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A Grammar of Jamsay

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A Grammar of Jamsay

by

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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	VblN	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

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 15º 00´ latitude by W 2º 56´ longitude), including Jamsay-speaking villages Dianwely Kessel, Dianwely Maoudé, Petaka, and Boumbam; 2) the area around Mondoro (N 14º 00´ by W 1º 58´) near the Burkina border east of Tabi mountain; and 3) the town of Koro (N 14º 00=4´ by W 3º 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 14º 48´ by W 2º 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 gàñá≡kɔ̀ mà, 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" (tɔ́rɔ̀-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

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 invastion. 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 ǧamsay (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

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 (Naŋa 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

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

b.   grammatical tones (local)
        <HL> = F[alling] tone attached to stem-final vowel (always H)
           —(unsuffixed) 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)
           —unsuffixed 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 Cvː- 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 gáːrá '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 fúː⇒ '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 Cvː syllables, with a smattering of CvC and a few CvːC and extra-long Cvːː syllables. Cv is monomoraic (=has one mora or syllabic weight unit), Cvː and CvC are bimoraic, and CvːC and Cvːː 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 dìgé 'row', ɔ̀ːrⁿɔ́ 'monkey' versus ɔ́ːrⁿɔ̀ 'waterskin', and círé 'horn' versus cìré '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 unsuffixed Perfective with H(H…)L overlaid tone or on the unsuffixed 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 unsuffixed Imperfective (positive), Nonhuman subject is distinguished from (human) 3Sg subject by adding quasi-verb ≡kɔ̀ '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.   yɛ̀ɾɛ́-m̀
               come.**Impf**-1SgS
               'I will come.'

         b.   láɣâ:-Ø
               hit.**Impf**-3SgS
               'He/She/It will hit.'

         c.   bɛ̀ɾɛ̀-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
       -tǐ-   Perfective (most action verbs)
       -yɛ̀-/-yà-, -âː-   Perfective (motion and stative verbs)
       -sà-   Resultative
       -jɛ̀-   Recent Perfect ('have already done')
       -tɛ́rɛ̀-   Experiential Perfect ('have [n]ever done')
       [Rdp + tone overlay] reduplicated Perfective

   b. **imperfective system**

       [final L-tone]   unsuffixed Imperfective
       -tɔ́ɣɔ̀-   (marked) Imperfective
       -áːrà-   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 (-tǐ-, -yɛ̀-/-yà-, or
-âː-) 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 Imprt
                       main clause relative clause

        jɛ̀yɛ́   jɛ̀yɛ̀-   jɛ́yɛ̀-   jɛ̀yɛ̂ː-   jɛ́yɛ́
                                                  (</jɛ̀yɛ́-L/)

    The lexical form jɛ̀yɛ́ 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 jɛ̀yɛ̀- in main clauses (after a
focalized constituent), but has the H(H…)L overlay in relative clauses, where it
appears as HL-toned jɛ́yɛ̀-. The unsuffixed Imperfective is underlying /jɛ̀yɛ́- 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 jɛ́yɛ́. 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 (làː, 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 yèrɛ́ 'come'.

(6)   a.   yɛ́rɛ́
            come
            'Come-Sg!'

        b.   yɛ́rɛ́-ỳ
            come-Imprt.Pl
            'Come-Pl!'

        c.   yɛ̀rɛ̀-ý   lây
            come-Imprt.Pl   ImprtNeg.Pl
            'Don't-Pl come!'

There is a **Hortative** with suffix -ḿ (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 -Ø, (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:-Ø

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   dàɣà   pírú] 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 pírú drops tones to become pì rù), 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   dàɣà pì rù]]   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 ènɛ́ (plural ènɛ́ 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 bɛ́rɛ̀ 'in', and an apparent Purposive-Causal postposition jɛ́ that may be a special case of the defective 'say' verb jɛ̀ (§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'; bɔ̀rɔ́ 'bottom', bɔ̀rɔ̂ː '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 yáː '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. dùndàŋá yèrɛ́ bé tɛ̀mɛ̀-Ø [èjú bɛ́rɛ̀]
          elephant come 3PlO find.Perf.L-Ø [**field in**]
          'An elephant came out and encountered them, in the field.'

      b. wó ñɛ́ː-wⁿɛ́ kàrà-Ø [bɛ́ː 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. yáː ú ɛ́ː-sà-m
          yesterday 2SgO see-Reslt-1SgS
          'Yesterday I saw you-Sg.'

      b. tì-táː jɔ̀ŋɔ́ kɔ̀ː-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]   búːdù   óː-sà-m
          [[1SgP.L father.HL] **Dat**] **money**   give-Reslt-1SgS
          'I gave the money to my father.'

      b. ù-rú   wó   ñɛ́ː-wⁿɛ́-m̀
          2Sg-Dat 3SgO   eat-Caus.Impf-1SgS
          'I will feed him/her for you-Sg.'

      c. wò-rú   óː-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 ⹀ỳ. If the focus is a pronominal subject, it appears as an independent pronoun, with or without ⹀ỳ, and there is no subject pronominal on the verb. This focalized pronoun appears at or near the beginning of the clause (16).

(16) ɛ́mɛ́   nì-dîːⁿ   ì ñêː
      1Pl   here   lie.down.Impf
      'It's <u>we</u> [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   nùŋò-nám] [bé   jùgɔ́-m̀]
      [person   Dem.L-owners][**3PlO**   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 -wǜ 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 mà (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   mà   èñέ   wò-rú   ò-ý
       2Sg   Poss   chicken   3Sg-Dat   give.L-VblN
       '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 ŋì rⁿ̀è   ú   mì   ɛ̂:-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 **2PlO 3PlS.L** convey.Perf.HL-Ppl.Nonh Def
              'the place where they took you-Pl yesterday' **2004.5.2**

       c.   dògùrù ù-rú   wó   mì   ñɛ́:-wⁿ̀ɛ̀-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 ŋì rⁿè   ànsá:rá-n   mí   ɛ̂:-Ø
            day.L   white.person-Sg   1SgO   see.Perf.HL-Ppl.Nonh
            'the day (when) the white person saw me'

       b.   nì ŋì rⁿè   ànsá:rá-n   mì   ɛ̂:-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   yɛ̀rɛ́-ǹ]   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] jɛ́ 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] jɛ́   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 [ǹ v̂]

   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 bèrɛ́- 'get', Perfective Negative bɛ̀l-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: ǹjâ: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 [σσ] foot behaving metrically as a **trochee** [sw], i.e., with a metrically strong σ₁ followed by a weak σ₂. 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 ɣ in C_2 position between low back vowels
        domain: all stems
        relevant structure: initial [(C)v(:)<u>C</u>v]

        b. Post-Sonorant Syncope (60) (§3.5.3.2)
        process: V_2 deleted after sonorant, usually {r rⁿ}, before coronal
        domain: verbs with nonzero AN inflectional suffix
        relevant structure: initial [(C)vC<u>v</u>]-[σ…, rarely [Cv:C<u>v</u>]-[σ…

        c. Suffixal u-Apocope (67) (§3.5.4.1)
        process: final -u (VblN suffix) deleted
        domain: Verbal Nouns
        relevant structure: [σC-<u>ú</u>], rarely [σσ][(σ)C-<u>ú</u>]

        d. Inter-Word u-Apocope (75) (§3.5.4.2)
        process: final u deleted
        domain: wide range of compounds and phrases
        relevant structure: [σC<u>u</u>]-[σ

        e. VblN V_2-Lenition (65) (§3.5.3.3)
        process: V_2 raised to i (or u) and often reduced to schwa
        domain: Verbal Nouns
        relevant structure: [σC<u>v</u>]-[C-ú] or the rare [σσ][C<u>v</u>C-ú]

        f. Presuffixal V_2-Raising (§3.5.2.2)
        process: mid-height V_2 {e ɛ} or (o ɔ} raised to i or u
        domain: suffixally derived verbs (e.g. causative)
        relevant structure: [σC<u>v</u>]-[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 [σσ-σσ], though this is not the only possible location Even Fulfulde borrowings like téːmédérè 'hundred' tend to be pronounced with a slight drop in pitch on the second syllable (without becoming truly L-toned), suggesting a division [téːmé][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 inter-vening 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 yɛ̀- 'woman' (§5.1.11), the examples are jì-nîː 'sleepiness' with initial reduced from jìré 'eye', bɔ̀-túmó 'buttock' where bɔ̀- is reduced from bɔ̀rɔ́ 'rear', wɔ̀-túmó 'small mound' with initial etymologically related to wárú- 'farm work', and pɛ̀-ɗíŋé 'clove' and téː-kɔ̀ɣɔ́rɔ̀ '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 Cv̀ syllables, e.g. Cv̀Cv̀Cv̀Cv́ or Cv̀Cv̀Cv́Cv̀ 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. Cv̀Cv̀-Cv̀Cv́.

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, occuring infrequently in loanwords, and/or occurring in semi-linguistic "uh-huh!" interjections like ɓⁿʔɔ̀ⁿ '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	wⁿ		
alveolar	t	d	n	s	l	r	rⁿ		
alveopalatal	c	j	ñ	((š))		y	yⁿ		
velar	k	g	ŋ						
laryngeal								(h)	((ʔ))

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. rɔ́ŋkɛ́- '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: dèrêwⁿ 'ratel (mammal)', à-jǎyⁿ 'planting in pits with manure', cêw 'all', tílây 'obligation', sɔ̀bɔ̌l 'gourd'. Stops/sibilants (rare): lók (intensifier for túrú 'one'), kák '(stop) still!' (intensifier), bâg 'ferry' (French *bac*), fɛ́s ('[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. wáccɛ́- 'chew cud', híjjɛ́- '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', dɔ̀ɣɔ̌- 'Dogon (compound initial)', wàɣà-já- 'cause to remain', and ɔ̀ɣɔ̌-n 'chief'. The combination ɔ…a occurs in Perfectives like jɔ̀ɣ-âː- from jɔ̀ɣɔ́- 'be shattered'. I know of no a…ɔ sequences within stems or in stem-suffix combinations. Note that o is not conducive to spirantization: dòɡó- 'finish' and Resultative dòg-âː- 'be finished' have unspirantized g, as does kóɡójó- 'cough'. Likewise, I did not observe spirantization between ɛ vowels, as in sɛ̀gɛ́ 'skeleton'.

The **tones** of the preceding and following vowels have no effect on spirantization; thus àɣá 'husband' and its possessed form áɣà 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:ɣá [dà:ɣá] 'night' and in dáɣà=> '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, dàɣá- 'leave' has a verbal noun dàg-ú, where the suffixal u prevents spirantization. Spirantized ɣ flanked by ɔ, and g flanked by o, contrast in the compound ɔɣɔ̀-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-dáɣá 'east' and tὲn-dáɣá 'west', which compete with uncompounded dû: 'east' and tἔŋ 'west', and in gàn-káɣà 'quandary' (literally "between-squeeze"). In kà-dàɣá 'peer group', the segmentation (which positions ɣ as C_2 in its morpheme) is supported by the synonym kù:ⁿ-dàɣá. 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 'sycomore fig tree'). In frozen compounds, spirantization is occasionally useful as a diagnostic for morphological structure, as in the plant name té:-kɔ̀ɣɔ́rɔ̀ '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:-tàɣà '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: dɔ̀rɔ̀gɔ́- 'ransom [verb]', àlàgárà 'wide boubou (garment)'. I suggested in §3.2.2, above, that there is an abstract default metrical structure for stems or two or more syllables, such that the second syllable is the weak one. Therefore in [dɔ̀rɔ̀][gɔ́] and [àlà][gárà] the g is in a strong syllable and fails to spirantize. Similarly, iterations of g-initial stems, as in gɔ̀ŋɔ́-gɔ̀ŋɔ́- '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 gɔ́lɔ́rɔ́ gɔ̀lɔ̀rɔ́- 'snore (a snore)' and gɔ́: gɔ̌:- 'dance (a dance)'.

(32)   **g-Spirantization** (g→ɣ)

g→ɣ 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 ɔ́gɔ́-rɔ́- or ɔ́ɣɔ́-rɔ́- 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 ɣ. I

interpret the unspirantized variant ɔ́gɔ́-rɔ́- 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. tɔ́ɣɔ́rɔ̀ '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:dì 'hatred' (<Ful, variant gáñá:dì), ŋɔ́:ñɔ̀ 'cake'.

ŋ is fairly common intervocalically, e.g. pàŋá 'strength', nèŋɛ́ 'knee', túŋó- 'kneel'. The homorganic clusters ŋk and ŋg are fairly common (táŋkà 'colonial coin' góŋgó 'tin can'). ŋ can occur finally: jûŋ 'hump', băŋ 'hippopotamus'.

3.3.4   Voiceless labials (p, f)

p is a well-established native consonantal phoneme.

f occurs in loanwords: màlfâ:ⁿ 'rifle', fú:⇒ 'all'. There are dialectal variants with p instead of f (màlpâ: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:jὲ 'need' (ultimately <Arabic). It also occurs intervocalically in ɔ̀ⁿhɔ́ⁿ 'yes!'.

ʔ occurs in ɔ́ⁿʔɔ̀ⁿ 'no!', and in gúrúʔáːnà '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 phonene is usually pronounced s, with occasional š-like articulations especially before i. š does seem to be regular in a few borrowings: šínwâː 'Chinese person' (French *chinois*), šínwáːrù 'balm'. The only syllable-final example is the dialectal fɛ́s '(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 inter-vocalically, 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', pɔ́rⁿɔ́- 'blow nose', tórⁿó- 'squat', ùrⁿó 'hole';
         r : kárá- 'make incision in', kɔ̀rɔ́ 'neck', úrɔ̀ 'boundary';
         n : mánà 'on', bɔ̀ːnɔ́ 'spoil (child)', múnɔ́- 'braid'.

         b. opposition {wⁿ w ŋ}
         wⁿ : dɔ̀wⁿɔ́ 'totem', kùwⁿá 'crowned crane', cì-cɛ́wⁿɛ̀ 'mosquito';
         w : ɔ́wɔ́- 'brood (on egg)', dúwâːw 'blessing', ɛ́wɛ́- 'buy';
         ŋ : jɔ̀ŋɔ́ 'hare', jùŋó- 'bob head', dèŋɛ́ 'anvil'.

c. opposition {y^n y}

y^n : dɔy^{n}ɔ́ 'ashes', kúy^{n}ɔ́ 'squirrel', jǎy^n 'bark fiber';

y : ɔ̀yɔ́ 'grass', húyɛ́- 'be happy', bǎy 'shin' ;

w^n and y^n, can also occur finally, as can unnasalized w and y. Final y^n occurs both in simple stems like jéy^n 'forked stick', and in apocopated bisyllabic verbal nouns (whose underlying suffix -ú is often deleted after an intervocalic sonorant) like mà-ý^n 'building' (verb má:-) and gǔy^n-Ø 'stealing' (verb gùy^{n}ɔ́-). My examples of w^n are all from apocopated verbal nouns, e.g. kǒw^n-Ø 'squeezing (VblN)' (cf. verb kɔ́w^{n}ɔ́-).

r^n, like unnasalized r, does not occur syllable-, stem-, or word-finally in lexically basic representations. When r^n 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 {r^n w^n y^n} 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 NVw^{n}V. This rule accounts for the nasalized y^n in Verbal Noun mà-ý^n 'building' cited above (verb má:-), compare the parallel Verbal Noun pɔ̀-ý 'picking fruits' (verb pɔ́:-).

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 ǹjâːl '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):   júggáːrè '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):   júnnáːjò '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)
      rⁿrⁿ (0):   —
      tt (11):   sáttéllè 'bauhinea tree' (Fulfulde)
      ww (0):   —
      wⁿwⁿ (0):—
      yy (1):   láyyáːrù '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+): déŋémbéːrè 'Zornia herb' (Fulfulde)
mp (5): kúmpâm 'anxiety' (<Fulfulde)
nd (10+): cèndɔːrɔ́ 'bunting (bird)'
nt (10+): tɔ́ntɛ̀ 'collective feast'
ŋg (10+): jáŋgɛ́- 'study' (Fulfulde)
ŋk (10+): táŋkà 'a colonial coin' (regional word)

b. nasal plus nonhomorganic stop:
mg (2): jámgâl 'wooer' (Fulfulde)
mk (2): àlàm-[kây^n-kây^n] 'Datura grain' (crypto-compound)
ng (0): —
nk (1): gánkɔ̀ 'Celtis tree'

c. nasal plus nonhomorganic nasal
nm, nm̃, nŋ (0): —
mn (10+): nèmnɛ́ '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): màlfâː^n 'rifle' (regional)
rf (0): —
ms (3): námsɛ̀gɛ̀ 'grasshopper sp.'
ns (2): ànsáːrá-n (var. ànì sáːrá-n) 'white person' (<Arabic)
ls (2): àlsémélé 'epics sung with tomtoms'
rs (6): gúrsɔ́ːjɛ̀ '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):   bàlkɔ́rɔ́ 'gum tree'

    lp (3):   bàlpɔ́: 'calabash drum'

    lt (2):   áltínɛ́:rè 'Monday' (Arabia via Fulfulde)

    rb (5):   àlàrbá-n 'Arab or Tuareg' (Arabic)

    rc (5):   àrcɛ́wɛ́ '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):   tɛ́rkây '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):   sèrmèñɛ́m 'fig tree sp.'.

    rn (2):   bɛ́rnè 'bovine liver disease'

    rñ (3):   pɛ́rñɛ́- 'graze, brush against'

    rŋ (0):   —

    rl (0):   —

g. semivowel plus stop

    wb, wc, wg:, wj, wk:, wp (0): —

    wd (1):   jáwdì 'livestock'

    wt (3):   sáwtɛ́- 'be sick and tired of' (Fulfulde)

    yb (1):   háybɛ́- 'watch over' (<Fulfulde)

    yc, yg, yp (0): —

    yd (1):   séydâ:n 'demon' (variant; Arabic via Fulfulde)

    yj (1):   yèyjê: 'morning'

    yk (2):   táykɛ́ '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): mày^n ná- 'take heart'

i. semivowel plus liquid

wl (2): máwlûld 'Maouloud (holy day)' (Arabic via Fulfulde)
wr (3): dǎwrù 'magical solution'
yl (1): gàylɛ́ '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, ŋw, ŋy (0): —

3.3.8.4   *Medial triple CCC clusters*

I can cite líwndù 'herder's staff' and sɛ́wndɛ̀ '(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 ≡ỳ ('it's…') with a preceding word ending in y or y^n, which are heard as geminated …y≡ỳ and (with Nasalization-Spreading)…y^n≡ỳ^n, respectively.

3.4   Vowels

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

(36)   short oral   long oral   nasalized

u	uː	uː^{n}
o	oː	oː^{n}
ɔ	ɔː	ɔː^{n}
a	aː	aː^{n}
ɛ	ɛː	ɛː^{n}
e	eː	eː^{n}
i	iː	iː^{n}

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

3.4.1   Short and (oral) long vowels

Since Jamsay favors Cv and Cvː 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 jèré- 'harvest [verb]' versus jèːré- '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

quality	short-V ex.	gloss	long-V ex.	gloss
u	dúdúrúm	'trash heap'	búːdù	'money'
o	bómó	'outside'	bòːmó-	'be stupid'
ɔ	yɔ̀rɔ́-	'be soft'	yɔ̀ːrɔ́-	'cook on fire'
a	játé-	'calculate'	wáːtɛ̀	'oath'
ɛ	séré-	'copulate'	sɛ́ːrɛ̀	'witness'
e	péjé-	'pound grain'	péːjú	'sheep'
i	síñé-	'sniffle'	síːŋè	'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-dúːrú 'gourd' and pùː-páː 'blacksmith's bellows', and a few loanwords (from Fulfulde) like láyyáːrù '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 Cvː-Cvː full-stem iterations, or as beginning with semi-segmentable à-): dì̀-dɛ́ː 'shield', lì̀-lɛ̌ː 'fear', ásêː 'Saturday' (ultimately Arabic), bàːbî 'rubber sandal', bèrù-àjî 'billy-goat', bàlpɔ́ː 'calabash drum', and bùtóː 'Mitragyna tree'. Additional cases of final long oral vowel are created by morphophonological rules, e.g. Imperfective verbs (type yɔ̀ːrɔ̂ 'will cook on fire', from /yɔ̀rɔ́-L/).

Monosyllabic stems, other than nouns and adjectives that end in a consonant, have a shape Cvː with long vowel. All monosyllabic verbs are of this type. Examples are the verbs yǎː 'go', dɔ̌ː- 'insult', and báː- 'learn', and the nouns dúː 'burden', dě ː 'father', and bɛ́ː 'excrement'. No short-voweled Cv verb, noun, or adjective stems occur.

Word-final super-heavy syllables of the shape CvːC are attested but somewhat uncommon. The final C is a sonorant (nasal, semivowel, or l), as in à-cě ːŋ 'agama lizard'. Many if not all of these cases involve historical loss of a word-final high vowel, cf. cèːŋú 'agama lizard' in some other Dogon languages. The same syllable type occurs on the surface in apocopated verbal nouns of the shape Cv̌ːC-Ø associated with CvːCv- verbs whose final consonant is one of the relevant sonorants, e.g. ñɛ́ː-wⁿɛ́- 'feed', VblN ñɛ̌ː-wⁿ-Ø 'feeding' (apocopated from /ñɛ̀ː-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 ː. 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).

(38)   vowel   example   gloss

    u:^{n} kú:^{n} 'head'
    ɔ:^{n} gɔ̌:^{n}-   'take out'
    a:^{n} gǎ:^{n} 'fig tree'
    ɛ:^{n} tɛ̌:^{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} —   bànàkû:^{n} 'cassava'
    ɔ:^{n} —   —
    a:^{n} —   màlfâ:^{n} 'rifle'
    ɛ:^{n} —   —
    i:^{n} sì:^{n}lɛ́   'disease'   à-tî:^{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. màlfâ:^{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 [e^n] is distinguishable from phonetic [ɛ^n], and phonetic [o^n] is distinguishable from phonetic [ɔ^n]. I do not indicate this kind of low-level nasalization except in narrow phonetic transcription. Example: bármɛ́r^{n}ɛ̀ 'injury' is phonetically [bármɛ́^{n}r^{n}ɛ̀^{n}], while jí-jéw^{n}é 'mud-dauber wasp' is phonetically [dʒídʒé^{n}w^{n}é^n].

3.4.3 Initial vowels

As noted above, the typical syllables of Jamsay are Cv and Cvː, while Cvːⁿ, CvC, and CvːC 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', álárbáːrè 'Wednesday'. Examples of stems beginning with other short vowels are újúró 'ask', ònùrⁿú 'smooth', ɔ́ñɔ́- 'suck', ɛ̀ndèkónó 'rock hyrax (mammal)', èjú 'field', and írù 'female breast'.

Examples of initial long vowels in stems of at least two syllables: úːñùm 'Cleome herb', òːɡú 'sweat [noun]', ɔ̌ːrⁿɔ́ 'waterskin', àːŋá 'how much?', éːñú 'shame', ɛ́ːrɛ́ 'peanuts', íːrⁿɛ́ 'iron'. Monosyllabic cases are mostly stems consisting of just a long vowel (óː- 'give', áː- 'catch', ɛ̌ː 'moon, month', ɛ́ː- 'see', ɛ́ːⁿ- 'weep' and its homonym ɛ́ːⁿ- 'get tight'), but there are also a few cases with final n : ǎːn 'infection', ûːn 'forest', ǔːn '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 Ciː- and Cuː- are allowed.

Examples of monosyllabic high-voweled verb stems: tíː- 'send', núː- '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 wɔ̀- and nonhuman kɔ̀- '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: bèré- 'obtain', bèrê:-Ø 'he/she will obtain' (/bèré-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: sállígì '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. kɔ̀rⁿî:ⁿ 'intestine'), I can cite a few cases of final long î:, namely fárnî: 'donut' (<Bambara), sàrî: 'plow' (<French *charrue*), wálî: '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: bàlpɔ́: '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', sɔ̀bɔ̌l 'gourd', jɛ́m '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 ɛ, 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 iiε
uo uuɔ
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', pɔ́jɔ́- 'crumble', yò:ró- 'lie in wait for'; trisyllabic cégéré- 'listen to', mèŋèrⁿé- 'roll between hands', ájárá- 'sew', sɔ́ŋɔ́rⁿɔ́- 'decorate', and bògòró- '(billygoat) bellow'. Harmonic high-low sequences: bisyllabic círé- 'fly away', íjέ- 'stand', bùgó- 'swim', dùrɔ́- 'heave (spear)'; trisyllabic jìgìré- 'shake', dìgì-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 ε_ε and ɔ_ɔ. The examples known to me are in (43).

(43)   stem   gloss   related form

έjú-né-   'make good'   èjú 'good'
mɔ̀ñù-nɔ́-   'make bad'   mɔ̀ñú '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. bámbɛ́-   'carry (child)'   <Fulfulde
    .   júkkɛ́-   'fine (sb)'   <Fulfulde
       pɔ́ttɛ́-   'participate'   <Fulfulde
       tɔ́ryɛ́-   '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: tɔ́ryɛ́- has a variant tɔ́rrɔ́- with identical vowels; likewise, pɔ́ttɛ́- has a variant pɔ́ttɔ́-. Disharmonic mixes of mid-height vowels, notably [ɔ ɛ], tend to be nativized to identical-vowel sequences [ɔ ɔ] (presumably [o e] would also tend to be nativized as [o o]). However, [a ɛ] and [u ɛ] 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 ɛ, resulting in a [aiɛ] 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)], [ɛ ɛ (ɛ)], [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 ɛ], [u o], [u ɔ];
            trisyllabic [i i e], [i i ɛ], [u u o], [u u ɔ]

        c. identical mid-height vowels separated by u
            [ɛ u ɛ], [ɔ u ɔ] (theoretically also [e u e], [o u o])

        d. some other combinations with final ɛ
            [a ɛ] in deadjectival verbalizations with -nv- suffix;
            [a ɛ], [a i ɛ], [u ɛ], and marginally [ɔ ɛ] 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. tìnìŋú '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 àdúrⁿɔ́ 'world', bísôm 'acacia tree', bòròdíyà 'banana', cámbôl 'nasal disease', cɛ̀ntɛ̀gú '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 ɛ o ɔ} 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 ɛ̀ndɛ̀kónó 'rock hyrax (mammal)', an original segmentation *ɛ̀ndɛ̀-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 wɔ̀-túmó 'small mound', aside from a weak synchronic connection to túmó 'stone', the very fact that we get ɔ and o together suggests a break wɔ̀-túmó, even though the initial is not synchronically recognizable (or glossable).

Lexical **adjectives** show less variation than nouns. Aside from mono-syllables (e.g. jóː 'many'), and longer stems with identical vowels (e.g. kàná 'new'), there are many adjectives with one mid-height vowel {e ɛ ɔ} (I can cite no example with o) plus u (ɛ̀jú 'good', érù 'sweet', mɔ̀ñú 'bad'). There is also one trisyllabic adjective with [o u u] (ònùrⁿú '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 nɔ̀wⁿɔ́ 'meat', adjective mǎyⁿ 'dry', numeral nǔːyⁿ 'five',
verb nàrⁿá- 'bear [a child]'. The loanword sínwâː 'Chinese' (Fr. *chinois*) is not
affected. With respect to native vocabulary, I am aware of one exception (for
some speakers): déméré 'stout, thick', dialectally démérⁿé. This can be
reconstructed as *démbéré, where the original b prevented Nasalization-
Spreading from the *m to the *r (cf. cognates like Walo dómbúró-).

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 ≡ỳ. 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 …ŋkawa,
because here the ŋ 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 nàŋà-yǎː '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. nàŋà wàl-gú 'lazy cow'.

However, derivational suffixes (e.g. Causative allomorph -wv- and Rever-
sive -rv-), pronominal-subject suffixes (e.g. 1Pl -y and 2Sg -w), and clitic ≡ỳ 'it
is', are all eligible targets for spreading. Examples: Reversive -rv- (páɣá-rá-
'untie') becomes -rⁿv- in náŋá-rⁿá- 'remember'; 2Sg subject suffix -w (páɣá-ẁ
'you-Sg tie') is nasalized to wⁿ in náŋá-ẁⁿ 'you-Sg forget'; and Focus or 'it is'
clitic ≡ỳ (béré≡ỳ 'it's a stick') is nasalized to ≡ỳⁿ in tùmó≡ỳⁿ 'it's a stone'.
The clitic can also directly follow a nasalized consonant, and of course it is
nasalized here as well, as in ʒyⁿ≡ỳⁿ 'it's a starling'. Double application
(recursion) is observed in náŋá-rⁿá-ẁⁿ 'you-Sg remember' from /naŋa-rv-w/.

The following section on consonantal metathesis includes discussion of
suffixal derivatives like súgó- 'go down', causative súnú-ŋó- 'take down'.
These are somewhat opaque, but one possibility is this: Causative allomorph
-nv́- would regularly produce /súgú-nó-/ (see Suffixal Vowel-Spreading,
§3.5.2.1), which could become /súnú-gó-/ 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', mŭŋ 'knot', ómóŋó- 'be puffed up', ñà:ŋà-èñɛ́ 'bird sp.' (with èñɛ́ '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 {r^n w^n y^n 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. The examples involve verb-to-verb derivations, and verbalizations of adjectives.

First, there are some alternations with inputs with **medial rhotic** r or r^n. Several adjectives have an inchoative and/or factitive verbalization (§9.6) with n…-r^n, where the n occurs in the position of the stem rhotic. The examples known to me are given in (49). The examples include all known bisyllabic adjectives with medial r (539.d), with one exception. This is yɔ̀rú 'soft', which has a morphologically different type of verbalization yɔ̀rɔ̀-gɔ́-, see (538.b). The alternation of r or r^n with n can therefore be described as productive.

In the one case where the adjective has a long vowel ('bitter'), this vowel is shortened in the derivative. Thus jé:rù 'bitter', inchoative jènè-r^né- 'become bitter' (49.b).

Many adjectives end in u, but in the inchoative verb the u is overwritten by Suffixal Vowel-Spreading (§3.5.2.1).

(49)   r or rⁿ to n…rⁿ

	gloss	adjective	inchoative/factitive (§9.6)
a.			

(a.)

gloss	adjective	inchoative/factitive (§9.6)
'fresh, soft & moist'	ɔ́rú	ɔ́nɔ́-rⁿɔ́-
'long'	gùrú	gùnù-rⁿó-
'sweet, sharp'	érù	éné-rⁿé-
'big'	gàrá	gànà-rⁿá-

	gloss	verb	inchoative/factitive (§9.6)
b.	'bitter'	jé:rù	jènè-rⁿé-

The usual inchoative-factitive derivational suffix is -nv́- (§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.

There are other analytic possibilities for these alternations. One is that the relevant inchoative/factitive allomorph is -rv́- rather than -nv́-. The rhotic allomorph is at best marginal, but it is attested in ɔ́gɔ́-rɔ́- 'become hot (or fast)' from adjective ɔ́gù. In (49), where the stem already has a rhotic, one could imagine a preference for this suffix allomorph, or alternatively an actual assimilation converting /-nv́-/ into /-rv́-/. This assimilation would then trigger a dissimilation of the stem rhotic. Example with gàrá 'big': /gàrà-ná-/, then /gàrà-rá-/ (assimilation), then /gànà-rá-/ (dissimilation), and then finally gànà-rⁿá- (Nasalization-Spreading) 'become big'. Or we could think in terms of output constraints favoring certain consonantal sequences over others, notably n...rⁿ over r...n.

Two Cvrv- or Cvrⁿv- inputs, and one Cvŋv- input, have causatives of the form Cv̀:-nv́- (50).

(50)   vrv or vŋv to v:n

	gloss	simple verb	causative
a.	'pass by'	gàrá-	gà:-ná-
	'come together'	mɔ̀rⁿɔ́-	mɔ̀:-nɔ́-
b.	'sit down'	dì ŋé-	dè:-né-

The long vowels in the causatives suggest that an original *Cv̀C₂v̀-Cv́- lost its C₂, with the resulting VV-cluster contracting to a long vowel. Both -rv́- and -nv́- 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 C_2. 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) /mɔ̀rⁿɔ-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 C_2 and contraction of the resulting sequence of identical vowels.

Possible analogues to (50.a) in nominal morphology are the cases of ă-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 îːⁿ that clouds the picture (§4.1.2). One adjective has a similar alternation: gàrá 'big, adult', human Sg gàrí-n or contracted gă-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 gàː-ná- and mɔ̀ː-nɔ́- (50.a) also have a suffix (Causative allomorph -nv́-) 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 Cvɣv-) inputs. In (51), input j corresponds to a g…-j sequence in the output. There is a minor Causative allomorph -gv́-, making a metathesis analysis possible (underlying j…-g surfacing as g…-j). Two cases are attested, one a deverbal causative and the other a denominal inchoative or factitive.

(51)   j to g…j

	gloss	simple verb	causative	gloss
a.	'be left over'	wàjá-	wàɣà-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 deverbal causatives and one deadjectival inchoative or factitive. Deverbal 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'	súgó-	súnú-ŋó-	'take down'
	'be finished'	dògó-	dònò-ŋó-	'put a stop to'
c.	'distant'	wàɣá	wànà-ŋá-	'go/take far away'

While these cases are less than transparent, I incline to take the suffix here as underlying /-nv́-/, 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 ɣ) are the two voiced velar consonants.

Again, these metatheses are lexically restricted rather than productive. Note, for example, that /Cvŋv-nv́-/ materializes as Cvː-nv́- in the case of dì ŋé- 'sit down', causative dèː-né- 'make sit' (50.b), but as metathesized Cvnv-ŋv́- 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 (Reversive -rv́-, Causative -wv́- and other allomorphs, pseudo-causative -wv̀) 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 V_2-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 Cuː- and Ciː-). 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.	táɣá-	'put on shoes'	táɣá-wá-	'put shoes on (sb)'
b.	nɔ̌ː-	'drink'	nɔ̀ː-wⁿɔ́-	'give drink to'

Inflected verb stems, however, are subject to a **constraint against stem-final high vowels** (i u}, except in monosyllabic Ciː- or Cuː- (níː- 'sleep', núː- '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 núː- 'enter' has a causative núː-wⁿɔ́- 'make enter', not #núː-wⁿú-, and níː- 'sleep' (used in the phrase jì-nîː níː- 'sleep') has a causative níː-wⁿé-, not #níː-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).

(56)   gloss   adjective   inchoative/factitive

   a.   'good'   èjú   éjú-né-
      'bad, ugly'   mɔ̀ñú   mɔ̀ñù-nɔ́-

   b.   'hot, fast'   ɔ́gù   ɔ́gɔ́-rɔ́-, ɔ́ɣɔ́-rɔ́-

   c.   'fresh; soft & moist' ɔ̀rú   ɔ́nɔ́-rⁿɔ́-
      'long'   gùrú   gùnù-rⁿó-
      'sweet, sharp'   érù   éné-rⁿé-

   d.   'sleek'   ònùrⁿú   ónórⁿó-

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 /-nv́-/, triggering another metathesis, or /-rv́-/ ?).

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. ɔ́gù becomes /ɔ́gɔ̀/ 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 ɛ], [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 ɛ], [u u o], and [u u ɔ], respectively.

(58)   input   gloss   derivative   gloss

    a.   píté-   'be inflated'   pítí-wé-   'inflate'
    b.   jìmnɛ́-   'become blind'   jìmnì-wⁿɛ́-   'make blind'
    c.   kúnó-   'put'   kúnú-wⁿó-   'allow to put'
    d.   jùgɔ́-   'know'   jùgù-wɔ́-   '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 ɛ]. 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 ɛ] sequences. From júkkɛ́- 'fine (sb)', a causative júkkɛ́-wɛ́- (not #júkkí-wɛ́-) 'cause to fine' was elicited. The failure of the second-syllable ɛ 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 ɛ], [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 $\#(C)vC_2\_C_3v$, 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 $(C)vC_2v$ verb stems when followed by a 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 r^n}; 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 -yὲ-/-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 Cvː- 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 -yὲ-/-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 mὲy⇑ 'make … (and …)' from kárⁿá- 'do, make'.

The process does not apply in nominal compounds: tɔ̀rɔ̀-tùmó '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: játὲ játέ-tì̀-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 yὲl-lí- 'not come.Perf' from stem yὲrέ- (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 -tì̀-, Resultative -sà-, Recent Perfect -jὲ-, Experiential Perfect -tέrὲ-, Imperfective -tɔ́ɣɔ̀-).

In the case of yὲrέ- **'come'**, Post-Sonorant Syncope (60) is irregularly accompanied by a change in vowel quality from ɛ to e. Thus unsuffixed Imperfective yὲrêː-Ø 'he/she will come', Imperfective Negative yὲrὲ-gó-Ø 'he/she will not come', but suffixed Perfective yěy-yà-Ø 'he/she came', yὲl-lí-Ø 'he/she did not come', etc. No similar vocalic change occurs with e.g. bὲrέ- '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-tì̀- or kún-tì̀- 'put.Perf'. This may have been suggested by the phonologically (and semantically) similar verb kúrⁿó- 'put on, wear (garment)', which regularly syncopates like other Cvrⁿv- stems: Perfective kún-tì̀ '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 mùnó- 'braid' (Imperfective mǔn-tɔ́ɣɔ̀-). Note that kúnó-, únó-, and mùnó- share a segmental shape (C)uno- with u in the first syllable. I did not observe syncope with e.g. nàná- '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 jɛ̀:ré- **'bring'**. The verb appears in syncopating suffixal environments as /jěr-/, 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 ɛ: to e. It may be that the central irregularity is that jɛ̀:ré- is shortened in syncopating environments; this then undergoes regular Post-Sonorant Syncope (60). However, there is no shortening of jɛ̀:ré- in e.g. Imperfective Negative jɛ̀:rɛ̀-gó-, i.e. where the suffix does not begin with a coronal. The lexicalization of syncopation for jɛ̀:ré- 'bring' is demonstrated by the failure of the homonym jɛ̀:ré- 'criticize' to syncopate: jět-tì- 'bring-Perf' versus jɛ̀:ré-tì- 'criticize-Perf'. The other case like jɛ̀: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 jɛ̀:ré- 'bring'), namely mɔ̀:-nɔ́- **'bring together'** (also 'gather, assemble'). For example, syncopated Perfective mɔ̀:-n-tì- varies freely with unsyncopated mɔ̀:-nɔ́-tì-. Unlike jɛ̀:ré-, mɔ̀:-nɔ́- **does not shorten its long vowel** when it syncopates. mɔ̀:-nɔ́- is the causative of mɔ̀rⁿɔ́- '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:ì]
        'cook'   síré-   sít-tì- [sít:ì]
        'groan'   dùró-   dǔt-tì- [dǔt:ì]
        'find'   bèré-   běs-sà- [běs:à]
        'get pregnant' lóró-   lóy-yà- [lój:à]

'come'	yèré-	yěy-yà- [jějːà]
'pass'	gàrá-	gǎy-yà- [gǎjːà]
'go up'	ùrɔ́-	ǔy-yà- [ǔjːà]

b. exceptional cases with long vowel (CvːCv-)

'bring'	jèːré-	jět-tì - [dʒětːì]

c. with /rⁿ/

'beat (drum)'	bàrⁿá-	bǎn-tì -
'summon'	bɔ̀rⁿɔ́-	bɔ̌n-tì -
'sell'	dɔ̀rⁿɔ́-	dɔ̌n-tì -
'swallow'	mì rⁿé-	mǐn-tì -
'cry out in joy'	sírⁿé-	sín-tì -
'(rain) fall'	mì rⁿé-	mǐyⁿ-yⁿà-
'assemble'	mɔ̀rⁿɔ́-	mɔ̌yⁿ-yⁿà-

d. exceptional case with medial n (Cvnv-)

'put'	kúnó-	kún-tì -

e. exceptional case with long vowel and medial n (Cvːnv-)

'bring together'	mɔ̀ː-nɔ́-	mɔ̌ːn-tì - (or: mɔ̀ː-nɔ́-tì -)

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 cororal C_3, hence gòŋɔ́-tì - 'spin.Perf'. With the exception of jèːré- 'bring', the rule does not apply to CvːCv- stems or to trisyllabic stems even if all other factors are favorable: gà:rⁿá-ti 'mix.Perf', jì ːré-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 táŋá- **'happen'**, and the triggering morpheme is either Imperfective Negative -gó- or (in the unsuffixed Imperfective) Nonhuman subject pronominal ≡kɔ̀.

(62)   a.   táŋá≡kɔ̀   = táŋ≡kɔ̀   'it will happen'
        b.   tàŋà-gó-Ø   = tàŋ-gó-Ø   'it will not happen'

Since the flanking consonants in táŋ≡kɔ̀ and tàŋ-gó-Ø constitute homorganic (velar) nasal-stop pairs, there is a clear similarity between this and

examples involving coronals in (61), especially kún-tì - 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 Symcope and Rhotic-Cluster Lateralization. For more on reversives, see §9.1.

(63)		input	gloss	Reversive	gloss
	a.	páɣá-	'tie'	páɣá-rá-	'untie'
	b.	píré-	'get stuck'	píl-le-	'get unstuck'
		kɔ́rɔ́-	'hang up, hook'	kɔ́l-lɔ́-	'unhook'
		màrⁿá-	'be lost'	màl-lá-	'be recovered

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

			careful style	allegro style
a.	'become white'	píní-rⁿé-	pìnì-rⁿ-ú	[pìnə̀rⁿú]
	'trim (branch)'	léréwé-	lèrì w-ú	[lèrə̀wú]
b.	'make soft & moist'	ɔ́nɔ́-rⁿɔ́-	ɔ̀nù-rⁿ-ú	[ɔ̀nə̀rⁿú]
	'inflate'	ómóŋó-	òmùŋ-ú	[òmə̀ŋú]
c.	'untie'	páɣá-rá-	pàgù-r-ú	[pàgə̀rú]
d.	'cause to snore'	gɔ̀lɔ̀rɔ̀-wɔ́-	gɔ̀lùrù-w-ú	[gɔ̀lə̀rə̀wú]

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) **VblN V₂-Lenition**

> In a tri- or quadrisyllabic verbal noun, medial-syllable vowels are raised to high vowels, with front {i e ɛ} 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. tὲm-ín 'wet-Sg' and tὲm-úm 'wet-Pl', or dɔ̀ŋ-ín 'lean-Sg' and dɔ̀ŋ-úm 'lean-Pl'), when followed by the postconsonantal clitic allomorph ≡î: or ≡ì: 'it is' (§11.2.1). Thus for 'it is wet ones' I recorded tὲm-ə́m≡î: with schwa-like vowel, and for 'it is a lean one' I heard dɔ̀ŋə́-n-≡î:. When a suffixal i follows homorganic y, as in pὲyⁿ-ín 'old-Sg', it is hard to hear any trace of the i with the clitic, the combination being pronounced pěyⁿ-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 gárə̀-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 $C\grave{v}(:)C_2$-ú and apocopated $C\check{v}(:)C_2$-Ø. 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-Ø
	'drag'	bùmó-	bùm-ú, bǔm-Ø
	'pound with water'	jàŋá-	jàŋ-ú, jǎŋ-Ø
	'massage'	mɔ̀ŋɔ́-	mɔ̀ŋ-ú, mɔ̌ŋ-Ø
	'put up on'	ná:ná-	nà:n-ú, nǎ:n-Ø
b.	'recuperate'	bàyá-	bày-ú, bǎy-Ø
	'rob'	gùyⁿó-	gùyⁿ-ú, gǔyⁿ-Ø
	'rot'	ɔ́yɔ́-	ɔ̀y-ú, ɔ̌y-Ø
c.	'buy'	ɛ́wɛ́-	ɛ̀w-ú, ɛ̌w-Ø
	'greet in A.M.'	ná:-wⁿá-	nà:-wⁿ-ú, nǎ:-wⁿ-Ø
d.	'park'	kálá-	kàl-ú
	'knock down'	járá-	jàr-ú
	'summon'	bɔ̀rⁿɔ́-	bɔ̀rⁿ-ú
	'suck'	ɔ̀ñɔ́-	ɔ̀ñ-ú

e.	'tie'	páɣá-	pàg-ú
	'swear (oath)'	wáːté-	wàːt-ú
	'card (cotton)'	háːsɛ́-	hàːs-ú
f.	'lift'	íllé-	ì ll-ú
	'agree'	háwrɛ́-	hàwr-ú
g.	'inform'	jùgù-wɔ́-	jùgù-w-ú
	'shout'	káːgíné-	kàːgì n-ú
	'arrange'	dànàŋá-	dànùŋ-ú

In (66.a), C_2 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 C_2 = y or y^n. In (66.c) C_2 is w or w^n; here it is difficult to distinguish e.g. Cv̌w from Cv̀wú 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 dǎy^n '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 V_2-Lenition (65).

(67)   **Suffixal ᵾ-Apocope (VblN)**

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

3.5.4.2   *Inter-Word ᵾ-Apocope*

In addition to these word-internal examples, there are frequent instances of ᵾ-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 #. ᵾ-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 tɔ̀gú 'kind' is followed by kâːⁿ 'each'. In (68.b), sàgú 'entrusting (someone)' is followed by gáː- 'say'.

(68)   full form   apocopated   gloss

    a.   tɔ̀gú kâːⁿ   tɔ̌g kâːⁿ   'each kind' **2004.3.1**
    b.   sàgú gáː-   săg gáː-   '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 kâːⁿ (not #yùrùg kâːⁿ) '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≡kɔ̀] 'it is ADJ'. Optional u-Apocope is observed with ɔ́gù 'fast' before velar stop, hence ɔ́g≡kɔ̀ 'it is fast' (phonetic [ɔ́kːɔ̀]. Similarly, ò:gú gó:-yɛ̀-m 'I sweated' (noun ò:gú 'sweat', gó:-yɛ̀-m 'I went out') is often apocopated to ǒ:g gó:-yɛ̀-m.

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

While the apocopated vowel is normally u, I have also recorded jùg-gó-w 'you-Sg do not know' as a variant of jùgɔ̀-gó-w. The high-frequency combination jùgɔ́- 'know' and Imperfective Negative -gó- can also be idiosyncratically contracted to jɔ̀:-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 bû: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: bû:d nǔ:yⁿ 'five riyals' and bû:d pérú '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 [cɛ̀j-Ø]-[cɛ̀j-ú] as a variant of [cɛ̀j-ù]-[cɛ̀j-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≡kɔ̀ 'it is plump' with the very common ér≡kɔ̀ (from érù) 'it is sweet'. Were …rⁿu to apocopate, 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-îːⁿ   nὲ]   wǒ-r   tímé-sà-Ø
             [goat-child   now]   3Sg-**Dat**   resemble-Reslt-3SgS
             'A small goat resembles it (=scorpion).' (wò-rú)

        b.   sὲllὲ-lúː-Ø   wǒ-r   gá-ẁ
             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   dɔ̀ɣɔ̌-m   yǐr   bɛ̌t-tɔ́ɣɔ̀-bà
             thus   Dogon-Pl   **clothes**   get-Impf-3PlS
             'That [focus] is how Dogon people get clothes.' (yì rú, bèrɛ́-)
             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 dógúrú 'time', hence dògùrù kâːⁿ (not #dògùr kâːⁿ) 'each time'.

The two dative pronominals not ending in -rú are 1Sg mǐ-n and 1Pl ὲmɛ̌-n. These were probably once *mì-rú and *ὲmὲ-rú, or rather (with Nasalization-Spreading) *mì-rⁿú and *ὲmὲ-rⁿú. If so, for these first person datives, the original apocopated variants mǐ-n and ὲmɛ̌-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: ɔ̀rú 'fresh' and predicative ɔ̌r≡kɔ̀ 'it is fresh';

érù 'sweet' and predicative ér≡kɔ̀ '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 jéːrù 'bitter' and of trisyllabic ɔ̀nùrⁿú 'smooth, sleek' to apocopate: jéːrú≡kɔ̀ 'it is bitter', ɔ̀nùrⁿú≡kɔ̀ 'it is smooth'. For the tones in ér≡kɔ̀ and jéːrú≡kɔ̀ 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 bɛ̀n-náː 'she-goat', cf. bɛ̀rú '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 yǐr téːré- (71.b), which is usually heard as [jǐtːéːré] with [tː].

(71)   a. compound
             bɛ̀rú 'goat', náː 'body'   bɛ̀n-náː 'goat'

        b. [word + verb]
             bɛ̀-rú '3Pl-Dative', téːré- 'show'   bɛ̌-r téːré-
             yì rú 'garment', téːré- 'show'   yǐr téːré-
             tárú 'egg', tárá- 'lay'   tár tárá-

   c. [noun/adjective + adjective]

      bèrú 'goat', cèté 'runty'   bèr cèté

      pírú 'white', nà:r^{n}á 'easy'   … pì r nà:r^{n}á

      bórù '(sb's) uncle', túmnó 'one, sole'   mì bòr túmnó ('my …')

   d. [noun/adjective/numeral + numeral]

      bèrú 'goat', túrú 'one'   bĕr túrú

      dùgú 'fat', kúróy 'six'   … dŭg kúróy

      pérú 'ten', tă:n 'three'   pét-tà:n ('thirty')

      túrú 'one' (distributive iteration)   tút-túrú ('one by one')

   e. [noun/adjective/numeral + NP-final morpheme]

      tɔgú 'kind', kâ:^{n} 'each, any'   tɔg kâ:^{n}

      dùgú 'fat', kâ:^{n} 'each, any'   … dùg kâ:^{n}

      dùgú 'fat', kù^n Definite   … dŭg kù^n

   f. [noun/adjective/numeral + quasi-verb]

      ɔ́gù 'fast', kɔ̀ 'be (nonhuman)'   ɔ́g≡kɔ̀

   g. [noun/adjective/numeral + discourse-particle]

      bórù '(sb's) uncle', nè 'now'   [mì bón] nè ('my …')

   h. [inalienable possessor noun + possessed noun]

      bórù '(sb's) uncle, tíríwè-n 'grandchild' [... bór] tíríwè-n

Regarding (71.d), complex numerals are compound-like sequences subject to (morphophonological) lexicalization. In decimal terms ('10' to '90'), which begin with pérú- 'ten', apocope occurs in pét-tà:n 'thirty' but not in pèrù-sûy^n '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 bórù] 'my uncle' does apocopate when it functions as inalienable possessor, i.e. as a kind of loose compound initial.

(72) [mì   bórù]   tógù   tógó-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]   téːré-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 sàː-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
            3Pl-Dat   only
            'only to them'

       b.   [mì   bórù]   sǎy
            [1SgP.L   **uncle.HL**]   only
            'only my uncle'

       c.   yì rú   sàː-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 (/r^n/ to n)

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

(76)   **Derhoticization**

/r^n/ → 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 r^n before a coronal. Thus dɔr^{n}ɔ́- 'sell', Perfective dɔ̌n-tì-, Perfective Negative dɔ̀n-lí.

The only other combination where /r^n/ 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 /r^n/ is clustered with a following consonant other than a coronal or y, at any stage in derivations.

tĭn-Ø '(fire-)wood', in form a Verbal Noun, cf. cognate noun-verb sequence tĭn-Ø tír^{n}é- 'go in search of firewood', shows that r^n 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 *r^n, e.g. bán 'red'; compare cènè bán 'anger' (originally 'red heart') with the associated verb (cénè) bàr^{n}á- '(heart) anger (sb)'.

3.5.5.2   Rhotic Assimilation

With a few exceptions in borrowings, such as bɛ́rnɛ̀ '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/ → $C_x C_x$ (C_x = coronal consonant, not a rhotic)

    b.   in verbal morphology only:
        /ry/ → yy
        /r^{n}y/ → y^{n}y^n

Example of (77.a) in verbal morphology: bèré- 'get' has AN-inflected forms Perfective bĕt-tì -, Resultative bĕs-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-sûy^n '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 ; 3Pl dative bè-rú plus verb bè-rú té:ré- 'show to them', often apocopated and assimilated as bĕ-t té:ré-.

Examples of (77.b), which occurs only with verbs that take Perfective allomorph -yà/-yè, are gàrá- 'pass by', Perfective gǎy-yà-, and mòr^{n}ɔ́- 'come together', Perfective mǒy^n-y^{n}à-. In the latter, it is reasonable to assume that Nasalization-Spreading (48) first converts /r^n…y/ to /r^n…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)vrv-stem, Post-Sonorant Syncope (60) should result in #Cvr-rv-. Instead, we get Cvl-lv- (78).

(78)   input   gloss   reversive   gloss

input	gloss	reversive	gloss
gòró-	'cover'	gòl-ló-	'uncover'
kɔ́rɔ́-	'hang up'	kɔ́l-lɔ́-	'take down (sth hanging)'
píré-	'get stuck'	píl-lé-	'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 …rvr…, 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 syncopation 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.

I have one case of a reversive derivative based on a Cvr^{n}v- stem. From màr^{n}á- '(sth) be lost' we get màl-lá- '(sth lost) be recovered'. The nasalization of r^n is lost in the derivation.

(79)   **Rhotic-Cluster Lateralization**

at the boundary between a verb stem and a derivational suffix:
/rr/ → ll
/r^{n}ɐr/ → ll

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

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 èjú 'his/her field'; object or subject pronoun plus verb, e.g. kó ɛ́ː-sà-m 'I saw it' or kó mì êː-Ø 'when I saw it'; noun plus verb, e.g. péːjú óː- 'give a sheep' or síñè áɣá- 'hear noise'; and noun plus adjective, e.g. màŋgòrò érù 'a sweet mango'.

Most nominal compounds show the same avoidance of contraction. Examples are gàsègè-úró 'herd (lit. "house") of sheep and goats' and tì rè-àr^{n}á '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)   a.   in non-monosyllabic Verbal Nouns with suffix -ú (§4.2.2.1)
　　　b.   in a subset of compounds with final -î:^{n} 'child' (§5.1.10)
　　　c.   when C_2 in a CvC_2v stem is idiosyncratically deleted
　　　d.   when 3Pl subject -ba deletes b after a Negative -Cv- AN suffix
　　　e.   adjective followed by Augment -í: or -: (§4.5.3)
　　　f.   copular 'it is' quasi-verb or Focus clitic ≡î: (§11.2.1)
　　　g.   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: íjɛ́- '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
ìjú	'dog'	ìj-î:^{n}	'puppy'	also ìjù-î:^{n}
námñú	'sesame'	nàmñ-î:^{n}	'sesame seed'	
nàŋá	'cow'	nàŋ-î:^{n}	'calf'	
àñú	'roselle'	àñ-î:^{n}	'roselle seed'	
èñɛ́	'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 jɔ̀ŋɔ̀-î:ⁿ 'young hare' (the initials mean '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.　jùgɔ́-　'know'　　　　jɔ̀:-gó-　　　Impf Negative
　　　　　　　　　　　　　[alongside jùgɔ̀-gó-]

　　　b.　gàrá-　'pass by'　　　gà:-ná-　　　causative
　　　　　mɔ̀rⁿɔ́-　'come together'　mɔ̀:-nɔ́-　　causative
　　　　　dì ŋé-　'sit down'　　　dè:-né-　　　causative

jɔ̀:-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 C_2 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 -tì-, 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 kɔ́:-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 -v́ (underspecified vowel, long or short). The contraction process can then be summarized as (87).

(87)   a.   u   +   -í: >   -î:

   b.   v́₁ +   v₂   >   v́₁:
       [-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 ⹀ỳ (with variant ⹀ỳⁿ by Nasalization-Spreading) and ⹀î: (with variant ⹀ì: 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⹀ì: '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: >   ⹀ì:

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 nǒ:- 'drink' and dé:- 'carry' combine with -á:rà- to give e.g. nǒ:-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: bì ré- 'work' and dɔɣɔ́- 'finish' have suffixed forms bì r-á:rà- and dɔɣ-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: dɔɣɔ́- 'finish', Perfective dɔɣ-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 (VblN -ú, 3Pl -ba)
            … long (C_2-Deletion)

    b. **quality** features (when v_1 and v_2 diverge)
        output vowel has quality features of …
            … v_2 (VblN -ú, 'child', C_2-Deletion, 'it is', -í: Augment allomorph, AN suffix after nonmonosyllable, 3Pl -ba after high vowel)
            … v_1 (-ː Augment allomorph, AN suffix after monosyllabic)
            … height features from v_1, backness and rounding features from v_2 (3Pl -ba after mid-height vowel)

    c. **tones** (when v_1 and v_2 diverge)
        output vowel has tone of …
            … v_2 (VblN -ú, 'child', -í: Augment)
            … amalgam of v_1 and v_2 ('it is')

I view the C_2-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 C_2-Deletion cases provide useful evidence about both length and quality features. However, C_2-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 iː, /uw/ to uː)*

This phonetically natural process converts tautosyllabic homorganic vowel-semivowel sequences into long vowels. It applies within suffix clusters, and within conjugated forms of the ≡ỳ '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 -tì-, extracted from §10.2.3, is given in (91).

(91)   3Sg   -tì-Ø
        1Sg   -tù-m
        1Pl   -tì:-Ø   (< -tì-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). -tì- and -lí- are the only two high-voweled AN suffixes.

3Sg -tì-Ø and -lí-Ø with underlying zero pronominal suffix (3Sg) suggest that the basic forms of the suffixes are -tì- 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 #-tì-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≡ỳ
        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 ≡ỳ. 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 -tì:-Ø and -lí:-Ø, since the "postvocalic" clitic allomorph ≡ỳ also happens to be used after word-final y. However, the 1Pl forms are

pronounced with long iː, and the forms are obviously parallel to the 2Sg ones, so I transcribe -tìː-Ø and -líː-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 ≡ûm, 2Sg ≡ûː, and 1Pl ≡îː. As shown in §11.2.1.2, the 1Sg form is derived as follows: /≡îː-m/ > /≡m̀/ > ≡ûm. The 2Sg and 1Pl are likewise, at the stage corresponding to ≡ûm, representable as /≡ûw/ and /≡îy/, 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   >   iː
uw   >   uː

Monophthongization does not apply across a clitic boundary, i.e. in the sequence …i≡ỳ, as in wákátì≡ỳ 'it is (a) time'. The rule is not applied after a Ciː- or Cuː- verb, as in tíː-y 'we will send' or núː-ẁⁿ '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 yɔ̌ː-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 iː word-finally. However, when núː-ẁⁿ '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)   núː-wⁿ≡îː   làː   dèy
        enter.Impf-2SgS≡**it.is**   Neg   if
        'unless you-Sg will go in'

3.6   Cliticization

The clearest case of cliticization is ≡ỳ (allomorph ≡îː) '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 kɔ̀ (nonhuman) and wɔ̀- (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 kɔ̀ and wɔ̀-, I will use this symbol only in those morpho-syntactic contexts where they appear to function as clitics.

3.6.1   Phonology of ≡ỳ 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)
         ≡î: (≡ì:)   ≡ỳ

The **nonsyllabic allomorph** ≡ỳ is always L-toned. The only further phono-logical modification that it can undergo is Nasalization-Spreading, which converts it to ≡ỳⁿ 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≡ỳ and …yⁿ≡yⁿ, the final semivowel is audibly prolonged. Examples of ≡ỳ and ≡ỳⁿ are in (96). Note that the final syllable (including the clitic) has <LHL> tone in yà:lĕy≡ỳ and àrⁿàkɔ̌yⁿ≡ỳⁿ.

(96)   gloss   without clitic   with clitic ('it is …')

        a. unnasalized, postvocalic or after y
            'house'   úró   úró≡ỳ
            'mongoose'   sĕ: sĕ:≡ỳ
            'small bowl'   pɛ́:rɛ̀   pɛ́:rɛ̀≡ỳ
            'woman's wrap'   yà:lĕy   yà:lĕy≡ỳ
            'duty'   tílây   tílây≡ỳ

        b. nasalized, postvocalic or after yⁿ
            'boubou (robe)'   àrⁿàkɔ̌yⁿ   àrⁿàkɔ̌yⁿ≡ỳⁿ
            'water'   ní: ní:≡ỳⁿ
            'usefulness'   nɛ̀wⁿɛ́   nɛ̀wⁿɛ́≡ỳⁿ
            'soldering metal'   pùgâ:ⁿ   pùgá:ⁿ≡ỳⁿ

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

The **syllabic allomorph** ⹀î: 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 ⹀î: 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 ⹀ì: 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⹀î:
            'spleen'   cènè-pá:làm   cènè-pá:làm⹀î:
            'root'   bɔrɔ-cé:ŋ   bɔrɔ-cé:ŋ⹀î:

        b. postconsonantal, stem ends in R-toned syllable
            'monitor lizard'   ǔ:n   ù:n⹀î:
            'pants'   pɔ̌n   pɔ̀n⹀î:
            'chief, Hogon'   ɔɣɔ̌-n   ɔɣɔ̀-n⹀î:

        c. postconsonantal, stem ends in F-toned syllable
            'thicket'   û:n   ú:n⹀ì:
            'memorial feast'   pídâ:w   pídá:w⹀ì:

    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 ⹀ỳ and ⹀î: are segmentally deleted, but their tone survives as the tone of the previously atonal pronominal suffix. An example is postvocalic 1Sg form ⹀m̀ from /⹀ỳ-m/. See §11.2.1.2 for details.

3.6.2   'Be' quasi-verbs (kɔ̀, wɔ̀-) and kùn- 'be in' as clitics

In their primary function as existential or locational quasi-verbs, kɔ̀ 'be (nonhuman)' and wɔ̀- '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 ≡kɔ̀] (§10.1.1, §10.1.2.8)
            —L-tone of Imperfective realized on kɔ̀ (Tone-Grafting (131), §3.7.3.3)

         c.   [Existential yɛ́ + 'be'] (positive existential predicate, §11.2.2.1)
            —idiosyncratic rounding assimilation (yɔ́≡kɔ̀, yɔ́≡wɔ̀-)

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

The rounding assimilation that shifts Existential yɛ́ to yɔ́ also takes place before kùn- 'be in', hence yɔ́≡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 ≡ỳ.

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 wɔ́- 'be' and sá- 'have', though these are nearly always heard in L-toned form (wɔ̀-, sà-). The only direct evidence for underlying H-tones in such quasi-verbs is from lexical-stem pseudo-participial clauses, e.g. wɔ́-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)vː- and may be R- or H-toned. R: yǎː- 'go', wɔ̌ː- 'kill'. H: gáː- 'say', góː- 'go out', and tíː- 'send'. A rare minimal pair is náː- 'spend night' versus nǎː- 'make (rope)'.

Bisyllabic verbs may be HH or LH. HH: pérɛ́- 'strike (match)', káːrá- 'rip', káwgá- 'separate'. LH: gòjó- 'treat differently', gòró- 'cover with blanket', jèːré- 'bring', dɔmnɔ́- 'console'. A rare minimal pair is ùgó- 'bake in oven' versus úgó- 'extinguish'.

Trisyllabic verbs (derived or underived) may be HHH or LLH. HHH: émé-wⁿé- 'make spacious', ɛ́ŋɛ́rⁿɛ́- 'restrain', káŋárⁿá- 'shine'. LLH dì gì -ré- 'align', dɔ̀rɔ̀gɔ́- 'ransom', gàmàrⁿá- 'divide'.

Quadrisyllabic verbs are rare, being limited to infrequently occurring causatives of trisyllabic verbs, e.g. HHHH káŋárⁿá-wⁿá- 'cause to shine', LLLH gɔ̀lɔ̀rɔ̀-wɔ́- '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 -wv̀.

Tabulations based on a working lexicon containing some 720 mono-morphemic 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)vː-

H	63	76
R	20	24
total	*83*	

    b. bisyllabic (C)vCv-, (C)vːCv-, (C)vCCv-

all-H	287	59
LH	196	41
total	*483*	

c. trisyllabic (C)vCvCv-, etc.

all-H	65	64
LLH	36	36
total	*101*	

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 ɛ and often showing medial consonant clusters, have all-H tone in their basic forms: júkkɛ́- '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)vː, 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 pǒː- used (as a verb) in greetings. R-tone correlated with C = semivowel (5/6), the exception being wɛ́ː- '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(ː)Cv- stems**, excluding suffixal derivatives from monosyllabic stems. All-H tone contour is categorically predictable when C_1 is a voiceless stop {p t c k}; I found some 130 all-H stems versus zero LH. Likewise, all 50 Cv(ː)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 (lɛ̀gɛ́- 'tease'). On the other hand, when C_1 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. gáːjɛ́- 'converse' (note the noncanonical a...ɛ vocalism). Likewise, when C_1 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 wɛ́rɛ́- 'be wild'. A nasal C_1 favors LH but only statistically, with 36 LH stems versus 14 all-H; of the latter, 3 are probable Fulfulde loans. All Cv(ː)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 C_2. 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 gɔ́ː gɔ̌ː- 'dance a dance', bɛ́ː bɛ̌ː- 'defecate, have a shit', bírɛ́ bìrɛ́- 'do a job, work', and bègérè bègèré- '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: bɛ́ː 'excrement', dɔ́n 'price', bíːⁿ 'Sclerocarya tree', céːŋ 'root'; R: děː 'father', běn 'tomtom', dǐːⁿ 'place', gǔːn 'pot cover'; F: dôː 'Striga herb', jêː 'swaying', ûːn 'thicket'. The rare bell-shaped <LHL> type is attested in gɔ̌ːⁿ-ǹ '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', ɛ́ndâm 'kinship', dɔ́ːráːjì '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 déŋémbéːrè or: déŋém-béːrè '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	ǎ-n 'man', ñě-n 'woman'
	total	*4*		
(C)vː	H	20	37	
	F	14	25	
	R	20	38	
	<LHL>	1	2	requires suffix -n, -m
	total	*55*		
(C)vC	H	22	22	
	F	20	20	
	R	56	57	
	<LHL>	0		
	total	*98*		
(C)vːC	H	4	25	
	F	6	38	
	R	6	38	
	<LHL>	0		[see under Cvː]
	total	*16*		

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:rὲ 'small bowl', búgù 'gunpowder'; LH bàtá 'box', bὲ:rú 'nightjar'. A bimoraic first syllable makes RL also possible: the instances noted are sǎmnà 'soap', dǎwrù 'strategem', sǒ:rò 'young', cě:rù 'cowry', ɔ̌:rⁿɔ̀ 'waterskin', and sě:rⁿὲ 'something amorphous' ('soap' and 'strategem' may reflect trisyllabic *C̀vĆvC̀v etyma). A human noun that takes Sg -n and Pl -m suffixes has LR contour in four cases: ɔ̀ɣɔ̌-n 'chief, Hogon', sàɣǎ-n 'chief's subordinate', sùrgɔ̌-n 'weaver (caste)', and dɔ̀ɣɔ̌-n 'Dogon'.

A minimal trio (HH, LH, HL) is ɛ́:rɛ́ 'peanuts', ὲ:rɛ́ 'Boscia bush', and Fulfulde loanword ɛ́:rὲ 'white cow with black spots'. Two more minimal pairs are LH ɔ̀:rⁿɔ́ 'monkey' versus RL ɔ̌:rⁿɔ̀ '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
	total	*291*		
(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		
	total	*109*		

(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	
	total	*58*		

(C)vCCCv
{HL}	HL	2	100	loanwords
	all others	0		
	total	*2*		

(C)vːCCv
{H}	HH	0		
{HL}	HL	2	67	
{LH}	LH	1	33	
	all others	0		
	total	*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 Cvː syllables: HH dí-déː 'shield' (only HH example, arguably a reduplication); HF jámâː 'crowd', jípîːⁿ 'Maerua tree'; LF pùgâːⁿ 'soldering metal', màlfâːⁿ 'rifle'; LH bàlpɔ́ː 'calabash', pùː-páː 'bellows' (onomatopoeic); LR yèsǎː 'sister' (only example). HR and HL are unattested.

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

shape	tone type	#	% of shape	comment
(C)vCvː				
{H}	HH	1	4	
{HL}	HF	7	26	4 loans; 2 possible -îːⁿ 'child' cpds
	HL	0		
{LH}	LH	5	19	
	LR	1	4	
{HLH}	HR	0		
{LHL}	LF	13	48	7 possible -îːⁿ 'child' cpds and 2 French loans
	total	*26*		
(C)vCCvː				
{H}	HH	0		
{HL}	HF	2	29	
	HL	0		
{LH}	LH	2	29	
	LR	0		
{HLH}	HR	0		
{LHL}	LF	3	43	
	total	*7*		
(C)vːCvː				
{H}	HH	0		
{HL}	HF	3	38	
	HL	0		
{LH}	LH	3	38	
	LR	0		
{HLH}	HR	0		
{LHL}	LF	2	25	1 possible -îːⁿ 'child' cpd
	total	*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 jíːlǔm 'leech' (only example); HL píːlòm 'bladder', úːñùm 'Cleome herb' (only two HL examples); LF wìl-wîl 'giraffe' (unusual

reduplication), tùgûn 'ladle'; LR pì nǎm 'powder', sɔ̀bɔ̌l 'gourd with neck', lèrěw 'everything'.

Unsuffixed HL-toned Cv́CʋC and Cv́CCʋC (with L-tone on the bimoraic final syllabic) are unattested, and Cv́:CʋC 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:làm 'spleen', cì rⁿè-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	
	total	*40*		
(C)vCCvC				
{H}	HH	0		
{HL}	HF	6	75	loanwords
{LH}	LR	1	13	
	all others	0		
{LHL}	LF	1	13	
	total	*8*		
(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	
	total	*10*		

(C)vCv:C
{H}	HH	0		
{HL}	HF	3	75	
{LHL}	LF	1	25	
	all others	0		
	total	*4*		

(C)vCCv:C
{H}	HH	0		
{HL}	HF	3	100	loanwords
	all others	0		
	total	*3*		

(C)v:CCvC, (C)v:Cv:C   [unattested]

Trisyllabic nouns with final short vowel can have the following tone patterns: HHH (béjéré 'shroud'), HHL (kɔ́pɔ́rɔ̀ 'colonial coin'), LHL (jɛ̀ɲɛ́rⁿɛ̀ 'tamarind seed'), LLH (ɛ̀gɛ̀jé 'sneeze'), marginally RLL, and possibly LHH. RLL is attested in the borrowing mǎŋgòrò (or mǎŋgòlò) 'mango'. LHH is attested only in àdúrⁿɔ́ 'world of the living' (<Arabic) and à-kɔ́rɔ́ '(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	
	total	*98*		

(C)v:CvCv
    {H}   HHH   0
    {HL}   HHL   5   100   all loanwords
                 all others 0
                 total   *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
                 total   *17*

(C)v:Cv:Cv
    {H}   HHH   0
    {HL}   HHL   3   100   all loanwords
                 all others 0
                 total   *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
                 total   *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 àsàrî:ⁿ 'sedge sp.', bànàkû:ⁿ 'cassava (manioc)', ñàmàkû: 'ginger root' (the latter two from Bambara); HHF sɔ́:-[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		
	total	*3*		
(C)v:Cv:Cv:				
{H}	HHH	0		
{HL}	HHF	1	100	
	all others	0		
	total	*1*		

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

Final F and R are also possible with trisyllabic stems endng in a CvC syllable. Examples of the attested tone patterns: HHH dúdúrúm 'trash heap' (only example), HHF dórówôl 'whip', HLF pí-pìlîm '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 sàɣàrám 'gravel', LLF bàràmîn 'lever' (only example), RLF sĕrmènêm 'fig tree sp.' (only example, quadrisyllabic variant sèrúmènêm), LLR ìjùbǎy '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		
	total	*18*		
(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

Quadrisyllabic 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): kórúkàjà 'tree locust'. To the previous examples of …HL with final bimoraic syllable, add quadrisyllable sàmàlɔ́wɔ̀n '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 ây^n 'slightly bitter' and tôm 'cold'; R dɔ̌ŋ '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 sûy^n '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

	verb	noun	adjective	numeral
H	√	√	√	—
R	√	√	√	√
F	—	√	√	√

      b. bisyllabic

	verb	noun	adjective	numeral
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 numer 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 ɔ̀ɣɔ̌-n 'chief, Hogon', sàɣǎ-n 'chief's subordinate', dɔ̀ɣɔ̌-n 'Dogon (person)', and sùrgɔ̌-n 'weaver' (plurals ɔ̀ɣɔ̌-m, sàɣǎ-m, dɔ̀ɣɔ̌-m, sùrgɔ̌-m). 'Chief' has an unsuffixed form ɔ̀ɣɔ́ 'leader (e.g. of animal pack)', with final H-tone replacing R-tone, and 'Dogon' has an unsuffixed form dɔ̀ɣɔ́ 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 /ɔ̀ɣɔ̀/, /sàɣà/, /dɔ̀ɣɔ̀/, and /sùrgɔ̀/, and the final mora secondarily acquires H-tone, for example in unsuffixed ɔ̀ɣɔ́ and in suffixed ɔ̀ɣɔ̌-n.

A theoretical objection to this argument is that e.g. unsuffixed ɔ̀ɣɔ́ 'leader' can also be derived from /ɔ̀ɣɔ̌/ 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 úrò

'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
        total   *10*   *1*

    b. bisyllables with final CvC, from (104)
        (C)vCvC   1   4
        (C)vCCvC   0   1
        (C)v:CvC   0   2
        total   *1*   *7*

    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 over-whelmingly 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 com-parative 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 com-ponent 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>
        Cv̌:-   1   requires suffix: Sg -n, Pl -m

b. bisyllabic, from (102-4)
    RL
        Cv̌CCv̀   2

LF

    CV̀CV̂:   13
    CV̀CCV̂:   3
    CV̀:CV̂:   2
    CV̀CV̂C   11
    CV̀CV̂:C   2
    CV̀CCV̂C   1

c. trisyllabic, from (105)

    LHL

        CV̀CV́CV̀   11
        CV̀CV́:CV̀   4
        CV̀CCV́CV̀ 2

    RLL

        CV̌CCV̀CV̀   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 CV̀:CV̂:, CV̀CCV̂C, and CV̀CV́:CV̀, 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 CV̌CCV̀ or CV̌:CV̀ 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 #/CV̀CCV̂/ or #/CV̀:CV̂/, which could then lengthen the final vowel to accomodate the contour tone. But this would then be learned and lexicalized as CV̀CCV̂: or CV̀:CV̂:, 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 …Cvː, all verbs)
     ii. …**final syllable** (bitonal nonmonosyllabic …Cvː)
     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 kɔ̀ 'it is' (arguably cliticized) in (225), and before kár^{n}à '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.

mey^n 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 mèy^n 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 mèy^n 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 mèy^n⇑.

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 inter-rogative 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 Cvː- 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 -Cv́- 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 -ḿ (§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: bɛ̀ré- 'get': bɛ̀ré noninitially in a chain; tone-dropped bɛ̀rɛ̀- 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 bɛ́rɛ̀- in relative clauses; and all-H Imperative bɛ́rɛ́.

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. kâːⁿ '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 Cv́ː- or Cv̌ː-, or longer stems ending in …Cv́-. The unsuffixed Imperfective equivalents are Cv̂ː- (F-tone), Cv̌ː�- (<LHL> tone), and /…Cv̂-/, respectively; the latter is lengthened to …Cv̂ː- 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 them-selves 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 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:rá-n 'a white person', jɛ́mɛ̀-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 dɔ̀ɣɔ̌-n '(a) Dogon' versus dɔ̀ɣɔ́ '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 kâːⁿ '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 deverbal nouns (§4.2.4);

Tone-dropping is seen in úró 'house', ùrò jɛ́m '(a) black house' with modifying adjective, and ùrò ù ɛ̂ː-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: ànsáːrá-n túrú 'one white man', jɛ́mɛ̀-n lɛ̀ 'to/for the blacksmith'. The same noun úró drops its tones as a compound initial in ùrò-díŋ-Ø 'neighboring family' and ùrò-dúː 'family'.

H(H…)L is seen with inalienable kin term ɔwⁿɔ́ '(a) parent-in-law' in possessed forms like ú ɔ́wⁿɔ̀ 'your parent-in-law'. The same tonal overlay occurs in the compound final of àná-[ɔ́ɣɔ̀-n] 'village chief', cf. ɔɣɔ̌-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 [x̀ v́-Ppl], as in bèːrù-jáː-m 'message deliverers' (verb jǎː- '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 nùmô: 'in the hand'; gɔ̌: 'granary' and gɔ̂: 'in the granary' (<LHL> tone); gǔn 'back (body)', postposition gǔnǹ '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: gɔ̌n 'curved, bent', Sg gɔ̀n-ín, Pl gɔ̀n-úm ; ɔ̂y 'rotten', Sg ɔ́y-ìn, Pl ɔ́y-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 gáːrá 'more'
            (§12.1.3) in comparatives and after ɛ̀jíⁿ⇒ '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 -nɛ́ 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 pɛ́rú- '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 -Cv́- 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. buro-, {LH}   buro-, Caus, {LH}   lexical input
       b. —   buru-go-, {LH}   causative derivation
       c. bùró-   bùrù-gó-   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, gàmàrⁿá- 'divide, share'. The H(H…)L overlay is realized as HHL in the unsuffixed Perfective gámárⁿà- in relative clause participles. In the relevant iteration pattern, H(L…)L appears in the first part of (and indeed the whole of) gámàrⁿà-gàmàrⁿà.

The existence of two distinct {HL} overlays is obviously a problem for an autosegmental approach to Jamsay tones, and perhaps to any other "phono-logical" 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)v́Cv̂C against zero cases of HL #C)v́Cv̀C, 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)v́Cv́Cv̂C 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 **unsuffixed 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 Cv́ syllable (not Cv́: or Cv́C), 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
        Cvː-   Cv̂ː-

    b. bisyllabic
        Cv(C)Cv-   Cv́(C)Cv̀-

    c. trisyllabic
        Cv(C)CvCv-   Cv́(C)Cv́Cv̀-

    d. quadrisyllabic
        Cv(C)CvCvCv-   Cv́(C)Cv́Cv́Cv̀-

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: gɔ̀lɔ̀rɔ̀-wɔ́- 'cause to snore', Perfective participle gɔ́lɔ́rɔ́-wɔ̀-, as in dɔ̀gùrɔ̀ gɔ́lɔ́rɔ́ mí wɔ̀ gɔ́lɔ́rɔ́-wɔ̀-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'   àɣá   áɣà
        '(man's) sister'   yèsǎː   yésâː

    c. trisyllabic
        '(woman's) brother'   àsàrⁿá   ásárⁿà
        '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 (yɛ́sâ:). 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:rá 'more, most' (§12.1.3) have H(H…)L contours. Some examples are in (125).

(125)   gloss   regular form   as modifier, after gá:rá

           a. monosyllabic
              'black'   jɛ́m   jɛ̂m

           b. bisyllabic
              'bad'   mɔ̀ñú   mɔ́ñù

           c. trisyllabic
              'smooth'   ònùrⁿú   ónúrⁿù

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 #gúrî-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 kóróy 'six' (note the final heavy syllable) appears as HF -kórôy in e.g. mírⁿé-kúrôy 'having six voices'. This is parallel in tonal pattern to possessed HF-toned yɛ́sâ: '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'   dúː   -dûː

    b. bisyllabic
       'sesame'   námñú   -námñù

    c. trisyllabic
       'cat'   nìꞏnì wⁿé   -ní-níwⁿè

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 bànàkûːⁿ (Bambara loan). The elicited compound 'bush cassava' came out as èjú-bánákûːⁿ. There is a possibility that the word for 'cassava' is a crypto-compound (bànà-kûːⁿ), as indeed it is in the Bambara source, so we must be circumspect about assessing this datum. However, on the face of it, èjú-bánákûːⁿ 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 unsuffixed 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 Cvː (127.a-b), R-toned Cv̌n (127.c), and longer stems ending in H-toned …Cv́ (127.d-e).

(127)   noun   tonal locative   comment

    a. Cvː   Cv̂ː

    b. Cv̌ː   Cv̌ː̀   Cv̌ː̀ = trimoraic Cv̀v́v̀

    c. Cv̌n   Cv̌nǹ   Cv̌nǹ = trimoraic Cv̀ńǹ

    d. …Cv́Cv́   …Cv́Cv̀

    e. …Cv̀Cv́   …Cv̀Cv̂ː

Examples: káː 'mouth' and tonal locative kâː 'at the mouth; gɔ̌ː 'granary' and gɔ̌ː̀ 'in the granary', gǔn 'back (body)' and postposition gǔnǹ 'behind', úró 'house' and úrò 'in the house, at home', bɔ̀rɔ́ 'bottom' and bɔ̀rɔ̂ː '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 Cv̌ː̀ is, properly speaking, Cv̀v́v̀ with a bell-shaped tone requiring three moras (the extra duration is audible). (127.e) likewise goes from final monomoraic Cv́ to final bimoraic Cv̂ː. 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 Cvː 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 accomodate 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 **unsuffixed Imperfective**, things are subtly different. The phonologically relevant typology of inputs is this: H- and R-toned Cvː-, and longer stems ending in H-toned short vowel (…Cv́-). (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. Cv́ː-   Cv̂ː-

    b. Cv̌ː   Cv̌ːˑ-   if -Ø suffix, Cv̌ːˑ-Ø = Cv̀v́v̀

    c. …Cv́Cv́-   …Cv́Cv̂-   if -Ø suffix, …Cv́Cv̂ː-Ø

    d. …Cv̀Cv́-   …Cv̀Cv̂-   if -Ø suffix, …Cv̀Cv̂ː-Ø

Examples: tíː- 'send' and /tîː-/, yǎ.- 'go' and /yǎ̀ː-/, páɣá- 'tie' and /páɣâ-/, jùgɔ́- 'know' and /jùgɔ̂-/.

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' tíː-   tîː-Ø   tíː-m̀   tíː-bà

    b. 'go'   yǎː-   yǎ̀ː-Ø   yǎː-m̀   yǎː-bà

                      [= yàáà-Ø] [= yàá-m̀]

    c. 'know' jùgɔ́-   jùgɔ̂ː-Ø   jùgɔ́-m̀   jùgɔ́-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 /tî:-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 -Cv̀ suffix, I reject a derivation of H-L tí:-bà via F-L /tî:-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 ≡kɔ̀ 'be (nonhuman)', as in tí:≡kɔ̀ '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/
                /tî:-ba/   Tone-Grafting (onto stem)
                /tî:-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 ⹀kɔ̀ 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 pérú- 'ten' plus a single-digit numeral. (132) presents data; for further discussion see §4.7.1.3.

(132)   gloss   form

    a.   '10'   pérú

    b.   '20'   pél-lèy
        '30'   pét-tà:n
        '40'   pén-này^n
        '50'   pén-nù:y^n

    c.   '60'   pèrù-kúróy
        '70'   pèrù-sûy^n
        '80'   pèrù-gá:rà
        '90'   pèl-lá:rúwà (or: pèl-lá:rwà)

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 pérú- (reduced to pér- 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 pérú, 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 -Ø (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 adjec-
tives, only H-tone occurs (135.a). For verbs, both H- and L-tones can be
adduced (135.b-c).

(135)   a.   j𝜖́m 'black'
               Sg jɛ́m-ín, Pl jɛ́m-úm

         b.   yàː- 'go' (unsuffixed Perfective of stem yǎː-)
               3Pl yàː-bà, 2Pl yàː-bè

         c.   yàː-gó- 'go' (Imperfective Negative)
               3Pl yàː-gó-bá, 2Pl yàː-gó-bé

This process does not apply to 3Pl -ba and 2Pl -be in the unsuffixed Imper-
fective. 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 dey '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: ñɛ́:-jɛ̀-Ø   dɛ̀y,   …
           meal   eat-Perf-3SgS   if,   …
           'if he/she has eaten, …'

      b. ñǎ: ñɛ̀:-lí-Ø   déy,   …
           meal   eat-PerfNeg-3SgS if,   …
           'if he/she didn't eat, …'

      c. ñǎ: ñɛ́:-jɛ̀-Ø   mà
           meal   eat-Perf-3SgS   Q
           'Has he/she eaten?'

      d. ñǎ: ñɛ̀:-lí-Ø   má
           meal   eat-PerfNeg-3Sg   Q
           'Did he/she not eat?'

      e. ñǎ: ñɛ́:-jɛ̀-Ø   wà
           meal   eat-Perf-3SgS   Quot
           'He/She has eaten, it is said'

      f. ñǎ: ñɛ̀:-lí-Ø   wá
           meal   eat-PerfNeg-3SgS Quot
           'if he/she didn't eat'

      g. ñǎ: ñɛ́:-jɛ̀-Ø   mà   wà
           meal   eat-Perf-3SgS   Q   Quot
           'It was asked, has he/she eaten?'

      h. ñǎ: ñɛ̀:-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 (⇒) and/or raising (⇑), 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. ñǎː ñɛ́ː-jɛ̀-Ø mà⇑ wà⇑ 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.

Postposition 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 unsuffixed 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 làɣà-ḿ, 2Pl làɣà-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 ⹀ỳ '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   bíré] ɛ́ː mèyⁿ kò-rú   yɔ̀wɔ̀-bá⹀ỳ
            [[NonhP work] see and   Nonh-with accept.Perf.L-**3PlS.H**⹀it.is
            làː   dèy] [kó   dènè-l-á]
            Neg   if]   [NonhO   like-PerfNeg-3PlS]
            'Instead of seeing how it (=plow) worked and accepting it, they didn't like it.' **2004.3.7**

       b. [á   àná]   dàːⁿ-ẃⁿ   kâːⁿ
            [2SgP village]   sit.Perf.L-**2SgS.H**   even
            'even if you-Sg are sitting in your village' **2004.3.24**

       c. [bé   ɔ̀ɣɔ̌-m]   yɛ́   dàːⁿ-bá   jìːⁿ
            [3Pl   chief-Pl] Index be.sitting.L-**3PlS.H**   Past
            'They the (colonial) leaders, they were sitting (=living) here?' **2004.4.22**

See also yɛ̀rɛ̀-bá 'they came' in (732.d), kùnò-ẃⁿ 'you-Sg put' in (926.b), tɔ̀jɔ̀-bá 'they paid' in (797.d), and jɛ̀yɛ̀-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 Perfec-

tives; see, for example, L-toned dà:ⁿ-bà and dà:ⁿ-yⁿ in (690.a-b) and dozens of similar examples. However, the constraint is activated in combination with clitic =ỳ or other post-verbal morpheme, and in isolation pronunciations.

The same speaker who gave (138.a), above, also raised the tone of =ỳ itself, spoken as a single word in isolation, after the zero-suffix 3Sg verb form in (139).

(139) yɔ̀wɔ̀-Ø=ý
       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 underying tone of the suffix, rather is due to an inconsistently applied phonoloigical process based on the constraint mentioned.

However, the constraint **does not affect unsuffixed Perfectives with zero (3Sg) suffix**, so e.g. yɔ̀wɔ̀-Ø 'he/she accepted' and dà:ⁿ-Ø 'he/she is sitting' are L-toned in all environments, including in isolation; one does not hear e.g. #yɔ̀wɔ́-Ø as an unsuffixed Perfective. This is evidence against a purely phono-logical 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, … cɛ̀:ⁿ-bà⇑, … dè:-bà⇑, and … dè:-bà. The suffixal pitch is higher on the second and third of these. I attribute this as the ⇑ 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 <LHL>

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 accomodate 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-âː/

        1Sg   nùmó-m̀   nùm-âː-m
        3Pl   nùmó-bà   nùm-âː-bà
        3Sg   nùmôː-Ø   nùm-âː-Ø

The Perfective has a long -âː- throughout. Phonetically, what I transcribe as 1Sg nùm-âː-m [numáám̀] 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 nùmôː-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: nùmôː-Ø, i.e. nùmóò-Ø.

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

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', wɔ̀- 'be (Human)', and kɔ̀- 'be (Nonhuman)'. These have suffixed participles such as (human) Sg sâ-n, wô-n, and kô-n showing the {HL} contour of Perfective participles, here realized as F-tone on a monosyllable. The Nonhuman forms are underlying /sâ-Ø/, /wô-Ø/, and /kô-Ø/. Here the contour tone is on a single mora, so Mora-Addition applies, giving sâ:-Ø, wô:-Ø, and kô:-Ø. When such a participle happens to be followed by a form like kâ:ⁿ 'each, any' that forces tone-dropping, the outputs are sà:-Ø, wɔ̀:-Ø, and kɔ̀:-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, wô:-Ø, and kô:-Ø on an initial word-level cycle, and these lengthened forms are those to which inter-word tone-dropping applies. Examples are wɔ̀:-Ø in (846.b), and sà:-Ø in (847). This treatment does not extend to cases where the participle is based on an Imperfective verb with Nonhuman ≡kɔ̀ '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≡kɔ̀-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 **accomodate 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 ɔ̀ɣɔ̌-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 ɔ̀ɣɔ̌-n, there is an unsuffixed nonhuman counterpart, ɔ̀ɣɔ́ 'leader (e.g. of animal pack)'. Parallel to the F-toned cases considered above, we might have expected #ɔ̀ɣɔ̌: 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 $\equiv$ỳ (142).

(142)		gloss	simple form	with $\equiv$ỳ clitic
	a.	'soldering metal'	pùgâː^n	pùgáː$^n\equiv$ỳ^n
	b.	'owner of X'	X bâː^n	X báː$^n\equiv$ỳ^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 $\equiv$ỳ is added. Thus tílây 'duty, obligation' combines with the clitic as tílây$\equiv$ỳ, 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 Cv̂ː-. When (atonal) Sg -n or Pl -m is added, stretching applies. Example: verb áː- 'catch', H(H…)L unsuffixed Perfective form âː-, Sg Perfective participle âː-n (pronounced [áár̀]), Pl participle âː-m (pronounced [áár̀]). 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. áː- 'catch', 1Sg unsuffixed Imperfective áː-m̀, I posit a floating suffixal L-tone between stem and (atonal) final suffix, hence /áː- L -n/. Although the output áː-ǹ 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 nǔːyⁿ 'five' (a phonetically better transcription would be nùùýⁿ) 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 [CǔC] is a normal bimoraic syllable in isolation, but adding a suffix -vC forces resyllabification to [Cǔ][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 = [déŋ́]   déŋ-ín   = [dé][ŋ-íń]

    b.   'confined'   ěm = [èḿ]   èm-ín   = [è][m-íń]

    c.   'cold, slow'   tôm = [tóm̀]   tóm-ìn   = [tó][m-ìn]
         'newborn'   bâ:yⁿ = [bááỳⁿ]   bá:yⁿ-ìn = [báá][yⁿ-ìn]

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 =î: **'it is' clitic** are in (145).

(145)   gloss   stem   'it's ...'

    a.   'like that'   cín   cín=î:
         'spleen'   cènè-pá:làm   cènè-pá:làm=î:

    b.   'tomtom'   běn = [bèń]   bèn=î: = [bè][n-íì]
         'cotton'   nǎ:m = [nààḿ]   nà:m=î: = [nàà][m-íì]

    c.   'parasol'   ílíwâl = …[wâl]   ílíwál=î: = …[wá][lìì]
         'forest'   û:n = [úúǹ]   ú:n=î: = [úú][n-ìì]

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 bèn=î: with F-toned clitic instead of #bèn=î̀: 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 ≡ỳ (postconsonantal allomorph ≡î:), we get á:-m≡ì:, 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≡ǐ:]/   Final-Tone Resyllabification produces <LHL>
                                    tone on clitic
       e. á:-m≡ì: 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≡ì: 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 ‖kɔ̀ 'be (nonhuman)' or ‖wɔ̀- 'be (human)', which here behave phonologically as clitics. Examples with ‖kɔ̀- are in (149).

(149)   gloss   form   with 'be' verb

    a.   'hot, fast' ɔ́gù   ɔ́gú‖kɔ̀ (also syncopated ɔ́g‖kɔ̀)
         'sweet'   érù   érú‖kɔ̀ (usually syncopated ér‖kɔ̀)

    b.   'slow'   tôm   tóm‖kɔ̀

    c.   'bitter'   jéːrù   jéːrú‖kɔ̀

    Likewise, with 'be (human)', ɔ́gú‖wɔ̀-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 ‖kɔ̀ 'it is'. For example, jɔ́bù (variant jɛ́bù) 'soaking wet' is predicative in jɔ́bù‖kɔ̀ 'it is soaking wet'; note that the H-tone does not spread.

    As existential-locational quasi-verbs, kɔ̀ and wɔ̀- 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 yɛ́.

(150)   **Rightward H-Spreading**

    An autosegmentally {HL} adjective spreads its H-tone component to its final mora before a cliticized 'be' quasi-verb ‖kɔ̀ or ‖wɔ̀-. (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 kùⁿ, as we see in tógù kùⁿ 'the shed' and kɔ́ŋɔ̀ kùⁿ '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 $/v_1$-$v_2/$ contracts, the quality and tone features of v_2 prevail in the contracted vowel, so in some cases there is no audible trace of v_1 at all. However, there is one type of contraction where the tone of v_1 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: >   ≡ì: 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 Cʋ̀C-ú or Cʋ̀:C-ʋ́ are subject to optional apocope when the medial C is a nasal or semivowel, the result being R-toned Cʋ̌C-Ø or Cʋ̌:C-Ø (§3.5.4.1). An example involving Suffixal u-Apocope (67) is dìŋ-ú 'sitting down' with apocopated variant dǐŋ-Ø. An example involving Inter-Word u-Apocope (75) is 3Pl Dative bè-rú in combinations like bě-r gá-ẁ 'you-Sg will say to them' and bě-r tè:rè-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 dùró- 'groan', syncopated Perfective dǔt-tì- (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≡kɔ̀ 'it is sweet', the /u/ deleted before the clitic is actually H-toned, as the full variant érú≡kɔ̀ demonstrates; see Rightward H-Spreading (150). Clitic ≡kɔ̀ 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 relinks to the left. (152) shows two representative examples, without and with apocope.

(152)   a.   [nì: ɔ́gù]   kún-tù-bà
              "   ɔ̂g   "   "
              [water.L   **hot**]   put-Perf-3PlS
              'They put the hot water (in).'

        b.   tógù   kùⁿ
              tóg   "
              shed   Def
              'the shed'

In (152.a), the HL adjective ɔ́gù '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 ɔ̂g, showing the that 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 ɔ̂g from ɔ́gù 'hot' in (153.a).

3.7.4.6   Final-Cv R-to-H Reduction

The combination of suffixed ɔ̀ɣɔ̌-n 'chief, Hogon' and nonhuman ɔ̀ɣɔ́ 'leader'
(e.g. of animal pack' has been mentioned above (along with dɔ̀ɣɔ̌-n 'Dogon'
and dɔ̀ɣɔ́ 'Dogon language'). I take the stem for 'chief, Hogon' to be /ɔ̀ɣɔ̌-/,
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 #ɔ̀ɣɔ̌: (i.e.
#ɔ̀ɣɔ̀ɔ́). Instead, the R-tone is reduced to H-tone, giving ɔ̀ɣɔ́.

Another possible example of this process is Presentative nùkɔ̌y ('here's __'
(§4.4.5), which has an optional, slightly irregular variant nùkɔ́- in nùkɔ́≡kɔ̀
with cliticized nonhuman 'be' quasi-verb. This varies with nùkɔ̌y≡kɔ̀ and with
nùkɔ́k≡kɔ̀.

Is the conversion of /ɔ̀ɣɔ̌-/ 'chief' to ɔ̀ɣɔ́ 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 ɔ̀ɣɔ́ '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 ɔ̀ɣɔ́ 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 ≡î:, 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. Cv̌C≡î: >   Cv̀C≡ì̂̀: (= Cv̀C≡ì íì)

        b.   after VV-Contraction (90) with stem-final L-tone
              e.g. Cv́:Cv̀≡î: >   Cv́:C≡ì̂̀: (= Cv́:C≡ì íì)

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'   ɛ̂m   ɛ́m≡ì:
        b.   'errand'   bé:rù   bé:r≡ì:

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

    [ɛ́m̀] + ⹀ỳ   [béé][rù] + ⹀ỳ
    [ɛ́m̀]⹀íì   [béé][rù]⹀íì   allomorphy and cliticization
      "   [béé][r̀]⹀íì   VV-Contraction (90), leaving de-linked
                                            L tone behind
    [ɛ́][m̀⹀íì]   [béé][r̀⹀íì]   resyllabification
    [ɛ́][m⹀ìíì]   [béé][r⹀ìíì]   Final-Tone   Resyllabification   (148)
                                            (clitic now has 2 moras and 3 tones)
    [ɛ́][m⹀ì ì]   [béé][r⹀ì 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.

⇒, ⇑, and ⇒↑ are broadly interchangeable functionally, as all can suggest that more is to come. ⇒↘ is phonetically somewhat like the dying-quail intonation (symbol ∴) 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) màlfâ:ⁿ   jǎ:-bà⇒↑,
        rifle   take.Impf-3PlS,
        sárú   jǎ:-bà⇒↑,
        knife   take.Impf-3PlS.
        béré   jǎ:-bà⇒↑,
        stick   take.Impf-3PlS,
        [mànà bè tâ:ⁿ]   nám   yǎ:-bà⇒↑, …
        [slingshot]   owners   go.Impf-3PlS, …
        'They take rifles, they take knives, they take sticks, people with slingshots go, …'

3.8.2   Adverbials and particles with lexically specified prolongation (⇒)

A number of **particles and expressive adverbs** are pronounced with exaggerated prolongation of the final segment. Most are H-toned, like dém⇒ 'straight', but there are also some like pátà⇒ 'wide and flat' with final L-tone.

The lexical ⇒ 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 ≡kɔ̀ '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'
        pɔ́⇒   'directly, straight (to a destination)'
        sɛ́^{n}⇒   '(looking) straight (at sth)'
        déy^n⇒   'apart, separate(ly), distinct'
        yɔ́⇒ gó⇒   'negligently, carelessly, sloppily'
                                   (cf. adverb + verb yɔ́⇒ 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 déy^n⇒ (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 síméy^n⇒ '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.   [tŏy∴   wàrà-năm-Ø∴   à-jăyⁿ∴]
             [sowing   farm(verb).L-step.on-VblN   planting.in.pits]
             yɔ́≡kɔ̀
             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 [wóōò, kóōò]. In (161.b), the final syllables of the conjuncts are phonetically [tòĵĵĵ …nàm̄m̀m̀ …jàj̄ⁿj̄ⁿjⁿ].

As the conjuncts become longer, the conspicuousness of the dying-quail contour typically descreases. 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: gănǹ (= gàńǹ) 'between' and gŭnǹ (= gùńǹ) 'behind'. These tonal locatives involve grafting of an extra final L-tone onto Cv̆n 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. gănǹ '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∴   ñě̌-n∴]   mà   gǎnǹ
        [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 gǎnǹ 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 gǎnǹ 'between' is that it appears with Focus or 'it is' clitic ≡ỳ (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   léjù∴]
        [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∴   fúː]   lè
       [sowing.with.manure.L-hole **all**]   in
       'in every pit (where seeds have been sown with manure)' **2004.3.6**

When fúː follows a pronoun, it forces tone-dropping: èmè fúː '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), fúː 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 fúː follows a relative clause to give the sense 'anywhone who …'.

(165) [dògùrù   kó   ù   láɣá-tì-Ø∴   fúː]
       [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 pǒː⇒ is phonetic [ôːː], 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'	mú:mò (adj)	mú:mò-n	mú:mò-m
'Dogon'	dɔ̀ɣɔ́ ('D. language')	dɔ̀ɣɔ̌-n	dɔ̀ɣɔ̌-m
'mountaineer'	tɔ́rɔ́ ('mountain')	tɔ́rɔ̀-n	tɔ́rɔ̀-m
'European'	ànsá:rá	ànsá:rá-n	ànsá:rá-m
'farmer'	wárú wàrá- (verb)	wàrù-wárá-n	wàrù-wárá-m

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'   ɔɣɔ̌-n = [ɔɣɔ̀-ń]
       'chief's subordinate'   sàɣǎ-n = [sàɣà-ń]
       'Dogon'   dɔ̀ɣɔ̌-n = [dɔ̀ɣɔ̀-ń]
       'weaver (caste)'   sùrgɔ̌-n = [sùrgɔ̀-ń]

Of these, excluding L-toned compound initials, only 'chief' and 'Dogon' (168.a) have unsuffixed nonhuman counterparts: ɔɣɔ́ 'leader (e.g. of animal pack)', dɔ̀ɣɔ́ '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 *…r^n-in has contracted to …n. Here the final n could segmentally reflect either the original *r^n 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 î-n. However, the plural úrⁿ-ùm suggests that î-n may have contracted from e.g. /írⁿ-ìn/. By analogy to the alternation of gàrí-n with contracted gǎ-n 'big, adult', one could argue that the contraction in î-n from /írⁿ-ìn/ 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,: gàrá- 'pass by' with causative gà:-ná- (for expected #gàrà-ná-) and mɔ̀rⁿɔ́- 'come together' with causative mɔ̀:-nɔ́- for expected #mɔ̀rⁿɔ̀-nɔ́-). The similarity is heightened by the fact that the suffix in *írⁿ-ìn, as in the causatives just mentioned, has an n, resulting in rvnv or rⁿvnv sequences that may have been articulatorily awkward. However, in the causative examples the contracted vowels are long, unlike the case in î-n. In general, there are too many loose ends to permit me to endorse any clean "phonological" analysis for the set nonhuman î:ⁿ, Sg î-n, and Pl úrⁿ-ùm.

For 'child', the unsuffixed "nonhuman" form î:ⁿ is extended to newborn human babies: î:ⁿ nǎn-tì -Ø 'she gave birth to a child', not #î-n nǎn-tì -Ø (verb nàrⁿá-). Suffixed î-n 'child' and its plural úrⁿ-ùm therefore denote children that have passed the newborn infant stage.

Two frozen compounds of î-n have related Sg/Pl irregularities (170).

(170)   gloss   singular   plural

		singular	plural
a.	'boy'	áy-î-n	ǎ:-rⁿ-ùm
b.	'girl'	ñè̀-î-n	ñě̀:-rⁿ-ùm

áy-î-n 'boy' consists of î-n plus an irregular compound initial related to ǎ-n 'man' (cf. adjective àrⁿá 'male'). The more regular ñè̀-î-n 'girl' consists of î-n plus a compound initial related to ñě̀-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
tì ré	tírè-n	tírè-m

Consider now the inalienable noun in (172).

(172) 'friend'

absolute   possessed Sg   possessed Pl

tɛ̌: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 nɛ̀rⁿɛ́, possessed nɛ́rⁿɛ̀ (Pl nɛ́rⁿɛ̀ 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 columsn in (173).

(173) gloss   absolute poss Sg poss Pl   suffixed Sg   suffixed Pl

'father'	dɛ̌:	dê:	dê: bé	dé:-n	dé:-m
'mother'	nǎ:	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. … nɔ̀:-wⁿɔ́-bà,   [[wò   nâ:]   mà   pènê:]
       … drink-Caus.Impf-3PlS, [[3SgP.L **mother**.HL] Poss beside]
       wó   dàɣá-bà,
       3SgO   leave.Impf-3PlS,
       [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   dê: bé] gò:rò-tɛ̌wⁿ-Ø   ó:-ẁ,   …,
    [3SgP.L **father**.HL Pl] kola-chew-VblN give.Impf-2SgS, …,
    [dé:-m   mà gò:rò-[tɛ̌wⁿ-Ø]]   nɛ̀   ó:-ẁ
    [**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' (mâːn)

mâːn 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 hínnɛ̀ mâːn 'such-
and-such an amount', see (251.a). In (175), the phrase with mâːn is repeated,
suggesting that more than one referent is involved.

(175) [mâːn   mà   èjú]   [mâːn   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 -àrⁿá
'being elegant' (cf. àrⁿá 'male' and related forms), though such an abstractive is
rather isolated semantically in this set; bite also í-ɛrⁿɛ́wⁿɛ̀ '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-túmúrⁿú 'termite'. A few stems fluctuate between Ci- or Cu-, or between
Ci/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

form	gloss	related form or comment
cì-cɛ́ː	'beetle, bug'	
kì-káː	'grasshopper'	
gì-gɔ̂n	'honey ant'	
cì-céwⁿɛ̀	'mosquito'	
cì-cíːjú	'small tick sp.'	see also under (b)
tù-túmúrⁿú	'termite'	
bì-bòːró	'cricket'	variant bòːró
cì-cěn	'Messor ant'	
mì-měn	'black ants'	
nì-nɔ̀ːrⁿɔ́	'spider'	nɔ̀ːrⁿɔ̀-dǎː 'spider's web'

b. birds/bats

form	gloss	related form or comment
cì-cíːjú	'bat; swift'	see also under (a)
kì-kájà	'pigeon'	
lì-lôm	'sparrow'	
tì-téw	'hawk'	
kì-kàrâw	'bustard sp.'	onomatopoeic
cì-cèrⁿɛ̂wⁿ	'lapwing'	onomatopoeic
pì-pòtú	'sandgrouse'	homonym: 'mud'

c. other fauna

form	gloss	related form or comment
tì-táː	'hyena'	often táː- as cpd initial
jù-jùwⁿó	'mouse'	variant ù-jùwⁿó, jì-jùwⁿó
kì-kòjú	'viper'	
nì-nìwⁿé	'cat'	

d. plants and plant parts

form	gloss	related form or comment
dì-dó	'thorn'	
gù-gûn	'watermelon'	
cì-cèːrú	'stem'	variant cèːrú 'stem'
kì-kǒw	'pod'	variant kù-kǒw

e. body parts and similar

cì̀-cɛ́nɛ́	'middle'	
kì̀-kírì	'fainting fit'	
cì̀-cì̀né	'shade'	VP cì̀né áː- 'frustrate (sb)'
gì̀-gǒn	'below knee'	alongside gǒn
kì̀-kàrá	'armpit'	
tì̀-tɔ̀jú	'calf (of leg)'	
tì̀-tɔ̀wɔ́	'upper shoulder'	

f. verbal concepts

bì̀-bégè	'hiccup'	bégé- 'hiccup (verb)'
cì̀-cɛ́rⁿɛ̀	'circumcision'	cɛ̀rⁿɛ̀-î-n 'circumcised boy'
tì̀-tírù	'mission'	verb tíː- 'send'

g. weather, time, space

nì̀-núwⁿó	'daytime'	also nù-núwⁿó ; núwⁿó 'fire'
jì̀-jàmá	'air'	
ñì̀-ñùwⁿó	'cold weather'	variant ñù-ñùwⁿó
nì̀-nǐː	'sun'	nǐː 'day'

h. artefacts

dì̀-dégè	'statuette'	
pì̀-pàyⁿsǒl	'bronze elbow-ring'	
sì̀-sérⁿɛ́wⁿɛ́	'rag'	
tì̀-tómò	'bird trap'	variant tì̀-tôm
fì̀-fàlá	'fan'	also pì̀-pàlá
kì̀-kǒw	'sheath'	see also in (d)
sì̀-sègú	'filtering basket'	
tù-tùːlú	'chief's horn'	

i. substances

kù-kùmɔ́	'smoke'	
pì̀-pɔ̀tú	'mud'	homonym: 'sandgrouse'
sì̀-sǒm	'sand'	
sù-sùrⁿó	'urine'	variant ù-sùrⁿó, cf. verb súːⁿ-

j. human

bì-bɔ̂ː-n	'Bobo person'	ethnic group
dì-déː	'elder sibling'	respectful form of dèré
dù-dùgú-n	'sorceror'	
gù-gùyⁿí-n	'thief'	verb gùyⁿó- 'steal'

k. abstractive and emotions

lì-lě̀ː	'fear'	verb lɛ́ː- 'be afraid of'
ì-àrⁿá	'being elegant'	àrⁿá 'male' or 'arming for war'; variant ì-ñàrⁿá

l. topography and fields

pì-pùːró	'old field'

The noun-like postposition gǎnǹ 'between' is related to gì-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-bíːjù	'small birds'	
cí-céjù	'(a) cutting'	céjé- 'cut (off)'
cí-céré	'saddle'	
cí-cérjù	'plant sp.'	
dí-dɛ́ː	'shield'	
jí-jémɛ́	'(rock) projecting out'	
jí-jéwⁿé	'mud-dauber wasp'	
kí-kájárá	'newly cleared field'	
kí-kôm	'mistletoe'	
kí-kɔ́rù	'dry millet stem with leaves'	
lí-lóːró	'cowardice'	cf. verb lɛ́ː- 'be afraid of'

lí-lɔ́ːɣɔ́	'fontanel'	
ní-nɛ́ŋ	'calabash holder'	
ñí-ñɛ́m	'bridle'	
pí-pîw	'mammal sp.'	
tí-táɣá	'arrogance'	
ɔ̀r-[tí-téːré]	'miracle'	with ɔ̀rú 'matter'
tí-tímé	'elevation'	cf. perhaps tɛ̀mɛ̀-kúːⁿ 'roof'

b. Cî- followed by L-tone
   pí-pì lîm   '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⇒	'wide and flat'
	jì rè-[pì -pèrú]	'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-cɛ̌ːŋ   'agama lizard'   varies with cɛ̌ːŋ
    à-jáŋáwⁿá   'forked stick'   varies with jáŋáwⁿá
    à-mâːn   'so-and-so'   varies with mâːn
    à-líwndù, à-líwnù 'herder's staff'   varies with líwndù

b. à-pàlá   'millet-cake meal' used with verb pálá-
    à-bîn   —   used with verb bínɛ́- 'roll on ground'

à-têm   'customs, rites'   cf. verb témé- 'find'
à-gɔ́ñɔ́   'curved staff'   cf. verb gɔ̀ñɔ́- 'turn around'

c.   à-bòn-sà:-rá   'tree sp.'   lit. "?-name.L-have-Neg'

The most straightfoward 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 pálá- '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 unprefixed 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-jăŋ   'forked stick'
         à-gɔ́ɣɔ̀   'herder's staff'

    b.   à-kòŋòr^{n}ó   'giant tortoise'
         à-dɔ̀rɔ̀mbàjú   'wind scorpion'

    c.   à-jăy^n 'planting in pits with manure' (cf. jă:^{n}- 'dig')
         à-jénî: 'dike ridge'
         à-jérú   'wrestling'
         à-kɔ́rɔ́   'well (for water)'   perhaps kɔ́rɔ́- 'hang up'
         à-kúrgɔ́   'private field'
         à-légù   'loincloth strap'
         à-tî:^{n} 'bird trap'   variant à-tî:
         à-wégù   'planting in manure after rains' (verb wègé-)

    d.   àdúr^{n}ɔ́   'world (of living)'   <Arabic
         àlàrbá-n   'Arab'   <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'   pàw-gí-n   'deaf mute'
          tó:jú   'big testicles'   tò:jù-gí-n   'one with big testicles'
          cámbôl   'a disease'   càmbòl-gí-n   'sufferer   from   this
                                            disease'

      b. mostly adjectival
          éjè   'cleanness'   èjè-gí-n   'clean'
          lóɣò   'filth'   lòɣò-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-mâːn   dêː]   dày-gú]   mà   mɔ́ːn]≡î:
       [[[ʔ-so.and.so father.HL]   wealth.L-**Char**]Poss   gathering]≡Foc
       mɔ̀n-lìː-Ø⇒
       be.together-PerfNeg.L-1PlS
       '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)' (dây, mɔ̀rⁿɔ́-)
       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 wɔ̀- and nonhuman kɔ̀ 'be' , sà- 'have' and its synonyms, kùn- 'be in', and stative stance verbs like dà:ⁿ- 'be sitting' all lack a Verbal Noun. However, the negative form sà:-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** VblN.

(183)   verb shape   Verbal Noun

      a.   Cv:-   Cv̀-ý
      b.   CvCv-   Cv̀C-ú (often > Cv̌C$_2$-Ø if C$_2$ = sonorant)
      c.   CvCvCv-   Cv̀Cv̀C-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 *Cv̀-y-ú. If so, the *y effectively replaced the second mora of the long vowel.

(184)   gloss   verb   VblN

      a.   'go out'   gó:-   gò-ý
      b.   'send'   tí:-   tì -ý
      c.   'go'   yǎ:-   yà-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)vC$_2$v- and (C)v:C$_2$v- stems with ungeminated medial consonant, if C$_2$ 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 Cv̌C$_2$-Ø and Cv̌:C$_2$-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'	háybέ-	hàyb-ú
e.	'give drink to'	ñɔ̀:-wⁿɔ́-	ñɔ̀:-wⁿ-ú or ñɔ̌:-wⁿ-Ø

Trisyllabic stems do not normally apocopate the suffixal vowel. However, they do raise the second vowel to u (occasionally i), usually weakly articulated and schwa-like. See VblN V$_2$-Lenition (65).

(186)   gloss   verb   VblN

a.	'arrange'	dànàŋá-	dànùŋ-ú
b.	'make firm'	dèŋè-wⁿé-	dèŋùwⁿ-ú
c.	'teach'	jáŋgínέ-	jàŋgùn-ú

Quadrisyllabic verbs are rare, but one can elicit causatives like gɔ̀lɔ̀rɔ̀-wɔ́- 'cause to snore' and their Verbal Nouns (187). Both medial vowels undergo VblN V$_2$-Lenition (65).

(187)   gloss   verb   VblN

           'snore'   gɔ̀lɔ̀rɔ̀-wɔ́-   gɔ̀lùrù-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. béː-   'happen, stay'   béː-gú   'staying, living'
    c. góː-   'go out'   yàrù-[góː-gú]   'season just after wet
                                           season' (yàrú 'clouds')

For an example of yér-gú see (229), line 2. For béː-gú see (700).

-góː-gú is also attested in [nì -nì ː]-[góː-gú] 'dawn' (i.e. coming out of the sun), and jèrù-[góː-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 dàná-ǹ, Pl dàná-m̀. In form, this is unsuffixed Imperfective /dàná- + 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. gòŋɔ̀-rⁿɔ́- 'turn, rotate'   góŋɔ́-rⁿɔ́   'curved tapstick
                                            for tomtom'

        námá-rⁿá- 'take foot off'   námá-rⁿá   'tracks'
        nàrⁿàwⁿá- 'straighten'   nárⁿáwⁿá   'scar'

    b. dànàŋá-   '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'
	tɔ́ɣɔ́-	'(sun) rise'	[nì-nì:]-[tɔ́gú-gú]	'sunrise'
			(cf. nì-nǐ: 'sun')	
d.	témɛ́-	'find, inherit'	témɛ́-rⁿɛ́	'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 tri-syllabic 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 VblN. The actual VblN of trisyllabic verbs has LLH tone (dànùŋ-ú 'preparing', ìjì-r-ú 'act of causing to stand'). The nominals dánúŋ-ú and íjí-r-ú are therefore the result of overlaying the H-tone contour onto the VblN. Note that the medial syllable in both the VblN and the H-toned nominal has a high vowel; cf. VblN V_2-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 -gv́- and -ŋv́- in (528).

(189.d) has an apparent suffix -rv́.

(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, wùː-wàː-wûː)

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 x̄-x̀-x̄ where the outer segments have their regular tone while the medial element lowers its tones resembles the v̄ v̀ v̄ tonal pattern sometimes found in triple verb chains (§15.1.1). The segments have no meaning of their own.

The x̄-x̀-x̄ pattern also occurs in one imitative onomatopoeia: kɛ́ː-kàː-kɛ́ː (sound of toad croacking)'.

A stylistically marked adverbial wùː-wàː-wûː 'hurriedly, hastily', attested in a tale, has x̀-x̀-x́ tone. The u-a-u vocalic sequence resembles the o-a-o sequence in kòró-kàrà-kòró and the ɛ-a-ɛ sequence in kɛ́ː-kàː-kɛ́ː ; note especially the a-vocalism of the medial iteration. The triple iteration wùː-wàː-wûː 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-náː-X, where however the medial element is phonologically unrelated to the iterated X segments (§5.1.14).

4.2.7 Iteration with vocalic shift (tòːŋò-táːŋá)

In the triple iterations (x-x-x) of the preceding section, the medial occurrence shifts to a-vocalism (kòró-kàrà-kòró, kɛ́ː-kàː-kɛ́ː, wùː-wàː-wûː). A similar pattern is observed in a few simple (two-part) iterations. Adverbial examples: tòːŋò-táːŋá 'walking with legs widely separated' and ñɔ̀ŋɔ̀y^n-ñáŋáy^n 'walking stiffly'. Onomatopoeic noun: pùː-páː '(a) bellows'.

Most simple nominal and adverbial iterations preserve the vocalism of the base: bɛ̀lɛ̀-bɛ́lɛ̀ 'shepherd's hat', jɛ̀gí⇒ jɛ̀gí⇒ '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 yɛ́ to the regular 3rd person preverbal subject pronoun, see §4.3.3, below. For 3rd person

reflexive and **logophoric** pronouns (Sg ɛ̀né, Pl ɛ̀nɛ́ bé), which pattern morphologically like nouns, see §18.1-2.

(191)   independent   subject   dative   possessor
                          [_Verb] [Verb-_]   alienable inalienable

		independent	subject [_Verb]	[Verb-_] dative	possessor alienable	inalienable
a.	1Sg	mí	mì	-m	mǐ-n	má	mì
	1Pl	ɛ́mɛ́	ɛ̀mɛ̀	-y	ɛ̀mɛ̌-n	ɛ́mɛ́	ɛ̀mɛ̀
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 ⹀kɔ̀ '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 prenominal 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 èmě-n may derive historically (by apocope) from *mì-rⁿú and *èmè-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: mì dê: '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 kâːⁿ 'that too' (with kâːⁿ '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)   [àmàsâd   bé]   [kó   dǎwrù]   nú: bèrɛ́-bà,
        [embassy   Pl]   [NonhP   solution] enter can.Impf-3PlS,
        [kó   kùⁿ]   jín   kán-tù-bà   dèy, …
        [**Nonh Def**] like   do-Perf-3PlS 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 (yɛ́)

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 yɛ́ '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 yɛ́- in the adverb yɛ́-dì:ⁿ 'there' (§4.4.3.1).

In the examples relevant to the current section, yɛ́ 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. yɛ́ 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 yɛ́- in yɛ́-dì:ⁿ 'there'. A nonproximal deictic nuance would also explain why yɛ́ as subject marker is almost always associated with third person referents.

Consider first (193).

(193)   [ì nè   kâ:ⁿ]   [nɛ́yⁿ   ké],   yèrɛ́   mɔ̀rⁿɔ́
        [person.L each]   [now   Top],   come   be.together
        wó   bàrà-bà,   yɛ́   kó   cɛ̀:ⁿ-bà⇑,
        3SgO   help.Perf.L-3PlS,   **Index** Nonh   slaughter.Perf.L-3PlS,
        [dùŋ-yàrá   kùⁿ]   dè:-bà⇑,
        [lion   Def]   carry.Perf.L-3PlS,
        bé   [àrⁿ-ùm   yɛ́   pɔ́ttè-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]   dè:-bà
        [3Pl   now]   carry.Perf.L-3PlS
        'Every_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 (**they_x**) got involved, it was <u>they_x</u>
        <u>now</u> [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 yɛ́ 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) [[ɛ̀nɛ́   mà   à-kɔ́rɔ́] kûːⁿ]   béː=kɔ̀,
       [[Refl   Poss   well]   on]   live.Impf≡be.Nonh,
       yɛ́   náː≡kɔ̀⇒,   yɛ́   dɛ̀gɛ́≡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 yɛ́ co-occurs with 1Pl subject suffix -ỳ.

(195) dàːɣá   [àná   bérè]   kɔ̀   núː-sà   dèy,
       night   [village in]   NonhS.L   enter-Reslt   if,
       yɛ́   láɣá   wɔ̌ː-rà-y⇑
       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. [kǐ-kɔ̀jú kùⁿ ké]   [kó   bèrêː] yɛ́   gó-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. [àrⁿá   kùⁿ]   yɛ́   mìrⁿ-áːrⁿà-Ø
           [rain   Def]   **Index** fall-Habit-3SgS
           'the rains are falling (in the wet season)' **2004.3.6**

(197) a. ñ̌ĕ-m   yɛ́   dé:-rà-bà   kòy⇑,
           woman-Pl **Index** carry-Habit-3PlS   indeed,
           [ì nè   [wòtórò 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. pɔ́mpɛ́-bà⇒   núwⁿó≡kɔ̀,
           pump.Impf-3PlS   die.Impf≡be.Nonh,
           yɛ́   kán-tɔ́ɣɔ̀-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, yɛ́ 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. [ɛ́mɛ́ î-n]   [[é   î-n]   lè], yɛ́   yèr-á:rà-Ø
           [1PlP child-Sg] [[2PlP child-Sg] to], **Index** come-Habit-3SgS
           'Our child (=son) [topic], **he** has been coming to your child
           (=daughter).' **2004.3.20**

       b. wò   yàŋâ:-Ø   jɛ́   mèyⁿ,
           3SgS.L look.Impf-Ppl.Nonh   say   and,
           tì -tá: [ɔ̀ɣɔ̀-ñɔ̀wⁿɔ́   kùⁿ] yɛ́   kó   ɛ́:-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   núŋò jín≡î: dèy] yɛ́   dɛ̀: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 nì-dî:ⁿ nùkǒy bǐt-tɔ́ɣɔ̀-m⇒,
       [1Sg now] now often here here's! work-Impf-1SgS
       [má tɔ́wⁿɔ́-n] nîm [ní∴ [b… mà ùrò núŋò]
       [1SgP companion.Sg] now [here [B Poss house.L Dem]
       tɔ̂:-n] yɛ́ bǐt-tɔ́ɣɔ̀-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.' (bì 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' (núŋò, nùŋò-bâ:ⁿ, nùŋò-nám, yúgò)

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 núŋò '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. núŋò≡ỳ
           Dem≡it.is
           'It's this/that.'

       b. èjù   núŋò
           field.L   Dem
           'this/that field'

The optional (nonhuman) plural is núŋò bé.

For **humans**, we get the compounds in (202). In these demonstratives, núŋò appears in L-toned form nùŋò.

(202)   a.   nùŋò-bâːⁿ   'this/that one' (Sg)
        b.   nùŋò-nám   'these/those' (Pl)

Tone-dropping is not found before bâːⁿ 'owner' or its plural nám, except in these human demonstratives and in the fairly uncommon form tùrù-bâːⁿ 'one person, someone' based on túrú 'one' (§5.1.12). In fact, human demonstrative nùŋò-bâːⁿ 'this/that one' differs tonally from the productively formed compound núŋò bâːⁿ 'owner of that'.

In (203), for example, both the modified noun î-n 'child' and the demonstrative núŋò (before bâːⁿ) appear in L-toned form.

(203)   [ì-n   nùŋò-bâːⁿ]   [dàná-n≡îː   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

núŋò 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   jàŋà-Ø,   wò-rú   èyⁿ-nè-Ø,
        3Sg-Dat request.Perf.L-3SgS, 3Sg-Dat tight-Caus.Perf.L-3SgS
        [nùŋò-bâːⁿ]   wò-rú   jàŋâː-Ø
        [Dem.L-owner]   3Sg-Dat   request.Impf-3SgS
        [nùŋò-bâːⁿ   nè]   wò-rú   ɛ́yⁿ-nɛ̂ː-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 yúgò (instead of núŋò) is attested only rarely in my Dianwely data, but is said to be common in western dialects.

(205) [yúgò cêw] [[jémὲ-n   mà   bírέ] bέrὲ] yɔ́≡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 nì̀-bâːⁿ)

Parallel to the very common human Sg nùŋò-bâːⁿ 'this/that (one)' (202.a), a specifically Proximal nì̀-bâːⁿ is attested once in a text. As with other post-nominal demonstratives, the modified stem drops its tones.

(206) [í⇒,   [[wàrù-wàrà-n   nì̀-bâːⁿ]
       [exclamation, [[farming.L-farm-Ppl.Sg.L **this.L-owner**]
       mà   bέː]   ér≡kɔ̀]   gâː-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 nì̀-nám. I was not able to elicit a nonhuman form (other than núŋò).

4.4.1.3 'This place' (dì̀ːⁿ nîŋ)

The adverb nîŋ (variant nîm) is common in the sense 'now'. A phonologically similar element nîŋ occurs as a demonstrative in the single phrase dì̀ːⁿ nîŋ 'this place' with dì̀ːⁿ 'place'. Note that the noun drops tones before nîŋ, as it would before núŋò 'this, that'. It is possible that nîŋ in dì̀ːⁿ nîŋ is a vestige of a once more productive demonstrative, perhaps historically connected with núŋò and with Proximal ní-.

4.4.2 Anaphoric demonstrative pronouns

4.4.2.1 Prenominal kò 'that (same)'

Aside from a form of núŋò, 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 poessessor 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 + núŋò], 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   pɔ́ːrɔ́]   tógó   [kó   bèrê:]
          [shed.L   first]   build.shed   [Nonh   in]
          bè   nûː-Ø   [kò   tôg   kùⁿ]
          3PlS.L   enter.Perf.HL-Ppl.Nonh   [**Dem** shed   **Def**]
          úró   táná-ŋá   mèyⁿ   nîŋ   yɔ́≡kɔ̀
          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 prenominal 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-bâːⁿ)*

kò-bâːⁿ (or kò-báŋà) is parallel in form to the much more common nùŋò-bâːⁿ 'this/that one (human)' (§4.4.1.1, above); note the L-tone of kò-. It consists of prenominal anaphoric demonstrative kò with singular compound final bâːⁿ 'owner'.

In one textual attestation of kò-bâː, 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-bâː (208). Both referents are generic (exemplars).

(208) [ú   jǎː-m̀   kùⁿ], [mùñú   kúróy] óː-ẁ,
       [2SgO convey.Impf-Ppl.Pl Def], [thousand six]   give.Impf-2SgS,
       kò-bâːⁿ   làɣá   èː-gó-w,
       Dem-owner   other (time)   see-ImpfNeg-2SgS
       [nì-bâːⁿ   lè] [mùñú   nàyⁿ] óː-ẁ
       [**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-bâːⁿ denotes a referent just introduced in the preceding clause.
It is again paired with a deictic demonstrative, this time nùŋò-bâːⁿ.

(209)   [ìnè   nùŋò-bá:ⁿ]≡ỳⁿ   [[wó   jèjù-gùjú] lè]
         [person.L **Dem.L-owner**]≡Foc [[3SgP   body]   in]
         cɛ́llâl   kɔ̂-n∴.   fúː,   nûː-Ø,
         health   be.Nonh.HL-Ppl.Sg all,   go.in.Impf-3SgS,
         [[wó   jèjù-gùjú]   lè] cɛ́llâl   kɔ̀ː-rɔ́-Ø,
         [[3SgP   body]   in] health   be.Nonh-Neg-Ppl.Nonh,
         kò-bâːⁿ   dàɣá-bà
         Dem-owner   leave.Impf-3PlS
         '<u>That person</u> [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 (ěn-, ɔ̌n-)*

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 nùŋò-bâːⁿ and Pl nùŋò-nám given above.

(210)   Sg   Pl

    a. nonhuman
       ěn-kɔ̀, ɔ̌n-kɔ̀, ɔ̌ŋ-kɔ̀   ěn-kɔ̀ bé, ɔ̌n-kɔ̀ bé, ɔ̌ŋ-kɔ̀ bé

    b. human
       èn-kɔ̀-bâ:^{n} èn-kɔ̀-nám

Morphologically, ěn-kɔ̀ and its variants look like combinations of Reflexive-Logophonic ènɛ́ (§18.1.2, §18.2) with kɔ̀ 'be (nonhuman)', or perhaps with a variant of Nonhuman pronoun kó. Indeed, ěn-kɔ̀ has strongly discourse-anaphoric functions somewhat comparable to those of ènɛ́.

In (211.a), for example, Pl ěn-kɔ̀ bé looks back to referents introduced in the prior discourse. The same is true in (211.b) with ɔ̌ŋ-kɔ̀. In (211.c), Hyena (while talking to Goat) uses ɔ̌n-kɔ̀ to refer back to Scorpion, who had bitten Hyena shortly before in another location.

(211)   a.   [bà:rù-pì nǎm   kù^n] [wè:ré   lè]   kúnó-ẁ^n,
        [acacia.L-powder Def] [bowl   in]   put.Impf-2SgS,
        [[ěn-kɔ̀ bé] dì:^{n} ù   kár^{n}à-Ø   kù^n jín]
        [[**that**   **Pl**] manner.L 2SgS.L do.Perf.HL-Ppl.Nonh Def   like
        ní: kɔ́wɔ́ kúnó-ẁ^n
        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.   [nùmɔ̀-î:^{n} lè]   [kɔ̀   fú:]
        [hand-child   Dat]   [Nonh.L   all]
        [[kɔ̀   ɔ̌ŋ-kɔ̀]≡ỳ   là: dèy]   kɔ̀:-rɔ́
        [[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⇒   ɔ̌ŋ-kɔ̀   dì:^{n} ní
        a.little   **that**   manner.L   here
        [ènɛ́   lè]   kár^{n}à-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 ěn-dî:^{n} and ěn-lé '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 kù^n without an overt demonstrative.

4.4.3   Demonstrative adverbs

In addition to the pure demonstrative adverbs considered below, kò-rú '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 ní-, yí-, yέ-, yé-

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 dǐ:^{n} 'place' (sense extendible to 'manner'), but with L- or F- rather than R-tone. Others contain a suffix related to postposition lé 'in, to' in its H-toned form (§8.2.2). The forms based on dǐ:^{n} and lé are discussed further in the remainder of this section. Short forms ní and yí are listed in (212) but are analysed separately in §4.4.4, below.

(212)   a.   ní-dì:^{n}, nì-dî:^{n} 'here'
                 ní   'here' (see §4.4.4.1, below)
                 nì-lé   'here'

         b   yí-dì:^{n}, yì-dî:^{n} 'here'
                 yí   'here' (see §4.4.4.2, below)
                 yì-lé   'here'

         c.   yέ-dì:^{n} 'over there'

         d.   yé-lé, yè-lé   'there' (anaphoric)

The 'here' adverbs whose most common forms are HL-toned ní-dì:^{n} and yí-dì:^{n} have variants with LF tones: nì-dî:^{n} and yì-dî:^{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   dɔ́:   dì ŋè-bà,
           here   come   arrive   sit.Perf.L-3PlS,
           [ní-dì:ⁿ   ké]   èmě-n   tɔ́rɔ́   gá:-rà-bà,
           [**here**   Topic] 1Pl-Dat mountaineer say-Habit-3PlS,
           [ɛ́mɛ́ jàmsǎy bé]≡ỳ   yí-dì:ⁿ   [ùjùbǎy kû:ⁿ]
           [1Pl Jamsay Pl]≡Foc   **here**   [country on]
           dà:ⁿ-yⁿ,   yɔ̌:-jì n   kárⁿá   mèyⁿ,
           sit.Perf.L-1PlS, how?   do   and,
           [jàmsày   pɔ́:rɔ́-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 <u>we Jamsay</u> [focus] who are sitting (=settled) here on the land. What did the first Jamsay do to come here?'

       B. [jàmsǎy   mà   pɔ́:rɔ́-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. [ɛ́mɛ́ nám] [yì-lé [ɛ̀nɛ́ bé] súgô:-Ø]
[1PlP 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. ɔ̀ⁿhɔ́ⁿ ɛ̀nɛ́ [íjé ké] [yì-lé nà: lé]
uh-huh! LogoS [today Topic] [here **spend.night.L Dat**]
yɛ̀rɛ̀-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) àsɛ̀gɛ̀-mǎŋ-Ø jì rⁿè-bíré,
animal.L-raise-VblN wet.season.L-work(noun),
[ɛ́mɛ́ ɔ̀rú mà pàŋá ké] yí-dì:ⁿ≡ỳⁿ
[1PlP 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. dì gé- 'follow'
implies a (metaphorical) pathway.

(216) [wó nò] jɛ́mɛ̀-n, [yí-dì:ⁿ bè-rú]
[3Sg now] blacksmith-Sg, [**here** Pl-in]
[wó jɛ̀mɛ̀-bíré],
[3SgP blacksmith.L-work(noun)],
ní-dì:ⁿ dì gé yǎ:≡kɔ̀
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) [[ɛ́mɛ́   à-kɔ́rɔ́]   mà   wóró   [kâːⁿ   nὲ]]
       [[1PlP   well]   Poss   depth   [also   now]]
       yí-dìːⁿ   gàl-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-dìːⁿ at the end of (287.a).
    yí-dìːⁿ may combine with bὲ-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 bὲ-rú is the dative-locative-instrumental
form of postnominal Plural morpheme bé (not that of 3Pl pronoun bé).
However, this use of bὲ-rú is routinized and its morphological structure may be
less than transparent to native speakers. In addition to (218), this bὲ-rú occurs
in the first line of (216). See also §4.4.3.3.

(218) î-n   [yí-dìːⁿ   bὲ-rú],   dàná   túmnôː-Ø
       child-Sg   [**here**   **Pl-in**],   hunt(verb)   begin.Impf-3Sgs
       'A child begins hunting in those ways (just described).' **2004.3.16**

Nonproximal yɛ́-dìːⁿ 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 yɛ́-dìːⁿ in (219.b)
may actually be focalized; the Focus clitic in yɛ́-dìːⁿ≡yⁿ would be difficult to
hear in tape recordings.

(219) a. yɛ́-dìːⁿ   [bὲ-rú   dìːⁿ   bὲ   bêː-Ø]
           there   [3Pl-with   place.N   3PlS.L   be.Impf-Ppl.Nonh]
           'There, in the place where they stayed with them.' **2004.3.11**

       b. háyὲ   [nɛ́yⁿ   ké]   cín   dàná
           well   [now   Topic]   thus   hunt(noun)
           yɛ́-dìːⁿ   gòjó   túmnó≡kɔ̀,
           there   subdivide   begin.Impf≡be.Nonh,
           jὲnὲŋὲ-kúnó-m   yɛ́-dìːⁿ   gòjó≡kɔ̀⇒,
           trap.L-put.H-Ppl.Pl   **there**   subdivide.Impf≡be.Nonh,
           dànà-n   [màlfàːⁿ-lὲ]-táːⁿ-n
           hunt.Impf-Ppl.Sg.L   [rifle.L-Inst]-shoot.H-Ppl.Sg
           yɛ́-dìːⁿ   gòjó≡kɔ̀⇒,
           there   diversify.Impf≡be.Nonh,

[[jénɛ́ŋɛ́   kù^n]   dò:-lí-n]
[[trap   Def]   reach-PerfNeg-Ppl.Sg]
[àtî:^{n} dánà-m]   yɛ́-dì:^{n} gòjó≡kɔ̀⇒,
[bird.trap hunt.HL-Ppl.Pl] **there**   diversify.Impf≡be.Nonh,
dàná   yɛ́-dì:^{n} gòjó   túmnó≡kɔ̀   [néy^n 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 yɛ́- in yɛ́-dì:^{n} is probably related historically to yɛ́ in its function as an
alternative third person subject pronoun, which has a presentative nuance
(§4.3.3, above), and to Existential particle yɛ́ used chiefly with positive 'be' and
'have' quasi-verbs (§11.2.2.1).
    The first morpheme in yɛ́-lé or yè-lé is perhaps a variant of yɛ́- just
discussed, with the vowel assimilated to that of -lé (cf. H-toned postposition lé,
§8.2.2). yɛ́-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)   […   [tàɣà   wóm]   yì-lé   yɔ́≡kɔ̀]   gá,
        […   [pond.L empty] **here**   exist≡be.Nonh say]
ɛ́mɛ́ jǎ: té:ré mèy^n, [ɛ́mɛ́ yè-lé bè:-m]   wà
1PlO 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 <u>we should stay there</u> [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)   [ɔ̀ɣɔ̀-ñɔ̀wɔ́ [èjú   lé]   kó   yárà]   jé   mèy^n,
        [camel   [field in] NonhO go.around.Perf.HL] say   and,
tì-tá: yè-lé òjù-kâ: 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)   ĕn-dî:ⁿ   'there (logophoric)'
         ĕn-lé, ăn-lé   'there (logophoric)

The stem ĕn-, on which these adverbs are based, is related to the broadly anaphoric third person pronominal ènɛ́. 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 ĕn-kɔ̀ 'that same one' above, §4.4.2.3. The adverbs ĕn-dî:ⁿ and ĕn-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), ĕn-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: nɛ̀] wǒ-r   tímé-sà-Ø,
         [NonhP   body   Def], [goat≡Foc now] 3Sg-Dat resemble-Reslt-3SgS
         [tăm-Ø   kùⁿ] èjíⁿ⇒   ĕn-lé wǒ-r   lɔ́gɔ́-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‑dîːⁿ 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] [jɔ́wⁿlè mà [á dɔ́ː-wò lé]] kɔ̀
       [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] [jɔ́wⁿlè gǎy-yà-w déy] kɔ̀
       [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 dǐːⁿ dǐːⁿ lè, with dǐːⁿ '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-dǐːⁿ '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 îjé, whose basic sense is 'today': îjé ní 'today, nowadays'. This is an alternative to the more common îjé nè 'today, up to now' or 'again' (with nè assimilated from nɛ̀ 'now'). Another is ní-jìn '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 dìːⁿ '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:jɛ́≡kɔ̀-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** 1PlS.L sit.Perf.HL-Ppl.Nonh in]
              'in this place here where we are sitting (=living)' **2004.3.11**

       c. mí [ìnè 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 ɛ̂:-Ø]
              [Rdp-ant.sp..L **here** 2SgS.L see.Impf-Ppl.Nonh]
              jǎ:ⁿ-sà-bà dèy
              dig-Reslt-3PlS if
              'if they excavate (the nest of) the black ants (*Messor* sp.) that you-
              Sg see here.' **2004.4.28** (ɛ̂:-Ø could also be Perfective)

       e. hâl ní gó: mùñúrⁿò yǎ: mɛ́rⁿɛ́,
              until **here** leave south go and,
              hâl yàŋá mèy⇑ yǎ: mèy⇑ [gàn núŋò 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** (mɛ́rⁿɛ́ §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 inter-
action 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 wⁿɛ̀ 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 i̋ ì]. 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-dî:ⁿ is much more usual.

(228) a. èjù-nɔ̀wⁿɔ́   έ:-jὲ-bà   dèy,
           field.L-meat   see-RecPf-3PlS   if,
           [ní∴ [èjù-nɔ̀wⁿɔ́ kùⁿ∴]]   mà   gǎnǹ,
           [**here** [field.L-meat Def]]   Poss between,
           [tìwⁿὲ   kâ:ⁿ]   [έmέ   gǎnǹ]   kùn-ó,
           [tree.L   each]   [1PlP   between] be.in-Neg,
           ní   íjí-rέ   gó:-yὲ-m   dèy   [kâ:ⁿ nὲ]
           here move   go.out-Perf-1SgS   if   [too   now]
           έmέ   έ:≡kɔ̀
           1PlO   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   núŋò]   tɔ̂:-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   yέrὲ-Ø],
       [manner.L   do   and   **here**   come.Perf.HL-Ppl.Nonh]
       [[[ùjùbày   núŋò]   lé   pá⇒]   mà   έmέ yέr-gú   ké]
       [[[country.L   Dem]   in   Emph]   Poss 1PlP coming   Topic]
       [jɔ̀wⁿlὲ   pěyⁿ]   gó: mèyⁿ   yí   yὲrὲ-y, …
       [Dianwely.L   old]   go.out   and   **here** come.Perf.L-1PlS, …
       '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 ≡kɔ̀ 'it is', the y and k optionally combine irregularly to form kk or just k (230.b). With human 'be' quasi-verb ≡wɔ̀-, the y of nùkǒy is optionally deleted (230.c).

(230)   a.   mòtó   nùkǒy
             motorcycle   **here's!**
             'Here's the motorcycle!' **2004.4.25**

        b.   nùkók≡kɔ̀   (variants nùkó≡kɔ̀ and regular nùkǒy≡kɔ̀)
             here's!≡it.is.Nonh
             'There it is!.'

        c.   nùkǒy≡wɔ̀-Ø   (variant nùkó≡wɔ̀- **2004.4.27**)
             here's!≡be.Hum-3SgS
             'There he/she is!.'

        d.   nùkǒy   gɔ́ː   gɔ̌ː-rà-bà
             here's!   dance(noun)   dance-Habit-3PlS
             'There they dance!' (Fr *Les voilà qui dansent!*)

        e.   nùkǒy   yèr-áːrà-Ø
             here's!   come-Habit-3SgS
             'Here he/she comes!'

        f.   [dǐːⁿ   nùkǒy   lè]   èmě-n   tèːrè-bà
             [place   **here's!** to]   1Pl-Dat show.Perf.L-3PlS
             '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 làɣá '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 làɣí-n.

4.5.1   Underived adjectives

(231) presents the unsuffixed and suffixed forms of the basic, underived 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'	jóː	jóː-n	jóː-m
'pointed'	sǐː	—	—
'spacious'	wáː	wáː-n	wáː-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	érì-n	érù-m
'plump'	èrⁿú	èrⁿí-n	èrⁿú-m
'sterile (woman)'	—	gúnì-n	gúnù-m
'long, tall'	gùrú	gùrí-n	gùrú-m
'bitter'	jéːrù	jéːrì-n	jéːrù-m
'coarse'	kùñú	kùñí-n	kùñú-m
'dense'	kùrgú	—	—
'undiluted'	kùrú	kùrí-n	kùrú-m
'bland (meal)'	mètú	—	—
'bad, ugly'	mɔ̀ñú	mɔ̀ñí-n	mɔ̀ñú-m
'smooth, sleek'	ònùrⁿú	ònùrⁿí-n	ònùrⁿú-m
'hot, fast'	ɔ́gù	ɔ́gì -n	ɔ́gù-m
'fresh'	ɔ̀rú	ɔ̀rí-n	ɔ̀rú-m

'crooked'	pì rì gú	pì rì gí-n	pì rì gú-m
'crooked'	pònùŋú	—	—
'unflavored'	sèlbú	—	—
'thin'	ùñú	ùñí-n	ùñú-m
'soft (skin)'	yɔ̀rú	yɔ̀rí-n	yɔ̀rú-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'	dáɣá	dáɣá-n	dáɣá-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:rⁿá	nà:rⁿá-n	nà:rⁿá-m
'flat'	pété	pété-n	pété-m
'weak, diluted'	sèré	sèré-n	sèré-m
'young'	sǒ:rò	só:rò-n	só:rò-m
'fast'	téré	téré-n	téré-m
'same, single'	túmnó	túmnó-n	túmnó-m
'distant'	wàɣá	wàɣá-n	wàɣá-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'	làɣá	làgí-n	làgú-m

f. ending in y or yⁿ (suffixes sometimes just -n, -m)

'half-bitter'	âyⁿ	âyⁿ-n, áyⁿ-ì n	âyⁿ-m, áyⁿ-ùm
'newborn'	bâ:yⁿ	bá:yⁿ-ì n	bá:yⁿ-ùm
'tight'	ĕyⁿ	ĕyⁿ-n, èyⁿ-ín	ĕyⁿ-m, èyⁿ-úm
'short'	gǒyⁿ	gǒyⁿ-n, gòyⁿ-ín	gǒyⁿ-m, gòyⁿ-úm
'dry, hardened'	mǎyⁿ	mǎyⁿ-n, màyⁿ-ín	mǎyⁿ-m, màyⁿ-úm
'respectable'	nínáyⁿ	nínáyⁿ-n	nínáyⁿ-m
'living'	ñéyⁿ	ñéy-n	ñéy-m
'rotten'	ɔ̌y	ɔ̌y-n, ɔ̀y-ín	ɔ̌y-m, ɔ̀y-úm
'old'	pěyⁿ	pěyⁿ-n, pèyⁿ-ín	pěyⁿ-m, pèyⁿ-úm, pèyⁿ-ím
'small'	tĕyⁿ	tĕyⁿ-n, tèyⁿ-ín	tĕyⁿ-m, tèyⁿ-úm

g. ending in w
    'separate'   kǎw   —   —   [cf. (833)]

h. ending in nasal

'red'	bán	bán-ín	bán-ím, bán-úm
'lukewarm'	bùkâm	bùkám-ìn	bùkám-ùm
[variant búgàm-bùgàm]			
'firm'	déŋ	déŋ-ín	déŋ-úm
'lean'	dɔ̌ŋ	dɔ̀ŋ-ín	dɔ̀ŋ-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'	gɔ̌n	gɔ̀n-ín	gɔ̀n-úm
'black'	jém	jém-ín	jém-úm
'difficult, costly'	nǎm	nàm-ín	nàm-úm
'sour, salty'	nɔ̂m	nɔ́m-ìn	nɔ́m-ùm
'lightweight'	ñén	ñén-ín	ñén-ím, ñén-úm
'not skinny'	ɔ̌m	ɔ̀m-ín	ɔ̀m-úm
'crispy'	pèrûm	—	—
'wet'	těm	tèm-ín	tèm-úm
'cold, slow'	tôm	tóm-ìn	tóm-ùm
'empty, innocent'	wɔ́m	wɔ́m-ín	wɔ́m-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 (pìrìgú 'crooked' (231.b), with not one but two i-vowels, does have u in the Pl (pìrìgú-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 làɣá '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 (nínáy[n] 'respectable'), and frequently (as a variant) after monosyllabic y-final stems, except bâ:y[n] 'newborn', the one relevant stem with a long vowel (231.f). The one w-final adjective, kǎw 'separate' (231.g), has no human forms; they are

provided by a verbal participle containing the Perfective suffix (Sg káw-âː-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 [CvC$_2$] stem is resyllabified in the suffixed forms to [Cv][C$_2$-v…, a contour tone on the stem-syllable is divided into components, with the tone component originally associated with C$_2$ now realized on the second syllable. For example, R-toned nǎm 'difficult', i.e. /nàḿ/, has Sg nàm-ín, and F-toned tôm 'cold', i.e. /tóm̀/, has Sg tóm-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 múːmɔ̀-n 'deaf one'), or by nouns (and adjectives) with Characteristic suffix -gí-, as in Sg tɔ̀m-gí-n 'hunchbacked', cf. tɔ́m '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 bùlɔ̀-búlɔ́, cf. the borrowed noun búlɔ̀ or búlà 'blue dye'. An unsuffixable adjective meaning 'young' is gàylɛ́. 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 -rv́- in quasi-verbs like sàː-rá- '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 sìñè-sìñú 'noisy', as in cèː sìñè-sìñú 'noisy thing(s)'. In form, sìñè-sìñú looks like a VblN (sìñ-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 -î: or -: after adjective stem

When an adjective ending in a consonant or short vowel is followed by a cliticized 'be' quasi-verb ≡wɔ̀- or ≡kɔ̀, or by the verb bé:- 'be, remain', it has two variants, one with and one without an augment -î: or -: (i.e. vowel-lengthening). The allomorphs are distributed as indicated in (232).

(232)   a.   -î: after consonant or short u
        b.   -:   after other short vowel {i e ɛ a ɔ 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 ≡kɔ̀ 'be'.

(233)   gloss   unaugmented   augmented

        a.   'fat'   dùgú≡kɔ̀   dùg-î:≡kɔ̀
             'black'   jɛ́m≡kɔ̀   jɛ́m-î:≡kɔ̀
             'hot' (ɔ́gù)   ɔ́gú≡kɔ̀   ɔ́g-î:≡kɔ̀
             'white'   pírú≡kɔ̀   pír-î:≡kɔ̀

        b.   'separate'   kǎw≡kɔ̀   kàw-î:≡kɔ̀
             'rotten'   ɔ̌y≡kɔ̀   ɔ̀y-î:≡kɔ̀

        c.   'half-bitter' (âyⁿ)   áyⁿ≡kɔ̀   áyⁿ-î:≡kɔ̀

        d.   'small'   dáɣá≡kɔ̀   dáɣá-:≡kɔ̀
             'big'   gàrá≡kɔ̀   gàrá-:≡kɔ̀
             'flat'   pɛ́tɛ́≡kɔ̀   pɛ́tɛ́-:≡kɔ̀
             'fast'   téré≡kɔ̀   téré-:≡kɔ̀
             'distant'   wàɣá≡kɔ̀   wàɣá-:≡kɔ̀
             'deep'   wóró≡kɔ̀   wóró-:≡kɔ̀

The adjectival augment is distinct tonally from clitic ≡î: 'it is' (or Focus marker), an allomorph of ≡ỳ (§11.2.1). In addition, the 'it is' clitic appears as ≡ỳ after {e ɛ a ɔ 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.   jέm-íː≡kɔ̀
            black-**Aug**=be.Nonh
            'It is (permanently) black.'

        b.   jέm≡kɔ̀
            black≡be.Nonh
            'It is (permanently or temporarily) black.'

        c.   jέm-íː≡wɔ̀-m
            black-**Aug**=be.Hum-1SgS
            'I am black.'

One adjective is attested only in the -íː 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, light-weight metal'.

(235)   a.   yák-íː≡kɔ̀
            insubstantial-**Aug**=be.Nonh
            'It (=e.g. metallic object) is insubstantial (lightweight, cheap).'

        b.   ìnè   yák-íː≡wɔ́-n≡ìː
            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: dɔɣɔ̌-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: ènɛ́ 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 làɣá. 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, làɣá 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   ñǎː   kùⁿ] …
       person-Pl   two,   [NonhP   meal   Def] …
       [ìnè   túmnó-n]   kó   dêː-Ø,
       [person.L **one**-Sg]   NonhO   carry.Impf-3SgS,

[kò   níː   kùⁿ], [é   íné-n   túrú] dêː-Ø
[NonhPwater Def],   [2PlP 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 (lèy)
'3'   tǎːn (tàːn)
'4'   nǎyⁿ (nàyⁿ)
'5'   nǔːyⁿ (nùːyⁿ)
'6'   kúróy
'7'   sûyⁿ
'8'   gáːrà
'9'   láːrúwà (or: láːrwà)
'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   έː-sà-m
           two   see-Reslt-1SgS
           'I saw two (of them).'

       b. [úró   lèy]   έː-sà-m
           [house   **two**]   see-Reslt-1SgS
           'I saw two houses.'

       c. [úró   lěy   kùⁿ]   έː-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). pɛ́rú '10' is repeated from above. The other decimal terms are compounds with pɛ́rú- '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 pɛ́rú- before a numeral beginning in L-tone ('20-50') and the form pɛ̀rù- 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'   pɛ́rú
'20'   pɛ́l-lɛ̀y
'30'   pɛ́t-tàːn
'40'   pɛ́n-này^n
'50'   pɛ́n-nùːy^n
'60'   pɛ̀rù-kúróy
'70'   pɛ̀rù-sûy^n
'80'   pɛ̀rù-gáːrà (for dɔ̀ɣɔ̀-sǔŋ see below)
'90'   pɛ̀l-láːrúwà (or: pɛ̀l-láːrwà)

The decimal numerals follow a modified noun in the same way as do simple numerals: úró pɛ́l-lɛ̀y 'twenty houses'.

Combinations of decimal numeral D as just given in (239) plus single-digit numeral S have the form [D [S sáɣà]]. The morpheme sáɣà 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', pɛ́rú 'ten' is modified slightly to pɛ́rɛ́, 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 sáɣà, such as the second tǎːn in (240.c).

(240) a. péré   [túrú   sáɣà]
           ten   [one   **plus**]
           'eleven'

       b. pén-nǔːyⁿ   [láːrúwà   sáɣà]
           ten-five   [nine   **plus**]
           'fifty-nine'

       c. nǐː   [pét-tǎːn   tǎːn   sáɣà]
           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)
             "   téːmédérè = téːmdérè = téːméndérè = téːmédè
                        (<Fulfulde)

       b. 'thousand'   mùñú
           'million'   mílyɔ̌ːⁿ (<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 dɔ̀ɣɔ̀-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 [[téːmédêr nǔːyⁿ] pél-lèy] 'five hundred twenty' there is no prosodically marked break, and the R-tone of nǔːyⁿ

'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)　[péːjú　　mùñú　　lèy]　　[péːjú　　téːmɛ́dêr　　nùːyⁿ]
　　　　[**sheep**　thousand two]　[**sheep**　hundred　　five]
　　　　[péːjú　　pél-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)　[péːjú　　mùñú　　lèy∴]　　[téːmɛ́dêr　　nùːyⁿ∴]　　[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 búːdù (plus a quantifier), often shortened to bûːd before a numeral, as in bûːd túrú 'one riyal'.

Without a quantifier, búːdù means 'money'. A more authentic, but now less common, term for 'money' is cɛ̌ːrù, 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 mílyɔ̂ːⁿ 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-lèy   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-lèy pél-lèy or pél-lěy-lèy '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   núŋò]   [à-tâːn   kó   tǎːn]
         [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' (pɔ́ːrɔ́, tí⟹, láː) and 'last' (dùmnó)*

For **'first'**, the most common form is pɔ́ːrɔ́ (human Sg pɔ́ːrɔ́-n). As a true ordinal, it induces tone-dropping on the preceding noun, as in other noun-adjective combinations.

(246) [kó   bì rè   pɔ́ːrɔ́]
       [NonhP   work.L   **first**]
       'its first work' **2004.3.17**

For temporal adverbial pɔ́ːrɔ́ 'first; previously; in the old days', and adverbial láː 'first' and reduplicated láː-láː, 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 tǎːn 'three', the ordinal is the slightly irregular tày-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 sàɣà-né   'eleventh'

    d. huindred

       tɛ̀:mɛ̀dɛ̀rɛ̀-nɛ́   'hundredth'

    e. hundred plus '1-99' numeral (two levels)

       té:mɛ́dɛ́rɛ̀ pɛ̀l-lɛ̀y-nɛ́   '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)s, of a group), some (of a mass)' (special human Pl gàmà nám).

(248)   a.   [mǎŋgòlò   mà   gójò]≡ỳ   mǐ-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] bɛ̀l-lú-m   [[bú:dù kù^n]   mà bɛ̀rɛ̂:]
            [1SgP share] get-PerfNeg-1SgS [[money Def]   Poss in]
            'I didn't get my (rightful) share of (lit.: in) the money.' (bɛ̀rɛ́-)

       c.   [ì jù   gàmá]   cɛ́rɛ́≡kɔ̀
            [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 "x̄") means that the constituent in question **retains the same tones** that it has in isolation. A grave accent ("x̀") means that all tones in the relevant constituent are **dropped to low**. An acute accent ("x́") means that all tones are **raised to high**, and a circumflex ("x̂") denotes an **overlaid H(H…)L** stem-wide tone pattern.

5.1.1 Compounds of type (x̄ n̄)

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 bâːⁿ 'owner' of (or its Pl nám), see §5.1.12. There is also a tree name yɔ̀rɔ́-sǎmnà (*Albizia*), which is literally 'soap of néré tree' (yɔ̀rɔ́ 'néré', sǎmnà 'soap').

In some of the remaining examples, the "compound" [X Y] seems to be logically equivalent to a possessive construction [X mà 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 mà seems to be generally omitted, resulting in a rather loose compound-like sequence.

(249) a. bòn-kǔn-Ø   ní-ŋírⁿé
       name.L-put-VblN   Rdp-day
       'the day of the name-giving ceremony' **2004.3.19**

    b. [nùŋ   sèré]   líːtúrù   túrú
       [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   lì:tùrù   tùrù]
      [[oil.L   **liquid.L**]   **liter.L**   **one.L**]
      ù-rú   mì   ô:-Ø   kùⁿ]   yɔ́kkɔ̀
      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. hínnɛ̀   mâ:n
         amount   such-and-such
         'such-and-such an amount' **2004.3.20**

     b. nǐ: hínnɛ̀   mâ:n
         day   amount   such-and-such
         'such-and-such a number of days'

In (252), we see that nǐ:, hínnɛ̀, 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) [nì: hì nnɛ̀   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 (x̀ n̄)

In this highly productive pattern, the **compound initial drops its tones to all low**, symbolized by the grave accent on x̀. 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. tɔ̀rɔ̀-ñɛ̌-m
   mountain.L-woman-Pl
   'mountain women' (women from villages in the hills, tɔ́rɔ́)
   2004.3.3

   b. tɛ̀ŋɛ̀-ñɛ̌-m
   Tengou.L-woman-Pl
   'Tengou women' (women of the Dogon division Teŋou, tɛ̀ŋɛ́)
   2004.3.3

   c. èñè̀-bɛ́:
   chicken.L-excrement
   'chicken excrement' (èñɛ́) **2004.3.17**

   d. màlfà:ⁿ-gɔ́:
   rifle.L-dance
   'rifle dance (=hunter's dance)' (màlfâ:ⁿ) **2004.3.20**

   e. tì wⁿɛ̀-bɔ̀rɔ́
   tree.L-base
   'tree root(s)' (tì wⁿɛ́) **2004.3.27**

   f. kù:ⁿ-nùrⁿó
   head.L-pain
   'flu with headache' (kú:ⁿ) **2004.3.27**

An uncharacteristic **partitive** sense is seen in (254).

(254) sùkɔ̀rɔ̀-kì lô:
   sugar.L-kilo
   'a kilo of sugar' **2004.5.1**

5.1.3 Compounds with final Verbal Noun, type (x̀ 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 [x̀ 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-bírɛ́,　　　　[bà:ñà-lǒw-Ø],
　　　　3PlP　hand.L-work(noun),　[**bowl.L**-carve-**VblN**],
　　　　[mànáː　mà　　lǒw-Ø], …
　　　　[mortar　**Poss**　carve-**VblN**], …
　　　　'Their trade (=occupation), carving wooden bowls, (and) the carving of wooden mortars, …' (bà:ñá, lówɔ́-) **2004.3.15**

Many compounds with final VblN have specialized senses (256).

(256)　a.　dì:ⁿ-nà-ýⁿ
　　　　　　place.L-spend.night-**VblN**
　　　　　　'(animals') place for spending the night' (dì:ⁿ, ná:-) **2004.3.16**

　　　　b.　jè:n　　　nì:-kùn-Ø≡î:
　　　　　　gear.L　　water.L-put-**VblN**≡it.is
　　　　　　'It is gear (=bags) for putting water (in).' (jé:n, níː, kúnó-) **2004.3.16**

　　　　c.　gò:rò-tĕwⁿ-Ø
　　　　　　kola.L-chew-**VblN**
　　　　　　'chewing kola nuts; price of kola (small gift of money)' (gó:rò, téwⁿɛ́-) **2004.3.20**

　　　　d.　cì nè-yăŋ-Ø
　　　　　　shadow.L-look-**VblN**
　　　　　　'mirror' (cì -cì né, yàŋá-) **2004.3.20**

　　　　e.　nùwⁿò-ɗiŋ-Ø
　　　　　　death.L-sit.down-**VblN**
　　　　　　'mourning period, wake' (nùwⁿó, dì ŋé-) **2004.3.21**

A compound with final Verbal Noun followed by dɔ́:- 'arrive (at), reach' often means '(the age of) VP-ing', denoting a maturation stage or similar mile-stone. In (257), the underlying phrase is [àɣà-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]-tăŋ-Ø
      [now   Topic] woman-Sg   [husband.L-house.L]-transfer-**VblN**
      dɔ́ː-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-VblN]-[shoot-VblN]
           'arrow(s) (and bow)' **2004.3.2**

       b. cèː-[wɔ̀-y]-[wɔ̀-ý]
           thing-[kill-VblN]-[kill-VblN]
           '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
céjé-, with céjé- '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 cě: 'thing'.

(259) [cèː   cèj-Ø-cèj]≡î:
       [thing.L cut.VblN.L-cut.VblN]≡it.is
       'something for cutting (i.e., a knife)' (from cèj-ú-cèj-ú plus ≡ỳ)

A similar adjectival function is carried out by compounds of níː 'water' and
a VblN ('sitting', 'running'), modifying the noun dǐːⁿ 'place', in the passage
(260).

(260) jìrⁿêː   [bùrò-níː   jín]
       wet.season.Loc.HL   [pond.L-water   like]
       [dìːⁿ   nìː-dìŋ-Ø]≡î: làː   dèy
       [place.L   **water.L-sit-VblN**]≡it.is   Neg   if
       [séwndè   jín]   [dìːⁿ   nìː-jɔ̌w-Ø]
       [water.spring like]   [place.L   **water.L-run-VblN**]
       [ɛ́mɛ́   kò   búró]   kó   sàː-rá-Ø,
       [1PlP   Dem   pond]   NonhO   have-Neg-3SgS

[ɛ́mɛ́   tùmó   kùⁿ]   kó   sà:-rá-Ø
[1PlP   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' (x̀ 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 [x̀ n̄] tonal type, rather than as a factive complement. In (261), from a text describing how elders adjudicate disputes, tɔ̀yⁿɔ́-sà:-rá 'not having truth', i.e. 'being in the wrong', is opposed to tɔ̀yⁿɔ́ '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)   [[tɔ̀yⁿɔ́   sà:-rá-n   kùⁿ]   lè]
         [[truth   have-Neg-Ppl.Sg Def]   Dat]
         [tɔ̀yⁿɔ́-sà:-rá   kùⁿ]   ó:-jɛ̀-bà   dèy, …,
         [**truth-have-Neg** Def]   give-RecPf-3PlS if, …,
         [[ì nɛ̀   tɔ̀yⁿɔ́   bâ:ⁿ   kùⁿ] lè]   tɔ̀yⁿɔ́ 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 nɛ̀wⁿɛ̀-sà:-rá]   èmɛ̌-n   kɔ̀:-rɔ́
         [[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 tɛ̌yⁿ 'lack or insufficiency', apparently here a nominal compound final, but related to the adjective tɛ̌yⁿ 'small'.

5.1.5   Compounds of type (x̄ n̂)

In this type of compound, the **initial has its regular tone** (I indicate this as x̄ 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 [x̄ n̂], 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 [x̄ n̂] tone pattern when the possessor is a (nonpronominal) noun or (other) NP (§6.2.2).

In (263), the initial is a place name, defining the origin or residence of the person(s) denoted by the final.

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 [x̄ v̂-Ppl] compounds (§5.1.7), and bahuvrihi [n̄ â] 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.   dómnó-ñ ê̌-m
             D-woman.HL-Pl
             'the women of Domno (village)' **2004.3.3**
             [from nɛ̌-m 'women']

        b.   úró-úrⁿ-ùm
             house-child.HL-Pl
             'the children of the house' **2004.3.1**
             [from úrⁿ-ùm 'children']

Further examples are in (264). I include (264.b) ('guitar song'), whose final is already F-toned lexically.

(264)   a.   àná-ɔ́ɣɔ̀-n
             village-chief.HL-Sg
             'the chief (Hogon) of the village' (ɔ̀ɣɔ̌-n)

        b.   kɔ̀nî:ⁿ-nûŋ
             guitar-song.HL
             'guitar song (song accompanied by native guitar)' (nûŋ) **2004.3.20**

        c.   nùmó-gɔ̂:
             hand-granary.HL
             'granary built by hand' (gɔ̌:) **2004.3.27**

    d. kárgù-gɔ̂ː
       brick-granary.HL
       'brick granary' (gɔ̌ː) **2004.3.27**

    e. kúːⁿ-dûː
       head-load.HL
       'load carried on head' (dúː)

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. kùːⁿ-dùː   mì   déː-rà-Ø   jìːⁿ
         head.L-load.L 1SgS.L carry-Habit-Ppl.Nonh Past
         'the head load that I was carrying'

    b. kɔ̀nìːⁿ-nùŋ   núŋò
         guitar.L-song.L Dem
         'that guitar song'

This [x̄ n̂] compound type competes directly with the [x̀ n̄] 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. [x̄ n̂]   èjú-námñù   'wild sesame' (< námñú)
            èjú-[ní-níwⁿè]   'wild cat' (< nìː-nìwⁿé)
            èjú-péllè   'wild pigeon' (< péllè)

    b. [x̀ n̄]   èjù-èrⁿɛ́   'wild goat' (='gazelle sp.')
            èjù-ìjú   'wild dog' (='side-striped jackal')
            èjù-nàŋá   'wild cow' (='African buffalo')

5.1.6   Nominalized verb-verb compounds (v̄ v́, or v̄ v̀ v́)

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 [v̄ v̀ v́]. 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 bɛ́: bɛ̌:-, the verb having R-tone, but in the compound we get -bɛ́:-bɛ́:. In (267.b), 'have-diarrhoea-and-be-cured' refers to a medical treatment involving a laxative.

(267)   a.   jì ñé-yàŋà-bɛ́:-bɛ́:   mà   dùrɔ́∴.
             sniff-look.L-excrement-defecate.H   Poss   tail
             'the tail of "sniff-look-and-shit", and …' (bɛ́: bɛ̌:-) **2004.4.2**

        b.   sárá-báyá   bè   jɔ̀ŋɔ̂:-Ø
             have.diarrhoea-be.cured   3PlS.L   heal.Impf-Ppl.Nonh
             yɔ́≡kɔ̀
             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 ñè-yàŋà-bɛ̀:-bɛ́: núŋò 'that "sniff-look-and-shit'.

5.1.7   Agentive compounds of type (x̄ v̂-Ppl)

The general pattern [x̄ n̂] 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 [x̄ v̂-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 ìnè 'person(s) who …'. They are less lexicalized than the [x̀ v́-Ppl] agentive compounds described below.

(268)   a.   àsègɛ́   dígè-n
             animal   follow.**HL**-Ppl.Sg
             'one who follows animals' (dì gɛ́-) **2004.3.9**

        b.   ì nè   [kàjú   wárà-m]
             person.L   [calabash   farm.**HL**-Ppl.Pl]
             'people who grow gourd (plants)' (wàrá-) **2004.3.9**

        c.   ù-jùwⁿó   dánà-m
             Rdp-mouse   hunt.**HL**-Ppl.Pl
             'hunters of mice' (dàná-) **2004.3.16**

        d.   à-tî:ⁿ   dánà-m
             bird.trap   hunt.**HL**-Ppl.Pl
             'bird trappers (=bird-trap hunters)' (dàná-) **2004.3.16**

        e.   [jénɛ́ŋɛ́   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:ɣá   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 [x̀ v́-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 yɛ́rè-m 'those who come to give blessings' (1082.e).

5.1.8   Verb-verb or adjective-verb compounds of type (x̀ v̂-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:-, yèrέ-)

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: dì ŋé- 'sit down to eat' (ñǎ: 'meal', ñέ:- 'eat'). These are described in §17.6.3.

5.1.9   Agentive compounds of type (x̀ v́-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 [x̀ v́-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, yǎ:- 'go') **2004.3.3**

         b.   àsègè-dígέ-m
               animal.L-follow.H-Ppl.Pl
               'herders (who follow livestock to pasture)' (àsègέ, dì gέ-) **2004.3.9**

   c.   àsègè-háybɛ́-n
        animal.L-protect.H-Ppl.Sg
        'animal custodian' (àsègɛ́, háybɛ́-) **2004.3.9**

   d.   [tì-tìrù]-yáː-m
        [Rdp-mission.L]-go.H-Ppl.Pl
        'those sent on missions or errands' (tì-tírù, yǎː-) **2004.3.15**

   e.   bèːrù-jáː-m
        errand.L-deliver.H-Ppl.Pl
        'those who deliver messages or sent items' (béːrù, jǎː-) **2004.3.15**

   f.   jènèŋè-kúnó-m
        trap.L-put.H-Ppl.Pl
        'trap-setters' (jénɛ́ŋɛ́, kúnó-) **2004.3.16**

   g.   èjù-núː-n
        field.L-enter.H-Ppl.Sg
        'those who (regularly) go into the bush' (èjú, núː-) **2004.3.16**

If the verb is regularly paired with a **cognate nominal**, the latter is the default compound initial (271).

(271) a.   gɔ̀ː-gɔ́ː-n
            dance(noun).L-dance(verb).H-Ppl.Sg
            'dancer' (gɔ́ː, gɔ̌ː-)

   b.   nùŋ-núŋó-n
        song.L-sing.H-Ppl.Sg
        'singer' (nûŋ, nùŋó-) **2004.3.20**

   c.   wàrù-wárá-n
        farming.L-farm(verb).H-Ppl.Sg
        'farmer' (wárú, wàrá-) **2004.4.4**

   d.   bìrè-bírɛ́-m
        work(noun).L-work(verb).H-Ppl.Pl
        'workers' (bírɛ́, bìrɛ́-) **2004.3.15**

   e.   jàŋ-jáŋá-n
        plea.L-plead.for.H-Ppl.Sg
        'one who pleads (begs for things)' (jáŋ, jàŋá-)

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. [ì꞉ⁿ-bà꞉yⁿ]-íní-rⁿé-m
    [**child.L-newborn.L**]-bathe-Cause.H-Ppl.Pl
    'those who bathe the newborn child (=midwives)' (ì꞉ⁿ bâ꞉yⁿ, ì nì -rⁿé-) **2004.3.19**

   b. [àjùwɔ̀-nɔ̀wⁿɔ̀]-gámárⁿá-m
    [**new.mother.L-meat.L**]-divide.H-Ppl.Pl
    'those who divide up the meat of (=given to) the new mother' (nɔ̀wⁿɔ́, gàmàrⁿá-) **2004.3.19**

   c. [bì rὲ-pɔ̀rbà]-bíré-m
    [**work(noun).L-communal.L**]-work(verb).H-Ppl.Pl
    'those who work (=do) collective work' (pɔ̀rbá, bì ré-) **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   [màlfà꞉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

ì j-î:ⁿ
dog.L-child
'puppy' (< ì jú)

èñ-î:ⁿ
chicken.L-child
'chick' (< èñέ)

.   àñ-î:ⁿ
roselle(plant).L-child
'roselle seed' (< àñú)

jèn-î:ⁿ
spinning.stick.L-child
'terre cuite weight (whorl) for holding stick used in spinning cotton' (the assemblage is called jènὲ-kárá)

b. no elision of final short vowel of initial

jòŋò-î:ⁿ
hare.L-child
'juvenile hare' (< jòŋó)

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)

jìrè-î:ⁿ
eye.L-child
'eyeball' (< jìré)

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)

ɔ̀ɣɔ̀-î:ⁿ
chief.L-child
'nobility, high class' (< ɔ̀ɣɔ̌-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: gɔ̀rⁿî:ⁿ 'knife with curved blade', kɔ̀nî:ⁿ 'native guitar', kɔ̀rⁿî:ⁿ 'intestine', mɔ̀tî:ⁿ 'pestle' (called 'mortar-child' in e.g. Songhay).

sàːj-îːⁿ 'bird' is related to the much less common synonym sàjú. Likewise, mén 'bracelet' has a diminutive mèːn-îːⁿ. Both mèːn-îːⁿ and sàːj-îːⁿ show **irregular lengthening** of the first vowel.

A special case semantically is bàː-îːⁿ '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' (-yǎː, yàː-, yɛ̀-)

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: ñɛ̀-n tèyⁿ-ín 'small woman', ñ̀ɛ-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 yǎː '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 tìré in (276).

(276)   a.   tìré   'grandparent' (unpossessed)
             tírè-n   'grandparent' (possessed)

        b.   tìrè-ǎ-n   'grandfather' (unpossessed)
             tírè-ǎ-n   'grandfather' (possessed)

        c.   tìrè-ñě-n   'grandmother' (unpossessed)
             tírè-ñě-n   'grandmother' (possessed)

        d.   tìrè-àrⁿá   'male ancestor'

        e.   tìrè-yǎː   '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 -yǎː with human reference is àɣà-yǎː '(woman's) co-wife'. This is based on áɣà 'husband; husband's sibling', and is therefore literally

'husband-woman'. 'Co-wife' is the relationship between two women married to the same (bigamous) husband.

-àrⁿá and -yǎ: compound finals are commonly used with names of animals to denote gender: ìjù-àrⁿá '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 -àrⁿá is used with the larger or more powerful implement. béré is the general word for 'stick', while bèrè-àrⁿá means 'large ceiling beam'. nùmó means 'hand', nùmò-îːⁿ ("hand-child") means 'finger', and nùmò-àrⁿá (perhaps contracted from *nùmò-îːⁿ-àrⁿá) 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, úːñùm is the general term for herbs of the genus *Cleome*, but individual species can be distinguished as ùːñùm-àrⁿá and ùːñùm-yǎ:, respectively. Likewise, námsɛ́gɛ̀ is a general term for grasshoppers of the family Catantopinae (division of Acrididae), and more precise terms are nàmsɛ̀gɛ̀-àrⁿá (*Cryptocatantops*) and nàmsɛ̀gɛ̀-yǎ: (*Diabolocatantops*). Incidentally, another subcategory (applied to two less conspicuous species, *Harpezocatantops* and *Catantops*) is nàmsɛ̀gɛ̀-gùnó, i.e. "slave of námsɛ́gɛ̀".

In a number of frequent combinations, 'woman' appears in a special compound-initial form yàː- or yɛ̀- (variant yà-) instead of ñɛ̌-n (or L-toned ñɛ̀-n) (277).

(277) a. yàː-gɔ́:   'women's dance'
           yàː-kûːⁿ-n   'unmarried young woman'
           yàː-pàní-n   'widow' (see variant with yɛ̀- below)
           yàː-tàgú   'woman's shoes'
           yàː-lɔ̀gú   'funeral tomtom music for woman'

       b. yɛ̀-kàná-n, yà-kàná-n   'newly married woman'
           yɛ̀-pàní-n   'widow' (see variant with yàː- above)

Other stems that might contain a frozen compound initial of this type, but are not synchronically segmentable, include yɛ̀sǎ: 'sister', yàːlɛ̌y 'woman's wrap (garment)', and yàːjí: 'marriage'. yàː-là-ý 'marriage (directly arranged by groom)', is interpreted by my informants as having yǎː- 'go' as initial (and the VblN of -láː- 'choose' as final), but perhaps the historical source was yàː- 'woman'.

A parallel male compound initial àrⁿà- is less common (278).

(278)   àrⁿà-kû:ⁿ-n   'unmarried young man'
        àrⁿà-tǒ: tó:-   'scold a child' (noun plus verb)
        àrⁿà-lɔ̀gú   'funeral tomtom music for man'

Another noun, now unsegmentable, that might contain this initial historic-
ally is àrⁿàkɔ̌yⁿ '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 ùrɔ́- '(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
jòŋ-jɔ́ŋɔ́-m 'women (=female) healers' from àrⁿ-úm mà jòŋ-jɔ́ŋɔ́-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 báŋà or bâ:ⁿ, Pl nám)

báŋà 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 ($\bar{x}$ n̂) compounds (§5.1.5).

(279)   a.   [pé:tàɣà   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 báŋà (or bâ:ⁿ) is nám. This (human) Pl
morpheme also occurs in gàmà-nám 'certain ones, some (others)' (Pl of gàmá
'a certain', §6.3.2), and in nùŋò-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   kâːⁿ   nɛ̀]   yɔ́≡wɔ̀-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. àːmá   nám
   Amba   **owners**
   'residents of Amba (a village)' **2004.3.11**

In the case of úró báŋà '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 báŋà bɛ̀ can be used for the sense 'house owners'.

As noted above, both the compound final bâːⁿ (báŋà) 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.   màlfâːⁿ   bâːⁿ
           rifle   owner
           'one with a gun'

       b.   màlfàːⁿ   bàːⁿ   nùŋɔ̀-bâːⁿ
           rifle.L   owner.L   Dem.L-owner
           'this/that one with a gun'

       c.   [màlfàːⁿ   bàːⁿ]   gôː-n∴.   fúː
           [**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: émɛ́ nám 'our kin, our ancestors' (**2004.4.24**). With a preceding NP, Possessive mà is required in this sense (282).

(282) [émɛ́   ànà   núŋɔ̀]   mà   nám
       [1PlP   village.L Dem]   Poss   **people**
       'the people of our village' **2004.3.11**

In the sense 'master (e.g. of slave)', báŋà is used with an **inalienable possessor**: mì báŋà 'my master'. The plural in this sense is not nám, rather báŋà 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)   èmὲ   báŋà   ǎ-n
        1PlP.L owner   man-Sg
        'our Lord' (= 'God') **2004.4.16**

In a single textual example, bâ:ⁿ occurs at the end of a relative clause (284).

(284)   yὲré   nàná-m̀   bâ: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 yὲré nàná-m̀ bâ:ⁿ has singular reference: 'one of those who come and …'. In other words, the plural participle yὲré nàná-m̀ 'those who …' has partitive function.

báŋà (bâ: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 ĕn-kɔ̀, 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-bâ:ⁿ   'this/that' (human Sg),
                 nùŋò-nám   'these/those' (human Pl)
             ὲn-kɔ̀-bâ:ⁿ   'that' (human Sg, anaphoric)
                 ὲn-kɔ̀-nám   'those' (human Pl, anaphoric)
             nì-bâ:ⁿ   'this' (human Sg)
                 nì-nám   'these' (human Pl)
             kò-bâ:ⁿ   'that (same) one' (human Sg)

        b.   tùrù-bâ:ⁿ   'one person, someone' (uncommon) **2004.3.21**

For gàmà-nám 'some, certain (ones)', plural of gàmá '(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   yɔ́≡kɔ̀⇒,   gùrú   yɔ̀≡kɔ̀⇒, …
           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],   [ñɛ̌-m   mà   gǎnǹ]
           [Nonh Topic], [woman-Pl Poss   between]
           mà   jóŋ≡î: mà ná:,
           Poss   healing≡Foc Poss **true**,
           [ñɛ̌-m   mà jòŋ-jóŋɔ́-m]   cé≡ỳ
           [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. ɛ́mɛ́   [jì rⁿè-bì rè]-bíré-m≡î:
           1PlP   [wet.season.L-work(noun).L]-work(verb).H-Ppl.Pl≡it.is
           sǎy, [ɛ́mɛ́ ná:], àsègè-mǎŋ-Ø   jì rⁿè-bíré,
           only, [**1PlP true**], animal.L-raise-VblN wet.season.L-work(noun),
           [[ɛ́mɛ́ ɔ̀rú]   mà pàná ké] yí-dì:ⁿ≡ỳⁿ
           [[1PlP 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   [ɛ̀nɛ́   mà   ná:]   jɔ̀:-gó-Ø⇒
    3SgS   [Logo   Poss   **true**]   know-ImpfNeg-3SgS
    '(He said:) you don't know me truly (=you have no idea who I am).' (jùgɔ́-) **2004.4.4**

c. [[kò   màbîl]   bɛ́rɛ̀ ké]   [kó   ná:∴ fú:]   nêyⁿ≡ỳⁿ
    [[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:]   bɛ̀rɛ̀-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:≡ỳ   dèy, [[yɛ̀-kànà]-cɛ̀rⁿɛ̀wⁿɛ́   cɛ́rⁿɛ́wⁿɛ́-n   déy
       yesterday≡it.is if,   [[woman-new.L]-fun   have.fun-**Ppl.Sg** **if**,
       mà   ná:]   wì-wɔ̂:-bà
       Poss   **true**]   Rdp-be.Hum.Perf.HL-3PlS
       '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   mèy^n⇑, …
       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}àkŏy^n 'boubou'   àr^{n}àkŏy^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:-têy^n] 'long-tailed bird spp.' is a combination of two bahuvrihi compounds, dúró-gúrù 'long-tailed' and ná:-têy^n 'small-bodied'.

Compounds with ná: are generally nonhuman. However, I can cite a human example with Sg suffix -n (292).

(292) ámà ɔγɔ̀-ná:-n,   [ènɛ́   mà   cɛ́llâl] dáγá
       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 -náː-/-nà- or -gɔ́-/-gá-

Another type of compound is X-náː/nà-X, with -náː- 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-náː/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 -gɔ́-/-gá-, describing gaits (293.c-d).

(293)   a.   jón-náː-jórù   'blister beetle' (Meloidae) (cf. *jórù* 'blister')
              són-náː-sórù   'long-nosed grasshopper' (*Acrida*)

        b.   bùːⁿ-nà-búːⁿ   'tall grass sp.' (*Andropogon*)

        c.   dɔ̀l-gɔ́-dɔ̂l   'ostrich' (cf. *dɔ́l-dɔ́l* '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-nàː-pěyⁿ 'very old', with L-toned initial and -nàː-, 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 ñêː-Ø]
        [[**skin.L   3PlS.L**   lie.down.Impf-Ppl.Nonh]
        kó   táná-ŋá-m̀]   yɔ́≡kɔ̀
        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. [ɛ́mɛ́ à-n   gǎ-n]   sàrî: jè:ré   gá: kân,
           [1PlP man-Sg.L old-Sg] plow   bring   say   after,
           [àsɛ̀gɛ̀   kó   bè   wàrà-wâ:-Ø]
           [**animal.L** NonhO **3PlS.L**   farm-Caus.Impf-Ppl.Nonh]
           yɛ́   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   kàrⁿà:-Ø   làɣá]   sà:-rá-w
           [**thing.L 3PlS.L** do.Impf-Ppl.Nonh.L   other]   have-Neg-2SgS
           tàŋà   dèy
           happen   if
           'If it happens that you-Sg have nothing else to do' **2004.3.9**
           [for kàrⁿà:-Ø > kárⁿâ:-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   tóŋô:-Ø   kùⁿ
           thing.L **gather deliver** 3PlS.L **dump**.Impf-Ppl.Nonh Def
           'what they gather, deliver, and pour out (millet ears) with (=i.e.,
           baskets)' **2004.3.6**

       b. cɛ́jé   cè: bè   kúnô:-Ø
           cut   thing.L 3PlS.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   kárⁿâ:-Ø
           thing.L [**water for**] **use**   3PlS.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 N$_1$] after the remainder of the construction. This (uncommon) construction is structurally equivalent to a "headless" relative clause followed by [mà N$_1$] 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 N$_1$] 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:ré]   bé   mǎ̀:⇒,
       [[water 3PlS.L bathe.Impf-Ppl.Nonh] **Poss bowl**] 3Pl build.Impf,
       [pè:rè   jì ré bè   súmô:-Ø]   bé   mǎ̀:
       [**small.bowl.L** eye   3PlS.L wash.Impf-Ppl.Nonh] 3Pl build.Impf
       'Earthenware bowls for bathing, it's <u>they</u> [focus] who make them; small earthenware bowls for washing the face, it's <u>they</u> [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) 3PlS.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   3PlS.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   láɣâ:-Ø],
   axe.L   [hit-VblN   3PlS.L   hit.Impf-Ppl.Nonh]
   sì rù   [cěⁿ-yⁿ   bè   cê:ⁿ-Ø]
   knife.L   [slaughter-VblN   3PlS.L   slaughter.Impf-Ppl.Nonh]
   'an axe for striking (animals), a knife for slaughtering (them).'
   2004.3.16

d. [pɔ̀sɔ̀ŋ   tǒy   bè   tɔ̂:-Ø]   ɛ́wɛ́-ẁ
   [**poison.L**   sowing   3PlS.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   nɔ̃̀:-Ø]   mà   ní: cêw
         [water.L [mouth Inst] 3PlS.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**] **3PlS.L** cover and
         [yɛ̀-kàná   wó   bè   táná-ŋâ:-Ø   kùⁿ]   mà
         [woman-new 3SgO 3PlS move-Cause.Impf-Ppl.Nonh Def] Poss
         [yì rù   bè   gòrô:-Ø   kùⁿ]
         [**garment.L   3PlS.L**   cover.Impf-Ppl.Nonh   Def]
         jǎ:-bè,   [nùŋ   bè   párâ:-Ø]   jǎ:-bè
         take.Impf-2PlS, [**oil.L   3PlS.L** rub.on.Impf-Ppl.Nonh] take.Impf-2PlS
         '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 yìrú 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)-**3PlS.L**-fight.Impf-Ppl.Nonh
             'combativeness, aggressiveness' (e.g. of cobra) **2004.3.5** (cɛ́nɛ̀)

   b.   mànà-bè-tâːⁿ-Ø
        plastic.L-**3PlS.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.

   èː-mí-téːré 'time when millet begins to develop ears' is from ɛ́- 'see', 1Sg mí, and téːré- '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)   jìré-lìɡíjù   'bush sp.'   lit. "eye-rubbing"

   This consists of jìré 'eye' without tonal change, plus a final in the form of a nominal (not separately attested) that is identical segmentally to the Verbal Noun lìɡìj-ú 'rubbing (eyes)'.

5.2   Adjectival compounds

5.2.1   Bahuvrihi ("Blackbeard") compounds (n̄ 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 [n̄ â], where the symbol "a" represents "adjective/numeral." This is

the same tone pattern we see with [x̄ n̂] and agentive [x̄ v̂-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)	bèré-dúgù	bèré-dúgì-n
	'leg-bent' (=bowlegged)	kɔ́ː-gɔ̂n	kɔ́ː-gɔ́nì-n
	'leg-crooked' (=knock-kneed)	kɔ́ː-pírígù	kɔ́ː-pírígì-n

Compare underived adjectives dùgú 'fat, thick', gɔ̌n 'curved, bent', and pìrìgú 'crooked'.

'Fearless' may be of the same type: àrⁿá-kájù (Sg -kájì-n), cf. àrⁿá 'male' (noun ǎ-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)   ìnè   [kɔ́ː-kɔ́rò-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. [[pɔ̀n-sǔŋ]-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, pɔ̌n)

       b. [mírⁿé-tâːn]
           [**voice-three**.HL]
           '(person) of three voices' (man's nickname) **2004.3.6** (tǎːn)

       c. é   [ì nè   [màː-káː]-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-túrì-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 predi-
cative function, the numeral has its lexical tones, with no H(H…)L tone
overlay, hence túrú- for 'one'.

(308) [úrⁿ-ùm   kùⁿ∴.   fúː]   nǎː   túrú-bá,
       [child-Pl   Def   all]   mother   **one**-3PlS.
       [úrⁿ-ùm   kùⁿ∴.   fúː]   bǎː   túrú-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)   ɔ̀yɔ̀-ɔ̀rú   ɔ̀yɔ̀-ɔ̀rí-n

5.2.2.1   *Other compound adjectives*

'Yellow' is expressed as yɔ̀rɔ̀-pǐ rⁿé, a special case of an existing noun-noun compound denoting a bright yellow flour made from the fruit of the néré tree. The human Sg form is yɔ̀rɔ̀-pǐ rⁿé-n.

'Blue' can be expressed either by búlɔ̀-búlɔ́ (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-ñǎː 'right hand' the final is ñǎː '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-ñǎː and nùmò-bàná can be added to another noun in modifying function: [bé [tǐ-tɔ̀wɔ̀ nùmò-ñǎː]] lè 'on their right shoulders' (tǐ-tɔ̀wɔ́ 'upper shoulder'). The word for 'left-handed person' is the noun bárgà-n (Pl -m).

5.2.3   Iterative adjectival compounds with medial -nàː-

Some adjectives have an iterative compound pattern consisting of L-toned stem, -nàː-, and regular-toned stem. Example: pěyⁿ 'old', pèyⁿ-nàː-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 èjíⁿ⇒ 'very' and that with lexical intensifiers (§6.3.3.2).

The type pèyⁿ-nàː-pěyⁿ 'very old' is probably related to the iterative nominal compound type with -náː- or -nà- medial, found in a handful of flora-fauna terms (§5.1.14, above). Tonally, the closest parallel is with bùːⁿ-nà-búːⁿ 'tall grass sp.', of type x̀-nà-x̄ (x̀ = L-toned, x̄ = lexical-toned). By contrast, jón-náː-jórù 'blister beetle' and són-náː-sórù 'long-nosed grasshopper' have H-toned initials and -náː-.

5.2.4   Compounds of adjective plus -lɔ́ɣɔ́ 'very'

Among several ways of expressing 'very A' with A some adjective, there is a combination A-lɔ́ɣɔ́ (with L-toned adjective). This combination is uncommon in texts, but is attested in (310).

(310) [wàkàtì   [kó   gǎnǹ]   kûn-Ø   kùⁿ]
       [time.L   [Nonh between]   be.in.HL-Ppl.Nonh   Def]
       [wàkàtì   gùrù-lɔ́ɣɔ́≡ỳ   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 -làɣá (§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 núŋò '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 kùⁿ
  f_3. cardinal numeral

g. universal quantifier 'all' (fú:, cêw)

The distributive quantifier kâ:ⁿ 'each' and the demonstrative núŋò '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 kárⁿà), 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   ùrò   dàɣà   pírú   bé   (a _ c d(2) _ f_1 _)
          1SgP   **house.L** small.L   white   Pl
          'my small white houses'

     b. bé   kò   úró   kùⁿ   bé   (a b c _ _ f_2 f_1 _)
          3PlP   Dem   **house**   Def   Pl
       or: bé   kò   úró   bé   kùⁿ   (a b c _ _ f_1 f_2 _)
                                    Pl   Def
          'those houses of theirs'

c. ùrò   èjù   núŋò   tǎ:n   kùⁿ $(\_ \_ \text{c d } e_2 \ f_3 \ f_2 \_)$
    house.L   good.L   Dem   three   Def

<u>or</u>. ùrò   èjù   núŋò   kùⁿ   tǎ:n $(\_ \_ \text{c d } e_2 \ f_2 \ f_3 \_)$
    'these/those three nice houses'

d. bé   kò   ùrò   núŋò $(\text{a b c} \_ e_2 \_ \_)$
    3PlP   Dem   **house.L**   Dem
    'that (aforementioned) house of theirs over there'

e. úró   kùⁿ   bé∴   fú: $(\_ \_ \text{c} \_ \_ f_2 \ f_1 \ \text{g})$
    house   Def   Pl   all
    'all of the houses'
    (preferred to ?…bé kùⁿ∴ fú: ⇒, which however is permitted)

f. mì   yésâ: bé   lèy $(\text{a} \_ \text{c} \_ \_ f_1 \ f_3 \_)$
    1SgP   sister.HL   Pl   two
    'my two sisters'
    (ordering #… lěy bé was rejected)

g. ùrò   gàrà   kâ:ⁿ $(\_ \_ \text{c d } e_1 \_ \_)$
    house.L   big.L   each
    'each big house' (uncommon)
    (cf. the more common ùrò gàrá 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 núŋò, cardinal numerals, and adjectives. One could argue that such phrases involve a zeroed noun as head.

In this **absolute** function, demonstrative núŋò 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. núŋò   mǐ-n   èl-lá-Ø
        Dem   1Sg-Dat   be.sweet-Neg-3SgS
        'This/That (one) [deictic] does not please me.' (érù)

b. lěy   yǎ:-yɛ̀-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. ɛ̀jú   kán-tù:-Ø   dɛ̀y
    good   do-Perf-2SgS   if
    'if you-Sg do something good (=a good deed)' (kárⁿá-) **2004.3.15**

e. [má   bán   lɛ̀y]   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   táŋà: dɛ̀y
       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]   ñɔ̀wⁿɔ́   gó:-yɛ̀-Ø
           [1SgP.L **possession**]   be.ruined   exit-Perf-3SgS
           'Mine has been ruined.'

b. [ñĕ:-rⁿ-ùm   kárⁿà],   àrá   nɔ̀:-wⁿɔ́-n   déy,
   [female-child-Pl also],   porridge drink-Caus-Ppl.Sg if,
   [bè   cé   kùⁿ   ké⇒]
   [3PlP.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-yⁿɛ̀-Ø
           [Nonh.L **all**]   be.lost-Perf-3SgS
           'All (= everything) is lost!' (màrⁿá-) (likewise with kò cêw)

       b. sóy   mǎyⁿ-yⁿɛ̀-Ø
           all   be.lost-Perf-3SgS
           'All (= evertyhing) is lost!' (màrⁿá-)

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, làɣá 'other')
          cardinal numeral

    b. appear after participle at end of relative clause
        Definite kùⁿ
        Plural bé (normally)
        postnominal demonstrative (núŋò 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. [ùrò   dàɣà]   mì   wɔ̌ː-Ø
         [house.L **small.L**] 1SgS.L be.Hum-Ppl.Nonh
         'the small house where I am' (úró, dáɣá)

      b. [ñὲ-m   kùròy]   yέrὲ-m   kùⁿ
         [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. bàndîː [má   kûːⁿ]   númò-m   kùⁿ bé
         bandit   [1SgP on]   fall.Perf.HL-Ppl.Pl **Def** **Pl**
         'the bandits who fell on (=attacked) me'
         (cf. bàndîː kùⁿ bé 'the bandits')

      b. dìːⁿ   nîŋ ní   ὲné   wɔ̀ː-Ø   núŋò
         place.L this here LogoS be.Hum.Perf-Ppl.Nonh.L **Dem**
         '(He said:) "this place where I am …"' **2004.4.4**

      c. ìnὲ   yὲrὲ-n   kâːⁿ
         person.L come.Perf-Ppl.Sg.L   **any**
         'anyone who came'

      d. èjù-nɔwⁿɔ́   àː-góː-Ø∴   fúː
         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   3**Pl.L**   catch.Perf.HL-Ppl.Pl
        'the people whom they conscripted' **2004.4.22**

làɣá '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 làɣá induces tone-dropping on the participles, which would otherwise be bâ:-Ø, kárⁿâ:-Ø, and dì ŋê:-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 làɣá inside the head NP.

(321)   a.   dì :ⁿ   bè   bà:-Ø   làɣá   déyⁿ
             place.L   3PlS.L   learn.Impf-Ppl.Nonh.L   **other** separate
             'another place apart for (their) learning' **2004.4.14**

        b.   [cè: bè   kàrⁿà:-Ø]   làɣá
             [**thing.L** 3PlS.L   do.Impf-Ppl.Nonh.L] **other**
             'something else to do' **2004.3.9**

        c.   dì :ⁿ   bè   dì ŋè:-Ø   làɣá
             place.L   3PlS.L   sit.down.Impf-Ppl.Nonh.L **other**
             'another place (for them) to sit'

        d.   [dì :ⁿ   làɣá]   bè   dì ŋê:-Ø
             [place.L   **other**]   3PlS.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 núŋò]
      c.   [X + kâːⁿ 'each, any']

For example, ì jú 'dog' has LH tone contour, but is L-toned ì jù in ì jù jɛ́m 'black dog', ì jù núŋò 'this/that dog', and ì jù kâːⁿ '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 dĕː with R-tone, but it appears with overlaid H(H…)L-tone after either a pronominal or NP possessor: mì dêː 'my father', séydù dêː 'Seydou's father'. In mì dêː '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 băː 'Dad!', used as a vocative but also, as L-toned bàː-, 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 ⇒), 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 ɛ̀m pú: varying with ɛ̀mɛ̀ 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 (ñɛ̌-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', ɛ̀mɛ̀ 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 kù^n]

    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 sáydù 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 sáydù dére in (326.b), where a modifying adjective has been added.

(326) a. [sàydù   dèrè]   núw^{n}ò-n   kù^n
           [**S.L**   **brother.L**] die.Perf.HL-Ppl.Sg   Def
           'the brother of Seydou who died'
           (elsewhere sáydù dérè)

      b. sàydù   dèrè   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 kù^n is normally L-toned anyway, making the issue of tone-dropping moot. Moreover, kù^n 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 ìjú pérú 'ten dogs', both ìjú 'dog' and pérú have at least one H-tone, as they would in isolation. As relative head, this NP becomes L-toned: [ìjù pèrù] gô:-Ø kù^n 'the ten dogs who went out'. However, má ìjú 'my dog' has a tonally independent possessor pronominal (1Sg má), so when ìjú drops its tones, e.g. before a modifying adjective, the possessor retains its

H-tone(s): má ì jù 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   nàm]   yè-lé   è   témé-m̀   kùⁿ
        [**3PlP   people.L**] there   2PlS.L   find.Impf-Ppl.Pl Def
        'their people (=kin) whom you-Pl 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 ɡé or cě: 'thing'), as is bâːⁿ (or báŋà) 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   mâːn   yáː   [á   àsègέ]
       well   so-and-so yesterday [**2SgP** animal]
       [má   èjú]   ñùnù-ŋó-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 ènέ mà and plural ènέ bé.

(331) a. [[ènέ   mà   úró]   èjù-lá-Ø]   wá
            [[**LogoP** **Poss** house] good-Neg-3SgS] say
            'He said (that) his (own) house is no good.'

      b. [[ènέ   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 ènέ 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   màlfáːⁿ]≡ỳⁿ   mà⇑
             [peace   **Poss**   rifle]≡it.is   Q
             'Were they peaceable (=celebratory) rifle shots?' **2004.3.20**

        b.   [nùŋ   bè   párâː-Ø],   mà   bàtá   túrú
             [oil.L   3PlS.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 àɣà-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 mì, 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 émɛ́, 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. dě: sà:-rá-m
           father   have-Neg-1SgS
           'I do not have a father.'

     b. mì   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 n̂] (§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 ènɛ́ 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 tén-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 ñɛ̌-n 'woman' are outside of the scope of the overlaid H(H…)L tone contour, which is realized on the compound initial tì rɛ̀-.

(336)   gloss   absolute   H(H…)L possessed form

       a. tonal change only
           'father'   dɛ̌:   dê:
           'mother'   nǎ: nâ:
           'husband'   àɣá   áɣà
           'elder same-sex sibling' dèré   dérè
           'father's sister'   nèrⁿɛ́   nérⁿɛ̀
           'parent/child-in-law'   ɔ̀wⁿɔ́   ɔ́wⁿɔ̀
           '(man's) sister'   yèsǎ: yésâ:
           '(woman's) brother'   àsàrⁿá   ásárⁿà
           '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'   tì ré   tírè-n (Pl tírè-m)
           'younger same-sex sibling' ɔ̀jɔ́   ɔ́jì -n (Pl ɔ́jù-m)
           'friend'   tɛ̌:ⁿ   tên (Pl tén-ùm)
           'comrade'   tɔ́wⁿɔ́   tɔ̂:-n (Pl tɔ̂:-m)
                                   [also alienably possessed tówⁿɔ́-n and tówⁿɔ́-n ; for
                                   Reciprocal tɔ̂:-n and tɔ̂:-m, see §18.3.1]

    d. no audible change since stem already has H(H…)L contour

'grandchild'	tíríwɛ̀-n	tíríwɛ̀-n (Pl -m)
'master (of slave)'	báŋà	(báŋà bé)

    e. compounds ending in 'man' or 'woman'

'grandfather'	tì rɛ̀-ǎ-n	tírɛ̀-ǎ-n (Pl -àrⁿ-úm)
'grandmother'	tì rɛ̀-ñɛ̌-n	tírɛ̀-ñɛ̌-n (Pl -ñɛ̌-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. yɛ̀sǎː '(man's) sister' is unique for a CvCvː noun stem in having a LR tone pattern; see (110.a) and cf. §3.7.4.6. The exceptional noun tɔ́wⁿɔ́ 'comrade' is also unusual in that it has both alienable and inalienable possessed forms, e.g. mì tɔ̂ː-n alongside má tɔ́wⁿɔ́-n 'my comrade'.

    Kin and similar relational terms that are treated as alienable include júːrò 'twin sibling', î-n 'child' when used in the kinship sense 'son or daughter' (it also has non-kinship uses), ñɛ̌-n 'woman' in the possessed sense 'wife', and tɔ́ɣɔ́rɔ̀ '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 cɛ̌ː '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'
ɛ̀né 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**]
         jɛ̀ːrɛ́   ú   tém-né   bè   sâː-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)   [mì   dê:]   nɛ́rⁿɛ̀
         [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 sáydù tên '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.   sàydù   tèn   ì nè   gǎ-n
               S.L   **friend.L**   person.L   old-Sg
               'Seydou's elderly friend'

         b.   [[mì   dè:]   nɛ̀rⁿɛ̀]   bàmàkó   wɔ̂-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 bón '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 -ẁ, 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-ẁ …

   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-VblN …

   The constructions (341) and (342) are cases where ordinary possessor morphosyntax has broken down. In a "regular" possessive construction, a VblN clause like 'our seeing the dog' would have the structure [our [dog's see-VblN]]. However, since either 1Pl or 'dog' (in the absence of the other) can directly possess the VblN ('our see-VblN' and 'dog's see-VblN'), the putative [our [dog's see-VblN]] 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-VblN], 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   ìnè   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]   bέrè
             [[**2SgP.L** elder.sib.HL] **Poss** child-Pl]   in
             '(from) among the children of your elder brother' **2004.3.20**

        c.   [má   ìjú]   mà   kɔ́:
             [**1SgP** dog]   **Poss**   foot
             'my dog's foot (=paw)'

        d.   [[[íné-m   mà   èjú] mà   támbɔ́rɔ̀]   mà   bɔ̀rɔ̀-ká:]
             [[[person-Pl.L **Poss** field] **Poss** date]   **Poss** debris]
             mà   sèmè-[mɔ̌:-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** (sɛ́mɛ́, mɔ̀:-nɔ́-)

        e.   [[àjùwɔ́   mà   úró]   mà   ɔ̀rú]
             [[new.mother **Poss** house] **Poss**   matter]
             kò-rú   wò-rú   gó: dògó≡kɔ̀
             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   [ñĕ-m   mà   [cì-cèrⁿɛ̀]-úró]
      3PlP   [woman-Pl   **Poss**   [Rdp-circumcision.L]-house]
      yɔ́≡kɔ̀   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.   ñɛ̀:-rⁿ-ùm   dáɣá-m
            woman-child-**Pl.L**   small-**Pl**
            '(the) small girls'

      b.   pùlɔ̀-m   jó:-m
            Fulbe-**Pl.L**   many-**Pl**
            'many (kinds of) Fulbe.' **2004.3.10**

c. ñɛ̀ː-rⁿù-m   dáɣá-m
    female-child-**Pl**.L   small-**Pl**
    '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   mɔ̀ñú-n
           ì nè   mɔ̀ñú-n
           person**(-Sg).L**   bad-**Sg**
           'a bad person'

       b. ì nè-m   mɔ̀ñú-m
           ì nè   mɔ̀ñú-m
           person**(-Pl).L**   bad-**Pl**
           '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 Pl form gàmà-nám. For nám in other contexts see §5.1.12.

(349) a. [ùjùbày   gàmá≡ỳ   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**-Pl]
           '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   jὲm   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.   jὲm   kújú-kújú≡kɔ̀
               black.L   black.Intens≡be.Nonh
               'It is jet black.'

b.   jέm≡kɔ̀   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   jὲm   kújú-kújú   lɛ̌y]   ɛ́ː-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 cétὲrὲ-cὲtὲrὲ differs from most other reduplicative intensifiers in its tonal pattern. It seems to have some relationship with the adjective cὲté applied to unusually short animal breeds. Still in (353.b), intensifier dáŋ-dáŋ will reappear in (354), below, with éːŋ 'nearby'.

(353)   gloss   regular adjective   intensifier

      a.   'hot'   ɔ́gù   jáw-jáw
           'fast'   "   táw-táw

      b.   'short'   gɔ̌yⁿ   cétὲrὲ-cὲtὲrὲ
           'short and stocky'   "   dáŋ-dáŋ

      c.   'black (matte)'   gɔ̌yⁿ   kújú-kújú
           'black (shiny)'   gɔ̌yⁿ   kúwⁿá-kùwⁿà

(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   párá-párá
        'red'   bán   búyⁿ-búyⁿ
        'rotten'   ɔ̌y   dúy-dúy
        'sour, salty'   nɔ̂m   póyⁿ-póyⁿ
        'firm'   déŋ   kúy-kúy

'cold'	tôm	pájá-pájá
'dry, hardened'	mǎyⁿ	káláŋ-káláŋ
'soft'	yɔ̀rú	bɔ́dɔ́-bɔ́dɔ́
'long; tall'	gùrú	sél-sél
'cold'	tôm	pájá-pájá
'hot (object)'	ɔ́gù	jáw-jáw, pál-pál
'hot (sun)'	"	táw-táw
'fast'	"	táw-táw
'thin'	ùñú	wérⁿɛ́-wérⁿɛ́
'tight'	ɛ̌yⁿ	géŋ-géŋ, gáyⁿ-gáyⁿ
'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'	dùjú	cérⁿɛ́-nénɛ́nɛ́
		'fast'	ɔ́gù	kàjàrá-lálálá
	b.	'everything'	čêw, fú:	lèrè-gètěw⇒
				(cf. lèrěw 'everything')
	c.	'straight'	dém⇒	cɔ́t, cɔ́t-cɔ́t
		'stop'	íjɛ́-	kák
		'red (=uncooked)'	bàrⁿá	jáyⁿ, jáyⁿ-jáyⁿ

For 'fat, thick', we do not get a two-part adjective-intensifier sequence. Instead, dùgú 'fat, thick' is replaced by gódɔ́góróm '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-   jɔ́bù
       '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 jɔ́bù can also function as (nonverbal) predicate.

(357)   a.   dòg-âː-Ø   péy-péy
            be.finished-Perf-3SgS   be.finished.**Intens**
            'It (e.g. sugar) is completely finished (=used up, depleted).'

       b.   tɛ́m-âː   jɔ́bù
            be.wet-Perf-3SgS   wet.**Intens**
            'He/She/It got soaking wet'.

       c.   jɔ́bú≡kɔ̀
            wet.**Intens**≡be.Nonh
            'It is soaking wet.' (jɔ́bù)

For 'thin', the elicited construction again involved an adjectival verb dɔ̀ŋɔ́- 'be thin', but this time it is chained to the intensifier, which functions as (nonverbal) predicate. The intensifier is heard as [kàⁿíːⁿ], which I take as /kàⁿ-íː/ with the -íː morpheme often used with predicative adjectives (§4.5.3).

(358)   dɔ̀ŋɔ́   mèyⁿ   kàⁿ-íː≡wɔ̀-Ø
        be.thin   and   thin.**Intens**≡be.Hum-3SgS
        'He/She is pencil-thin.'

6.3.3.3   'Other' *(làɣá)*

The adjective làɣá 'other' may be added unproblematically to a noun-adjective combination (359).

(359)   sàddὲ   ὲyⁿ   làɣá
         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 làɣá], followed (perhaps after an intervening constituent) by a negative relative clause of the type 'that is not Y' (360).

(360)   a.   [ànà   làɣá]   [jɔ́wⁿlὲ≡ỳ   là:-Ø]
               [village.L   **other**]   [Dianwely≡it.is Neg-Ppl.Nonh]
               'a village that is not (=a village other than) Dianwely'

         b.   [cὲ: làɣá]   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, làɣá 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]   lὲ]   é:ŋ≡î:
               [[place.L   Dem]   **in**]   **near**≡it.is
               'it's near (to) this place' **2004.3.21**

    b. à-nà   [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. ɛ́wɛ́   [úró   mà   dǐːⁿ]   é:ŋ≡kɔ̀
        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) [à-nà   [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   [ɛ́wɛ́   lè]   wàɣá≡kɔ̀
       house [market **in**]   **far**≡be.Nonh
       'The house is far from the market'

In (364), wàɣá⇒ is an adverb 'far away'. It has a locative-adverbial complement, separated from it by an object pronominal.

(364) [[á   jé:n]   lè]   kó   wàɣá⇒   dáɣá
       [[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 érù '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. nɔ̀-ýⁿ   ér≡kɔ̀
          drink-VblN good≡be.Nonh
          'It's good to drink.' (érù)

b. cègùr-ú   ér≡kɔ
listen-VblN good≡be.Nonh
'It's good to listen to.' (érù)

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   ér≡kɔ
           look.at-Caus good≡be.Nonh
           'It (=ripe millet in the field) is nice to look at' (érù) **2004.3.6**

    b. ñɛ́:-wⁿɛ́   ér≡kɔ
           eat-Caus   good≡be.Nonh
           'It's good to eat.' (érù)

6.4   Noun plus demonstrative

6.4.1   Prenominal kɔ̀

Rarely, an L-toned kɔ̀ preceding a noun can be the Nonhuman L-toned inalienable possessor form, in unusual combinations like 'its father'. Much more often, prenominal kɔ̀ 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. kɔ̀   úró
           Dem   house
           'that (aforementioned) house'

    b. kɔ̀   íné-m
           Dem   person-Pl
           'those (aforementioned) people'

    c. kɔ̀   nɔ̆ŋ   lɛ̆y   kùⁿ
           Dem neighborhood two   Def
           'those two (same) neighborhoods' **2004.4.6**

Demonstrative kɔ̀ 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 núŋò

A **deictic** demonstrative sense 'this, that' is expressed by adding Nonhuman núŋò, human Sg nùŋò-bâ:^{n}, or human Pl nùŋò-nám to the noun. For the forms, see §4.4.1.1. A preceding modified noun drops its tones to all-L, showing that núŋò patterns in this respect as an adjective.

(370)   a.   ùrò   núŋò
               house   **Dem**
               'this/that house' (deictic)

         b.   á   ñὲ-ì-n   nùŋò-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:y^n
               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), nǔ: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 nǔ: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. [ìnè-m   mɔ̀ñú-m]   nù:yⁿ
           [person-Pl.L bad-Pl]   **five**
           'five bad (nasty) people'

       c. dɔ̀ɣǒ-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 ostensively indicated (373.a) or discourse-definite (373.b).

(373) a. [gù-gùn   núŋò nù:yⁿ]   ɛ́wɛ́-ỳ
           [Rdp-watermelon.L   **Dem** **five**]   buy.Impf-1PlS
           'We'll buy those five watermelons.'

       b. [kò   gù-gûn   nù:yⁿ]   ɛ́wɛ́-ỳ
           [**Dem**   Rdp-watermelon **five**]   buy.Impf-1PlS
           '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 gǎnǹ 'between, among' (§8.3.12) or bɛ̀rɛ̂: '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   núŋò   mà   gǎnǹ],
       [Rdp-watermelon.L **Dem**   Poss   **between**],
       [gù-gûn   nù:yⁿ]   ɛ́wɛ́-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 (bɛ́)

The Plural particle bɛ́ is related to 3Pl pronoun bɛ́, and it is part of Logophoric Pl pronoun ɛ̀nɛ́ bɛ́. However, bɛ́ 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 bɛ́ to express plurality: mì yésâ: 'my (man's) sister', plural mì yésâ: bɛ́ 'my sisters'. Other examples of nouns with Pl bɛ́ are jàmsǎy bɛ́ 'Jamsay (people)' and borrowed nouns like *conseiller* bɛ́ 'councilors' and *aventurier* bɛ́ 'adventurers'.

For nonhuman nouns, plurality is an optional category and is usually not expressed. However, Pl bɛ́ is available when the speaker chooses to express plurality overtly: ì jú bɛ́ 'dogs', versus simple ì jú 'dog(s)'. Examples involving inanimate nouns are in (375).

(375) a. [[kó   kùⁿ]   mà   à-tî:]   mà   tɔ̌g   kùⁿ   bɛ́
           [[Nonh Def]   Poss bird.trap] Poss kind   Def   **Pl**
           'those types of bird traps' (tɔ̀gú) **2004.3.16**

       b. [jè:n   bè   jèrê:-Ø]≡ỳ⇒,
           [gear.L   3PlS.L keep.Impf-Ppl.Nonh]≡it.is
           [bɛ̀:nɛ́   kùⁿ   bɛ́]≡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

bɛ́ may precede a cardinal numeral, or a universal quantifier ('all').

(376) a. mì   yésâ: bé   lὲy
        1SgP   sister.HL   Pl   two
        'my two sisters' (lĕy)

     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) [ñĕ:-rⁿ-ùm   dê: bè-rú]   yǎ:
      [female-child-Pl father.HL **Pl-Dat**]   go
      [î-n   kùⁿ]   jàŋá-bà
      [child-Sg   Def]   request.Impf-3PlS
      '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) [nǐ: túrú   ké]   nì-nì wⁿé   yǎ: mèyⁿ—,
       [day   one   Topic] Rdp-cat   go   and,
       [ù-jùwⁿó   kùⁿ] [ɛ̀né   yâ:-Ø   kùⁿ]
       [Rdp-mouse   **Def**] [Refl   go.Perf.HL-Ppl.Nonh   **Def**]
       [nǐ: túrú   ké]   kɔ̀ñɔ́   nɔ̀:-Ø,
       [day   one   Topic] millet.beer   drink.Perf.L-3SgS,
       [kɔ̀ñɔ́   nɔ̌:   mèyⁿ] hâl   yǎ: mèyⁿ
       [millet.beer drink   and]   until   go   and
       [kɔ̀ñɔ́   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 círⁿé 'my (logophoric) nose' earlier in the same text, without kùⁿ.

(380) [ɛ̀né   mà   círⁿé   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, kùⁿ occurs in the high-frequency combination kó kùⁿ '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 kùⁿ are (192), (207.a), (280.b), (484.a), and (507.a).

6.8 Universal and distributive quantifiers

6.8.1 'Each X' (kâːⁿ) and 'all X' (cêw, fúː, sóy)

Three forms are relevant here. **Distributive** quantifier kâːⁿ 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) + kâːⁿ]. It does not co-occur with determiners (demonstratives, Definite) or with other quantifiers such as cardinal numerals. It must be distinguished from homonym kâːⁿ 'also, too' (variant kárⁿà), 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 fúː (the latter also pronounced púː 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 fúː do not force tone-dropping on a preceding nonpronominal NP. However, fúː 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): ùrⁿó∴ fúː 'every hole', roughly phonetic [ùrⁿóōò fúː]. The ∴ effect is usually omitted, but occasionally audible, in pronominal combinations, e.g. [kò(∴) fúː] 'all of it, everything'.

Both cêw and fúː force **L-tone on a preceding pronominal** (but not noun): èmɛ̀ cêw or èmɛ̀ fúː 'all of us'. 'Everything' is expressed by [kò cêw] or [kò fúː], where kò can be taken as the tone-dropped counterpart of Nonhuman pronoun kó, or (less likely) as the prenominal demonstrative kò. 1Pl émɛ́ is often **apocopated** before fúː, with the f then hardening to p after the nasal: èm púː 'all of us'. fúː is sometimes itself prolonged intonationally: fúː⟹. An elicited example is (381), where fúː shifts to púː after a nasal. I have difficulty in text transcriptions determining when the intonational marking ⟹ is justified for fúː, since universal quantifiers are naturally emphatic.

(381) úrⁿ-ùm∴   púː⟹   yǎː-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 ìnè without suffix (and with tones dropped) before kâːⁿ 'each', hence ìnè kâːⁿ 'each person'. A possibly related quirk is that ìnè kâːⁿ is sometimes applied to nonhuman entities in the sense 'each one' (383).

(383)   yàː-gɔ̀ː-náː   [kó   lɛ̀y] tùl-lá-Ø,
        woman.L-dance.L-true   [Nonh two] one-Neg-3SgS,
        [ìnè   kâːⁿ] [ɛ̀né   mà   tɔ̀gú] 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.'
        (túrú) **2004.4.14**

Other human nouns keep Sg suffix -n (NB: not Pl -m) before kâːⁿ 'each', as in dɔ̀ɣɔ̀-n kâːⁿ 'each Dogon' and ñɛ̀-n kâːⁿ 'each woman'.

(384) shows that all three quantifiers can be used at least loosely in **distributive** sense. The version with kâːⁿ (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.   [ìnè   kâːⁿ   lɛ̀]   [péːjú   tút-túrú] 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-túrú]   ò:-bà
   [person   **all**   Dat]
   [=a]

c. [íné-n∴   fú: lè]   [pé:jú   tút-túrú]   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. [kì̀-ká: kù^n]   [ñú: kù^n cêw]   ñɛ́:-jɛ̀-Ø
       [grasshopper Def]   [millet Def   **all**]   eat-RecPf-3SgS
       'The grasshoppers (=locusts) have eaten all of the millet.'

    b. [kì̀-ká: kù^n]   [ñú: kù^n∴   fú:]   ñɛ́:-jɛ̀-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   kù^n∴   fú:]   nùm-â:-Ø
     [úró   kù^n 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   lɛ̀y   cêw]   bɔ̀r^{n}ɔ̂:-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   yérὲ-m   cêw
           man-Pl.L   come.Perf.HL-Ppl.Pl   all
           'all (of) the men who came'

       b. àrⁿ-ùm   cêw   yérὲ-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, kâːⁿ 'each' has a wide-scope interpretation and can be glossed 'any' (389).

(389) [cὲː   kâːⁿ]   bὲl-lú-m
       [thing   **each**]   get-PerfNeg-1SgS
       'I didn't get anything.' (bὲré-)

That is, [∀ X [not [I got X]]].

Even with what are ordinarily mass nouns, kâːⁿ may be used, arguably imposing an individuation on the mass. fúː may be added to kâːⁿ for emphasis, but fúː is not directly added to the noun in this wide-scope sense.

(390) a. [ñùː   kâːⁿ]   cὲjὲ-lú-m
           [millet   **each**]   cut-PerfNeg-1SgS
           'I didn't cut (=harvest) any millet.'

       b. [ñùː   kâːⁿ∴   fúː]   cὲjὲ-lú-m
           [millet   **each**   **all**]   cut-PerfNeg-1SgS
           'I didn't cut (=harvest) any millet.'

fúː 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:]   cɛ̀jɛ̀-lú-m
          [millet   **all**]   cut-PerfNeg-1SgS
          'I did not cut (=harvest) all the millet.'

       b.. [ñú: cêw]   cɛ̀jɛ̀-lú-m
          [millet   **all**]   cut-PerfNeg-1SgS
          [=(a)]

       c. gàmà-nám [kò   cêw]   bɛ̀rɛ̀-j-é,
          some-Pl   [Dem   **all**]   get-ImpfNeg-3PlS,
          bɛ̀l-l-á   táŋà: 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 àrⁿà-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: bɛ̀ré-ẁ   dèy⇑,
          [**year**   **to**   **year.L**]   millet get.Impf-2SgS   if,
          [ñú: ké]   wá:jíbì≡ỳ   kó   dɔ̀rⁿɔ́-ẁⁿ
          [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]   bɛ̌n   kùn-ó-Ø,
          [**death**   **to**   **death.L**]   tomtom   be.in-Neg-Ppl.Nonh,
          [sún≡ì: là: dèy]   [sɛ̀yàm   kâ: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. [màlfâːⁿ   yó⇒   màlf àːⁿ]   gôː-Ø,
    [**rifle**   **to**   **rifle.L**]   go.out.Perf.HL-Ppl.Nonh,
    [màlf àːⁿ   [kó   ní-ŋírⁿé]   kɔ́rsɔ́-sà-Ø]
    [rifle.L   [Nonh   Rdp-day]   fail-Reslt-Ppl.Nonh]
    [kó   bèrɛ̂ː]   gòː-lî -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 -cèrⁿ ɛ̀-î-n   yó⇒
    [**Rdp-circumcision.L-child-Sg   to**
    cì -cèrⁿ ɛ̀-î-n],
    Rdp-circumcision.L-child-S]
    [témɛ́-rⁿ ɛ́   mà   bèrɛ̂ː]   láː-láː≡ỳ   dèy,
    [tradition   Poss   in]   first-first≡it.is   if,
    làːrá   láːrâː-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 + yôː],
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) [kùːⁿ-bɔ̀nɔ̌   kùⁿ], [káːlísì   lè], [càrà   yôː   lè],
    [head.L-tie.in.row Def], [money   Inst], [silver.L **Pl(?)** Inst],
    [kúːⁿ   kùⁿ] kó≡ỳ   bɔ̀nɔ̌   jǎː-bà   jìːⁿ   wà
    [head   Def] Nonh≡Foc tie.in.row   convey.Impf-3PlS Past   say
    'That tie-in-row-on-head (a hairstyle), with coins, with (lots of) silver
    (coins); the head, <u>that (=coins)</u> [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   lɛ̌y-lɛ̀y]   bɛ̀rɛ̀-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   lɛ̌y-lɛ̀y]   ɔ̀:-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. "[∀ X [X get two sheep]] & [∃ 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] ɔ̀:-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 "[∀ 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   wàrá   bɛ̀rɛ̀-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   jùgɔ́-ǹ]
           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 túrú '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   lɛ̀y]
           2Pl [person-Pl **two**]
           'you two, the two of you'

       b. ú   [íné-n   túrú-n]
           2Sg [person-Sg **one-Sg**]
           'you-Sg alone'

       c. ú   túrú
           2Sg **one**
           [= (b)]

       d. [ɛ́mɛ́ lɛ̀y]   gàmá   nîm
           [1Pl **two**]   some   now
           [[ɛ́mɛ́ lɛ̌y]   mà   gǎnǹ]   mà   wàɣá …
           [[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 kúːⁿ 'head' to the equation. In (399), kúːⁿ is the immediate complement of the numeral. The 1Pl pronoun ɛ́mɛ́ 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   íné-m   kú:ⁿ   nù:yⁿ
            1Pl   person   **head**   five
            'the five of us'

        b.   émé   [íné-m   péré   lěy   sáɣà]
            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 ɔɣɔ̌-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   ɔɣɔ̌-n
            2Sg   chief-Sg
            'you-Sg the chief'

        b.   émé   dɔɣɔ̌-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∴]   tɔ̂ː-n   bè   âː   cêw, …
           [**3Sg**   **Nonh**]   Recip-Sg 3PlS.L catch.Perf.HL all, …
           'When he and it (=lion) had seized each other, …' **2004.3.2**

       b. έmέ∴.   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 gǎnn̄ 'between'.

(402)   [ɛ́mɛ́∴   é∴]   mà   gǎnn̄
        [1Pl   2Pl]   Poss   **between**
        'between us and you-Pl'

A logophoric may be a conjunct (403).

(403)   ñɛ̌-m   [ú∴   [ɛ̀nɛ́   bé∴]]   cí-cɛ̂w   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∴   ñɛ̌-m∴
             man-Pl   **woman-Pl**
             'men and women'

        b.   [tájù∴   sì -sèg]≡î:
             [**basket**   **Rdp-filtering.basket**]≡it.is
             'It is (tightly woven) baskets and (coarse) filtering baskets'
             2004.3.6

        c.   [yá:∴   íjé∴]   kǎw≡kɔ̀
             [**yesterday today**]   different≡be.Nonh
             'Yesterday and today are quite different.' **2004.3.19**

In (404.b), which ends in underlying /sì -sègú∴≡ỳ/, the contraction of stem-final ú and clitic ≡ỳ to F-toned ≡î: almost swallows up the second ∴ intonational segment.

in (405), a pronoun is conjoined to a noun. Here, as often, a conjunction phrase functions as complement of gǎnn̄ 'between'.

(405)   [kó∴   ùjùbǎy∴]   mà   gǎnn̄
        [**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∴   [ñĕ-m   mà   àjùwɔ̀-sŭm-Ø]
         [[**Nonh   [woman-Pl   Poss   new.mother-wash-VblN]**
         mà   kû:ⁿ]   èmĕ-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]   yɔ́≡kɔ̀
         [**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-VblN]
         [kó   èm-tɔ̀ŋ-ú∴],   [kó   bò:-dè-ý∴],
         [NonhP   milk.L-grow-VblN], [NonhP   fuzz.L-carry-VblN],
         [kó   kùⁿ   mà   kû:ⁿ]   dáɣà⟹   èmĕ-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) [[tàmbɔ̀rɔ̀ èjú∴] mɔ̀ñú∴] mà kàw-g-ú bé⇒
       [[date.L **good** **bad**] Poss be.separate-Caus-VblN 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), kɔ̀ 'be' has scope over the entire conjunction. The same is true of the postposition in (410.b).

(410) a. [wɔ̌m∴ wárú∴] kɔ̀
           [weeding planting] be.Nonh
           'It is weeding and planting' **2004.3.6**

       b. [[ɛ̀nɛ́ nâ:] [ɛ̀nɛ́ dê:]] 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 kárⁿá- '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) [yá∴ yɛ́rɛ̀∴] kárⁿá≡kɔ̀
       [**going** **coming**] do.Impf≡be.Nonh
       'It (=cobra) makes back-and-forth movements (while spitting)' (yǎ:-, yɛ̀rɛ́-) **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∴   ñĕ-m∴
             1Sg   woman-Pl
             'me and the women'

        b.   á:mádù∴   [wò   dê:∴]
             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.   émέ∴   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∴],   [ùjùbăy∴   ùjùbăy∴],
        [**village   village**],   [**country   country**],
        íné-m   tô:-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 gǎnǹ 'between, among' (415), cf. §8.3.12.

(415)   [ɛ́mɛ́   dɔ̀ɣɔ̀-àná]
        [1PlP   Dogon.L-village]
        [[ùrò-dú:∴   ùrò-dú:∴]   mà   gǎnǹ]   jéy   bé:-yà-Ø,
        [[**family   family**]   Poss   **among**]   fight   happen-Perf-3SgS
        [[iné-m∴   íné-m∴]   mà   gǎnǹ]   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)   mâ:n   [[[ú:∴   mâ:n:∴   lɛ̌y]   mà   gǎnǹ]
        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.Pl 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   cérè-Ø   kùⁿ   yɔ́kkɔ
             [**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 ⟹ 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⟹ (419.a). A conjunct may also be a plural NP of the form [noun bé], in which case we get [noun bé bé⟹], sometimes shortened to [noun bé⟹] (419.a).

(419)   a. [bé bé⟹] [bè   nâ: (bé) bé⟹]   mà gàn≡î:
         [3Pl **Pl**] [3PlP.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⟹]
         today   [radio   **Pl**]
         [cè: kó   tímé-sà-Ø   bé⟹]
         [thing.L NonhO resemble-Reslt-Ppl.Nonh]   Pl]
         kárⁿ-á:rⁿà-m   yɔ́≡kɔ̀
         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-kɔ̀rɔ̀]-jà-ýⁿ   bé⟹,   kó   bé⟹
         [well.L]-dig-VblN **Pl**,   Nonh   **Pl**
         [kùrⁿâ:ⁿ   mà   sǔŋ] [àná bérè],   *goudron*
         [electricity Poss cord] [village in],   paved.road
         cě: kán   tí   mèyⁿ⇑ mà gǎ:-n-Ø   bé⟹.
         thing do   Link   and   Poss pass-Caus-VblN **Pl**,
         [pɔ̀ⁿsé   bérè] mà lɔ́ɣɔ̀ mà gɔ̀ⁿ-ýⁿ   bé⟹
         [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. [lármɛ́   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   dérè   bé∴.]
      A   [3SgP.L elder.sibling.HL **Pl**]
      'Amadou and his brothers.'

7.1.3   Pronominal conjunction of type [X wó≡ỳ] 'X and them'

An alternative to the prosodically symmetrical [X∴. Y∴.] form of pronominal conjunction is a type with clitic ≡ỳ (§11.2.1) added to the second conjunct. The first conjunct is a plural pronoun in L-tone (1Pl èmɛ̀, 2Pl è, 3Pl bè). The second conjunct takes the invariant 3Sg form wó but has third plural reference.

(421) a. kó≡ỳ   [è   wó≡ỳ]   [[[pɔ̀n-sǔŋ   tùr] lá-m]
        Nonh≡it.is [**2Pl** **3Sg≡it.is**] [[[pants.L-cord one.L] not.be-Ppl.Pl]
        mà   ñɛ̀-m]≡î:
        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).' (túrú 'one')] **2004.3.3**

    b. èmɛ̀   wó≡ỳ
      1Pl   3Sg≡it.is
      'us and them'

    c. bè   wó≡ỳ
      3Pl   3Sg≡it.is
      'them and them'

Another example of è wó≡ỳ 'you and they' is (928.f).

My assistant rejected #mì wó≡ỳ 'I and them' (because of the singular first conjunct), and also rejected #ὲmὲ ú≡ỳ '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 nὲ 'person' is coindexed with one or other of the 3Sg wó conjuncts. Note that the participle is singular.

(422) [ì nὲ   [wó∴   wó∴]   yâː-n   kùⁿ   lὲ],
       [**person.L [3Sg   3Sg]   go.Perf.HL-Ppl.Sg   Def   with]**
       wó   bòːnó   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 lὲy 'the two of them' instead of wó∴ wó∴, hence ì nὲ [bé lὲy] yâː-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   2PlS.L   go.Perf.HL-Ppl.Nonh]
       [è   yɛ́rɛ̀-Ø∴]
       2PlS.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 con-
ditional 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)   séllɛ́   sà-m   dèy,   àrⁿá   mì l-lí-Ø   dèy,
       health   have-1SgS **if**,   rain   fall-PerfNeg-3SgS **if**,
       yì rú   súmó-m̀
       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-nŭŋ-Ø∴   gɔ̀:-gɔ̀-ý∴]   dàɣá-tì -Ø
       [**song.L-sing-VblN   dance(noun).L-dance-VblN**] 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.   [ɛ́:ⁿ∴   pé:∴]   túmnó-tì -Ø
            [**weeping   crying**]   begin-Perf-3SgS
            'He/She began to weep and cry.'

       b.   [yǎ: yèrɛ́]   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 (⇒) and/or raising (⇑). 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⇒] [Y ma⇒]] with ma⇒ 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⇒⇑] [nùw^{n}ó   má⇒]]≡ỳ^n dènê:-Ø
            [wealth **or**   death   **or**]≡Foc   want.Impf-3SgS
            '<u>Either wealth or death</u> [focus] is what he wants.'

b. [bû:d   nŭ:yⁿ   má⇒]   [bû:d   pérú
   [riyal   five   **or**]   [riyal   ten
   má:⇒]   [ñù:-sèyⁿ   dáɣá]
   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. [ènɛ́   bé] [[íné-m   pén-nàyⁿ   má] [pén-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** (bèrɛ́-)

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.   [èñɛ́   túrú]   má⇒   [èñɛ́   lèy]   cê:ⁿ-Ø
             [chicken one]   **or**   [chicken two]   slaughter.Impf-3SgS
             'He will slaughter one chicken or two chickens.'

        b.   tă:n   má⇒   nàyⁿ
             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)   [[ànà   é:ŋ   kùⁿ bɛ́rɛ̀]   mà, [é   pɔ̀n-sŭŋ túrù-m]]   mà,
        [[village.L near   Def in]   **or**,   [2PlP pants-cord one-HL-Pl]] Poss
        ì nè   gă-n   mà   ì nè   nínáy-n,   wó≡ỳ 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 <u>he</u> [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 (mà⇒↑). 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) pàŋá   nám   ké,   gá:rá   bú:dù   sâ-n   mà⇒↑,
       power   owners   Topic, more   money   have.HL-Ppl.Sg **or**,
       gá:ra   [tègù   érù]   gòrⁿɔ́-ǹ   mà⇒↑,
       more   [speech   sweet]   be.able.Impf-Ppl.Sg   **or**,
       [gá:rá   tòyⁿɔ́   tímé-sà-Ø]   tégé   bèré-ǹ
       [more   truth   resemble-Reslt-Ppl.Nonh]   speak   can.Impf-Ppl.Sg
       mà⇒↑,   lè   yǎ: dònò-ŋó   mèyⁿ⇑
       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. [[ɛ̌:   tǎ:n]   [ɛ̌:   nǎyⁿ]   bǎ:]
           [[month   **three**] [month   **four**]   since]
           'for (a duration of) three or four months' **2004.3.9**

       b. kàrgù-î:ⁿ   [lɛ̌y   tǎ:n]   tô:-n   mǎ:-tù:-Ø   dèy
           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≡ỳ∴.   fú:]   ó:-ẁ
        [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 ⇒), 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. [màlfâːⁿ   nám] yǎ: wǒ-r   táːⁿ   ó:-bà,
            [rifle   owners] go   3Sg-Dat shoot   give.Impf-3PlS,
            mà⇒   màlf âːⁿ   yàŋá   méy yǎ: tâːⁿ-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. [mâːn∴.   mâːn∴.   lèy] èl-lá-bá   àɣà-m
            [so-and-so so-and-so two] sweet.L-Neg-3PlS   hear.Perf.L-1SgS
            mà⇒   jèɣέ-tù-bà   àɣà-m
            or   fight-Perf-3PlS   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*≡ì: [bé   gǔnǹ] d ̌ìmè,
            military.guard≡Foc [3Pl   behind] follow.Perf.L,
            núŋò≡ỳⁿ [ɔ̀rù   mɔ̀ñú jín] kɔ̂:-Ø   mà⇒↑
            Dem≡Foc [thing.L bad   like] be.Nonh.HL-Ppl.Nonh **or**
            [ɔ̀rù   kàrⁿ-ú   jàːⁿ-lá-Ø   jín]
            [thing.L do-VblN   be.acceptable-Neg-Ppl.Nonh   like]
            kɔ̂:-Ø   cêw, bé   dàɣá kàrⁿà-wⁿà-gó-Ø
            be.Nonh.HL-Ppl.Nonh all, 3PlO leave do-Caus-ImpfNeg-3SgS
            'It was <u>a military guard</u> [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],   3PlO   lie.down-Caus.Impf-3PlS,
        kà: [kàrá   mánà]   bé   ì ñì -wⁿè-j-é,
        but   [mat   on]   3PlO   lie.down-Caus-ImpfNeg-3PlS,
        wâl-mà   [cɛ́wé   mánà]   bé   ì ñì -wⁿé-bà
        or.else [plank   on]   3PlO   lie.down-Caus.Impf-3PlS
        '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]   bέrὲ∴.   fú:⇒
           [village Def]   **in**   **all**
           'throughout the village'

       b. [àná   kùⁿ fú:]   bέrὲ
           [village Def **all**]   **in**
           'in all the villages'

       c. [èjú   lé]   kó   έ:-sà-m,
           [field   in]   NonhO   see-Reslt-1SgS,
           [àná   bέrὲ   kâ:ⁿ]   kó   έ:-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]
           [[[2PlP   village Def]   **in**   **all**]
           mà   íné-m   kùⁿ]   bòrɔ̂:-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 fúː '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 Cv́ː (436.b), …LH (436.c), monosyllabic Cv̌ː (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'
	kùːⁿ-cɛ́nɛ́	'middle of head'	kùːⁿ-cɛ́nɛ̀	'in middle of head'
	cì-cɛ́nɛ́	'middle'	cì-cɛ́nɛ̀	'in the middle'
	ɛ́wɛ́	'market'	ɛ́wɛ̀	'in the market'
	nì-bárⁿá	'hot season'	nì-bárⁿà	'in the hot season'
	nì-núwⁿó	'daytime'	nì-núwⁿò	'in the daytime'

	ójú	'road'	ójù	'on the road'
	pàrà-séːrⁿέ	'autumn'	pàrà-séːrⁿὲ	'in the daytime'
	úró	'house'	úrò	'at home, (to) home'
b.	káː	'mouth'	kâː	'at the mouth'
	níː	'water'	nîː	'in water'
	òjù-káː	'road'	òjù-kâː	'on the road'
	tògù-náː	'palaver shelter'	tògù-nâː	'in the palaver shelter'
c.	bòró	'bottom'	bòrôː	'at the bottom'
	jìrè-kùró	'twilight'	jìrè-kùrôː	'at dusk'
	jìrⁿé	'wet season'	jìrⁿêː	'in the wet season'
	gòró	'upper nape'	gòrôː	'on the nape (of)'
	kòró	'neck'	kòrôː	'on the neck (of)'
	mànáː	'mortar'	mànâː	'in the mortar'
	nìː-sìːrⁿ-ú	'dawn'	nìː-sìːrⁿ-ûː	'at dawn'
	nùmó	'hand'	nùmôː	'in the hand (of)'
	—	—	àrⁿâː	'in a (certain) year'
			(cf. àrⁿà-kújú	'year', àrⁿá 'rain')
d.	gɔ̌ː	'granary'	gɔ̌ɔ̌ː (=[gɔ̀ɔ́ɔ̀])	'in the granary'
e.	gǎn	'area'	gǎnǹ	'between'
	gǔn	'back (body)'	gǔnǹ	'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.   mòbîl   òjù-kâː   céjé-sà-y
             vehicle   **road.Loc.HL**   meet-Reslt-1PlS
             'We met the vehicle on the road.'

b. [[ènɛ́   mà   kɔ́:]   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]
   [[2PlP bread]   [2PlP meal]   [2PlP water]   all]
   [é   kɔ̀rɔ̂:]   kùn-Ø
   [2PlP **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.   ɛ́mɛ́   dɔ̀ɣɔ̀-úrò
             1PlP   Dogon-**house.Loc.HL**
             '(here) in our Dogon country' (common phrase)

        b.   [ɔ̀jù-kà: núŋò]   lè
             [**road**   Dem]   in
             'on this road'

The noun úró 'house' and its tonal locative úrò are ordinarily distin-
guishable. As compound initials, in the main noun-noun compound type with
tone-dropping on the initial, they would both merge as ùrò-. In e.g.
[àɣà-ùrò]-tǎŋ-Ø '(bride's) transfer to her husband's home', a compound
ending in a Verbal Noun, the associated VP is àɣà-úrò táŋá- 'move to the
husband's home'. One could argue, therefore, that the compound initial
[àɣà-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: gɔ̀ŋɔ́∴

gòŋɔ́∴ cf. gòŋɔ́ '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. kòrɔ́   'neck'   kòrɔ̂:   'at the expense of'

(440) a. [[é   bú:rù∴],   [é   ñǎ:∴],   [é   ní:∴]   cêw]
       [[2PlP bread],   [2PlP meal],   [2PlP   water]   all]
       [é   kòrɔ̂:]   kùn-Ø
       [2PlP **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   àjùwɔ̀-sǔm-Ø]   mà   kû:ⁿ]
       [[woman-Pl Poss new.mother-wash-VblN] Poss **head.Loc.HL**]
       ɛ̀mě-n   tégé
       1Pl-Dat   speak.Imprt
       'tell-Sg us about the washing of new mothers (i.e., postpartum seclusion)!' **2004.3.19**

For kòrɔ̂: expressing responsibility (for an expense), compare English *on the shoulders of (someone)*.

See also the discussions of locatives bɛ́rɛ̀ (or bɛ̀rɛ̂:) 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 kó　　　　 gloss

a. dógúró　 'time'　 kó dógúrù　　 '(at) that time'
　　　　　　　　　 (variant: kó dógúrú)

b. dǐːⁿ　　 'place'　 kó dǐːⁿ　　　 '(at) that place'
　　　　　　　　　 (variant: kó dǐːⁿ)

c. wákátì　 'time'　 kó wákátì　　 '(at) that time'

A similar phrase, kó ní-ŋírⁿé '(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　　 nìːñé∴]　 [á　 màlfâːⁿ∴　　 fúː]　 [dìːⁿ　 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.   [[ɛ̀nɛ́   mà   círⁿé   kùⁿ]   lè]   dɔ́:-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]   kɔ̀rɔ̀-Ø
          [wall   in]   be.hung.Perf.L-NonhS
          'It (=garment) is hanging on (=against) the wall.'

    Instrumental examples are in (445).

(445)   a.   [béré   lè]   ì jú   láɣá
          [stick   **Inst**]   dog   hit.Imprt
          'Hit-Sg the dog with a stick!'

      b.   [nîm   ké]   [nàŋá   lè]   wàr-á:rà-y
          [now   Top]   [bovine   **Inst**]   farm-Habit-1PlS
          'Nowadays, we farm (e.g. plow) with oxen.'

    In some combinations, there is no clear distinction between locative and instrumental function. For example, kɔ́: lè '(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   lɛ̀y] cín [tɔ̂:-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   yóŋkù 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-àɣá]   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:=kɔ̀   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): ènɛ́ lè 'to him/her-Logo'. Other
pronominals have a special set of forms ending in -ń 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 post-position 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 (jìré), it makes little sense to take it as direct input to the adverbial, since the adverbial is jíré lé with HH-tones, not #jìré lé as we would expect from (448.a).

(448)	stem	gloss	adverbial	gloss
a.	àrgá	'side'	àrgá lé	'on the side of'
	bèré	'belly'	bèré lé	'inside' (cf. béré 'in')
	bɔrɔ́	'rear, base'	bɔrɔ́ lé	'at the rear'
	cèrⁿèwⁿɛ́	'festivity'	cèrⁿèwⁿɛ́ lé	'in festivities'
	èjú	'field, bush'	èjú lé	'in the bush (away from village)'
	gǔn	'back'	gǔn lé	'behind'
	nùmò-bàná	'left hand'	nùmò-bàná lé	'on the left'
	nùmò-ñǎː	'right hand'	nùmò-ñǎː lé	'on the right'
b.	bómó	'exterior'	bómó lé	'outside'
	[contrast bómó lè '(woman) in menstrual period']			
	úró	'house'	úró lé	'at home'
c.	mánà	'on'	máná lé	'on top, up above'
	dójù	'under'	dójú lé	'down below'
	[< dójú 'bottom']			
	gójò	'division'	gójó lé	'in divisions'
	jérè	'side'	jél lé	'toward' (< /jéré lé/)
	jírè	'in front of'	jíré lé	'in front'
	[cf. jìré 'eye']			
	jìrè-dágù	'in front of'	jìrè-dágú lé	'in front'

There are also some demonstrative adverbs ending in lé (449). For detailed discussion see §4.4.3.1-2.

(449)	ĕn lé, ǎn lé	'there (in that same place)'
	yì-lé	'here'
	yé-lé, yè-lé	'over there'

For yɔ̌: 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', ɡóː- 'go out, leave', yɛ̀rɛ́- 'come', and yǎː- '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 bèré '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 bèré '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]   yɔ́≡wɔ̀-bà
            [person.L   some-Pl]   exist≡be.Hum-3PlS
            '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   bɛ́rɛ̀
             field   **in**
             'in the field'

      b.   [àná   bɛ́rɛ̀]   nú: mɛ̀yⁿ⇑,
             [village   **in**]   enter   and,
             'entering (into) the village, …' **2004.3.3**

      c.   [[nì ŋè-dá:ŋá   bɛ́rɛ̀]≡ỳ   dèy]   ñɛ́:-ẁⁿ
             [[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 bɛ̀rȇ: and bɛ́rɛ̀. The fact that only bɛ̀rȇ: is used with pronouns is an indication that there is little or no semantic difference.

8.3.4   'on; on the head of; about' (kûːⁿ)

This postposition is the tonal-locative (HL-tone) form of kúːⁿ '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-nɔ̀wⁿɔ́   té=>]   [é   kûːⁿ]   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   kûːⁿ]   yǎ:-yɛ̀-bà   táŋà: dèy, …
        [man-Sg Poss   **on**]   go-Perf-3PlS 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)   [[ñĕ̌-m   mà   àjùwɔ̀-sǔm-Ø]   mà   kûːⁿ]
        [[woman-Pl   Poss   new.mother-wash-VblN]   Poss **about**]
        èmĕ̌-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.   [nùwⁿó kùⁿ]   yàŋá   [ɔwⁿɔ̀-túm   mánà]
             [corpse Def]   take   [burial.mound **on**]
             náːná-tù-bà   dèy
             put-Perf-3PlS   if
             'when they have laid the corpse on the burial mound'

        b.   [nîŋ   ké]   [nùwⁿó kùⁿ]   [ɔwⁿɔ̀-túm   mánà] góː,
             [now Topic] [corpse Def]   [burial.mound **on**]   go.out,
             [bέrέ   lé]   núː-yⁿɛ̀   kùⁿ   jùgɔ́-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.   [ènέ   [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 kùⁿ]   mánà] béré   téː-né   mèyⁿ⇑, …
             [[stone Def]   **on**] stick   arrange-Caus and, …
             '(They) place sticks on top of those stones, and …' **2004.3.6**

e. [dèŋέ 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' (dǐˋⁿ)

This postposition is uncommon in texts. It is the tonal locative of the high-frequency noun dǐ:ⁿ 'place', which is also used as head noun (L-toned dì: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 jέ mèyⁿ],
[NonhO 3SgS.L expose.to.sun hold.Perf.HL-Ppl.Nonh say and]
[[wó jé:n] mà dǐˋⁿ],
[[3SgP gear] Poss **beside**],
púlɔ̀-n yèrέ wó tὲmὲ-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 jὲ yèrέ
until [rifle Def] hold.in.hand go.with come

[wó   dĭ̀ːⁿ]   dɔ̀ː-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, jíré lé, jìrè-dágù, kâː)

jírè with HL tone contour, or jíré lé with H-tones, means basically 'in front of'. Simple jírè takes a pronominal or NP complement in **possessor** form.

(459) a. [kó   gǔnǹ]   è   dígè-n
           [Nonh behind]   2PlS.L   follow.Perf.HL-Ppl.Sg
           [é   jírè]   kò   jɔ̀wɔ́-ǹ
           [**2PlP** **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   dêː]   mà   jírè
           [1SgP father.HL] Poss   **in.front.of**
           'in front of my father'

There is an extended variant jìrè-dágù with the same sense and syntax (460.a). In addition, jíré 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 jìrè-dágú lé with H-toned compound final and H-toned postposition lé (448.c).

(460) a. [má   jìrè-dágù]   ùmɔ̀-Ø
           [**1SgP**   **in.front.of**]   be.lying(=prone).Perf.L-3SgS
           'He/She is lying down (= sleeping) in front of me.'

       b. [má   jíré   lé]   dàːⁿ-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) [ɛ́mɛ́   jírè]   yɛ̀rɛ̀-bà
       [**1PlP   before**]   come.Perf.L-3PlS
       'They came here before us.'

However, there is a clausal 'before …' construction with "pseudocausative" nominal (suffix -wʋ̀) 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   bɛ̀r-ú]   dèné-m̀
       [[1SgP money]   Poss obtain-VblN]   want.Impf-1SgS
       [ɛ́wɛ́   mà   dɔ́:-wɔ̀   lé]
       [market Poss arrive-**Caus in**]
       'I want my money before the market (day) (arrives).'

When the reference point is a dwelling, instead of jírè or variant, we get a locative form (final …HL tone realized as F-tone) of the compound mɔ̀:-ká: 'door' (including ká: 'mouth'), namely mɔ̀-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   mɔ̀:-kâ:]   nùmò-Ø
           [house **Poss ?-mouth.Loc.HL**] fall.Perf.L-3SgS
           'He/She fell down in front of (=at the door of) the house.'

       b. [tùmò-kóm   kâ:]   ì jɛ̀-Ø
           [stone.L-hole **mouth.Loc.H**L]   stand.Perf.L-3SgS
           'He/She stopped in front of the cave.'

8.3.8 'behind' (gǔn lé), 'after' (gǔnǹ)

gǔn may have the spatial sense 'behind', where the reference position is defined by a person, object, or place. In this sense, gǔn 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   gǔn   lé]   jì-nî: nì:-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, gǔnǹ 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, gǔnǹ is in tonal locative form.

(465)   a. [ɛ́mɛ́   gǔnǹ]   nì -dî:ⁿ   yɛ̌s-sà-bà
            [**1PlP   after**]   here   come-Reslt-3PlS
            'They came here after us (=after our departure).' (yɛ̀rɛ́-)

         b. [lá:yá:rù   mà   gǔnǹ],   àná   yǎ:-ỳ
            [Feast.of.Ram   **Poss   after**],   village   go.Impf-1PlS
            'After the Feast of the Ram, we'll go on a trip.'

         c. gàmá   [kó   gǔnǹ]
            often   [Nonh   **after**]
            [[nǐ: pél-lɛ̀y]   mà⟹⇑   ɛ̌:   tɔ̂:-n]   bé:-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

gǔnǹ without lé may also be used in what appears to be spatial rather than temporal sense with the verb dì gɛ́- '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]   yɛ́rɛ́
            [**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]   yɔ́≡kùn-Ø
         stone   [house   **under**]   exist≡be.in.Perf.L-3SgS
         'There are rocks under the house.'

       b. lù:ró   [á   dójù]   yɔ́≡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-cìné]   dójù]   ù   kún-ìn
         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) [èjíⁿ⇒   [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' (pénè, pènê:)

This pair of related forms is structurally similar to the pair bɛ́rè, bɛ̀rê: for 'in, inside of'. The two variants are derived from the noun pènɛ́ 'side'. With pénè 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   pénè
        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' (gǎnǹ, gì̀-gǎn)

'Between X and Y' is normally expressed as [[X∴ Y∴] mà gǎnǹ], whether X and Y are independent pronouns or nonpronominal NPs. In other words, 'X and Y', treated as a nonpronominal NP, appears as the possessor (471). For the conjunction construction [X∴ Y∴], see §7.1.1.

(471)   a.   [àrⁿ-úm∴   ñɛ̌-m∴]   mà   gǎnǹ
             [man-Pl   woman-Pl]   Poss   **between**
             'between men and women'

        b.   [ɛ́mɛ́∴   é∴]   mà   gǎnǹ
             [1Pl   2Pl]   Poss   **between**
             'between us and you-Pl'

    With referentially plural NP or pronoun, we get just [X mà gǎnǹ] as in íné-m mà gǎnǹ 'between/among the people', or with a pronoun [X gǎnǹ], as in ɛ́mɛ́ gǎnǹ '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).

Postposition gǎnǹ is in tonal locative form, parallel to gǔnǹ 'behind'. There is a noun gǎn 'zone', attested only once in my textual corpus (472).

(472) [gàn   núŋò.∴. fú:]   yǎ: mɔ̀rⁿɔ́≡kɔ̀
       [**zone.L** Dem   all]   go   be.together.Impf≡be.Nonh
       '(people of) the whole area went and assembled.' **2004.4.22**

When focalized by clitic ≡î:, we get … gàn≡î: with no prolongation of the nasal. There is also a rare reduplicated variant gì -gǎn.

8.4   Purposive-Causal jɛ́

This (apparent) postposition can mean 'for' (purposive) or 'because of, on account of'. A **purposive** sense is present in (473).

(473) a. [kó   sɔ̀r-ú   jɛ́]   [[ɛ̌:   tǎ:n] [ɛ̌:   nǎyⁿ bǎ:]
           [NonhP sprinkle-VblN **for**]   [[month three] [month four]   since]
           [bé: bè   sâ:-Ø   dèy⇑], …
           [stay 3PlS.L do.Perf.HL-Ppl.Nonh   if], …
           'For irrigating it (properly), if they keep at it throughout three or
           four months, …' **2004.3.9** (for sâ:-Ø dèy see §15.1.15)

       b. [mí   jɛ́]   ì nì wⁿé   nùrⁿù-ŋò-Ø
           [1Sg **for**]   Refl   be.wounded-Caus.Perf.L-3SgS
           'He hurt himself because of me (e.g. while cutting fruit for me)'

In (474.a), jɛ́ may be construed as causal or purposive. A causal reading is necessary in (474.b-c).

(474) a. [ànà   gàmá]   [kàjú   jɛ́],
           [village.L certain]   [calabash   **for**],
           [dì :ⁿ   làɣá]   yà:-j-é
           [place.L   other]   go-ImpfNeg-3PlS
           'Some (other) villages, on account of calabash (farming), they don't
           go anywhere else (in the dry season).' **2004.3.9**

       b. gɔ̀:-tùmó   lá: dé:-ẁ,   [tù-túmúrⁿú jɛ́]
           granary.L-stone first carry.Impf-2sgS [Rdp-termite   **for**]
           '(To construct a granary,) you first carry some granary stones (for
           the base of the granary), on account of termites (who would eat
           through wood).' **2004.3.26**

    c. [sìːⁿlɛ́   jɛ́]   jóŋ   jɔ̀ŋɔ́-bà   táŋà: dèy
       [disease **for**]   healing heal.Impf-3PlS happen if
       'if they (=healers) treat (people) for sickness' **2004.3.27**

The phrase ámà jɛ́ 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 jɛ̀. The relevant example is (754) in §13.1.5. Both the fact that jɛ́ allows Focus clitic ≡ỳ to attach to the complement NP, and the dropping of tones to jɛ̀, suggest a (perfective) verb-like status for this "postposition."

A verb-like status is also suggested by (475), where jɛ́ 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] jɛ́   méy]
      Rdp-mouse [[Dem food   Def] **for** **and**]
      [gǔ:n   kùⁿ]   dì gɛ́ nú:-yⁿɛ̀-Ø   táŋà: 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" jɛ́ (Purposive or Causal) and the defective quasi-verb jɛ̀- 'say', whose inflected forms are limited to the unsuffixed Perfective. For jɛ́ and jɛ́ 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: … ('<u>that</u>'s how …). It may be followed by jín 'like'.

(476) a. cín   jín   [cὲ: bé:-Ø]≡ỳ
           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. [tǒy   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 the do them.' **2004.3.6**

       c. [bé   lὲy]   cín≡kɔ̀
           [3Pl   two]   thus≡be.Nonh
           'The two of them (=sorceror and healer), it's thus (with them).' **2004.3.27**

       c. [bὲ   ké]   cín≡wɔ̀-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. [[jàndúrú   jín]   bírέ   bìrέ] é   ñέ:-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: mὲy⇑   [bὲr-ná: jín]   dɔ̀rⁿɔ́-bà
           catch   take   and   [goat   **like**] sell.Impf-3PlS
           'They (=slave-capturers) used to catch, transport, and sell (people) like goats.' **2004.3.11**

jín also occurs as second element in interrogative yɔ̌:-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-cέw '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. ñɛ̌-m   [ú∴   [ɛ̀nɛ́ bé∴]] cí-cɛ́w   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-cɛ́w≡kɔ̀
           Rdp-same≡be.Nonh
           'They (objects) are the same'

       c. cì-cɛ̀w-lá-Ø
           Rdp-same-Neg-3SgS
           'They are not the same.'

       d. ǎ-n   [ñɛ̌-n   lè] cí-cɛ́w   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')

èjí^n⟹ '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≡kɔ̀   èjí^n⟹
           lazy≡be.Nonh   **very**
           'It (=viper) is very lazy.' **2004.3.5**

       b. èjí^n⟹   wàlgú≡kɔ̀
           very   lazy≡be.Nonh
           [=(a)] **2004.3.5**

   èjí^n⟹ 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   èjí^n⇒   éjù   lèy]   jì nè-m
       [house.L   **very**   good.**HL**   two]   have.Perf.L-1Sg
       'I have two very good houses.' (èjú)

èjí^n⇒ has no effect on the tone of a predicative adjective: èjú=kɔ̀ 'it is good', èjí^n⇒ èjú=kɔ̀ '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) ñɛ̌-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 lɔ́ɣɔ́- 'overflow, be excessive, be numerous' and its causative lɔ́ɣɔ́-wɔ́- '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   wɔ̌:   mèy^n [hâl   yǎ: lɔ̀ɣɔ̀-wɔ̀-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. dáɣà⇒   'a little'   dáɣá   'small, young'
       c. wàɣá⇒   'far away'   wàɣá   'distant'

These adverbials are illustrated in (484).

(484) a. [[kó   kù^n]   mà   kû:^{n}] dáɣà⇒ èmɛ̌-n tégé
           [[Nonh Def]   Poss on]   **a.little** 1Pl-Dat speak.Imprt
           'Tell us a little about it.'

       b. [kɔ̀   wàrá≡kɔ̀]
           [NonhS.L   farm.Impf≡be.Nonh]

gàrá⇒   wò-rú   èl-lá-m
a.lot   3Sg-Dat   be.good-Neg-Ppl.Pl
mà   ìnè   gàrú-m   tút-túrú   yɔ́≡kɔ̀
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   táŋà: dèy,
get.up-Perf-3SgS happen   if,
wàɣá⇒   yǎ: ná:≡kɔ̀
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' (tɔ̂:n, jín)*

Reciprocal tɔ̂:-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   núŋò]] tɔ̂:-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 tɔ̂:-n, suggesting that
the overtly expressed numeral phrase ('ten years') and the actual elapse of time
converge approximately.

(486) [sàrî: kùⁿ]   yɛ́   sà-Ø,   [[[àrⁿà-kújú   pɛ́rú]
[plow   Def]   exist have-3SgS, [[[year   ten]
cè: dɔ́:≡kɔ̀-Ø]   tɔ̂:-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 wàrá-) **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 tô:-n.

(487)   [[[nǐ: pél-lèy]   mà⇒⇑ ě:]   tô:-n]   bé:-bà
        [[[day   ten-two]   **or**   month] **Recip-Sg**] remain.Impf-3PlS
        '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]   ɛ́wɛ́-bè,
        [NonhP   baguette] [NonhP eight   **or**   **like**] buy.Impf-2PlS,
        [bù:rù   kàlá   gá:rà   jín]   má⇒   ɛ́wɛ́-bè
        [bread.L baguette eight   **like**] **or**   buy.Impf-2PlS
        [gà:rí   mà bô:l], [bô:l   nǔ:yⁿ]   má⇒
        [porridge.cake Poss cup] [cup   five]   **or**
        [bô:l   kúróy   jín]   ɛ́wɛ́-bè
        [cup   six   **like**] buy.Impf-2PlS
        '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'*

cɛ́w-cɛ́w 'exactly' is used with a preceding quantifier. An example is mùñú lèy cɛ́w-cɛ́w 'exactly two thousand (riyals)', i.e. ten thousand CFA francs.

Reduplicated té:-té: can be used in the sense 'precisely' with reference to time: [mídî: 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:tì)*

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. [ɛ́mɛ́   ùjùbǎy kùⁿ]   mà bèrê: té⇒   ké
        [1PlP   country Def   Poss] in   **specifically** Topic
        'as for (here) in our (Dogon) country specifically, …' **2004.3.6**

    b. ì nè   gàmà-nám⇒,   èñè-bɛ́:   té⇒
        person.L certain-Pl,   chicken.L-excrement **specifically**
        lúgúró-sà-bà   dèy, …
        look.for-Reslt-3PlS if, …
        'Some (other) people, when they have looked for chicken exrement
        (used in tanning hides), …' **2004.3.17**

    c. [ɛ́mɛ́ ànà   kàná té⇒   kùⁿ   ké],
        [1PlP village.L new **specifically** Def   Topic]
        bùrò-ní: nì -dí:ⁿ≡ỳⁿ   èmǎ-n   nɛ̀wⁿɛ́-sà-Ø
        pond.L-water   here≡Foc   1Pl-Dat be.useful-Reslt-3SgS
        'Specifically (regarding) our new village (=Dianwely Kessel), pond
        water [topic], <u>here</u> [focus] it is useful to us.' **2004.4.5**

    d. [[èmǎ-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. [[èmǎ-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:]-[tɔ́gú-gú]]   mà   wàkàtì
   morning [[sun.L]-[rising]]   Poss time.L
   núŋò lè] té:-té: tɔ̂:-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. jɛ́mɛ̀-n   mà nèwⁿɛ́ 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. [jɛ̀mɛ̀-ñɛ̌-m   mà   bíɾɛ́   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 (earthenware) water jars.' **2004.3.13**

    c. dɔɣɔ̀-úrò   jòŋ-jɔ́ŋɔ́-m,
       Dogon.L-house.Loc.HL   healing.L-heal.H-Ppl.Pl,
       [ì nè-m   jóŋ   jòŋɔ́-m̀   kừⁿ   pá⇒]
       [person-Pl healing heal.Impf-Ppl.Pl Def   **Emph**],
       [cè: bè-rú   lɔ̌y≡ỳ   là:-Ø],
       [thing.L 3Pl-Dat medicine≡it.is Neg-Ppl.Nonh]
       [kó   tǎŋ-Ø]   nám≡kɔ̀
       [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   cɛ́w]≡ì: mɔ̀rⁿɔ́≡kɔ̀,
       [village   all]≡Foc   be.together.Impf≡be.Nonh,
       mais [ɛ́mɛ́   àná   bɛ́rɛ̀   pá⇒],
       but   [1PlP   village in   **Emph**],

nšŋ   à-kɔ́rɔ́   dó:≡kɔ̀
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 #ɛ́mɛ́ 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   yɛ́rɛ́   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]   wàrâ:-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 èjíⁿ⇒ (§8.5.2) may have the contextual meaning 'well'. Morpho-
logically, one could argue that it is still connected to èjú 'good', but the
semantic connection is weak and the morphology would be obscure.

(495) ɛ̀jíⁿ⇒   jów   jɔ̀wɔ̂ː-Ø
       well/much   running   run.Impf-3SgS
       'He/She runs well (or: runs a lot).'

The verb céːné- 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]   ìnì wⁿé páɣá [hâl céːn-âː-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' (jáːⁿ)

A culturally important adverbial is jáːⁿ, which means 'normal, appropriate, (socially) acceptable, right' with respect to behavior. It usually appears as a predicate with Nonhuman subject (≡kɔ̀) referring to the behavior, and may take a dative to specify the person or group for whom the behavior is normal.

(497) [jáŋ   kâːⁿ nɛ̀] jàŋá-bà,   bɛ̀-rú   jáːⁿ≡kɔ̀
       [begging too   now] beg.Impf-3PlS, 3Pl-Dat **normal**≡be.Nonh
       'They (=men of ségé-m caste) do begging also, it's normal (=socially acceptable) for them.' **2004.3.15**

The negative is jàːⁿ-lá- with the usual stative Negative suffix (§11.4.3).
In (498.a), jáːⁿ and jàːⁿ-lá- occur in parallel positive and negative relative-clause predicates. The positive form treats jáːⁿ 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 jâːⁿ-Ø. A similar construction occurs in (498.b).

(498) a. ɔ̀rù   kàrⁿ-ú   jàːⁿ-lá-Ø …
           thing.L do-VblN **normal**-Neg-Ppl.Nonh …
           ɔ̀rù   kàrⁿ-ú   jâːⁿ-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   jà:ⁿ-lá-Ø   cêw]
    put.Impf-3PlS, [place.L put-VblN **normal**-Neg-Ppl.Nonh all]
    [cě:rù   kùⁿ]   dì ŋé   jǐ:ⁿ≡kɔ̀
    [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 t́ílây '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]   t́ílây≡ỳ
        [rain   Poss   fall-VblN] **necessity**≡it.is
        'It will certainly rain.'

    Possibility or uncertainly 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≡ỳ   dèy]   yèrɛ́-m̀
        [**some**≡it.is   if]   come.Impf-1SgS
        'It's possible/uncertain that I will come.'

    bé:≡kɔ̀ '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:≡kɔ̀.

(501)   [ù-rú   lɔ́ɣɔ́   gàrà-gó-Ø]   bé:≡kɔ̀
        [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   bèrέ-bè]
           some [[2PlP peace] Nonh-with get.Impf-2PlP]
           béː≡kɔ̀
           be.Impf≡be.Nonh
           'Possibly you-Pl will have peace with (=relief from) them (=birds).'
           2004.3.8

       b. íjέ   mèy^n⇑ [kó   nɔ̀ː-w^{n}ɔ́   gàmá
           stop   and   [NonhO drink-Caus   **some**
           bèrè-gó-Ø]   béː≡kɔ̀
           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 mǎy^n 'dry, hardened, stiff' has an adverbial counterpart whose minimal form is the singly iterated mǎy^n-mày^n (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) dɔ̀ɣɔ̌-m   mǎy^n-mày^n-mày^n-mày^n sàrî: cèjè-bà
       Dogon-Pl hard-hard.L-hard.L-hard.L plow   accept.Perf.L-3PlS
       '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'
         néyⁿ   'now'
         íjé né   'up to now; again'
         kà:ná   'just now', 'just recently'
         dôm   'as of now; (not) yet'
         yá: 'yesterday'
         yògó   'tomorrow'
         nɔ́:   'this year'
         gà:rú   'last year'
         yògó nàŋúrⁿù   'next year' (contains 'yesterday', above).
         lá: 'first' (adverb)
         lá:-lá: 'previously; long ago'
         pɔ́:rɔ́   '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   làɣá
             time.L   other
             'soon'

        b.   dògùrù   gàmá
             time.L   certain
             'often'

        c.   hâl   gàmá
             until   certain
             '(most) often'

   'Next (e.g. month)' and **'last** (e.g. month)' are expressed with làɣá 'other'
or as relative clauses with appropriate aspectual marking.

(506)   a.   ɛ̀:   làɣá
             month.L   other
             'next month'

   b. è: tóɣɔ̰≡kɔ̀-Ø
       month.L   rise.Impf≡be.Nonh-Ppl.Nonh
       'next month' (lit., "the month/moon that will rise anew")

   c. è: gárà-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 gàrà- '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   kù^n]   gǎy-yè-Ø   kân
           [Nonh   Def]   pass.by-Perf-3SgS after
           'after that passed' (='after that') **2004.4.28** (gàrá-)

       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' (pɔ́:rɔ́, 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.

   pɔ́:rɔ́, which can also be used as an ordinal adjective 'first' (human Sg pɔ́:rɔ́-n), has adverbial function in cases like (508). (If pɔ́:rɔ́ 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   pɔ́:rɔ́   bè   mâ:-Ø
       house.L **first**   3PlS.L   build.Perf.HL-Ppl.Nonh
       'the house that they built first' **2004.3.11**

pɔ́:rɔ́ is common in texts in the sense 'previously, earlier; in the old days'.

(509)   dɔ̀ɣɔ̀-úrò,   pɔ́:rɔ́,
        Dogon.L-house.Loc.HL, **first**,
        ă:-rⁿ-ùm   mà   àrà-nǒ:-wⁿ-Ø   cín≡kɔ̀   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:-dǒyⁿ   lá: gǒ:ⁿ-bà
             millet.L-hip **first** take.away.Impf-3PlS
             'They remove (=harvest) ñù:-dǒyⁿ (a fast-growing strain of millet)
             first.' **2004.3.6**

        b.   [[ù-jùwⁿò   [úró   bɛ́rɛ̀] yárà-Ø   kùⁿ]
             [[Rdp-mouse.L[house in]   go.around.Perf.HL-Ppl.Nonh Def]
             lɛ̀]   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 pɔ́:rɔ́ 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 dɔ́nɔ́rⁿɔ́m⇒ 'somewhat elongated (like a half-full sack)', yùgùjí⇒ 'woolly, furry', póm⇒ (variant bóm⇒) 'thick, solid', pɛ́tɛ̀⇒ 'flat (small, longer than wide), brick-shaped', pátà⇒ 'flat and wide', dɔ̀ní⇒ 'almost alongside (but one slightly behind the other)' (e.g. two moving vehicles or quadrupeds that are almost neck and neck), jɛ̀wⁿrⁿí⇒ 'on the verge of falling, perched precariously', jèlí⇒ 'teetering', gògì rí⇒ (variant gògùrí⇒) 'rickety, shaky', símɛ́yⁿ⇒ 'jutting out; pointing downwards' or 'sloped (road)', cɛ́mɛ́⇒y 'wrinkled' (the syllabic nucleus, not the final y, is elongated), díyâw⇒ 'stretched out', ténéyⁿ⇒ 'a short distance away', dím⇒ 'towering, lofty', sàná⇒ (variant sèná⇒) 'necessarily (as a condition)' (859), sá⇒m in the combination sá⇒m pɔ́rɔ́ 'strangle to death' (pɔ́rɔ́ 'squeeze, strangle').

ñàŋà-ñàŋǎyⁿ⇒ 'in clusters' is a frozen reduplication. An adverbial with a nominal compound initial (kú:ⁿ 'head') is kù:ⁿ-sɔ́m⇒ '(with) long head and bending forward'. Another that is dubiously analysable is láɣá-jɛ̀⇒ 'walking fast', if connected with the verb láɣá- 'hit' (cf. Recent Perfect -jɛ̀-).

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!'

yɛ̂⇒ occurs in the combination yɛ̂⇒ yǎ:- 'fly a short distance' (yǎ:- 'go'). Perhaps one could alternative transcribe yɛ́∴ with phonological H-tone and dying-quail intonation, which would have the same duration and pitch contour.

8.5.8.1   *'Straight' (dém⇒, pɔ́⇒, sɛ́ⁿ⇒)*

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⇒   yǎ:
           straight   go.Imprt
           'Go-Sg straight!'

       b. ɛ́wɛ̀   dém⇒   yà:-m
           market.Loc.HL   **straight**   go.Perf.L-1SgS
           'I went straight to the market'

       c. à-n   ɛ́wɛ̀   dém⇒   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⇒   ɛ́wɛ̀   mí   jà:-Ø
           straight   market.Loc.HL   1SgO   convey.Perf.L-3SgS
           'He/She took me straight to the market.'

       e. òjù   dém⇒   kɔ̂:-Ø
           road.L   **straight**   be.Nonh.HL-Ppl.Nonh
           'a road that is straight.'

       f. [kó   kùⁿ] á:-jè-bà   táŋà: déy nè,   dém⇒
           [Nonh Def]   catch-RecPf-3PlS   happen if   now, **straight**
           bé   [ìnɛ̀   bɛ̀   â:-m   kùⁿ] jíjɛ̀   mèyⁿ,
           3Pl [person.L3PlS.L catch.Perf.HL-Ppl.Pl Def] go.with and,
           [[[ɛ̀nɛ́   bé]   ìjùbǎy] lɛ̀]   yǎ:-bà   mà⇒↑
           [[[Refl Pl]   land]   in]   go.Impf-3PlS   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   gɔ̀ŋɔ́   lɛ̀]   dém-dém   dɛ̀:ré-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 pɔ́⇒, 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] bɛ́rɛ̀] gó: mèyⁿ pɔ́⇒
       [[1SgP field] in] go.out and **directly**
       [dì:ⁿ [á gɔ̀rɔ́] kò yɛ́rɛ̀-Ø]
       [place.L [2SgP camp] NonhS.L come.Perf.HL-Ppl.Nonh]
       nùkó≡kɔ̀
       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, sɛ́ⁿ⇒, is used with verb yàŋá- 'look (at)' in the
sense 'look straight at', 'stare straight at'.

(515) sɛ́ⁿ⇒   mí   yàŋá-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. ñɛ̌-m   déyⁿ≡wɔ̀-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⇒   mɔ́:bɛ́-bà
           [Dem cotton-child Def] **apart**   keep.Impf-3PlS
           'They will keep (=save) those cotton seeds apart.' **2004.3.14**

       d. [kò fú:] mà bɛ̌n kùⁿ tɔ̀gú 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   ké]   àbádá⇒≡kɔ̀
        [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:-tɛ̀-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⇒   pàɣà-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-sɔ́:ⁿ, sɔ́:ⁿ-sɔ́:ⁿ)

In addition to sí-sɔ́:ⁿ, which has an apparent Cí- reduplication (cf. §4.1.5), there is an iterated variant sɔ́:ⁿ-sɔ́:ⁿ. These adverbials may be used predicatively, with cliticized 'be' quasi-verb ≡wɔ̀- (human) or ≡kɔ̀ (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 [ñè-m sí-sɔ́:ⁿ] as a whole functions as a possessor.

(520) a. émɛ́   sí-sɔ́:ⁿ≡wɔ̀-y
           1Pl   **all.together**≡be.Hum-1PlS
           'We are all together.'

       b. bé   sɔ́:ⁿ-sɔ́:ⁿ   yǎ:-yè-bà
           3Pl   **all.together**   go-Perf-3PlS
           '<u>They</u> [focus] all went together.'

       c. [[ñè-m   sí-sɔ́:ⁿ]   mà   mɔ́:n   lè]
           [woman-Pl **all.together** Poss gathering in]
           [ñě-m   mà   mɔ́: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 adverbal 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' (sɔ́y)

This adverb is occasionally used as an emphatic alternative to a universal quantifier 'all' (§6.8.1). Though basically adverbal ('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. ñɛ́:-jɛ̀-bà   sóy
           eat-RecPf-3PlS   **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   gàmàrⁿá-sà-bà   dèy⇑
           division   divide-Reslt-3PlS   if
           'when they have divided them up into (several) distinct piles'
           2004.3.1

       b. [kó   nò]   yǎ: dé: jɛ̀:ré-ẁ,   [kò   cêw]
           [Nonh   now] go   carry bring.Impf-2SgS [Nonh.L all]
           [tɔ̀gú   lè]   [tɔ̀gú   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) [nɔ̀ŋ   kò   táŋá-sà-Ø   cêw],
       [neighborhood.L NonhS.L   become-Reslt-Ppl.Nonh   all],
       [nɔ̌ŋ-nɔ̌ŋ   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-kán≡kɔ̀
            scattered≡be.Nonh
            'They (e.g. millet plants) are scattered here and there.'

        b.   kân-kân   tɔ̀:-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 V_2-Raising (59) (§3.5.2.2).

The suffixes in question will be represented as -rv́-, -wv́-, -gv́-, -nv́-, etc., where "v́" 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-tones, 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.

-rv́- and -wv́- appear as -r^{n}v́- and -w^{n}v́-, 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. páɣá-   'tie'   páɣá-rá-   'untie'

	péɡé-	'insert (blade)'	péɡé-ré-	'remove (blade)'
	sɔ́ɣɔ́-	'lock'	sɔ́ɣɔ́-rɔ́-	'unlock'
	léː-	'attach (wrap)'	léː-ré-	'untie, take off (wrap)'
b.	cíné-	'go out of sight'	cíní-rⁿé-	'come back into view'
	níŋé-	'tangle'	níŋí-rⁿé-	'untangle'
	píné-	'shut'	píní-rⁿé-	'open'
	mùŋó-	'tie (knot)'	mùŋù-rⁿó-	'untie (knot)'
	mì né-	'roll up (pants)'	mì nì -rⁿé-	'unroll'
c.	dòmó-	'roll on (turban)'	dòmò-rⁿó-	'unroll (turban)'
	ɡɔ̀nɔ́-	'be bent'	ɡɔ̀nɔ̀-rⁿɔ́-	'straighten'
	mǎː-	'seal up (jar)'	màː-rⁿá-	'unseal (jar)'
	méː-	'twist (fibers)'	méː-rⁿé-	'untwist (fibers)'
	nǎː-	'make (rope)'	nàː-rⁿá-	'unravel (rope)'
	námá-	'step on'	námá-rⁿá-	'take foot off'
	náŋá-	'forget'	náŋá-rⁿá-	'remember'
	nɔ́ŋɔ́-	'be caught (in tree)'	nɔ́ŋɔ́-rⁿɔ́-	'unhook (sth in tree)'
	ɔ́ŋɔ́-	'crumple'	ɔ́ŋɔ́-rⁿɔ́-	'uncrumple'
	sáŋá-	'fence (in)'	sáŋá-rⁿá-	'remove fence from'
	tɔ́ŋɔ́	'hobble (animal)'	tɔ́ŋɔ́-rⁿɔ́-	'unhobble (animal)'
d.	ɡòró-	'cover (sb)'	ɡòl-ló-	'uncover (sb)'
	kɔ́rɔ́-	'hang up'	kɔ́l-lɔ́-	'take down (sth hanging)'
	píré-	'get bogged'	píl-lé-	'get unbogged'
	tárá-	'be stuck (to sth)'	tál-lá-	'become unstuck'
	màrⁿá-	'be lost'	màl-lá-	'be recovered'
e.	léː-	'shut (door)'	líl-lé-	'open (door)'
	dɛ̀wɛ́-	'cover (e.g. jar)'	dɛ̀l-lé-	'uncover'
	bɔ̌ː-	'cover up, bury'	bɔ̀l-lɔ́-	'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 dɛ̀wɛ́-, and bɔ̌ː- may be a reflex of *bɔ̀wɔ́- (cf. Tabi bì wá). Note that léː- 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 C$_2$**: 3 cases of g (including ɣ), 4 of r, 2 of r^n, 12 with nasals, and 2 with w. A similar range is found with the - rv́- 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$_1$Cv$_1$rv$_1$-, Cv$_1$llv$_2$-) are compatible with reversive morphology. In a pair like gàmá- 'reduce' along-side gàmàr^{n}á- 'share, divide', there is a hint of possible reversive semantics, but the relationship is not transparent. A similar case is dàŋá- 'patch up' and dàŋàr^{n}á- 'cut crosswise, cut (sth long) in half'. With kólló- 'take off, doff (garment)', there is more than a hint of reversive semantics, but from kúr^{n}ó- 'put on, don, wear (garment)' we would expect reversive #kúl-ló rather than kól-ló-. It is unclear whether tɔ́:-rɔ́- 'unwind (thread)' is directly related to tɔ́:^{n}- 'wind, coil' (one would expect nasalized reversive #tɔ́:-r^{n}ɔ́-). 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 gó:- 'go out' or by gɔ́:^{n}- 'take out' depending on the sense (i.e. valency). For example, both gɔ̀ŋɔ́- and gɔ̀ŋɔ̀-r^{n}ɔ́- occur in the simple sense 'encircle, sur-round'. The Reversive 'dis-encircle' (i.e. go away after having surrounded something) is always gɔ̀ŋɔ̀-r^{n}ɔ́-, but since this is ambiguous the reversive sense can be made clearer by the combination gɔ̀ŋɔ̀-r^{n}ɔ́ gó:-.

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 …îné- or …îné- (the choice depends mainly on harmony with preceding vowels). These contain the Fulfulde Causative formative -in- plus the -ɛ (-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 -wv̀, see below, §9.3.

For the causative strictly speaking, there is a basic choice between **four basic suffix allomorphs** -wv́-, -gv́-, -rv́-, and -nv́-, 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 mono-syllables with LH-toned causatives. The productive Causative suffix -wv́- is represented three times (526.a); see also passive ɛ̀:-wɛ́- 'be seen' from ɛ́:- 'see' in §9.4. Four cases (526.b) involve a less common Causative suffix allomorph -nv́-.

(526)   input   gloss   causative   gloss

      a. bé:-   'remain'   bɛ̀:-wé-   'cause to remain'
           dɛ́:^{n}-   'be tired'   dɛ̀:^{n}-w^{n}ɛ́- 'weary (sb)'
           ɛ́:^{n}-   'weep'   ɛ̀:^{n}-w^{n}ɛ́- 'cause to weep'

      b. bá:-   'learn'   bà:-ná-   'teach'
           dɔ́:-   'arrive'   dɔ̀:-nɔ́-   'cause to arrive'
           jó:-   'be much, many' jò:-nó-   'do much'
           mɛ́:^{n}- 'be ground up' mɛ̀:^{n}-nɛ́- 'grind up'

ɛ́:^{n}- 'weep' in (526) has a homonym ɛ́:^{n}- 'be tight' (variant of ɛ́y^{n}ɛ́-); the latter has a tonally regular causative ɛ́:^{n}-w^{n}ɛ́- 'tighten'. (cf. adjective ɛ̌y^n 'tight')

The most productive of the three Causative suffix allomorphs is -wv́-. 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 -w^{n}v-)

        input   gloss   causative   gloss

      a. pá:-   'come up beside' pá:-wá-   'put next to'
           pé:-   'weep'   pé:-wé-   'cause to weep'
           kó:-   'eat (meat)'   kó:-wó-   'give meat to'
           yǎ:-   'go'   yà:-wá-   'allow to go'

      b. áɣá-   'hear'   áɣá-wá-   'cause to hear'
            cégé-   'be charred'   cégé-wé-   'char'
            dɛ̀gé-   'spend day'   dɛ̀gè-wé-   'have (sb) spend day'
            lɔ́ɣɔ́-   'overflow'   lɔ́ɣɔ́-wɔ́-   'make overflow'
           péré-   'jump'   péré-wé-   'cause to jump'
            táɣá-   'put on shoes' táɣá-wá-   'put shoes on (sb)'

	wɛ̀ːjɛ́-	'become accustomed'	wɛ̀ːjɛ̀-wɛ́-	'habituate (sb)'
c.	ñɛ́ː-	'eat (meal)'	ñɛ́ː-wⁿɛ́-	'feed'
	nɔ̌ː-	'drink'	nɔ̌ː-wⁿɔ́-	'give drink to'
	nú-	'enter'	núː-wⁿó-	'make enter'
d.	ɛ́rⁿɛ́-	'be full (sated)'	ɛ́rⁿɛ́-wⁿɛ́-	'make full (sated)'
	kárⁿá-	'do'	kárⁿá-wⁿá-	'cause to do'
	páŋá-	'hold in place'	páŋá-wⁿá-	'cause to hold'
e.	kúnó-	'put'	kúnú-wⁿó-	'allow to put'
	jìmnɛ́-	'become blind'	jìmnì-wⁿɛ́-	'make blind'
	jùgɔ́-	'know'	jùgù-wɔ́-	'inform'
	pítɛ́-	'be inflated'	pítí-wɛ́-	'inflate'
	dìŋɛ́-	'sit'	dìŋì-wⁿɛ́-	'make sit'
f.	ájárá-	'sew'	ájárá-wá-	'cause to sew'

A small set of causatives is characterized by a suffix allomorph -gv́- or (apparent) -ŋv́-. 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.	ɛ́rɛ́-	'escape'	ɛ́r-gɛ́-	'let escape'
	káwá-	'separate self'	káw-gá-	'separate'
	séré	'be diluted'	sér-gé-	'dilute (with water)'
c.	sáyⁿá-	'be spread' (compare sáyⁿá-wⁿá- 'spread [tr]')	sáyⁿ-ŋá-	'disorder, shuffle'
d.	súgó-	'go down'	súnú-ŋó-	'take down'
	dògó-	'be finished'	dònò-ŋó-	'finish (sth)'
e.	ñùwⁿó-	'(sb) wake up'	ñùnù-ŋó-	'wake (sb)'
	ñɔ̀wⁿɔ́-	'be damaged'	ñùnù-ŋɔ́-, ñùnù-ŋó-	'ruin'

In (528.a), the medial vowel has raised to high by regular Presuffixal V_2-Raising (59). In (528.b), the medial vowel is **idiosyncratically syncopated**. Summing across (528), we have the following C_2's: 3 r, 1 w, 2 w^n, 1 y^n, 2 g.

The causatives with suffix -ŋv́- (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 -gv́- (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), sáy^n-ŋá- is semantically as well as morphologically specialized, and it co-exists with a semantically and morphologically regular causative sáy^{n}á-w^{n}á-. Syncope to (C)vC- before the derivational suffix connects sáy^n-ŋá- (528.c) to the two cases of Syncope in (528.c), reinforcing the view that -gv́- in (528.a-b) and -ŋv́- 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 -nv́- rather than -gv́-. (See below for more cases of -nv́-.) 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 wànà-ŋá 'become/make distant', inchoative and factitive of adjective wàɣá '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 -nv́- might work, though, for (528.e), where however the final shift would be a kind of fortition from w^n to ŋ.

Another phonologically difficult pattern is seen in (529).

(529) input   gloss   causative   gloss

       wàjá-   'be left over'   wàɣà-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 -jv́- in these two derivatives is taken to be a surface variant of allomorph -gv́-, an allomorph seen clearly in e.g. bùrù-gó- 'revive' (528.a), above, metathesis can again be posited. Thus underlying /Cv̀jv̀-gv́-/ becomes /Cv̀gv̀-jv́-/. If the vowels are from the set {a ɔ}, the /g/ becomes ɣ by g-Spirantization (32). This accounts for wàɣà-já- in (529); see (51) in §3.5.1.2 for fuller discussion.

There are some semantically causative derivatives with a third suffix allomorph -rv́-, 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 -rv́- is cognate to Tommo-So Causative -r-
(Plungian 1993a:392-3).

(530)   Causatives with -rv- (or -rⁿv-)

	input	gloss	causative	gloss
a.	dì gɛ́-	'follow; join at ends'	dì gì -ré-	'align in a row'
	íjɛ́-	'stand, stop'	íjí-rɛ́-	'arrest, detain'
b.	jɛ̀gɛ́-	'tilt'	jɛ̀gɛ̀-rɛ́-	'cause to tilt'
c.	gɔ̀ŋɔ́-	'rotate'	gɔ̀ŋɔ̀-rⁿɔ́-	'cause to rotate'
	ì né-	'take a bath'	ì nì -rⁿé-	'bathe (sb)'

There are no phonological irregularities. Vocalism, tones, and nasalization
of /r/ to rⁿ conform to the patterns seen with other causatives. The C_2 distri-
bution is as follows: 2 g, 1 j, 1 n, 1 ŋ. This C_2 pattern is similar to what we saw
above with reversive -rv́-.

tɛ́mɛ́- 'find' has a regular causative tɛ́mɛ́-wⁿɛ́- and an irregular one
tɛ́m-nɛ́-. Both are used in contexts like 'cause (e.g. problems) to find (sb)', i.e.,
'bring (troubles) upon (sb)'. tɛ́m-nɛ́- is homophonous to the deadjectival
factitive tɛ́m-nɛ́- 'soak, make wet', cf. adjective tɛ̌m 'wet'. It may be that
tɛ́m-nɛ́- was resorted to for 'cause to find' to distinguish this causative from the
common passive derivative tɛ́mɛ́-wⁿɛ́- 'be found' (§9.4, below).

Finally, there are a few Cv̀:-nv́- causatives with a fourth basic suffix
allomorph, -nv́-, 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 Cv́:- 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 -nv́-

	input	gloss	causative	gloss
a.	gàrá-	'pass by'	gà:-ná-	'take across'
	mɔ̀rⁿɔ́-	'come together'	mɔ̀:-nɔ́-	'bring together'
b.	dì ŋé-	'sit down'	dè:-né-	'make sit'
c.	jó:-	'be much, many'	jɔ̀:-nó-	'do much'

dɔ́ː-   'arrive'   dɔ̀ː-nɔ́-   'cause to arrive'
mɛ́ːⁿ-   'be ground up'   mɛ̀ːⁿ-nɛ́-   'grind up'

The n of the -nv́- 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 gàː-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 -nv́-. We will see below that -nv́- is common in deadjectival verbalizations.

9.3   Pseudo-causative "verb" (-wv̀-)

In addition to true causatives (whose productive suffix is -wv́-), 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 -wv̀, 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 V_2-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 -wv̀ 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 -wⁿv̀- 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 ɛ] vowel sequence, and shows that such stems do not raise the second-syllable vowel.

(532)   gloss   basic form   pseudo-causative   true causative

	gloss	basic form	pseudo-causative	true causative
a.	'arrive'	dɔ́ː-	dɔ́ː-wɔ̀	dɔ̀ː-nɔ́-
	'see'	ɛ́ː-	ɛ́ː-wɛ̀	—
	'say'	gá-	gá-wà	—
	'go out'	góː-	góː-wò	—
	'send'	tíː-	tíː-wè	—
	'go'	yǎː-	yáː-wà	—
b.	'enter'	núː-	núː-wⁿɔ̀	núː-wⁿɔ́-
	'sleep'	níː-	níː-wⁿɛ̀	—
c.	'come'	yɛ̀ré-	yɛ́ré-wɛ̀	—
d.	'assemble'	mɔ̀rⁿɔ́-	mɔ́rⁿɔ́-wⁿɔ̀	mɔ̀ː-nɔ́-
e.	'spill'	yùwɔ́-	yúwú-wɔ̀	—
	'stand'	íjé-	íjí-wɛ̀	íjí-ré-
	'go down'	súgó-	súgú-wò	súnú-ŋó-
	'sit'	dì ŋé-	díŋí-wⁿɛ̀	dì ŋì -wⁿé-
	'know'	jùgɔ́-	júgú-wɔ̀	jùgù-wɔ́-
	'be blinded'	jì mnɛ́-	jímní-wⁿɛ̀	jìmnì-wⁿɛ́-
	'accompany'	dì mnɛ́-	dímní-wⁿɛ̀	—
f.	'shell (nuts)'	kórówó-	kórówó-wò	—
	'inform'	jùgù-wɔ́-	júgú-wɔ́-wɔ̀	—
g.	'fine'	júkkɛ́-	júkkɛ́-wɛ̀	júkkɛ́-wɛ́-

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 wɔ̌ː-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-wⁿɛ́-   'be found (regularly)'
       b. bèrɛ́-   'obtain'   bèrɛ̀-wɛ́-   'be obtainable (regularly)'
       c. ɛ́ː-   'see'   ɛ̀ː-wɛ́-   'be seen'
       d. gáː-   'say'   gáː-wá-   'be said, be sayable'

The suffix is -wv́-, identical to the productive Causative suffix. Nasalized -wⁿv́- is of course due to Nasalization-Spreading (48). The only irregularity is the {LH} tone pattern of ɛ̀ː-wɛ́-. Compare e.g. béː- 'remain' but bèː-wé- 'cause to remain' (526.a) (§9.2, above).

Textual examples are in (534).

(534) a. [cɛ̀nɛ̀-jɛ́y-bɛ̀-jɛ̀yɛ̂ː-Ø   kùⁿ]   [kó   kùⁿ]
           [combativeness   Def]   [Nonh Def]
           kǒ-r   témé-wⁿɛ́≡kɔ̀
           Nonh-with   **find-Pass**.Impf≡be.Nonh
           'A combative spirit is regularly found with it (=cobra).' (ko-rú)
           2004.3.5

       b. kó   gáːrá   jóː⇒   bèrɛ̀-wɛ́≡kɔ̀   jɛ́
           Nonh   more   many   **get-Pass**.Impf≡be.Nonh   for
           'in order that more (millet) will be obtained' **2004.3.6**

       c. úːrⁿó≡kɔ̀   dèy   ɛ̀ː-wɛ́≡kɔ̀   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]   làɣá   nùː-gó-Ø
           [today   Topic]   other   enter-ImpfNeg-3SgS
           gàː-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**

bèrɛ̀-wɛ́- can also be used as the passive of bèrɛ́- 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-wɛ́≡kɔ̀
        [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.   lɔ́ɣɔ́-jɔ́-   'become dirty'   'make dirty'
        b.   kárⁿá-   '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.   sɛ́mɛ́-   'sweep (up)'   'sweep (e.g. courtyard)'
        b.   sírɛ́-   '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 nùŋó-); one doesn't "eat," one "eats a meal" (ñǎ: ñɛ́:-); one doesn't "work," one "works (a) work" (bírɛ́ bìrɛ́-); one doesn't "stutter," one "stutters (a) stuttering" (îm ímɛ́-). 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'	déŋ	dèŋé-	dèŋè-wⁿé-
	'lean'	dɔ̌ŋ	dɔ̀ŋɔ́-	dɔ̀ŋɔ̀-wⁿɔ́-
	'confined'	ɛ̌m	ɛ́mé-	ɛ́mé-wⁿé-
	'bent'	gɔ̌n	gɔ̀nɔ́-	gɔ̀nɔ̀-wⁿɔ́-
	'dry'	mǎyⁿ	màyⁿá-	màyⁿà-wⁿá-
	'rotten'	ɔ̌y	ɔ́yɔ́-	ɔ́yɔ́-wɔ́-
	'old'	pɛ̌yⁿ	pɛ́ːⁿ-	pɛ́ːⁿ-wⁿɛ́-
b.	'hard'	sèːgú	séːgé-	séːgé-wé-
	'soft'	yɔ̀rú	yɔ̀rɔ́-	yɔ̀rɔ̀-gɔ́-
c.	'tight'	ɛ̌yⁿ	ɛ́yⁿɛ́-	ɛ́yⁿ-nɛ́-
	'wet'	tém	témé-	tém-nɛ́-
d.	'ripe, cooked'	ì ré	íré-	írí-wé-
	'coarse'	kùñú	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 V_2-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 -w�́- (becoming -wⁿ́- 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 -ń- **to the consonant-final adjective**. It is difficult to understand the tonal patterns

if we directly compare the adjectives and the -nv́- 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 indiscrimately in both factitive and inchoative functions. The most common and versatile derivational suffix is -nv́-, which appears after Cv:-, CvCv-, and CvC- stems (539.a-c).

(539)		gloss	adjective	inchoative/factitive
	a.	'pointed'	sǐ:	sí:-né-
		'spacious'	wá:	wà:-ná-
	b.	'fat'	dùgú	dùgù-nó-
		'heavy'	dùjú	dùjù-nó-
		'good'	èjú	éjú-né-
		'bad'	mɔ̀ñú	mɔ̀ñù-nó-
		'thin'	ùñú	úñú-nó-
	c.	'short'	gɔ̌y^n	gɔ̀y^n-nó-
				[factitive also gɔ̀y^n-nɔ̀-w^{n}ɔ́-]
		'black'	jɛ́m	jɛ́m-né-
		'lightweight'	ñɛ́n	ñɛ̀n-né-
		'sour'	nɔ̂m	nɔ́m-nó-
		'small'	tɛ̌y	téy-né-
		'cold, slow'	tôm	tóm-nó-
	d.	'big'	gàrá	gànà-r^{n}á-
		'long, tall'	gùrú	gùnù-r^{n}ó-
		'sweet, sharp'	érù	éné-r^{n}é-
		'bitter'	jé:rù	jènè-r^{n}é-
		'fresh'	ɔ̀rú	ɔ́nɔ́-r^{n}ɔ́-
	e.	'red'	bán	bànà-r^{n}á-
	f.	'hot, fast'	ɔ́gù	ɔ́gɔ́-rɔ́-, ɔ́ɣɔ́-rɔ́-
				[inchoative also ɔ́gɔ́- or ɔ́ɣɔ́-]
	g.	'distant'	wàɣá	wànà-ŋá-
				[factitive also wànà-ŋà-wá-]

h.	'sleek'	ònùrⁿú	ónórⁿó-
	'crooked'	pònùŋú	pónóŋó-
	'crooked'	pì rì gú	pírígé-

On the whole, these inchoative/factitive suffixes resemble the minor Causative suffixal allomorphs, although the primary Causative allomorph -wv́- 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-ŋá- in (539.g), from wàɣá 'distant', is parallel to causative súnú-ŋó- 'take down' from intransitive súgó- 'go down' (528.d). These unusual consonantal alternations suggest an underlying suffix /-nv́-/, and derivations involving metathesis (§3.5.1.2) and an irregular extension of Nasalization-Spreading (48).

Inchoative/factitive ónórⁿó- from trisyllabic adjective ònùrⁿú 'sleek' (539.h) is difficult to model phonologically, since a syllable seems to have been truncated. Alternatively, ònùrⁿú could be analysed as the (regular) **Verbal Noun** (ònùrⁿ-ú) of the verb ónórⁿó-, 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: -rv́- (whence -rⁿv́- by Nasalization-Spreading (48)), -jv́- (problematic), -nó-, -ŋó- (perhaps nasalized from -gó-)

(540)	noun	gloss	verb	gloss
	dú:	'load'	dù:-rɔ́-	'load (sth)'
	tì gé	'family name'	tì gì -ré-	'(griot) chant the ancestry of (sb)'
	gàmá	'a certain one'	gàmà-rⁿá-	'divide, share'

b. lɔ́ɣɔ̀   'trash'   lɔ́ɣɔ́-jɔ́-   'become/make dirty'
                         [cf. lógójó 'toilet']

c. pɔ́ː   (greeting)   pɔ́ː-nɔ́-   'greet (sb)'

d. nùrⁿó   'pain, injury'   nùrⁿù-ŋó-   'injure; be injured'
    yěn   'credit'   yènè-ŋé-   'extend credit'
    bòːmó   'stupidity'   bòːmò-ŋó-   'become stupid'
                         (alternatively from bòːmó 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-
        gɔ̀ŋɔ́-   'encircle'   gɔ̀ŋɔ̀-rⁿɔ́-   'encircle'
        pégé-   'inset (blade)'   pégé-ré-   'slide handle over (blade)'
          "   'drive in (nail)'   "   'embed (nail, in wall)'
        péː-   'break off'   péː-ré-   'break apart'
        sáná-   'undo'   sáná-rⁿá-   'undo'
        séːⁿ-   '(day) break'   séː-rⁿɛ́-   '(day) be about to break'
        tɔ́ɣɔ́-   'chop tree hole'   tɔ́ɣɔ́-rɔ́-   'carve out cavity in'

    b. addition of -wv-
        lɛ́ː-   'fear'   lírí-wɛ́-   'frighten'
                         [cf. noun lì -lěː 'fear']
        náː-   'spend night'   náː-wⁿá-   'greet in morning'

    c. addition of -ŋv-
        émɛ́-   'pinch to hold'   émɛ́-ŋɛ́-   'hold (stick) in armpit'
        màːná-   'think, believe'   mànà-ŋá-   'think, believe'

    d. medial -gv- (apparent infix)
        síré-   'cook, boil'   sígíré-   'cook, boil'
        lígé-   '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 C_2/C_3 sequences in these stems are strikingly reminiscent of those seen in suffixal derivatives where C_3 is the suffixal consonant. The data can be summarized in tabular form, taking C_3 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 C2 = 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 witn n). All cases of ŋ, ñ, r^n, and w^n follow nasal or nasalized C_2. 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 (-rv́- for reversive and a few causatives, -wv́- in causatives, some causatives in -gv́- and -jv́-). Moreover, the associations of these suffix allomorphs with particular C_2'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 C_3 position in the sample of one hundred verbs are many consonants that occur as C_1 in this same set of verbs. The data for C_1 (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 C_1 and as C_3; stops {c d k p t}, sibilant s, sonorants{m ŋ y) occur as C_1 but not as C_3; while r (which is very rare initially) and nasalized sonorants {w^n r^n} (which cannot occur word-initially) occur as C_3 but not as C_1.

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, ŋ = 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)   Cv́:   Cv̌:   Cv́Cv́Cv́   Cv̀Cv̀Cv́

    unsuffixed Perfective
        in main clause   Cv̀:-   Cv̀:-   Cv̀Cv̀Cv̀-   Cv̀Cv̀Cv̀-
        in relative clause   Cv̂:-   Cv̂:-   Cv́Cv́Cv̀-   Cv́Cv́Cv̀-

    unsuffixed Imperfective
        before -Ø suffix   Cv̂:-   Cv̌ː-   Cv́Cv́Cv̂:-   Cv̀Cv̀Cv̂:-
        before other suffix   Cv́:-L   Cv̌:-L   Cv́Cv́Cv́-L   Cv̀Cv̀Cv́-L

The unsuffixed 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 unsuffixed 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 unsuffixed 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 unsuffixed Imperfective Cv́Cv́Cv̂:- and Cv̀Cv̀Cv̂:- before -Ø suffix, see Contour-Tone Mora-Addition (141). What I write as Cv̌ː- in (543) is actually trimoraic Cv̀v́v̀-, as it too has undergone Contour-Tone Mora-Addition (141).

The important thing to note from a categorial perspective is that the unsuffixed Perfective and the unsuffixed Imperfective are always **distinguishable from each other**, except for **monosyllabic H-toned Cv́: stems in relative clauses**. In addition, the unsuffixed Perfective and the un-suffixed 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}

    unsuffixed Perfective
        in main clause   {L}   {L}
        in relative clause   {HL}   {HL}

    unsuffixed 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 unsuffixed and suffixed (=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)

> unsuffixed Perfective (overlaid tones, syntactically restricted)
> Perfective -tì-, -yὲ-/-yà-, or -âː-
> Resultative -sà-
> Recent Perfect -jὲ-
> > Recent Perfect plus Resultative -jὲ-sà-
> Experiential Perfect -tέrὲ-
> > Experiential Perfect plus Resultative -tέs-sà-
> reduplicated Perfective (Rdp plus overlaid H(H…)L tone)

> b. imperfective system (positive)

> unsuffixed Imperfective (final L-tone)
> Imperfective -tɔ́ɣɔ̀-
> Habitual -áːrà-
> reduplicated Imperfective (Rdp plus final L-tone)

Experiential Perfect -tέrὲ- and Recent Perfect -jὲ- 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)   [ɛ̀nɛ́   ké]   [ɛ̀nɛ́   mà   dǐːⁿ]   yǎː-yɛ̀-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 jìːⁿ 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 jìːⁿ 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   *Unsuffixed Perfective with all-L or H(H…)L stem tone*

The **unsuffixed Perfective** is limited to positive clauses, and competes with the marked Perfective suffixes (-tì-, -yà/-yɛ̀, -âː-) 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 Cî- 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.. [î jù   núŋò]=yⁿ   làɣà-m
        [dog.L   that]=it.is   hit.Perf.L-1SgS
        'It's <u>that dog</u> [focus] that I hit.'

     b. yɔ̌:-jì n≡î: dɔɣɔ̌-m   kó   cèjè-bà
         how≡Foc   Dogon-Pl NonhO welcome.**Perf.L**-3PlS
         '<u>How</u> [focus] did the Dogon receive it (=plow)?'

     c. [kî -ká:≡ỳ   tɔ̀:rⁿɔ̀]   tàŋà-Ø   dèy
         [Rdp-grasshopper≡Foc hatch.**Perf.L**] happen.**Perf.L**-3SgS if
         'if it has happened that <u>the grasshoppers</u> [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 ≡ỳ (549).

(549) a. sàrî: jè:rè-bà
           plow   bring.**Perf.L**-3PlS
           'They brought (=introduced) <u>the plow</u> [focus].' **2004.3.7**

     b. tàrá   yǎ: bè   gá: kân,
         collective.hunt   go   3PlS.L say after,
         dùŋ-yàrá   gò:-Ø
         lion   go.out.**Perf.L**-3SgS
         'When they (hunters) had gone out to the hunt, a <u>lion</u> [focus] appeared.' **2004.3.2**

     c. kô:-Ø⇒   cín   mà:nà-Ø
         eat.Impf-3SgS thus   think.**Perf.L**-3SgS
         '"(I) will eat," <u>thus</u> [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. ɔɣɔ̀-ñɔ̀wⁿɔ́ [máná lé] tì wⁿɛ̀-kúrɔ́ áː   mèyⁿ
          camel   [above in] tree-leaf   catch   and
          tɔ̀rɔ̀-Ø
          strip.off.**Perf.L**-3SgS
          'Camel took hold of some tree leaves up above and stripped them off.' **2004.4.3**

       b. [pùlɔ̀-n   àsɛ̀gɛ̀-jíré-n]   yè-lé yɛ̀rɛ́ mèyⁿ
          [Fulbe-Sg.L animal.L-lead.H-Sg] there come   and
          [wó   tɛ̀mɛ̀-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 gáː- has a full set of AN forms including imperfectives, there is also a common 'say' quasi-verb jɛ̀- 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 (-tì -, -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 -tì - 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) -tì - 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-), páɣá- 'tie' (páɣá-tì-); and b) active intransitives plus weak transitives that regularly take fixed "objects" such as cognate nominals (gɔ́lɔ́rɔ́) dɔ̀ñɔ́- 'snore' (dɔ̀ñɔ́-tì-), (níː) ì né- 'bathe' (ì né-ti-), mɔ̀wⁿɔ́- 'laugh' (mɔ̀wⁿɔ́-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 tíː- 'send'.

The choice between -yè-/-yà- on the one hand and -âː- 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 Cvː-
             syncopating bisyllabic (C)vrv-, (C)vrⁿv- (before phonological
                 contractions)

         b. -âː-
             nonsyncopating bisyllabic stems
             trisyllabic and longer stems

The allomorph -yè-/-yà- perhaps derives historically from yǎː- 'go'. Indeed, many of the verbs taking -yè-/-yà- are motion verbs. It seems unlikely that allomorph -âː- is historically related to the phonologically similar verb áː- 'catch', but -âː- might have some historical connection to (the onset of) the Habitual suffix -áːrà- in the imperfective system.

Monosyllabic stems with -yè-/-yà- include dɔ́ː- 'arrive, reach' (dɔ́ː-yà-), góː- 'go out' (góː-yà-), béː- 'stay, live' (béː-yà-), níː- 'sleep' (níː-yⁿà-), náː- 'pass the night' (náː-yⁿà-), and yǎː- 'go' (yǎː-yà-).

Syncopating bisyllabic stems (those of shape Cvrv- or Cvrⁿv-) that take -yè-/-yà- include yèré- 'come' (yěy-yà-), gàrá- 'pass by' (gǎy-yà-), lóró- 'get pregnant' (lóy-yà-), bàrⁿá- 'become red' (bǎyⁿ-yà-), mɔ̀rⁿɔ́- 'come together' (mɔ̌yⁿ-yⁿà-), and ùrɔ́- '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 -âː- include náŋá- 'forget' (náŋ-âː-), tímé- 'resemble' (tím-âː-), nùmó- 'fall' (nùm-âː-), sùgó- (sùg-âː-), dì ŋé- 'sit down' (dì ŋ-âː-), ì ñé- 'lie down' (ì ñ-âː-), núwⁿó- 'die' (núwⁿ-âː-), úːrⁿó- 'get

up' (úːrⁿ-âː), jɔ̀wɔ́- 'run' (jɔ̀w-âː-), íjɛ́- 'stand' (íj-âː-), and dòñó- 'stumble' (dòñ-âː-).

Trisyllabic examples are kómóñó- 'became wrinkled' (kómóñ-âː-), náŋá-rⁿá- 'remember' = reversive of 'forget' (náŋá-rⁿ-âː-), and bànà-rⁿá- 'become red' (bànà-rⁿâː-).

The rare combination of-yɛ̀-/-yà- or -âː- 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-âː-Ø
    1SgO resemble-**Perf**-3SgS
    'He/She resembled (=came to resemble) me'

   b. ú   náŋ-âː-bà
    2SgO   forget-**Perf**-3PlS
    'They have forgotten you-Sg.'

   c. mí   náŋá-rⁿ-âː-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 níː-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 góː-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≡kɔ̀ 'it is red', intransitive perfective bànà-rⁿ-âː-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-âː- 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-âː- can only be intransitive inchoative 'Y became fat'.

Some textual examples are in (555).

(555)   a.   î-n   wó   nǎn-tù-bà   dèy, …
           child-Sg   3SgO   bear-**Perf**-3PlS   if, …
           'A child [topic], when they give birth to it (=when it is born), …'
           (nàrⁿá-) **2004.3.12**

       b.   kɔ̀ñɔ́   wó   dàɣá-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.   [ɛ̀nɛ́   mà   círⁿé   kùⁿ   lè]   dɔ́ː-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   kɔ̀mɔ́   yǎː-yɛ̀-Ø   dèy, …
           village war   go-**Perf**-3SgS   if, …
           'when a village goes to war, …' **2004.3.15**

       e.   ñúː   ír-âː-Ø   dèy, …
           millet   ripen-**Perf**-3SgS   if, …
           'when the millet has ripened, …' **2004.3.6**

       f.   [nɛ́yⁿ   ké]   sáyⁿá-sáyⁿá   mèyⁿ
           [now   Top]   scatter-scatter   and
           bàŋá   túmn-âː-Ø   dèy, …
           hide   begin-**Perf**-NonhS   if, …
           '... (and) now, when they (animals) have scattered and have begun
           to hide, ...' **2004.3.1**

       g.   ñúː   sóy   nàn-lí-Ø   ñɔ̀wⁿɔ́   dòg-âː-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 sâː-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** ɛ́:- 'see' and áɣá- 'hear'. These verbs cannot take Perfective -yè-/-yà- or -â:-, and informants showed considerable aversion to combining them with Perfective -tǐ -. Except for Experiential Perfect -tɛ́rɛ̀- 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]   áɣá-sà-m
          [Nonh Def   also]   hear-**Reslt**-1SgS
          'That too, I heard about it (=didn't see it myself).' **2004.3.4**

      b. [néyⁿ   ké]   ñù:-kà:-à-ý   ɛ́:-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:gɛ̀   yɛ́ sà-Ø   tán,
          cause.shame.to-**Reslt**-3SgS, shame(noun) exist have-3SgS only,
          yǎ: [wó   kû: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   nɛ̀] jɔ̀wɔ́ mèyⁿ⇑ tɛ̀rɛ̀-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**

   c. sáráwá-sà-bè   dèy, pé:∴   tù-tù:lú∴.   síñè∴.
       spread.out-**Reslt**-2PlS if,   shout Rdp-horn   noise
       cὲ: kâ:ⁿ-kâ:ⁿ,   kárⁿá-n   déy,
       thing.L each-each,   do-Ppl.Sg   if,
       'When you-Pl have spread out, (you) make shouts, horn blowing,
       noise, etcetera.' **2004.3.1** [excerpt from (1211)

A similar context is (558), where a relative clause rather than a conditional
antecedent is involved.

(558) [àrà-nɔ̀-ýⁿ   dɔ́:-sà-m],   mɔ̀:-nɔ́   mèyⁿ⇑
       [porridge.L-drink-VblN reach-**Reslt**-Ppl.Pl], be.together-Caus and
       [bè   dê: bé], àrá   bé   nɔ̀:-wⁿɔ́-bà
       [3PlP.L father.HL Pl], porridge 3PlO   drink-Caus.Impf-3PlS
       'Having assembled those (boys) who have reached the age of
       circumcision ("porridge drinking"), their fathers [topic], they (=fathers)
       will circumcise them ("give them porridge to drink").' **2004.3.18**

In (559), -sà- occurs in a polar interrogative, representing a type of question
eagerly asked among farmers who try to keep up with the state of the crop
around the village throughout the growing season.

(559) [[èjù   núŋò] lè] yă:-sà-w   mà⇒
       [[field.L Dem] in] go-**Reslt**-2SgS   Q
       'Have you-Sg gone (yet) to that field (to see it)?' **2004.3.6**

For the infrequent combination of -sà- with preceding Experiential Perfect
-térè- or Recent Perfect -jè-, see the sections on these suffixes, just below.

10.1.2.5 *Experiential Perfect (-térè-) 'have ever'*

This suffix directly follows the stem. It is usually directly followed by the pro-
nominal-subject or Participial suffix, but it may be followed by Resultative -sà-
or Perfective Negative -lí- (560). The preceding verb stem has its lexical tones.

(560) Forms of -térè-

       Perfective   -térè-
       Resultative   -tés-sà-
       Perfective Negative   -tè-lí- (see §10.1.3.2, below)

-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 idiosyncracy is that ɛ́:- 'see' has a high-frequency Experiential Perfect ɛ́t-térè- instead of #ɛ́:-térè-.

The Experiential Perfect is glossable **'have (ever)'**, or in connection with a negation 'have (never)'. Though most common with perception verbs ɛ́:- 'see' and áɣá- '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],   áɣá-tés-sà-y
           [lion   go.out-Perf-3SgS], hear-**ExpPf**-Reslt-1PlS
           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]   ɛ́t-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. [[[pɛ́:rɛ́   yǎ: [bé gàsègɛ́]   nàná-jè   yǎ:]
           [[[merely   go   [3PlP animal]   lead.away-RecPf   go]
           mà jêr] lè] àbádá kó   yɔwɔ-tè-l-á
           Poss side] in] never NonhO   accept-**ExpPf**-PerfNeg-3PlS
           'They$_x$ (=Jamsay) have never accepted the fact of (Fulbe) just going and driving off their$_x$ animals and going away.' (jɛ́rɛ̀) **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. sɛ́mɛ́-jè-Ø
           sweep-**RecPf**-3SgS
           'She has already swept.'

b. ñú: nàrⁿá   dògó-jὲ-Ø   táŋà: dὲy
    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:-jὲ-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-jὲ-Ø
    give.birth-**RecPf**-3SgS
    'She (=pregnant woman) has just given birth' (nàrⁿá-)

The combination -jὲ-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:-jὲ-sà-bà   dὲy,
       [house.L-behind   in]   learn-**RecPf-Reslt**-3PlS   if,
       cín   tǎy   íj-â:-Ø   dὲy,
       thus   holiday stand-Perf-3SgS if,
       cín   [tǎy   lὲ]   gǒ:-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 -jὲ occasionally occurs without pronominal inflection in verb
chains (564.a). Rarely, -jὲ is followed by mὲyⁿ as part of a chain (564.b); this
combination, with L-toned -jὲ, is audibly distinct from the much more common
adverbial-clause type with bare verb stem plus H-toned jέ plus mὲyⁿ
(§15.2.2.2).

(564) a. hâl   jàndùrù   ǔj-jὲ
           until   donkey.L   go.up-**RecPf**
           èjú   ù   yǎ:-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' (ùrɔ́-) **2004.3.10**

b. nì ŋì rⁿè   ɛ́mɛ́   bè   jâ:-Ø,
day.L   1PlO   3PlS.L   convey.Perf.HL-Ppl.Nonh,
[dà:ɣá   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 jɛ́- 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 Perfect is 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)', dì-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] ɛ́t-tɛ́rɛ̀-m,
       [hyena   go.out after Top] see-ExpPf-1SgS
       [kò ké] jì-jɔ́wɔ̀-Ø   [kó bɛ̀l-lí:-Ø]
       [Nonh.L Top] **Rdp**-run.**Perf**.HL-3SgS [Nonh get-PerfNeg-1PlS]
       'I once saw a hyena appear (during a hunt). That one (=hyena), it
       ran away, we didn't catch it.' (ɛ́:-, bɛ̀rɛ́-) **2004.3.2**

       b. [á   wárú] cé:n-â:-Ø,
       [2SgP farming] be.good-Perf-3SgS,
       [á   tòy-tɔ̀ɣɔ́ nɛ̀] ɛ̀jú≡kɔ̀,   jìrⁿé   kùⁿ
       [2SgP seed-sprout now] good≡be.Nonh, wet.season Def
       cì-cé:nè-Ø   tàŋà   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. jìrⁿé   cì-cé:nè-Ø
       wet.season   **Rdp**-be.good.**Perf**.HL-3SgS
       ñì-ñɔ́wⁿɔ̀-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. [àsɛ̀gɛ́ kùⁿ] yǎ: 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   [ùjùbǎy kùⁿ] kɔ̂:-Ø   jì:ⁿ]
       [manner.L [country Def] be.Nonh.HL-Ppl.Nonh   Past]
       bì-bɔ̀gú-m   yì-yárà-bà
       Rdp-slave.trader-Pl **Rdp**-go.around.**Perf**.HL-3PlS
       '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 3PlS.L skin.Perf.HL-Ppl.Nonh Def   in,
       tímné   dì-dáɣà-w⇒,
       shut   **Rdp**-leave.**Perf**.HL-2SgS
       táyⁿá   dì-dáɣà-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. [ɔɣɔ̌-m   kùⁿ∴   fú:]   mà   ɔ̀wⁿɔ̀-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] yɔ́≡kɔ̀   dì-dɛ́wɛ̀-Ø,
    [Nonh   on]   exist≡be.Nonh   **Rdp**-be.covered.**Perf**.HL-3SgS,
    [túm   kùⁿ]   gɔ̌:ⁿ-tù-bà   dèy, [mà:-ká: kùⁿ]
    [mound   Def]   remove-Perf-3PlS if, [door   Def]
    [bɛ̀ré   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-3PlS   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-áɣà-y   ɛ̀:-lí:-Ø
    Rdp-hear.**Perf**.HL-1PlS   see-ImpfNeg-1PlS
    '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 wɔ̀-. The result is wì-wɔ̂:-. This is attested after an Imperfective verb with AN suffix -tɔ́ɣɔ̀- (566).

(566)   lúgúró-tɔ́ɣɔ̀   wì-wɔ̂:-w
        look.for-Impf   **Rdp**-be.Hum.HL-2SgS
        'You-Sg keep searching.' **2004.3.16**

For **H-toned monosyllabic** stems, i.e (C)v́:-, 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) [dɔ̀ɣɔ̀-cɛ̀rⁿɛ̀wⁿɛ́   mà   sî:]   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)v́:- 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 C_1ì-C_1v̂:-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 C_1ì-C_1v́:-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-wɔ̂:-w in (566), above, has a 2Pl counterpart wì-wɔ̂:-bè 'you-Pl are' with F-tone.

(568) jì-jô:-bà
       Rdp-be.many.Perf.HL-**3PlS**
       'They are numerous.'

10.1.2.8 *Unsuffixed Imperfective (positive)*

The **unsuffixed 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 -tɔ́ɣɔ̀-. The three are, to some extent, interchangeable (the category labeled "Habitual" has fairly broad imperfective functions).

    The unsuffixed 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

Cv̌ː-, 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)v́ː-, there is **homophony** between participles based on the unsuffixed Perfective and those based on the unsuffixed Imperfective, except for nonhuman subject (on which see below). Thus âː-Ø from áː- 'catch', with Nonhuman Participial suffix, could be either the unsuffixed Perfective with H(H…)L tone overlay, realized on a monosyllable as F-tone, or the unsuffixed 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)v́ː- is unrelieved.

A unique attribute of the unsuffixed Imperfective in both main and relative clauses is that a **nonhuman subject** pronominal is expressed by **adding cliticized** ≡kɔ̀ 'be (nonhuman)' after the verb stem. This is a special case of kɔ̀, a locational-existential 'be' quasi-verb (§11.2.2.2). This quasi-verb is not always cliticized, but cliticized ≡kɔ̀ is also used after predicative adjectives with nonhuman subject, as in 'it is (big, red, etc.)' (§11.4.1). The use of ≡kɔ̀ to distinguish nonhuman from 3Sg subject is limited to the unsuffixed 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 unsuffixed Imperfective of the verb 'come' (569).

(569)   subject   Perfective   unsuffixed Imperfective

        3Sg (human)   yěy-yà-Ø   yɛ̀rɛ̂ː-Ø
        Nonh   "   yɛ̀rɛ́≡kɔ̀

This ≡kɔ̀ 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 ≡kɔ̀- rather than directly to the Imperfective stem in relative clauses (§14.1.9) and related subordinated clauses. In addition, ≡kɔ̀ is attested (though rarely) as the final element in a verb-chain of the type [… VERB mèyⁿ≡kɔ̀], see (904) in §15.1.14.

Textual examples of the unsuffixed Imperfective are in (570).

(570) a. pɔ́ːrɔ́   [[nùmó lè]   mà   wár]≡îː   jùgɔ́-ỳ
          before   [[hand   with] Poss farming]≡Foc know.**Impf**-1PlS
          'In the old days, <u>farming by hand</u> [focus] was what we knew
          (before the advent of the plow).' **2004.3.7**

  b. [gàsɛ̀gɛ́   lè]   kúnó   mèyⁿ⇑   wàrà-wá-bà
      [animal   on]   put   and   farm-Caus.**Impf**-3PlS
      'Putting it (=plow) on the animals, they farm.' **2004.3.7**

  c. [ɔ̀yɔ̀   gàmá]   nùwⁿɔ̀-lí-Ø   kárⁿá   mèy⇑
      [grass.L some]   die-PerfNeg-3SgS   do   and
      wàjá≡kɔ̀
      remain.**Impf**≡be.Nonh
      'Some grass (=weeds) have not died and still remain (there).'

10.1.2.9 *Cì-Reduplicated Imperfective*

A form consisting of the regular unsuffixed Imperfective plus initial Cì-
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. jɛ́mɛ̀-n   wó   [ɛ̀nɛ́   mà   kúːⁿ   lè]
          blacksmith-Sg 3Sg   [Refl Poss head   with]]
          [íːrⁿé   kùⁿ]   yì-yɔ̀ːrɔ̂ː-Ø
          [iron   Def]   **Rdp**-heat.on.fire.**Impf**-3SgS
          'The blacksmith [topic], <u>he himself</u> [focus] will heat (the iron).'
          2004.3.12

  b. [nɛ́yⁿ   ké]   nǔŋ   párá   mèyⁿ⇑,
      [now   Topic] oil   rub.in and,
      lì-láɣá-bà≡ỳ,
      Rdp-hit.**Impf**-3PlS≡it.is
      'Now [topic], they will rub oil into it (=cowhide) and they will beat
      it (over two days).' **2004.3.17**

  c. [nɔ́ː   ké]   [[î-n   kùⁿ] tì-táná-ŋá-bà]
      [this.year Topic] [[child-Sg Def] **Rdp**-transfer-Caus.**Impf**-3PlS]
      dɔ́ː-yɛ̀-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-gɔ́ː]≡ỳ   déy nè,   tì-tɛ́wɛ́-ẁ
       [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-gɔ̂ː) **2004.3.26**

    e. [[[ɛ̀nɛ́ bé] kò tóːrù]   lè]   yǎː 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-nɔ̀wⁿɔ́-bà   déy nè,   [nùm-náː   mánà]
       Rdp-crush.**Impf**-3PlS if   now,   [grinding.stone on]
       únó   kó   nɔ̀wⁿɔ́-ỳⁿ
       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 unsuffixed 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)v́ː- verbs (H-toned monosyllables) have the form Cì-Cv̂ː- 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 (-tɔ́ɣɔ̀-)

From inspection of textual examples, it is difficult to find consistent aspectual distinctions between the unsuffixed Imperfective, the form with -tɔ́ɣɔ̀- suffix, and the form with -áːrà- suffix. However, some tendencies do emerge.

In (572), -tɔ́ɣɔ̀- occurs in passages describing **recurrent activities**. In (572.a), note that déː- 'carry' occurs both in the unsuffixed Imperfective (dêː-) and the -tɔ́ɣɔ̀- form, with no obvious difference in aspectual value.

(572) a. [dì:ⁿ   gá:rá   ê:ŋ   cêw], ñĕ-m   dê:,
           [place.L more   near.HL   all]   woman-Pl carry.Impf,
           [dì:ⁿ   wàɣá⇒   cêw] [[wòtórò kùⁿ]   lè]
           [place.L distant   all]   [[cart   Def]   with]
           dé:-tóɣɔ̀-bà,   [kó   nò] cín≡î: kò-rú   kán-tóɣɔ̀-y
           carry-**Impf**-3PlS, [Nonh now] thus≡Foc Nonh-Dat do-**Impf**-1PlS
           '(From) any place that is nearer (to the village), <u>women</u> [focus] will
           carry it (millet, in baskets on their heads); (from) any distant place,
           they (normally) **transport** it with carts; that now, <u>thus</u> [focus] is
           how we **do** it.' (kárⁿá-) **2004.3.6**

       b. cín   dɔ̀ɣɔ̌-m   yǐr   bĕt-tóɣɔ̀-bà
           thus   Dogon-Pl   garment get-**Impf**-3PlS
           'That [focus] is how Dogon people **get** clothing.' (yìrú, bèrɛ́-)
           2004.3.14

       c. pɔ́:rɔ́   yěy-yà-Ø   dèy
           first   come-Perf-3SgS   if
           yɔ̌:-jìn≡î: kò-rú   kán-tóɣɔ̀-bè   jì:ⁿ
           how?≡Foc   Nonh-Inst do-Impf-2PlS   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-túrú   íné-m   kó   bǎ:-tóɣɔ̀
           one-one   person-Pl   NonhO   learn-**Impf**
           'One by one, people **have been learning** it (=use of plow).'
           2004.3.7

       b. [kò   kɔ́:]≡ỳ   dùrⁿó   yĕt-tóɣɔ̀-m
           [Dem   foot]≡Foc   follow   come-**Impf**-1SgS
           'Its (=cow's) tracks are what I **have been following** coming here.'
           (yèrɛ́-) **2004.3.10**

       c. …   [àná   mà   bèrê:]   yílím⇒
           …   [village Poss   in]   walking(adv)
           sà:j-î:ⁿ   tá:ⁿ-tóɣɔ̀   yàrà-Ø   ɛ́:-jɛ̀-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   wăt-tɔ́ɣɔ̀   wò   wɔ̂:-Ø
   [field in] farming farm-**Impf** 3SgS.L be.Perf.HL-Ppl.Nonh
   jɛ́   mèyⁿ
   say   and
   'While he (=farmer) **was working** in the field(s), …' (wàrá-)
   2004.4.4

In (574), two sentences from the same text, separated by brief intervening material (not reproduced here), seem to use -tɔ́ɣɔ̀- 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) [nìm   ké]   … pòmpù-ní:≡ỳ   nɔ̌:-tɔ́ɣɔ̀-y, …
       [now   Topic] … pump.L-water=Foc   drink-**Impf**-1Pl, …
       kà: íjé [pòmpù-ní: mà   nì: éjé-sà-Ø]
       but today [pump.L-water Poss water.L be.clean-Reslt-Ppl.Nonh]
       bèrɛ́   mèyⁿ [nîŋ ké]   kó≡ỳ   nɔ̌:-rⁿà-y
       get   and   [now Topic] Nonh≡Foc   drink-**Habit**-1PlS
       'Nowadays … <u>pump water</u> [focus] is what we **drink**; … but today,
       having gotten (access to) clean pump water, <u>that</u> [focus] is what we
       drink.' **2004.4.5**

For wɔ̀- 'be' and its reduplicated Perfective wì-wɔ̂:- after -tɔ́ɣɔ̀-, see (674.a-b) in §11.2.2.3. For uninflected -tɔ́ɣɔ̀ 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: bìrɛ́-, Habitual bìr-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 -tɔ́ɣɔ̀-. 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.   cὲː   bὲ   bì r-á:rà≡ỳ
             thing.L   3PlS.L   work-**Habit**≡it.is
             'It's what they do (=their work).' **2004.3.3**

        b.   àrⁿá   kùⁿ   yέ   mì rⁿ-á:rⁿà-Ø
             rain   Def   Index   fall-**Habit**-3SgS
             'The rains are falling (in the wet season).' **2004.3.6**

        c.   îjé   àrⁿ-úm   bé   bàr-á:rà-bà
             today   man-Pl   3PlO   help-**Habit**-3PlS
             'Nowadays, the men help them (=women).' **2004.3.6**

        d.   ὲmě-n   tɔ̀rɔ̀-gǎnǹ   gá:-rà-bà
             1Pl-Dat   mountain.L-among   say-**Habit**-3PlS
             'They say of us (=Jamsay) (that we are) mountaineers.' **2004.3.11**

        f.   [έmέ î-n]   [é   î-n   lè], yέ   yὲr-á:rà-Ø,
             [1PlP child-Sg] [2PlP child-Sg to], Index come-**Habit**-3SgS,
             ὲnέ   bé   tègú   ñɔ̀wⁿɔ̀-lí-Ø
             Refl   PlP   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 nὲ   gàmà-nám] [sàmnà   dùgú]
             [[person.L   certain-Pl] [soap.L   fat]
             [pérέ   túrú   sáɣà] kárⁿ-á:rⁿà-m]   yɔ́≡kɔ̀
             [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.   [bùrɔ̀   bán]   [kó   nò]
             [wire.L   red]   [Nonh now]
             nîm   bὲ   kún-á:rⁿà-Ø   mà⇒↑   pɔ́:rɔ́
             now   3PlS.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]   yɛ́   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   yàŋâ:-Ø   jɛ́   mèyⁿ,
           3SgS.L   look.Impf-Ppl.Nonh   say   and,
           tì -tá: [ɔ̀ɣɔ̀-ñɔ̀wⁿɔ́ kùⁿ]   yɛ́   kó   ɛ́:-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 Cv̀(C)(Cv̀)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 Cv̀ýỳ (arguably Cv̀î: but in one syllable) with the same contour compressed into a single <LHL> syllable, hence lè-ýỳ '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 ≡ỳ là: 'not be' (§11.2.1.3), and the more versatile (stative) Negative là with short vowel (§11.2.1.4).

(577) a. mɔ̀:-ká: pì nì -rⁿ-î:-Ø
           doorway   shut-Revers-Stative-3SgS
           'The door is open.'

b. pìnì-rⁿ-î:-bà
    shut-Revers-Stative-3PlS
    'They (e.g. doors) are open.'

Negatives: pìnì-rⁿ-î: là:-Ø 'it is not open', pìnì-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 ≡ỳ and ≡ì:), added to the Verbal Noun (§4.2.2.1, e.g. pìn-ú 'shutting', lè-ý '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: unsuffixed 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 -tέrὲ-; the combination is pronounced -tὲ-lí- for expected #-tὲl-lí- (§10.1.3.2).

Imperfective Negative -gó- replaces the unsuffixed 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 -tì-, -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 -tɛ́rɛ̀-   special negative form -tɛ̀-lí-
    ExpPf + Reslt -tɛ́s-sà-   "

b. imperfective system

unsuffixed Imperfective   Imperfective Negative -gó-
reduplicated Imperfective   "
marked Imperfective -tɔ́ɣɔ̀-   " (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 ≡ỳ 'it is', see §11.2.1.3.

'Be sick' is regularly expressed as the negation of 'be healthy' (sɛ́llɛ́-), as in sɛ̀llɛ̀-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, ɔ́ɣɔ́rɔ́ 'quickly' is under the scope of the negation.

(580)   ɔ́ɣɔ́rɔ́   kò-rú   yɔ̀wɔ̀-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   yà:-lí-Ø
         go-Perf-3SgS   go-**PerfNeg**-3SgS
         'he/she went'   'he/she didn't go'

    b.   ɛ́:-sà-m   ɛ̀:-lú-m
         see-Reslt-1SgS   see-**PerfNeg**-1SgS
         'I saw'   'I didn't see'

    c.   túmnó-tù:-Ø   tùmnò-lú:-Ø
         begin-Perf-2SgS   begin-**PerfNeg**-2SgS
         'you-Sg began'   'you-Sg didn't begin'

    d.   ǎ:≡ỳ   nùmò   ǎ:≡ỳ   nùmò-lì
         who?≡Foc fall.Perf.L who?≡Foc   fall-**PerfNeg.L**
         '<u>Who</u> [focus] fell?''   '<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

   lúgúró-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 Experiental Perfect ('have not ever'). This is the usual way to express 'never'. Here the Experiental Perfect suffix -térè- is truncated to -tɛ- 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 -ɛ́:- 'see' with ExpPf suffix in the positive (ɛ́t-térɛ́-instead of #ɛ́:-térɛ́-) is carried over into the negative.

(583)   positive   negative

   ɛ́t-térɛ̀-w 'you-Sg have seen' ɛ̀t-tè-lú:-Ø 'you have never seen'
   áɣá-térɛ̀-m 'I have heard'   àɣà-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. tì-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)   jìrⁿé   cì-cé:nè-Ø
        wet.season   **Rdp-be.good.Perf.HL**-3SgS
        cì-cé:nè-lî-Ø⇒   cêw,
        Rdp-be.good,Perf.HL-PerfNeg.L-3SgS   all,
        ñú: sóy   nàn-lí-Ø
        [millet all]   bear-PerfNeg-Ppl.Nonh
        ñɔ̀wⁿɔ́   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.'
        (nàrⁿá-) **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-jɔ̀wɔ̀-lí-Ø 'it didn't run (away)', corresponding to positive
jì-jɔ́wɔ̀-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 unsuffixed 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-m̀ 'I want'   dènè-gó-m 'I don't want'
        sâ:-Ø 'it will respond'   sà:-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 -tɔ́ɣɔ̀-, and the reduplicated Imperfective. However,
-á:rà- and -tɔ́ɣɔ̀- 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

bìr-á:rà-m 'I work'   bìr-á:rà-lá-m 'I don't usually work'
                              [variant bìr-â:l-lá-m]
yǎ-tɔ́ɣɔ̀-m 'I go (often)'   yǎ-tɔ́ɣɔ̀-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 bê: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]
       kɔ̀:-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	≡kɔ̀ in Impf, otherwise = 3Sg
Nonh Pl (optional)	≡kɔ̀-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 ≡kɔ̀ '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 ≡kɔ̀, is realized on the ≡kɔ̀ (i.e. it merges with the already low tone of the clitic). Thus mí cɛ́rɛ́≡kɔ̀ 'it will bite me' from /cɛ́rɛ́-L≡kɔ̀/, see Tone-Grafting (131).

≡kɔ̀ 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, ≡kɔ̀ remains in postverbal position in relatives, and Participial suffixes are added to it rather than to the preceding verb (§14.1.9).

≡kɔ̀ 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 (yǎ:-yɛ̀-Ø 'He/She/It went', mí cɛ́t-tì-Ø 'He/She/It bit me'), Resultative -sà- (mí ɛ́:-sà-Ø 'He/She/It saw me'), -jɛ̀- (ñɛ́:-jɛ̀-Ø 'He/She/It already ate'), -tɛ́rɛ̀- (mí cɛ́t-tɛ́rɛ̀-Ø 'He/She/It once bit me'), Perfective negative (mí cɛ̀l-lí-Ø 'He/She/It didn't bite me'), Imperfective Negative (mí cɛ̀rɛ̀-gó-Ø 'He/She/It won't bite me'), Habitual (mí cɛ̀r-á:rà-Ø 'He/She/It bites me'), or marked Imperfective (mí cɛ́t-tɔ́ɣɔ̀-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 a preverbal 3rd person or Nonhuman pronoun, apparently in subject function. In the type exemplified by (589.a), the verb ná:-yⁿɛ̀-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), kɔ̀:-rɔ́ '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:ɣá   lὲy]   [wó   úrò]
           [night   two]   [3SgP   house.Loc.HL]
           wò   ná:-yⁿὲ-Ø   dὲy
           3SgS.L   spend.night-Perf-Ppl.Nonh   if
           'when she (=bride) has spent two nights at his house' **2004.3.20**

       b. kó   kɔ̀:-rɔ́
           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 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 ≡kɔ̀ in the unsuffixed Imperfective, the nonzero pro-
nominal 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.   …v́-   …v́-m   …v́-bé

  b.   …v́- + L   …v́-m̀   …v́-bè

  c.   …-â:-   …-â:-m   …â:-bè
                               [...áám̀]

  d.   …v̀-   …v̀-m   …v̀-bè
                        (occasionally …v̀-ḿ, …v̀-bé)

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 unsuffixed Imperfective. Examples: bèré- 'get', unsuffixed Imperfective /bèré- + L/, hence 1Sg bèré-m̀, 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) unsuffixed 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 -tóγò-). Examples: Perfective láγá-tì-Ø 'he/she hit', láγá-tì-m 'I hit', and láγá-tì-bè 'you-Pl hit'; unsuffixed Perfective làγà-Ø 'he/she hit', làγà-m 'I hit', and làγà-bè 'you-Pl hit'.

In the unsuffixed Perfective, an ostensibly L-toned pronominal-subject suffix occasionally appears with **unexpected H-tone**, although the preceding stem is entirely L-toned: làγà-ḿ 'I hit', làγà-bá 'they hit' (for the more usual làγà-m, làγà-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. discussioin of related issues in §3.7.1.5.

10.3 Clause-final temporal particles

10.3.1 Past jì:ⁿ (jĭ:ⁿ) and conjugatable jĭ: 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 ≡ỳ '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.   yɔ́≡wɔ̀-Ø   jì:ⁿ
             exist≡be.Hum-3SgS   **Past**
             'He/She was there.'

       b.   lá:-lá: [kó   kùⁿ]   kárⁿá-bà   jì:ⁿ
             first-first   [Nonh Def]   do.Impf-3PlS **Past**
             'Long ago, they used to do that.' **2004.3.8**

       c.   [kò∴.   fú:]   kò-r≡î: gɔ̌:ⁿ-bà   jì:ⁿ
             [Nonh.L all]   Nonh-with≡Foc   take.out.Impf-3PlS   **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.   nùm-â:-Ø   jì:ⁿ
             fall-Perf-3SgS   **Past**
             'He/She/It had (already) fallen.'

       b.   ñǎ: ñέ:-sà-Ø   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 kùⁿ,

which is common in relative clauses, the particle may appear as R-toned jǐːⁿ (594.b).

(594) a. ìnè   láː-láː   mì   jùgɔ́-m̀   jìːⁿ
           person.L first-first 1SgS.L   know.Impf-**Ppl.Pl**   **Past**
           'the people whom I used to know long ago'

       b. à-n   ú   báŋá-rⁿà-n   jǐːⁿ   kùⁿ
           man-Sg.L 2SgO   hide-Caus.Perf.HL-**Ppl.Sg** **Past**   Def
           'the man who (had) hid you-Sg'

       c. dìːⁿ   ú   bè   báŋá-rⁿà-Ø   jìːⁿ
           place.L 2SgO   3PlS.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 jǐ̀ːⁿ-. The preceding verb takes its regular lexical tone and is uninflectable, showing that a **verb-chain** is at hand. jǐ̀ːⁿ- itself is morphologically an **unsuffixed Imperfective**, implying an R-toned lexical form /jǐːⁿ/ 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 jǐ̀ːⁿ- is an unsuffixed Imperfective is demonstrated by the fact that a Nonhuman subject requires a following cliticized 'be' quasi-verb ≡kɔ̀, 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. ú   bàŋà-rⁿá   jǐ̀ːⁿ--Ø
           2SgO   hide-Caus   **Past.Impf-3SgS**
           'He/She will hide you in the meantime.'

       b. ú   bàŋà-rⁿá   jǐːⁿ-m̀
           2SgO   hide-Caus   **Past.Impf-1SgS**
           'I will hide you in the meantime.'

       c. dùn-dàŋá   ú   bàŋà-rⁿá   jǐːⁿ≡kɔ̀
           elephant   2SgO   hide-Caus   **Past.Impf≡be.Nonh**
           'The elephant will hide you in the meantime.'

d. lámpò wó dɔ̀:-lí-n, wó dàɣá jǐːⁿ-bà
   tax 3SgO reach-PerfNeg-Ppl.Sg, 3SgO leave **Past.Impf**-3PlS
   '(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
bàŋà-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 Parti-
cipial suffixes. Unlike the cases in (594), where jìːⁿ is added after a participle,
in (596) jǐːⁿ- is itself participialized.

(596) a. dìːⁿ ú bè bàŋà-rⁿá jǐːn-Ø
      place.L 2SgO 3PlS.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 bàŋà-rⁿá jǐːⁿ-ǹ 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 bàŋà-rⁿá jǐːⁿ-m̀ 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' (dɔ̂m)

This particle means 'still', 'up to now, so far', or 'as for now' in positive
utterances. It may precede or follow the verb.

(597) [dàná mà bírɛ́]≡ỳ yǎː-tóɣɔ̀-Ø dɔ̂m
     [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-bɔ́rù∴]   mà   lɔ̌y,
           [Nonh   millet.grub]   Poss   medication,
           ὲ:-lí:-Ø   dɔ̂m
           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]   dɔ̂m   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)v́:- or (C)v́Cv́-, the shift being audible in
the case of R-toned (C)v̌:- and LH-toned (C)v̀Cv́- 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 syl-
lables, 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 gòː-ý.

For monosyllabic (C)vː- 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: gòː-ý 'don't go out!', but gò-ý 'going out (VblN)'.

The Imperative and Prohibitive forms for 'come' are given in (600). Note the H-tone Imperative stem yɛ́rɛ́-, compare the LH tone of the lexical stem yèrɛ́-. Note also how the tones distinguish yèrɛ̀-ý (600.b) from yɛ́rɛ́-ỳ (600.c).

(600)   a.   yɛ́rɛ́
            come.Imprt.H
            'Come!-Sg'

        b.   yèrɛ̀-ý
            come.L-ImprtNeg
            'Don't-Sg come!'

        c.   yɛ́rɛ́-ỳ
            come.Imprt.H-Pl
            'Come!-Pl'

        d.   yèrɛ̀-ý   lây
            come.L-ImprtNeg   ImprtNeg.Pl
            'Don't-Pl come!'

Examples with a trisyllabic verb dànàŋá- 'arrange': dànàŋá (singular imperative), dànàŋà-ý^n (singular Prohibitive), dànàŋá-ỳ^n (plural Imperative), dànàŋà-ý^n 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 yèrɛ́ has its lexical tones as an ordinary chained verb. Likewise in (601.e), where dàɣá 'leave' is in chained rather than Prohibitive form.

(601)   a.   [î-n   kù^n]   yèrɛ́   yɔ́wɔ́
            [child-Sg Def]   come   receive.**Imprt.H**
            'Come receive-Sg the child (=bride)!' (yɔ̀wɔ́-) **2004.3.20**

b. [mâːn   mà   kûːⁿ]   yǎː   yàːjíː   páɣá-ỳ
    [so-and-so Poss on]   go   marriage   tie.**Imprt.H-Pl**
    'Go-Pl and tie (=contract) marriage on so-and-so (=the bride).'
    (páɣá-) **2004.3.20**

c. mí   táːⁿ   yàŋá-ỳⁿ
    1SgO   shoot   look-**Imprt-Pl**
    'Shoot-Pl me and look (=and you'll see)!' (yàŋá- with Imprt yàŋá)
    2004.3.24

d. làɣá   pàntɛ̀-ý
    other   repeat.L-**ImprtNeg**
    'Don't-Sg do it again!' (pántɛ́-) **2004.3.10**

e. èjú   dàɣá   yàː-wà-ý
    field leave   go-Caus.L-**ImprtNeg**
    'Don't-Sg let the animals go out into the field!' (yàː-wá-) **2004.3.9**

f. [yògò làɣá] [tôː-n   lè] pàntɛ̀-ý   lây
    [day.L other] [Recip-Sg with] **repeat-ImprtNeg   Pl**
    'Don't-Pl do it (=fight) with each other another day (=in the
    future)!' (pántɛ́-) **2004.4.6**

10.4.2 Irregular {LH} imperative stems

As noted before, most monosyllabic Cvː-, and short-voweled bisyllabic
(C)vCv- stems require all-H tone in the Imperative stem. Regular examples:
monosyllabic jǎːⁿ- 'dig', Imperative jáːⁿ ; bisyllabic dìɡé- 'follow', Imperative
díɡé (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 yǎː- 'go', dìŋé- 'sit down', ìñé 'lie down, go to bed', and yàŋá- 'look;
pick up'. The Imperatives are yǎː 'go!', dìŋé 'sit down!', ìñé 'go to bed!', and
yàŋá 'look!'

For wɔ̌ː- **'kill'**, I recorded a special positive Imperative form wɔ̌ː tí-, hence
singular Imperative wɔ̌ː tí 'kill!' with plural /wɔ̌ː tí-ỳ/ (= wɔ̌ː tîː-Ø). Here wɔ̌ː
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 wɔ̌ː-ý 'don't-Sg kill!', plural wɔ̌ː-ý lây 'don't-Pl kill!'.

The extra tí- in the positive Imperative is also attested in (1016.a) for the Imperative of cɛ́ːⁿ- 'slaughter, cut the throat of', which of course has a lexical sense very similar to 'kill'.

10.4.3 Hortative (-ḿ)

The Hortative has an H-toned suffix -ḿ, following a verb stem with all-L tones. The high-frequency form yà-ḿ 'let's go!' has a short vowel, but other Cvː-verbs retain their lexical long vowel: gòː-ḿ 'let's go out!', jàːⁿ-ḿ 'let's dig!', nɔ̀ː-ḿ 'let's drink!'. The hortative does not occur with short-voweled Cv- or CvC- quasi-verbs (wɔ̀- 'be', sà- 'have', kùn- 'be in', see §11.2 and §11.5), perhaps for semantic as well as morphological reasons. Defective stance verbs like dàːⁿ- '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 dìŋè-ḿ 'let's sit down!' (verb dìŋé-). 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 béː-.

I transcribe e.g. yà-ḿ with the H-tone marker on the suffixal C. A representation yǎ-m would convey the pronunciation, given my transcription conventions, but yà-ḿ 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 -ḿ 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 -ḿ is basically a **first inclusive dual** hortative, though it may extend loosely to include larger numbers (see below). The 1Pl pronoun ɛ́mɛ́ 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-ẁⁿ   dèy]   gàrá   yà-ḿ
           [want.Impf-2SgS   if]   pass   go-**Hort**
           'If you-Sg would like, let's-Du go along (the trail)!.' **2004.3.10**

       b. (ɛ́mɛ́)   yǎː   yèrè-ḿ
           (1Pl)   go   come-**Hort**
           'Let's-Du go and come!'

    c.   [ì jú   kùⁿ]   làɣà-ḿ
        [dog   Def]   hit-**Hort**
        'Let's-Du hit the dog!'

At the end of a long clause, the pitch rise on -ḿ is sometimes not heard (603). This results in homophony between the Hortative and the 1Sg unsuffixed Perfective.

(603)   [ɛ̀mɛ̌-n   kó   tégé]   yàŋà-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 -ḿ suffix is optionally used for more-than-dual subject, especially when dealing with general collectivities.

(604)   [ɛ́mɛ́   yè-lé   bɛ̀ː-m]   wà
        [1Pl   there   stay-**Hort.L**]   say
        'They told us (=Jamsay villagers) to stay (right) <u>there</u> [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 -ḿ, especially when the situation involves persons present in the conversational context, as opposed to broader collectivities where -ḿ may be used in extended sense.

(605)   yǎː   yɛ̀rɛ̀-mâyⁿ
        go   come-**Hort.Pl**
        '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.   yàː-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. ámà   ù-rú   yá:pínέ
      God   2Sg-Dat   make.healthy.**Imprt**
      'May God make you well!' (yá:pínέ-)

b. ámà   círⁿé   dáɣá
      God   nose   leave.**Imprt.H**
      'May God leave a nose (=give long life)!' (dàɣá-) **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) [[έmέ   àná]   tàrá   yà-ɱ́]   gá-bà
     [[1PlP   village] collective.hunt go-**Hort**]   say.Impf-3PlS
     '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 ὲnέ mà (§18.1.2). This is illustrated in (609.b).

(609) a. [ú   yǎ:]   [kó   yὲrὲ-ɱ́]   gá-bà
      [2Sg go.Imprt] [Nonh   come.**Hort**]   say.Impf-3PlS
      'They say, "Go, (and) may it come here!."' (i.e. 'go bring it!')
      2004.4.23

b.   wó   [wó   mǎŋgòlò]   ñɛ́ː
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.   yèrɛ́   wó   [wó   dáːŋá]   yàŋà-ḿ
come   3Sg   [3SgP   water.jar]   pick.up-**Hort**
'May he$_x$ come and take his$_x$ water jar!'

b.   wó   [wó   mǎŋgòlò]   ñɛ̀ː-ḿ
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) [[ɛ̀nɛ́   bé]   [ɛ̀nɛ́   bé   mǎŋgòlò]   ñɛ̀ː-ḿ]   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. yɛ́rɛ́   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]   láɣá   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 ìnì wⁿé (not specified for person) as direct object coindexed with the subject.

(613) mí   ìnì wⁿé   láɣá   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) yɛ̀rɛ̀-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) ɛ́mɛ́   yɛ́rɛ́   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): Cvː-, CvCv-, CvːCv-, 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-, wɔ̀-, kɔ̀-, kùn-) are limited to the unsuffixed 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, wɔ̀- and kɔ̀- '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 ≡kɔ̀ is used for Nonhuman subject in the unsuffixed Imperfective. This suggests that quasi-verbs wɔ̀- and kɔ̀- '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:-)	§11.3.2
		wa (wá, wà) (uninflected)	§17.1.3
b.	'have'	sà-	§11.5.2
c.	'exist, be (somewhere)'	wɔ̀- (human)	§11.2.2.2-5
		kɔ̀- (nonhuman)	"
d.	'be in; be put in'	kùn- (Neg kùnó-)	§11.2.3

There is also a copula clitic 'be' with allomorphs ≡ỳ and ≡ì: 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'	yèrɛ́-	/yěr-/ with e for ɛ when syncopated: Perf yěy-yà-, Perfective Negative yèl-lí- ; contrast e.g. Imperfective Negative yèrè-gó- ; see also (632.b).
b.	'bring'	jè:rɛ́-	syncopated form is /jěr-/, with ɛ: shortened and raised to e : Perfective jět-tì-, Perfective Negative jèl-lí- ; contrast Imperfective Negative jè:rè-gó-.
c.	'know'	jùgɔ́-	optionally contracted to /jɔ̌:-/ before g-initial AN suffix jɔ̀:-gó- (varying with jùgɔ̀-gó-), compare uncontracted Imperfective jùgɔ̂-, Perfective Negative jùgɔ̀-lí-, Recent Perfect jùgɔ́-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'   kúr^{n}ó-   same pattern as for 'put' (d): Perfective kúr^{n}ó-tì- or kún-tì-, Resultative kúr^{n}ó-sà- or kún-sà-, Perfective Negative kùr^{n}ò-lí- or kùn-lí-; contrast Imperfective Negative kùr^{n}ò-gó-.

f. 'see'   ɛ́ː-   Experiential Perfect ɛ́t-tɛ́rɛ̀- instead of #ɛ́ː-tɛ́rɛ̀-.

g. 'stroll'   yɛ̀ré-   variant yàrá-; unsuffixed Perfective participle yárà-; Reduplicated Perfective yì-yárà-.

h. 'arrive'   dɔ́ː-   varies with dóː-.

11.1.2 Verb types (valency)

Verbs have the usual valency possibilities: intransitive, transitive, ditransitive. However, the distinction between transitive and intransitive is muddied 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 dìŋé- 'sit down' and **atelic motion verbs** like yàná- 'glide'.

Telic motion verbs like yǎː- 'go' and yɛ̀ré- '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) [dìː^n ènɛ́   yàː-gó-Ø   jìː^n cɛ̂w]   yǎː-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 yǎː-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. yǎː- '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 lòmèːtérè   téːmédè   tǎːn]
       [kilometer   hundred   three]
       [kɔ̌ː   lè]   kó   yǎː-bè
       [foot   Inst]   **NonhO go**.Impf-2PlS
       'Three hundred kilometers, you'll go that (distance) on foot.' **2004.4.5**

With núː- 'enter', informants again disliked pronominal objects in elicitation sessions, but the textual example (620) shows that they are possible.

(620) [kò àná]   kó   bállá   mèyⁿ kó   núː-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. náːná- 'put (sth) up on (sth)'. Basic perception verbs are transitive: ɛ́ː- 'see', áɣá- '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] yɔ́≡kùn- 'be in X, be part of X'. An example is (621).

(621) [[wó   jèjù-gùjú] lè]   céllâl   yɔ́≡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 óː- 'give' and téːré- '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.   [ɔ̀rɔ̀-nì ŋé   ñâː]   mí   ñéː-wⁿɛ́-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   ñéː-wⁿɛ́-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 nǐ: 'day' (cf. nì-nǐ: 'sun', nì-núw^{n}ó 'daytime')
            nǐ: sí:^{n}-   'day break'
            nǐ: bàr^{n}á-   'be summer (hot season)' (cf. bán 'red')

        b. other
            pàrá   sɛ́:^{n}-   'be just after the harvest'
            àr^{n}á   mì r^{n}é-   'rain fall' (àr^{n}á 'rain [noun]')
            dà:ɣá   dɛ́:-   'night fall' (dà:ɣá 'night')

Elsewhere, bàr^{n}á- is a verb meaning 'beat (e.g. tomtoms)'. It is also in the phrase cɛ́nɛ̀ bàr^{n}á- 'be angry' (cɛ́nɛ̀ 'heart' as seat of emotions). The sense 'beat' is felt by informants to be unrelated to nǐ: bàr^{n}á- '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-r^{n}á- 'become red'). There is a related noun nì-bár^{n}á 'summer, hot season' (with short-voweled initial morpheme). In nǐ: sí:^{n}- 'day break', the verb is not attested except in this combination.

The two stems in pàrá sɛ́ːⁿ- occur only with each other. There is a related noun pàrà-sɛ́ⁿ denoting the post-harvest season in question. àrⁿá 'rain [noun]' and dà:ɣá 'night', seen in (625.b), are also common elsewhere. The verb dɛ́ː- in dà:ɣá dɛ́ː- 'night fall' has no obvious semantic connection to dɛ́ː- '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		
pɛ́ː	pɛ́ː-	'cry, weep'
b. noun H, verb R		
bɛ́ː	bɛ̌ː-	'defecate, take a shit'
gɔ́ː	gɔ̌ː-	'dance, perform a dance'
c. noun F, verb R		
jîːⁿ	jǐːⁿ-	'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

bɔ̀ɣɔ́	bɔ̀ɣɔ́-	'be deceptive, trick'
dàná	dàná-	'hunt, go on a hunt'
jàmá	jàmá-	'betray' (regional, e.g. Fulfulde jamba)
jìmɛ́	jìmɛ́-	'double up, have two'
jùŋó	jùŋó-	'(insects) mount on top of each other'

b. noun all-H, verb LH

| bíré | bìré- | 'work, do a job' |
| dúgó | dùgó- | 'practice sorcery' |

c. noun LH, verb all-H

èré	éré-	'be rivals, have a rivalry'
ìjɛ́	íjɛ́-	'stand/ stop in a position'
là:rá	lá:rá-	'go behind village (to defecate)'
nùwⁿó	núwⁿó-	'(a) death occur'
pèré	péré-	'jump, take a jump'
pɔ̀mɔ́	pɔ́mɔ́-	'compete, be in a race'
sìrⁿé	sírⁿé-	'(woman) emit cry of joy'

d. noun HL, verb LH

dá:rⁿà	dà:rⁿá	'thicken into syrup'
dómò	dòmó-	'roll turban (on head)'
gójò	gòjó-	'divide into halves'
jɛ́:rɛ̀	jɛ̀:rɛ́-	'criticize'

e. noun HL, verb all-H (includes some Fulfulde borrowings)

játè	játé-	'do a calculation'
píllè	píllé-	'tell a story' (<Fulfulde)
pútɔ̀	pútɔ́-	'(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
        gɔ́lɔ́rɔ́   gɔ̀lɔ̀rɔ́-   'snore'

    b. noun LLH, verb all-H
        cèrⁿɛ̀wⁿɛ́   cɛ́rⁿɛ́wⁿɛ́-   'have fun, stage festivities'
        kònòŋó   kónóŋó-   'build a conical roof'

    c. noun LHL, verb LLH
        bègérè   bègèré-   'belch'

    d. noun HHL, verb all-H
        ɛ́rⁿɛ́wⁿɛ̀   ɛ́rⁿɛ́wⁿɛ́-   '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
        kɔ̀rú   kɔ́rɔ́-   '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   gòró-   'dig a ditch'
        jèrú   jèrɛ́-   'harvest, do the harvest'

    c. apocope applied, verb all-H
        p̌w   péwɛ́-   'make an accusation'
        tǐn   tírⁿé-   'go gather firewood'
        tɔ̌ŋ   tɔ́ŋɔ́-   'write, do some writing'

    d. apocope applied, verb LH
        wɔ̌m   wɔ̀mɔ́-   'remove weeds (from field)'

    e. monosyllabic stem (-ý VblN suffix), verb H
        tɔ̌y   tɔ́ː-   'vomit' (for 'sow' see below)

A case like (629.a) but with irregular vocalic divergence is sɛ̀ñú 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 Cv́C nominal (630.a).

(630)   C-final cognate nominal (≠Verbal Noun) plus verb

        noun   verb   gloss of combination

    a. noun H, verb LH
        jáŋ   jàŋá-   'request, make a plea'
        jɛ́w   jɛ̀wɛ́-   'curse, utter a curse'
        jɛ́y   jɛ̀yɛ́-   'fight, engage in a fight'
        mɔ́wⁿ   mɔ̀wⁿɔ́-   '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   ímɛ́-   '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 (≠Verbal Noun) plus verb

    a. noun and verb all-H
       tárú   tárá-   '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 ɛ in some AN forms (617.a).

(632)   Vocalic divergence

    a.   tǒy   tɔ́:-   'sow, plant (seeds); sow the seedstock'
        jóŋ   jòŋɔ́-   'heal, perform healing'
        jów   jòwɔ́-   '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 tɔ̀-ý 'sowing', jǒŋ-Ø

'healing', and jɔ̌w-Ø 'running'. These are used, for example, in Verbal Noun complements (§17.4). tǒy tɔ́ː- 'sow (seeds)' is distinguished from tǒy tɔ́ː- '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.	gáːjáːdù	gáːjé-	'have a chat' (<Fulfulde)
	lárvêl	lárvá-	'use modern weapons' (<Fr ?)
b.	ñǎː	ñɛ́ː-	'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. pírú 'white' and ñǎː 'meal'), or a perhaps segmentable initial à- (634.d).

(634)   Morphologically complex cognate nominal

a.	àrⁿà-dúrù	dùró	'(thunder) rumble'
	àrⁿá-árúwù	áráwá	'(thunder) rumble loudly'
	àrⁿà-tǒː	tɔ́ː	'(thunderclap) sound'
	jì -nîː	níː-	'sleep' (cf. jì ré 'eye')
	kɔ̀ː-tàŋá	táŋá	'take a step'
	kɔ̀ː-tógù	tógó	'(horse) rear'
b.	bì -bégè	bègé-	'hiccup'
c.	[ñàː pírú]	píré-	'cook the meal ñàː pírú'
d.	à-pàlá	pálá-	'cook the meal à-pàlá'
	à-bîn	bíné-	'roll on ground'

There are some cases of trisyllabic verb and nominal. Examples: álfàjárà fájárá 'tell a riddle', bídígà bì dì gé 'do magic tricks', tírⁿíwⁿú tírⁿíwⁿé 'give formal counsel', and several cases denoting noises like sógúrù sógóró 'make a sudden noise' and bógúrù 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 tǒy tɔ́:- 'sow
(seeds)', for example, tǒy can denote the seeds used for sowing, while in jέy
jɛ̀yέ- 'fight, engage in a fight', noun jέy 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: jɛ̌t-tì-Ø
            millet   harvest-Perf-3SgS
            'He/She harvested the millet.' (jɛ̀rέ)

       b.   mí   jɔ̀ŋɔ́-tì-Ø
            1SgO   cure-Perf-3SgS
            'He/She cured me.'

       c.   ɛ̀mέ   wǎt-tì-Ø
            sorghum   farm-Perf-3SgS
            'He/She raised sorghum.' (wàrá-)

       d.   [ɛ̀nέ   mà   ñù:-èjú]   wɔ̀mɔ́-tì-Ø
            [Refl   Poss   millet.L-field] weed-Perf-3SgS
            'He weeded his millet field.'

       e.   kà:-ñǐyⁿ   mǐ-n   jàŋá-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
jàmá- 'betray' has both an optional cognate nominal jàmá 'betrayal' and a
variable direct object, here 'me'.

(636) (jàmá)   mí   jàmá-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) (jɛ́y)   mǐ-n   jɛ̀yɛ́-tì-Ø
    (**fighting**) **1Sg-Dat** f**ight**-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   jɔ̀ŋɔ́-ti-Ø
        [cure.L **good**]   1SgO   cure-Perf-3SgS
        'He/She gave me a good cure (=cured me well).'

     b. [jɛ̀y   dògò-gó-Ø]   mǐ-n   jɛ̀yɛ́-ti-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. [jɛ́y   lɛ̀y]   mǐ-n   jɛ̀yɛ́-ti-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 jɛ́] íjɛ́- with a possessor X has the sense 'stand in the place (of)', by extension 'become like'.

(639) a. [ú   [áy-î-n   bɔ́rù]]
           [2Sg   [male-child-Sg uncle.HL]]
           [[áy-î-n   dê:]   mà ì jɛ́]   íjɛ́-ẁ
           [[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 negotation).' **2004.3.20**

       b. [tòy-mǎyⁿ   mà ì jɛ́]   íj-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 (VblN) 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 nɛ̀ 'also now' follows the cognate
nominal.

(641) [bé   àrⁿ-úm   kùⁿ],   [jáŋ   kâ:ⁿ   nɛ̀]   jàŋá-bà
       [3PlP   man-Pl   Def],   [**begging too   now**] **beg**.Impf-3PlS
       'Their (sɛ́gɛ́-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-m̀]
           prayer   [Nonh≡Foc   want.Impf-1SgS]
           'Prayer [topic], <u>that</u> [focus] is what I like.

       b. sàl-[sàl-ú]   [kó≡ỳ   dèné-m̀]
           prayer.L-[pray-VblN] [Nonh≡Foc   want.Impf-1SgS]
           'Performing the Muslim prayer [topic], <u>that</u> [focus] is what I like.

(643) [èjú   bɛ́rɛ̀]   jèr-Ø≡î: jèrɛ́-bà
      [field   in]   **harvest-VblN≡Foc**   **harvest**.Impf-3PlS
      'They will carry out the <u>harvesting</u> [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.   [yɔ̌:   lé]   tègú   tègè-Ø
            [where? in]   speech   speak.Perf.L-3SgS
            '<u>Where</u> [focus] did he/she speak?'

      b.   mí≡ỳ   jèrú   jèrɛ̀
            1Sg≡Foc   harvest(noun)   harvest.Perf.L
            'It was <u>I</u> [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.   [cěr-Ø   céré-bà]   kárⁿá   bèrè-gó-Ø
            [bite-VblN   bite.Impf-3PlS] **do**   can-ImpfNeg-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≡kɔ̀   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   [ámbárkê: kárⁿá]   fárá:nsì   yà:-bà
        Nonh-Inst   [embarcation do]   France   go.Perf.L-3PlS
        'With that, they embarked (by ship) and went to France.' **2004.4.21**

However, some French borrowings are directly inflectable verbs: átákɛ́- 'attack' in e.g. átákɛ́-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 wɔ̀- and kɔ̀ 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 -rv́- (postvocalic) or -v́ (postconsonantal).

Also covered here are the morphologically regular verbs bé:- 'remain, happen' and táŋá- '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 dì ɡὲ-lá- 'doesn't connect' (§11.2.5).

≡ỳ '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 …' (≡ỳ, ≡ì꞉)

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 ≡ỳ, ≡ỳⁿ, ≡ì꞉, 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 ≡ỳ (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) [ɔwⁿɔ̀-sǎyⁿ   kùⁿ] [à-n≡î꞉   dèy], [àrⁿà-lɔ̀gú   lè]
       [cemetery   Def] [man-Sg=**it.is** if], [male.L-drum.style   Instr]
       kó≡ỳ   yǎ꞉-bà⇒,   [ñὲ-n≡î꞉   dèy]
       Nonh=Foc   go.Impf-3PlS,   [woman-Sg=**it.is** if]
       [yà꞉-lɔ̀gú   lè]   yǎ꞉-bà⇒
       [female.L-drum.style   Instr]   go.Impf-3PlS
       '(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.' (ǎ-n, ñɛ̌-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-nɔ̀wⁿɔ́   [cɛ̀:   pɔ̀rbá]≡ỳ
             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-3PlS   if]
             kòn-cɛ̌j-ú   [sèrèwé   lè≡y]
             navel.L-cut-VblN   [knife   with≡**it.is**]
             'When they bear a child (=a child is born), cutting the navel (=umbilical cord) is with a barber's knife.' (nàrⁿá-) **2004.3.12**

Another example is (1010) in §17.1.5 ('this place is my livelihood').

An independent pronoun may be the complement of ≡ỳ (649). The clitic may also take a **PP** or other adverbial as its complement (650).

(649)   [wò   ké]   mí≡ỳ   là:
        [3Sg   Topic] 1Sg≡**it.is**   Neg
        'He/She is not me.' (for là: see §11.2.1.3, below]

(650)   [ámà   jɛ́]≡ỳ   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** ≡ỳ 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 ≡ỳ 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, yⁿ)

   1Sg   ≡ùm   ≡ûm   ≡m̀
   1Pl   ≡ì: ≡î: ≡ỳ
   2Sg   ≡ù: ≡û: ≡ẁ
   2Pl   ≡ì:-bè   ≡î:-bè   ≡ỳ-bè
   3Sg   ≡ì: ≡î:-Ø   ≡ỳ-Ø
        [≡wɔ̀-Ø occasionally added]
   Nonh   ≡ì: ≡î:-Ø   ≡ỳ-Ø
        [≡kɔ̀ occasionally added]
   3Pl   ≡ì:-bà   ≡î:-bà   ≡ỳ-bà

In the **postvocalic** forms (rightmost column), we observe the ≡ỳ 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) ≡ỳ clitic. Perhaps the historical driver of this reduction came in the 1Pl, whose original *≡ỳ-ỳ 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 /≡m̂/. 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/ > /≡ŵ/ > /≡ûw/. However, it needs a final rule, Monophthongization (93) to ≡ú:, 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/ > /≡ŷ/ > /≡îy/.

It is possible to add a cliticized form of the 'be' quasi-verb after ≡ỳ, instead of the conjugated forms given above. In practice, this is uncommon, and is chiefly implemented with 3Sg ≡wɔ̀-Ø, hence …≡ỳ≡wɔ̀-Ø. In effect, this provides the 3Sg with a conjugated form of ≡ỳ that is audibly distinct from the unconjugated form. See (676) in §11.2.2.3 for ≡ỳ≡wɔ̀-Ø.

The conjugated variants undergo the same tone rules that apply to unmarked ≡ỳ. Examples with ă-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   í-n≡ù-m   pàntá≡m̀
       2Sg àn≡û: í-n≡ù: pàntá≡ẁ
       3Sg àn≡î: í-n≡ì: pàntá≡ỳ

   b. 1Pl àrⁿ-úm≡î: úrⁿ-ùm≡î: ádémá:≡ỳⁿ
       2Pl àrⁿ-úm≡î:-bè   úrⁿ-ùm≡î:-bè   ádémá:≡ỳⁿ-bè 3Pl
       3Pl àrⁿ-úm≡î:-bà   úrⁿ-ùm≡î:-bà   ádémá:≡ỳⁿ-bà

Examples of the inflected-clitic construction are in (653).

(653) a. [bè   ké]   [nù-núwⁿò∴   dà:ɣá∴   fú:⇒]
           [3Pl   Topic] [Rdp-daytime.Loc.HL night   all]
           dàná-m]≡ì:-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   pàŋá   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   wàɣá]
       [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 …' (≡ỳ là:)

The great majority of textual occurrences of là: occur in the combination [X≡ỳ
là:] 'it is not X', where là: negates a predication with the 'it is' clitic ≡ỳ (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. dɔ̀rɔ́≡ỳ   là:⇑,   ɛ̀w≡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.'
           (ɛ̌w) **2004.3.1**

       b. [ì:ⁿ   kò   kúnò-Ø   kùⁿ]
           [child.L   NonhS.L   put.Perf.HL-Ppl.Nonh   Def]
           [ì: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≡ỳ là:] 'it is not X' is the conditional
antecedent clause [X≡ỳ 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≡ỳ là: dèy] are in (655); see also (392.b).

(655) a. [íné-m   mɔ̀rⁿɔ́   dê:≡ỳ   là: dèy]
           [person-Pl be.togethercarry.Impf≡**it.is** **Neg**   **if**]
           [íné-n   túrú-n   dé: gɔ̀rⁿɔ̀-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   tὲmὲ-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≡î: là: dèy,
    [first-first Def],   man-Sg≡it.is   Neg   if,
    ñɛ̌-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≡î: là: dèy]   kɔ̀:-rɔ́
       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) àɣá   [wò   dê: bé]≡ỳ   wó   ô:,
       husband [3SgP.L father.HL Pl]≡Foc   3SgO   give.Impf,
       [ñɛ̌-n   ké]   [èné mà   î-n]   ó: bὲrὲ-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 <u>her fathers</u> [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 ⸗ỳ 'it is' and the Negative morpheme are conjugated. Since bâːⁿ 'owner' is vowel-final, the relevant instance of ⸗ỳ is phonologically fused with 2Sg suffix -w as ⸗ẁ (then nasalized to ⸗ẁⁿ).

(658)   [jámáː⸗ỳⁿ]   báːⁿ⸗ẁⁿ   là-w   tán
        [crowd⸗Foc] owner⸗**it.is.2SgS** **Neg-2SgS**   only
        'if you-Sg are not a member of a <u>crowd</u> [focus], …' (jámâː, bâːⁿ)
        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⸗îː-bè), suggesting that double conjugation is somewhat restricted.

(659)   [jámáː⸗ỳ]   nám⸗îː   là-bè   tán
        [crowd⸗Foc] owners⸗**it.is**   **Neg-2PlS**   only
        'if you-Pl are not members of a <u>crowd</u> [focus], …'

If only the short-voweled type were found, one might use it as evidence that Negative làː 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** làː- 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 ⸗ỳ is the Focus marker (or perhaps jointly 'it is' and Focus).

(660)   a.   tɔ́ːwⁿɔ́⸗ỳⁿ   làː-bè   dèy
             group⸗**Foc/it.is**   **Neg-2PlS**   if
             'if you-Pl are not (part of) <u>a group</u> [focus]'

        b.   ànsáːrá⸗ỳ   làː-bà
             white.person⸗**Foc/it.is**   **Neg-3PlS**
             'They are not <u>whites</u> [focus].'

The positive counterpart of (660.a) is tɔ́:wⁿɔ́≡ỳⁿ-bè dèy. (660.a) itself was volunteered by my assistant as a (polarity-reversed) paraphrase for textual example (661), where tɔ́:wⁿɔ́≡ỳⁿ is overtly focalized.

(661)   tɔ́:wⁿɔ́≡ỳⁿ   bɛ̀rɛ̀-bè   dèy
        group≡**Foc**   obtain.Perf.L-2PlS   if
        'if you-Pl have gotten (=put together) <u>a group</u> [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 ≡ỳ, but I hear no such clitic on sày (L-toned variant of sǎy 'only'). If ≡ỳ were present, we would get sǎy≡ỳ, 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 ≡ỳ. 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 (*yɛ́*)

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 yɛ́ sà- 'have' (§11.5.1), yɛ́ jì nè- 'have possession of' (§11.5.2), yɔ́≡kùn- 'be in' (§11.2.3), and the existentials yɔ́≡wɔ̀- 'be (human)' and yɔ́≡kɔ̀ '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 jìné-, yɛ́ is used in the possessive reading, but not in the non-possessive sence 'hold'.

I interpret Existential yɛ́ as indicating that the existential-locational or possessive quasi-verb is **not defocused**. yɛ́ is absent when there is a true focalized constituent. Therefore yɛ́ is absent in (663), where an interrogative element functions as focalized constituent.

(663) a. ǎːⁿ≡ỳ   ì jú   jì nè
           who?≡Foc   dog   hold.Perf.L
           'Who has a dog?'

       b. [ì ñé   jɛ́]   ì jú   jì nè-wⁿ
           [what?   for]   dog   hold.Perf.L-2SgS
           'Why do you-Sg have a dog?'

When yɛ́ is present, jìné- in the sense 'have possession of' appears in L-toned unsuffixed Perfective form. The other possessive and existential-locational quasi-verbs likewise occur in main clauses only in an L-toned form (sà-, wɔ̀-, kɔ̀-) interpretable as unsuffixed Perfective. The unsuffixed Perfective for other verbs is associated with the presence of a focalized constituent. This suggests that yɛ́ itself functions as a **default focalized constituent**, in the absence of a "real" focus.

yɛ́ 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 yɛ́ in (664) with the immediately following clause ('if you-Sg have …') where the same 'have' quasi-verb is preceded by yɛ́.

(664) ì nè   nùmɔ̀-bíré   sá-m̀   nè,
       person.L   hand.L-work   **have**.HL-Ppl.Pl   now,
       nùmɔ̀-bíré   yɛ́   sà-w   tàŋà   dèy
       hand.L-work **exist** **hav**e.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 yɛ́ may have **originated as a demonstrative element**, cf. demonstrative adverb yɛ́-dìːⁿ '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 yɛ́ 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 -yɛ̀-/-yà- on inflected verbs (§10.1.2.3) is probably unrelated.

yɛ́ is usually immediately adjacent to the verb, but if a direct object clitic intervenes between the two, as in yɛ́ kó jèrè-bà 'they (have) kept it' (674.a).

11.2.2.2 *Locational quasi-verbs (wɔ̀- or kɔ̀, usually without yɛ́)*

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-, -âː-, -jè-, -tɛ́rɛ̀-) are not possible. Imperfectives are extremely rare, only a single instance of wɔ́ː-tɔ́ɣɔ̀- 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 wɔ́- for the human quasi-verb is arguably lexically basic, though it actually occurs as such only in lexical-stem pseudo-participial wɔ́-n (§3.7.1.1, §15.1.1.3).

Examples, illustrating the regular use of these forms **with overt locational expressions**, and without yɔ́, are in (666).

(666)   a.   dúwán   wɔ̀-m
             Douentza   **be.Hum**-1SgS
             'I am in Douentza.'

    b. [àná   bérɛ̀]   wɔ̀-bà
       [village   in]   **be.Hum**-3PlS
       'They are in the village.'

    c. [kó   àrgá   lɛ̀]   wɔ̀-y
       [NonhP side   in]   **be.Hum**-1PlS
       '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. ǎː≡ỳ   nì -dîːⁿ   wɔ̀
        who?≡**Foc** here   **be.Hum**
        'Who is here?'

      b. ì ñé≡ỳ   kɔ̀
        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 lɛ̀ can mean 'in' or 'with' (§8.2.1)

(668) [nùmó mà wɔ̀-túmó]≡ỳⁿ dèy jùgó-ẁ]
      [hand   Poss ridge≡it.is   if   know.Impf-2SgS]
      [tèŋé-tèŋé   lɛ̀]   kɔ̀,
      [segment-segment with]   **be.Nonh**,
      [sàrîː   mà wɔ̀-túmó] tèŋé   sàː-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 wɔ̀- or kɔ̀ must be lengthened (Contour-Tone Mora-Addition (141)) to accomodate 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. ñὲ-m   nì-dî:ⁿ   wô-m
           woman-Pl   here   **be.Hum**.HL-Ppl.Pl
           'the women who are here'

       d. lù:rò   kò-rú   mòñú   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 yέ 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   yɔ́≡wɔ̀-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 tέmέ-wⁿέ- 'be found'.

A preceding Existential yέ, in the assimilated form yɔ́, is sometimes present in locational function (671). However, the combinations yɔ́≡wɔ̀- and especially yɔ́≡kɔ̀ are more systematically used in existential function. There is, moreover, evidence that yɔ́ (i.e. yέ) is associated with the absence of a focalized preverbal constituent (§11.2.2.1). Since wɔ̀- and kɔ̀ 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   yɔ́≡wɔ̀-m
           house.Loc.HL   **exist≡be**.Hum-1SgS
           'I am/was at home' **2004.3.2**

b. [[kó   kùⁿ]   nám   kâːⁿ   nè]   yɔ́≡wɔ̀-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**

wɔ̀- and kɔ̀ 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   [ñɛ̌-m   nǎyⁿ]   wɔ̀-bè   dèy,
        2Pl   [woman-Pl   four]   **be.Hum**-2PlS   if,
        é   nǎyⁿ   cêw   dì gì 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 ≡wɔ̀- or ≡kɔ̀ after inflected verb or 'it is' clitic

Occasionally, cliticized ≡wɔ̀- or ≡kɔ̀ 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 ≡wɔ̀-
'be' (or nonhuman ≡kɔ̀). Compare (673.a) with (673.b). The latter has **double
pronominal-subject inflection**.

(673)   a. íj-âː-m
            stand-Perf-1SgS
            'I am standing.'

        b. íj-âː-m≡wɔ̀-m
            stand-Perf-1SgS≡be.Hum-1SgS
            'I am already standing.'

≡wɔ̀- or ≡kɔ̀ (or reduplicated variant) may also be used after a marked
Imperfective verb with suffix -tɔ́ɣɔ̀- (§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 -wɔ̂ː- (§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 kɔ̀ (in participial form kɔ̂ː-). (674.e) has a 1Pl subject.

(674)   a.   àrⁿ-úm   yǎː   [kó   kùⁿ]   mɔ̀rⁿɔ́-bà   [nɛ́yⁿ ké],
             man-Pl   go   [Nonh Def]   be.together.Impf-3PlS   [now Topic],
             [dàːɣá≡ỳ   làː⇒↑] [nù-núwⁿɔ̀≡ỳⁿ   làː]   yɛ́
             [night≡it.is Neg]   [Rdp-daytime.Loc.HL≡it.is Neg]   exist
             kó   jèrè-bà,   [jǎːⁿ-tɔ́ɣɔ̀   ẁı-wɔ̂ː-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.   jǎːⁿ-tɔ́ɣɔ̀≡wɔ̀-Ø
             dig-**Impf≡be.Hum**-3SgS
             'He/She keeps digging.'

        c.   jǎːⁿ-tɔ́ɣɔ̀-Ø
             dig-**Impf**-3SgS
             'He/She is digging.'

        d.   nìː   góː-tɔ́ɣɔ̀   kɔ̂ː-Ø
             water.L   go.out-**Impf**   **be.Nonh**.HL-Ppl.Nonh
             [jìrⁿéː.   nì-bárⁿáː.   fúː⇒]   [níː
             [rainy.season dry.season   all]   [water
             dìːⁿ   góː≡kɔ̀-Ø]   kɔ̀-rú   kɔ̂ː-rɔ́
             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≡îː   kó   bı̌t-tɔ́ɣɔ̀≡wɔ̀-y
             well   thus≡Foc   NonhO   work-**Impf≡be.Hum**.L-1PlS
             'Well, <u>that</u> [focus] is how we're working on it (=government).' (bı̀ré-) **2004.4.23**

The first segment of Text 2 has a verb with -tɔ́ɣɔ̀ followed by participial wɔ̂ː-Ø in a temporal clause, with an intervening L-toned subject pronominal. Here the wɔ̂ː-Ø is clearly not cliticized to the verb with -tɔ́ɣɔ̀.

In (675), I take mɔrⁿɔ́ in mɔrⁿɔ́≡wɔ̀-y to be the unsuffied Imperfective /mɔrⁿɔ́- L/, whose L-tone merges with that of the quasi-verb. Again, wɔ̀- but not the main verb is inflected pronominally.

(675) cín   mɔrⁿɔ́≡wɔ̀-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 ≡wɔ̀-Ø 'he/she is' added to an 'it is …' predication with clitic ≡ỳ (allomorph ≡î:). Parallel examples with e.g. 1Sg wɔ̀-m 'I am' after ≡ỳ were elicited, but it may be that the construction is mainly used with 3Sg wɔ̀-Ø, which lacks a nonzero subject suffix following ≡ỳ 'it is'. In both examples, clitic ≡ỳ is added to a participle in agentive function.

(676) a. [wó   nò]   [[ɛ̀né   mà   dɔ̀ɣɔ̀-ñɛ̌-n]
           [3Sg   now]   [[Refl   Poss   Dogon.L-woman-Sg]
           mà   tì-tì rù-yá:-n]≡î:≡wɔ̀-Ø
           Poss   Rdp-message.L-go.H-Ppl.Sg]≡**it.is**≡**be.Hum**-3SgS
           'She (=blacksmith woman) now [topic], she is the messenger of her (freeborn) Dogon woman.' **2004.3.13**

       b. [dá:rá   mà   ì nè   gǎ-n]
           [clan   Poss   person.L old-Sg]
           [kó   dònò-ŋó-n]≡ì:≡wɔ̀-Ø
           [NonhO   finish-Caus.Impf-Ppl.Sg]≡**it.is**≡**be.Hum-3SgS**
           'The oldest man in the clan, he will be the one to bring it (=squabble) to an end.'(dònò-ŋó-ǹ) **2004.4.6**

Actually, (676.a-b) are syntactically ambiguous, since ≡ỳ (and allomorph ≡î:) can also function as the Focus clitic. I do not think that ≡ỳ has focalizing function here, but the possibility cannot be excluded. In (677), focalization is present (cín 'thus' is commonly focalized). I therefore do not consider (677) with ≡kɔ̀ to be parallel to the preceding examples (676/a-b) with ≡wɔ̀-Ø.

(677) lá:-lá: cín≡î:≡kɔ̀   jì:ⁿ
       first-first thus≡**Foc**≡**be.Nonh**   Past
       'Long ago, <u>that</u> [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 yɛ́ (yɔ́) is absent in negative sentences. kɔ̀:-rɔ́- is common for human as well as nonhuman reference in existential (as opposed to locational) function.

(678)   a.   wɔ̀ː-rɔ́-   'not be' (human)
      b.   kɔ̀ː-rɔ́-   'not be' (nonhuman, sometimes human)

The unusual combination of lengthened first vowel and Negative -rv́- (instead of the usual Perfective Negative -lí-) is elsewhere observed only with 'have' (positive -sà-, negative sà:-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 -rv́- and -lá- is historically suggestive. Examples are in (679).

(679)   a.   [àná   bɛ́rɛ̀]   àrⁿ-úm   kɔ̀ː-rɔ́
          [village   in]   man-Pl   **be.Nonh-Neg**
          'There are no men in the village.'

      b.   úrⁿ-ùm   nì-dîːⁿ   wɔ̀ː-rɔ́-bá
          child-Pl   here   **be.Hum-Neg**-3PlS
          'The children are not here.'

kɔ̀ː-rɔ́ 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, kɔ̀ː-rɔ́ is usually generalized to human as well as nonhuman reference: 'anyone who didn't go, he/it doesn't exist (kɔ̀ː-rɔ́)' = 'everyone went'. See §14.1.2.

    There is no causative of wɔ̀- or kɔ̀ in any sense.

11.2.2.4   *Existential quasi-verbs (kɔ̀, sometimes wɔ̀-) with yɔ́*

The form kɔ̀, 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, kɔ̀ is cliticized to Existential yɔ́ (assimilated from yɛ́, §11.2.2.1).

(680)   a.   [àrⁿ-ùm   tàrá   yà:-lú-m]
          [man-Pl.L   collective.hunt   go-PerfNeg-Ppl.Pl]
          [úrò   bé:-m̀]   yɔ́≡kɔ̀
          [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, yɔ́≡wɔ̀- is also possible but is less common in texts than yɔ́≡kɔ̀. A textual example of 3Pl yɔ́≡wɔ̀-bà is (681). Other forms include 1Pl yɔ́≡wɔ̀-y 'we are (here)' and yɔ́≡wɔ̀-m 'I am (here)'.

(681) [pùlɔ̀-m   jóː-m]   yɔ́≡wɔ̀-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 yɔ́≡kɔ̀, producing yɔ́≡kɔ̀-bà. This is an optional form (attested but not very common in texts), referring to a nonhuman plurality (usually animate).

(682) a. [[ɛ́mɛ́ èjù-bómó] mà   bɛ̀rɛ̂ː]   lùːró yɔ́≡kɔ̀-bà
           [[1PlP brousse]   Poss in]   snake exist≡be.Nonh-**3PlS**
           'In our brousse (wilderness), there are some snakes.' **2004.3.5**

       b. [cì gɛ̀   ñúː   ñùnù-ŋó≡kɔ̀-Ø
           [thing.L   millet   be.ruined-Caus.Impf≡be.Nonh-Ppl.Nonh
           yɔ́≡kɔ̀-bà
           exist≡be.Nonh-**3PlS**
           'There are things that are harmful to millet.' **2004.3.7**

The negative counterparts are again kɔ̀ː-rɔ́ and wɔ̀ː-rɔ́-, with "Nonhuman" kɔ̀ː-rɔ́- often extended to humans.

(683) a. ñúː   kɔ̀ː-rɔ́
           millet   **be.Nonh-Neg**
           'There is no millet.'

       b. [àná   bɛ́rɛ̀]   î-n   kɔ̀ː-rɔ́
           [village   in]   child-Sg   **be.Nonh-Neg**
           'There is no child (=there are no children) in the village.'

       c. nì-dîː^n≡ỳ   wɔ̀ː-rɔ̀-bà
           here≡Foc   **be.Hum.L-Neg**-3PlS
           'They are not <u>here</u> [focus].'

An alternative (in some contexts) to the 'be, exist' quasi-verbs is kár^{n}á- (§11.1.7), here used intransitively, in the sense 'be done, be produced', as in (684).

(684)   [yògó nàŋúrⁿù]   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 wɔ́:- and kɔ́:-

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 wɔ́:-tɔ́ɣɔ̀- turned up in a text (685.a), and a parallel form with nonhuman kɔ́:-tɔ́ɣɔ̀- was elicited (685.b).

(685)   a.   [*Agadès*   bɛ́rɛ̀]   wɔ́:-tɔ́ɣɔ̀   mèyⁿ
             [A   in]   **be.Hum**-Impf   and
             'while (we were) staying in Agadès (city in northern Niger)'
             2004.5.5

        b.   [*Agadès*   bɛ́rɛ̀]   kɔ́:-tɔ́ɣɔ̀   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 kûn-Ø (819), human Sg kún-ìn (467.c) and human Pl kún-ùm (688).

    Existential yɛ́ regularly precedes intransitive kùn- in positive main clauses in the absence of another focalized constituent. When the two are adjacent, the

pronunciation is yɔ́≡kùn-. Based on the vocalic assimilation (rounding), I treat this combination as cliticized, cf. yɔ́≡kɔ̀ and yɔ́≡wɔ̀- with 'be' quasi-verbs.

kùn- 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 bérè or bèrê: 'in, inside' (686.a-c), or sometimes with the all-purpose postposition lè 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. èñɛ́   [èñɛ̀-ùgú   bérè]   yɔ́≡kùn-Ø
           chicken [chicken.L-coop in]   **exist≡be.in**.Perf.L-3SgS
           'The chickens are inside the chicken coop.'

       b. [nì -nɔ̀ːrⁿɔ́   bè   gâː-Ø]
           [Rdp-spider   3PlS.L   say.Perf.HL-Ppl.Nonh]
           [kó   bèrê:]   yɔ́≡kùn-Ø
           [Nonh   in]   **exist≡be.in**.L-3SgS
           'What they call "spiders" are in it (=millet).' **2004.3.8**

       c. [ùrò   pɔ́ːrɔ́   bè   mâː-Ø]
           [house.L first(adv) 3PlS.L   build.Perf.HL-Ppl.Nonh]
           [[ànà   kàná] mà bèrê:]   yɔ́≡kùn-Ø
           [[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. [[gàmà-nám   mà   dígɛ́]   lè]
           [[certain-Pl   Poss   thigh]   in]
           màlfàːⁿ-íːⁿ≡ỳ   kùn-Ø   jìːⁿ
           rifle-child≡Foc   **be.in**.L-3SgS Past
           '<u>Bullets</u> [focus] were in the thighs of some (of them).' (= 'Some of them had taken bullets in the thigh.') **2004.5.1**

The phrase [dɔ́yⁿ lè] sìr kûn, literally 'knife (sìrú) 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 kùn- is kùn-ó-. The LH tone contour of this form distinguishes it from (positive) kúnó- 'put' and its unsuffixed Perfective variants kùnò- and (in perfective relatives) kúnò-. As usual, Existential yɛ́ is absent from negative clauses.

(687) [kò∴. fú:] [[cɛ̀: pɔ́sɔ̂ŋ [kó bɛ̀rɛ̂:]
       [Nonh all] [[thing.L poison [Nonh in]
       kùn-ó-Ø]   kɔ̀:-rɔ́
       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. There is no morphological causative ('cause to be in'). Transitive kúnó- 'put' fulfills this semantic function.

(688) [à-mâːn bé] yɔ́≡kùn-bà,   [à-mâːn 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 lámpò] mà dǎyⁿ]
       [[[person.L **be.in**.HL-Ppl.Pl] Poss tax] Poss limit]
       dòg-âː-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**

A similar defective verb, not very common, is nàː- 'be (up) on (e.g. roof, tree)'. The negative form is nàː-lá- 'not be (up) on'. Compare the regular (and very common) transitive verb náːná- 'put (sth) up on (sth)'.

11.2.4 Stative stance verbs dàːⁿ- 'be sitting', ùmò- 'be lying down'

In active senses, 'sit down' is dì ŋé- 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 C̀vCv́ bisyllables (except yàŋá- 'look') have HH-toned imperatives (§10.4.1). The Imperative stems are dì ŋé and ì ñé.
    A few examples involving dì ŋé- 'sit down' will illustrate its basic regularity. (689.a) contains both an unsuffixed Imperfective dì ŋê- and a suffixal Perfective -dì ŋ-âː-. (689.b) has an L-toned unsuffixed Perfective, while (689.c) is a Perfective Negative.

(689) a. [bé nè] yɛ̀rɛ́ dì ŋé-bà,
           [3Pl now] come   **sit.Impf**-3PlS

yèré   díŋ-âː-bà   táŋàː   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-dìːⁿ   yèrέ   dɔ́ː   dì ŋè-bà
     here   come   arrive   **sit.Perf.L**-3PlS
     '<u>Here</u> [focus] they (=Dogon ancestors) came and settled.' **2004.3.11**

  c. dì ŋè-lí-Ø
     sit-PerfNeg-3SgS
     'He/She did not sit down.'

In addition to the active intransitives dì ŋé- '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 dàːⁿ- **'be sitting'** (i.e. 'be seated, be in
sitting position') appears in the L-toned unsuffixed Perfective dàːⁿ-, with a
preceding constituent (such as a locational) that might be taken as focalized.

(690) a. nì -dîːⁿ   dàːⁿ-bà
        here   **sit**.Perf.L-3PlS
        'They are sitting <u>here</u> [focus].'

     b. [έmέ   jàmsǎy   bé≡ỳ]
        [1Pl   Jamsay   Pl]
        yí-dìːⁿ   [ùjùbǎy   kûːⁿ]   dàːⁿ-yⁿ
        here   [country   on]   **sit**.Perf.L-1PlS
        'We Jamsay, here <u>on this land</u> [focus] we are settled.' **2004.3.11**
        [excerpt from (213)]

     c. yɔ̌ː-dìːⁿ   dàːⁿ-Ø
        where?-place   **sit**.Perf.L-3SgS
        '<u>Where</u> [focus] is he/she sitting?'

     d. ǎː≡ỳ   dàːⁿ-Ø
        who?≡Foc   **sit**.Perf.L-3SgS
        '<u>Who</u> [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 dâːⁿ-. Examples in (69a); see also (226.c), (864.d), (866.b).

(691)   a.   [[kó   kùⁿ]   mà   kûːⁿ]   dâːⁿ-m   yɔ́≡kɔ̀
            [[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.   [dìːⁿ   ní   ɛ̀mɛ̀   dâːⁿ-Ø   lè]
            [place.L   here   1PlS.L   **sit**.Perf.HL-Ppl.Nonh   in]
            'here in the place where we are sitting (=living)' **2004.3.11**

Reduplicated Perfective dì-dâːⁿ- is used instead of unsuffixed Perfective dàːⁿ- in main clauses when there is no focalized constituent (692).

(692)   dì-dâːⁿ-bà   sǎy
        Rdp-**sit**.Perf.HL-3PlS   only
        'They are just sitting (=seated).'

I have one attestation of dáːⁿ- with Imperfective -tɔ́ɣɔ̀-, in a chain construction (693).

(693)   [jɔ̀wⁿlè   ànà   pěyⁿ]   dáːⁿ-tɔ́ɣɔ̀   mèyⁿ, …
        [Dianwely.L village.L old]   **sit**-Impf   and, …
        'Sitting (=dwelling) in Old Dianwely, …' **2004.3.11**

Unlike dìŋé- 'sit down', which takes regular Perfective and Imperfective Negative suffixes, stative dàːⁿ- is negated by adding -lá-, a Negative suffix used with adjectival predicates and some other statives (§11.4.3)..

(694)   nì-dîːⁿ   dàːⁿ-lá-bá
        here   **sit**.Perf.L-Neg-3PlS
        'They are not sitting <u>here</u> [focus].'

ùmɔ̀- **'be lying down'** (i.e. 'be in prone position') behaves grammatically like dàːⁿ- '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:]≡ỳⁿ   ùmò   wá
      [3SgP.L mother.HL]≡Foc be.lying.down.**Perf.L**   say
      'He said, "<u>your mother</u> [focus] is lying down (here)".' **2004.4.1**

    b. ì-úmò-m
      Rdp-be.lying.down.**Perf**.HL-1SgS
      'I am lying down.'

    c. ìnè   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 íjé- 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 dìŋé- 'sit down' and dà:ⁿ- 'be sitting'. In form, it is probably related to dìŋé- 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' (dìgè-lá-)

dìgé-, 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,
      yìlìwé   mèyⁿ⇑,
      stroll   and

èñέ   [[má   èñέ]≡ỳ]   dì gὲ-lá-Ø
chicken   [[1SgP chicken]≡it.is] **be.connected-Neg-3SgS**
[[má   èñέ]≡ỳ   là:]   dì gὲ-lá-Ø
[[1SgP chicken]≡it.is Neg]   **be.connected-Neg-3SgS**
kó   bӗj-jὲ-bà   dὲy,   láɣá-bà
NonhO   get-RecPf-3PlS   if,   hit.Impf-3PlS
'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.' (bὲrέ) **2004.3.18**

This dì gὲ-lá- may be conjugated pronominally, in the sense '(X) doesn't
care'.

(697)   [mì   nâ:]   cé≡ỳ   dì gὲ-lá-bá,
         [1SgP.L mother.HL] possession≡it.is be.connected-Neg-**3PlS**,
         [ù   nâ:]   cé≡ỳ   dì gὲ-lá-bá
         [2SgP.L mother.HL] possession≡it.is be.connected-Neg-**3PlS**
         '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 gὲ-lá-, which may take a further pronominal-subject suffix
as just shown, is distinguishable from dì gὲ-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 dìgὲ-lí-, the Perfective Negative of the (non-stative) verb dìgέ-.

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.   [àrⁿ-ùm   pómúrⁿú]   [úrⁿ-ùm   mà   bὲrê:]
               [man-Pl.L Ongoiba]   [child-Pl Poss   in]

tàrá   yà:-gó-m   bé:-yà   táŋà: 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. [lóɣɔ   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. [ñɛ̌-n   kùⁿ]   [àrⁿà-kùjú   pér]≡î:
    [woman-Sg Def]   [year   ten]≡Foc
    [ɛ̀nɛ́ bé úrò]   bê:-Ø   kâ:ⁿ
    [Refl PlP 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:≡kɔ̀ '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) ǎ-n   [ñɛ̌-n   lè]   cí-cɛ́w   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:∴   dɔ̀ɣɔ̌-m∴] mà   gǎnɲ̀   mà   bé:-gú
       [[3Pl   Dogon-Pl] Poss among   Poss **existence**
       mà   kû:ⁿ]   ɛ̀mɛ̌-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' (táŋá-)

The verb táŋá- is a basic 'become' verb, with nominal complement.

(701)　ɔ̀ɣɔ̀-î-n　　　　táŋá-ẁⁿ　　　　　dèy
　　　　chief-child-Sg　become.Impf-2SgS　if
　　　　'if you-Sg become a noble' **2004.3.12**

A morphologically unusual form táŋàː, 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 factitve complement in main-clause form (702).

(702)　[dùŋ-yàrá　　　góː-yà]　　　táŋàː　　　　mà ?
　　　　[lion　　　　　go.out-Perf]　happen　　　Q
　　　　'Did it (ever) happen that a lion appeared?' **2004.3.2**

The majority of occurrences of táŋàː are in the combination [...] táŋàː 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.

táŋá- 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 táŋá- 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 gáː- 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' (gáː-)

The stem that has the most features of a regular verb is gáː- (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 gâː-Ø after Contour-Tone Mora-Addition (141).

(703) a. núŋò   gàː-lí-Ø
           Dem   **say**-PerfNeg-3SgS
           'He/She did not say that.'

     b. dɔ̀ɣɔ̌-m   sùm-pégù   gâː-Ø   yɔ́≡kɔ̀
           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-ẁ
           Dem   **say**.Impf-2SgS
           'You-Sg will say that.'

     d. gàː-l-á
           say-PerfNeg-3PlS
           'They did not say.'

More examples of short-voweled Imperfective /gâ-/ are 3Pl gá-bà (403), 1Pl gá-ỳ (999.c), and Plural participle gá-m̀ (842).

For gàː-lú-m 'did I not say?' as a backchannel-checking phrase, see §19.6.

There is a Verbal Noun gà-ý 'saying', and a causative gáː-wá- 'cause to say'; both are (morpho-)phonologically regular from gáː-. Long-voweled gáː- also occurs in the bare stem used in verb chains (704).

(704) " … " gáː   bèrɛ́-m̀
       " … " say   be.able.Impf-1SgS
       'I can say that …' **2004.3.7**

A form, often with 3Pl subject, of gáː- '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 gà 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' (jὲ-)

jὲ- '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 jɛ̀-m, 1Pl jɛ̀-y, 2Sg jɛ̀-w, 2Pl jɛ̀-bɛ̀, 3Sg jɛ̀-Ø, 3Pl jɛ̀-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 jɛ̀- as the focus (when there is no other focalized constituent).

(705) a. ì ñé≡ỳⁿ   jɛ̀-w
           what?≡Foc   **say**.Perf.L-2SgS
           'What did you-Sg say?'

       b. [ɛ̀nɛ́   mà   èjú   mà   tɔ̀jɔ́]
           [Logo   Poss   field   Poss   compensation]
           [hínnɛ̀   má:n]≡ì: jɛ̀-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. [jɛ́mɛ̀-n   nɛ̀] yɔ̌:-jìn [í:rⁿé   kùⁿ]   bì rɛ̂:-Ø
           [blacksmith-Sg now] how?   [metal   Def] work.Impf-3SgS
           mà⇑   jɛ̀-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   jɛ̀-Ø   tán]
           [2SgO   want.Impf-3SgS   **say**.Perf.L-3SgS only]
           ù-rú   dèné-m̀
           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 /jɛ̂-/. Before zero suffix, it is automatically lengthened to jɛ̂:-by Contour-Tone Mora-Addition (141).

(706) a. cɛ̀:   ù   jɛ̂:-Ø
           thing.L   2SgS.L   **say**.Perf.HL-Ppl.Nonh
           'what you-Sg said'

b. nɪ̀ːñ̀ɛ̀ …   ɛ̀mɛ̀   jɛ̂ː-Ø
   gear.L   1PlS.L   **say**.Perf.HL-Ppl.Nonh
   'the gear that we said …' **2004.3.24**

One may substitute gâː-Ø 'said' or tégè-Ø 'spoke' for jɛ̂ː- in (706) without changing the sense. However, because gá- is an H-toned monosyllabic stem, the form gâː-Ø is ambiguous between an unsuffixed Perfective with overlaid H(H…)L tone, and an unsuffixed Imperfective with final-syllable F-tone.

Expected 3Pl jɛ̀-bà is sometimes simplified to jɛ̀-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   [ɛ́mɛ́   gàː-ná   bɛ̀ré-bà]   jɛ̀-Ø
       person-Pl [1PlO   go.past-Caus can.Impf-3PlS] **say**-3SgS
       'Some people said they could take us across (the border).' **2004.5.5**

While H-toned inflected #jɛ́- 'say' does not occur, an H-toned jɛ́ that is probably identical historically to this 'say' verb is common as a temporal-clause subordinator, either as simple jɛ́ or, more often, in the combination jɛ́ mèyⁿ (§15.2.2.2). In (1236) in Text 2, jɛ́ is followed by tègè-Ø 'he spoke' in a context where 'he said' would be reasonable; here it is difficult to determine whether jɛ́ 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 jɛ́, which has some verb-like properties (§8.4). Recent Perfect suffix -jɛ̀- 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 ≡kɔ̀. For human subject, it is based on ≡wɔ̀-, 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.   ér≡kɔ̀
              sweet≡be.NonhS
              'It is sweet (=it tastes good)'. (érù)

         b.   gùrú≡wɔ̀-bà
              long≡be.Hum-3PlS
              'They are long (=tall).'

         c.   těyⁿ≡wɔ̀-m
              small≡be.Hum-1SgS
              'I am small.'

         d.   dém⇒≡wɔ̀-Ø
              straight≡be.Hum-3SgS
              'He (=his body) is straight.'

In **comparatives**, a predicative adjective may appear clause-finally without a 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 bè-rú gùrú-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≡ỳ   gùrù
           3Sg≡Foc   **long.L**
           'It's <u>he/she</u> [focus] who is long (=tall).' (gùrú)

       b. ǎː≡ỳ   gùrù
           who?≡Foc   **long.L**
           '<u>Who</u> [focus] is long (=tall)?' (gùrú)

       c. yɔ́kkɔ̀   ɔ̀gù   mà⇒
           which?   **fast.L**   Q
           'Which one is fast(=er)?' **2004.4.2**

       d. yɔ̌ː-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 ≡kɔ̀ and ≡wɔ̀- 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.   jɔ̀ː-lá-Ø
       many.L-**Neg**-3SgS
       'It isn't common (or frequent).' **2004.3.10**

    d.   sîː   tùl-lá-bá
       kind   one.L-Neg-3PlS
       'The kinds are not the same.' (túrú) **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 làː, a higher-level Negative used after clitic ≡ỳ '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 -tɔ́ɣɔ̀- (marked Imperfective) or -áːrà- (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 kɔ̀ː-rɔ́ 'it is not', as in (711.a). With adjectives, this construction was elicitable, as with wɔ̀ː-rɔ́- in (711.b) but did not occur spontaneously. Either kɔ̀ː-rɔ́ or wɔ̀ː-rɔ́- may drop tones, suggesting that they may be defocalized (a phenomenon associated with the unsuffixed Perfective of verbs).

(711) a.   dém⇒   kɔ̀ː-rɔ́   [or: kɔ̀ː-rɔ̀]
           straight   be.Nonh-**Neg**
           'It isn't straight.'

      b.   tĕy^{n} wɔ̀ː-rɔ̀-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 sáː- '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 yέ 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 yέ as in canonical possessive predicates.

(712) a. tɔ́:kὲ   yέ   sà-Ø
           nastiness exist   **have**-3SgS
           'It (=viper) has nastiness (=is nasty/dangerous)'.

       b. yá:gὲ   yέ   sà-Ø
           shame   exist   **have**-3SgS
           'He/She has (=feels) shame'. [excerpt from (557.a)]

       c. [[nì-nɔ̀:rⁿɔ́   kùⁿ]   lὲ]   nὲwⁿέ   yέ   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-ìn (653.c), and Pl sâ-m (713.b) or sán-ùm. In sán-ìn and sán-ùm variants, the n of sâ-n has been secondarily incorporated into the stem.

(713) a. ìjὲ   pàŋá   sâ:-Ø
           standing.L   strength **have**.Perf.HL-Ppl.Nonh
           'a standing that has power (=an important function)'

       b. [ìnὲ   tĕn   sá-m]≡ì:-bà   dὲy
           [person.L prudence **have**.Perf.HL-Ppl.Pl]≡it.is-3PlS if
           'if they are people who have prudence (=are prudent)' (sâ-m)
           2004.3.10

Existential yɛ́ is omitted in relative clauses, as shown in (430), (653.c), and (713.a-b). This is a characteristic of yɛ́ (§11.2.2.2, above). Further participial examples are in (714).

(714) a. íné-m   [dùndàŋá lè]   jéyɛ̀-m,
           person-Pl [elephant with]   fight.Perf.HL-Ppl.Pl,
           sǒː   ù   sâ-m   yɔ́≡kɔ̀
           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:rá   èmɛ̌-n   tɔ́rɔ́yɛ̀   sâː-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 sàː-rá-. This resembles the special negative forms of wɔ̀- and kɔ̀ 'be' (wɔ̀ː-rɔ́-, kɔ̀ː-rɔ́-). All of these are aspectually unmarked.

(715) bú:dù   sàː-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 sàː-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 sàː-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 -sàː-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** jìnè-, even with present time reference.

The second is that jìnè- (like sà-) is preceded by **Existential** yɛ́ (§11.2.2.1) in positive possessive predications, if there is no (other) explicitly focalized constituent. A chained verb may intervene between yɛ́ and jìné- (716.a). yɛ́ is not used before jìné- with lexical tones in the sense 'hold'.

(716) a. [màlfâːⁿ   yɛ́   dàrá   jìnè-Ø]
           [rifle   **exist** sling **have**.Perf.L-3SgS]
           tàŋà-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. jóː⇒   nàŋá   yɛ́   jìnè-bà
           many   cow   **exist** **have**.Perf.L-3PlS
           'They have many cattle.' **2004.3.10**

Thirdly, in possessive function ('have') jìnè- 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', jìné- has ordinary Perfective Negative and Imperfective Negative suffixes.

(717) a. [ìnè   gàmà-nám   yɛ́   sà-bà⇒],
           [person   certain-Pl   exist   have-3PlS],
           [ìnè   kó   jìré-m̀   kùⁿ kâːⁿ   nè] jìnè-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. jìnè-lá-m
           have-Neg-1SgS
           'I don't have any.'

The verb jèré- 'keep, have for oneself' is more or less interchangeable with, jìné-, and it has the same morphosyntax. Therefore, in the sense 'have', it regularly appears in the L-toned unsuffixed Perfective form jèrè-, is preceded by Existential yɛ́ in positive clauses in the absence of a focalized constituent, and is negated by -lá- (hence jèl-lá-) with no yɛ́ (718).

(718) a. yɛ́   kó   jèrè-m
            exist   NonhO   **have**.Perf.L-1SgS
            'I have it (on me).'

    b. [mí   màlfâːⁿ   yɛ́   jèrè]   wà
        [1Sg   rifle   **exist**   **have**.Perf.L] say
        'He/She says that I̱ [focus] have a rifle.'

    c. [ìnè   séwɛ̀   jèl-lá-n]   yɛ́-dìːⁿ   bɛ́ː   mèyⁿ
        [person.L paper   **have-Neg**-Ppl.Sg]   there   remain   and
        bírɛ́   bìré   bɛ̀rɛ̀-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. [sùrgɔ̌-n   nɛ̀]   [kì-kɔ̀rɔ̀-îːⁿ   cɛ̀ː
        [weaver-Sg   now]   [Rdp-shuttle-child   thing.L
        bɛ̀   gâː-Ø]   yɛ́   jèrè-Ø
        3PlS.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 cěː (variant cìgé) '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', ɛ̀mɛ̀ cé≡ỳ 'it is ours', etc., with L-toned inalienable possessor
pronominals). The ≡ỳ is the common 'it is' clitic. The negation is with làː
(719.b), as usual for the 'it is' clitic (§7.2.1.3).

(719) a. [nàŋá∴.   fúː]   [púlɔ̀-m   cé≡ỳ]
            [cow   all]   [Fulbe-Pl   **possession≡it.is**]
            'All of the cows [topic], they belong to the Fulbe.'

b. [kó   ɛ̂m]   [ù   cé≡ỳ   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 ≡ỳ 'it is' to a possessed noun.

(720) [kò   nàŋá   kù^n],
       [Dem   cow   Def],
       [ɛ́mɛ́   wàrù-wárá-m   mà   nàŋá]≡ỳ^n
       [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 [… verb$_1$] [… verb$_2$-inflection], and expanded chains like [… verb$_1$] [… verb$_2$] [… verb$_3$-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 unsuffixed Perfective).

(721)   [dójú lé]   ñùː-sěyⁿ   yɔ́≡kùn-Ø   [kò   ñúː   kùⁿ]
        [under in]   millet.L-grain exist≡be.in.L-3SgS [Dem millet Def]
        gɔ̌ːⁿ-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 ($\bar{v}_1$-$\grave{v}_1$ … $\bar{v}_2$-suffixes, $\bar{v}_1$-$\grave{v}_1$-$\bar{v}_1$-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-v_1 …
v_2-suffixes], or a verb plus two iterations [v_1-v_1-v_1-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 $\grave{v}$) (722). Another example is jǎː-jàː in (876.a). This iterative $\bar{v}_x$ $\grave{v}_x$
tone pattern is consistent with the tonal patterning of noniterative three-verb
chains of the type [$\bar{v}_1$ $\grave{v}_2$ $\bar{v}_3$-suffixes] (§15.1.1).

(722)   a.   ñě-m   àrⁿ-úm nàná-nànà   tàrá   tíː-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 ɛ̀nɛ́   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 ($\hat{v}_1$-$\grave{v}_1$[-$\grave{v}_1$ …])

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≡ỳ   [kó   jélgé⇒   dé:
           child-Pl   Def≡it.is   [Nonh   swinging take
           té:rè-tè:rè]   úrò   yèré   nû:, …
           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. [jɔwⁿlè   pɛ̌yⁿ]   gó: mèyⁿ,
           [Dianwely   old]   go.out   and,
           yɛ́rɛ̀-yɛ̀rɛ̀-yɛ̀rɛ̀-yɛ̀rɛ̀,   yɛ̀ré   mèyⁿ …
           come.HL-come.L-come.L-come.L,   **come**   and …
           'Having left Old Dianwely, (we) kept coming (here). (We) came
           and …' (yɛ̀ré-) **2004.3.11**

       c. kó   nàná   láɣà-làɣà
           NonhO   chase   **hit.HL-hit.L**
           'He (=boy) will chase it (=mouse), hitting it (over and over).'
           (láɣá-) **2004.3.16**

       d. … sáŋâ:-Ø   sárá gàrá kúnò-kùnò-kùnò   yǎ:
           … put.fence.Impf-3SgS   pass pass **put.HL-put.L-put.L** go
           [fútúrò   mà   wàkàtì   núŋò] dɔ́:-yɛ̀-Ø   dèy,
           [twilight Poss time.L   Dem] arrive-Perf-3SgS   if,
           [sáŋà-rⁿà]-[sàŋà-rⁿà]
           [fence-Revers.HL]-[fence.Revers.L]
           kó   dì gé   pílíwê:-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-, sáŋá-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. [màlfàːⁿ-běn∴]   [màlfàːⁿ-gɔ́ːˑ]
    [rifle.L-tomtom]   [rifle.L-dance(noun)]
    [màlfâːⁿ   tâːⁿ-tàːⁿ-tàːⁿ]
    [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.   [[ñè̀-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)   [cὲ: wó   já:sé-sà-Ø∴.   fú:]   kɔ̀:-rɔ́
        [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   mɔ́ñù̀
             Rdp-snake.L   **more** bad.**HL**
             'the nastiest (=most dangerous) snake' (mɔ̀ñú) **2004.3.5**

        b.   ìnὲ   gá:rá   gúrì̀-n
             person.L   **more** long.**HL**-Sg
             'the tallest person' (gùrú, Sg gúrì̀-n)

        c.   ñà: gá:rá   érù̀
             meal.L   **more** sweet.**HL**
             'the tastiest meal' (érù)

        d.   gá:rá   ónúr^{n}ù̀
             more   smooth.**H**
             'the smoothest, sleekest (thing)' (ònùr^{n}ú)

  When a second adjective is added, gá:rá must be repeated (727).

(727) lì -lùːrò   [gáːrá   dúgù]   [gáːrá   mɔ́ñù-Ø
       Rdp-snake.L   [**more**   big.**HL**]   [**more**   bad. **HL**]
       'the biggest, nastiest snake' (dùgú, mɔ̀ñú)

For a similar H(H…)L tone overlay, see (480) in §8.5.2, where èjíⁿ⇒ '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   gáːrá   èjù
             Nonh   more   good.L
             '<u>That</u> [focus] is better (=preferable).' **2004.5.1**

        b.   mí   gáːrá   èjù
             1Sg   more   good.L
             'I am better.'

In (729), the adjective is predicative in function but has H(H…)L tone contour as êːŋ (cf. regular lexical form éːŋ). This may be because the predicative adjective ('near') is separated from gáːrá 'more' by intervening material. My assistant accepted a variation with L-toned èːŋ.

(729)   [dù-dùgú-m   kùⁿ∴]   [jòŋ-jɔ́ŋɔ́-m   kùⁿ∴]
        [Rdp-sorceror-Pl   Def]   [healing.L-heal.H-Ppl.Pl Def]
        mà   gǎnǹ   gáːrá,   [tɔ̂ː-n   lè]   êːŋ,
        Poss   between   **more**   [Recip-Sg   Dat]   **near.HL**,
        [tòːrù-gú-m∴   jòŋ-jɔ́ŋɔ́-m∴   mà   gǎnǹ]   sógò
        [fetish-Char-Pl healing.L-heal.H-Ppl.Pl Poss between] than
        'Sorcerors and healers are closer (=more similar) to each other than animists (fetish-worshipers) and healers are (to each other).' **2004.**

In (730), gáːrá 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.   [ɛ́mɛ́   dì:ⁿ   núŋò lè]
            [1PlP   place.L   Dem   in]
            gá:rá   ɛ̀mɛ̌-n   tɔ́rɔ́yɛ̀   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.   ìnè   gá:rá   [[kó   lǒy∴]   [kó   sì:ⁿlɛ́] jó:⇒
            person.L **more**   [[NonhP medicine] [NonhP disease] much
            jùgɔ́-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 mì sógò 'instead
of me', 3Sg wò 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.   [wò   sógò]   [wò   dérè]   gùrù-Ø
            [3Sg.L   **instead.of**] [3SgP.L brother.HL] **long.L**-3SgS
            'His brother is taller than he (is).'

       b.   [ñɛ̌-n   kùⁿ]   ú   dènê:-Ø,
            [woman-Sg Def]   2SgO   want.Impf-3SgS,

[ɛ̀nɛ́   áɣà   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 nὲ   íné-m   jǎ:-m̀   kùⁿ] lὲ]
     [[person.L person-Pl convey.Impf-Ppl.Pl Def] to]
     ɛ́mɛ́ jǎ̀:-Ø   sógò,   ì né≡ỳⁿ
     1PlO convey.Impf-3SgS **instead.of**, Refl≡Foc
     [[ɛ̀nɛ́ mà nám] lὲ] dém⇒ ɛ́mɛ́ jà: dὲy,]
     [[Logo Poss people] to] straight 1PlO convey.Perf.L if,]
     ɛ̀nɛ́ [kó gá:rá ὲjù] 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   dàɣá tí   yὲrὲ-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:≡ỳ   mǐ-n   ì rè
               who?≡Foc   1Sg-Dat   **be.better**.L
               <u>Who</u> [focus] is better than I (am)?'

        d.   à-n   [á:mádù   lè]   ì ré-n   kɔ̀:-rɔ́
               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   gɔ́ː   gɔ̌ː-Ø
         1Sg-Dat **be.better** dance(noun) dance.Impf-3SgS
         'He dances better than I (do).'

    b. wɔ̀-rú   ì ré   gɔ́ː   gɔ̌ː-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 rè   ì ñé]≡ỳⁿ   mǐ-n   ì rè
         [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 réː 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]   gùrù-Ø
         [1Sg   like]   long-3SgS.L
         'He/She is as long (=tall) as I am'

    b. [wó   jín]   gùrù-m
         [3Sg   like]   long-1SgS.L
         'I am as long (=tall) as he/she (is).'

12.2.2   '(Not) particularly' (-làɣá)

A construction of the type [ADJ$_x$-làɣá 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. -làɣá is invariant, while the negated second adjective may be conjugated. Since it is part of a bipartite construction, it is difficult to gloss -làɣá precisely; I use 'so.much' in interlinears.

(739)   a.   gùl-làɣá   gùl-lá-Ø
              'long-so.much   long.L-Neg-3SgS
              'It (snake) is not particularly long' (gùrú) **2004.3.5**

         b.   gùl-làɣá   gùl-lá-m
              'long-so.much   long.L-Neg-!SgS
              'I am not particularly long (=tall)' (gùrú)

     -làɣá resembles compound final -lɔ́ɣɔ́ '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:≡kɔ̀ '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 dɔ́:- (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. [ĕn   dê:]   bà:-lí-Ø
           [LogoP father.HL] **equal**-PerfNeg-3SgS
           'He is not as good as his father.' (ènέ)

       b. [lì-lù:rò   [cín bǎ:]   èmὲ   lὲ:-gó-Ø
           [Rdp-snake.L [thus **equal**] 1PlS.L fear-ImpfNeg-Ppl.Nonh
           [kâ:ⁿ   nὲ]]   yɔ́≡kɔ̀
           [also   now]]   exist≡be.Nonh
           'There are also some snakes that we do not fear to that extent.'
           2004.3.5

       c. [ú   bǎ:]   ñǎ: ñὲ:-gò-m
           [2Sg **equal**] meal   eat-ImpfNeg.L-1SgS
           'I eat less than <u>you-Sg</u> [focus] do.'

       d. lù:rò-[jì-jùwⁿó]   kì-kɔjú   bǎ:-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 kɔ̀:-rɔ́ 'there is none' to a relative clause with bǎ:- creates a stylistically colorful, double-negative superlative.

(741) a. [kì-kɔ̀jú   cὲ: bà:-sà-Ø   kâ:ⁿ ké]
           [Rdp-viper thing.L **equal**-Reslt.L-Ppl.Nonh any Top]
           kɔ̀:-rɔ́
           Nonh.be-Neg
           'There is nothing (=no other snake) that equals the viper (in lethalness).' **2004.3.5**

       b. [cὲ: [kó   bǎ:]   èmὲ   lὲ:-Ø   kâ:ⁿ]
           [thing.L [Nonh **equal**] 1PlS.L fear.Impf-Ppl.Nonh.L   any]
           kɔ̀:-rɔ́
           be.Nonh-Neg
           'There is nothing that we fear as much as (we fear) it (=cobra).'
           2004.3.5

       c. [sǒm   kùⁿ],
           [horse Def],
           [[kó   bǎ:]   cìgὲ dáwlὲ sâ:-Ø]   kɔ̀:-rɔ́
           [[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' (dɔ́ː-, dóː-)

dɔ́- (dóː-) '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.   [ɛ̌n   dêː]   dɔ̀ː-gó-Ø
             [LogoP   father.HL]   **reach**-ImpfNeg-3SgS
             gà: [ɛ̌n   dérɛ̀]   dɔ̂ː-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-kɔ̀jú   lè]   gùrú⇒,
             [Rdp-viper   Dat]   long
             [lùːrò-[ù-jùwⁿó]   kùⁿ]   dɔ̀ː-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' (yɛ́∴)

A particle yéː∴ 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.   úːrⁿó   bɛ̀rɛ̀-gó-m   yéː∴
             get.up   can-ImpfNeg-1SgS   **a.fortiori**
             gɔ́ː   gɔ̌ː-m̀   mà
             dance(noun) dance.Impf-1SgS or
             'I can't get up, much less can I dance.'

        b.   [wó   ì jú]   bàː-lúː-Ø   yéː∴
             [3SgP dog]   equal-PerfNeg-2SgS   **much.less**
             [wó   tèg]≡îː   mà
             [3SgP speak-VblN]≡it.is   or
             'You are not as good as his dog, not to speak of (being as good as) himself.' (tègú)

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** ⹀ỳ, or its allomorph ⹀ì: (sometimes ⹀î: 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 <u>you</u> (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 ⹀ỳ.

Since verb defocalization has audible effects on the stem only with perfective and negative verbs, and since the 3Sg pronominal-subject suffix is -Ø, 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, <u>that</u>'s what I like', b) 'we sow seeds early, <u>that</u>'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≡ỳ   kó   gùjɔ̂:,
           [child.Pl   Def],   3Pl≡**Foc** NonhO   defeather.Impf,
                                  bé≡ỳ   kó   kárâ:
                                                   cut.Impf
                                  bé≡ỳ   kó   cé:nê:
                                                   do.well.Impf
        'The children [topic], it's <u>they</u> [focus] who de-feather them (=birds), it's <u>they</u> [focus] who cut them up, it's <u>they</u> [focus] who do (=prepare) them completely.' **2004.3.1**

       b. ñɛ̌-m   [bé≡ỳ   ɛ̀:-m]
           woman-Pl   [3Pl≡**Foc** see.Perf.L-1Sgs]
           'The women [topic], it's <u>them</u> [focus] that I saw.'

13.1.1 Focalization of complement of ≡ỳ 'it is'

Although Focus clitic ≡ỳ is, to all appearances, morphologically identical to the 'it is …' form ≡ỳ (§11.2.1), it is possible for the two to co-occur. Compare the ungrammaticality of English #*It's <u>meat</u>* [focus] *that it is*, in contrast to the grammatical *<u>Meat</u>* [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 ≡ỳ 'it is/was'. The construction is rare, but my assistant found it grammatical.

(745) [jámâ:≡ỳ   bɛ́rɛ̀]≡ỳ   tàŋà-Ø
        [crowd≡**Foc** in]≡**it.is**   happen.Perf.L-3SgS
        'It happened that it was in <u>the crowd</u> [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≡ỳ] with the Focus clitic. If the subject is pronominal, it appears in preverbal position in its **H-toned independent** form,

with or without Focus ≡ỳ. A perfective (positive) verb takes the L-toned unsuffixed Perfective form, as usual in focalization constructions.

(746) a. émέ   nì-dî:ⁿ   ì ñê:
           1Pl   here   lie.down.Impf
           'It's <u>we</u> [focus] who go to bed here.'

       b. íné-n≡î: yǎ: [kó   kû:ⁿ]   gò:
           person-Sg≡**Foc** go   [Nonh on]   go.out.**Perf.L**
           '<u>a person</u> [focus] went and attacked it (=lion).' **2004.3.2**

       c. … tàrá   yǎ:-yὲ-bà   [è   ké]
           … collective.hunt go-Perf-3PlS   [2Pl.L Top]
           lí-ló:ró≡ỳ   é   pì lì wè
           fear≡**Foc**   2PlO   hold.back.**Perf.L**
           '… they went to the collective hunt. As for you-Pl, <u>fear</u> [focus] is
           what held you back.' **2004.3.3**

       d. ñὲ-m≡î: ñǎ: sírê:,
           woman-Pl≡**Foc** meal   cook.Impf
           àrⁿ-úm≡î: wárú   wàrâ:
           man-Pl≡**Foc**   farming farm.Impf
           'it's <u>women</u> [focus] who cook, and it's <u>men</u> [focus] who farm.'
           (ñǎ-m)

       e. ànsá:rá   bé≡ỳ   é   bàrà   dèy,
           white   3PlS≡**Foc** 2PlO   help.**Perf.L** if,
           [é   pàŋá-nám   kùⁿ]≡yⁿ   é   bàrà   dèy,
           [2PlP   power-owners   Def]≡**Foc** 2PlO help.**Perf.L** if,
           pɔ́sɔ̂ŋ   yɔ́≡kɔ̀
           poison   exist≡be.Nonh
           'White people [topic], if it's <u>they</u> [focus] who have helped you-Pl,
           (or) if it's <u>your government</u> [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   cέw]≡ì: mɔ̀rⁿɔ́≡kɔ̀
           [village all]≡**Foc** be.together.Impf≡be.Nonh
           '<u>The entire village</u> [focus] will gather together.'
           [can also mean: 'All the villages …'] **2004.4.5**

b. [àná∴   fú:]≡ỳ   mɔ̀rⁿɔ́≡kɔ̀
    [village   all]≡**Foc** be.together.Impf≡be.Nonh
    [= (a)]

c. [ànà   ká:ⁿ]≡ỳⁿ   mɔ̀rⁿɔ́≡kɔ̀
    [village.L each]≡**Foc** be.together.Impf≡be.Nonh
    'Each village [focus] will gather together.' (kâ:ⁿ)

(748) illustrates tone-dropping on negative verbs in the presence of a focalized constituent. Imperfective Negative -gó- is elsewhere H-toned.

(748) wó≡ỳ   [cɛ̀:   kâ:ⁿ]   kàrⁿà-gò-Ø
       3Sg≡**Foc** [thing.L any]   do-**ImpfNeg**-3SgS.L
       'It's <u>he/she</u> [focus] who doesn't do anything'.

The "subject" of locational-existential quasi-verbs wɔ̀- 'be (human)' and kɔ̀ 'be (nonhuman)' can be focalized (749).

(749) [[à-kɔ̀rɔ̀]-nì:-nɔ̌:   kùⁿ   kâ:ⁿ]
       [[well.L]-water.L-drinking   Def   also]
       [kó≡ỳ   kɔ̀   jì:ⁿ]
       [Nonh≡**Foc** be.Nonh   Past]
       'That drinking of well water also, <u>that</u> [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 ≡ỳ. A pronominal subject has its normal main-clause expression as a suffix on the verb.

(750) a. nì m≡î: lùgùr-á:rà-m
           cow-peas≡**Foc**   look.for-Habit-1SgS
           'It's <u>cow-peas</u> [focus] that I'm looking for?'

       c. èmɛ̌-n   jɛ̀:rɛ́   kó≡ỳ   dɔ̀rⁿɔ́-bà
           1Pl-Dat   bring   Nonh≡**Foc**   sell.Impf-3PlS
           '<u>That</u> [focus] (=milk) is what they bring and sell to us.' **2004.3.10**

b. gàmà-nám⇒,   bὲr-bɛ́:≡ỳ   kùnò-bà
    certain-Pl,   goat-excrement≡Foc   put.Perf.L-3PlS
    'Some people [topic], <u>goat excrement</u> [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 -lì-).

(751) [dùŋgò: ὲjú]   mà   mɔ́:n≡î:
       [clothes.L good]   Poss gathering≡Foc
       mɔ̀n-lì:-Ø⇒
       come.together-PerfNeg.L-1PlS
       'We did not meet (=hold) a <u>well-dressed meeting</u> [focus].' **2004.3.24**

13.1.4 Focalization of PP or other adverbial

Except in the case of the atypically verb-like postposition jɛ́ (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 ≡ỳ follows
the entire PP, i.e., it comes after the postposition (752).

(752) cín≡î: kò-rú   kárⁿá-bà   tàrà-nɔ̀wⁿɔ́
       thus≡Foc   Nonh-in   do.Impf-3PlS collective.hunt-meat
       [nì ŋé   bɛ́rὲ]≡ỳ   dɔ̀gó≡kɔ̀
       [sauce   in]≡**Foc**   finish.Impf≡be.NonhS
       '<u>That</u> [focus] is what they do in that (=then). The meat from the
       collective hunt [topic], <u>in the sauce</u> [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) [ὲm   wájà-Ø   kùⁿ]
       [milk.L   remain.Perf.HL-Ppl.Nonh   Def]
       kò-r≡î: [bé   nὲ]   kó   ñɛ́:-bà
       Nonh-Inst≡**Foc** [3Pl   now] NonhO   eat.Impf-3PlS
       'The milk that remains [topic], <u>that</u> [focus] is what they will eat it
       (=meal) with.' **2004.3.10**

13.1.5   Focalization of postpositional complement

A postpositional complement NP, as opposed to the full PP, cannot in general be focalized by directly adding Focus clitic ≡ỳ to it (with the postposition following). The exception is Purposive or Causal postposition jɛ́, which does allow such focalization. This postposition has other unusual traits suggesting a verb-like status (§8.4).

In (754), sɛ́:dɛ̀ 'testimony' is focalized. The postposition jɛ̀ appears in L-toned form. jɛ̀- is also used as a 'say' verb in the L-toned unsuffixed Perfective (a category that, for regular verbs, is associated with the presence of a focalized constituent). The fact that postposition jɛ́ drops its tones after a focalized constituent in (754) points to its verb-like status.

(754)   [sɛ́:dɛ̀≡ỳ   jɛ̀]   [bé nè]   yɛ̀rɛ́ dì ŋé-bà
        [testimony≡**Foc for.L**] [3Pl now]   come sit.Impf-3PlS
        'It's <u>for testifying</u> [focus] that they (=councilors who have inspected the scene) will come and sit down.' **2004.3.10**

13.1.6   Focalization of a clause

In (755), a factive complement of táŋá- 'happen' is focalized. The context is that the women of caste are going around urging recalcitrant men to get off their butts and join the other men in a collective hunt outside of the village.

(755)   sɛ̀llɛ̀-lú:-Ø≡ỳ   tàŋà   dèy
        be.healthy-PerfNeg-2SgS≡Foc   happen   if,
        sɛ̀llɛ̀-lú:-Ø   wǒ-r   gá-ẁ
        be.healthy-PerfNeg-2SgS   3Sg-Dat   say.Impf-2SgS
        'If <u>the fact that you are sick</u> [focus] is what has happened (and <u>that</u>'s why you can't go hunting), you'll (just) tell her that you're sick.' **2004.3.3**

13.1.7   Focalization of a constituent within a relative clause

(756)   [kò   gùrú-ñɛ̂-m   kùⁿ],
        [Dem   Gourou-woman.HL-Pl   Def],
        [gùr≡î: ì nɛ̀   gó:-m]≡ì: yà:-yɛ́rɛ̀-m≡î:
        [G≡**Foc** person.L go.out.Impf-Ppl.Pl≡**Foc** go.L-come.HL-Ppl.Pl≡it.is

'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:-m̀) **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 yέ 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 yέ 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) nǐm   dènè-gó-m,   nɔ̀wⁿɔ́≡ỳⁿ   dèné-m̀
       cow.peas   want-ImpfNeg-1SgS,   meat≡**Foc**   want.Impf-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 ⹀ỳ (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 (⟹), pitch-raising (⇑), or both (⟹↑).

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 ⟹↘, similar to the dying-quail intonation (symbol ∴).

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. [ñǎː   ñéː-sà-w   mà⇒↑]   [ñèː-lúː-Ø]
       [meal   eat-Reslt-2SgS   **Q**]   [eat-PerfNeg-2SgS
       'Have you-Sg eaten a meal, or haven't you?'

      b. [à-tîː   nè]   sàːj-îːⁿ   kò-rú   áː-bà   mà⇒↑,
         [bird.trap now]   bird   Nonh-Inst catch.Impf-3PlS   **Q**,
         [èjù-nɔ̀wⁿɔ́   kâːⁿ   áː≡kɔ̀
         [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. níː   yɛ́   sà-Ø   mà⇒↑   níː   sàː-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⇒,   yògó   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≡ỳⁿ   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. [jɛ́mɛ̀-n   nɛ̀]   yɔ̌:-jî n [í:rⁿé   kùⁿ]   bì rɛ̂:-Ø
           [blacksmith-Sg now] how?   [metal   Def]   work.Impf-3SgS
           mà⇑   jɛ̀-bà   dèy
           Q   **say**.Perf.L-3PlS   **if**
           'If they say (=ask), how does a blacksmith work the iron, …'
           2004.3.12

       b. [dà:ɣá   kùⁿ   kâːⁿ]   dàná-n≡ì̀:,
           [night   Def   too]   hunt-Ppl.Sg≡it.is,
           ì ñé≡ỳ   kó≡ỳ   mà⇑   dèy⇑,   dà:ɣá, …
           what?≡Foc Nonh≡it.is **Q**   **if**,   night,   …
           'At night too he is a hunter. What (=how) is that? At night, …'
           (dàná-ǹ) **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:mɛ́-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) dì :ⁿ   ànsá:rá   kárⁿ-á:rⁿà-Ø   jì :ⁿ
       manner.L   white(s)   do-Habit-Ppl.Nonh Past
       ɛ́:-sà-y   là:⇑,   kó   dàɣà-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 ≡ỳ. 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.   ǎ:≡ỳ   ú   làɣà
        who?≡Foc   2SgO   hit.Perf.L
        'Who hit you-Sg?'

    c.   [ú∴   ǎ:∴]   jɔwɔ
        [2Sg   **who?**]   run.Perf.L
        'You-Sg and who ran?' (= 'Who did you run with?')

    d.   [wó   ǎ:≡ỳ   mà⇑]   wà⇑
        [3Sg   **who?**≡it.is Q]   say
        'It (=hyena) asked it (=scorpion), "who are you?"' **2004.4.2**

The plural [ǎ: 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)   é   [ǎ: bé]≡ỳ   yɛ̀rɛ̀
      2Pl   [**who?** **Pl**]≡Foc   come.Perf.L
      'You-Pl who?-Pl came?' (= 'Who are you-Pl who have come?')

An alternative form ì lá: is less common, but it is substitutable for ǎ: in the above contexts with no change in sense (768). (768.c) is a self-conjunction with repeated bé⇒ (§7.1.2), and also shows that ì lá: may be used as a modifying adjective similar to yɔ́kkɔ̀ 'which?', with preceding L-toned noun.

(768)   a.   [[ì lá: nâ:]   cé]≡ỳ   kâ:ⁿ
        [[who? mother.HL]   property]≡it.is   too
        'whoever's mother it belongs to' **2004.3.18**

    b.   [íjé   ké]   [núŋò ì lá:≡ỳ   ùmò   mà⇑]   wà⇑
        [today   Topic] [Dem   who?≡Foc lie   Q]   say
        'He (=cat) said (=wondered), "today, who is that (animal) lying down?"' **2004.4.1**

    c.   [[ì nɛ̀-m   ì lá: bé]   [ì nɛ̀-m   ì lá: bé]≡ỳ
        [[person.Pl **who?** Pl] [person.Pl **who?** Pl]]≡Foc
        ì nɛ̀   bɛ̀   â:-m≡î:
        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 jɛ́)

The stem for 'what?' is ì ñé. It gets some competition from yɔ́kkɔ̀ 'which?' (§13.2.2.7) and, as complement of kárⁿá- 'do' in the 'do what?' construction, from yɔ̌:-jì n 'how?' (§13.2.2.5).

When 'what?' is an argument of a verb-headed clause, ì ñé is focalized with clitic ≡ỳ (769.a).

(769)   ì ñé≡ỳⁿ   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 wth ì ñé≡ỳⁿ, 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 ≡ỳⁿ to be in focalizing function: <u>what</u> [focus] is it that is X?'

(770) a.   ì ñé≡yⁿ   kó≡ỳ   mà⇒↑
             what?=Foc   Nonh≡**it.is**   Q
             'What is it?'

       b.   ì ñé≡ỳⁿ   bú:d≡ì :
             what?≡Foc   money≡**it.is**
             'What is money?'

Alternatively, the substantive NP (or pronoun) whose identity is queried precedes ì ñé≡ỳⁿ (771.a) or a conjugated form thereof (771.b). Here the substantive NP is arguably topicalized.

(771) a.   [jèmɛ̀-ñɛ̌-m   nɛ̀],   [bé   bírɛ́]   ì ñé≡ỳⁿ
             [blacksmith.L-woman-Pl   now],   [3PlP   work]   **what?**≡it.is
             'Women of blacksmith caste now, their work (, it) is what?'
             2004.3.13

       b.   [ù   ké]   ì ñé≡ẁⁿ
             [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   kûːⁿ]   jèyè-bé   má
       [**what? Poss**   about]   fight.Perf.L-2PlS   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   yǎː   [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]≡ỳ   [émé   [yàːjìː-[pàg-ù]]-tɔ̀jɔ́]≡ỳ
            [**what?   Pl**]≡Foc   [1PlP   [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∴]   gɔ̌ːⁿ-sà-bà   dèy
            [**what?   what?**]   take.out-Reslt-3PlS   if
            cín   dáːŋá   mǎː-bà
            thus   water.jar   build.Impf-3PlS
            '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-áːrⁿà-bà
            [**what?   Inst**]   person-Pl   wood   chop-Habit-3PlS
            'With what do the people chop wood?'

b. [ì ñé   lè]   yɔ̀ːrɔ̂ː-Ø   mà⇑   dèy⇑
   [**what?**   **Inst**]   heat.on.fire.Impf-3SgS   Q   if
   'heating it (=iron) with what?' **2004.3.12**

c. [kó   nò]   [ì ñé   lè]≡ỳ   kó   jɔ̀ŋɔ́-bà
   [Nonh   now]   [**what?**   **Inst**]≡Foc   NonhO   treat.Impf-3PlS
   'That (disease) [topic], with what (medicine) do they treat it?'
   2004.4.15

With Purposive postposition jɛ́ 'for', we can get a 'what for?' = **'why?'** phrase (776).

(776)   a. [ì ñé   jɛ́]   nàŋá   cɛ̀ːⁿ-wⁿ
          [**what?**   **for**]   cow   slaughter.Perf.L-2SgS
          'Why did you-Sg slaughter the cow?'

A synonymous expression is ì ñé sógò 'because of what?' = **'why?'** (777). For sógò 'instead of' or 'than' in comparatives, see §12.1.3, e.g. examples (729) and (732.a-d).

(777)   ì ñé   sógò]   yɛ̀rɛ̀-w
        [**what?**   **because.of**]   come.Perf.L-2SgS
        'Why did you-Sg come?'

I could find no semantic difference between the two 'why?' expressions. Both [ì ñé jɛ́] and [ì ñé sógò] were said by informants to be possible in utterances like 'I came because of the war', whether the speaker was a person who went somewhere to join the battle ('because of' = prospective purposive 'for'), or a person who had fled a combat zone ('because of' = retrospective 'as a result of').

Often ì ñé≡ỳⁿ 'what is it?' is used in the sense **'why?'** or 'in what sense?', without an explicit purposive morpheme.

(778)   sábù   ì ñé≡ỳⁿ   kó≡ỳ   mà⇑   dèy⇑, …
        because   **what?**≡Foc   Nonh≡it.is   Q   if, …
        'because why is that?, …' [speaker then answers his own question]
        2004.3.27

13.2.2.3   *'Where?' (yɔ̌ː, yɔ̌ː lé, yɔ̌ː-dì ːⁿ, yɔ̌y)*

As predicate, the form is yɔ̌ː plus the relevant 'be' quasi-verb.

(779)   yɔ̌:≡wɔ̀-w
         where?≡be.Hum-2SgS
         'Where are you-Sg?'

Adverbial 'where?' forms are also built on the stem yɔ̌:. For example, there is a PP [yɔ̌: 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.   [yɔ̌:   lé]   yǎ:-ẁ
              [**where?** in]   go.Impf-2SgS
              'Where are you-Sg going?'

         b.   [yɔ̌:   lé]   [ñú: kù\u207f]   kùnɔ̀-bà
              [**where?** in]   [millet Def]   put.Perf.L-3PlS
              'Where did they put the millet?'

For yɔ́kkɔ̀ as a contraction of yɔ̌: (lé) kɔ̀- with a nonhuman referent, see (793) in §13.2.2.3, below.

Another extended form is yɔ̌:-dǐ:\u207f. This contains a form of dǐ:\u207f 'place', the closest parallel being with demonstrative adverbs like ní-dǐ:\u207f 'here' (§4.4.3.1). Since dǐ:\u207f provides the spatial element, yɔ̌: here approaches 'which?' in sense. Perhaps this is the original 'where?' phrase from which others like those cited above originated; see also yɔ̌:-jǐn 'how?', below.

(781)   [yɔ̌:-dǐ:\u207f]   nùmɔ̀-w\u207f
         [**where?**-place.L   fall.Perf.L-2SgS
         'Where did you-Sg fall?'

Another option is yɔ̌y, which is attested only with following yǎ:- 'go'. It can be taken as a slightly irregular output for expected #yɔ̌:≡ỳ with Focus clitic ≡ỳ, or else as a mutation from *yɔ̌: yǎ:- with the second *y spreading leftward into the final mora of *yɔ̌:. Having shortened its vowel, this form has only two moras and cannot support a bell-shaped <LHL> tone, so the resulting form yɔ̌y has R-tone.

(782)   a.   yɔ̌y   yǎ:-ẁ
              where? go.Impf-2SgS
              'Where are you-Sg going?'

b. [wó   yɔ̌y   yǎː-rà-Ø   mà⇑]   wà⇑
   [3Sg   **where?**   go-Habit-3SgS   Q]   say
   'He asked, "hey, where are you-Sg going?"' **2004.4.18**

For yɔ̌ː-jìn 'how', see §13.2.2.5, below.

13.2.2.4 'When?' (*yàŋárⁿà*)

The general word for 'when?' is yàŋárⁿà. It can be followed by Focus ≡ỳ, but more often the clitic is omitted. yàŋárⁿà is used for prospective as well as retrospective time frames (783).

(783) a. yàŋárⁿà   nùmɔ̀-wⁿ
           when?   fall.Perf.L-2SgS
           'When did you-Sg fall?'

       b. yàŋárⁿà   yèrɛ́-ẁ
           when?   come.Impf-2SgS
           'when will you-Sg come (back)?'

13.2.2.5 'How?' (*yɔ̌ː-jìn, yɔ̌ː-ŋ̀*)

yɔ̌ː-jìn consists of yɔ̌ː, which by itself means 'where?', and a final element related to jín 'like' but L-toned. The overtly focalized form yɔ̌ː-jìn≡î: is common. As a basic interrogative of manner, yɔ̌ː-jìn 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. yɔ̌ː-jìn   ùrɔ́-ẁ
           how?   go.up.Impf-2SgS
           'How will you-Sg go up (the hill)?'

       b. î-n   dàná,   [yɔ̌ː-jìn   lè]   túmnôː-Ø
           child-Sg   hunt(verb), [**how?**   in]   begin.Impf-3SgS
           'How does a child begin to hunt?' **2004.3.16**

       c. [kó   nò]   yɔ̌ː-jìn≡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**

yɔ̌ː-jìn also turned up in elicited sentences meaning 'what kind of X?' for some noun X. In (785), it seems that yɔ̌ː-jìn combines with the following noun tɔ̀gú 'kind' as a kind of compound adjective modifying úró 'house', which therefore drops its tones. Since tɔ̀gú shifts to /tɔ́gù/ 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   yɔ̌ː-jìn   tɔ́g]≡ìː   mǎ-ẁⁿ   mà ?
       [house.L   how?   kind]≡Foc   build.Impf-2SgS   Q
       'What kind of house will you-Sg build?' (tɔ̀gú)

A variant yɔ̌ː-ŋ̀, i.e. [yɔ̀ɔ́ŋ̀] with <LHL> tone, is a reduced form of yɔ̌ː-jìn, attested in my data only before gáː- 'say' (786). As with 'do', 'say' regularly takes 'how?' rather than 'what?' as its interrogative complement.

(786) yɔ̌ː-ŋ̀   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' (àːŋá)*

The interrogative noun àːŋá 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 àːŋá (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 bèrêː 'in' or gǎnǹ '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 inde-pendent 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]   ɛ̀:-w
            [cow   **how.many?**] see.Perf.L-2SgS
            'How many cows did you-Sg see?'

       c. [súkkɔ́rɔ̀   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. [àrⁿ-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. [pì rⁿé   mà   tɔ̀gú] [kó   à:ŋá]=kɔ̀   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?' (yɔ́kkɔ̀)

This is an adjective or noun. As adjective, it induces tone-dropping on the modified noun. Instead of the adjectival construction [noun + yɔ́kkɔ̀], it is also possible to use yɔ́kkɔ̀ as a noun, accompanied by a (usually topicalized) partitive phrase that specifies the universe from which the correct entity is to be

selected. Such a partitive phrase may be with bèrê: 'in' or gǎnǹ 'between, among'.

Examples of yɔ́kkɔ̀ in various non-predicate functions are in (788): bare subject (788.a), postpositional complement modifying noun (788.b), after another modifying adjective as part of a direct object NP (788.c). The preceding noun or adjective is tone-dropped in (788.b-c), cf. (789.a), showing that yɔ́kkɔ̀ functions syntactically as a modifying adjective.

(788) a. yɔ́kkɔ̀≡ỳ   yèl-lì   mà⇒↑
           which?≡Foc   come-PerfNeg.L   Q
           'Which (animal) [focus] did not come back (with the herd)?'
           2004.3.9

       b. [màná:∴.   bà:ñá:∴.]
           [mortar   bowl]
           [[tì wⁿɛ̀   yɔ́kkɔ̀]   lè]   kó   lɔ́wɔ́-bà
           [[tree.L   **which?**] with]   NonhO   carve.Impf-3PlS
           'Wooden mortars and wooden bowls, with (wood of) which tree(s) do they carve them?' **2004.3.15**

       c. [èjù-nɔ̀wⁿɔ̀   dùgù   yɔ́kkɔ̀]≡ỳ   ɛ̀:-ẁ
           [bush.L-meat.L   big.L   which?]≡Foc   see.Perf.L-2SgS
           'Which large wild animal did you-Sg see?'

To translate 'which (one) is...?', a focalized yɔ́kkɔ̀ as subject is followed by a nominal predicate. In (789.a-b), this predicate is [ú cé≡ỳ] 'it is yours (=your property)'.

(789) a. [ùrò   yɔ́kkɔ̀]≡ỳ   [ù   cé]≡ỳ
           [house.L **which?**]≡Foc   [2SgP.L   possession]≡it.is
           'Which house is yours?'

       b. [[úró   kùⁿ   bé]   gǎnǹ],
           [[house   Def   Pl]   between].
           yɔ́kkɔ̀≡ỳ   [ù   cé]≡ỳ
           which?≡Foc   [2SgP.L   thing]≡it.is
           'Among the houses, which is yours?'

yɔ́kkɔ̀, like interrogatives for 'who?' and 'what?', may be followed by Pl bé in the sense 'which ones?' or 'which (=what) kinds?' (790).

(790)   [kó   nè]   [jɔ̀w-Ø   yɔ́kkɔ̀   bé]≡ỳ   jɔ̀wɔ́   mèy⇑
     [Nonh   now]   [run-VblN.L   **which?**   **Pl**]≡Foc   run   and
     [ñě-n   kùⁿ]   àɣà-úrò   táná-ŋá-bà
     [woman-PlDef]   husband.L-house.Loc.HL   transfer-Caus.Impf-3PlS
     '(As for) that, they move the woman (=bride) to the husband's house by
     running what kinds of running (=races)?' **2004.3.20**

Alternatively, yɔ́kkɔ̀ may be conjoined with itself, using the conjunction
phrase type [X bé⇒] [X bé] (§7.1.2), or it can just be iterated as yɔ́kkɔ̀-yɔ́kkɔ̀.
Examples are in (791).

(791)   a.   [kó   nì꞉ñè   jèrú   bè   jèrê꞉-Ø],
        [NonhP   gear.L   harvest(noun)   3PlS.L   harvest.Impf-Ppl.Nonh],
        [yɔ́kkɔ̀   bé⇒   yɔ́kkɔ̀   bé⇒]≡ỳ
        [**which?** **Pl**   **which?**   **Pl**]≡it.is
        'The gear for harvesting that, it consists of which and which?'
        2004.3.6

     b.   [kó   nò]   [nì꞉ñè   yɔ́kkɔ̀-yɔ́kkɔ̀]   kó≡ỳ
        [Nonh   now]   [gear.L   **which?-which?**]   Nonh≡it.is
        'That (equipment) [topic], which kinds of equipment is it?'
        2004.3.24

yɔ́kkɔ̀ 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 yɔ́kkɔ̀ construction is fairly common where there is a small
universe of entities to pick from, e.g. tools (792).

(792)   èjú   yǎ꞉   táŋà꞉   dèy,
     field   go   happen   if,
     [wó   àrⁿà-nì꞉ñé]   [yɔ́kkɔ̀   bé]≡ỳ
     [3SgP   fighting.L-gear]   [**which?**   **Pl**]≡it.is
     'When he (=hunter) goes into the bush, his fighting gear [topic], it is
     which ones (=weapons)?' **2004.3.16**

Finally, yɔ́kkɔ̀ may function as a contraction of yɔ̌꞉ (lé) kɔ̀- 'where is …'
with nonhuman referent (Sg or Pl, the latter adding -bà). Thus (793.b,d) are
equivalent to (793.a,c).

(793)   a.   [yɔ̌꞉   lé]   kɔ̀
        [**where?**   in]   be.Nonh
        'Where is it?'

b. yɔ́kkɔ̀
   [= (a)]

c. [yɔ̌ː   lé]   kɔ̀-bà
   [where?   in]   be.Nonh-3Pl
   'Where are they (e.g. animals)?'

d. yɔ́kkɔ̀-bà
   [= (c)]

It is possible that yɔ́kkɔ̀ in its basic function is historically a mutation of an originally predicative *yɔ̌ː kɔ̀ 'it is which?'. Compare yɔ̌ː 'where?' and yɔ̌ː-jǐn 'how?'. The first syllable of yɔ́kkɔ̀ 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 cìgé '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) [gáːw   èmɛ̀   yâː-Ø]   cě: nàː-y^n,
       [Gao   1PlS.L go.Perf.HL-Ppl.Nonh] **thing** spend.night.Perf.L-1PlS,
       [[bâg   mà   dǐː^n kù^n] lè]   nàː-y^n
       [[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?' (yɔ̌ː-jìn gá-bà) may also be used as a 'whatchamacallit?' phrase.

There is no simple inflectable verb with the sense 'do/be whatchamacallit?'. The phrase cìgé kár^{n}á-, 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⇑]   jέ   újúró-sà-bà
              [2Sg   come.Impf   Q]   say   ask-Reslt-3PlS
              'They asked whether you-Sg are/were coming.'

        b.   [[…   ì nè   kó   jùgɔ́-ǹ∴   fú:⇒]   kɔ̀:-rɔ́]
              [[… person.L NonhO know.Impf-Ppl.Sg all]   be.Nonh-Neg]
              wá   [ὲnέ≡ỳⁿ   wó   wɔ̀:-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   jɔ̀:-gó-m
              come.Impf-3SgS   know-ImpfNeg-1SgS
              yèrὲ-gó-Ø   jɔ̀:-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." (jùgɔ́-)

        b.   yèrê:-Ø   mà⇒↑   yèrὲ-gó-Ø   má⇒
              come.Impf-3SgS Q   come-ImpfNeg-3SgS   Q
              jɔ̀:-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. jɛyɛ́-tù-bà   táŋàː   dèy,
           fight-Perf-3PlS   happen   if,
           [ǎː≡ỳ   tɔ̀yⁿɔ́   sà   mà⇑]   ñɛ̀mɛ́-bà
           [**who?**≡Foc truth   have   Q]   choose.Impf-3PlS
           'If they (man and wife) have squabbled, they (=elders) will rule as to who (=which of them) is in the right.'

       b. [ǎː≡ỳ   nì-dîːⁿ   wɔ̀   mà⇒↑]   jɔ̀ː-gó-m
           [**who?**≡Foc here   be.Hum   Q]   know-ImpfNeg-1SgS
           'I don't know who [focus] lives here.'

       c. [[ǎː   mà   úró]≡ỳ   mà⇒↑]   jɔ̀ː-gó-m
           [[**who?** Poss   house]≡it.is Q]   know-ImpfNeg-1SgS
           'I don't know whose house it is.'

       d. [àːŋá   tɔ̀jɔ̀-bá   má⇒]   jɔ̀ː-gó-m
           [**how.much?** pay.Perf.L-3PlSQ]   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. ú   [ì nè   [dì :ⁿ   kò   kɔ̂:-Ø]
          2Sg   [person.L [**place.L**   NonhS.L   be.Nonh.HL-Ppl.Nonh]
          jùgɔ́-ǹ   kùⁿ]
          know.Impf-Ppl.Sg Def
          'You-Sg who know where ("the place where") it is located.'
          2004.4.4

    b. [dògùrù   wò   yɛ̀rɛ̂:-Ø]   jɔ̀:-gó-m
          [**time.L**   3SgS.L   come.Impf-Ppl.Nonh]   know-ImpfNeg-1SgS
          'I don't know when he/she is coming.'

    c. [dì :ⁿ   dá:ŋá   bè   cé:nɛ̂:-Ø]
          [**manner.L**   water.jar   3PlS.L   make.well.Impf-Ppl.Nonh]
          jɔ̀:-gó-m
          know-ImpfNeg-1SgS
          'I don't know how they manufacture earthenware water jars.'

    d. [ànà   wò   wɔ̂:-Ø]   jɔ̀:-gó-m
          [**village.L**   3SgS.L   be.Hum.HL-Ppl.Nonh] know-ImpfNeg-1SgS
          'I don't know which village he/she is in.'

    e. [cɛ̀:   ù   lúgúr-á:rà-Ø]   jɔ̀:-gó-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 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 propability 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 kì̀-ká: ñɔ́wⁿɔ̀ [ñú: lè]   téwέ
[[**time.L** Rdp-grasshopper damage [millet in]   inflict
bὲrὲ-gó-Ø]   mà   wákátì ∴ fú:] kɔ̀:-rɔ́
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-nɔ̌:   [ùrò   mà   bὲrὲ:]   kùn-ó-Ø]
[[water.jug   [**house.L** Poss in.L]   be.in-Neg-Ppl.Nonh]
mà   úró]   kɔ̀:-rɔ́
Poss **house**] be.Nonh-Neg
'There is no house that a water jug is not in.' **2004.3.13**

c. [[dànà-m   [dàná   yǎ: mèyⁿ⇑],
[[**hunt-Ppl.Pl.L** [hunt   go   and],
[èjù-nɔ̀wⁿɔ́   έ:-jὲ-bà   dèy],
[field.L-meat   see-RecPf-3PlS if],
[[èjù-nɔ̀wⁿɔ́   kùⁿ]   yò:ró   mèyⁿ⇑] tá:ⁿ-mì]
[[field.L-bush Def]   stalk   and]   shoot.Impf-Ppl.Pl
mà   dàná-mì]   yɔ́≡kɔ̀
Poss   hunt.Ppl.Pl] 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   kɔ̀:-rɔ́-Ø   kùⁿ]
[[**time.L**   prayer be.Nonh-Neg-Ppl.Nonh   Def]
mà   dógúrú   kùⁿ]   lè
Poss **time** Def]   in
'(back) in the time when there was no praying (=before Islam)'
2004.3.20

e. [ì jὲ   è   íjé   bὲrê:-Ø]   mà   ì jé
[**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-ŋìrⁿè   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-ŋìrⁿè   [[ènέ   áɣà]   mà   úrò]
        [**Rdp-day.L** [[ReflP husband.HL] Poss   house.Loc.HL]
        wò   dɔ̀:-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   íjέ≡kɔ̀-Ø]   mà   tì wⁿέ
        [get.up stand.Impf≡be.Nonh-Ppl.Nonh] Poss **tree**
        'a tree that gets up and stands' **2004.3.16**

     b. [[[jǐr   dɔ̀:-lí-Ø]   mà   dògùrù núŋò] lè]
        [[[harvest(noun) arrive.L-ImpfNeg] Poss **time**.L Dem] in]
        túmnó≡kɔ̀
        begin.Impf≡be.Nonh
        'It (=wrestling contest) begins at the time when the harvest hasn't
        (yet) arrived.' (jèrú) **2004.3.23**

     c. [[bέ: ènέ   bê:-Ø]   mà   cě:]
        [[excrement LogoS defecate.Impf-Ppl.Nonh] Poss **thing**]
        yɔ́≡kɔ̀   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. yǎː   dɔ́ː   láɣá   [mà, [cě:≡ỳ
           go   arrive   hit   **[Poss, [thing≡it.is**
           [cě:≡ỳ   là:]   cêw]   [kâːⁿ   nὲ]]
           [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   sâː-Ø   dèy] [nùmó lè]
           [catch NonhS.L do.Perf.HL-Ppl.Nonh if]   [hand   Inst]
           yǎ: dɔ́ː   á: cɛ́ːⁿ   tí   jín
           go   arrive   catch   slaughter Link   **like**
           [mà   [cě:≡ỳ   [cě:≡ỳ   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 Nₓ], I have one textual example with nám 'owners'
(§5.1.12) added to a relative with human plural head. It is possible, however,
that déːsà-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]   yɔ́≡kɔ̀
       [[…   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   yàː-lú-m]
             [**man-Pl.L**   collective.hunt   go-PerfNeg-**Ppl.Pl**]
             [úrò   béː-m]   yɔ́≡kɔ̀
             [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   [dùŋdàŋá lè]   jɛ́yɛ̀-m]
             [**person-Pl.L** [elephant with] fight.Perf.HL-**Ppl.Pl**]
             [sóː   ù   sâ-m]   yɔ́≡kɔ̀
             [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   nì -dîːⁿ ñɛ́ː-rⁿà-m   mà⇒↑] [nɔ̌ː-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 formating in (807) indents the lower relative, and bolds the higher and lower heads in the interlinears.

(807) a. [à-n,
         [**man.L**
             [ùrò   ɛ́mɛ́   súgô:-Ø   kùⁿ]
             [**house.L**   1PlS   go.down.Impf-Ppl.Nonh   Def]
         mâ:-n]   jɔ̀:-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:, jùgɔ́)

       b. [pùlɔ̀-n,
         [**Fulbe.L**
             [má   nàŋà [ɛ́wɛ́   lè] mì   ɛ́wɛ̀-Ø   kùⁿ]
             [1SgP **cow.L** [market in] 1SgS.L buy.Perf.HL-Ppl.Nonh Def]
         gúyⁿò-n   kùⁿ]   ɛ́:-jɛ̀-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]].' (púlɔ̀-n, nàŋá, ɛ́wɛ́ '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.   [**<u>noun.L</u>**]
   b.   [*alienable possessor NP* - (mà) – **<u>noun.L</u>**]
   c.   [**<u>inalienable possessor NP</u>** - **<u>noun.L</u>**]
   d.   [**<u>noun.L</u>** – **<u>adjective.L</u>**]
   e.   [**<u>noun.L</u>** - **<u>numeral.L</u>**]

   KEY: **<u>bolded underlined</u>** 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 bâːⁿ (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.   [ɛ́mɛ́   dɔ̀ɣɔ̌-m]   [gùjú   lè]
                 [1PlP   Dogon-Pl]   [skin   Inst]

cì gὲ   bὲ   bì rê:-Ø
thing.L   3PlS.L   work.Impf-Ppl.Nonh
'Our Dogon people [topic], the thing(s) that they make from hides'
(cì gέ) **2004.3.17**

b. [ùrò   dàɣà]   mì   wô:-Ø
    [house.L   **small.L**]   1SgS.L   be.Hum-Ppl.Nonh
    'the small house where I am' (úró, dáɣá)

c. [[má   ùrò]   númò-Ø]   έ:-sà-Ø
    [[1SgP   **house.L**]   fall.Perf.HL-Ppl.Nonh]   see-Reslt-3SgS
    'He saw my house that fell' (úró)

d. [[[kó   àrgà]   bὲ   pánà-Ø   kùⁿ]
    [[[NonhP **side.L**] 3PlS   skin(verb).Perf.HL-Ppl.Nonh   Def]
    mà   àrgá]   lὲ
    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 dáɣá '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. [ñὲ-m   kùròy]   yέrὲ-m   kùⁿ
           [**woman-Pl.L six.L**]   come.Perf.HL-Ppl.Pl   Def
           'the two women who came' (< ñ̃ĕ-m kúróy 'six women')

b. [cὲ: tùrù]   wò   dènê: cêw
    [**thing.L   one.L**]   3SgS.L   want.Impf-Ø   all
    'any one thing that you want' **2004.4.4** (cὲ: 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 [x̄ n̄] where neither the initial nor the
final changes its tones in a main clause (811.b), [x̄ n̂] 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 (bâːⁿ) '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. [àːmàdù dèː]   bàmàkó wɔ̂-n   kùⁿ
       [**Amadou.L father.L**] Bamako be.HL-Ppl.Sg   Def
       'Amadou's father who is (living) in Bamako' (áːmádù dêː)

      b. [mèːtèrè   gàːrà]   bè   jâːⁿ-Ø   kùⁿ
       [**meter.L   eight.L**] 3PlS.L dig.Perf.HL-Ppl.Nonh Def
       'the eight meters (depth) that they have dug' (mɛ́ːtérɛ̀ gáːrà)

      c. [dòmnò   ñɛ̀-m]   yɛ́rɛ̀-m   kùⁿ
       [**Domno.L woman-Pl.L**] come.Perf.HL-Ppl.Pl   Def
       'the women of Domno (village) who have come' (dómnó ñê-m)

      d. [pɛ̀ːtàɣà   bàːⁿ]   núwⁿò-n   kùⁿ
       [**Petaka.L   owner.L**] die.Perf.HL-Ppl.Sg   Def
       'the resident of Petaka (village) who died.' (pɛ́ːtàɣà bâːⁿ)

      e. yáː   [àːmàdù   dèː   bé   kúróy]
       yesterday [A.L   father.L Pl   six]
       [ìjúkùⁿ]   láɣà-m   kùⁿ
       [dog Def] hit.Perf.HL-Ppl.Pl   Def
       'the six fathers of Amadou who hit the dog yesterday'
       (áːmádù dêː 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 dógúrú '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, cè:), but not to the pronoun.

(812)   a.   é   [ì nè   [ñè-î-n   yɔwɔ̀   lé]
             you-Pl [**person.L**   [woman-child-Sg accept.L   in]
             yǎ:-m̀   kùⁿ]
             go.Impf-**Ppl.Pl**   Def]
             'You-Pl, 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]
             2Pl [**person**   collective.hunt   proclaim.Perf.HL-**Ppl.Pl**   Def]
             'you-Pl 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-VblN.L   3Sg-Dat   3PlS.L   give.Perf.HL-Ppl.Nonh   Def,
        [wò   cé]≡ỳ
        [3SgP.L   possession]≡it.is
        'What(-ever) they give her [topic], it's hers (to keep).' (ò-ý, wò-rú)
        2004.3.20

14.1.5   Relative clause with conjoined NP as head

When the head of a relative is a **conjoined NP**, expressed by dying-quail intonation on both conjuncts, the left conjunct has its regular tones plus the dying-quail conclusion. The right (=second) conjunct most often takes ordinary tone-dropped form with no intonational prolongation (814). However, other treatments of the right conjunct are possible; see (417) and surrounding discussion.

(814)   [ñɛ̌-n∴.   à-n]   yɛ́rɛ̀-m   kùⁿ
        [**woman-Sg   man-Sg.L**] come.Perf.HL-Ppl.Pl Def
        '[the woman and the man] who came' (ñɛ̌-n, ǎ-n)

14.1.6   Internally headless relative clause

Internally headless relatives with no overt head NP within the clause are also possible. In most such cases there is also no external head noun, but see (802) above for the occasional internally headless but externally headed relative type. The omission of a head NP is similar to the omission of the (implied) noun in headless NPs (§6.1.2).

   (815) illustrates headless subject relatives. The full expansion of (815.a) would have íné 'person' as overt head, while those of (815.b-c) would have cɛ̌ː 'thing' as head, the head taking L-tone form in each case (ìnè, cɛ̀ː). In (815.d), a pronominal conjunction 'you and them' (§7.1.3) is in apposition to three headless subject relatives with 'people' as implied head.

(815)   a.   ɔ̀wⁿɔ̀-sǎyⁿ   dòː-gó-m   kùⁿ
             cemetery   arrive-ImpfNeg-**Ppl.Pl**   Def
             'those (people) who do not arrive (=go) at the cemetery'

        b.   yɛ̀-kàná   céjé   jɛ́ːrɛ̀-m
             woman-new   meet   bring.Perf.HL-**Ppl.Plb**
             'those who greet and bring (into the village) the new bride'
             2004.3.20

        b.   dáːŋá   mǎː   bɛ̀rɛ́≡kɔ̀-Ø
             water.jar build   can.Impf≡be.Nonh-**Ppl.Nonh**
             'that (=good clay) which can make (good) water jars' **2004.3.13**

        d.   [è   wó≡ỳ]   [[mɔ̀rⁿɔ́   wárà-m]
             [2Pl   3Sg≡it.is]   [[be.together farm.Perf.HL-**Ppl-Pl**]

[mɔ̀rⁿɔ́   bírɛ̀-m]
[be.together   work.Perf.HL-**Ppl-Pl**]
[bì rɛ̀   túmnó]   bírɛ̀-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 unsuffixed 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', yèrɛ́-m̀ 'one who comes', Pl yèrɛ́-m̀ '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 unsuffixed Perfective. It has the following participles, with the usual H(H…)L unsuffixed Perfective relative-clause tone contour: Nonhuman kûn-Ø (819), Sg kún-ìn (467.c), Pl kún-ùm (688). The vocalic extensions (with high vowels) in -ìn and -ùm are common in adjectival morphology.

(819)   [ùrò   [ɛ̀nɛ́ bé]   kûn-Ø   kù^n]   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 /Cv̂-/ 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 wɔ̀- and kɔ̀- in the locational sense 'be'. Their forms, showing overlaid Perfective H(H…)L tone, with zero Participial suffix, are sâː-Ø (713.a), wɔ̂ː-Ø (820.c), and kɔ̂ː-Ø (820.a-b), respectively. There is no lengthening before a nonzero suffix: Sg Participial sâ-n, wɔ̂-n (811.a), kɔ̂-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-ìn (653.c) and Pl sán-ùm for 'have', and Sg wɔ́n-ìn and Pl wɔ́n-ùm for 'be.Human'.

(820) a. [gùjú kùⁿ lè], lɔ̀ɣɔ̀ kɔ̂:-Ø.ː.   fú:]
         [skin Def in], dirt.L **be.Nonh**.HL-Ppl.Nonh all]
         dègɛ́≡kɔ̀
         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-cèrⁿɛ̀]-úró
         man-Pl   Poss   [Rdp-circumcision.L]-house
         dìːⁿ   kɔ̂:-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 dìːⁿ   èmè   wɔ̂:-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 ≡kɔ̀

In the unsuffixed Imperfective verb, the form for Nonhuman subject consists of the Imperfective verb stem plus Nonhuman kɔ̀ 'be'. An example is yɛ̀rê-'come.Impf' plus kɔ̀, realized as yɛ̀ré≡kɔ̀ 'it will come' after tone sandhi.

    When such a combination occurs in a relative clause, the Participial suffix is added to ≡kɔ̀. The forms are Nonhuman ≡kɔ̀-Ø, Sg ≡kɔ̀-n, and Pl ≡kɔ̀-m. Compare the parallel Perfective and Imperfective relative clauses in (821.a-b).

(821) a. [ìnè-m   lè]   gɔ́:   túmnɔ̀-m
         [person-Pl.L Inst] dance(noun)   begin.**Perf**.HL-Ppl.Pl
         'the people with whom the dance began'

      b. [ìnè-m   lè]   gɔ́:   túmnó≡kɔ̀-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 ≡kɔ̀- remain L-toned. Therefore the Nonhuman participle ending in ≡kɔ̀-Ø does not undergo Contour-Tone Mora-Addition (141), as seen in (822).

(822)   a.   cɛ̀ː   kó   téːré≡kɔ̀-Ø
            thing.L   NonhO   show.Impf≡**be.Nonh**-Ppl.Nonh
            '(some) thing that shows it'

        b.   [ànà   kárⁿá≡kɔ̀-Ø]   yɔ́≡kɔ̀⇒
            [village.L   do.Impf≡**be.Nonh**-Ppl.Nonh]   exist≡be.Nonh
            'There are villages that do (that).' **2004.3.18**

For Nonhuman Participial kɔ̂ː-Ø with lengthened vowel in the locational sense 'be', see (820.a-b), above.

14.1.10   Participle of jîì- 'in the meantime'

In a special 'in the meantime' construction, a form related to the usual Past particle jìːⁿ can be conjugated pronominally. The conjugatable form is jîì-, 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) jìːⁿ is added after the participle, illustrated in (594).

14.1.11   Relative-clause participle including positive AN morpheme

With rare exceptions, Perfective -tì - and allomorphs (-yà-/yɛ̀-, -âː-) 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.   cɛ̀ː   ù   kúnó-sà-Ø   cêw
            thing.L   2SgS.L   put-**Reslt**-Ppl.Nonh   all
            'whatever you have put (in it)' **2004.3.17**

b. [bè   dérè]   [àrá   nɔ̌:-jè-n]
   [3PlP.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-kɔ̀jú   á:-térè-n]≡î: 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. [kɔ̀nî:ⁿ   nûŋ]   nùŋ-á:rⁿà-m   yɔ́≡kɔ̀
   [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   tɔ̂:-m] [gúyⁿó   lè]
   [3Pl too] [person.Pl.L [Dem Recip-Pl] [theft   in]
   yǎ:-tɔ́γɔ̀-m≡î:
   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 -tɔ́γɔ̀- 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   dɔ̀:-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   àɣà-lí-n]   kɔ̀:-rɔ́
   [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:-rá- 'not have' may be participialized, asin (825). See also Sg
sà:-rá-n in (261) and (419.c).

(825) … hâl   [[círé   sà:-rá-Ø]   lè] yǎ: dɔ́:≡kɔ̀
       … 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,
wɔ̀:-rɔ́- (human) and kɔ̀:-rɔ́ (nonhuman). The latter is illustrated in (826); see
also line 3 of (209).

(826) [ànà   cín   kɔ̀:-rɔ́-Ø]   yɔ́≡kɔ̀
       [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 jèl-lá- 'not have' (jèré- '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. [pɔ̀n-sǔŋ   tùl]-lá-m
           [pants.L-cord   one]-**Neg-Ppl.Pl**
           'those who are not of the same belt-cord (=extended family).' (túrú,
           in this compound otherwise HL-toned túrù] **2004.3.3**

       d. ì -n   èjù-lá-n
           child-Sg.L   good-**Neg-Ppl.Sg**
           'the child who isn't good'

       c. tèy   èl-lá-Ø
           tea.L   sweet-**Neg-Ppl.Nonh**
           'the tea that isn't sweet' (têy, érù)

A relative clause may be formed from the negation of the ≡ỳ 'it is' clitic, which appears in main clauses as ≡ỳ 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]
           [[màlfâːⁿ   dánà-n]   mà   tílây≡ỳ],
           [[rifle   hunt.HL-Ppl.Sg] Poss   necessity≡it.is],
           [[màlfâːⁿ   dánà-n]≡îː   là-n],
           [[rifle   hunt.HL-Ppl.Sg]≡**it.is   Neg-Ppl.Sg**]
           [ìjú   dánà-n   kùⁿ]≡ỳⁿ   dèy
           [dog   hunt.HL-Ppl.Sg Def]≡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. ìj≡îː   là:-Ø   kùⁿ
           do≡**it.is   Neg-Ppl.Nonh**   Def
           'that one who is not a dog' (ìjú)

       c. [ìnè   [wó tɔ̀gú] wɔ̂-m]   yèrɛ́ mɔ̀rⁿɔ́-bà,
           [person.L [3SgP kind] be.HL-Ppl.Pl] come be.together.Impf-3PlS,
           [[wó   tɔ̀g]≡îː   là-m   kâːⁿ]
           [[3SgP kind]≡**it.is Neg-Ppl.Pl**   even]
           [cɛ̀rⁿɛ̀wⁿɛ̀-dèné-m]   yèrɛ́ mɔ̀rⁿɔ́-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 -tî-, -yà-/-yɛ̀-, or -âː-). 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   jâː^n-Ø
            2SgS.L   dig.**Perf**.HL-Ppl.Nonh
            'what you-Sg have dug' (headless; jǎː^n-) **2004.3.6**

      b.   lùgù   ù   bàrá jâː-Ø   kù^n
            manure.L 2SgS.L gather   convey.**Perf**.HL-Ppl.Nonh   Def
            'the manure that you-Sg have gathered and taken (there)' (jǎː-)
            2004.3.6

      c.   [dògùrù kó   bè   pánà-Ø   kù^n] lè
            [time.L   NonhO 3PlS.L skin.Perf.HL-Ppl.Nonh Def]   in
            'when they have skinned (and butchered) it (=animal)' **2004.3.17**

      d.   [bè   gámár^{n}à-Ø   kù^n lè]
            [3PlS.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 Cvː- (relative Perfective Cv̂ː), and the only C-final verb is monosyllabic kùn- 'be in' (relative Perfective kûn-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 #CvCvː-, 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)v́ː-, and for no other verb type, there is a **surface homophony** between the unsuffixed Perfective and unsuffixed Imperfective participle. Starting with lexical (C)v́ː-, the H(H…)L contour produces F-toned (C)v̂ː-, and the final L-tone segment that characterizes the unsuffixed Imperfective also combines with lexical (C)v́ː- to

produce F-toned (C)v̂ː-. 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)v́ː-ǹ for the unsuffixed Imperfective, with underlying form /(C)v́ː-L-n/ with floating L-tone marking the aspectual category, and e.g. (C)v̂ː-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)v̂ː-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 -tì-, -yè-/-yà-, -âː-) in relative clauses. However, there are rare exceptions in the texts. Consider first (831).

(831)   ù   láɣá-ǹ,   ù   láɣá-ǹ,   [nǐː   lὲy]
         2SgS.L hit.Impf-Ppl.Sg, 2SgS.L hit.Impf-Ppl.Sg, [day   two]
         [dògùrù kó   ù   láɣá-tì-Ø∴.   fúː],
         [time.L   NonhO 2SgS.L   hit.Impf-**Perf**-Ppl.Nonh all],
         [gùjú   kùⁿ]   íré≡kɔ̀
         [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), -tì- occurs before fúː 'all', which imposes dying-quail intonation (∴) on the preceding word. Perhaps -tì- here emphasizes finality; the cowhide is oiled and beaten over a two-day period.

The adjectival verb péːⁿ- '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 pěyⁿ 'old'.

(832)   a. [ì nὲ   gǎ-n]   [ì nὲ   péːⁿ-yⁿὲ-n]≡îː
             [person.L old-Sg]   [person.L   become.old-Perf-Ppl.Sg]≡Foc
             nùwⁿɔ̀   dὲy
             die.Perf.L if
             'If it is an adult, a person who has become old [focus] who has died, …' **2004.3.21**

        b. [ì nὲ   péːⁿ-sà-n]≡îː   tàŋà   dὲy
             [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 -âː- in resultative-stative sense (833). This is an isolated, lexicalized form. Singular káw-âː-n (and Plural káw-âː-m), based on the verb káwá- 'be separate', are the human counterparts of the (nonhuman) adjective kǎw 'separate' (231.g).

(833)   ì nὲ   káw-âː-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)   sàːj-îːⁿ,   [dìːⁿ   kò   têyⁿ∴   fúː⇒]
         bird-child,   [manner.L NonhS.L   **small.HL**   all]
         à-tîː   kó   áː≡kɔ̀
         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 tĕyⁿ. The switch to F-toned têyⁿ is independent of the "dying quail" intonation associated with the following fúː 'all', and in follow-up elicitation informants gave [dìː kò têyⁿ] when the fúː 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 nὲ   ùrɔ́   súgò-n
              person   **go.up**   go.down.Perf.HL-Ppl.Sg
              'the person who went up and came (back) down'

b. ìnè   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) [ɛ́mɛ́   à-kɔ̀rɔ̀ pɛ̀yⁿ]   dàmá   dùŋó   mèyⁿ,
       [1PlP   well.L   old.L]   **push**   **close.up**   and,
       [sì mɔ̂: tárá   ɛ̀mɛ̀   wɔ̀ɣɔ̀rɔ́-sà-Ø]   yɔ́≡kɔ̀
       [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   dɔ́:≡kɔ̀,
          [place.N NonhS.L   arrive.Impf≡be.Nonh]
          ù   dènè-gó-Ø]   yɔ́≡kɔ̀
          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. [[ì nè   gàmà-nàm] jàndúrú (bé)   céré≡kɔ̀
[[person certain-Pl.L] donkey   (3PlO) bite.Impf≡be.Nonh
ù   dènè-gó-m]   yɔ́≡kɔ̀
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 gáː- 'say' as higher-level verb.

(838) a. [ñɛ̀-n   è   jɛ́ː   bɛ̀rɛ́-ǹ   lè]
[woman-Sg.L 2PlS.L marry **can**.Impf-**Ppl.Sg**   with]
fɔ́tt-âː-Ø
coincide-Perf-3SgS
'He has met with a woman whom you-Pl can marry' **2004.3.20**

b. [cɛ̀ː   ámà kárⁿá]   è   gâː-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) [bìrè   [ɛ̀nɛ́ bé] bìrêː]   [ɛ̀nɛ́ bé] júgɔ̀-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 fúː and cêw 'all'
d. kâːⁿ or kárⁿà 'also, too' (usually in the combination kâːⁿ nè)
e. Past jìːⁿ

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.

kù^n, 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 participipialized; see (596).

(841) a. [[é   wàrù-wárá-m]   háybé-m   kù^n]
           [[2Pl   farming.L-farm(verb).H-Pl]   protect-Ppl.Pl   **Def**]
           'those who protect you farmers' **2004.3.8**

       b. [bànɗî: [má   kû:^{n}]   númò-m   kù^n bé]
           [bandit   [1SgP on]   fall.Perf.HL-Ppl.Pl   **Def**   **Pl**]
           jɔ̀:-gó-m
           know-ImpfNeg-1SgS
           'I don't know the bandits who fell on (=attacked) me.' (jùgɔ́-)

       c. [èjù-nɔ̀w^{n}ɔ̀   à:-gó:-Ø.∴.   fú:]
           [field.L-meat.L catch-ImpfNeg-Ppl.Nonh   **all**]
           mà   tɔ̌g   kɔ̀:-rɔ́
           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') (tɔ̀gú) **2004.3.16**

       d. [â:-Ø   cêw]
           [catch.Perf.HL-Ppl.Nonh   **all**]
           'whatever he has caught' **2004.3.16**

       e. [[pɔ́:rɔ́   ènɛ́   dɔ̀:-gó-Ø
           [[first   Refl   reach-ImpfNeg-Ppl.Nonh
           jì:^{n} kù^n cêw]   lè]   dɔ̂:-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', kâːⁿ (variant kárⁿà, extension kâːⁿ nɛ̀) has no tonal effect on the preceding participle (842). (For homonym kâːⁿ 'each' see the following section.)

(842) [jǎm   ì nɛ̀   bè   gá-m̀   kâːⁿ]   yɔ́≡kɔ̀
       [tanners person.L 3PlS.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 kâːⁿ '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 kâːⁿ (kárⁿà) in the sense 'also'; see the preceding section. Distributive kâːⁿ rarely co-occurs with a following final morpheme; one can imagine (on semantic grounds) a combination with following kâːⁿ (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 kâːⁿ 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 kâːⁿ is fairly common in constructions freely translatable with 'nobody' or 'nothing', and in double-negative constructions translatable with 'everybody' or 'everything'.

(843) a. [ɛ̀ː-lî -n   kâːⁿ]   kɔ̀ː-rɔ́
           [see-PerfNeg-**Ppl.Sg.L any**]   be.Nonh-Neg
           'There is nobody who did not see (it).' = 'Everybody saw it.'
           2004.3.6

       b. [cɛ̀ː   béː-rà-là-Ø   kâːⁿ]   kɔ̀ː-rɔ́
           [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≡ỳⁿ   bɛ̀ː-Ø   kâːⁿ]   [kó   bɛ̀rɛ̂ː]
           [death≡Foc   happen-**Ppl.Nonh.L any**]   [Nonh in]

ŋáɲá:dì ≡ỳ   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}]   kɔ̀:-rɔ́
            [person.L **work-Reslt-Ppl.Sg.L** **any**]   be.Nonh-Neg
            'There is nobody who worked.' (bǐr-sà- < bǐré-)

       b.   [ì nè   nîm   bíré   bì r-à:rà-n   kâ:^{n}]
            [person.L now   work(noun)   **work-Habit-Ppl.Sg.L**   **any**]
            kɔ̀:-rɔ́
            be.Nonh-Neg
            'There is nobody who is working now.' (bì r-á:rà-)

       c.   [mòbîl   kò   àrgá]
            [vehicle   Dem   side]
            [mòllò-sà-Ø   kâ:^{n}]   kɔ̀:-rɔ́
            [**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   kâːⁿ]   kɔ̀ː-rɔ́
          [person.L **come.Perf-Ppl.Sg.L any**]   be.Nonh-Neg
          'Nobody came' (yérè-n)

Demonstrative núŋò (and its human counterparts), like modifying adjectives and Distributive kâːⁿ, forces tone-dropping on a preceding noun in simple NPs: ì jù núŋò 'that dog' (ì jú). 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 wɔ̂ː-Ø without the demonstrative.

(846)   a.   à-n   yèl-lì -n   nùŋò-bâːⁿ
             man-Sg.L   come-PerfNeg-**Ppl.Sg.L**   **Dem-owner**
             'that man who did not come'

        b.   [dì ːⁿ   nî ŋ] [[ní ɛnɛ́   wɔ̀ː-Ø   núŋò]   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 wɔ̀ː-Ø in (846.b), cf. wɔ̀- '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 sàː-Ø. Both wɔ̀ː-Ø and sàː-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-nɔ̀wⁿɔ̀   círɛ́   sàː-Ø   núŋò   bé]
        [field.L-meat.L   horn   **have.Perf.L**-Ppl.Nonh   Dem   Pl]
        tɔ̀gú   yàŋá   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 ≡kɔ̀-Ø as Nonhuman unsuffixed Imperfective participle (848), so the vowel is not lengthened.

(848)   [cɛ̀ː   kó   téːrɛ́≡kɔ̀-Ø   kâːⁿ]   kɔ̀ː-rɔ́
        [thing.L   NonhO   show.Impf≡**be.Nonh-Ppl.Nonh** any]   be.Nonh-Neg
        'There is nothing that shows that.' **2004.3.18**

14.2 Subject relative clause

14.2.1 Simple subject relative clause

Subject relatives are those where the subject NP and the head NP converge. Most of the morphosyntax of relatives is constant from subject to non-subject relatives, since the form of the head NP and that of the participle (and the NP-final morphemes that follow it) are not dependent on case. The main formal difference between subject and non-subject relatives is that only the latter allow L-toned preverbal subject pronominals (if there is no other subject NP). Examples of subject relatives are in (849). The great majority of textual examples involve human subjects, but nonhuman subjects are also possible (849.c,f). In interlinears, the head NP and the participial suffix are bolded.

(849)   a.   ì nè   gó:-m̀ ∴.   fú:
             person.L   go.out.Impf-**Ppl.Pl**   all
             or: go.out.Perf.HL-**Ppl.Pl**
             'everyone who was going out' (Impf)
             or: 'everyone who went out' (Perf)   (gó:)
             [note: transcribed gô:-m if Perfective, gó:-m̀ if Imperfective]

        b.   à-n   íjé   dègé   bèré-ǹ
             man-Sg.L   stand   spend.day be.able.Impf-**Ppl.Sg**
             'a man who can stand up all day'.

        c.   cì gè   émé   mɔ̀:-nɔ́-sà-Ø
             thing.L   1PlO   be.together-Caus-Reslt-**Ppl.Nonh**
             'the thing that unites us' **2004.3.11**

        d.   [ì nè   úrò   pílíwé-m̀]   yɔ́≡kɔ̀
             [**person.L** house.Loc.HL return.Impf-**Ppl.Pl**]   exist≡be.Nonh
             'There are (also) some people who remain at home' **2004.3.9**

        e.   [*conseiller*   bè]   èjú   yâ:-m
             [**councilor.L** **Pl.L**]   field   go.**Perf.HL-Ppl.Pl**
             'the (village) councilors who have gone to the field' **2004.3.10** (yǎ:)

        f.   [màlfà:ⁿ   kɔ̀rsɔ̀-sà-Ø   kâ:ⁿ]   [kó   bèrê:]
             [**gun.L**   misfire-Reslt-**Ppl.Nonh**.L any]   [Nonh   in]
             gò:-lí-Ø
             go.out-PerfNeg-3SgS
             'No gun that misfired went out (with the men) in that (activity)'.

g. pùlɔ̀-n   [nàŋá kù ͫ]   gúy ͫɔ̀-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 yǎː-, 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-ǹ 'hunter' (Pl dàná-m̀). 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 [x̄ v̂-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 [x̀-v́-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-yáː-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)   [cɛ̀ː   ù   bírɛ̀-Ø]   céːn-âː
        [**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   jùgɔ̂:-Ø]   mà   tègú
            [**snake.L** *2SgS.L* know.Impf-**Ppl.Nonh**] Poss   speech
            'saying something about the snakes that you know (of).'

       b. kǐ-kàjàrà   tɔ́:   ù   dò:-lí-Ø
            Rdp-**new.field.L** sow   *2SgS.L* reach-ImpfNeg-**Ppl.Nonh**
            'a newly cleared field that you-Sg have planted (in part) but have
            not reached (the boundary of') **2004.3.6**

       c. púlɔ̀-m   nàŋà   nàná   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   ǔj-jὲ
            until   **donkey.L** go.up-RecPf
            èjú   ù   yæ̌:-Ø   kâːⁿ
            field   *2SgS.L* go.Impf-**Ppl.Nonh**   even
            'even a donkey that you-Sg have already mounted and (will) go to
            the field (with)' (ùrɔ́-) **2004.3.10**

       e. [cὲ: kò   ñúnú-ŋò-Ø]
            [**thing.L** *NonhS.L* be.ruined-Caus.Perf.HL-**Ppl.Nonh**]
            yǎ: yàŋá-bà
            go   look.at.Impf-3PlS
            'They will go and look at what it damaged (=the damage it did).'
            (verb ñùnù-ŋó-) **2004.3.10**

       f. à-n   mì   láɣà-n   kùⁿ
            man-Sg.L *1SgS.L* hit.Perf.HL-**Ppl.Sg** Def
            'that (same) man whom I hit'

       g. ì-n   bὲ   nárⁿà-n   kùⁿ
            child-Sg.L *3PlS.L* bear.Perf.HL-**Ppl.Sg** Def
            'the child that they have borne (=the child that was born).'
            2004.3.19

       h. ìnὲ   ù   á: bὲré-ǹ
            person.L *2SgS.L* catch   can.Impf-**Ppl.Sg**
            'the person whom you are capable of wrestling' **2004.3.23**

    i.   [ì nè   làgù-m]   ù   ɛ̀ː-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 gáː- '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 gâː-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≡ỳ   [mòñù-cěm   bè   gâː-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. [ñɛ̀-m   yàː-yɛ́rɛ̀-m]   ñɛ̀-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≡ỳ] 'it is X' and its negation [X≡ỳ làː] (§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   jɔ̀:-gó-Ø]≡ỳ   là:]
       [[tree.L   2SgS.L   know-ImpfNeg-Ppl.Nonh]≡it.is   Neg]
       [tì wⁿɛ̀   lɔ̌y≡ỳ   là:-Ø]   kɔ̀:-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.' (jùgɔ́-) **2004.3.27**

A parallel example where the 'it is' clause is positive was elicited (855).

(855) [tì wⁿɛ̀   lɔ̌y≡ỳ]   kɔ̀:-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) ñɛ̌-n   ɔ̀ɣɔ̀-n≡î:
       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 ≡î:). They either used compounds (e.g. 'there is
no woman-chief'), or switched from relative clause to factive complement
(857).

(857) [ñɛ̌-n   ɔ̀ɣɔ̀-n≡î:]   kɔ̀:-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) [ñὲ-n   ὸɣɔ-n≡î: là-n]   kɔ:-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 nὲ gàsὲgɛ́ 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 nὲ and gàsὲgɛ́ 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 nὲ   gàsὲgɛ́ bὲ   nánà-m]≡î:
       necessarily [**person.L animal** 3PlS.L drive.off.Perf.HL-Ppl.Pl]≡Foc
       ú:rⁿô: mà⇒↑
       get.up.Impf   Q
       'Is it necessarily (=specifically) <u>the people whose animals they (=Fulbe)</u>
       <u>have driven off</u> (=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   wɔ̂ː-n   kùⁿ
            [**person.L** Poss   dog]   1SgS.L kill.Perf.HL-Ppl.Sg   Def
            'the person whose dog I killed' (wɔ̌ː-)

        b. ì nè   [wó   ì jú]   mì   wɔ̂ː-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]   ɛ́jù-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   dɛ̀gɛ̀-gó-n]
            [**person.L** [**3SgP** gunpowder] 3SgO spend.day-ImpfNeg-Ppl.Sg]
            gɔ̀ː-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]   bɛ́rɛ̀]   sìːⁿlɛ́
            [**person.L** [[**3SgP** body]   in]   disease
            sɔ́wɔ́   mèyⁿ kɔ̂-n   cêw]   dàɣá-bà
            jab   and   be.Nonh.HL-Ppl.Sg   all]   leave.Impf-3PlS

'They (=colonial army recruiters) would leave (=reject) anyone in whose body a disease had penetrated and was (still there).' **2004.4.21**

e. ì nè [wò dê:] mì wɔ̂:-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 púlɔ̀-n before à-n.

(862) a. [ì nè gàrá⇒ jì ré ɛ́:-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 ɛ́:-ǹ] **2004.4.4**

   b. à-n púlɔ̀-n [wó nàŋá] gúyⁿɔ̀-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) unsuffixed 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. [cɛ̀: lè] lá: kò túmnó≡kɔ̀-Ø
       [**thing.L Inst**] first NonhS.L begin.Impf≡be.Nonh-Ppl.Nonh
       'the thing with which it first begins' (cɛ̌:) **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]   kɔ̀:-rɔ́
    ["…" [**person.L Dat**]   3PlS.L say-Reslt-Ppl.Sg]   be.Nonh-Neg
    'There was nobody to whom they (had) said "…".' (íné)
    2004.3.11(emended)

d. jèmè-ñě-n   [[ì nè   lè]   yǎ: tègú   tégé
    blacksmith.L-woman-Sg [[**person.L Dat**] go   speech speak
    wò   bèrè-gò-n   kâ:ⁿ]
    3SgS.L   can.ImpfNeg.-Ppl.Sg.L   any]
    [[ñě-m   kùⁿ] mà   bèrê:]   [kó   nò]   kɔ̀:-rɔ́
    [[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 3PlS.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 mánà 'on' (864.a), and to Purposive jɛ́ (864.b-c).

(864) a. [tà:bàl   mànà]   wò   íjè-Ø   kùⁿ
            [**table.L   on.L**] 3SgS.L stand.Perf.HL-Ppl.Nonh   Def
            'the table on which he stood' (tà:bǎl, mánà)

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:, jɛ́)
    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' (bú:dù, jɛ́)

    d. [tògù   dòjù]   mì   dâːⁿ-Ø   kùⁿ

      [**shed.L under.L**] 1SgS.L be.sitting.HL-Ppl.Nonh Def

      'the shed (=shelter) under which I am sitting' (tógù, 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)   [dàːɣà   bè   yérὲ-Ø]

        [**night.L**   3PlS.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. [[dàːŋà-nɔ̌ː   [ùrò   mà   bὲrὲː]   kùn-ó-Ø]

        [[water.jug   [**house.L** Poss **in.L**]   be.in-Neg-Ppl.Nonh]

        mà   úró]   kɔ̀ː-rɔ́

        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, bὲrȇː) **2004.3.13**

    b. [tògù   mà   dòjù]   mì   dâːⁿ-Ø   kùⁿ

        [**shed.L** Poss   **under.L**] 1SgS.L be.sitting.HL-Ppl.Nonh Def

        'the shed (=shelter) under which I am sitting' (tógù, dójù)

  c. [ì nè   mà   jì rè]   mì   íjὲ-n   kù^n
    [**person.L** Poss in.front.of.L] 1SgS.L stand.Perf.HL-Ppl.Sg Def
    'the person in front of whom I am standing' (jírè)

  d. [ì nè   mà   dì:^{n}]   mì   íjὲ-n   kù^n
    [**person.L** Poss **beside**.L] 1SgS.L stand.Perf.HL-Ppl.Sg Def
    'the person close to whom I am standing' (dǐ:^{n})

  e. [ì nè   mà   pènè]   mì   íjὲ-n   kù^n
    [**person.L** Poss **beside**.L] 1SgS.L stand.Perf.HL-Ppl.Sg Def
    'the person near whom I am standing' (pénè)

  Now consider (867). Here tone-dropping applies to the complement NP ('thing'), but not to the postposition kû:^{n} which follows it after intervening mà.

(867) a. [kò   fú:]   [[cὲ: mà   kû:^{n}]
     [Nonh.L all]   [[**thing.L** Poss   **on**]
     wò   dì ŋé:-Ø]≡ỳ
     3SgS.L   sit.down.Impf-Ppl.Nonh]≡it.is
     'All that [topic], it's what she will sit (=live) on.' (cě:, dìŋê:-Ø)
     2004.3.20

   b. [cὲ: mà   kû:^{n}]   è   jéyὲ-Ø
     [**thing.L** Poss **on**]   2PlS.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 bὲrê: 'in' and the other postpositions illustrated in (866), behaves syntactically like a simple PP. The other, my only clear example being kû:^{n}, behaves like a possessed NP phrase. This in turn suggests that kû:^{n}, but not bὲrê: 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 kû:^{n} can plausibly be glossed concretely as 'on the head of' (as in 'it fell on me') provide additional evidence that kû:^{n} is still closely connected by native speakers to the source noun kú:^{n} 'head'. The synchronic connection between bὲrê: 'in' and the original source noun bὲré 'belly' seems weaker.

  This reasoning leads to an analysis of [X mà kû:^{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   dâːⁿ-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 (v̄ v̀ v̄)

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. èmĕ-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.' (gó:-)
          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. [nîŋ   ènέ   wó   táːⁿ   wɔ̀:   tì   yǎ̀ː]   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
[v̄ v̀ v̄] pattern, with mèyⁿ treated as a medial chained verb.

A similar [v̄ v̀ v̄] pattern, along with two-part (v̄ v̀), occurs in verb-stem
iteration (§11.6.2). See also the expressive triple iterations with x̄-x̀-x̄ 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. sìːrè-tèːr-ú
          point.at.L-show-**VblN**
          'pointing (with finger) and showing' (verbs síːré-, téːré-) **2004.3.11**

       b. [bé   nè]   [[nɔ̀wⁿɔ́   kùⁿ]   mà
          [3Pl   now]   [[meat   Def]   Poss
          lùgùrò-làɣà-jèːr-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)' (lúgúró-, láɣá-, jèːrέ-) **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 mèy[n], we may get Possessive mà.

(871) [kùr[n]â:[n]   mà   sǔŋ]   [àná   bɛ́rɛ̀],   *goudron*
       [electricity Poss cord]   [village   in],   paved.road
       cě: kán   tí   mèy⇑   mà   gǎ:-n-Ø   bé⇒
       thing   do   Link   and   **Poss**   go.past-Caus-VblN   Pl
       'there's doing something to take electrical wires across streets in the town, and there's removing filth from (=cleaning out) the ditches, …' (kár[n]á-, 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 …láɣá cê:[n]-Ø with a verb chain including láɣá '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] láɣâ:-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.   ɔ̌:r[n]ɔ̌≡ỳ[n]   táná-ŋá-ẁ[n]   táná-ŋá-ẁ[n],
             waterskin≡Foc   become-Caus.Impf-2SgS   become-Caus.Impf-2SgS
             bɛ̀:nɛ́≡ỳ[n]   táná-ŋá-ẁ[n]   táná-ŋá-ẁ[n],
             shoulder.bag≡Foc
             'You-Sg will be making them (=tanned hides) into <u>waterskins</u> [focus]; you will be making them into <u>shoulder bags</u> [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 mèy[n]. 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** -tɔ́ɣɔ̀ 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. [[ɛ̀nɛ́   mà   bà:ñá.∴]   [ɛ̀nɛ́   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. jɔ̀:mɔ́-jè   yǎ:-ẁ
           ride-RecPf   go.Impf-2SgS
           'You-Sg will ride away (on a bicycle).' **2004.4.25**

       b. wó≡ỳ   lúgúró-tɔ́ɣɔ̀   yàrà-m
           3Sg≡Foc   look.for-**Impf**   go.around.Perf.L-1SgS
           'It's <u>him</u>/<u>her</u> [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) [[ɛ̀nɛ́   mà   màlfâ:ⁿ]   dàrá]   [dúwⁿɔ́sán 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:rɛ́   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 Ø (and Ø$_x$ 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]   [Ø   [èjú   lé]   jǎ:-jà:]
           [**manure**$_x$ gather] [Ø$_x$ [field in]   convey-convey]
           [Ø   sáráwá-jè-bà   dèy,
           [Ø$_x$ spread-**RecPf-3PlS**   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:]   [Ø   [púlɔ-m   lè]   ó:-bà]
           [**NonhO**$_x$ take]   [Ø$_x$ [Fulbe-Pl   **Dat**]   give.Impf-3PlS]
           '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) [[pàɣà   túmnó]   kó   páɣá]
       [[bundle.L   one]   NonhO   **tie**]
       [[wòtórò   mánà]   ná:ná]
       [[cart   on]   **put**]
       [[wò   nâ:]   mà   úrò]   àrⁿ-úm   mɔ̀rⁿɔ́
       [[3SgP.L mother.HL] Poss   house.Loc.HL]   man-Pl   **be.together**
       yǎ: kó   dé: súnú-ŋó-bà
       go   NonhO   **carry**   go.down-Caus.Impf-3PlS
       '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) ɛ́wⁿɛ́-jè-bà   dèy, jè:rɛ́ [àná   bɛ́rɛ̀] kúnó mèyⁿ⇑,
       milk(verb)-**RecPf**-3PlS   **if**, bring [village in]   put   and,

yì lì wé   [êm   kùⁿ]   dɔ̀rⁿɔ́-bà
walk.around   [milk   Def]   sell.**Impf**-3PlS
'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   súj̃ɔ́   gɔ̀ŋɔ́-bè
              village   blow   go.around.Impf-2PlS
              '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]   yàŋá   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) ɛ́mɛ́   jǎ: té:ré   mèyⁿ
        1PlO   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 kɔ́l-lɔ́- (Reversive derivative of kɔ́rɔ́-
'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.   kɔ́l-lɔ́   jɛ̀ːré-
             hang.up-Revers   bring-
             'unhook (sth hanging) and bring'

        b.   kɔ́l-lɔ́   dàɣá-
             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)   táːⁿ   wɔ̌ː-   'shoot and kill' = 'shoot dead'
        láɣá   wɔ̌ː-   'hit (with a stick) and kill' = 'strike dead'
        bàrá   gɔ̌ːⁿ-   'gather and remove' = 'round up and expel'
        úːrⁿó   íjé-   'arise and stand/stop' = 'stand up'
        céré   púl-lɔ́-   'bite and break' = 'bite off or through'
        nàná   tíː-   'chase and send' = 'drive out, expel'
        dàmá   dùŋó-   'push and close up' = 'fill (well) with earth'

Rarely, a verb is attested only as noninitial member of a chain. For example, sárá- in the sense 'pass' seems to occur only in the combination sárá gàrá- 'go past (continuing on one's way)', with gàrá- 'pass, pass by, exceed'.

15.1.7   Chains including a time-of-day verb

Time-of-day verbs dɛ̀gɛ́- 'spend (mid-)day' and náː- '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.   jɔ̀wɔ́   nàː-bà
             run   **spend.night**.Perf.L-3PlS
             'They drove ("ran" all night.' **2004.5.1**

b. yɛ́-dì:ⁿ   jɔ̀wɔ́   dègɛ̀-y
    there   run   **spend.day**.Perf.L-1PlS
    'There we drove all day.' **2004.5.1**

15.1.8   Chains including dàɣá- 'leave'

dàɣá- 'leave' is a common second element in chains. Often the addition of dàɣá- 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   wɔ̀-túmó   mà   kú:ⁿ]≡ỳⁿ   [tòy   mǎyⁿ]
            [2SgP   mound   Poss   on]≡Foc   [sowing.L   dry]
            tɔ́:   únó   dàɣá-ẁ
            sow   put.down   leave.Impf-2SgS
            '<u>On the mounds</u> [focus] you-Sg will sow, put down, and leave the dry seed (in pits with manure, before the rains).' (kû:ⁿ) **2004.3.6**

       b.   nǎn   dàɣá-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)?' (nàrⁿá-) **2004.3.9**

       c.   dì:ⁿ   ɛ́m   bè   jǎ: dáɣà-Ø
            place.L   1PlO   3PlS.L   convey   leave.Perf.HL-Ppl.Nonh
            'the place where they took and left us.' (ɛ́mɛ́) **2004.5.6**

    dàɣá '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   dàɣá   kùnù-wⁿɔ̀-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   dàɣá   jì-nî: 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-m̀
             go   **come**.Impf-1SgS
             'I will go and come (back).'

        b.   yèré   bé   témé-
             come   3PlO   find-
             '(to) come and encounter them'

        c.   yèré   [íné-m   lè]   tégé   mèyⁿ⇑
             come   [person-Pl   Dat]   speak   and
             [màlfâ:ⁿ   nám]   yǎ: wǒ-r   tá:ⁿ   ó:-bà
             [rifle   owners]   **go**   3Sg-Dat   shoot   give.Impf-3PlS
             '(He) having come and spoken to the people, the hunters with guns
             will go, shoot (an animal), and give it (to him).' (wò-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 v̀] tone (§11.6.3).

(887)   a.   nûŋ   nùŋó-tóɣɔ́   yèrè-Ø
             song   sing-Impf   **come**.Perf.L-3SgS
             'He/She came singing.'

        b.   nûŋ   núŋò-nùŋò   yèrè-Ø
             song   sing.HL-sing.L   **com**e.Perf.L-3SgS
             'He/She came singing.'

    'Pick up, take' is also common with a following verb (888).

(888)   a.   wó   yàŋá   jè:rè-bá⇒
             3SgO   **take**   bring.Perf.L-3PlS
             'They (=police) took him and brought him (to where he said he had
             killed an elephant).'

b. [pì rⁿé   kùⁿ nè]   yàŋá   nɔ́ː   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 mɔ̀rⁿɔ́- 'be/do together'

Among the most commonly chained verbs is mɔ̀rⁿɔ́-, 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. mɔ̀rⁿɔ́- may also follow another verb, especially in its basic lexical sense after a motion verb (889.b). In (889.c), mɔ̀rɔ́ is second in a string of three verbs, matching the sequence of sub-events.

(889) a. [bé   nè]   mɔ̀rⁿɔ́   ǔ-r   téwɛ́-bà
         [3Pl   now] **be.together** 2Sg-Dat make.brick.Impf-3PlS
         'They now [topic], they will get together and make bricks for you-Sg.' (ù-rú) **2004.3.25**

    b. [bé   nè]   yèré   mɔ̀rⁿɔ́-bà
         [3Pl   now]   come   **be.together**.Impf-3PlS
         'They now [topic], they will come and assemble.' **2004.3.19**

    c. yèré   mɔ̀rⁿɔ́   wó   bàrà-bà
         come   **be.together** 3SgO   help.Perf.L-3PlS
         'They came together and helped him.' **2004.3.2**

There is a causative mɔ̀ː-nó- 'put together, gather, assemble' with similar combinatorial potential (890).

(890) é   bɔ̀rⁿɔ́   mɔ̌ː-n-tù-bà   dèy
      2PlO   call   **be.together-Caus**-Perf-3PlS if
      'when they have summoned and assembled you-Pl' **2004.4.6**

15.1.11 Chains with causative verb and kàrà

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 kárá- 'compel'. This is not the 'do, make' verb kár^{n}á-, which has a nasalized r^n (§11.1.7). My examples of kárá- are in the L-toned unsuffixed Perfective (891). I was also able to elicit a VblN kàr-ú.

(891) a. [bɛ́ː   kùⁿ]   wó   bɛ̀ː-wɛ́   kàrà-Ø
            [excrement Def]   3SgO   defecate-Caus **compel**.Perf.L-3SgS
            'He forced him to defecate.' **2004.4.4** [from (1256)]

       b. wó   ñɛ́ː-wⁿɛ́   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 kárá-. Instead, my assistant preferred imperfective forms of the morphological causative kárá-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 ɔ́gɔ́-rɔ́ 'be fast, do fast' and pílíwé- 'go back; do again'.

(892) a. pílíwé   [ɔ̀yɔ́   nɛ̀]   tɔ́ɣɔ́≡kɔ̀
           go.back [grass   now]   sprout.Impf≡be.Nonh
           'The grass will sprout again.' **2004.3.6**

       b. ɔ́gɔ́-rɔ́   kɔ̀   dɔ́ː≡kɔ̀   dèné-ẁⁿ   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 jàmá- 'betray', which may be glossed adverbially as 'treacherously' in (893).

(893) [dàːɣá dɛ́ː-yɛ̀-Ø   dèy] yɛ̀rɛ́ jàmá léjɛ́-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   ɛ́wɛ́   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-dî:ⁿ   nú: dì ŋè-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**,
       ɛ́mɛ́   jè:rɛ́   dè:nè-l-á]
       1PlO   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   cɛ̀:   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. cɛ̀:   lúgúró   mì   bɛ̀l-lí-Ø
           thing.L look.for 1SgS.L get-**PerfNeg**-Ppl.Nonh
           'what I looked for and (=but) did not find' (bɛ̀rɛ́-)

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 -jɛ̀ 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   ɛ̀nɛ́   yǎ: yɛ̀rɛ́   sɔ́ɣɔ̀:-Ø   wà⇑,
       crane   LogoS   go   come   peck.Impf-3SgS   say,
       [ɛ̀nɛ́   sɔ́ɣɔ́-jɛ̀   yà:-gó-Ø]   jɛ̀-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 mɛ̀yⁿ

A VP with its verb in infinitival (bare-stem) form followed by particle mɛ̀yⁿ may be chained with a following VP (perhaps with inflected verb). Some fairly long chains with multiple [VP mɛ̀yⁿ] constituents occur in texts.

The particle has variants màyⁿ and mɛ̀, and an archaic variant mɛ́rⁿɛ́ was recorded from an old man (226.e). I generally transcribe mɛ̀yⁿ 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 mɛ̀yⁿ⇑.

There are, however, a few cases where a high-pitched méyⁿ 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]   ñĕ-n   gó: mèyⁿ,
           [village Def]   woman-Sg   go.out   **and**,
           [nîŋ   ké]   yĕy-yà-Ø   tánà: 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), …' (yèrɛ́-) **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   3PlS.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-3PlS,
           [cín   dé: mèyⁿ]   úrò   jè:rè-bà
           [thus   carry **and**]   house.Loc.HL bring.Perf.L-3PlS
           '... <u>they</u> [focus] carried (them) on their heads. Carrying (them), they
           brought (them) home.' **2004.3.2**

b. [[cèrⁿɛwⁿɛ̀   yɔ́kkɔ̀   bé]≡ỳ   cɛ́rⁿɛ́wⁿɛ́   mèy⇑]
    [[amusement.L which? Pl]≡Foc have.fun   and]
    ñɛ̌-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. [ɔyɔ̀   gàmá]   nùwⁿɔ̀-lí-Ø   kárⁿá   mèyⁿ⇑,
           [grass.L   certain] die-**PerfNeg**-3SgS   **do**   and,
           wàjá≡kɔ̀
           remain.Impf≡be.Nonh
           '… some weeds will not die, and will still remain (around the millet
           sprouts)' **2004.3.6**

       b. [bì rè-bírɛ̀   yàː-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. [… jùgɔ̀-lí-Ø   kárⁿá   mèyⁿ]
  `   [… know-**PerfNeg**-3SgS   **do**   and]
           yé-dìːⁿ   yèré   ɛ́mɛ́   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 -tɔ́ɣɔ̀
occur in a chain ending in mèyⁿ. I have one textual example, however, where
mèyⁿ follows a verb with an AN suffix, namely Imperfective -tɔ́ɣɔ̀-. The
passage in question comes at a narrative climax, and the VP containing -tɔ́ɣɔ̀- is
itself repeated.

(902) lɛ́ː   wò   gáː   kân,
       fear   3SgS.L say   after,
       [pɔ́rɔ́   jìné-tɔ́ɣɔ̀   pɔ́rɔ́   jìné-tɔ́ɣɔ̀]   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 ≡ỳ 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 ≡ỳ, the particle occured in **H-toned** form méyⁿ.

(903) [[tùmó mánà] bé: méyⁿ]≡ỳⁿ là: dèy,
       [[rock on] stay **and]≡it.is Neg if**,
       [dójù súgó yì lì wé bì ré-bì rè mèyⁿ mà⇒
       [below go.down walk.around work(verb)-work(verb).L and or
       [tĕr-Ø téré mèyⁿ⇑] … [[kó kùⁿ] kɔ̀:-rɔ́]
       [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.' (tɛ̀r-ú) **2004.3.11**

In (904), mèyⁿ (variant màyⁿ) is followed by cliticized ≡kɔ̀ 'be (nonhuman)'. This sequence is very rare.

(904) [wó ɔ̀wⁿɔ̀-sǎmnà kùⁿ] tílây≡ỳ,
       [3SgP parent-in-law.L-soap Def] obligation≡it.is
       [nîm táŋá màyⁿ≡kɔ̀],
       [now become **and≡be.Nonh**]
       [lá:-lá: [kò cêw] kɔ̀:-rɔ́ 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)   [ɛ̀nɛ́   mà   tɔ̀yⁿɔ́-sà:-rá   kùⁿ]   mà   dú:]   dé: mèyⁿ⇑,
        [Refl   Poss   truth-have-Neg   Def]   Poss   load]   carry   **and**,
        [[ì nɛ̀   tɔ̀yⁿɔ́   bâ:ⁿ   kùⁿ]   lɛ̀]   tɔ̀yⁿɔ́   ó: mèyⁿ⇑,
        [[person.L   truth   owner   Def]   Dat]   truth   give   **and**,
        ì nì wⁿé   yá:fɛ́-wɛ́   mèyⁿ⇑,
        Refl   pardon-Caus   **and**,
        [dògó≡kɔ̀-Ø]   yɔ́≡kɔ̀
        [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:fɛ́-wɛ emended from yá:fɛ́)

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   gàmá]   tɔ́:   wà:-ná
             [place   certain]   sow   widen-Caus
             bè   sâ:-Ø   dèy,
             3PlS.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   3PlS.L   **do**.Perf.HL-Ppl.Nonh   if], …
             'if they keep at it (=work)' **2004.3.9** [excerpt from (473.a)]

        c.   [yì rú   kùⁿ]   cɛ́jɛ́-cɛ́jɛ́   ájárá
             [fabric   Def]   cut-cut   sew
             bè   sâ:-Ø   dèy, …

3PlS.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 sà- 'have' (§11.5.1), and Resultative suffix -sà- (§10.1.2.4). All three are associated with the perfective aspectual system. Resultative suffix -sà- is a kind of perfective semantically, and is especially common before dey 'if'. The quasi-verb sà- '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 sà- 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 -tì-) 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 chonologically**. 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 dàɣá- '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,
          ènɛ́   kó   dàɣá   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   dàɣá   tí   yèrè-bá]   sógò
    [Nonh   leave   **Link**   come.Perf.L-3PlS]   instead.of
    'instead of (them) leaving it (=lion) and coming (home)' **2004.3.2**
    [excerpt from (732.d)]

c. [ú   dàɣá]   tí   gàrá-bà
    [2SgO   leave]   **Link**   pass.Impf-3PlS
    'They will leave you (alone) and go on.' **2004.3.3**

d. [íné-n   lè]   újúró   tí   dì ŋè-l-á
    [person-Sg Dat]   ask   **Link**   sit-PerfNeg-3PlS
    '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-ŋír^{n}é]   dàɣá   tí   jɔwɔ̀-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   jěr   tí-sà-bà   dèy, …
            harvest(noun)   harvest(verb)   **Link**-Reslt-3PlS   if, …
            'when they have harvested (the millet ears), …' (jèrɛ́) **2004.3.6**

        b. gàmà-nám   [[kó   kù^n lè]   wɔ́-n   déy]
            certain.L-Pl   [[Nonh Def   in]   be.Hum-Ppl.Sg   if]
            [kó   kù^n]   dàɣá   tí-sà-bà   dèy, …
            [Nonh   Def]   leave   **Link**-Reslt-3PlS   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 mèy^n '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   kúːⁿ]   púlló   tí   mèy^n⇑, …
            [NonhP head]   cut.off   **Link**   and, …
            '(They) clip off the top (of a shrub), and …' **2004.3.16**

        b. [gùjú   kù^n]   súmó   tí   mèy^n, …
            [skin   Def]   wash   **Link**   and, …
            '(They) wash the hide, and …' **2004.3.17**

The verbs wɔ̌:- 'kill' and cɛ́: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 jíjɛ̀ (or jɛ̀) 'go with'

The form jíjɛ̀, or reduced variant jɛ̀, is used only with a following motion verb. The combination is transitive-like, requiring a preceding NP as complement. jíjɛ̀ 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   jɛ̀   gó:-bà   táŋà: dèy
           3SgO cover **go.with** go.out.Impf-3PlS 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]
           [ñɛ̌-n   kùⁿ]   jíjɛ̀   gó:-bè
           [woman-Sg Def]   **go.with**   go.out.Impf-2PlS
           'until you-Pl have gone out of the village with her' **2004.3.20**

       c. [tɔ̂:-n   jíjɛ̀]   èjú   nú: èmɛ̀ gá: kân,
           [Recip-Sg **go.with**] field enter 1PlS.L say   after,
           'After we accompanied each other into the bush, …' **2004.3.24**

       d. [é   jɛ́y   kùⁿ]   jíjɛ̀   gàrá-bè
           [2PlP fight Def]   **go.with** pass.Impf-2PlS
           '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. mòbîl   kó≡ỳ   jíjɛ̀   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 jὲ in (458.a) and (1239), and jíjὲ in (923.f). In (512.f), jíjὲ is followed by chaining particle mὲyⁿ rather than directly by a motion verb.

It is possible that jíjὲ and jὲ are related historically to the verb jέrέ- 'hold, have (temporary) possession of'. If so, jíjὲ 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 unsuffixed 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　　　　jǎːⁿ-ǹ
　　　　2SgS.L　　dig.**Impf-Ppl.Sg**
　　　　'(as) you-Sg keep digging' (jǎːⁿ-) **2004.3.6**

　　b. yǎː-yǎː　　bè　　　mɔ̀rⁿɔ́-ǹ,
　　　　go-go　　　3PlS　　come.together.**Impf-Ppl.Sg**
　　　　yǎː-yǎː　　bè　　　mɔ̀rⁿɔ́-ǹ
　　　　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).' (mɔ̀rⁿɔ́-) **2004.3.1**

　　c. [nîn　　ké],　　[nùmó　lè]　kó　　　táráwá-ẁ,
　　　　[now　　Topic],　[hand　Inst]　NonhO　rub.Impf-2SgS,
　　　　ù　　　táráwá-ǹ,　　　ù　　　táráwá-ǹ,
　　　　2SgS.L　rub.**Impf-Ppl.Sg**,　2SgS.L　rub.**Impf-Ppl.Sg**,
　　　　hâl　[ɛ̀nɛ́　　mà　　níː]　　nɔ̌ː≡kɔ̀
　　　　until　[Refl　　Poss　water]　drink.Impf≡be.Nonh
　　　　kɔ́wⁿɔ́　　tí　mèyⁿ⇑,　hâl　ù　　　tíːrⁿɛ́-ǹ,
　　　　wring.out　Link　and,　　until　2SgS.L　stretch.out.**Impf-Ppl.Sg**
　　　　ù　　　táráwá-ǹ　　　ù　　　tíːrⁿɛ́-ǹ, …
　　　　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-, tíːrⁿɛ́-) **2004.3.17**

　　d. lì-láɣá-bà≡ỳ,
　　　　Rdp-hit.Impf-3PlS≡it.is,
　　　　ù　　　　láɣá-ǹ,　　　　ù　　　　láɣá-ǹ,
　　　　2SgS.L　hit.**Impf-Ppl.Sg**,　2SgS.L　hit.**Impf-Ppl.Sg**,
　　　　nǔŋ　　ù　　　párá-ǹ,
　　　　oil　　2SgS.L　rub.in.**Impf-Ppl.Sg**,
　　　　ù　　　láɣá-ǹ,　　　　ù　　　láɣá-ǹ
　　　　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.' (láɣá-, párá-) **2004.3.17**

Note that the ostensibly "singular" suffix -n 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 dey, which here appears as L-toned dèy by Atonal-Morpheme Tone-Spreading (137). Examples are (912.a-e). Elsewhere dey is the 'if/when' particle in conditional antecedents (§16.1).

(912)   a.   tèŋé-tèŋé   bè   lúgó-ǹ   dèy,
             segment-segment 3PlS.L count.**Impf-Ppl.Sg   if**,
             [nîm   ké]   [á   ñúː]   tèŋé   kún-tì̀-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   sáɣárá-sáɣárá bè   gɔ̌ː-ǹ   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   mɔ̀ŋɔ́-ǹ   dèy], hâl   yǎː
             [2SgS.L massage.**Impf-Ppl.Sg if**] until   go
             [kó   àrgà   kâːⁿ]   áː=kɔ̀
             [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   cɛ́rⁿɛ́wⁿɛ́-ǹ   dèy]   hâl   yǎː …
             [3PlS.L have.fun.**Impf-Ppl.Sg   if**] until   go
             'they keep up the festivities until …' **2004.3.20**

        e.   [[á   nùmó] lè]   ní-jìn   nɔ̀wⁿɔ́-ẁⁿ,
             [[2SgP hand]   Inst]   this-like   crush.Impf-2SgS,
             [nùm-náː   lè]   ní-jìn   nɔ̀wⁿɔ́-ẁⁿ,
             [grindstone Inst]   this-like   crush.Impf-2SgS,
             ní-jìn   ù   nɔ̀wⁿɔ́-ǹ   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 dey has an H-toned form (regardless of preceding tones) when grouped with following particles (§16.1.3), here kâːⁿ nè 'also'.

(913)   [ɔ̀yɔ́∴ fúː] tɔ́ɣɔ́   dɒ̀gɒ̀-lí-Ø   jìːⁿ
        [grass all] sprout(verb) finish-PerfNeg-3SgS   Past
        táŋá≡kɔ̀⇒,   [ù   wàrá-ǹ   déy   kâːⁿ   nè],
        happen.Impf≡be.Nonh, [2SgS.L farm.**Impf-Ppl.Sg if**   also   now],
        [[ñúː   kùⁿ] tĕyⁿ≡kɔ̀]   [kò   kɔ̂ː-Ø   kùⁿ]
        [[millet Def] small≡be.Nonh] [NonhS.L be.Nonh.HL-Ppl.Nonh Def]
        ɔ̀yɔ́ [kó   bɔ̀rɔ̂ː]   wàjá≡kɔ̀⇒,
        grass [NonhP bottom.Loc.HL]   remain.Impf≡be.Nonh,
        [ù   wàrá-ǹ   déy   kâːⁿ   nè]
        [2SgS   farm.**Impf-Ppl.Sg if**   also   now]
        ñúː [ɔ̀yɔ̀   gàmá] nùwⁿɔ̀-lí-Ø   kárⁿá   méy
        millet [grass certain] die-PerfNeg-3SgS   do   and
        wàjá≡kɔ̀
        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꞉∴   tùtù꞉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,   2PlS.L   go.**Perf.HL-Ppl.Sg**,
         [é   jírè]   kò   jɔ̀wɔ́-ǹ,
         [2Pl   in.front] NonhS.L run.Impf-Ppl.Sg,
         [kó   gǔnǹ]   è   dígè-n
         [Nonh behind] 2PlS.L   follow.**Perf.HL-Ppl.Sg**,
         [é   jírè]   kò   jɔ̀wɔ́-ǹ,
         [2Pl   in.front] NonhS.L   run.Impf-Ppl.Sg,
         [kó   gǔnǹ]   è   dígè-n
         [Nonh behind]   2PlS.L follow.**Perf.HL-Ppl.Sg**,
         [é   jírè]   kò   jɔ̀wɔ́-ǹ,
         [2Pl   in.front] NonhS.L   run.Impf-Ppl.Sg,
         hǎl   yǎ꞉   mèyⁿ   dɛ́꞉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)   [[jɛ́nɛ́ŋɛ́   kùⁿ]   dò꞉-lí-n]
         [[metal-trap   Def]   reach-**PerfNeg-Ppl.Sg**]
         [à-tî꞉   dánà-m]
         [bird.trap   hunt.HL-**Ppl.Pl**]
         '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) dey '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 mèy^n. 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 prepatory actions).

(916) a. [tàrá   lè],   yǎ:-n   déy,
            [collective.hunt in]   go-**Ppl.Sg**   **if**,
            [[àr^{n}à-nì:ñé   bè   kùnò-gó-Ø]
            [[man.L-gear   3PlS.L put-ImpfNeg-Ppl.Nonh]
            mà   tɔ̆g   kâ:^{n}]   kɔ̀-rɔ́
            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:-, tɔ̀gú) **2004.3.2**

       b. tàrá   [kó   túmnó-n   déy]
           collective.hunt [Nonh   begin-**Ppl.Sg**   **if**]
           nǐ: bàr^{n}á   mèy^n⇑,
           day   be.summer   and,
           'Collective hunts, when (they) begin, it is the hot season, (and …)' (túmnó-) **2003.4.1**

d. ùrò-gŭn   gó:-yà-w   dèy,
    house.L-behind   go.out-Perf-2SgS   if,
    yà:-gɔ́:   cɛ́rⁿɛ́wⁿɛ́-n   déy,
    woman.L-dance   have.fun-**Ppl.Sg**   **if**,
    yé-lé [ùrò-gŭn   lé   ké]   gó:-bà
    there [house.L-behind   in   Topic] go.out.Impf-3PlS
    '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-cɛ́rɛ́   kùⁿ] páɣá-n   déy] jáppérè yàŋá ná:ná-bà
    [[Rdp-saddle Def] tie-**Ppl.Sg if**] padding take put.Impf-3PlS
    [jàppèrè   bè   ná:nâ:-Ø   kùⁿ]
    [padding.L 3PlS.L   put.Impf-Ppl.Nonh   Def]
    cí-cɛ́rɛ́   [kó   kû:ⁿ]   dè:né-bà
    saddle   [Nonh   on]   set.Impf-3PlS
    '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   kû:ⁿ]   ùrɔ́-n   déy⇒, [ǎ-n   kùⁿ]
    [Nonh   on]   go.up-**Ppl.Sg** if,   [man-Sg Def]
    ìnìwⁿé   páɣá   hâl   cé:nâ:-Ø   dèy,
    Refl   tie   until   be.good.Impf-3SgS   if,
    kó   àrcéwɛ́   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]
            tóŋó-tóŋó   únó-n   déy, …
            dump-dump   put.down-**Ppl.Sg**   **if**]
            cɛ́jɛ́   [èjú   kùⁿ]   dògó-jè-bà   dèy,
            cut   [field   Def]   finish-RecPf-3PlS   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≡kɔ̀   á:-n   déy,   hâl   yǎ:
thus≡be.Nonh catch-**Ppl.Sg if**,   until   go
[[ì nè   gàrú-m] lè]   yǎ: dògó≡kɔ̀
[[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],   mɔ̀ŋɔ́-n   déy,
[Nonh   Def   too],   rub-**Ppl.Sg if**,
kó   gɔ̌:ⁿ-jὲ-bà   dὲy, …
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), …' (mɔ̀ŋɔ́-) **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 wɔ̀- 'be' occurs in this construction in H-toned form as wɔ́-n
(918).

(918)   [ì -n   jì :ⁿlέ⇒   wɔ́-n   déy]
[child-Sg.L small   **be.Hum-Ppl.Sg**   if]
wó   dàná-n≡ì:
3Sg   hunt.Impf-Ppl.Sg≡it.is
'Even as (=while being) a young child, he is a hunter.' (dàná-ǹ)
2004.3.16

The construction may also be used with sà- 'have', in H-toned form sá-n.

(919)   [tùmó sá-n   déy] wó   dàná-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: páɣá-tù:-Ø   dèy,
        marriage   tie-Perf-2SgS   if,
        ì nὲ   yà:jí: ù   páɣá-ǹ   kùⁿ,
        person.L   marriage   2SgS.L   **tie.Impf-Ppl.Sg   Def**,
        [yà:jí: păg-Ø   kùⁿ]   mà   ó:-wò   lὲ, …
        [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, …' (páɣá-)
        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-ǹ rather than from
(Imperfective) participle kárⁿá-ǹ. 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 jέ (mὲyⁿ) clauses. They therefore contrast with VP chains (with
or without mὲyⁿ), 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   yɔ́≡wɔ̀-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   kɔ́:   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. něm   nɔ̀wⁿɔ́   kò-rú   yì:ré-bà,
           salt   crush   Nonh-in   sprinkle.Impf-3PlS
           hâl   kó   bǎ:≡kɔ̀,
           until   NonhO   suffice.for.Impf≡be.Nonh,
           kò-rú   něm   yì:ré   ù   kân
           Nonh-in   salt   sprinkle 2SgS.L   **after**
           kó   bǎ:-yè-Ø   táɲà: 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   làɣá]   táɲá   yèré   kân,
           [woman-new.L   other]   transfer come   **after**,
           [wó   úrò]   sánáwⁿá gàrà-bá≡ỳ   là: dèy
           [3SgP   house.Loc.HL] switch.to pass.Perf.L-3PlS≡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-ẁⁿ   dèy
       [NonhS.L dry-**Perf** **after**]≡Foc   NonhO take.Impf-2SgS   if
       'if you-Sg take it <u>after it has dried</u> [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 jɛ́ 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**]   **2PlS.L**   **say**]   **after**
           'when you-Pl have gone to the field(s)'

       b.   [[tàrá   yǎ:]   è   gá:]   kân,   [kó   bèrê:]
           [[collective.hunt go]   **2PlS.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. [àsègɛ́   ñùŋò-nó   kò   gá:]   kân,
   [livestock   be.ruined-Caus Nonh.L **say**]   **after**,
   [kɔ̀wⁿɔtó: [kó   bèrê:]   nú: bè   gá:] kân,
   [rescue.party [Nonh in]   enter   **3PlS.L   say**]   **after**,
   [pé:jɛ́   gǎnɩ̀]   bè   yárà   jɛ́   mèyⁿ,
   [Vetiveria   among]   3PlS.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. íjɛ́   ànsá:rá-n   yèrɛ́   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. mɔrⁿɔ́   èmè   gá: kân,   [tɔ̂:-n   jíjè]
   be.together   1PlS.L   **say after**,   [Recip-Sg   go.with]
   èjú   nú: èmè   gá: kân,   [ì nè   kâ:ⁿ]
   field   enter   1PlS.L   **say   after**,   [person.L   each]
   [ènɛ́   mà   àrⁿà-nì:ñɛ́]   gɔ̌:ⁿ   té:rɛ́   mèy⇑
   [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 (jɛ́, jɛ́ mèyⁿ 'while …')*

Another adverbial clause type apparently involving a 'say' verb ends with jɛ́, or more often jɛ́ mèyⁿ. 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. jɛ̀-   'say' (unsuffixed Perfective, §11.3.2)
           jɛ́   Purposive-Causal postposition (§8.4)
           jɛ́ (mèyⁿ)   at end of adverbial clauses

b. jὲ   'holding; with', reduced from jíjὲ in chains (§15.1.17)
    -jὲ-   Recent Perfect suffix (§10.1.2.6)

Here we are concerned with jɛ́ and the more common jɛ́ mὲyⁿ in adverbial clauses. I will gloss jɛ́ as 'say' on the theory that it may still be synchronically connected to the inflected jὲ- 'say', and for lack of a better translation. In this analysis, jɛ́ is the (bare) lexical form of the 'say' verb, which otherwise appears as L-toned unsuffixed Perfective jὲ-. In this analysis, jɛ́ 'say' is chained to the following clause, with or without mὲyⁿ.

Adverbial clauses ending in jɛ́ (mὲyⁿ) 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 jɛ́ 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 jɛ́ mὲyⁿ, while (926.b,d) have just jɛ́.

(926) a. [ɛ́mɛ́   nám]   dàná   yɛ́rὲ-m,
           [1PlP   people] hunt   come.Perf.HL-Ppl.Pl,
           dɨ̌ːⁿ   ὲː-bà   jɛ́   mὲyⁿ,
           place   see.**Perf.L-3PlS**   **say**   **and**,

[bé   nè]   yèré   dì ŋè-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   jɛ́]   tégé
    [thing.L put.**Perf.L-2SgS**   **say**]   speak
    àná   ù   áɣá-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   jɛ́   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) jɛ́ combines with following tégé 'speak' as in
(926.b) and in (1236), it is particularly difficult to separate the subordinator jɛ́
from the unattested #jɛ́ that arguably underlies unflectable L-toned jè- 'say'.

Perhaps (927) belongs here. The predicate with H-toned jɛ́ is a noun with
clitic ≡ỳ 'it is' (allomorph ≡î:).

(927) tì-tá: [[kò   ké]   kɔr-Ø≡î: jɛ́,
       Rdp-hyena   [[Nonh.L   Topic]   lie-VblN≡it.is   **say**,
       [wó   dì:ⁿ   ní   wò   wɔ̂:-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, …".' (kɔrú) **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 pro-
nominals 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 jɛ́ mèyⁿ clause. In the jɛ́
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 jɛ́ is present in (928.b),
while the other examples have jɛ́ mèyⁿ.

(928)   a.   [pὲːjέ   gǎǹ] bὲ   yárà-Ø   jέ mὲyⁿ,
            [Vetiveria among] **3PlS.L**   walk.**Perf.HL-Ppl.Nonh** say and,
            kó   bὲ   lúgúrô:-Ø   jέ,
            Nonh.O   **3PlS.L**   look.for.**Impf-Ppl.Nonh**   say,
            kó   mà   úːrⁿò⇒
            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   bɔ́wɔ̀-Ø]   jέ]
            [[**NonhS.L**   lie.down.**Perf.HL-Ppl.Nonh**]   **say**]
            [íné-n≡î: [kó   kûːⁿ]   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.   [ὲnέ mà èjú] wò   wàrâ:-Ø   jέ   mὲyⁿ,
            [Refl Poss field] **3SgS.L** farm.Impf-**Ppl.Nonh** say   and,
            [[gòrò-digέ   mà   dìːⁿ   núŋò] lè]
            [[canal.H-row   Poss   place.L Dem]   in]
            dùn-dàŋá   yὲrέ   bé   tὲmὲ-Ø
            elephant   come   3PlO   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   dànâ:-Ø   jέ mὲyⁿ],
            hunt(noun) **3SgS.L** hunt.Impf-**Ppl.Nonh** say and],
            [kó   wò   kárⁿâ:-Ø
            [NonhO   **3SgS.L**   do.Impf-**Ppl.Nonh**
            wò   kárⁿâ:-Ø   jέ mὲyⁿ]
            3SgS.L do.Impf-**Ppl.Nonh**   say   and,
            wó   ù   yàŋâ:-Ø   jέ   mὲyⁿ,
            3SgO **2SgS.L** look.Impf-**Ppl.Nonh** say   and,
            mánà [ěn lè]   έwέ 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, …' (ὲnέ) **2004.3.16**

e. … ù-rú bè gá: kân,
 … 2Sg-Dat 3PlS.L say after,
 [ù dùrⁿô:-Ø jɛ́ mèyⁿ], hâl
 [2SgS.L follow.Impf-**Ppl.Nonh say and**] until
 [ñɛ̀-î-n kùⁿ] [àɣà ɛ̌yⁿ] dɔ́:-yɛ̀-Ø dèy
 [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≡ỳ] mɔ̀rⁿɔ́
 brick [2Pl.L 3Sg≡it.is] be.together
 è tɛ́wɛ̂:-Ø jɛ́ mèyⁿ,
 2PlS.L make.Impf-**Ppl.Nonh say and**
 [nîŋ ké] ɔ́gɔ́-rɔ́ cì llɛ̀-gó-bé
 [now Topic] be.fast-Inch finish-ImpfNeg-2PlS
 mà:ná-jɛ̀-bè dèy
 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 jɛ́ mèyⁿ.

(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 jɛ́ mèyⁿ construction as a quotative (jɛ́ = '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 jɛ́
mèyⁿ involve a subject switch with respect to the following clause. In this

respect, jɛ́ mèyⁿ is similar to gá: kân, both contrasting sharply with mèyⁿ (which assumes same subjects across chain boundaries).

However, neither quotative, cognitive processing nor subject-switch account for all the examples of jɛ́ mèyⁿ. In many cases, jɛ́ mèyⁿ functions as a durative background clause, translatable **'while** …' (928.a,c,f). Additional examples are (930.a-b).

(930) a. tî -tá: [kò   yárà-Ø   jɛ́   mèyⁿ],
           Rdp-hyena [NonhS.L go.around.Perf.HL-Ppl.Nonh **say**   **and**],
           nèmnɛ́   ɛ̀:-Ø
           scorpion   see.Perf.L-3SgS
           'Hyena [topic], as it walked around, it saw Scorpion.' **2004.4.2**

       b. tá: kò-rú   sárá   gàrà-Ø,
           hyena   Nonh-Inst   pass   pass.Perf.L-3SgS,
           [kò   ké]   wò   yâ:-Ø   jɛ́   mèyⁿ,
           [Nonh.L   Topic] 3SgS.L go.Perf.L-Ppl.Nonh   **say**   and,
           [jów   mà   kû:ⁿ] wò   yâ:-Ø   jɛ́,
           [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 jɛ́ in its verbal function 'say'. Here a purposive element (**intention**) is clear, and a comparison with Purposive postposition jɛ́ is pertinent. The clause before jɛ́ is reduced to a subjectless VP, though a topical NP may be preposed.

(931) a. tàrà-yá:-m,   [tàrá   yǎ: jɛ́   mèyⁿ]
           collective.hunt.L-go.H-Ppl.Pl [collective.hunt go **say** **and**]
           tù-tù:lú   kún-tù-bà   táɲà: dèy, …
           Rdp-horn   put-Perf-3PlS   happen   if, …
           'The hunters [topic], intending to go on a collective hunt, when they have put (=played) the horn, …' (kúnó-) **2004.3.3**

       b. àr̄ⁿ-úm   àr̄ⁿá   náŋá-r̄ⁿá   jɛ́   mèyⁿ,
           man-Pl   arming   forget-Revers **say**   **and**,
           [mɔ́:n   túrú]   m̌n-sà-y
           [gathering one]   come.together-Reslt-1PlS

'The men [topic], intending to remember (=revive) the (tradition of) arming for war as men, we came together in one (large) gathering.' (mɔ̀rⁿɔ́-) **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   náŋá-rⁿá   jɛ́   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.   [[tàrá   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   gárà-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'.

(934) gì rè-sî:ⁿ   [[dòɡùrù   tǒy   ù   tô:-Ø]
       early   [[time.L   sowing   2Sgs.L   sow.Impf-Ppl.Nonh]
       lè]   bǎ:
       in]   **since**
       'early (in the morning), at the time in which you do the planting, …'
       2004.3.8

15.2.3.3 'Since …' (íllɛ̀)

A clause-initial particle íllɛ̀ 'since', from Fulfulde, occurred occasionally in
texts.

(935) [kó   kùⁿ]
       [Nonh   Def]
       [[íllɛ̀   tǒy   dòɡùrù   tɔ́ɣɔ̀-Ø]   lè]
       [[**since**   seeds   time.L   sprout.Perf.HL-Ppl.Nonh]   in]
       'That (larva), back when the (millet) seeds have sprouted, …' **2004.3.8**

15.2.4   Other temporal adverbial clauses

In addition to the constructions described below, note that conditionals with dey
'if …' (§16.1) can often be glossed 'when …' (expressing temporal anteriority
as well as, or instead of, causal priority).

15.2.4.1 *Noun-headed temporal clause ('the time when …')*

One straightforward temporal clause is formally a relative construction headed
by a noun meaning 'time', 'day', or the like. The clause is therefore
syntactically an NP. Typical head nouns are dóɡúrú 'time', wákátì 'time'
(from Arabic via Fulfulde), and ní-ŋírⁿé 'day'. The following features are
required by the relative clause structure: a) the head noun appears with all-L
tone; b) an unsuffixed Perfective verb has H(H…)L, while imperfective-system
verb stems have their usual tone; and c) subject pronominals are preverbal
rather than suffixed to the verb.
    The resulting NP is optionally followed by postposition lè in locative
function.

(936) a. [wàkàtì búró ní: kûn-Ø kù^n] 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 gšn-sà-Ø cêw
time.L 2SgS.L be.able-Reslt-**Ppl.Nonh** all
'any time you-Sg are able (to)' (gòr^{n}ś-) **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 ŋì r^{n}è bè nâ:-Ø
day.L 3PlS.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-3PlS if],
[wó bè nár^{n}à-Ø]
[3SgO 3PlS.L bear.Perf.HL-**Ppl.Nonh**]
'A child [topic], if they bear it (=if it is born), when they have borne it, …' (nàr^{n}á- 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 -wǹ (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-dóː-wò   lè,
           house.Loc.HL **2PlP**   **come.L**-arrive.H-**Caus.L**   **in**
           'before you-Pl come back home (=to the village)' (yèrɛ́-, dɔ́ː-)
           2004.3.1

       b. … yùwɔ́≡kɔ̀,   [kó   yúwú-wɔ̀   lè],
           … shed.Impf≡be.Nonh, [**NonhP** shed.H-**Caus.L** **in**],
           [láː-láː   ké] ñɛ̌-m   yǎː gɔ̃ːⁿ   jìːⁿ
           [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.' (yùwɔ́-, gɔ̌ːⁿ-) **2004.3.6**

c. [[îːⁿ   kùⁿ]   ír-âː-Ø]   bé   gáː-wà   lè
   [[child Def]   ripen-Perf-3SgS] **3PlP** say.H-**Caus.L** **in**
   'before they (can) say that the grains (of millet) have ripened' (gáː-) **2004.3.8**

d. [kó   tɔ̀jɔ́   kùⁿ] mà   dɔ́ː-wɔ̀   lè,
   [NonhP payment Def] **Poss** arrive.H-**Caus.L in**,
   jàmá   jàmá-jɛ̀   jɔ̀wɔ́-m̀   yɔ́≡kɔ̀
   betrayal betray-RecPf run.Impf-Ppl.Pl exist≡be.Hum
   'It exists (=sometimes happens) that before the payment (deadline) arrives, he flees treacherously.' (dɔ́ː-) **2004.3.10**

e. nìː-sìːrⁿûː: [àsɛ̀gé   mà   góː-wò   lè]
   morning.Loc.HL [animal   **Poss** go.out.H-**Caus.L** **in**]
   'in the morning, before the (livestock) animals have gone out' (góː-) **2004.3.16**

f. má   úːrⁿú-wⁿɔ̀   lè
   1SgP   get.up.H-**Caus.L** **in**
   'before I got up' (úːrⁿɔ́-)

g. wó   sàrà-gárá-wà   lè
   3SgP   **pass.L**-pass.H-**Caus.L** **in**
   'before he passed by' (sárá-, gàrá-)

h. [kó   máyⁿá-wⁿà lè], kó   ù   jùjɔ́-ǹ   dèy,
   [**NonhP** dry.H-**Caus.L in**], NonhO 2SgS.L rub.Impf-Ppl.Sg if,
   cín   yɛ̀ré   mɛ̀yⁿ⇑   màyⁿá≡kɔ̀
   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)' (-pàg-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
indepedent 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   láɣá-wà   lè
             [**3Pl   Poss**]   **1SgP**   hit.H-Caus.L   in
             'before they hit me'

        b.   [wó   mà]   má   láɣá-wà   lè
             [**3Sg   Poss**]   **1SgP**   hit.H-Caus.L   in
             'before he/she hits me'

        c.   [ú   mà]   má   láɣá-wà   lè
             [**2Sg   Poss**]   **1SgP**   hit.H-Caus.L   in
             'before you-Sg hit me'

d. [ú   mà]   mí   láɣá-wà   lè
    2Sg   Poss   **1SgO**   hit.H-Caus.L   in
    [= (c)]

e. [mí   mà]   wó   láɣá-wà   lè
    [**1Sg   Poss**]   **3SgP/O**   hit.H-Caus.L   in
    'before I hit him/her'

f. [ì jú   mà]   mí   céré-wὲ   lè
    [dog   **Poss**]   **1SgO**   bite.H-Caus.L   in
    'before the dog bit me'

g. [ì jú   mà]   má   céré-wὲ   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   dê:]   mà   [árá   mà   sá:kù]   mà
       [1SgP.L   father.HL] **Poss** [rice   Poss   sack]   **Poss**
       jέ:rέ-wὲ   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   dê:]   [árá   mà   sá:kù]
          [1SgP.L   father.HL] [rice   Poss   sack]
          wó   jέ:rέ-wὲ   lè
          3SgP   bring.H-Caus.L   in
          'my father$_x$ [topic], before he$_x$ brings the sack of rice.'

b. [mí   mà]   péːjú   céːⁿ-wⁿɛ̀   lè
    [1Sg   Poss]   **sheep**   slaughter.H-Caus.L   in
    'before I slaughter the sheep'

c. [mì   dêː]   mà   péːjú   céːⁿ-wⁿɛ̀   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 mis-parsing 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. [péːjú   mà]   má   céːⁿ-wⁿɛ̀   lè
           [**sheep**   **Poss**] 1SgP   slaughter.H-Caus.L   in
           'before I slaughter the sheep'

       b. [ìjú   mà]   má   céré-wɛ̀   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   láɣá-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

exercised in (945.d-e). In (945.e), úrò 'in the house' is a tonal locative, equivalent to a locative PP.

(945) a. [mì   dê: lè]   bú:dù   mà   [má ó:-wò   lè]
          [1SgP.L father.HL **Dat**] money Poss [1SgP give.H-Caus.L in]
          'before I give the money to my father'

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     b. bú:dù   mà   ù-rú   mì   ó:-wò   lè
          money   Poss 2Sg-**Dat** **1SgS.L** give.H-Caus.L in
          'before I give you-Sg the money'

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     c. bú:dù   mà   mí   ù-rú   ó:-wò   lè
          money   Poss **1Sg** 2Sg-**Dat** give.H-Caus.L in
          [= (b)]

     d. ù-rú   mà   mí   kó   ó:-wò   lè
          2Sg-**Dat** Poss **1Sg** NonhO   give.H-Caus.L in
          'before I give it to you-Sg'

     e. pé:jú   úrò   mà   má   já:-wà   lè
          sheep   house.**Loc**.HL Poss **1SgP** convey.H-Caus.L in
          'before I bring the sheep home (=to the village)'

Occasionally there is an L-toned nominal **compound initial** on the pseudo-causative 'before' verb with suffix -wɛ̀. In this case, if there is a preceding **chained verb**, this chained verb cannot also take compound-initial form, so it takes its regular tones. In (946), the compound initial ùrò- 'house' is based on the tonal locative úrò 'in the house', which occurs in the preceding sentence in the text. The chained verb is súmó 'wash'.

(946) bé   mà   súmó   ùrò-nú:-wⁿò   lè
       3Pl   Poss wash   house.L-enter.H-Caus.L   in
       'before they clean (the circumcision quarters) and go into their (own)
       home(s)' **2004.3.18**

15.2.4.3 'When …' (-sé)

This rare pattern is expressed by an **L-toned verb** and a suffix -sé. Post-Sonorant Syncope (60) is applicable to Cvrv- and Cvrⁿv- verb stems. A pronominal subject is expressed with an L-toned preverbal subject pronominal. The only attestation in my texts is (947). Here the -sé clause follows a [v̂ v̀]

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 yèrέ mèyⁿ dà:ɣá dὲ:-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**,
       [ɔɣɔ̀-ñɔ̀wⁿɔ́   ú:rⁿó   íj-â:-Ø]   tὲmὲ-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.' (yὲrέ-) [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 dɔ̀:-sé from dɔ́:- '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   kɔ̂:-Ø⇒   fú:
           corpse **place.L** be.Nonh.Perf.HL-Ppl.Nonh   all
           'where(-ever) the corpse is' **2004.3.21**

       b. dì:ⁿ   ὲnέ   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   bὲ   nùŋɔ̂:-Ø]
           [song in]   also, [**place.L** NonhO 3PlS.L sing.Impf-Ppl.Nonh]
           bé   yɔ́≡kɔ̀-bà
           3Pl   exist≡be.Nonh-3PlS
           '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] dì: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 dĭ:ⁿ in a strictly spatial sense is jérè 'side', by extension 'direction, area'.

(949) [jèrè ènɛ́ yǎ:-Ø] wó jɔ̀:-gó
[**side.L** LogoS go.Impf-Ppl.Nonh] 3SgS know-ImpfNeg
'(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 dĭ:ⁿ 'place, manner'

The usual manner adverbial is identical in form to the spatial adverbial clause just described. Here dĭ:ⁿ 'place' is interpreted more abstractly as 'situation' or 'manner'. As the head of the relative, it appears in L-toned form dì:ⁿ.

(950) a. [úró dì:ⁿ bè mâ:-Ø],
[house **manner.L** 3PlS.L build.Perf.HL-Ppl.Nonh]
[gǒ: dì: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 dì:ⁿ [èjú lé] yǎ: jè:rê:-Ø
[man-Pl **manner.L** [bush in] go bring.Impf-Ppl.Nonh
kù nè] jè:rè-gó-w
Def now] bring-ImpfNeg-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 dì:ⁿ may be the complement of tégé- 'tell'.

(951) [dì:ⁿ kò kɔ̂:-Ø] ɛmɛ̌-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 dì:ⁿ may function as complement of jùgɔ́- '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. ɛ̀nɛ́≡ỳⁿ   [dì:ⁿ   kò   kárⁿá≡kɔ̀]   jùgô:
           Logo≡Foc [**manner.L** NonhS.L do.Impf≡be.Nonh] know.Impf
           wà
           say
           'He said, "it's I̲ [focus] who knows how it (=rifle) works."'
           2004.4.4

       b. [dì:ⁿ   kárⁿá kó   bè   wàrá   yǎ̀:-Ø]
           [**manner.L** do   NonhO 3PlS.L farm(verb) go.Impf-Ppl.Nonh]
           jùgɔ̀-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 òjù-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 dì:ⁿ (see above).

(953) [dì:ⁿ   kárⁿá mèy⇑ kó   bè   dònò-ŋô:-Ø]
       [**manner.L** do   and   NonhO 3PlS.L finish-Caus.Impf-Ppl.Nonh]
       mà   òjù-ká: mà   tɔ̀gú jì-jô:-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   3PlS   catch.**Perf.HL-Ppl.Nonh**   Def]
        [kó   nò]   [yǒ:-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⇑]   bàrmɛ̀-Ø,
             [NonhO   shoot.Perf.L-3SgS]   wound.Perf.L-3SgS,
             bàrmɛ̀-Ø⇑   [wó   kû: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   pɔ̀rɔ̀-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]   mɔ̀rⁿɔ́ —,
             [3PlS.L divide.**Perf.HL-Ppl.Sg** Def in]   be.together,.
             mɔ̀rⁿɔ́   sáyⁿá-bà
             be.together   disperse.Impf-3PlS
             'When they have divided it (=meat) up, they disperse from each other.' **2004.3.19**

c. ñɛ̌:-rⁿ-ùm   àrà-nɔ̌:-wⁿ-Ø,   [ɔrú
female-child-Pl porridge.L-drink-Caus-VblN, [matter
wò   jùgɔ̀-lí-Ø]   kó   nɔ̀:-wⁿɔ́-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 yàŋá 'take, pick up' is widely used to initiate (and continue) a series,
especially in the combination yàŋá 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 dɔ́:- '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 yàŋa
mèyⁿ⇑ opening the series of life stages of the millet plant, and a final hâl yǎ:.
In (956.b), we have yǎ: and dɔ́:- without hâl.

(956)   a. [kó   tòy-tɔ̀ɣɔ́   lè]   yàŋá mèyⁿ⇑,
            [NonhP seed.L-sprout in] **take** **and**,
            [yèrɛ́ tèŋé kún-tì -Ø]   yàŋá mèyⁿ⇑,
            [come segment put-Perf-3SgS] **take**   **and**,
            yàŋá 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. [ɛ́mɛ́   à-kɔ́rɔ́]   mà   wóró,
         [1PlP   well]   Poss   depth,
         [mé:tɛ́rɛ̀ pɛ́rɛ́ gá:rà sáɣà] yàŋá mèyⁿ⇑,
         [meter   ten   eight plus] **take**   **and**,
         [[pɛ́l-lɛ̌y   lɛ̌y sáɣà] lè]   yǎ: dɔ̀:-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) ìnè   kàjú   wárà-m   bé≡ỳ,
       person   calabash   farm.HL-Ppl.Pl   3Pl≡it.is,
       [kó   yàŋá-sà-Ø   dèy], [tùŋ-nɔ̌:   yàŋá-sà-Ø   dèy]
       [Nonh **take**-Reslt-3SgS if],   [ladle   **take**-Reslt-3SgS if]
       [sɔbɔ̌l   lè] yǎ: dɔ́:,
       [gourd.with.neck to] **go**   **arrive**,
       [yàŋá   yǎ: gù-gûn   bè   témɛ́, …
       [**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) pɔ́rɔ́   wò   gá: kân
       hug   3SgS.L   say   after
       kó   sárⁿám⇒   pɔ́rɔ́   wò   gá: kân
       NonhO squeezing   hug   3SgS.L   say   after
       hâl   yǎ: mèyⁿ   ɛ̀:ⁿ-Ø
       until **go**   **and**   be.tight.Perf.L-3SgS
       [wó   gùn-cɛ́nɛ́ lè]   wɔɣ-á:rà-Ø
       [3SgP back   on]   scratch-Habit-3SgS
       'Having gotten it (=leopard) in a bearhug, having sqeezed 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 yàŋá- 'take' to define the starting point (959).

(959) yí   gò:-Ø   dêm-tɔ́rɔ̀ tô:-n   dɔ́:≡kɔ̀
       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 yàŋá-) occurs, it may be translated as 'for example' or 'for starters', with an implied but unstated

endpoint. In (960) my assistant, beginning an interview, made the obvious point that there were various crop pests harmful to millet, then added the following to suggest specific animals that could be covered.

(960)   sà:j-î:ⁿ   yàŋá-sà-Ø   dèy,
         bird-child   **take**-Reslt-3SgS   if,
         kì -ká: yàŋá-sà-Ø   dèy
         Rdp-grasshopper   **take**-Reslt-3SgS   if
         'Birds for example, grasshoppers for example' **2004.3.8**

In (961), an elderly male speaker used an imperative yɛ́rɛ́ 'come!' to conclude a 'from …, to …' construction.

(961)   [*en quatorze* yàŋá] [íjé   mà   ñàlɔ̀:mɔ̀ núŋò lè] yɛ́rɛ́
         [in fourteen take] [today Poss day.L   Dem in] come.Imprt
         'From 1914 until today, …' **2004.4.21**

15.2.9   'As though …' clause (jín)

The 'like' morpheme jín may follow a clause, which takes main-clause form.

(962)   ɔ̀yɔ́ kárⁿá mèyⁿ⇑, hâl   wàl-l-á   jín
         grass be   and,   until farm(verb)-PerfNeg-3PlS   **like**
         bé:≡kɔ̀
         be.Impf≡be.Nonh
         'Weeds will grow, to the point that it looks at though they (=people) hadn't done any farm work (i.e. first-stage weeding)' (wàrá-) **2004.3.6**

15.3   Constructions with superfluous mà

15.3.1   Narrative-climax construction with mà plus H(H…)L Perfective

In narrative climaxes, it is possible to shift to a highly marked construction ending in an **unsuffixed perfective verb in H(H…)L tone** (as in relatives). We also find **Possessive** mà connecting various preceding constituents in a somewhat profligate fashion. A pronominal subject is expressed by an **independent pronoun** preceding mà. A chained verb preceding the H(H…)L verb has its tones dropped to all-L, in the fashion of a **compound initial**. Frequently two such clauses are paired, the first of which undergoes **intona-tional prolongation** (⇒).

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*   yǎː   mèyⁿ
       look.at 3PlS.L after in France   go   and
       táwè [ĕː   lèy] [ĕː   tàːn] béː bèrêː-Ø   tán,
       maybe [month two] [month three] stay can.Impf-3SgS   only,
       ú   áː-bà,   *mais* fàráːnsì yǎː   dɔ́ː
       2SgO catch.Impf-3PlS,   but   France   go   arrive
       [ú   mà dɔ̂ː⇒]   [ú   mà pílíwè]
       [2Sg Poss **arrive.HL**] [2SgS Poss **go.back.HL**]
       non ú   àː-j-é   dé,   ú   dàɣá-bà
       no!   2SgO catch-ImpfNeg-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.' (dɔ́ː-, 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) áːmádù mà   díŋè⇒,   wó   mà   núwⁿò
       A   Poss **sit.down.HL**, 3Sg   Poss **die.HL**
       'No sooner did Amadou sit down than he died.' (dìŋé-, 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⇒,   [ɔ́:jɔ́   mà
         Nonh   **Poss**   get.up.Perf.**HL**, [Grewia   **Poss**
         bèrè   ɔ̀r≡î:ⁿ]   jèrè-Ø   tàŋà-Ø,
         stick.L   fresh≡it.is]   hold.Perf.L-3SgS   happen.Perf.L-3SgS,
         wó   mà   [kó   dàrⁿà-céné   mà   kûːⁿ]
         3SgS   **Poss**   [NonhP   head-heart   **Poss** head]
         mà   [béré   kûⁿ]   mà   súnú-ŋò, …
         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-ŋó-) **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   kûːⁿ]   wó   mà   dɔ́:-nɔ̀,
         [3SgP   head.Loc.HL]   **3Sg**   **Poss**   approach-Caus.Perf.**HL**,
         [[círⁿé   mà   dì:ⁿ   éjé-sà-Ø   kûⁿ]   lè]
         [[nose   Poss   place.L   be.clean-Reslt-Ppl.Nonh   Def]   in]
         nèmné   mà   tàmà-kúnò⇒
         scorpion   **Poss**   **kick.L**-put.**HL**
         [bɔ̀rɔ́   lè]   mà   bé: mà   érè
         [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.' (dɔ̀:-nɔ́-, támá-, kúnó-, érɛ́-) **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]
       [dìːⁿ   kó   bè   kúnô:-Ø   kùⁿ]
       [place.L   NonhO   3PlS.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 yǎː '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) … gáːrá   ǎ-n   táná-ŋá-m̀,
       … more   man-Sg   become-Caus-Ppl.Pl,
       [àrⁿá   mà   témé-rⁿέ]   jírè   yǎː,
       [readiness.for.war   Poss   inherited.trait] ahead   go,
       mà   àrⁿ-úm   dàmá   jì rè-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   lὲy]   mà   kùn-ó-Ø]
       [[person-Sg one-Sg]   [person-Pl two]   Poss   be.in-Neg-3SgS]
       [[à-kɔ́rɔ́   kùⁿ]   mà   jàⁿ-ýⁿ]   gà:nà-gó-Ø
       [[well   Def]   Poss   dig-VblN]   prevent-ImpfNeg-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 [S$_1$ dey, S$_2$]. In this construction, S$_1$ 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, [S$_1$ dey, S$_2$] 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 [S$_1$ dey, S$_2$] construction therefore competes with the explicitly temporal [[S$_1$ (gáː) kân], S$_2$] 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 -tì- 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: [nîm ké] [kó ì:ⁿ-nàrⁿ-ú]
    millet [now Top] [NonhP child-bear-VblN]
    dɔ́:-yɛ̀-Ø   dèy
    arrive-**Perf**-3SgS **if**
    'the millet now, when the bearing of its ear (=grain spike) has
     arrived …' **2004.3.6**

   b. nì-nǐ: nùm-â:-Ø   dèy,
     Rdp-sun fall-**Perf**-3SgS **if**,
     [àná   ǎ:-rⁿù-m] mɔ̌n-sà-bà   dèy, …
     [village male-child-Pl] assemble-**Reslt**-3PlS **if**, …
     'when the sun has set, (and) when the boys of the village have
     gathered together, …' (mɔ̀rɔ́) **2004.3.8**

   c. [[àrgà núŋò lè] kɔ̀] mà:ná-jè-bà   dèy,
     [[side.L Dem in] be.Nonh] think-**RecPf**-3PlS **if**,
     jìnìŋé-bà
     drive.ahead.**Impf**-3PlS
     '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 ìnè gàrú-m] mɔ̀rⁿɔ́-bà
     go-**Perf**-2PlS **if** [village person.L old-Pl] assemble.**Impf**-3PlS
     'When you-Pl have gone (to the village), the village elders will
     assemble.' **2004.3.10**

   e. [ɔ̀gɔ̀-rɔ̀-lú:-Ø   déy] [kó tɛ̀mɛ̀-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] ɛ́:-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 ≡ỳ (or variant) 'it is'.

(972) [[[nì ŋè-dá:ŋá   bérὲ]≡ỳ]   dèy]   ñέ:-ẁⁿ
       [[[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 táŋá- 'happen', is idiomatic ('otherwise').

(973) [wɔ̀mɔ́   mèyⁿ⇑]   [kó   dó:-ẁ],
       [weed(verb)   and]   [NonhO   reach.Impf-2SgS]
       [kó≡ỳ   tàŋà-lí-Ø   dèy⇑]
       [Nonh≡Foc   **happen**-PerfNeg-3SgS   **if**]
       ñú: bὲrὲ-gó-w
       millet   get-**Impf**Neg-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 -jὲ- (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 quesiton as participles. In addition to the examples in (974), see (314) and (589.a).

(974) a. tǐn   bὲ   dé: jĕs-sà-Ø   dèy
           wood   **3PlS.L**   carry   bring-**Reslt**-Ppl.Nonh   if
           'when they have carried and brought the wood (here)' (jὲ:rέ-)
           2004.3.5

       b. wɔ̀mɔ́   ù   dògó-jὲ-Ø   dèy [kâ:ⁿ   nὲ]
           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   táŋà: dèy, …
    NonhO **NonhS.L** catch-**RecPf**-Ppl.Nonh   happen if, …
    'when it (=trap) has just caught it, …' **2004.3.16**

d. [[ì nè   tɔyⁿɔ   bè   ô:-n]   lè]
    [[person.L truth   3PlS.L give.Perf.HL-Ppl.Sg]   Dat]
    tɔyⁿɔ   bè   ó:-tì-Ø   dèy,
    truth   **3PlS.L** give-**Perf**-Ppl.Nonh   if,
    [[tɔyⁿɔ   sà:-rá-n   kùⁿ] lè] [tɔyⁿɔ-sà:-rá   kùⁿ]
    [[truth   have-Neg-Ppl.Sg   Def] Dat] [truth-have-Neg Def]
    wò-rú   bè   té:ré-jè-Ø   dèy
    3Sg-Dat   **3PlS.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. [tĭn bè jĕs-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 … sâ:-Ø dèy (accompanied by L-toned subject pronominal), where
sâ:-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, táŋà: 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 grass-
hoppers to birds.

(975) sà:j-í:ⁿ≡ỳⁿ   dé   nè,   yɔ̌:-jì n≡î: kárⁿá-bà
       bird-child≡it.is **if** **now**, how≡Foc   do.Impf-3PlS
       '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)   [tɔyⁿɔ̇≡ỳⁿ   dé   ké]
        [**truth≡it.is   if   Top**]
        'If it's the truth (=frankly), …'

A particle kâːⁿ 'also, too' is occasionally added to dey. The contexts are similar to those for dé nè (see above). The dey kâːⁿ sequence is distinct from cases where kâːⁿ 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)   sàːj-íːⁿ≡ỳⁿ   déy   kâːⁿ, …
        bird-child≡it.is   **if   also**, …
        'If it's birds too (in addition to grasshoppers), …' **2004.3.8**

Another common extension of dey is táŋàː dèy. The form táŋàː is irregular, but it is certainly connected to the verb táŋá- 'become, happen'. Perhaps it is really táŋà⇒ 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 táŋá- is fairly common with a preceding clause in the sense '(it) happen(ed) that ...'. Therefore [S₁ táŋàː 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.

táŋàː 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.   sàːj-íːⁿ≡ỳⁿ   táŋàː   dèy,   dàːɣá
             bird-child≡it.is   **happen   if**,   night
             [é   àná]≡ỳ   náː≡kɔ̀   táŋàː   dèy, …
             [2PlP   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   cì̀ -céːnè-Ø   tàŋà   dèy,
             year   be.good-be.good-3SgS   **happen   if**,
             kàjú   wǎr-sà-w   tàŋà   dèy,   [kàjú   kùⁿ]
             calabash farm-Reslt-2SgS **happen   if**,   [calabash   Def]

[á   nì-bàrⁿà   bíré∴.   fú: ⇒]   mà   òjù-káː
[2SgP   dry.season.L work   all]   Poss   road
mà   ì jɛ́   ù-rú   îjɛ́   bèrɛ́≡kɔ̀
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).' (wàrá-) **2004.3.9**

I have one example where táŋàː in táŋàː dèy has the sense 'become' and
takes an NP complement (979).

(979)   nîŋ   nɛ̀mnɛ́   ă-n   táŋàː   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, kâːⁿ)

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.   kâːⁿ   'even'
             kâːⁿ nɛ̀   '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 con-
ditionals is a regional phenomenon; it is certainly widespread in Songhay
languages.

(981)   ɔɣɔ̌-n   nì-dîːⁿ   yɛ̌y-yà-Ø   dèy,   gɔ́rⁿɔ̀
        chief-Sg   here   come-Perf-3SgS   **if**, means

yέ   jìnè-m   cêw, pé:jú wò-rú   cέ:ⁿ-mì
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 [S$_1$ tán, S$_2$] 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   yὲré   mǒyⁿ-yⁿὲ-bà   tán, …
       person-Pl come   be.together-Perf-3PlS **only**, …
       'as soon as they gather together, (they ask each other) …' **2004.3.6**

Finally, [S$_1$ kâ:ⁿ, S$_2$] or variant [S$_1$ kárⁿà, S$_2$] may be glossed 'even if S$_1$, S$_2$', stating that the eventuality S$_2$ will occur in spite of, rather than because of, the fulfillment of the eventuality in S$_1$. 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] dὲgὲ-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 tɔ́wⁿɔ́≡ỳⁿ   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 ≡ỳ 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 fúː 'all' (984).

(984) bè-rú   ér≡kɔ̀⇒   èl-lá-Ø∴.   fúː
       3Pl-Dat   sweet≡be.Nonh   sweet-Neg-3SgS   **all**
       'whether it pleases them or it doesn't please them' (érù) **2004.3.18**

Other disjunctive antecedents have a similar structure, the two clauses being directly juxtaposed with a concluding cêw (985).

(985) [jìrⁿé   cì-céːnè-Ø]
       [wet.season   Rdp-be.good.Perf.HL-3SgS]
       ñì-ñɔ́wⁿɔ̀-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 cì-céːnè- 'be good' and its unusual negative counterpart cì-céːnè-lì-, see §10.1.2.7.

In (986), fúː '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) dàɣà-lúː-Ø   déy   kâːⁿ   nè,
       leave-PerfNeg-2SgS   if   too   now,
       [dìːⁿ   ènɛ́   jɔ̀wɔ́-sà-Ø∴.   fúː]
       [**manner.L** LogoS   run-Reslt-Ppl.Nonh   **all**]
       yěy-yà-Ø   dèy   tɔ́jɔ̂ː-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 (≡ỳ làː dèy)

An 'unless' conditional has an antecedent ending in ≡ỳ làː dèy, literally 'if it is not (the case that …)'. This is just dey 'if' added to the regular negation of clitic ≡ỳ '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 ≡ỳ 'it is' (987.c).

(987) a. [[ú≡ỳ   kó   jíré-n]≡î: là: dèy,
           [[2Sg≡Foc NonhO   tend-Ppl.Sg]≡**it.is** **Neg** **if**,
           [kó   êm]   [ù   cé≡ỳ   là:]
           [NonhP   milk]   [2SgP   property≡it.is   Neg]
           'Unless it's the case that <u>you-Sg</u> [focus] are the one who tends them (=cattle), their milk doesn't belong to you.' **2004.3.10**

       b. hâl   [[àrⁿà-kùjù   làɣá]≡ỳ   là: dèy]
           until   [[year.L   other]≡**it.is Neg**   **if**],
           wó   ɛ̀:-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. tŏy   tɔ́:   bɛ̀rɛ̀-gó-y,
           sowing   sow   can-ImpfNeg-1PlS,
           [àrⁿá   ɛ̀jíⁿ⇒   mì rⁿɛ̀-Ø]≡ýⁿ   là: dèy
           [rain   very.much rain.fall.Perf.L-3SgS]≡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:-jɛ̀-bà dèy)

The phrase gá:-jɛ̀-bà dèy, literally 'if they have said' may occur after a sentence functioning as conditional antecedent. cêw 'all' may replace dey 'if', as in (988).

(988) néyⁿ   yɛ̀ré   mèyⁿ
       now   come   and
       ŏ:g   káyⁿ-yⁿɛ̀-Ø   gá:-jɛ̀-bà   cêw
       sweat(noun) happen-Perf-3SgS   say-RecPf-3PlS   all
       [cɛ̀:   [kó   bǎ:] ɛmɛ̀ lɛ̂:-Ø   kâ:ⁿ] kɔ̀:-rɔ́
       [thing [Nonh equal] 1PlS.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).' (ɔ̀:gú, kárⁿá-) **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)   [bὲr≡î: cɛ́:ⁿ-ẁⁿ]   cɛ́:ⁿ-ẁⁿ,
        [goat≡Foc   slaughter.Impf-2SgS]   slaughter.Impf-2SgS
        [pé:j≡î: cɛ́:ⁿ-ẁⁿ]   cɛ́:ⁿ-ẁⁿ,
        [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 dey, which follows jì:ⁿ. A verb in a positive antecedent typically has **Resultative** -sà- (990.a-b). A quasi-verb (wɔ̀- '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   bǎs-sà-Ø   jì:ⁿ   dèy,
             [1SgP   child-Sg]   1SgO   help-**Reslt**-3SgS   **Past**   **if**,
             ɔ́gù   bὲrɛ́   jèrɛ́-m̀   jì:ⁿ
             fast   get   harvest.**Impf**-1SgS   **Past**
             [kì-ká: mà   yérɛ́-wὲ   lὲ]
             [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-dî:ⁿ   yěs-sà-bà   jì:ⁿ   dèy,
             here   come-**Reslt**-3PlS   **Past**   **if**,
             bé   wɔ̌:-m̀   jì:ⁿ
             3PlO   kill.**Impf**-1SgS   **Past**
             'If they had come here, I'd have killed them.' (yὲrɛ́-)

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   yέ   sà-m   dèy,   wò-rú   ó:-m̀   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. jòŋ-jóŋó-n   yèl-lì -Ø   dèy,
           healing.L-heal-H-Ppl.Sg   come-**PerfNeg**-3SgS.L   **if**,
           núwⁿó-m̀   jì:ⁿ
           die.Impf-1SgS   **Past**
           'If the healer hadn't come, I'd have died.' (yὲrέ-)

       b. màbîl   yěs-sà-Ø   jì:ⁿ   dèy,
           vehicle   come-Reslt-3SgS   **Past**   **if**,
           yὲ-dî: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.'
           (yὲrέ-)

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 émέ   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   wɔ̌:-m̀
         2SgO   kill.Impf-1SgS
         'I will kill you-Sg.'

      b.   [èné   wó   wɔ̌:-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) [ɛ̀nɛ́≡ỳⁿ   é   bɔ̀rⁿɔ̀]   kúːⁿ   mà   ɔ̀jù-káː   jɛ́
       [Logo≡Foc **2PlO** call.Perf.L] head   Poss   road   for
       '(He said:) "by virtue of it being <u>me</u> [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) [… [ɛ́mɛ́∴   ɛ̀nɛ́∴]   háwrɛ́-m]   wá
       [… [**1Pl**   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 háyè '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 mâːn (variant à-mâːn) '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) [ɛ̀nɛ́ [ámà jɛ́] wò-rú jàŋà-Ø] wà⇑,
       [LogoS [God for] 3Sg-Dat request.Perf.L-3SgS say,
       [wó ɛ̀nɛ́ táːⁿ wɔ̀ː-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!"' (wɔ̌ː) **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) [[ɛ̀nɛ́ dêː] mà jìm-sɔ̀rⁿîːⁿ lè]
       [[Refl father.HL] Poss Ceiba-sapling Dat]
       [kó cɛ́ːⁿ kárⁿá ɛ̀nɛ́ núː-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   àr^{n}á   mǐn-sà-Ø]   jè-Ø
             [there   rain   fall-Reslt-3SgS] **say**.Perf.L-3SgS
             'He/She said it has rained there.' (mì r^{n}é-)

        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.   [[néy^n ké]   ñù:-kà:-à-ý   é:-sà-m]
             [now   Topic]   millet.L-mouth.L-catch-VblN   see-Reslt-1SgS]
             gá-ỳ
             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 kù^n 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: bèré-m̀
       [[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.   [mâːn   mà   ñɛ̌-n]
            [so-and-so   Poss   woman-Sg]
            mâːn   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-pǒː⇒]   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   ñǎː   ñɛ́ː-sà]   wà
       [2SgS.L meal]   eat-Reslt   **say**
       'He said that <u>you-Sg</u> [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) [ɛ́nɛ́   [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-sɔ̀rⁿî:ⁿ   kùⁿ]   yèrɛ́   mèyⁿ   dɛ̀:]   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) [ɛ́nɛ́   sɔ́ɣɔ́-jɛ̀   yà:-gó-Ø]   jɛ̀-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:-, jɛ̀-, 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-sɛ́:rⁿɛ́   pàrá   sɛ́:ⁿ-yⁿà-Ø]
       [post.harvest.season   post.harvest   be.post.harvest-Perf-3Sg]
       gá:-jɛ̀-bà   dèy, yèrɛ́   mèyⁿ⇑ [ñú: mà   bírɛ́]
       say-RecPf-3PlS   if,   come   and   [millet Poss work(noun)]
       súg-â:-Ø   gá:-jɛ̀-bà   dèy
       go.down-Perf-3SgS   **say**-RecPf-3PlS   if
       [[wàkàtì   búró   ní: kûn-Ø   kùⁿ]   lɛ̀],
       [[time.L   pond   water be.in.HL-Ppl.Nonh   Def]   in]
       kàrgù-tɛ́wɛ̀   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-tɛ́wɛ̀ 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 protoganist 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) [yɛ̀-kàná   kùⁿ]   yɛ̀ré   dɔ́:-yɛ̀-Ø   gá:-jè-bà   dèy,
        [woman-new Def]   come   arrive-Perf-3SgS **say**-RecPf-3PlS   if,
        pàná   ñɛ́:-jè-bà   dèy,
        supper   eat-RecPf-3PlS   if,
        [ɛ̀nɛ́   bé   cɛ̀rⁿɛ̀wⁿɛ́]   cɛ́rⁿɛ́wⁿɛ́-bà
        [Refl   PlP   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 ɡà, so I interpret the raised pitch as intonational.

(1008) a. … [ɛ̀nɛ́   bé   tègú   ñɔ̀wⁿɔ̀-lí-Ø   gá
        … [Refl   PlP speech   be.ruined-PerfNeg-3SgS   **say**
        [ɛ́mɛ́   yǎ:]   jɛ̀-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. [[ɛ̀nɛ́   mà   ní:]   yì-lé   yɔ́≡kɔ̀]   gà⇑
        [[Logo   Poss water] there   exist≡be.NonhS] **say**
        [wó   yǎ: nɔ́:]   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 ɡà 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) háyɛ̀, [mâ:n   mà   î-n]   újúró-sà-m   gà
        well, [so-and-so Poss child-Sg] ask-Reslt-1SgS   **say**
        yǎ:,   [wó   tègú]   tégé-ỳ,
        go,   [3SgP   speech]   speak.Imprt-PlS,
        [mâ:n   mà   î-n]   lá:-sà-m   gà
        [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**

ɡà is again an interim quotative marker in (1010), following an L-tone.

(1010) [[màlfâ:ⁿ kùⁿ] ɛ̀nɛ́   kó   dó:-jè-Ø]   gà,
        [[rifle   Def] LogoS NonhO reach-RecPf-3SgS] **say**,
        [[ɛ̀nɛ́   ké]   yì-dî:ⁿ   bɛ̀r-Ø≡î:
        [[Logo   Topic]   here   obtain-VblN≡it.is
        [ɛ̀nɛ́   mà   dǐ:ⁿ]≡ỳⁿ]   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-m̀   gà⇑   á:,   kó   à:-gó-Ø
        want.Impf-1SgS   **say** catch.Imprt, Nonh   catch-ImpfNeg-3SgS
        [gɔ̀rⁿɔ́-m̀   gá   á:]≡ỳ   là: dèy,
        [be.able.Impf-1SgS **say** catch.Imprt]≡it.is   Neg   if,
        dèné-ẁⁿ   gɔ̀rⁿɔ́-ẁⁿ   á:-ẁ
        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) <u>and</u> you can (wrestle), <u>then</u> 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) [ènɛ́   mà   jèmè-ñɛ̌-n]   bɔ̀rⁿɔ́   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   [cɛ̀:   bè   bì r-á:rà]≡ỳ
            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**
   [cɛ̀:   kɔ̂:-Ø]≡ỳ
   [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 gà 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 …'. gà 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 gà 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
dey 'if'.

(1014) a. [wàkàtî   gàmá≡ỳⁿ   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≡î: 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   [úro   cì-cì né   dójù]
            hot.season,   until [house.Loc.HL   Rdp-shade   under]
            ù   kún-ì n   déy   kárⁿà, [nì-bárⁿá   mà   ɔ́gù]
            2SgS   be.in-Partpl.Sg if   even,   [hot.season   Poss   heat]
            yèré ú   témɛ́≡kɔ̀   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 syntac-
tically 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-3PlS.L   if**,
        sô: gà:-l-à   dèy⇑,
        pail   **say.PerfNeg-3PlS.L   if**,
        bármá   gà:-l-à   dèy⇑,   ɔhɔ́
        pot   **say.PerfNeg-3PlS.L   if**,   uh-huh!
        [cè: kó   tímé-sà-Ø   lè]
        [thing.L   NonhO   resemble-Reslt-Ppl.Nonh   with]
        yǎ: dɔ̀:-Ø,
        go   arrive.Perf.L-3SgS
        [ànsá:rá   jɛ́:rɛ̀-Ø]≡ỳ   là: dèy,
        [white   bring.Perf.HL-Ppl.Nonh]≡it.is   Neg   if,
        [jèmɛ̀-ñɛ̌-m   sǎy   mà   bíré]≡ỳ   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. háyὲ wó [ὲnɛ́ lè] kó cɛ́: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-3PlS
    'they told us to go.' **2004.3.20**

d. [gɔ̀:-bɔ̀rɔ́   ǔ-d   dè:né]   gá-ẁ
    [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]   tègè-bà
        [[1PlP   Dem   driver]   Dat]   speak.Perf.L-3PlS
        [òjù-kà: núŋò lè]   kà:ná yé-lé [ɛ̀né bè] yǎ: gá: kân,
        [road.L   Dem in]   now   there [Logo Pl] go   say   after,
        [bàndî: bé]   [ɛ̀né   bé]   àtàkɛ̀-bá⇒,
        [bandit   Pl]   [Logo Pl]   attack.Perf.L-3PlS,
        [kó   nò]   émé   yè-lé   dì 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 ɛ̀né 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-mí]   gá-bà
            [[1PlP   village] collective.hunt   go-**Hort**] say.Impf-3PlS
            'They will say, let our village go on a collective hunt!' **2004.3.1**

b. à-kɔ́rɔ́   jà:ⁿ-ḿ   gá:-jɛ̀-bà   dɛ̀y
   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 jɛ́ 'for that' toward the end is a "resumption" of the preceding long purposive clause.

(1019) [[[ǎ: mà   cǐ nè-góró]   lè]   bɛ̀rɛ́   bé:
       [[[who? Poss shadow.L-covering]   in]   get   stay
       bɛ̀rɛ́-ỳ   mà⇑] [tɔ̂:-n   lè]   yàŋá-ỳⁿ   jɛ́]
       can.Impf-1PlS Q]   [Recip-Sg in]   look.Impf-1PlS   for]
       mà [kó   jɛ́]   mà   mɔ́:n]   mɔ̌n-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?"' (mɔ̀rⁿɔ́-) **2004.3.24**

In (1020), the quotation is treated more explicitly as an NP, specifically in "possessor" function.

(1020) [[wó   kó   kàn-lí]   [[ɛ̀nɛ́   wó   tà:ⁿ-ýⁿ]
       [[3Sg NonhO   do-PerfNeg]   [[LogoS 3SgO   shoot-ImprtNeg]
       mà   nàŋà-dùrɔ́]   kɔ̀:-rɔ́]   jɛ̀-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 VblN 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:rá- 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   ènɛ́   jì ñè-n   dà:rá-ǹ]   kɔ̀:-rɔ́
            [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. ùrɔ̀-n   dà:rá-ẁ
            go.up.**L-Ppl.Sg**   dare.Impf-2SgS
            'You-Sg dare to go up?.' (ùrɔ́-)

        e. [íné-n   fú:]   yè-lé   kǒ-r   dɔ̀:-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.' (kɔ̀-rú, dɔ́:-) **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:rá- 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 kùⁿ 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 ː]   **kùⁿ**,
   [2Sg≡Foc   3SgO   send.Perf.L]   **Def**,
   [bé   nám   lè]   té:ré-ẁ
   [3PlP   people   Dat]   show.Impf-2SgS
   'You-Sg [focus] will show their people that it was <u>you</u> [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:≡kɔ̀ (1024.a), and kùnò-ẃⁿ (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), jùgɔ́- 'know' (see below), and mà:ná- 'think, believe'.

17.3.1 'Know that …' complement clause

jùgɔ́- '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) tíllɛ́-tù-bà   dèy   [[úró   lé]   wɔ̂-m]
   change-Perf-3PlS   if   [[house   in]   be.Hum.HL-Ppl.Pl]
   [íjé   kâ:ⁿ],   [ɔ̀wⁿɔ̀-î:ⁿ   lè]   kún-tù-bà
   [now   even],   [grave.L-child   in]   put-Perf-**3PlS**
   [dɔ̂:m   kâ:ⁿ]   tì mnè-l-á   **kùⁿ**]   jùgɔ́-bà
   [up.to.now even] close.up-PerfNeg-**3PlS** **Def**] **know**.Impf-3PlS
   '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-bɔ̀rɔ́]   dì ŋ-â:-Ø]   jùgɔ́-jè-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. [[kɔ̀   cêw]   bǎ:≡kɔ̀]   jùgɔ́-jè-w   dèy
            [[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   yògó   yǎ̀:]   jùgɔ́-m̀
            [2Sg   tomorrow   go.Impf]   **know**.Impf-1SgS
            'I **know** that <u>you-Sg</u> [focus] are going tomorrow.

        d. [ú≡ỳ   [bú:dù   kùⁿ]   gùyⁿɔ̀]   jùgɔ́-m̀
            [2Sg≡Foc   [money   Def]   steal.Perf.L] **know**.Impf-1SgS
            'I **know** that it was <u>you-Sg</u> [focus] who stole the money.'

        e. [ú   [jù-jùwⁿó]   kùⁿ   wɔ̀:-lí]   jùgɔ́-m̀
            [2Sg   [mouse   Def]   kill-PerfNeg] **know**.Impf-1SgS
            'I **know** that you-Sg didn't kill the mouse.'

        f. [ú   jù-jùwⁿó≡ỳⁿ   wɔ̀:-lí   ké]   jùgɔ́-m̀
            [2Sg   mouse≡Foc   kill-PerfNeg   Topic] **know**.Impf-1SgS
            'I **know** that it wasn't <u>a mouse</u> [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   jìné   jǎ: àbádá⇒   kúdáy   yɔ́≡kɔ̀]
            [keep   hold   take   always   for.good   exist≡be.Nonh]
            kárⁿá   bɛ̀rɛ̀-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:]   [púlɔ̀-m   cé≡ỳ]
            [cow   all]   [Fulbe-Pl   property≡it.is]
            [ɛ́mɛ́   ùjùbǎy   lè]   cín   kɔ̀:-rɔ́
            [1PlP   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 áɣá-wá- 'cause to hear, inform'. The presence of Definite kùⁿ indicates that this is a factive, not a quotative, complement.

(1026) [[hínnɛ̀   mâ:n]   [yà:jì:-pàg-ú   lè]
            [[amount   such-and-such]   marriage.L-tie-VblN   Dat]
            kùnò-ẃⁿ   kùⁿ]   tégé   àná   áɣá-wá-ẁ
            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) [[[làɣá   pàntɛ̀-ý]   lè]
        [[[other   repeat-ImprtNeg   with]
        tɔ̌:-n   bè   yá:fɛ̀:]   yɔ́≡kɔ̀
        Recip-Sg   **3PlS.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 ≡ỳ '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. [[ɛ̀nɛ́   bé   bɛ̀:nɛ́]   kɔ́rɔ́   tɛ̌r-Ø   tɛ́rɛ́   mèyⁿ
           [[Refl   Pl.P   bag]   hang   chop-VblN   chop   and
           dì ŋè-bá]≡ỳ   sày
           sit.Perf.L-3PlS]≡**it.is**   only
           'It was just (the action of) them hanging up their shoulder bags and
           chopping (to clear fields).' (tɛ̀r-ú) **2004.3.11**

      b. [kɔ̀   ké]   wɔ̀ɣɔ̀rɔ́   mèyⁿ⇑   [êm bɛ́rɛ̀]   kúnó
          [Nonh Topic] ladle.out and   [milk in]   put
          mɔ̀ŋɔ́-wⁿ≡ì̀ː   săy
          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 táŋá- 'become, happen' occurs in a number of constructions with
a preceding complete main clause. The most common construction is táŋà: dèy
'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:≡kɔ̀ '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 des-
cribes 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) [ñɛ̌-n   kâːⁿ] [úːrⁿó   [ɛ̀nɛ́   mà   yàːjíː]
        [woman-Sg   too]   [get.up [Refl   Poss   marriage]
        mà   ì jɛ́   íjɛ̂ː-Ø]   mà   òjù-káː]   yɔ́≡kɔ̀,
        Poss standing   stand.Impf-**3SgS**   Poss **road**]   exist≡be.Nonh,
        [[mɔ̀rⁿɔ̀-bè-ý   lè]   [ǎ-n∴.   [wó   ñɛ̌-n∴.]]
        [[be.together-be.VblN   in]   [man-Sg   [3SgP woman-Sg]]
        lígíjé-bà]   mà   òjù-káː   kâːⁿ   yɔ́≡kɔ̀
        be.mixed.Impf-**3PlS]** 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 …'

ɛ́ː- 'see', tɛ́mɛ́- 'find', and áɣá- '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   nànâː-Ø]   ɛ̀t-tɛ̀rɛ̀-y
            [NonhO thus **3PlS.L** chase.**Impf**-Ppl.Nonh] **see**-ExpPf-1PlS
            'We have (once) seen them (=people) chase birds away like this.'
            2004.3.8

        b. [kó   nò]   [cín kò-rú   bè   kárⁿâː-Ø]
            [Nonh   now] [thus Nonh-Inst **3PlS.L** do.**Impf**-Ppl.Nonh]

ɛ̀ː-m
see.Perf.L-1SgS
'That (=cowhide) [topic], <u>them doing thus to it</u> [focus] is what I've
seen' **2004.3.17**

c. [wò   nùmồː-Ø]   έː-sà-m
    [**3SgS.L**   fall.**Impf**-Ppl.Nonh]   **see**-Reslt-1SgS
    'I saw him/her fall.'

d. [bè   núwⁿồː-Ø]   έː-sà-m
    [3PlS.L   die.**Impf**-Ppl.Nonh]   **see**-Reslt-1SgS
    'I saw them die.'

e. [bè   ké]   [[ànsá:rá-m kárⁿầː-Ø]   έː   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   tồː-n   láɣầː-Ø]   áɣá-sà-m
            [child-Pl   Recip-Sg   hit.**Impf**-Ppl.Nonh]   **hear**-Reslt-1SgS
            'I heard the children hitting each other (=fighting).'

        b. [[kó   nǔm-Ø]   mà   sógúrù]   áɣá-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 ≡kɔ̀ 'be
(nonhuman)' follows the imperfective participle in the complement (1032.a).
This confirms that the complement participle is an unsuffixed Imperfective, the
only AN category that requires ≡kɔ̀ 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 ≡kɔ̀- after an
unsuffixed 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 ≡kɔ̀-Ø, 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. [kɔ̀   núwⁿó≡kɔ̀-Ø]   ɛ́:-sà-m
           [NonhS.L   die.Impf≡**be.Nonh**-Ppl.Nonh]   **see**-Reslt-1SgS
           'I saw it die.'

     b. [kɔ̀   núwⁿó≡kɔ̀-Ø   bé]   ɛ́:-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. dɔ̀gùrù   [bè   dâ:ⁿ-Ø]
           time.L   [**3PlS.L**   be.sitting.**Perf.HL**-Ppl.Nonh]
           ù   ɛ́:-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]
           ènɛ́   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]   ɛ́:-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-nàŋá [à-tî: lè]   bè   â:-Ø]
        [field-cow [bird.trap   Inst]   **3PlS.L**   catch.Impf-Ppl.Nonh]
        ɛ́:-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 tɛ́mɛ́- '**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   bɔ́wɔ̀-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   yǎ: mì   kân]   [[àná∴.   àná∴.]
            [village go   1SgS.L after] [[village   village]
            à-jérù   á:≡kɔ̀-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 ≡ỳ 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 ≡ỳ (postconsonantal ≡î:). (1036.d), with the same meaning, is a standard adjectival predicate with 'be' quasi-verb.

(1036) a. [ú   yà:-lí-Ø]   έ:-rà-m
           [**2Sg** go-**PerfNeg**]   **see**-Habit-1SgS
           'I see (=recognize) that you-Sg have not gone.'

       b. [wó   bàyà-gó]   έ:-sà-m
           [**3Sg** be.cured-**ImpfNeg**] **see**-Reslt-1SgS
           'I saw (=recognized) that he/she would not recover (from injury).'

       c. [bán≡î:]   έ:-rà-m
           [red≡**it.is**]   **see**-Habit-1SgS
           'I see (=recognize) that it's red.'

       d. [bán≡kɔ̀]   έ:-rà-m
           [red≡**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:]   áɣá-sà-m
           [**3Pl** die-**Perf**]   **hear**-Reslt-1SgS
           'I heard that they died.'

       b. [bé   nùwⁿò-lí]   áɣá-sà-m
           [**3Pl** die-**PerfNeg**] **hear**-Reslt-1SgS
           'I heard that they didn't die.'

    c. [ú   bàmàkɔ́   yǎː]   áɣá-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' (sàː-rá-Ø)

sàː-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≡îː   yèrè-Ø   tàŋà   sàː-rá-Ø⇒,
        visiting≡Foc come.Perf.L-3SgS happen.Perf.L **have-Neg-3SgS**,
        bòn-kùn-Ø≡îː   dànàŋà   tàŋà   sàː-rá-Ø⇒
        name.L-put-VblN≡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 (wáːjíbì 'obligation')

The Fulfulde (ultimately Arabic) noun wáːjíbì 'obligation, duty' is used as a predicative nominal with clitic ≡ỳ 'it is'. The following clause has an imperfective or imperative verb. In effect, wáːjíbì≡ỳ functions like an adverbial. Alternatively, the complement may appear as a topicalized Verbal Noun clause, with following wáːjíbì≡ỳ 'it is a duty'.

(1039) a. [ñúː   ké]   wáːjíbì≡ỳ   kó   dɔ̀rⁿɔ́-ẁⁿ
         [millet   Topic] **duty≡it.is** NonhO sell.**Impf**-2SgS
         'The millet, you-Sg must sell it.' **2004.3.10**

    b. wáːjíbì≡ỳ   yògó   yɛ́rɛ́
         duty≡it.is   tomorrow come.**Imprt**
         'You-Sg must come tomorrow.'

    c. [á   yògò-yèr-ú]   wáːjíbì≡ỳ
         [2SgP tomorrow.L-come-**VblN**] **duty≡it.is**
         'You-Sg must come tomorrow.'

17.3.7 Factive complement with tílây≡ỳ 'it is certain'

tílây 'duty, obligation' may be used in the epistemic sense 'certainty', hence with 'it is' clitic tílây≡ỳ 'it is certain'. This takes a factive complement with unsuffixed Imperfective verb in (1040).

(1040) [dì:ⁿ   kárⁿá [ì nè   túmnó-n]   [bú:dù mùñú   kúróy]
      [manner.L do   [person.L single-Sg] [riyal thousand six]
      gá:w ú   kò   dɔ̀:-nɔ́≡kɔ̀-Ø   fú:]
      Gao   2SgO NonhS.L reach-Caus.Impf≡be.Nonh-Ppl.Nonh all]
      kɔ̀:-rɔ́,   [ù   ké]
      be.Nonh-Neg,   [2Sg.L   Topic]
      [òjù-kâ: núwⁿó-ẁⁿ]   tílây≡ỳ
      [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 -ý 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 wɔ̀- and kɔ̀ '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-ý]   dɔ́:-yà-Ø   dèy, …
      [[field   to]   3SgP go.out-**VblN**]   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 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 lì wè-yèr-ú]
             [Rdp-grasshopper Poss   **go.back.L**-come-VblN]
             'the locusts' coming back (here)' (yèrɛ́)

        b.   yèrè-ɗíŋ-Ø   dèné-m̀
             come.L-sit.VblN   want.Impf-1SgS
             'I want (=I'd like) to come and sit.' (dì ŋé-)

        c.   [yèrɛ́   ñà:-ñè-ý^n]   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 mì). (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   ὲ-ý]   jὸ:-lá-Ø
            [**NonhP**   see-VblN]   be.many-Neg-3SgS
            'Seeing it (a millet plant without an ear) isn't common.' **2004.3.6**

        c. ñἔ-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. nɔ̀wⁿɔ̀-sì r-ú
            meat.L-cook-VblN
            'meat-cooking'

c. nɔwⁿɔ́   mà   sì r-ú
    meat   Poss   cook-VblN
    'cooking meat'

d. pè:jì -cɛ̀ⁿ-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) [pɔ̀ⁿsé   mà]   ùrⁿɔ̀-jà-ýⁿ⇒,   …,
        [ditch   Poss]   **hole.L**-dig-VblN,   …,
        [támbɔ́rɔ̀   mà]   [bɔ̀rɔ̀-kà:]-sěm-Ø, …
        [date(fruit)   Poss]   [**debris.L**]-sweep-VblN, …
        'digging trench (=gutter) ditches, …, sweeping up debris of date palms,
        …' (ùrⁿó, jǎ:ⁿ, bɔ̀rɔ̀-ká:. 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: áɣá-sà-y
            but   hear-Reslt-1PlS
            '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≡kɔ̀
            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   ñĕ-m   mà   làg-ú]   hádé-bà
         [man-Pl   **Poss** woman-Pl   **Poss** hit-**VblN**] prevent.Impf-3PlS
         '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. [àr^n-úm mà]   [ñè-m]-làg-ú   hádé-bà
            [man-Pl Poss] [**woman-Pl.L**]-hit-Vbl.N   prevent.Impf-3PlS
            'They will prevent men from hitting women.' (ñě-m)

        b. [kì -ká: mà] ñù:-ñè-ý^n hádé-bà
            [Rdp-grasshopper Poss] **millet.L**-eat-VblN   prevent.Impf-3PlS
            'They will prevent the locusts' millet-eating.'

        c. [kì -ká: mà] má   ñù:-ñè-ý^n
            [Rdp-grasshopper Poss] 1SgP   **millet.L**-eat-VblN
            hádé-bà
            prevent.Impf-3PlS
            'They will prevent the locusts from eating my millet.' (lit.: "…my millet-eating")

        d. [àr^n-úm   mà]   [[ñè-m]-[gàrù-m]]-làg-ú
            [man-Pl   Poss]   [[**woman-Pl.L**]-[**old-Pl.L**]]-hit-Vbl.N
            hádé-bà
            prevent.Impf-3PlS
            'They will prevent men from hitting old women.' (ñè-m gàrú-m 'old women')

        e. [àr^n-úm   mà]   [[ñè-m]-[gàrù-m]   nùŋò-nám   lèy]
            [man-Pl   Poss]   [**woman-Pl.L**]-[**old-Pl.L**] **this-Pl**   **two**]
            mà]   làg-ú   hádé-bà
            Poss   hit-Vbl.N   prevent.Impf-3PlS
            'They will prevent men from hitting these two old women.'

In subject-object-VblN 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   bàmàkò-yéy]
            [1SgP   **Bamako.L**-going]
            'my going to Bamako.'

        d. [á:mádù   mà   fà:tùmà-jè-ý]
            [Amadou   Poss   **Fatouma.L**-marry-VblN]
            '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] VblN]], where X is a cognate object and Y is dative or allative with postposition lè.

(1052) [yà:jí: mà   òjù-ká: mà   ì jέ]
        [marriage   Poss   road   Poss   standing]
        tì -tírù   mà   [íné-n   lè]   mà   tì -ý
        Rdp-mission   **Poss**   [person-Sg to]   **Poss** send-VblN
        'Standing (=being involved in) the process of marriage; being sent on missions to somebody' **2004.3.12**

17.4.2   'Prevent' (hádέ-, 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**
            cὲː   ú   hádὲ-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. úrⁿ-ùm   [má   bì rὲ-bì r-ú]   gàːn-áːrⁿà-bà
            child-Pl   [1SgP work(noun).L-work-**VblN**] **prevent**-Habit-3PlS
            'The children are preventing my doing my work.'

        c. sámbò   [[wò   dêː]   mà   làg-ú]
            [S   [3SgP.L father.HL]   **Poss** hit-**VblN**]
            wó   hàdὲ-m
            3SgO   **prevent**.Perf.L-1SgS
            'Sambo [topic], I prevented him from striking his father.'

17.4.3 'Consent' (yɔ̀wɔ́-)

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]   yà-ý   yɔ̀wɔ̀-lí-Ø
            [elephant   Def]   go-**VblN** **accept**-PerfNeg-3SgS
            'The elephant refused (=did not accept) to go away.' **2004.3.4**

        b. [mì   dêː]   [má bàmàkò-yéy]   yɔ̀wɔ́-jὲ-Ø
            [1SgS.L father.HL] [1SgP Bamako.L-going] **accept**-RecPf-3SgS
            'My father has consented that I go to Bamako.'

        c. [áːmádù   mà   pèːjì -cὲⁿ-ýⁿ]   yɔ̀wɔ̀-lí-Ø
            [Amadou   Poss sheep.L-slaughter-**VblN**] **accept**-Reslt-3SgS
            'He refused to agree that Amadou may slaughter a sheep.'

        d. [mì   dêː]   [áːmádù   mà   fàːtùmà-jὲ-ý]
            [1SgS.L father.HL] [Amadou   Poss   Fatouma.L-marry-**VblN**]
            yɔ̀wɔ́-jὲ-Ø
            accept-RecPf-3SgS
            'My father has consented that Amadou marry Fatouma.'

When the subjects of the two clauses are not coindexed, as in (1054.b-d), it is also possible to have a complement clause with an imperfective verb, rather than a Verbal Noun. See (1142-3) in §18.4.4, below.

17.4.4 'Cease' (dàɣá-)

Among its many functions, the high-frequency transitive verb dàɣá- 'leave, abandon' may be used in the sense 'cease (doing sth)'. The complement takes Verbal Noun or similar nominal form.

(1055) a. [nùŋ-nǔŋ-Ø]   dàɣá-tì -Ø
       [song.L-sing-**VblN**]   **leave**-Perf-3SgS
       'He/She stopped (lit.: left) singing.'

      b. [úrⁿ-ùm   mà   làg-ú]   dàɣá-tù-m
       [child-Pl   **Poss** hit-**VblN**]   **leave**-Perf-1SgS
       'I have stopped hitting children.'

      c. mɔ̀rⁿɔ̀-ɗíŋ-Ø   kùⁿ   ké]   dàɣà-l-á
       be.together.L-sit.down-**VblN** Def   Top] leave-PerfNeg-3PlS
       'They haven't stopped (=they still practice) getting together and sitting down (for a funeral).' **2004.3.21**

17.4.5 'Want' (dèné-)

When the subject of 'want' is coindexed with the subject of the complement clause, the latter appears as a Verbal Noun (1056) or similar nominal.

(1056) a. [nîm   [ñà:-ñè-ýⁿ]]   dènê:-Ø
       [now   [meal.L-eat-**VblN**]] **want**.Impf-3SgS
       'He/She wants to eat now.'

      b. [íjé   yèr-ú]   dènè-j-é
       [today   come-**VblN**]   **want**-ImpfNeg-3PlS
       'They don't want to come today.'

      c. [jù-jùwⁿó   mà   wɔ̀-ý]   dèné-m̀
       [mouse   **Poss** kill-**VblN**] **want**.Impf-1SgS
       'I would like to kill the mice.'

d. [[kó   kùⁿ]   mà   ɛ̀-ý   nɛ̀]   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. [[tàrá   mà   kûːⁿ] tègú   ù   tégêː-Ø]
        [[coll.hunt Poss on] speech **2SgS.L** speak.**Impf**-Ppl.Nonh
        dèné-ỳⁿ
        want.Impf-1PlS
        'We want you-Sg to speak about the collective hunt(s).' **2004.3.1**
        [excerpt from (1200) in Text 1]

    b. [[ènɛ́   bé   úrⁿ-ùm]≡îː   kó   jì rêː-Ø   kùⁿ
        [[Refl   Pl   child.Pl]≡Foc NonhO tend.**Impf**-Ppl.Nonh   Def
        kâːⁿ   nɛ̀]   dènè-j-é
        too   now] **want**-ImpfNeg-3PlS
        'They do not want <u>their own children</u> [focus] to tend them
        (=animals).' **2004.3.10**

    c. [ɔ́gɔ́-rɔ́   kò   dɔ́ː≡kɔ̀-Ø]
        [fast-Caus   **NonhS.L**   reach.**Impf**≡be.Nonh-Ppl.Nonh]
        dèné-ẁⁿ   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' (nàŋá-)

In the non-factive sense 'forget to (do)', we get a Verbal Noun or similar nominal complement.

(1058) yèr-ú   nàŋ-â:-Ø
       come-**VblN**   forget-Perf-3SgS
       'He/She forgot to come.'

17.4.7 'Be afraid to' (lɛ́:-)

When the complement clause is positive, we get a Verbal Noun or similar nominal complement.

(1059) a.   …   dɔ̀-ý   lɛ̀:-Ø
            …   approach-**VblN**   fear.Perf.L-3SgS
            '… (he) was afraid to approach.' **2004.3.4**

       b.   ñà:-ñè-ý   lɛ́:-yè-Ø
            meal.L-eat.**VblN**   fear-Perf-3SgS
            'He/She was afraid to eat.'

       c.   nì-dî:ⁿ mà   [jì-nì:]-nì-ýⁿ   lɛ̀:-gó-m
            here   Poss [sleeping.L]-sleep(verb)-**VblN** 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.   [ñǎ: ñè-gó-Ø]   lɛ́:-yè-Ø
            [meal   eat-**ImpfNeg-3SgS**]   fear-Perf-3SgS
            'He/She was afraid not to eat.'

       b.   [ñǎ: ñè-gó-m]   lɛ́:-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]   [ènɛ́ mà î-n]   láɣâ: mà⇒↑]
            [[1SgP.L elder.sib.HL] [Refl Poss child-Sg] hit.Impf   **Q**]

    lɛ́ː-m̀
    fear.Impf-1SgS
    'I'm afraid that my brother will (=might) hit his child.'

  b. [kì -káː   mà   pì lì wè-yèr-ú]   lɛ́ː-m̀
      [Rdp-grasshopper Poss   go.back.L-come-**VblN**] 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 [O_1 O_2 $VERB_1$ $VERB_2$].

    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]   ɛ́wⁿɛ́]   túmnó-tì -Ø
      [[1SgP cow]   **milk**(verb)]   begin-Perf-3SgS
      'He/She began to milk my cow.'

  c. [kó   béné]   sɔ́wɔ́   tùmnò-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.   [ɔ̀yɔ́∴   fú:]   tɔ́ɣɔ́   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.   wɔ̀mɔ́   ù   dògó-jè-Ø   dèy   [kâ:ⁿ   nɛ̀]
        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' (bàrá-)

bàrá- 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 mì in (1065), appears immediately before the final 'help' verb.

(1065)   dògùrù   bé   wàrá   mì̀   bárà-Ø
   time.L   3PlO   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.   [ùrò-mà-ýⁿ   lè]   [ɛ̀né   dê:]   bàrà-Ø
     [house-build-**VblN**   in]   [3ReflP   father.HL]   **help**.Perf.L-3SgS
     'He helped his father in building the house.'

   b.   ú   bàrá-bà   [kàrgù-tɛ̌w-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' (bɛ̀ré-, gɔ̀rⁿɔ́-)

The verb bɛ̀ré-, 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.   cɛ́ré   bɛ̀rɛ̀-gó-Ø
     bite   can-ImpfNeg-3SgS
     'It (=snake) cannot bite'. **2004.3.5**

   b.   [àrⁿá   túl lè]   [á   èjú]   tɔ́:   dògó   bɛ̀ré-ẁ
     [rain   one with]   [2SgP   field]   sow   finish   **can**.Impf-2SgS
     'With a single rain, you can finish planting your (millet) field.'
     (túrú) **2003.4.6**

c. kà: [kó   kùⁿ]   kó   gàmá bèrɛ́≡kɔ̀
    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, gɔ̀rⁿɔ́-, 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 bɛrɛ́- and focuses on actual ability (physical or financial). It
too takes complements ending in bare verb stems.

(1069) [íné-n   túrú-n]   dé: gɔ̀rⁿɔ̀-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 dǐ:ⁿ 'place, manner' as relative-clause head can
also be used in basically purposive sense (1070).

(1070) dáwɛ́   gô:-Ø,
        go.in.AM go.out.Impf-3SgS,
        [dǐ:ⁿ   àsègɛ́   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. [ìnè   [ñè-î-n   yɔ̀wɔ̀   lé] yǎ:-m̀   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).' (yɔ̀wɔ́-) **2004.3.20**

       b. [èjù   [yàŋà lé] bè   yà:-gó-Ø]   kɔ̀:-rɔ́
           [field.L [**look.L in**] 3PlS.L **go**-ImpfNeg-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. ɔ̀ⁿhɔ́ⁿ ènέ   [íjé ké]   [yì-lé nà: lé]
           uh-huh! LogoS [today Topic] [here   **spend.night.L   in**]
           yὲrὲ-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] lὲ] nù: lé] yὲrὲ-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 yɔ̀wɔ̀ lé] 'in order to receive me'.

   In (1072), the same construction has **causal** sense, denoting the initial event that induced the protagonist to act. Being causal (retrospective), not purposive (prospective), it is not associated with an immediately adjacent motion verb.

(1072) [kó=ỳ   wó   tɔ̀:ñɔ̀   lé],
       [Nonh=Foc 3SgO **provoke.L   in**],

[wó   kúːⁿ]   kò-rú   bèrɛ́   mèyⁿ   gàrà-Ø
[3SgP head]   Nonh-with get   and   pass.Perf.L-3SgS
'Since <u>it</u> (=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).' (tɔ́ːñɔ́-) **2004.3.4**

17.6.1.2 *'Intend to' complement with Imperfective verb and lè*

In (1073), the verb is an **inflected unsuffixed Imperfective**. It is followed by
L-toned postposition lè, and by a form of the **'be' quasi-verb** wɔ̀-. The
specific sense of the construction is 'intend to VP'.

(1073) a. [úró   mǎː-ẁⁿ   lè]   wɔ̀-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]   [yǎː-ỳ   lè]
           [Nonh Def]   [NonhP Rdp-day]   [go.Impf-1PlS **Dat**]
           èmὲ   wɔ̀ː-Ø   jɛ́   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 jɛ́ 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 unsuffixed second person Imperfective form of
the **same verb** stem, is attested (1074).

(1074) [kó   kâːⁿ] [kó   lègú]   [déː   lé]   déː-ẁ
       [Nonh too] [NonhP earth]   [**carry.H Inst**] **carry**.Impf-2SgS
       'That too, it behooves you to carry the earth (for bricks).' (déː-)
       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*.

While déː- 'carry' is already lexically H-toned, follow-up elicitation with other verbs (ending in …LH or R tone) brought out the **tone-raising** in the verb preceding lé.

(1075) a. [déːné   lé]   dèːné-w̃ⁿ
          [**lay.down.H   Inst**]   **lay.down**.Impf-2SgS
          'It behooves you to lay them (=bricks)'. (dèːné-)

       b. [nɔ́ː   lé]   nɔ̌ː-w̃ⁿ
          [**drink.H   Inst**] **drink**.Impf-2SgS
          'It behooves you to drink (it).' (nɔ̌ː-)

       c. [kó   dánáŋá   lé]   dànàŋá-w̃ⁿ
          [Nonh   **organize.H Inst**] **organize**.Impf-2SgS
          'It behooves you to organize them (nonhuman).'

Phonologically, this pattern with H-tone overlay on the stem, followed by lé with H-tone arguably due to Atonal-Morpheme Tone-Spreading (137), is strikingly similar to a set of lexicalized adverbial PP's with H-toned lé and (in several cases) an H-toned overlay on the preceding noun (§8.2.2). See also §3.7.1.8.

17.6.1.4 *Locative indicative complement with lè*

Consider (1076), which describes how some hunters give up on hunting with dogs, in favor of hunting with rifles.

(1076) [[[ìjú   cèː   nàná   dòː-gó-Ø   kùⁿ]
          [[[dog   thing.L chase   reach-ImpfNeg-Ppl.Nonh   Def]
          [màlfâːⁿ   lè]   táːⁿ-bà]   lè]   núː-bà
          [rifle   Inst]   shoot.Impf-3PlS   **in**] **enter**.Impf-3PlS
          'They enter into (=switch over to) shooting with rifles what (=the animals that) the dogs would chase but would not catch up to.

The verb 'enter', though in this case abstract (i.e. 'entering' into a new activitiy or technique), calls for a locative complement. In (1076), postposition lè 'in' is therefore added to a complete indicative clause ('they shoot …').
    A similar construction occurs with the antonym of 'enter', namely góː- 'go out', in the sense 'get away from' or 'abandon' (an activity).

(1077) … [já:ⁿ≡kɔ̀]   jín≡kɔ̀,
        … [appropriate≡be.Nonh]   like≡be.Nonh,
        [[já:ⁿ≡kɔ̀]   lè]   gó: mèyⁿ⇑
        [[appropriate≡be.Nonh] **in**]   **go.out**   and
        íné-m   tílây   yέ   táná-ŋá-bà,
        person--Pl duty   Index   become-Caus.Impf-3PlS,
        [[já:ⁿ≡kɔ̀]   lè]   kán-tɔ́ɣɔ̀   mèyⁿ
        [[appropriate≡be.Nonh] **in**]   do-Impf   and
        [[tílây   yέ   táná-ŋá-bà   bǎ:]
        [[duty   Index   become-Caus.Impf-3PlS   since]
        mà   dǐ:ⁿ   dɔ́:-yὲ-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   ὲnέ   ê:-Ø]   lè,   sárá   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 jέ

Purposive postposition jέ 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 Cǐ:- and CὶCv́-
verbs.

In (1079), the first jέ has scope over the two parallel imperfective clauses,
while the final jέ follows an imperative verb bárá 'add!'

(1079) àrⁿ-úm   [ὲnέ   bé   ñě-m]   bàrá   méyⁿ   kâ:ⁿ
        man-Pl   [Refl Pl   woman-Pl] help   and   also
        ñù:-dɔ̌yⁿ   gɔ̀:ⁿ-bà   [kó   gá:rá   έjέ≡kɔ̀⇒]
        millet.L-hip   remove.Impf-3PlS [Nonh more   be.clean.**Impf**≡be.Nonh]

[kó   gá:rá   jó:⇒   bɛ̀rɛ̀-wɛ́≡kɔ̀]   jɛ́
[Nonh   more   much   get-Pass.**Impf**≡be.Nonh]   **for**
[bérɛ̀   bɛr-ú   bárá]   jɛ́≡ỳ, …
[getting get-VblN add.**Imprt**]   **for**≡it.is, …
'The men help their women and remove (=harvest) the early millet, so that it will be more clear (=orderly) and so that more will be gotten, to increase the gain (=yield or profit).' (bàrá-) **2004.3.6**

More examples with imperative verbs are in (1080).

(1080) a.   … wàrá   bɔ̌:-bà,   kó   gámá   jɛ́
         … farm(verb) fill.up.Impf-3PlS, NonhS be.reduced.**Imprt for**
         '… they dig up (earth) and fill it up (after driving grasshoppers into the pit), in order to reduce them (=grasshoppers, in number).' (gàmá-) **2004.3.8**

      b.   [mɔ̀rⁿɔ̀-bɛ̀-ý   kùⁿ] cé:né   jɛ́≡ỳ
         [be.together.L-remain-VblN Def] be.food.**Imprt** **for**≡it.is
         'It's so that the living together (in peace) be good.' **2004.4.6**

      c.   [ámà sàgú⇒   é   sàgú],   [ɔ̀r   núŋò],
         [God entrusting 2Pl   entrusting], [matter.L   Dem],
         mǐ-n   kó   dònò-ŋó   jɛ́,
         1Sg-Dat   NonhO   finish-Caus.**Imprt**   **for**
         [kó   jɛ́]   é   mɔ̀:-nɔ̀-m
         [Nonh for] 2PlO   be.together-Caus.Perf.L-1SgS
         'Entrusting (it) to God and to you-Pl, this matter (=quarrel) [topic], in order to put it to an end for me, that's why I have assembled you-Pl.' (ɔ̀rú) **2004.4.6**

      d.   wó [yǎ: núwⁿó jɛ́] wó   tì:-Ø   dèy⇑
         3Sg [go die.**Imprt for**] 3SgO   send.Perf.L-3SgS   if
         '"you [vocative], if she sent you-Sg (here) to go and die, …"' **2004.4.18**

More examples with imperfective verb are in (1081). Except for the imperfective aspect, this construction is identical in form to the quasi-main-clause subtype of adverbial clause with jɛ́ (mèyⁿ) if the mèyⁿ particle is omitted (§15.2.2.2).

(1081) a. nǐ ŋì rⁿè   yì-dî:ⁿ   [kó   yǎ:-ỳ   jέ]
            day.L   here   [NonhO   go.**Impf**-1PlS   **for**]
            èmὲ   gô:-Ø
            1PlS.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   jέnnátù]   mà   gá:rù]   bέrὲ,
         [[Dem J]   Poss   station]   in,
         [gárdíyà yǎ:-ỳ   jέ] èmὲ   wô:-Ø   jέ
         [G   go.**Impf**-1PlS **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 jέ is purposive, the second (after wô:-Ø) is adverbial; see discussion of quasi-relative jέ (mὲyⁿ) adverbial clauses in §15.2.2.2. The passage in (1081.b) was repeated shortly thereafter in the same text, replacing yǎ:-ỳ jέ by another purposive phrase yǎ:-ỳ lὲ (followed by wô:-Ø jέ mὲyⁿ) (1073.b).

The construction with H-toned jέ is easily distinguishable from verb forms with Recent Perfect suffix -jὲ- (§10.1.2.6).

17.6.3 Reduced purposive clause in compound form (ǹ 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. … ñέ:-bà⇒,   ñà:-ñê: dì ŋ-â:-bà   dèy, …
           … eat.Impf-3PlS, **meal.L-eat.HL** **sit**-Perf-3PlS if, …
           '… and they will eat. When they have sat down to eat, …' (ñǎ:, ñέ:-) **2004.3.18**

     b. yà:jì :-páɣà   dì ŋ-â:-bà   dèy
         marriage.L-tie.HL   **sit**-Perf-3PlS if

gó:rò   gǒ:ⁿ-ẁⁿ
kola   take.out.Impf-2SgS
'When they sit down to contract the marriage, you-Sg will bring out some kola nuts (to offer them).' (yà:jí:, páɣá-) **2004.3.20**

c. bì rè-bírè   yǎ:-
    work(noun).L-work.HL   go
    'go (to a city) in order to work' (noun bíré, verb bì ré-)

d. kàràwà-kúnò   yǎ:-yà-w   dèy
    entrusting.L-put.HL   go-Perf-2SgS   if
    'if you go to put your trust (in them)' (kàràwá, kúnó-) **2004.3.20**

e. [[àmà-sàw]-kúnò   yérè-m   kùⁿ]   nǒ:-bà
    [[**blessing.L]-put.HL come**.HL-Ppl.Pl   Def]   drink.Impf-3PlS
    'Those who come to give blessings (to a newborn) will drink.' (àmà-sǎw, kúnó-) **2004.3.19**

f. wàrù-wárà   yǎ:-yè-w   tán
    farming.L-farm.HL   go-Perf-2SgS   only
    'if you-Sg go (to the fields) to farm' **2004.4.4** [< (1280)]

In (1082.e), the purposive àmà-sàw-kúnò is embedded in a larger compound involving the (agentive) participle of 'come'. This outer compound is of the type [x̄ v̂-Ppl] (§5.1.7).

The L-toned noun and (nominalized) H(H…)L-toned verb are **suggestive of a perfective relative clause** with L-toned head noun and H(H…)L-toned unsuffixed Perfective participle. However, the purposive compound does not allow the preverbal L-toned subject pronominals that are regular in relatives, and there are other formal and semantic differences that make a conflation impossible. A tonal similarity to the rare agentive compound type yà:-yérè-m 'go-and-come women' (§5.1.8) is suggestive, but again there is no semantic connection.

Definite kùⁿ is uncommon after the purposive compound, but it occurs in (1083).

(1083) [làmpò-â: kùⁿ]   yěy-yà-bà   dèy
        [**tax.L-catch.HL   Def**]   come-Perf-3PlS   if
        'when they came to collect the tax' **2004.4.22**

This construction may be used with núː- '**enter**' in the sense 'get involved in, engage oneself in'. In (1084.a), it follows an agentive compound of type [x̀ v́-Ppl] (§5.1.9).

(1084) a. [sàl-sálá-m]   sàl-sálà   nú: mèyⁿ
             [prayer.L-pray.H-Ppl.Pl] **prayer.L-pray.HL**   **enter** and
             'Those who pray, having entered prayer (=having converted to Islam), …' (noun-verb sequence sâl sálá-) **2004.3.21**

      b. kàrgù-tɛ́wɛ̀   nú:-ẁⁿ
             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-tɛ́rɛ̀]   nú:-ẁⁿ
             [**2SgP** **stick.L-cut.HL**]   **enter**.Impf-2SgS
             'You-Sg will enter (=engage in) your wood-cutting.' **2004.3.25**

      b. [á   kɔ̀ñɔ̀-nɔ̂:]   nú:-ẁⁿ
             [**2SgP** **millet.beer.L-drink.HL**] **enter**.Impf-2SgS
             'You-Sg will enter (=engage in) your millet-beer drinking.' (kɔ̀ñɔ́, nɔ̌:-)

      c. [á   nì:-ínè]   nú:-ẁⁿ
             [**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:]   yɛ̀rɛ̀-j-é
             [**2SgP** catch.HL]   come-ImpfNeg-3PlS
             'They will not come to arrest you-Sg.' **2004.5.3**

   b. [á   páɣà]   yɛ̀rɛ̀-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 yɛ́rɛ̀- 'come' is treated here as though it were a Verbal Noun.

(1087) [bé   mà   [á   kûːⁿ]   yɛ́rɛ̀]≡ỳ   làː
        [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 yâː- 'go' (< yǎː-) and númò- 'fall' (< nùmó-) instead of yɛ́rɛ̀-.

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 -ḿ suffix after a tone-dropped all-L stem, i.e. [$\grave{v}$ + -ḿ] (§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≡ỳ '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-m̀), and that it is not a 1Sg subject form (Perfective tèmè-m, Imperfective témé-m̀).

(1089) A. [èjù-àrⁿá   nɛ̀]   tílây≡ỳ   [nì꞉ñɛ   núŋò]
        [bush.L-man now] obligation≡it.is [gear.L   Dem]
        ǔ-r   témɛ́-m]   mà   nì꞉ñé,
        2Sg-Dat   find-**so.that**]   Poss   gear,
        tílây-tílây   è   táná-ŋâ꞉-Ø   kùⁿ nɛ̀
        obligation-obligation 2PlS.L become-Caus.Impf-Ppl.Nonh Def now
        [kó   nò]   [nì꞉ñɛ   yɔ́kkɔ̀   yɔ́kkɔ̀   kó≡ỳ]
        [Nonh now]   [gear.L   which?   which?   Nonh≡it.is]
     B. [nì꞉ñɛ   tílây   ǔ-r   témɛ́-m   [kó   ní-ŋírⁿé]
        [gear.L   obligation 2Sg-Dat find-**so.that**] [NonhP   Rdp-day]
        ɛ̀mɛ̀   jɛ̂꞉-Ø,
        1PlS.L   say.Perf.HL-Ppl.Nonh
        [màlfâ꞉ⁿ   kó   ǔ-r   témɛ́-m]
        [rifle   NonhO 2Sg-Dat   find-**so.that**]
        [[màlfâ꞉ⁿ   kùⁿ   kɔ̀rsɔ̀-gó]   kó   ù-r   témɛ́-m]
        [[rifle   Def jam-ImpfNeg] NonhO 2Sg-Dat find-**so.that**
        [[màlfâ꞉ⁿ   kùⁿ   lɛ̀]   î꞉ⁿ   kó   témɛ́-m]
        [[rifle   Def Inst] child NonhO   find-**so.that**
        [bûg   kó   témɛ́-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 témɛ́-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   témɛ́-m   tílây≡ỳ
           3Sg   here   1SgO   find-**so.that**   **obligation**≡it.is
           'He/She had better (=must) find me here.'

       b. mí   ní-dì:ⁿ   bé   témɛ́-m   tílây≡ỳ
           1Sg   here   3PlO   find-**so.that**   **obligation**≡it.is
           'I had better (=must) find them here.'

Without tílây≡ỳ, the usual sense of [… v̄ + -m] is '**so that**' (=in order that). The construction has low text frequency. One textual example is (1091).

(1091) [dɔ̀yⁿɔ̀   ù   nɔ̃̀:-Ø   kùⁿ]
        [ashes.L   2SgS.L   drink.Impf-Ppl-Nonh   Def]
        [á   gùjú   lè]   nɛ̀wⁿɛ́   nú:-m
        [2SgP   skin   Dat]   usefulness   go.in-**so.that**
        bɛ̀   jɔ̀ŋɔ̂:-Ø]   yɔ́≡kɔ̀
        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:rɛ́-m̀   [ú   wó   láɣá-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. nɔ̀:-m in (1093.a) shows that R-toned monosyllables may drop to L-tone.

(1093) a. [wó   ní: ó: [ɛ̀nɛ́   nɔ̀:-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 [[cɛ̀ː tùrù] wò dènê:-Ø cêw]
    [3Sg [[thing.L one.L] 3SgS.L want.Impf-Ppl.Nonh all]
    tégé mèy⇑, ɛ̀né wò-rú kárⁿá-m] wá
    speak and, LogoS 3Sg-Dat do-**so.that**] say
    'Heₓ (Fulbe man) said (to the Dogon manᵧ), "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,
    ɛ́mɛ́ ní-dì:ⁿ bé:-sà dèy,
    1Pl here remain-Reslt if,
    [ɛ́mɛ́∴. ɛ̀nɛ́∴.] háwrɛ́-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 cɛ́:ⁿ kárⁿá ɛ̀nɛ́ 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:ɣá [dì:ⁿ tô:-n é céjé-m ù
        night [place.L Recip-Sg 2Pl meet-**so.that** 2SgS.L
        gâ:-Ø lè] yǎ:-ẁ,
        say.Perf.HL-Ppl.Nonh in] go.Impf-2SgS,
        wó ɛ̀:-gó-w
        3SgO see-ImpfNeg-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]   tɔ̀:-j-é
           because   [Nonh Topic]   sow-ImpfNeg-3PlS
           'because they won't plant that (seedstock) [topic]' **2004.3.6**

       b.   àmà-sɔ̀ɣɔ́   yɛ́   sà-Ø,
           pity   exist   have-3SgS,
           sábù   ò:g≡î: ñɛ̀wⁿ-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 [S$_1$, sábù S$_2$]. An alternative construction with the order of clauses inverted is [S$_2$ *for-Focus*, S$_1$], i.e. 'S$_2$ is why S$_1$'. Here the 'for' (i.e. 'because of') postposition is jɛ́ (§8.4).

(1096) [[lí-ló:ró≡ỳ   [ǎ-n   lè]   dènè-j-é]   jɛ́]≡ỳ
       [[fear-Foc   [man   Dat]   want-PerfNeg-3PlS] **for**]≡**Foc**
       [bé   nè]   [àná   bɛ́rɛ̀]   nù:-bà
       [3Pl   now]   [village in]   enter.Perf.L-3PlS
       '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 ì ñé 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:-jɛ̀-bà   kásù   nú:-yⁿà-wⁿ,
       2SgO   catch-RecPf-3PlS   jail   enter-Perf-2SgS,
       lámpò lúgúró bɛ̀rɛ̀-gó-w,   má⇒   kɔ̀r≡î:,
       tax   seek   can-ImpfNeg-2SgS,   or   lie≡it.is,

háyὲ   [kó   kùⁿ   sógò]   [kò   kùmàndâ:wⁿ   kùⁿ   bé]
well   [Nonh Def   **because.of**] [Dem commandant   Def   Pl]
yɛ̌y-yà-bà   dὲy
come-Perf-3PlS   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)' (kɔ̀r-ú)
2004.4.22

sógòn means 'because of' or 'on account of' in (1098).

(1098) a.   [[kó   kùⁿ]   sógòn]≡î:,
              [[Nonh Def]   **because.of**]≡Foc,
              ñɛ̌-m   àrⁿ-úm   nàná-nànà   tàrá   tí:-bà
              woman-Pl man-Pl   chase-chase.L collective.hunt send.Impf-3PlS
              'It's <u>for that reason</u> [focus] that women drive men to the collective
              hunt.' [nàná-nànà: §11.6.3] **2004.3.3**

        b.   [kó   tɛ̌yⁿ   sógòn   ké]   kò-rú   yà:-ý
              [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), sógòn 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) [ɛ́mɛ́ gòrô:]   gó: bὲrὲ-j-é   kùⁿ   sógòn,
        [1PlP nape.Loc.HL] go.out can-ImpfNeg-3PlS Def a.fortiori
        ὲmɛ̌-n tál-lá   gò: wànà-ŋá   bὲrὲ-j-é
        1Pl-Dat attach-Revers go.out.L be.far-Caus can.ImpfNeg-3PlS
        '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 sógò 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) kònòŋó   kónóŋó   [kó   kûːⁿ]   náːná-bà
        conical.roof   make.roof   [Nonh   on]   put.on.Impf-3PlS
        [kó   nò]   [àrⁿá   mǐn-sà-Ø   kâːⁿ]
        [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.' (mǐ rⁿé-) **2004.3.6**

17.7   Clause-final nàː 'though'

A clause-final morpheme nàː 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 nàː 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 nàː. A similar reading is possible in (1102), though the logical structure of the sentence is rather complex.

(1101) a. ì-áɣà-y   ὲː-líː-Ø
           Rdp-hear.HL-1PlS   see-PerfNeg-1PlS
           'We have heard (about it), (but) we have not seen (it).' **2004.4.5**

      b. ì-áɣà-y   nàː   ὲː-líː-Ø
           Rdp-hear.HL-1PlS   **though**   see-PerfNeg-1PlS
           'Though we have heard (about it), we have not seen (it).'

(1102) [[[ì nè-n   nùŋò-bâːⁿ]   pòttò-lí-Ø   nàː]
        [[[person.Sg.L   Dem.L-owner]   participate-PerfNeg-3SgS   **though**]
        jàːⁿ-j-é]   kɔ̀ː-rɔ́
        dig-ImpfNeg-3PlS]   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) [nɔ̌ŋ   lɛ̌y   kùⁿ]
        [neighborhood two   Def]
        mà   ì nè   jɛ́yɛ̀-m   kùⁿ bɔ̀rⁿɔ́-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] [nɔ̌ŋ   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 ì nì wⁿé (e.g. reflexive object) and ènɛ́ (e.g. reflexive possessor, logophoric) may be related to each other and to the noun ɪ́nɛ́- 'person' (e.g. Sg ɪ́nɛ́-n). ènɛ́ has a dialectal variant ìnɛ́-. Both ì nì wⁿé and ènɛ́ 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, ènɛ́ (but not ì nì wⁿé) may be pluralized by adding particle bé.

18.1 Reflexive

18.1.1 Reflexive non-subject arguments (ì nì wⁿé)

Reflexive ì nì wⁿé 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 ì nì wⁿé, which does not agree with the subject in person, humanness, or plurality (1104).

(1104) a. ì nì wⁿé   láɣá-sà-m
            Refl   hit-Reslt-1SgS
            'I hit-Past myself.'

        b. ì nì wⁿé   láɣá-sà-bà
            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 ≡ỳ clitic is also possible.

(1105) a. ì nì wⁿé   làɣà-m
         Refl   hit.Perf.L-1SgS
         'I hit-Past myself.'

       b. ì nì wⁿé≡ỳⁿ   làɣà-m
         Refl-Foc   hit.Perf.L-1SgS
         'I hit-Past <u>myself</u> [focus].'

    ì nì wⁿé may also function as complement of a postposition (1106).

(1106) bú:dù   [ì nì wⁿé   lè]   tì:-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:fɛ́-wɛ́   mèyⁿ⇑
         Refl   pardon-Caus   and
         'having excused himself, …' **2004.4.6** (yá:fɛ́-wɛ́ emended from yá:fɛ́)

       b. ì nì wⁿé   dɛ̀:ⁿ-wⁿɛ̀-ýⁿ
         Refl   be.weary-Caus-ImprtNeg
         'Don't weary yourself!' **2004.5.5**

       c. ì nì wⁿé   páɣá …
         Refl   tie …
         'tying himself (=tying his beltcord)' (chained VP) **2004.4.26**

       d. ì nì wⁿé   kámá   [[cí-cɛ́rɛ́   kùⁿ]   mà   cèn-ná:]
         Refl   throw   [[saddle   Def]   Poss   heart-true]
         dɔ́:   dì ŋé   dɛ̀:rⁿɛ̂:-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.' (cɛ́nɛ̀) **2004.4.26**

18.1.2   Reflexive possessor (Sg ɛ̀nɛ́, Pl ɛ̀nɛ́ bé)

18.1.2.1   Ordinary contexts (not coordinated)

In third-person possessor function, we get the noun ɛ̀nɛ́ for Singular Reflexive, and ɛ̀nɛ́ bé (with nominal Plural particle bé) for Plural Reflexive. Again, the antecedent is the clause-mate subject. ɛ̀nɛ́ and Pl ɛ̀nɛ́ 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 ɛ̀nɛ́ 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 jú]   wɔ̌ː-tù-m
             [**3SgP**   dog]   kill-Perf-1SgS
             'I killed his/her dog.'

        b.   [ɛ̀nɛ́   mà   ì jú]   wɔ̌ː-sà-Ø
             [**Refl**   Poss   dog]   kill-Reslt-3SgS
             'He$_x$ killed his$_x$ (own) dog.'

        c.. [má   ì jú]   wɔ̌ː-sà-m
             [**1SgP**   dog]   kill-Reslt-1SgS
             'I killed my (own) dog.'

        d.   ǎ-n   [[wó   èjú]   bɛ́rɛ̀]   wó   dì gɛ́-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 jú   [ɛ̀nɛ́   mà   îːⁿ]   cɛ́t-tì -Ø
             dog   [**Refl**   Poss   child]   bite-Perf-3SgS
             'The dog bit its (own) puppy.' (cɛ́rɛ́)

b. úró   [ɛ̀nɛ́   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 ɛ̀nɛ́ bé (1110) does not take Possessive postposition mà where we might expect it, i.e. in normal (alienable) possessives (1110.a). When ɛ̀nɛ́ bé functions as inalienable possessor, the bé drops its tone, and we get ɛ̀nɛ́ 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 ɛ̀nɛ́ bé is (in part) morphemically identical to 3Pl pronoun bé.

(1110) a. [ɛ̀nɛ́   bé   ì jú]   wɔ̌ː-tù-bá
        [**Refl**   **Pl**   dog]   kill-Perf-3PlS
        'They$_x$ killed their$_x$(own) dog(s).'

      b. [úrⁿ-ùm   ì nè   kâːⁿ]   bàrá   jǎː
        [child.Pl   person.L   each]   gather   take
        [[ɛ̀nɛ́   bè   nâː]   lè]   ôː-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 ɛ̀nɛ́ 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 ɛ̀nɛ́ is used (before ì nè gàrú-m) tells us that the referent is distinct from that of the initial 3Sg pronominal.

(1111) [wó   yǎː   [wó   ì nè   gàrú-m]   tíː   kùⁿ]
       [3Sg   go   [**3SgP**   person   big-Pl]   send.Imprt   Def]
       ɛ́mɛ́   jè
       1Pl   say.Perf.L
       'It was <u>we</u> [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]   dèː-gó-bé
       [person.L   certain.Pl]   [[dead.one Def]   carry-ImpfNeg-2PlS
       [[ɛ̀nɛ́   mà   kɔ́ː   lè]   úrò   yɛ̀rêː-Ø]
       [[**Refl**   Poss   foot   Inst]   house.Loc.HL   come.Impf-3SgS]

mà dú: ɛ̀mɛ̌-n dɛ́:-sà-m]   mà íné-m   yɔ́≡kɔ̀
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 kúːⁿ 'head'*

Though not the regular all-purpose reflexive, kúːⁿ 'head' does occur in various
expressions that verge on this function.

    (1113) illustrates a common construction consisting of an independent pro-
nominal X (as topic) followed by a '**with X's head'** phrase including post-
position 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   kúːⁿ   lè]]   ɛ́wɛ́   mèyⁿ⇑, …
           [2Sg [2SgP **head   with**]] buy   and, …
           'You-Sg [topic], you will buy (insecticide) on your own (initiative)
           and …' **2004.3.8**

       b. [bé   [ɛ̀nɛ́   bé   kúːⁿ   lè]],   [dǐːⁿ   kùⁿ],
           [3Pl [**Refl   Pl   head   with**]], [place   Def]
           [[íné-n   lè] jàŋá   mèyⁿ,
           [[person-Sg Dat] ask   and,
           ɛ́mɛ́   jɛ̀:rɛ́   dɛ̀:nɛ̀-l-á]
           1PlO   bring   put-PerfNeg-3PlS]
           '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. jɛ́mɛ̀-n   [wó   [ɛ̀nɛ́   mà   kúːⁿ   lè]]
           blacksmith [3Sg [**Refl   Poss   head   with**]]
           [íːrⁿé   kùⁿ]   yì -yɔ̀:rɔ̂:-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]
    bὲl-lú:-Ø   déy, [á   kú:ⁿ   lὲ]
    get-PerfNeg-2SgS   if,   [**2SgP   head** Inst]
    débérê: kárⁿá   gó:-ẁ   [kɔ́:   lὲ]
    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.' (bὲrɛ́-, Fr *se
    débrouiller* 'manage') **2004.4.27**

e. [á   kú:ⁿ   lὲ]   téwɛ́   dɔ̀:-nɔ́   bὲrɛ́-ẁ
    [**2SgP   head**   Instr] make.brick arrive-Caus can.Impf-2SgS
    táŋà: dὲy
    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) ὲnɛ́   mà   kù:ⁿ-báná   cé,   jíjὲ   yὲrê:-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 nὲ   [ὲnɛ́   mà   kú:ⁿ]   jùgɔ́-ǹ,
       person.L [**Refl   Poss head**]   **know**.Impf-Ppl.Sg
       [bé   bὲrê:]   dàɣá-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 bɛ̀rɛ́- 'get, obtain'. There is no Reflexive Possessor here ('his own head' with ɛ̀nɛ́ mà) since 'his head' is topicalized (presentential), and "resumed" by a clause-internal Nonhuman pronominal.

(1116) [wó   kúːⁿ]   kò-rú   bɛ̀rɛ́   mɛ̀yⁿ   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 (ɛ̀nɛ́, ɛ̀nɛ́ 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 "ɛnɛ (be)."

The basic Jamsay third person Logophoric anaphor is ɛ̀nɛ́ (Sg) or ɛ̀nɛ́ 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 ɛ̀nɛ́ 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 ɛ̀nɛ́ (or its plural ɛ̀nɛ́ bé), always before the verb but not necessarily adjacent to it, and with no L-toned form #ɛ̀nɛ̀ (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 ɛ̀nɛ́ bé takes an audible 3Pl subject suffix -bà (1117.d-e). Logophoric object is expressed by the same forms (1117.c).

(1117) a. ènέ   yὲrê:-Ø   wà⇑
            LogoS   come.Impf-3SgS   say
            '**She**ₓ said (that) **she**ₓ is/was coming.'

        b. ènέ   ú   láɣá-sà-Ø   wà⇑
            LogoS 2SgO   hit-Reslt-3SgS   say
            '**He**ₓ said (that) **he**ₓ hit-Past you.'

        c. mí   ènέ   láɣá-sà   wà⇑
            1Sg   **LogoO**   hit-Reslt-3SgS say
            '**He**ₓ said (that) I̲ [focus] hit-Past **him**ₓ.'

        d. [ènέ   bé]   mí   láɣá-sà-bà   jὲ-bà
            [**LogoS Pl**]   1SgO   hit-Reslt-3PlS   say.Perf.L-3PlS
            '**They**ₓ said (that) **they**ₓ hit-Past me.'

        e. [ènέ   bé]   ñǎ: jὲ:rέ-bà   jὲ-bà
            [LogoS Pl]   meal   bring.Impf-3PlS   say.Perf.L-3PlS
            '**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 ≡kɔ̀, agreeing with the logophoric subject.

(1118) … ènέ   wɔ̌:≡kɔ̀   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 ènέ with its regular tones (not #ènὲ). A second Logophoric occurs in (1119.a) in the subsequent main clause as object of 'have'.

In (1119.b-c), Pl Logophoric ènέ bé (with regular tones) occurs in subject function in the adverbial relative clause; see also (839). In the ensuing main clause, repetition of the Pl Logophoric is optional (1119.b). This main clause need not contain a mention of the referent in question (1119.c).

(1119) a. [nì ŋèrⁿè   mí   ènɛ́   láɣà-Ø   kùⁿ]
          [day.L   1SgO   **LogoS**   hit.Perf.HL-Ppl.Nonh   Def]
          wéjè≡ỳ   ènɛ́   sà-Ø   jì: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 ŋèrⁿè   [ènɛ́   bé]   yɛ́rè-Ø   kùⁿ]
          [day.L   [**LogoS** **Pl**]]   come.Perf.HL-Ppl.Nonh   Def]
          (ènɛ́ bé)   bú:dù   sà:-rá-bá   jè-bá   jì:ⁿ
          (**Logo Pl**) 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 ŋèrⁿè   [ènɛ́   bé]   yɛ́rè-Ø   kùⁿ]
          [day.L   [**Logo** **Pl**]   come.Perf.HL-Ppl.Nonh]   Def]
          àrⁿá   èjíⁿ⇒   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,   [[ènɛ́   bé   pènè-kû:ⁿ]
       person.Pl.L certain-Pl,   [[**Logo** **Pl**   beside]
       ì nè-m   [nùmò-ñǎ: lé]   pɛ́l-lèy,
       person.Pl.L [hand.L-meal(=right) in]   ten-two,
       [nùmò-bàná   lé]   pɛ́l-lèy,
       [hand.L-left   in]   ten-two,
       í:rⁿé   [ènɛ́   bé]   nù:-gó-Ø
       iron   [**LogoO**   **Pl**]   enter-ImpfNeg-3SgS
       [kó   kùⁿ   nám]   nù:-gó-Ø],
       [Nonh   Def   owners] enter-ImpfNeg-3SgS],
       mà   á:dù   èmě-n   á:-sà-m]   yɔ́≡kɔ̀
       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 ɛ̀nɛ́ 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 / ɛ̀nɛ́   yɛ̀rɛ̂:-Ø   jɛ̀-Ø   wà]]
            [A   [**3Sg / Logo** come.Impf-3SgS say.Perf.L-3SgS   say]]
            tɛ̀g-á:rà-bà
            speak-Habit-3PlS
            'They say [that **Amadou$_x$** said [that **he$_x$** would come]].'

        b. [á:mádù [[ɛ̀nɛ́   bé] láɣâ:-Ø   jɛ̀-Ø   wà]
            [A   [[**LogoO Pl**] hit.Impf-3SgS say.Perf.L-3SgS   say]]
            tɛ̀g-á:rà-bà
            speak-Habit-3PlS
            '**They$_y$** say [that Amadou$_x$ said [that he$_x$ would hit **them$_y$**].'

        c. #?[á:mádù [ɛ̀nɛ́   [ɛ̀nɛ́   bé] láɣâ:-Ø
            [A   [**LogoS** [**LogoO** **Pl**] hit.Impf-3SgS
            jɛ̀-Ø   wà]   tɛ̀g-á:rà-bà
            say.Perf.L-3SgS   say]]   speak-Habit-3PlS
            [= (b)]

d. [á:mádù [wó   [ènɛ́   bé] láɣâ:-Ø   jɛ̀-Ø
    [A   [3Sg [**LogoO Pl**] hit.Impf-3SgS say.Perf.L-3SgS
    wà]   tɛ̀g-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 (ènɛ́, ènɛ́ bé)

Once a discourse referent is established as a topical NP, a co-indexed Reflexive pronoun (Sg ènɛ́, Pl ènɛ́ 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:-tǒy   [[ènɛ́   mà   dáɣá]   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 ènɛ́ as Reflexive possessor function, which is not directly relevant here. Another example is (214.a).

(1123) b. kì̀-ká: [wàkàtì [kó   bɛ̀rê:] ènɛ́
           Rdp-grasshopper [time.L [Nonh   in]   **Refl**
           nú:-sà-Ø   fú:⇒]
           enter-Reslt-Ppl.Nonh   all]
           ñɔ́wⁿɔ̀   téwɛ́   bɛ̀rɛ́≡kɔ̀
           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   kâːⁿ] [ɛ́né   mà   dúː]
[person.L any] [Refl   Poss   load]
[dìːⁿ   ɛ́né   gɔ̀rⁿɔ̂ː-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 ɛ́né or ɛ́né bé as subject of a **non-subject relative
clause** are in (1124.a-c). The head noun 'his iron' in (1124.a) also contains ɛ́né
in Reflexive possessor function. Another example is (841.e).

(1124) a. [[ɛ́né   mà   íːrⁿé]   ɛ́né   dùwɔ̂ː-Ø   kùⁿ]
[[Refl   Poss   iron]   **Refl**   forge.Impf-Ppl.Nonh   Def]
kúnó-jɛ̀-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. pɔ́tɔ́   [cɛ̀ː   ɛ́né   dènê:-Ø   kùⁿ]
beat   [thing.L   **Refl**   want.Impf-Ppl.Nonh   Def]
kó   táná-ŋâ:-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   [ɛ́né   bé   dígè-n   cêw   kùⁿ]
person.L [**Refl**   **Pl**   follow.Perf.HL-Ppl.Sg   all   Def]
[gáːrá   ǎ-n]   táná-ŋá-m̀
[more   man-Sg]   become-Caus.Impf-Ppl.Pl
'people$_x$ (=griots) who transform whomever **they$_x$** have followed
into a better man.' **2004.3.15** (ɛ́né bé emended from ɛ́né)

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 ɛ́né bé …].

The use of ɛ́né in this indexing function **does not apply to non-subject**
functions within clauses. For these non-subject functions, ɛ́né may only have
the clause-mate subject, not a preposed topic, as antecedent. Therefore we get
ordinary 3Sg wó rather than Reflexive ɛ́né 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   láɣà-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   ì jú]   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   ì jú]   wǒ: mì   kân,
            [Amadou   Topic], [**3SgP** dog]   kill   1SgS.L   after,
            cénɛ̀   bǎyⁿ-yɛ̀-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 ɛ̀né form in a dative (referring to the generic child that has been the topic of preceding discourse). The dative here is ɛ̌n lè, contracted from ɛ̀né 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 ɛ̀né, but one that is subject to self-censorship.

(1126) [wó   ù   yàŋâ:-Ø   jɛ́   mèyⁿ],
       [3SgO   2SgS.L   look.Impf-Ppl.Nonh   say   and],
       [mánà [ɛ̌n   lè]   ɛ́wɛ́   ò: ù   gá:]   kân —,
       [plastic [**Refl** Dat]   buy   give.L   2SgS.L   say]   after —,
       [mánà   wò-rú   ɛ́wɛ́   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)]

   ɛ̀né 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 ɛ̀nɛ́. When I asked informants to substitute ǎ-n 'man' for 'dog', I did get ɛ̀nɛ́ as relative-clause subject.

(1127) [ì jú   kùⁿ],
     [dog   Def],
     [[cɛ̀:   nàná   kò   dó:≡kɔ̀-Ø   cêw]
     [[thing.L   chase   **NonhS.L**   reach.Impf≡be.Nonh-Ppl.Nonh   all]
     mà cɛ́:]   ɛ́:-jɛ̀-Ø   dèy,   nàná≡kɔ̀⇒
     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 ɛ̀nɛ́

My informants from Dianwely generally used ɛ̀nɛ́ 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 ɛ̀nɛ́ (e.g. reflexive possessor, logophoric). For one of my Dianwely informants, ì né appeared instead of ɛ̀nɛ́ in elicited examples. For another speaker, ì né appeared occasionally in subject position (focalized or not) in logophoric function (1128.a-b), whereas ɛ̀nɛ́ appeared in all other contexts.

(1128) a. ì né≡ỳⁿ   [ɛ̀nɛ́   mà   nám   lè]   dém⇒
        Logo≡Foc [Refl/Logo Poss   people   to]   straight
        ɛ́mɛ́   jà: dèy
        1PlO   convey.Perf.L   if,
        '(He said:) if <u>he</u> [focus] took us straight to his own kin, …' **2004.5.1**

     b. [ɛ́mɛ́   lɛ̌y   mà   mɔ́:n]
        [1Pl   two   Poss   group]
        [ì né   ɛ̀spâ:ñ   ɛ́mɛ́   jǎ:-Ø]   wà⇑
        [**LogoS** Spain   2PlO   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), ɛ̀nɛ́ in possessor function is simultaneously reflexive and logophoric in function.

18.3   Reciprocal

18.3.1   Simple reciprocals (tɔ̂:-n, tɔ̂:-m)

Reciprocal is expressed by the noun tɔ̂:-n (Singular) or tɔ̂:-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 tɔ́wⁿɔ́-n 'my comrade', or inalienable, e.g. mì tɔ̂:-n 'my comrade' (§6.2.1-2). The F-tone in tɔ̂:-n is compatible with the overlaid H(H…)L tone of inalienably possessed kin terms.

(1129)   unpossessed   possessed Sg   possessed Pl

    tɔ́wⁿɔ́
                a. alienable   tɔ́wⁿɔ́-n   tɔ́wⁿɔ́-m
                b. inalienable   tɔ̂:-n   tɔ̂:-m

The forms used as Reciprocal pronouns (without a possessor) are identical to inalienably possessed forms of 'comrade'. The Reciprocal pronouns tɔ̂:-n and tɔ̂:-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   tɔ̂:-m   wɔ̌:-ỳ
              tomorrow   **Recip**-Pl   kill.Impf-1PlS
              'Tomorrow we-3+ will kill each other.'

        b.   tɔ̂:-n   yàŋá-tɔ́ɣɔ̀-bà
              Recip-Sg look.at-Impf-3PlS
              'They-Dual (often) look at each other.'

        c.   [ú∴   kó∴]   tɔ̂:-n   ɛ́: è   gá: kân,
              [2Sg Nonh] **Recip**-Sg see 2PlS.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. [tɔ̂:-m   lɛ̀]   tárá   nɛ̀   lɔ́ɣɔ́   bɛ̀rɛ̀-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. [cɛ̀:   [tɔ̂:-n   lɛ̀]   è   jérè-Ø]
          [thing.L [**Recip**-Sg **Dat**] 2PlS.L   hold.Perf.HL-Ppl.Nonh]
          kò:-rɔ́   jì:ⁿ   dèy
          be.Nonh-Neg   Past   if
          'if there was nothing (=no grudge) that you held against each other'
          2004.3.21

       c. [tɔ̂:-n   mà   kû:ⁿ]   nùm-â:-bà
          [**Recip**-Sg Poss **on**]   fall-Perf-3PlS
          'They fell on top of each other.' (nùmɔ́-)

Since they are nouns in form, tɔ̂:-n and tɔ̂:-m are readily used in reciprocal function as possessors with following mà. (1132) occurred in the same passage as (1131.a), above.

(1132) [tɔ̂:-m   mà   ká:rê:]   gɔ̀rⁿɔ̀-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 tɔ̂:-n, tɔ̂:-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 tɔ̂:-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: ɛ̀mɛ̀   céjè-Ø   kùⁿ,
        vehicle.L   road.Loc.HL   1PlS.L   encounter.Perf.HL-Ppl.Nonh Def,
        [bé   kâ:ⁿ]   [ì nè-m   [kò   tɔ̂:-m]
        [3Pl   too]   [person-Pl [Dem **comrade-Pl**]
        [gúyⁿó   lɛ̀]   yǎ:-tɔ́ɣɔ̀-m]≡î:
        [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**

tɔ̀ː-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' (mɔ̀rⁿɔ́-, mɔ̀ː-nɔ́-)

The intransitive verb mɔ̀rⁿɔ́- '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. yèré   mɔ̀rⁿɔ́   wó   bàrà-bà
           come   be.together   3SgO   help.Perf.L-3PlS
           'They came together (there) and helped him.'

The causative mɔ̀ː-nɔ́- 'bring together, gather together' has similar uses when the 'together' entities are in direct object function (for causatives see §9.2).

(1135) a. [wó∴   kó∴]   fúː   mɔ̀ː-nɔ́   mèyⁿ]
           [3Sg   Nonh]   all   **be.together-Caus**   and]
           [déː   mèyⁿ]   búmbâm   jèːrè-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. [kò   bèːné   kùⁿ   lè]   kúnó-sà-bà   dèy,
         [Dem   bag   Def   in]   put-Reslt-3PlS   if,
         kò-rú   mɔ̀ː-nɔ́   ù   námá-ǹ   dèy
         Nonh-with be.together-Caus 2SgS.L   step.on.Impf-Ppl.Sg if
         nŭŋ   nɔ̌ː   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, 3PlP) 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   dérè   bé⇒]   [bé   ñĕ-m   bé⇒]
         [1PlP.L elder.sib.HL Pl]   **[3PlP**   woman-Pl Pl]
         'my (elder) brothers and **their** wives'

     c. [dàná-ǹ   mà⇒↑]   [wó   ñĕ-n   má⇒]
         [hunt.Impf-Ppl.Sg or]   **[3SgP** woman-Sg or]

nì-dî: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]   yɔ́≡kɔ̀⇒,
       [[man-Sg   [**3SgP** woman-Sg]]   Poss fight(noun)] exist≡be.Nonh,
       [[î-n∴.   [wò   dê:∴.]]   mà   jéy]   yɔ́≡kɔ̀⇒
       [[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 ènɛ́ 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∴.   [ènɛ́   mà   ìjú:∴.]]   è:-Ø
          [lion   [**Refl** Poss dog]]   see.Perf.L-3SgS
          'He_x saw the lion and **his_x** dog.'

       b. [ènɛ́   mà   nì-nìwⁿé:∴.][ènɛ́ 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 ènɛ́ mà. In other words, a topical NP does not count as "clause-mate subject" for this purpose.

(1141) [á:mádù   ké]
        [Amadou   Topic]
        [[wò   dê:∴.]   [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 VERB$_1$ [Y VERB$_2$ [__'s Z]], using English order to clarify grammatical relations, where VERB$_1$ is a control verb taking a subordinated clause with VERB$_2$. 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 ènɛ́ may have either 'Amadou' or 'my father' as antecedent.

(1142) [mì   dê:]   [á:mádù [[ènɛ́   nɛ́rⁿɛ̀]   mà   î-n]
        [1SgP.L father.HL] [Amadou [[**Refl** aunt.HL] Poss   child-Sg]
        jê:-Ø]   yɔ̀wɔ́-jɛ̀-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 ènɛ́ (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   [[ènɛ́   mà   î-n]   ènɛ́   ê:-Ø]
            Haoua   [[Refl   Poss   child-Sg]   **Refl** see.Impf-3SgS]
            yɔ̀wɔ̀-lí-Ø
            accept-PerfNeg-3SgS
            'Haoua$_x$ didn't consent (=allow) her$_x$ son to see **her$_x$**.'

b. há:wà   [[ènɛ́   mà   î-n]   ì nì wⁿé   wɔ̃̀:-Ø]
    Haoua   [[Refl   Poss   child-Sg]   **Refl**   kill.Impf-3SgS]
    yɔ̀wɔ̀-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 ènɛ́. 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   ñɛ̀:-wⁿɛ̀-m
           [**3SgP**   meal]   3SgO   eat-Caus.Perf.L-1SgS
           'I made him$_x$ eat **his**$_x$ meal.'

       b. [wò   nâ:]   [wó ñǎ:]   wó   ñɛ̀:-wⁿɛ̀-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]   dàɣá   [wó   ñɛ̌-n]
           [1SgP.L   elder.sib.HL]   leave   [**3SgP**   woman-Sg]
           wó   ɛ̀:-wɛ̀-l-à
           3SgO   see-Caus-PerfNeg-3PlS.L
           'My brother$_x$ [topic], they didn't let him$_x$ see **his**$_x$ wife.'

In (1144.b), if we substitute Reflexive [ènɛ́ 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) [ènɛ́   mà   ñǎ:]   wó   ñɛ̀:-wⁿɛ̀-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. ì nì wⁿé   wó   yàŋà-wⁿà-m
            Refl   3SgO   look-Caus.Perf.L-1SgS
            'I made her$_x$ look at herself$_x$.'

        b. wò-rú   ì nì wⁿé   yàŋà-wⁿà-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, ì nì wⁿé is positioned directly before the verb in (1146.b), but before the object pronominal in (1146.a).

18.4.6   3rd 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 wó (§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 [wó círⁿέ]. See line 2 of (1267) for the relevant textual example.

19 Grammatical pragmatics

This chapter covers selected discourse markers, pragmatic functions (e.g. topic-alization), 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 s **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, post-positional 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]   tɔ̀ː-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. nè (nè, nò) 'now' (§19.1.2)
        c. kâːⁿ (kárⁿà) 'also, too, even' (§19.1.3)

Also relevant to topicalization are two issues covered in other chapters. A preverbal particle yɛ́ may be used as a kind of indexing device; see §4.3.3. The Reflexive pronoun ɛ̀nɛ́ (or plural ɛ̀nɛ́ bɛ́) 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 ɛ̀mɛ̀ ké, 3Pl bɛ̀ 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. ñùː-[ñùː-dɔ̌yⁿ]   bɛ̀   gâː-Ø   kùⁿ,
            millet.L-[millet.L-hip] 3PlS.L   say.Impf-Ppl.Nonh   Def,
            [kò   ké]   írɛ́≡kɔ̀⇒,
            [Nonh.L   **Top**]   ripen.Impf≡be.Nonh,
            [kɔ́   tì gè-gó-Ø]   yùwɔ́≡kɔ̀,
            [NonhO   wait.for-ImpfNeg-3SgS]   shed.Impf≡Nonh,
            [kɔ́   yúwú-wɔ̀   lè],   [láː-láː   ké]
            [NonhP   shed.H-Caus.L in],   [first-first **Top**]
            ñɛ̌-m   yǎ: gɔ̌ːⁿ   jìːⁿ
            woman-Pl   go   take.away.Impf   Past
            'What they call "ñùː-ñùː-dɔ̌yⁿ" (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   màbîl   bɛ́rɛ̀   ké]
            [Dem   vehicle in   **Topic**]
            [kɔ́   náː∴.   fúː⇒]   nɛ́yⁿ≡ỳⁿ
            [NonhP   entirety   all]   blood≡it.is
            'As for inside the vehicle [topic], the whole thing was blood(y).' (nɛ̂yⁿ) **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 condi-
tional antecedent of the type [lá:-lá:=ỳ 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) nîm   mà:sô:ⁿ   gòrⁿ́-ẁⁿ   táŋà: dèy,
        now   builder   be.able.Impf-2SgS   happen   if,
        [ù   ké]   [kò   ké]   [mà:sò:ⁿ-bíré   kùⁿ]
        [2Sg.L   **Topic**] [Nonh.L   **Topic**]   [builder.L-work   Def]
        èjíⁿ⇒   yé-lé   èjú=kò
        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 *maçon*) **2004.5.3**

Common combinations include nîŋ ké (variant nîm ké) 'now' and nɛ́yⁿ
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 pro-
nouns. 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 ɛ́mɛ́ nè with ɛ. Note also nè
in îjé 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 nɛ́yⁿ, both of which are usually followed by Topic
morpheme ké (nîŋ ké, nɛ́yⁿ ké). However, nè is sometimes used after nîŋ or
nɛ́yⁿ, and it is regular in the combination îjé 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) [ñɛ̌:-rⁿ-ùm   mà   àrà-nɔ̌:-wⁿ-Ø   nɛ̀],
       [female-child-Pl Poss   porridge.L-drink-Caus-VblN   **now**],
       [kó   nò]   yɔ̌:-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 nɛ̀ 'they now' in the last line of (193), and mí nɛ̀ '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 nɛ̀ with nɛ̀ '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. [ñɛ̌:-rⁿ-ùm   kárⁿà],   àrá   nɔ̌:-wⁿɔ́-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: ɔ̀ⁿhɔ́ⁿ   ú   dèné-m̀
               un-huh   2SgO   want.Impf-1SgS

B: gɔ́ːŋgà   [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 kâːⁿ.

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 kâːⁿ 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   kâːⁿ]   [kó   kùⁿ   ké]   héddé-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   kâːⁿ]   kɔ̀ː-rɔ́
          until   [NonhP one   **even**] be.Nonh-Neg
          'There was nobody whose possession (=equipment) was missing even one (item).' **2004.3.24**

For kâːⁿ 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) [yáː∴   îjé∴]   kǎw≡kɔ̀,   yáː≡ỳ   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, …' (háyè)

háyè 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) … jàŋá-bà,   háyè yǎː yɛ́rɛ́   gá-bà
       … request.Impf-3PlS, well go   come.Imprt say.Impf-3PlS
       '… 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…' (wálâː)

Pronounced wálâː, French *voilà* 'there it is' occurs in texts in situations similar
to those of háyè. However, wálâː, more than háyè, 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) wálâː   bírɛ́   bǎj-jɛ̀-w
       well   work(noun)   get-RecPf-2SgS
       'Well, in that case you-Sg have got some work to do.' (bɛ̀rɛ́-)
       2004.3.20

19.2.3   'But …' (kàː, káː, gàː)

Clause-initial kàː (most common variant), gàː, or káː has the adversative sense
'but'. This is a regional form, occuring 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 káː
with fairly high pitch, but most textual occurrences have L-toned kàː 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] [bìrὲ gàrá] kɔ̀:-rɔ́,
        [Nonh time.HL Topic] [work.L big] be.Nonh-Neg,
        kà: èjù-yéy jó:≡kɔ̀
        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≡kɔ̀ jì:ⁿ]
        [thus≡be.Nonh Past]
        kà: íjé [kó kùⁿ] kó kɔ̀:-rɔ́
        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≡ỳⁿ,
        [NonhP entirety all] blood≡it.is,
        gà: [kɔ̀ mòbîl 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, …' (bὲy, hɔ́nɔ̀)

Another clause-initial discourse particle is bὲy. 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. bὲy, [yà:jí: páɣá-tù:-Ø] ñӗ-n
        so, [marriage tie-Perf-2SgS] woman-Sg
        dɔ̂m [á úrò] táŋá 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 hɔ́nɔ̀. This is a Fulfulde borrowing, used occasionally in Jamsay. It can be glossed 'so' in a more literally causal sense.

(1159) [á   ɔ̀rú]   bɛ̌-r   dùjù-lá-Ø   péy,
       [2SgP matter] 3Pl-Dat heavy.L-Neg-3SgS   at.all,
       hɔ́nɔ̀ 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 <u>like a slave</u> [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   íjέ   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 jákà-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⇑, ɔⁿhɔⁿ   wá,
          [3Sg here   spend.night.Impf Q]   say, un-huh! say,
          jàká⇒ [kó   kò-ý]   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!, <u>it</u> (=Hyena) [focus] had an urge to eat it
          (=Camel).' **2004.4.3**

b. jákà-jákà   [wàrù-wárá-n   ké]
   lo!   [farm(noun).L-farm.H-Ppl.Sg   Topic]
   [cὲ: wó   já:sέ-sà-Ø∴.   fú:] kɔ̀:-rɔ́
   [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   nèwⁿέ   [dɔɣɔ-úrò]
       blacksmith-Pl   Poss   value   [Dogon.L-house.Loc.HL]
       dògò-gó-Ø   àbádá⇒, tí⇒   jémè-n   némné-n≡î:
       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. dɔɣɔ̀-î-n   wó   nǎn-tù-bà   dèy
       Dogon-child-Sg   3Sg   bear-Perf-3PlS   if
       [wó   bè   nárⁿà-Ø]   tí⇒   yàŋá   mèyⁿ,
       [3SgO 3PlS.L bear.Perf.HL-Ppl.Nonh] **first** take   and,
       hâl   yǎ: méy   [[wó   έ:rú]   dògò-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, …' (nàrⁿá) **2004.3.12**

An alternative expression meaning 'for one thing' is dɔ̂m ké, a topicalized form of dɔ̂m '(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' (làɣá)

làɣá, 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   cὲ:ⁿ-bà,
       NonhO   slaughter.Perf.L-3PlS,
       ù:rⁿò-lí-Ø   làɣá   tàŋà-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. làɣá   pàntɛ̀-ý
    other   repeat-ImprtNeg
    'Don't do it again!' **2004.3.10**

kó làɣá 'other than it' or kó kûːⁿ làɣá '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).

làɣá 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: lɔ́ɣ-âː-Ø,   háyɛ̀
       [middleman Pl] Nonh-Dat be.many overflow-Perf-3SgS, well
       [ɛ́mɛ́ kúːⁿ lɛ̀] làɣá ɛ̀mɛ̀ yâː-Ø   kùⁿ,
       [1PlP head with] **other** 1PlS.L go.Perf.HL-Ppl.Nonh Def,
       [[úrò   ɛ̀mɛ̀ gôː-Ø]   lɛ̀] bǎː,
       [[house.Loc.HL 1PlS.L go.out.Perf.HL-Ppl.Nonh] in] since,
       [a…   mà   bón] ɛ̀mě-n ó:-sà-bà   jîːⁿ
       [A   Poss name] 1Pl-Dat give-Reslt-3PlS   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** (ɛ́mɛ́ kúːⁿ lɛ̀ emended)

19.3.3 'And so forth' (tímé-, cɛ̀ː kâːⁿ-kâːⁿ)

'… 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 cɛ̀ː kâːⁿ-kâːⁿ '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-, pílíwé)

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   kûːⁿ]   ná:-yⁿɛ̀-Ø   dèy
            [Dem   Poss   on]   **go.beyond**-Perf-3SgS   if
            'furthermore, …'

        b. kò   gǎy-yɛ̀-Ø   dèy
            Nonh.L   pass-Perf-Ppl.Nonh   if
            'in addition to that, …' (gàrá) **2004.3.6**

        c. [kó   kùⁿ   fúː]   dòg-âː-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.

pílíwé- is a common verb meaning 'return, go back'. As a nonfinal verb in a chain, pílíwé 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   nàːm-pìrⁿé   kùⁿ],   pílíwé   kó   háːsɛ́-bà,
        [Dem   cotton.L-powder   Def],   **return**   NonhO   card.Impf-3PlS,
        háːsɛ́-sà-bà   dèy,   pílíwé   kó   mìrⁿé-bà
        card-Reslt-3PlS   if,   **return**   NonhO   spin.Impf-3PlS
        '(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' (tɔ̀yⁿɔ́)

Something like 'frankly, …', mitigating an unpleasant affirmation, can be expressed as a topicalized 'if it's the truth, …' (1168).

(1168) [tɔ̀yⁿɔ́≡ỳⁿ   dé   ké]   ñǎː   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.   [íːrⁿé   lè   sǎy]   kó   bì rêː-Ø
           [iron   Instr   **only**]   NonhO   work.Impf-3SgS
           'He (=blacksmith) works strictly with iron (=metal).' **2004.3.12**

       b.   [wɔ̀   ké]   [dù-dùgú-n≡îː   sǎy]   wɔ̀-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   ñàː-bàːñá   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 ≡ỳ làː 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 sǎy '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) dìːⁿ   àrⁿá   mìl-lí-Ø   nè [kó   túrú] kó≡ỳ
       place.L rain   rain.fall-PerfNeg-3SgS now [**Nonh one**] Nonh≡Foc
       tìgè-ý   jìrⁿé   [ìñé   lè] céːnêː-Ø,
       wait.for.Perf.L-1PlS   wet.season [what? Inst] be.good.Impf-3SgS
       e! [kó   túl   lók]   kó≡ỳ   tìgè-y   là:,
       eh? [Nonh one **a.mere**] Nonh≡Foc wait.for.Perf.L-1PlS   Neg
       mìl-lí-Ø   tán   ké   nùm-âː-yⁿ
       rain.fall-PerfNeg-3SgS   only   Topic   fall-Perf-1PlS
       '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, mìrⁿé-) **2004.4.28**

    lók may follow other numerals, as in búːdù tàːn 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)   yɔ́≡kɔ̀   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)   [cítáŋà   kùⁿ   já:tì   ké]   [kò   ké],
      [drought.of.1914 Def   Emph   Topic] [Nonh.L Topic],
      ìnná:dì llâ:y   àlàmɔ́: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.   ñɛ̌-m   yɛ́   dé:-rà-bà   kòy
           woman-Pl   Index carry-Habit-3PlS   **Emph**
           'Women [topic], they certainly take (push-carts).' **2004.3.6**

      b.   [dŏg-Ø   ké]   dògò-gó-Ø   kòy
           [finish-VblN   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 [S_1 wa kòy], where S_1 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. dɔɣɔ̀-cɛ̀rⁿɛ̀wⁿɛ́   mà   sî: jì-jô: 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   dàɣá-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 (pɛ́y, sóy, fɛ́s)

Various clause-final emphatic particles, pronounced as interjections, occur in emphatic negatives like (1176).

(1176) bé   [gùjú-jɛ́m≡ù: dèy],
        3Pl   [skin-black.HL≡it.is-2Sg   if],
        [á   ɔ̀rú]   bě-r   dùjù-lá-Ø   pɛ́y
        [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-jɛ̂m [bahuvrihi], bè-rú) **2004.5.4**

This is the only occurrence of pɛ́y in my recorded texts, though I have heard it in conversation. Elicitation brought out two other particles with similar '(not) at all' uses, fɛ́s and sóy. For sóy, whose more general sense is 'all, entirely', see cf. §8.5.8.7.

fɛ́s is unusual in ending in a sibilant, a possibility restricted to interjections (and poorly integrated borrowings). fɛ́s 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. [dǎg-Ø   ké]   dàɣà-j-é
            [**leave.VblN**   **Top**]   **leave**-ImpfNeg-3PlS
            '(You can bet) they won't leave (it).' (dàg-ú) **2004.3.2**

        b. [nǔ-yⁿ   ké]   nùː-gó-w
            [**enter.VblN**   **Top**]   **enter**-ImpfNeg-2SgS
            'You-Sg (damn well) won't go inside.'

        c. [jěy-Ø   ké]   jèyɛ̀-gó-bé
            [**fight.VblN**   **Top**]   **fight**-ImpfNeg-2PlS
            'You-Pl won't (=you better not) fight.'

        d. [jɛ́y   ké]   jèyɛ̀-gó-bé
            [**fight(noun)**   **Top**]   **fight**-ImpfNeg-2PlS
            [= (c)]

        e. #[jèy-jěy-Ø   ké]   jèyɛ̀-gó-bé
            [**fight(noun)-fight.VblN**   **Top**]   **fight**-ImpfNeg-2PlS
            [= (c) but not accepted]

    If there is a noncognate direct object, the Verbal noun or cognate nominal is
omitted.

(1178) [nɔ̀wⁿɔ́   ké]   kóː-jè-m
        [**meat**   **Top**]   eat(meat)-RecPf-1SgS
        'I have indeed (already) eaten meat.'

19.6 Backchannel and uptake checks

Are you listening? Have you understood so far? These are backchannel and uptake checks, where the speaker tests whether the listener is paying attention, or whether uptake of a difficult passage has occurred.

As in all local languages, expressions of the general type 'did you (not) understand?' are frequently used by some speakers. The listener is expected to respond in some way, at least by gesture or grunt. In texts from an older man, such forms as (1179) were common.

(1179) pá:mé-rⁿà-wⁿ   là:
        understand-Habit-2SgS   Neg
        'Is it not (the case) that you-Sg understand?'

In this pronunciation, pá:mé-rⁿà-wⁿ is a slightly irregular variant of pá:m-á:rⁿà-wⁿ.

Another backchannel checking phrase, used by a different speaker occasionally in a long recording, was (1180).

(1180) gà:-lú-m
        say-PerfNeg-1SgS
        'I did not say …' (= 'Did I not say …?')

In (1180), the preceding discourse is taken retrospectively as a quotative complement. Though there is no overt marker of interrogative status, (1180) is evidently interrogative in function: 'did I not say (…)?'

19.7 Greetings

A greeting sequence begins with an expression relevant to a given time of day (good morning, good evening, etc.), or to an activity that the initial addressee is engaged in or returning from (in a field, at a well, at work, arriving at a house, etc.). The ABAB… sequence is initially asymmetrical (with "adjacency pairs" consisting of a greeting and a well-defined response) but then may blur into a symmetrical interaction where essentially the same highly general greetings are exchanged. tà:ré is used to bring a sequence (or sub-sequence) to an end, but this may lead to a relaunch of the greeting cycle.

(1181-2) are examples of morning greeting sequences.

(1181) A. ná:m   'Good morning.'
        B. ná: mâyⁿ   'Good morning (to you all).'

A:	jâm	'Peace'
B.	àlpέ:≡ỳ	'It's a greeting!' (àlpê:)
A.	àlpέ:≡ỳ	'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:≡kɔ̀	'Good morning.' [reply]
	A.	[inaudible]	—
	B.	jám nà:-wⁿ	'Did you-Sg sleep in peace?'
	A.	jám≡ì:	'It's peace.'
	B.	káñá nà:-wⁿ	'Did you-Sg sleep well?'
	A.	jám≡ì: sày	'It's peace only.'
	B.	tà:ré	'Fine.'
	A.	sέ:w nà:-wⁿ	'Did you-Sg sleep in well-being?'
	B.	jâm sày	'Peace only.'
	A.	[é jèjú] sέ:w nà:-Ø	'Did your-Pl bodies sleep in well-being?'
	B.	sέ:w nà:-yⁿ	'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' (unsuffixed Perfective nà:-)
ná:m	'good morning' (in greetings)
ná:≡kɔ̀	(reply to ná:m, literally 'it will spend the night')
ná: mâyⁿ	(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)
sέ: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 sày with L-tone)
   ≡ỳ, ≡ì :   'it is' (clitic)

A progressive sequence from jâm to jám≡ì : to jám≡ì : sày 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:-ỳ 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:≡kɔ̀

       A: pǒ:⇒↓ 'good day!'
       B: ó∴

       A: dà:ɣà-ní: pǒ:⇒↓ 'good afternoon!' (after 2 PM)
       B: ó∴

       A: dà:ɣá 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', ɛ́wɛ́ 'market', and à-kɔ́rɔ́ '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 ɛ́wɛ̀, there is in fact an attested (but uncommon) tonal-locative ɛ́wɛ̀ 'in the market'

(436). However, there is no attestation, outside of greetings, of tonal locatives #bírè 'at work' or #à-kɔ́rɔ̀ '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 #èjûː).

(1185) Situational greetings

A: èjú pŏː⇒↓ (to one in, or returning from, a field)
B: ô∴

A: bírè pŏː⇒↓ (to one at, or returning from, work)
B: ô∴

A: ɛ́wɛ̀ pŏː⇒↓ (to one in, or returning from, a market)
B: ô∴

A: à-kɔ́rɔ̀ pŏː⇒↓ (to one at, or returning from, a well)
B: ô∴

20 Dialects

20.1 Mainstream (non-Gourou) dialects

Thiis 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 ɛ 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 *{ɛ ɔ} to Dianwely {e o} takes place when a stem-final short *ɛ or *ɔ after a nasal was not reinforced by a similar vowel earlier in the same stem. In cases like sà-sèŋɛ́rⁿɛ̀ 'sifting residue' and témɛ́ '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 témɛ́-wⁿɛ́ 'be found'. Such stems as ñɛ́: 'eat' and nɔ̌: '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'   núwⁿó   núwⁿɔ́
    'die'   núwⁿó   núwⁿó

Other examples where Dianwely e or o reflects *ɛ or *ɔ are given in (1187).

(1187) gloss   Dianwely   Mondoro

    ‘daytime’   nù-núwⁿó   nù-núwⁿ$\mathcal{O}$
               [variant nì -núwⁿó]
    ‘pain’   nùrⁿó   nùrⁿ$\mathcal{O}$
    ‘sauce’   nì ŋé   nì ŋέ
    ‘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 *nj, 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 ɛ} 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). ɣ 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'   íjɛ́   ígɛ́
        'harvest' (noun) jèrú   gèrú
        'billygoat'   bɛ̀r-àjí: bɛ̀r-àgí:
        'black'   jɛ́m   gɛ́m
        'gizzard'   jɛ̂:ⁿ   gɛ̂:ⁿ
        'field'   èjú   egú
        'hunger'   jɛ̌:   gɛ̌:

    b. Jam g = Gou g
        'cheek'   légé   légé
        'thigh'   dígɛ́   dígɛ́
        'lick'   dègɛ́   dègɛ́
        'unravel'   gùjùrɔ́   gùsùrɔ́
        'be capable of'   gɔ̀rⁿɔ́   gɔ̀rⁿɔ́
        'earth'   lègú   lègú
        'listen to'   cégéré   kégéré
        'tie'   páɣá   páɣá

    c. Jam c = Gou k
        'harvest knife'   pòrù-cɛ́wɛ́   pòr-kɛ́wɛ́
        'bone'   cì rⁿé   kì rⁿé
        'liver'   cɛ́nɛ̀   kɛ́nɛ̀
        '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 corres-
pondences. 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

gloss	Jamsay	Gourou	comparative
'doze'	jùŋó	zùŋó	Be=Nn=Nj j, Wa=Ta z
'pocket'	júwɔ̀	zúwɔ̀	Nn=Be=Nj j, Wa=Ta z
'medical care'	jóŋ	zóŋ	Nn=Be=Nj j, Wa=Ta z
'rainy season'	jì rⁿé	zì rⁿé	Be=Nj j, Nn g, Wa=Ta z
'bring'	jɛ̀ːrɛ́	zɛ̀ːrɛ́	Be=Nj j, Wa=Ta z
'betray'	jàmá	zàmá	Be=Nj j, Wa=Ta z
'millet-spike pile'	jùrɔ́	zùrɔ́	Nn=Be j, Wa=Ta z
'twin'	jèŋɛ́	zèŋɛ́	Nn=Be j, Wa=Ta z
'marriage'	yàː-jíː	yàː-zíː	Nn=Be j, Wa z
'forked stick'	jéyⁿ	zéyⁿ	Be j, Wa z
'squabble(n)'	jɛ́y	záy	Be j, Wa z
'shake'	jì gì ré	zì gì ré	Be j, Ta z
'pound into dough'	jàŋá	zàŋá	Be=Nj j, Wa z
'full'	jóː	zóː	Nj j, Ta z
'marry (woman)'	jɛ́ː	zɛ́ː	Be=Nn=Nj j
'mane'	jàgú	zàgú	Nn=Be j
'knead'	jèŋé	zèŋé	Be j
'donkey'	jàmdúrú [variant jàndúrú]	zàmdúrú	Ta z
'break up'	jɔ̀ɣɔ́	zɔ̀ɣɔ́	Ta z
'run'	jɔ̀wɔ́	zɔ̀wɔ́	Ta z
'beg'	jàŋá	zàŋá	Ta z
'breeze'	jì -jàmá	zì -zì má	Ta z

b. Beni s

gloss	Jamsay	Gourou	comparative
'file (tool)'	dì ːjú	dì ːzú	Nn=Be s
'lung'	pùːjú-pàːjú	pùːzù-pàːzú	Nn=Be s
'cough(n)'	kògòjó	kògùzó	Na=Be=Wa=Ta s

c. Beni z

'fan' (verb)	jùwó	zìwé	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'	jɛ́:	zɛ́:	Be=Wa c, Ta j

e. no comparative data (yet)

'type of hoe'	járáwá	zárúwá
'tree bark'	jǎyⁿ	zǎyⁿ
'onion'	jɔ̀wⁿɔ̀-î:ⁿ	zàwá
'contradict'	jì:ré	zì:ré

f. Fulfulde loans

'peace, health'	jâm	zâm	Nn=Be=Wa j
'conversation'	gá:já:dù	gá:zɛ̀	Be j
'Friday'	áljúmá:rɛ̀	àlzúwⁿɔ̀	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'	léjɛ́	lésɛ́	Nn=Be=Wa=Ta s, Nj j
'be left over'	wàjá	wàsá	Nn=Be=Wa=Ta s, Nj j
'skin'	gùjú	gùsú	Nn=Be=Wa=Ta s, Nj j
'handle' (noun)	kújú	kúsú	Nn=Be=Wa=Ta s, Nj j
'cut'	cɛ́jɛ́	kɛ́sɛ́	Nn=Be=Wa=Ta s, Nj j
'de-feather'	gùjɔ́	gùsɔ́	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'	tɔ́jɔ́	tɔ́sɔ́	Nn=Be=Wa=Ta s
'question'	újúrú	úsúrú	Nn=Be=Wa=Ta s
'road'	òjù-ká:	òsù-ká:	Nn=Be=Wa=Ta s
'heavy'	dùjú	dùsú	Nn=Be=Wa=Ta s
'snatch'	gùjó	gùsó	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'	gùjùrɔ́	gùsùrɔ́	Nn=Wa s
'under'	dójù	dósù	Nn=Ta s

b. original nasal-initial cluster

'younger sibling'	ɔ̀jɔ́	ɔ̀sɔ́	Nn=Be nj, Wa z, Ta (^{n})s, Nj j
'draw'	síjé	sísé	Be ŋg, Nj j
'pound grain spike'	dùjɔ́	dùsɔ́	Nn=Be=Wa y, Nj nj

c. no comparative data (yet)

'sew'	ájárá	ásárá
'toilet area'	lògòjó	lògùsó
'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'	kɔ́:jɔ́	kó:só kó:zó	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

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 sì yâ:).

(1192)	gloss	Jamsay	Gourou	comparative
a.	'peck at'	sɔ́ɣɔ́	sɔ́ɣɔ́	Nn=Be=Wa s
	'ear'	sûn	súŋùn	Nn=Be=Wa=Ta=Nj s
	'stand on tiptoes'	séwé	séwé	Nn=Be s
	'wipe'	súñúrⁿó	sújúrɔ́	Be=Wa=Ta=Nj s
	'strain, filter'	sá:	sá:	Nn=Be=Wa=Ta s
b.	'urine'	(s)ù-sùrⁿó	ù-sùrⁿú	
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'	kɔ̀ñɔ́	kɔ̀sɔ́	Nn=Be=Nj nj, Wa z, Ta ns
'chicken'	èñɛ́	èsɛ́	Nn=Be nj, Wa z, Ta (ⁿ)s
'stumble'	dòñó	dòsó	Nn=Be nj, Wa z
'suck'	ɔ́ñɔ́	ɔ́sɔ́	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:ⁿsá	
	'roselle'	àñ-î:-kó:rò	à:ⁿsú-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 ŋg 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'	mìñé	mìsé	Nn=Ta s, Nj j
	'lie down'	ìñé	ìsé	Ta s
b.	'odor'	jíñù	gísù	Wa yⁿ (cf. Nn gǐ:ⁿ, Be jî:ⁿ)
c.	'wipe'	súñúrⁿó	sújúró	Be=Wa s, Ta ŋg, Nj j

Comparison with Gourou also reveals that intervocalic *ŋ has been lost in Jamsay certain lexical items (1196.a), though not in others (1196.b).

(1196)   gloss   Jamsay   Gourou   comparative

    a. *ŋ lost in Jamsay
        'ear'   sûn   súŋùn   Nn súŋùrⁿì , Ta súgúrú
        'remove'   gɔ̌:ⁿ   gùŋó   Ta gùŋó
        'get up'   ú:rⁿó   úŋúrⁿó   Be íŋgírí, Ta úŋgúró
                [dialectally Jamsay úŋúrⁿó]
        'waterskin'   ɔ̌:rⁿɔ̀   ɔ̀ŋɔ́rⁿɔ̀   Nn ɔ̀mórò, Be ɔ̀mdô:,
                                           Wa m̀bùrô:

    b. *ŋ lost in Gourou
        'Afterworld'   núŋúrⁿú   nú:rⁿú

    c. *ŋ preserved in both Jamsay and Gourou (among many exx.)
        'chest (body)' gɔ̀ŋɔ́   gɔ̀ŋɔ́   Nn=Ta=Nj ŋ, Be=Wa ŋg
        'carry (child)' dùŋó   dùŋó
        'stool'   túŋúrⁿú   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)'   kɔ́:   kúwɔ́

    b. *y lost in Jamsay
        'father'   dě: dì yé

    c. no loss of semivowel (examples)
        'spill, pour'   yùwɔ́   yùwɔ́
        '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)   kògòjó   kògùzó
        '(de-)shell' (verb)   kórówó   kúrúwó
        'folding knife'   sèrèwé   sèrúwé
        'fun'   cèrⁿèwⁿέ   kèrⁿì wé
        'spur' (noun)   sèrèwé   sèrwé

    A difference in the consonantal phonology of verbal derivation was noted: Jamsay súnú-ŋó versus Gourou súnú-gó 'take down', causative of 'go down' (Jamsay súgó, 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-ŋá, Gourou wàn-gá), cf. adjective wàɣá 'distant' (both dialects). A similar correspondence is seen in the noun 'trap': Jamsay jénέŋέ, Gourou géŋgέ.

21 Texts

Text 1: Collective Hunting

(1199) A: pǒ:
        greeting

        'Hello!'

    B: pǒ: pǒ:⇒↓
        greeting   greeting
        'Hello (to you)!'

    A: sé: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:ré
        fine
        'Fine.' [end of greetings]

    B: tà:ré
        fine
        'Fine.' [end of greetings]

[greeting sequence initiated with pǒ: *and terminated by* tà:ré *; terms* sé:w, àlpê:, *and* tà:ré *have only vague senses; see §19.7]*

(1200) A: íjé   èmɛ̌-n—, [[[tàrá   mà   kû:ⁿ] tègú]
        today 1Pl-Dat—, [[[coll.hunt Poss on] speech]
        ù   tégê:-Ø]   dènê-y,
        2SgS.L speak.Impf-Ppl.Nonh] want-Impf-1PlS

[dɔɣɔ̌-m   mà   tàrá]   [[kó   à-têm]   lè],
[Dogon-Pl Poss   coll.hunt]   [[NonhP   custom]   with]
tàrá   yɔ̌:-jîn kárⁿá-bà ?
coll.hunt   how?   do.Impf-3PlS
'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:tî,   já:tî,
            indeed,   indeed,
            tàrá   dì:ⁿ   bè   kárⁿâ:-Ø   dèy⇑,
            coll.hunt   manner.L   3PlS.L   do.Impf-Ppl.Nonh   if,
            tàrá   [dànà   pɔ̀rbɔ́]≡ỳ,
            coll.hunt   [hunt(noun).L   common(adj)]≡it.is,
            tàrá   [mɔ́:n   mà   dàná]≡ỳⁿ   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 dàná 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]   yɔ̌:-jín kò-rú   kárⁿá-bà ?
            [Nonh Def] [today   now]   how?   Nonh-Dat do.Impf-3PlS
            '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],   nì:-bárⁿá hâl
            [until go   and]   [now Top],   hot.season until
            [[úró   cì-cî né]   dójù]   ù   kún-ìn   déy kárⁿà,
            [[house Rdp-shade] under] 2SgS.L   be.in.Perf.HL-Ppl.Sg if   even,
            [nì:-bárⁿá mà ɔ́gù]   yèré   ú   témɛ́≡kɔ̀
            [hot.season Poss heat(n)] come   2SgO encounter.Impf≡NonhS
            gà   táŋà: dèy,
            say   happen   if,

[úrⁿ-ùm mà mɔ́ːn]   [mɔ̀ːn   dáɣá] kárⁿá mèyⁿ⇑,
[child-Pl Poss gathering] [gathering.L small] do   and,
[tàrà   dáɣá] láː kárⁿá-bà
[coll.hunt.L small] first do.Impf-3PlS
'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; nǐː bàrⁿá- (625);
perfective pseudo-participial clause based on kùn 'be in' in perfective
participial form with {HL} tone contour §15.2.1.2; quotative gà
§17.1.5; adverbial láː 'first(ly)' §8.5.7]*

(1204) B: [tàrà   dáɣá] bè   kárⁿâː-Ø   kùⁿ⇒,
[coll.hunt.L small] 3PlS.L do.Impf-Ppl.Nonh Def,
súgù-tèrⁿɛ̀   kò-rú   gáː-ỳ
S   Nonh-Dat say.Impf-1PlS
'The small-scale collective hunt that they do, we call it "sugu-
tere."'

*[dáɣá '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] yǎː yèré bè   gáː kân]
[[Nonh Def] go   come 3PlS.L say   after]
[tàrá   kùⁿ] núː-yⁿɛ̀-Ø   táŋàː dèy,
[coll.hunt Def] enter-Perf-3SgS happen if,
nɛ́yⁿ ké, àná   mŏn-sà-Ø   dèy⇑,
now Top, village be.together-Reslt-3SgS if,
jìrè-kùrôː   tù-tùːlú kúnó mèyⁿ⇑,
dusk.Loc.HL Rdp-horn put   and,
yògó   [jâm náː-yⁿɛ̀-Ø   dèy⇑],
tomorrow [peace spend.night-Perf-3SgS if],
[[[ɛ́mɛ́   àná] tàrá yà-ḿ] gá-bà
[[[1PlP   village] coll.hunt go-Hort] say.Impf-3PlS
'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; m̌n- from mɔ̀rⁿɔ́ 'be together' by Post-
Sonorant Syncope (60) §3.5.3.2 followed by Derhoticization (76)
§3.5.5.1; jì rè-kùrô: is a tonal locative §8.1.1; Hortative yà-ⁿí 'let's
go!' §10.4.3*]

(1206) B: [cín   lè]   ná:-bà
            [thus   with]   spend.night.Impf-3PlS
            'They sleep on that (idea).'

(1207) B: [cín   lè]   ná:-yⁿɛ̀-bà   táŋà: dèy,
            [thus   with]   spend.night-Perf-3PlS   happen   if,
            é   [ì nè   tàrá   bó:nò-m   kùⁿ],
            2Pl [person.L coll.hunt announce.Perf.HL-Ppl.Pl   Def]
            yèyjê: ú:rⁿó-sà-bè   dèy, tù-tù:lú yàŋá   mèyⁿ⇑,
            morning get.up-Reslt-2PlS if, Rdp-horn pick.up and,
            àná   sújɔ́   gɔ̀ŋɔ́-bè
            village blow   go.around.Impf-2PlS
            '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] pɔ́ndɔ́-bè
            [2PlP gear] carry and, [bush in] head.for.Impf-2PlS
            '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≡î: é   téwɛ́-bà
            [now   Top]   thus≡it.is 2PlO   encounter.Impf-3PlS
            táŋá≡kɔ̀
            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 [x̀ v́-Ppl] §5.1.9]

(1210) B: [[téwñɛ́   èjú   yǎ:-yǎ: bè   mɔ̀rⁿɔ́-ǹ]
[[rejoin   bush   go-go   3PlS.L   be.together.Impf-Ppl.Sg]
[yǎ:-yǎ: bè   mɔ̀rⁿɔ́-ǹ]   [yǎ: mèyⁿ]
[go-go 3PlS.L   be.together.Impf-Ppl.Sg] [go   and]
mɔ̀rⁿɔ́   jó:-yɛ̀-bà   táŋà: dèy,
be.together   be.many-Perf-3PlS   happen   if,
àná   gàrá≡kɔ̀   táŋà: dèy,
village   big≡be.NonhS   happen   if,
íné-m   [tɔ̂:-m   lè]   yǎ: [èjù-nɔ̀wⁿɔ́   kùⁿ]
person-Pl   [Recip-Pl   with]   go   [bush.L-meat   DefSg]
kó:ró   mèyⁿ,   [èjú   lé]   dì:ⁿ   nàná
surround   and,   [bush   in]   manner.L   drive.out
[àná   lè]   è   jɛ̀:rɛ́   bɛ̀rɛ̂:-Ø   jín⇒,
[village   in]   2PlS.L   bring   can.Impf-Ppl.Nonh   like,
[[àná   lè]   jì ré   è   tí: bɛ̀rɛ̂:-Ø   jín⇒
[[village   in]   eye   2PlS.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 joing 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 mɔ̀rⁿɔ́-ǹ in an adverbial clause, note the "Sg" participial suffix with preceding 3Pl subject pronominal §15.2.1.1; bɛ̀rɛ́- 'can' with bare verb stem complement §17.5.4]

(1211) B: sáráwá-sà-bè   dèy,
fan.out-Reslt-2PlS   if,
pé:∴.   tù-tù:lú∴.   síñè∴.   [cè: kâ:ⁿ-kâ:ⁿ],
shout(n)   Rdp-horn   noise   [thing.L   each-each],
kárⁿá-n   déy,   [è   yâ:-n]
do-Ppl   if,   [2PlS.L   go.Perf.HL-Ppl.Sg]
[[é   jírè]   kɔ̀   jɔ̀wɔ́-ǹ],
[[2Pl   before]   NonhS.L   run.Impf-Ppl.Sg,
[[kɔ̀   gǔnǹ]   è   dígè-n]
[[NonhS.L   behind]   2PlS.L   chase.Perf.HL-Ppl.Sg]

[[é   jírè]   kò   jɔ̀wɔ́-ǹ],
[[2Pl   before] NonhS.L   run.Impf-Ppl.Sg],
[[kò   gǔnǹ]   è   dígè-n]
[[NonhS.L behind]   2PlS.L   chase.Perf.HL-Ppl]
[[é   jírè]   kò   jɔ̀wɔ̂-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 (yâː-n
'having gone', dígè-n 'having chased/come up behind') paired with
imperfective pseudo-participles denoting the animals' response (jɔ̀wɔ́-ǹ
'running'); yâː-n is actually ambiguous between perfective yâː-n or
homophonous imperfective yáː-ǹ but is taken as perfective by
parallelism to the clearly perfective dígè-n]*

(1212) B: [hâl   yǎː   mèyⁿ]   [dɛ́ːⁿ   mèyⁿ]
          [until   go   and]   [tire(verb) and]
          [[néyⁿ   ké]   sáyⁿá-sáyⁿá   mèyⁿ]
          [[now   Top]   disperse-disperse   and]
          [bàŋá túmn-âː-Ø   dèy], [ì nè   kɔ́ː-kórò-m]   cín⇒,
          [hide begin-Perf-3SgS if]   [person.L foot-fresh.HL-Pl] thus,
          [kó   dì gɛ́-dì gɛ́   mèyⁿ⇑] láɣá-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 yǎː mèyⁿ 'until … go(es) and …', see (958); dɛ́ːⁿ 'become tired'
is commonly used to suggest that an activity has lasted a long time;
néyⁿ ké §8.5.7.1 and §19.1.1; 'begin' plus chained VP complement
§17.5.1; bahuvrihi compound adjective kɔ́ː-kórò-m §5.2.1]*

(1213) A: úrò   yěy-yà-bà   déy   nè,
          house.Loc.HL   come-Perf-3PlS   if   now,
          tàrá   [íjé   nè]   ì ñé≡ỳⁿ   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-3PlS   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 yèrɛ́ 'come' §10.1.2.3; H-toned déy 'if' before clause-final particle §16.1.3]

(1214) B: [tàrá   lè]   úrò   yěy-yà-bà   táŋà: dèy,
        [coll.hunt in] house.Loc.HL come-Perf-3PlS   happen if,
        úrò   é   yèrè-dɔ́:-wɔ̀   lè,
        house.Loc.HL 2PlS   come.L-arrive.H-Caus.L in,
        [tàrá   è   yâ:-Ø   kúⁿ]   lè,
        [coll.hunt 2PlS.L go.Perf.HL-Ppl.Nonh Def]   in
        ùrⁿ-ùm   tàrá   dɔ̀:-gó-m,   ní: kúnó   mèyⁿ,
        child-Pl.L coll.hunt arrive-ImpfNeg-Ppl.Pl, water put   and,
        ójù   é   céjé-bà
        road.Loc.HL 2PlO meet.Impf-3PlS
        '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 dɔ́:-wɔ̀ 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 kùⁿ 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   táŋà: dèy,
        road.Loc.HL 2PlO meet-RecPf-3PlS happen   if
        [ì nè   kâ:ⁿ] [cè: wò   bɛ́rɛ̀-Ø],
        [person.L each] [thing.L 3SgS.L obtain.Perf.HL-Ppl.Nonh],
        [[[ɛ̀nɛ́ bé] úró-úrⁿ-ùm]   lè]   gɔ̌: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 kâːⁿ 'each' §6.8.1; object relative with head cɛ̀ː 'thing' §14.3.1; the tones of úró-[úrⁿ-ùm] suggest a compound of type [x̄ n̂] §5.1.5, but logically one would bracket úró with the possessor ɛ̀nɛ́ bɛ́ ; 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]≡ỳⁿ kó   jélgé⇒ déː téːrè-tèːrè
            [child-Pl Def]≡Foc NonhO waving carry show.HL-show.L
            úrò   yèrɛ́ nûː
            house.Loc.HL   come   enter.Impf
            'It's the <u>young people (=young men)</u> [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 $\hat{v}_1$-$\grave{v}_1$ tone contour §11.6.3]

(1217) B: [yèrɛ́   mèyⁿ] núː-yⁿɛ̀-bà   táŋàː   dèy,
            [come   and]   enter-Perf-3PlS happen   if,
            tàrà-nɔ̀wⁿɔ́   [nɔ̀wⁿɔ́   pɔ̀rbá]≡ỳ,
            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: ùrò-dúː   mà   bèrêː,
            family   Poss   inside,
            [ì nè   gàmà-nám] yɔ́≡wɔ̀-bà⇒,
            [person.L certain-Pl] Exist≡be.Human-3PlS
            bé sày, bé ñàː-bàːñá   sǎy⇒,
            3Pl only, 3PlP meal.L-bowl only,
            [[tàrá   kùⁿ] ì nè   dóː-ǹ]   sàː-rá-bà
            [[coll.hunt Def] person.L arrive.Impf-Ppl.Sg] have-Neg-3PlS
            '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 yɔ́≡wɔ̀ 'exist' §11.2.2.4; sǎy 'only' follows both conjuncts 'they' and 'their bowls' but the logical sense is 'only [they with their bowls]' §19.4.1; dóː-ǹ is taken in context as an imperfective participle, but the perfective participle (transcribed dôː-n) is homophonous]

(1219) B: [tàrà-nɔ̀wⁿɔ́   nɛ̀]   gòddù-tàj-ú   kò-rú
        [coll.hunt.L-meat now] refuse.to.give-VblN Nonh-with
        kɔ̀:-rɔ́-Ø,   [íné-m   mà   cì nɛ̀-[à-ý]
        be.Nonh-Neg [person-Pl Poss   shadow.L-[catch-VblN]]
        [tàrà-nɔ̀wⁿɔ́   lɛ̀]   kɔ̀:-rɔ́
        [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.'

        *[góddù 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   táɲà: tán,
        go   come-Perf-3PlS   happen   only,
        [cɛ̀:   núŋò]≡ỳⁿ— [cɛ̀:   bérɛ̀-bè   fú:],
        [thing.L Dem]≡For— [thing.L obtain.Perf.HL-2Pl all],
        [úrⁿ-ùm   kùⁿ]   bé≡ỳ   kó   gùjô:⇒,
        [child-Pl Def]   3Pl≡Foc NonhO defeather.Impf,
        bé≡ỳ   kó   kárâ:⇒,   bé≡ỳ   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 <u>they</u> [focus] who will defeather them (=birds), it's <u>they</u>
        who will rip (them) open, and it's <u>they</u> [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: [[[ɲà:-bà:ɲá   tút-túrú] nám   kùⁿ] mà   dǎyⁿ] lɛ̀,
        [[[meal.L-bowl one-one] owners Def] Poss   limit]   at,
        [pɔ̀n-sǔŋ]-túrù-m   cêw, [ɛ̀nɛ́   bé]   tàrà-nɔ̀wⁿɔ́
        [pants.L-cord]-one.HL-Pl all, [Refl   Pl]   coll.hunt.L-meat
        [gòjú   lɛ̀] [gòjú   lɛ̀] gòjó   gàmàrⁿá-sà-bà   dèy⇑,
        [division in] [division in] divide distribute-Reslt-3PlS if,
        úrⁿ-ùm   [ì nè   kâ:ⁿ]   bàrá   jǎ:
        child-Pl [person.L each]   gather convey
        [[[ɛ̀nɛ́   bé]   nâ:]   lɛ̀]   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-túrú 'one at a time, individually' for /túrú-túrú/;
bahuvrihi compound [pɔ̀n-sǔŋ]-túrù-m §5.2.1; úrⁿ-ùm [ì nè kâːⁿ] is a
slightly broken way of saying ì-n kâːⁿ '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-3PlS]
            tàrà-nɔ̀wⁿɔ́   [nì ŋé bɛ́rɛ̀]≡ỳ dɔ̀gó≡kɔ̀
            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: dɔ̀rⁿɔ́≡ỳⁿ là:⇒↑,   ɛ̀w≡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; ɛ̀w≡î: is based on the Verbal Noun ɛ̀-ẃ (for
/ɛ̀w-ú/)]

Text 2: The Pullo and the Dogon Farmer

(1224) ɔⁿhɔ̌ːⁿ   wàrù-wárá-n,   [èjú   lé]
uh-huh!   farming.L-farm.H-Ppl.Sg   [field   in]
wárú   wăt-tɔ́ɣɔ̀   wò   wɔ̌ː-Ø   jɛ́   mèyⁿ,
farming   farm-Impf   3SgS.L   be.Hum.HL-Ppl.Nonh   say   and,
[[pùlɔ̀-n   àsɛ̀gɛ̀-jírɛ́-n]   yè-lé   yèrɛ́   mèyⁿ]
[[Pullo-Sg.L animal.L-tend.H-Ppl.Sg] there   come   and
wó   tɛ̀mɛ̀-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 [x̀-v́-Ppl] §5.1.9; wăt-tɔ́ɣɔ̀ from /wàrá-tɔ́ɣɔ̀/ by Post-Sonorant Syncope (60); quasi-verb wɔ̀- 'be' after Imperfective -tɔ́ɣɔ̀- §11.2.2.3; temporal clause ending in jɛ́ mèyⁿ with a quasi-relative complement §15.2.2.2; 'Pullo animal herder' is the subject both of yèrɛ́ 'come' and tɛ̀mɛ̀- '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-wárá-n   kùⁿ], [ɛ̀nɛ́   mà   màlfâːⁿ]
[farming.L-farm.H-Ppl.Sg   Def], [Refl   Poss   rifle]
lɔ́ːwɔ́ mèyⁿ, î:ⁿ   kúnó mèyⁿ, sûn   tɛ́gɛ́   mèyⁿ,
load   and,   child   put   and,   ear   sprinkle   and,
[kó   sûn   kùⁿ]   nɛ̀rⁿɛ́   mèyⁿ, [[wɔ̀-tùmò kàná]
[NonhP   ear   Def]   rub   and,   [[ridge.L   new]
[ɛ̀nɛ́ túmò-Ø   kùⁿ] [[wɔ̀-túmó kùⁿ] mánà]
[Refl make.mound.Perf.HL-Ppl.Nonh Def] [[ridge   Def] on]
[kó   wò   táyⁿá   jérè-Ø]   jɛ́   mèyⁿ,
[NonhO 3SgS.L   lay.out.in.sun   hold.Perf.HL-Ppl.Nonh]   say   and,
[[wó   jɛ́ːn]   mà   dî̀ːⁿ],
[[3SgP   gear   Poss   place.Loc.HL],
púlɔ̀-n   yèrɛ́   wó   tɛ̀mɛ̀-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 dî: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   nɔ̀:-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   wǎt-tɔ́ɣɔ̀-Ø]   lè]
       [[farming   side.L LogoS farm-Impf-Ppl.Nonh]   in]
       [[èné   mà   ní:]   wò-rú   sí:ré   té:ré   mèyⁿ]
       [[Refl Poss water] 3Sg-Dat point   show   and]
       [èné   mà   ní:]   yì-lé   yɔ́≡kɔ̀   gà⇑
       [Logo Poss water] there   exist≡be.NonhS say
       wó   yǎ: nɔ́:   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   nɔ̀:-Ø   kùⁿ],
       [go   water Refl drink.Perf.HL-Ppl.Nonh   Def],
       wó   pìrⁿé   yɔ́≡kɔ̀   gà⇑, [pìrⁿé   kùⁿ nè]
       3Sg   millet.cream exist≡be.NonhS say, [millet.cream Def now]
       yàŋá nɔ́:   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!"'

[nɛ̀ 'now' after NP in topical function §19.1.2; Existential yé and
cliticized Nonhuman kɔ̀ in existential-locational predication §11.2.2.4]

(1230) ɔ́⇒   wá,
        all.right   say,
        [pì rⁿé   kùⁿ nɛ̀] [yàŋá mèyⁿ]   nɔ̀:-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 nɛ̀ I take it
        here to be a preclausal topic NP]

(1231) ɛ̀né nɔ̂:-Ø   kùⁿ, [[wó màlfâ:ⁿ kùⁿ] mà kû:ⁿ]
        Refl drink.Perf.HL-Ppl.Nonh Def, [[3SgP rifle   Def] Poss on]
        î jé   mèyⁿ,   wàrù-wárá-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 kû:ⁿ §8.3.4; 'farmer' is a quoted vocative]

(1232) hǎ:ⁿ   wá,
        huh?   say.
        hé, [wó màlfâ:ⁿ   kùⁿ]   èjú≡kɔ̀   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] [yɔ̌: lé] kó   bɛ̀rɛ̀-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 yɔ̌: lé §13.2.2.3]

(1236) [dì:ⁿ   kó   ènɛ́   bɛ́rɛ̀-Ø]≡ỳ
        [place.L   NonhO   Refl   get.Perf.HL-Ppl.Nonh]≡it.is
        jɛ́   tègè-Ø
        say   speak.Perf.L-3SgS
        'He (=Dogon) said, "it's where I got it."'
        [jɛ́ 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]   [màlfâːⁿ   kùⁿ]   mánɛ̂ː-Ø
        [3Sg   now]   [rifle   Def]   flatter.Impf-3SgS
        [wó   nò]   tégɛ̂ː-Ø
        [3Sg   now]   speak.Impf-3SgS
        'He (=Pullo) now, he was praising the rifle; he (=Dogon) now, he was
        talking.'
        [nò allomorph of topical nɛ̀ 'now', before two parallel clauses with a
        switch in referents, §19.1.2)

(1238) [wó   nò]   [màlfâːⁿ   kùⁿ]   mánɛ̂ː-Ø
        [3Sg   now]   [rifle   Def]   praise.Impf-3SgS
        [wó   nò]   tégɛ̂ː-Ø
        [3Sg   now]   speak.Impf-3SgS
        [repeat of preceding]

(1239) hâl   [màlfâːⁿ   kùⁿ]   kúmó   jè   yɛ̀rɛ́
        until   [rifle   Def]   hold.in.hand go.with   come
        [wó   dî̀ːⁿ]   dɔ̀ː-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   màlfâːⁿ   kùⁿ]   kó   táːⁿ≡kɔ̀
        [3SgS   rifle   Def]   Nonh   shoot.Impf≡be.NonhS
        ènɛ́   màːnâː-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   bèrɛ́   lé]   cè: kûn-Ø
       [NonhP inside in]   thing.L be.in.Perf.HL-Ppl.Nonh
       ɛnɛ́≡ỳⁿ   kó   jùgɔ̂:
       Logo≡Foc Nonh   know.Impf
       'He (Dogon) said "what is inside it, I [focus] am the one who knows."'
       [for bèrɛ́ lé, see (448.a) in §8.2.2; kùn- 'be in' §11.2.3; subject
       focalization §13.1.2]

(1243) [kó   sûn]   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   sûn]   tímné   mèyⁿ,
       [NonhP   ear]   close   and,
       [[wàrù-wárá-n   kùⁿ]   lè]   yàŋá   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≡ỳ   kó   jùgɔ̂:]   wà
       [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) ɛnɛ́   [wó èjú mà bèrê:]   [wó   ní:]   nɔ̌:-jè-Ø,
       LogoS [3SgP field Poss inside] [2SgP water]   dring-RecPf-3SgS
       [wó   pì rⁿé]   nɔ̌:-jè-Ø,
       [3SgP   millet.cream]   drink-RecPf-3SgS,
       bɔ́nɔ̀-mɔ́jjɛ́rɛ̀ wǒ-r   kán tí   yǎ:-Ø   wà
       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/; kár^n á- 'do' reducing to kán before t ; Linker tí indicating a temporal sequence among adjacent chained verbs §15.1.16]

(1247) nîŋ   ènɛ́   wó   tá:^n   wɔ: tì   yǎ̀:-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,   ɔ^n hɔ́^n   wá
huh? Q   say, uh-huh say
'He (=Dogon) asked, "what?" He (=Pullo) said, "uh-huh!"'

(1249) ènɛ́   [ámà   jɛ́]   wò-rú   jàŋà-Ø   wà⇑,
LogoS [God Purp] 3Sg-Dat beg.Perf.L-3SgS   say,
wó   ènɛ́   tá:^n   wɔ̀:-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 jɛ́ 'for' §8.4; Imperative Negative -ý §10.4.1]

(1250) wó   [[cè: tùrù] wò   dènê:-Ø   cêw] tégé mèy^n,
3Sg [[thing.L one.L] 3SgS.L want.Impf-Ppl.Nonh all] speak and,
ènɛ́   wò-rú   kár^n á-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 mèy^n 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: ènɛ́   dènê:-Ø∴.   fú:] kɔ̀:-rɔ́   jè-Ø,
[thing.L LogoS want.Impf-3SgS all] be-Neg say.Perf.L-3SgS,
[wó   [[wɔ̀-tùmò núŋò] mà   jìrè-dágù] yí-dì:^n   tɔ́r^n ɔ́   mèy^n ⇑]
[3SgS [[ridge.L Dem] Poss front]   there   squat   and]
bɛ́:   bɛ̌:≡ỳ   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 bɛ̌:≡ỳ (based on the bare stem) rather than bɛ̀-ý≡ỳ (based on the Verbal Noun, as one might expect if this were treated as the complement of 'want', see §17.4.5; ≡ỳ là: dèy 'if it is not' §16.4]

(1252) wó   [ámà jɛ̀]   [kó   kùⁿ   ké]
        3Sg   [God Purp]   [Nonh Def   Top]
        [ɛ̀nɛ́   lè]   kàrⁿà-ýⁿ   wá,
        [Logo   Dat]   do-ImprtNeg   say.
        ɛ̀nɛ́   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]   [[ɛ̀nɛ́   wó   tà:ⁿ-ýⁿ]
        [3SgS NonhO   do-PerfNeg] [[LogoS 3SgO   shoot-ImprtNeg]
        mà   nàŋà-dùrɔ́]   kɔ̀:-rɔ́   jɛ̀-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 ɛ̀nɛ́   gô:-Ø]   wó   jɔ̀:-gó-Ø⇒,
        [side.L LogoS go.out.Perf.HL-Ppl.Nonh]   3SgS know-ImpfNeg-3SgS,
        wó   [ɛ̀nɛ́   mà   ná:]   jɔ̀:-gó-Ø⇒,
        3SgS   [Logo Poss   self]   know-ImpfNeg-3SgS,
        [jèrè   ɛ̀nɛ́   yǎ:-Ø   wó   jɔ̀:-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 yǎ:-Ø) or Perfective, but the context suggests Perfective; ná: §5.1.13; jɔ̀:-gó- is irregular Imperfective Negative of jùgɔ́- 'know', see (617.c)]

(1255) [[èjú   bɛ́rɛ̀]≡ỳ   sǎy]   yèrɛ́   ɛ̀nɛ́   wó   tèmè-Ø,
        [[field in]≡Foc   only]   come   LogoS   3SgO   find.Perf.L-3SgS,
        ɛ̀nɛ́   nîŋ   [wó   tá:ⁿ   wɔ̀:   tì   mèyⁿ]
        LogoS now   [3SgO shoot kill.L Link.L   and]

yǎ̀ː-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 tì as part of a tone-dropped noninitial verb sequence in a chain §15.1.1]

(1256) wò-rú   jàŋà-Ø,   wò-rú   èyⁿ-nὲ-Ø,
        3Sg-Dat beg.Perf.L-3SgS, 3SgDat   tighten-Caus.Perf.L-3SgS,
        [nùŋò-bâːⁿ   wò-rú   jàŋâː-Ø]
        [Dem.L-owner 3Sg-Dat   beg.Impf-3SgS
        [[nùŋò-bâːⁿ   nὲ]   wò-rú   έyⁿ-nêː-Ø]
        [[Dem.L-owner   now]   3Sg-Dat tighten-Caus.Impf-3SgS
        [bέː   kùⁿ]   wó   bὲː-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; nùŋò-bâːⁿ 'this (person)', repeated in parallel clauses (the second time followed by nὲ 'now') with a switch in reference; kàrà- 'compel' §15.1.11]

(1257) wó   ὲnέ   bέː-wὲ-Ø   kùⁿ,
        3SgS   LogoS   defecate-Caus.Perf.HL-Ppl.Nonh   Def,
        mɔ̀wⁿɔ́   mèyⁿ,
        laugh(verb)   and,
        wàrù-wárá-n   lì-lěː   lɔ́ɣ-âː-Ø   wà,
        farming.L-farm.H-Ppl.Sg Rdp-fear   overflow-Perf-3SgS   say,
        jákà-jákà   [wàrù-wárá-n   ké]
        lo!   [farming.L-farm.H-Ppl.Sg Top]
        [cὲː   wó   jáːsέ-sà-Ø∴   fúː]   kɔ̀ː-rɔ́
        [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' (kɔ̀ː-rɔ́ and an asymmetrical comparative in a relative clause is logically equivalent to a superlative ('he is the most shiftless of all')]

(1258) [ɛ̀nɛ́ [wó èjú bérè] yɛ̀rɛ́ wó témé mèyⁿ]
[LogoS [3SgP field in] come 3SgO find and]
[wó níː] nɔ̌ː-jɛ̀-Ø⇒,
[3SgP water] drink-RecPf-3SgS,
[wó pìrⁿé] nɔ̌ː-jɛ̀-Ø⇒,
[3SgP millet.cream] drink-RecPf-3SgS,
[[wó màlfâːⁿ] lɛ̀] béː wó bɛ̀ː-wé-tì-Ø,
[[3SgP rifle] with] excrement 3SgO defecate-Caus-Perf-3SgS,
[ɛ̀nɛ́ ké] [ɛ̀nɛ́ mà dǐːⁿ] yǎ-yɛ̀-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) [màlfâːⁿ kùⁿ] ɛ̀nɛ́ únò-Ø kùⁿ,
[rifle Def] LogoS put.down.Perf.HL-Ppl.Nonh Def,
[jìgìré mèyⁿ] kò-rú gǔn tòː-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 yǎː-Ø jɛ́ mèyⁿ,
3SgS.L go.Impf-3SgS say and,
[dáɣà⇒ wó ténéyⁿ⇒ góː-yà-Ø]
[a.little 3SgS apart go.out-Perf-3SgS]
[ɛ̀nɛ́ ɛ̂ː-Ø kùⁿ]
[ReflS see.Perf.HL-Ppl.Nonh Def]
[ǎ-n kùⁿ] [ɛ̀nɛ́ ùró mèyⁿ]
[man-Sg Def] [ReflS bend.over and]
[ɛ̀nɛ́ mà màlfâːⁿ kùⁿ] yàɲà-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.'
*[dáɣà⇒ 'a little', see (443) in §8.5.2; Reflexive ɛ̀nɛ́ as a topical index
§18.2.2]*

(1261) [[dìːⁿ wǎː dèːnè tímné mèyⁿ]
[manner.L pull.to.self set.L close and]
[dìːⁿ dàɣá tí wò yâː-Ø] jín]
[manner.L leave Link 3SgS.L go.Perf.HL-Ppl.Nonh] like

yàŋá   wǒ-r   dɛ̀:rɛ̀-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).'
[dé:né- tone-dropped in medial position in verb chain §15.1.1; 3Sg Dative wò-rú]

(1262) nàŋà-jíré-n   wá   hǎ:ⁿ   wá,
        cow.L-tend.H-Ppl.Sg   say   huh?   say,
        wó   gɔ̀nɔ́   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 [x̀-v́-Ppl] §5.1.9; irregular {LH} toned imperative yàŋá]

(1263) gɔ̀nɔ́   yàŋà-Ø,
        turn   look.Perf.L-3SgS,
        [[wó   gɔ̀nɔ́]   lè] dém-dém dɛ̀:ré   tí   dàɣà-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]   ì ñé≡ỳⁿ   wò-rú   wàjà-Ø   mà⇑
        [now   Top]   what≡Foc   3Sg-Dat   remain.Perf.L-3SgS Q
        wó   jùgɔ̂:-Ø   mà   wà
        3SgS   know.Impf-3SgS   Q   say
        [màlfâ:ⁿ   kùⁿ]   ènɛ́   kó   dó:-jɛ̀-Ø   gà,
        [rifle   Def]   LogoS NonhO   reach-RecPf-3SgS   say,
        [ènɛ́   ké] yì-dî:ⁿ bèr≡î: [ènɛ́   mà dî:ⁿ]≡ỳⁿ   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 ènɛ́ ké is repeated, after an interruption; quotative gà §17.1.5; bèr-ú 'livelihood']

(1265) [dì:ⁿ   nîŋ]   [[ní
        [place.L   this]   [[here
        ènɛ́   wɔ̀:-Ø   núŋò]   lè],
        LogoS be.Hum.Perf(HL)-Ppl.Nonh.L   Dem]   in],

[nîŋ   nὲmnɛ́   ǎ-n   táŋà: dὲy]
[now   scorpion   man-Sg   happen   if
[wó   lá:kárà   já:jê:-Ø]   wà
[3SgS   Hereafter go.back.Impf-3SgS]   say
[ὲnɛ́≡ỳⁿ [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:
dὲy 'if it happens that' §16.1.3]*

(1266) [[bɛ́:   kùⁿ] mà bὲ-ý≡ỳ   nàm≡lá   wá kòy,
       [[excrement Def] Poss defecate-VblN≡Foc difficult≡Neg say Emph,
       wó   yὲrɛ́ [[bɛ́:   kùⁿ] yàŋá]   ñɛ́:   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 bὲ-ý≡ỳ based on the Verbal Noun bὲ-ý from bě:
'defecate'; negative predicate adjective with ≡lá §11.4.3; clause-final
Emphatic kòy §19.5.2]*

(1267) kó   ìrè-Ø   gá   dáɣà⇒,
       NonhS be.better.Perf.L-3SgS   say   a.little,
       wó   [wó   círⁿé   kùⁿ] dὲnê:-Ø   dὲy,
       3SgS [3SgP nose   Def] want.Impf-3SgS if,
       yὲrɛ́ [bɛ́:   kùⁿ] yàŋá   ñɛ́:,
       come [excrement Def] pick.up eat.Imprt,
       wó   [wó   círⁿé   kùⁿ] dὲnè-gó-Ø   táŋà: dὲy,
       3SgS [3SgP nose   Def] want-ImpfNeg-3SgS happen if,
       [[ὲnɛ́   mà   wàrù-wàrù   núŋò] bɛ́rὲ]
       [[Logo   Poss   (active)field.L   Dem]   in]
       [[ὲnɛ́   [wó   ɔwⁿɔ̀-sǎyⁿ] jǎ̀:ⁿ-Ø
       [[LogoS [3SgS   grave]   dig.Impf-3SgS
       [wó   kúnó bɔ̀:   tì   yǎ̀:-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 ènέ as "reflexive" possessor ('your nose') with original second person reference in indirect discourse §18.4.6]

(1268) tá:ⁿ   wɔ̀:   tì   mèyⁿ,
        shoot   kill.L   Link.L   and,
        [[[wó   nàŋá]   já:jɛ́=kɔ̀]=ỳ   là: dèy]
        [[[3SgP   cow]   go.back.Impf=NonhS]=it.is   Neg   if]
        jɛ̀rɛ̀   wò   gô:-Ø
        side.L   3SgS.L   go.out.Perf.HL-Ppl.Nonh
        jɛ̀rɛ̀   wò   já:jɛ̂:-Ø
        side.L   3SgS.L   go.back.Impf-Ppl.Nonh
        [ì nè   kó   jùgɔ́-ǹ   fú:] kɔ̀:-rɔ́   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) ènɛ́=ỳⁿ   wó   wɔ̀:   mà⇒↘   kâ:ⁿ
        Logo=Foc   3SgO   kill.Perf Q   too
        íjé   bɔ̀rɔ́   gò:-gó-Ø   táŋ=kɔ̀   wà,
        today   rear.end go.out-ImpfNeg-3SgS   happen.Imp=NonhS   say,
        [wó nò] [dì:ⁿ   [ènɛ́ lè] wò gâ:-Ø   kùⁿ]
        [3Sg now] [manner.L [Logo Dat] 3SgS say.Perf.HL-Ppl.Nonh Def]
        jín,   cín=î:=kɔ̀   wà,
        like,   thus=Foc=NonhS   say.
        háyɛ̀   wó   jɔ̀:-gó-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=kɔ̀ with truncated form of táŋá 'happen' §11.2.6.2; Nonhuman =kɔ̀ after 'it is' clitic (perhaps here as focalizer) §11.2.1.2; preclausal háyɛ̀ 'well, …' §19.2.1]

(1270) gɔ́:ŋgɔ̀,   hà:sín   tɔ̀yⁿɔ́=ỳⁿ   wà,
        yes,   indeed   truth=it.is   say,

wó   nàná   jὲ:rὲ-Ø
3SgS   chase   bring.Perf.L-3SgS
[[bέ: kừ^n] mà   kû:^{n}]   ì jì-rὲ-Ø,
[[excrement Def] Poss on]   stand-Caus.Perf.L-3SgS
jàŋà-Ø,   [wò-rú   ὲy^n-nὲ-Ø]
beg.Perf.L-3SgS,   [3Sg-Dat   be.tight-Caus.Perf.L-3SgS]
jàŋà-Ø   [wò-rú   ὲy^n-nὲ-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   ñέ:-w^{n}έ   kàrà-Ø   [bέ: kừ^n],
        3SgO eat-Caus compel.Perf.L-3SgS [excrement Def]
        kó   yàŋá   ñέ:-jὲ-Ø   dèy
        NonhO pick.up eat-RecPf-3SgS if
        i⇒ [[wàrà-wàrà-n   nì-bâ:^{n}]   mà bέ:]
        eh! [[farming.L-farm.H-Ppl.Sg.L this.L-owner] Poss excrement]
        ér≡kɔ   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≡kɔ with érù; imperfective gâ:- 'say' §11.3.1]

(1272) yàŋá [[ὲnέ mà   ká:]   gɔmɔ]   ñέ:-sà-Ø   dèy,
        pick.up [[Refl Poss mouth] open.wide] eat-Reslt-3SgS if,
        héy   [[wàrù-wàrà-n   nì-bâ:^{n}]   mà bέ:]
        eh! [[farming.L-farm.H-Ppl.Sg this.L-owner] Poss excrement]
        ér≡kɔ   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) nừŋò-bâ:^{n} wó   bὲ:-wὲ-Ø⇒,
        Dem.L-owner   3SgO   defecate-Caus.Perf.L-3SgS,
        nừŋò-bâ:^{n} wó   ñὲ:-w^{n}ὲ-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) sárá   gàrà-Ø,
        pass.by   pass.Perf.L-3SgS
        'It happened (like that).'
        [lexicalized verb chain sárá gàrá 'pass by, continue on one's way', or as here 'happen, take place (in the past)']

(1275) [kó   gárà-Ø]   mà   dǎyⁿ,
        [NonhS   pass.Perf.HL-Ppl.Nonh] Poss   limit
        ìnè   kó   áɣà-m   kâːⁿ,
        person.L   NonhO   hear.Perf.HL-Ppl.Pl   too,
        màlfâːⁿ   [ù   cé]≡ỳ,
        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; kâːⁿ 'too' §19.1.3 rather than kâːⁿ 'each' §6.8.1, which would have dropped tones of the preceding word; possessive predication with cé≡ỳ §11.5.3]

(1276) [èjú   mà   bèrêː] wár≡îː   wǎt-tóɣɔ̀-w,
        [field   Poss   inside] farming≡Foc farm-Impf-2SgS,
        [[á   nìːñé∴][á   màlfâːⁿ∴] fúː] [dìːⁿ   túmnò],
        [[2SgP gear]   [2SgP rifle]   all] [place.L   single.Loc.HL],
        tèwètè   má
        tag.Q   Q
        'In the field(s), if it's <u>farm work</u> [focus] that you-Sg are doing, your (regular) gear and your rifle (are) in one place (=together), don't you find?'
        [wárú wàrá- (631.b); conjunction by dying-quail intonation ∴ §7.1.1; tonal-locative form of túmnó 'single, sole, one (adj)'; tèwètè or tèwètêː 'you find' (Pullo), here in tag question function]

(1277) ú   ɛ́ː-rà-bà   [màlfâːⁿ   kùⁿ]   ɛ̀ː-w-áːrà-Ø
        2SgO   see-Habit-3PlS [rifle   Def]   see-Pass-Habit-3SgS,
        'They see you-Sg, (and) the rifle is seen (simultaneously).'
        [passive verb ɛ̀ː-wɛ́- §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]≡î:]
       farming.L-farm.H-Ppl.Sg [person.L bend.over.Perf.HL-Ppl.Sg]≡it.is]
       [ì nè   gàrá⇒   jì ré   ɛ́:-n]≡î: 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
       [ɛ́nɛ́ mà jé:n∴ fú:] ɛ́: dògó   bɛ̀rɛ̀-gò-Ø
       [Refl Poss gear all] see finish   can-ImpfNeg.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 [x̀-v́-Ppl]
       §5.1.9; 'be able to' §17.5.4]

(1280) wàrù-wárà   yǎ:-yɛ̀-w   tán,
       farming.L-farm.HL   go-Perf-2SgS if,
       [màlfâ:ⁿ lè]   mɔ̀rⁿɔ́   yǎ:-ẁ   dèy,
       [rifle   with]   come.together go.Impf-2SgS   if,
       [dì:ⁿ   [íné-n   fú:] kó   ɛ̀:-gò-Ø   jín]
       [manner.L [person-Pl all] NonhO see-ImpfNeg.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]
       jùgɔ́-ǹ   kùⁿ]
       know.Impf-Ppl.Sg   Def
       [[á   jé:n] lè]   kó   wàɣá⇒   dáɣá
       [[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 wàɣá⇒ 'far' §8.5.2; locative adverbial phrase as
complement to 'far' §6.3.3.4]*

(1281) [[wàrù-wárá-m   mà   tír^{n}íw^n]   bɛ́rɛ̀] yɔ́≡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 yɛ́ §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

Dogon linguistics and lexicography

[anonymous]
  1979   Lexique dogon-français—dògòn sò—faransi sò, Bamako: DNAFLA. [short vocabulary of tòrò sò variety].
Bendor-Samuel, John, Elizabeth Olsen, and Ann White
  1989   Dogon. In: John Bendor-Samuel and Rhonda Hartell (eds.), *The Niger-Congo languages*. Lanham MD/New York/London: University Press of America, 169—177.
Calame-Griaule, Geneviève
  1963a   Le verbe dogon. In: *Actes du second Colloque international de linguistique négro-africaine, Dakar, 12–16 avril 1962*. Dakar, 99–111. [copy at Musée de l'Homme, Paris].
  1963b   Syntaxe des particules « subordinatives » en dogon. JAL 2: 268–271.
  1968   *Dictionnaire dogon: dialecte toro*. Paris: Klincksieck.
  1987   *Ethnologie et langage: la parole chez les dogon*, 2nd ed. Paris: Gallimard.
Culy, Christopher
  1994   A note on logophoricity in Dogon. JALL 15: 113–125.
  1995   Ambiguity and case marking in Sonno SO (Dogon). In: Akinbiyi Akinlabi (ed.), *Theoretical approaches to African linguistics*. Lawrenceville NJ: Africa World Press.
  2002   The logophoricity hierarchy and variation in Dogon. In: Tom Güldemann and Manfred von Roncador (eds.), *Reported discourse, a meeting ground for different linguistic domains*. Philadelphia: Benjamins, 201–220.

Culy, Christopher, Koungarma Kodio, and Patrice Togo
  1994   Dogon pronominal systems: their nature and evolution. *Studies in African Linguistics* 23: 315–344.
Dieterlen, Germaine
  1952   Classification des végétaux chez les dogon. JSA 22: 115–158.
Griaule, Marcel
  1961   Classification des insectes chez les dogon. JSA 31: 7–71.
Hochsteller, J. Lee, J. A. Durieux, and E. I. K. Durieux-Boon
  2004   Sociolinguistic survey of the Dogon language area. [http://www.sil.org/silesr/abstract.asp?ref=2004-004].
Kervran, Marcel
  1993   *Dictionnaire dogon: Donno-So*. Bandiagara: Paroisse Catholique, 2nd ed.
Kervran, Marcel and André Prost
  1969   *Les parlers dogon: 1. Donno So*. (Documents linguistiques, 16). Dakar: Université de Dakar, Dept. de Linguistique. [reprinted Bandiagara 1986 as *Un parler dogon, le donno-so*]. [copy at INALCO].
Léger, Jean
  1971a   *Grammaire dogon tomo-kan*. [mimeo, copy at INALCO].
  1971b   *Dictionnaire dogon, tomo-kan*. [mimeo, copy at INALCO].
Leiris, Michel
  1948   *La langue secrète des dogon de Sanga*. (Travaux et mémoires, 50.) Paris: Institut d'Ethnologie. [Reprint 1992: Paris: Place] [ISBN 2-85893-167-4].
Ongoïba, Oumar
  1988   *Étude phonologique du dogon, variante ǧamsay (Mali)*. [Ph.D. dissertation, Université Laval].
Plungian, Vladimir
  1988   Resultative and apparent evidential in Dogon. In: Vladimir Nedjalkov (ed.), *Typology of resultative constructions*. Amsterdam: Benjamins, 481–493.
  1990   Materialy k opisaniju imperativa v jazyke dogon (= Toward a description of the imperative in Dogon). In: L. A. Birjulin and V. S. Xrakovskij (eds.), *Functional'no-tipologičeksie aspekty analiza imperativa*. Leningrad (= St. Petersburg): Institut of Linguistics, 36–40.
  1991a   Singarmonizm i glagol'naja morfologija v jazyke dogon (= Vowel harmony and verbal morphology in Dogon). *Africana* (St. Petersburg): 15: 31–38.
  1991b   Existe-t-il des traits mandé dans la typologie du dogon? *Mandenkan* 22 (no. 2): 31–38.
  1992   *Glagol v aggljutinativnom jazyke (na materiale dogon)* (= The verb in an agglutinating language: the case of Dogon). Moscow: Institut of Linguistics.
  1993a   Three causatives in Dogon and the overlapping of causative and passive markers. In: Bernard Comrie et al. (eds.), *Causatives and transitivity*. Amsterdam: Benjamins, 391–396.
  1993b   Relations actancielles en dogon. *Actances* (Paris) 7: 227–238.

1995. *Dogon*. (Languages of the World/Materials 64). Munich: Lingcom Europa. [47 pp., Tommo-So].

Plungian, Vladimir and Issiaka Tembiné
    1995   Vers une description sociolinguistique du pays dogon: attitudes linguistiques et problèmes de standardisation. In: Gérard Dumestre (ed.), *Stratégies communicatives au Mali: langues régionales, bambara, français*. Paris: Didier.

Prost, André
    1969   *Les parlers dogon 2, Togo Kan*. [copy at INALCO].

Tembiné, Issiaka
    1986   *Kategorial'naja sistema mladopis'mennogo jazyka (na materiale dogon*) (= The categorial system of an unwritten language: the case of Dogon). Dissertation. Moscow: Institut of Linguistics.

Prehistory

Raimbault, Michel and Kléna Sanogo (eds.)
    1991   *Recherches archéologiques au Mali*. Paris: Karthala. [with many further references].

Dogon ethnography

Beaudoin, Gérard
    1984   *Les dogon du Mali*. Paris: A. Colin.

Bouju, Jacky
    1984   *Graine de l'homme, enfant du mil*. (Sociétés Africaines, 6.) Paris: Société d'ethnographie.

Calame-Griaule, Geneviève
    1951   Le vêtement dogon: confection et usage. JSA 21: 151–162.
    1987   *Des cauris au marché: essais sur des contes africains*. Paris: Société des Africanistes, Mémoires. [ISSN 0248-2576].

Cazes, Marie-Hélène, et al.
    1993   *Les dogon de Boni: Approche démo-génétique d'un isolat du Mali*. Paris: Presses Universitaires de France. [Tabi-Sarinyere area].

Decourchelle, Denis
    1991   *Les sens perceptifs: leur signification dans la pensé mythique dogon*. [thèse, Université de Bordeaux II].

Dieterlen, Germaine
    1941   *Les âmes des Dogon*. Paris: Institut d'Ethnologie.
    1947   Mécanisme de l'impureté chez les Dogon. JSA 17: 81–90.
    1957   Parenté et mariage chez les Dogon. *Africa* 27: 107–148.

1965–66   Contribution à l'étude des forgerons en Afrique occidentale. *Annuaire de l'École Pratique des Hautes Études*, 73: 5–28. [copy at Faculté de Théologie Protestante, Montpellier].

1970   La serrure et la clef (Dogon, Mali). In: *Échanges et communi-cations: Mélanges offerts à Claude Lévi-Strauss*. Paris-La Haye: Mouton, 7–20.

1999   *Les dogon: notion de personne et mythe de la création*. Paris: l'Harmattan.

n.d.   L'image du corps et les composantes de la personne chez les dogon, Paris: Groupe de Recherche 11. [31-page mimeo, copy at Musée de l'Homme, Paris].

Dieterlen, Germaine and Solange de Ganay

1942   *Le génie des eaux chez les dogon*. Paris: Geuthner.

Dieterlen, Germaine and Geneviève Calame-Griaule

1960   L'alimentation dogon. *Cahiers d'Études Africaines* 3: 46–89.

Doquet, Anne

1999   *Les masques dogon*. Paris: Karthala.

Ganay, Solange de

1937   Notes sur le culte du Lebe chez les dogon du Soudan français. JSA 6: 203–211.

1941   *Les devises des Dogon*. (Travaux et Mémoires, 41.) Paris: Institut d'Ethnologie.

Görög-Karady, Veronika and Geneviève Calame-Griaule

1980   *Histoires d'enfant terrible*. Paris: Maisonneuve. [ISBN 7068-0788-1].

Griaule, Marcel

1938   *Jeux dogons*. (Travaux et Mémoires, 32). Paris: Institut d'Ethnologie.

1940   Remarques sur le mécanisme du sacrifice dogon. JSA 10: 127–129.

1966   *Dieu d'eau: entretiens avec Ogotemmêli*. Paris: Fayard. [translated 1965 as: *Conversations with Ogotemmueli: An introduction to Dogon religious ideas*, London/NY: Oxford University Press (for the International African Institute)].

1996   *Descente du troisième verbe*. Paris: Fata Morgana.

Griaule, Marcel and Germaine Dieterlen

1950   La harpe-luth des dogon. JSA 20: 209–227.

1991   *Le renard pâle*. (Travaux et Mémoires). Paris: Institut d'Ethnologie. [ISSN 0767-8703]

Huet, Jean-Cristophe

1994   *Villages perchés des dogons du Mali*. Paris: l'Harmattan.

Michel-Jones, Françoise

1999   *Retour aux Dogon: Figures du double et ambivalence*. [originally 1978; epistemological reflections on earlier French ethnology]

Palau Martoi, Montserrat

1957   *Les dogon*. Paris: Presses Universitaires de France.

Parin, Paul

1966   *Les blancs pensent trop: 13 entretiens psychanalytiques avec les Dogon*. Paris: l'Ayot.

Petit, Véronique
  1998   *Migrations et société dogon*. Paris: l'Harmattan.
Roy, Christopher
  1983   *The Dogon of Mali and Upper Volta = Die Dogon von Mali und Ober-Volta*. Munich: F. and J. Jahn.
Tinta, Sidiki
  1999   *Les conceptions autour de la transmission de la maladie et les pratiques préventives chez les dogon du Mali*. [EHESS doctoral thesis, directed by Olivier de Sardan].
Zahan, Dominique
  1969   *La viande et la graine: mythologie dogon*. Paris: Présence Africaine.

Biology, ecology, ethnobotany

Alden, Peter, Richard Estes, Duane Schlitter, and Bunny McBride
  1995   *Field guide to African wildlife*. NY: Knopf [good photos of some mammal and bird spp.]
Arbonnier, Michel
  2000   *Arbres, arbustes et lianes des zones sèches d'Afrique de l'Ouest*. Montpellier: CIRAD.
Balança, G. and M. N. de Vissher
  1993   Notes sur les oiseaux observés sur le Plateau Dogon au Mali. *Malimbus* 14(2): 52–58.
Barlow, Clive, Tim Wacher, and Tony Disley
  1997   *A field guide to birds of the Gamba and Senegal*.
Barth, Hans
  1986   *Mali: Eine geographische Landeskunde*. Darmstadt: Wissenschaftliche Buchgesellschaft. [ecological geography].
Beaudoin, Gérard
  1997   *Les Dogon du Mali*. Paris: BDT Développement. ISBN 2-9511-030-0-X.
Berhaut, Jean
  1971–   *Flore illustré du Sénégal*, vols 1–6 and 9, the other planned volumes having been abandoned. [illustrations and species descriptions for the region including southern Mali; omitted are monocot families from letter P to Z including grasses, and dicot families from letter O to Z].
Boudet, G.
  1986   *Catalogue des plantes vasculaires du Mali*. (Études et Synthèses de l'I.E.M.V.T, 16.) Maisons Alfort, France: Institut d'Élevage et de Médecine vétérinaire des pays tropicaux. ISBN 2-85985-102.X. [complete botanical species checklist with references to herbarium specimens and collection localities; very useful for delimiting the universe of plants likely to be found in each zone].
Boullard, Bernard
  2001   *Plantes médicinales du monde: réalités et croyances*. Paris: ESTEM.

Bremnes, Lesley
    1994   *Herbs*. (Eyewitness Handbooks.) London/New York: Dorling Kindersley.
                [good photos and descriptions of many spice herbs]
Brown, Leslie, et al.
    1982–2004   *Birds of Africa*, 7 vols. London/New York: Academic. [authoritative
                and complete, very bulky].
Burkill, H. M
    1985–2004   *The useful plants of West Tropical Africa*, 6 vols. Kew: Royal
                Botanical Gardens. [encyclopedic distillation of ethnobotanical literature
                with up-to-date taxonomy; lists native-language terms including Dogon,
                often badly transcribed by field botanists and without more precise
                language or locality information, but very useful in nailing down species
                identifications].
Chastanet, Monique (ed.)
    1998   *Plantes et paysages d'Afrique*. Paris: Karthala.
Chippaux, Jean-Philippe
    2001   *Les serpents d'Afrique occidentale et centrale*. (Faune et flora tropicales,
                35.) Paris: IRD.
Ferri, V.
    2000   *Guide des tortues*. Paris: Delachaux and Niestlé.
Hölldobler, Bert and Edward Wilson
    1990   *The ants*. Berlin: Springer. [the major reference work on ants; pp. 39–45
                is a key to sub-Saharan African ant genera].
Honnorat, Simone
    2001   *Guide Vigot des mammifères d'Afrique*. Paris: Vigot.
Hutchinson, J. and J. M. Dalziel
    1954–   *Flora of West Tropical Africa*. 3 vols. London.
Joger, Ulrich and Michael Lambert
    1996   Analysis of the herpetofauna of the Republic of Mali, I: Annotated
                inventory, with description of a new Uromastix (Sauria: Agamidae). *Jrnl.*
                of Afr. Zool. 110: 21–51. [includes a complete checklist of Malian snake,
                reptile, frog, and crocodile spp. with references to museum specimens and
                their collection localities].
Keita, Arouna and Piero Coppo
    1993   *Plantes et remèdes du plateau Dogon*. Bandiagara/Perugia: CRMT/
                PSMTM. [includes field botanical checklists for several locations].
Kingdon, Jonathan
    1997   *The Kingdon field guide to African mammals*. San Diego/London:
                Academic. [comprehensive guide to sub-Saharan African mammals
                including rodents and bats].
Launois-Luong, M. H. and M. Lecoq
    1989   *Vade-mecum des criquets du Sahel*. (Collection Acridologie Opera-
                tionelle, 5). Niamey, Rep. of Niger: CIRAD (Comité inter-états de lutte
                contre la sécheresse dans le Sahel), Centre AGRYPHMET, Dépt. de
                formation en protection des végétaux; Montpellier, France: PRIFAS.

ISBN 2-87614-018-7). [supplement to Lecoq 1988 on West African grasshoppers; copies of both at Bibliothèque Nationale de France, Paris].

Lebrun, J.P.
  1991   *Catalogue des plantes vasculaires du Burkina Faso*. (Études et Synthèses de l'I.E.M.V.T, 40.) Maisons Alfort, France: Institut d'Élevage et de Médecine vétérinaire des pays tropicaux. ISBN 2-85985-173-9. [counterpart to Boudet for neighboring Burkina Faso, which abuts the Dogon area in eastern Mali]

Lecoq, Michel
  1988   *Les criquets du Sahel*. (Collection Acridologie Operationelle, 1). Niamey: CIRAD/Montpellier: PRIFAS. ISBN 2-87614-010-1.

Lévèque, Christian, Didier Paugy, and Guy Teugels
  1990—1992 *Faune des poissons d'eaux douces et saumâtres de l'Afrique de l'Ouest*, 2 vols. Paris: ORSTOM. [comprehensive guide to local fish taxonomy]

Malgras, Denis
  1992   *Arbres et arbustes guérisseurs des savanes maliennes*. Paris: Karthala. [mostly about flora farther south but some species descriptions useful]

Rohwer, J. G.
  2002   *Guide des plantes tropicales*. Paris: Delachaux and Nistelé. [translated from the same author (2000), *Pflanzen der Tropen*, Munich: BLV Verlagsgesellschaft].

Serle, William and Gérard. Morel
  1993   *Les Oiseaux de l'ouest africain*. Paris: Delachaux et Niestlé.

Spierenburg, P.
  2000   Nouvelles observations de six espèces d'oiseaux au Mali. *Malimbus* 22: 23–38.

Thoyer, Annik
  1986   *Plantes médicinales du Mali*. Bamako: Imprimerie Mathey.

Audio and filmography

Barlow, Clive, John Hammick, and Pat Sellar
  2002   Bird song of Gambia and Senegal. [3-CD set]

Chappuis, Claude
  2001   *African Bird Sounds/Oiseaux d'Afrique*, vol. 2. Paris: Alauda, Société ornithologique de France. [11-CD set, West and Central Africa]

Jean Rouch
  1970   Sigui, CNRS. [Dogon village]
  1971   Funérailles à Bongo, CNRS. [Dogon mortuary practices]
  1993(?) Cimetières dans la falaise, CNRS. [Dogon cemeteries]
  1994   Le dama d'Ambara, CNRS.

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