.2.1). As a result, the marked focalization construction resembles English clefts of the type ‘it’s you (e.g. not that other woman) that I love’.

In the **unmarked construction**, we get the verb defocalization described above, and there is a focal constituent (e.g. *cín* ‘like that’), but the latter is not overtly marked with the clitic $\equiv\hat{y}$.

Since verb defocalization has audible effects on the stem only with perfective and negative verbs, and since the 3Sg pronominal-subject suffix is $-\emptyset$, the unmarked focalization construction is indistinguishable from unfocalized clauses when the verb is imperfective positive and the subject is 3Sg.

Quite often in Jamsay discourse, a **topic** is presented first, followed by sentence containing a pronominalized or otherwise reduced variant thereof in focalized form. Schematic examples to give the flavor of this strategy: a) ‘meat, that’s what I like’, b) ‘we sow seeds early, that’s how we farm’. Real examples are in (744). In (744.a), the parallel segments are aligned. Note the absence of

pronominal-subject marking (3Pl -bà) on the defocalized verbs in the subject-focus example (744.a), and the presence of a pronominal-subject suffix (1Sg -m) in the non-subject-focus example (744.b).

- (744) a. [úrⁿ-ùm kùⁿ], bé≡ỵ kó gùj̣ô:
 [child.Pl Def], 3Pl≡Foc NonhO defeather.Impf,
 bé≡ỵ kó kárâ:
 cut.Impf
 bé≡ỵ kó cé:nê:
 do.well.Impf
 ‘The children [topic], it’s they [focus] who de-feather them (=birds), it’s they [focus] who cut them up, it’s they [focus] who do (=prepare) them completely.’ 2004.3.1
- b. ñě-m [bé≡ỵ è:-m]
 woman-Pl [3Pl≡Foc see.Perf.L-1Sgs]
 ‘The women [topic], it’s them [focus] that I saw.’

13.1.1 Focalization of complement of ≡ỵ ‘it is’

Although Focus clitic ≡ỵ is, to all appearances, morphologically identical to the ‘it is ...’ form ≡ỵ (§11.2.1), it is possible for the two to co-occur. Compare the ungrammaticality of English #*It’s meat [focus] that it is*, in contrast to the grammatical *Meat [focus] is what it is*. In (745), the focused constituent is the complement of the preposition ‘in’. The entire PP is the complement of the external ≡ỵ ‘it is/was’. The construction is rare, but my assistant found it grammatical.

- (745) [jámâ:≡ỵ bérè]≡ỵ tàŋà-Ø
 [crowd≡Foc in]≡it.is happen.Perf.L-3SgS
 ‘It happened that it was in the crowd [focus].’

13.1.2 Subject focalization

In subject focalization, there is **no subject pronominal suffix** on the verb. There is also no participial suffix of the sort found in relative clauses. This lack of suffixation is a useful diagnostic, except for 3Sg subject which has -Ø suffix anyway. The subject X is always overtly expressed earlier in the clause, either as unmarked [X] or in the form [X≡ỵ] with the Focus clitic. If the subject is pronominal, it appears in preverbal position in its **H-toned independent** form,

with or without Focus $\Rightarrow \hat{y}$. A perfective (positive) verb takes the L-toned unsuffixed Perfective form, as usual in focalization constructions.

- (746) a. émé nì-dî:ⁿ ì ñê:
1Pl here lie.down.Impf
'It's we [focus] who go to bed here.'
- b. íné-n=î:ⁿ yǎ: [kó kû:ⁿ] gò:
person-Sg=**Foc** go [Nonh on] go.out.**Perf.L**
'a person [focus] went and attacked it (=lion).' **2004.3.2**
- c. ... tàrá yǎ:-yè-bà [è ké]
... collective.hunt go-Perf-3PlS [2Pl.L Top]
lí-ló:ró= \hat{y} é pì lì wè
fear=**Foc** 2PlO hold.back.**Perf.L**
'... they went to the collective hunt. As for you-Pl, fear [focus] is what held you back.' **2004.3.3**
- d. ñè-m=î:ⁿ ñǎ: sírê:,
woman-Pl=**Foc** meal cook.Impf
àrⁿ-úm=î:ⁿ wárú wàrà:
man-Pl=**Foc** farming farm.Impf
'it's women [focus] who cook, and it's men [focus] who farm.'
(ñè-m)
- e. ànsá:rà bé= \hat{y} é bàrà dèy,
white 3PlS=**Foc** 2PlO help.**Perf.L** if,
[é pàṅá-nám kùⁿ]=yⁿ é bàrà dèy,
[2PlP power-owners Def]=**Foc** 2PlO help.**Perf.L** if,
pósôṅ yó=kò
poison exist=be.Nonh
'White people [topic], if it's they [focus] who have helped you-Pl,
(or) if it's your government [focus] that has helped you, there will
be poison (for killing crop-pest birds).' **2004.3.8**

An NP in subject (or other) function ending in a universal quantifier *cêw* or *fú*: 'all', or in distributive *kâ:ⁿ* 'each, any', may be focalized.

- (747) a. [àná céw]=î:ⁿ m̀̀rⁿó=kò
[village all]=**Foc** be.together.Impf=be.Nonh
'The entire village [focus] will gather together.'
[can also mean: 'All the villages ...'] **2004.4.5**

- b. [àná: fú:]≡ỹ m̀̀r̀́ó=k̀̀
 [village all]=**Foc** be.together.Impf≡be.Nonh
 [= (a)]
- c. [ànà ká:]≡ỹⁿ m̀̀r̀́ó=k̀̀
 [village.L each]=**Foc** be.together.Impf≡be.Nonh
 ‘Each village [focus] will gather together.’ (ká:)ⁿ

(748) illustrates tone-dropping on negative verbs in the presence of a focalized constituent. Imperfective Negative -g̀́- is elsewhere H-toned.

- (748) wó≡ỹ [cè: ká:] k̀̀r̀́à-g̀̀-Ø
 3Sg=**Foc** [thing.L any] do-**ImpfNeg**-3SgS.L
 ‘It’s he/she [focus] who doesn’t do anything’.

The “subject” of locational-existential quasi-verbs ẁ̀- ‘be (human)’ and k̀̀ ‘be (nonhuman)’ can be focalized (749).

- (749) [[à-k̀̀r̀̀]-nì :-n̄: k̀̀ⁿ ká:]
 [[well.L]-water.L-drinking Def also]
 [kó≡ỹ k̀̀ jì:]ⁿ
 [Nonh=**Foc** be.Nonh Past]
 ‘That drinking of well water also, that [focus] is what there was.’
2004.4.5

13.1.3 Object focalization

Examples are in (750). The focalized object must be expressed overtly, with or without ≡ỹ. A pronominal subject has its normal main-clause expression as a suffix on the verb.

- (750) a. nì m≡í: l̀̀g̀̀r̀́-á:r̀́-m
 cow-peas=**Foc** look.for-Habit-1SgS
 ‘It’s cow-peas [focus] that I’m looking for?’
- c. èm̄-n jè:r̀́é kó≡ỹ d̀̀r̀́ó-bà
 1Pl-Dat bring Nonh=**Foc** sell.Impf-3PlS
 ‘That [focus] (=milk) is what they bring and sell to us.’ **2004.3.10**

- b. gàmà-nám⇒, bèr-bé:≠y kùnò-bà
 certain-Pl, goat-excrement=Foc put.Perf.L-3PIS
 ‘Some people [topic], goat excrement [focus] (i.e. rather than chicken excrement) is what they apply (in tanning hides).’
2004.3.17

(751) illustrates post-focus tone-dropping on a negative verb (Perfective Negative -lí- becoming L-toned -lǐ-).

- (751) [dùŋgò: èjú] mà mó:n≠í:
 [clothes.L good] Poss gathering=Foc
 m̀n-lǐ:-Ø⇒
 come.together-PerfNeg.L-1PIS
 ‘We did not meet (=hold) a well-dressed meeting [focus].’ **2004.3.24**

13.1.4 Focalization of PP or other adverbial

Except in the case of the atypically verb-like postposition jé (see §13.1.5, just below), there is no mechanism for focusing only the NP complement of a postposition. Instead, **the full PP is focalized** as an adverbial. Focus ≠y follows the entire PP, i.e., it comes after the postposition (752).

- (752) cín≠í: kò-rú kárⁿá-bà tàrà-nòwⁿó
 thus=Foc Nonh-in do.Impf-3PIS collective.hunt-meat
 [nǐ ɲé bérè]≠y dògó=kò
 [sauce in]=Foc finish.Impf=be.NonhS
 ‘That [focus] is what they do in that (=then). The meat from the collective hunt [topic], in the sauce [focus] (is where) it ends up.’
2004.3.1

Instrumental focus is present in (753). As often, the full NP in question is a preposed topic, and is resumed by a Nonhuman pronominal within the focalized clause.

- (753) [èm wájà-Ø kùnⁿ]
 [milk.L remain.Perf.HL-Ppl.Nonh Def]
 kò-r≠í: [bé nè] kó ñé:-bà
 Nonh-Inst=Foc [3Pl now] NonhO eat.Impf-3PIS
 ‘The milk that remains [topic], that [focus] is what they will eat it (=meal) with.’ **2004.3.10**

‘Those women of Gourou (village) [topic], it’s [the ones who leave (=come from) [Gourou [focus]] [focus] who are the “go-and-come” women.’ (gó:-m) **2004.3.3**

As I tentatively interpret (756) in context, at the outermost level the entire constituent ‘the ones who leave Gourou’ is the focalized “subject” of ‘be the go-and-come women’. Within the subject relative ‘the ones who leave Gourou’, the village name Gourou is also focalized. However, focalization of a constituent within a relative clause is quite rare, and the single example above might have other explanations (including a false start).

An interesting diagnostic is that Existential yé does not occur in relative clauses with the quasi-verbs and defective verbs (‘be’, ‘have’, etc.) that require it in positive main clauses (in the absence of another focalized constituent). I have argued that yé is a kind of default focalized constituent used with these predicates (§11.2.2.1), and its absence from relatives supports the view that relatives are not conducive to internal focalization.

13.1.8 Focalization and negation

Clause-internal negation is compatible with focalization, as long as the negative has narrow scope.

(757) nì m=î: dènè-gó-m
 cow.peas=**Foc** want-ImpfNeg-1SgS
 ‘Cow-peas are what I don’t want.’

In contexts like that of the first clause of (758), however, a simple negative clause without focalization is used, even though it is parallel to a following positive focalized clause.

(758) nĩm dènè-gó-m, nòwⁿó=ỳⁿ dèné-m
 cow.peas want-ImpfNeg-1SgS, meat=**Foc** want-1SgS
 ‘I don’t want cow-peas, (rather) meat [focus] is what I want.’
 (= ‘It isn’t cow-peas [focus] that I want, it’s meat [focus] that I want.’)

13.2 Interrogatives

Polar interrogatives are formed by adding a particle (arguably identical to the ‘or’ disjunctive particle) to the end of a statement. Other interrogatives are

based on a WH-word like ‘what?’. WH interrogatives are regularly marked as focalized by Focus clitic $\Rightarrow\dot{y}$ (or variant).

13.2.1 Clause-final interrogative particles

13.2.1.1 Polar (yes/no) interrogative *ma*

The polar interrogative clause-final particle is (atonal) *ma*. It is arguably identical to the disjunctive particle *ma* ‘or’ (§7.2.1). If this equation is correct, it raises the interesting question whether one sense (interrogative or disjunctive) is basic. In German, *oder* ‘if’ is often added to a statement as a kind of polar tag question marker: *Du hast schon gegessen, oder?* ‘you have already eaten, or?’. If the disjunctive sense is taken as basic in Jamsay, then we have a possible structural parallel to the German construction, functioning however as the basic polar-question construction. Since the final ‘or’ (in this interpretation) is the truncation of a fuller version of the (polarized) second clause (‘you have already eaten, or [sc. you have not yet eaten]?’), this would account for the typical nonterminal intonation of the Jamsay particle (see below). On the other hand, a disjunction of the type ‘X or Y’ could be taken as a kind of question in many contexts: compare ‘X or Y will come’ with ‘(I wonder whether) X will come, (or) Y will come’. Moreover, many polar questions involve disjunctions: ‘Will X or Y come?’.

However, a complete identification of the polar-question and disjunctive particles is doubtful. It will be seen below that *ma* is also optionally used after WH-interrogatives, which are not interpretable as disjunctions.

The Jamsay particle appears with variable pitch and duration. In my interpretation, it is subject first to Atonal-Morpheme Tone-Spreading (137), which extends the preceding phonological tone into the particle, resulting in *má* or *mà*. Of these, *mà* is more common (at least at the end of full clauses), since positive inflected verbs all end in L-tones. After this rule applies, the particle is then frequently (but not obligatorily) subject to **intonational modification**, in the form either of prolongation (\Rightarrow), pitch-raising (\uparrow), or both ($\Rightarrow\uparrow$).

Whether intonationally raised or not, the pitch is often steady-state during the articulation of the particle. However, I have occasionally observed a slowly falling pitch that I indicate with symbols $\Rightarrow\searrow$, similar to the dying-quail intonation (symbol \therefore).

In polar interrogatives, the corresponding reverse-polarity statement, or some other proposition contradicting the first, may also be added. In this case, *ma* occurs minimally once, at the junction between the two propositions. The prosodic grouping is variable, with *ma* often clearly grouped with the preceding

proposition, but sometimes in a prosodically seamless string combining both propositions.

- (759) a. [ñǎ: ñé:-sà-w mà⇒↑] [ñè:-lú:-Ø]
 [meal eat-Reslt-2SgS Q] [eat-PerfNeg-2SgS]
 ‘Have you-Sg eaten a meal, or haven’t you?’
- b. [à-tí: nè] sà:j-î:ⁿ kò-rú á:-bà mà⇒↑,
 [bird.trap now] bird Nonh-Inst catch.Impf-3PlS Q,
 [èjù-nòwⁿó kâ:ⁿ á:≡kò
 [field.L-meat too catch.Impf≡be.Nonh
 ‘A bird-trap now, do they (=hunters) catch (only) birds with it? Or does it (=trap) catch game animals too?’ **2004.3.16**
- c. ní: yé sà-Ø mà⇒↑ ní: sà:-rá-Ø
 water exist have-3SgS Q water have-Neg-3SgS
 ‘Do they (=rocky hills) have water, or do they not have water?’
2004.4.5

ma may be repeated after the second alternative (760), though this option did not occur in my texts. In this case, ma is clearly grouped prosodically with the preceding segment. Perhaps examples like (760) are abbreviations of longer sets of alternatives including at least one implied but nonovert option (‘today, or tomorrow, or....’).

- (760) íjé má⇒, yògò má⇒
 today Q, tomorrow Q
 ‘Today? Or tomorrow?’

ma is optionally added to WH-interrogatives (761).

- (761) [ú nò] [ì nè núwⁿò-n] á ì ñé≡yⁿ mà
 [2Sg now] [person.L die.Perf.HL-Ppl.Sg] 2SgP what?≡it.is Q
 ‘You-Sg now, the deceased person was your what (=was in what kin relation to you)?’ **2004.3.21**

When a speaker asks a self-directed question (adopting the perspective of an interlocutor) and intends to proceed to answer it (in his/her own voice), dey ‘if’ may be added. This makes sense when an overt quotative verb is present: ‘if they say (=ask) ...’ (762.a). However, the quotative verb may be omitted (762.b).

- (762) a. [jémè-n nè] yǎ:-jì n [í:rⁿé kùⁿ] bì rê:-Ø
 [blacksmith-Sg now] how? [metal Def] work.Impf-3SgS
 mà↑ jè-bà dèy
Q say.Perf.L-3PlS if
 ‘If they say (=ask), how does a blacksmith work the iron, ...’
2004.3.12
- b. [dà:γá kùⁿ kâ:ⁿ] dāná-n=i:,
 [night Def too] hunt-Ppl.Sg=it.is,
 ì ñé=ỳ kó=ỳ mà↑ dèy↑, dà:γá, ...
 what?=Foc Nonh=it.is **Q if, night, ...**
 ‘At night too he is a hunter. What (=how) is that? At night, ...’
 (dāná-ñ) **2004.3.16**

13.2.1.2 Tag-question (Negative là:)

Negative là:, which is very common after ‘it is’ clitic =ỳ (§11.2.1.3), is also used after a proposition-expressing clause, in (polarity-reversed) tag-question function. One text, from an elderly man addressing a much younger interviewer, was full of uptake-checking expressions, including (763).

- (763) pá:mé-rⁿà-wⁿ là:
 understand-Habit-2SgS **Neg**
 ‘You-Sg understand, no?’ **2004.4.21**

Another example from the same text is (764). Here the tag functions as a rhetorical question, eliciting confirmation from the younger interlocutor.

- (764) dī:ⁿ ànsá:rá kárⁿ-á:rⁿà-Ø jì:ⁿ
 manner.L white(s) do-Habit-Ppl.Nonh Past
 é:-sà-y là:↑, kó dāyà-lí:-Ø déy
 see-Reslt-1PlS **Neg, NonhO** leave-PerfNeg-1PlS **if**
 ‘We saw how the whites used to do it, didn’t we? If we don’t abandon that, ...’ **2004.4.23**

A rhetorical tag question may also be expressed as a polarity-reversed version of the initial proposition, reduced to its inflected verb. In (765), the speaker bemoans the fact that young women of the village often go to cities to work, and come back pregnant. The tag reverses the negative polarity of the primary proposition.

- (765) [kó kùⁿ ké] yègèrè-lí-Ø kòy,
 [Nonh Def Topic] be.attractive-PerfNeg-3SgS Emph,
 yègèré-sà-Ø
 be.attractive-Reslt-3SgS
 ‘That [topic], it’s definitely not pretty to see. Is it pretty to see?’
2004.4.27

A tag question may also be expressed as [X ma⇒, cín⇒î: là:] where X is the primary predication. This is literally ‘[X, or it is not thus?]. Also used in tag-question function is kòr⇒î: ‘is it (the) truth?’ or its negation (‘is it not the truth?’).

13.2.2 WH-interrogatives

The following subsections cover WH (content) interrogatives involving the senses ‘who?’, ‘what?’, ‘where?’, ‘when?’, ‘how?’, ‘how much/many?’, and ‘which?’ They behave as focalized constituents, and are often (though not always) followed by the Focus clitic ⇒ȳ. If the clause containing a WH-word has a perfective positive verb, it normally occurs in the unsuffixed Perfective (as usual in the focalization construction); examples include (766.a) and (772).

The WH-interrogative words most often occur clause-initially (if topicalized constituents are excluded). However, other NPs and adverbials (whether focalized or not) also occur in this position. The WH-interrogatives may in fact follow another NP or adverbial that appears to be part of the same clause, as in (766.a) and (773.a). I conclude that the WH-words remain *in situ* rather than being (systematically) fronted.

The interrogative particle *ma*, most commonly found in polar interrogatives, is optionally used (redundantly) at the end of WH-interrogative clauses, as noted in (761), above. Further examples are (768.b) and (770.a).

13.2.2.1 ‘Who?’ (ǎ: ì lá:)

The common ‘who?’ interrogative is ǎ:. (For ì lá:, see just below.)

- (766) a. [bú:dù kùⁿ] [ǎ: lè] ò:-w
 [money Def] [who? Dat] give.Perf.L-2SgS
 ‘Who did you-Sg give the money to?’

- b. $\check{a}:\text{=}\dot{y}$ \acute{u} $\text{l}\grave{a}y\grave{a}$
who?=Foc 2SgO hit.Perf.L
 ‘Who hit you-Sg?’
- c. [$\acute{u}:\text{:}$ $\check{a}:\text{:}$] $\text{j}\grave{o}w\grave{o}$
 [2Sg **who?**] run.Perf.L
 ‘You-Sg and who ran?’ (= ‘Who did you run with?’)
- d. [$w\acute{o}$ $\check{a}:\text{=}\dot{y}$ $m\grave{a}\uparrow$] $w\grave{a}\uparrow$
 [3Sg **who?**=it.is Q] say
 ‘It (=hyena) asked it (=scorpion), “who are you?”’ **2004.4.2**

The plural [$\check{a}:\text{ bé}$] is not very common but is used when plurality is explicit. It appears to be required when in apposition to a plural pronoun (767).

- (767) \acute{e} [$\check{a}:\text{ bé}$]= \dot{y} $y\grave{e}r\grave{e}$
 2Pl [**who?** Pl]=Foc come.Perf.L
 ‘You-Pl who?-Pl came?’ (= ‘Who are you-Pl who have come?’)

An alternative form \grave{i} lá: is less common, but it is substitutable for $\check{a}:$ in the above contexts with no change in sense (768). (768.c) is a self-conjunction with repeated $\acute{b}\acute{e}\Rightarrow$ (§7.1.2), and also shows that \grave{i} lá: may be used as a modifying adjective similar to $y\acute{o}k\acute{k}\grave{o}$ ‘which?’, with preceding L-toned noun.

- (768) a. [[\grave{i} lá: $n\grave{a}:$] $c\acute{e}$]= \dot{y} $k\hat{a}:\text{^n}$
 [[who? mother.HL] property]=it.is too
 ‘whoever’s mother it belongs to’ **2004.3.18**
- b. [$\acute{i}j\acute{e}$ $k\acute{e}$] [$n\acute{u}j\grave{o}$ \grave{i} lá:]= \dot{y} $\grave{u}m\grave{o}$ $m\grave{a}\uparrow$] $w\grave{a}\uparrow$
 [today Topic] [Dem who?=Foc lie Q] say
 ‘He (=cat) said (=wondered), “today, who is that (animal) lying down?”’ **2004.4.1**
- c. [[\grave{i} $n\grave{e}$ -m \grave{i} lá: $\acute{b}\acute{e}$] [\grave{i} $n\grave{e}$ -m \grave{i} lá: $\acute{b}\acute{e}$]= \dot{y}
 [[person.Pl **who?** Pl] [person.Pl **who?** Pl]]=Foc
 \grave{i} $n\grave{e}$ $b\grave{e}$ $\hat{a}:\text{-m}=\acute{i}:$
 person.L Pl.L catch.Perf.HL-Pl=it.is
 ‘Who and who (=which people) are the people that they conscripted?’ **2004.4.22**

‘Whose X?’ with some noun X is expressed as [who? Poss X], with possessive *mà* (if the possession is alienable, as it is for all but a few kin terms and other nouns). See (806.c) for an example.

13.2.2.2 ‘What?’ (*ì ñé*), ‘with what?’ (*ì ñé lè*), ‘why?’ (*ì ñé jé*)

The stem for ‘what?’ is *ì ñé*. It gets some competition from *yókòkò* ‘which?’ (§13.2.2.7) and, as complement of *kárⁿá-* ‘do’ in the ‘do what?’ construction, from *yǎ:-jì n* ‘how?’ (§13.2.2.5).

When ‘what?’ is an argument of a verb-headed clause, *ì ñé* is focalized with clitic *≡ỹ* (769.a).

- (769) *ì ñé≡ỹⁿ lùgùr-á:rà-w*
what?≡Foc look.for-Habit-2SgS
 ‘What are you-Sg looking for?’

In the predicative ‘X is what?’ (‘what is X?’) construction, it is possible to begin with *ì ñé≡ỹⁿ*, and follow it with an ‘it is X’ construction. The result looks like it should mean e.g. ‘it is what?, it is X’, but here I take the first *≡ỹⁿ* to be in focalizing function: what [focus] is it that is X?’

- (770) a. *ì ñé≡ỹⁿ kó≡ỹ mà⇒↑*
what?≡Foc Nonh=**it.is** Q
 ‘What is it?’
- b. *ì ñé≡ỹⁿ bú:d≡ì :*
what?≡Foc money=**it.is**
 ‘What is money?’

Alternatively, the substantive NP (or pronoun) whose identity is queried precedes *ì ñé≡ỹⁿ* (771.a) or a conjugated form thereof (771.b). Here the substantive NP is arguably topicalized.

- (771) a. [*jèmè-ñě-m nè*], [*bé bírÉ*] *ì ñé≡ỹⁿ*
 [blacksmith.L-woman-Pl now], [3PIP work] **what?**≡it.is
 ‘Women of blacksmith caste now, their work (, it) is what?’
2004.3.13
- b. [*ù ké*] *ì ñé≡w̃ⁿ*
 [2Sg.L **Topic**] what?≡it.is.2Sg
 ‘What are you-Sg?’ (e.g. ethnicity or occupation)

ì ñé is morphosyntactically a noun, as we would expect. For combinations with postpositions, see below. In (772), it functions as possessor (of a noun-like postposition).

- (772) [ì ñé mà kû:ⁿ] jèyè-bé má
 [what? Poss about] fight.Perf.L-2PIS Q
 ‘What have you-Pl been fighting about?’ 2004.4.6

The plural ì ñé bé is occasionally used to specify that multiple entities are involved.

- (773) a. éwé yǎ: [ì ñé bé] bèrè-w
 market go [what? Pl] get.Perf.L-2SgS
 ‘What things did you go and get in the market?’
 b. [ì ñé bé]=ȳ [émé [yà:jì:-[pàg-ù]]-tòjój]=ȳ
 [what? Pl]=Foc [1PIP [marriage.L-[tie-VblN.L]]-payment]=it.is
 ‘What-Pl are our marriage-contracting payments?’ 2004.3.20

Alternatively, a conjunction [[ì ñé bé] [ì ñé bé]], literally ‘what? and what?’, may be used (774.a). This is based on the [[X bé] [Y bé]] ‘X and Y’ conjunction construction (§7.1.2), where X and Y may be referentially singular. A variant of this is [ì ñé.: ì ñé.:], with conjunction by intonation (774.b).

- (774) a. [[á jémé] bérè] [[ì ñé bé] [ì ñé bé]] kùn
 [[2SgP bag] in] [[what? Pl] [what? Pl]] be.in
 ‘What and what (=what things) are in your bag?’
 b. [ì ñé.: ì ñé.:] gǒ:ⁿ-sà-bà dèy
 [what? what?] take.out-Reslt-3PIS if
 cín dá:ṅá mà:-bà
 thus water.jar build.Impf-3PIS
 ‘They make (earthenware) water jars by taking out what and what (=by using what raw materials)?’ 2004.3.13

With postposition lè in instrumental function, we can get a ‘by means of what?’ phrase (775).

- (775) a. [ì ñé lè] íné-m tǐn tírⁿ-á:rⁿà-bà
 [what? Inst] person-Pl wood chop-Habit-3PIS
 ‘With what do the people chop wood?’

- (779) yǎ:≡wò-w
 where?≡be.Hum-2SgS
 ‘Where are you-Sg?’

Adverbial ‘where?’ forms are also built on the stem yǎ:. For example, there is a PP [yǎ: lé] (for H-toned postposition lé in fixed adverbial PP’s, see §8.2.2). This combination is regular in isolation (‘Where?’), but can also occur within a sentence.

- (780) a. [yǎ: lé] yǎ:-w̃
 [where? in] go.Impf-2SgS
 ‘Where are you-Sg going?’
- b. [yǎ: lé] [ńú: kùⁿ] kùnò-bà
 [where? in] [millet Def] put.Perf.L-3PlS
 ‘Where did they put the millet?’

For yǎkkò as a contraction of yǎ: (lé) kò- with a nonhuman referent, see (793) in §13.2.2.3, below.

Another extended form is yǎ:-dì:ⁿ. This contains a form of dǐ:ⁿ ‘place’, the closest parallel being with demonstrative adverbs like ní-dì:ⁿ ‘here’ (§4.4.3.1). Since dǐ:ⁿ provides the spatial element, yǎ: here approaches ‘which?’ in sense. Perhaps this is the original ‘where?’ phrase from which others like those cited above originated; see also yǎ:-jǐn ‘how?’, below.

- (781) [yǎ:-dì:ⁿ] nùmò-wⁿ
 [where?-place.L fall.Perf.L-2SgS
 ‘Where did you-Sg fall?’

Another option is yǎy, which is attested only with following yǎ:- ‘go’. It can be taken as a slightly irregular output for expected #yǎ:≡ỹ with Focus clitic ≡ỹ, or else as a mutation from *yǎ: yǎ:- with the second *y spreading leftward into the final mora of *yǎ:. Having shortened its vowel, this form has only two moras and cannot support a bell-shaped <LHL> tone, so the resulting form yǎy has R-tone.

- (782) a. yǎy yǎ:-w̃
 where? go.Impf-2SgS
 ‘Where are you-Sg going?’

- b. [wó yǒy yǎ:-rà-Ø mà↑] wà↑
 [3Sg **where?** go-Habit-3SgS Q] say
 ‘He asked, “hey, where are you-Sg going?”’ **2004.4.18**

For yǒ:-jì n ‘how’, see §13.2.2.5, below.

13.2.2.4 ‘When?’ (*yàṅárⁿà*)

The general word for ‘when?’ is *yàṅárⁿà*. It can be followed by Focus $\equiv \dot{y}$, but more often the clitic is omitted. *yàṅárⁿà* is used for prospective as well as retrospective time frames (783).

- (783) a. *yàṅárⁿà* nùmò-wⁿ
when? fall.Perf.L-2SgS
 ‘When did you-Sg fall?’
- b. *yàṅárⁿà* yèré-w̄
when? come.Impf-2SgS
 ‘when will you-Sg come (back)?’

13.2.2.5 ‘How?’ (*yǒ:-jì n*, *yǒ:-ṅ*)

yǒ:-jì n consists of *yǒ:*, which by itself means ‘where?’, and a final element related to *jín* ‘like’ but L-toned. The overtly focalized form *yǒ:-jì n=î:* is common. As a basic interrogative of manner, *yǒ:-jì n* may be used alone (784.a) or with postposition *lè* (784.b). As in other Malian languages, ‘do what?’ is expressed as ‘do how?’ (784.c).

- (784) a. *yǒ:-jì n* ùrɔ-w̄
 how? go.up.Impf-2SgS
 ‘How will you-Sg go up (the hill)?’
- b. *î-n* dàná, [yǒ:-jì n *lè*] túmnô:-Ø
 child-Sg hunt(verb), [**how?** **in**] begin.Impf-3SgS
 ‘How does a child begin to hunt?’ **2004.3.16**
- c. [kó nò] yǒ:-jì n=î: kò-rú kárⁿá-bè ?
 [Nonh now] **how**=Foc Nonh-Dat do.Impf-3PlS
 ‘That one now (=leopard) [topic], what do you-Pl do with respect to it?’ **2004.3.2**

yǎ:-jì n also turned up in elicited sentences meaning ‘what kind of X?’ for some noun X. In (785), it seems that yǎ:-jì n combines with the following noun tǒgú ‘kind’ as a kind of compound adjective modifying úró ‘house’, which therefore drops its tones. Since tǒgú shifts to /tǒgù/ in this combination, it may be that the combination is treated either as a bahuvrihi compound (§5.2.1) or as an inalienable possessive construction (§6.2.2).

- (785) [ùrò yǎ:-jì n tǒg]≡ì: mǎ:-wⁿ mà ?
 [house.L how? kind]≡Foc build.Impf-2SgS Q
 ‘What kind of house will you-Sg build?’ (tǒgú)

A variant yǎ:-ṅ, i.e. [yǎṅ] with <LHL> tone, is a reduced form of yǎ:-jì n, attested in my data only before gá:- ‘say’ (786). As with ‘do’, ‘say’ regularly takes ‘how?’ rather than ‘what?’ as its interrogative complement.

- (786) yǎ:-ṅ gá-bà
 how? say.Impf-3PlS
 ‘How do they say?’ (=‘What do they call it?’) **2004.4.20**

13.2.2.6 ‘How much?’, ‘how many’ (à:ṅá)

The interrogative noun à:ṅá may be predicative ‘be how much?’ (787.a). For partitive ‘how much/many of NP’, a number of choices are available. When the relevant NP is not the subject of a simple ‘how much/many?’ predicate, it may precede à:ṅá (787.b-c) with its regular independent form (including normal tones). This can be taken as **apposition**, exactly as with [noun+numeral] combinations.

In combination with a plural pronoun (787.d), the partitive sense is stronger (‘how many [of them]?’). In other words, a bounded set is understood, from which a subset is selected. With a noun-headed NP, a partitive sense is most clearly expressed by using a locative PP, e.g. with bërê: ‘in’ or gǎnṅ ‘between, among’ (787.e). The PP can be analysed as topical, as suggested by the free translation of (787.e), and the pronoun in (787.d) is compatible with topicalization as well (though it could also be interpreted as an alienable possessor--unfortunately, 1Sg and 2Sg do not make sense in partitive contexts, and these are the only two pronominals that have different forms for independent pronoun and possessor pronoun). A topicalized partitive also occurs with a numeral in (374). The noun ‘kind, type’ combined with ‘how many?’ in (787.f) makes the partitive semantics obvious, so no locative postposition is needed. Nevertheless, the partitive NP is again topicalized, and it is resumed by a pronoun (kó).

- (787) a. à:ŋá=ỳⁿ
how.much?≡it.is
 ‘How much (is there)?’ = ‘How many (are there)?’
 also: ‘How much (in price) is it?’
- b. [nàŋá à:ŋá] è:-w
 [cow **how.many?**] see.Perf.L-2SgS
 ‘How many cows did you-Sg see?’
- c. [súkkórð à:ŋá]=ỳⁿ
 [sugar **how.much?**]=it.is
 ‘It is how much sugar?’
- d. bé à:ŋá=ỳⁿ yà:
 3Pl **how.many?**≡Foc go.Perf.L
 ‘How many of them went?’
- e. [àⁿ-úm mà bèrê:] à:ŋá=ỳⁿ yà:
 [man-Pl Poss in] **how.many?**≡Foc go.Perf.L
 ‘Among the men [topic], how many (of them) went?’
- f. [pìⁿé mà tðgú] [kó à:ŋá]=kð mà⇒
 [millet.cream Poss kind] [Nonh **how.many?**]=be.Nonh Q
 ‘The kind(s) of millet cream [topic], how many of them are there?’
- 2004.4.10**

Like other quantifiers, à:ŋá can be iterated for **distributivity**, as in asking the price per unit in the market: à:ŋá-à:ŋá=ỳⁿ ‘how much (per unit) are they?’.

The ordinal adjective is à:ŋà-né ‘which-th?’ (the reply is an ordinal: ‘second’, ‘third’, etc.). Cf. French (*le*) *quantième?*

There is no simple way to express e.g. ‘how big (is it)?’ where the quantification is over a scalar adjective. Cues of this type were always translated as simple polar interrogatives, paired (‘is it big or is it small?’) or simple (‘is it very big?’).

13.2.2.7 ‘Which?’ (yókkð)

This is an adjective or noun. As adjective, it induces tone-dropping on the modified noun. Instead of the adjectival construction [noun + yókkð], it is also possible to use yókkð as a noun, accompanied by a (usually topicalized) partitive phrase that specifies the universe from which the correct entity is to be

- (790) [kó nè] [jòw-Ø yókkò bé]⇒ŷ jòwó mèy↑
 [Nonh now] [run-VbIN.L **which?** PI]⇒Foc run and
 [ñě-n kùⁿ] àyà-úrò táná-ḡá-bà
 [woman-PIDef] husband.L-house.Loc.HL transfer-Caus.Impf-3PIS
 ‘(As for) that, they move the woman (=bride) to the husband’s house by running what kinds of running (=races)?’ **2004.3.20**

Alternatively, *yókkò* may be conjoined with itself, using the conjunction phrase type [X *bé*⇒] [X *bé*] (§7.1.2), or it can just be iterated as *yókkò-yókkò*. Examples are in (791).

- (791) a. [kó nì :ñè jèrú bè jèrê:-Ø],
 [NonhP gear.L harvest(noun) 3PIS.L harvest.Impf-Ppl.Nonh],
 [yókkò *bé*⇒ yókkò *bé*⇒]⇒ŷ
 [**which?** PI **which?** PI]⇒it.is
 ‘The gear for harvesting that, it consists of which and which?’
2004.3.6
- b. [kó nò] [nì :ñè yókkò-yókkò] kó⇒ŷ
 [Nonh now] [gear.L **which?-which?**] Nonh⇒it.is
 ‘That (equipment) [topic], which kinds of equipment is it?’
2004.3.24

yókkò may also be used without a preceding noun or accompanying partitive phrase in the sense ‘which (thing)?’ In this function, it competes with *ì ñé* ‘what?’. This *yókkò* construction is fairly common where there is a small universe of entities to pick from, e.g. tools (792).

- (792) èjú yǎ: tánà: dèy,
 field go happen if,
 [wó àrⁿà-nì :ñé] [yókkò bé]⇒ŷ
 [3SgP fighting.L-gear] [**which?** PI]⇒it.is
 ‘When he (=hunter) goes into the bush, his fighting gear [topic], it is which ones (=weapons)?’ **2004.3.16**

Finally, *yókkò* may function as a contraction of *yǎ: (lé) kò-* ‘where is ...’ with nonhuman referent (Sg or Pl, the latter adding *-bà*). Thus (793.b,d) are equivalent to (793.a,c).

- (793) a. [yǎ: lé] kò
 [**where?** in] be.Nonh
 ‘Where is it?’

- b. yók kò
[= (a)]
- c. [yǒ: lé] kò-bà
[where? in] be.Nonh-3Pl
'Where are they (e.g. animals)?'
- d. yók kò-bà
[= (c)]

It is possible that yók kò in its basic function is historically a mutation of an originally predicative *yǒ: kò 'it is which?'. Compare yǒ: 'where?' and yǒ:-jǐn 'how?'. The first syllable of yók kò has a short vowel followed by a voiceless stop, which does not allow audible expression of R-tone; this could explain the shift to H-tone.

13.2.3 'Whatchamacallit?'

cě: or cǐ gé 'thing' is used as a 'whatchamacallit?' filler noun with nonhuman reference, or as an adverbial. It is not a true interrogative morphosyntactically, but it does have some similarity to self-directed questions, cf. French *comment dirais-je?*

- (794) [gá:w èmè yâ:-Ø] cě: nà:-yⁿ,
[Gao 1PlS.L go.Perf.HL-Ppl.Nonh] **thing** spend.night.Perf.L-1PlS,
[[bâg mà dǐ:ⁿ kùⁿ lè] nà:-yⁿ
[[ferry Poss place Def] in] spend.night.Perf.L-1PlS
'When we went to Gao, we spent the night at whatchamacallit?, we spent the night at the ferry place (=where the ferry crosses during the day).' (French *bac*) **2004.5.1**

In local French, *chose* is used in this way, and it has spawned verbs *choser* and *chosiner* 'do whatchamacallit?'.
An overtly self-directed question 'how do they say it?' (yǒ:-jǐ n gá-bà) may also be used as a 'whatchamacallit?' phrase.

There is no simple inflectable verb with the sense 'do/be whatchamacallit?'. The phrase cǐ gé kárⁿá-, literally 'do (a) thing' is used.

13.2.4 Embedded interrogatives

In this section I consider interrogative complements to main-clause verbs like ‘know’, as in ‘I don’t know (whether/who/what ...)’.

An embedded **polar** interrogative clause (‘whether or not ...’) is a simple quotative complement (§17.1), plus the usual clause-final interrogative particle *ma*. The particle distinguishes an embedded interrogative (‘I didn’t know whether ...’) from a factive complement (‘I didn’t know that ...’), although the Jamsay embedded interrogative construction may be used (as complement of ‘know’) where English would use the factive complement. Examples are in (795).

- (795) a. [ú yèrê: mà↑] jé újúró-sà-bà
 [2Sg come.Impf Q] say ask-Reslt-3PIS
 ‘They asked whether you-Sg are/were coming.’
- b. [[... ì nè kó jùgó-ñ.: fú:⇒] kò:-ró]
 [[... person.L NonhO know.Impf-Ppl.Sg all] be.Nonh-Neg]
 wá [èné=yⁿ wó wò:-Ø má.: kâ:ⁿ]
 say [Logo=Foc NonhO be.Hum-Ppl.Sg **Q** also]
 ‘ “... there will be nobody who knows,” he said, “whether (=that) it was I [focus] who killed you-Sg ...”’ **2004.4.4**

Both the positive and negative alternatives are overt in (796.a-b), which are interchangeable.

- (796) a. yèrê:-Ø jò:-gó-m
 come.Impf-3SgS know-ImpfNeg-1SgS
 yèrè-gó-Ø jò:-gó-m
 come-ImpfNeg-3SgS know-ImpfNeg-1SgS
 ‘I don’t know whether he/she is coming, or not?’
 (lit.: “I don’t know that he/she is coming, I don’t know that he/she is not coming.” (jùgó-))
- b. yèrê:-Ø mà⇒↑ yèrè-gó-Ø má⇒
 come.Impf-3SgS Q come-ImpfNeg-3SgS Q
 jò:-gó-m
 know-ImpfNeg-1SgS
 ‘I don’t know whether he/she is coming, or not?’
 (lit.: “‘He/She is coming? He/she is not coming?’ I don’t know.”)

Embedded polar interrogatives are sometimes used in Jamsay in contexts where English speakers would use a factive complement. This is the case in (796.a), above, which would more naturally be expressed as ‘... who knows that it was I ...’ in a free English translation.

Embedded **WH interrogatives** may be of two types. In one, the **regular WH-word** is used, with optional clause-final interrogative particle *ma*. This type approximates direct discourse, except for deictic substitutions such as logophoric pronominals, where appropriate (797).

- (797) a. *jèyè-tù-bà táŋà: dèy,*
 fight-Perf-3PIS happen if,
 [ǎ:=y tòyⁿó sà mà↑] ñèmé-bà
 [who?=Foc truth have Q] choose.Impf-3PIS
 ‘If they (man and wife) have squabbled, they (=elders) will rule as to who (=which of them) is in the right.’
- b. [ǎ:=y nì-dí:ⁿ wò mà⇒↑] jò:-gó-m
 [who?=Foc here be.Hum Q] know-ImpfNeg-1SgS
 ‘I don’t know who [focus] lives here.’
- c. [[ǎ: mà úró]=y mà⇒↑] jò:-gó-m
 [[who? Poss house]=it.is Q] know-ImpfNeg-1SgS
 ‘I don’t know whose house it is.’
- d. [à:ŋá tòjò-bá má⇒] jò:-gó-m
 [how.much? pay.Perf.L-3PISQ] know-ImpfNeg-1SgS
 ‘I don’t know how much they paid.’

This type, with the regular WH-word, is preferred for embedded ‘how much?’ and for embedded ‘who?’. In the first case, this may be for lack of a suitable nominal counterpart (‘amount’, ‘quantity’). In the second, the preference may be due to avoidance of ambiguity between e.g. ‘I don’t know who lives here’ (identificational knowledge) versus ‘I don’t know the person who lives here’ (acquaintance).

The second possibility for embedded WH interrogatives is the literal type exemplified by “I don’t know the place in which he is” as the translation of English ‘I don’t know where he is.’ That is, a **generic noun** like ‘place’, ‘time’, ‘manner’, or ‘thing’ is the head of a relative clause, which (as a syntactic NP) functions as direct object of ‘know’ or other main-clause verb. There is no overt interrogative element.

- (798) a. \acute{u} [i n\`e [d\`i :ⁿ k\`o k\`o:-\`O]
 2Sg [person.L [**place.L** NonhS.L be.Nonh.HL-Ppl.Nonh]
 j\`ug\`o-\`n k\`uⁿ]
 know.Impf-Ppl.Sg Def
 ‘You-Sg who know where (“the place where”) it is located.’
2004.4.4
- b. [d\`og\`ur\`u w\`o y\`e:r\`e:-\`O] j\`d\`:-g\`o-m
 [**time.L** 3SgS.L come.Impf-Ppl.Nonh] know-*ImpfNeg-1SgS*
 ‘I don’t know when he/she is coming.’
- c. [d\`i :ⁿ d\`a:ŋ\`a b\`e c\`e:n\`e:-\`O]
 [**manner.L** water.jar 3PlS.L make.well.Impf-Ppl.Nonh]
 j\`d\`:-g\`o-m
 know-*ImpfNeg-1SgS*
 ‘I don’t know how they manufacture earthenware water jars.’
- d. [à\`n\`a w\`o w\`o:-\`O] j\`d\`:-g\`o-m
 [**village.L** 3SgS.L be.Hum.HL-Ppl.Nonh] know-*ImpfNeg-1SgS*
 ‘I don’t know which village he/she is in.’
- e. [c\`e: \`u l\`u:g\`ur-\`a:r\`a:-\`O] j\`d\`:-g\`o-m
 [**thing.L** 2SgS.L look.for-Habit-Ppl.Nonh] know-*ImpfNeg-1SgS*
 ‘I don’t know what you-Sg are looking for.’

14 Relativization

14.1 Basics of relative clauses

The basic relative clause pattern has an **internal head NP** (marked by tone-dropping), and a **participle** agreeing in gender-number features with this head NP (rather than an inflected verb agreeing in all pronominal features with the clause subject). Modifying adjectives and cardinal numerals remain with the internal head NP, but some other NP-final elements (e.g. Definite kùⁿ, Plural bé, universal and distributive quantifiers) follow the participle. The participle itself therefore behaves somewhat like an adjective modifying the head noun in several respects (recall that modifying adjectives also force tone-dropping on the modified noun, and precede the NP-final elements mentioned above).

It is also possible to expand this core relative clause structure (ending with a participle and perhaps one or two NP-final morphemes) by adding a copy of the head noun (not the full head NP), as a special kind of **external head**. Specifically, this copied noun is “possessed” by the relative-clause proper, which functions here as the possessor NP (and is therefore followed by Possessive mà). The complete construction may be suggested (crudely) by a structural paraphrase, whereby ‘a/the dog that I saw’ is expanded as ‘dog of [a/the big dog that I saw]’, though of course the linear order in Jamsay is very different (with the external ‘dog’ at the end). The copied external head noun is optional, and occurs in fewer than half of relative clauses occurring in my texts, but it is nonetheless quite well-attested.

The internal head NP is occasionally omitted, whether or not the external head is present. This results in an **internally headless** relative. However, in such cases it is reasonable to think of a “light” head noun (such as ‘person’, ‘thing’, ‘place’, ‘time’, or ‘manner’) as being virtually present, though phonologically inaudible. Furthermore, the participle agrees with this virtual head: (human) Singular, (human) Plural, or Nonhuman. We can therefore think of the agreement morpheme on the participle as a stand-in for a full head NP, just as subject-pronominal suffixation on the verb of a main clause can function as “subject NP.”

Thus the maximal relative-clause construction might be described as **double-headed**. However, the Jamsay construction (when examined in detail) is rather unique, and I question how useful it would be to assign it to a general “double-headed” typological category.

Within the relative-clause proper, the head NP remains *in situ*, i.e. it is **not systematically extracted** to either the left or the right of (the rest of) the clause. The head noun often happens to be clause-initial (disregarding topicalized constituents), as is true of nonpronominal NPs in general, but it need not be so.

Relative clauses in Jamsay are not used for parenthetical comments, as in English nonrestrictive relatives of the type *I like John, who (by the way) is in Texas right now*.

Jamsay relatives may be definite or indefinite. If definite ('the man whom I saw'), they presuppose that the propositional content of the clause is true, and known to the listener, often by virtue of preceding discourse. Since the content is presupposed, there is a high probability that core NPs other than the relativized NP itself will appear in pronominal form. Since pronominals (if not topicalized or emphatic) occur in immediately preverbal position, this typically results in clause-initial position for the (internal) head NP. Indefinite relatives ('a/any man who can climb this hill') characterize an unidentified or generic referent by the relevant proposition, which may include new nonpronominal discourse referents, so in such relatives the head NP have no unusual association with clause-initial position.

Some notable features of Jamsay relatives, in addition to the use of participles and the arrangement of (internal and external) heads as outlined above, are the use of preverbal L-toned subject pronominals in non-subject relatives with no nonpronominal subject NP, and the application of a H(H...)L tone overlay to unsuffixed Perfective verbs (which generally replace suffixed positive Perfective verb forms).

Some important spatiotemporal and manner clauses are simply relative clauses with a noun like 'day' or 'place, manner' as (overt or covert) head.

14.1.1 Relative clause with final *mà* plus repeated head noun

The maximal structure of a relative clause, with N_x representing the noun functioning as lexical head within the internal head NP, and SP representing a preverbal subject pronominal (allowed in non-subject relatives only), is (799).

(799) [[... [... N_x ...]_{NP} ... (SP) Verb-Ppl] *mà* N_x]

In this maximal version, **the head noun N_x appears twice**, once internally within the internal head NP (which may also contain a possessor and/or a postnominal modifier), and once externally (as an unmodified noun) after Possessive *mà*. While the redundant (*mà* N_x) portion is often omitted, there are many textual examples like (800.a-e) where it does occur, and it is clearly an authentic part of the relative-clause system.

- (800) a. [[wàkàtì kì-ká: ñówⁿò [ñú: lè] téwé
 [[**time.L** Rdp-grasshopper damage [millet in] inflict
 bèrè-gó-Ø] mà wákáti ∴ fú:] kò:-rò
 be.able-ImpfNeg-Ppl.Nonh] **Poss time** all] be.Nonh-Neg
 ‘There is no time when grasshoppers can not inflict damage on the
 millet.’ **2004.3.8**
- b. [[dà:ŋà-nò: [ùrò mà bèrè:] kùn-ó-Ø]
 [[water.jug [**house.L** Poss in.L] be.in-Neg-Ppl.Nonh]
 mà úró] kò:-rò
 Poss **house**] be.Nonh-Neg
 ‘There is no house that a water jug is not in.’ **2004.3.13**
- c. [[dàná-m [dàná yă: mèyⁿ↑],
 [[**hunt-Ppl.PI.L** [hunt go and],
 [èjù-nòwⁿó é:-jè-bà dèy],
 [field.L-meat see-RecPf-3PlS if],
 [[èjù-nòwⁿó kùⁿ] yò:rò mèyⁿ↑] tá:ⁿ-m̄]
 [[field.L-bush Def] stalk and] shoot.Impf-Ppl.PI
 mà dàná-m̄] yó=kò
Poss hunt.Ppl.PI] exist=be.Nonh
 ‘There are some hunters_x who, having gone hunting, if they_x have
 seen the wild animals, (they_x) have stalked those animals and shot
 (them).’ **2004.3.16**
- d. [[dògùrù sâl kò:-rò-Ø kùⁿ]
 [[**time.L** prayer be.Nonh-Neg-Ppl.Nonh Def]
 mà dógúró kùⁿ] lè
 Poss **time** Def] in
 ‘(back) in the time when there was no praying (=before Islam)’
2004.3.20
- e. [ì jè è íjé bèrê:-Ø] mà íjé
 [**position.L** 2PlS.L stand can.Impf-Ppl.Nonh] Poss **position**
 ‘the position (or: situation) where you-Pl stand’ **2004.3.24**

While mà is usually present in this construction, in (801.a) the head noun ní-ŋírⁿé ‘day’ is repeated after the core relative clause without mà. This may be related to the fact that ní-ŋírⁿé can be used as a kind of (loose) compound final with no Possessive morpheme and none of the tonal changes typical of real nominal compounds; see (249.a) in §5.1.1. I have another textual example where mà does precede ní-ŋírⁿé (801.b).

- (801) a. [nì-ŋì rⁿè wó bè nárⁿà-Ø] ní-ŋírⁿé
 [Rdp-day.L 3SgO 3PlS.L bear.Perf.HL-Ppl.Nonh] Rdp-day
 ‘they day on which they have borne him (=on which he was born).’
2004.3.12
- b. [nì-ŋì rⁿè [[èné áyà] mà úrò]
 [Rdp-day.L [[ReflP husband.HL] Poss house.Loc.HL]
 wò dò:-Ø kùⁿ] mà ní-ŋírⁿé
 3SgS reach.Perf.HL-Ppl.Nonh Def] Poss Rdp-day
 ‘the day on which she (=new bride) has arrived at her husband’s
 house’ **2004.3.20**

It is possible, though not very common, to have an (internally) **headless relative** clause (with no NP_x head inside the relative clause proper), **followed by** an overt [mà N_x] segment. In this case, the only audible head noun is the external (possessed) one. See §14.1.6 for completely (i.e. internally and externally) headless relatives.

- (802) a. [ú:rⁿó íjé=kò-Ø] mà tí wⁿé
 [get.up stand.Impf=be.Nonh-Ppl.Nonh] Poss tree
 ‘a tree that gets up and stands’ **2004.3.16**
- b. [[[jër dò:-lí-Ø] mà dògùrù núŋò] lè]
 [[[harvest(noun) arrive.L-ImpfNeg] Poss time.L Dem] in]
 túmnó=kò
 begin.Impf=be.Nonh
 ‘It (=wrestling contest) begins at the time when the harvest hasn’t
 (yet) arrived.’ (jèrú) **2004.3.23**
- c. [[bé: èné bê:-Ø] mà cě:]
 [[excrement LogoS defecate.Impf-Ppl.Nonh] Poss thing]
 yó=kò mà ↑] wà ↑
 exist=be.Nonh Q] say
 ‘He asked, “is there a thing (because of which) I will defecate
 (=that can make me defecate)?”’ **2004.4.2**

The construction just described, with final [mà N_x] and no nominal head in the main relative clause, has a variant involving a disjunction in the appended head (‘it is a thing (or) it is not a thing’, i.e., ‘whatever it may be’). In this construction, my examples show nonparticipialized bare verb stems (with lexical tones), as in verb-chains (803.a) and sometimes with jín ‘like’ (803.b).

- (803) a. yǎ: dǒ: láyá [mà, [cě:=ŷ
 go arrive hit [Poss, [thing=it.is
 [cě:=ŷ là:] cêw] [kâ:ⁿ nê]]
 [thing=it.is Neg] all] [also now]]
 ‘He will go there and hit whatever (animal) it is (caught in the trap)’
2004.3.16

- b. [á: kò sâ:-Ø dèy] [nùmó lè]
 [catch NonhS.L do.Perf.HL-Ppl.Nonh if] [hand Inst]
 yǎ: dǒ: á: cě:ⁿ tí jín
 go arrive catch slaughter Link like
 [mà [cě:=ŷ [cě:=ŷ là:]]]
 [Poss [thing=it.is [thing=it.is Neg]]]
 ‘If it (=trap) has caught it, he (=hunter) will go there and seize and
 slaughter whatever (type of animal) it is.’ **2004.3.16**

In place of [mà N_x], I have one textual example with *nám* ‘owners’ (§5.1.12) added to a relative with human plural head. It is possible, however, that *dé:sà-m* in (804) is really a 1Sg subject form (‘I have carried’) rather than a plural participle, in which case the material preceding *nám* is a quotation (‘there are those of [those who say] “...”’).

- (804) [[... mà dú: dé:-sà-m] nám] yó=kò
 [[... Poss load carry-Reslt-Ppl.Pl] owners] exist=be.Nonh
 ‘there are some who bear the burden of ...’ **2004.3.24**

14.1.2 Coordinated and stacked (recursive) relatives.

A single overt head NP may occur in a construction involving two or more relative clauses, i.e. in a **conjoined relative** of the type ‘the man [[who went there] and [who took the horse]]’. (Of course this is distinct from conjunction of two referentially distinct NPs with relatives: ‘[the man who came] and [the woman who stayed]’).

In (805.a-c), there is no overt conjunctive particle linking the clauses, which is to be expected since a) Jamsay relative clauses are morphosyntactically nominal (participles have nominal suffixation), and b) conjunction of NPs in Jamsay is generally expressed by juxtaposition without overt conjunctions (§7.1.1). The head NP appears overtly once, in the first relative clause. One might argue that a zeroed copy of the head NP is (virtually but not audibly) present in the succeeding relative clauses. In a conjoined relative of this type, the truth conditions of all of the relatives must be satisfied for the overall NP to

refer properly. In (805.a), the two relatives denote two propositions, one of which (the negative second proposition) is entailed by the other. In (805.b), the first relative denotes a primary action, while the second is a higher-level proposition ('of whom you are aware'). This example is also interesting in that the (shared) head NP is the subject in one clause and the object in the other.

- (805) a. [àrⁿ-ùm tàrá yà:-lú-m]
 [**man-Pl.L** collective.hunt go-PerfNeg-**Ppl.Pl**]
 [úrò bé:-m] yó=kò
 [house.Loc.HL stay-**Ppl.Pl**] exist=be.Nonh
 'There are (some) men who do not go on the hunt and who
 (instead/therefore) stay home.' **2004.3.3**
- b. [ì nè-m [dùṅdàṅá lè] jéyè-m]
 [**person-Pl.L** [elephant with] fight.Perf.HL-**Ppl.Pl**]
 [só: ù sâ-m] yó=kò
 [awareness 2SgS.L have.Perf.HL-**Ppl.Pl**] exist=be.Nonh
 'There are people who have fought with an elephant, (people) of
 whom you are aware.' **2004.3.4**

The conjoined-relative construction competes with an alternative where, given several consecutive VP's with a shared subject NP, the final VP contains a participle while all the preceding VP's are in chaining form (§14.1.15). This alternative would work easily in (805.a), where the head NP is subject of both clauses, but less easily in (805.b), where this is not the case.

A **disjunctive** relative clause of the same type is possible (806). The disjuncts are followed by *ma* 'or' (§7.2).

- (806) [ì nè ní-dí:ⁿ ñé:-rⁿà-m mà⇒↑] [nǒ:-rⁿà-m mà]
 [person.L here eat-Habit-Ppl.Pl or] [drink-Habit-Ppl.Pl or]
 'the people who eat here or (who) drink here'

One relative clause may be embedded within another (**recursive** or **stacked** relatives). In this construction, the higher relative clause contains an NP (not the higher head NP) that is itself expanded with a relative clause. The resulting center-embedded construction is awkward in production and processing terms and did not occur in my texts, but it is entirely grammatical and was readily elicited. The left edge of the lower relative clause is normally marked prosodically, as the preceding word shows prepausal prosody. This is most often expressed by a brief pause, represented by a comma, since an intonationally determined terminal pitch drop might not be audible (the word in question is often the final word of the higher head NP and is therefore already

entirely L-toned). Such prosodic marking is useful in warning the listener that a center-embedded construction is at hand, and is therefore helpful in preventing misparsing. The right edge of the lower relative may also be marked prosodically in the same ways, but this is less systematic, since the right edge is in most cases already clearly marked morphologically (e.g. by a participle, perhaps with a following Definite morpheme or other NP-final element). Thus, in (807.a), *à-n* ‘man’ (word preceding the left edge of the lower relative) and (optionally) Definite *kùⁿ* (final word in the lower relative, i.e. word preceding the latter’s right edge) have prepausal prosody (final pitch drop and/or brief pause). The formatting in (807) indents the lower relative, and bolds the higher and lower heads in the interlinears.

- (807) a. [*à-n*,
[man.L
 [ùrò émé súgô:-Ø kùⁿ]
 [house.L 1PIS go.down.Impf-Ppl.Nonh Def]
 mâ:-n] jð:-gó-m
 build.Perf.HL-Ppl.Sg] know-ImpfNeg-1SgS
 ‘I don’t know [the man who built [the house where we go down
 (=dwell)].’ (*ǎ-n*, *úró*, *súgó*, *mǎ:*, *jùgó*)
- b. [*pùlð-n*,
[Fulbe.L
 [má nàŋà [éwé lè] mì éwè-Ø kùⁿ]
 [1SgP **cow.L** [market in] 1SgS.L buy.Perf.HL-Ppl.Nonh Def]
 gúyⁿð-n kùⁿ] é:-jè-m
 steal.Perf.HL-Ppl.Sg Def] see-RecPf-1SgS
 ‘I saw [the Fulbe (man) who stole [my cow that I (had) bought in
 the market]].’ (*pùlð-n*, *nàŋá*, *éwé* ‘buy’, *gùyⁿó*)

14.1.3 Tone-dropping on final word(s) of NP in relative clause

Relative clauses are most reliably identified by observing **tone-dropping on the final word in the head NP**. This word would otherwise have at least one H-tone, but it appears in relatives with all-L tones.

If the head NP (disregarding alienable possessors) consists of multiple words, its nonfinal word(s) may already have become L-toned by tone-dropping triggered by a following modifier (adjective or demonstrative). However, there are some NP types that end in two (rarely more) words, each of which has at least one H-tone. When such an NP functions as relative clause head, **tone-dropping applies simultaneously** to the relevant words. The combinations in

question are [noun + (cardinal) numeral] (§6.5), and inalienably possessed nouns with nonpronominal possessor (§6.2.2).

The audible tone-dropping patterns for relative-clause heads are summarized in (808). Please read the “key” underneath.

(808) Tone-Dropping Sites within Head NP

- a. [**noun.L**]
- b. [*alienable possessor NP* - (mà) – **noun.L**]
- c. [**inalienable possessor NP** - **noun.L**]
- d. [**noun.L** – **adjective.L**]
- e. [**noun.L** - **numeral.L**]

KEY: **bolded underlined** word undergoes audible tone-dropping specifically due to relativization; **bolded but not underlined** word has already undergone tone-dropping due to regular NP-internal rules; *italicized* word (alienable possessor) retains its lexical tones.

Inalienably possessed nouns (with nonpronominal possessor NP) and certain types of compounds have at least one H-tone in both the left and right component when they occur NP-finally (more precisely, when they are not followed by a modifying adjective or demonstrative). Examples include compounds with final bâ:ⁿ (báŋà) ‘owner’ or its plural nám (§5.1.12). When such an NP functions as relative head, the left and right components undergo simultaneous tone-dropping.

Unless the entire head NP is omitted (“headless” relatives, see below), the NP-final word targeted by relative-clause tone-dropping is either a noun or a postnominal modifier. If there is a postnominal adjective and/or a postnominal demonstrative (núŋò ‘that’), this postnominal modifier will have already forced tone-dropping on the preceding word (a noun, or another postnominal adjective). For example, an NP of the form [*dog big that*] is already expressed as [*dog.L big.L that*] in main clauses, as each nonfinal word drops its tones under the influence of the immediately following modifier. Therefore the only change the NP undergoes as relative head is that the final word, here the demonstrative ‘that’, also undergoes tone-dropping, resulting in [*dog.L big.L that.L*].

Examples where **just one word** undergoes tone-dropping due to relativization are in (809). These are cases where the NP (excluding alienable possessors) does not end in two tonally independent elements.

- (809) a. [émé dòyǎ-m] [gùjú lè]
 [1PIP Dogon-PI] [skin Inst]

cì gè bè bìrê:-Ø
thing.L 3PlS.L work.Impf-Ppl.Nonh
 ‘Our Dogon people [topic], the thing(s) that they make from hides’
 (cì gè) **2004.3.17**

b. [ùrò dàyà] mì wô:-Ø
 [house.L **small.L**] 1SgS.L be.Hum-Ppl.Nonh
 ‘the small house where I am’ (úró, dáyá)

c. [[má ùrò] númò-Ø] é:-sà-Ø
 [[1SgP **house.L**] fall.Perf.HL-Ppl.Nonh] see-Reslt-3SgS
 ‘He saw my house that fell’ (úró)

d. [[[kó àrgà] bè pánà-Ø] kùⁿ]
 [[[NonhP **side.L**] 3PlS skin(verb).Perf.HL-Ppl.Nonh Def]
 mà àrgá] lè
 Poss side] in
 ‘on the side (of the cowhide) that they skinned (i.e., the inside of the
 hide)’ **2004.3.17**

(809.a) has a simple one-word head NP ‘thing’. In (809.b), the relevant NP appears in main clauses as ùrò dáyá ‘small house’; the noun úró ‘house’ has already dropped its tones because of the modifying adjective. When the NP functions as relative head, the adjective also drops its tones. In (809.c-d), the alienable possessor pronoun (má, kó) is unaffected by the tone-dropping that applies to the noun ‘house’.

In a [**noun + numeral**] sequence, in ordinary clauses both the noun and the numeral have their lexical tones (tonal independence). When such an NP is head of a relative, both the noun and numeral drop their tones (810).

(810) a. [ñě-m kùròy] yérè-m kùⁿ
 [**woman-Pl.L six.L**] come.Perf.HL-Ppl.Pl Def
 ‘the two women who came’ (< ñě-m kúróy ‘six women’)

b. [cè: tùrù] wò dènê: cêw
 [**thing.L one.L**] 3SgS.L want.Impf-Ø all
 ‘any one thing that you want’ **2004.4.4** (cè: túrú)

We also get simultaneous tone-dropping for the following combinations when functioning as relative-clause heads: possessor plus inalienable noun such as a kin term (811.a), compounds of type [\bar{x} \bar{n}] where neither the initial nor the final changes its tones in a main clause (811.b), [\bar{x} \hat{n}] compounds where the

final has an overlaid H(H...)L tone contour while the initial retains its lexical tones (811.c), and compounds whose final is báŋà (bâ:ⁿ) ‘owner’ or its plural counterpart nám following a lexical-toned initial (811.d).

In (811.e), however, we have a combination including a numeral following a kin term plus Pl bé. Normally bé would appear after the participle. However, in the combination bé plus numeral, bé is trapped inside the clause-internal head NP. It does, however, resist tone-dropping, as does the following numeral, although the preceding head noun and its inalienable possessor noun do undergo tone-dropping.

The main-clause forms of the relevant NPs are given in parentheses after the free translations.

- (811) a. [à:màdù dè:] bàmàkó wô-n kùⁿ
 [Amadou.L father.L] Bamako be.HL-Ppl.Sg Def
 ‘Amadou’s father who is (living) in Bamako’ (á:mádù dè:)
- b. [mè:tèrè gà:rà] bè jâ:ⁿ-Ø kùⁿ
 [meter.L eight.L] 3PIS.L dig.Perf.HL-Ppl.Nonh Def
 ‘the eight meters (depth) that they have dug’ (mé:térè gà:rà)
- c. [dòmno ñê-m] yérè-m kùⁿ
 [Domno.L woman-Pl.L] come.Perf.HL-Ppl.Pl Def
 ‘the women of Domno (village) who have come’ (dómno ñê-m)
- d. [pè:tàyà bà:ⁿ] núwⁿ-n kùⁿ
 [Petaka.L owner.L] die.Perf.HL-Ppl.Sg Def
 ‘the resident of Petaka (village) who died.’ (pè:tàyà bà:ⁿ)
- e. yá: [à:màdù dè: bé kúróy]
 yesterday [A.L father.L Pl six]
 [î jú kùⁿ] láyà-m kùⁿ
 [dog Def] hit.Perf.HL-Ppl.Pl Def
 ‘the six fathers of Amadou who hit the dog yesterday’
 (á:mádù dè: bé kúróy)

When a conjoined NP of the type [X.: Y.:], with both conjuncts ending in the dying-quail intonation contour, occurs as head of a relative clause, there is a **conflict** between preservation of this prolonged, falling intonation contour and application of regular relative-head tone-dropping (which would force flat low pitch). In elicited data, the dying-quail intonation was regularly maintained on the left conjunct. The right conjunct usually (but not always) underwent tone-dropping. See §7.1.1.5 for examples and discussion.

14.1.4 Restrictions on the head noun in a relative clause

Among the most **common heads** of relatives are íné ‘a person (who...)', cě: ‘a thing (that...)', and spatiotemporal and manner nouns like dógúró ‘time’ and dǐ:ⁿ ‘place, manner’. On the spatiotemporal and manner cases, see the discussion of relevant adverbials in Chapter 15.

A **pronoun** may not head a relative. Instead, the pronoun is placed to the left in its independent form (with H-tone), in apposition to a proxy noun, either human íné ‘person’ (812) or nonhuman cě: ‘thing’. The independent pronoun is external to the relative clause proper. Tone-dropping applies to the proxy noun (hence ì nè, cě:), but not to the pronoun.

- (812) a. é [ì nè [ñè-î-n yòwò lé]
you-PI [**person.L** [woman-child-Sg accept.L in]
 yǎ:-m kùⁿ]
 go.Impf-**Ppl.PI** Def]
 ‘You-PI, the people who go in order to receive the girl (the bride).’
 [for the purposive clause see §17.6.1]
- b. mí [ì nè ní dâ:ⁿ-n]
1Sg [**person.L** here sit.Perf.HL-Ppl.Sg]
 ‘I who am sitting here’ **2004.3.16**
- c. é [ì nè tàrá bó:nò-m kùⁿ]
2PI [**person** collective.hunt proclaim.Perf.HL-**Ppl.PI** Def]
 ‘you-PI who have proclaimed the collective hunt’ **2004.3.1**

While cě: ‘thing’ is extremely common as a default head in object relatives (‘the thing that you brought’ = ‘what you brought’), I have one example where a Verbal Noun cognate to the participialized verb is used as head.

- (813) ò-y wǒ-r bè ô:-Ø kùⁿ,
give-VbIN.L 3Sg-Dat 3PlS.L give.Perf.HL-Ppl.Nonh Def,
 [wò cě]≡ỹ
 [3SgP.L possession]≡it.is
 ‘What(-ever) they give her [topic], it’s hers (to keep).’ (ò-ý, wò-rú)
2004.3.20

[mɔ̃rⁿɔ́ bírè-m]
 [be.together work.Perf.HL-**Ppl-Pl**]
 [bí rè túmnó] bírè-m kùⁿ]
 [work(noun).L one] work.Perf.HL-**Ppl-Pl** Def]
 ‘You and them, (people) who have farmed together, who have
 worked together, who have worked on (=done) the same job’
2004.3.25

Headless object relatives are common, the implied head being cě: ‘thing’.

- (816) [à:lí-Ø cêw] ... [â:-Ø cêw]
 [catch-PerfNeg-**Ppl.Nonh** all] ... [catch.Perf.HL-**Ppl.Nonh** all]
 ‘whatever he has not caught; ... whatever he has caught’ **2004.3.16**

For headless adverbial relatives, where a head noun meaning ‘time’ or the like is implied, see §15.2.7.

14.1.7 Preverbal L-toned subject pronominal in relative clause

The conditions for the appearance of a **preverbal L-toned subject pronominal** are given in (817).

- (817) a. subject relatives: there is no overt subject pronominal (the role of subject is expressed by a head NP, overt or implicit); examples in §14.2
- b. non-subject relatives: if there is no full (nonpronominal) subject NP, an L-toned subject pronominal appears in preverbal position.

Numerous examples occur in the sections below covering subject relatives, object relatives, and PP relatives.

14.1.8 Participial verb in relative clause

The verb in a relative clause can be in any of a wide range of AN categories, positive and negative. However, the verb cannot take subject pronominal suffixes. Instead, the verb ends in a **Participial** suffix (818), agreeing with the head noun (which may be subject, object, or anything else). If verb-chaining is present, only the final verb is participial in form.

(818) Participial Suffixes on Verb in Relative Clause

- | | | |
|----|------------|----|
| a. | Nonhuman | -Ø |
| b. | (human) Sg | -n |
| c. | (human) Pl | -m |

Examples occur throughout this chapter.

These suffixes are identical to the usual suffixes on nouns and adjectives, expressing humanness and number. Recall that all relatives have a 3rd person head (even though this may be in apposition to a 1st or 2nd person pronoun). The nominal-type agreement of participles is therefore ideally suited to relative clauses. However, because the Participial suffix for nonhumans is phonologically zero, the verb of a relative clause may be indistinguishable in form from a main-clause verb.

The nonzero Participial suffixes have no intrinsic tones, and therefore acquire tones by spreading from the final segments of the stem. For example, the unaffixed Imperfective of non-monosyllabic stems always end in a short F-toned vowel. This F-tone is realized (without vowel lengthening) on the CvC syllable that includes the -n or -m Participial suffix: /yèrê-/ ‘come.Impf’, yèré-m̄ ‘one who comes’, Pl yèré-m̄ ‘some who come’; see §3.7.3.5.

The only C-final verb is the defective quasi-verb kùn- ‘be in’, whose inflected forms are limited to the L-toned unaffixed Perfective. It has the following participles, with the usual H(H...)L unaffixed Perfective relative-clause tone contour: Nonhuman kûn-Ø (819), Sg kún-î n (467.c), Pl kún-ùm (688). The vocalic extensions (with high vowels) in -î n and -ùm are common in adjectival morphology.

- (819) [ùrò [èné bé] kûn-Ø kùⁿ] mà bèrê:
 [house.L [Refl Pl] **be.in.HL-Ppl.Nonh Def**] Poss in
 ‘in the house where they live (“in which they are”)’ **2004.3.18**

A monosyllabic short-voweled F-toned /Cv-/ stem has its vowel lengthened before the zero Participial suffix (as do similar stems before 3SgS -Ø in main clauses), by Contour-Tone Mora-Addition (141). This applies to the quasi-verb sà- ‘have’, and to quasi-verbs wà- and kà- in the locational sense ‘be’. Their forms, showing overlaid Perfective H(H...)L tone, with zero Participial suffix, are sâ:-Ø (713.a), wâ:-Ø (820.c), and kâ:-Ø (820.a-b), respectively. There is no lengthening before a nonzero suffix: Sg Participial sâ-n, wâ-n (811.a), kâ-n (861.e). There are bisyllabic variants of the latter, suggesting that the n has been reanalysed as part of the inner stem: Sg sán-î n (653.c) and Pl sán-ùm for ‘have’, and Sg wón-î n and Pl wón-ùm for ‘be.Human’.

- (820) a. [gùjú kùⁿ lè], lòyð kâ:-Ø.: fú:]
 [skin Def in], dirt.L **be.Nonh.HL-Ppl.Nonh** all]
 dègè=kò
 lick.Impf=be.Nonh
 ‘All the filth that is in the (animal) hides, it (=tanning solution) licks
 (=leeches) away.’ **2004.3.17**
- b. àrⁿ-úm mà [cì-cèrⁿè]-úrò
 man-Pl Poss [Rdp-circumcision.L]-house
 dì:ⁿ kâ:-Ø jín
 manner.L **be.Nonh.HL-Ppl.Nonh** like
 ‘(the women’s excision house was) just like the way the men’s
 circumcision house was’ **2004.3.18**
- c. íjé nîm dì:ⁿ èmè wâ:-Ø lè
 today now manner.L 1PlS.L **be.Hum.HL-Ppl.Nonh** in
 ‘in the situation we are in nowadays’ **2004.3.19**

In addition to normal use in productively formed relative clauses, participles are also found in several types of compounds (mostly agentive in sense). These compounds have their own tone contours; see §5.1.7-9 for details.

14.1.9 Participle of Nonhuman Imperfective with =kò

In the unsuffixed Imperfective verb, the form for Nonhuman subject consists of the Imperfective verb stem plus Nonhuman kò ‘be’. An example is yèrê- ‘come.Impf’ plus kò, realized as yèrê=kò ‘it will come’ after tone sandhi.

When such a combination occurs in a relative clause, the Participial suffix is added to =kò. The forms are Nonhuman =kò-Ø, Sg =kò-n, and Pl =kò-m. Compare the parallel Perfective and Imperfective relative clauses in (821.a-b).

- (821) a. [ì nè-m lè] gó: túmnò-m
 [person-Pl.L Inst] dance(noun) begin.**Perf.HL-Ppl.Pl**
 ‘the people with whom the dance began’
- b. [ì nè-m lè] gó: túmnó=kò-m
 [person-Pl.L Inst] dance(noun) begin.**Impf=be.Nonh-Ppl.Pl**
 ‘the people with whom the dance will begin’

In this imperfective construction, participles of $\text{=k}\delta\text{-}$ remain L-toned. Therefore the Nonhuman participle ending in $\text{=k}\delta\text{-}\emptyset$ does not undergo Contour-Tone Mora-Addition (141), as seen in (822).

- (822) a. $\text{c}\grave{\text{e}}\text{:}$ $\text{k}\acute{\text{o}}$ $\text{t}\acute{\text{e}}\text{:r}\acute{\text{e}}\text{=k}\delta\text{-}\emptyset$
 thing.L NonhO show.Impf=**be.Nonh-Ppl.Nonh**
 ‘(some) thing that shows it’
- b. [$\text{\grave{a}}\text{n}\grave{\text{a}}$ $\text{k}\acute{\text{a}}\text{r}^{\text{n}}\acute{\text{a}}\text{=k}\delta\text{-}\emptyset$] $\text{y}\acute{\text{o}}\text{=k}\delta\text{=}\Rightarrow$
 [village.L do.Impf=**be.Nonh-Ppl.Nonh**] exist=**be.Nonh**
 ‘There are villages that do (that).’ **2004.3.18**

For Nonhuman Participial $\text{k}\hat{\text{o}}\text{:}\text{-}\emptyset$ with lengthened vowel in the locational sense ‘be’, see (820.a-b), above.

14.1.10 Participle of $\text{j}\grave{\text{i}}\text{:}$ - ‘in the meantime’

In a special ‘in the meantime’ construction, a form related to the usual Past participle $\text{j}\grave{\text{i}}\text{:}^{\text{n}}$ can be conjugated pronominally. The conjugatable form is $\text{j}\grave{\text{i}}\text{:}$ -, morphologically an unsuffixed Imperfective verb. It follows a regular VP in a chain construction. It may occur within a relative clause, in which case the participial suffix is added directly to it; see (596) in §10.3.1 for examples. This construction is distinct from the one where (unconjugated) $\text{j}\grave{\text{i}}\text{:}^{\text{n}}$ is added after the participle, illustrated in (594).

14.1.11 Relative-clause participle including positive AN morpheme

With rare exceptions, Perfective $\text{-t}\acute{\text{i}}\text{-}$ and allomorphs ($\text{-y}\grave{\text{a}}\text{-}/\text{-y}\grave{\text{e}}\text{-}$, $\text{-\grave{a}}\text{:}$) are replaced by the unsuffixed Perfective, with a special tone contour, in relative-clause participles (§14.1.8, below). However, other AN suffixes may occur in participles. For negative suffixes, see §14.1.95, just below. Examples with positive AN categories: Resultative (823.a), Recent Perfect (823.b), Experiential Perfect (823.c), Habitual (823.d), and marked Imperfective (823.d).

- (823) a. $\text{c}\grave{\text{e}}\text{:}$ $\grave{\text{u}}$ $\text{k}\acute{\text{u}}\text{n}\acute{\text{o}}\text{-s}\grave{\text{a}}\text{-}\emptyset$ $\text{c}\hat{\text{e}}\text{w}$
 thing.L 2SgS.L put-**Reslt**-Ppl.Nonh all
 ‘whatever you have put (in it)’ **2004.3.17**

- b. [bè dérè] [àrá nǎ:-jè-n]
 [3PIP.L elder.sib.HL] [porridge drink-**RecPf**-Ppl.Sg]
 ‘their (=circumcision novices’) elder brother, who has already been
 circumcised (“has eaten porridge”)’ **2004.3.18**
- c. [kì-kǒjú á:-térè-n]=í: lúgúr-á:rà-m
 [Rdp-viper catch-**ExpPf**-Ppl.Sg]=Foc look.for-Habit-1SgS
 ‘I’m looking for someone who has (once) caught a viper.’
- d. [kòní:n nûŋ] nûŋ-á:rⁿà-m yó=kò
 [guitar song.HL] sing-**Habit**-Ppl.Pl exist=be.Nonh
 ‘There are some who sing guitar-accompanied songs.’ **2004.3.20**
- e. [bé kâ:n] [ì nè-m [kò tò:-m] [gúyⁿó lè]
 [3Pl too] [person.Pl.L [Dem Recip-Pl] [theft in]
 yǎ:-tǒyò-m=í:
 go-**Impf**-Ppl.Pl=it.is
 ‘They too [topic], they (too) were people of the same type (as us)
 who were going clandestinely.’ **2004.5.1** [excerpt from (1133)]

For -sà- see also e.g. (392.c), (419.b), and (836). For -jè- see also (974.b-d).
 For -á:rà- see also e.g. (197.a), (265.a), and (419.b). For -tǒyò- see also (1228).

14.1.12 Relative-clause participle based on negative verb or predicate

Relative clauses are formed in the regular way when the verb is negative. In the Perfective Negative (-lí-) and the Imperfective Negative (-gó-), the Participial suffix is simply added to the negative verb form.

- (824) a. è yâ:-Ø kúⁿ lè,
 2PlS.L go.Perf.HL-Ppl.Nonh Def in,
 ùrⁿ-ùm tàrá dǒ:-gó-m,
child-Pl.L collective.hunt arrive-**ImpfNeg**-Ppl.Pl
 ní: kúnó méy, ...
 water put and, ...
 ‘When you-Pl went (to the hunt), the children who weren’t going all
 the way to the hunt put out (=offer) water (along the way), ...’
2004.3.1

- b. [ì nè kó àyà-lí-n] kò:r-ó
 [person.L NonhO hear-**PerfNeg-Ppl.Sg** be.Nonh-Neg
 ‘There is nobody who has not heard (=Everybody has heard).’
2004.3.20

Negative sà:r-á- ‘not have’ may be participialized, asin (825). See also Sg sà:r-á-n in (261) and (419.c).

- (825) ... hâl [[círé sà:r-á-Ø] lè] yă: d-ó=kò
 ... until [[horn **have-Neg-Ppl.Nonh**] to] go arrive.Impf=be.Nonh
 ‘(from horned animals) it goes all the way to (animals) that do not have
 horns’ **2004.3.16**

So may the negative forms of locational-existential ‘be’ quasi-verbs, w-ò:r-ó- (human) and k-ò:r-ó (nonhuman). The latter is illustrated in (826); see also line 3 of (209).

- (826) [ànà cín k-ò:r-ó-Ø] y-ó=kò
 [village.L thus **be.Nonh-Neg-Ppl.Nonh** exist=be.Nonh
 ‘There are villages where that sort of thing is absent (=doesn’t happen).’
2004.3.18

For participles based on kùn-ó ‘not be in’ (§11.2.3), see (392.b) and (687). For one based on j-èl-lá- ‘not have’ (j-èr-é- ‘have’, §11.5.2), see (718.a).

Participial endings may be added to the negative morpheme -lá- used after adjectives and other stative predicates. The Participial forms are Nonhuman -lá-Ø, Sg -lá-n, and Pl -lá-m (827.a-c). See also -lá-Ø in line 3 of (433.c), and -lá-m in (484.b). In (587), L-toned là-Ø reflects tone-dropping triggered by the following kâ:ⁿ ‘any’.

- (827) a. [p-òn-sũŋ t-ùl]-lá-m
 [pants.L-cord one]-**Neg-Ppl.Pl**
 ‘those who are not of the same belt-cord (=extended family).’ (t-ùrú,
 in this compound otherwise HL-toned t-ùr-ù) **2004.3.3**
- d. ì-n èj-ù-lá-n
 child-Sg.L good-**Neg-Ppl.Sg**
 ‘the child who isn’t good’
- c. t-èy èl-lá-Ø
 tea.L sweet-**Neg-Ppl.Nonh**
 ‘the tea that isn’t sweet’ (t-èy, èr-ù)

A relative clause may be formed from the negation of the $\Rightarrow\dot{y}$ ‘it is’ clitic, which appears in main clauses as $\Rightarrow\dot{y}$ là:. The suffixed Participial forms remain L-toned: Nonhuman là:-Ø, Sg là-n, Pl là-m. In addition to (828), see là:-Ø in (360.a-b), line 3 of (491.c).

- (828) a. [núŋò kùⁿ ké]
 [Dem Def Topic]
 [[màlfâ:ⁿ dánà-n] mà tílây $\Rightarrow\dot{y}$],
 [[rifle hunt.HL-Ppl.Sg] Poss necessity \Rightarrow it.is],
 [[màlfâ:ⁿ dánà-n] \Rightarrow í: là-n],
 [[rifle hunt.HL-Ppl.Sg] \Rightarrow it.is **Neg-Ppl.Sg**]
 [ì jú dánà-n kùⁿ] $\Rightarrow\dot{y}$ ⁿ dèy
 [dog hunt.HL-Ppl.Sg Def] \Rightarrow it.is if
 ‘That (gear) is a necessity for a rifle hunter. If he is (instead) that dog hunter, who is not a rifle hunter, ...’ (tílây) **2004.3.16**
- b. ì j \Rightarrow í: là:-Ø kùⁿ
 do \Rightarrow it.is **Neg-Ppl.Nonh** Def
 ‘that one who is not a dog’ (ì jú)
- c. [ì nè [wó tògú] wô-m] yèré m̀rⁿó-bà,
 [person.L [3SgP kind] be.HL-Ppl.Pl] come be.together.Impf-3PlS,
 [[wó tòg] \Rightarrow í: là-m kâ:ⁿ]
 [[3SgP kind] \Rightarrow it.is **Neg-Ppl.Pl** even]
 [cèrⁿèwⁿè-déné-m] yèré m̀rⁿó-bà
 [fun.L-want.H-Ppl.Pl] come be.together.Impf-3PlS
 ‘People who are his (=the deceased’s) kin will come and gather; even those who are not his kin, (but are) lovers of festivities, will come and gather.’ **2004.3.21**

14.1.13 H(H...L) unsuffixed Perfective participle in relative clause

As the preceding sections have shown, the verb preceding a Participial suffix has the same form (including tone contour) that it has in main clauses (preceding a subject pronominal suffix), across a wide range of positive and negative AN categories.

However, in the positive perfective, the **unsuffixed Perfective** is almost always used in participles instead of the suffixally marked Perfective (with suffix -tì-, -yà/-yè-, or -â:-). Moreover, the unsuffixed Perfective takes a special form in participles (i.e. in relative clauses), characterized by an

H(H...)L tonal overlay (829). (This contour is also found in relative clauses and some other subordinated clauses (829).

(829) H(H...)L-toned unsuffixed Perfective in relative clauses

- a. a marked (suffixed) Perfective (suffix -tì-, -yè/-yà, -â:-) is almost always replaced by an unsuffixed Perfective;
- b. this unsuffixed Perfective has a H(H...)L tone contour overlaid on it.

The H(H...)L tone is realized as F-tone on monosyllables (830.a-b), HL tone contour on bisyllables (830.c), HHL on trisyllables (830.d), etc.

- (830) a. ù jâ:ⁿ-Ø
 2SgS.L dig.**Perf**.HL-Ppl.Nonh
 ‘what you-Sg have dug’ (headless; jâ:ⁿ-) **2004.3.6**
- b. lùgù ù bàrá jâ:-Ø kùⁿ
 manure.L 2SgS.L gather convey.**Perf**.HL-Ppl.Nonh Def
 ‘the manure that you-Sg have gathered and taken (there)’ (jâ:-)
2004.3.6
- c. [dògùrù kó bè pánà-Ø kùⁿ] lè
 [time.L NonhO 3PIS.L skin.**Perf**.HL-Ppl.Nonh Def] in
 ‘when they have skinned (and butchered) it (=animal)’ **2004.3.17**
- d. [bè gámárⁿà-Ø kùⁿ lè]
 [3PIS.L divide.**Perf**.HL-Ppl.Nonh Def in]
 ‘at (the time) when they divide it up.’ **2004.3.19**

Because the only verbs ending in a long vowel are monosyllabic Cv:- (relative Perfective C^h:-), and the only C-final verb is monosyllabic kùn- ‘be in’ (relative Perfective kùn-Ø), we can generalize that all verbs associate the final L of overlaid perfective H(H...)L contour with the final mora of the bare stem. There are no nonmonosyllabic verbs ending in a heavy syllable, e.g. #CvCvC- or #CvCv:-, which could combine with the H(H...)L overlay to produce a surface tone contour like HF.

For **H-toned monosyllabic verbs**, i.e. those of the shape (C)ý:-, and for no other verb type, there is a **surface homophony** between the unsuffixed Perfective and unsuffixed Imperfective participle. Starting with lexical (C)ý:-, the H(H...)L contour produces F-toned (C)ý:-, and the final L-tone segment that characterizes the unsuffixed Imperfective also combines with lexical (C)ý:- to

produce F-toned (C)ṽ:-. The participial suffixes are either zero (Nonhuman) or nonsyllabic (Sg -n, Pl -m), and adding these suffixes does not affect the homophony. Orthographically, I write e.g. (C)ṽ:-ṅ for the unsuffixed Imperfective, with underlying form /(C)ṽ:-L-n/ with floating L-tone marking the aspectual category, and e.g. (C)ṽ:-n for the unsuffixed Perfective, on the grounds that the H(H...)L contour here functions as a unit. However, the two are identical phonetically, and even orthographically I make no distinction when the suffix is -Ø (Nonhuman), hence (C)ṽ:-Ø. An example of homophony is in (849.a), below. There is no Imperfective/Perfective homophony involving bisyllabic (or longer) stems, or R-toned monosyllabic stems.

As noted above, the unsuffixed Perfective nearly always replaces the suffixal Perfective (suffix -tî-, -yè-/yà-, -â:-) in relative clauses. However, there are rare exceptions in the texts. Consider first (831).

- (831) ù láyá-ṅ, ù láyá-ṅ, [ní: lèy]
 2SgS.L hit.Impf-Ppl.Sg, 2SgS.L hit.Impf-Ppl.Sg, [day two]
 [dògùrù kó ù láyá-tî-Ø.: fú:],
 [time.L NonhO 2SgS.L hit.Impf-Perf-Ppl.Nonh all],
 [gùjú kùⁿ] íré=kò
 [skin Def] ripen.Impf=be.Nonh
 ‘You-Sg keep beating (and oiling) it (=cowhide), you keep beating it,
 (for) two days. When you are finally done with beating it, the hide will
 be ripe (=cured).’ **2004.3.17**

In (831), -tî- occurs before fú: ‘all’, which imposes dying-quail intonation (.:) on the preceding word. Perhaps -tî- here emphasizes finality; the cowhide is oiled and beaten over a two-day period.

The adjectival verb pé:ⁿ- ‘become old’ occurred in participles with both Perfective -yè- (832.a) and Resultative -sà- (832.b) in a text about mortuary practices. These participles seem to mean ‘who has become old’, in contrast to a form of the simple modifying adjective pèyⁿ ‘old’.

- (832) a. [ì nè gǎ-n] [ì nè pé:ⁿ-yⁿè-n]≡î:
 [person.L old-Sg] [person.L become.old-Perf-Ppl.Sg]≡Foc
 nùwⁿò dèy
 die.Perf.L if
 ‘If it is an adult, a person who has become old [focus] who has died,
 ...’ **2004.3.21**
- b. [ì nè pé:ⁿ-sà-n]≡î:
 [person.L become.old-Reslt-Ppl.Sg]≡it.is happen if
 ‘if it happens to be a person who has become old’ **2004.3.21**

In elicitation, I recorded one case involving Perfect -â:- in resultative-stative sense (833). This is an isolated, lexicalized form. Singular káw-â:-n (and Plural káw-â:-m), based on the verb káwá- ‘be separate’, are the human counterparts of the (nonhuman) adjective kǎw ‘separate’ (231.g).

- (833) ì nè káw-â:-n
 person.L be.separate-Perf-Ppl.Sg
 ‘a different (or: separate) person’

14.1.14 Relative clause based on predicative adjective

Since adjectives may directly modify nouns in the common pattern [noun.L adjective], adjectives are rarely participialized in full-fledged relative clauses. However, a predicative adjective may appear in manner adverbial function in a relative clause (834). In this case, we get the same H(H...)L tone pattern overlaid as for unsuffixed Perfective verbs.

- (834) sà:j-î:ⁿ, [dì:ⁿ kò tēyⁿ.: fú:⇒]
 bird-child, [manner.L NonhS.L **small.HL** all]
 à-tí: kó á:≡kò
 bird.trap NonhO catch.Impf=be.Nonh
 ‘A bird, however small it may be, a bird trap will catch it.’ **2004.3.16**

Here the adjective has a basic R-toned form tēyⁿ. The switch to F-toned tēyⁿ is independent of the “dying quail” intonation associated with the following fú: ‘all’, and in follow-up elicitation informants gave [dì: kò tēyⁿ] when the fú: was omitted.

(361.b) in §6.3.3.4 (‘a village that is near the water’) is another case involving a predicate adjective.

14.1.15 Relative clause involving verb- or VP-chain

A relative clause may contain a VP- or verb-chain. The nonfinal VP or verb has its usual bare-stem (i.e. infinitival) form, while the final verb has the participial form appropriate for relatives. The nonfinal bare-stem verb is bolded in the interlinears in (835).

- (835) a. ì nè ùró sùgò-n
 person **go.up** go.down.Perf.HL-Ppl.Sg
 ‘the person who went up and came (back) down’

- b. ì nè yǎ: yèré-m̀
 person go come.Impf-Ppl.Pl
 ‘ones who go and come (back)’
- c. bù:dù yèré mǐ-n wò ô:-Ø kùⁿ
 money.L come 1Sg-Dat 3SgS.L give.Perf.HL-Ppl.Nonh Def
 ‘the money that he came and gave me’

A complex textual example involving a chain of four verbs (‘push’, ‘close up’, ‘plaster’, and ‘dig out’), with only the final verb in participial form, is (836). This construction competes with the conjoined-relative construction (§14.1.2).

- (836) [émé à-kòrò pèyⁿ] dàmá dùṅó mèyⁿ,
 [1PIP well.L old.L] **push close.up** and,
 [sì m̀: tárá èmè wòyòrò-sà-Ø] yó=kò
 [cement **(re-)plaster** 1PlS.L dig.out-Reslt-Ppl.Nonh] exist=be.Nonh
 ‘There are (also) our old wells that we have filled up with earth
 (“pushed and closed up”) and have plastered cement on and excavated.’
2004.4.5

14.1.16 Relativization within adverbial and complement clauses

Since the relativized-on NP is not fronted, there is no difficulty forming relatives inside complement clauses. (837.a) is an example involving ‘want’ as higher verb. That the higher verb rather than the lower verb is participialized is brought out by an elicited construction (837.b) that is parallel in structure, but that has a human head (and therefore a nonzero Participial suffix). The resumptive 3Pl object pronominal in the lower clause in (837.b) is optional.

- (837) a. [dì:ⁿ kò dó:=kò,
 [place.N NonhS.L arrive.Impf=be.Nonh]
 ù dènè-gó-Ø] yó=kò
 2SgS.L **want-ImpfNeg-Ppl.Nonh** exist=be.Nonh
 ‘There are places (in your field) that you don’t want it (=donkey) to
 reach.’ **2004.3.10**

- b. [[i nè gàmà-nàm] jàndúru (bé) cééré=kò
 [[person certain-Pl.L] donkey (3PIO) bite.Impf=be.Nonh
 ù dènè-gó-m] yó=kò
 2SgS.L **want-ImpfNeg-Ppl.Pl]** exist=be.Nonh
 ‘There are certain people that you don’t want the donkey to bite.’

(838.a) is a similar example with ‘can’ as higher-level verb. (838.b) is based on a jussive (=embedded imperative) clause with gá:- ‘say’ as higher-level verb.

- (838) a. [ñè-n è jé: bèré-ñ lè]
 [woman-Sg.L 2PlS.L marry **can.Impf-Ppl.Sg** with]
 fót-â:-Ø
 coincide-Perf-3SgS
 ‘He has met with a woman whom you-Pl can marry’ **2004.3.20**
- b. [cè: àmà kárⁿá] è gâ:-Ø kùⁿ
 [thing.L God do.Imprt] 2PlS.L **say.Perf.HL-Ppl.Nonh** Def
 ‘what you-Pl told (=prayed to) God to do’ **2004.4.6**

In (839), the higher verb is ‘know (that ...)’.

- (839) [bì rè [èné bé] bì rê:] [èné bé] júgò-Ø
 [work.L [Refl Pl] work.Impf] [Refl Pl] **know.Perf.HL-Ppl.Nonh**
 ‘the work that they knew that they could do’ **2004.4.23**

14.1.17 Non-tone-dropping NP-final morphemes that follow participles

Morphemes that commonly occur at the end of NPs may also appear at the end of relative clauses, **after the participle**. This excludes modifying adjectives and cardinal numerals, which must remain with the internal head NP; examples given above are (809.b) with a modifying adjective and (810.a-b) with cardinal numerals.

Final morphemes that **do not impose tone-dropping** include those in (840).

- (840) a. Definite kùⁿ
 b. Plural bé
 c. universal quantifiers fú: and cêw ‘all’
 d. kâ:ⁿ or kárⁿà ‘also, too’ (usually in the combination kâ:ⁿ nè)
 e. Past jì:ⁿ

These add-ons occur, in my textual data, only in relative clauses that do not end in the optional [mà N_x] segment, with repeated head noun.

Although none of these elements induces tone-dropping, fú: does impose its usual dying-quail final intonation on the preceding word.

kùⁿ, bé, fú:, cêw, and jì:ⁿ are illustrated in (841); for jì:ⁿ see also (594). (841.e) has no fewer than three such particles. (841.c), with fú:, illustrates the very common double-negative construction ‘[[any/every X that doesn’t ...] doesn’t exist]’, i.e. ‘every X does ...’. bé is also attested as part of the internal head NP, in (849.e) where it (therefore) undergoes tone-dropping to bè, but this is dispreferred in elicitation. There is also a distinct ‘in the meantime’ construction in which jì:ⁿ is itself directly participialized; see (596).

- (841) a. [[é wàrù-wára-m] háybé-m kùⁿ]
 [[2Pl farming.L-farm(verb).H-Pl] protect-Ppl.Pl **Def**]
 ‘those who protect you farmers’ **2004.3.8**
- b. [bàndí: [má kù:ⁿ] númò-m kùⁿ bé]
 [bandit [1SgP on] fall.Perf.HL-Ppl.Pl **Def Pl**]
 jð:-gó-m
 know-ImpfNeg-1SgS
 ‘I don’t know the bandits who fell on (=attacked) me.’ (jùgó-)
- c. [èjù-nòwⁿð à:-gó:-Ø.: fú:]
 [field.L-meat.L catch-ImpfNeg-Ppl.Nonh **all**]
 mà tǒg kð:-ró
 Poss kind be.Nonh-Neg
 ‘There isn’t any kind of animal that it (=bird trap) doesn’t catch.’
 (=‘It catches every kind of animal’) (tǒgú) **2004.3.16**
- d. [â:-Ø cêw]
 [catch.Perf.HL-Ppl.Nonh **all**]
 ‘whatever he has caught’ **2004.3.16**
- e. [[pó:ró èné dð:-gó-Ø
 [[first Refl reach-ImpfNeg-Ppl.Nonh
 jì:ⁿ kùⁿ cêw] lè] dð:-Ø⇒
Past Def all in] reach.Impf-3SgS
 ‘What she could not previously reach (=do), she reaches (now, after emerging from post-partum seclusion).’ **2004.3.19**

In the sense ‘also, too’, *kâ:n* (variant *kárⁿà*, extension *kâ:n nè*) has no tonal effect on the preceding participle (842). (For homonym *kâ:n* ‘each’ see the following section.)

- (842) [jǎm ì nè bè gá-mè *kâ:n*] yó=kò
 [tanners person.L 3PIS.L say.Impf-Ppl.Pl **also**] exist=be.Nonh
 ‘There are also the people whom they call “jam” (caste of tanners).’
2004.3.17

14.1.18 Tone-dropping NP-final morphemes that follow participles

Two other morphemes that follow the participle at the end of a relative clause are Distributive *kâ:n* ‘any, each’ and demonstrative *núŋò* ‘this, that’. These two morphemes must directly follow the participle, on which they **enforce tone-dropping**. The two do not occur together. In those cases where *núŋò* co-occurs with a non-tone-dropping final morpheme, *núŋò* comes first, so there is no incremental issue involving tone-dropping patterns. Specifically, *núŋò* may be followed by Definite *kùⁿ*, Plural *bè*, or *kâ:n* (*kárⁿà*) in the sense ‘also’; see the preceding section. Distributive *kâ:n* rarely co-occurs with a following final morpheme; one can imagine (on semantic grounds) a combination with following *kâ:n* (*kárⁿà*) ‘also, too’, but (perhaps because of their partial homonymy) the combination did not occur in texts, in relatives or in ordinary NPs, and my assistant found it unacceptable.

Distributive *kâ:n* requires tone-dropping on a preceding participle (843), just as it does on a preceding noun in a simple NP (§6.8.1). This is readily observable with negative participles, since negative suffixes are otherwise H-toned. The combination of negative participle plus *kâ:n* is fairly common in constructions freely translatable with ‘nobody’ or ‘nothing’, and in double-negative constructions translatable with ‘everybody’ or ‘everything’.

- (843) a. [è:-lì-n *kâ:n*] kò:-ró
 [see-PerfNeg-Ppl.Sg.L **any**] be.Nonh-Neg
 ‘There is nobody who did not see (it).’ = ‘Everybody saw it.’
2004.3.6
- b. [cè: bé:-rà-là-Ø *kâ:n*] kò:-ró
 [thing.L happen-Habit-Neg-Ppl.Nonh.L **any**] be.Nonh-Neg
 ‘There is nothing that doesn’t happen.’ **2004.3.10** [= (587)]
- c. [nùwⁿó≡yⁿ bè:-Ø *kâ:n*] [kó bèrè:]
 [death=Foc happen-Ppl.Nonh.L **any**] [Nonh in]

ṅáǎá:dì ≡ŷ là:
rancor≡it.is Neg

‘Any death that may occur during it (=wrestling competition), it is not (cause for) rancor.’ **2004.3.23**

For the tonal patterning in (843.b), see discussion of the same example given as (587), above.

Distributive *kâ:n* also forces audible stem-wide tone-dropping on participles based on verbs containing a nonzero AN suffix, whether the suffix is L-toned as with Resultative *-sà-* (844.a), or contains an H-tone as with Progressive *-á:rà-* (844.b). In participles based on the (low-text-frequency) combination of Negative *-lá* with a preceding nonzero AN suffix, as in *bé:rà-lá* ‘it doesn’t happen’, tone-dropping due to *kâ:n* is limited to the Negative suffix *-lá* (which drops to *-là-*), leaving the H-tone of the stem unscathed (844.d). This is not surprising, since Negative *-lá*, though elsewhere capable of inducing tone-dropping, has failed to drop the initial H-tone in cases like *bé:rà-lá*; see (587) in §10.1.3.4.

- (844) a. [ì nè bì r-sà-n kâ:n] kò:r-ó
[person.L **work-Reslt-Ppl.Sg.L any**] be.Nonh-Neg
‘There is nobody who worked.’ (*bír-sà-* < *bír-é-*)
- b. [ì nè ní m bí ré bì r-à:rà-n kâ:n]
[person.L now work(noun) **work-Habit-Ppl.Sg.L any**]
kò:r-ó
be.Nonh-Neg
‘There is nobody who is working now.’ (*bì r-á:rà-*)
- c. [mòbíl kò àrgá]
[vehicle Dem side]
[mòllò-sà-Ø kâ:n] kò:r-ó
[**be.punctured-Reslt-Ppl.Nonh.L any**] be.Nonh-Neg
‘(In) that part of the vehicle [topic], nothing was punctured (by bullets).’ **2004.5.1**
- d. cè: bé:-rà-là-Ø kâ:n
thing.L happen-Habit-Neg-Ppl.Nonh.L any
‘anything that doesn’t happen’ **2004.3.10**

Tone-dropping due to Distributive *kâ:n* also overrides the overlaid H(H...)L tone pattern otherwise required on (positive) unsuffixed Perfective participles in relative clauses.

- (845) [ì nè yèrè-n kâ:ⁿ] kò:-rò
 [person.L **come.Perf-Ppl.Sg.L any**] be.Nonh-Neg
 ‘Nobody came’ (yèrè-n)

Demonstrative núṅò (and its human counterparts), like modifying adjectives and Distributive kâ:ⁿ, forces tone-dropping on a preceding noun in simple NPs: ì jù núṅò ‘that dog’ (ì jù). When it follows a relative clause, it has a tone-dropping effect on the participle. In (846.a), the negative participle would have the form yèl-lí-n with H-toned suffix without the following demonstrative. In (846.b), the form of the unsuffixed Perfective participle would be wò:-Ø without the demonstrative.

- (846) a. à-n yèl-lí -n núṅò-bâ:ⁿ
 man-Sg.L come-PerfNeg-Ppl.Sg.L **Dem-owner**
 ‘that man who did not come’
- b. [dì:ⁿ nîṅ] [[ní èné wò:-Ø núṅò] lè]
 [place.L this] [[hereLogoS be.Hum.Perf-Ppl.Nonh.L **Dem**] in]
 ‘(He said:) “here in this place where I am ...”’ **2004.4.4** [<(1265)]

The long vowel in wò:-Ø in (846.b), cf. wò- ‘be-Human’, is due to Contour-Tone Mora-Addition (141), and long-voweled examples of this type are analysed just after the formulation of that rule. A similar example is (847), with sà- ‘have’ appearing in long-voweled form sà:-Ø. Both wò:-Ø and sà:-Ø have F-tones at a point in their derivations after the {HL} Perfective Participial contour has been overlaid, but the F-tone is later erased by tone-dropping due to the following demonstrative.

- (847) [èjù-nòwⁿò círé sà:-Ø núṅò bé]
 [field.L-meat.L horn **have.Perf.L-Ppl.Nonh** Dem Pl]
 tḡgú yàṅá méy, ...
 kind take and, ...
 ‘starting with those species of those animals that have horns, ...’
2004.3.16

No F-tone is present in the derivation of =kò-Ø as Nonhuman unsuffixed Imperfective participle (848), so the vowel is not lengthened.

- (848) [cè: kó té:rè=kò-Ø kâ:ⁿ] kò:-rò
 [thing.L NonhO show.Impf=**be.Nonh-Ppl.Nonh** any] be.Nonh-Neg
 ‘There is nothing that shows that.’ **2004.3.18**

g. pùlò-n [nàŋá kùⁿ] gúyⁿò-n
Fulbe-Sg.L [cow Def] steal.**Perf.HL-Ppl.Sg**
 ‘a/the Fulbe (man) who stole the cow.’

Since the form of the head NP and that of the participle do not indicate case, various heuristics may be used to distinguish subject from non-subject relatives. In (849.a,d,e), the human head NP is easily identified as the (agentive) subject of the motion verb. Likewise, in (849.b,f) the head NP may only be taken as the subject of the verb ‘stand’ or ‘misfire’, since these verbs take only one referential argument. However, the verbs ‘X unite Y’ in (849.c) and ‘X steal Y’ in (849.g) each have two referential argument positions. In (849.c), there is also a preverbal H-toned pronoun, which must be the direct object, so the L-toned head noun ‘thing’ must be the subject; this is confirmed by the Nonhuman suffix on the participle. In (849.g), aside from the asymmetrical semantics of ‘steal’ and the (human) Singular participle, the fact that the subject NP usually precedes the direct object NP (when both are nonpronominal) is a further clue that the head NP ‘Fulbe (man)’ is the subject.

The ambiguity between unsuffixed Imperfective and unsuffixed Perfective participial readings for (849.a) is a feature of lexically H-toned monosyllabic stems, and is explained above (§14.1.13). Contrast (849.e), from lexically R-toned yǎ:-, where the F-toned participle can only be interpreted as based on the unsuffixed Perfective. These details apply to non-subject as well as subject participles.

For internally headless subject relatives see (815). For a subject relative with an additional external head noun, see (800.c). For one that is externally headed but lacks an overt internal head, see (802.a).

14.2.2 Agentives

Some subject relatives, generally consisting of a simple Imperfective participial verb without complements, function as agentives.

An example is verb *dàná-* ‘hunt’, unsuffixed Imperfective stem *dànâ-*, Agentive *dàná-ñ* ‘hunter’ (Pl *dàná-m*). There is no formal difference between ‘hunter’ and the imperfective relative clause ‘one who hunts’ (§4.2.3).

However, we can partially distinguish agentives from ordinary subject relatives when the agentives are extended by incorporating an object noun, or other complement or adverbial. Here a true agentive takes **one of two tone contours**, each associated with a type of noun-noun compound. One type (§5.1.7), identical in form to subject relatives, is [\bar{x} \hat{v} -Ppl], where the (loosely) incorporated element *x* has its regular tone, and the participial verb has H(H...)L tone (850.a). The other type (§5.1.9, with many examples), clearly

distinguishable from ordinary subject relatives, is a more tightly fused [*ǎ-ǎ-Ppl*], where the incorporated element has its tones dropped to all-L, and the verb shifts to all-H tone (850.b).

- (850) a. *ù-jùwⁿó* *dánà-m*
 Rdp-mouse hunt.HL-Ppl.Pl
 ‘mouse-hunters’ **2004.3.16**
- b. *tàrà-yá:-m*
 collective.hunt-go-Ppl.Pl
 ‘those who go on the collective hunt’ **2004.3.3**

14.3 Object relative clause

14.3.1 Ordinary object relative clause

In object relatives and other non-subject relatives, if the subject is not expressed by a nonpronominal NP, it appears as an L-toned subject pronominal immediately preceding the participle. An example is (851), which also illustrates the H(H...)L tone contour on the unsuffixed Perfective participle.

- (851) [*cè:* *ù* *bírè-Ø*] *cé:n-â:*
 [**thing.L** **2SgS.L** work.**Perf.HL-Ppl.Nonh**] be.good-Reslt
 ‘what you-Sg have accomplished is very good’

More nonhuman object relatives are in (852). The head noun and the Participial suffix are bolded in interlinears. L-toned preverbal subject pronominals appear in most of the examples, and are italicized in interlinears. These subject pronominals make it relatively easy to identify the head NP as the object. In (852.c), however, both subject and object are expressed as nonpronominal (i.e. noun-headed) NPs. Clues that ‘cattle’ is the object, rather than subject, are: a) the Nonhuman zero suffix on the participle, b) the fact that nonpronominal NPs follow subject-object order, and c) the subject-object animacy asymmetry of the verb ‘chase, drive ahead’.

- (852) a. [lù:rò ù jùgô:-Ø] mà tègú
 [snake.L 2SgS.L know.Impf-Ppl.Nonh] Poss speech
 ‘saying something about the snakes that you know (of).’
- b. kì-kàjàrà tó: ù dò:-lí-Ø
 Rdp-new.field.L sow 2SgS.L reach-ImplNeg-Ppl.Nonh
 ‘a newly cleared field that you-Sg have planted (in part) but have not reached (the boundary of)’ **2004.3.6**
- c. púlò-m nàṅà náná jínè-Ø fú:
 Fulbe-Pl cow.L chase have.Perf.HL-Ppl.Nonh all
 ‘all the cattle that the Fulbe drive ahead and have possession of’
2004.3.10
- d. hâl jàndùrù ùj-jè
 until donkey.L go.up-RecPf
 èjú ù yă:-Ø kâ:ⁿ
 field 2SgS.L go.Impf-Ppl.Nonh even
 ‘even a donkey that you-Sg have already mounted and (will) go to the field (with)’ (ùr-ó-) **2004.3.10**
- e. [cè: kò ñúnú-ṅò-Ø]
 [thing.L NonhS.L be.ruined-Caus.Perf.HL-Ppl.Nonh]
 yă: yàṅá-bà
 go look.at.Impf-3PIS
 ‘They will go and look at what it damaged (=the damage it did).’
 (verb ñùnù-ṅó-) **2004.3.10**
- f. à-n mì láyà-n kùⁿ
 man-Sg.L 1SgS.L hit.Perf.HL-Ppl.Sg Def
 ‘that (same) man whom I hit’
- g. ì-n bè nárⁿà-n kùⁿ
 child-Sg.L 3PIS.L bear.Perf.HL-Ppl.Sg Def
 ‘the child that they have borne (=the child that was born).’
2004.3.19
- h. ì nè ù á: bèr-é-ṅ
 person.L 2SgS.L catch can.Impf-Ppl.Sg
 ‘the person whom you are capable of wrestling’ **2004.3.23**

- i. [î nè làgù-m] ù ê:-m
 [person.L other-Pl.L] 2SgS.L see.Perf.HL-Ppl.Pl
 ‘other people whom you-Sg have seen’ **2004.3.25**

For an internally headless object relative, see (816). An object relative with an additional external head is (800.e), involving a cognate nominal.

See also the discussion of object relatives functioning as instrumental and similar compound-like nouns (‘oil for rubbing’) in §5.1.15.

14.3.2 ‘what they call “X”

The verb gá:- ‘say’ may be used in a special type of object relative. This construction is very common in interview-style texts where an expert speaker is explaining e.g. agricultural techniques, and periodically introduces technical or archaic vocabulary. Jamsay ‘what they call “X” can be freely glossed as ‘so-called X’. The subject is 3Pl (nonspecific referentially), the verb is a participle based on Perfective gâ- with H(H...)L contour, and Definite kùⁿ is regularly added. With zero suffix, gâ- is lengthened by gâ:-Ø by Contour-Tone Mora-Addition (141). The quoted term has its normal tones, and is therefore not the head NP. Therefore, when no obvious object NP is present, as in (853.a), a zero object functioning as relative head is posited. In (853.b), an object NP ‘women’ (the third word in the example) is an overt direct-object head. The quoted term is therefore an adjunct and is neither relative head nor direct object.

- (853) a. kó≡ỹ [mòñù-cěm bè gâ:-Ø kùⁿ]
 Nonh≡it.is [“**Mossi.L-point**” 3PlS.L say.Perf.HL-Ppl.Nonh Def]
 ‘it’s what they call “Mossi point(s)” [= arrows].’ **2004.3.2**
- b. [ñè-m yà:-yéřè-m] ñè-m
 [woman-Pl.L go.L-come.HL-Ppl.Pl] woman-Pl.L
 bè gâ-m kùⁿ
 3PlS.L say.Perf.HL-Ppl.Pl Def
 ‘the women who(m) they call “go-come women”’ [cf. (269)]
2004.3.3

14.4 Relative clause from ‘it is’ clitic construction

The construction [X≡ỹ] ‘it is X’ and its negation [X≡ỹ là:] (§11.2.1) allow the predicative constituent X to be relativized on. The negative version occurred (as part of a double negative) in a text (854); examples given earlier are (360.a-b).

- (854) [[tì wⁿɛ̀ ù jò:-gó-Ø]≡ỳ là:]
 [[tree.L 2SgS.L know-ImpfNeg-Ppl.Nonh]≡it.is Neg]
 [tì wⁿɛ̀ lǒy≡ỳ là:-Ø] kò:-rɔ́
 [**tree.L** medicine≡it.is Neg-**Ppl.Nonh**] be.Nonh-Neg
 ‘Aside from trees that you-Sg don’t know, there is no tree that is not
 medicine.’ (jùgó-) **2004.3.27**

A parallel example where the ‘it is’ clause is positive was elicited (855).

- (855) [tì wⁿɛ̀ lǒy≡ỳ] kò:-rɔ́
 [tree.L medicine≡it.is] be.Nonh-Neg
 ‘There is no tree that is medicine.’

This example is structurally interesting. ‘Tree’ shows the tone-dropping typical of relatives. Since a relative clause is at hand, there should be a Nonhuman Participial suffix -Ø. However, there is no verb, or even a quasi-verb capable of taking Participial suffixes. This is “finessed” in (855), since the relevant Participial suffix is phonetically inaudible (zero). What happens when we force the issue by using a human head NP? Consider the simple ‘it is’ clause (856).

- (856) n̄ɛ̀-n òyò-n≡í:
 woman-Sg chief-Sg≡it.is
 ‘A woman is (the) chief.’

When I tried to elicit a relative clause version, as in ‘there is no woman who is chief’, informants altered the construction rather than put Singular Participial -n on the clitic ≡ỳ (allomorph ≡í:). They either used compounds (e.g. ‘there is no woman-chief’), or switched from relative clause to factive complement (857).

- (857) [n̄ɛ̀-n òyò-n≡í:] kò:-rɔ́
 [woman-Sg chief-Sg≡it.is] be.Nonh-Neg
 ‘That a woman be chief, it does not exist.’

Note that ‘woman’ in (857) does not undergo tone-dropping; it is in the form of a main-clause subject (or topic) rather than a relative-clause head. I conclude that there is a morphological constraint against combining ≡ỳ ‘it is’ with nonzero Participial suffixes, but that relatives with nonhuman head are allowed (“tolerated” might be a better word) since their zero Participial does not force the constraint to be audibly violated.

There is no problem in forming human participles (with audible suffixes) based on the negative ‘it is not’ construction, since here the Participial suffix is added to Negative là: (allomorph là-) rather than directly to the ‘it is’ clitic. Therefore in (858) ‘woman’ appears in tone-dropped form, as head of a relative clause.

- (858) [ñè-n òyò-n=î: là-n] kò:-rɔ́
 [woman-Sg.L chief-Sg=it.is Neg-**Ppl.Sg**] be.Nonh-Neg
 ‘There is no woman who is not a chief.’ (=‘Every woman is a chief.’)

14.5 Possessor relative clause

Possessor relatives are covered here, since their structure is relevant to the discussion of relatives based on complex postpositions (§14.6.2, below).

Three constructions are possible for possessor relatives. In the first, recorded once in a text, the possessor noun undergoes tone-dropping. Possessive mà is not present. In (859), ì nè gàsègè could be mistaken for a compound (L-toned initial, lexical-toned final), but this would make no sense. Perhaps this uncommon first construction is a slightly truncated version of the third (see below). If so, ì nè and gàsègè in (859) should be considered as two constituents that just happen to be adjacent, rather than as constituting a single constituent (possessed NP).

- (859) sàná⇒ [ì nè gàsègè bè nánà-m]=î:
 necessarily [**person.L animal** 3PIS.L drive.off.Perf.HL-Ppl.PI]=Foc
 ú:rⁿô: mà⇒↑
 get.up.Impf Q
 ‘Is it necessarily (=specifically) the people whose animals they (=Fulbe)
have driven off (=rustled) [focus] who get up (and fight the Fulbe)?’
2004.4.25

In the second construction, obtained in elicitation (see below), the regular possessed NP phrase [X mà Y] ‘the Y of X’ is preserved intact, except that (as relative head) the possessor X undergoes tone-dropping (860.a).

In the third construction, observed in a text and in elicitation (see below) and evidently the productive pattern, the possessor is extracted (or at least separated) from the possessed NP phrase and **placed to its left** (not necessarily directly adjacent). This possessor NP (as relative head) undergoes tone-dropping. Its original place within the possessed NP phrase is occupied by a **resumptive third person possessor** (Singular, Plural, or Nonhuman) in its

regular form (H-toned for alienable, L-toned for inalienable possession). The resumptive pronominal is not Reflexive/Logophoric in form.

In elicitation, my assistant gave (860.a) and (860.b) as interchangeable. (860.a) has the second construction with [X mà Y], while (860.b) illustrates the more common third type showing extraction and a resumptive possessor pronominal.

- (860) a. [ì nè mà ì jú] mì wô:-n kùⁿ
 [person.L Poss dog] 1SgS.L kill.Perf.HL-Ppl.Sg Def
 ‘the person whose dog I killed’ (wô:-)
- b. ì nè [wó ì jú] mì wô:-n kùⁿ
 person.L [3SgP dog] 1SgS.L kill.Perf.HL-Ppl.Sg Def
 [= (a)]

Textual examples of the third, extraction pattern are in (861.a-d). In these examples the extracted possessor is adjacent to the pronominally possessed noun. (861.e) is an elicited example involving an inalienable noun. The possessed NP happens to be a subject in (861.a-c), the complement of a postposition in (861.d), and a direct object in (861.e).

- (861) a. bùrò [kó lègú] éjù-Ø
 pond.L [NonhP earth] good.HL-Ppl.Nonh
 ‘a (seasonal) pond whose clay is good (for pottery).’ 2004.3.13
- b. ì nè [wò cé] ñáká-sà-n
 person.L [3SgP.L possession] be.incomplete-Reslt-Ppl.Sg
 ‘a person whose possession (=equipment) was incomplete
 (=missing something)’ 2004.3.24
- c. [ì nè [wó búgù] wó dègè-gó-n]
 [person.L [3SgP gunpowder] 3SgO spend.day-ImpfNeg-Ppl.Sg]
 gò:-lí-Ø
 go.out-PerfNeg-3SgS
 ‘Nobody_x went out (to the bush) whose_x gunpowder didn’t last him_x
 all day.’ 2004.3.24
- d. [ì nè [[wó jèjú] bérè] sì:’lé
 [person.L [[3SgP body] in] disease
 sówó mèyⁿ kô-n cêw] dàyá-bà
 jab and be.Nonh.HL-Ppl.Sg all] leave.Impf-3PIS

‘They (=colonial army recruiters) would leave (=reject) anyone in whose body a disease had penetrated and was (still there).’
2004.4.21

- e. ìnè [wò dè:] mì wô:-n kùⁿ
person.L [**3SgP.L** father] 1SgS.L kill.Perf.HL-Ppl.Sg Def
 ‘the child whose father I killed’

In this productive extraction construction, the possessed noun may be separated from the possessor by an adverb (862.a) or by another NP (862.b). In (862.a), the resumptive pronominal possessor is omitted, perhaps because in this context ‘eye’ is an abstraction for ‘vision, ability to see’. In (862.b), my assistant also accepted the ordering of púlò-n before à-n.

- (862) a. [ì nè gàrá⇒ jì ré é:-n]≡ì: là:
 [person.L a.lot eye see.Impf-Ppl.Sg]≡it.is Neg
 ‘(A farmer) is not someone whose eyes see a lot (while he is bent over with the hoe).’ [*< Imperfective participle é:-n*] **2004.4.4**
- b. à-n púlò-n [wó nàṅá] gúyⁿ-n kùⁿ
man-Sg.L Fulbe-Sg [**3SgP** cow] steal.Perf.HL-Ppl.Sg Def
 ‘the man whose cow the Fulbe man stole’

14.6 PP relative clause

14.6.1 With simple postposition

In PP relatives, only the NP complement of the postposition is logically relativized on, as is brought out by English translations with stranded prepositions (‘the house_x that I live in ___x’). However, in Jamsay, **both the postposition and the complement NP undergo tone-dropping**. The usual general features of relativization are also applicable: Participial suffix on the verb agreeing with the head, preverbal L-toned subject pronominal, and H(H...)L tone overlay on a (positive) unaffixed Perfective verb.

The first set of examples (863) involve the all-purpose postposition lè (§8.2.1). Since lè is already L-toned, we cannot observe audible tone-dropping on it, but tones are audibly dropped on the preceding noun (or noun modifier).

- (863) a. [cè: lè] lá: kò túmnó=kò-Ø
 [**thing.L Inst**] first NonhS.L begin.Impf=be.Nonh-Ppl.Nonh
 ‘the thing with which it first begins’ (cè:) **2004.3.6**

- b. [ì nè-m lè] wò túmnò-m kùⁿ
 [person-Pl.L Inst] 3SgS.L begin.Perf.HL-Ppl.Pl Def
 ‘the people with whom he began’ (íné-m)
- c. [“...” [ì nè lè] bè gá:-sà-n] kò:-ró
 [“...” [person.L Dat] 3PIS.L say-Reslt-Ppl.Sg] be.Nonh-Neg
 ‘There was nobody to whom they (had) said “...”.’ (íné)
2004.3.11(emended)
- d. jèmè-ně-n [[ì nè lè] yă: tégú tégé
 blacksmith.L-woman-Sg [[person.L Dat] go speech speak
 wò bërè-gò-n kâ:ⁿ
 3SgS.L can.ImpfNeg.-Ppl.Sg.L any]
 [[ně-m kùⁿ] mà bërê:] [kó nò] kò:-ró
 [[woman-Pl Def] Poss in] [Nonh now] be.Nonh-Neg
 ‘A blacksmith woman [topic], there is nobody, among the (noble)
 women, to whom she cannot go and speak now.’ (íné) **2004.3.13**
- e. dá:ŋá [cè: lè] kó bè mǎ:-Ø
 water.jar [thing.L Inst] NonhO 3PIS.L build.Impf-Ppl.Nonh
 ‘Water jars, the thing (=raw material) with which they make them
 (is ...)’ (cě:) **2004.3.13**

If the preposition has at least one H-tone, tone-dropping on the postposition (as well as on the complement NP) is audible. This applies to spatial postpositions such as *mànà* ‘on’ (864.a), and to Purposive *jé* (864.b-c).

- (864) a. [tà:bàl mànà] wò ijè-Ø kùⁿ
 [table.L on.L] 3SgS.L stand.Perf.HL-Ppl.Nonh Def
 ‘the table on which he stood’ (tà:bàl, mànà)
- b. [cè: jè] ù yà:-lí-Ø
 [thing.L for.L] 2SgS.L go-PerfNeg-Ppl.Nonh
 ‘the thing for which (= the reason why) you-Sg did not go.’ (cě:, jé)
2004.3.3
- c. [bù:dù jè]
 [money.L for.L]
 bíré mì bírè-Ø kùⁿ
 work(noun) 1SgS.L work(verb).Perf.HL-Ppl.Nonh Def
 ‘the money for which I (have) worked’ (bù:dù, jé)

- d. [tògù dòjù] mì dâ:ⁿ-Ø kùⁿ
 [shed.L under.L] 1SgS.L be.sitting.HL-Ppl.Nonh Def
 ‘the shed (=shelter) under which I am sitting’ (tògù, dójù)

The alternative is a resumptive construction of the type ‘a thing_x that poison is not [in it_x]’ with a simple L-toned head noun (‘thing’) and an ordinary pronominal PP. An example is (687), above.

Nouns denoting places or times may be used, without a postposition, as heads of relatives in adverbial function.

- (865) [dà:yà bè yérè-Ø]
 [night.L 3PIS.L come.Perf.HL-Ppl.Nonh]
 ‘(on) the night (when) they arrived here’ 2004.3.11

See also the temporal, spatial, and manner adverbial clauses (special subtypes of relative clause) as described in §15.2.4.1 and §15.2.6-7.

14.6.2 With complex PP of type [NP mà Postp]

Consider now what happens when the postposition is separated from its complement NP by an **intervening Possessive** morpheme (mà). This occurs with a number of spatial postpositions that take complements in the form of “possessors.”

In (866), an intervening mà does not prevent tone-dropping from applying to both the complement NP ‘house’ and to the postposition ‘in’. Here, then, the complex PP pattern [NP mà Postp] is treated exactly like the simple PP pattern [NP Postp] discussed above.

- (866) a. [[dà:ɲà-nǎ: [ùrò mà bèrè:] kùn-ó-Ø]
 [[water.jug [house.L Poss in.L] be.in-Neg-Ppl.Nonh]
 mà úró] kǎ:-ró
 Poss house] be.Nonh-Neg
 ‘There is no house that a water jug is not in’ (i.e., every house has a water jug) (úró, bèrè:) 2004.3.13
- b. [tògù mà dójù] mì dâ:ⁿ-Ø kùⁿ
 [shed.L Poss under.L] 1SgS.L be.sitting.HL-Ppl.Nonh Def
 ‘the shed (=shelter) under which I am sitting’ (tògù, dójù)

- c. [ì nè mà jì rè] mì íjè-n kùⁿ
 [person.L Poss in.front.of.L] 1SgS.L stand.Perf.HL-Ppl.Sg Def
 ‘the person in front of whom I am standing’ (jìrè)
- d. [ì nè mà dì:ⁿ] mì íjè-n kùⁿ
 [person.L Poss beside.L] 1SgS.L stand.Perf.HL-Ppl.Sg Def
 ‘the person close to whom I am standing’ (dî:ⁿ)
- e. [ì nè mà pènè] mì íjè-n kùⁿ
 [person.L Poss beside.L] 1SgS.L stand.Perf.HL-Ppl.Sg Def
 ‘the person near whom I am standing’ (pènè)

Now consider (867). Here tone-dropping applies to the complement NP (‘thing’), but not to the postposition kù:ⁿ which follows it after intervening mà.

- (867) a. [kò fú:] [[cè: mà kù:ⁿ]
 [Nonh.L all] [[thing.L Poss on]
 wò dî ñé:-Ø]=ŷ
 3SgS.L sit.down.Impf-Ppl.Nonh]=it.is
 ‘All that [topic], it’s what she will sit (=live) on.’ (cě:, dîñé:-Ø)
2004.3.20
- b. [cè: mà kù:ⁿ] è jéyè-Ø
 [thing.L Poss on] 2PIS.L fight.Perf.HL-Ppl.Nonh
 ‘the thing about (=over) which you-Pl fought’ **2004.4.6**

The differential application of tone-lowering in (866) and (867) could be taken as evidence that there are two distinct types of “complex PP,” both of the form [NP mà Postp]. One type, e.g. with bèrê: ‘in’ and the other postpositions illustrated in (866), behaves syntactically like a simple PP. The other, my only clear example being kù:ⁿ, behaves like a possessed NP phrase. This in turn suggests that kù:ⁿ, but not bèrê: et al., is still treated synchronically as a denominal tonal locative (§8.1), and therefore as itself a kind of mini-PP. Textual examples where kù:ⁿ can plausibly be glossed concretely as ‘on the head of’ (as in ‘it fell on me’) provide additional evidence that kù:ⁿ is still closely connected by native speakers to the source noun kú:ⁿ ‘head’. The synchronic connection between bèrê: ‘in’ and the original source noun bèré ‘belly’ seems weaker.

This reasoning leads to an analysis of [X mà kù:ⁿ] ‘on NP’ as structurally [[X Poss head]-Loc], i.e., ‘on X’s head’. Here the NP complement X functions as possessor of ‘head’, not (directly) as complement of the Locative postposition. We have seen in §14.5, above, that in one attested construction, a

relativized possessor remains in place and simply drops its tones, with no change in the possessed noun. This is consistent with the tone-dropping pattern in ‘what she will sit (=live) on’ in (867.a), above.

Parallel to ‘on the head of’ (867), above, is (868), where the “postposition” is overtly a PP on its own.

- (868) [ì nè mà gǔn lé] mì dâ:ⁿ-n kùⁿ
 [person.L Poss behind in] 1SgS.L be.sitting.HL-Ppl.Sg Def
 ‘the person behind whom I am sitting’

15 Verb (VP) Chaining and Adverbial Clauses

The first part of this chapter (§15.1) is about chaining VPs (or verbs) together. The second part (§15.2) is about various explicitly adverbial clauses, chiefly those that specify temporal relations. Some of these are special cases of relative clauses, including an important type (“headless” relatives) with a virtual head NP that takes Nonhuman participial agreement on the verb (§15.2.7). The chapter concludes with a brief section (§15.3) on special cases of Possessive *mà*.

15.1 Chaining

The term “chaining” will be used for combinations of VPs (sometimes reduced to simple verbs), such that the nonfinal verbs occur in **infinitival (=bare stem)** form with their lexical tone, which depending on the verb is either all-H or L(L...)H. The VPs in question have a **shared subject**, which facilitates the reduction of one clause to just a VP. The final verb in a chain is inflected for aspect-negation categories, and usually for subject pronominal category.

Chaining covers a range of phenomena involving various degrees of integration. At one extreme, we have two or more completely separate VPs chained together, sharing a subject and implying some sort of temporal or causal relationships, but with no other formal clause-level integration. At the other extreme, we have a kind of verb-verb compounding, where a pair of verbs functions like a single verb, with a single set of arguments and adverbial complements.

Closely related to VP-chaining in form and function is a VP-linking construction with particle *mèyⁿ* (§15.1.14, below). There is also a similarity to constructions with main-clause verbs like ‘want’ that take complements in the form of VPs ending in bare stems (§17.5).

15.1.1 Tone-dropping of medial chained verb ($\bar{v} \ \bar{v} \ \bar{v}$)

When three (or more) verbs are chained together without separating material, a verb in the middle of the chain optionally appears in **L-toned form** (869). In (869.c), if the linker *tí* (§15.1.16) is considered to be a verb there are four verbs in the chain, and the two medial ones including *tí* drop their tones..

- (869) a. èmě-n tál-lá gò: wànà-ŋá bèrè-j-é
 1Pl-Dat stick-Revers **go.out.L** be.far-Caus can-ImpfNeg-3PlS
 ‘They cannot separate themselves from us and go far away.’ (gò:-)
2004.3.10
- b. [sùrgǒ-n lè] dé: jà: ó:-bà
 [weaver-Sg Dat] carry **take.L** give.Impf-3PlS
 ‘They will carry it (=cotton) and give it to the weaver.’ (jǎ:-)
2004.3.14
- c. [níŋ èné wó tá:ⁿ wà: tí yǎ:] wà↑
 [now LogoS 3SgO shoot **kill.L Link.L** go.Impf] say
 ‘He said, “now I will shoot and kill you, and (then) go.”’ **2004.4.4**

Since the particle *mèyⁿ* is commonly used after a nonfinal verb in a chain, the fact that it is (often, but not always) low-pitched may be a special case of the [\bar{v} \grave{v} \bar{v}] pattern, with *mèyⁿ* treated as a medial chained verb.

A similar [\bar{v} \grave{v} \bar{v}] pattern, along with two-part (\bar{v} \grave{v}), occurs in verb-stem iteration (§11.6.2). See also the expressive triple iterations with \bar{x} - \grave{x} - \bar{x} pattern in §4.2.6.

15.1.2 Verbal Noun of chained verbs

Verbal nouns may be created for tightly-knit verb chains. Only the final verb has the VblN suffix. The preceding verbs appear as **L-toned compound initials**, similar to L-toned nominal compound initials (§5.1.2).

- (870) a. sǐ:rè-tè:r-ú
 point.at.L-show-**VblN**
 ‘pointing (with finger) and showing’ (verbs sǐ:r-é-, té:r-é-) **2004.3.11**
- b. [bé nè] [[nòwⁿ kùⁿ] mà
 [3Pl now] [[meat Def] Poss
 lùgùrò-làyà-jè:r-ú kùⁿ] [èjú lé] —
look.for.L-hit.L-bring-VblN Def] [field in] —
 [bómó lé]
 [outside in]
 ‘They now [topic], (their) looking for, hitting, and bringing (back) that meat (e.g. chickens) from the bush —, (or rather) from outside (the village)’ (lúgùró-, láyá-, jè:r-é-) **2004.3.18**

When the nonfinal VP in the chain is too cumbersome to function as compound initial, for example when it is followed by *mèyⁿ*, we may get Possessive *mà*.

- (871) [kùrⁿâ:ⁿ mà sǔŋ] [àná bérè], *goudron*
 [electricity Poss cord] [village in], paved.road
 cě: kán tí mày↑ mà gǎ:-n-Ø bé⇒
 thing do Link and **Poss** go.past-Caus-VbIN Pl
 ‘there’s doing something to take electrical wires across streets in the town, and there’s removing filth from (=cleaning out) the ditches, ...’
 (kárⁿá-, gà:-ná-) **2004.5.3**

15.1.3 Double inflection instead of chaining

There are a number of passages where chaining would have been easy for the speaker, but where two adjacent verbs are each inflected. This is most common with imperfective verbs. In (872.a), one could easily have gotten ...*láyá cê:ⁿ-Ø* with a verb chain including *láyá* ‘hit’ in bare-stem form. In (872.b) the same verb (with full inflection) is repeated, instead of a simple stem iteration (with the second occurrence inflected).

- (872) a. [â:-Ø cêw] láyâ:-Ø cê:ⁿ-Ø
 [catch.Perf.HL-Ppl.Nonh all] hit.Impf-3SgS slaughter.Impf-3SgS
 ‘Whatever he has caught (in his traps), he beats and slaughters.’
2004.3.16
- b. ǎ:rⁿð=ÿⁿ táná-ŋá-wⁿ táná-ŋá-wⁿ,
 waterskin=Foc become-Caus.Impf-2SgS become-Caus.Impf-2SgS
 bè:né=ÿⁿ táná-ŋá-wⁿ táná-ŋá-wⁿ,
 shoulder.bag=Foc
 ‘You-Sg will be making them (=tanned hides) into waterskins [focus]; you will be making them into shoulder bags [focus].’
2004.3.17

15.1.4 Presence of AN suffix in nonfinal chained verb

While most nonfinal verbs in chains are morphologically bare, there are infrequent examples in texts of chained verbs **with an AN suffix** (but, by definition, without a pronominal-subject or Participial suffix). I include here both direct chaining, and chaining with intervening *mèyⁿ*. The AN categories in

question are **Recent Perfect** -jè indicating a chronological sequencing among the chained verbs in (873.a-b) and (939.d), and **Imperfective** -tóyò indicating extended time overlap (873.b). If the Linker tí (§15.1.16) is equated with Perfective suffix -tì -, many additional examples can be recognized.

(873) a. [[èné mà bà:ñá:.] [èné mà ù-jùwⁿó:.]]
 [[Refl Poss bowl] [Refl Poss Rdp-mouse]]
 dé:-jè [bómó lé] gô:-Ø
 carry-**RecPf** [outside to] go.out.Impf-3SgS
 ‘Having put his wooden bowl (part of mousetrap) with his mouse
 (trapped in the bowl) on his head (to carry it), he will go outside.’
2004.3.16

b. jò:mó-jè yǎ:-w̃
 ride-RecPf go.Impf-2SgS
 ‘You-Sg will ride away (on a bicycle).’ **2004.4.25**

b. wó≡ỹ lúgúró-tóyò yàrà-m
 3Sg=Foc look.for-**Impf** go.around.Perf.L-1SgS
 ‘It’s him/her [focus] that I went around looking for.’ **2004.3.10**

15.1.5 Simple VP-chains and their NP arguments

A typical example extracted from a still longer chain is (874). Here each verb (‘sling over shoulder’, ‘go’) is preceded by the arguments logically associated with it. One can therefore easily bracket the VPs including their complements.

(874) [[èné mà màlfâ:ⁿ] dàrá] [dúwⁿósán yǎ:] ...
 [[Refl Poss rifle] **sling**] [Douentza **go**] ...
 ‘Having slung his rifle over his shoulder, and having gone to Douentza,
 ...’ **2004.3.4**

(875) shows how chaining can produce compact utterances, with a single NP (e.g. direct object) being **simultaneously governed** by several verbs, only the last of which is in fully inflected form (with AN marking and a pronominal-subject suffix).

(875) jì:já: bàrá jè:ré kúnó-bà
 balsam-spurge gather bring put.Impf-3PlS
 ‘They will gather, bring, and put down (branches) of balsam-spurge
 shrub’ **2004.3.18**

(876.a-b) further illustrate this pattern. I have marked them up syntactically with \emptyset (and \emptyset_x in interlinears) indicating the approximate syntactic positions where the shared direct object NP ('manure') or pronoun ('it' = cattle) could have been repeated.

- (876) a. [lúgù bàrá] [\emptyset [èjú lé] jǎ:-jà:]
 [manure_x gather] [\emptyset_x [field in] convey-convey]
 [\emptyset sáráwá-jè-bà dèy,
 [\emptyset_x spread-**RecPf-3PIS** if,
 'When they have gathered the manure, taken it to the bush, and spread it out, ...' [for jǎ:-jà: see §11.6.2] **2004.3.5**

- b. [kó jǎ:] [\emptyset [púlò-m lè] ó:-bà]
 [NonhO_x take] [\emptyset_x [Fulbe-Pl **Dat**] give.Impf-3PIS]
 'They (=Dogon) take it (=cattle) and give it to the Fulbe.' **2004.3.10**

An extended chain involving six verbs (indicating by bolding in the interlinears) is seen in (877).

- (877) [[pàḡà túmnó] kó páyá]
 [[bundle.L one] NonhO **tie**]
 [[wòtóro mánà] ná:ná]
 [[cart on] **put**]
 [[wò nâ:] mà úró] àrⁿ-úm mòrⁿó
 [[3SgP.L mother.HL] Poss house.Loc.HL] man-Pl **be.together**
 yǎ: kó dé: súnú-ḡó-bà
go NonhO **carry** **go.down-Caus**.Impf-3PIS
 'The men will tie up one bundle (of millet), put it on a cart, get together and go carry it and unload it at the house of her mother.' **2004.3.20**

In (877), the subject NP 'men' does not appear until after two chained VPs have been uttered. A complement such as a direct object may likewise be omitted during the first one or two VPs, then appear overtly before a noninitial (perhaps the final) verb of which it is a logical argument. In (877), note that Nonhuman object pronominal *kó* is repeated (lines 1 and 4).

In (878), 'milk' is the logical object of 'bring', 'put', and 'sell', but it does not appear until just before the final verb 'sell'. This contrasts with e.g. (876.a), above, where the direct object appears in the first eligible VP and is not repeated.

- (878) éwⁿé-jè-bà dèy, jè:rè [àná bérè] kúnó mèyⁿ↑,
 milk(verb)-**RecPf-3PIS** if, bring [village in] put and,

yì lí wé [êṁ kùⁿ] dòrⁿó-bà
 walk.around [milk Def] sell.**Impf-3PIS**
 ‘When they (=Fulbe) have milked (the cows), they will bring, put (in containers), and go around selling the milk.’ **2004.3.10**

In (879.a) àná ‘village’, here in locative adverbial function, is more naturally associated with ‘go around’ than with ‘blow (horn)’. However, it is placed to the left of the two-verb sequence. In (879.b), the dative pronominal is properly the argument of the second verb ‘speak’, but it is placed before the first verb ‘go’. (879.c) has a similar structure, with ‘give’. These examples suggest that **two VPs in a chain have coalesced** into one.

(879) a. àná sújǒ gòṅǒ-bè
 village blow go.around.**Impf-2PIS**
 ‘you-Pl will go around town blowing (the horn).’

b. bè-rú yǎ: tégé-ẁ
 3Pl-Dat go speak.**Impf-2Sg**
 ‘You-Sg will go and speak to them.’ **2004.3.10**

c. [àrⁿ-úm lè] yàṅá ó:-ẁ
 [man-Pl Dat] pick.up give.**Impf-2SgS**
 ‘You-Sg will pick up and give (the cotton) to the men.’ **2004.3.14**

In (880), ‘us’ is the regular direct object of ‘take, convey’, but should be the dative (=indirect) object of ‘show’. The speaker could therefore have used two 1Pl pronominals, an object form before ‘take’ and a dative form before ‘show’. Instead, he used only the object form before ‘take’, correctly assuming that the context was sufficiently clear. ‘Show’, like ‘give’, often omits an expected Nonhuman direct object pronominal.

(880) émé jǎ: té:ré m̀yⁿ
 1PIO take show and
 ‘having taken us (there) and showed (it to us), ...’ **2004.3.11**

15.1.6 Verb-chaining and verb-verb compounds

In some cases, the meanings of two chained verbs may blend together, constituting the verbal equivalent of compounds.

One pair of examples, both involving kól-ló- (Reversive derivative of kóró- ‘hang up, hook’), is in (881). Here the second verb, ‘bring’ or ‘leave (in place)’,

clarifies the sense of the first verb as well as specifying motion (or lack thereof). In one case, the suspended object is to be unhooked (and then brought). In the other, the object has already been unhooked and is to be re-hung (and left there); the logical sequence [unhook-(re)hang-leave] is boiled down to [unhook-leave].

- (881) a. kól-ló jè:ré-
 hang.up-Revers bring-
 ‘unhook (sth hanging) and bring’
- b. kól-ló dàyá-
 hang.up-Revers leave-
 ‘hang up (again) and leave (there)’

Further examples where the two verbs together denote a more or less unified action are in (882).

- (882) tá:ⁿ wǎ:- ‘shoot and kill’ = ‘shoot dead’
 láyá wǎ:- ‘hit (with a stick) and kill’ = ‘strike dead’
 bàrá gǔ:ⁿ- ‘gather and remove’ = ‘round up and expel’
 ú:rⁿó íjé- ‘arise and stand/stop’ = ‘stand up’
 céré púl-ló- ‘bite and break’ = ‘bite off or through’
 nàná tí:- ‘chase and send’ = ‘drive out, expel’
 dámá dùŋó- ‘push and close up’ = ‘fill (well) with earth’

Rarely, a verb is attested only as noninitial member of a chain. For example, sára- in the sense ‘pass’ seems to occur only in the combination sára gára- ‘go past (continuing on one’s way)’, with gára- ‘pass, pass by, exceed’.

15.1.7 Chains including a time-of-day verb

Time-of-day verbs dègè- ‘spend (mid-)day’ and ná:- ‘spend the night’ may combine with a preceding activity verb. The time-of-day verb specifies the temporal frame of the activity. This temporal frame is coextensive with the activity (‘sing all night’, ‘work all day’).

- (883) a. j̀wó nà:-bà
 run **spend.night**.Perf.L-3PIS
 ‘They drove (“ran” all night.’ **2004.5.1**

- b. yé-dì:ⁿ jòwó dègè-y
 there run **spend.day.Perf.L-1PlS**
 ‘There we drove all day.’ **2004.5.1**

15.1.8 Chains including dàyá- ‘leave’

dàyá- ‘leave’ is a common second element in chains. Often the addition of dàyá- makes explicit what is implied but unstated in English translation equivalents with just ‘put’. For example, in (884.a) ‘sow, put down, and leave (seeds)’ would be lumped together as ‘sow’ (or ‘plant’) in English with ‘put down’ and ‘leave’ being implied. Similar examples are in (884.b-c).

- (884) a. [á wò-túmó mà kú:ⁿ]=yⁿ [tòy mǎyⁿ]
 [2SgP mound Poss on]=Foc [sowing.L dry]
 tó: únó dàyá-wè
 sow put.down leave.Impf-2SgS
 ‘On the mounds [focus] you-Sg will sow, put down, and leave the dry seed (in pits with manure, before the rains).’ (kú:ⁿ) **2004.3.6**
- b. nǎn dàyá-sà-Ø mà⇒↑
 give.birth **leave-Reslt-3SgS** Q
 ‘Did (a ewe or she-goat) give birth to and abandon (a newborn, in the pasture)?’ (nǎnⁿá-) **2004.3.9**
- c. dī:ⁿ ém bè já: dáyà-Ø
 place.L 1PlO 3PlS.L convey leave.Perf.HL-Ppl.Nonh
 ‘the place where they took and left us.’ (émé) **2004.5.6**

dàyá ‘leave’ may also be used as the first verb in a two-verb chain. One recurring pattern is with a following causative, resulting in a sense ‘let X do’, as opposed to the coercive ‘cause X to do’.

- (885) a. bé dàyá kùnù-wⁿò-gó-Ø
 3PlO **leave** **put-Caus-ImpfNeg-3SgS**
 ‘It (=situation) does not allow them to put (calabash plants, in field)’ **2004.3.9**
- b. mí dàyá jì-ní: nì:-wⁿè-gó-Ø
 1SgO **leave** sleep(noun) **sleep(verb)-Caus-ImpfNeg-3SgS**
 ‘He/She won’t let me sleep.’

15.1.9 Chains including a motion verb or ‘pick up, take’

Motion verbs (‘go’, ‘come’) are often chained with each other, or with another verb. Where the two events are chronologically sequenced, the sequence is respected in the linear ordering. (886.a) is one of the most common sentences in Jamsay discourse.

- (886) a. yǎ: yèré-m̄
go **come**.Impf-1SgS
 ‘I will go and come (back).’
- b. yèré bé témé-
come 3PIO find-
 ‘(to) come and encounter them’
- c. yèré [íné-m lè] tégé m̀yⁿ↑
come [person-Pl Dat] speak and
 [m̀alfâ:ⁿ nám] yǎ: w̄-r tá:ⁿ ó:-bà
 [rifle owners] **go** 3Sg-Dat shoot give.Impf-3PIS
 ‘(He) having come and spoken to the people, the hunters with guns will go, shoot (an animal), and give it (to him).’ (w̄-rú) **2004.3.16**

‘Go’ or ‘come’ may also be used as final member of a chain, with a preceding activity verb. Here the motion and the (durative) activity are simultaneous. The activity verb is in suffixed Imperfective form, or in a stem iteration with [v̂ v̂] tone (§11.6.3).

- (887) a. n̄ŋ n̄ŋó-t̄óv̄ð yèrè-Ø
 song sing-IMPf **come**.Perf.L-3SgS
 ‘He/She came singing.’
- b. n̄ŋ n̄ŋ̀-̀n̄ŋ̀ yèrè-Ø
 song sing.HL-sing.L **come**.Perf.L-3SgS
 ‘He/She came singing.’

‘Pick up, take’ is also common with a following verb (888).

- (888) a. wó yàŋá jè:r̄è-bá⇒
 3SgO **take** bring.Perf.L-3PIS
 ‘They (=police) took him and brought him (to where he said he had killed an elephant).’

- b. [pì rⁿé kùⁿ nè] yàṅá nó: wá
 [millet.creamDef now] **take** drink.Imprt say
 ‘He said, “take the millet cream and drink it!”’ **2004.4.4**

15.1.10 Chains including m̀̀rⁿ́- ‘be/do together’

Among the most commonly chained verbs is m̀̀rⁿ́-, whose meaning in isolation is intransitive ‘gather, come together, assemble, have a meeting’. In combination with another verb, it may be translated as ‘together’. Usually it precedes the other relevant verb, hence ‘get together and VERB’ (889.a). In many textual contexts, this chronological sequence is apt, and English translations of the type ‘VERB together’, which involve no such sequence, do not capture the sequential aspect. m̀̀rⁿ́- may also follow another verb, especially in its basic lexical sense after a motion verb (889.b). In (889.c), m̀̀rⁿ́ is second in a string of three verbs, matching the sequence of sub-events.

- (889) a. [bé nè] m̀̀rⁿ́ ù-r téwé-bà
 [3Pl now] **be.together** 2Sg-Dat make.brick.Impf-3PIS
 ‘They now [topic], they will get together and make bricks for you-Sg.’ (ù-rú) **2004.3.25**
- b. [bé nè] yèré m̀̀rⁿ́-bà
 [3Pl now] come **be.together**.Impf-3PIS
 ‘They now [topic], they will come and assemble.’ **2004.3.19**
- c. yèré m̀̀rⁿ́ wó bàrà-bà
 come **be.together** 3SgO help.Perf.L-3PIS
 ‘They came together and helped him.’ **2004.3.2**

There is a causative m̀̀:-ń- ‘put together, gather, assemble’ with similar combinatorial potential (890).

- (890) é b̀̀rⁿ́ m̀̀:-n-tù-bà dèy
 2PIO call **be.together-Caus-Perf-3PIS** if
 ‘when they have summoned and assembled you-Pl’ **2004.4.6**

15.1.11 Chains with causative verb and k̀̀rà

Morphologically causative verbs (§9.2) have a range of “causative” senses, ranging from ‘compel (sb) to VP’ to the more benign ‘have (sb) VP’ or ‘let (sb)

VP'. To emphasize that compulsion is involved, the causative verb may be followed by *kára-* 'compel'. This is not the 'do, make' verb *kárⁿá-*, which has a nasalized *rⁿ* (§11.1.7). My examples of *kára-* are in the L-toned unsuffixed Perfective (891). I was also able to elicit a VblN *kàr-ú*.

- (891) a. [bé: kùⁿ] wó bè:-wé kàrà-Ø
 [excrement Def] 3SgO defecate-Caus **compel**.Perf.L-3SgS
 'He forced him to defecate.' **2004.4.4** [from (1256)]
- b. wó ñé:-wⁿé kàrà-Ø
 3SgO eat-Caus **compel**.Perf.L-3SgS
 'He forced him to eat (the excrement).' **2004.4.4** [$<$ (1271)]

I was unable to elicit imperfective forms of *kára-*. Instead, my assistant preferred imperfective forms of the morphological causative *kára-wá-* (with no change in meaning).

15.1.12 Adverb-like chained verbs

Chaining lends itself to adverb-like modification. Examples of verbs commonly used in this function are *ógó-ró* 'be fast, do fast' and *píliwé-* 'go back; do again'.

- (892) a. píliwé [ðyó nè] tóyó=kò
go.back [grass now] sprout.Impf=be.Nonh
 'The grass will sprout again.' **2004.3.6**
- b. ógó-ró kò dó:=kò dèné-wⁿ dèy
be.fast NonhS.L reach=be.Nonh want.Impf-2SgS if
 'if you-Sg want it (wall under construction) to reach (its endpoint) quickly' **2004.3.25**

Another example is with *jámá-* 'betray', which may be glossed adverbially as 'treacherously' in (893).

- (893) [dà:yá dé:-yè-Ø dèy] yèré jámá léjé-sà-Ø dèy
 [night fall-Perf-3SgS if] come **betray** push.down-Reslt-3SgS if
 'At nightfall, when it (=Hyena) came and treacherously pushed (=attacked), ...' **2004.4.3**

15.1.13 Negation of verb chains

Only the final verb in a chain may be morphologically negated. In the majority of cases, there is no difficulty in determining the scope of the negation. If only the last VP is under negation, a loose chain with *mèyⁿ* may be used, hence [VP1 *mèyⁿ*, VP₂-Neg] as in (894).

- (894) [nàŋá éwé mèyⁿ] bú:dù sà:-rá-m
 [cow buy and] money have-Neg-1SgS
 ‘I bought a cow and have no money (left)’

If the negation has wide scope, a simple chain ending in one negative verb may be used (895).

- (895) nì-dí:ⁿ nú: dî ñè-j-è àbádá
 here enter sit.down-**ImpfNeg**-3PlS.L never
 ‘They never come in and sit down here.’

If only the first (or some other nonfinal) VP is negated, there is a (somewhat cumbersome) way of chaining the clauses using *kárⁿá mèyⁿ* ‘doing’ after a negated verb; see (901.a-c), below. When verbs or VPs are directly chained without *mèyⁿ*, the negation most often has wide scope. However, consider (896).

- (896) [dǐ:ⁿ kùⁿ], [[íné-n lè] jàŋá mèyⁿ,
 [place Def] [[person-Sg Dat] ask **and**,
 émé jè:ré dè:nè-l-á]
 1PIO bring put-**PerfNeg**-3PlS]
 ‘They (=people of Perge village) didn’t ask anyone and bring and settle us (here).’ (i.e., they brought us here to settle without asking anyone else for permission) **2004.3.11** [excerpt from (1113.b)]

We can boil this down structurally to the sequence of two VPs followed by a full clause: [[anyone ask] [us bring] [(us) put-3Pl-Neg]]. The three verbs are ‘ask’, ‘bring’, and ‘put’, with only ‘put’ inflected for negation (and 3Pl subject). However, the context makes it clear that the bringing and the putting did occur, while the asking did not. In English, this is best expressed with *without* in the negated VP. In the absence of a clause-level ‘without’ construction, the speaker negated the final verb in the chain, leaving it to the listener to apply contextual knowledge to piece together the sense. The same text includes other verb-chain negations of the same type, in the same context (i.e. not first getting permission before settling). See (907.d) in §15.1.16, below, with linker *tí* rather than *mèyⁿ*.

(897.a-b) are further examples. The agent does chase or look for, but fails to catch or find. Therefore the scope of negation is essentially limited to the final verb ‘reach’ and does not extend to ‘chase’. However, a wide-scope negation interpretation ([Neg [chase and reach]]) is also logically possible if ‘chase and reach’ is thought of as a coalesced event type.

- (897) a. ìjú cè: nàná dò:-gó-Ø kùⁿ
 dog thing.L chase reach-**ImpfNeg**-Ppl.Nonh Def
 ‘what (=animals) the (hunting) dog chases but doesn’t catch’
2004.3.16

- b. cè: lúgúró mì b̀̀l-lí-Ø
 thing.L look.for 1SgS.L get-**PerfNeg**-Ppl.Nonh
 ‘what I looked for and (=but) did not find’ (b̀̀r-é-)

In (898), what is negated is not one or other of the component eventualities, rather a particular chronological sequence. In the tale, Crane is offered a chance to eat, but refuses to eat until after it has gone on a mission and come back. Note the Recent Perfect -j̀̀ on the chained verb. As in previous examples, only the final verb is morphologically negated. (The final wà is the hearsay quotative common in tales.)

- (898) kùwⁿá èné yǎ: ỳ̀ré sóyô:-Ø wà↑,
 crane LogoS go come peck.**Impf**-3SgS say,
 [èné sóyô-j̀̀ ỳ̀:-gó-Ø] j̀̀-Ø wà
 [LogoS peck-**RecPf** go-**ImpfNeg**-3SgS] say.L-3SgS say
 ‘Crane said, “I will go and come back and (then) eat (by pecking).” It
 said, “I will not go after having eaten,” (it is said).’ **2004.4.16**

15.1.14 VP-chaining with m̀̀yⁿ

A VP with its verb in infinitival (bare-stem) form followed by particle m̀̀yⁿ may be chained with a following VP (perhaps with inflected verb). Some fairly long chains with multiple [VP m̀̀yⁿ] constituents occur in texts.

The particle has variants m̀̀yⁿ and m̀̀, and an archaic variant m̀̀rⁿé was recorded from an old man (226.e). I generally transcribe m̀̀yⁿ unless the variant pronunciation is very clear on the tape.

The particle is sometimes heard with high pitch. When this pronunciation occurs clause-finally, I attribute the high pitch to **nonterminal high intonation contour** ↑ rather than to a phonological H-tone, and accordingly transcribe m̀̀yⁿ↑.

There are, however, a few cases where a high-pitched *mèyⁿ* seems to occur before a clitic or a clause-final particle, and does not have a convincing intonational explanation. Here it is necessary to mark the tone as high. See line 1 of (1079) and line 1 of (903).

For lack of a better gloss, I use ‘and’ in interlinears, but *mèyⁿ* is not used to conjoin NPs or other constituents.

The chained VPs (almost) always have a **shared subject**. The temporal relation between the relevant eventualities is variable (anteriority or simultaneity). If the VP ending in *mèyⁿ* denotes a short-duration event, the normal interpretation is that this event was completed before that denoted by the following VP. This is the case in (899).

- (899) a. [àná kùⁿ] ñě-n gó: mèyⁿ,
 [village Def] woman-Sg go.out **and**,
 [níŋ ké] yěy-yà-Ø táŋà: dèy
 [now Topic] come-Perf-3SgS happen if
 ‘The woman (=bride) having left the (=her) village, now when she has come (to her husband’s village), ...’ (yèré-) **2004.3.20**
- b. [kó jèjú lè] sírⁿé mèyⁿ↑, [[kó jèjú] lè]
 [NonhP body in] cut.strip **and**, [[NonhP body] in]
 kó dàŋá bè sâ:Ø dèy, ...
 NonhO patch 3PIS.L do.Perf.H-Ppl.Nonh if, ...
 ‘after having cut a strip from its (=a hide’s) main section, when they have patched it onto its main section (to close up the holes), ...’
 [sâ:Ø §15.1.15] **2004.3.17**

In (900), the temporal relationship involves at least some overlap. In (900.a), ‘carry (on head)’ and ‘bring’ overlap, though ‘carry’ focuses on the onset (when the load is put up on the head), while ‘bring’ focuses on the endpoint. In (900.b), the temporal overlap is complete.

- (900) a. ... [bé nè] dè:-bà,
 ... [3Pl now] carry.Perf.L-3PIS,
 [cín dé: mèyⁿ] úrò jè:rè-bà
 [thus carry **and**] house.Loc.HL bring.Perf.L-3PIS
 ‘... they [focus] carried (them) on their heads. Carrying (them), they brought (them) home.’ **2004.3.2**

- b. [[cèrⁿèwⁿè yók^kò bé]=y cérⁿéwⁿé mèyⁿ↑]
 [[amusement.L which? Pl]=Foc have.fun and]
 ñě-n céjé kúnó-bà
 woman-Sg meet put.Impf-3PlS
 ‘They meet the woman (=bride just arrived from another village)
 and put down (her baggage), staging which kinds of festivities?’
2004.3.20

mèyⁿ may not directly follow a negated verb. However, one may add the semantically neutral verb kárⁿá- ‘do’ or ‘be done’ after a negated verb, and kárⁿá- itself is readily followed by mèyⁿ.

- (901) a. [ðyð gàmá] nùwⁿò-lí-Ø kárⁿá mèyⁿ↑,
 [grass.L certain] die-PerfNeg-3SgS **do** and,
 wàjⁿá=kò
 remain.Impf=be.Nonh
 ‘... some weeds will not die, and will still remain (around the millet
 sprouts)’ **2004.3.6**
- b. [bì rè-bírè yà:l-á kárⁿá mèyⁿ↑,
 [work(noun).L-work(verb).HL go-PerfNeg-3PlS **do** and,
 ‘(They) having not gone south to do seasonal work, ...’ **2004.3.9**
- c. [... jùgò-lí-Ø kárⁿá mèyⁿ]
 [... know-PerfNeg-3SgS **do** and]
 yé-dì:ⁿ yèré émé tèmè-Ø
 there come 1PlO find.Perf.L-3SgS
 ‘Not knowing (that I had been arrested), he came there and
 encountered us.’ **2004.5.5**

The verb preceding mèyⁿ is nearly always in bare-stem (infinitival) form. Rarely, the verb has a nonzero AN suffix. (564.b) has a verb with Recent Perfect -jè followed by mèyⁿ. In (902), two occurrences of Imperfective -tógò occur in a chain ending in mèyⁿ. I have one textual example, however, where mèyⁿ follows a verb with an AN suffix, namely Imperfective -tógò-. The passage in question comes at a narrative climax, and the VP containing -tógò- is itself repeated.

- (902) lé: wò gá: kân,
 fear 3SgS.L say after,
 [póró jì né-tógò póró jì né-tógò] mèyⁿ,
 [squeeze hold-**Impf** squeeze hold-**Impf**] and,

‘After he became afraid (of the leopard), he was still holding on and holding on to it (for dear life), and then ...’

Though *mèyⁿ* occurs in final position in a clause (or VP) in the great majority of textual instances, in (903) it is followed by \Rightarrow *là: dèy* ‘if it is not’ (i.e., ‘unless’ or ‘other than’). The final ‘there was none of that’ negates the other parts of the *mèyⁿ* chain, but the double negation constituted by the embedded ‘if it is not’ insures that ‘staying on top of the mountain’ is not negated. In combination with \Rightarrow , the particle occurred in **H-toned** form *méyⁿ*.

- (903) [[tùmó mánà] bé: méyⁿ]=yⁿ là: dèy,
 [[rock on] stay **and**]=it.is Neg if,
 [dójù sùgó yì lì wé bì ré-bì rè mèyⁿ mà⇒
 [below go.down walk.around work(verb)-work(verb).L and or
 [tǝr-Ø téré mèyⁿ↑] ... [[kó kùⁿ] kò:-ró]
 [cut-VblN cut and] ... [[Nonh Def] be.Nonh-Neg]
 ‘Aside from (the mountaineers) staying on top of the mountain, (their) coming down below and working (the fields) or chopping (=clearing fields) ..., there was none of that.’ (tǝr-ú) **2004.3.11**

In (904), *mèyⁿ* (variant *màyⁿ*) is followed by cliticized \Rightarrow *kò* ‘be (nonhuman)’. This sequence is very rare.

- (904) [wó òwⁿò-sǎmnà kùⁿ] tílây⇒y,
 [3SgP parent-in-law.L-soap Def] obligation=it.is
 [nî m táŋá mǎyⁿ⇒kò],
 [now become **and**=be.Nonh]
 [lá:-lá: [kò cêw] kò:-ró jì:ⁿ]
 [first-first [Dem all] be.Nonh-Neg Past]
 ‘Her parent-in-law soap (=soap given by a man as gift to future parents-in-law) has now become an obligation; formerly all that was not so.’ (tílây) **2004.3.20**

Although nearly all cases of *mèyⁿ* involve same-subject clause sequences, occasionally this is not so. It is not clear whether the textual counterexamples are grammatically significant, however. Since the *mèyⁿ* clause precedes the main clause (or the next clause in a more complex chain), there is always the possibility that the speaker may have incorrectly anticipated the subject of the following clause. An example is (905), where a string of clauses with the same human subject, all ending in *mèyⁿ*, is concluded by a clause with a nonhuman subject (‘disputes’). The same-subject construction could have been saved if the speaker had used causative ‘he will bring (the dispute) to an end’, instead of

intransitive ‘it (=dispute) will come to an end’. A similar example occurs in Text 2 (1250).

- (905) [èné mà tàyⁿð-sà:-rá kùⁿ] mà dú:] dé: mèyⁿ↑,
 [Refl Poss truth-have-Neg Def] Poss load] carry **and**,
 [[ì nè tàyⁿó bà:ⁿ kùⁿ] lè] tàyⁿó ó: mèyⁿ↑,
 [[person.L truth owner Def] Dat] truth give **and**,
 ì nì wⁿé yá:fé-wé mèyⁿ↑,
 Refl pardon-Caus **and**,
 [dògó=kò-Ø] yó=kò
 [finish.Impf=be.Nonh-Ppl.Nonh] exist=be.Nonh
 ‘He having carried (=accepted) the burden of being (judged to be) wrong (in a dispute), having acknowledged being in the right to the person who is in the right, and having excused himself, there are some (disputes) that will come to an end (like that).’ **2004.5.5** (yá:fé-we emended from yá:fé)

15.1.15 Chaining with final sâ:-Ø dèy

A less common construction is characterized by a final F-toned verb sâ:-Ø following one or more other verbs in a chain. This sâ:-Ø adds little or nothing semantically, and I gloss it neutrally as ‘do’. In this construction, sâ:-Ø is attested only with following dey ‘if/when’. The subject is expressed by a preverbal L-toned subject pronominal (or by a noun-headed NP), not by a pronominal-subject suffix.

In addition to the examples in (906), see (899.b), above.

- (906) a. [dì:ⁿ gámá] tó: wà:-ná
 [place certain] sow widen-Caus
 bè sâ:-Ø dèy,
 3PIS.L **do**.Perf.HL-Ppl.Nonh if,
 ‘In some places, if they plant widely (=over a wide area), ...’
2004.3.6
- b. [bé: bè sâ:-Ø dèy↑], ...
 [remain 3PIS.L **do**.Perf.HL-Ppl.Nonh if], ...
 ‘if they keep at it (=work)’ **2004.3.9** [excerpt from (473.a)]
- c. [yì rú kùⁿ] céjé-céjé ájára
 [fabric Def] cut-cut sew
 bè sâ:-Ø dèy, ...

3PIS.L **do**.Perf.HL-Ppl.Nonh if, ...
 ‘when they have cut up and sewn the fabric (from a roll), ...’
2004.3.14

There is evidently a three-way connection, at least historically, between this *sâ:-Ø*, quasi-verb *sâ-* ‘have’ (§11.5.1), and Resultative suffix *-sâ-* (§10.1.2.4). All three are associated with the perfective aspectual system. Resultative suffix *-sâ-* is a kind of perfective semantically, and is especially common before *dey* ‘if’. The quasi-verb *sâ-* ‘have’ is morphologically defective, appearing only in the unsuffixed Perfective. This ‘have’ quasi-verb takes the F-toned form *sâ-* in relative clauses, with H(H...)L contour overlaid as usual in the unsuffixed Perfective. With Nonhuman Participial suffix *-Ø*, this participial *sâ-* appears as *sâ:-Ø*, with lengthened vowel after Contour-Tone Mora-Addition (141). Therefore the *sâ:-Ø* in (906.a-c) is interpretable (in form) as a participle of *sâ-* with an unexpressed Nonhuman head noun that has a sense like ‘time’ or ‘situation’. The L-toned subject pronominal, such as 3Pl *bè* in each of (906.a-c), is likewise consistent with a participial (i.e. relative-clause) analysis. For similar combinations also involving a following *dèy* ‘if’, see §16.1.2.

15.1.16 Chaining with linker *tí*

A morpheme *tí* (probably related historically to Perfective suffix *-tí-*) may be inserted between chained verbs. Occasionally, it functions as the final verb in a chain (in which case it takes suffixal inflections). I gloss it in interlinears as “Link.”

In (907.a-e), *tí* links two verbs, and has no inflection of its own. As I interpret the examples, the two relevant events are **ordered chronologically**. I take this to be characteristic of *tí*, which makes sense if it is related to the Perfective verbal suffix. Three of the examples, namely (907.a-c), involve verb *dàyá-* ‘leave, abandon’ before *tí*, though (907.a) and (907.b) are from the same textual passage.

- (907) a. *dùŋ-yàrá* *témé* *mèyⁿ*,
 lion find and,
èné kó dàyá tí gàrà-Ø kùⁿ,
 LogoS NonhO leave **Link** pass.Perf.L-3SgS Def,
 [[wó yóŋkù] lè] *ènè-rⁿè-lí-Ø*
 [[3SgP soul] Dat] be.sweet-Caus-PerfNeg-3SgS
 ‘Having encountered the lion, (the thought of) him(-self) leaving it
 (=lion) and continuing on his way did not please him.’
 [factive complement: §17.3] **2004.3.2**

- b. [kó dàyá tí yèrè-bá] sógò
 [Nonh leave **Link** come.Perf.L-3PIS] instead.of
 ‘instead of (them) leaving it (=lion) and coming (home)’ **2004.3.2**
 [excerpt from (732.d)]
- c. [ú dàyá] tí gàrá-bà
 [2SgO leave] **Link** pass.Impf-3PIS
 ‘They will leave you (alone) and go on.’ **2004.3.3**
- d. [íné-n lè] újúrò tí dì ηè-l-á
 [person-Sg Dat] ask **Link** sit-PerfNeg-3PIS
 ‘They didn’t (first) ask anyone and (then) settle (there).’ (i.e., they settled without getting permission) **2004.3.11**
- e. bèn-ná: [kó ní-ηírⁿé] dàyá tí jòwò-Ø
 goat [NonhP Rdp-day] leave **Link** run.Perf.L-3SgS
 ‘At that time, it (=Hyena) abandoned and ran away from Goat.’
2004.4.2

In (908.a-b), *tí* follows a verb, but is itself inflected with Resultative *-sà-*.

- (908) a. jèrú jër tí-sà-bà dèy, ...
 harvest(noun) harvest(verb) **Link-Reslt-3PIS** if, ...
 ‘when they have harvested (the millet ears), ...’ (jèrÉ) **2004.3.6**
- b. gàmà-nám [[kó kùⁿ lè] wó-n déy]
 certain.L-Pl [[Nonh Def in] be.Hum-Ppl.Sg if]
 [kó kùⁿ] dàyá tí-sà-bà dèy, ...
 [Nonh Def] leave **Link-Reslt-3PIS** if, ...
 ‘Some people [topic], when they leave (=abandon) that (=hunting with dogs), after being (engaged) in it, ...’ **2004.3.16**

tí is sometimes followed by *mèyⁿ* ‘and’ (often with intonational high pitch) before the chain resumes. In addition to (909.a-b), see line 4 of (911.c).

- (909) a. [kó kú:ⁿ] púlló tí mèyⁿ↑, ...
 [NonhP head] cut.off **Link** and, ...
 ‘(They) clip off the top (of a shrub), and ...’ **2004.3.16**
- b. [gùjú kùⁿ] sùmó tí mèyⁿ, ...
 [skin Def] wash **Link** and, ...
 ‘(They) wash the hide, and ...’ **2004.3.17**

The verbs wǎ:- ‘kill’ and cé:ⁿ- ‘slaughter, cut the throat of’ have unusual positive Imperatives where the bare stem of the verb is followed by tí-, which hosts any nonzero inflectional suffixation. See the end of §10.4.2.

15.1.17 Chaining with jíjè (or jè) ‘go with’

The form jíjè, or reduced variant jè, is used only with a following motion verb. The combination is transitive-like, requiring a preceding NP as complement. jíjè is not a comitative postposition, since it can be separated from the logical “complement” by an intervening chained verb. It must therefore either be taken as a **comitative adverb**, signaling the presence earlier in the clause of a complement in comitative function, or as a **defective verb** that occurs only as nonfinal member of chains with a following motion verb. It is not verb-like in form, since no verb has a bare stem (used in chaining) with HL tone contour. Examples are in (910).

- (910) a. wó gòró jè gó:-bà tánà: dèy
 3SgO cover **go.with** go.out.Impf-3PIS happen if
 ‘when they cover her (=bride) and go out (from her home) with her’
2004.3.20
- b. hâl [àná kùⁿ lè]
 until [village Def in]
 [ñě-n kùⁿ] jíjè gó:-bè
 [woman-Sg Def] **go.with** go.out.Impf-2PIS
 ‘until you-Pl have gone out of the village with her’ **2004.3.20**
- c. [tâ:-n jíjè] èjú nú: èmè gá: kân,
 [Recip-Sg **go.with**] field enter 1PIS.L say after,
 ‘After we accompanied each other into the bush, ...’ **2004.3.24**
- d. [é jéy kùⁿ] jíjè gàrá-bè
 [2PIP fight Def] **go.with** pass.Impf-2PIS
 ‘You-Pl will keep up your dispute (=despite an adverse ruling from the elders) and will go on your way (=leave the area).’ **2004.4.6**
- e. mòbíl kó≡y jíjè ù:rⁿò-Ø
 vehicle Nonh≡Foc **go.with** get.up.Perf.L-3SgS
 ‘The vehicle [topic], that [focus] is what it set off with’ **2004.5.1**

See also *jè* in (458.a) and (1239), and *jíjè* in (923.f). In (512.f), *jíjè* is followed by chaining particle *mèyⁿ* rather than directly by a motion verb.

It is possible that *jíjè* and *jè* are related historically to the verb *jéré-* ‘hold, have (temporary) possession of’. If so, *jíjè* may have originated as a reduplication.

15.2 Adverbial clauses

Jamsay is left-branching and this applies to the structure of multiclausal sentences. Often one or more clauses occur to the left of a main clause, the combination constituting a kind of “paragraph.” In an adverbial clause, the verb may have normal inflection (finite clauses), may have a participle-like form (pseudo-participial clauses), or may be uninflected.

15.2.1 Pseudo-participial adverbial clauses (-n suffix)

In §15.2.1.1-3 I describe clause types characterized by an invariant suffix *-n*. This suffix looks like the nominal (human) Sg suffix *-n*, which (in a verb) functions as a (human) Singular Participial suffix. However, *-n* is used here without regard to humanness or to number, so I label the construction **pseudo-participial**. (Historically, the suffix is probably unrelated to Sg suffix *-n*.) The pseudo-participle may be based on a perfective, imperfective, or lexical-toned stem; these three constructions are described in turn below. Pronominal subject is expressed by a **L-toned preverbal pronominal** in the imperfective and perfective types, but not in the lexical-stem type.

15.2.1.1 Imperfective pseudo-participial clause

In the examples treated in this section, Pseudo-Participial *-n* suffix is added to the unaffixed Imperfective stem (i.e. the bare stem plus a *-L-* tonal formative that docks on a suffix). The word-final syllable has F-tone, resulting from grafting of the floating L-tone of the Imperfective onto the lexical form of the verb, which always ends in H-tone. The earlier syllables of the verb are H- or L-toned depending on the verb. If the subject is pronominal, it is expressed by an **L-toned preverbal subject pronominal**. Imperfective pseudo-participial clauses denote **prolonged activity** (‘keep VERB-ing’), and are **often repeated** for emphasis. Typically these are background clauses that lead up to an ‘until ...’ clause or the like, describing the next major event (911.c).

- (911) a. ù jǎ:ⁿ-n̄
 2SgS.L dig.**Impf-Ppl.Sg**
 ‘(as) you-Sg keep digging’ (jǎ:ⁿ-) **2004.3.6**
- b. yǎ:-yǎ: bè m̀rⁿ’ó-n̄,
 go-go 3PlS come.together.**Impf-Ppl.Sg**
 yǎ:-yǎ: bè m̀rⁿ’ó-n̄
 go-go 3PlS come.together.**Impf-Ppl.Sg**
 ‘(and) they (small groups of people) keep going and meeting up,
 going and meeting up (to form a large group).’ (m̀rⁿ’ó-) **2004.3.1**
- c. [n̄n k̄é], [n̄mó l̄è] kó táráwá-w̄,
 [now Topic], [hand Inst] NonhO rub.**Impf-2SgS**,
 ù táráwá-n̄, ù táráwá-n̄,
 2SgS.L rub.**Impf-Ppl.Sg**, 2SgS.L rub.**Impf-Ppl.Sg**,
 h̄al [èn̄é mà ní:] n̄’=k̄ò
 until [Refl Poss water] drink.**Impf=be.Nonh**
 k̄ówⁿ’ó tí m̄yⁿ↑, h̄al ù tí:rⁿ’é-n̄,
 wring.out Link and, until 2SgS.L stretch.out.**Impf-Ppl.Sg**
 ù táráwá-n̄ ù tí:rⁿ’é-n̄, ...
 2SgS.L rub.**Impf-Ppl.Sg** 2SgS.L stretch.out.**Impf-Ppl.Sg**, ...
 ‘Now, you-Sg rub it (=hide being tanned) hard with your hands.
 You keep rubbing hard, you keep rubbing hard, until it (=hide) has
 absorbed its liquid. You wring it out, then you keep stretching
 (=unfolding) (it), you keep rubbing hard and you keep stretching,
 ...’ (táráwá-, tí:rⁿ’é-) **2004.3.17**
- d. lì-láyá-bà=ỳ,
 Rdp-hit.**Impf-3PlS=it.is**,
 ù láyá-n̄, ù láyá-n̄,
 2SgS.L hit.**Impf-Ppl.Sg**, 2SgS.L hit.**Impf-Ppl.Sg**,
 n̄ŋ ù párá-n̄,
 oil 2SgS.L rub.in.**Impf-Ppl.Sg**,
 ù láyá-n̄, ù láyá-n̄
 2SgS.L hit.**Impf-Ppl.Sg**, 2SgS.L hit.**Impf-Ppl.Sg**
 ‘They will beat it (=cowhide). You-Sg keep beating it, you keep
 beating it; (you) keep rubbing (more) oil in, you keep beating it,
 you keep beating it.’ (láyá-, párá-) **2004.3.17**

Note that the ostensibly “singular” suffix -n̄ co-occurs with a wide range of subject categories, including 3Pl (911.b). Note also the absence of anything that could be reasonably taken as a head NP.

Imperfective pseudo-participles in adverbial function optionally occur with a following *dèy*, which here appears as L-toned *dèy* by Atonal-Morpheme Tone-Spreading (137). Examples are (912.a-e). Elsewhere *dèy* is the ‘if/when’ particle in conditional antecedents (§16.1).

- (912) a. *tèṅé-tèṅé* *bè* *lúgó-ṅ* *dèy*,
 segment-segment 3PlS.L count.**Impf-Ppl.Sg if**,
 [nîm ké] [á ñú:] *tèṅé* *kún-tì-Ø*
 [now Topic] [2SgP millet] segment put-Perf-3SgS
 ‘When the stem segments (on the growing millet plant) are counted, (it is seen that) your-Sg millet now has developed segments.’
 (*lúgó-*, *kúnó-*) **2004.3.6**
- b. *kó* *sáyára-sáyára* *bè* *gǔ:-ṅ* *dèy*, ...
 [Nonh remove-remove 3PlS.L remove.**Impf-Ppl.Sg if**, ...
 ‘They selectively remove (early millet from the larger mass of millet)’ **2004.3.6**
- c. [ù *mòṅó-ṅ* *dèy*], *hâl* *yǎ:*
 [2SgS.L massage.**Impf-Ppl.Sg if**] until go
 [*kó* *àrgà* *kâ:n*] *á:=kò*
 [NonhP side.L each] catch.Impf=be.Nonh
 ‘You-Sg keep rubbing it (new hide in a tanning solution) until it (=solution) has taken (=penetrated) on each side (of the hide).’
2004.3.17
- d. [*bè* *cérⁿéwⁿé-ṅ* *dèy*] *hâl* *yǎ: ...*
 [3PlS.L have.fun.**Impf-Ppl.Sg if**] until go
 ‘they keep up the festivities until ...’ **2004.3.20**
- e. [[*á* *nùmó*] *lè*] *ní-jì n* *nòwⁿó-wⁿ*,
 [[2SgP hand] Inst] this-like crush.Impf-2SgS,
 [*nùm-ná:* *lè*] *ní-jì n* *nòwⁿó-wⁿ*,
 [grindstone Inst] this-like crush.Impf-2SgS,
ní-jì n ù *nòwⁿó-ṅ* *dèy*
 this-like 2SgS.L crush.**Impf-Ppl.Sg if**
 ‘You-Sg will crush it (millet) with your hand, you will crush it with (or: on) a flat grinding stone. You will keep crushing it, (until ...).’
2004.4.8

We get H-toned *déy* twice after imperfective pseudo-participles in (913), but this is because *déy* has an H-toned form (regardless of preceding tones) when grouped with following particles (§16.1.3), here *kâ:ⁿ nè* ‘also’.

- (913) [ðyó.: fú:] tóyó dògò-lí-Ø jì:ⁿ
 [grass all] sprout(verb) finish-PerfNeg-3SgS Past
 táŋá=kò=>, [ù wàrá-n déy kâ:ⁿ nè],
 happen.Impf=be.Nonh, [2SgS.L farm.**Impf-Ppl.Sg if** also now],
 [[ñú: kùⁿ] tǔyⁿ=kò] [kò kô:-Ø kùⁿ]
 [[millet Def] small=be.Nonh] [NonhS.L be.Nonh.HL-Ppl.Nonh Def]
 ðyó [kó bôrô:] wàjá=kò=>,
 grass [NonhP bottom.Loc.HL] remain.Impf=be.Nonh,
 [ù wàrá-n déy kâ:ⁿ nè]
 [2SgS farm.**Impf-Ppl.Sg if** also now]
 ñú: [ðyò gámá] nùwⁿò-lí-Ø kárⁿá méy
 millet [grass certain] die-PerfNeg-3SgS do and
 wàjá=kò
 remain=be.Nonh
 ‘It may be that the weeds had not finished sprouting (when you did the first weeding). When you continue farming, the millet (in the field) is young. There where it (=millet) is, (some) weeds will remain at its base. When you farm some more, the millet [topic], some weeds have not died and will remain.’ **2004.3.6**

15.2.1.2 Perfective pseudo-participial clause

The perfective pseudo-participial clause has overlaid **H(H...)L tone** contour on the verb, as in relatives and other subordinated clauses based on the unsuffixed Perfective stem (§14.1.13).

Perfective pseudo-participials in adverbial function are not common. In (914), which describes the noisy first stage in a collective hunt, the entire passage is pseudo-participial. There are three perfective pseudo-participial clauses (verbs ‘go’, ‘follow’, and again ‘follow’), each such clause being **paired with an imperfective participial clause** (‘run’ in each case). The perfective-imperfective pairings involve cause-and-effect relationships, as the advancing line of villagers making loud noises drives the frightened animals to flight (they will be met at the other end by hunters). The perfective pseudo-participles are accompanied by **L-toned preverbal subject pronominals**. The passage begins with a lexical-toned pseudo-participial clause (‘be done’), a type described in the immediately following section. Note that the subject of the “Singular”

pseudo-participles is 2Pl, and that there is no head NP suggestive of a true relative-clause construction.

- (914) [pé: .: tûtù:lú: .: síñè: .:] cè: kâ:ⁿ-kâ:ⁿ,
 [shouting horn noise] thing.L each-each,
 kárⁿá-n déy, è yâ:-n
 be.done-Ppl.Sg if, 2PIS.L go.**Perf.HL-Ppl.Sg**,
 [é jířè] kò jòwó-ñ,
 [2Pl in.front] NonhS.L run.Impf-Ppl.Sg,
 [kó gǔññ] è dígè-n
 [Nonh behind] 2PIS.L follow.**Perf.HL-Ppl.Sg**,
 [é jířè] kò jòwó-ñ,
 [2Pl in.front] NonhS.L run.Impf-Ppl.Sg,
 [kó gǔññ] è dígè-n
 [Nonh behind] 2PIS.L follow.**Perf.HL-Ppl.Sg**,
 [é jířè] kò jòwó-ñ,
 [2Pl in.front] NonhS.L run.Impf-Ppl.Sg,
 hǎl yǎ: mèyⁿ dé:ⁿ mèyⁿ, ...
 until go and be.tired and, ...

‘There is shouting and horn-blowing and hubbub, and so forth; you-Pl have gone (forward), they (=animals) are running ahead of you; you have followed behind them, they are running ahead of you; you have followed behind them (some more), they are running ahead of you; until eventually they get tired and ...’ **3004.3.1** [from (1211)]

Incidentally, in line 2 of (914), kárⁿá-n déy is an example of the lexical-stem pseudo-participial type (discussed in the following section). So (914) exemplifies all three types of pseudo-participles.

Perfective Negative -lí-n in (915) also belongs to the pseudo-participial adverbial type with invariant “Singular” suffix -n. This is shown by the fact that the protagonists are plural.

- (915) [[jénɛŋɛ kùⁿ dò:-lí-n]
 [[metal-trap Def] reach-**PerfNeg-Ppl.Sg**]
 [à-tí: dánà-m]
 [bird.trap hunt.HL-**Ppl.PI**]

‘those who, having failed to get regular metal animal traps, hunt (instead) with bird traps’ **2004.3.16**

15.2.1.3 Lexical-stem pseudo-participial clause

Imperfective and perfective pseudo-participial clauses described above involve a verb form ending in suffix -n that looks like the (human) Singular suffix -n, which is elsewhere added to verb stems only in participial function. There is another type of pseudo-participial clauses where -n is added directly to the **lexical-toned form** of the verb, which cannot happen with true participles. This type of pseudo-participle is either **all-H-toned** or **L(L...)H-toned** depending on the lexical tones of the verb. The -n suffix itself is therefore always H-toned, since it acquires its tone by spreading from the left. These tone patterns do not occur in imperfective or perfective pseudo-participles.

The lexical-stem pseudo-participial is always followed by H-toned *déy*, cf. (atonal) *déy* ‘if/when’. The H-tone is carried over from the final H-tone of the pseudo-participle, cf. Atonal-Morpheme Tone-Spreading (137).

Another feature of lexical-stem pseudo-participial clauses is that there is **no overt expression of the subject**. In particular, L-toned preverbal subjects are strikingly absent. Therefore these “clauses” are better described as subordinated VPs, similar to chaining constructions such as that with *mèyⁿ*. However, there is normally an understood subject, and it need not be coindexed with that of the following clause.

In several examples, the pseudo-participial clause **denotes an overall activity** in general terms (often with emphasis on the endpoint or objective), and subsequent clauses may describe individual sub-activities (or even preparatory actions).

- (916) a. [tàrá lè], yǎ:-n déy,
 [collective.hunt in] go-Ppl.Sg if,
 [[àⁿà-nì :ñé bè kùnò-gó-Ø]
 [[man.L-gear 3PlS.L put-ImpfNeg-Ppl.Nonh]
 mà tǒg kâ:ⁿ] kò:-ró
 Poss kind each] be.Nonh-Neg
 ‘When (they) go on the collective hunt, there is no kind of men’s equipment (weapons etc.) that they don’t put in (their bags)’ [i.e., they take all of the requisite gear] (yǎ:-, tǒgú) **2004.3.2**

- b. tàrá [kó túmnó-n déy]
 collective.hunt [Nonh begin-Ppl.Sg if]
 nǐ: bàⁿá mèyⁿ↑,
 day be.summer and,
 ‘Collective hunts, when (they) begin, it is the hot season, (and ...)’
 (túmnó-) **2003.4.1**

- d. ùrò-gǔn gó:-yà-w dèy,
house.L-behind go.out-Perf-2SgS if,
yà:-gó: cêrⁿéwⁿé-n déy,
woman.L-dance have.fun-**Ppl.Sg** **if**,
yé-lé [ùrò-gǔn lé ké] gó:-bà
there [house.L-behind in Topic] go.out.Impf-3PIS
'If you go out to the place behind the house (=at the edge of the village), when (they) are going to do the women's dancing, they will go out there behind the house.' **2004.4.14**
- e. [[cí-céré kùⁿ] páyá-n déy] jáppèrè yàṅá ná:ná-bà
[[Rdp-saddle Def] tie-**Ppl.Sg** **if**] padding take put.Impf-3PIS
[jàppèrè bè ná:ná:-Ø kùⁿ]
[padding.L 3PIS.L put.Impf-Ppl.Nonh Def]
cí-céré [kó kùⁿ] dè:né-bà
saddle [Nonh on] set.Impf-3PIS
'When (they) are going to attach the saddle (=saddle up a horse), they (first) take and put the padding (on the horse's back); the padding that they are putting on [topic], they will set the saddle on top of it.' **2004.4.26**
- f. [kó kùⁿ] ùró-n déy⇒, [ǎ-n kùⁿ]
[Nonh on] go.up-**Ppl.Sg** **if**, [man-Sg Def]
ì nì wⁿé páyá hâl cé:ná:-Ø dèy,
Refl tie until be.good.Impf-3SgS if,
kó àrcéwé námâ:-Ø
NonhP stirrup step.on.Impf-3SgS
'In mounting on it (=saddled horse), when the man has tied his belt well, he will put his foot in the stirrup, ... (and mount).' **2004.4.26**

More difficult textual examples are in (917), for the record. Here the pseudo-participial clause denotes a process that appears to precede that of the following clause.

- (917) a. [wájà cêw] [[dì:ⁿ kò ê:ŋ] lè]
[remainder all] [[place.L Nonh.L near.HL] in]
tónó-tónó únó-n déy, ...
dump-dump put.down-**Ppl.Sg** **if**
cójé [èjú kùⁿ] dògó-jè-bà dèy,
cut [field Def] finish-RecPf-3PIS if,
'(They) keep dumping out all the rest of it (=millet, from shoulder bags) and keep laying it (on the ground) in a place that it is near;

when they have finished reaping (millet) in that field, ...' (únó-)
2004.3.6

- b. cín=kò á:-n déy, hâl yă:
 thus=be.Nonh catch-**Ppl.Sg if**, until go
 [[i nè gàrú-m] lè] yă: d̀̀gó=kò
 [[person.L old-Pl] to] go finish.Impf=be.Nonh
 'It (=wrestling tournament) was like that. (The boys) wrestle, until
 it ends up proceeding to older men.' **2004.3.23**
- c. [kó kùⁿ kâ:ⁿ], m̀̀ḡó-n déy,
 [Nonh Def too], rub-**Ppl.Sg if**,
 kó g̀̀:ⁿ-jè-bà d̀̀y, ...
 NonhO remove-RecPf-3PlS if, ...
 'That too (=hide being tanned) [topic], when (they are) have rubbed
 it (between their hands), when they have taken it out (from the
 tanning solution), ...' (m̀̀ḡó-) **2004.3.17**

For a combination of this type of pseudo-participial clause type with following ná: 'true, authentic', see (289) in §5.1.13.

Quasi-verb ẁ̀- 'be' occurs in this construction in H-toned form as ẃ-n (918).

- (918) [i-n jì:ⁿlé⇒ ẃ-n déy]
 [child-Sg.L small **be.Hum-Ppl.Sg if**]
 ẃ d̀̀ná-n=ì:
 3Sg hunt.Impf-Ppl.Sg=it.is
 'Even as (=while being) a young child, he is a hunter.' (d̀̀ná-ḡ)
2004.3.16

The construction may also be used with sà- 'have', in H-toned form sá-n.

- (919) [tùmó sá-n déy] ẃ d̀̀ná-n=ì:
 [stone **have-Ppl.Sg if**] 3Sg hunt.Impf-Ppl.Sg=it.is
 'Having a stone, he (=child) is a hunter.'

While the great bulk of textual examples involve déy, in (920) the same aspectually-unmarked -n pseudo-participle occurs with **Definite** kùⁿ, evidently in referential rather than adverbial function.

- (920) yà:jí: páyá-tù:-Ø dèy,
 marriage tie-Perf-2SgS if,
 ì nè yà:jí: ù páyá-ñ kùⁿ,
 person.L marriage 2SgS.L **tie.Impf-Ppl.Sg Def**,
 [yà:jí: pǎg-Ø kùⁿ] mà ó:-wò lè, ...
 [marriage tie-VblN Def] Poss give.H-Caus.L in, ...
 ‘When you-Sg have contracted a marriage, the person (=woman) you
 are to marry [topic], before handing over the brideprice, ...’ (páyá-)
2004.3.20

15.2.2 Temporal adverbial clauses based on ‘say’ verbs

15.2.2.1 Temporal anteriority (*kân*, *gá: kân* ‘after ...’)

A common clause-type expressing temporal anteriority of a clause vis-à-vis a following clause ends in *kân*, which I gloss as ‘after’ in interlinears. This is best interpreted as a reduced and grammatically specialized singular participle of *kárⁿá-’do’*, most likely from (Perfective) participle *kárⁿà-n* rather than from (Imperfective) participle *kárⁿá-ñ*. The contraction is irregular, and the morphological structure of *kân* is non-transparent. I will gloss it as ‘after’ in interlinears, though in free translations ‘when’ is often adequate.

Preceding verbs are usually **chained** with *kân*, i.e., they appear in bare-stem (=infinitival) form. If the subject is pronominal, it appears as an **L-toned preverbal subject pronominal**, either directly before *kân* or before a preceding verb. The fact that the subject pronominal may directly precede *kân* indicates that *kân* can be treated as a participle.

In most cases, *kân* (or the extension *gá: kân*, see below) occurs in conjunction with a **switch in subjects** (or topics). In this respect, (*gá:*) *kân* clauses are like *jé* (*mèyⁿ*) clauses. They therefore contrast with VP chains (with or without *mèyⁿ*), which are regularly used when the subject is held constant. A switch in subjects is observable in the various examples given below. However, there is often some difficulty in interpreting textual examples, since there are often two or more adverbial (or other subordinated) clauses preceding a final main clause, and the higher-level bracketing can be tricky. When adverbial clause *S*₁ is followed by adverbial clause *S*₂ and then the main clause *S*₃, it is not always clear whether *S*₁ is locally subordinated to the adjacent *S*₂, or is directly subordinated to the more distant *S*₃.

Simple *kân* without *gá:* is illustrated in (921). *kân* directly follows the relevant bare verb stem, except that a preverbal L-toned subject pronominal (if present) intervenes.

- (921) a. [tàrá yǎ: mì kân],
 [collective.hunt go **1SgS.L after**]
 [mí [má kú:ⁿ lè]], [[tàrá
 [1Sg [1SgP head with]], [[collective.hunt
 yǎ: mì bâ:-Ø] mà dǎyⁿ],
 go 1SgS.L learn.Perf.HL-Ppl.Nonh] Poss limit],
 [tàrá yèré kân] [[tàrá yà:-lú-m]
 [collective.hunt come **after**] [[coll..hunt go-PerfNeg-1SgS]
 [úrò yó=wò-m] gǎy-yè-Ø]
 [house.Loc.HL exist=be.Perf.L-1SgS] pass-Perf-3SgS]
 kàn-lí-Ø
 happen-PerfNeg-3SgS
 ‘After I (first) went on a collective hunt, me personally, ever since I
 first learned about (=got my first exposure to) going on the hunt,
 when a hunt came (=was organized), for it (=hunt) to pass by with
 me not going to it while I was home (in the village), it didn’t
 happen (=I never missed a hunt unless I was out of town).’ (gàrá)
 [for bâ:-Ø see (933.a)] **2004.3.2**
- b. ì jú kó: ù kân, á ì jú, ...
 dog raise **2SgS.L after**, 2SgP dog, ...
 ‘when you-Sg have raised a dog, your dog ...’ **2004.3.16**
- c. nĕm nòw^ó kò-rú yì :ré-bà,
 salt crush Nonh-in sprinkle.Impf-3PIS
 hâl kó bã:=kò,
 until NonhO suffice.for.Impf=be.Nonh,
 kò-rú nĕm yì :ré ù kân
 Nonh-in salt sprinkle 2SgS.L **after**
 kó bã:-yè-Ø táṅà: dèy, ...
 NonhO suffice.for-Perf-3SgS happen if, ...
 ‘They will crush some salt and sprinkle it on it (=cowhide), until it
 (=salt) is enough for it (=hide). After you-Sg have sprinkled salt on
 it, when it (=salt) has been enough for it, ...’ **2004.3.17**
- d. [yè-kànà làyá] táṅá yèré kân,
 [woman-new.L other] transfer come **after**,
 [wó úrò] sánáw^á gàrà-bá=y là: dèy
 [3SgP house.Loc.HL] switch.to pass.Perf.L-3PIS=it.is Neg if
 ‘(They would continue the festivities for one newlywed bride),
 except that after another newlywed bride came (to the village) to

move (into her husband's home), they switched over to her house (to have more festivities).' **2004.3.20**

As these examples show, *kân* is normally preceded by a bare verb stem in a chain-style sequence. Occasionally, the verb is Perfective, in stative sense (922).

- (922) [kò màyⁿ-â: kán]=ì: kó yàŋá-wⁿ dèy
 [NonhS.L dry-**Perf after**]=Foc NonhO take.Impf-2SgS if
 'if you-Sg take it after it has dried [focus], ...' (màyⁿá-) **2004.3.17**

In the majority of instances, *kân* is accompanied by a preceding *gá:* 'say', a verb in infinitival (i.e. chained) form. The interchangeability of *kân* and *gá:* *kân* is shown by the fact that (921.d), above ('after another newlywed bride came'), was repeated by the speaker, after the taping was briefly interrupted, with *gá: kân* instead of just *kân*.

Perhaps *gá: kân* originated (like *jé* clauses) as a quotative construction ('after X said that a lion has ravaged the animals'), where the act of saying entails that the protagonists have processed the event in question; see §17.1. However, in many textual passages there is no suggestion of actual speech or thought by any discourse referent, and simple free translations like 'after a lion had ravaged the animals' are usually best. To whatever extent the construction is still felt (by native speakers) to involve quotation (or thought), the source of the quotation is abstract and impersonal. Therefore 'say' in this construction does not entail the use of logophorics, and the clause preceding 'say' has a verb in bare-stem form, whereas a normal quotative complement has an inflected verb (§17.1.2).

- (923) a. [[èjú yǎ:] è gá:] kân
 [[field go] **2PIS.L say**] **after**
 'when you-Pl have gone to the field(s)'
- b. [[tára yǎ:] è gá:] kân, [kó bèrê:]
 [[collective.hunt go] **2PIS.L say**] **after**, [Nonh in]
 dùŋ-yàrá gó:-yà táŋà: mà⇒
 lion go.out-Perf happen Q
 'When you-Pl had gone out to the collective hunt, in (the course of) that, did it ever happen that a lion appeared?' **2004.3.2**
- c. yèyjê: [nǐ: sí:ⁿ gá:] kân,
 morning [day break **say**] **after**,
 [kó kùⁿ] sùgò-Ø
 [Nonh Def] go.down.Perf.L-3SgS

‘In the morning, when day (=first light) had broken, he (=man) attacked it (=elephant).’ **2004.3.4**

- d. [àsègé ñùṅò-nó kò gá:] kân,
 [livestock be.ruined-Caus Nonh.L say] after,
 [kòwⁿɔ́tó: [kó bèrê:] nú: bè gá:] kân,
 [rescue.party [Nonh in] enter 3PIS.L say] after,
 [pé:jé gǎnṅ] bè yára jé mèyⁿ,
 [Vetiveria among] 3PIS.L walk say and
 ‘After it (=lion) had ravaged the animals, when a rescue party had gone into that (area), as they were walking among the tall Vetiveria grass, ...’ **2004.3.4**
- e. íjé ànsá:rá-n yèré gá: kân, ...
 today white-Sg come say after
 ‘nowadays, since the white man (collective sense) has come, (the manufacture of pottery has changed) ...’ **2004.3.13**
- f. m̀d̀rⁿó èmè gá: kân, [tô:-n jíjè]
 be.together 1PIS.L say after, [Recip-Sg go.with]
 èjú nú: èmè gá: kân, [ì nè kâ:ⁿ]
 field enter 1PIS.L say after, [person.L each]
 [èné mà àrⁿà-nì:ñé] gǎ:ⁿ té:rè m̀y[↑]
 [Refl Poss combat.L-gear] take.out show and
 ‘After we had the meeting, we accompanied each other into the bush, then each person took out and displayed his fighting gear (knives, etc.) and ...’ **2004.3.24**

15.2.2.2 Temporal simultaneity (jé, jé m̀yⁿ ‘while ...’)

Another adverbial clause type apparently involving a ‘say’ verb ends with jé, or more often jé m̀yⁿ. Before proceeding, a comment on phonologically similar morphemes may be helpful. It is likely that some or all of the forms in (924.a) are historically related, but their connection with those in (924.b) is questionable.

- (924) a. j̀è- ‘say’ (unsuffixed Perfective, §11.3.2)
 jé Purposive-Causal postposition (§8.4)
 jé (m̀yⁿ) at end of adverbial clauses

- b. jè 'holding; with', reduced from jíjè in chains (§15.1.17)
 -jè- Recent Perfect suffix (§10.1.2.6)

Here we are concerned with jé and the more common jé mètⁿ in adverbial clauses. I will gloss jé as 'say' on the theory that it may still be synchronically connected to the inflected jè- 'say', and for lack of a better translation. In this analysis, jé is the (bare) lexical form of the 'say' verb, which otherwise appears as L-toned unsuffixed Perfective jè-. In this analysis, jé 'say' is chained to the following clause, with or without mètⁿ.

Adverbial clauses ending in jé (mètⁿ) have a range of morphosyntactic forms. The variables are a) the expression of pronominal subject, and b) the form of the verb if it is perfective (positive). There are two basic types involving **inflected verbs**, i.e. verbs with at least AN marking (925). See (931) below for an uncommon pattern involving bare verb stems.

- | | | |
|-------|-------------------------------|-------------------------------|
| (925) | pronominal subject | tone of unsuffixed Perfective |
| | a. quasi-main-clause type | |
| | suffix on verb | all-L |
| | b. quasi-relative-clause type | |
| | L-toned preverbal pronoun | H(H...)L |

Type (925.a) is consistent with main-clause form in most respects. However, the L-toned unsuffixed Perfective in main clauses is elsewhere associated with the presence of a focalized constituent, which is not the case in jé clauses.

Type (925.b) is consistent with relative-clause form in most respects. However, no audible Participial suffix is present on the verb. One might argue for a Nonhuman Participial suffix -Ø, which would require us to assume a covert nonhuman head; I will not adopt this suggestion.

The **quasi-main-clause type** (925.a) is less common. The clear examples of this construction have perfective-system verbs or statives, as in (926). I interpret structurally similar examples involving imperfective (or imperative) verbs to be purposive clauses (§17.6.2). Note the L-toned unsuffixed Perfective verbs in (926.a-b) and the presence of regular pronominal-subject suffixes throughout. (926.a,c) have jé mètⁿ, while (926.b,d) have just jé.

- | | | | | | |
|-------|----|------------------|-------------------------|------------|----------------------|
| (926) | a. | [émé | nám] | dàná | yérè-m, |
| | | [1PIP | people] | hunt | come.Perf.HL-Ppl.Pl, |
| | | dĩ: ⁿ | è:-bà | jé | mèt ⁿ , |
| | | place | see. Perf.L-3PIS | say | and, |

[bé nè] yèré dì ñè-bà
 [3Pl now] come sit.Perf.L-3PlS
 ‘When our kin (=Jamsay hunters) who had come to hunt (here) had seen the area, they too (=Jamsay villagers) [topic], they now came and settled.’ **2004.3.11**

b. [cè: kùnò-wⁿ jé] tégé
 [thing.L put.Perf.L-2SgS say] speak
 àná ù áyá-wâ:-Ø kùⁿ
 village 2SgS.L hear-Caus.Impf-Ppl.Nonh Def
 ‘what you-Sg will inform the village that you have put (=contributed)’ **2004.3.20**

c. [mâ:n.: mâ:n.:] èl-lá-bá jé mèyⁿ†
 [so-and-so so-and-so] sweet-Neg-3PlS say and
 ‘when So-and-so and So-and-so (=any two people) are not sweet (=are in conflict)’ (érù) **2004.4.6**

When (uninflected H-toned) *jé* combines with following *tégé* ‘speak’ as in (926.b) and in (1236), it is particularly difficult to separate the subordinator *jé* from the unattested #*jé* that arguably underlies uninflectable L-toned *jè-* ‘say’.

Perhaps (927) belongs here. The predicate with H-toned *jé* is a noun with clitic *≡y* ‘it is’ (allomorph *≡î*:).

(927) tì-tá: [[kò ké] kòr-Ø≡î: jé,
 Rdp-hyena [[Nonh.L Topic] lie-VblN≡it.is say,
 [wó dî:ⁿ ní wò wâ:-Ø] ...
 [3Sg place.L here 3SgS.L be.Hum.HL-Ppl.Nonh] ...
 ‘Hyena said: “that (=what you just said) is a lie; (as for) you, here where you-Sg are, ...”.’ (kòrú) **2004.4.2**

The **quasi-relative-clause type** (925.b) with L-toned preverbal subject pronominal is more common. It is exemplified in (928). Note subject pronominals throughout, and in (928.a-b) the perfective H(H...)L contour (usually bisyllabic HL). Another perfective example is the first line in (458.a). There is no audible participial suffix, but this is interpretable as Nonhuman -Ø. In (928.a), both of these features are observable in the *jé mèyⁿ* clause. In the *jé* clause that follows, still in (928.a), the verb (‘look for’) is imperfective, so only the preverbal subject pronominal tells us that the quasi-relative type is at hand. Similar imperfective clauses occur in (928.c-e). Simple *jé* is present in (928.b), while the other examples have *jé mèyⁿ*.

- (928) a. [pè:jé gǎnh] bè yàrà-Ø jé mèyⁿ,
 [Vetiveria among] **3PIS.L** walk.**Perf.HL-Ppl.Nonh** say and,
 kó bè lúgúrô:Ø jé,
 Nonh.O **3PIS.L** look.for.**Impf-Ppl.Nonh** say,
 kó mà ú:rⁿò⇒
 Nonh.P Poss get.up.Perf.HL
 ‘Walking among the Vetiveria grass, while they were looking for it
 (=lion), Lo! It (=lion) got up (=appeared)!’ **2004.3.4** [cf. (923.d)]
- b. [[kò bówò-Ø] jé]
 [[**NonhS.L** lie.down.**Perf.HL-Ppl.Nonh**] say]
 [íné-n≡î: [kó kù:ⁿ] gò:-Ø]
 [person-Sg=Foc [Nonh on] go.out.Perf.L-3SgS]
 ‘Realizing that it (=lion) had lain down, a person [focus] attacked
 it.’ **2004.3.2**
- c. [èné mà èjú] wò wàrà:-Ø jé mèyⁿ,
 [Refl Poss field] **3SgS.L** farm.**Impf-Ppl.Nonh** say and,
 [[gòrò-digé mà dí:ⁿ núṅò] lè]
 [[canal.H-row Poss place.L Dem] in]
 dùn-dàṅá yèré bé tèmè-Ø
 elephant come 3PIO find.Perf.L-3SgS
 ‘While he was farming his field, an elephant came out and found
 them (=the villagers) in the canal-row place.’ **2004.3.4**
- d. [î-n [kó kùⁿ lè]
 [child-Sg [Nonh Def Instr]
 dàná wò dàná:-Ø jé mèyⁿ],
 hunt(noun) **3SgS.L** hunt.**Impf-Ppl.Nonh** say and],
 [kó wò kárⁿâ:-Ø
 [NonhO **3SgS.L** do.**Impf-Ppl.Nonh**
 wò kárⁿâ:-Ø jé mèyⁿ]
3SgS.L do.**Impf-Ppl.Nonh** say and,
 wó ù yàṅâ:-Ø jé mèyⁿ,
 3SgO **2SgS.L** look.**Impf-Ppl.Nonh** say and,
 mànà [ěṅ lè] éwé ò: gá: kân, ...
 slingshot [Refl Dat] buy give.Perf.L-3SgS say] after, ...
 ‘(Seeing that) the child hunts in that way, (seeing that) he keeps
 doing that and doing that, you-Sg watch him (hunt); (then) after you
 buy a slingshot and give it to him, ...’ (èné) **2004.3.16**

- e. ... ù-rú bè gá: kân,
 ... 2Sg-Dat 3PlS.L say after,
 [ù dùrⁿô:-Ø jé m̀yⁿ], hâl
 [2SgS.L follow.Impf-Ppl.Nonh say and] until
 [ñè-î-n kùⁿ] [àyà ẽyⁿ] d́ó:-yè-Ø d̀y
 [female.L-child-Sg Def] [husband.L tight] reach-Perf-3SgS if
 ‘When they (=prospective parents-in-law) have told you “...”, and
 you have kept following up (with more gifts), when finally the girl
 has reached the age of marriage, ...’ **2004.3.20**
- f. kárgù [è wó=ý] m̀rⁿó
 brick [2Pl.L 3Sg=it.is] be.together
 è téwê:-Ø jé m̀yⁿ,
 2PlS.L make.Impf-Ppl.Nonh say and
 [nîŋ ké] ógó-ró cì llè-gó-bé
 [now Topic] be.fast-Inch finish-ImplNeg-2PlS
 mà:ná-jè-bè d̀y
 think-RecPf-2PlS if
 ‘Bricks [topic], while you and they are making (them), if you have
 already reckoned that you-Pl will not finish quickly now.’
2004.3.25

Some or all of the ingredients in (929) appear to be present with *jé m̀yⁿ*.

- (929) a. quotative (‘say’)
 b. cognitive processing of eventuality by a protagonist
 c. change of subject (or topic) vis-à-vis the following clause
 d. simultaneity (durative background clause)

Function (929.a) and its extension (929.b) are consistent with the probable origin of the *jé m̀yⁿ* construction as a quotative (*jé* = ‘say’). A quotative interpretation is possible in examples (926.b) and (927), above.

In the cognitive processing interpretation (929.b), the sense can be captured by the sample formulation “X realized that *S*₁, (then) X ...”. Here, referent X has cognitively processed the eventuality *S*₁, and the same X is a protagonist in *S*₂. This may be the case in (928.b,d), whose nuances may not be perfectly captured by the free translation.

The formulation “X realized that *S*₁, (then) *S*₂” has the (perhaps accidental) by-product of favoring subject (or topic) switches. If X is the subject of *S*₂ but not of *S*₁, a subject switch is at hand. Many, though not all, examples of *jé m̀yⁿ* involve a subject switch with respect to the following clause. In this

respect, *jé m̀̀yⁿ* is similar to *gá: kân*, both contrasting sharply with *m̀̀yⁿ* (which assumes same subjects across chain boundaries).

However, neither quotative, cognitive processing nor subject-switch account for all the examples of *jé m̀̀yⁿ*. In many cases, *jé m̀̀yⁿ* functions as a durative background clause, translatable ‘**while ...**’ (928.a,c,f). Additional examples are (930.a-b).

(930) a. *tì-tá:* [kò yára-Ø *jé m̀̀yⁿ*],
Rdp-hyena [NonhS.L go.around.Perf.HL-Ppl.Nonh **say and**],
nèmné è:-Ø
scorpion see.Perf.L-3SgS
‘Hyena [topic], as it walked around, it saw Scorpion.’ **2004.4.2**

b. *tá:* kò-rú sára gára-Ø,
hyena Nonh-Inst pass pass.Perf.L-3SgS,
[kò ké] wò yâ:-Ø *jé m̀̀yⁿ*,
[Nonh.L Topic] 3SgS.L go.Perf.L-Ppl.Nonh **say and**,
[jów mà kù:ⁿ] wò yâ:-Ø *jé*,
[running Poss on] 3SgS.L go.Perf.HL-Ppl.Nonh **say**,
bèn-ná: ...
goat ...
‘With that, Hyena continued on its way. He then [topic], as it went along, as it ran (=trotted) along, a goat ...’ **2004.4.2**

A third syntactic possibility, as an alternative to the quasi-main-clause and quasi-relative constructions, is for the adverbial clause to end in a **bare verb stem**, in effect being chained with *jé* in its verbal function ‘say’. Here a purposive element (**intention**) is clear, and a comparison with Purposive postposition *jé* is pertinent. The clause before *jé* is reduced to a subjectless VP, though a topical NP may be preposed.

(931) a. *tàrà-yá:-m,* [tára yá: *jé m̀̀yⁿ*]
collective.hunt.L-go.H-Ppl.Pl [collective.hunt go **say and**]
tù-tù:lú kún-tù-bà táḡà: d̀̀y, ...
Rdp-horn put-Perf-3PIS happen if, ...
‘The hunters [topic], intending to go on a collective hunt, when they have put (=played) the horn, ...’ (kúnó-) **2004.3.3**

b. *àrⁿ-úm àrⁿá náḡá-rⁿá *jé m̀̀yⁿ*,*
man-Pl arming forget-Revers **say and**,
[mó:n túrú] mǎn-sà-y
[gathering one] come.together-Reslt-1PIS

‘The men [topic], intending to remember (=revive) the (tradition of) arming for war as men, we came together in one (large) gathering.’
(mòrⁿó-) **2004.3.24**

Asked to substitute a pronominal subject for ‘men’ in (931.b), my assistant used a topical independent 3Pl pronoun, not a preverbal L-toned subject pronominal (932).

- (932) bé àrⁿá náná-rⁿá jé mèyⁿ, ...
3Pl arming forget-Revers **say and**, ...
‘They [topic], intending to remember the arming for war as men, ...’

15.2.3 ‘Since ...’ clauses

15.2.3.1 ‘Since ...’ (... mà dǎyⁿ)

dǎyⁿ is a noun meaning ‘boundary, limit, maximum extent’. It is used to construct ‘since ...’ clauses denoting unbounded temporal extent beginning at a fixed point in the past. The construction is [...] mà dǎyⁿ, where the brackets enclose a clause in relative form (arguably headed by a virtual second occurrence of dǎyⁿ).

- (933) a. [[tára yǎ: mì bâ:-Ø]
[[collective.hunt go 1SgS.L learn.Perf.HL-Ppl.Nonh]
mà dǎyⁿ
Poss **limit**
‘ever since I first learned about (=got my first exposure to) going on the hunt’ **2004.3.2** (ba#[excerpt from (921.a)])
- b. [kò gára-Ø] mà dǎyⁿ
[NonhS.L pass.Perf.HL-Ppl.Nonh] Poss **limit**
‘(ever) since (the time when) that happened’ **2004.4.4**

15.2.3.2 ‘Since ...’ (bǎ:)

bǎ: ‘since, starting with, as early as, back at (time)’ may follow an adverbial with a meaning like ‘morning’. A clausal counterpart may be constructed using a relative clause headed by a noun meaning ‘time’, with postposition lè ‘in’.

- (936) a. [wàkàtì búró ní: kûn-Ø kùⁿ] lè
 [time.L pond water be.in.Perf.HL.Ppl.Nonh Def] in
 ‘at the time when (abundant) water is in the pond.’
- b. dògùrù ù gǎn-sà-Ø cêw
 time.L 2SgS.L be.able-Reslt-Ppl.Nonh all
 ‘any time you-Sg are able (to)’ (gòrⁿó-) **2004.3.6**
- c. wárú dògùrù ù gô:-Ø
 farming time.L 2SgS.L go.out.Perf.HL-Ppl.Nonh
 ‘at the time when you (first) went out to do the farming’ **2004.3.6**
- c. nì ñì rⁿè bè nâ:-Ø
 day.L 3PIS.L spend.night.Impf-Ppl.Nonh
 ‘the day(s) (when) they stayed for the night’ **2004.3.11**

In examples like (937), a virtual head noun meaning ‘time’ or the like may be assumed. For more on this headless-relative temporal clause type, see §15.2.7, below.

- (937) î-n [wó nǎn-tù-bà dèy],
 child-Sg [3SgO bear-Perf-3PIS if],
 [wó bè nárⁿà-Ø]
 [3SgO 3PIS.L bear.Perf.HL-Ppl.Nonh]
 ‘A child [topic], if they bear it (=if it is born), when they have borne it,
 ...’ (nàⁿá- twice) **2004.2.12**

15.2.4.2 ‘Before ...’ clauses with pseudo-causative nominal

Jamsay has a remarkable construction to express ‘before ...’ clauses. The propositional content may be factive (as in ‘before the rain fell, we were able to get inside the shelter’) or irrealis (‘I managed to run away before the elephant trampled [=could trample] me’). For its use in expressions meaning ‘on this side of X’, see (224). The construction is characterized by the formal features in (938).

- (938) a. the verb takes the form of a pseudo-causative nominal;
 b. this nominal is followed by postposition lè ‘in, with’;
 c. chained verbs immediately preceding the pseudo-causative nominal appear as L-toned compound initials;
 d. multiple NP and adverbial arguments may appear as possessors:

- an inner argument (immediately preceding the pseudo-causative nominal) often appears in alienable possessor form (pronominal in alienable possessor form without *mà*, or a noun-headed NP plus Possessive *mà*)
- outer arguments (not adjacent to the pseudo-causative nominal) often appear with Possessive *mà* not only with NPs (where *mà* is expected) but also with independent pronouns

In its treatment of NP arguments, the ‘before ...’ construction shows syntactic similarities to Verbal Noun complements, the other major subordinated clause type in Jamsay that is based on a nominalized verb (§17.4). A subtle difference is that the VblN is more prone than the pseudo-causative nominal to form compounds.

The (final) verb in the ‘before ...’ construction takes **pseudo-causative** form, with H-toned stem followed by an L-toned suffix *-ẁ* (with vowel quality taken from the final stem vowel). The overall tone pattern is therefore H(H...)L. For the form of the pseudo-causative, see §9.3. The pseudo-causative “verb” is morphosyntactically a noun (it is followed by a postposition, and it may be preceded by a possessor).

In the ‘before ...’ construction, the pseudo-causative nominal is followed by *lè*. Elsewhere, this is an all-purpose postposition, in context variably locative, dative, or instrumental (§8.2.1). I will gloss it in interlinears as ‘in’, but this is arbitrary, and there is no way to determine which of the postpositional readings (locative, etc.) is relevant here.

In ‘before ...’ clauses based on intransitive verbs, the logical **subject appears in possessor form**, hence with *mà* if a noun-headed NP (939.d-e), otherwise with the regular H-toned alienable possessor pronominal (939.a-c, f-h). If a **chained verb** immediately precedes the pseudo-causative verb, it appears as an **L-toned compound initial**; see ‘come’ in (939.a) and *sárá-* ‘pass’ in (939.g).

- (939) a. *úrò* *é* *yèrè-dó:-ẁ* *lè*,
house.Loc.HL **2PIP** **come.L-arrive.H-Caus.L** **in**
‘before you-Pl come back home (=to the village)’ (*yèrè-*, *dó:-*)
2004.3.1

- b. ... *yùwó=k̀*, [*kó* *yúwú-ẁ* *lè*],
... shed.Impf=be.Nonh, [**NonhP** shed.H-Caus.L **in**],
[*lá:-lá:* *ké*] *ñě-m* *yă:* *gǔ:ⁿ* *jì:ⁿ*
[first-first Topic] woman-Pl go remove.Impf Past

‘... it (=early millet) sheds (grains). Before it shedded, in the old days the women would go and remove (=harvest) it.’ (yùwó-, gǒ:n-) **2004.3.6**

c. [[í:n kùⁿ] ír-â:-Ø] bé gá:-wà lè
[[child Def] ripen-Perf-3SgS] **3PIP** say.H-Caus.L **in**
‘before they (can) say that the grains (of millet) have ripened’ (gá:-) **2004.3.8**

d. [kó tǒjǒ kùⁿ] mà dǒ:-wò lè,
[NonhP payment Def] **Poss** arrive.H-Caus.L **in**,
jàmá jàmá-jè jòwó-m̄ yó=kò
betrayal betray-RecPf run.Impf-Ppl.Pl exist=be.Hum
‘It exists (=sometimes happens) that before the payment (deadline) arrives, he flees treacherously.’ (dǒ:-) **2004.3.10**

e. nì :-sì :rⁿû: [àsègè mà gó:-wò lè]
morning.Loc.HL [animal **Poss** go.out.H-Caus.L **in**]
‘in the morning, before the (livestock) animals have gone out’ (gó:-) **2004.3.16**

f. má ú:rⁿú-wⁿò lè
1SgP get.up.H-Caus.L **in**
‘before I got up’ (ú:rⁿó-)

g. wó sàrà-gàrá-wà lè
3SgP **pass.L-pass.H-Caus.L** **in**
‘before he passed by’ (sàrá-, gàrá-)

h. [kó máyⁿá-wⁿà lè], kó ù jùjǒ-ñ dèy,
[**NonhP** dry.H-Caus.L **in**], NonhO 2SgS.L rub.Impf-Ppl.Sg if,
cín yèré mèyⁿ↑ màyⁿá=kò
thus come and dry.Impf=be.Nonh
‘Before it (=cowhide) dries, you-Sg rub it with salt, thus it will come and dry out’ (màyⁿá-) **2004.3.17**

In transitive ‘before ...’ clauses, when the **direct object but not the subject** is overtly specified, we get the same simple alienable possessive construction as in intransitives where only the subject is expressed. This time the logical direct object is the possessor (940). I have no examples of this subject-less version with a pronominal object.

- (940) [yà:jì :-pǎg-Ø kùⁿ] mà ó:-wò lè
 [marriage.L-tie.VblN Def] **Poss** give.H-Caus.L in
 ‘before (you) hand over the marriage-contracting payment
 (=brideprice)’ (-pǎg-ú) **2004.3.20**

Now consider what happens when **both the logical subject and the logical object** are overtly expressed. The linear order is normally **subject-object-verb**. This ordering is common even when the subject is a pronoun (violating the usual principle, enforced in main clauses, that preverbal subject pronominals immediately precede the verb). It is also possible (but less common) for a pronominal subject to follow an object (see below).

In the normal subject-object-verb ordering, the object is the inner (immediately preverbal) argument. It may appear in its regular (i.e. main-clause) direct-object form, or in the form of an alienable possessor (nonpronominal NP plus mà, or the alienable possessor form of a pronoun).

The subject is the outer argument in the normal subject-object-verb ordering. It is most often treated as a special kind of outer possessor. If **the subject is a pronoun**, it normally appears as an **independent pronoun** plus mà, for example 2Sg ú mà, 1Sg mí mà, and 3Sg wó mà; see (941.a-e), below. Such a combination never occurs in main clauses, where pronominal possessors are expressed without mà by either H-toned alienable possessor forms (2Sg á, 1Sg má, 3Sg wó, etc.) or L-toned inalienable possessor forms (2Sg ù, 1Sg mì, 3Sg wò, etc.). The only other construction where Possessive mà follows an independent pronoun is Verbal Noun complement clauses (§17.4).

If the **object is pronominal**, the object appears in either (alienable) **possessor** (941.a-c,g) or regular **direct-object** form (941.d,f), e.g. 1Sg possessor má or direct-object mí. The difference between possessor and object series is audible only for the 2Sg, 1Sg, and Logophoric pronominals. Other pronominals like 3Sg wó and 1Pl émé are ambiguous between possessor and object, hence the noncommittal P/O in interlinears (941.e).

- (941) a. [bé mà] má láyá-wà lè
 [3Pl Poss] 1SgP hit.H-Caus.L in
 ‘before they hit me’
- b. [wó mà] má láyá-wà lè
 [3Sg Poss] 1SgP hit.H-Caus.L in
 ‘before he/she hits me’
- c. [ú mà] má láyá-wà lè
 [2Sg Poss] 1SgP hit.H-Caus.L in
 ‘before you-Sg hit me’

- d. [ú mà] mí láyá-wà lè
2Sg Poss 1SgO hit.H-Caus.L in
 [= (c)]
- e. [mí mà] wó láyá-wà lè
[1Sg Poss] 3SgP/O hit.H-Caus.L in
 ‘before I hit him/her’
- f. [ì jú mà] mí céré-wè lè
[dog Poss] 1SgO bite.H-Caus.L in
 ‘before the dog bit me’
- g. [ì jú mà] má céré-wè lè
[dog Poss] 1SgP bite.H-Caus.L in
 ‘before the dog bit me’
 [for the alternative reading ‘before I bit the dog’, see (944.b),
 below]

When **both subject and object are nonpronominal NP’s**, we can get a **stacked-possessor** construction of the form [[subject mà] [[object mà] pseudo-causative]], as in (942). This resembles the [[pronoun mà] [possessor-pronoun verb]] pattern in (941.a-c), above.

- (942) [mì dè:] mà [ára mà sá:kù] mà
 [1SgP.L father.HL] **Poss** [rice Poss sack] **Poss**
 jé:rè-wè lè
 bring.H-Caus.L in
 ‘before my father brings the sack of rice.’

However, speakers find this construction to be rather bulky, and other variants are observed. First, the subject NP may be **topicalized**, then resumed by a possessor pronominal (943.a), which reduces the bulkiness of the ‘before ...’ clause proper. Second, the object NP may appear in **normal object** form, i.e. without a following Possessive mà (943.b-c).

- (943) a. [mì dè:] [ára mà sá:kù]
 [1SgP.L father.HL] [rice Poss sack]
 wó jé:rè-wè lè
3SgP bring.H-Caus.L in
 ‘my father_x [topic], before he_x brings the sack of rice.’

- b. [mí mà] pé:jú cé:n-wⁿè lè
 [1Sg Poss] **sheep** slaughter.H-Caus.L in
 ‘before I slaughter the sheep’
- c. [mì dê:] mà pé:jú cé:n-wⁿè lè
 [1SgP.L father.HL] Poss **sheep** slaughter.H-Caus.L in
 ‘before my father has slaughtered the sheep-Sg’

If the subject is pronominal, it is also possible to **front the object** (as an outer possessor, with mà). The subject is realized as a simple (alienable) possessor pronominal. This allows ‘before ...’ clauses to approximate the main-clause linearization pattern whereby pronominals (unless emphatic or topicalized) follow nonpronominal NP’s. However, since the subject-object-verb order is normal in ‘before ...’ clauses, object-fronting may create parsing difficulties (misidentification of subject and object roles). With verbs like ‘slaughter’ (944.a), the asymmetry between subject and object makes misparsing unlikely. The reading for (944.b) is unlikely for the same reason; see the more usual reading (941.g). (944.c) is more seriously ambiguous. My impression is that object-fronting is uncommon in natural speech, especially when both subject and object are pronominal.

- (944) a. [pé:jú mà] má cé:n-wⁿè lè
 [**sheep Poss**] 1SgP slaughter.H-Caus.L in
 ‘before I slaughter the sheep’
- b. [ì jú mà] má cé:ré-wè lè
 [**dog Poss**] 1SgP bite.H-Caus.L in
 ‘before I bit the dog’
 [for the reading ‘before the dog bit me’, see (941.g), above]
- c. [î-n mà] má láyá-wà lè
 [**child-Sg Poss**] 1SgP hit.H-Caus.L in
 ‘before I hit the child’
 [or: ‘before the child hit me’]

Adverbials such as dative pronominals or PP’s, or locationals, may be added, usually **with a following Possessive** mà (which is absent in corresponding main clauses). Examples of pronominal and NP datives with mà are in (945). In (945.b-d), the pronominal subject does not have possessor form; instead, it appears as an L-toned preverbal subject pronominal, immediately before the verb (945.b), or as an H-toned independent pronoun, when separated from the verb (945.c-d). The option to add Possessive mà after an adverb is

verb iteration denoting a prolonged activity (§11.6). The -sé verb itself is intonationally prolonged (symbol ⇒) in the example. A gloss ‘when he came’ seems most appropriate in context.

- (947) [[dògùrò yèré mèyⁿ dà:yá dê:-Ø kùⁿ lè],
 [[time.L come and night fall.Perf.HL-Ppl.Nonh Def] in]
 yó:rò-yò:rò wò yès-sé⇒,
 sneak.HL-sneak.L 3SgS come-when,
 [ðyà-ñðwⁿó ú:rⁿó ij-â:-Ø] tèmè-Ø
 [Camel get.up stand-Perf-3SgS] find.Perf.L-3SgS
 ‘When night came and fell, he (=Hyena) crept along and along. When he came (=arrived), he found (=it happened that) Camel had gotten to its feet and was standing.’ (yèré-) [for yó:rò-yò:rò see §11.6.3]
2004.4.4

Other elicited forms, showing the L-toned verb, were yà:-sé from yǎ:- ‘go’, and dð:-sé from dǒ:- ‘arrive’.

15.2.5 Spatial adverbial clause (‘where ...’)

In the usual spatial adverbial construction, dǐ:ⁿ ‘place’ is the head NP of a relative clause. After tone-dropping it appears here as dì:ⁿ. This construction may have a strictly spatial sense ‘(the place) where...’, as in (948).

- (948) a. nùwⁿó dì:ⁿ kâ:-Ø⇒ fú:
 corpse **place.L** be.Nonh.Perf.HL-Ppl.Nonh all
 ‘where(-ever) the corpse is’ **2004.3.21**
- b. dì:ⁿ èné úmò-Ø kùⁿ lè
place.L LogoS lie.down.Perf.HL-Ppl.Nonh Def in
 ‘where it (=snake) has lain down’ **2004.3.5**
- c. [nûŋ lè] kâ:ⁿ, [dì:ⁿ kó bè nùŋô:-Ø]
 [song in] also, [**place.L** NonhO 3PIS.L sing.Impf-Ppl.Nonh]
 bé yó=kò-bà
 3PI exist=be.Nonh-3PIS
 ‘In the songs too, there (=in songs) where they sing it, there are some (singers).’ **2004.3.11**
- d. [[kò mòbîl] mà jíré lè]
 [[Dem vehicle] Poss front in]

[[*chauffeur* bé] dî:ⁿ dâ:ⁿ-Ø kùⁿ]
 [[driver Pl] **place.L** be.sitting.HL-Ppl.Nonh Def]
 ‘in the front of that vehicle, where the drivers sit’ **2004.5.1**

For more abstract manner-adverbial senses like ‘(in the situation) where...’ and ‘(in) the way (whereby...),’ see §15.2.6, just below.

An alternative to dî:ⁿ in a strictly spatial sense is jérè ‘side’, by extension ‘direction, area’.

(949) [jèrè èné yã:-Ø] wó jò:-gó
 [**side.L** LogoS go.Impf-Ppl.Nonh] 3SgS know-ImprNeg
 ‘(He said:) “where I am going, you-Sg don’t know.”’ **2004.4.4**

15.2.6 Manner adverbial clause (‘how ...’)

15.2.6.1 With dî:ⁿ ‘place, manner’

The usual manner adverbial is identical in form to the spatial adverbial clause just described. Here dî:ⁿ ‘place’ is interpreted more abstractly as ‘situation’ or ‘manner’. As the head of the relative, it appears in L-toned form dî:ⁿ.

(950) a. [úró dî:ⁿ bè mâ:-Ø],
 [house **manner.L** 3PlS.L build.Perf.HL-Ppl.Nonh]
 [gǒ: dî:ⁿ bè mâ:-Ø]
 [granary **manner.L** 3PlS.L build.Perf.HL-Ppl.Nonh]
 ‘(Tell us) how they build houses, (and) how they build granaries.’

b. [àrⁿ-úm dî:ⁿ [èjú lé] yã: jè:rê:-Ø
 [man-Pl **manner.L** [bush in] go bring.Impf-Ppl.Nonh
 kù nè] jè:rê-gó-w
 Def now] bring-ImprNeg-2SgS
 ‘The way the (other) men go to the bush and bring (wild game),
 you-Sg don’t bring (it).’ **2004.3.3**

A manner clause with dî:ⁿ may be the complement of tégé- ‘tell’.

(951) [dî:ⁿ kò kô:-Ø] èmě-n tégé
 [**manner.L** NonhS.L be.Nonh.HL-Ppl.Nonh] 1Pl-Dat speak.Imprt
 ‘Tell us how it was!’ **2004.3.9**

A manner clause with $d\dot{i}:^n$ may function as complement of $j\grave{u}g\acute{o}$ - ‘know’ in the sense ‘know how ...’ (952.a) or ‘know how to ...’. The latter is expressed as ‘know how they ...’ with impersonal 3Pl subject; to avoid confusion I translate this 3Pl as impersonal ‘one’ in (952.b).

- (952) a. $\grave{e}n\acute{e}=\grave{y}^n$ [$d\dot{i}:^n$ kò kárⁿá=kò] $j\grave{u}g\acute{o}$:
 Logo=Foc [**manner.L** NonhS.L do.Impf=be.Nonh] know.Impf
 wà
 say
 ‘He said, “it’s I [focus] who knows how it (=rifle) works.”’
2004.4.4
- b. [$d\dot{i}:^n$ kárⁿá kó bè wàrá yǎ:-Ø]
 [**manner.L** do NonhO 3PlS.L farm(verb) go.Impf-Ppl.Nonh]
 $j\grave{u}g\grave{o}$ -j-é⇒
know-PerfNeg-3PlS
 ‘They didn’t know how one goes and farms with it (=plow).’
2004.3.8

15.2.6.2 *With òjù-ká: ‘road, method’*

The noun $\grave{o}j\grave{u}$ -ká: ‘road, path’ may be used abstractly in senses like ‘method, technique, procedure’, which approaches the sense ‘manner’ (cf. English *way*). The noun does not typically function as head of a relative clause, but it is combinable with a manner adverbial clause headed by the L-toned version of $d\dot{i}:^n$ (see above).

- (953) [$d\dot{i}:^n$ kárⁿá m\grave{e}y↑ kó bè dònò-ŋ\acute{o}:-Ø]
 [**manner.L** do and NonhO 3PlS.L finish-Caus.Impf-Ppl.Nonh]
 mà òjù-ká: mà t\grave{o}gú j\grave{i}-j\acute{o}:-Ø
 Poss **road** Poss kind Rdp-be.many.Perf.HL-3SgS
 ‘There are many kinds of method for putting an end to them
 (=squabbles).’ **2004.4.6**

More literally, this is something like ‘there are many kinds of roads (=methods) of the ways (=things) that they do and (=in order to) finish them’.

15.2.7 Headless relative as adverbial clause

The logical head noun is sometimes omitted in adverbial relatives. It is difficult to determine in this case whether the missing head noun is ‘manner/way (that ...)’ or ‘time (when ...)’. Perhaps a locative sense ‘place (where ...)’ is also possible, though I can cite no compelling textual examples. Contextual information and any available native wit must be used in translating such headless adverbial relatives.

In (954), because of the immediately following ‘how?’ question, I opt for ‘the way ...’ in the free translation, though a temporal reading is also possible.

- (954) [íné-m bè â:-Ø kùⁿ],
 [person.Pl 3PIS catch.Perf.HL-Ppl.Nonh Def]
 [kó nò] [yǎ:-jǐn lè], kó ?
 [Nonh now] [how? Instr], Nonh
 ‘... the way they catch people, that (practice) now, how is it?’ **2004.3.3**

In (955), temporal readings (‘when/while ...’) seem preferable on the whole, but more abstract readings (‘in a situation where ...’) are also possible.

- (955) a. [kó tà:ⁿ-Ø↑ bàrmè-Ø,
 [NonhO shoot.Perf.L-3SgS] wound.Perf.L-3SgS,
 bàrmè-Ø↑ [wó kù:ⁿ] jàwà-Ø,
 be.wounded.Perf.L-3SgS [3SgP on] struggle.Perf.L-3SgS,
 [wó kò jáwà-Ø],
 [3SgO NonhS.L struggle.Perf.HL-Ppl.Nonh],
 kó pàrè-Ø
 NonhO hug.Perf.L-3SgS
 ‘He shot and wounded it (=leopard). It was wounded, it struggled with him. While it struggled with him, he got it in a bearhug.’
2004.3.4
- b. [bè gámárⁿà-Ø kùⁿ lè] m̀̀rⁿó —,
 [3PIS.L divide.Perf.HL-Ppl.Sg Def in] be.together,
 m̀̀rⁿó sáyⁿá-bà
 be.together disperse.Impf-3PIS
 ‘When they have divided it (=meat) up, they disperse from each other.’ **2004.3.19**

- c. ñě:-rⁿ-ùm àrà-nǎ:-wⁿ-Ø, [ðrú
 female-child-Pl porridge.L-drink-Caus-VblN, [matter
 wò jùgò-lí-Ø] kó nǎ:-wⁿó-bà
 3SgS.L know-PerfNeg-**Ppl.Nonh**] NonhO drink-Caus.Impf-3PlS
 ‘The excision (“giving porridge to drink”) of girls; when she (still)
 didn’t know matters (=when she was very young), they would
 excise it (=her) [lit. “would give it (=porridge) to drink”].’
2004.3.18

15.2.8 ‘From X, until (or: all the way to) Y’

The verb yàṅá ‘take, pick up’ is widely used to initiate (and continue) a series, especially in the combination yàṅá mèyⁿ↑. It can take an NP or a clause as complement. The series is normally concluded with a phrase containing some combination of hâl ‘until’, yǎ:- ‘go’, and/or dǎ:- ‘arrive, reach’. The trope is therefore of the speaker ‘picking up’ one or more objects and going (with it) to a destination.

One version of the complete construction is seen in (956.a), with two yàṅá mèyⁿ↑ opening the series of life stages of the millet plant, and a final hâl yǎ:-. In (956.b), we have yǎ:- and dǎ:- without hâl.

- (956) a. [kó tǎy-tǎyó lè] yàṅá mèyⁿ↑,
 [NonhP seed.L-sprout in] **take and**,
 [yèré tènǎ kún-tí-Ø] yàṅá mèyⁿ↑,
 [come segment put-Perf-3SgS] **take and**,
 yàṅá yǎ:-, hâl yǎ: î:ⁿ nàrⁿá mèyⁿ↑, ...
 take go —, **until go** child bear and, ...
 ‘**From the time** it (=millet) is in seedling form, **through the time** it has formed stem segments, and **finally on to the time** when it has borne grains (or: ears), ...’ (kúnó-) **2004.3.8**
- b. [émé à-kóró] mà wóró,
 [1PIP well] Poss depth,
 [mè:térè péré gá:rà sáyà] yàṅá mèyⁿ↑,
 [meter ten eight plus] **take and**,
 [[pél-lěy lěy sáyà] lè] yǎ: dǎ:-Ø
 [[ten-two two plus] to] **go reach**.Perf.L-3SgS
 ‘The depth of our wells, (it’s) **from** 18 meters **up to** 22 meters.’
2004.4.5

The high-frequency combination hâl yǎ: is sometimes pronounced hâl lǎ:.

Another variation is seen in (957), from a text about dry-season farming. The ladles and necked gourds form a mini-series, coming from fruits of the same species (*Lagenaria*); the speaker then extends (or restarts) the series by bringing in watermelons.

- (957) ì nè kàjú wàrà-m bé=ỳ,
 person calabash farm.HL-Ppl.Pl 3Pl=it.is,
 [kó yàṅá-sà-Ø dèy], [tùṅ-nǎ: yàṅá-sà-Ø dèy]
 [Nonh **take-Reslt-3SgS** if], [ladle **take-Reslt-3SgS** if]
 [sàbǎl lè] yǎ: dǎ:
 [gourd.with.neck to] **go arrive**,
 [yàṅá yǎ: gù-gùn bè témé, ...
 [**take go** Rdp-watermelon 3PlS.L find, ...
 ‘It’s people who raise gourd (=calabash) plants. **Starting with** that, **starting with** ladles (from small gourd fruits), and **going on to** gourds with necks (from larger gourd fruits). In addition, they find (=grow) watermelons, ...’ **2004.3.9**

In (958), *hâl yǎ: mèyⁿ* is used in the sense ‘to the point that’, describing an effect of an intense prior action.

- (958) póró wò gá: kân
 hug 3SgS.L say after
 kó sárⁿám⇒ póró wò gá: kân
 NonhO squeezing hug 3SgS.L say after
 hâl yǎ: mèyⁿ è:ⁿ-Ø
until go and be.tight.Perf.L-3SgS
 [wó gùn-céné lè] wǎy-á:rà-Ø
 [3SgP back on] scratch-Habit-3SgS
 ‘Having gotten it (=leopard) in a bearhug, having squeezed it hard, to the point that it (=bearhug) was tight on his back, it was digging into his back.’ **2004.3.4**

The verb *gó:-* ‘go/come out’ is sometimes used instead of *yàṅá-* ‘take’ to define the starting point (959).

- (959) yí gò:-Ø dèm-tórò tǎ:-n dǎ:=kò
 here **go.out**.Perf.L-3SgS D Recip-Sg **reach**.Impf=be.Nonh
 ‘(the distance was the same as) from here to Demtoro (hill)’ **2004.5.1**

When just the first half of the construction (e.g. with *yàṅá-*) occurs, it may be translated as ‘for example’ or ‘for starters’, with an implied but unstated

Some of these features suggest affinities with Verbal Noun complements (§17.4.1) and ‘before ...’ clauses (§15.2.4.2).

A free translation with ‘**suddenly**’ or the like captures the narrative flavor. When two such clauses are **paired**, a rapid-fire chronological sequence is suggested, as in line 4 of (963). The contextual translation is ‘no sooner did ... than ...’.

- (963) yàŋá bè kân *en France* yă: m̀yèⁿ
 look.at 3PlS.L after in France go and
 táwè [ě: l̀y] [ě: tà:n] bé: bèrê:-Ø tán,
 maybe [month two] [month three] stay can.Impf-3SgS only,
 ú á:-bà, *mais* fàrá:nsì yă: d̀ó:
 2SgO catch.Impf-3PlS, but France go arrive
 [ú mà d̀ó:⇒] [ú mà pílíwè]
 [2Sg Poss **arrive.HL**] [2SgS Poss **go.back.HL**]
 non ú à:-j-é dé, ú dàyá-bà
 no! 2SgO catch-ImplNeg-3PlS Emph, 2SgO leave.Impf-3PlS
 ‘If they (=colonial army recruiters) have reckoned that (an African) can probably go to France and remain (=survive) (there) for two or three months, they would conscript you-Sg; but if (they think that) arriving in France, no sooner would you arrive than you would come back (to Mali), no, they would not conscript you, they would reject you.’ (d̀ó:-, pílíwé-) **2004.4.22**

The subject of ‘arrive’ and ‘go back’ nominals is expressed as a possessor, specifically as an independent pronoun (here 2Sg ú) plus Possessive mà.

(964) is an elicited example of the same type.

- (964) á:mádù mà d̀iŋè⇒, wó mà núwⁿò
 A Poss **sit.down.HL**, 3Sg Poss **die.HL**
 ‘No sooner did Amadou sit down than he died.’ (d̀iŋé-, núwⁿó-)

Consider now (965). The first clause (‘got up’) is of the same type as in (963-4), i.e. H(H...)L verb with preceding ...mà, and denotes a sudden action. After a second clause (‘was holding’) whose form is not relevant here, the passage concludes with a long third clause of the same type as the first (‘brought down’). What is interesting about this third clause is that **each constituent is linked to the following by Possessive mà**. Excluding one case where mà occurs in its normal function within a possessed NP, the third clause may be schematically modeled as [*he mà top mà stick mà brought down*], i.e. ‘he (suddenly) brought down the stick on the top’. When one does include the

true possessive occurrence, we get an even more incantatory sequence [*he mà [heart mà top] mà stick mà brought down*].

- (965) kó mà ú:rⁿò⇒, [ó:jó mà
Nonh Poss get.up.Perf.HL, [Grewia **Poss**
 bèrè ðr=í:ⁿ] jèrè-Ø tàjà-Ø,
 stick.L fresh=it.is] hold.Perf.L-3SgS happen.Perf.L-3SgS,
 wó mà [kó dârⁿà-céné mà kù:ⁿ]
 3SgS **Poss** [NonhP head-heart **Poss** head]
 mà [béré kù:ⁿ] mà súnú-ηò, ...
Poss [stick Def] **Poss** go.down-Caus.Perf.HL ...
 ‘Lo! It (=lion) suddenly got up (=appeared)! It happened (luckily) that
 he (=a hunter) was holding a freshly cut stick (=shaft) of Grewia tree.’
 He suddenly brought down that stick on the top of its (=lion’s) head.
 (ú:rⁿó-, súnú-ηó-) **2004.3.4**

In (966), there are three closely spaced occurrences of the construction with H(H...)L verb and preceding ... mà. In the first, we again see an independent pronoun, here 3Sg wó, before mà. The second occurrence has an L-toned chained verb (‘kick’ = ‘[scorpion] sting’) before the H(H...)L verb ‘put’. In the third occurrence, we see another superfluous mà linking ‘in (=from) the rear’ and ‘excrement’.

- (966) [wó kù:ⁿ] wó mà dó:-nò,
 [3SgP head.Loc.HL] **3Sg Poss** approach-Caus.Perf.HL,
 [[círⁿé mà dī:ⁿ éjé-sà-Ø kù:ⁿ] lè]
 [[nose Poss place.L be.clean-Reslt-Ppl.Nonh Def] in]
 nèmné mà tàrà-kúnò⇒
 scorpion **Poss** **kick.L-put.HL**
 [bòró lè] mà bé: mà éré
 [rear in] **Poss** excrement **Poss** escape.Perf.HL
 ‘Suddenly he (=Hyena) brought his head close to it (=Scorpion, to sniff
 it). In the spot on his nose that was clean (=bare of fur), suddenly
 Scorpion stung (“kicked”) penetratingly. Instantly, excrement escaped
 from his (=Hyena’s) rear end.’ (dò:-nó-, támá-, kúnó-, éré-) **2004.4.2**

15.3.2 Other cases of superfluous mà

Structurally unnecessary Possessive mà occurs in a number of other textual passages. An example is mà before the verb ‘not have’ in (967). My transcription assistant suggested omitting the mà, but I regard superfluous mà as a

stylistic device rather than a grammatical error. Perhaps the fact that the preceding object NP ('a place to put them') is long and cumbersome is a factor in favor of inserting mà before the verb here.

- (967) [ì nè gàmà-nám nè]
 [person certain-Pl now]
 [dì :ⁿ kó bè kúnô:-Ø kùⁿ]
 [place.L NonhO 3PIS.L put.Impf-Ppl.Nonh Def]
 mà sà:-rá-Ø
Poss have-Neg-3SgS
 'Some (other) people now do not have any place to put them (plants).'
2004.3.9

In (968), what appears to be a chained VP ending in yă: 'go' is followed, after an intonation break, by mà plus noun. Perhaps mà here is an improvised connective, as the structure of the sentence is adjusted in mid-stream.

- (968) ... gá:rá ă-n táná-ŋá-m̄,
 ... more man-Sg become-Caus-Ppl.Pl,
 [àrⁿá mà témé-rⁿé] jí r̄è yă:,
 [readiness.for.war Poss inherited.trait] ahead go,
 mà àrⁿ-úm dàmá jì r̄è-já:-m
Poss man-Pl push ahead.L-convey.H-Ppl.Pl
 '(griots) who make (anyone whom they follow) more of a man; who push (=urge on) and propel forward the men (so that) their (=the men's) innate combativeness goes forward (=is increased).' **2004.3.15**

In (969), the quasi-verb kùn-ó-Ø 'is not (put) in' is at the end of a factive clause ('the fact that X is not in') that serves as subject of a higher main clause ('does not prevent ...'). There is an unexpected mà between this kùn-ó-Ø and the preceding subject NP. Perhaps what is going on here is that the negative verb form ... kùn-ó-Ø is treated here as though it were a Verbal Noun. (Complements of Verbal Nouns regularly have mà, §17.4.1).

- (969) [[íné-n túrú-n] [íné-m l̄y] mà kùn-ó-Ø]
 [[person-Sg one-Sg] [person-Pl two] Poss be.in-Neg-3SgS]
 [[à-kóró kùⁿ] mà jàⁿ-yⁿ] gà:nà-gó-Ø
 [[well Def] Poss dig-VblN] prevent-ImplNeg-3SgS
 '(The fact that) one or two people are not in (=involved) does not prevent digging the well.' **2004.4.5**

16 Conditional Constructions

16.1 Simple conditional with dey (dèy, déy, dé) ‘if’

The unmarked simple conditional clause is of the form [S₁ dey, S₂]. In this construction, S₁ denotes an eventuality that has occurred, does occur, or may occur. The pitch of dey is variable. When **clause-final**, it behaves as an atonal morpheme, which then copies the final tone of the preceding word, see Atonal-Morpheme Tone-Spreading (137). Because of the way H- and L-tones pattern with AN suffixes, in practice we get déy after negative verbs (if not defocalized) and after lexical-stem pseudo-participles, but dèy in the more common combination with a preceding positive verb.

When **non-clause-final** (i.e. when followed by another particle), the basic form is H-toned déy. In some high-frequency combinations this simplifies to dé (§16.1.3).

Both antecedent and consequent clauses have **main-clause form** in the great majority of cases, so their verbs have pronominal suffixes as appropriate. dey occurs at the end of the antecedent clause, which normally precedes the consequent, though occasional textual examples of postposed antecedent clauses (probably afterthoughts) have turned up. The construction is very common, and one can often translate dey as ‘when ...’ instead of as ‘if’. In other words, [S₁ dey, S₂] may simply indicate chronological ordering, as in the description of a complex activity involving multiple sequential actions, so long as there is some connection between these actions (a necessary sequencing, for example). The [S₁ dey, S₂] construction therefore competes with the explicitly temporal [[S₁ (gá:) kân], S₂] construction (§15.2.2.1).

16.1.1 Regular antecedent clause with pronominal subject suffix

The unmarked AN category for the antecedent is a **perfective-system verb**. The Resultative suffix -sà- is very common with active (non-stative) verbs, though all other perfective-system suffixes (including Perfective -tî- and Recent Perfect -jè-) and the unsuffixed Perfective are possible. A pronominal subject is usually expressed as a **pronominal subject suffix** on the verb (see the immediately following section for a distinct pattern with preverbal subject pronominals).

The unmarked AN category for an indicative consequent clause is the **unsuffixed Imperfective**.

- (970) a. ñú: [ním ké] [kó ì:ⁿ-nà:ⁿ-ú]
 millet [now Top] [NonhP child-bear-VbIN]
 dó:-yè-Ø dèy
 arrive-**Perf**-3SgS **if**
 'the millet now, when the bearing of its ear (=grain spike) has arrived ...' **2004.3.6**
- b. nì-ní: nùm-â:-Ø dèy,
 Rdp-sun fall-**Perf**-3SgS **if**,
 [àná ǎ:-rⁿù-m] mǎn-sà-bà dèy, ...
 [village male-child-Pl] assemble-**Reslt**-3PIS **if**, ...
 'when the sun has set, (and) when the boys of the village have gathered together, ...' (mǎró) **2004.3.8**
- c. [[àrgà núṅò lè] kò] mà:ná-jè-bà dèy,
 [[side.L Dem in] be.Nonh] think-**RecPf**-3PIS **if**,
 jì nì ṅé-bà
 drive.ahead.**Impf**-3PIS
 'If they think that they (=birds) are on this side (of the village), they (=line of villagers) will drive them straight ahead.' **2004.3.8**
- d. yǎ:-yè-bè dèy [àná ì nè gàrú-m] mǎrⁿó-bà
 go-**Perf**-2PIS **if** [village person.L old-Pl] assemble.**Impf**-3PIS
 'When you-Pl have gone (to the village), the village elders will assemble.' **2004.3.10**
- e. [ògò-rò-lú:-Ø déy] [kó tèmè-gó-w]
 [fast-Inch-**PerfNeg**-2SgS **if**] [NonhO find-**ImpfNeg**-2SgS]
 'if you-Sg are not quick, you won't find (=catch) it.' **2004.3.16**

The consequent may also be an **imperative**.

- (971) [ú nò] é:-sà-w dèy [íné-m lè] té:ré
 [2Sg now] see-**Reslt**-2SgS **if** [person-Pl Dat] show.**Imprt**
 'If you-Sg have seen (it), show (it) to the people!' **2004.3.6**

dey is often added to a clause with clitic =ȳ (or variant) 'it is'.

- (972) [[[nì ɲè-dá:ɲá bérè]=ỹ] dèy] ñé:-w̃ⁿ
 [[[sauce.L-pot in]=it.is] **if**] eat.**Impf-2SgS**
 ‘If it’s the case that (it is) in the sauce pot, you-Sg will eat it.’

The sequence in the middle of (973), literally ‘if that does not happen’ with a negative form of táɲá- ‘happen’, is idiomatic (‘otherwise’).

- (973) [wòmó mèyⁿ↑] [kó dó:-w̃],
 [weed(verb) and] [NonhO reach.Impf-2SgS]
 [kó=ỹ tàɲà-lí-Ø dèy↑]
 [Nonh=Foc **happen-PerfNeg-3SgS** **if**]
 ñú: bèrè-gó-w
 millet get-**ImpfNeg-2SgS**
 ‘You-Sg will weed (the field) until you reach (its end); otherwise, you won’t get any millet.’ **2004.3.5**

16.1.2 Antecedent with L-toned preverbal subject pronominal

Many examples above illustrate the predominant pattern whereby a pronominal subject in the antecedent clause is expressed as a suffix on the verb. However, the subject is occasionally expressed by an **L-toned preverbal subject pronominal**. This suggests that such antecedent clauses have participialized verbs (with Nonhuman -Ø suffix), since L-toned pronominals are elsewhere found chiefly in (non-subject) relative clauses (§14.1.7).

The textual examples I have all involve a marked AN suffix: Recent Perfect -jè- (three examples), Perfective -tì- (one) or -yà- (two), and Resultative -sà- (one). This is an argument against a participial analysis, since relative-clause participles are usually based on the unsuffixed Perfective; thus compare relative-clause participle ô:-n with conditional ó:-tì-Ø in the first two lines of (974.d). Nevertheless, I will mark the verb forms in question as participles. In addition to the examples in (974), see (314) and (589.a).

- (974) a. ńín bè dé: jès-sà-Ø dèy
 wood **3PIS.L** carry bring-**Reslt-Ppl.Nonh** if
 ‘when they have carried and brought the wood (here)’ (jè:rè-)
2004.3.5
- b. wòmó ù dògó-jè-Ø dèy [kâ:ⁿ nè]
 weed(verb) **2SgS.L** finish-**RecPf-Ppl.Nonh** if [even now]
 ‘even when you-Sg have finished weeding (the field)’ **2004.3.6**

- c. kó kò á:-jè-Ø tájà: dèy, ...
 NonhO **NonhS.L** catch-**RecPf**-Ppl.Nonh happen if, ...
 'when it (=trap) has just caught it, ...' **2004.3.16**
- d. [[i nè tỳⁿó bè ô:-n] lè]
 [[person.L truth 3PIS.L give.Perf.HL-Ppl.Sg] Dat]
 tỳⁿó bè ó:-tì-Ø dèy,
 truth **3PIS.L** give-**Perf**-Ppl.Nonh if,
 [[tỳⁿó sà:-rá-n kùⁿ] lè] [tỳⁿó-sà:-rá kùⁿ]
 [[truth have-Neg-Ppl.Sg Def] Dat] [truth-have-Neg Def]
 wò-rú bè té:ré-jè-Ø dèy
 3Sg-Dat **3PIS.L** show-**RecPf**-Ppl.Nonh if
 'When they have given truth to (=haved ruled in favor of) the one to
 whom they have given truth, (and) when they have shown
 (=explained) to the one who is in the wrong that he was in the
 wrong, ...' cf. French *donner raison à*) **2004.4.6**

Informants also accepted versions of these clauses with subject pronominal suffixes instead of preverbal subject pronominals, e.g. [tĩn bè jès-sà-bà dèy] with 3Pl subject suffix -bà in (974.a). Conditional antecedents therefore make only unsystematic use of L-toned preverbal subject pronominals, in contrast to their obligatory usage in relatives.

For ... sà:-Ø dèy (accompanied by L-toned subject pronominal), where sà:-Ø appears to be a specialized unsuffixed Perfective with H(H...)L tone overlay, see §15.1.15.

16.1.3 Extensions of dey (dé nè, dé ké, dèy kâ:ⁿ, tájà: dèy)

Certain elements may follow dey. One such is nè 'now', a quasi-topicalizing morpheme (§19.1.2). The combination, usually pronounced dé nè (less often déy nè), can be used in a second conditional following on a first if there is some parallelistic logic to the sequence. For example, in (975), from the middle of a long text on crop pests, the interviewer changes the subject from grasshoppers to birds.

- (975) sà:j-í:ⁿ≡yⁿ dé nè, yǒ:-jì n≡î: kárⁿá-bà
 bird-child=it.is **if** **now**, how=Foc do.Impf-3PIS
 'Suppose now that it's (=that we're talking about) birds, what do they
 (=people) do (about them)?' (sà:j-î:ⁿ) **2004.3.8**

Topic particle *ké* is attested but uncommon with *dey*. The combination is pronounced *dé ké* (976).

- (976) [tàyⁿɔ̃ⁿ dé ké]
 [truth=it.is if Top]
 ‘If it’s the truth (=frankly), ...’

A particle *kâ:ⁿ* ‘also, too’ is occasionally added to *dey*. The contexts are similar to those for *dé nè* (see above). The *dey kâ:ⁿ* sequence is distinct from cases where *kâ:ⁿ* replaces *dey*, where the sense is ‘even if’ (see §16.2, just below). In (977), the interviewee takes up the new topic (birds) proposed by the interviewer in (976) above.

- (977) sà:j-í:ⁿɔ̃ⁿ déy kâ:ⁿ, ...
 bird-child=it.is if also, ...
 ‘If it’s birds too (in addition to grasshoppers), ...’ 2004.3.8

Another common extension of *dey* is *tàŋà: dèy*. The form *tàŋà:* is irregular, but it is certainly connected to the verb *tàŋá-* ‘become, happen’. Perhaps it is really *tàŋà⇒dèy*, with intonational lengthening, but the combination is very common and is usually pronounced rapidly, making it difficult to distinguish simple length from intonational prolongation. In other contexts, the verb *tàŋá-* is fairly common with a preceding clause in the sense ‘(it) happen(ed) that ...’. Therefore [S₁ *tàŋà: dèy*, S₂] could be glossed ‘if it happens (to be the case that) S₁, ...’. A common variant is *tàŋà dèy*, with what appears to be an unsuffixed Perfective *tàŋà* with L-tone.

tàŋà: dèy (978.a) and *tàŋà dèy* (978.b) are used in contexts where a protagonist has little or no control over the fulfillment of S₁, as in ‘if the next day happens to be sunny’, or ‘if it happens that the harvest is a good one’.

- (978) a. sà:j-í:ⁿɔ̃ⁿ tàŋà: dèy, dà:yá
 bird-child=it.is **happen if**, night
 [é àná]ɔ̃ⁿ ná:=kò tàŋà: dèy, ...
 [2PIP village]=Foc spend.night.Impf=be.Nonh **happen if**, ...
 ‘If it happens to be birds (that are the crop pests), if it happens that they (=birds) have been in your-Pl village at night, ...’ 2004.3.8
- b. àrⁿà-kújú cì-cé:nè-Ø tàŋà dèy,
 year be.good-be.good-3SgS **happen if**,
 kàjú wār-sà-w tàŋà dèy, [kàjú kùⁿ]
 calabash farm-Reslt-2SgS **happen if**, [calabash Def]

[á nì-bàrⁿà bíré: . fú: =>] mà òjù-ká:
 [2SgP dry.season.L work all] Poss road
 mà ìjé ù-rú íjé bèré=kò
 Poss position 2Sg-Dat stand can.Impf=be.Nonh
 'If the year happens to have turned out well, if you have raised
 gourd (=calabash) plants, the calabash plants (and) all of your dry-
 season work can stand up (independently) on the road for you (=can
 fulfill some of your needs).' (wàrà-) **2004.3.9**

I have one example where tánà: in tánà: dèy has the sense 'become' and takes an NP complement (979).

(979) nîŋ nèmné ă-n tánà: dèy
 now scorpion man-Sg **become** if
 'Now if the trigger ("scorpion") becomes a man (=is fearless), ...'
2004.4.4

For dey in pseudo-participial adverbial clauses, see §15.2.1.1-3, above.

16.2 Alternative 'if' particles (cêw, tán, kâ:ⁿ)

Alternatively, a particle other than dey can be used. The forms regularly used in this way are listed in (980).

(980) a. cêw 'all, entirely'
 b. tán 'only' (<Fulfulde)
 c. kâ:ⁿ 'even'
 kâ:ⁿ nè 'also, too'

The nuances are only slightly different from those with dey. cêw 'all, entirely' is a strong ending for a clause (or sequence of connected clauses), and is therefore a good boundary marker to separate the antecedent from the consequent in a structurally complex conditional. The use of 'all' in conditionals is a regional phenomenon; it is certainly widespread in Songhay languages.

(981) ðyǎ-n nì-dí:ⁿ yěy-yà-Ø dèy, górnò
 chief-Sg here come-Perf-3SgS **if**, means

yé jì nè-m cêw, pé:jú wò-rú cé:ⁿ-m̄
 exist have.Perf.L-1SgS **all**, sheep 3Sg-Dat slaughter.Impf-1SgS
 ‘If the chief comes here and if I have the means, I’ll slaughter a sheep
 for him.’

cêw here is optional, and could be replaced by a second dey. Another universal quantifier, fú:, is rarely used in this construction, but it is attested as such in (165).

tán, a Fulfulde borrowing, is confined to use in conditionals. This is not the usual ‘only’ particle in Jamsay, see sǎy ‘only’ in §19.4.1. The construction [S₁ tán, S₂] suggests that the fulfillment of the antecedent eventuality leads immediately to that of the consequent. A translation like ‘as soon as’ is appropriate in some contexts.

- (982) íné-m yèré mǎyⁿ-yⁿè-bà tán, ...
 person-Pl come be.together-Perf-3PIS **only**, ...
 ‘as soon as they gather together, (they ask each other) ...’ **2004.3.6**

Finally, [S₁ kâ:ⁿ, S₂] or variant [S₁ kárⁿà, S₂] may be glossed ‘even if S₁, S₂’, stating that the eventuality S₂ will occur in spite of, rather than because of, the fulfillment of the eventuality in S₁. For other uses of kâ:ⁿ ‘also, too, even’, see §19.1.3. This particle is distinct from homophone kâ:ⁿ ‘each, any’.

- (983) a. tàrá kùⁿ yà:-gó-w kâ:ⁿ
 collective.hunt Def go-ImpfNeg-2SgS **even**
 [àná bérè ké] dègè-gó-w
 [village in Top] spend.day-ImpfNeg-2SgS
 ‘Even if you-Sg don’t go on the collective hunt, you won’t (be able
 to) spend the day in the village.’ **2004.3.3**
- b. [yéy kùⁿ] [mí.: ú.:] nîm tówⁿó≡yⁿ kâ:ⁿ
 [going Def] [1Sg 2Sg] now companion=it.is.1Pl **even**
 ‘Waling along [topic], even if you-Sg and I are traveling
 companions, (we keep our distance).’ **2004.5.1** (‘it is’ clitic ≡y here
 may be the 1Pl conjugated form, or it may be unconjugated)

See also kâ:ⁿ or kárⁿà in (138.b), (467.c), (698.d).

16.3 Willy-nilly and disjunctive antecedents (‘whether X or Y ...’)

Willy-nilly antecedents are expressed by juxtaposing the positive and negative versions of the pseudo-antecedent, with a final cêw or fú: ‘all’ (984).

- (984) b̀è-rú é̀r=k̀ò⇒ è̀l-lá-Ø.: fú:
 3Pl-Dat sweet=be.Nonh sweet-Neg-3SgS all
 ‘whether it pleases them or it doesn’t please them’ (ér̀ù) **2004.3.18**

Other disjunctive antecedents have a similar structure, the two clauses being directly juxtaposed with a concluding cêw (985).

- (985) [jì rⁿé c̀ì -cé:nè-Ø]
 [wet.season Rdp-be.good.Perf.HL-3SgS]
 ñ̀ì -ñ̀ówⁿð-Ø cêw
 Rdp-be.ruined.Perf.HL-3SgS all
 ‘whether the wet season is good, or is ruined (=poor), ...’ **2004.3.9**

For a willy-nilly antecedent involving the reduplicated Perfective c̀ì -cé:nè- ‘be good’ and its unusual negative counterpart c̀ì -cé:nè-l̀ì -, see §10.1.2.7.

In (986), fú: ‘all’ at the end of a manner adverbial implies an unexpressed disjunctive antecedent (‘regardless of whether ...’). The context involves someone who flees the area to avoid paying an indemnity and comes back only years later.

- (986) dà̀yà-lú:-Ø dé̀y k̀â:ⁿ nè,
 leave-PerfNeg-2SgS if too now,
 [d̀ì:ⁿ è̀né j̀òwó-sà-Ø.: fú:]
 [manner.L LogoS run-Reslt-Ppl.Nonh all]
 ỳëy-yà-Ø d̀èy t̀ój̀ò:-Ø
 come-Perf-3SgS if pay.Impf-3SgS
 ‘If you have not left off (=forgiven the indemnity owed you), regardless of the fact that he fled, when he does (finally) come (back) he will pay.’
2004.3.10

16.4 ‘Unless’ antecedent (≡ȳ là: dèy)

An ‘unless’ conditional has an antecedent ending in ≡ȳ là: dèy, literally ‘if it is not (the case that ...)’. This is just dey ‘if’ added to the regular negation of clitic ≡ȳ ‘it is’ (§11.2.1.3). The construction is most common when the antecedent clause is already an ‘it is’ predication (987.a-b), but it was possible to elicit

examples involving a verb-based clause that is under the scope of $\equiv\hat{y}$ ‘it is’ (987.c).

- (987) a. [[$\acute{u}\equiv\hat{y}$ kó jíré-n] $\equiv\hat{í}$: là: dèy,
 [[2Sg= \equiv Foc NonhO tend-Ppl.Sg] \equiv it.is Neg if,
 [kó êm] [ù cé= \hat{y} là:]
 [NonhP milk] [2SgP property= \equiv it.is Neg]
 ‘Unless it’s the case that you-Sg [focus] are the one who tends them
 (=cattle), their milk doesn’t belong to you.’ **2004.3.10**
- b. hâl [[$\grave{a}r^n\grave{a}$ -kùjù làyá] $\equiv\hat{y}$ là: dèy]
 until [[year.L other] \equiv it.is Neg if],
 wó è:-gó-w
 3SgO see-ImpfNeg-2SgS
 ‘(He will flee) to the extent that you won’t see him, unless it is
 (=until) some other year.’ **2004.3.10**
- c. tǒy tó: bèrè-gó-y,
 sowing sow can-ImpfNeg-1PIS,
 [$\grave{a}r^n\acute{a}$ èj $\acute{í}^n\Rightarrow$ mì r \acute{a} -Ø] $\equiv\hat{y}^n$ là: dèy
 [rain very.much rain.fall.Perf.L-3SgS] \equiv it.is Neg if
 ‘We can’t plant (seeds), unless (it’s the case that) rain has fallen
 heavily.’

16.5 ‘If they have said’ antecedent (gá:-jè-bà dèy)

The phrase gá:-jè-bà dèy, literally ‘if they have said’ may occur after a sentence functioning as conditional antecedent. cêw ‘all’ may replace dèy ‘if’, as in (988).

- (988) néy n yèré mèy n
 now come and
 ò:g káy n -y n è-Ø gá:-jè-bà cêw
 sweat(noun) happen-Perf-3SgS say-RecPf-3PIS all
 [cè: [kó bǎ:] èmè lê:-Ø kâ: n] kò:-ró
 [thing [Nonh equal] 1PIS.L fear.Impf-Ppl.Nonh also] be.Nonh-Neg
 ‘Now if it (=hot weather) has come, supposing that the hot season has
 happened. Then there is nothing that we fear more than it (=cobra).’
 (ò:gú, kár n á-) **2004.3.5**

For the full construction, and more examples, see §17.1.4, below.

16.6 Truncated antecedent

A type of reduced conditional occurs in a construction where the content of the antecedent and that of the consequent are identical.

- (989) [bèr=î: c'é:ⁿ-wⁿ] c'é:ⁿ-wⁿ,
 [goat=Foc slaughter.Impf-2SgS] slaughter.Impf-2SgS
 [pé:j=î: c'é:ⁿ-wⁿ] c'é:ⁿ-wⁿ,
 [sheep=Foc slaughter.Impf-2SgS] slaughter.Impf-2SgS
 'If you-Sg are going to slaughter a goat, you slaughter (it); if you're going to slaughter a sheep, you slaughter (it).' 2004.3.19

This is a typically Jamsay way of saying 'you'll (perhaps) slaughter either a goat or a sheep'.

16.7 Counterfactual conditional

Counterfactuals are characterized by the use of the Past particle *jì:ⁿ* (§10.3.1) in both antecedent and consequent clauses. Occasionally *jì:ⁿ* is omitted in the antecedent (990.d). The antecedent ends in the usual 'if' particle *dèy*, which follows *jì:ⁿ*. A verb in a positive antecedent typically has **Resultative** -sà- (990.a-b). A quasi-verb (*wà-* 'be', *sà-* 'have') or defective stance verb appears in its usual L-toned unsuffixed Perfective form (990.c-d). A regular verb in the consequent most often appears in the **unsuffixed Imperfective** form.

- (990) a. [má î-n] mí bäs-sà-Ø jì:ⁿ dèy,
 [1SgP child-Sg] 1SgO help-Reslt-3SgS Past if,
 ógù bère jère-m jì:ⁿ
 fast get harvest.Impf-1SgS Past
 [kì-ká: mà yéré-wè lè]
 [Rdp-grasshopper Poss come.H-Caus.L in]
 'If my son had helped me, I would have (gotten and) harvested quickly, before the locusts came.' (bàrá-)
- b. nì-dí:ⁿ yës-sà-bà jì:ⁿ dèy,
 here come-Reslt-3PlS Past if,
 bé wǎ:-m jì:ⁿ
 3PlO kill.Impf-1SgS Past
 'If they had come here, I'd have killed them.' (yère-)

- c. lù:ró wó cérè-Ø kùⁿ, [àná bérè]
 snake 3SgO bite.Perf.HL-Ppl.Nonh Def, [village in]
 wò-Ø jì:ⁿ dèy, bàyâ:-Ø jì:ⁿ
be.Hum.L-3SgS Past if, be.cured.Impf-3SgS Past
 ‘When the snake bit him, if he had been in a town, he would have survived.’
- d. bú:dù yé sà-m dèy, wò-rú ó:-m jì:ⁿ
 money exist **have.L-1SgS if,** 3Sg-Dat give.**Impf-1SgS Past**
 ‘If I had had any money, I’d have given it to him/her.’

A **negative** antecedent has a Perfective Negative verb (991.a), while a negative consequent has an Imperfective Negative verb (991.b).

- (991) a. jòη-jóηó-n yèl-lì-Ø dèy,
 healing.L-heal-H-Ppl.Sg come-**PerfNeg-3SgS.L if,**
 núwⁿó-m jì:ⁿ
 die.**Impf-1SgS Past**
 ‘If the healer hadn’t come, I’d have died.’ (yèré-)
- b. màbíl yěs-sà-Ø jì:ⁿ dèy,
 vehicle come-Reslt-3SgS **Past if,**
 yè-dí:ⁿ nà:-gó-m jì:ⁿ
 there spend.night-**ImpfNeg-1SgS Past**
 ‘If the vehicle had come, I would not have spent the night there.’
 (yèré-)

17 Complement and Purposive Clauses

17.1 Quotative complement

17.1.1 Direct versus indirect in quotative complements

Jamsay quotative complements have a mix of “direct” and “indirect” discourse features. A distinction between direct and indirect discourse can be made on the basis of deictics, particularly first and second person pronouns. In completely **direct discourse**, the original deictics (including pronominals) are preserved. In **indirect discourse** there is a new deictic center (usually including a new speaker and listener), so pronouns and other deictics must be shifted. The regular conversions are those in (992).

(992)		direct	indirect
a.	original speaker	1Sg mí	Logophoric Sg èné
	original speaker and others	1Pl émé	Logophoric Pl èné bé
b.	original addressee	2Sg ú	3Sg wó
	original addressees	2Pl é	3Pl bé

For more on logophorics, see §18.2. Note that in addition to **logophorics** (referring to the quoted speaker), **third person** pronominals are regularly used to refer to the **original addressee(s)**. The conversions in (992) assume that the original speaker and the original addressee(s) are distinct from the current speaker and addressee. Thus the original threatening speech event (993.a) could be reported, by a third party to a fourth party, as (993.b).

(993)	a.	ú	wǎ:-m̀		
		2SgO	kill.Impf-1SgS		
		‘I will kill you-Sg.’			
	b.	[èné	wó	wǎ:-Ø]	wà
		[LogoS	3SgO	kill.Impf-3SgS]	say
		‘He _x said (to her _y) that he _x would kill her _y .’			

The 3rd person substituting for original 2nd person is not treated as a full-fledged 3rd person pronominal. In particular, it does not serve as an antecedent for a reflexive, as does a true 3rd person; see §18.4.6.

However, it sometimes happens that an original-speech-event speaker and/or addressee is **also a participant in the current speech act**. In this case, the current speech-act participant status trumps the indirect conversions in (992), as in English, where a directly quoted *I will kill you*, with speech-act roles reversed in the current speech event, becomes indirectly quoted (*you said that*) *you would kill me*.

An example of this trumping is (994), from a text describing how disputes are resolved. The speaker uses ‘you-Pl’ generically to denote the disputants. In the (indirect) quotation, the disputants are also the original addressees (i.e., are embedded second persons). The original 1Sg shifts to Logophoric as usual. However, the expected shift of embedded 2Pl to 3Pl pronoun *bé* does not occur, since their status as current speech-event addressees locks the referents into second person status.

- (994) [ɛ̀nɛ̀=ɣ̃ⁿ é b̀ɔ̀rⁿɔ̀] kú:ⁿ mà ɔ̀jù-ká: jé
 [Logo=Foc **2PIO** call.Perf.L] head Poss road for
 ‘(He said:) “by virtue of it being me [focus] who has summoned you-Pl, ...” ’ [i.e. by virtue of it being himself] **2004.4.6**

Likewise, in (995), the original addressee happens to be coreferential to the ‘we’ of the current speech event, and we get a 1Pl (rather than 2Pl or 3Pl) pronominal.

- (995) [... [émé.: ɛ̀nɛ̀.:] háwré-m] wá
 [... [**1PI** Logo] agree-so.that] say
 ‘He told us to ..., so that he and we might come to an agreement.’
2004.5.1

Even in “indirect” discourse as thus defined by pronominal conversions, some features of the original direct quotation are routinely smuggled in (996).

- (996) presentential discourse marker
 vocative
 imperative or hortative

Quotations often begin with a **presentential discourse marker** that mimics conversational speech. The usual marker for this purpose is *háýè* ‘well, ...’. See §19.2.1 for discussion.

Quotations often include a **vocative** after this discourse marker. In indirect discourse, the vocative takes the form of a third person human independent pronoun, usually 3Sg *wó*. Therefore even “indirect” quotations may begin with what is literally ‘well, he/she!, ...’, intended to suggest an original utterance like ‘well, Seydou, ...’ or ‘well, Mother, ...’. I will use ‘hey!’ in the free translation, however awkward it makes the English, to capture the presence of a vocative without getting tangled in pronominal conversions that do not work well in translation.

An alternative vocative substitute is *mâ:n* (variant *à-mâ:n*) ‘So-and-so’, which specifically replaces a (variable) personal name.

In addition, as is shown below, in jussives (embedded imperatives and hortatives), even in otherwise clearly indirect discourse the verb has the **same modal category** as in the original utterance. Therefore ‘He told them to come’ is expressed as ‘He said well, they!, come-Pl!’

An example of indirect discourse is (997). It occurs in the middle of a tale that consists largely of quoted dialogue, so there is no need for an initial discourse particle to define the following as a quotation.

- (997) [èné [ámà jé] wò-rú jàŋà-Ø] wà↑,
 [LogoS [God for] 3Sg-Dat request.Perf.L-3SgS say,
 [wó èné tá:ⁿ wò:-ý] wá
 [3SgS LogoO shoot kill-ImprtNeg] say
 ‘He said, “I (hereby) beg you-Sg for (=in the name of) God, don’t shoot and kill me!”’ (wǒ:) **2004.4.4**

This is literally something like “Logo begged him for (=in the name of) God (he) said, don’t he shoot Logo! (he) said.” The 3Sg pronouns systematically refer to the **original addressee**, logophorics refer to the **original speaker**, and the original imperative negative verb form is retained without change. Because of the importance of “direct” features in “indirect” discourse, I often use “direct” quotations in the free English translations.

When the embedded addressee is nonhuman, it is expressed in indirect discourse as a Nonhuman pronominal. (998) is from a tale where a girl speaks to an unusually astute tree.

- (998) [[èné dè:] mà jì m-sòrⁿí:ⁿ lè]
 [[Refl father.HL] Poss Ceiba-sapling Dat]
 [kó cé:ⁿ kárⁿá èné nú:-m] wá
 [**Nonh** creak! do.Impf LogoS enter-so.that] say
 ‘(She said) to her father’s Ceiba tree sapling, “you!, make a creaking sound, so that I may enter!”’ (-m §17.6.4) **2004.4.16**

A further complication is that the **outer frame** ('X said to Y') may be formulated with a plural pronominal (e.g. 1Pl or 2Pl), while the **quoted material proper** replaces this with a corresponding singular. Example (999.c), below, is of this type: "Now I've seen that the millet stems have stopped growing", we'll say.' The outer 1Pl or 2Pl operates at the generalized level subsuming multiple utterances, while the inner 1Sg or 2Sg is a representative individual utterance.

17.1.2 'Say that ...' with inflectable 'say' verb (gá:-, jè-)

A special feature of Jamsay discourse is the role of 'say' verb gá:- and quasi-verb jè- (see §11.3.1-2 for the forms). They occur not only in plainly quotative contexts, but also in constructions that overlap functionally with temporal adverbial clauses.

A simple quotative verb like gá:- or jè- may be added to an otherwise complete sentence, with no other overt indication of quotation status (999). In imperfective and/or negative contexts, a form of gá:- is used (the unsuffixed Imperfective is gâ- with short vowel). In perfective positive contexts, the only pronominally inflectable 'say' (quasi-)verb is L-toned jè- (unsuffixed Perfective). The use of the unsuffixed Perfective suggests that the verb itself (or at least its aspectual value) is defocalized.

- (999) a. [yè-lé àrⁿá mǐn-sà-Ø] jè-Ø
 [there rain fall-Reslt-3SgS] say.Perf.L-3SgS
 'He/She said it has rained there.' (mì rⁿé-)
- b. [cě: èjù-lá-Ø] jè-bà dèy
 [thing good.L-Neg-3SgS] say.Perf.L-3PlS if
 'if they say that a (certain) thing isn't good, ...' **2004.4.2**
- c. [[néyⁿ ké] ñù:-kà:-à-ý é:-sà-m]
 [now Topic] millet.L-mouth.L-catch-VblN see-Reslt-1SgS]
 gá-yè
 say.Impf-1PlS
 "Now I've seen the millet-mouth-catching (=the fact that the millet stems have stopped growing)", we'll say.' **2004.3.6**

In (1000), Definite kùⁿ at the end of the quotation suggests that a factive complement (§17.3) rather than a (normal) quotative complement is present.

- (1000) [[kó dènè-l-á] kùⁿ] gá: bèrè-m̃
 [[NonhO like-PerfNeg-3PlS] Def] say be.able.Impf-1SgS
 ‘I can say (as I just did say) that they didn’t like it.’ **2004.3.7**

17.1.3 Quotative clitic wa

This uninflectable clitic occurs after a quotation, and (for some speakers) as a hearsay evidential in tales and in reports of long-past practices known only from oral tradition. In texts, the **tone** is normally carried forward from the final tone of the preceding word, so we hear wá after H-tone and wà after L-tone. In texts, the pitch of wa is sometimes higher than that of a preceding L-tone. I am inclined to take this as an intonational effect and transcribe wà↑.

wa is used after a more or less verbatim quotation, not in examples like ‘what did he/she say?’ with an NP rather than a quotation as complement. It presupposes a contextually understood 3Sg (less often 3Pl) speaker. It can therefore often be glossed ‘he/she said’ at the end of a quotation. However, the “speaker” is sometimes impersonal or generalized (‘it is said’, ‘they say’). The quotation is usually from a past speech event, so wa competes most directly with third person forms of quasi-verb jè-, especially 3Sg jè-Ø ‘he/she said’. However, wa can also occur after a quotation attributed to a future time.

- (1001) a. [mâ:n mà ñě-n]
 [so-and-so Poss woman-Sg]
 mâ:n kó gùjó-jè-Ø wà↑
 so-and-so Nonh snatch-RecPf-3SgS **say**
 ‘So-and-so’s wife, (a different) so-and-so has snatched (=eloped with) her,’ they (will) say.’ **2004.3.20**
- b. [wó èjú-pǒ:⇒] wá
 [3Sg field-greeting] **say**
 ‘He said, “hey, greetings (to you in the field)!”’ **2004.4.4**

The quoted clause may contain a focalized constituent.

- (1002) [ú ñă: ñé:-sà] wà
 [2SgS.L meal] eat-Reslt **say**
 ‘He said that you-Sg [focus] ate the meal.’

Clause-final Emphatic particles such as kòy that were part of the original quotation follow rather than precede wá (1003). A similar example with Emphatic dé is in Text 2.

- (1003) [ɛ̀né [tógù mánà] nà:-gó-Ø] wá kòy
 [LogoS [shed on] spend.night-ImpfNeg-3SgS] **say Emph**
 ‘(Camel) said, “I certainly am not going to spend the night on top of the shed!” **2004.3.4**

The quotative particle may also be used here and there in a tale, which (by definition) is based on hearsay. (1004) is one of several occurrences of *wa* in a tale, with no suggestion of a quotation within the narrative.

- (1004) [[jì m-sòrⁿí:ⁿ kùⁿ] yèré mèyⁿ dè:] wà↑
 [[Ceiba.L-sapling Def] come and be.burned.Perf.L] **say**
 ‘The Ceiba tree sapling was burned.’ **2004.4.16**

In this hearsay use, *wá* can follow an inflected quotative verb (1005).

- (1005) [ɛ̀né sóyó-jè yà:-gó-Ø] jè-Ø wà
 [LogoS peck-RecPf go-ImpfNeg-3SgS] **say.L-3SgS say**
 ‘It (=Guinea-Fowl) said, “I won’t go after having eaten (by pecking).”
2004.4.16

In such tales, and in extended quotations, *wá* may occur repeatedly, each time at the end of a clause (and generally at a well-marked intonational break). However, it is also possible to use short-voweled *ga* as an interim quotative marker in the middle of an extended quotation (§17.1.5, below), with a normal ‘say’ expression *gá:-*, *jè-*, or *wá* at the end.

17.1.4 Impersonal ‘if they have said’ construction

Often a ‘they have said’ phrase should be disregarded, in an idiomatic free translation. at the end of a conditional antecedent clause (1006).

- (1006) [pàrà-sé:rⁿé pàrà sé:ⁿ-yⁿà-Ø]
 [post.harvest.season post.harvest be.post.harvest-Perf-3Sg]
 gá:-jè-bà dèy, yèré mèyⁿ↑ [ńú: mà bíré]
say-RecPf-3PIS if, come and [millet Poss work(noun)]
 sùg-â:-Ø gá:-jè-bà dèy
 go.down-Perf-3SgS **say-RecPf-3PIS** if
 [[wàkàtì búró ní: kùn-Ø kùⁿ] lè],
 [[time.L pond water be.in.HL-Ppl.Nonh Def] in]
 kàrgù-téwè nú:-wⁿ
 brick.L-make.HL enter.Impf-2SgS

‘When (they have said that) the post-harvest season is happening, when (they have said that) the work of (growing) millet has come and gone down (=ended), at the time when there is (plenty of) water in the ponds, you-Sg will enter into (=engage in) making mud bricks.’ [kàrgù-téwè see (1084.b)] **2004.3.25**

Here there is no previously established discourse referent for ‘they’, and the 3Pl is mis-matched with the 2Sg protagonist who appears in the concluding main clause. At best, one might imagine an impersonal or omniscient ‘they’ who take note of the eventuality denoted by the preceding clause.

A similar instance is (1007). See also (988), above, with cêw for dèy.

- (1007) [yè-kàná kùⁿ] yèré dó:-yè-Ø gá:-jè-bà dèy,
 [woman-new Def] come arrive-Perf-3SgS say-RecPf-3PlS if,
 pàná ñé:-jè-bà dèy,
 supper eat-RecPf-3PlS if,
 [èné bé cèrⁿèwⁿé] cérⁿéwⁿé-bà
 [Refl PIP fun] have.fun.Impf-3PlS
 ‘When (they have just said that) the newlywed woman has arrived here,
 after they have eaten supper, they perform their celebrations.’ **2004.3.20**

Such examples, which have a clearly recognizable, conjugated gá:- ‘say’, are transitional between true quotative constructions (with a concrete referent as quoted speaker), and the temporal adverbial clause type ending in gá: kân (§15.2.2.1), which is often best translated as simply ‘after ...’.

17.1.5 Uninflected ga (quotative, interim quotative)

A short-voweled ga at the end of a clause often functions as a reduced, uninflectable version of gá:- ‘say’. While ga may occur at the end of a quotation, as a substitute for an inflected ‘say’ verb (see below), it also has a more unique function as an **interim quotative**, at the end of one clause in the quotation, with more of the quotation to follow (ending with a normal quotative verb or quasi-verb gá:-, jè-, or wa). It can be thought of as an uninflected quotative clitic, like wa. Unlike wa, ga can be used with first or second person quoted speaker, as well as with third person quoted speaker.

The particle is heard as gá or gà, often **agreeing with the preceding tone** in the fashion of wa. However, in its quality as an interim quotative, it is subject to pitch modification in the form of a nonterminal rise, indicated with ↑ when the tone would not already be high.

High-pitched [gá] in interim quotative function is seen in (1008). In (1008.a) I take this as simple spreading from the preceding H-tone, see Atonal-Morpheme Tone-Spreading (137). In (1008.b), the latter rule should give L-toned gâ, so I interpret the raised pitch as intonational.

- (1008) a. ... [ɛ̀né bé tɛ̀gú ñ̀ðwⁿ̀-í-Ø gá
 ... [Refl PIP speech be.ruined-PerfNeg-3SgS say
 [émé yǎ:] jè-bà
 [1Pl go.Imprt] say.Perf.L-3PlS
 ‘(They will say:) “... their words were not bad; they told us to go.”’
2004.3.20

- b. [[ɛ̀né mà ní:] yì-lé yó≡kò] gâ↑
 [[Logo Poss water] there exist=be.NonhS] say
 [wó yǎ: nó:] wá
 [3Sg go drink.Imprt] say
 ‘He said (to the Fulbe man), “my water is over there; you-Sg, go and drink!”’ **2004.4.4** [excerpt from (1228)]

L-toned gâ occurs twice in (1009), first as an interim quotative marker and then at the end of the quotation. Here the quoted speaker is second person, and the mood is deontic. The preceding final tone is L in both instances.

- (1009) háyè, [mâ:n mà í-n] újúró-sà-m gâ
 well, [so-and-so Poss child-Sg] ask-Reslt-1SgS say
 yǎ:, [wó tɛ̀gú] tégé-y,
 go, [3SgP speech] speak.Imprt-PlS,
 [mâ:n mà í-n] lá:-sà-m gâ
 [so-and-so Poss child-Sg] choose-Reslt-1SgS say
 ‘(You-Sg will say to your nephews:) “Well, I have asked for So-and-so’s daughter (=in marriage), go and speak-Pl about her (to her parents); I’ve chosen So-and-so’s daughter”.’ **2004.3.20**

gâ is again an interim quotative marker in (1010), following an L-tone.

- (1010) [[màlfâ:ⁿ kùⁿ] ɛ̀né kó dó:-jè-Ø] gâ,
 [[rifle Def] LogoS NonhO reach-RecPf-3SgS] say,
 [[ɛ̀né ké] yì-dí:ⁿ bèr-Ø=í:
 [[Logo Topic] here obtain-VblN=it.is
 [ɛ̀né mà dǐ:ⁿ≡yⁿ] wà
 [Logo Poss place]=it.is] say

‘He (=farmer) said, “the rifle [topic], I have reached it, as for me [topic], this place (=field) is my livelihood, it is my place.”’ **2004.4.4**

In (1011), *gà*↑ is a reduced quotative marker translatable as ‘saying ...’. The quoted speaker is arguably the (generic) second person that appears at the end. The point of the passage is that a boy who possesses the desire but not the skill to wrestle will not be admitted into the (rather brutal) traditional wrestling tournament; skill (toughness) as well as desire are needed. The verb *á:*- ‘catch’ is used here both in the sense ‘wrestle’ and, in the negative, in the sense ‘(not) be acceptable’.

- (1011) *dèné-m* *gà*↑ *á:*, *kó* *à:-gó-Ø*
 want.Impf-1SgS **say** catch.Impprt, Nonh catch-ImpfNeg-3SgS
 [*gòrⁿó-m* *gá* *á:*]=*ÿ* *là:* *dèy*,
 [be.able.Impf-1SgS **say** catch.Impprt]=it.is Neg if,
dèné-wⁿ *gòrⁿó-wⁿ* *á:-w*
 want.Impf-2SgS be.able.Impf-2SgS catch.Impf-2SgS
 ‘Saying “I want” and “wrestle!”, that is not acceptable, except (also) saying “I am able” and “wrestle!”; (if) you want (to wrestle) and you can (wrestle), then you will wrestle.’ **2004.3.23**

In (1012), *gá* functions (unusually) as a **chained ‘say’** verb, i.e., as a reduced variant of *gá:* ‘say’. This may account for its H-tone, though following a word ending in L-tone.

- (1012) [*èné* *mà* *jèmè-ně-n*] *bòrⁿó* *mèyⁿ↑*
 [Refl Poss blacksmith.L-woman-Sg] call and
 [*núŋò* *jín*]=*î:* *gá* *tí:* *bèrê:-Ø*
 [Dem like]=it.is **say** send can.Impf-3SgS
 ‘(A woman) can summon her blacksmith woman, say “it’s like this,” and send her (on an errand).’ **2004.3.13**

In (1013), *gà* follows a ‘like that’ expression that refers to **descriptions just given** by the speaker. *gà* here means something like ‘(as) I have just said’. In both (1013.a) and (1013.b), *gà* is L-toned but follows an H-toned syllable, namely *jín* ‘like’. The CvC syllabic shape of this stem may have weakened the tendency to spread tones.

- (1013) a. *cín* *jín* *gà* [*cè:* *bè* *bì r-á:rà*]=*ÿ*
 thus like **say** [thing.L 3PlS.L work-Habit]=it.is
 ‘What (= how) they operate is like that.’ **2004.3.3**

- b. [à-jèrù]-kóró cín jín gà
 [wrestling.L]-trough thus like **say**
 [cè: kô:-Ø]=ŷ
 [thing.L be.Nonh.HL-Ppl.Nonh]=it.is
 ‘The wrestling tournament [topic], the thing that it was (=its nature)
 was like that (=as I have just described)’. **2004.3.23**

There are several textual examples of *ga* in **conditional antecedents**, where epistemic modality is suspended (so that a hearsay modal value is not possible). The examples have L-toned *ga* following an L-tone, presumably by spreading. Although there is no real quotation (or even thought), it is possible that an abstract, impersonal “quotation” is involved: ‘if (one says that) it happens that ...’. *ga* here is therefore a reduced version of *gá:-jè-bà* ‘they have said’, which occurs (with impersonal subject) in conditional antecedents (§16.5). The reduced form *ga* seems to be specifically associated with the phrase *táŋà: dèy* ‘if it happens that ...’, while *gá:-jè-bà* ‘they have said’ is usual before simple *dèy* ‘if’.

- (1014) a. [wàkàtì gàmá=ŷⁿ gà] táŋà: dèy
 [time.L certain=it.is **say**] happen if
 ‘if it happens to be at a certain time’ **2004.3.6**
- b. [kó jín=í: gà] bé:-yà-Ø táŋà: dèy
 [Nonh like=it.is **say**] be-Perf-3SgS happen if
 ‘if it happens to be like that, ...’ **2004.3.6**
- c. nì-bárⁿá, hâl [úrò cì-cì né dójù]
 hot.season, until [house.Loc.HL Rdp-shade under]
 ù kún-î n déy kárⁿà, [nì-bárⁿá mà ógù]
 2SgS be.in-Partpl.Sg if even, [hot.season Poss heat]
 yèré ú témé=kò gà táŋà: dèy, ...
 come 2SgO find.Impf=be.Nonh **say** happen if, ...
 ‘The hot season, if it happens that even when you are in the shade
 in a house, the heat of the hot season will come and find you, ...’

17.1.6 ‘Aside from ...’ (gà:-l-à dèy)

With a preceding NP or similar constituent, which can be taken here syntactically as a quotation, *gà:-l-à dèy* ‘if they didn’t say’ may be glossed ‘aside from’, ‘not to mention’, or ‘if not for’. Here *gà:-l-à* is tone-dropped from *gà:-l-á* ‘they didn’t say’, implying that the “quotation” is focalized, cf. (581.d). Passage

(1015) follows a description of earthenware produces made by blacksmith women, and describes the modern industrial products that have partially replaced them.

- (1015) sàtállà gà:-l-à dèy↑,
 kettle **say.PerfNeg-3PIS.L** **if,**
 sô: gà:-l-à dèy↑,
 pail **say.PerfNeg-3PIS.L** **if,**
 bármá gà:-l-à dèy↑, òhó
 pot **say.PerfNeg-3PIS.L** **if,** uh-huh!
 [cè: kó tímé-sà-Ø lè]
 [thing.L NonhO resemble-Reslt-Ppl.Nonh with]
 yá: dò:-Ø,
 go arrive.Perf.L-3SgS
 [ànsá:rà jé:rè-Ø]=y là: dèy,
 [white bring.Perf.HL-Ppl.Nonh]=it.is Neg if,
 [jèmè-ñě-m sǎy mà bírɛ]=y jì:ⁿ
 [blacksmith.L-woman-Pl only Poss work]=it.is Past
 ‘If not for the fact that (modern) kettles, (modern) pails, (modern) pots,
 uh-huh!, along with other similar things came here, if not for what the
 white(s) brought, it (=pottery) used to be the work solely of women of
 blacksmith caste.’ **2004.3.13** (Fr *seau* ‘pail’)

17.1.7 Jussive complement

The term “jussive” is used here for constructions involving embedded imperatives or hortatives, under the scope of ‘say’ or a similar verb.

17.1.7.1 Embedded imperative

Embedded imperatives take their regular main-clause imperative form, and are followed by a quotative verb or quasi-verb. An embedded vocative, in the form of a 3Sg or 3Pl independent pronoun (substituting for ‘you!’ or a more concrete vocative in the original), is common. Positive imperatives are exemplified in (1016).

- (1016) a. háyè wó [ènɛ lè] kó cé:ⁿ tí wá
 well 3SgS [Logo Dat] NonhO slaughter Link.**Imprt** say
 ‘He_x told him, well, hey!, to cut its (=leopard’s) throat! for him_x.’
2004.3.4

- b. [wó yéré] wá, yèrè-Ø
 [3Sg come.**Imprt**] say, come.Perf.L-3SgS
 ‘He told him_x, hey!, to come, and (indeed) he_x came.’ **2004.3.4**
- c. [émé yǎ:] jè-bà
 [1Pl go.**Imprt**] say.Perf.L-3PIS
 ‘they told us to go.’ **2004.3.20**
- d. [gò:-bòró ù-d dè:né] gá-w
 [granary.L-rear 2Sg-Dat lay.**Imprt**] say.Impf-2SgS
 ‘You-Sg will tell (him) to lay the base of the granary for you.’
 (ù-rú) **2004.3.26**

In (1016.a), the substantive verb ‘slaughter, cut the throat of’ is chained with the semantically empty linker tí, and I take only the latter to be morphologically imperative.

(1017) is a similar construction with a **prohibitive** (negative imperative).

- (1017) [[émé kò *chauffeur*] lè] tégè-bà
 [[1PIP Dem driver] Dat] speak.Perf.L-3PIS
 [òjù-kà: nújò lè] kà:ná yé-lé [èné bè] yǎ: gá: kân,
 [road.L Dem in] now there [Logo Pl] go say after,
 [bàndí: bé] [èné bé] àtàkè-bá⇒,
 [bandit Pl] [Logo Pl] attack.Perf.L-3PIS,
 [kó nò] émé yè-lé dī gè-ý
 [Nonh Topic] 1Pl there follow-**ImprtNeg**
 ‘They (=people in other vehicle) said to our driver, “when we went there just now on this road, bandits attacked us, (so) this (road) [topic], don’t you follow (it) there!” (first Logo Pl èné bé emended from 3Pl bè on tape) **2004.5.1**

17.1.7.2 *Embedded hortative*

The structure is the same as for embedded imperatives. The verb has the same Hortative ending as in the original utterance (1018).

- (1018) a. [[émé àná] tàrá yà-ní] gá-bà
 [[1PIP village] collective.hunt go-**Hort**] say.Impf-3PIS
 ‘They will say, let our village go on a collective hunt!’ **2004.3.1**

- b. à-kóró jà:ⁿ-ní gá:-jè-bà dèy
 well dig-**Hort** say-RecPf-3PlS if
 ‘if they say, “let’s dig a well,” ...’ **2004.4.5**

17.1.8 Embedded descriptive quotations

Jamsay texts are full of embedded quotations describing speech or thought of a protagonist. An example is (1019). kó jé ‘for that’ toward the end is a “resumption” of the preceding long purposive clause.

- (1019) [[[ǎ: mà cì nè-góró] lè] bèré bé:
 [[[who? Poss shadow.L-covering] in] get stay
 bèré-ỳ mà↑] [tô:-n lè] yàṅá-ỳⁿ jé]
 can.Impf-1PlS Q] [Recip-Sg in] look.Impf-1PlS for]
 mà [kó jé] mà mót:n] mǎn-sà-y
 Poss [Nonh for] Poss gathering] be.together-Reslt-1PlS
 ‘We did not meet (=hold) a meeting for us to look among ourselves
 (thinking) “Whose shade can we live under?”’ (mòrⁿó-) **2004.3.24**

In (1020), the quotation is treated more explicitly as an NP, specifically in “possessor” function.

- (1020) [[wó kó kàn-lí] [[èné wó tà:ⁿ-ýⁿ]
 [[3Sg NonhO do-PerfNeg] [[LogoS 3SgO shoot-ImprtNeg]
 mà nàṅà-dùró] kò:-ró] jè-Ø
 Poss cow.L-tail] be.Nonh-Neg] say.Perf.L-3SgS
 ‘He (=Fulbe man) said, “(If) you-Sg don’t do that, (then) there is no
 cow-tail of ‘don’t shoot him!’ ”’ (kárⁿá-) **2004.4.4**

In other words, ‘if you don’t do that, I swear (Fulbe-style) by the tail of a cow that I will shoot you.’

See also the discussion of “phrasal compounds” (§5.1.16).

17.2 Participial (-n) complements

17.2.1 ‘Dare’ (dà:rá-)

There is one verb, dà:rá- ‘dare (to do)’, that can take either a VbIN complement, or one with -n suffix on the verb. This -n suffix resembles Sg Participial -n, but since it is used here for plural as well as singular subject the

closest connection is with invariant -n in pseudo-participial adverbial clauses (§15.2.1). However, in the complement of *dà:rà-* the verb stem before -n is L-toned (1021), which differentiates it from all (other) pseudo-participial clauses. One could argue that in this construction -n is added to an L-toned unsuffixed Perfective verb, but the unsuffixed Perfective is normally not clause-initial while e.g. (1021.c-d) show the tone-dropped verb in initial position.

(1021) a. [bé kâ:ⁿ] sùgò-n dà:rà-j-é jì:ⁿ
 [3Pl too] go.down.L-Ppl.Sg dare-ImpfNeg-3PlS Past
 ‘They too didn’t dare come down (from the hills).’ (súgó-)
2004.3.11

b. [ì nè èné jì ñè-n dà:rà-ñ] kò:-ró
 [person.L LogoO sniff.L-Ppl.Sg dare-Impf-Ppl.Sg] be.Nonh-Neg
 ‘(He said:) “there is nobody who dares to sniff me.”’ (jì ñé-)
2004.4.2

c. ì ñè-n dà:rà-j-é
 lie.down.L-Ppl.Sg dare-ImpfNeg-3PlS
 ‘They don’t dare to go to bed.’ (ì ñé-)

d. ùrò-n dà:rà-w
 go.up.L-Ppl.Sg dare-Impf-2SgS
 ‘You-Sg dare to go up?.’ (ùró-)

e. [íné-n fú:] yè-lé kǒ-r dò:-n
 [person-Sg all] there Nonh-in reach.L-Ppl.Sg
 dà:rà-gó-Ø wá
 dare-Impf-Neg-3SgS say
 ‘Nobody dares to go there to it.’ (kò-rú, dó:-) **2004.4.17** (a tale)

Informants also gave counterparts with Verbal Nouns, saying that there was no difference in meaning. However, the one textual occurrence of *dà:rà-* with VblN means something like ‘feel like’ or ‘have an urge to’; see (1161.a) in §19.2.6.

17.3 Factive (indicative) complements

Jamsay **main clauses** may function as arguments of higher clauses, with no overt complementizer or other modification. The higher clause may assess the

truth of the lower proposition, or the lower proposition may function as an argument.

Definite $kù^n$ may be added at the end of such a main-clause-like factive complement. This makes it overtly clear that the factive clause functions as an NP in the higher clause.

- (1022) [ú=ỳ wó tì:] $kù^n$,
 [2Sg=Foc 3SgO send.Perf.L] **Def**,
 [bé nám lè] té:ré-ẁ
 [3PIP people Dat] show.Impf-2SgS
 ‘You-Sg [focus] will show their people that it was you [focus] who sent him.’ **2004.3.20**

In this main-clause-like subtype of factives, there is a pronominal-subject suffix on the verb unless, as in (1022), the subject is focalized. Examples given below with an audible pronominal-subject suffix on the inflected verb in a factive are $tì\ mnè-l-á$ (1023), $bǎ:=kò$ (1024.a), and $kùnò-ẁ^n$ (1026).

A less common alternative factive clause type has a **preverbal L-toned subject** pronominal, and (therefore) no pronominal-subject suffix on the verb (1027).

Some transitive verbs that take factive complements are $té:ré-$ ‘show’ (1022), $jùgó-$ ‘know’ (see below), and $mà:ná-$ ‘think, believe’.

17.3.1 ‘Know that ...’ complement clause

$jùgó-$ ‘know’ will be used here to exemplify the factive complement construction.

(1023) is from a text about mortuary practices. The funeral party in the cemetery includes tomtom players who abruptly change the drumming rhythm at each stage of the burial (excavation, placing corpse on mound of earth, placing corpse in grave, shoveling back the earth to cover it), so that people in the village some distance away know what is happening.

- (1023) $tíllé-tù-bà$ $dèy$ [[úró lé] $w\hat{o}-m$]
 change-Perf-3PIS if [[house in] be.Hum.HL-Ppl.PI]
 [íjé $k\hat{a}:^n$], [$\partial w^n\partial-\hat{i}:^n$ lè] $kún-tù-bà$
 [now even], [grave.L-child in] put-Perf-**3PIS**
 [$d\hat{o}:m$ $k\hat{a}:^n$] $tì\ mnè-l-á$ $kù^n$] $jùgó-bà$
 [up.to.now even] close.up-PerfNeg-**3PIS Def**] **know**.Impf-3PIS
 ‘When they change (the rhythm), the people who are (back) at home (=in the village) [topic], right then they will **know** that they (=funeral

party) have put (the body) into the grave hole, but have not as of yet closed (it) up.’ **2004.3.21**

In this example, the factive clause (complement of ‘know’) has regular pronominal subject suffixes on the verb, and ends with Definite *kùⁿ*.

Other examples are in (1024). In elicitation, my assistant regularly produced factives with clause-initial **independent pronouns** (in subject function) instead of pronominal-subject suffixes (1024.c-f). A clause-initial independent pronoun is elsewhere usually topical or focal. In (1024.d) the pronoun is indeed overtly focalized. However, in (1024.c,e) the context requires no focalization, and in (1024.f) a distinct constituent is overtly focalized.

- (1024) a. [[á ùrò-b̀̀r̀́] d̀̀ ñ-â:-Ø] j̀̀g̀́-ǰ̀̀-*w*
 [[2SgP house.L-rear] sit.down-Perf-3SgS] **know**-RecPf-2SgS
 ‘You-Sg have (just) **known** (for sure) that your house foundation
 has been settled (=is clearly defined).’ **2004.3.25**
- b. [[k̀̀ c̀̀w] b̀̀:~k̀̀] j̀̀g̀́-ǰ̀̀-*w* d̀̀y
 [[Nonh.L all] suffice.Impf=be.Nonh] **know**-RecPf-2SgS if
 ‘when you-Sg **know** (=realize) that it’s enough’ **2004.3.25**
- c. [ú ỳ̀g̀́ ỳ̀:] j̀̀g̀́-*m̀̀*
 [2Sg tomorrow go.Impf] **know**.Impf-1SgS
 ‘I **know** that you-Sg [focus] are going tomorrow.’
- d. [ú~ỳ̀ [b̀̀:d̀̀ k̀̀ⁿ] g̀̀ỳⁿ̀̀] j̀̀g̀́-*m̀̀*
 [2Sg=Foc [money Def] steal.Perf.L] **know**.Impf-1SgS
 ‘I **know** that it was you-Sg [focus] who stole the money.’
- e. [ú [ǰ̀̀-ǰ̀̀wⁿ̀̀] k̀̀ⁿ ẁ̀:-l̀̀] j̀̀g̀́-*m̀̀*
 [2Sg [mouse Def] kill-PerfNeg] **know**.Impf-1SgS
 ‘I **know** that you-Sg didn’t kill the mouse.’
- f. [ú ǰ̀̀-ǰ̀̀wⁿ̀̀~ỳ̀ⁿ ẁ̀:-l̀̀ k̀̀] j̀̀g̀́-*m̀̀*
 [2Sg mouse=Foc kill-PerfNeg Topic] **know**.Impf-1SgS
 ‘I **know** that it wasn’t a mouse [focus] that you killed.’

When the subject is a third person singular NP, we cannot tell whether the verb agrees with it (i.e. has -Ø pronominal-subject suffix) or is unsuffixed. An example is the complement of ‘they know’ in (456.b).

17.3.2 ‘The fact that ...’

Often an elaborate positive proposition is fully articulated, then negated in its entirety by a final ‘it doesn’t happen’ or the like. It is not always clear in these cases whether we are dealing with two sentences, or with a single complex sentence including an embedded factive clause.

- (1025) a. [dè:né jì né jǎ: àbádá⇒ kúdáy yó=kò]
 [keep hold take always for.good exist=be.Nonh]
 kárⁿá bèrè-gó-Ø
 be.done can-ImpfNeg-3SgS
 ‘Keeping and storing (millet, so) there is always some (at hand) cannot be done.’ **2004.3.10**
- b. [nàŋá.: fú:] [púlò-m cé=yè]
 [cow all] [Fulbe-Pl property=it.is]
 [émé ùjùbǎy lè] cín kò:ró
 [1PIP country in] thus be.Nonh-Neg
 ‘That all the cows (in a herd) belong to the Fulbe, it doesn’t happen like that in our (=Dogon) country.’ **2004.3.10**

In (1025.a), there is no reason not to assume that the main predication functions as subject of kárⁿá- ‘be done’. In (1025.b), however, the presence of cín ‘thus’ in the latter part suggests that the two sentences are syntactically distinct, with cín effectively resuming the first proposition. Still, the logical structure of the sequence in (1025.b) requires that the entire first clause be understood as negated.

A clearer case of factive subordination is (1026), with main-clause verb áyá-wá- ‘cause to hear, inform’. The presence of Definite kùⁿ indicates that this is a factive, not a quotative, complement.

- (1026) [[hínnè mâ:n] [yà:ji :-pàg-ú lè]
 [[amount such-and-such] marriage.L-tie-VblN Dat]
 kùnò-wⁿ kùⁿ] tégé àná áyá-wá-wè
 put.Perf.L-2SgS Def] speak village hear-Caus.Impf-2SgS
 ‘You-Sg will speak to the village, **informing** them (of the fact) that you have put (=contributed) such-and-such an amount for contracting the marriage.’ **2004.3.20**

In (1027), the factive clause has an **L-toned preverbal subject pronominal** instead of a pronominal suffix on the verb.

- (1027) [[làyá pàntè-ý] lè]
 [[other repeat-ImprtNeg with]
 t̂:-n bè yá:fê:] yó=kò
 Recip-Sg 3PIS.L pardon.Impf] exist=be.Hum
 ‘It **exists** (=sometimes happens) that with “don’t do it again!” they
 (=persons in a dispute) pardon each other.’ **2004.3.10**

The versatile clitic =ŷ ‘it is’ most often has scope over a predicative NP or adverbial, or is used as a focalizing morpheme. It can, however, also take scope over an entire clause, which I consider to be a factive complement.

- (1028) a. [[èné bé bè:né] kóró t̂r-Ø téré m̂yⁿ
 [[Refl Pl.P bag] hang chop-VblN chop and
 d̂i ñè-bá]=ŷ ŝy
 sit.Perf.L-3PIS]=**it.is** only
 ‘It was just (the action of) them hanging up their shoulder bags and
 chopping (to clear fields).’ (t̂r-ú) **2004.3.11**
- b. [kò ké] ŵŷðró m̂yⁿ↑ [êm bérè] kúnó
 [Nonh Topic] ladle.out and [milk in] put
 m̂ŷĵ-wⁿ=i: ŝy
 crumble.Impf-2SgS=**it.is** only
 ‘That [topic], it is just (necessary) that you-Sg ladle it out, put it
 into some milk, and crumble it.’ **2004.4.10**

In (1028.a), the point being made is that the settlers just took over the land, without obtaining the blessing of the locals. The factive clause is unremarkable in form in this example.

The verb táṅá- ‘become, happen’ occurs in a number of constructions with a preceding complete main clause. The most common construction is táṅà: d̂ŷ ‘if it happens that ...’ in conditional antecedents. (§11.2.6.2).

The verb bé:- ‘remain, live, happen’ (§11.2.6.1) may also be preceded by a complete main clause. In the nonhuman-subject imperfective form bé:=kò ‘it is, it will be’, the sense is roughly ‘maybe’. See (501-2) in §8.5.5.

17.3.3 ‘Road, situation’ (òjù-ká:) with indicative complement clause

The noun òjù-ká: ‘road’, more abstractly ‘situation, activity’, can take a full main-clause as complement, with intervening Possessive mà. The passage describes situations where a Dogon woman, or a Dogon couple, need external

assistance (i.e. from women of the blacksmith caste). The verbs in the factive clauses have regular suffixal pronominal-subject inflection.

- (1029) [ñě-n kâ:ⁿ] [ú:rⁿó [èné mà yà:jí:]
 [woman-Sg too] [get.up [Refl Poss marriage]
 mà ijé íjê:-Ø] mà òjù-ká:] yó=kò,
 Poss standing stand.Impf-3SgS] Poss road] exist=be.Nonh,
 [[mòrⁿò-bè-ý lè] [ǎ-n.: [wó ñě-n.:]]
 [[be.together-be.VblN in] [man-Sg [3SgP woman-Sg]]
 lígíjé-bà] mà òjù-ká: kâ:ⁿ yó=kò
 be.mixed.Impf-3PIS] Poss road too exist=be.Nonh
 ‘A (Dogon) woman too [topic], there is a situation whereby she arises
 and gets involved in her wedding; there is also a situation in which,
 while being together, a man and his woman (=wife) get into a dispute.’
2004.3.13

17.3.4 ‘See (find, hear) that ...’

é:- ‘see’, témé- ‘find’, and áyá- ‘hear’ can take indicative (=factive) complements. Two syntactic types must be distinguished.

17.3.4.1 Direct-perception type (relative-clause complement)

When a ‘see’ construction involves more or less **direct perception** of an event or activity, the complement is **necessarily positive**. Its verb appears in the **unsuffixed Imperfective**, even when the eventuality described may be construed as a punctual event (‘fall’, ‘die’). There is no pronominal-subject suffixation on the verb; instead, if the subject is pronominal, it appears as a **preverbal L-toned subject pronominal** (1030.a-d). This suggests that the complement has the form of a (headless) **relative clause** with unexpressed nonhuman head (something like ‘situation’ or ‘fact’), and that the “verb” is really a Nonhuman participle (suffix -Ø) agreeing with it.

- (1030) a. [kó jín bè nàná:-Ø] èt-tèrè-y
 [NonhO thus 3PIS.L chase.Impf-Ppl.Nonh] see-ExpPf-1PIS
 ‘We have (once) seen them (=people) chase birds away like this.’
2004.3.8

- b. [kó nò] [cín kò-rú bè kárⁿâ:-Ø]
 [Nonh now] [thus Nonh-Inst 3PIS.L do.Impf-Ppl.Nonh]

è:-m

see.Perf.L-1SgS

‘That (=cowhide) [topic], them doing thus to it [focus] is what I’ve seen’ **2004.3.17**

c. [wò nùmô:-Ø] é:-sà-m
[**3SgS.L** fall.**Impf**-Ppl.Nonh] **see**-Reslt-1SgS
‘I saw him/her fall.’

d. [bè núwⁿô:-Ø] é:-sà-m
[3PlS.L die.**Impf**-Ppl.Nonh] **see**-Reslt-1SgS
‘I saw them die.’

e. [bè ké] [[ànsá:rà-m kárⁿâ:-Ø] é: mèy↑],
[3Pl Topic] [white-Pl do.**Impf**-Ppl.Nonh] **see** and,
kárⁿ-á:rⁿà-bà
do-Habit-3PlS
‘They_x (=post-independence Malian leaders) saw the whites
(=colonists) do (it), (and) they_x (too) are doing (it).’ **2004.4.23**

The same is true of ‘**hear**’, provided that what is heard is the (sound of) the event or activity itself, rather than a spoken report. That is, the evidence is **auditory perception** rather than hearsay; on the latter, see §11.3.4.2, below. In free translation, the correct sense is expressed by English ‘hear X VERB(-ing)’ (1031.a). However, my assistant preferred an alternative with the noun ‘sound (of unseen entity)’ as overt direct object, possessed by a verbal noun (1031.b).

(1031) a. [úrⁿ-ùm tî:-n láyâ:-Ø] áyá-sà-m
[child-Pl Recip-Sg hit.**Impf**-Ppl.Nonh] **hear**-Reslt-1SgS
‘I heard the children hitting each other (=fighting).’

b. [[kó nŭm-Ø] mà sógúrù] áyá-sà-m
[[NonhP fall-VblN] Poss sound] hear-Reslt-1SgS
‘I heard the sound of its (=tree’s) falling.’

With a **nonhuman** subject in the subordinate clause, cliticized $\equiv k\delta$ ‘be (nonhuman)’ follows the imperfective participle in the complement (1032.a). This confirms that the complement participle is an unaffixed Imperfective, the only AN category that requires $\equiv k\delta$ when the subject is nonhuman. This analysis is consistent with the view that factive complements are relative clauses; it is shown in §14.1.9 that the participial suffix is added to $\equiv k\delta$ - after an unaffixed Imperfective stem. However, in the nonhuman-subject type (1032.a),

the head NP is not a covert abstraction ('situation', 'fact') as in the preceding examples. Instead, the head NP is the actual nonhuman subject of the clause. The participial form is therefore $\equiv k\delta-\emptyset$, with the usual zero Nonhuman ending. Notably, this may be pluralized by adding *bé* (1032.b), though plural marking is optional for nonhumans even when more than one individual is denoted. We have seen elsewhere that Plural *bé* may follow participles, pluralizing a (clause-internal) head NP that is not already marked as plural; see §14.1.17, e.g. (841.b). For any pronominal-subject category other than Nonhuman, plurality is already indicated by the preverbal pronominal.

- (1032) a. [kò núwⁿó≡kδ-Ø] é:-sà-m
 [NonhS.L die.Impf=**be.Nonh**-Ppl.Nonh] **see**-Reslt-1SgS
 'I saw it die.'
- b. [kò núwⁿó≡kδ-Ø bé] é:-sà-m
 [NonhS.L die.Impf=**be.Nonh**-Ppl.Nonh Pl] **see**-Reslt-1SgS
 'I saw them (=animals) die.'

If the complement participle is based on a quasi-verb or a defective stance verb that **has no imperfective**, the participle takes **unsuffixed Perfective** form (which has stative sense for these stems), with **H(H...)L tone** overlay. This tone overlay is normal for positive perfective participles in relative clauses.

- (1033) a. dògùrù [bè dâ:ⁿ-Ø]
 time.L [3PIS.L be.sitting.**Perf.HL**-Ppl.Nonh]
 ù é:-sà-Ø cêw
 2SgS.L **see**-Reslt-Ppl.Nonh all
 'any time you-Sg see them sitting' **2004.3.17**
- b. [wò íjè-Ø]
 [3SgS.L stand.**Perf.HL**-Ppl.Nonh]
 èné ê:-Ø kùⁿ
 Refl **see**.**Perf.HL**-Ppl.Nonh Def
 'when it (=Hyena) saw him (=Camel) stopped' **2004.4.3**
- c. [ěn-lé wò dâ:ⁿ] é:-sà-m
 [there 3SgS.L be.sitting.**Perf.HL**-Ppl.Nonh] **see**-Reslt-1SgS
 'I saw him/her sitting there.'

With H-toned monosyllabic verb stems, there is no audible distinction between the unsuffixed Imperfective and the H(H...)L-toned unsuffixed

Perfective. In (1034), ‘catch’ is an active transitive verb, so I take â:-Ø to be imperfective.

- (1034) sábù [má jì ré lè],
 because [1SgP eye Inst],
 [èjù-nàṅá [à-tí: lè] bè â:-Ø]
 [field-cow [bird.trap Inst] **3PIS.L** catch.Impf-Ppl.Nonh]
 é:-sà-m
see-Reslt-1SgS
 ‘because I have seen, with my own eyes, them catching a wild buffalo
 with a bird trap.’ **2004.3.16**

The verb *témé-* ‘**find**’ is often used in contexts like ‘X (came and) found Y (in a certain situation)’ with NP object, or like ‘X (came and) found that ...’ with clausal complement describing a situation. In the latter case, it can take a factive complement of the same type as with ‘see’, as in (1035.a). In (1035.b), however, ‘find’ is simply an add-on to a normal main clause with subject inflection on the verb.

- (1035) a. [wò bówò-Ø] tèmè-Ø
 [**3SgS.L** lie.on.belly.Perf.HL-Ppl.Nonh] **find**.Perf.L-3SgS
 ‘He (=Hyena) found him (=Camel) lying on his belly.’ **2004.4.3**
- b. [àná yă: mi kân] [[àná.: àná.:]
 [village go 1SgS.L after] [[village village]
 à-jérù á:=kò-Ø] tèmè-m
 wrestling take.Impf=be.Nonh-Ppl.Nonh] **find**.Perf.L-1SgS
 ‘When I went to the village, I found several villages holding a
 wrestling tournament.’

‘Find’ should be interpreted loosely as ‘(happen to) coincide with’, and does not require that the subject of ‘find’ have a cognitive appreciation of the eventuality denoted by the complement. For example, an alternative free translation for (1035.a) is ‘When he (=Hyena) came, it so happened that he (=Camel) was lying on his belly (just then)’.

17.3.4.2 *Recognition (inference, hearsay) construction*

A different construction of the type ‘see that [proposition]’ denotes **recognition** (involving inference or deduction) rather than witnessing (simple perception). Here, instead of a relative-clause complement, we get one with **ordinary AN-**

inflected verbs (any aspect, positive or negative). As in the previous direct-perception examples, there is no pronominal-subject suffixation on the verb. However, now a pronominal subject shows up not as an L-toned preverbal subject pronominal, rather as an **H-toned independent pronoun** (1036.a-b).

In my interpretation, the complement no longer has a participle (with unexpressed nonhuman head), rather a verb inflected for AN but not pronominal-subject category. In other words, the complement clause is similar to the subject-focalization construction, except that (in my data) the overt Focus clitic $\Rightarrow\hat{y}$ is not present on the independent pronoun in subject function. (1036.a) is perfective negative, while (1036.b) is an imperfective negative. (1036.c) has the ‘it is’ clitic $\Rightarrow\hat{y}$ (postconsonantal $\Rightarrow\hat{1}$). (1036.d), with the same meaning, is a standard adjectival predicate with ‘be’ quasi-verb.

- (1036) a. [ú yà:-lí-Ø] é:-rà-m
 [2Sg go-PerfNeg] see-Habit-1SgS
 ‘I see (=recognize) that you-Sg have not gone.’
- b. [wó bàyà-gó] é:-sà-m
 [3Sg be.cured-ImpfNeg] see-Reslt-1SgS
 ‘I saw (=recognized) that he/she would not recover (from injury).’
- c. [bán $\Rightarrow\hat{1}$:] é:-rà-m
 [red $\Rightarrow\hat{it.is}$] see-Habit-1SgS
 ‘I see (=recognize) that it’s red.’
- d. [bán $\Rightarrow\hat{k}\delta$] é:-rà-m
 [red $\Rightarrow\hat{be.Nonh}$] see-Habit-1SgS
 ‘I see (=recognize) that it’s red.’

The equivalent of the recognition construction for ‘hear’ is the **hearsay** construction, where the speaker’s evidence is second-hand verbal reports rather than direct auditory perception.

- (1037) a. [bé núwⁿ-â:] áyá-sà-m
 [3PI die-Perf] hear-Reslt-1SgS
 ‘I heard that they died.’
- b. [bé nùwⁿ-lì] áyá-sà-m
 [3PI die-PerfNeg] hear-Reslt-1SgS
 ‘I heard that they didn’t die.’

- c. [ú bàràkó yǎ:] áyá-sà-m
 [2Sg Bamako go.**Impf**] **hear-Reslt-1SgS**
 ‘I heard that you-Sg are going to Bamako.’

17.3.5 ‘It doesn’t matter (much) that’ (sà:-rá-Ø)

sà:-rá-Ø means ‘it doesn’t have’ (§11.5.1). In this invariant form, it may be placed after a main-like clause (i.e. a factive complement) in the sense ‘it doesn’t matter (much) that ...’. There may be two mutually exclusive factives, resulting in a parallel construction. (1038) is from a passage about how a respectable older man keeps an eye out for a potential bride for a younger man while visiting other villages.

- (1038) yér≡î: yèrè-Ø tàṅà sà:-rá-Ø⇒,
 visiting≡Foc come.Perf.L-3SgS happen.Perf.L **have-Neg-3SgS**,
 bòn-kùn-Ø≡î: dànàṅà tàṅà sà:-rá-Ø⇒
 name.L-put-VbIN≡Foc coincide.L happen.L **have-Neg-3SgS**
 ‘It doesn’t really matter whether it happens that he has come as a visitor, or whether it happens that he has been present at a name-giving ceremony.’ (yérú) **2004.3.20**

17.3.6 Factive obligational (wá:jíbì ‘obligation’)

The Fulfulde (ultimately Arabic) noun wá:jíbì ‘obligation, duty’ is used as a predicative nominal with clitic ≡ỵ ‘it is’. The following clause has an imperfective or imperative verb. In effect, wá:jíbì≡ỵ functions like an adverbial. Alternatively, the complement may appear as a topicalized Verbal Noun clause, with following wá:jíbì≡ỵ ‘it is a duty’.

- (1039) a. [ñú: ké] wá:jíbì≡ỵ kó dərⁿó-w̃ⁿ
 [millet Topic] **duty**≡it.is NonhO sell.**Impf-2SgS**
 ‘The millet, you-Sg must sell it.’ **2004.3.10**
- b. wá:jíbì≡ỵ yògó yéré
duty≡it.is tomorrow come.**Imprt**
 ‘You-Sg must come tomorrow.’
- c. [á yògò-yèr-ú] wá:jíbì≡ỵ
 [2SgP tomorrow.L-come-VbIN] **duty**≡it.is
 ‘You-Sg must come tomorrow.’

17.3.7 Factive complement with tílây⇒ȳ ‘it is certain’

tílây ‘duty, obligation’ may be used in the epistemic sense ‘certainty’, hence with ‘it is’ clitic tílây⇒ȳ ‘it is certain’. This takes a factive complement with unsuffixed Imperfective verb in (1040).

- (1040) [dì:ⁿ kárⁿá [ĩ nè túmnó-n] [bú:dù mùñú kúróy]
 [manner.L do [person.L single-Sg] [riyal thousand six]
 gá:w ú kò dò:-nó=kò-Ø fú:]
 Gao 2SgO NonhS.L reach-Caus.Impf⇒be.Nonh-Ppl.Nonh all]
 kò:-rò, [ù ké]
 be.Nonh-Neg, [2Sg.L Topic]
 [òjù-kâ: núwⁿó-wⁿ] tílây⇒ȳ
 [road.Loc.HL die.Impf-2SgS] **obligation⇒it.is**
 ‘There is no way, (for) one person (=you) [topic], that six thousand
 riyals (=30,000 CFA francs) will get you-Sg (from Algeria) to Gao; you
 [topic], it is certain that you will die on the road.’ **2004.5.4**

For obligational constructions involving tílây, see (1089-90) in §17.6.4.

17.4 Verbal Noun (and other nominal) complements

The Verbal Noun has suffix -ȳ after a monosyllabic stem, elsewhere -ú. The ú is lost under some conditions, by Suffixal u-Apocope (67) after a sonorant (§3.5.4.1). A Verbal Noun may be formed from any regular verb, but not from defective quasi-verbs like wò- and kò ‘be’, or sà- ‘have’, nor from stative stance verbs confined to inflected perfective forms such as dà:ⁿ- ‘sit’. Verbal Nouns are formed directly from uninflected verb stems, one consequence of which is that there are no negative Verbal Nouns.

A Verbal Noun (or other nominal denoting an action), can be used in a complement clause, as the following sections will demonstrate. The Verbal Noun may be accompanied by a full range of internal arguments, so we should really speak of a **Verbal Noun clause**.

Verbal Noun phrases may also function as regular **arguments of verbs**. In (1041), the Verbal Noun phrase is the subject of ‘arrive’.

- (1041) [[èjú lé] wó gò-ȳ] dó:-yà-Ø dèy, ...
 [[field to] 3SgP go.out-VbIN] arrive-Perf-3SgS if, ...
 ‘when the (time for) his going out into the bush has come, ...’
2004.3.16

17.4.1 Structure of Verbal Noun Phrase

The structure of a Verbal Noun Phrase may be summarized as in (1042).

- (1042) a. the verb is nominalized as a Verbal Noun;
 b. an immediately preceding chained verb appears as an L-toned compound initial;
 c. an unmodified object noun usually appears as an L-toned compound initial:
 —very common with cognate nominal or generic object (§11.1.6);
 —possible for a wider variety of object NPs when preceded by a subject NP (in possessor form)
 d. other NPs and adverbials typically appear in possessor form
 —the inner possessor (adjacent to VblN) has normal alienable possessor form
 —an outer possessor (not adjacent to VblN), even an independent pronoun, has a following Possessive *mà*

Overall, the structure of a Verbal Noun phrase, especially the treatment of preceding constituents, is similar to that of ‘before ...’ clauses, which have a nominalized verb that I call pseudo-causative (§9.3, §15.2.4.2). The main syntactic difference is that Verbal Nouns are more prone to object-compounding than are pseudo-causative nominals.

The word-level morphology of Verbal Nouns is described in §4.2.2.

Examples showing how a **chained verb** immediately preceding the VblN appears as an **L-toned compound initial** are (1043.a-b). (1043.c) shows that a chained verb retains its normal form when something else (here an object noun as compound initial) intervenes.

- (1043) a. [kì -ká: mà pì lí wè-yèr-ú]
 [Rdp-grasshopper Poss **go.back.L-come-VblN**]
 ‘the locusts’ coming back (here)’ (yèré)
- b. yèrè-dǐŋ-Ø dèné-m̀
 come.L-sit.VblN want.Impf-1SgS
 ‘I want (=I’d like) to come and sit.’ (dǐ ŋé-)
- c. [yèré ñà:-ñè-ýⁿ] dèné-m̀
 [**come** meal.L-eat-VblN] want.Impf-1SgS
 ‘I want (=I’d like) to come and eat a meal.’

In the absence of an overt subject in possessor form, a non-generic **object** NP may appear as a **possessor** of the VblN, unless separated from the nominal by an intervening element such as a dative pronominal. Possessor status is standard when the object is pronominal, or an NP that does not lend itself to being a compound initial (e.g. a plural noun, a multi-word NP, or a personal name). The possessive structure is seen clearly in (1044.a), where *má* is unambiguously a 1Sg possessor pronominal (contrast 1Sg independent pronoun or object *mí* and 1Sg preverbal subject *mĩ*). (1044.b) has *Nonh kó* in the same construction. (1044.c) has a plural NP ('women') as logical object, expressed as a possessor with Possessive *mà*.

- (1044) a. *má cèr-ú*
1SgP bite-VblN
 'biting me'
- b. [*kó è-ý*] *jò:-lá-Ø*
 [**NonhP** see-VblN] be.many-Neg-3SgS
 'Seeing it (a millet plant without an ear) isn't common.' 2004.3.6
- c. *ñě-m mà làg-ú*
 woman-Pl **Poss** hit-VblN
 'hitting women'

If the object NP consists of a simple noun stem with no following modifier, especially with generic reference, or if it is an unmodified cognate nominal, it quite often takes **compound-initial** form, which requires stem-wide tone-dropping (to all-L tone). (1045.a) is based on *bíré bì ré-* 'work a work' (i.e. 'do work'). a sequence of cognate nominal and inflectable verb. In (1045.a), the cognate nominal appears as an L-toned compound initial *bì rè-*. With 'cooking meat' and the like, where the object is a "real" noun, we can get either a compound (1045.b) or a possessive construction (1045.c). (1045.d) is another example of the compound structure.

- (1045) a. *bì rè-bì r-ú*
work(noun).L-work(verb)-VblN
 'working (=performing work)'
- b. *nòwⁿḁ-sì r-ú*
meat.L-cook-VblN
 'meat-cooking'

- c. nòwⁿǒ mà sǐ r-ú
 meat Poss cook-VblN
 ‘cooking meat’
- d. pè:jì -cèⁿ-ýⁿ
sheep.L-slaughter-VblN
 ‘sheep-slaughtering’

A possessor does not necessarily prevent the noun from appearing as L-toned compound initial, as long as the noun’s referent is generic (1046). One could argue that the (surface) morphosyntax in such examples is of the type ‘hole-digging of ditches’ and ‘debris-sweeping of date palms’, though in main clauses ‘ditches’ and ‘date palms’ would be possessors of ‘hole’ and ‘debris’, respectively.

- (1046) [pòⁿsé mà] ùrⁿò-jà-ýⁿ⇒, ...,
 [ditch Poss] **hole.L**-dig-VblN, ...,
 [támbo^rǒ mà] [bò^rǒ-kà:] -sěm-Ø, ...
 [date(fruit) Poss] [**debris.L**]-sweep-VblN, ...
 ‘digging trench (=gutter) ditches, ..., sweeping up debris of date palms,
 ...’ (ùrⁿó, já:ⁿ, bò^rǒ-ká:ⁿ. French *fossé*) **2004.5.3**

As shown below, when both the subject (as possessor) and the object are overtly expressed in a Verbal Noun clause, an unusually wide variety of object NPs are forced into compound initial status.

The **subject** of the lower verb is often coindexed with the main-clause subject, and in this case it is not repeated in the lower clause. However, a subject may appear in a Verbal Noun clause in certain contexts. With intransitives (i.e. in the absence of a co-occurring object NP), the subject is expressed as a possessor (1047).

- (1047) a. ñě-m mà ànà-yéy
 woman-Pl Poss village.L-going
 ‘women’s traveling’ **2004.3.9**
- b. má nì -ýⁿ
1SgP sleep-VblN
 ‘my sleeping’ (variant as compound: má jì nì :-nì -ýⁿ)

In transitives with both an object and a subject expressed, the subject normally appears as an **outer possessor**, followed by Possessive mà (even after an independent pronominal). The construction is easy to elicit, and occurs

occasionally in texts, provided that at least one of the two arguments is pronominal. ‘Cat’ in (1048.a) is followed by Possessive *mà*, as are the pronouns 1Pl *émé* and 2Sg *ú* in (1048.b-c). The 2Sg example (1048.c) demonstrates that the pronominal preceding *mà* is in **independent pronoun** (rather than possessor) form, since 2Sg independent H-toned *ú* is distinct both from alienable possessor *á* and from L-toned inalienable possessor *ù*. (1048.c) also shows that the logical object *èñé* ‘chicken’ appears in normal main-clause form with lexical tones (rather than as possessor or L-toned compound initial) when it is separated from the VblN by an intervening element (here a dative pronominal).

- (1048) a. *nì-nì wⁿé* *mà* [*má* *cèr-ú*]
 cat **Poss** [1SgP bite-VblN]
 ‘the cat’s biting me’
- b. [*émé* *mà* *kó* *è-ý* *ké*] *jò:-lá-Ø*
 [1Pl **Poss** NonhP see-VblN Topic] be.many-Neg-3SgS
ká: *áyá-sà-y*
 but hear-Reslt-1PIS
 ‘Our (actually) seeing it isn’t common, but we’ve heard (about it).’
2004.3.8
- c. [*ú* *mà* *èñé* *wò-rú* *ò-ý*]
 [2Sg **Poss** chicken 3Sg-Dat give-VblN]
já:ⁿ=kò
 appropriate=be.Nonh
 ‘Your-Sg giving a chicken to her is appropriate.’ **2004.3.19**

It is more difficult to elicit examples where both subject and object are nonpronominal NPs. The **recursive-possession** construction, of the type [NP *mà* [NP *mà* VblN]], is what we would expect based on the preceding examples. It is in fact elicitable (1049), but in practice speakers avoid it.

- (1049) [*àrⁿ-úm* *mà* *ñě-m* *mà* *làg-ú*] *hádé-bà*
 [man-Pl **Poss** woman-Pl **Poss** hit-VblN] prevent.Impf-3PIS
 ‘They will prevent men from hitting women.’

Instead, speakers generally express the logical object as an **L-toned compound initial** rather than as a possessor, resulting in [NP *mà* noun.L-VblN] with just one morphologically overt possessor (in normal alienable possessor form), as in (1050.a-c). Some of the normal restrictions on nominal compound initials (generic reference, no separate pluralization, no separate possessor) are

relaxed to allow generous use of the compound construction. Thus (1050.a) is preferred to (1049), above, although it allows the compound initial to keep its Plural suffix -m. Likewise (1050.b), with unmodified ‘millet’ that can be construed as generic, may be expanded as (1050.c), where ‘my’ is logically the possessor of the millet, hence ‘(the) eating (of) [my millet]’. This forces a non-generic reading of ‘millet’, but it still appears in compound-initial form; the surface morphosyntax is, apparently, ‘my [millet-eating]’, though not in the sense this would have in English.

However, my assistant did balk at using the compound construction when postnominal modifiers (numerals, demonstratives) forced nongeneric readings. So (1050.d) was unproblematic (the modifying adjective permits a generic reading), but (1050.e) reverts to the full construction where the object (as well as the subject) appears as a possessor.

- (1050) a. [àrⁿ-úm mà] [ñè-m]-làg-ú hádè-bà
 [man-Pl Poss] [**woman-Pl.L**]-hit-Vbl.N prevent.Impf-3PIS
 ‘They will prevent men from hitting women.’ (ñè-m)
- b. [kì-ká: mà] ñù:-ñè-ýⁿ hádè-bà
 [Rdp-grasshopper Poss] **millet.L**-eat-VblN prevent.Impf-3PIS
 ‘They will prevent the locusts’ millet-eating.’
- c. [kì-ká: mà] má ñù:-ñè-ýⁿ
 [Rdp-grasshopper Poss] 1SgP **millet.L**-eat-VblN
 hádè-bà
 prevent.Impf-3PIS
 ‘They will prevent the locusts from eating my millet.’ (lit.: “...my millet-eating”)
- d. [àrⁿ-úm mà] [[ñè-m]-[gàrù-m]]-làg-ú
 [man-Pl Poss] [[**woman-Pl.L**]-[**old-Pl.L**]]-hit-Vbl.N
 hádè-bà
 prevent.Impf-3PIS
 ‘They will prevent men from hitting old women.’ (ñè-m gàrù-m
 ‘old women’)
- e. [àrⁿ-úm mà] [[ñè-m]-[gàrù-m] nùṅò-nám lèy]
 [man-Pl Poss] [**woman-Pl.L**]-[**old-Pl.L**] **this-Pl** **two**
 mà] làg-ú hádè-bà
Poss hit-Vbl.N prevent.Impf-3PIS
 ‘They will prevent men from hitting these two old women.’

In subject-object-VbIN sequences, expressing the object as a compound initial seems to be regular even when it is a **toponym** or a **personal name**, as in (1051). Such flagrantly non-generic nouns are elsewhere disallowed as initials in noun-noun or noun-agentive compounds. This is further evidence of the lengths to which speakers will go to avoid the recursive-possessor construction in Verbal Noun clauses.

- (1051) a. [má bà:màkò-yéy]
 [1SgP **Bamako.L**-going]
 ‘my going to Bamako.’
- d. [á:mádù mà fà:tùmà-jè-ý]
 [Amadou Poss **Fatouma.L**-marry-VbIN]
 ‘Amadou’s marrying Fatouma’

The strategy of expressing the object as L-toned compound initial, regardless of generic or specific reference, makes this construction resemble syntactic tone-dropping in relative-clause subjects, rather than ordinary compounding. Verbal Noun clauses contrast with the other productive nominalized clause, the ‘before ...’ clause with pseudo-causative nominal, which seems to have no problem with recursive possessors.

A PP or other **adverbial** may appear in a Verbal Noun clause with following Possessive mà. (1052) is from a text describing the many activities of members of the blacksmith caste. We get a sequence [[X mà] [[[Y lè] mà] VbIN]], where X is a cognate object and Y is dative or allative with postposition lè.

- (1052) [yà:jí: mà òjù-ká: mà ìjé]
 [marriage Poss road Poss standing]
 tì-tírù mà [íné-n lè] mà tì-ý
 Rdp-mission **Poss** [person-Sg to] **Poss** send-VbIN
 ‘Standing (=being involved in) the process of marriage; being sent on
 missions to somebody’ **2004.3.12**

17.4.2 ‘Prevent’ (hádé-, gà:ná-)

gà:ná- and Fulfulde loanword hádè- can be used in the sense ‘obstruct, prevent (sb, from doing sth)’. The subject of the lower verb appears as main-clause direct object (1053.a), or as possessor of the Verbal Noun (1053.b).

- (1053) a. [ú nò] tàrà-yéy
 [2Sg now] collective.hunt-**going**
 cè: ú hádè-Ø
 thing.L 2SgO **prevent**-Ppl.Nonh
 ‘you-Sg now, the thing that prevented you-Sg from going on the
 collective hunt, ...’ **2004.3.3**
- b. úⁿ-ùm [má bì r-è-bì r-ú] g-à:n-á:rⁿà-b-à
 child-Pl [1SgP work(noun).L-work-**VbIN**] **prevent**-Habit-3PlS
 ‘The children are preventing my doing my work.’
- c. sámbo [[wò d-è:] mà làg-ú]
 [S [3SgP.L father.HL] **Poss** hit-**VbIN**]
 wó hàdè-m
 3SgO **prevent**.Perf.L-1SgS
 ‘Sambo [topic], I prevented him from striking his father.’

17.4.3 ‘Consent’ (yòwó-)

This verb, which ranges from ‘receive’ to ‘consent’, occurs in positive utterances (‘agree to VP’, ‘consent that S’), or in negatives (‘refuse to VP’, ‘refuse to consent that S’). In (1054.b), -yéy ‘going, trip’ is a cognate nominal rather than a true Verbal Noun.

- (1054) a. [dùn-dàŋá kùⁿ] y-à-ý yòwò-lí-Ø
 [elephant Def] go-**VbIN** **accept**-PerfNeg-3SgS
 ‘The elephant refused (=did not accept) to go away.’ **2004.3.4**
- b. [mì d-è:] [má bà màkò-yéy] yòwó-j-è-Ø
 [1SgS.L father.HL] [1SgP Bamako.L-going] **accept**-RecPf-3SgS
 ‘My father has consented that I go to Bamako.’
- c. [á:mádù mà p-è:jì -c-èⁿ-ýⁿ] yòwò-lí-Ø
 [Amadou Poss sheep.L-slaughter-**VbIN**] **accept**-Reslt-3SgS
 ‘He refused to agree that Amadou may slaughter a sheep.’
- d. [mì d-è:] [á:mádù mà f-à:tùm-à-j-è-ý]
 [1SgS.L father.HL] [Amadou Poss Fatouma.L-marry-**VbIN**]
 yòwó-j-è-Ø
accept-RecPf-3SgS
 ‘My father has consented that Amadou marry Fatouma.’

- d. [[kó kùⁿ] mà è-ý nè] dènè-j-é
 [[Nonh Def] **Poss** see-VblN now] **want**-ImpfNeg-3PlS
 ‘They did not want to see it.’ **2004.3.7**

With a **switch in subjects**, the complement takes the form of an ordinary main clause with unsuffixed Imperfective verb, but with preverbal **L-toned subject pronominals** (1057). This is the same structure usually seen in factive complements of ‘see’ (§17.3.4.1). This complement is arguably a **relative clause** with virtual Nonhuman head NP (with a sense like ‘situation’) and therefore with (inaudible) Nonhuman Participial suffix -Ø.

- (1057) a. [[tára mà kù:ⁿ] tégú ù tégê:-Ø]
 [[coll.hunt Poss on] speech **2SgS.L** speak.**Impf**-Ppl.Nonh
 dènè-ýⁿ
want.Impf-1PlS
 ‘We want you-Sg to speak about the collective hunt(s).’ **2004.3.1**
 [excerpt from (1200) in Text 1]
- b. [[ènè bé úⁿ-ùm]=î: kó jì rê:-Ø kùⁿ
 [[Refl Pl child.Pl]=Foc NonhO tend.**Impf**-Ppl.Nonh Def
 kâ:ⁿ nè] dènè-j-é
 too now] **want**-ImpfNeg-3PlS
 ‘They do not want their own children [focus] to tend them
 (=animals).’ **2004.3.10**
- c. [ógó-ró kò dó:=kò-Ø]
 [fast-Caus **NonhS.L** reach.**Impf**=be.Nonh-Ppl.Nonh]
 dènè-wⁿ dèy⇒
want.Impf-2SgS if
 ‘if you-Sg want it (=wall under construction) to reach (its endpoint)
 quickly’ **2004.3.25**

Examples (1056.b,d) and (1057.b) show that **negation** is expressed on the ‘want’ verb. It would be morphologically possible to express negation in the lower clause in the switched-subject cases, but not in the same-subject cases (since there is no negative counterpart of the Verbal Noun).

17.4.6 ‘Forget’ (nàṅá-)

In the non-factive sense ‘forget to (do)’, we get a Verbal Noun or similar nominal complement.

- (1058) yèr-ú nàŋ-â:-Ø
 come-**VbIN** forget-Perf-3SgS
 ‘He/She forgot to come.’

17.4.7 ‘Be afraid to’ (lé:-)

When the complement clause is positive, we get a Verbal Noun or similar nominal complement.

- (1059) a. ... dò-ý lè:-Ø
 ... approach-**VbIN** fear.Perf.L-3SgS
 ‘... (he) was afraid to approach.’ **2004.3.4**
- b. ñà:-ñè-ý lé:-yè-Ø
 meal.L-eat.**VbIN** fear-Perf-3SgS
 ‘He/She was afraid to eat.’
- c. ñì-dí:ⁿ mà [jì-nì:] -nì -ýⁿ lè:-gó-m
 here Poss [sleeping.L]-sleep(verb)-**VbIN** fear-ImpfNeg-1SgS
 ‘I’m not afraid to sleep here.’

When the ‘be afraid’ clause is positive but the complement clause is negative, elicitation produced complements with negative inflected imperfective verbs as in main clauses (1060).

- (1060) a. [ñă: ñè:-gó-Ø] lé:-yè-Ø
 [meal eat-**ImpfNeg-3SgS**] fear-Perf-3SgS
 ‘He/She was afraid not to eat.’
- b. [ñă: ñè:-gó-m] lé:-yè-m
 [meal eat-**ImpfNeg-1SgS**] fear-Perf-1SgS
 ‘I was afraid not to eat.’

When the subject of the complement clause is not coindexed with the subject of ‘be afraid’, the possibilities are these: an ordinary main clause ending with the interrogative (or disjunctive) particle *ma* (1061.a), or a Verbal Noun clause (1061.b).

- (1061) a. [[mì dérè] [èné mà î-n] láyâ: mà⇒↑]
 [[1SgP.L elder.sib.HL] [Refl Poss child-Sg] hit.Impf **Q**]

lé:-m̀
 fear.Impf-1SgS
 ‘I’m afraid that my brother will (=might) hit his child.’

- b. [kì -ká: mà pì lî wè-yèr-ú] lé:-m̀
 [Rdp-grasshopper Poss go.back.L-come-**VbIN**] fear.Impf-1SgS
 ‘I’m afraid of the locusts’ coming back.’

17.5 Infinitival (bare-verb-stem) complement clause

Here the lower-clause verb appears in its bare form (infinitive), as in VP-chain constructions. The (logical) upper and lower clauses partially fuse (flatten) into a single clause. If the higher verb is transitive (e.g. ‘help’), when it combines with a transitive lower clause the resulting construction is a single clause with two direct objects, linearized as [O₁ O₂ VERB₁ VERB₂].

If the two-verb construction is itself nominalized, the second verb appears as a verbal noun (or cognate nominal), and the first verb drops its tones and is treated as a compound initial.

17.5.1 ‘Begin’ (túmnó-)

Here the upper and lower clauses share a subject, and the two clauses are seamlessly fused. The clausal bracketings in (1062) show the logical structure, with complements governed by the lower verb, but the surface syntactic structure arguably erases these brackets.

- (1062) a. [nûŋ nùŋó] túmnó-tì-Ø
 [song **sing**] begin-Perf-3SgS
 ‘He/She began to sing.’
- b. [[má nàŋá] éwⁿé] túmnó-tì-Ø
 [[1SgP cow] **milk**(verb)] begin-Perf-3SgS
 ‘He/She began to milk my cow.’
- c. [kó béné] sówó tùmno-Ø
 [NonhP side] jab **begin**.Perf.L-3SgS
 ‘He began to jab (with the knife) into its (=leopard’s) side.’
2004.3.4

See also (219.b), (426.a-b).

17.5.2 ‘Finish’ (dògó-)

This construction is parallel in structure to that with ‘begin’ (see just above). That is, the complement is a VP containing a bare verb stem, e.g. ‘sprout’ in (1063.a) and ‘weed’ in (1063.b).

- (1063) a. [ðyó.: fú:] tóyó dògò-lí-Ø jì:ⁿ
 [grass all] sprout(verb) **finish**-PerfNeg-3SgS Past
 ‘The grass had not finished sprouting (=had not all sprouted).’
2004.3.6

- b. wòmó ù dògó-jè-Ø dèy [kâ:ⁿ nè]
 weed(verb) 2SgS.L finish-RecPf-Ppl.Nonh if [even now]
 ‘even when you-Sg have finished weeding (the field)’ **2004.3.6**

17.5.3 ‘Help’ (bàrà-)

bàrà- has a range of senses including ‘help’, ‘gather’, and ‘add, increase’. In the sense ‘help’, the simple construction is transitive [X help Y] where Y is the person or entity helped, see line 1 of (1079). The maximal structure is approximately [X help Y [Y VP]], where Y potentially appears as upper-clause direct object and as lower-clause subject. In my data, Y is not repeated.

In the most basic construction, the upper and lower verbs fuse into a serial combination (a kind of compound verb) that can take two direct objects, one the object of ‘help’, the other the object governed by the lower verb. One might expect the linear ordering [[sack carry] him I-helped] for ‘I helped him carry the sack’, but instead we get [sack him carry I-helped] with the two objects to the left and the two verbs bunched at the right.

- (1064) a. [ñú: mà sá:kù] wó dé: bàrà-m
 [millet Poss sack] 3SgO **carry** help.Perf.L-1SgS
 ‘I helped him (to) carry the sack of millet.’

- b. èjú á:mádù wàrá bàrà-Ø
 field A **farm**(verb) help.Perf.L-3SgS
 ‘He/She helped Amadou to farm a/the field.’

However, the two verbs are not always adjacent in this construction. When we convert the entire construction into a non-subject relative clause with a pronominal subject, the L-toned subject pronominal, such as 1Sg mĩ in (1065), appears immediately before the final ‘help’ verb.

- (1065) *dògùrù* *bé* *wàrá* *mì* *bàrà-Ø*
 time.L 3PIO farm(verb) 1SgS.L help.Perf.HL-Ppl.Nonh
 ‘(at) the time when I helped them farm.’

When ‘help’ is nominalized as a VblN, as in [X want [X help Y [Y VP]], the lower verb is not nominalized in form, but is treated as a compound initial (all-L toned).

- (1066) [*wó* *wàrà-bàr-ú*] *dèné-m̀*
 [3SgO/P farm(verb)-help-VblN] want.Impf-1SgS
 ‘I would like to help him/her farm.’

An alternative construction has transitive ‘help’ plus overt object NP in the main clause, and a PP with postposition *lè* ‘in’ following the nominalized lower verb.

- (1067) a. [*ùr̀-̀m̀-̀ỳⁿ* *lè*] [*èné* *dè:*] *bàrà-Ø*
 [house-build-VblN in] [3ReflP father.HL] help.Perf.L-3SgS
 ‘He helped his father in building the house.’
- b. *ú* *bàrà-bà* [*kàrgù-těw-Ø* *lè*]
 2SgO help.Impf-3PlS [brick.L-make-VblN in]
 ‘They will help you-Sg in making bricks.’ **2004.3.25**

17.5.4 ‘Be able to, can’ (*bèré-*, *g̀r̀ⁿ-*)

The verb *bèré-*, also used as a simple transitive meaning ‘get, obtain’, is combined with a preceding VP ending in a bare verb stem in the sense ‘can, be able to’, often somewhat abstract.

- (1068) a. *céré* *bèrè-gó-Ø*
 bite can-impfNeg-3SgS
 ‘It (=snake) cannot bite’. **2004.3.5**
- b. [*àr̀ⁿ* *túl* *lè*] [*á* *èjú*] *tó:* *dògó* *bèré-ẁ*
 [rain one with] [2SgP field] sow finish can.Impf-2SgS
 ‘With a single rain, you can finish planting your (millet) field.’
 (*túrí*) **2003.4.6**

- c. kà: [kó kùⁿ] kó gàmá bèrɛ=kò
 but [Nonh Def] NonhO reduce **can**.Impf=be.Nonh
 ‘but that (method of killing grasshoppers) can reduce them (in number).’ **2004.3.8**

Another verb, gòrⁿó-, can be a simple transitive ‘X be stronger than Y’, or it can take a complement clause in the sense ‘be capable of, be able to afford’. It is less abstract than bèrɛ- and focuses on actual ability (physical or financial). It too takes complements ending in bare verb stems.

- (1069) [íné-n túrú-n] dé: gòrⁿò-gó-Ø
 [person one-Sg] carry be.able-ImpfNeg-3SgS
 ‘One person can’t carry (it).’ **2004.3.20**

17.6 Purposive, causal, and locative clauses

In the following sections, data on purposive and causal clauses are prominently featured. Some of these involve postposition *lè* or *lé* (§8.2), and I have also included some other clause types that likewise end in this postposition.

In addition to the specifically purposive and causal clauses considered below, manner adverbials with *dí:*ⁿ ‘place, manner’ as relative-clause head can also be used in basically purposive sense (1070).

- (1070) dáwé gò:-Ø,
 go.in.AM go.out.Impf-3SgS,
 [dí:ⁿ àsègɛ kó nàmà-gó-Ø]
 [**manner.L** animal NonhO step.on-ImpfNeg-Ppl.Nonh]
 ‘He goes out early in the morning (to check his animal traps), in such a way that (=in order that) the livestock animals won’t trample them (=traps).’ **2004.3.16**

17.6.1 Clauses ending in postposition *lè* or *lé*

17.6.1.1 Purposive or causal clause with L-toned bare verb plus *lé*

In (1071), a construction with L-toned verb and H-toned postposition *lé* has **purposive** sense. All textual examples in the texts are given. The purposive clause is in all cases the complement of a **motion verb** ‘come’ or ‘go’. The motion verb itself is often L-toned (1071.c-e), in which case the purposive complement is probably focal. Elsewhere, H-toned postposition *lé* occurs in

some types of locational PPs (§8.2.2), but without tone-dropping on the preceding noun. If *lé* in (1071) is equated with this postposition, it suggests a blending of (abstract) purpose and of goal-directed motion.

- (1071) a. [ì nè [ñè-í-n yòwò lé] yǎ:-m kùⁿ]
 [person [woman.L-child-Sg **accept.L in**] go.Impf-Ppl.Pl Def]
 ‘the people who go in order to receive (=take custody of) the girl (=the bride).’ (yòwó-) **2004.3.20**
- b. [èjù [yàṅà lé] bè yà:-gó-Ø] kò:-ró
 [field.L [**look.L in**] 3PlS.L go-ImprNeg-Ppl.Nonh] be.Nonh-Neg
 ‘There is no field that they don’t go to (=they go to every field) in order to look at it.’ (yǎ:-) **2004.3.6**
- c. ðⁿhóⁿ èné [íjé ké] [yì-lé nà: lé]
 uh-huh! LogoS [today Topic] [here **spend.night.L in**]
 yèrè-Ø wà
come.Perf.L-3SgS say
 ‘He said, “Uh-huh! I have come today in order to (=intending to) sleep here.”’ (ná:-) **2004.4.3**
- d. [[[núwⁿó kùⁿ] lè] nù: lé] yèrè-bà wà↑
 [[[fire Def] in] **enter.L in**] **come.Perf.L-3PlS** say
 ‘(It is said) they came in order to plunge into the fire.’ (nú:-) **2004.4.16** (tale)
- e. [wó bàjà lé] yǎ: bè kân
 [3SgO **pull.L in**] go 3PlS.L after
 ‘after they went in order to pull her out’ **2004.4.17**
- f. [kó sùmò lé] yà:-rà-m
 [NonhO **wash.L in**] go-Habit.L-1SgS
 ‘I am going (there) in order to wash it.’ **2004.4.18**

In (1071.a), ‘the girl’ is a direct object. A version with 1Sg patient, , has 1Sg object *mí*, hence [mí yòwò lé] ‘in order to receive me’.

In (1072), the same construction has **causal** sense, denoting the initial event that induced the protagonist to act. Because it is causal (retrospective) rather than purposive (prospective), it is not associated with an immediately adjacent motion verb.

- (1072) [kó≡y wó tò:ñò lé],

[Nonh=Foc 3SgO **provoke.L in**],
 [wó kú:ⁿ] kò-rú bèr'é mèyⁿ gàrà-Ø
 [3SgP head] Nonh-with get and pass.Perf.L-3SgS
 ‘Since it (=elephant) [focus] had been aggressive to him, he got his head
 (=saved his skin) in that way (=by shooting the elephant) and got
 through (=survived).’ (tó:ñó-) **2004.3.4**

17.6.1.2 ‘Intend to’ complement with Imperfective verb and *lè*

In (1073), the verb is an **inflected unaffixed Imperfective**. It is followed by **L-toned postposition *lè***, and by a form of the **‘be’ quasi-verb *wè-***. The specific sense of the construction is ‘intend to VP’.

- (1073) a. [úró mǎ:-wⁿ *lè*] wè-w dèy
 [house build.Impf-2SgS **Dat**] be.Hum-2SgS if
 ‘if you intend to build a house’ **2004.3.25**
- b. [kó kùⁿ] [kó ní-ŋírⁿé] [yǎ:-ỳ *lè*]
 [Nonh Def] [NonhP Rdp-day] [go.Impf-1PlS **Dat**]
 èmè wê:-Ø jé mèyⁿ
 1PlS.L be.HL-Ppl.Nonh say and
 ‘thus, on that day, while we were intending to go (to Ghardaia), ...’
2004.5.5

In its text, (1073.b) is a slightly modified repeat of a preceding sentence with *jé* instead of *lè* in the purposive expression; see (1081.b), below.

17.6.1.3 *H-toned repeated bare verb stem plus *lé** (‘behooves you’)

A construction involving a bare verb stem raised to **all H-tones**, plus **H-toned postposition *lé***, followed by an unaffixed second person Imperfective form of the **same verb stem**, is attested (1074).

- (1074) [kó kâ:ⁿ] [kó lègú] [dé: lé] dé:-wè
 [Nonh too] [NonhP earth] [**carry.H Inst**] **carry**.Impf-2SgS
 ‘That too, it behooves you to carry the earth (for bricks).’ (dé:-)
2004.3.26

The sense is that the subject (agent) has no choice but to perform the action. The French gloss was *le banco est à porter*.

- (1077) ... [já:ⁿ≡kò] jín≡kò,
 ... [appropriate≡be.Nonh] like≡be.Nonh,
 [[já:ⁿ≡kò] lè] gó: mèyⁿ↑
 [[appropriate≡be.Nonh] **in**] **go.out** and
 íné-m tílây yé táná-ηá-bà,
 person--Pl duty Index become-Caus.Impf-3Pls,
 [[já:ⁿ≡kò] lè] kán-tóγò mèyⁿ
 [[appropriate≡be.Nonh] **in**] do-impf and
 [[tílây yé táná-ηá-bà bǎ:]
 [[duty Index become-Caus.Impf-3Pls since]
 mà dĩ:ⁿ dǒ:-yè-Ø, ...
 Poss place reach-Perf-3SgS, ...
 ‘It was like it (=giving a new mother a chicken) was appropriate (i.e., nice but not obligatory). (Nowadays,) having gotten away from (it) being (just) appropriate, people have made it an obligation. Having done (=gotten away) from it being (just) appropriate has reached the point ...’ (kárⁿá-) **2004.3.19**

The construction exemplified above is unrelated to one where postposition *lè* (in roughly instrumental sense) is added to a quotative complement (1078).

- (1078) [... wó èné ê:-Ø] lè, sára gàrà-Ø
 [... 3SgO LogoS see.Impf-3SgS] **Inst**, pass pass.Perf.L-3SgS
 ‘With (=saying) “... I’ll see you-Sg,” it (=cat) went on its way.’
2004.4.1

17.6.2 Purposive clause with final *jé*

Purposive postposition *jé* may be added to a clause with an **imperfective** or an **imperative** verb. In the latter case, the fact that we are dealing with a morphological imperative, rather than with a bare verb stem, is brought out by verbs where these two forms differ tonally, viz., the majority of Cǎ:- and CǎCǎ-verbs.

In (1079), the first *jé* has scope over the two parallel imperfective clauses, while the final *jé* follows an imperative verb *bára* ‘add!’

- (1079) àrⁿ-úm [èné bé ñě-m] bàrá méyⁿ kâ:ⁿ
 man-Pl [Refl Pl woman-Pl] help and also
 ñù:-dǒyⁿ gǒ:ⁿ-bà [kó gá:rá éjé≡kò⇒]
 millet.L-hip remove.Impf-3Pls [Nonh more be.clean.**Impf**≡be.Nonh]

- (1081) a. nì ñì rⁿè yì-dí:ⁿ [kó yǎ:-ỳ jé]
 day.L here [NonhO go.**Impf**-1PIS **for**]
 èmè gô:-Ø
 1PIS.L go.out.Perf.HL-Ppl.Nonh
 ‘(on) the day when we left here (=village) in order for us to go to it
 (=Algeria)’ **2004.5.1**
- b. [[kò jénnátù] mà gá:rù] bérè,
 [[Dem J] Poss station] in,
 [gárdíyà yǎ:-ỳ jé] èmè wô:-Ø jé
 [G go.**Impf**-1PIS **for**] 1PLS.L be.Hum.HL-Ppl.Nonh **say**
 ‘While we were in the station of that (aforementioned) Jennatou
 (town), intending to go to Ghardaia, ...’ **2004.5.5**

In (1081.b), the first *jé* is purposive, the second (after *wô:-Ø*) is adverbial; see discussion of quasi-relative *jé* (*mèyⁿ*) adverbial clauses in §15.2.2.2. The passage in (1081.b) was repeated shortly thereafter in the same text, replacing *yǎ:-ỳ jé* by another purposive phrase *yǎ:-ỳ lè* (followed by *wô:-Ø jé mèyⁿ*) (1073.b).

The construction with H-toned *jé* is easily distinguishable from verb forms with Recent Perfect suffix *-jè-* (§10.1.2.6).

17.6.3 Reduced purposive clause in compound form (*ñ v̂*)

We now turn to a (more or less) purposive construction with a sharply reduced subordinated clause in the form of a **noun-verb compound**, functioning syntactically as a noun (suggesting that the “verb” has been nominalized). The **noun is L-toned** and the verb (in bare-stem form) has overlaid **H(H...L) tone**. The main clause which follows has a **motion** verb (‘come’, ‘go’, ‘enter’). The stance verb ‘sit down’ is also allowed, but here too the motion component is probably relevant.

Examples from the texts are in (1082). Note that the subject of the stance or motion verb is identical to the (unexpressed) subject of the purposive clause.

- (1082) a. ... ñé:-bà⇒, ñà:-ñê: dì ñ-â:-bà dèy, ...
 ... eat.Impf-3PIS, **meal.L-eat.HL sit**-Perf-3PIS if, ...
 ‘... and they will eat. When they have sat down to eat, ...’ (ñǎ:
 ñé:-) **2004.3.18**
- b. yà:jì:-páyà dì ñ-â:-bà dèy
marriage.L-tie.HL sit-Perf-3PIS if

This construction may be used with *nú:-* ‘enter’ in the sense ‘get involved in, engage oneself in’. In (1084.a), it follows an agentive compound of type [x̄ v-Ppl] (§5.1.9).

- (1084) a. [sàl-sálá-m] sàl-sàlà nú: mèyⁿ
 [prayer.L-pray.H-Ppl.PI] **prayer.L-pray.HL** **enter** and
 ‘Those who pray, having entered prayer (=having converted to Islam), ...’ (noun-verb sequence sàl sálá-) **2004.3.21**
- b. kàrgù-téwè nú:-wⁿ
brick.L-make.HL **enter.Impf-2SgS**
 ‘You-Sg will enter (=engage in) making bricks.’ **2004.3.25**

The ‘enter’ examples suggest that “purposive” is a misleading label for the construction at hand. Given that the main clause has a motion verb, it may be that the noun-verb compound is interpreted by native speakers as locative, hence ‘go (in-)to [meal/eating]’, parallel to the more transparently locative ‘enter into [brick-making]’.

Though redundant, given that the purposive clause and the motion or stance verb have the same subject, a **possessor** denoting the subject of the purposive clause may be added (1085).

- (1085) a. [á bèrè-térè] nú:-wⁿ
[2SgP stick.L-cut.HL] **enter.Impf-2SgS**
 ‘You-Sg will enter (=engage in) your wood-cutting.’ **2004.3.25**
- b. [á kðñð-nð:] nú:-wⁿ
[2SgP millet.beer.L-drink.HL] **enter.Impf-2SgS**
 ‘You-Sg will enter (=engage in) your millet-beer drinking.’ (kðñó, nð:-)
- c. [á nì :-ínè] nú:-wⁿ
[2SgP water.L-bathe.HL] **enter.Impf-2SgS**
 ‘You-Sg will enter (=engage in) your bathing.’ (ní:, ì né-)

When the **object is pronominal**, it appears in **possessor** form (1086), since pronominals cannot be used as compound initials.

- (1086) a. [á â:] yèrè-j-é
[2SgP catch.HL] **come-ImpfNeg-3PlS**
 ‘They will not come to arrest you-Sg.’ **2004.5.3**

- b. [á páyà] yèrè-j-é
 [2SgP tie.HL] come-ImpfNeg-3PlS
 ‘They will not come to tie you-Sg up.’

In (1087), instead of a direct object there is a PP (‘on you’). Unusually, instead of a pronominal-subject suffix, the 3Pl subject is expressed as an independent pronoun plus Possessive morpheme mà, a feature otherwise restricted to nominalized clauses (verbal noun clauses, ‘before ...’ clauses with pseudo-causative). In effect, H(H...)L-toned yérè- ‘come’ is treated here as though it were a Verbal Noun.

- (1087) [bé mà [á kû:ⁿ] yérè]≡y là:
 [3Pl Poss [2SgP on] come.HL]≡it.is Neg
 ‘It isn’t (the case that) they will come on account of you-Sg.’ **2004.5.3**

My assistant also accepted variations on (1087) with yâ:- ‘go’ (< yă:-) and númò- ‘fall’ (< nùmó-) instead of yérè-.

17.6.4 ‘So that ...’ or ‘had better’ (\bar{v} + -m)

There is a purposive construction of the type (1088). Here the purposive (‘so that ...’) clause **follows the main clause**, or at least does so often. This sets this construction apart from other subordinated clauses, which precede (or are embedded in) the main clause.

- (1088) [main clause] [... \bar{v} + -m]

For examples see (1091-3) later in this section. The notation [\bar{v} + -m] means that the verb has its **lexical tones** (though an R-toned monosyllable may be heard as L-toned), and is followed by an atonal suffix -m that acquires its surface tone from the preceding morpheme. The tonal pattern distinguishes the current construction from the Hortative, which has an H-toned -mí suffix after a tone-dropped all-L stem, i.e. [\bar{v} + -mí] (§10.4.3).

A pronominal subject is expressed with a **clause-initial independent pronoun**, arguably a presentential topic.

The sense ‘**had better**’ or ‘must’ is expressed by combining [... \bar{v} + -m] with tílây≡y ‘it is an obligation’ (< noun tílây). We see this in the extended passage (1089). The verb témé- ‘find’ has its lexical HH tones before -m, hence témé-m. The HH tone contour makes it clear that this is not a plural participle (cf. Perfective témè-m, Imperfective témé-m), and that it is not a 1Sg subject form (Perfective tèmè-m, Imperfective témé-m).

- (1089) A. [èjù-àrⁿá nè] tílây=ỳ [ní :ñè núŋò]
 [bush.L-man now] obligation=it.is [gear.L Dem]
 ǔ-r témé-m] mà ní :ñé,
 2Sg-Dat find-**so.that**] Poss gear,
 tílây-tílây è táná-ŋâ:-Ø kùⁿ nè
 obligation-obligation 2PIS.L become-Caus.Impf-Ppl.Nonh Def now
 [kó nò] [ní :ñè yókkò yókkò kó=ỳ]
 [Nonh now] [gear.L which? which? Nonh=it.is]
- B. [ní :ñè tílây ǔ-r témé-m [kó ní-ŋírⁿé]
 [gear.L obligation 2Sg-Dat find-**so.that**] [NonhP Rdp-day]
 èmè jê:-Ø,
 1PIS.L say.Perf.HL-Ppl.Nonh
 [màlfâ:ⁿ kó ǔ-r témé-m]
 [rifle NonhO 2Sg-Dat find-**so.that**]
 [[màlfâ:ⁿ kùⁿ kòrsò-gó] kó ù-r témé-m]
 [[rifle Def jam-**ImpfNeg**] NonhO 2Sg-Dat find-**so.that**]
 [[màlfâ:ⁿ kùⁿ lè] î:ⁿ kó témé-m]
 [[rifle Def Inst] child NonhO find-**so.that**]
 [bûg kó témé-m]
 [gunpowder NonhO find-**so.that**]
- A: ‘(As) a man of the bush (=ready for battle), the equipment that they had better find on you-Sg (=any young man), what you-Pl (=elders) require as obligatory, those now [topic], what kinds of equipment are they?’
- B: ‘The equipment that we (just) described that they had better find on you-Sg (=any young man) on that day (=when young men display their equipment): a rifle [topic], they had better find that on you; that the rifle doesn’t jam [topic], they had better find that on you; they had better find bullets (=ammunition) with the rifle; they had better find gunpowder.’ (búgù) **2004.3.24**

This text is about a ritual where the young men of the village assembled in the bush, under the watchful gaze of their elders, to demonstrate that they were properly armed for fighting (or for taking on wild animals). The force of the repeated *témé-m* is captured by ‘they had better find ...’, where ‘they’ (not expressed overtly) is generic.

Follow-up elicitation produced examples (1090), where the subject (agent) of ‘find’ is expressed as an independent pronoun (perhaps topicalized) at the left.

- (1090) a. wó ní-dì:ⁿ mí témé-m tílây≡ỹ
 3Sg here 1SgO find-**so.that** obligation≡it.is
 ‘He/She had better (=must) find me here.’
- b. mí ní-dì:ⁿ bé témé-m tílây≡ỹ
 1Sg here 3PIO find-**so.that** obligation≡it.is
 ‘I had better (=must) find them here.’

Without tílây≡ỹ, the usual sense of [... \bar{v} + -m] is ‘**so that**’ (=in order that). The construction has low text frequency. One textual example is (1091).

- (1091) [dòyⁿ ù nḏi-Ø kùⁿ]
 [ashes.L 2SgS.L drink.Impf-Ppl-Nonh Def]
 [á gùjú lè] nèwⁿé nú:-m
 [2SgP skin Dat] usefulness go.in-**so.that**
 bè jòṅḡ:-Ø] yó≡kò
 3PlS.L treat.Impf-Ppl.Nonh] exist≡be.Nonh
 ‘There is (healing) that they (=healers) perform with ashes that you-Sg will drink (in a liquid solution), for your skin, so that a benefit goes in (=accrues).’ **2004.3.27**

An elicited example of the ‘in order that’ sense is (1092).

- (1092) î-n jè:r-é-m [ú wó láyá-m]
 child-Sg bring.Impf-1SgS [2Sg 3SgO hit-**so.that**]
 ‘I will bring the child, so that you-Sg may hit him/her.’

Further textual examples are in (1093). The general pattern, with variations, is this: ‘X said, “[imperative!], so that ...”’, where the ‘in order that’ clause ending in -m suffix is immediately followed by the quotative particle. In (1093.b), the verb tégé is apparently a bare stem rather than an imperative, but it has imperative force. nḏi-m in (1093.a) shows that R-toned monosyllables may drop to L-tone.

- (1093) a. [wó ní: ó: [èné nḏi:-m]] wà
 [3Sg water give.Imprt.H [LogoS drink-**so.that**]] say
 ‘He_x (Fulbe man) told (him), hey!, to give (him_x) some water so that he_x might drink.’ **2004.4.4**

- b. [wó [[cè: tùrù] wò dènê:-Ø cêw]
 [3Sg [[thing.L one.L] 3SgS.L want.Impf-Ppl.Nonh all]
 tégé mèy↑, èné wò-rú kárⁿá-m] wá
 speak and, LogoS 3Sg-Dat do-**so.that**] say
 ‘He_x (Fulbe man) said (to the Dogon man_y), “hey!, say one thing
 that you desire, so that I may do it (=make it happen).’ **2004.4.4**
- d. [kó tègú] [íné-m lè] tègè-ý wá,
 [NonhP speech] [person.Pl Dat] speak-ImprtNeg say,
 émé ní-dí:ⁿ bé:-sà dèy,
 1Pl here remain-Reslt if,
 [émé.: èné.:] háwré-m wá
 [1Pl Logo] agree-**so.that**] say
 ‘He told us not to talk about it to the people, so that when we had
 stayed there (for a while), we and he might come to an agreement.’
2005.5.1
- e. [kó cé:ⁿ kárⁿá èné gó:-m] wá
 [Nonh creak! do.Impf LogoS enter-**so.that**] say
 ‘She said (to the sapling), “hey!, make a creaking sound (while
 opening), so that I may go out!”’ **2004.4.16**

The most puzzling textual example is (1094). Here we have the quotative context as in the preceding examples, but the clause with *céjé-m* ‘meet’ is not attached to another preceding clause (imperative or otherwise). I suggest it is truncated from something like ‘...the place that you-Sg have told him to go in order for you-Pl to meet’, but the embedded imperative ‘(told) him to go’ is my interpolation.

- (1094) dà:yá [dì:ⁿ tî:-n é céjé-m ù
 night [place.L Recip-Sg 2Pl meet-**so.that** 2SgS.L
 gâ:-Ø lè] yǎ:-w̄,
 say.Perf.HL-Ppl.Nonh in] go.Impf-2SgS,
 wó è:-gó-w
 3SgO see-ImprtNeg-2SgS
 ‘You-Sg will go at night to the place where you-Sg have told (him to
 go) so that you-Pl (=you and he) will meet each other, but you-Pl won’t
 see him.’ **2004.5.6**

17.6.5 Causal ('because') clause (sábù, sábùn)

sábù (less often sábùn) 'because' may precede an otherwise normal main clause. This Jamsay form belongs to a large set of 'because' forms in various Malian languages, ultimately derived from Arabic *sabab*- 'reason'.

(1095) a. sábù [kò ké] tò:-j-é
 because [Nonh Topic] sow-ImpfNeg-3PIS
 'because they won't plant that (seedstock) [topic]' **2004.3.6**

b. àmà-sòyó yé sà-Ø,
 pity exist have-3SgS,
 sábù ò:g=î: ñèwⁿ-á:rⁿà-Ø
because sweat=Foc drip-Habit-3SgS
 'It's pitiful, since (so much) sweat has been expended' **2004.3.6**

The formula here is [S₁, sábù S₂]. An alternative construction with the order of clauses inverted is [S₂ *for-Focus*, S₁], i.e. 'S₂ is why S₁'. Here the 'for' (i.e. 'because of') postposition is jé (§8.4).

(1096) [[lí-ló:ró=ỳ [ǎ-n lè] dènè-j-é] jé]=ỳ
 [[fear-Foc [man Dat] want-PerfNeg-3PIS] **for**]=Foc
 [bé nè] [àná bérè] nù:-bà
 [3Pl now] [village in] enter.Perf.L-3PIS
 'Cowardice [focus] is what they (=women) don't like (to see) in a man;
 that's why they came into the village.' **2004.3.3**

17.6.6 'Because of', '(more) than', 'a fortiori' (sógòn, sógò)

sógòn and sógò have at least some overlap in meaning.

Both can be used in the sense '**because of**' with preceding NP. An interrogative ìñé sógò 'because of what?' = 'why?' is also attested, though it competes with other 'why?' interrogatives (§13.2.2.2). /kó sógò/ or more often /kó kùⁿ sógò/ with Nonhuman pronoun (in discourse-anaphoric function) means 'because of that; for that (reason)' as in (1097); see also (207.a) in §4.4.2.

(1097) ú á:-jè-bà kàsù nú:-yⁿà-wⁿ,
 2SgO catch-RecPf-3PIS jail enter-Perf-2SgS,
 lámpò lúgúró bèrè-gó-w, má⇒ kòr=î:;
 tax seek can-ImpfNeg-2SgS, or lie=it.is,

há yè [kó kùⁿ só gò] [kò kùmàndá:wⁿ kùⁿ bé]
 well [Nonh Def **because.of**] [Dem commandant Def Pl]
 yě y-ya-bà dè y
 come-Perf-3PIS if

‘(Suppose) they have just arrested you-Sg and you have gone into jail; you can’t seek the tax (=earn money to pay the annual head tax), or is it (=what I have said) a lie? Well, because of that, when those (colonial) commandants came, (they would not imprison tax delinquents)’ (kòr-ú)

2004.4.22

sò gòn means ‘because of’ or ‘on account of’ in (1098).

- (1098) a. [[kó kùⁿ] só gòn]=í:,
 [[Nonh Def] **because.of**]=Foc,
 ñě-m àrⁿ-úm nà ná-nà nà tà rá tí:-bà
 woman-Pl man-Pl chase-chase.L collective.hunt send.Impf-3PIS
 ‘It’s for that reason [focus] that women drive men to the collective hunt.’ [nà ná-nà: §11.6.3] **2004.3.3**

- b. [kó tǔ yⁿ só gòn ké] kò-rú yà:-y
 [NonhP smallness **because.of** Topic] Nonh-Dat go.L-ImprtNeg
 ‘Don’t-Sg go up to it (just) because of its small size.’ (i.e., even a small creature can be dangerous) **2004.4.2**

In (1099), sò gòn seems to mean ‘**a fortiori**’ (colloquial English *let alone*, *much less*, *never mind*, or the like). Cf. Fulfulde sako and phonologically similar ‘a fortiori’ forms in languages throughout the region. The sense ‘a fortiori’ is more often expressed in Jamsay by yé.: (§12.3).

- (1099) [émé gòrô:] gó: bèrè-j-é kùⁿ só gòn,
 [1PIP nape.Loc.HL] go.out can-ImpfNeg-3PIS Def a.fortiori
 è mǔ-n tál-lá gò: wà nà-ŋá bèrè-j-é
 1Pl-Dat attach-Revers go.out.L be.far-Caus can.ImpfNeg-3PIS
 ‘They (=Fulbe) can’t get away from (clinging to) our napes (=depending on us), much less can they become separated and go far away (from us).’ **2004.3.10**

For the sense ‘**than**’ in comparatives (e.g. ‘bigger [than a dog]’), and for the closely related sense ‘**instead of**’, only só gò occurs in my data. It is typically used in conjunction with comparatives containing gá:rá ‘more’. See §12.1.3 for examples and discussion.

17.6.7 Negative purposive (=prohibitive) clause

In (1100), the final prohibitive verb ('do not leak!') describes the purpose for which the special granary roof has been constructed.

- (1100) kònòṅó kónóṅó [kó kû:ⁿ] ná:ná-bà
 conical.roof make.roof [Nonh on] put.on.Impf-3PIS
 [kó nò] [àrⁿá mǎn-sà-Ø kâ:ⁿ]
 [Nonh now] [rain fall-Reslt-3SgS even]
 sòjò-ý
 leak-**Prohib**

'They build a conical roof and put it on top of it (=granary), so that it won't leak now even if rain falls.' (mì rⁿé-) **2004.3.6**

17.7 Clause-final *nà:* 'though'

A clause-final morpheme *nà:* may occur at the end of a clause immediately followed by another clause.

In each textual example there is some kind of **adversarial** relationship between the two clauses, so a gloss 'though, however' is often appropriate. For example, my assistant commented that textual example (1101.a) could also be phrased with *nà:* as (1101.b). The adversarial relationship that is merely implied by juxtaposing positive and negative clauses in (1101.a) is made more explicit by adding *nà:*. A similar reading is possible in (1102), though the logical structure of the sentence is rather complex.

- (1101) a. ì-áyà-y è:-lí:-Ø
 Rdp-hear.HL-1PIS see-PerfNeg-1PIS
 'We have heard (about it), (but) we have not seen (it).' **2004.4.5**

- b. ì-áyà-y *nà:* è:-lí:-Ø
 Rdp-hear.HL-1PIS **though** see-PerfNeg-1PIS
 'Though we have heard (about it), we have not seen (it).'

- (1102) [[[ì nè-n nùṅò-bâ:ⁿ] pòttò-lí-Ø *nà:*]
 [[[person.Sg.L Dem.L-owner] participate-PerfNeg-3SgS **though**]
 jà:ⁿ-j-é] kò:-ró
 dig-ImpfNeg-3PIS] be.Nonh-Neg
 'That they (=villagers) refuse to dig doesn't happen, even though (this or) that person has not joined in.' **2004.4.5**

In (1103), below, the context is this: the speaker has already described how disputes are adjudicated when they occur internally within a neighborhood (adjudicated by the oldest man of that neighborhood), and now turns to the situation where members of two distinct neighborhoods of the village are involved.

- (1103) [nǒŋ lěy kùⁿ]
 [neighborhood two Def]
 mà ì nè jéyè-m kùⁿ bòrⁿó-bà⇒,
 Poss person.L fight.Perf.HL-Ppl.Pl Def call.Impf-3PlS,
 [ànà mà ì nè gà-n]=î: nà:
 [village Poss person. old-Sg]=it.is **though**
 [nîŋ ké] [nǒŋ mà ì nè gà-n]=î: là:
 [now Topic] [neighborhood Poss person old-Sg]=it.is Neg
 'They (=village elders) summon the persons, belonging to the two neighborhoods, who have fought; now, however, it (=the principal judge) is the oldest man of the (whole) village, not (merely) the oldest man of the neighborhood.' **2004.4.6**

18 Anaphora

This chapter covers the morphosyntax of antecedent-anaphor relationships: reflexive, topic-indexing, logophoric, and reciprocal.

The forms $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$ (e.g. reflexive object) and $\grave{\text{e}}\text{n}\acute{\text{e}}$ (e.g. reflexive possessor, logophoric) may be related to each other and to the noun $\acute{\text{i}}\text{n}\acute{\text{e}}$ - ‘person’ (e.g. Sg $\acute{\text{i}}\text{n}\acute{\text{e}}$ -n). $\grave{\text{e}}\text{n}\acute{\text{e}}$ has a dialectal variant $\dot{\text{i}}\text{n}\acute{\text{e}}$ -. Both $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$ and $\grave{\text{e}}\text{n}\acute{\text{e}}$ are morphologically **nouns rather than pronouns**. They may be followed by regular nominal postpositions, but do not have special dative clitic forms like those of true personal pronouns, $\grave{\text{e}}\text{n}\acute{\text{e}}$ (but not $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$) may be pluralized by adding particle $\acute{\text{b}}\acute{\text{e}}$.

18.1 Reflexive

18.1.1 Reflexive non-subject arguments ($\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$)

Reflexive $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$ is an anaphor that is coindexed with the clause-mate subject. It may function as a direct object or postpositional complement. Further detail on the syntax is given in §18.4, below.

Reflexive object is expressed by the invariant noun $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$, which does not agree with the subject in person, humanness, or plurality (1104).

- (1104) a. $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$ $\acute{\text{l}}\acute{\text{a}}\acute{\text{y}}\acute{\text{a}}\text{-s}\acute{\text{a}}\text{-m}$
 Refl hit-Reslt-1SgS
 ‘I hit-Past myself.’
- b. $\dot{\text{i}}\text{n}\dot{\text{i}}\text{w}^{\text{n}}\acute{\text{e}}$ $\acute{\text{l}}\acute{\text{a}}\acute{\text{y}}\acute{\text{a}}\text{-s}\acute{\text{a}}\text{-b}\acute{\text{a}}$
 Refl hit-Reslt-3Pl
 ‘They hit-Past themselves.’

A following verb may also occur in the unmarked Perfective. This defocalization of the verb suggests that the Reflexive pronoun is (covertly) focalized. Therefore (1105.a), below, is available as an alternative to (1104.a), above. (1105.b) shows that overt focalization with $\acute{\text{e}}\text{y}$ clitic is also possible.

- (1105) a. ì nì wⁿé làyà-m
Refl hit.Perf.L-1SgS
 ‘I hit-Past myself.’
- b. ì nì wⁿé≡yⁿ làyà-m
Refl-Foc hit.Perf.L-1SgS
 ‘I hit-Past myself [focus].’

ì nì wⁿé may also function as complement of a postposition (1106).

- (1106) bú:dù [ì nì wⁿé lè] tí :-w
 money [**Refl** Dat] send.Perf.L-2SgS
 ‘You-Sg sent some money to yourself.’

ì nì wⁿé is not very common in texts. It did not occur in the first 90-minute interview-style tape that I transcribed. The examples in (1107) occurred in the subsequent tapes.

- (1107) a. ì nì wⁿé yá:fé-wé mèyⁿ†
Refl pardon-Caus and
 ‘having excused himself, ...’ **2004.4.6** (yá:fé-wé emended from yá:fé)
- b. ì nì wⁿé dè:rⁿ-wⁿè-ýⁿ
Refl be.weary-Caus-ImprtNeg
 ‘Don’t weary yourself!’ **2004.5.5**
- c. ì nì wⁿé páyá ...
Refl tie ...
 ‘tying himself (=tying his beltcord)’ (chained VP) **2004.4.26**
- d. ì nì wⁿé kámá [[cí-céré kùⁿ] mà cèn-ná:]
Refl throw [[saddle Def] Poss heart-true]
 dó: ò ñé dè:rⁿê:-Ø
 reach sit.down be.quiet.Impf-3SgS
 ‘He (=one mounting a horse) will propel himself (up) onto the heart (=middle) of the saddle, (will) sit, and (will) settle in.’ (cénè) **2004.4.26**

18.1.2 Reflexive possessor (Sg *ènéné*, Pl *ènéné bé*)18.1.2.1 *Ordinary contexts (not coordinated)*

In third-person possessor function, we get the noun *ènéné* for Singular Reflexive, and *ènéné bé* (with nominal Plural particle *bé*) for Plural Reflexive. Again, the antecedent is the clause-mate subject. *ènéné* and Pl *ènéné bé* are also used in logophoric function (§18.2.1, below).

First and second persons have no special Reflexive possessor forms. The regular possessor forms for those categories are used regardless of any coindexing to a clause-mate subject.

Singular Reflexive *ènéné* is followed by **Possessive postposition** *mà* in cases of ordinary (alienable) possession. (1108.a) shows 3Sg possessor with a subject that it is not coindexed to. This contrasts with the reflexive possessor construction in (1108.b). (1108.c) shows that 1st/2nd person subjects co-occur with ordinary possessor pronominals of the same category, rather than taking special reflexive possessor forms. (1108.d) shows that a non-subject NP (here the direct object) may not serve as the antecedent of a reflexive possessor ('his field').

- (1108) a. [wó ì jù] wǎ:-tù-m
 [**3SgP** dog] kill-Perf-1SgS
 'I killed his/her dog.'
- b. [ènéné mà ì jù] wǎ:-sà-Ø
 [**Refl** Poss dog] kill-Reslt-3SgS
 'He_x killed his_x (own) dog.'
- c.. [má ì jù] wǎ:-sà-m
 [**1SgP** dog] kill-Reslt-1SgS
 'I killed my (own) dog.'
- d. ǎ-n [[wó èjù] bérè] wó ò gè-tù-m
 man-Sg [[3SgP field] in] 3SgO chase-Perf-1SgS
 'The man_x, I chased him_x (away) from his_x (or her_y) field.'

The Reflexive may be used with **non-human antecedent**, such as animals that can be thought of "possessing" something, and occasionally even inanimates with reference to their parts.

- (1109) a. ì jù [ènéné mà ì:ⁿ] cét-tì-Ø
 dog [**Refl** Poss child] bite-Perf-3SgS
 'The dog bit its (own) puppy.' (céré)

- b. úró [èné mà béné lé] wùrò-Ø
 house [Refl Poss side in] fall.over.Perf.L-3Sg
 ‘The house fell over onto its side.’

The plural form èné bé (1110) does not take Possessive postposition mà where we might expect it, i.e. in normal (alienable) possessives (1110.a). When èné bé functions as inalienable possessor, the bé drops its tone, and we get èné bè (1110.b). These features (absence of mà, tone-dropping as inalienable possessor) are shared with the regular 3Pl pronoun bé, suggesting that bé in èné bé is (in part) morphemically identical to 3Pl pronoun bé.

- (1110) a. [èné bé ì jú] wǒ:-tù-bá
 [Refl PI dog] kill-Perf-3PlS
 ‘They_x killed their_x(own) dog(s).’
- b. [úrⁿ-ùm ì nè kâ:ⁿ] bàrá já:
 [child.Pl person.L each] gather take
 [[èné bè nâ:] lè] ô:-Ø
 [[Refl Pl.L mother.HL] to] give.Impf-3SgS
 ‘Each of the children will gather and convey (them) and give them to his/her mother.’ **2004.3.1**

On the other hand, Plural Logophoric èné bé retains H-tone on bé in subject function in non-subject relative clauses, as in (819) and (1119.b-c). By contrast, true 3Pl pronoun bé appears as L-toned bè in this function.

In (1111), the fact that 3Sg possessor wó instead of Refl possessor èné is used (before ì nè gàrú-m) tells us that the referent is distinct from that of the initial 3Sg pronominal.

- (1111) [wó yǎ: [wó ì nè gàrú-m] tí: kùⁿ]
 [3Sg go [3SgP person big-Pl] send.Imprt Def]
 émé jè
 1Pl say.Perf.L
 ‘It was wé [focus] who told him to go and send (them) to her elders.’
2004.3.20

Another textual example of a (singular) Reflexive possessor is (1112).

- (1112) [ì nè gàmà-nám] [[nùwⁿó kùⁿ] dè:-gó-bé
 [person.L certain.Pl] [[dead.one Def] carry-ImplNeg-2PlS]
 [[èné mà kó: lè] úrò yèrê:-Ø]
 [[Refl Poss foot Inst] house.Loc.HL come.Impf-3SgS]

mà dú: èmě-n dé:-sà-m] mà íné-m yó=kò
 Poss load 1Pl-Dat carry-Reslt-Ppl.Pl] Poss person-Pl exist=be.Nonh
 ‘There are some (other) people who carry the load (=who take upon themselves the responsibility) for us (of insuring, by occult powers) that if you-Pl do not carry the dead person (back to the village), he (=dead person) will come home on his own feet.’ **2004.3.24**

18.1.3 Expressions with ‘head’

18.1.3.1 *Simple kú:ⁿ ‘head’*

Though not the regular all-purpose reflexive, kú:ⁿ ‘head’ does occur in various expressions that verge on this function.

(1113) illustrates a common construction consisting of an independent pronominal X (as topic) followed by a ‘with X’s head’ phrase including postposition *lè* ‘with’. The initial independent pronominal is used even when the fuller NP is preposed, giving a second layer of topicalization (1113.c). If X is third person, a reflexive possessor form must be used with ‘head’ (1113.b-c).

- (1113) a. [ú [á kú:ⁿ lè]] éwé mèyⁿ↑, ...
 [2Sg [2SgP **head with**]] buy and, ...
 ‘You-Sg [topic], you will buy (insecticide) on your own (initiative) and ...’ **2004.3.8**
- b. [bé [èné bé kú:ⁿ lè]], [dǐ:ⁿ kùⁿ],
 [3Pl [**Refl Pl head with**]], [place Def]
 [[íné-n lè] jàṅá mèyⁿ,
 [[person-Sg Dat] ask and,
 émé jè:ré dè:nè-l-á]
 1PIO bring put-PerfNeg-3PIS]
 ‘They themselves (people of Perge village) [topic], they didn’t bring us to that place and allow us to settle (here) after asking anyone.’ **2004.3.11**
- c. jémè-n [wó [èné mà kú:ⁿ lè]]
 blacksmith [3Sg [**Refl Poss head with**]]
 [í:rⁿé kùⁿ] yì-yò:rô:-Ø
 [iron Def] Rdp-heat.on.fire.Impf-3SgS
 ‘The blacksmith [topic], he himself (qua blacksmith) will heat the iron.’ **2004.3.12**

- d. [kó kùⁿ] [ú sày] [kò fú:]
 [Nonh Def] [2Sg only] [Nonh.L all]
 bèl-lú:-Ø déy, [á kúⁿ lè]
 get-PerfNeg-2SgS if, [2SgP head Inst]
 débéré: kárⁿá gó:-wè [kó: lè]
 managing do go.out.Impf-2SgS [foot Inst]
 ‘In that way, you-Sg alone [topic], if you haven’t gotten all that (=a few fellow travelers), you will (have to) leave by yourself (=on your own) and (try to) manage (traveling) on foot.’ (bèrè-, Fr *se débrouiller* ‘manage’) **2004.4.27**
- e. [á kúⁿ lè] téwé dò:-nó bèrè-wè
 [2SgP head Instr] make.brick arrive-Caus can.Impf-2SgS
 tájà: dèy
 happen if
 ‘if it happens that you-Sg are able to complete (the job of) making the bricks’ **2004.3.25**

18.1.3.2 Extended form kù:ⁿ-báná

An extended form kù:ⁿ-báná with otherwise unattested compound final (or adjective) turned up once in a text.

- (1114) èné mà kù:ⁿ-báná cé, jíjè yèrê:-Ø
 Refl Poss head-? possession, go.with come.Impf-3SgS
 ‘He will come with (=bring) things for himself.’ **2004.4.27**

18.1.3.3 Idiomatic phrases with kú:ⁿ ‘head’

The phrase ‘know one’s own head’ is used to describe a young person who has attained the age of reason and can therefore be expected to act responsibly.

- (1115) ì nè [èné mà kú:ⁿ] jùgó-ñ,
 person.L [Refl Poss head] know.Impf-Ppl.Sg
 [bé bèrê:] dàyá-bà
 [3Pl in] leave.Impf-3PlS
 ‘They (=elders) will leave someone who has attained the age of reason (e.g. an older brother) among them (=circumcision novices).’ **2004.3.18**

Another idiomatic construction is with *bèrè-* ‘get, obtain’. There is no Reflexive Possessor here (‘his own head’ with *èné mà*) since ‘his head’ is topicalized (presentential), and “resumed” by a clause-internal Nonhuman pronominal.

- (1116) [wó kú:ⁿ] kò-rú bèrè mèyⁿ gàrà-Ø
 [3SgP head] Nonh-with get and pass.Perf.L-3SgS
 ‘His head (=himself) [topic], he got (=saved) it and got through (the elephant attack)’. 2004.3.4

18.2 Logophoric and indexing pronouns

18.2.1 True logophoric function (*èné*, *èné bé*)

For a discussion of logophorics and reflexives in the central Dogon languages Donno-So, Toro-So, and Togo-kan, see Culy, Kodio, and Togo (1994). Of interest is the fact that the Logophoric in Togo-kan is given as “*ene* (be).”

The basic Jamsay third person Logophoric anaphor is *èné* (Sg) or *èné bé* (Pl). We have just seen that the same forms may function as reflexives. The logophoric is used most systematically when the antecedent is the sentient being (usually human but sometimes animal) whose speech, thoughts, or intentions are reported by the speaker. In this function, logophorics function a) to **clarify reference** (by coindexation to a stable antecedent), b) to define the relevant stretch of discourse **as a quotation** (often in conjunction with explicit quotative markers), and c) to **dissociate** the present speaker from responsibility for the veracity of the assertions made (‘allegedly’). Logophorics may be thought of as **embedded 1Sg and 1Pl pronouns** within quotations attributed to a third-party speaker.

Logophorics do not behave like other pronominals in terms of tonal patterns or ordering, suggesting that *èné* is a noun. Subject category is expressed, for other pronominal categories, by either suffixes on the verb (in main clauses) or by special L-toned proclitics immediately adjacent to the verb (in relatives and some other subordinated clauses). Logophoric subject is expressed by *èné* (or its plural *èné bé*), always before the verb but not necessarily adjacent to it, and with no L-toned form #*ènè* (1117.a-b,d-e). Logophoric subjects are NP-like in that they require regular third person subject pronominal agreement on the verb. While 3Sg subject suffix -Ø is inaudible, Logophoric plural *èné bé* takes an audible 3Pl subject suffix -*bà* (1117.d-e). Logophoric object is expressed by the same forms (1117.c).

- (1117) a. èné yèrê:-Ø wà↑
LogoS come.Impf-3SgS say
 ‘She_x said (that) she_x is/was coming.’
- b. èné ú láyá-sà-Ø wà↑
LogoS 2SgO hit-Reslt-3SgS say
 ‘He_x said (that) he_x hit-Past you.’
- c. mí èné láyá-sà wà↑
 1Sg **LogoO** hit-Reslt-3SgS say
 ‘He_x said (that) I [focus] hit-Past him_x.’
- d. [èné bé] mí láyá-sà-bà jè-bà
 [**LogoS** PI] 1SgO hit-Reslt-3PIS say.Perf.L-3PIS
 ‘They_x said (that) they_x hit-Past me.’
- e. [èné bé] ñă: jè:rè-bà jè-bà
 [LogoS PI] meal bring.Impf-3PIS say.Perf.L-3PIS
 ‘They_x said (that) they_x will bring the meal.’

An example with a **nonhuman referent**, from an animal tale, is (1118). Note that the unsuffixed Imperfective verb is followed by Nonhuman =kò, agreeing with the logophoric subject.

- (1118) ... èné wǎ:=kò wà↑
 ... **Logo** kill.Impf=be.Nonh say
 ‘It said, “... I will kill (you).”’ 2004.4.2

Logophorics may be used in **clauses embedded within the quoted matter**, i.e. at one or more removes from the ‘say’ verb. In (1119.a-c), there is a temporal adverbial clause (in the form of a relative headed by ‘day’). In the first line of (1119.a), the relevant clause has a singular Logophoric, in subject function. For other pronominal categories, preverbal subject in relative clauses is expressed by L-toned pronominals (191), but for the Logophoric pronoun we get èné with its regular tones (not #ènè). A second Logophoric occurs in (1119.a) in the subsequent main clause as object of ‘have’.

In (1119.b-c), PI Logophoric èné bé (with regular tones) occurs in subject function in the adverbial relative clause; see also (839). In the ensuing main clause, repetition of the PI Logophoric is optional (1119.b). This main clause need not contain a mention of the referent in question (1119.c).

- (1119) a. [nì ɲèrⁿè mí ɛ́né láyà-Ø kùⁿ]
 [day.L 1SgO **LogoS** hit.Perf.HL-Ppl.Nonh Def]
 wéjè=ỳ ɛ́né sà-Ø jí:ⁿ wà
 craziness=Foc LogoO have-3SgS Past say
 ‘He_x said (that), on that day when **he**_x hit me, craziness had taken possession of **him**_x.’
- b. [nì ɲèrⁿè [ɛ́né bé] yérè-Ø kùⁿ]
 [day.L [**LogoS PI**] come.Perf.HL-Ppl.Nonh Def]
 (ɛ́né bé) bú:dù sà:-rá-bá jè-bá jí:ⁿ
 (**Logo PI**) money have-Neg-3PlS say.Perf.L-3PlS Past
 ‘They_x said (that), on that day when **they**_x came, **they**_x had no money.’
- c. [nì ɲèrⁿè [ɛ́né bé] yérè-Ø kùⁿ]
 [day.L [**Logo PI**] come.Perf.HL-Ppl.Nonh] Def]
 àrⁿá ɛ́jíⁿ⇒ mǐn-sà-Ø jè-bà
 rain very.much (rain)fall-Reslt-3SgS say-3PlS
 ‘They_x said (that), on that day when **they**_x came, it rained a lot.’
 (mì rⁿé)

Two logophorics occur in the complex textual example (1120).

- (1120) [ì nè-m gàmà-nám, [[ɛ́né bé pènè-kù:ⁿ]
 person.Pl.L certain-Pl, [[**Logo PI**] beside]
 ì nè-m [nùmò-ñǎ: lé] pél-lèy,
 person.Pl.L [hand.L-meal(=right) in] ten-two,
 [nùmò-bàná lé] pél-lèy,
 [hand.L-left in] ten-two,
 í:rⁿé [ɛ́né bé] nù:-gó-Ø
 iron [**LogoO PI**] enter-ImpfNeg-3SgS
 [kó kùⁿ nám] nù:-gó-Ø],
 [Nonh Def owners] enter-ImpfNeg-3SgS],
 mà á:dù ɛ̀mǎ-n á:-sà-m] yó=kò
 Poss promise 1Pl-Dat catch-Reslt-Ppl.Pl] exist=be.Nonh
 ‘There were some people_x (warriors) who made us a promise, to the effect that the twenty persons beside **them**_x on the right and the twenty persons (beside them_x) on the left [topic], iron (=spears) would never penetrate into **them**_x (=the speakers), and it would never penetrate into those others (=fellow soldiers on the right and left).’ **2004.3.24**

I have no good examples from the texts of quotations embedded in other quotations (stacked quotations). The data in (1121), below, were elicited. They show that it is possible for a logophoric to be **coindexed with either the higher or lower** antecedent. I framed the cues with singular and plural antecedents to reduce any confusion about indexing in any given example.

In (1121.a), the ‘he’ in the lowest quoted clause is coindexed with Amadou, the lower of two possible antecedents; either the regular 3Sg wó or Logophoric èné may be used. In (1121.b), the logophoric ‘them’ in the lowest quoted clause is coindexed with the higher antecedent ‘they’. These two examples, taken together, show that logophorics are possible with antecedents one clause up or two clauses up. In view of this, one might expect (1121.c) as at least an alternative to (1121.b), with both ‘they’ and ‘Amadou’ binding logophoric anaphors in the lowest quoted clause. However, my assistant rejected this version. When the category of the pronoun coindexed with Amadou is made explicit (as a clause-initial independent pronoun), my assistant gave it as wó, i.e., the regular (non-anaphoric) third singular pronoun (1121.d).

Overall, the data (which should be used with caution) suggest that a) the highest antecedent readily binds a logophor regardless of depth of embedding, b) a mid-level antecedent (not the highest quoted speaker) only optionally binds a logophor, and c) the option to use a nonanaphoric third person pronominal is especially favored when we would otherwise get two referentially disjoint logophors in the same clause.

- (1121) a. [á:mádù [wó / èné yèrê:-Ø jè-Ø wà]]
 [A [3Sg / Logo come.Impf-3SgS say.Perf.L-3SgS say]]
 tèg-á:rà-bà
 speak-Habit-3PIS
 ‘They say [that Amadou_x said [that he_x would come]].’
- b. [á:mádù [[èné bé] láyâ:-Ø jè-Ø wà]]
 [A [[LogoO PI] hit.Impf-3SgS say.Perf.L-3SgS say]]
 tèg-á:rà-bà
 speak-Habit-3PIS
 ‘They_y say [that Amadou_x said [that he_x would hit them_y]].’
- c. #?[á:mádù [èné [èné bé] láyâ:-Ø
 [A [LogoS [LogoO PI] hit.Impf-3SgS
 jè-Ø wà] tèg-á:rà-bà
 say.Perf.L-3SgS say]] speak-Habit-3PIS
 [= (b)]

- d. [á:mádù [wó [èné bé] láyâ:-Ø jè-Ø
 [A [3Sg [LogoO Pl] hit.Impf-3SgS say.Perf.L-3SgS
 wà] tèg-á:rà-bà
 say]] speak-Habit-3PlS
 [= (b)]

The use of a logophoric to replace an original first-person pronoun is part of a broader shift in pronominal categories in reported speech. An original second person pronominal is regularly converted into a (non-logophoric) **third person** pronominal, unless this original second person corresponds to speaker or addressee in the current speech event. For the larger picture, see the discussion of “direct” and “indirect” discourse in §17.1.1.

18.2.2 Non-logophoric topic-indexing function (èné, èné bé)

Once a discourse referent is established as a topical NP, a co-indexed Reflexive pronoun (Sg èné, Pl èné bé) may occur as subject of a following adverbial clause or non-subject relative clause, or as possessor of the complement of an adverbial PP that serves as background for a subsequent main clause. The term “Reflexive” is not quite right for this indexing function, but for lack of a better label I will use “Refl” in interlinears.

The **adverbial PP** type is illustrated in (1122). Such an adverbial phrase is semantically equivalent to a background clause (e.g. ‘when it is young’).

- (1122) ñù:-töy [[èné mà dáyá] lè], ...
 millet.L-seed [[**Refl** Poss young.stage] in], ...
 ‘a millet seedling_x [topic], in **its**_x early stage of development, ...’
2004.3.8

The **adverbial-clause** type is shown in (1123), with Reflexive pronominals in subject function. (1123.b) also has an a second èné as Reflexive possessor function, which is not directly relevant here. Another example is (214.a).

- (1123) b. kì-ká: [wàkàti [kó bèrê:] èné
 Rdp-grasshopper [time.L [Nonh in] **Refl**
 nú:-sà-Ø fú:⇒]
 enter-Reslt-Ppl.Nonh all]
 ñówⁿᵛ téwé bèrê=kò
 damage inflict be.able.Impf=be.Nonh
 ‘Grasshoppers_x [topic], any time **they**_x enter into it (=millet), they_x
 can inflict damage.’ **2004.3.8**

- c. [ì nè kâ:ⁿ] [ènέ mà dú:]
 [person.L any] [Refl Poss load]
 [dì:ⁿ èné gòrⁿð:-Ø] jín kúnô:-Ø
 [manner.L **Refl** be.able.Impf-Ppl.Nonh] like put.Impf-3SgS
 ‘Each person_x [topic], she puts her_x load (on her head) like this, as
 much as **she_x** can (carry).’ **2004.3.6**

Examples involving èné or èné bé as subject of a **non-subject relative clause** are in (1124.a-c). The head noun ‘his iron’ in (1124.a) also contains èné in Reflexive possessor function. Another example is (841.e).

- (1124) a. [[ènέ mà í:rⁿέ] èné dùwô:-Ø kùⁿ]
 [[Refl Poss iron] **Refl** forge.Impf-Ppl.Nonh Def]
 kúnó-jè-Ø dèy
 put-RecPf-3SgS if
 ‘when he_x (=blacksmith) has already put (on the fire) his_x iron
 which **he_x** is going to forge’ **2004.3.12**
- b. pótó [cè: èné dènê:-Ø kùⁿ]
 beat [thing.L **Refl** want.Impf-Ppl.Nonh Def]
 kó táná-ηâ:-Ø
 NonhO become-Caus.Impf-3SgS
 ‘He_x (=blacksmith) will beat it (=iron) and transform (=forge) it
 into what(-ever) **he_x** wants.’ **2004.3.12**
- c. ì nè [ènέ bé dígè-n cêw kùⁿ]
 person.L [**Refl PI** follow.Perf.HL-Ppl.Sg all Def]
 [gá:rá ă-n] táná-ηá-m
 [more man-Sg] become-Caus.Impf-Ppl.PI
 ‘people_x (=griots) who transform whomever **they_x** have followed
 into a better man.’ **2004.3.15** (ènέ bé emended from èné)

The emendation in (1124.c) is based on the plural participle (suffix -m); the text is about a class of griots (a caste of bards) rather than about an individual. The speaker’s slip is easily understood, since the initial ì nè ‘person’ is unmarked for number, as often with relative heads. The embedded relative clause ‘whomever they follow’ is headless; the full form would have another ì nè ‘person.L’ as head within the brackets: ì nè [ì nè èné bé ...].

The use of èné in this indexing function **does not apply to non-subject functions** within clauses. For these non-subject functions, èné may only have the clause-mate subject, not a preposed topic, as antecedent. Therefore we get ordinary 3Sg wó rather than Reflexive èné in object function (1125.a) and as

possessor of subject (1125.b) or of object (1125.c), in spite of the preposed coindexed topical NP.

- (1125) a. [á:mádù ké],
 [Amadou Topic],
 [[dògùrù wó mì láyà-Ø] lè],
 [[time.L **3SgO** 1SgS.L hit.Perf.HL-Ppl.Nonh] in]
 pé: pè:-Ø
 cry(noun) cry.Perf.L-3SgS
 ‘Amadou_x [topic], when I hit-Past him_x, he_x cried out.’
- b. [á:mádù ké],
 [Amadou Topic],
 [[wó ìjú] núwⁿ-â: kân] yà:-Ø
 [[**3SgP** dog] die-Perf after] go.Perf.L-3SgS
 ‘Amadou_x [topic], after his_x dog died, he_x went away.’
- c. [á:mádù ké], [wó ìjú] wǒ: mì kân,
 [Amadou Topic], [**3SgP** dog] kill 1SgS.L after,
 cénè bãyⁿ-yè-Ø
 heart be.angry-Perf-3SgS
 ‘Amadou_x [topic], after I killed **his_x** dog, he_x got angry.’ (bàrná-)

In (1126), from a text about how children learn to hunt, the speaker appears to “slip into” the èné form in a dative (referring to the generic child that has been the topic of preceding discourse). The dative here is ěn lè, contracted from èné lè. The speaker then interrupts himself, and repeats the phrase with the regular 3Sg dative form wò-rú. The example suggests a latent tendency to expand the use of èné, but one that is subject to self-censorship.

- (1126) [wó ù yàṅâ:-Ø jé mèyⁿ],
 [3SgO 2SgS.L look.Impf-Ppl.Nonh say and],
 [mánà [ěn lè] éwé ò: ù gá:] kân —,
 [plastic [**Refl** Dat] buy give.L 2SgS.L say] after —,
 [mánà wò-rú éwé ó: ù gá:] kân, ...
 [plastic **3Sg-Dat** buy give 2SgS.L say] after, ...
 ‘...you-Sg watch him_x (=child learning to hunt), (then) after you buy a slingshot and give it to **him_x** —, after you (then) give him_x a slingshot, ...’ **2004.3.16** [overlaps with (928.d)]

èné is not regularly used for nonhuman referent. This restriction is again borne out in the indexing construction, except e.g. in animal tales where person-

ification is common. In (1127), the subject of the relative clause is coindexed with the preceding topical NP ‘dog’, but we get an ordinary L-toned preverbal Nonhuman subject pronominal *kò* instead of *èné*. When I asked informants to substitute *ǎ-n* ‘man’ for ‘dog’, I did get *èné* as relative-clause subject.

- (1127) [i jú kùⁿ],
 [dog Def],
 [[cè: nàná kò dó:=kò-Ø cêw]
 [[thing.L chase NonhS.L reach.Impf=be.Nonh-Ppl.Nonh all]
 mà cé:] é:-jè-Ø dèy, nàná=kò=
 Poss thing] see-RecPf-3SgS if, chase.Impf=be.Nonh
 ‘The dog_x [topic], if it_x sees anything that it_x (can) chase and reach, it_x
 will chase (it).’ 2004.3.16

18.2.3 Variant *ì né* for *èné*

My informants from Dianwely generally used *èné* for the functions described above. However, there is a dialectal variant *ì né*. It appears that some speakers use this in the full range of functions for *èné* (e.g. reflexive possessor, logophoric). For one of my Dianwely informants, *ì né* appeared instead of *èné* in elicited examples. For another speaker, *ì né* appeared occasionally in subject position (focalized or not) in logophoric function (1128.a-b), whereas *èné* appeared in all other contexts.

- (1128) a. *ì né*=*ỳⁿ* [èné mà nám lè] dém⇒
 Logo=Foc [Refl/Logo Poss people to] straight
émé *jà:* *dèy*
 1PIO convey.Perf.L if,
 ‘(He said:) if he [focus] took us straight to his own kin, ...’
 2004.5.1
- b. [émé lěy mà mó:n]
 [1Pl two Poss group]
 [ì né èspâ:ñ émé jǎ:-Ø] wà↑
 [LogoS Spain 2PIO convey.Impf-3SgS] say
 ‘He said, the two of us together [topic], he would take us to Spain.’
 [Fr *Espagne*] 2004.5.5

In (1128.a), *èné* in possessor function is simultaneously reflexive and logophoric in function.

18.3 Reciprocal

18.3.1 Simple reciprocals (t̂:-n, t̂:-m)

Reciprocal is expressed by the noun t̂:-n (Singular) or t̂:-m (Plural). The Singular form is required when there are **just two entities** involved. When three or more are involved, either the Singular or the Plural may be used. To the extent that the Pl form is used when a minimum of three entities (e.g. speaker and two other persons) is involved, the choice of grammatical number is based on **the perspective of one of the participants** ('me and the other one' versus 'me and the other ones').

These Reciprocal pronouns are related to a noun meaning 'comrade, colleague', which has the forms in (1129). Human suffixes occur only in the presence of an overt possessor, as with some inalienable kin terms (§6.2.2). The possessed forms may be treated as alienable, e.g. má t̂wⁿɔ́-n 'my comrade', or inalienable, e.g. m̂i t̂:-n 'my comrade' (§6.2.1-2). The F-tone in t̂:-n is compatible with the overlaid H(H...)L tone of inalienably possessed kin terms.

(1129) unpossessed		possessed Sg	possessed Pl
	t̂w ⁿ ɔ́		
	a. alienable	t̂w ⁿ ɔ́-n	t̂w ⁿ ɔ́-m
	b. inalienable	t̂:-n	t̂:-m

The forms used as Reciprocal pronouns (without a possessor) are identical to inalienably possessed forms of 'comrade'. The Reciprocal pronouns t̂:-n and t̂:-m occur in non-subject position in main clauses, with a coindexed subject of any pronominal person. Direct-object function is illustrated in (1130).

- (1130) a. yògó t̂:-m wǎ:-ŷ
 tomorrow **Recip-Pl** kill.Impf-1PIS
 'Tomorrow we-3+ will kill each other.'
- b. t̂:-n yàŋá-t̂ŷð-bà
Recip-Sg look.at-Inf-3PIS
 'They-Dual (often) look at each other.'
- c. [ú.: kó.:] t̂:-n é: è gá: kân,
 [2Sg Nonh] **Recip-Sg** see 2PIS.L say after
 'If you and it (=cobra) have seen each other (=made eye contact), ...' **2004.3.5**

Examples with postpositions are in (1131).

- (1131) a. [tô:-m lè] tárá nè lóγó bèrè-gó-y
 [Recip-Pl to] adhere now do.too.much can-ImpfNeg-1PlS
 ‘We-3+ (=Dogon and Fulbe) can’t stick too closely to each other.’
2004.3.10
- b. [cè: [tô:-n lè] è jérè-Ø]
 [thing.L [Recip-Sg Dat] 2PlS.L hold.Perf.HL-Ppl.Nonh]
 kò:-rós jì:ⁿ dèy
 be.Nonh-Neg Past if
 ‘if there was nothing (=no grudge) that you held against each other’
2004.3.21
- c. [tô:-n mà kû:ⁿ] nùm-â:-bà
 [Recip-Sg Poss on] fall-Perf-3PlS
 ‘They fell on top of each other.’ (nùmó-)

Since they are nouns in form, tô:-n and tô:-m are readily used in reciprocal function as possessors with following mà. (1132) occurred in the same passage as (1131.a), above.

- (1132) [tô:-m mà ká:rê:] gòrⁿò-gó-y
 [Recip-Pl Poss being.separate] be.able-ImpfNeg-1PlS
 ‘We-3+ (=Dogon and Fulbe) cannot exist separately (=without each other).’ **2004.3.10**

18.3.2 Other uses of tô:-n, tô:-m

In (1133), a party of young men seeking to cross the desert and clandestinely enter Europe encounter another group with the same intention. Since tô:-m is not a reciprocal here in the ordinary sense, I gloss it in its lexical sense ‘comrade(s)’, though the comradeship in question is rather attenuated (‘fellow travelers’ catches the nuance somewhat better).

- (1133) mòbì l òjù-kâ: èmè céjè-Ø kùⁿ,
 vehicle.L road.Loc.HL 1PlS.L encounter.Perf.HL-Ppl.Nonh Def,
 [bé kâ:ⁿ] [ì nè-m [kò tô:-m]
 [3Pl too] [person-Pl [Dem comrade-Pl]
 [gúyⁿó lè] yă:-tóγò-m]≡í:
 [stealth with] go-Impf-Ppl.Pl]≡it.is

‘The vehicle that we encountered, they too were people of that same type (as us) who were going clandestinely.’ **2004.5.1**

tô:n may be used after an expression of quantity, time, or distance in the sense ‘approximately’; see §8.5.3.1.

18.3.3 ‘Together’ (m̀̀rⁿ́- , m̀̀:-ń-)

The intransitive verb m̀̀rⁿ́- ‘come together, be assembled’ expresses proximity and/or collective action, when chained with other predicates. The free translation often has ‘together’, but the Jamsay construction should really be taken literally as a combination of ‘come/bring together’ and the other verb(s).

- (1134) a. ỳ̀r̀é m̀̀rⁿ́ ẃo bàrà-bà
 come be.together 3SgO help.Perf.L-3PlS
 ‘They came together (there) and helped him.’

The causative m̀̀:-ń- ‘bring together, gather together’ has similar uses when the ‘together’ entities are in direct object function (for causatives see §9.2).

- (1135) a. [ẃo: . kó: .] fú: m̀̀:-ń m̀̀yⁿ]
 [3Sg Nonh] all **be.together-Caus** and]
 [dé: m̀̀yⁿ] búmbâm j̀̀è:r̀è-bà
 [carry and] B bring.Perf.L-3PlS
 ‘They carried him and it (=dead man and dead leopard) together to Boumbam (village).’ **2004.3.4**

- b. [k̀̀ b̀̀è:né k̀̀ⁿ l̀̀] k̀̀nó-sà-bà d̀̀y,
 [Dem bag Def in] put-Reslt-3PlS if,
 k̀̀-rú m̀̀:-ń ù námá-̀̀ d̀̀y
 Nonh-with be.together-Caus 2SgS.L step.on.Impf-Ppl.Sg if
 nũŋ n̄: méy ...
 oil drink and ...
 ‘When they put them (=wild raisins) into that shoulder bag (made from a hide), as you keep stepping on them (bag and fruits) together, the oil (from the wild raisin seeds) is absorbed (into the bag) and ...’ **2004.3.17**

18.4 Restrictions on reflexives

As noted in §18.1, reflexives are anaphors that are coindexed with a clause-mate subject. In the subsections below, further detail and exemplification is given.

18.4.1 No leftward antecedent-reflexive relationship

The possessor of a subject NP may not function as antecedent for purposes of reflexive anaphora, and is not itself eligible to be a reflexive anaphor. Instead, we get regular third person pronominal marking both for the possessor (if pronominal) and for a following non-subject, as shown in (1136). This example was elicited in parallel with e.g. ‘my dog bit me’ to make it clear to the informant that coindexation was involved. Of course (1136) also has a second reading where the two 3Sg pronominals are not coindexed.

- (1136) [wó ì jú] wó cét-tì-Ø
 [3SgP dog] 3SgO bite-Perf-3SgS
 ‘His_x dog bit him_x.’ (céré-)

18.4.2 No antecedent-reflexive relation between coordinands

Conjunctions of the type [X and X’s Y], and disjunctions of the type [X or X’s Y], do not allow the possessor in the right coordinand to be expressed by a Reflexive pronoun, regardless of whether the entire coordinated NP functions as subject. Instead, ordinary third person possessors (3SgP, 3PIP) are used even when the possessor of the right coordinand is coindexed with the left coordinand..

- (1137) a. á:mádù.: [wó ì jú.:]
 Amadou [3SgP dog]
 ‘Amadou and **his** dog’
- b. [mì déré bé⇒] [bé ñě-m bé⇒]
 [1PIP.L elder.sib.HL PI] [3PIP woman-PI PI]
 ‘my (elder) brothers and **their** wives’
- c. [dàná-ñ mà⇒↑] [wó ñě-n má⇒]
 [hunt.Impf-Ppl.Sg or] [3SgP woman-Sg or]

nì-dí:ⁿ yèré bèrê:-Ø
 here come can.Impf-3SgS
 ‘A hunter or **his** wife can come here.’

A textual example is (1138); cf. line 3 of (1029).

- (1138) [[ǎ-n.: [wó ñě-n.:]] mà jéy] yó=kò⇒,
 [[man-Sg **3SgP** woman-Sg]] Poss fight(noun)] exist=be.Nonh,
 [[î-n.: [wò dê:..]] mà jéy] yó=kò⇒
 [[child-Sg **3SgP.L** father.HL]] Poss fight] exist=be.Nonh
 ‘There are squabbles between a man and **his** woman (=wife); there are
 squabbles between a child and **his/her** father; ...’ **2004.4.6**

Of course the same is true in the infrequent case where the coindexed possessor is in the left coordinand, i.e. in the sequence [X’s Y and (or) X].

- (1139) [wò dê:..] wó:.
 [**3SgS.L** father.HL] 3Sg
 ‘her_x father and her(self)_x’

These data suggest that the two coordinands are syntactically symmetrical, rather than one being subordinated to the other. Any coordinand may have a reflexive possessor under **coindexation with the clause-mate subject**. In (1140.a) we get èné as possessor of the right coordinand not under coindexation with the left coordinand, rather under coindexation with the clausal subject. In (1140.b), both coordinands have possessors with this coindexation.

- (1140) a. [dùŋ-yàrá:.. [èné mà ìjú:..]] è:-Ø
 [lion [**Refl** Poss dog]] see.Perf.L-3SgS
 ‘He_x saw the lion and **his**_x dog.’
- b. [èné mà nì-nì wⁿé:..][èné mà ìjú:..] è:-Ø
 [[**Refl** Poss Rdp-cat] [**Refl** Poss dog]] see.Perf.L-3SgS
 ‘She_x saw **her**_x cat and **her**_x dog.’

For more on coordination, including the dying-quail terminal intonation (symbol :.), see §7.1.1.

18.4.3 No antecedent-reflexive relation between topic and coordinand

A topical NP does not induce reflexive possessor of a coordinand in the clause proper. Therefore (1141) has simple 3Sg possessor *wò* (inalienable) rather than Reflexive *èné mà*. In other words, a topical NP does not count as “clause-mate subject” for this purpose.

- (1141) [á:mádù ké]
 [Amadou Topic]
 [[wò dè:·:] [wò nâ:·. fú:]] yǎ:-yà-bà
 [[3SgP.L father.HL] [3SgP.L mother.HL all] go.Perf-3PlS
 ‘As for Amadou_x [topic], **his**_x father and **his**_x mother have both gone.’

18.4.4 Reflexives in complement clauses

X and Y in the formulae below are understood to be other than first or second pronouns.

Consider a construction [X VERB₁ [Y VERB₂ [__’s Z]], using English order to clarify grammatical relations, where VERB₁ is a control verb taking a subordinated clause with VERB₂. In Jamsay, if the NP in the blank possessor position is coindexed with either X (higher subject) or Y (clause-mate subject), the possessor has reflexive form. This accounts for the ambiguity of (1142), where *èné* may have either ‘Amadou’ or ‘my father’ as antecedent.

- (1142) [mì dè:] [á:mádù [[èné nérⁿè] mà î-n]
 [1SgP.L father.HL] [Amadou [[**Refl** aunt.HL] Poss child-Sg]
 jê:-Ø] yòwó-jè-Ø
 marry.Impf-3SgS] consent-RecPf-3SgS
 ‘My father_x has consented that Amadou_y marry **his**_y aunt’s daughter.’
 or: ‘...marry **his**_x aunt’s daughter.’

In a construction of the type [X VERB [Y VERB Z]], where Z is direct object of the lower clause, if Z is coindexed to X, then Z appears in the form *èné* (1143.a). If it is coindexed to Y, it appears in clause-internal reflexive-object form *ì nì wⁿé* (1143.b).

- (1143) a. há:wà [[èné mà î-n] èné ê:-Ø]
 Haoua [[**Refl** Poss child-Sg] **Refl** see.Impf-3SgS]
 yòwò-lí-Ø
 accept-PerfNeg-3SgS
 ‘Haoua_x didn’t consent (=allow) her_x son to see **her**_x.’

- b. há:wà [[èné mà í-n] ì nì wⁿé wǒ:-Ø]
 Haoua [[Refl Poss child-Sg] **Refl** kill.Impf-3SgS]
 yǎwǎ-lí-Ø
 accept-PerfNeg-3SgS
 ‘Haoua_x didn’t consent (=allow) her_x son_y to kill **himself**_y.’

18.4.5 Reflexives in causative clauses

In (1144), we see that the sense [X cause [Y to VERB [Y’s Z]]], expressed with a single verb as [X Y [Y’s Z] VERB-Caus], does not allow Y to serve as antecedent for a reflexive possessor. Therefore we get 3Sg possessor wó rather than Reflexive èné. In other words, the fact that Y is the (underlying) subject of a clause does not count for purposes of antecedent determination in this case.

- (1144) a. [wó ñǎ:] wó ñè:-wⁿè-m
 [3SgP meal] 3SgO eat-Caus.Perf.L-1SgS
 ‘I made him_x eat **his**_x meal.’
- b. [wò nâ:] [wó ñǎ:] wó ñè:-wⁿè-Ø
 [3SgP.L mother.HL] [3SgP meal] 3SgO eat-Caus.Perf.L-3SgS
 ‘His_x mother made him_x eat **his**_x meal.’
- c. [mì dérè] dàyá [wó ñě-n]
 [1SgP.L elder.sib.HL] leave [3SgP woman-Sg]
 wó è:-wè-l-à
 3SgO see-Caus-PerfNeg-3PIS.L
 ‘My brother_x [topic], they didn’t let him_x see **his**_x wife.’

In (1144.b), if we substitute Reflexive [èné ñǎ:] for 3Sg possessor [wó ñǎ:] ‘his meal’, Jamsay listeners infer that the meal belonged to the mother, see (1145). That is, causative clause-union creates a structure with **only the higher subject** capable of functioning as antecedent for the possessor of a non-subject NP in the remainder of the clause.

- (1145) [èné mà ñǎ:] wó ñè:-wⁿè-Ø
 [**Refl** Poss mother] 3SgO eat-Caus.Perf.L-3SgS
 ‘She_x made him eat **her**_x meal.’

However, when the targeted NP is the direct object rather than a possessor, it is possible to use the clause-internal Reflexive object ì nì wⁿé when coindexed with the subordinated agent Y. Since ì nì wⁿé may also be co-

indexed with the higher (=causal) agent, there is a problem. In elicitation, my assistant nonetheless managed to distinguish the two readings in (1146.a-b).

- (1146) a. $\dot{\text{i}}\ \text{n}\dot{\text{i}}\ \text{w}^{\text{n}}\dot{\text{e}}\quad \text{w}\acute{\text{o}}\quad \text{y}\grave{\text{a}}\eta\grave{\text{a}}\text{-w}^{\text{n}}\grave{\text{a}}\text{-m}$
Refl 3SgO look-Caus.Perf.L-1SgS
 ‘I made her_x look at herself_x.’
- b. $\text{w}\grave{\text{o}}\text{-r}\acute{\text{u}}\quad \dot{\text{i}}\ \text{n}\dot{\text{i}}\ \text{w}^{\text{n}}\dot{\text{e}}\quad \text{y}\grave{\text{a}}\eta\grave{\text{a}}\text{-w}^{\text{n}}\grave{\text{a}}\text{-m}$
 3Sg-Dat **Refl** look-Caus.Perf.L-1SgS
 ‘I made her look at me.’

The subordinated agent is expressed as an object pronominal in (1146.a), and as a dative in (1146.b). In addition, $\dot{\text{i}}\ \text{n}\dot{\text{i}}\ \text{w}^{\text{n}}\dot{\text{e}}$ is positioned directly before the verb in (1146.b), but before the object pronominal in (1146.a).

18.4.6 3rd person for 2nd person in quotation is not a reflexive antecedent

When an original utterance like ‘you want your nose’ is quoted, the subject is expressed as 3rd person, e.g. 3Sg $\text{w}\acute{\text{o}}$ (§17.1.1). However, this “false” 3rd person (understood to be a substitute for 2nd person) cannot serve as antecedent for a reflexive possessor. Therefore ‘you want your nose’ is expressed as ‘3Sg want 3Sg’s nose’ with no direct indication of coindexation. The Jamsay for ‘3Sg’s nose’ is [$\text{w}\acute{\text{o}}\ \text{c}\acute{\text{i}}\text{r}^{\text{n}}\dot{\text{e}}$]. See line 2 of (1267) for the relevant textual example.

19 Grammatical Pragmatics

This chapter covers selected discourse markers, pragmatic functions (e.g. topicalization), pragmatic adverbials (or equivalents), and greetings. For focalization, see Chapter 13 *passim*. For tag questions, see §13.2.1.2.

19.1 Topic

Jamsay discourse has many NPs (and adverbials) that precede the verb and any preverbal subject or object pronominals. Many of these are best analysed as **topical** expressions, and as we will see just below this status is sometimes explicitly marked by a particle.

The issue arises whether a topical NP at the beginning of an utterance is pre-clausal or clause-internal. The clearest indication that a topical NP is pre-clausal is when it is **resumed by a pronominal** (other than a pronominal-subject suffix on the verb, which is obligatory in any event) in the clause proper. This test is available for all non-subject categories such as direct object, postpositional complement, or possessor of any NP. In addition, a pre-clausal topical NP is often prosodically set off (as indicated by a comma).

In (1147), the fact that topical [kò ké] is sandwiched between sábù and the rest of the clause, and the fact that Nonhuman kò is not resumed by a further object pronominal kó, suggest that the topical phrase is clause-internal.

- (1147) sábù [kò ké] t̀̀:-j-é
 because [Nonh.L Topic] sow-ImpfNeg-3PlS
 ‘because they won’t sow that (seedstock) [topic]’ **2004.3.6**

Topicalization is overt when the NP in question is immediately followed by one of the particles in (1148).

(1148) Topicalizing Particles

- a. ké ‘Topic’ (§19.1.1)
- b. ǹ̀ (ǹ̀, ǹ̀) ‘now’ (§19.1.2)
- c. kâ:ⁿ (kárⁿà) ‘also, too, even’ (§19.1.3)

Also relevant to topicalization are two issues covered in other chapters. A preverbal particle *yé* may be used as a kind of indexing device; see §4.3.3. The Reflexive pronoun *èné* (or plural *èné bé*) is, among other things, used in subject function in a backgrounded adverbial to index a just-introduced topical NP; see §18.2.2.

19.1.1 Topic (*ké*)

With an independent pronoun, *ké* remains H-toned while the **pronoun drops to L-tone**: Nonhuman *kò ké*, 1Pl *èmè ké*, 3Pl *bè ké*, etc. There is no tone-dropping on nouns or other phrase-final words that precede *ké*.

This particle is very common with NPs (including pronouns) and adverbials. Usually it signals a change or switch in discourse topic or setting ('as for'). The particle often does not merit translation by a marked topicalization construction in English.

- (1149) a. *ñù:-[ñù:-dǔyⁿ] bè gâ:-Ø kùⁿ,*
 millet.L-[millet.L-hip] 3PlS.L say.Impf-Ppl.Nonh Def,
 [*kò ké*] *íré=kǔ⇒,*
 [Nonh.L **Top**] ripen.Impf=be.Nonh,
 [*kó tǐ gè-gó-Ø*] *yùwó=kǔ,*
 [NonhO wait.for-impfNeg-3SgS] shed.Impf=Nonh,
 [*kó yúwú-wò lè*], [*lá:-lá: ké*]
 [NonhP shed.H-Caus.L in], [first-first **Top**]
ñě-m yǎ: gǔ:ⁿ jì:ⁿ
 woman-Pl go take.away.Impf Past
 'What they call "*ñù:-ñù:-dǔyⁿ*" (an early-ripening cultivar) of millet), as for it [topic], it ripens (and) it doesn't wait for them (=other cultivars), it sheds (grains). Before it shedded (=could shed), in the old days [topic], the women would go and remove it.'
2004.3.6

- b. [*kò màbíl bérè ké*]
 [Dem vehicle in **Topic**]
 [*kó ná:∴ fú:⇒*] *néyⁿ≡yⁿ*
 [NonhP entirety all] blood=it.is
 'As for inside the vehicle [topic], the whole thing was blood(y).'
(néyⁿ) 2004.5.1 [overlaps with (1157.c)]

In (1149.a), a discourse referent (a cultivar of millet) is introduced, then in [*kò ké*] a pronominal form denoting the same referent is made into an overt

topic of what follows ('ripens', etc.). A second case of *ké* occurs, in line 4 of the same example, when the time frame shifts from the present to the past. The alternative to [lá:-lá: *ké*] 'as for (in) the past' would be a more laborious conditional antecedent of the type [lá:-lá:≡ȳ *dèy*] 'if it is/was (in) the past'.

It is not unusual for two [X *ké*] topical phrases to occur back-to-back (1150).

(1150)	<i>nîm</i>	<i>mà:sò:n</i>	<i>gòrⁿó-wⁿ</i>	<i>táŋà:</i>	<i>dèy,</i>	
	now	builder	be.able.Impf-2SgS	happen	if,	
	[ù	<i>ké</i>]	[kò	<i>ké</i>]	[<i>mà:sò:n</i> -bírè	<i>kùⁿ</i>]
	[2Sg.L	Topic]	[Nonh.L	Topic]	[builder.L-work	Def]
	èj ⁿ ⇒	<i>yé-lé</i>	<i>èjú=kò</i>			
	very	there	good=be.Nonh			
	'Now if you are capable of working as a builder, (for) you-Sg [topic], it (=work) [topic], that construction work is very good (i.e., well-paid) there.' (Fr <i>maçon</i>) 2004.5.3					

Common combinations include *nîŋ ké* (variant *nîm ké*) 'now' and *néyⁿ ké* 'now'.

19.1.2 'Now' (*nè, nè, nò*)

The default form is *nè*, which may be used with a wide variety of preceding elements (NPs, adverbials). However, we get *nè* and *nò* by assimilation in certain high-frequency combinations, including those with independent pronouns. Thus 3Sg *wó nò*, Nonh *kó nò* (variant *kó nè*) and 2Sg *ú nò* with *o*, and 3Pl *bé nè*, 2Pl *é nè*, and 1Sg *mí nè* with *e*, but 1Pl *émé nè* with *ε*. Note also *nè* in *íjé né* 'today'.

This particle may be glossed as 'now', but in the discourse sense ('turning now to X'). 'Now' in the strictly temporal sense is often expressed as *nîŋ* (variant *nîm*), or by *néyⁿ*, both of which are usually followed by Topic morpheme *ké* (*nîŋ ké*, *néyⁿ ké*). However, *nè* is sometimes used after *nîŋ* or *néyⁿ*, and it is regular in the combination *íjé nè* 'today' (with extended senses 'up to now' and 'again').

A good example of the discourse function of *nè* is (1151). This is spoken by the interviewer, changing the subject from boys' circumcision to the equivalent (i.e. excision) for girls. Both male circumcision and female excision are referred to as "giving porridge to drink".

- (1151) [ñě:-rⁿ-ùm mà àrà-nǎ:-wⁿ-Ø nè],
 [female-child-Pl Poss porridge.L-drink-Caus-VblN **now**],
 [kó nò] yǎ:-jì n=î:
 [Nonh **now**] what?-like=it.is
 ‘Now female circumcision (=excision) [topic], (as for) it now [topic],
 what is it like?’ **2004.3.18**

See also bé nè ‘they now’ in the last line of (193), and mí nè ‘me now’ in (200), to cite only two examples.

19.1.3 ‘Also, even’ (kâ:ⁿ, kárⁿà)

The morpheme meaning ‘also, too’ (see below for ‘even’) is usually heard as kâ:ⁿ, which can easily be confused with the distributive quantifier kâ:ⁿ ‘each, any’. However, the particle meaning ‘also’ has a variant kárⁿà that is not shared with the quantifier. In addition, the ‘each, any’ quantifier occurs in a more limited set of morphosyntactic combinations, e.g. with a preceding unmodified noun or a preceding relative clause, and it induces **tone-dropping** in the preceding word (§6.1.4, §6.8.1). The ‘also, even’ particle occurs after a wide range of phrases and clause-finally, and has **no tonal effect** on a preceding word.

kâ:ⁿ and kárⁿà variants are interchangeable. However, kárⁿà seems to occur chiefly after a pronoun or other NP. kâ:ⁿ is more common in all positions, but seems especially dominant in clause-final position (with clausal scope), and in the high-frequency combination kâ:ⁿ nè with nè ‘now’. The variant kárⁿà should be distinguished from the common verb kárⁿá- ‘do’, which appears as the form kárⁿà-Ø in perfective relative clauses with Nonhuman head NP.

For examples of kâ:ⁿ in the sense ‘also, too’ see (217), (280.b), (435.c), (556.a), (641), (671.b), (740.b), (749), (795.b), etc. For kárⁿà in this sense see (315.b), (1152.a-b).

The constituent that the ‘also’ particle has scope over is not always topical, but it may be (1152).

- (1152) a. [ñě:-rⁿ-ùm kárⁿà], àrá nò:-wⁿǎ-n déy, ...
 [female-child-Pl **also**], porridge drink-Caus-Ppl.Sg if, ...
 ‘Girls too, when they (=elders) are going to give them porridge to
 drink (i.e., will excise them), ...’ [-n déy §15.2.1.3] **2004.3.18**
- b. A: ðⁿhóⁿ ú dèné-mì
 un-huh 2SgO want.Impf-1SgS

B: gó:ngà [mí kárⁿà] ú dèné-m̀
 yes [1Sg **also**] 2SgS want.Impf-1SgS
 (He:) ‘Uh-huh! I love you-Sg!’ (She:) ‘Yes, me too, I love you!’
2004.3.20

The mí kárⁿà ‘me too’ in (1152.b) was repeated in a parallel passage later in the same text as mí kâ:ⁿ.

The sense ‘also’ is closely related to that of ‘even’, the only difference being that ‘even’ presupposes the unlikelihood of one out of two (or more) parallel events differing in at least one substantive component. The distinction is made in English but not in Jamsay, where kâ:ⁿ and kárⁿà may be translated either way depending on context. The choice of translations is fairly arbitrary in cases like ‘even today’ (= ‘today too’) following a discussion of past practices (1153.a). The sense ‘even’ may be reinforced by hâl ‘until, to the point that’ (1153.b).

(1153) a. [íjé kâ:ⁿ] [kó kùⁿ ké] hédde-sà-Ø
 [today **even**] [Nonh Def Topic] persist-Reslt-3SgS
 ‘Even today [topic], that (practice) [topic], it persists.’ **2004.3.20**

b. ì nè [wò cé] ñáká-sà-n
 person.L [3SgP.L possession] be.incomplete-Reslt-Ppl.Sg
 hâl [kó túrú kâ:ⁿ] kò:-ró
 until [NonhP one **even**] be.Nonh-Neg
 ‘There was nobody whose possession (=equipment) was missing even one (item).’ **2004.3.24**

For kâ:ⁿ in the sense ‘even’ see also (1023) lines 2 and 3. For kárⁿà in this sense see also (1014.c). For these particles with clausal complements in the sense ‘even if/when ...’, see §16.2.

19.1.4 Subtopics (dey)

In complex discourse, often a pair or set of entities or situations are mentioned at the beginning, then each is treated in turn. The usual way to open a subtopic is with ≡ỳ dèy ‘if it is’ plus an NP or adverbial, or with dey ‘if’ (§16.1) plus a main clause. For example, in (1154), the speaker has been asked about name-giving rituals, and begins by making a distinction between former and current practices, which he will describe in succession.

- (1154) [yá:∴ íjé:∴] kǎw=kò, yá:=ȳ dèy, ...
 [yesterday today] separate=be.Nonh, yesterday=**it.is if**, ...
 ‘Yesterday (=the old days) and today are different (=things have changed). If it is (=as for) yesterday, ...’ **2004.3.19**

19.2 Presentential discourse markers

19.2.1 ‘Well, ...’ (háýè)

háýè is a common presentential particle, borrowed from Fulfulde. It is used like English ‘well, ...’. That is, it often suggests a mildly adversarial element in a conversation. However, it is often used (with no adversarial sense) at the beginning of a quotation. It often seems to be included to signal that a quotation is at hand, there being no other indicator at the beginning of a quotation.

- (1155) ... jàṅá-bà, háýè yǎ: yéré gá-bà
 ... request.Impf-3PIS, well go come.Imprt say.Impf-3PIS
 ‘... they will request (the bride). “Well, go and come back-Sg!,” they (=bride’s kin) will say.’ **2004.3.20**

19.2.2 ‘Well, in that case...’ (wálâ:)

Pronounced wálâ:, French *voilà* ‘there it is’ occurs in texts in situations similar to those of háýè. However, wálâ:, more than háýè, is a response to something just said (cf. English *there you are!* as a confirmation). I find a free translation ‘well, in that case ...’ appropriate, as in (1156).

- (1156) wálâ: bíré běj-jè-w
 well work(noun) get-RecPf-2SgS
 ‘Well, in that case you-Sg have got some work to do.’ (bèré-)
2004.3.20

19.2.3 ‘But ...’ (kà:, ká:, gà:)

Clause-initial kà: (most common variant), gà:, or ká: has the adversative sense ‘but’. This is a regional form, occurring with slight phonological variations in the languages of the zone, including Fulfulde and Songhay. I am unable to confidently establish a lexical tone. In isolation, my assistant pronounces ká: with fairly high pitch, but most textual occurrences have L-toned kà: or variant

gà: It may be that kà: is correct phonological transcription while the high-pitched version is intonation, i.e. kà:↑.

- (1157) a. [kó dógúrù ké] [bì rè gàrá] kò:-ró,
 [Nonh time.HL Topic] [work.L big] be.Nonh-Neg,
 kà: èjù-yéy jó:=kò
but field-go much=be.Nonh
 ‘At that time there is no major work (in the fields), but going to the fields is common (anyway).’ **2004.3.6**

- b. [cín=kò jì :ⁿ]
 [thus=be.Nonh Past]
 kà: íjé [kó kùⁿ] kó kò:-ró
but today [Nonh Def] Nonh be.Nonh-Neg
 ‘It was like that in the past, but today, that [topic], there is none of that.’ **2004.3.21**

- c. [kó ná:∴ fú:⇒] néyⁿ=yⁿ,
 [NonhP entirety all] blood=it.is,
 gà: [kò mòbíl mà jíré lé] ...
but [Dem vehicle Poss front in]
 ‘the whole (interior of vehicle) was bloody, but in the front of that vehicle ...’ (nêyⁿ) **2004.5.1** [overlaps with (1149.b)]

French *mais* (often heard with low tone) is increasingly used among young people, as in all languages of this area.

19.2.4 ‘So, ...’ (bèy, hónò)

Another clause-initial discourse particle is bèy. It is best translated as sentence-initial ‘So now, ...’. It occurs in the middle of conversations as a presentential particle, set off with an intonation break. It occurs, for example, when the speaker is ready to ask a follow-up question of the interlocutor, developing the preceding discourse. The particle does not mean ‘so’ in the causal sense.

- (1158) a. bèy, [yà:jí: páyá-tù:-Ø] ñě-n
so, [marriage tie-Perf-2SgS] woman-Sg
 dôm [á úrò] táṅá yèl-lí-Ø
 for.now [2SgP house.Loc.HL] transfer come-PerfNeg-3SgS

‘So, (now) you’ve contracted the marriage, but the woman hasn’t (yet) come and moved into your (=bridegroom’s) house.’ (yèrÉ)
2004.3.20

b. [é nè] bèy [tùmó dójù] dà:ⁿ-bé
 [2Pl now] **so** [stone under] sit.Perf.L-2PlS
 ‘So you-Pl are sitting (=living) at the bottom of the hills.’ **2004.4.5**

Another particle is hónò. This is a Fulfulde borrowing, used occasionally in Jamsay. It can be glossed ‘so’ in a more literally causal sense.

(1159) [á òrú] bĕ-r dùjù-lá-Ø pĕy,
 [2SgP matter] 3Pl-Dat heavy.L-Neg-3SgS at.all,
 hónò gùnó-n jín=î: ú yàŋá-bà⇒
 so slave-Sg like=Foc 2SgO look.at.Impf-3PlS
 ‘Your-Sg situation (=behavior) is not at all important to them, so it’s
 like a slave [focus] that they look on you.’ (bè-rú) **2004.5.4**

Preclausal topical phrases based on Nonhuman kó (here with discourse-deictic reference) are also common (§4.3.2). The phrase [kó kùⁿ] ‘that (discourse-definite)’ is often used to preface new material that is somehow contextualized by the preceding material. It may be loosely translated as ‘so, ...’ or ‘that being the case, ...’, but with no strong causal connotations. Like English so, [kó kù] is often used at the beginning of a question in the middle of an interview; examples are in (1202) and (1205).

19.2.5 ‘Indeed’ (hà:sín)

This particle, of rather low text-frequency, is clause-initial. I gloss it ‘indeed’ or ‘in fact’. In addition to the examples in (1160), see (197.b). In (1160.a), the village elders announce their findings in a hypothetical case where a cow damaged a farmer’s field.

(1160) a. mâ:n, hà:sín [á nàŋá kùⁿ],
 So-and-so, **indeed** [2SgP cow Def]
 [wó èjú] ñùnù-ŋó-sà-Ø
 [3SgP field] be.ruined-Caus-Reslt-3SgS
 ‘So-and-so (vocative), indeed your cow did damage his field.’
2004.3.10

- b. hà:sín [kó bèrè-àrⁿá:], [kó bèrè-sèmî:~:],
indeed [NonhP stick.L-male], [NonhP stick.L-?]
 [lá:-lá: ké] sěw kúnó-bà jì:ⁿ
 [first-first Topic] small.branch put.Impf-3PlS Past
 ‘(After gathering wood,) indeed (there were) large roof beams, and
 mid-sized poles (to be laid across the beams); in the old days
 [topic], they used to put little branches (in a roof).’ **2004.3.25**
- c. ú:rⁿó íjé wò gá: kân
 get.up stand 3SgS.L say after
 hà:sín yǎ: bèrè-gó-Ø
 indeed go can-impfNeg-3SgS
 ‘When it (=mouse, drunk with millet beer) stood up, it was indeed
 unable to go (=walk steadily).’ **2004.4.1**

19.2.6 ‘Lo, ...’ (jàká⇒, jákà-jákà)

Presentential marker *jàká⇒* or iterated *jàkà-jákà*, borrowed from Fulfulde *jaka*, occurs before clauses in narrative that contain a surprise or other strongly highlighted material. In my texts, it occurs only in lively tales and anecdotes.

- (1161) a. [wó yí-dì:ⁿ nâ: mà↑] wà↑, òⁿhóⁿ wá,
 [3Sg here spend.night.Impf Q] say, un-huh! say,
 jàká⇒ [kó kò-y] kó dà:rà-Ø
lo! [NonhP eat.meat-VblN] Nonh dare.Perf.L-3SgS
 ‘(Camel) said, “so you-Sg will spend the night here?” (Hyena) said:
 “un-huh!” But lo!, it (=Hyena) [focus] had an urge to eat it
 (=Camel).’ **2004.4.3**
- b. jákà-jákà [wàrù-wára-n ké]
lo! [farm(noun).L-farm.H-Ppl.Sg Topic]
 [cè: wó já:sé-sà-Ø.: fú:] kò:ró
 [thing.L 3SgO be.shiftless-Reslt-Ppl.Nonh all] be.Nonh-Neg
 ‘Lo!, a farmer [topic], there is nothing more shiftless than him.’
2004.4.4

19.3 Pragmatic adverbials or equivalents

19.3.1 ‘Firstly’ (tí⇒) and ‘to conclude’ (dùmnó)

tí⇒, related irregularly to numeral túrú ‘one’, can be used clause-initially in the sense ‘for one thing’ or ‘firstly’ (‘to begin with’), suggesting that there is more to come.

- (1162) a. jémè-m mà nèwⁿé [dòγð-úrò]
 blacksmith-PI Poss value [Dogon.L-house.Loc.HL]
 dògð-gó-Ø àbádá⇒, tí⇒ jémè-n némné-n≡í:
 finish-ImpfNeg-3SgS never, **first** blacksmith-Sg griot-Sg=it.is
 ‘There is no end to the usefulness of the blacksmiths (caste) among
 the Dogon. For starters, a blacksmith is a griot (=bard).’ **2004.3.12**

- b. dòγð-î-n wó năn-tù-bà dèy
 Dogon-child-Sg 3Sg bear-Perf-3PIS if
 [wó bè nárⁿà-Ø] tí⇒ yàηá mèyⁿ,
 [3SgO 3PIS.L bear.Perf.HL-Ppl.Nonh] **first** take and,
 hâl yă: méy [[wó é:rú] dògð-Ø], ...
 until go and [[3SgP life] finish.Perf.L-3SgS, ...
 ‘A Dogon child [topic], when they have borne him (=when he is
 born), starting from when they have first borne him, continuing
 until his life has ended, ...’ (nârⁿá) **2004.3.12**

An alternative expression meaning ‘for one thing’ is dôm ké, a topicalized form of dôm ‘(up to) now’.

For sequential adverbial ‘first’ (as in ‘think first, then act’), see lá: in (474.b).

‘To conclude’ may be expressed by kó dùmnó, literally ‘its ending’.

19.3.2 ‘(Not) again’, ‘on the other hand’ (làγá)

làγá, also a simple adjective meaning ‘other’, is used adverbially in a range of functions. It is fairly common in negative sentences in the sense ‘(not) again’, ‘(not) any more’ (1163).

- (1163) a. kó cè:ⁿ-bà,
 NonhO slaughter.Perf.L-3PIS,
 ù:rⁿð-lí-Ø làγá tàηà-Ø
 get.up-PerfNeg-3SgS **other** happen.Perf.L-3SgS

‘They cut its (=lion’s) throat. It didn’t get up again, so it happened (=luckily).’ **2004.3.4**

- b. làyá pàntè-ý
other repeat-ImprtNeg
 ‘Don’t do it again!’ **2004.3.10**

kó làyá ‘other than it’ or kó kù:ⁿ làyá ‘other than on it’ is occasionally used in the sense ‘in addition’. This sense is more often expressed in texts by phrases with a verb like gàrá- ‘pass, go past’ (§19.3.4, below).

làyá is also used to mark a major shift in topics (‘elsewhere, ...’ or ‘meanwhile, ...’). In (1164), it marks an interruption in a narrative sequence, where the narrator moves back in time. The speaker has been describing how he and a companion had traveled from Dogon country to Gao (in northern Mali).

- (1164) [*coxeur* bé] kò-rú jó: lóy-â:-Ø, háyè
 [middleman Pl] Nonh-Dat be.many overflow-Perf-3SgS, well
 [émé kú:ⁿ lè] làyá èmè yâ:-Ø kù:ⁿ,
 [1PIP head with] **other** 1PIS.L go.Perf.HL-Ppl.Nonh Def,
 [[úrò èmè gô:-Ø] lè] bã:,
 [[house.Loc.HL 1PIS.L go.out.Perf.HL-Ppl.Nonh] in] since,
 [a... mà bón] èmè-n ó:-sà-bà jì:ⁿ
 [A Poss name] 1Pl-Dat give-Reslt-3PIS Past
 ‘... there were plenty of coxeurs (=transportation middlemen) there (=in Gao). Well, as for us [topic], separately, (back) when we left, back at the time when we left home, they had given us the name of A (=as a reliable coxeur).’ **2004.5.5** (émé kú:ⁿ lè emended)

19.3.3 ‘And so forth’ (tímé-, cè: kâ:ⁿ-kâ:ⁿ)

‘... And so forth’ may be expressed as list-final phrase meaning ‘what resembles it/them’. There are several variations on the syntactic form, but the verb is tímé- ‘resemble’. In (1165), we have a conjunction structure with bé after both conjuncts (§7.1.2).

- (1165) [kó bé⇒], [kó tímé-sà-Ø bé⇒]
 [Nonh Pl], [NonhO resemble-Reslt-Ppl.Nonh Pl]
 ‘that (just described) and what resembles it’

An alternative is cè: kâ:ⁿ-kâ:ⁿ ‘thing each-each’, as in line 2 of (1211).

Another alternative is an iteration of *cín* ‘thus’: *cín-cín-cín-cín* ‘and so forth’.

19.3.4 ‘In addition’ (*gàrá-*, *dògó-*, *píliwé*)

More expressions meaning ‘in addition to that’ are literally ‘if it goes beyond that’ (1166.a) with verb *ná:-*, ‘if it has passed that’ (1166.b) with verb *gàrá-*, or ‘if that is finished’ (1166.b) with verb *dògó-*.

(1166) a. [núŋò mà kù:ⁿ] ná:-yⁿè-Ø dèy
 [Dem Poss on] **go.beyond-Perf-3SgS** if
 ‘furthermore, ...’

b. kò gǎy-yè-Ø dèy
 Nonh.L pass-Perf-Ppl.Nonh if
 ‘in addition to that, ...’ (*gàrá*) **2004.3.6**

c. [kó kùⁿ fú:] dòg-â:-Ø dèy
 [Nonh Def all] be.finished-Perf-3SgS if
 ‘in addition to all that, ...’ **2004.3.9**

In (1166.b), the L-tone on *kò* shows that it is not a regular object pronominal. Perhaps it is an L-toned preverbal subject pronominal, or an unusual case of demonstrative *kò* ‘that’ not modifying a following noun.

píliwé- is a common verb meaning ‘return, go back’. As a nonfinal verb in a chain, *píliwé* may usually be glossed ‘again’. However, it may be stretched into a distinct adverbial sense close to ‘furthermore’. In (1167), I render it with the English verb ‘proceed to’, suggesting a sequence of actions.

(1167) [kò nà:m-pì rⁿé kùⁿ], píliwé kó há:sé-bà,
 [Dem cotton.L-powder Def], **return** NonhO card.Impf-3PIS,
 há:sé-sà-bà dèy, píliwé kó mì rⁿé-bà
 card-Reslt-3PIS if, **return** NonhO spin.Impf-3PIS
 ‘(After the seeds are removed by ginning), (as for) that ginned cotton [topic], they proceed to card it; when they have carded it, they proceed to spin it.’ **2004.3.14**

19.3.5 ‘Frankly’ (tòyⁿó)

Something like ‘frankly, ...’, mitigating an unpleasant affirmation, can be expressed as a topicalized ‘if it’s the truth, ...’ (1168).

- (1168) [tòyⁿó≡yⁿ dé ké] ñǎ: dènè-gó-m
 [truth=it.is if Top] meal want-ImpfNeg-1SgS
 ‘To tell the truth, I don’t like the meal.’

19.4 ‘Only’ particles

19.4.1 ‘Only’ (sǎy)

The regular ‘only’ particle is sǎy, following the relevant constituent. The R-tone is often dropped to L-tone, especially in prepausal position; this is similar to what happens with R-toned numerals like lěy ‘two’. The R-tone, however, is audible in (1160.a-b).

- (1169) a. [í:rⁿé lè sǎy] kó bì rê:-Ø
 [iron Instr **only**] NonhO work.Impf-3SgS
 ‘He (=blacksmith) works strictly with iron (=metal).’ **2004.3.12**
- b. [wò ké] [dù-dùgú-n=í: sǎy] wò-Ø
 [3Sg.L Topic] [Rdp-sorceror-Sg=Foc **only**] be.Hum-3SgS
 ‘Him [topic], he is only a sorceror (not also a healer).’ **2004.3.27**

When added to a conjoined NP, sǎy may be repeated, appearing with left and right conjuncts, and it may therefore carry the special prosodic lengthening and F-tone associated with conjunction (1170).

- (1170) [bé sǎy.:], [bé ñà:-bà:ñá sǎy.:]
 [3Pl **only**], [3Pl food-bowl **only**]
 ‘Just them and their eating bowls.’

sǎy is not as common in texts as ‘only’ forms in many other languages, since it gets stiff competition from an explicitly or implicitly double-negative construction including ≡y là: dèy (§11.2.1.3, §16.4). This means literally ‘if it is not X’, but can extend to ‘unless it is X’ (i.e., ‘except X’, ‘other than X’), and with implied by unexpressed double-negative ‘(nothing) unless it is X’, which is equivalent to ‘only (=exclusively) X’.

19.4.2 ‘A mere ...’ (lók)

An interjection-like emphatic particle *lók* may follow a numeral or other quantified expression. It is a colorful alternative to *săy* ‘only’, cf. English *a mere* or *a paltry*. In (1171), *kó túrú* ‘one of them’ is repeated later in the stronger form *kó túl lók*.

- (1171) *dì:n àrⁿá mì l-lí-Ø nè [kó túrú] kó=y*
 place.L rain rain.fall-PerfNeg-3SgS now [Nonh one] Nonh=Foc
tì gè-y jì rⁿé [i ñé lè] cé:nê-Ø,
 wait.for.Perf.L-1PIS wet.season [what? Inst] be.good.Impf-3SgS
 e! [kó túl lók] kó=y tí gè-y là:,
 eh? [Nonh one a.mere] Nonh=Foc wait.for.Perf.L-1PIS Neg
mì l-lí-Ø tán ké nùm-â:yⁿ
 rain.fall-PerfNeg-3SgS only Topic fall-Perf-1PIS
 ‘Where the rains haven’t fallen now, (just) one of them (=one rain), that
 [focus] is what we waited for. The wet season [topic], how could it be
 good, huh? Just one lousy rain, that [focus] is what we waited for, no?
 If it (=rain) didn’t fall, we were in trouble.’ (túrú, mì rⁿé-) **2004.4.28**

lók may follow other numerals, as in *bú:dù tà:n lók* ‘a mere three riyals (=15 francs CFA)’. However, it is most often used with ‘one’.

lók is unusual in ending in a stop. This possibility is limited to interjections (and poorly integrated loanwords).

19.4.3 ‘If (only)’ (tán)

A particle *tán*, from a Fulfulde particle meaning ‘only’, is used in Jamsay as a clause-final particle, substituting for *dey* ‘if’. An instance of *tán* occurs near the end of (1171), above. See §16.2 for discussion.

19.5 Emphatics

For a pronominal construction of the type ‘you with your head’, meaning ‘you yourself’, see §18.1.3. For adverbs of specificity (‘exactly’, etc.), see §8.5.3.2-3.

19.5.1 Phrase-final *já:tì*

The regional (e.g. Fulfulde) word *já:tì* ‘indeed’ is often used to signal agreement with what the interlocutor has just said.

- (1172) *yó=kò* *já:tì*
 exist=be.Nonh **Emph**
 ‘Yes, that exists indeed (just as you said).’ **2004.4.6**

já:tì is also used in NP-final position.

- (1173) [*cítánà* *kùⁿ* *já:tì* *ké*] [*kò* *ké*],
 [drought.of.1914 Def Emph Topic] [Nonh.L Topic],
ì nná:dì llâ:y *àlámó:nèn*
 by.God God.forfend
 ‘The drought of 1914 indeed [topic], as for that [topic], may God preserve us (from that).’ **2004.4.28** (ending in Fulfulde phrase)

For *já:tì* as a positive response (‘indeed’) to an interlocutor’s statement or request, see e.g. (1201).

For reduplicated adverbial *já:tì-já:tì* ‘precisely’, see (492) in §8.5.3.3.

19.5.2 Clause-final *kòy*

This particle is added to the end of a sentence as a mild emphatic. Similar forms occur in Fulfulde and some Songhay languages.

- (1174) a. *ñě-m* *yé* *dé:-rà-bà* *kòy*
 woman-Pl Index carry-Habit-3PIS **Emph**
 ‘Women [topic], they certainly take (push-carts).’ **2004.3.6**
- b. [*dög-Ø* *ké*] *dògò-gó-Ø* *kòy*
 [finish-VbIN Topic] finish-ImpfNeg-3SgS **Emph**
 ‘They (=grasshoppers) do not completely disappear.’ (*dòg-ú*)
2004.3.8

When an original utterance ending in Emphatic *kòy* is quoted, Quotative particle *wa* precedes *kòy*. The result is therefore [*S₁ wa kòy*], where *S₁* is the basic proposition in the original utterance. An example is (1003).

19.5.3 Clause-final *dé*

This particle occurs with slight phonological variation in all languages of the zone, and is even used in local French. It seems less common in Jamsay, where it may be a fairly recent borrowing.

In (1175.a), the speaker responds with a trace of irritation to a vague question about what kinds of song-and-dance festivities there are. In (1175.b), the negation is emphatic.

- (1175) a. *dòyò-cèrⁿèwⁿé* mà sî: jî-jò: dé
 Dogon.L-fun Poss kind Rdp-be.many.Perf.HL **Emph**
 ‘Hey, there are lots of kinds of Dogon festivities!’ **2004.3.22**
- b. *non!* ú à:-j-é dé, ú dàyá-bà
 no! 2SgO catch-PerfNeg-3PlS **Emph**, 2SgO leave.Impf-3PlS
 ‘No! They (=colonial army recruiters) wouldn’t accept you-Sg at all! They would reject you.’ **2004.4.22**

19.5.4 Clause-final ‘(not) at all!’ particles (*péy*, *sóy*, *fés*)

Various clause-final emphatic particles, pronounced as interjections, occur in emphatic negatives like (1176).

- (1176) *bé* [gùjú-jém=ù: dèy],
 3Pl [skin-black.HL=it.is-2Sg if],
 [á òrú] bẽ-r dùjù-lá-Ø péy
 [2SgP matter] 3Pl-Dat heavy-Neg-3SgS **at.all**
 ‘They (=Algerians) [topic], if you-Sg are a black-skinned person (=an African), your situation (=behavior) is not at all important to them.’
 (gùjú-jêm [bahuvrihi], bẽ-rú) **2004.5.4**

This is the only occurrence of *péy* in my recorded texts, though I have heard it in conversation. Elicitation brought out two other particles with similar ‘(not) at all’ uses, *fés* and *sóy*. For *sóy*, whose more general sense is ‘all, entirely’, see cf. §8.5.8.7.

fés is unusual in ending in a sibilant, a possibility restricted to interjections (and poorly integrated borrowings). *fés* itself resembles ‘(not) at all’ particles in some other languages of the region (e.g. Humburi Senni).

19.5.4.1 *Emphatic construction with verb plus topicalized related nominal*

This construction has **truth-value emphatic** function, as when an assertion is reaffirmed to a skeptical audience, or when someone lays down the law to a child or other subordinate about what will or will not happen. The discourse flavor can be approximated by adding ‘sure as hell’ or the like to the free translation.

A nominal related to the verb (perhaps a Verbal Noun) is followed by Topicalizing particle *ké* (§19.1.1), then the inflected verb form (1177.a-b). There is no prosodic break between the “topical” phrase and the verb, suggesting that the topical constituent is clause-internal. Where both a Verbal Noun and another cognate nominal are available, either may be used (1177.c-d). For verbs like ‘fight’ that are regularly accompanied by a cognate nominal, my assistant did not accept a proposed version where the cognate nominal and the Verbal noun (i.e. as a compound Verbal Noun) both occurred (1177.e).

- (1177) a. [däg-Ø ké] dägà-j-é
 [**leave.VblN** **Top**] **leave**-ImpfNeg-3PIS
 ‘(You can bet) they won’t leave (it).’ (däg-ú) **2004.3.2**
- b. [nũ-yⁿ ké] nù:-gó-w
 [**enter.VblN** **Top**] **enter**-ImpfNeg-2SgS
 ‘You-Sg (damn well) won’t go inside.’
- c. [jěy-Ø ké] jèyè-gó-bé
 [**fight.VblN** **Top**] **fight**-ImpfNeg-2PIS
 ‘You-Pl won’t (=you better not) fight.’
- d. [jéy ké] jèyè-gó-bé
 [**fight(noun)** **Top**] **fight**-ImpfNeg-2PIS
 [= (c)]
- e. #[jèy-jěy-Ø ké] jèyè-gó-bé
 [**fight(noun)-fight.VblN** **Top**] **fight**-ImpfNeg-2PIS
 [= (c) but not accepted]

If there is a noncognate direct object, the Verbal noun or cognate nominal is omitted.

- (1178) [nòwⁿó ké] kó:-jè-m
 [**meat** **Top**] eat(meat)-RecPf-1SgS
 ‘I have indeed (already) eaten meat.’

- | | | |
|----|------------|----------------------------|
| A: | jâm | ‘Peace’ |
| B: | àlpé:≡ŷ | ‘It’s a greeting!’ (àlpê:) |
| A: | àlpé:≡ŷ | ‘It’s a greeting!’ |
| B: | tà:ré | ‘Fine.’ |
| A: | jâm | ‘Peace.’ |
| B: | jám≡ì: | ‘It’s peace.’ |
| A: | jám≡ì: sày | ‘It’s peace only.’ |
| B: | jám≡ì: sày | ‘It’s peace only.’ |
| A: | tà:ré | ‘Fine.’ 2004.5.1 |
- (1182)
- | | | |
|----|-------------------------|---|
| A: | ná:m | ‘Good morning.’ |
| B: | ná:≡kò | ‘Good morning.’ [reply] |
| A: | [inaudible] | — |
| B: | jám nà:-w ⁿ | ‘Did you-Sg sleep in peace?’ |
| A: | jám≡ì: | ‘It’s peace.’ |
| B: | káñá nà:-w ⁿ | ‘Did you-Sg sleep well?’ |
| A: | jám≡ì: sày | ‘It’s peace only.’ |
| B: | tà:ré | ‘Fine.’ |
| A: | sé:w nà:-w ⁿ | ‘Did you-Sg sleep in well-being?’ |
| B: | jâm sày | ‘Peace only.’ |
| A: | [é jèjú] sé:w nà:-Ø | ‘Did your-Pl bodies sleep in well-being?’ |
| B: | sé:w nà:-y ⁿ | ‘We slept in well-being.’ |
| A: | tà:ré | ‘Fine.’ 2004.4.7 |

The components of these greetings are partly based on counterparts in Fulfulde, and the senses (‘peace’, ‘welfare’, etc.) blur into each other, making literal translation difficult. The lexical stems typical of greetings are those in (1183).

(1183) a. verb and related greeting forms

- | | |
|----------------------|--|
| ná:- | ‘spend the night’ (unaffixed Perfective nà:-) |
| ná:m | ‘good morning’ (in greetings) |
| ná:≡kò | (reply to ná:m, literally ‘it will spend the night’) |
| ná: mây ⁿ | (plural-addressee variant of ná:m) |

b. nouns/adverbs with vaguely identifiable sense but limited to greetings

- | | |
|------|---|
| jâm | ‘peace’ (Fulfulde) |
| káñá | ‘feeling well’ (often iterated in greetings: káñá-káñá) |
| sé:w | ‘well-being’ |

c. nouns or adverbs with no clear lexical sense, limited to greetings

àlpê:

tà:ré (used to close a greeting sequence or sub-sequence)

d. particles and clitics

sǎy 'only' (often sǎy with L-tone)

≡ỹ, ≡ì: 'it is' (clitic)

A progressive sequence from jâm to jám≡ì: to jám≡ì: sǎy is typical.

A generous set of time-of-day greetings and responses is given in (1184). When the addressee is plural, replace ná:m by ná:m-ây, and pǒ: by pǒ:-ỹ bè. The responses are invariant. The most general greeting is simple pǒ:, which is used especially around mid-day but can be used as a default at other times. As (1184) shows, pǒ: may follow terms meaning '(late) afternoon' and 'evening, night'. Whether alone or at the end of a fuller greeting, pǒ: is often prolonged intonationally (unless iterated) and has rather low pitch; it may be represented in this case as pǒ:⇒↓, see (1.d). The greetings based on ná:m appear to be (frozen and slightly irregular) singular imperatives in form, hence the plural ná:m-ây.

(1184) Time-of-day greetings

A: ná:m 'good morning!'

B: ná:≡kò

A: pǒ:⇒↓ 'good day!'

B: ó:.

A: dà:yà-ní: pǒ:⇒↓ 'good afternoon!' (after 2 PM)

B: ó:.

A: dà:yá pǒ:⇒↓ 'good evening!'

B: ó:.

A: jâm ná:m '(may you have a) good night!'

B: àmí:nà

Situation-specific greetings (based on the addressee's location or activity) are given in (1185). The response in all cases is ó:.. Compare nouns èjú 'field', bíré 'work', éwé 'market', and à-kóró 'well'. Except for 'field', these nouns end in a ...HH tone sequence over the last two syllables. This changes to ...HL in the greetings, which suggests **tonal-locative** form (§8.1). Regarding éwè, there is in fact an attested (but uncommon) tonal-locative éwè 'in the market'

(436). However, there is no attestation, outside of greetings, of tonal locatives #bírè ‘at work’ or #à-kórè ‘at/in the well’. èjú ‘field’ has a lexical LH tone sequence and does not change (if it had a tonal locative it would be #èjú:).

(1185) Situational greetings

A: èjú pǒ:⇒↓ (to one in, or returning from, a field)
B: ô:.

A: bírè pǒ:⇒↓ (to one at, or returning from, work)
B: ô:.

A: éwè pǒ:⇒↓ (to one in, or returning from, a market)
B: ô:.

A: à-kórè pǒ:⇒↓ (to one at, or returning from, a well)
B: ô:.

20 Dialects

20.1 Mainstream (non-Gourou) dialects

This grammar is based on the variety of Jamsay spoken in Dianwely Kessel, about 15 km south of Douentza. There is undoubtedly considerable variation in Jamsay proper (excluding Gourou), for example from Douentza to Mondoro, but this variation has not yet been studied. For more on the geography, see §1.2.

20.1.1 Mergers of mid-height vowels in nasalized environments

One dialectal issue within mainstream Jamsay is the (partial) merger of ϵ and e (as e) and of ɔ and o (as o) in certain types of nasalized environment. This raising is typical of my Dianwely data, but I have noticed that at least some of the non-Dianwely dialects (including Mondoro) preserve these vocalic distinctions. Even in villages not far from Dianwely, I have noticed anecdotally that the distinctions are preserved.

The raising of $\{* \epsilon \text{ ɔ} \}$ to Dianwely $\{e o\}$ takes place when a stem-final short $* \epsilon$ or $* \text{ɔ}$ after a nasal was not reinforced by a similar vowel earlier in the same stem. In cases like $s\grave{a}\text{-}s\grave{e}\eta\acute{e}r^n\grave{e}$ ‘sifting residue’ and $t\acute{e}m\acute{e}$ ‘encounter’, the occurrence of two or three identical vowels blocks raising. Raising is likewise not observed in derivational suffixes whose vowel is copied from one in the stem, e.g. passive $t\acute{e}m\acute{e}\text{-}w^n\acute{e}$ ‘be found’. Such stems as $\acute{n}\acute{e}$: ‘eat’ and $n\grave{o}$: ‘drink’ show that long vowels, at least in monosyllables, do not undergo raising. Therefore the typical environment for raising is the final vowel in $CV_{nh}NV$ where N is a nasal or nasalized consonant and V_{nh} is a non-harmonic vowel, i.e. from the set $\{i u a\}$.

An important instance of homophony in Dianwely due to this neutralization is (1186). The original distinction is maintained in Mondoro.

(1186) gloss	Dianwely	Mondoro
‘fire’	$n\acute{u}w^n\acute{o}$	$n\acute{u}w^n\acute{o}$
‘die’	$n\acute{u}w^n\acute{o}$	$n\acute{u}w^n\acute{o}$

Other examples where Dianwely e or o reflects $* \epsilon$ or $* \text{ɔ}$ are given in (1187).

(1187) gloss	Dianwely	Mondoro
‘daytime’	nù-núw ⁿ ó [variant nì-núw ⁿ ó]	nù-núw ⁿ ó
‘pain’	nùr ⁿ ó	nùr ⁿ ó
‘sauce’	nì ñé	nì ñé
‘gear’	nì :ñé	nì :ñé
‘sprinkle’	mì ñé	mì ñé

20.2 Gourou

Gourou (/gùrú/) is the term for a zone near Koro where a distinctive dialect (also called by this name) is spoken. My skeletal data are from the village of Kiri on the highway from Koro to the Burkina border, collected during a 5-day visit there in 2004. I worked with an old man, but noticed that younger people were speaking something closer to mainstream Jamsay.

Most of the basic Gourou vocabulary is identical to that of Jamsay. However, there are some striking phonological divergences. These will be illustrated below, but bear in mind that the Gourou forms need to be checked in future fieldwork.

20.3 Comparative Jamsay-Gourou phonology

One striking feature of Gourou is the **virtually complete absence of palatoalveolar {j c}**. In basic (i.e. non-flora-fauna) vocabulary, I recorded sújúró ‘wipe’ (the j here is reduced from *ñj, see below), and that was it for palatoalveolars. In Jamsay, there is some reason to think that a process of palatalization of velars {g k} before front vowels {i e ε} may have been going on, since e.g. ji is much more common than gi, ce is more common than ke, and so forth. However, this palatalization is not rigorous in Jamsay, and there is still a clear phonemic difference between g and j, and between k and c.

As a result, the Jamsay/Gourou correspondences are **g/g or j/g**, and **k/k or c/k**. Jamsay is more likely to preserve the original distinctions in these cases, though some recent palatalization may have taken place in Jamsay. Some examples (among many) are given in (1188). γ is essentially an allophone of g between low back vowels (a_a, ɔ_ɔ, ɔ_a).

(1188)	gloss	Jamsay (Dianwely)	Gourou
a. Jam j = Gou g			
	‘stand’	íjé	ígé
	‘harvest’ (noun)	jèrú	gèrú
	‘billygoat’	bèr-àjí:	bèr-àgí:
	‘black’	jém	gém
	‘gizzard’	jê: ⁿ	gê: ⁿ
	‘field’	èjú	ègú
	‘hunger’	jě:	gě:
b. Jam g = Gou g			
	‘cheek’	légé	légé
	‘thigh’	dígé	dígé
	‘lick’	dègé	dègé
	‘unravel’	gùjùró	gùsùró
	‘be capable of’	gòr ⁿ ó	gòr ⁿ ó
	‘earth’	lègú	lègú
	‘listen to’	cégéré	kégéré
	‘tie’	páyá	páyá
c. Jam c = Gou k			
	‘harvest knife’	pòrù-céwé	pòr-kéwé
	‘bone’	cì r ⁿ é	kì r ⁿ é
	‘liver’	cénè	kénè
	‘stem’	cè:rú	kè:rú
d. Jam k = Gou k			
	‘armpit’	kì-kàrá	kì-kàrá
	‘mouth’	ká:	ká:
	‘head’	kú: ⁿ	kú: ⁿ
	‘navel’	kón	kón

Correspondences involving Jamsay j are rather complex. In addition to Jamsay/Gourou j/g, as in (1188.a), above, there are many j/z and j/s correspondences. The known cases of the **j/z correspondence** are in (1189); note that the consonants in question may be **stem-initial or medial (intervocalic)**. Where cognates in other northern Dogon languages are known to me, the consonant (or cluster) corresponding to Jamsay j and Gourou z is given in the final column: the language (and locality) abbreviations are Nn = Nanga, Be = Beni, Wa = Walo, Ta = Tabi, Nj = Najamba. The predominant comparative pattern, seen in (1189.a), is Nn=Be=Nj j (matching Jamsay) but Wa=Ta z

(matching Gourou). Using Beni (for which the current data are fairly complete) as diagnostic, a smaller number of cases involve Beni s (1189.b), z (1189.c), or other (1189.d), and there are several sets where no cognates outside of Jamsay and Gourou have so far been recorded (1189.f). The comparative situation is complicated by loanwords from Fulfulde (often of Arabic origin) which are set apart in (1189.g).

(1189)	gloss	Jamsay	Gourou	comparative
a. Jamsay/Nanga/Beni/Najamba j = Gourou/Walo/Tabi z				
	'doze'	jùŋó	zùŋó	Be=Nn=Nj j, Wa=Ta z
	'pocket'	júwò	zúwò	Nn=Be=Nj j, Wa=Ta z
	'medical care'	jón	zón	Nn=Be=Nj j, Wa=Ta z
	'rainy season'	jì r ⁿ é	zì r ⁿ é	Be=Nj j, Nn g, Wa=Ta z
	'bring'	jè:ré	zè:ré	Be=Nj j, Wa=Ta z
	'betray'	jàmá	zàmá	Be=Nj j, Wa=Ta z
	'millet-spike pile'	jùró	zùró	Nn=Be j, Wa=Ta z
	'twin'	jèŋé	zèŋé	Nn=Be j, Wa=Ta z
	'marriage'	yà:-jí:	yà:-zí:	Nn=Be j, Wa z
	'forked stick'	jéy ⁿ	zéy ⁿ	Be j, Wa z
	'squabble(n)'	jéy	záy	Be j, Wa z
	'shake'	jì gí ré	zì gí ré	Be j, Ta z
	'pound into dough'	jàŋá	zàŋá	Be=Nj j, Wa z
	'full'	jó:	zó:	Nj j, Ta z
	'marry (woman)'	jé:	zé:	Be=Nn=Nj j
	'mane'	jàgú	zàgú	Nn=Be j
	'knead'	jèŋé	zèŋé	Be j
	'donkey'	jàmdúró	zàmdúró	Ta z
		[variant jàndúró]		
	'break up'	jòyó	zòyó	Ta z
	'run'	jòwó	zòwó	Ta z
	'beg'	jàŋá	zàŋá	Ta z
	'breeze'	jì-jàmá	zì-zì má	Ta z
b. Beni s				
	'file (tool)'	dì:jú	dì:zú	Nn=Be s
	'lung'	pù:jú-pà:jú	pù:zù-pà:zú	Nn=Be s
	'cough(n)'	kògòjò	kògùzó	Na=Be=Wa=Ta s

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c. Beni z			
‘fan’ (verb)	jùwó	zì wé	Nn=Be=Wa j, Ta y
‘wrestling’	à-jérù	à-zérù	Nn nj, Be j
d. other			
‘sheep’	pé:jú	pé:zú	Ng rg, Be=Wa r, Nj g
‘take handful’	jé:	zé:	Be=Wa c, Ta j
e. no comparative data (yet)			
‘type of hoe’	járáwá	zárúwá	
‘tree bark’	jǎy ⁿ	zǎy ⁿ	
‘onion’	jòw ⁿ ḏ-í: ⁿ	zàwá	
‘contradict’	jì:ré	zì:ré	
f. Fulfulde loans			
‘peace, health’	jâm	zâm	Nn=Be=Wa j
‘conversation’	gá:já:dù	gá:zè	Be j
‘Friday’	áljúmá:rè	àlzúw ⁿ ḏ	Nn=Be=Wa=Ta=Nj j
‘devil (djinn)’	jínná:jò	zíná:gù	Be=Wa=Nj j
	[also júnná:jò]		

So much for Jamsay j = Gourou z. There are also many cases where **Jamsay j matches Gourou s**. In all examples known to me, the consonant in question is **noninitial**, and in Jamsay and Gourou always **intervocalic**. The usual comparative pattern is that Nanga, Beni, Walo, and Tabi have s (like Gourou) while Najamba has j (like Jamsay) (1190.a). This suggests that Jamsay and Najamba have merged two originally distinct consonantal phonemes into j, while the other languages preserve the distinction (Gourou/Walo/Tabi z versus s, Nanga/Beni j versus s). In a few cases, the comparative data suggest an original nasal-initial cluster (1190.b). No comparative data are yet available for the examples in (1190.c).

(1190)	gloss	Jamsay	Gourou	comparative
a. unclustered intervocalic consonant				
	‘press’	léjé	lésé	Nn=Be=Wa=Ta s, Nj j
	‘be left over’	wàjá	wásá	Nn=Be=Wa=Ta s, Nj j
	‘skin’	gùjú	gùsú	Nn=Be=Wa=Ta s, Nj j
	‘handle’ (noun)	kùjú	kùsú	Nn=Be=Wa=Ta s, Nj j
	‘cut’	céjé	késé	Nn=Be=Wa=Ta s, Nj j
	‘de-feather’	gùjò	gùsò	Nn=Be=Wa=Ta s, Nj j
	‘body’	jèsú	gèsú	Nn=Be=Wa=Ta s, Nj j

‘maternal uncle’	lèjé	lèsé	Nn=Be=Wa=Ta s, Nj j
‘calabash’	kàjú	kàsú	Nn=Be=Wa=Ta s
‘pay’	tójó	tósó	Nn=Be=Wa=Ta s
‘question’	újúú	úsúú	Nn=Be=Wa=Ta s
‘road’	òjù-ká:	òsù-ká:	Nn=Be=Wa=Ta s
‘heavy’	dùjú	dùsú	Nn=Be=Wa=Ta s
‘snatch’	gùjò	gùsò	Nn=Be=Wa s
‘good’	èjú	èsú	Nn=Be=Wa s
‘pound off chaff’	péjé	pésé	Nn=Be=Wa s
‘pull’	bàjá	bàsá	Nn=Be=Wa s
‘basket (grass)’	tájù	tásù	Nn=Be=Wa=Ta=Nn s
‘unravel’	gùjùró	gùsùró	Nn=Wa s
‘under’	dójù	dósù	Nn=Ta s

b. original nasal-initial cluster

‘younger sibling’	òjò	òsò	Nn=Be nj, Wa z, Ta (ⁿ)s, Nj j
‘draw’	síjé	sísé	Be ñg, Nj j
‘pound grain spike’	dùjò	dùsò	Nn=Be=Wa y, Nj nj

c. no comparative data (yet)

‘sew’	ájára	ására
‘toilet area’	lògòjò	lògùsò
‘shroud’	béjéré	béséré

There are two cases where **both z and s** were recorded for Gourou during the brief fieldwork (1191). These require further field study.

(1191)	gloss	Jamsay	Gourou	comparative
	‘scour’	kó:jò	kó:sò kó:zò	Be s, Nj j
	‘dog’	ì jú	ì zú ì sù-kóró (‘dog’s pan’)	
	‘meet’	céjé	késé kézé	Be s

Gourou s may correspond to Jamsay s or ñ as well as to Jamsay j. The **s/s correspondence** is largely confined to **stem-initial** position; a few representative examples are in (1192.a). “Stem-initial” for this purpose includes position after an initial reduplicative syllable (1192.b). The forms for ‘sneeze’ (1192.c) are probably cognate (one dialect or the other has metathesized), so this may be

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a case of intervocalic position, but of course a raspy sibilant is effective as an onomatopoeia here. The wider cognate set for ‘sneeze’ is also problematic, but several nearby languages have an s onset of the second syllable as in Gourou (e.g. Beni ì sî yâ:).

(1192)	gloss	Jamsay	Gourou	comparative
a.	‘peck at’	sóγó	sóγó	Nn=Be=Wa s
	‘ear’	sûn	súγùn	Nn=Be=Wa=Ta=Nj s
	‘stand on tiptoes’	séwé	séwé	Nn=Be s
	‘wipe’	súñúr ⁿ ó	sújúró	Be=Wa=Ta=Nj s
	‘strain, filter’	sá:	sá:	Nn=Be=Wa=Ta s
b.	‘urine’	(s)ù-sùr ⁿ ó ù-sùr ⁿ ú		
c.	‘sneeze’ (noun)	ègèjé	èsì gé	Nn=Be=Wa=Ta s (?)

Since the j/s correspondence involves intervocalic position, while the s/s correspondence is stem-initial, a tentative conclusion is that **Jamsay and Najamba shifted *s to j medially**.

We now turn to the **ñ/s correspondence**. In the majority of cases (1193), comparative evidence points to original clusters of a nasal plus a sibilant or *j (i.e. of the type *nz, *ns, *nj) for the ñ/s correspondences. We get Nn=Be=Nj nj, and Ta ns or (ⁿ)s (perhaps these two Ta reflexes are equivalent). Where a Wa cognate is known, there is a split between z (1193.a) and less often s (1193.b); no Wa cognates are available for some items (1193.c).

(1193)	gloss	Jamsay	Gourou	comparative
a.	Walo z			
	‘millet beer’	kòñó	kòsó	Nn=Be=Nj nj, Wa z, Ta ns
	‘chicken’	èñé	èsé	Nn=Be nj, Wa z, Ta (ⁿ)s
	‘stumble’	dòñó	dòsó	Nn=Be nj, Wa z
	‘suck’	óñó	ósó	Nn=Be=Nj nj, Wa z, Ta (ⁿ)s
	‘merchant’	sèñù-sáñá-n	sèsù-sásá-n	Be nj, Wa z
b.	Wa s			
	‘intact grain spike’	cíñù	kísù	Be nj, Wa s
	‘Mossi person’	mùñú-n	mùsú-n	Be nj, Wa s

c. no Wa data			
‘rough’	kùñú	kùsú	Nn=Be nj
‘gear’	nì :ñé	nì :sé	Be nj
‘butt with head’	dòñó	dòsó	Be nj
‘wooden bowl’	bà:ñá	bà:sá	Ta (ⁿ)s
‘thin’	ùñú	ùsí: ⁿ	Ta (ⁿ)s

While Gourou has s without nasalization in the preceding examples, there are two cases where the s in Gourou is preceded by a **nasalized vowel** (1194.a). There is also one example where a ñ/s correlation is present as the second consonant in a cluster beginning with m (1194.b).

(1194)	gloss	Jamsay	Gourou	comparative
a.	‘half-ripe’	àñá	à: ⁿ sá	
	‘roselle’	àñ-î:-kó:rò	à: ⁿ sú-kòrò	Nn=Be nj, Wa z, Ta (ⁿ)s
b.	‘wing’	gámñú	gámsá	Be mj

The ñ/s correspondence also involves some sets where the comparative languages show **no sign of nasal-initial clusters**. In most cases (1195.a) the comparative data show Ng=Be=Wa=Ta s and Nj j, exactly as in (1190.a), where however the Jamsay counterpart was j rather than ñ. There is also one example (‘odor’) where the comparative data suggest *yⁿ rather than a cluster; the *yⁿ has been elided in Ng and Be (1195.b). Another difficult case is ‘wipe’ (1195.c), which is partially compatible with (1195.a), but where Gourou has j instead of s, and Ta has a nasal-initial cluster ηg instead of s.

(1195)	gloss	Jamsay	Gourou	comparative
a.	‘bad’	mòñú	mòsú	Nn=Be=Wa=Ta s
	‘wind’ (noun)	ó:ñó	ó:só	Nn=Be=Wa s
	‘thousand’	mùñú	mùsú	Nn=Be=Wa s, Nj j
	‘sprinkle’	mì ñé	mì sé	Nn=Ta s, Nj j
	‘lie down’	ì ñé	ì sé	Ta s
b.	‘odor’	jíñù	gísù	Wa y ⁿ (cf. Nn gí: ⁿ , Be jí: ⁿ)
c.	‘wipe’	súñúr ⁿ ó	sújúró	Be=Wa s, Ta ηg, Nj j

Comparison with Gourou also reveals that intervocalic *η has been lost in Jamsay certain lexical items (1196.a), though not in others (1196.b).

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(1196)	gloss	Jamsay	Gourou	comparative
a.	*ŋ lost in Jamsay			
	‘ear’	sûn	súŋùn	Nn súŋùr ⁿ ì, Ta sùgúrú
	‘remove’	gǎ: ⁿ	gùŋó	Ta gùŋó
	‘get up’	ú:r ⁿ ó	úŋúr ⁿ ó	Be íŋgírí, Ta úŋgúró
		[dialectally Jamsay	úŋúr ⁿ ó]	
	‘waterskin’	ǎ:r ⁿ ǎ	ǎŋór ⁿ ǎ	Nn òmórò, Be òmdô:, Wa m̀b̀ùr̀ò:
b.	*ŋ lost in Gourou			
	‘Afterworld’	núŋur ⁿ ú	nú:r ⁿ ú	
c.	*ŋ preserved in both Jamsay and Gourou (among many exx.)			
	‘chest (body)’	gǎŋó	gǎŋó	Nn=Ta=Nj ŋ, Be=Wa ŋg
	‘carry (child)’	dùŋó	dùŋó	
	‘stool’	túŋúr ⁿ ú	túmúrú	Nn=Be=Wa ŋg

Comparison with Gourou also shows that a few Jamsay words have contracted an original bisyllabic *Cuwo to Co: (1197.a) and *Ciye to Ce: (1197.b). That the Gourou bisyllable is original, at least in the *Cuwo cases, is showed by wider comparative data not given here. There are several other stems with w in a similar environment that have not contracted (1197.c).

(1197)	gloss	Jamsay	Gourou
a.	*w lost in Jamsay		
	‘eat (meat)’	kó:	kúwó
	‘time(s)’	kó:	kúwó
b.	*y lost in Jamsay		
	‘father’	dě:	dì yé
c.	no loss of semivowel (examples)		
	‘spill, pour’	yùwó	yùwó
	‘fan’ (verb)	jùwó	jùwó

Jamsay and Gourou also differ in the treatment of medial vowels in uncompounded trisyllabic stems. Jamsay likes to harmonize this vowel with one or both flanking vowels, except for requiring a high vowel in verbal nouns (suffix -ú). Gourou more systematically favors a high vowel in the middle

syllable of trisyllabics, as do several other northern Dogon languages. The high vowel is in a metrically weak position and may syncopate.

(1198)	gloss	Jamsay	Gourou
	‘cough’ (noun)	kògòjò	kògùzó
	‘(de-)shell’ (verb)	kórówó	kúrówó
	‘folding knife’	sèrèwé	sèrúwé
	‘fun’	cèr ⁿ èw ⁿ é	kèr ⁿ ì wé
	‘spur’ (noun)	sèrèwé	sèrwé

A difference in the consonantal phonology of verbal derivation was noted: Jamsay súnú-ηó versus Gourou súnú-gó ‘take down’, causative of ‘go down’ (Jamsay sùgó, Gourou sígé). Both causative variants show nasalization of the consonants, but only one consonant is affected in Gourou. Likewise in the inchoative adjectival verb ‘go far away’ (Jamsay wànà-ηá, Gourou wàn-gá), cf. adjective wàýá ‘distant’ (both dialects). A similar correspondence is seen in the noun ‘trap’: Jamsay jénéηé, Gourou géηgé.

21 Texts

Text 1: Collective Hunting

(1199) A: pǒ:
greeting

‘Hello!’

B: pǒ: pǒ:⇒↓
greeting greeting
‘Hello (to you)!’

A: sɛ:w wɔ̀-w
well-being be.Hum.Perf.L-2SgS
‘You-Sg are all right?’

B: jâm
peace
‘Peace.’

A: àlpê:
greeting
‘Greeting(s)!’

B: àlpê:
greeting
‘Greeting(s)!’

A: tà:rɛ́
fine
‘Fine.’ [end of greetings]

B: tà:rɛ́
fine
‘Fine.’ [end of greetings]

[greeting sequence initiated with pǒ: and terminated by tà:rɛ́; terms sɛ:w, àlpê:, and tà:rɛ́ have only vague senses; see §19.7]

(1200) A: íjé èmĕ-n—, [[[tàrá mà kû:ⁿ] tɛ́gú]
today 1Pl-Dat—, [[[coll.hunt Poss on] speech]
ù tɛ́gê:-Ø] dènê-y,
2SgS.L speak.Impf-Ppl.Nonh] want-Impf-1PIS

[dòyǒ-m mà tàrá] [[kó à-têm] lè],
 [Dogon-Pl Poss coll.hunt] [[NonhP custom] with]
 tàrá yǒ:-jì n kárⁿá-bà ?
 coll.hunt how? do.Impf-3PIS

‘Today we want you-Sg to speak about the collective hunt; the Dogons’ collective hunt, with its customs; how do they do a collective hunt?’

[*verb tégé ‘speak’ and its cognate nominal tègú with an adverbial complement, hence ‘talk [the talk [on X]]’ = ‘talk about X’; ‘want X to VP’ construction with subject switch §17.4.5*]

- (1201) B: já:tì, já:tì,
 indeed, indeed,
 tàrá dǐ:ⁿ bè kárⁿâ:-Ø dèy↑,
 coll.hunt manner.L 3PIS.L do.Impf-Ppl.Nonh if,
 tàrá [dànà pòrbó]=ỹ,
 coll.hunt [hunt(noun).L common(adj)]=it.is,
 tàrá [mó:n mà dāná]=ỹⁿ kwà
 coll.hunt [gathering Poss hunt(noun)]=it.is Emph

‘Indeed, indeed, if (it’s) they way they do the collective hunt; the collective hunt is a hunt done in common; the collective hunt is a hunt of (=by) the group.’

[*tàrá refers only to the collective hunt, while dāná is the more general noun ‘hunt’; manner adverbial (how ...) clause with dǐ:ⁿ ‘manner’ as head in L-toned form §15.2.6.2; kwà is French quoi*]

- (1202) A: [kó kùⁿ] [íjé né] yǒ:-jǐn kò-rú kárⁿá-bà ?
 [Nonh Def] [today now] how? Nonh-Dat do.Impf-3PIS
 ‘So, nowadays, how do they do it (=collective hunt)?’

[*kó kùⁿ ‘so’, see end of §19.2.4*]

- (1203) B: tàrá [kó túmnó-n déy], [nǐ: bàrⁿá mèyⁿ]
 coll.hunt [Nonh begin-Ppl.Sg if], [sun blaze and]
 [hǎl yǎ: mèyⁿ] [néyⁿ kè], nǐ:-bárⁿá hâl
 [until go and] [now Top], hot.season until
 [[úró cì-cì né] dójù] ù kún-ì n déykárⁿà,
 [[house Rdp-shade] under] 2SgS.L be.in.Perf.HL-Ppl.Sg if even,
 [nǐ:-bárⁿá mà ógù] yèré ú témé=kò
 [hot.season Poss heat(n)] come 2SgO encounter.Impf=NonhS
 gà táḡà: dèy,
 say happen if,

[úrⁿ-ùm mà mót:n] [mò:n dáyá] kár^{ná} mèyⁿ↑,
 [child-Pl Poss gathering] [gathering.L small] do and,
 [tàrà dáyá] lá: kár^{ná}-bà
 [coll.hunt.L small] first do.Impf-3PIS

‘Collective hunts, when they begin, the season is hot, to the point that, now, (it is) the hot season, to the extent that even if you-Sg are under (=in) the shade of a house, if it happens that the heat of the hot season comes and finds you (there), a group of young people, having made a small group, they initially do a small-scale collective hunt.’

[pseudo-participial clause based on verb túmnó ‘begin’ with its lexical tone and suffix -n, plus H-toned déy §15.2.1.3; nǐ: bàr^{ná}- (625); perfective pseudo-participial clause based on kùn ‘be in’ in perfective participial form with {HL} tone contour §15.2.1.2; quotative gá §17.1.5; adverbial lá: ‘first(ly)’ §8.5.7]

(1204) B: [tàrà dáyá] bè kár^{ná}:Ø kùⁿ⇒,
 [coll.hunt.L small] 3PIS.L do.Impf-Ppl.Nonh Def,
 sùgù-têrⁿè kò-rú gá:-ỹ
 S Nonh-Dat say.Impf-1PIS

‘The small-scale collective hunt that they do, we call it “sugutere.”’

[dáyá ‘small’ should drop its tones (as relative-clause head) but is exceptionally heard on the tape with regular tones, suggesting that the speaker adjusted the syntax during production]

(1205) B: [[kó kùⁿ] yǎ: yèré bè gá: kân]
 [[Nonh Def] go come 3PIS.L say after]
 [tàrà kùⁿ] nú:-yⁿè-Ø tánà: dèy,
 [coll.hunt Def] enter-Perf-3SgS happen if,
 néyⁿ ké, àná mǎn-sà-Ø dèy↑,
 now Top, village be.together-Reslt-3SgS if,
 jì rè-kùrô: tù-tù:lú kúnó mèyⁿ↑,
 dusk.Loc.HL Rdp-horn put and,
 yògó [jâm ná:-yⁿè-Ø dèy↑],
 tomorrow [peace spend.night-Perf-3SgS if],
 [[[émé àná] tàrà yà-mí] gá-bà
 [[[1PIP village] coll.hunt go-Hort] say.Impf-3PIS

‘So, after they have gone and come back doing that (=hunt), if it happens that the hunt has come in (=has been carried out) now, when the village (population) has come together, they do (=blow) the horns at dusk (as a signal to the villagers), and the next day,

when it (=village) has slept well, they (will) say, let our village go on a collective hunt!’

[‘after ...’ clause ending in *gá: kân* §15.2.2.1; conditional antecedent with *táŋà: dèy* §16.1.3; *mǎn-* from *màrⁿó* ‘be together’ by Post-Sonorant Syncope (60) §3.5.3.2 followed by Derhoticization (76) §3.5.5.1; *jìrè-kùrô:* is a tonal locative §8.1.1; Hortative *yà-mí* ‘let’s go!’ §10.4.3]

- (1206) B: [cín lè] ná:-bà
[thus with] spend.night.Impf-3PIS
‘They sleep on that (idea).’

- (1207) B: [cín lè] ná:-yⁿè-bà táŋà: dèy,
[thus with] spend.night-Perf-3PIS happen if,
é [ì nè tàrá bó:nò-m kùⁿ],
2Pl [person.L coll.hunt announce.Perf.HL-Ppl.Pl Def]
yèyjà: ú:rⁿó-sà-bè dèy, tù-tù:lú yàŋá mèyⁿ↑,
morning get.up-Reslt-2PIS if, Rdp-horn pick.up and,
àná sújós gòŋós-bè
village blow go.around.Impf-2PIS

‘If it happens that they have slept on that, (then) you-Pl the people who have announced the hunt, on the (next) morning when you-Pl have gotten up, you-Pl (will) take the horns and you-Pl (will) circulate through the village blowing (them).’

[2Pl *é* in apposition to ‘person’, which replaces a first/second person pronoun as the tone-dropped (internal) head of the relative clause §14.1.4; *bó:nò-m* is a plural perfective participle with {HL} tone contour §15.2.1.2]

- (1208) B: [é jé:n] dé: mèyⁿ↑, [èjú lé] pónó-bè
[2PIP gear] carry and, [bush in] head.for.Impf-2PIS
‘Carrying your gear, you will head for the bush (=wilderness).’

- (1209) B: [ì nè wájà-m] tàrà-déné-m cêw,
[person.L be.left.Perf.HL-Ppl.Pl] coll.hunt.L-want.H-Ppl.Pl all,
[néyⁿ ké] cín=í: é téwé-bà
[now Top] thus=it.is 2PIO encounter.Impf-3PIS
táŋá=kò
happen.Impf=Nonh
‘The remaining people (=participants), all (those) who want to join in the collective hunt, not it’s thus that they will meet up with you-Pl, it may happen.’

[wájà-m plural perfective participle §15.2.1.2; tàrà-déné-m agentive compound of type [x̣ v-Ppl] §5.1.9]

- (1210) B: [[téwñé èjú yǎ:-yǎ: bè m̀̀rⁿó-̀̀n]
 [[rejoin bush go-go 3PIS.L be.together.Impf-Ppl.Sg]
 [yǎ:-yǎ: bè m̀̀rⁿó-̀̀n] [yǎ: mèyⁿ]
 [go-go 3PIS.L be.together.Impf-Ppl.Sg] [go and]
 m̀̀rⁿó jó:-yè-bà táṅà: dèy,
 be.together be.many-Perf-3PIS happen if,
 àná gàrá=k̀̀d táṅà: dèy,
 village big=be.NonhS happen if,
 íné-m [t̀̀:~m lè] yǎ: [èjù-nòwⁿó k̀̀n]
 person-Pl [Recip-Pl with] go [bush.L-meat DefSg]
 k̀̀r:ró mèyⁿ, [èjú lé] d̀̀i:ⁿ nàná
 surround and, [bush in] manner.L drive.out
 [àná lè] è jè:rè b̀̀rê:-Ø jín⇒,
 [village in] 2PIS.L bring can.Impf-Ppl.Nonh like,
 [[àná lè] j̀̀rè è tí: b̀̀rê:-Ø jín⇒
 [[village in] eye 2PIS.L send can.Impf-Ppl.Nonh like
 ‘They (=one group) are catching up by going to the bush and
 joining up, (and) they (=another group) are going and joining up,
 they joining up and if they have gathered and become numerous,
 (and) if that the village is large, the people get together and go and
 form a ring around the game animals, (in) a way that you-Pl (one
 group) can drive them out from the bush and bring (=drive) them
 toward the village like this, (in) a way that you-Pl (in a line) can
 direct your eyes to (=move toward) the village like this.’

[[iteration of yǎ: ‘go’ §11.6; imperfective pseudo-participle m̀̀rⁿó-̀̀n in an adverbial clause, note the “Sg” participial suffix with preceding 3Pl subject pronominal §15.2.1.1; b̀̀rê- ‘can’ with bare verb stem complement §17.5.4]

- (1211) B: sáráwá-sà-bè dèy,
 fan.out-Reslt-2PIS if,
 pé:~. t̀̀-t̀̀:lú:~. síñè:~. [c̀̀: k̀̀:~k̀̀:~],
 shout(n) Rdp-horn noise [thing.L each-each],
 k̀̀rⁿá-n déy, [è yǎ:-n]
 do-Ppl if, [2PIS.L go.Perf.HL-Ppl.Sg]
 [[é j̀̀rè] k̀̀ j̀̀wó-̀̀n],
 [[2Pl before] NonhS.L run.Impf-Ppl.Sg,
 [[k̀̀ gũ̀n] è d̀̀gè-~n]
 [[NonhS.L behind] 2PIS.L chase.Perf.HL-Ppl.Sg]

[[é jířè] kò jòwó-ń],
 [[2Pl before] NonhS.L run.Impf-Ppl.Sg],
 [[kò gũnn] è dígè-n]
 [[NonhS.L behind] 2PlS.L chase.Perf.HL-Ppl]
 [[é jířè] kò jòwô-n]
 [[2Pl before] NonhS.L run.Impf-Ppl]

‘When you-Pl have fanned out (in a row), doing (=sounding) shouts and horns and loud noise and so forth, you-Pl have gone (forward) and they (=animals) are running ahead of you-Pl; you-Pl have come up behind them and they are running ahead of you-Pl; you-Pl have come up behind them and they are running ahead of you-Pl.’

[the main line of hunters move forward making noise to drive animals ahead; extended conjunction with dying-quail intonation ∴ at the end of each conjunct §7.1.1; several pseudo-participial clauses here, beginning with kárⁿá-n ‘doing’ with lexical tone §15.2.1.3, then a set of perfective pseudo-participles denoting the hunters’ movements (yâ-n ‘having gone’, dígè-n ‘having chased/come up behind’) paired with imperfective pseudo-participles denoting the animals’ response (jòwó-ń ‘running’); yâ-n is actually ambiguous between perfective yâ:-n or homophonous imperfective yâ:-ń but is taken as perfective by parallelism to the clearly perfective dígè-n]

(1212) B: [hâl yă: m̀yⁿ] [d̀é:ⁿ m̀yⁿ]
 [until go and] [tire(verb) and]
 [[n̄yⁿ ké] sáyⁿá-sáyⁿá m̀yⁿ]
 [[now Top] disperse-disperse and]
 [bàṅá túmn-â:-Ø d̀y], [i nè kó:-kórò-m] cín⇒,
 [hide begin-Perf-3SgS if] [person.L foot-fresh.HL-Pl] thus,
 [kó d̀i gé-d̀i gé m̀yⁿ↑] láyá-bà
 [NonhO chase-chase and] hit.Impf-3PlS

‘(This goes on) until eventually they (=animals) get exhausted, and then when they scatter and begin to hide, the people who have fresh legs (=fast runners) chase after them and strike (=kill) them.’

[hâl yă: m̀yⁿ ‘until ... go(es) and ...’, see (958); d̀é:ⁿ ‘become tired’ is commonly used to suggest that an activity has lasted a long time; n̄yⁿ ké §8.5.7.1 and §19.1.1; ‘begin’ plus chained VP complement §17.5.1; bahuvrihi compound adjective kó:-kórò-m §5.2.1]

(1213) A: úrò ỳy-yà-bà déy nè,
 house.Loc.HL come-Perf-3PlS if now,
 tàrá [íjé nè] i ñé=yⁿ kò-rú kárⁿá-bà ?,
 coll.hunt [today now] what?=Foc Nonh-with do.Impf-3PlS,

úrò yěy-yà-bà dèy
 house.Loc.HL come-Perf-3PIS if
 ‘When they (=hunters) have come home, (from) the collective hunt now, what do they do with them (=animals)? When they have come home.’

[tonal locative úrò, from úró ‘house’ §8.1.1; irregular Perfective yěy-yà- (variant yěy-yè-) from yèré ‘come’ §10.1.2.3; H-toned déy ‘if’ before clause-final particle §16.1.3]

- (1214) B: [tàrá lè] úrò yěy-yà-bà táṅà: dèy,
 [coll.hunt in] house.Loc.HL come-Perf-3PIS happen if,
 úrò é yèrè-dó:-wò lè,
 house.Loc.HL 2PIS come.L-arrive.H-Caus.L in,
 [tàrá è yâ:-Ø kúⁿ] lè,
 [coll.hunt 2PIS.L go.Perf.HL-Ppl.Nonh Def] in
 ùⁿ-ùm tàrá dò:-gò-m, ní: kúnó mèyⁿ,
 child-Pl.L coll.hunt arrive-ImpfNeg-Ppl.Pl, water put and,
 ójù é céjé-bà
 road.Loc.HL 2PIO meet.Impf-3PIS

‘When they have come home from the collective hunt. Before you-Pl (=hunters) arrive back home, the boys who didn’t make it to the hunt at the time when you-Pl went, they (=boys) will meet you-Pl on the road (back) providing (drinking) water.’

[the first clause is a rephrasing of part of A’s question; ‘before ...’ clause with pseudo-causative nominal dó:-wò and a preceding chained verb in L-toned compound-initial form §15.2.4.2; headless adverbial relative with implied ‘time’ as head §12.5.7; subject relative based on Imperfective Negative verb §14.1.12; Definite kúⁿ is normally L-toned but may optionally appear as H-toned kúⁿ before a postposition §6.7; tonal locative ójù from ójú ‘road’ §8.1.1]

- (1215) B: [ní: kúnó mèyⁿ]
 [water put and]
 ójù é céjé-jè-bà táṅà: dèy,
 road.Loc.HL 2PIO meet-RecPf-3PIS happen if
 [ì nè kâ:ⁿ] [cè: wò bérè-Ø],
 [person.L each] [thing.L 3SgS.L obtain.Perf.HL-Ppl.Nonh],
 [[[èné bé] úró-úrⁿ-ùm] lè] gǒ:ⁿ ô:-Ø
 [[[Refl Pl] house-child.Pl.HL] Dat] take.out give.Impf-3SgS
 ‘When they have already met you-Pl on the road putting (=offering you) water, whatever (game animal) each person (=hunter) has

gotten, he (=hunter) will take (it) out and give it to the children of their (=his) house (=family).

[distributive *kâ:n* 'each' §6.8.1; object relative with head *cè:* 'thing' §14.3.1; the tones of *úrò-[úrⁿ-ùm]* suggest a compound of type [*x̄ n̄*] §5.1.5, but logically one would bracket *úrò* with the possessor *èné bé*; a Reflexive Plural possessor 'their (own)' is common even with a singular discourse referent ('each hunter') especially with 'house' as possessed noun

- (1216) B: [*úrⁿ-ùm kùⁿ]=yⁿ kó jélgé⇒ dé: té:rè-tè:rè
[child-Pl Def]=Foc NonhO waving carry show.HL-show.L
úrò yèré nû:
house.Loc.HL come enter.Impf
'It's the young people (=young men) [focus] who come home carrying and and showing (=flaunting) them (=game animals).'
[subject focalization with no pronominal-subject suffix on verb §13.1.2; bare-verb-stem iteration with *v̂₁-v̂₁* tone contour §11.6.3]*

- (1217) B: [*yèré mèyⁿ nû:-yⁿè-bà táṅà: dèy,*
[come and] enter-Perf-3PIS happen if,
tàrà-nòwⁿó [nòwⁿò pòrbá]=ŷ,
coll.hunt.L-meat [meat.L common]=it.is
'When they have come and gone in (=come back home), the meat (=game) of the collective hunt is collective property (=shared by all).'

- (1218) B: *úrò-dú: mà bèrê:,*
family Poss inside,
[ì nè gàmà-nám] yó=wò-bà⇒,
[person.L certain-Pl] Exist=be.Human-3PIS
bé sây, bé ñà:-bà:ñá sây⇒,
3Pl only, 3PIP meal.L-bowl only,
[[tára kùⁿ] ì nè dó:-n̄] sà:-rá-bà
[[coll.hunt Def] person.L arrive.Impf-Ppl.Sg] have-Neg-3PIS
'Within the family (=household), there are certain people, only they and their (wooden) food bowls (i.e. they eat separately); they (perhaps) do not have anyone who (can) go on the collective hunt.'
[*gàmá* 'a certain (one)' and Pl *gàmà-nám* §6.3.2; human *yó=wò* 'exist' §11.2.2.4; *sây* 'only' follows both conjuncts 'they' and 'their bowls' but the logical sense is 'only [they with their bowls]' §19.4.1; *dó:-n̄* is taken in context as an imperfective participle, but the perfective participle (transcribed *dô:-n̄*) is homophonous]

- (1219) B: [tàrà-nòwⁿó nè] gòddù-tàj-ú kò-rú
 [coll.hunt.L-meat now] refuse.to.give-VbIN Nonh-with
 kò:-ró-Ø, [íné-m mà cì nè-[à-ý]
 be.Nonh-Neg [person-Pl Poss shadow.L-[catch-VbIN]]
 [tàrà-nòwⁿó lè] kò:-ró
 [coll.hunt.L-meat in] be.Nonh-Neg
 ‘(As for) the meat of the collective hunt, there is no being stingy
 with it (e.g. teasing others by not sharing); there is no catching the
 shadow of (=depriving) anyone in the collective hunt.’
 [gòddù tájá ‘be stingy toward sb with sth, refuse to give sb sth (that he
 craves), based on a Fulfulde expression]
- (1220) B: yǎ: yěy-yà-bà táṅà: tán,
 go come-Perf-3PIS happen only,
 [cè: núṅò]=yⁿ— [cè: bérè-bè fú:],
 [thing.L Dem]=For— [thing.L obtain.Perf.HL-2Pl all],
 [úrⁿ-ùm kùⁿ] bé=y kó gùjô:⇒,
 [child-Pl Def] 3Pl=Foc NonhO defeather.Impf,
 bé=y kó kárâ:⇒, bé=y kó cé:nê:
 3Pl=Foc NonhO rip.Impf, 3Pl=Foc NonhO do.well.Impf
 ‘When they have gone and come (back), it’s this thing—,
 everything (=game) that you-Pl have gotten, the children (=young
 people), it’s they [focus] who will defeather them (=birds), it’s they
 who will rip (them) open, and it’s they [focus] who will do (=take
 care of) them properly.’
 [tán in conditionals §16.2; object relative §14.3.1; subject focalization
 §13.1.2]
- (1221) B: [[[ñà:-bà:ñá tút-túru] nám kùⁿ] mà dǎyⁿ] lè,
 [[[meal.L-bowl one-one] owners Def] Poss limit] at,
 [pòñ-sùṅ]-túru-m cêw, [èné bé] tàrà-nòwⁿó
 [pants.L-cord]-one.HL-Pl all, [Refl Pl] coll.hunt.L-meat
 [gòjú lè] [gòjú lè] gòjó gàmàⁿá-sà-bà dèy↑,
 [division in] [division in] divide distribute-Reslt-3PIS if,
 úⁿ-ùm [ì nè kâ:ⁿ] bàrá já:
 child-Pl [person.L each] gather convey
 [[[èné bé] nâ:] lè] ô:-Ø
 [[[Refl Pl] mother.HL] Dat] give.Impf-3SgS
 ‘All the way to (=even including) those who have their individual
 (=separate) food bowls (=who eat separately), all those of one belt-
 cord (=of the same extended family), when they have organized the
 meat into divisions (=piles) and distributed them, the children

(=young people), each one (=young person) will collect it and take it and give it to their (=his) mother.’

[distributive *tút-túru* ‘one at a time, individually’ for /*túru-túru*;/ *bahuvrihi* compound [*pòn-sǔŋ*]-*túru-m* §5.2.1; *úrⁿ-ùm* [*ì nè kâⁿ*] is a slightly broken way of saying *ì-n kâⁿ* ‘each child’; *nâ*: ‘mother’ with {HL} tone as inalienably possessed noun, cf. regular form *nǎ*: ;

- (1222) B: [*cín=î*: *kò-rú* *kárⁿá-bà*]
 [thus=Foc Nonh-Dat do.Impf-3PIS]
tàrà-nòwⁿó [*nì ñé bérè*]=*ỳ* *dògó=kò*
 coll.hunt.L-meat [sauce in]=Foc finish.Impf=NonhS
 ‘It is thus [focus] that they do; (the) meat of the collective hunt, it’s in the sauce [focus] that it ends up.’
 [manner adverbial focalization, then locative adverbial focalization §13.1.4]

- (1223) B: *dòrⁿó=ỳⁿ* *là:=↑*, *èw=î*: *là*:
 sale=it.is Neg, buying=it.is Neg
 ‘It (=meat from collective hunt) is not for selling, it’s not for buying.’
 [‘it is not ...’ §11.2.1.3; *èw=î*: is based on the Verbal Noun *è-ń* (for /*èw-ú*/)]

Text 2: The Pullo and the Dogon Farmer

- (1224) ðⁿh̄:ⁿ wàrù-wára-n, [èjú lé]
 uh-huh! farming.L-farm.H-Ppl.Sg [field in]
 wárú wát-tóyò wò wô:-Ø jé mèyⁿ,
 farming farm-Impf 3SgS.L be.Hum.HL-Ppl.Nonh say and,
 [[pùlò-n àsègè-jírè-n] yè-lé yèré mèyⁿ]
 [[Pullo-Sg.L animal.L-tend.H-Ppl.Sg] there come and
 wó tèmè-Ø
 3SgO find.Perf.L-3SgS

‘Uh-huh! While a (Dogon) farmer was doing farm work in a field, a Pullo animal herder came there and encountered him.’

[two different agentive participial compounds of type [x-*v*-Ppl] §5.1.9; wát-tóyò from /wàrà-tóyò/ by Post-Sonorant Syncope (60); quasi-verb wò- ‘be’ after Imperfective -tóyò- §11.2.2.3; temporal clause ending in jé mèyⁿ with a quasi-relative complement §15.2.2.2; ‘Pullo animal herder’ is the subject both of yèré ‘come’ and tèmè- ‘find’ so its bracketing with one verb or the other is ambiguous; adverb yè-lé ‘there (in the previously mentioned place)’ (212.d)]

- (1225) [wàrù-wára-n kùⁿ], [ènè mà màlfâ:ⁿ]
 [farming.L-farm.H-Ppl.Sg Def], [Refl Poss rifle]
 ló:wó mèyⁿ, î:ⁿ kúnó mèyⁿ, sùn tégé mèyⁿ,
 load and, child put and, ear sprinkle and,
 [kó sùn kùⁿ] nèrⁿé mèyⁿ, [[wò-tùmò kàná]
 [NonhP ear Def] rub and, [[ridge.L new]
 [ènè tùmò-Ø kùⁿ] [[wò-túmó kùⁿ] mánà]
 [Refl make.mound.Perf.HL-Ppl.Nonh Def] [[ridge Def] on]
 [kó wò táyⁿá jérè-Ø] jé mèyⁿ,
 [NonhO 3SgS.L lay.out.in.sun hold.Perf.HL-Ppl.Nonh] say and,
 [[wó jé:n] mà dî:ⁿ],
 [[3SgP gear Poss place.Loc.HL],
 púlò-n yèré wó tèmè-Ø
 Pullo-Sg come 3SgO find.Perf.L-3SgS

‘The farmer loaded his rifle, put bullets in it, sprinkled the ear (=chamber latch) of the rifle (with gunpowder), and rubbed its ear; when he made a new ridge (of earth, in the field), as he laid it (=rifle) on the surface of the ridge near his (farming) gear, the Pullo came and encountered him.’

[*reflexive possessor èné mà of nonsubject NP §18.1.2; headless adverbial relative (participle túmò-Ø) §14.1.6 and §15.2.7; èné in topic-indexing function ('when he ...') §18.2.2; postposition mánà 'on' §8.3.5; Nonhuman kó plus tonal locative dī:ⁿ 'at the place of' §8.1.2;]*

- (1226) wó èjú pǒ: wà, ó: wà
 3Sg field greeting say, greeting say
 He (=Pullo) said, “you there, greetings in the field!” He (=Dogon:) replied, “you there, greetings!”
 [*standard greeting exchange in the fields; 3Sg wó replacing original 2Sg in indirect discourse §17.1.1*]

- (1227) wó ní: ó: [èné nò:-m] wà
 3Sg water give.Imprt [LogoS drink-so.that] say
 He (=Pullo) said, “you there, give (me) some water so that I may drink!”
 [*-m 'so that ...' §17.6.4*]

- (1228) [[wárú jèrè èné wăt-tóyò-Ø] lè]
 [[farming side.L LogoS farm-Imprf-Ppl.Nonh] in]
 [[èné mà ní:] wò-rú sí:rè té:rè mèyⁿ]
 [[Refl Poss water] 3Sg-Dat point show and]
 [èné mà ní:] yì-lé yó=kò gà↑
 [Logo Poss water] there exist=be.NonhS say
 wó yǎ: nó: wá
 3Sg go drink.Imprt say
 ‘At (=from) the spot where he (=Dogon) was farming, he (=Dogon) pointed out his (=Dogon’s) water to him (=Pullo), and said “my water is just over there, you there, go and drink!”’
 [*èné in indexing function §18.2.2, then as reflexive possessor èné mà §18.1.2, then as logophoric possessor èné mà within the quotation §18.2.2; deictic adverb yì-lé 'here' §4.4.3.1; quotative gá §17.1.5*]

- (1229) [yǎ: ní: èné nò:-Ø kùⁿ],
 [go water Refl drink.Perf.HL-Ppl.Nonh Def],
 wó pì rⁿé yó=kò gà↑, [pì rⁿé kùⁿ nè]
 3Sg millet.cream exist=be.NonhS say, [millet.cream Def now]
 yàṅá nó: wá,
 take drink.Imprt say,
 ‘When he (=Pullo) had gone and drunk the water, he (=Dogon) said, “you there, there is some cream of millet; take and drink the cream of millet!”’

[*nè* ‘now’ after NP in topical function §19.1.2; Existential *yé* and cliticized Nonhuman *kò* in existential-locational predication §11.2.2.4]

- (1230) *ś*⇒ wá,
all.right say,
[pì rⁿé kùⁿ nè] [yàŋá mèyⁿ] nò:-Ø
[millet.cream Def now] [take and] drink.Perf.L-3SgS
He (=Pullo) said, “all right!” He (=Pullo) took the cream of millet and drank (it).
[‘cream of millet’ is logical object of both ‘take’ and ‘drink’, so it could be bracketed with either, but since it has a topical element *nè* I take it here to be a preclausal topic NP]
- (1231) èné nò:-Ø kùⁿ, [[wó màlfâ:ⁿ kùⁿ] mà kù:ⁿ]
Refl drink.Perf.HL-Ppl.Nonh Def, [[3SgP rifle Def] Poss on]
íjé mèyⁿ, wàrù-wára-n wá
stand and, farming.L-farm.H-Ppl.Sg say
‘When he (=Pullo) had drunk, he (=Pullo) stood on his (=Dogon’s) rifle, and said “(hey) farmer!”’
[postposition *kù:ⁿ* §8.3.4; ‘farmer’ is a quoted vocative]
- (1232) hǎ:ⁿ wá,
huh? say.
hé, [wó màlfâ:ⁿ kùⁿ] èjú=kò wà
hey, [3SgP rifle Def] good=be.NonhS say
‘He (=Dogon) asked, “what?” He (=Pullo) said, “hey, your rifle is nice.”’
[adjectival predicate §11.4.1]
- (1233) [[ní wò gâ:-Ø] lè] ì ré wá
[[here 3SgS.L say.Perf.HL-Ppl.Nonh] Dat] be.better say
‘He (=Dogon) said, “it’s (even) better than what you (just) said.”’
[reduced deictic *ní* §4.4.4.1; comparative with *ì ré* ‘better’ §12.1.5]
- (1234) [ùró mèyⁿ] kó yàŋà-Ø
[bend.over and] NonhO take.Perf.L-3SgS
‘He (=Pullo) bent over and picked it (=rifle) up.’
- (1235) [wó núŋò] [yǒ: lé] kó bèrè-Ø mà↑ wà↑
[3Sg Dem] [where in] NonhO get.Perf.L-3SgS Q say
‘He (=Pullo) said, “you there, that (=rifle), where did you get it?”’
[interrogative *yǒ: lé* §13.2.2.3]

- (1236) [dì:ⁿ kó èné bérè-Ø]≡ŷ
 [place.L NonhO Refl get.Perf.HL-Ppl.Nonh]≡it.is
 jé tègè-Ø
 say speak.Perf.L-3SgS
 ‘He (=Dogon) said, “it’s where I got it.”’
[jé before tégé- is arguably an uninflected, chained form of the ‘say’ verb jè- §11.3.2, but it could also be taken as the (historically related) subordinator jé §15.2.2.2, cf. jé tégé in (926.b)]
- (1237) [wó nò] [màlfâ:ⁿ kùⁿ] mánê:-Ø
 [3Sg now] [rifle Def] flatter.Impf-3SgS
 [wó nò] tégê:-Ø
 [3Sg now] speak.Impf-3SgS
 ‘He (=Pullo) now, he was praising the rifle; he (=Dogon) now, he was talking.’
[nò allomorph of topical nè ‘now’, before two parallel clauses with a switch in referents, §19.1.2)
- (1238) [wó nò] [màlfâ:ⁿ kùⁿ] mánê:-Ø
 [3Sg now] [rifle Def] praise.Impf-3SgS
 [wó nò] tégê:-Ø
 [3Sg now] speak.Impf-3SgS
[repeat of preceding]
- (1239) hâl [màlfâ:ⁿ kùⁿ] kúmó jè yèré
 until [rifle Def] hold.in.hand go.with come
 [wó dî:ⁿ] dò:-Ø
 [3Sg place.Loc.HL] reach.Perf.L-3SgS
 ‘Until, holding the rifle in his hand, he (=Pullo) came with it and approached him (=Dogon).’
[jè ‘(go) with’, variant of jíjè, §15.1.17]
- (1240) [wó màlfâ:ⁿ kùⁿ] kó tá:ⁿ≡kò
 [3SgS rifle Def] Nonh shoot.Impf≡be.NonhS
 èné mà:nâ:-Ø wà↑ dé
 LogoS think.Impf-3SgS say Emph
 ‘He (=Pullo) said, “your rifle, I believe it will (=is ready to) fire.”’
[clause-final Emphatic dé §19.5.3, here part of the original quotation; Quotative wa between the verb and a clause-final Emphatic, see (1003) in §17.1.3]

- (1241) ínná:dì lâ:y [[ní wò gâ:-Ø] lè] ì ré wá
by.God [[here 3SgS.L say.Perf.HL-Ppl.Nonh] Dat] be.better say
'He (=Dogon) said, "by God, it's better than what you (just) said."'
- (1242) [kó bèré lé] cè: kûn-Ø
[NonhP inside in] thing.L be.in.Perf.HL-Ppl.Nonh
èné=yⁿ kó jùgô:
Logo=Foc Nonh know.Impf
'He (Dogon) said "what is inside it, I [focus] am the one who knows."'
[for bèré lé, see (448.a) in §8.2.2; kûn- 'be in' §11.2.3; subject focalization §13.1.2]
- (1243) [kó sùn] tímné mèyⁿ, wǎ: dè:nè-Ø
[NonhP ear] close and, pull.in set.L-3SgS
'He locked its (=rifle's) ear (=gunpowder chamber latch) and pulled in and settled (it) (=closed the bolt).'
- (1244) [kó sùn] tímné mèyⁿ,
[NonhP ear] close and,
[[wàrù-wára-n kùⁿ] lè] yàṅá dè:rè-Ø
[[farming.L-farm.H-Ppl.Sg Def] in] take extend.Perf.L-3SgS
'He (=Pullo) locked its (=rifle's) ear (=latch), and took it (=rifle) and held it out, pointing (it) at the farmer.'
- (1245) [[[wó màlfâ:ⁿ kùⁿ] mà bèrê:]
[[[3SgP rifle Def] Poss inside]
cè: wò kúnò-Ø]
thing.L 3SgS.L put.Perf.L-3SgS]
[wó=yⁿ kó jùgô:] wá
[3Sg=Foc NonhO know.Impf] say
'He (=Pullo) said, what you-Sg have put in your rifle, it's you [focus] who knows it.'"
[postposition bèrê: 'inside' §8.3.3]
- (1246) èné [wó èjú mà bèrê:] [wó ní:] nǒ:-jè-Ø,
LogoS [3SgP field Poss inside] [2SgP water] dring-RecPf-3SgS
[wó pì rⁿé] nǒ:-jè-Ø,
[3SgP millet.cream] drink-RecPf-3SgS,
bónò-mójjérè wǒ-r kán tí yǎ:-Ø wá
ungratefulness 3Sg-Dat do and go.Impf-3SgS say
'He (=Pullo) said, "I have drunk your water in your field, I have drunk your cream of millet, (but) I will be ungrateful to you and leave.'"

[wǒ-r for /wò-rú/; kárⁿá- ‘do’ reducing to kán before t; Linker tí indicating a temporal sequence among adjacent chained verbs §15.1.16]

- (1247) nîŋ èné wó tá:ⁿ wò: tì yǎ:-Ø wà↑
 now LogoS 3SgO shoot kill.L Link.L go.Impf-3SgS say
 ‘He (=Pullo) said, “now I will shoot and kill you and go.”’
 [tone-dropped verbs in medial position in long verb chains §15.1.1; nîŋ ‘now’ as temporal adverb §8.5.7.1]
- (1248) hâ:ⁿ má wá, ɔⁿhóⁿ wá
 huh? Q say, uh-huh say
 ‘He (=Dogon) asked, “what?” He (=Pullo) said, “uh-huh!”’
- (1249) èné [ámà jé] wò-rú jàŋà-Ø wà↑,
 LogoS [God Purp] 3Sg-Dat beg.Perf.L-3SgS say,
 wó èné tá:ⁿ wò:-ý wá
 3Sg LogoO shoot kill-ImprtNeg say
 ‘He (=Dogon) said, I (hereby) beg you, for the sake of God, you there, don’t shoot and kill me!’”
 [Purposive-Causal jé ‘for’ §8.4; Imperative Negative -ý §10.4.1]
- (1250) wó [[cè: tùrù] wò dènê:-Ø cêw] tégé mèyⁿ,
 3Sg [[thing.L one.L] 3SgS.L want.Impf-Ppl.Nonh all] speak and,
 èné wò-rú kárⁿá-m wá
 LogoS 3Sg-Dat do-so.that say
 ‘He (=Dogon) said, “you there, (you) having said one thing that you wish, I will make it (happen) for you.”’
 [subordinator mèyⁿ unusually in a switch-subject clause sequence, perhaps reflecting a repair in mid-stream, cf. (905) in §15.1.14; -m ‘so that ...’ §17.6.4]
- (1251) [cè: èné dènê:-Ø.: fú:] kò:-ró jè-Ø,
 [thing.L LogoS want.Impf-3SgS all] be-Neg say.Perf.L-3SgS,
 [wó [[wò-tùmò núŋò] mà jì rè-dágù] yí-dì:ⁿ tórⁿó mèyⁿ↑]
 [3SgS [[ridge.L Dem] Poss front] there squat and]
 bē: bē:≡y là: dèy
 excrement defecate.VblN=it.is Neg if
 ‘He (=Pullo) said, “there is nothing that I want,” he (=Pullo) said, “if it is not (=other than) that you squat there on the ridge (between furrows in the field) and defecate.”’

[deictic adverb *yí-dì:*ⁿ ‘there’ §4.4.3.1; in the last line I hear *bě:≡ŷ* (based on the bare stem) rather than *bè-ý≡ŷ* (based on the Verbal Noun, as one might expect if this were treated as the complement of ‘want’, see §17.4.5; *≡ŷ là: dèy* ‘if it is not’ §16.4]

- (1252) wó [ámà jè] [kó kùⁿ ké]
 3Sg [God Purp] [Nonh Def Top]
 [èné lè] kà^rnà-ýⁿ wá,
 [Logo Dat] do-ImprtNeg say.
 èné è:ñè-rⁿè-ýⁿ wá
 LogoO be.ashamed-Caus-ImprtNeg say
 ‘He (=Dogon) said, “you, for the sake of God, don’t do (this) to me!
 Don’t humiliate me!”’

- (1253) [wó kó kàn-lí] [[èné wó tà:ⁿ-ýⁿ]
 [3SgS NonhO do-PerfNeg] [[LogoS 3SgO shoot-ImprtNeg]
 mà nàṅà-dùró] kò:ró jè-Ø
 Poss cow.L-tail] be-Neg say.Perf.L-3SgS
 ‘He (=Pullo) said, “(if) you don’t do it, there is no cow-tail of “let me
 not shoot you.”’
*[The Pullo swears Pullo-style, on the tail of a cow, that he will shoot
 the Dogon man unless the latter does his bidding; kàn-lí Perfective
 Negative of kárⁿá- ‘do’; sentence (‘let me not shoot you’) treated as a
 possessor NP]*

- (1254) [jèrè èné gô:-Ø] wó jò:-gó-Ø⇒,
 [side.L LogoS go.out.Perf.HL-Ppl.Nonh] 3SgS know-ImpfNeg-3SgS,
 wó [èné mà ná:] jò:-gó-Ø⇒,
 3SgS [Logo Poss self] know-ImpfNeg-3SgS,
 [jèrè èné yã:-Ø] wó jò:-gó-Ø
 [side.L LogoS go.Impf-Ppl.Nonh 3SgS know-ImpfNeg-3SgS
 ‘(Pullo:) “The area where I have come from you don’t know, me
 personally you don’t know, the area where I am going you don’t know.”’
*[Participle gô:-Ø is ambiguous between Imperfective (like the parallel
 yã:-Ø) or Perfective, but the context suggests Perfective; ná: §5.1.13;
 jò:-gó- is irregular Imperfective Negative of jùgó- ‘know’, see (617.c)]*

- (1255) [[èjú bérè]≡ŷ sáy] yèré èné wó tèmè-Ø,
 [[field in]≡Foc only] come LogoS 3SgO find.Perf.L-3SgS,
 èné níṅ [wó tá:ⁿ wò: tì mèyⁿ]
 LogoS now [3SgO shoot kill.L Link.L and]

yǎ:-Ø wà
 go.Impf-3SgS say
 ‘He (=Pullo) said, “it is only in (this) field that I have come and
 encountered you; now, after shooting and killing you, I will go.”
 [Linker tí with subordinator mèyⁿ §15.1.16, here tí as part of a tone-
 dropped noninitial verb sequence in a chain §15.1.1]

- (1256) wò-rú jàṅà-Ø, wò-rú èyⁿ-nè-Ø,
 3Sg-Dat beg.Perf.L-3SgS, 3SgDat tighten-Caus.Perf.L-3SgS,
 [nùṅò-bâ:ⁿ wò-rú jàṅâ:-Ø]
 [Dem.L-owner 3Sg-Dat beg.Impf-3SgS
 [[nùṅò-bâ:ⁿ nè] wò-rú éyⁿ-nê:-Ø]
 [[Dem.L-owner now] 3Sg-Dat tighten-Caus.Impf-3SgS
 [bé: kùⁿ] wó bè:-wé kàrà-Ø
 [excrement Def] 3SgO defecate-Caus compel.Perf.L-3SgS
 ‘He (=Dogon) pleaded with him, (but) he (=Pullo) put the squeeze
 (=pressure) on him; this one (=Dogon) was pleading with him, (but)
 this one (=Pullo) was putting the squeeze on him, (until) he compelled
 him to defecate.’
 [the initial perfective ‘beg’ and ‘tighten’ clauses are followed by
 imperfective counterparts to indicate protracted repetitions; nùṅò-bâ:ⁿ
 ‘this (person)’, repeated in parallel clauses (the second time followed
 by nè ‘now’) with a switch in reference; kàrà- ‘compel’ §15.1.11]

- (1257) wó èné bé:-wè-Ø kùⁿ,
 3SgS LogoS defecate-Caus.Perf.HL-Ppl.Nonh Def,
 m̀̀wⁿó mèyⁿ,
 laugh(verb) and,
 wàrù-wára-n lì-lě: lóy-â:-Ø wà,
 farming.L-farm.H-Ppl.Sg Rdp-fear overflow-Perf-3SgS say,
 jákà-jákà [wàrù-wára-n ké]
 lo! [farming.L-farm.H-Ppl.Sg Top]
 [cè: wó já:sé-sà-Ø.: fú:] k̀̀:-ró
 [thing.L 3SgO be.worthless-Reslt-Ppl.Nonh all] be.Nonh-Neg
 ‘When he had made him defecate, he (=Pullo) laughed: “lo, a farmer,
 (his) fearfulness overflows (=is excessive),” he said. “A farmer, there is
 nothing more shiftless (=cowardly) than him.”
 [the combination of ‘there is not’ (k̀̀:-ró and an asymmetrical
 comparative in a relative clause is logically equivalent to a superlative
 (‘he is the most shiftless of all’)]

- (1258) [ɛné [wó ɛ́jú bérè] yèré wó témé mɛ̀yⁿ]
 [LogoS [3SgP field in] come 3SgO find and]
 [wó ní:] nǎ:-jè-Ø⇒,
 [3SgP water] drink-RecPf-3SgS,
 [wó pì rⁿé] nǎ:-jè-Ø⇒,
 [3SgP millet.cream] drink-RecPf-3SgS,
 [[wó màlfâ:ⁿ] lè] bé: wó bɛ̀:-wé-tì-Ø,
 [[3SgP rifle] with] excrement 3SgO defecate-Caus-Perf-3SgS,
 [ɛné ké] [ɛné mà dǐ:ⁿ] yǎ:-yè-Ø wà
 [Logo Top] [Logo Poss place] go-Perf-3SgS say
 ‘(Pullo:) “having come into your field and encountered you, I drank
 your water, I drank your cream of millet, with your (own) rifle I made
 you defecate; as for me, I have gone (=I am off) to my place,” he said.
- (1259) [màlfâ:ⁿ kùⁿ] ɛné únò-Ø kùⁿ,
 [rifle Def] LogoS put.down.Perf.HL-Ppl.Nonh Def,
 [jì gí ré mɛ̀yⁿ] kò-rú gǔn tò:-Ø
 [turn.around and] Nonh-Dat back turn.Perf.L-3SgS
 ‘When he (=Pullo) put the rifle down, he (=Pullo) turned around and
 turned his back to it (=rifle).’
- (1260) wò yǎ:-Ø jé mɛ̀yⁿ,
 3SgS.L go.Impf-3SgS say and,
 [dáyà⇒ wó ténéyⁿ⇒ gó:-yà-Ø]
 [a.little 3SgS apart go.out-Perf-3SgS]
 [ɛné ê:-Ø kùⁿ]
 [RefIS see.Perf.HL-Ppl.Nonh Def]
 [ǎ-n kùⁿ] [ɛné ùró mɛ̀yⁿ]
 [man-Sg Def] [RefIS bend.over and]
 [ɛné mà màlfâ:ⁿ kùⁿ] yàṅà-Ø
 [Logo Poss rifle Def] pick.up.Perf.L-3SgS
 ‘While he (=Pullo) man was going, when he (=Dogon) saw that he
 (=Pullo) had gone a short distance away, the (Dogon) man bent over
 and picked up his rifle.’
 [dáyà⇒ ‘a little’, see (443) in §8.5.2; Reflexive ɛné as a topical index
 §18.2.2]
- (1261) [[dì:ⁿ wǎ: dè:nè tímné mɛ̀yⁿ]
 [manner.L pull.to.self set.L close and]
 [dì:ⁿ dàyá tí wò yâ:-Ø] jín]
 [manner.L leave Link 3SgS.L go.Perf.HL-Ppl.Nonh] like

yàŋá wǒ-r dè:rè-Ø
 pick.up 3Sg-Dat extend.Perf.L-3SgS
 ‘Just as he (=Pullo) had pulled (the cock) toward himself, set it and closed it, as he (=Pullo) had left it (=rifle) and gone away, he (=Dogon) picked it up and held it out (ready to shoot).’
[dè:né- tone-dropped in medial position in verb chain §15.1.1; 3Sg Dative wò-rú]

(1262) nàŋà-jíré-n wá há:n wá,
 cow.L-tend.H-Ppl.Sg say huh? say,
 wó gònó yàŋá wá
 3Sg turn look.Imprt say
 ‘He (=Dogon) said: ‘Oh cowherd!’ He (=Pullo) said, “what?” He (=Dogon) said, “turn your head and look!”
[compound agentive participial [x-v-Ppl] §5.1.9; irregular {LH} toned imperative yàŋá]

(1263) gònó yàŋà-Ø,
 turn look.Perf.L-3SgS,
 [[wó gònó] lè] dém-dém dè:rè tí dàyà-Ø
 [[3SgP chest] in] straight extend Link leave.Perf.L-3SgS
 ‘He (=Pullo) turned his head and looked. He (=Dogon) kept (the rifle) pointing straight at his (=Pullo’s) chest.’

(1264) [nîŋ ké] îñé=y^n wò-rú wàjà-Ø mà↑
 [now Top] what=Foc 3Sg-Dat remain.Perf.L-3SgS Q
 wó jùgô:-Ø mà wà
 3SgS know.Impf-3SgS Q say
 [màlfâ:n kù^n] èné kó dó:-jè-Ø gà,
 [rifle Def] LogoS NonhO reach-RecPf-3SgS say,
 [èné ké] yî-dí:n bèr=î: [èné mà dí:n]=y^n wà,
 [Logo Top] there livelihood=it.is [Logo Poss place]=it.is say
 ‘He (=Dogon) asked: “now, what is it that remains (=is in store) for you? Do you know? The rifle, I have reached (=gotten to) it,” he said; “as for me, (my) livelihood is there, my place is there,” he said.
[on the tape, the last sentence beginning èné ké is repeated, after an interruption; quotative gà §17.1.5; bèr-ú ‘livelihood’]

(1265) [dì:n nîŋ] [[ní
 [place.L this] [[here
 èné wò:-Ø núŋò] lè],
 LogoS be.Hum.Perf(HL)-Ppl.Nonh.L Dem] in],

[nîŋ nèmné ǎ-n táŋà: dèy]
 [now scorpion man-Sg happen if
 [wó lá:kàrà já:jê:-Ø] wà
 [3SgS Hereafter go.back.Impf-3SgS] say
 [èné=yⁿ [dì:ⁿ kò kárⁿá=kò] jùgô:] wà,
 [Logo=Foc[manner.L NonhS.L do.Impf=NonhS] know.Impf] say
 ‘(Dogon:) “In this place, here in (the place) where I am, now if the
 trigger (“scorpion”) is a man (=is courageous), you will go back to the
 Hereafter (=will die),” he said; “it’s I [focus] who knows how it
 operates (=what it’s for),” he said.
 [dì:ⁿ-nîŋ ‘in this place’, perfective Ppl wô:-Ø ‘who is ...’ drops tones
 but retains long vowel before the demonstrative núŋò, cf. (846); táŋà:
 dèy ‘if it happens that’ §16.1.3]

- (1266) [[bé: kùⁿ] mà bè-ý=y^y nàm=lá wá kòy,
 [[excrement Def] Poss defecate-VblN=Foc difficult=Neg say Emph,
 wó yèré [[bé: kùⁿ] yàŋá] ñé: wá,
 3Sg come [[excrement Def] pick.up] eat.Imprt say
 ‘(Dogon:) “Defecating is indeed not difficult,” he said. “You, come and
 pick up and eat the excrement!” he said.’
 [here we do get bè-ý=y^y based on the Verbal Noun bè-ý from bé:
 ‘defecate’; negative predicate adjective with =lá §11.4.3; clause-final
 Emphatic kòy §19.5.2]

- (1267) kó ì rè-Ø gá dáyà⇒,
 NonhS be.better.Perf.L-3SgS say a.little,
 wó [wó cíⁿé kùⁿ] dènê:-Ø dèy,
 3SgS [3SgP nose Def] want.Impf-3SgS if,
 yèré [bé: kùⁿ] yàŋá ñé:,
 come [excrement Def] pick.up eat.Imprt,
 wó [wó cíⁿé kùⁿ] dènè-gó-Ø táŋà: dèy,
 3SgS [3SgP nose Def] want-impfNeg-3SgS happen if,
 [[èné mà wàrù-wàrù núŋò] bérè]
 [[Logo Poss (active)field.L Dem] in]
 [[èné [wó ðwⁿð-săyⁿ] jã:ⁿ-Ø]
 [[LogoS [3SgS grave] dig.Impf-3SgS]
 [wó kúnó b̀̀: tĩ yã:-Ø] wà
 [3SgS put bury.L Link.L go.Impf-3SgS] say
 ‘(Dogon:) “it’s better, somewhat” he said; “if you love your nose
 (=your life), come and pick up and eat the excrement; if it happens that
 you do not love your nose, I will dig your grave in this field of mine; I
 will put you down and bury you and go away,” he said.’

[Quotative *gá* §17.1.5; *wó* rather than *èné* as “reflexive” possessor (‘your nose’) with original second person reference in indirect discourse §18.4.6]

- (1268) tá:ⁿ wò: tì mèyⁿ,
 shoot kill.L Link.L and,
 [[[wó nàŋá] já:jé=kò]=yè là: dèy]
 [[[3SgP cow] go.back.Impf=NonhS]=it.is Neg if]
 jèrè wò gô:-Ø
 side.L 3SgS.L go.out.Perf.HL-Ppl.Nonh
 jèrè wò já:jê:-Ø
 side.L 3SgS.L go.back.Impf-Ppl.Nonh
 [i nè kó jùgò-ñ fú:] kò:-ró wá
 [person.L NonhO know.Impf-Ppl.Sg all] be.Nonh-Neg say
 ‘(Dogon:) “(I) having shot and killed (you), other than (by the fact that) your cows are going back (from pasturing), where you have come from (and) where you are going back, there is nobody who will know,” he said.’

[as previously, *gô:-Ø* ‘go out’ can be interpreted morphologically as either unsuffixed Perfective with {HL} tone, or as unsuffixed Imperfect]

- (1269) èné=yⁿ wó wò: mà⇒↘ kâ:ⁿ
 Logo=Foc 3SgO kill.Perf Q too
 íjé b̀r̀ró gò:-gò-Ø táŋ=kò wà,
 today rear.end go.out-impfNeg-3SgS happen.Imp=NonhS say,
 [wó nò] [dì:ⁿ [èné lè] wò gâ:-Ø kùⁿ]
 [3Sg now] [manner.L [Logo Dat] 3SgS say.Perf.HL-Ppl.Nonh Def]
 jín, cín=í:=kò wà,
 like, thus=Foc=NonhS say.
 háyè wó j̀:-gò-Ø má wá
 well 3SgS know-impfNeg-3SgS Q say

‘(Dogon:) “Furthermore, whether (or not) it was I [focus] who killed you, it may be that (=it looks like) the butt won’t go out (=the secret won’t be revealed),” he said; “you now, like the way you said to me, that [focus] is how it is; well, don’t you know?” he said.’

[*táŋ=kò* with truncated form of *táŋá* ‘happen’ §11.2.6.2; Nonhuman =kò after ‘it is’ clitic (perhaps here as focalizer) §11.2.1.2; preclausal *háyè* ‘well, ...’ §19.2.1]

- (1270) gó:ŋgò, hà:sín t̀yⁿó=yⁿ wà,
 yes, indeed truth=it.is say,

wó nàná jè:rè-Ø
 3SgS chase bring.Perf.L-3SgS
 [[bé: kùⁿ] mà kù:ⁿ] ìjì -rè-Ø,
 [[excrement Def] Poss on] stand-Caus.Perf.L-3SgS
 jàṅà-Ø, [wò-rú èyⁿ-nè-Ø]
 beg.Perf.L-3SgS, [3Sg-Dat be.tight-Caus.Perf.L-3SgS]
 jàṅà-Ø [wò-rú èyⁿ-nè-Ø]
 beg.Perf.L-3SgS [3Sg-Dat be.tight-Caus.Perf.L-3SgS]

‘(Pullo:) “yes, indeed it is the truth,” he said; “you have followed and brought (me) and made (me) stand on the excrement.” He (=Pullo) begged, (but) he (=Dogon) put the squeeze on him; he begged, (but) he put the squeeze on him.’

[hà:sín preclausal particle §19.2.5]

- (1271) wó ñé:-wⁿé kàrà-Ø [bé: kùⁿ],
 3SgO eat-Caus compel.Perf.L-3SgS [excrement Def]
 kó yàṅá ñé:-jè-Ø dèy
 NonhO pick.up eat-RecPf-3SgS if
 i⇒ [[wàrà-wàrà-n nì-bâ:ⁿ] mà bé:]
 eh! [[farming.L-farm.H-Ppl.Sg.L this.L-owner] Poss excrement]
 ér=kò gâ:-Ø
 sweet=be.NonhS say.Impf-3SgS

‘He (=Dogon) compelled him (=Pullo) to eat (it), that excrement. When he (=Pullo) had picked it up and eaten it, he was saying: “eh, this farmer’s excrement is delicious!”’

[human demonstrative nì-bâ:ⁿ ‘this (person)’ §4.4.1.2; ér=kò with érù; imperfective gâ:- ‘say’ §11.3.1]

- (1272) yàṅá [[èné mà ká:] gòmó] ñé:-sà-Ø dèy,
 pick.up [[Refl Poss mouth] open.wide] eat-Reslt-3SgS if,
 héy [[wàrà-wàrà-n nì-bâ:ⁿ] mà bé:]
 eh! [[farming.L-farm.H-Ppl.Sg this.L-owner] Poss excrement]
 ér=kò gâ:-Ø
 sweet=be.NonhS say.Impf-3SgS

‘When he (=Pullo) had picked (it) up, opened his mouth wide, and eaten (it), he was saying: “hey, this farmer’s excrement is delicious!”’

- (1273) nùṅò-bâ:ⁿ wó bè:-wè-Ø⇒,
 Dem.L-owner 3SgO defecate-Caus.Perf.L-3SgS,
 nùṅò-bâ:ⁿ wó ñè:-wⁿè-Ø,
 Dem.L-owner 3SgO eat-Caus.Perf.L-3SgS,

‘(So) this one (=Pullo) made him defecate, (and now) this one (=Dogon) made him eat (it).’

[paired deictic demonstratives ‘this one’ §4.4.1.1 denoting complementary referents in the two clauses]

- (1274) sára gàrà-Ø,
pass.by pass.Perf.L-3SgS
‘It happened (like that).’

[lexicalized verb chain sára gàrà ‘pass by, continue on one’s way’, or as here ‘happen, take place (in the past)’]

- (1275) [kó gára-Ø] mà dǎyⁿ,
[NonhS pass.Perf.HL-Ppl.Nonh] Poss limit
ì nè kó áyà-m kâ:ⁿ,
person.L NonhO hear.Perf.HL-Ppl.Pl too,
màlfâ:ⁿ [ù cé]=ỹ,
rifle [2SgP possession]=it.is,

‘Ever since (the time) when that happened, (for) people who have (merely) heard it (=the story) too, a rifle belongs to (=is essential for) you-Sg.’

[‘since’ clause with mà dǎyⁿ §15.2.3.1; kâ:ⁿ ‘too’ §19.1.3 rather than kâ:ⁿ ‘each’ §6.8.1, which would have dropped tones of the preceding word; possessive predication with cé=ỹ §11.5.3]

- (1276) [èjú mà bërê:] wár=î: wăt-tóyò-w,
[field Poss inside] farming=Foc farm-Impf-2SgS,
[[á nì :ñé.:] [á màlfâ:ⁿ.:] fú:] [dì:ⁿ túmnò],
[[2SgP gear] [2SgP rifle] all] [place.L single.Loc.HL],
tèwètè má
tag.Q Q

‘In the field(s), if it’s farm work [focus] that you-Sg are doing, your (regular) gear and your rifle (are) in one place (=together), don’t you find?’

[wárú wàrà- (631.b); conjunction by dying-quail intonation ∴ §7.1.1; tonal-locative form of túmnó ‘single, sole, one (adj)’; tèwètè or tèwètê: ‘you find’ (Pullo), here in tag question function]

- (1277) ú é:-rà-bà [màlfâ:ⁿ kùⁿ] è:-w-á:rà-Ø
2SgO see-Habit-3PlS [rifle Def] see-Pass-Habit-3SgS,
‘They see you-Sg, (and) the rifle is seen (simultaneously).’

[passive verb è:-wé- §9.4 (533.c)]

- (1278) kà: [wàrù-wárá-n lè] jà:ⁿ=lá, [sábù
 but [farming.L-farm.H-Ppl.Sg Dat] normal=Neg, [because
 wàrù-wárá-n [ì nè úrò-n]=ì:]
 farming.L-farm.H-Ppl.Sg [person.L bend.over.Perf.HL-Ppl.Sg]=it.is]
 [ì nè gàrá⇒ jì ré é:-n]=ì: là:
 [person.L much(adv) eye see.Impf-Ppl.Sg]=it.is Neg
 ‘But it isn’t normal (=natural) for a farmer, because a farmer is
 someone who has bent over (and looks at the ground as he hoes), he is
 not someone whose eye sees a lot.’
*[‘because’ clause §17.6.5; possessor relative §14.5 with this example
 repeated as (862.a)]*
- (1279) ì nè úrò-n ké,
 person.L bend.over.Perf.HL-Ppl.Sg Top,
 [tòy-ì:ⁿ]-yáŋá-n
 [seed-child.L]-look.at.H-Ppl.Sg
 [ènè mà jé:n.: fú:] é: dògó bèrè-gò-Ø
 [Refl Poss gear all] see finish can-ImplNeg.L-3SgS
 ‘One who has bent over, one who looks at the young plants, he cannot
 completely see (=keep watching) all his gear.’
*[Topic ké §19.1.1; agentive participial compound of type [x-ṽ-Ppl]
 §5.1.9; ‘be able to’ §17.5.4]*
- (1280) wàrù-wárá yǎ:-yè-w tán,
 farming.L-farm.HL go-Perf-2SgS if,
 [màlfâ:ⁿ lè] mòrⁿó yǎ:-w dèy,
 [rifle with] come.together go.Impf-2SgS if,
 [dì:ⁿ [íné-n fú:] kó è:-gò-Ø jín]
 [manner.L [person-Pl all] NonhO see-ImplNeg.L-3SgS like]
 kó bàŋà-rⁿá tí mèyⁿ↑,
 NonhO hide-Caus Link and,
 ú [ì nè [dì:ⁿ kò kô:-Ø]
 2Sg [person.L [place.L NonhS.L be.Nonh.Perf.HL-Ppl.Nonh]
 jùgó-ñ kùⁿ]
 know.Impf-Ppl.Sg Def
 [[á jé:n] lè] kó wàyá⇒ dáyá
 [[2SgP gear] at] NonhO far(adv) leave.Imprt
 ‘If you-Sg have gone (to the field) in order to do farm work, if you have
 gone along with a rifle, having hidden it in a manner (=in a place) that
 nobody can see it, (then) you-Sg, (namely) the person who knows
 where it is, leave (imperative) it some distance away from your (other)
 gear!’

[wàrù-wárà is {HL}-toned form of wàrá- as purposive complement before motion verb, plus L-toned version of cognate nominal wárú here as compound initial §17.6.3; tán instead of dey ‘if’ §16.2; reduced purposive clause in compound form §17.6.3; stacked relative clauses §14.1.2; adverbial wàyá⇒ ‘far’ §8.5.2; locative adverbial phrase as complement to ‘far’ §6.3.3.4]

- (1281) [[wàrù-wárà-m mà tírⁿíwⁿ] bérè] yó=kùn
 [[farming.L-farm.H-Pl Poss counsel(noun)] in] exist=be.in.Perf.L
 ‘That is in (=is part of) the counseling of (=given to) farmers.
[kùn- ‘be in’ §11.2.3 cliticized to Existential yé §11.2.2.1]
- (1282) [kó nò] cín jì:ⁿ
 [Nonh now] thus Past
 ‘It was like that.’
 [Past particle §10.3.1]

Dogon Bibliography

The following is a relatively comprehensive linguistic bibliography along with a select bibliography (and filmography) of Dogon ethnography.

Journal and publisher abbreviations

JAL = Journal of African Languages (London)

JALL = Journal of Africal Languages and Linguistics (Leiden)

JSA = Journal de la Société des Africanistes (Paris)

PRIFAS = Programme de recherches inter-disciplinaires françaises sur les acridiens du Sahel

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