**A Grammar of Jalkunan**

(Mandé language of Burkina Faso)

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**draft, citable with author’s permission**

black main text

blue regular phonemic transcriptions for this language

green transcriptions for other languages, reconstructions, phonetic representations, underlying phonological representations

red author’s comments to self (e.g. data to be elicited, need to rewrite)

orange temporary cross-refs to examples in other sections

highlight bibliographic references in text

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# Introduction

## Mande languages

Languages of the Mande family are widely spoken in central and southern Mali, southwestern Burkina Faso, northern Côte d’Ivoire, and Guinea-Conaky. There are extensions into Ghana, Sierra Leone, Liberia, Guinea-Bissau, Gambia, and Senegal. Among the best-known languages in the family are the Manding group including Bambara, Jula, and Mandinka.

The spread of Mande beyond northern Guinea-Conakry and southern Mali into this broader region is attributable to the expansion of the medieval Mande empire (12th-14th C.), and more recently to extensive networks of Jula-speaking merchants. In Burkina, the area including Bobo Dioulasso (second-largest city in Burkina) and points north and west of that city is mostly populated by speakers of Mande languages. As its name (Bobo “Jula”-sso) suggests, the city is itself a hybrid of old-stock Bobo and newer Jula-speaking populations. There is also another important Mande block in west central Burkina including the Marka and Samo languages. These two main Mande blocks are separated by speakers of Bwamu, a Gur language. Especially in Mali, the Bwamu people and languag are misleadingly called “Bobo.”

The medieval Mande expansion was less intensive in the plateau between Banfora and Bobo Dioulasso in SW Burkina and the mountainous Mali-Burkina border to their west. This area remains mostly populated by several Senoufo groups and by speakers of various Gur languages like Toussian, Turka, Wara, and Natioro. Other than a few strictly Jula-speaking villages, the only Mande language spoken near Jalkunan is Dzuungo, which is not closely related genetically.

Using a more-or-less current model of the language family, the Mande languages of Burkina Faso have the genetic relationships in (xx1). A few languages of the immediately adjacent part of southeastern Mali are included, in italics. The first genetic split is east/west. The west then splits into central-southwest and northwest. Two central-SW divisions represented in Burkina are Manding, which includes Jula, and the very small Jogo-Jeri division, to which Jalkunan belongs. Many of the non-Jula Mande languages of western Burkina and the adjacent southeast of Mali belong to northwestern Mande.

(xx1) divisions languages

eastern Bisa, Samo

western

central-SW

Jogo-Jeri Jalkunan

Manding Jula, Bolon, Marka, Sininkere

northwestern

Samogo Dzuungo, Seenku, *Bankagooma, Jowulu, Duungooma*

Soninke-Bobo Bobo Madaré, Konabéré

## Jalkunan language

### Geography

The language described here is spoken in Blédougou (or just Blé) and Kinkinkan in the Cascades province of far southwestern Burkina Faso. The ethnicity is called *jàl* (plural *jàl‑á‑àⁿ‑nū* ) in Jalkunan, and either Blé or Jali ~ Diali in local French.

Blédougou is a cluster of settlements (*quartiers*) treated administratively as one village (with one *chef de village*). The village of Kinkinkan was formerly a fourth quartier of Blédougou but since 1983 it is a separate village with its own *chef de village*. This area is a small part of the plateau west of Banfora in extreme southwest Burkina Faso, in the département of Loumana, in the province of Léraba, in the région of Cascades. Blédougou and Kinkinkan constitute a pocket surrounded by villages speaking other languages (Senoufo, Jula, Natioro, and the languages/dialects of blacksmiths and leatherworkers/potters).

(xx1) villages names in Jalkunan N latitude W longitude

quartiers

a. Blédougou *jàlsà-dù*

Soba *gbɛ́ⁿsɛ́-dù* 10 33.164 05 16.409

Fanora *fɔ́nɔ̀* 10 34.270 05 15.760

Kokora *lò-fɔ́nɔ̀* 10 33.572 05 15.892

b. Kinkinkan *kɛ̀ⁿ-kɛ́ⁿ-káàⁿ* 10 35.057 05 15.413

Fanora itself is a dispersed cluster of small settlements, but has a single *chef de quartier*. The population of Kinkinkan is said to have been originally ethnic Senoufo who were linguistically Jalkunan-ized. Because it is somewhat more isolated and traditional than Blédougou, its children are said to be more proficient in Jalkunan than those of Blédougou.

There are schools at Blédougou (primary and secondary) and Kinkinkan (primary). Both villages are on the piste that begins at Timba to the north, and runs south to SSE past Kinkinkan and then Blédougou and on to Kangoura and Tagbasoni. Timba (N 10 37.345 x W 05 14.241) is the oldest Natioro-speaking village but also includes Senoufo, blacksmiths, and a few Fulbe. Other Natioro-speaking villages are in the nearby département of Sindou to the east: Kawara, Sindoukorony, Dinaoro, and Fafasso. Kangoura, which is 1-2 km south of Blédougou (N 10 33.572 x W 05 15.892), is a cosmopolitan village with four distinct quartiers (though not far apart) for Jula, Senoufo, blacksmiths, and leatherworkers/potters. An elder in Blédougou told me that the Jula of Kangoura came from near Sikasso in Mali in precolonial times. Blacksmiths (*forgerons*) and leatherworkers/potters (*cordonniers*) in the zone have their own languages, which have not been adequately investigated. The blacksmiths are thought to speak a variety related to Dzuungo (Mande language spoken around Orodara). The zone south of Kangoura (e.g. Tagbasoni) is Senoufo, and there are more Senoufo villages west of Timba.

Fulbe women enter all the villages of the zone to sell milk, but are not a significant linguistic influence on Jalkunan or other languages.

### Classification

Jalkunan has been classified as part of the Jogo-Jeri division of the Manding-Jogo branch of Mande, which consists entirely of the Jogo (aka Ligbi) language spoken by a small population on the Côte d’Ivoire-Ghana border, plus Jeri-Jalkunan.

As of this writing (10/2016) there is an unresolved issue whether Jalkunan is a distinct language, or one of two dialects of a single language. The positions at this date by the Glottolog and Ethnologue websites are as follows:

(xx1) a. Glottolog

Jeri language, with two dialects:

Jeli, code jeri1241

Jalkunan, code jalk1242 or jeri1242

b. Ethnologue (SIL)

two languages

Jeri Kuo, ISO (639-3) code jek

Jalkunan, ISO (639-3) code bxl

Jeri (Kuo) ~ Jeli (Kuo) is spoken by members of a leatherworker caste of Mande origin in several villages or village quarters in the vicinity of Korhogo in north central Côte d’Ivoire. The zone is dominated by ethnic Senoufou.

Literature on Jeri of Côte d’Ivoire is as follows. Kastenholz (1991-MS), eventually published as Kastenholz (2001), provides a word-list and background comments, growing out of a wider dialectal survey. Tröbs (1998) is only substantial grammatical work; see also Tröbs (2013) on an issue involving postpositions. Literature on Jeri ethnicity includes Frank (1995) and Launey (1995).

In Jalkunan, the noun *jɛ̀l* (with nominal suffix *jɛ̀l-lá* singular or *jɛ̀l-lá‑à-nū* plural), which may be cognate to “Jeli” and “Jeri,” denotes members of a pottery-making caste who are present at the nearby mostly Jula-speaking village of Kangoura (1 km from Blédougou), the village of Kawara (Natioro- and Jula-speaking) between Timba and Sindou, and at Sindou (the provincial capital). The *jɛ̀l-lá‑à-nū* are said to speak a distinctive dialect of Jula, not Jalkunan. Oddly, there are no blacksmiths, leatherworkers, potters, or other artisan castes resident in Blédougou itself.

The Jalkunan-speaking people of Blédougou refer to themselves by a distinct but phonologically similar ethnonym *jàl* (suffixed *jàl-á*, plural *jàl‑á‑àⁿ‑nū* ). Blédougou village is called *jàlsà-dù*, of which *dù* is probably a frozen locative marker though the form now functions as a noun (not as a PP). The *sà* syllable is obscure, but it might be a compound final related to *sàà* ‘house; village’. The traditional local etymology of *jàlsà-dù* is a contraction of *[jál-á-àⁿ sàá] dù* ‘in the house (=village) of tse-tse flies’, in honor of the biting flies (stem *jálá* ) who, the story goes, were there to “welcome” the first settlers. The language itself is called *jàlìkùⁿ* (or with nominal suffix *jàlìkù-ná*), less often without nasalization *jàlìkù* (suffixed *jàlìkù-rɔ́*).

## Previous and contemporary study of Jalkunan

### Prost (1968)

R. P. André Prost, a giant of West African linguistics, authored numerous works of his own and and collaborated with long-term missionaries and others to produce valuable grammars, dictionaries, and sketches of languages in multiple families. The 14-page sketch he made of Jalkunan (Prost 1998), based on a few days’ work with a young student he encountered in an undisclosed location, brought the language to the attention of West Africanists. As Prost stated in his paper, the material was preliminary, and he did not attempt tonal markings. Nevertheless, in a very short time and under less than ideal circumstances he was able, characteristically, to describe the essentials of this language. His short paper presents a basically correct analysis of NP morphosyntax, and provides some insights into the verbal system, as well as giving a basic lexicon (mostly without tones).

### Our fieldwork

As an extension of an NSF-funded project directed by me and focused on Dogon and on the language isolate Bangime, Vu Truong (then a recent B.A. graduate of Brandeis) undertook fieldwork on Jalkunan out of the project’s Burkina base in Bobo Dioulasso during the period 2012-14. In fall 2014 he enrolled in the University of Chicago Ph.D. program in Linguistics.

I had some involvement with Jalkunan during that time period. He made the first contacts with Blédougou in 2012, and returned twice for three-day visits to collect flora-fauna vocabulary and to collect flora specimens. Later, he prepared a workshop on Jalkunan grammar, with a native speaker (my assistant), as part of the International Conference on Mande Languages, held in Bobo Dioulasso in 2014.

With Truong unable to return to Burkina during school year 2016-17, the project’s deadline for promised products on Jalkunan among other languages, Heath took a leave of absence from University of Michigan to complete fieldwork on Jalkunan and other languages. He worked with a Jalkunan speaker during most of September 2016 and wrote this grammar from scratch.

### Acknowledgements

The fieldwork by myself and the first year of fieldwork by Truong was funded by the National Science Foundation, Documenting Endangered Languages program, grant BCS-1263150 (2013-17).

I and my team thank the people of Blédougou for their warm hospitality and cooperation.

I am especially indebted to my assistant, Wamara Traoré. He is a resident of Blédougou but was willing to relocate to our base in Bobo Dioulasso for most of the work. He is a traditional hunter as well as farmer. With some hunter colleagues he led us on the flora-collecting trips in the vicinity of Blédougou.

# Sketch

This sketch describes basic features of the language, all of which are described more fully in later chapters.

## Phonology

### Segmental phonology

Basic consonants that can occur word-initially include voiceless obstruent like *k* and *s,* voiced obstruents like *g* and (marginally) *z*, nasals, lateral *l*, and (marginally) h. Other consonants that can occur intervocalically are tap *r* and glottal stop *ʔ*.

There are seven vowel qualities with two high vowels {*i u*}, four mid-height vowels including an ATR opposition {*e o*} versus {ɛ ɔ}, and a low vowel a. ATR harmony is evident in some combinations (like negative enclitic *‑rē* ~ *‑rɛ̄* ), but overall it is not strict. All qualities occur in nasalized and oral forms, and as short or long vowels, for a total of 7x2x2 = 28 vowel phonemes.

### Syllabic shapes and tone levels

The canonical syllable is *Cv* or *Cvv* (*vv* = long vowel or vowel sequence). *Cvv* may be lexical or it may be due to contraction at a boundary.

There are three tone levels H, M, and L. Most syllables are level-toned. However, contour tones HL, HM, LH, MH, and LHL can be expressed on single syllables.

### Tonal effects of +3Sg versus -3Sg forms

Singular NPs and 3Sg pronouns differ from plural NPs and 3Pl pronouns in their tonal effects on immediately following words. 1Pl belongs with the other plurals in this respect, while 1Sg, 2Sg, and 2Pl (the three M‑toned pronominals) mostly avoid having to choose because M‑Spreading overrides any ablaut-like tonal processes. As preverbal objects, however, where they take L‑toned forms, they are treated like the plurals. On this basis the division may really be between 3Sg (including singular NPs) and everything else.

In any event, the distinction has wide-ranging effects. It applies to NP-verb sequences (whether the NP is an intransitive subject or a transitive object), to possessor-possessum combinations, and to NP-postposition combinations.

### Segmental phonological rules

Because of the *Cv(v)* syllable norm there are few segmental phonological processes other than *vv*‑Contraction. Initial tap *r* in suffixes and enclitics is nasalized to *n* after nasal syllables, including any syllable beginning with a nasal. *r*‑Naalization is very conspicuous since two of the most important morphemes in the language are the ubiquitous nominal suffix *-rà* ~ *-rɔ̀* and the negative enclitic *=rē* ~ *=rɛ̄*.

Voiceless stops tend to be voiced intervocalically, e.g. *k*→*g*. Since the voicing is so common it is difficult in some cases to decide that the voiceless stop is lexical (underlying). A similar situation occurs with medial nasal-stop clusters, which often lose the stop, e.g. *ŋg*→*ŋ* (or sometimes →*ŋŋ*, keeping the old metrical structure).

## Nouns, NPs, and pronouns

Basic linear order is Poss-N-Adj-Num. Plurality is marked by a suffix, but is omitted in NPs containing a nonsingular numeral.

### The nominal suffix

The most distinctive feature of Jalkunan nouns is what I call the “nominal” suffix, which occurs in some but not all syntactic contexts. It occurs word-finally on nouns, or on the adjective in an N-Adj sequence. It is not affected by the presence or absence of a preceding possessor. The abbreviation “Nom” in interlinears may suggest “nominative” (case), but this is not altogether unfortunate, since the distribution of the suffix overlaps in part with that of nominative (subject) case in other languages.

Broadly speaking, the nominal suffix is present at the end of NPs that can be described as prosodically independent: citation forms, predicate nominals, and postverbal nouns used as adverbs (without a postposition). It cannot be used in combinations where the NP is closely phrased with a following word: object of a following verb, intransitive subject followed by the verb, possessor of a following noun, left conjunct in a conjoined NP, NP complement of a postposition, or NP followed by a discourse particle like ‘only’. The syntactic function that sits on the fence is subject: the nominal suffix is absent when immediately followed by a nonpronominal object NP, but present before the imperfective subject enclitic and present in combinations with certain pronominal objects.

There is a plural suffix which, for regular nouns, is added to the nominal suffix. The two occur in the same position in NPs (e.g. after an unmodified noun, or after the adjective in noun-adjective sequences). Plurals have their own word-final nominal suffix, so the full form of a plural noun is N-Nom-Pl-Nom. The medial -Nom- is obligatory before the plural suffix in all syntactic positions, but the word-final -Nom is subject to syntactic restrictions, and in fact is more restricted than the word-final ‑Nom on singular nouns.

Example: noun *mɛ̀ʔɛ̀ⁿ* (variant *mìʔìⁿ* ) ‘person’, with nominal suffix *mɛ̀ʔɛ̀‑ná* from /mɛ̀ʔɛ̀ⁿ‑rá/. The bare form *mɛ̀ʔɛ̀ⁿ* (variant *mɛ̀ʔɛ́ⁿ* in some contexts by tone sandhi) is always used as possessor, object, or postpositional complement, while suffixed *mɛ̀ʔɛ̀‑ná* is the citation form and occurs in subject function before some pronominal objects. The plural is *mɛ̀ʔɛ̀‑ná‑àⁿ* ‘people’, or (e.g. in the citation form) with final nominal suffix *mɛ̀ʔɛ̀‑ná‑à‑nū*.

### Possession

There is no segmental possessive (genitive) morpheme. Possessors, whether pronominal or nonpronominal, directly precede the possessed noun (possessum). The possessum undergoes tonal changes, the details depending on the possessum’s input (lexical) tones, on the category of the possessor, and on whether possession is alienable or inalienable (the latter includes body parts and kin terms).

For example, *ɲí-ná* ‘tooth’ is lexically H‑toned. It has possessed forms like *mā ɲī-nā* ‘my tooth’, *à ɲì-ná* ‘his/her tooth’, and *mùʔùⁿ ɲí-ná* ‘our tooth’. The {LH} tones of ‘his/her tooth’ are standard for nouns with 3Sg possessors, alienable or inalienable. However, the application of M‑Spreading in ‘my tooth’ and the {H} tones of ‘our tooth’ (not automatically carried over from lexical tones) are features of inalienable possession. See §6.2.2 for details.

### Pronominal categories

Jalkunan is unusual among Mande languages in sharply distinguishing human from nonhuman pronominal categories in the third person. The primary forms of the pronouns, along with reflexive possessor forms, are in (xx1). They are proclitic in function, and a distinct set of independent pronouns are used clause-finally and in isolation. When a given proclitic is repeated with the same reference within a construction (adjoined same-subject clause, reflexive object or possessor), it undergoes certain reductions. Of special interest are reflexive proclitics, which show a segmental convergence (except for nasalization in the 1Sg) between human third person and first person on the one hand, and between nonhuman third person and second person on the other. The segmentally convergent categories are distinguished by tones in the reflexive possessor paradigm (M for 1st/2nd, L for third). For discussion see §18.xxx.

(xx1) Pronominal proclitics

category basic reflexive possessor (§18.1.1)

1Sg *mā āⁿ*

2Sg *wō ē* ~ *ī*

1Pl *mùʔùⁿ āāⁿ*

2Pl *ēēⁿ ēēⁿ* ~ *īīⁿ*

3SgHum *à à*

3SgNonh *è* *è* ~ *ì*

3PlHum *ààⁿ ààⁿ*

3PlNonh *èèⁿ èèⁿ* ~ *ììⁿ*

The other well-documented Mande language with a roughly similar distinction in third person pronouns is Jowulu (or Jɔ) in the Mali-Burkina border area (I thank Valentin Vydrine for pointing me to this language). Jowulu distinguishes masculine, feminine, and neuter in the 3Sg and human versus nonhuman in the 3Pl (Carlson 1993: 23). The forms are 3MascSg *ú*, 3FemSg *ní*, 3HumPl *ki̋*, and 3NonhPl *yìrì* (for typographic reasons I modify Carlson’s tonal accents, so that acute = high and double acute = superhigh). The Jowulu forms do not appear to be cognate to the Jalkunan forms, with the possible exception of nonhuman plural (Jowulu *yìrì*, Jalkunan *èèⁿ* ).

## Postpositions

There are several basic monosyllabic or bisyllabic postpositions (simple locative and several more specific spatial categories, instrumental, comitative, and benefactive). They are subject to the tonal processes mentioned above, appearing in L‑toned form after singular NPs or pronouns and in H‑toned form after plural NPs or pronouns, except that M‑toned pronouns (1Sg, 2Sg, 2Pl) spread their M‑tone into the postposition. Thus *kìnà* ~ *kíná* ~ *kīnā* ‘in front of’ in *sàá kìnà* (< /sàà kìnà/) ‘in front of the house’, *sàà-rá-àⁿ kíná* ‘in front of the houses’, and *mā kīnā* ‘in front of me’.

## Verb inflection

Disregarding complementary grammatical particles and enclitics such as future *sà* and negative *=rĒʔ*, word-level verb morphology involves the following forms, illustrated with one intransitive verb (‘come’) and one OV transitive verb (‘buy’). Tonal alternations like *sɛ̌* ~ *sɛ́* reflect the effects of preceding +3Sg and -3Sg NPs (and pronouns). These alternations occur only in positions where the verb is immediately preceded by an NP (as opposed to an inflectional particle or subject enclitic); for intransitives this alternation is limited to the perfective, for transitives it occurs in all indicative and deontic inflections. The subject-focus perfective (with M‑tones) is limited to intransitives.

(xx1) ‘come’ ‘buy’

a. indicative inflections

perfective *sɛ̌* ~ *sɛ́ sàní* ~ *sánī*

subject-focus perfective *sɛ̄ɛ̄* (n. a.)

imperfective *sáá sànà* ~ *sáná*

progressive *sé-yá* *sànìyá* ~ *sání-yā*

b. deontic inflection

imperative *sɛ̄ sǎⁿ* ~ *sáⁿ*

c. subordinated forms

adjoined *sá sàⁿ*

adjoined (L-toned) *sà sàⁿ*

d. nominalization

verbal noun (suffixed) *séé* (*séé-rá* ) *sànì* (*sàn-nà* )

## Main clauses and constituent order

Simple main clauses are of the types in (xx1). Additional variations can be produced by adding spatiotemporal adverbs and adjoined (non-argument) PPs either before the subject (S) or after the verb.

(xx1) composition label

a. S-infl-V intransitive

S-infl-V-O intransitive plus postverbal “object” (VO transitive)

S-infl-V-PP intransitive plus postpositional phrase

b. S-infl-O-V ordinary transitive (OV transitive)

S-infl-O-V-O ditransitive (‘give’ etc.)

c. S-infl-3SgNonh-V pseudo-transitive (‘go’)

S-infl-ReflO-V reflexive (with referential object), pseudo-reflexive (middle)

The sequences S-infl-V and S-infl-O-V are tightly bound and do not allow interruptions by adverbs or other elements, which may however occur before or after. The inflectional elements that can precede the VP (V… or OV…) are imperfective subject enclitic /H+=∅/ (in present, future, and progressive clauses) which is realized as final H‑tone, future particle *sà* (following the imperfective enclitic), and prohibitive particle *bí*. There is no pre-VP inflectional marker in perfectives.

Negation, not shown in (xx1) above, is a clause-final enclitic *=rĒʔ*. This is the only indicator of negation in indicatives. Prohibitives (negative imperatives) have both a pre-VP inflectional particle bí and clause-final *=rĒʔ*.

Examples of the intransitive types in (xx1) above are in (xx2).

(xx2) type

a. *zàkíì sɛ́*

Z come.Pfv

‘Zaki came.’ perfective intransitive

b. *zàkíì sɛ́ [yí dɛ̀]*

Z come.Pfv [water with]

‘Zaki brought (the) water.’ perfective intransitive + PP

c. *zàkíì báʔrī tàgà-rá*

Z touch.Pfv sheep-Nom

‘Zaki touched a/the sheep-Sg.’ perfective VO transitive

d. *bákàrí=∅ sà sáá*

B=Ipfv Fut come.Ipfv

‘Bakari will come.’ future intransitive

Examples of OV transitive and ditransitive verbs, cf. (xx1b) above, are in (xx3). A ditransitive like ‘give’ is essentially the combination of an OV transitive with an additional postverbal object. The preverbal object denotes the theme (the entity given), the postverbal object denotes the recipient.

(xx3) type

a. *zàkíì mā báʔrī(ī)*

Z 1Sg hit.Pfv

‘Zaki hit me.’ perfective OV transitive

b. *zàkíì yí bìlí mā-n̄*

Z water give.Pfv 1Sg-Indep

‘Zaki gave water to me.’ perfective ditransitive

Examples of pseudo-transitive, true reflexive, and pseudo-transitive (middle) clauses, cf. (xx1c) above, are in (x.x4). The only pseudo-transitive verb is ‘go’ (imperfective *wàá*, one of two ‘go’ verbs). It has a nonreferential, pro-forma nonhuman 3Sg object, in part of its paradigm (§10.1.1.2). True reflexives are special cases of regular OV transitives where the object happens to be coindexed with the subject (§18.1.2). Pseudo-reflexives have reduced reflexive object markers and function as middles (§10.1.1.3).

(xx4) type

a. *tàgà-ré= è wěē*

sheep-Nom 3SgNonh hit.Pfv

‘The sheep-Sg went (away).’

(< /tàgà-rá è/) perfective pseudo-transitive

b. *zàkíì [ná yèʔré] bàʔrí*

Z [3SgHumObj self] hit.Pfv

‘Zakii hit himself.’ perfective true reflexive

c. *zàkíì ná jòʔrí*

Z 3SgHumObj jump.Pfv

‘Zakii jumped’ perfective pseudo-reflexive (middle)

## Focalization

For third person pronouns, focalization (in subject, object, or other function) can be directly expressed by changing the form of the pronoun. For example, regular 3Sg *à* subject proclitic is replaced by independent pronoun *à-wò*.

For noun-headed NPs and 1st/2nd person pronouns, no such morphological marking of focalization occurs. There is also no fronting of focused constituents. The only remaining possibility is indirect marking of constituent focalization by some modification of the verb. The only such modification is a special M‑toned form of perfective intransitive verbs when the preceding subject is focalized.

Both the morphological marking of 3Sg and the M‑toned perfective subject-focus verb are illustrated in (xx1a), compare unfocalized (xx1b). These examples also illustrate the wide clausal scope of negation in focalized (xx1a) versus its narrow VP scope in (xx1b).

(xx1) a. *à-wò sɛ̄ɛ̄=rɛ̄ʔ*

Hum-3Sg.Indep come.Pfv.SbjFoc=Neg

‘It wasn’t he-or-she [focus] who came.’

b. *à sɛ̀ɛ̀=rɛ̄ʔ*

3SgHum come.Pfv

‘He/She didn’t come.’

Focalization is covered in chapter 13 along with interrogation, which is closely related.

## Relative clauses

Relative clauses, covered in chapter 14, are internally-headed. The head NP can be subject, object, possessor, or postpositional complement. It occurs in its normal position within its clause (*in situ*, not fronted or extracted), and is marked by addition of *mì* particle (distinct from demonstrative *mí* ‘this’). An example is (xx1).

(xx2) *[wó=∅ [sàá mì] jíí-yá nɛ̀]*

[2Sg=Ipfv [house Rel] see.Ipfv there]

‘That house that you-Sg see there.’

## Adjoined clauses

I use the term “adjoined clause” to denote the second of two clauses, including a reduced second subject pronoun and a special adjoined form of the second verb, that combine tightly without completely losing their biclausal nature. The first verb typically contracts with the second subject pronoun, partially masking the underlying form of the second subject pronoun. Contractions (typically involving two input vowels) are indicated by adding the enclitic boundary = after the first verb. This construction class is described in chapter 15. An example is (xx1).

(xx1) *[à bá=] [á jàʔàⁿ] [yí dù]*

[3SgHum fall.Pfv] [3SgHum descend.Adjn] [water in]

‘He/She fell down into the water.’ (</à bɛ̌ à jàʔàⁿ/)

# Phonology

## Internal phonological structure of stems and words

### Syllables

Open syllables (are the norm. Monosyllabic words and stems may be *Cv* or *Cvv* (*v* = any vowel quality).

Word-final short vowels may be deleted by syncope (medial) or apocope (final), creating *CvC* syllables. There are also some stems with medial CC clusters whose first consonant is syllabified with the preceding vowel.

### Metrical structure

In the absence of overt stress, metrical (rhythmical) structure in African languages of this zone is most apparent in patterns of vocalic reduction (to schwa or zero). Certain positions in Jalkunan are especially relevant.

First, stem-initial *CvCv* allows syncope of *v1 i* and sometimes *e* when *C2* is *l*. The tone of the syncopated vowel is retained; I show it in (xx1) as rising tone on the following vowel, but phonetically the L‑tone begins on the lateral.

(xx1) *bìlí* ~ *bə̀lí* ~ *blǐ* ‘gave’

*bèlé* ~ *bə̀lé* ~ *blě* ‘passed’

Words like *flā* ‘2’, *glàŋù* ‘nightjar’, *kláá* ‘ring (on finger)’, and *slāā* ‘daytime’ that now usually begin with a *Cl* cluster likely originated in this way, and *i* can still occur in artifically slow pronunciations.

Second, the medial syllable of word-final *…CvCvCv* can syncopate. This is most apparent in nouns and adjectives when followed by the nominal suffix (*‑rà* or variant). Although the examples in (xx2) show a range of vowel qualities in the syncopated vowel, syncope is most common with short high vowels {*i u*}, and rare (only one adjectival case known) with *a*. The nature of the flanking consonants is also a factor: *n\_n*, *l\_l*, and *r\_r* are the most favorable frames.

(xx2) noun suffixed gloss

a. *búlú búl-lá* ‘caterpillar, grub’

*būtūnī būtūn-nā* ‘fist’

b. *bɔ̀nɔ̀ bɔ̀n-ná* ‘kite (hawk)’

*fɛ́nɛ́ fɛ́n-ná* ‘mushroom’

c. *kānā kān-nā* ‘red’

Word-final *…CvCvCv* can also occur within a stem, and when the medial vowel is {*i u*} and the flanking consonants are propitious, syncope is an option: *fúnúnà* ~ *fúnnà* ‘become inflated or swollen’ (imperfective).

Some nouns and adjectives ending in {*i u*} like those in (xx2a) optionally apocopate word-finally in clause-medial position. There is much variation from one stem to another, and some free variation for individual stems, in my assistant’s speech.

## Consonants

The consonantal phonemes are in (xx1).

(xx1) Consonants

1 2 3 4 5 6 7 8 9

labial *p b m f v w*

alveolar *t d n s z l r*

glottalized  *ʔr*

alveopalatal *c j ɲ y*

velar *k g ŋ*

labial velar *kp gb ŋm*

laryngeal *ʔ* *h*

*key to columns: 1. aspirated voiceless stops and affricates; 2. voiced stops and affricates; 3.nasals, 4. voiceless fricatives (including sibilants); 5. voiced fricatives (including sibilants); 6. laterals; 7. other sonorants (taps, semivowels); 8. glottal stop; 9. laryngeal (aspiration)*

The orthography differs from IPA as indicated in (xx2).

(xx2) a. *c* is IPA [tʃ]

b. *j* is [dʒ]

c. *ʔr* is a tap with simultaneous glottal stop [ɾʼ]

d. ligatures are omitted for labial velars (but they are unit phonemes)

### Comments on specific consonants

#### *h*

This consonant is uncommon and is limited to stem-initial position in borrowings, e.g. *hɛ́ɛ́rɛ́* ‘well-being’.

#### *ʔ*

Glottal stop *ʔ* is common stem-medially between two short vowels: *bùʔúⁿ* ‘liver’, *dóʔó* ‘younger brother’. It does not occur word- or stem-initially, or word- or stem-finally. It does occur finally in negative enclitic *=rĒʔ* when it is clause-final (§10.2.1), and in clause-final emphatic particle *dɛ̄ʔ* (§19.3.2). See, however, the comments in §10.2.2.

Usually *ʔ* within a stem is flanked by short vowels of identical quality. Nominal examples are *bàʔà* ‘wild onion’, *zɛ́ʔɛ̀nɛ́* ‘wild date tree (Balanites)’, *bòʔòkááⁿ* ‘tall grass spp. (*Hyperthelia*, *Diheteropogon*)’, and *níínààⁿ-tùʔùgú* ‘praying mantis’. Aspectual alternations such as imperfective *dàʔà* and E‑stem perfective *dɛ̀ʔɛ́* for the verb ‘let go, set free’ show that this vocalic harmonization is systematic at least for verbs. Exceptions are *wòʔùl‑dí(‑rà)* ‘mid-sized honey bee sp.’ and *ɲíʔɛ́náá* ‘get wet’.

Allophonic nasalization of the vowel preceding *ʔ* is carried over to the vowel that follows it. There are many words like 1Pl pronoun *mùʔùⁿ* that have an initial *Nv* syllable (nasal consonant plus short vowel that is automatically nasalized), followed by a glottal initial syllable with a clearly nasalized vowel. Although the nasalization of both vowels is automatic, I transcribe it in this case to avoid confusing readers.

#### *r* and *ʔr*

Tap *r* and glottalized *ʔr* do not occur word-initially. They do not occur word-finally, except in words like *máʔr̀* ‘mango’ when apocopated from *máʔrù*.

r can occur as first member of medial CC clusters: *bàrkár* ‘herb sp. (*Leucas*)’, *màrfá* ‘rifle’.

Other than this, both *r* and *ʔr* are limited to medial intervocalic position; *r* also occurs in the negative enclitic *=rĒʔ*, which usually follows a vowel. However, syncope/apocope can create *Cr* clusters, which can feed CC-adjustment rules like *r*‑Lateralization and *r*‑Deletion.

*ʔr* is phonetic [ɾʼ] with simultaneous glottal stop and (weak) tap. One could argue that it is a cluster of ʔ with r, but the simultaneity of the glottal stop argues for unit phoneme status. An alternative analysis is that it is the result of syncope from /ʔvr/ with some vowel *v*. This is plausible diachronically, but there is no good evidence for it synchronically. For example, nominal suffix *‑rà* (or tonal variant) allows syncope of a preceding vowel under some conditions, but there are no cases of *Cvʔv‑rà* syncopating to *Cvʔ-rà* [Cvɾʼà]. Examples of non-syncopation are *dèʔè‑rá* ‘cream of millet’ and *jóʔó‑rá* ‘Jula person’.

Examples of *ʔr* [ɾʼ] are the nouns *gúmàʔrà* ‘palm-frond bed’, *ɲɔ́kɔ̀ʔrɔ̀* ‘face’, *bɔ́ʔrɔ́* ‘loam’, *wɔ́ʔrɔ́* ‘thigh’, *fáʔrā* ‘cave’, *kóʔrō* ‘night’, *yɛ̀ʔrɛ̀* ‘néré tree’ (*Parkia*), *máʔr̀* ~ *máʔrù* ‘mango’, and the verbs *kàʔrà* ‘break, snap’, *bɛ́ʔrɛ̄* ‘yam (*Dioscorea*)’, *jɔ̀ʔrɔ̀* ‘jump’, *bàʔrà* ‘hit’, *tòʔrɔ̀* ‘sell’, *nɔ̀ʔrɔ̀* ‘affix’, *sèʔrà* ‘sweep’, *sònsóⁿʔrà* ‘squat’, and *kɔ̀ʔrìyáà* ‘get old’. I have no examples involving preceding high vowel *i* or *u*, but a following *i* or *u* is allowed, as shown by examples above and by several I‑stem perfectives of the verbs above (*kàʔrí* ‘broke’, etc.).

#### *ʔn*

Usually sonorants other than r are separated from a preceding glottal stop by at least an echo vowel. However, *sóʔń* ‘shrew (*Crocidura*)’, with suffix *sóʔń-ná*, was heard with more or less simultaneous glottal closure.

#### *z*

*z* is uncommon initially and seems to be limited to loanwords and to cultural vocabulary that can be suspected of being loanwords: *záʔàmɛ́* ‘rice cooked with sauce in it’, *zɛ́ʔɛ̀nɛ́* ‘wild date tree (*Balanites*)’. There are more examples of *z* intervocalically, but they too are flora-fauna or other cultural items: *sìzó* ‘scissors’ (< French), *táábìzɔ̀ŋɔ́* ‘Abdim’s stork’, *séⁿzé* ‘waterbuck’ (also in Jula), *kɔ̀ɔ̀ⁿzíⁿ* ‘fruit of tree sp. (*Annona*)’. As Prost already notes, medial *s* is sometimes pronounced *z*. I have observed this in the semi-reduplicative verb *sòⁿsóⁿʔrà* ‘squat’.

#### *v*

*v* is uncommon initially and unattested medially. My examples of word-initial *v* are flora-fauna terms: *vìlàⁿ* ‘fat mouse (*Steatomys*)’, *vègè-kùⁿ*, one of two synonyms for ‘wild grape tree (*Lannea*)’, *vóó* ‘antrhopod sp.’, *vɔ̀ɔ̀ⁿ-vɔ̄ɔ̄ⁿ* ‘mud-dauber wasp’ (onomatopoeic).

In formulae like *CvCv*, the symbol *v* represents any vowel. It is necessary to use lowercase *v* to allow tone diacritics.

#### *p* versus *kp*

As already observed by Prost, *p* appears to be absent from native lexicon and occurs in borrowings and in cultural lexical items that are likely to have been borrowed. Stem-initial *p* is attested in *pɛ́lɛ̄* ‘chili pepper’, *pándàl* ‘pants’, *pɔ̀sɔ́n* ‘poison’, *pítòl* ‘bulbul (bird)’, and *pɔ̀tɔ̀‑pɔ̀tɔ́* ‘jatropha (tree)’. Medial *p* occurs in *álà‑pɛ̀rɛ́n̄‑káⁿ* ‘thunder’, *tápɛ́tí* ‘plastic sandals’, *kápɔ̀n* ‘daba (hoe) type’, and *sípítí* ‘Saturday’ (< Arabic).

Labial velar *kp* (a unit phoneme) is common word-initially in native vocabulary: *kpááⁿ* ‘die’, *kpɔ́ɔ́lɔ́* ‘time(s)’, *kpɔ̄* ‘foot’, etc.

#### Voiceless obstruents (*k/g* and *t/d* variation medially)

Voiceless obstruents are common stem- and word-initially. They may occur intervocalically but they are much less common there. Variation between *k* and *g* is common in the medial position in *CvCv* stems, with *k* preferred in careful speech: *dùkù* ‘the bush, the outback’, usually *dùgù* in allegro speech. The relationship between intervocalic *t* and *d* is similar, as in *kítā* ~ *kídā* ‘bad’.

Based on my assistant’s strong tendency to pronounce such words with the voiced stop in allegro speech, and with the voiceless stop in careful “elicitation-ese,” I am not sure that there is a phonemic distinction in intervocalic position. That is, it may be that all cases of stem-internal intervocalic *g* and *d*, and perhaps *gb* and *b*, can be pronounced as voiceless in careful speech.

#### *k/g* versus *c/j* before front vowel

There is very little difference in my assistant’s pronunciation between *kɛ*, *cɛ*, *kiɛ*, and *ciɛ*, or between *gɛ*, *jɛ*, *giɛ*, and *jiɛ*, and likewise with other front vowels *i* and *e*. He does, however, have clear intuitions about the correct representation of individual words, and I generally follow them.

### Consonant clusters

#### Word- and morpheme-initial *CC* clusters

*kp* and *gb* are units, not clusters, so they are excluded here.

Initial *CC* clusters are of the form *Cl* or *Cy*. At least some are probably due to historical syncope of a short high vowel. If there is no synchronic evidence for an underlying vowel, we must recognize an initial cluster.

(xx1) a. initial *Cl*

*noun*

*flā* ‘two’

*klāā* ‘mouse’

*glàŋù* ‘nightjar (bird)’

*compound final*

*táá-blàʔà-bláʔá* ‘firefly’

b. initial Cy

*fyɛ̀ɛ̀* ‘wind (n)’

In cases like *bèlé* ~ *bə̀lé* ~ *blé* (and tonal variants) ‘pass’, I take the full form as underlying.

#### Medial geminated *CC* clusters

*nn*, *ll*, and *rr* occur in nouns at the suffixal boundary.

(xx1) stem with suffix gloss

*sàfàlì sàfàl-lá* ‘donkey’

*sàmàrà sàmàr-rá* ‘shoes’

*sánū sán̄-nà* ‘gold’

In most cases these geminates result from syncope of a stem-final short vowel. However, there are also some nouns that end in one of the relevant sonorants (at least, I have not heard them with final high vowels): *sùkár̄* ‘sugar’, *bèr(è)fán* ‘blanket’, *jén* ‘ax’, *kɔ᷆l* ‘cotton’, and these too have geminated sonorants in the suffixed form: *sùkár̄‑rà*, *bèr(è)fán‑nà*, *jén‑ná*, *kɔ᷆l‑là*.

#### Medial non-geminate *CC* clusters

*kp*, *gb*, *ŋm*, and *ʔr* are analysed here as unit consonants, not clusters. True nongeminate CC clusters are relatively uncommon but a few have been recorded in noun stems. Those that do not seem to occur only at obvious compound boundaries are in (xx1).

(xx1) cluster example gloss

a. *Cl*

*ml kámléwòtóólū* ‘galago (mammal)’

*fl màflánì-kíī* ‘tree spp. (*Parinari*, *Maranthes*)’

b. *Cy*

*fy tàfyɛ́l* ‘square fan’

c. *lC*

*lm sàlmátàànkéé* ‘thrush (bird)’

*ln bɔ̀ln-á* ‘hitching post for goat’

*lk bálkúⁿ* ‘tree spl (*Khaya*)’

*lw dɔ̀lwáálī* ‘ground-dwelling termite’

d. *rC*

*rf màrfá* ‘gun’

*rt kórtòò gbóʔó* ‘paper wasp sp.’

*rn cɛ́rná* ‘cricket’

*rw jɛ́rwòtó* ‘snail’

e. *NC*

*ŋgb lɛ́ŋgbɛ́* ‘cattle egret’

*ŋkp cííŋkpɛ̀rì-kúⁿ* ‘tree sp. (*Entada*)’

*ŋg wáláŋgárā* ‘giraffe’

*ŋk gbéŋká-kúⁿ* ‘tree sp. (*Bridelia*)’

*nj bàlànjúrú* ‘amaranth (herb)’

*mb ɲáán-dāmbālī* ‘bachelor’

*nd pándàl* ‘pants’

#### Word-final *CC* clusters

Word-final clusters are abnormal in Jalkunan. I have recorded *bɔ̀ln* ‘hitching post’ before modifiers or verbs: *bɔ̀lǹ flā* ‘two hitching posts’, *mā bɔ̀ln̄ jìɛ́* ‘I saw a hitching post’. The *n* is not noticeably syllabic. The suffixed form is *bɔ̀ln‑á*.

## Vowels

The inventory is (xx1), omitting tones.

(xx1) oral nasal

short long short long

u u: uⁿ uuⁿ

o o: oⁿ ooⁿ

ɔ ɔ: ɔⁿ ɔɔⁿ

a a: aⁿ aaⁿ

ɛ ɛ: ɛⁿ ɛɛⁿ

e e: eⁿ eeⁿ

i i: iⁿ iiⁿ

### Short and (oral) long vowels

Both short and long vowels occur frequently in monosyllabics. A few examples among many are in (xx1).

(xx1) a. *Cv* monosyllabics

*nouns*

*dí* ‘child’

*kpɔ̄* ‘foot’

*bé* ‘uncle’

*ɲì* ‘blood’

*pronouns*

*mā* 1Sg

*wō* 2Sg

*adjectives*

*gbɔ́* ‘big’

*ɲɛ́* ‘good’

*numerals*

*flā* ‘come’ (perfective)

*verbs*

*bà* ‘fall’ (imperfective)

*sɛ̌* ‘come’ (perfective)

b. *Cvv* monosyllabics

*nouns*

*kóō* ‘back (body)’

*féē* ‘calabash’

*lóó* ‘mask’

*gbíí* ‘boil (on skin)’

*adjectives*

*táā* ‘hot’

*kpēē* ‘white’

*numerals*

*táá* ‘ten’

*verbs*

*bàâ* ‘sleep’ (imperfective)

*sàà* ‘build’ (imperfective)

In nonmonosyllabic stems, long vowels are less common than short vowels in all positions. Nonmonosyllabic verbs especially tend to have only short vowels. The most common shape that does include a long vowel is *CvvCv*, followed by *CvCvv* (xx2a‑b). Medial long vowels in trisyllabics occur in a few loanwords (xx2c).

(xx2) a. *CvvCv*

*nouns*

*jààgbè* ‘courage’

*bɔ̀ɔ̀rɔ́* ‘sack’

*báárá* ‘work (n)’

*numerals*

*sóóló* ‘5’

*búúlī* ‘thousand’

*verbs*

*mììlí* ‘think’ (perfective; variant *mììrí* )

*fɛ̀ɛ̀ní* ‘untie’ (perfective)

*mààsɛ́* ‘bow, bend over’ (perfective)

b. *CvCvv*

*nouns*

*sìlàà* ‘daytime’

*jàŋgbáā* ‘cat’ (and other variants)

*verbs*

*mùníī* ‘crawl’ (perfective)

*nɛ̀nɛ́ɛ̀* ‘taste’ (perfective)

c. *CvCvvCv*

*nouns*

*tùbààbú* ‘white person’

*lìmààmí* ‘imam’

### Nasalized vowels

Short and long nasalized vowels have the same distribution as oral short and long vowels. Any vowel quality can be nasalized. Because a syllable-initial nasal consonant induces phonetic nasalization of the vowel, the examples given here involve syllables beginning with oral consonants.

(xx1) a. *Cv* monosyllabics

*nouns*

*sɛ́ⁿ* ‘thing’

*tóⁿ* ‘arrow’

*demonstratives*

*míⁿ* ‘this’

*verbs*

*kpāⁿ* ‘die’ (imperfective)

*bɛ̌ⁿ* ‘draw (water)’ (imperative)

*kìⁿ* ‘fly away’ (imperative)

b. *Cvv* monosyllabics

*nouns*

*cííⁿ* ‘breast’

*gbááⁿ* ‘shoulder’

*kwéēⁿ* ‘crops’

*dɔ̀ɔ̀ⁿ* ‘dance (n)’

*kùùⁿ* ‘penis’

*pronouns*

*ēēⁿ* 2Pl

*ààⁿ* human 3Pl

*verbs*

*jɔ̀ɔ̂ⁿ* ‘steal’ (imperfective)

*kpàâⁿ* ‘kill’ (imperfective)

In nonmonosyllabics, it is easiest to find phonemically nasalized vowels word-finally (xx2b) than initially or medially, where vocalic nasalization is more strongly associated with nasal consonants. Some long nasalized vowels are in (xx2). These include some *CvCvv* stems with nasalized medial *C*, on the grounds that phonemic nasalization is more readily heard in final long than short vowels.

(xx2) a. nonfinal long nasalized vowel

*nouns*

*cīīⁿ-yí* ‘breast-milk’ (compound)

b. final long nasalized vowel

*nouns*

*jàŋgbáāⁿ* ‘cat’ (variants include *jàŋmáāⁿ* )

*kūmɛ̄ɛ̄ⁿ* ‘food’

*kūmāāⁿ* ‘cold(ness)’

*verbs*

*sàmɛ́ɛ̄ⁿ* ‘pull’ (perfective)

*mɔ̀mɔ́ɛ̄ⁿ* ‘crawl’ (perfective)

Some nonmonosyllabics with short nasalized vowels are in (xx3). Nonfinal nasalized vowels are rare unless preceded by a nasal consonant. Final nasalized vowels are common

(xx3) a. nonfinal short nasalized vow*el*

*nouns*

*cíⁿwù* ‘termitary’

b. final short nasalized vowel

*nouns*

*dúléⁿ* ‘fishing apparatus’

*búʔúⁿ* ‘liver’

*gbíríⁿ* ‘wilderness’

*gbāājéⁿ* ‘tea’

*fààndáⁿ* ‘pauper’

*sààbíⁿ* ‘roof’

Several verb stems have some alternations between *Cvnv* and *Cvⁿ*. The short form is the imperative.

(xx4) imperfective imperative gloss

*dɔ̀nɔ̀ dɔ̀ⁿ* ‘chew’

*gbɛ̀nà gbɛ̌ⁿ* ‘throw’

*jàʔánà jàʔáⁿ* ‘descend’

In some stems, however, a final short nasalized vowel in the imperative is denasalized, see §3.6.3 below.

The vowel of a *Nv* or *Nvv* syllable, where *N* is a nasal consonant, is treated as nasalized. This is especially relevant to *n* ~ *r* alternations in suffixes (nominal suffix *‑rà* ) and enclitics (negative *=rɛ̄ʔ* ), see §3.6.1.1. I do not normally transcribe vocalic nasalization in such cases since it is redundant, but a good case could be made that one should, and that one should extend this to vowels preceding nasal consonants. My assistant regularly corrected my pronunciation, especially when words were broken up artifically into syllables. For example, he insisted in syllabifying *gbɛ̀nà* ‘throw’ as *gbɛ̀ⁿ* plus *nàⁿ*.

Stems ending in *Nvʔv* are likewise treated as ending in a nasalized vowel, thereby triggering *r*‑Nasalization in a following nominal suffix or negative enclitic. To avoid confusion I do add the nasalization diacritic at the end of such stems, but as with *Nv* and *Nvv* syllables the vocalic nasalization is automatic. Examples are the pronoun *mùʔùⁿ* ‘we’, noun *bìnáʔáⁿ* ‘herb sp. (*Ceratotheca*)’ with suffixed form *bìnáʔá‑ná*, and verb *kɔ̀máʔàⁿ* ‘knead, stir’ with negation *kɔ̀máʔà=nɛ̄ʔ*.

### Initial vowels

Initial vowels *a* and *e* occur in pronominals (2Pl *ēēⁿ*, human 3Pl *ààⁿ*, human 3Sg *à*, nonhuman 3Pl *èèⁿ*, nonhuman 3Sg *è* ). These pronominals occur clause-initially in subject or possessor function.

In stems (nouns, adjectives, numerals, verbs, adverbs), initial vowels are rare. I can cite only two nouns (xx1), the first of which also has several compounds.

(xx1) *álā* ‘God’

*ìkájɛ̀ⁿ* ‘shrub sp. (*Alchornea*)’

### Stem-final vowels

Most stems ends in vowels. All vowel qualities are attested.

### Vowel sequences

#### *ɔɛ* diphthong

The diphthong *ɔɛ* occurs in verbs with basic vowel(s) *ɔ* that add a mid-height front vowel *ɛ* in the perfective. However, the diphthong is monophthongized (and in some cases optionally shifted to +ATR) in the perfective negative (xx1a). No diphthong is created even in the positive when the high front vowel *i* rather than *ɛ* is used in the perfective (xx1b). The other vowel quality in verb stems that is not already a front vowel and that can acquire *ɛ* in the perfective is the low vowel *a*, which is replaced by *ɛ* rather than forming a diphthong with it (xx1c). There is therefore no #*aɛ* diphthong.

(xx1) imperfective perfective PfvNeg (+3Sg) gloss

a. *sɔ́ɔ́ sɔ̀ɛ̀* ~ *sɔ́ɛ́* *sòò=rēʔ* ‘enter’

*bɔ́ɔ́ bɔ̀ɛ̀* ~ *bɔ́ɛ́* *bòò=rēʔ* ‘exit’

*kɔ̀ɔ̀* ~ *kɔ́ɔ́ kɔ̀ɛ̀* ~ *kɔ́ɛ́* *kòò=rēʔ* ‘count’

*sɔ̀ɔ̀* ~ *sɔ́ɔ́ sɔ̀ɛ̀* ~ *sɔ́ɛ́* *sòò=rēʔ* ‘put (sth) in’

*mɔ̀ɔ̀* ~ *mɔ́ɔ́ mɔ̀ɛ̀* ~ *mɔ́ɛ́* *mɔ̀ɔ́=rɛ̄ʔ* ‘rub, wipe’

*jɔ̀ɔ̂ⁿ* ~ *jɔ́ɔ̂ⁿ jɔ̀ɛ́ⁿ* ~ *jɔ́ɛ̄ⁿ* *jɔ̀ɔ́=nɛ̄ʔ* ‘steal’

*dɔ̀ɔ̂ⁿ* ~ *dɔ́ɔ̂ⁿ dɔ̀ɛ́ⁿ* ~ *dɔ́ɛ̄ⁿ* *dɔ̀ɔ́=nɛ̄ʔ* ‘step on’

*mɔ̀mɔ́ɔ̀ mɔ̀mɔ́ɛ̄* *mɔ̀mɔ́ɔ̄=nɛ̄ʔ* ‘carry on back’

~ *mɔ́mɔ́ɔ̀* ~ *mɔ́mɔ́ɛ̄*

b. (PfvNeg not relevant)

*būlɔ̄ bùlí* ‘return, go back’

*dùtɔ̀lɔ̀ dùtɔ̀lí* ‘point at’

c. *kpāⁿ kpɛ̌ⁿ* ‘die’

*bàà bɛ̌* ‘fall’

*dòsā dòsɛ́* ‘add’

A +ATR diphthong *oe* would seem to be structurally possible. However, the *ɔɛ* diphthong occurs only in perfectives of monosyllabic verbs. Verbs of this shape that have *oo* in the perfective negative and/or other forms, like ‘enter’, ‘exit’, and ‘put (sth) in’ in (xx1), have ‑ATR *ɔɛ* in the perfective.

#### *iɛ*

There are several verbs that have a form *Ciɛ* as perfective and/or imperfective stem. This diphthong patterns prosodically like a long vowel. Pronunciation is often brief, similar to *Cyɛ*.

(xx1) imperfective perfective PfvNeg (+3Sg) gloss

a. *jìɛ̀* ~ *jíɛ́ jìɛ̀* ~ *jíɛ́* *jìɛ̀=rɛ̄ʔ* ‘see’

*fìɛ̀* ~ *fíɛ́ fìɛ̀* ~ *fíɛ́* *fìɛ̀=rɛ̄ʔ* ‘blow’

*cìɛ̀* ~ *cíɛ́ cìɛ̀* ~ *cíɛ́* *cìɛ̀=rɛ̄ʔ* ‘arrive’

b. *mìɛ̀* ~ *míɛ́ mǐī* ~ *miī*  ‘drink’

*ɲìɛ̀* *ɲǐī* ~ *ɲiī*  ‘spend night’

*nìà* ~ *níà* *nǐī* ~ *níī*  ‘divide’

*kìàⁿ* ~ *kíàⁿ* *kǐīⁿ* ~ *kíīⁿ*  ‘fly (v)’

## ATR and related issues

### ATR Harmony

The key ATR (advanced tongue root) opposition is ‑ATR {*ɛ ɔ*} versus +ATR {*e o*}. Within simple (noncomposite) stems, including aspect-marked verb stems, harmony is respected. For example, *tòlóē* ‘rotted’ and *bɔ̀ɛ́* ‘exited’ are perfective forms of verbs, ending in the perfective stem-final *e* or *ɛ*, the choice based on ATR value of the rest of the stem.

ATR Harmony is also central to the variation between *=rēʔ* and *=rɛ̄ʔ* variants of the all-purpose clause-final negative enclitic (§10.2), and that between *=ē* and *=ɛ̄* variants of the ‘it is’ enclitic (§12.2.1.1). It has no effect on the nominal suffix *‑rà* (and variants), progressive suffix *‑yá*, or other suffixes not involving mid-height vowels.

The two ATR-harmonizing enclitics mentioned bring out the covert ATR value of high and low vowels. The full set of vowels in each harmonic class are these:

(xx1) -ATR {*ɛ ɔ a*}

+ATR {*e o i u*}

For example, the negative enclitic takes the form *=rɛ̄ʔ* after a syllable containing the low vowel *a* (xx2a) as well as one containing overtly ‑ATR {*ɛ ɔ*} or, and it takes the form *=rēʔ* after a syllable containing a high vowel {*i u*} (xx2b) as well as one containing overtly +ATR {*e o*}. See §10.2 for more examples.

(xx2) a. *è sá ꜜsáá=rɛ̄ʔ* ‘It will (not) come.’

b. *é kìí=nēʔ* ‘It did not fly’

*bí=í gùⁿ=nēʔ* ‘(don’t shorten it!’

The ATR‑harmonic class of a verb is usually not constant. ‑ATR vocalism is shifted to +ATR, optionally before the negative enclitic (which then itself adjusts to the new ATR value of the stem), and obligatorily in the progressive verb form (§10.1.2.3, §10.3.2.4).

(xx3) imperative perfective imperfective progressive gloss

a. +ATR in progressive only

*dɛ̌ dɛ̀ɛ́ dɛ̀ɛ̀ dè-yá* ‘heat (sb)’

*mɔ̀ɔ́ mɔ̀ɛ́ mɔ̀ɔ̀ mó-yā* ‘rub’

In addition, there are a few verbs that shift from +ATR in the perfective and imperative to ‑ATR in the imperfective stem (§10.1.2.3).

(xx4) imperative perfective imperfective gloss

a. shift to ‑ATR in imperfective

*wě wěē wɛ̀ɛ̀* ‘bathe (sb)’

*dàkó dàkóī dàkɔ̂* ‘catch (sth thrown)’

Given that *i* and e are +ATR, while *a* is ‑ATR, the recurrent opposition within third person pronouns between nonhuman *e* ~ *i* and human *a* can be thought of as a kind of sound symbolism: +ATR = nonhuman and ‑ATR = human. In reflexive possessor pronouns, this is expanded by including second person pronouns in the +ATR group and first person pronouns in the ‑ATR group (§18.1.xxx).

### *e/i* alternation

Alternations between *e* and *i* (both +ATR) occur primarily in pronouns. The e variant occurs in isolation and clause-initially, while the i variant is typical of contractions with the final vowel of the preceding word. The most important affected pronouns are these:

(xx1) a. *è* nonhuman 3Sg

b. *èèⁿ* nonhuman 3Pl

c. *ēēⁿ* 2Pl

d. *ē* 2Sg (in some contexts, e.g. reflexive)

The most transparent instances of shift from *e* to *i* occurs when the pronominal immediately follows future *sà*, either as object or as possessor of object. The 2Pl morpheme escapes contraction as regular object but not as pseudo-reflexive object.

(xx2) Future plus preverbal object

a. *sí=ì* nonhuman 3Sg

b. *sí=ìⁿ* nonhuman 3Pl

c. *sà ééⁿ* 2Pl (object)

*sì=ìⁿ* pseudo-reflexive

d. *sì=ì* 2Sg (pseudo-reflexive)

Somewhat similar contractions occur in two-clause adjunction constructions, see §15.2.1.3 below.

The verb ‘go’ (perfective *tɛ̀ʔɛ́* ~ *tɛ́ʔɛ́*, imperfective *táʔá* ) has a variant form *tíʔí* as first verb in a two-clause adjunction construction, i.e. a construction where the first verb usually contracts with the following pronominal second subject. It is likely that this originated in combinations where the verb was followed by an *e*‑initial pronoun, most often nonhuman 3Sg *è*, which becomes *i* in contractions. The *i*-vowel idiosyncratically spread leftward to the first syllable of ‘go’.

(xx1) a. *[jɛ̀r-rá=∅ tíʔ=] [í bǎl dāà]*

[lion-Nom=Ipfv go.Pfv] [3SgNonh stand.Adjn mouth]

‘The lion went and stopped at the edge (of the hole).’ (2016\_02 @ 02:40)

b. *[è tíʔ=] [í bàà fō→* —*]*

[3SgNonh go.Pfv] [3SgNonh put.down.Ipfv until —]

‘It went and put it down all the way to—’ (2016\_01 @ 03:31)

## Verb-stem ablaut

Each regular verb occurs in a number of TAM inflections. These are distinguished from each other partly by inflectional morphemes that follow the subject NP, and partly by verb-stem alternations.

As explained in §10.1.2, the imperfective stem has the most lexically specific information (vocalism, tone), and I generally use it as a citation form. The perfective is characterized by a final front vowel {*i e ɛ*}, which can be analysed either as a suffix or as a final-vowel (and in some cases stem-wide) vowel mutation. Perfectives with mid-height *e* or *ɛ* form one subset of perfectives, the choice between the two depending on ATR‑harmonic class (xx1a); those with *i* are a second subset (xx1b).

(xx1) imperfective perfective +3Sg gloss

a. *ɲìnâ ɲìnɛ́* ‘forget’

*wàá wěē* ‘go’

*dàʔà dɛ̀ʔɛ́(ɛ̄)* ‘escape’

b. *búlɔ́ bùlí* ‘go back’

*díbɛ́ dìbí* ‘be extinguished’

## Segmental phonological rules

### Processes affecting consonants

#### *r*-Nasalization (/nr/ → *nn*, /Nv-r/ → *Nv-n*)

A suffix- or enclitic-initial tap *r* is nasalized to *n* following a nasal consonant or a nasal syllable. The latter is defined as *Nv(v)* or *Cv(v)ⁿ*, i.e. either a syllable beginning with a nasal consonant or containing a nasalized vowel.

*r*-Nasalization applies to nominal suffix *‑ra* ~ *‑rɔ* (tone variable) and to negative enclitic *=re* ~ *=rɛ*.

(xx1) a. *kàr-mūʔūⁿ* ‘holy man’, with nominal suffix *kàr-mūʔūⁿ=nā*

b. *ɲáā-nà=∅* ‘it’s a woman’, negated as *ɲáā-nà=∅=nɛ̄*

A counterexample is provided by cases like the noun *cɛ́ŋgɔ̀* ~ *cɛ́ŋŋɔ̀* ‘middle’, where *ŋg* is in the process of simplifying to *ŋ* via *ŋŋ*. In principle, *r*-Nasalization of the nominal suffix should apply after variant *cɛ́ŋŋɔ̀* but not after variant *cɛ́ŋgɔ̀*, whose oral stop *g* prevents nasalization from spreading rightward. However, the actual forms are *cɛ́ŋgɔ̀‑rɔ̀* ~ *cɛ́ŋŋɔ̀‑rɔ̀* without nasalization of the suffix (§8.3.xxx).

#### *r*‑Lateralization (/lr/ → *ll* )

Tap *r* assimilates to an immediately preceding *l*, resulting in a geminated *ll*. As with *r*‑Nasalization (preceding section), this process affects nominal suffix *‑ra* ~ *‑rɔ* and negative enclitic *=re* ~ *=rɛ*.

*r*‑Lateralization can be fed by Apocope in the sense of stem-final short-vowel deletion before a consonant. This is the case with the basic nominal suffix *-rà* (and variants). When the preceding stem ends in a vowel, the suffixal consonant is always *r* (or nasalized *n*). When the stem-final vowel is apocopated, an /lr/ cluster may be created, and this shifts to *ll*. For example, *sìⁿyélé* ‘charcoal’ has an apocopated suffixed form *sìⁿyél-là*, evidently from /sìⁿyélé‑rà/ via apocopated /sìⁿyél‑rà/. See, however, the following section.

#### *r*-Deletion (/lr/→ *l* )

There are also some nouns ending in *lv* (*v* = any short vowel) after which the nominal suffix has the form *‑a* ~ *‑ɔ* (tone depends on noun stem) without the suffixal *r* or assimilated second l. The simplest phonological analysis is that /lvr/ apocopates to /lr/ and the *r* is then deleted instead of assimilating to the lateral. An alternative is a two-step derivation with assimilation to /ll/ followed by degemination to *l*.

#### Deletion of intervocalic sonorants before diminutive *-lī*

Though not a productive process, there are a number of cases where a final syllable from the set {*lv nv rv*}, i.e. an alveolar sonorant plus any short vowel, loses the sonorant before diminutive suffix *‑lī* or variant. The resulting vowel cluster contracts. An example is *kàʔrà* ‘unmarried woman’, diminutive *kàà‑lì* ‘young girl’. There are additional minor phonological idiosyncracies of these diminutives; see §4.2.1 for examples and discussion.

### Processes affecting vowels

#### *vv*‑Contraction

Two vowels come together, within a word or at a boundary, in several contexts. Word-internally, and frequently at boundaries, two vowels contract.

Word-internally, the clearest case is plural suffix *-àⁿ*, which is added to the nominal suffix. The latter has variants *‑rà*, *‑rá*, *‑nà*, and *‑ná*, the choice depending on the tones and nasality of the stem. If the final stem-syllable has a back rounded vowel, there are additional free variants with *ɔ* instead of *a*. All of these variants combine with plural *-àⁿ* to result in *‑rà‑àⁿ*, *‑rá‑àⁿ*, *‑nà‑àⁿ*, *‑ná‑àⁿ* or, with rounded vowel, *‑rɔ̀‑ɔ̀ⁿ*, *‑rɔ́‑ɔ̀ⁿ*, *‑nɔ̀‑ɔ̀ⁿ*, *‑nɔ́‑ɔ̀ⁿ*. Since the rounded variants are optional, one can’t be sure whether /ɔa/ always, or just optionally, becomes *ɔɔ* as opposed to *aa*.

The word-boundary (including enclitic-boundary) examples involve words ending in a vowel (i.e. essentially any word, before apocope) followed by one of the vowel-initial pronouns, in any grammatical function (object, possessor, complement of postposition). The relevant pronouns are those in (xx1), omitting some tonal variants.

(xx1) a. reflexive possessor only

1Sg *āⁿ*

1Pl *āāⁿ*

2Sg *ē*

b. multiple functions

2Pl *ēēⁿ*

3SgHum *à* except object (*ná* )

3SgNonh *è* except object (*ní* )

3PlHum *ààⁿ* except object (*náàⁿ* )

3PlNonh *èèⁿ* except object (*níìⁿ* )

Since there are only two vowel qualities in the second vowel of the contracting *vv* sequence, we cannot determine the outputs for all possible combinations.

In general, the vowel quality of the second contracting vowel, i.e. the vowel of the pronoun, survives in the resulting long contracted vowel. However, as second vowel, *e* is usually treated like *i*. Therefore the usual contracted vowels are *aa* and *ii*. The tones of the inputs are usually preserved.

One of the most common first elements is future particle *sà*, which can precede object pronouns. It combines with the elements in (xx1b) above as shown in (xx2). Combinations with third person object pronouns are based on H‑toned variant *sá*.

(xx2) a. 2Pl *sà* + *ēēⁿ* → *sè=èⁿ*

b. 3SgHum *sà* + *à* → *sá=à*

3SgNonh *sà* + *è* → *sí=ì*

3PlHum *sà* + *àⁿ* → *sá=à(à)ⁿ*

3PlNonh *sà* + *èèⁿ* → *sí=ì(ì)ⁿ*

A wider range of first vowels can be garnered from combinations of verbs with postverbal objects or postpositional complements. Vowel qualities attested in *Cv* verbs are {*ɔ ɛ e a*} (including nasalized *aⁿ* ). All seven vowel qualities are attested as final short vowels in nonmonosyllabic verbs. There is some variation in contractions depending on speech style, but representative results are in (xx3).

(xx3) verb +3SgHum *à* +3SgNonh *è* gloss

a. monosyllabic verb

*kpāⁿ kpāⁿ=àⁿ kpēⁿ=èⁿ* ‘die’ (imperfective)

*sɔ̄* *sɔ̄=ɔ̀* *sō=ò* ‘enter’ (imperfective)

*bɛ̌ bá=à* *bé=è* ‘fall’ (perfective)

*sɛ̌ sá=à* *sé=è* ‘come/bring’ (perfective)

*wě wɛ́=ɛ̀* *wé=è* ‘bathe’ (imperative)

b. nonmonosyllabic verb

*tìgɛ̀* *tìg=ɛ̀* *tìg=ì* ‘pound’ (imperfective)

*ɲìnɛ́* *ɲín=ɛ̀* *ɲín=ì* ‘forget’ (perfective)

*bēlē* *bēl=ɛ̀* *bēl=è* ‘pass’ (imperative)

*tìgí* *tìg=ɛ̂ tìg=î* ‘pound’ (imperative)

*bùgú* *bùg=ɔ̂* *bùg=ô* ‘butcher’ (imperative)

*būlɔ̄* *būl=ɔ̀* *būl=ò* ‘return’ (imperfective)

*dàkó* *dàk=ɔ̂ dàk=ô* ‘catch’ (imperative)

Usually the result is a contracted long vowel in the monosyllabic cases (xx3a) and a contracted short vowel in the longer stems (xx3b). The distinction between *a* (as in human 3Sg *à*) and *e/i* (as in nonhuman 3Sg *è/ì* ) as second vowel is maintained in the contraction as that between ‑ATR {*ɛ ɔ*} and either +ATR {*e* *o*} or high vowel i.

There are also some tonal elements in the contractions. *Cv̌* combines with *v̀* as *Cv́=v̀* rather than *Cv̌=v̀*, i.e. <LHL> reduces to <HL> in monosyllabic contractions, see ‘come/bring’ and ‘bathe’ in (xx3a) above. Intransitive *Cv̀Cv́*, as in ‘forget’ (which takes a postverbal PP complement) in (xx3b), becomes *Cv́C=v̀*.

For *Caʔa* and *Cɛʔɛ* verb stems, as with imperfective/perfective forms of *tāʔā* ‘go’ and *dàʔà* ‘receive’, the contracted vowel quality extends to the first syllable (a kind of imbrication), suggesting that such stems are treated (in this context) as having a single vowel quality. The human/nonhuman distinction is then expressed by *Caʔa* or *Cɛʔɛ* versus *Ceʔe* (xx4).

(xx4) verb +3SgHum *à* +3SgNonh *è* gloss

*tāʔā táʔ=à* *téʔ=è* ‘go’ (imperfective)

*tɛ̀ʔɛ́ tɛ́ʔ=ɛ̀ téʔ=è* ‘go’ (perfective)

In verbs whose full stem shape is trisyllabic *CvCvnv*, the truncated imperative is *CvCvⁿ* or for some stems denasalized CvCv (§3.6.2.5). In either case, the *n* reappears when a vowel-initial form is encliticized (§3.6.3.1). This happens when a vowel-initial third-person pronominal PP follows the imperative verb. The reappearance of n blocks *vv*‑Contraction. This is the case with imperatives of *jàʔánà* ‘descend’ and *sìdánà* ‘ascend’ (xx5).

(xx5) verb +3SgHum *à* +3SgNonh *è* gloss

*jàʔáⁿ jàʔàn=á jàʔàn=í* ‘descend’ (imperative)

*sìdáⁿ sìdàn=á sìdàn=í* ‘ascend’ (imperative)

The encliticized vowel in *jàʔàn=á* and other forms in (xx5) is H‑toned in all examples. This can be attributed either to word-internal tone sandhi, or to Final Tone-Raising, since in all relevant examples the 3Sg morpheme is immediately followed by a postposition or possessed noun which has the initial L‑tone required by a preceding +3Sg word (xx6).

(xx6) *jàʔàn= [í/á dɛ̀]*

descend.Imprt [3SgNonh/3SgHum with]

‘Go down with it/with him-or-her!’

#### Syncope or epenthesis?

Short high vowel *i* appears in extra-short (clipped) and centralized form in the contexts *C\_rv* and *C\_lv* (v = any vowel). For example, *dí* ‘child’ combines with the nominal suffix as *dí‑rá*, which is heard as [də́ɾá] with a clipped schwa-like vowel.

Where the *C\_rv* or *C\_lv* sequence is internal to a stem, reanalysis as *Crv* or *Clv* may be in progress. This seems to be the case with the numeral *flā* ‘2’ and the second word in *fóʔó glān* ‘flour from roasted millet grains’, among other examples. A brief schwa is sometimes heard, as in [fə̄lā]. One could argue that it is epenthetic, but in syllable-by-syllable pronunciation my assistant sometimes syllabifies as *fī.lā*.

A similar example is *fìlí* ~ *fílí* ‘threw’ (perfective). In the first tonal variant, which follows a 3Sg object, the first vowel is reduced to a clipped schwa but nonetheless bears the initial L‑tone, so one hears [fə̀lí]. If reanalysis as /fli/ plus LH tone had occurred, one would expect phonetic [flǐ] with the pitch rise concentrated on the final vowel. In the monotonal variant *fílí*, which follows a -3Sg object, there is no clear schwa: [flí].

#### Apocope

Stem- and word-final short vowels, especially but not exclusively {*i* *u*}, are deleted under some conditions. In general, Apocope occurs when the relevant word is phrased with a following word, rather than prepausally (or in isolation). In cases where a word that can occur prepausally with the final vowel preserved loses this vowel at lest optionally before any following element beginning with *Cv* (suffix, enclitic, or word), I refer to the final-vowel deletion as Apocope. I reserve Syncope for vowel-deletion not involving stem- or word-final position (preceding section). However, there is little practical difference between Apocope and Syncope in this language.

Singular nouns and adjectives occur in two basic forms, one with word-final nominal suffix *-rà* or variant (obligatory prepausally, before the imperfective enclitic, and in perfectives before some third person object pronouns), the other without (always phrased with a following word). My three elicitation frames for singular nouns, designed to bring out lexical tones and segments, involve a) the suffixed form (prepausal) showing the nominal suffix, b) the form before numeral *flā* ‘two’, and c) the form as direct object before a verb beginning with L‑tone (*jìɛ́* ‘saw’ with a ‑3Sg subject such as 1Sg). The second environment flattens an HM noun to HH. The third environment is favorable to Final Tone-Raising, which is not immediately relevant here. In general, the best choice for lexical representation of segments and tones is the third environment after undoing Final Tone-Raising.

The data in (xx1a‑c) and abundant other data not presented here show that the stem-final vowel is never apocopated after an obstruent, glottal stop, or cluster. Unit phoneme *ʔr* is not a cluster and does allow Apocope (xx1d), most obviously with ‘mango’ but also in the suffixed form of ‘soil’ (< /bɔ́ʔrɔ́-rɔ́/ by Apocope and *r*‑Deletion).

(xx1) suffixed ‘two \_\_s’ ‘(I) saw \_\_’ gloss

a. medial obstruent

*fūgū-rā fūgū fūgú* ‘hill, mountain’

*sìbì-rá sìbì sìbí* ‘meat’

b. medial glottal

*mìʔì-ná mìʔìⁿ mìʔíⁿ* ‘person’ (~ *mɛ̀ʔɛ̀ⁿ* )

c. medial cluster

*fúrnó-rà fúrnó fúrnó* ‘burner’

d. *ʔr* is not a cluster

*máʔr̀-rá máʔr̀ máʔr̀* ~ *máʔrù* ‘mango’

*bɔ́ʔr-ɔ́ bɔ́ʔrɔ́ bɔ́ʔrɔ́* ‘soil’

In *CvLv* stems with medial sonorant L, some stems do not apocopate in any position (xx2a‑c). It is difficult to determine whether Apocope has applied with *Cvyi* and *Cvwu* stems, with homorganic semivowel and short vowel (xx2d). (xx2) has all relevant *CvCv* stems in my working lexicon (excluding flora-fauna) after the first month of fieldwork.

(xx2) suffixed ‘two \_\_s’ ‘(I) saw \_\_’ gloss

a. medial nasal

*n*

*dínɛ̄-nà dínɛ́ dínɛ̄* ‘religion, Islam’

*dòŋò-ná dòŋò dòŋó* ‘termitary’

*dùnú-nɔ̀ dùnú dùnú* ‘cylindrical tomtom’

*jɛ́nɛ́-nà jɛ́nɛ́ jɛ́nɛ́* ‘shed, stall’

*jínā-nà jíná jínā* ‘devil, djinn’

*kúnɔ̄-nà kúnɔ́ kúnɔ̄* ‘wooden bowl’

*níní-nà níní níní* ‘tongue’

*nɔ̄nɔ́-nɔ̀ nɔ̄nɔ́ nɔ̄nɔ́* ‘milk’

*sɔ́nɔ̄-nɔ̀ sɔ́nɔ́ sɔ́nɔ̄* ‘maize’

~ *sɔ᷆n-nɔ̀*

*ŋ*

*bíŋí-nà bíŋí bíŋí* ‘granary’

*cɛ́ŋɔ̀-rɔ̀ cɛ́ŋɔ̀ cɛ́ŋɔ̀* ‘middle’

*kàŋá-nà kàŋá kàŋá* ‘froth, foam’

*kpàŋà-ná kpàŋà kpàŋá* ‘soap’

*kpēŋū-nɔ̄ kpēŋū kpēŋú* ‘dike’

*lòŋá-nà lòŋá lòŋá* ‘hourglass tomtom’

*nɔ̀ŋɔ̀-nɔ́ nɔ̀ŋɔ̀ nɔ̀ŋɔ́* ‘friend’ or ‘side’

*tɔ̀ŋɔ̀-nɔ́ tɔ̀ŋɔ̀ tɔ̀ŋɔ́* ‘cauldron’

*m*

*bòmò-rá bòmò bòmó* ‘stomach’

*jàmù-nà jàmù jàmú* ‘surname’

*jèmé-nà jèmé jèmé* ‘tall basket’

*jɔ̄mɛ́-nà jɔ̄mɛ́ jɔ̄mɛ́* ‘bag’

*làmó-rà làmó làmó* ‘tax’ (< Fr. *l’impôt*)

*sɔ̀mɛ́-nà sɔ̀mɛ́ sɔ̀mɛ́* ‘marrow’

*tàmà-ná tàmà tàmá* ‘spear’

b. medial semivowel

*síyá-rà síyá síyá* ‘type, sort’

c. medial liquid

*l*

*fílā-rà fílā fílá* ‘Pullo, Fulbe person’

*mèlɔ́-nɔ̀ mèlɔ́ⁿ mèlɔ́ⁿ* ‘watermelon’

*yūlō-nā yūlōⁿ yūlōⁿ* ‘couscous steamer’

*r*

*gbírī-nà gbíríⁿ gbírīⁿ* ‘wilderness’

d. doubtful cases (homorganic *yi*, *wu*)

*yi*

*ɲàyí-rà ɲàyí ɲàyí* ‘tears (n)’

*sɔ́yí-ná sɔ́yíⁿ sɔ́yíⁿ* ‘strap’

*gɔ̀yì-rá gɔ̀yì gɔ̀yí* ‘gravel’

*kɔ̄yī-rā kɔ̄yī kɔ̄yí* ‘belly’

*wu*

*cíⁿwù-rɔ́ cíⁿwù cíⁿwù* ‘low termitary’

In *bòmò-rá* ‘stomach’ and *làmó-rà* ‘tax’ in (xx2a), the failure of suffixal *r* to nasalize suggests recently departed pronunciations with medial nasal-stop cluster, which in the case of ‘tax’ is consistent with the foreign source.

Apocope does, however, often occur in one or more forms of many other *CvLv* stems. In those cases where the stem takes the form *CvL(v)* in unsuffixed contexts but bisyllabic *CvL‑a/ɔ* or *CvL‑La/ɔ* in the suffixed form, rather than trisyllabic *CvLv‑ra/ɔ*, Apocope has evidently applied in the suffixed form, i.e. /CvLv‑ra/ → /CvL‑ra/ followed by adjustments to /Lr/ (e.g. /lr/→ *ll* by *r*‑Laterialization or → *l* by *r*‑Deletion). In this analysis, the choice between ungeminated *CvL‑a/ɔ* and geminated *CvL‑La/ɔ* is a matter of *CC*-cluster processes, and Apocope can be assumed to have applied in either case.

(xx3) suffixed ‘two \_\_s’ ‘(I) saw \_\_’ gloss

a. medial *l*

*Apocope before ‘two’, /l-r/ cluster realized as l*

*bɛ́l-á bɛ́lɛ́* ~ *bél bɛ́lɛ́* ‘medication’

*cál-à cél cálā* ‘road’

*jùl-ɔ́ jùl jùlɔ́* ‘leaf’

*kɔ́l-ɔ́ kɔ́l kɔ́lɔ́* ‘hill, mountain’

*kpɔ̀l-ɔ́ kpɔ̀l kpɔ̀lɔ́* ‘skin’

*sɔ̀l-ɔ́ sɔ̀l sɔ̀lɔ́* ‘gear’

*tál-á tál tálá* ‘sun’

*tɔ́l-ɔ̀ tól tɔ́lɔ̄* ‘ear’

*wàl-á wàlà wàlá* ‘urine’

*wál-à wál* ~ *wálá wálā* ‘noise’ or ‘shout’

*wùl-á wùl wùlá* ‘dog’

*yál-á yál yálá* ‘egg’ or ‘bone’

*yál-à yál yálā* ‘hole’

*Apocope before ‘two’, /l-r/ cluster realized as ll*

*búl-lá búl búlú* ‘grub’

*dál-lá dál dálí* ‘grub’

*jél-lá jél jélé* ‘grub’

*kél-lá kél kélé* ‘courtyard’

*ɲi᷆l-là ɲíl ɲílī* ‘eyes’

*pɛ᷆l-là pɛ́l pɛ́lɛ̄* ‘chili pepper’

*súl-lá súl súlú* ‘shade’

*túl-lá túl túlú* ‘metal’

*wál-lá wál wálí* ‘work (n)’

*no Apocope before ‘two’,* /l-r/ *realized as l*

*bál-áⁿ báláⁿ báláⁿ* ‘balafon (xylophone)’

*kál-á kálá kálá* ‘home’

*no Apocope before ‘two’,* /l-r/ *cluster realized as ll*

*bàl-láⁿ bàlàⁿ bàláⁿ* ‘Senoufo person’

~ *bàl-ná*

*tél-lá télé télé* ‘oil’

*wèl-lá wèlè wèlé* ‘scales; bark’

*ye᷆l-là yélé yélē* ‘thorn’

b. medial *n*

*Apocope before ‘two’, /n-r/ cluster realized as nn*

*sán̄-nà sán sánū* ‘gold’

*tàn-ná tàn tàná* ‘totem’

*no Apocope before ‘two’, /n-r/ cluster realized as nn*

*kpɛ́n-ná kpɛ́nɛ́ kpɛ́nɛ́* ‘courtyard’

*kún-ná kúnú kúnú* ‘village’

*mùn-ná mùnù mùnú* ‘rice (crop)’

c. medial *m*

*no Apocope before ‘two’*

*nɔ́m̄-nà nɔ́m nɔ́mī* ‘skullcap’

d. medial *r*

*Apocope before ‘two’*

*sér̄-rà sér sérī* ~ *sér̄* ‘prayer’

*wár̄-rà wár wárī* ‘money’

*no Apocope before ‘two’*

*màr-rá màrà màrá* ‘chronic malaria’

*sár̄-rà sárá sárrā* ‘tobacco’

*wór̄-rà wóró wórō* ‘kola nut’

e. medial *ʔr*

*Apocope before ‘two’ and sometimes ‘see',* /ʔr-r/ *realized as ʔrr*

*fáʔr-à fáʔŕ fáʔrā* ‘cave’

*kàʔr-á kàʔr̀ kàʔrá* ‘unmarried woman’

*máʔr̀-rá máʔr̀ máʔr̀* ‘mango’ (variant)

~ *máʔrù* ~ *máʔrù*

*sɛ̀ʔr-á sɛ̀ʔr̀ sɛ̀ʔrɛ́* ‘porridge woman’

*no Apocope before ‘two’,* /ʔr-r/ *realized as ʔr*

*wɔ́ʔr-ɔ́ wɔ́ʔrɔ́ wɔ́ʔrɔ́* ‘thigh’

*bɛ́ʔr-à bɛ́ʔrɛ̄ bɛ́ʔrɛ́* ‘yam’

*kóʔn̄-nà kóʔró kóʔrō* ‘night’ (suffixed form implies /kóʔróⁿ/)

*bàʔr-á bàʔrà bàʔrá* ‘calabash tomtom’

A small number of *CvL* stems appear not to have a lexical final vowel, even in object function. Unless further study brings out a vowel-final object form, these nouns do not require synchronic Apocope.

(xx4) suffixed ‘two \_\_s’ ‘(I) saw \_\_’ gloss

*jén-ná jén jén* ‘ax’

*bu᷆l-là búl bu᷆l* ‘inheritance’

*sɔ᷆l-là sɔ᷆l sɔ᷆l* ‘weeding daba’

*kɔ᷆l-là kɔ᷆l kɔ᷆l* ‘cotton (crop)’

*tòn-ɔ́ tòn tǒn* ‘heap’

#### Monophthongization

Monophthongization as a synchronic process applies primarily to words of the monosyllabic diphthongal shape *Cɔɛ*. These are perfective verb stems like *bɔ̀ɛ́* ‘exited’, when they are followed by a negative enclitic. The result in this case is *bɔ̀ɔ̀=rɛ̄ʔ* ‘did not exit’, or *bòò=rēʔ* with optional shift to +ATR vocalism.

Exactly how to formulate Monophthongization is not transparent. One obvious possibility is to take the bivocalic form *bɔ̀ɛ́* as input and simply spread the features back and rounded from the first mora into the second. An alternative is to argue that the final *ɛ* is clipped, and the resulting /bɔ̀/ is then lengthened. A possible argument in favor of the clipping analysis is that the H‑tone on *ɛ́* in *bɔ̀ɛ́* is also absent from the negative form. One might then compare ‘exit’ with other verbs (xx1).

(xx1) positive negative gloss

a. *à bɔ̀ɛ́ à bɔ̀ɔ̀=rɛ̄ʔ* ‘he/she did (not) exit’

b. *é kǐīⁿ é kìí=nēʔ* ‘it did (not) fly’

c. *è gǔⁿ bí=í gù=nēʔ* ‘(don’t) shorten it!’

One could argue that the final moras of ‘exit’ (xx1a) and ‘fly’ (xx1b), along with their tones, are clipped before the negative clitic, leaving /bɔ̀/ and /kǐ/, and that these are lengthened to *bɔ̀ɔ̀* and *kìí*. Since *é kìí=nēʔ* demonstrates that a *Cv̀v́* form is possible on the surface before the negative clitic, it is not obvious why *bɔ̀ɛ́* would have to drop its final H‑tone, unless this were part of a clipping process. On the other hand, (xx1c) shows that a monomoraic *Cv̀* form is allowable before the negative morpheme, so the motivation for a lengthening process in (xx1a‑b) is unclear.

#### Denasalization of final vowel in imperatives

Imperfective/imperative alternations of the type imperfective *dɔ̀nɔ̀*, imperative *dɔ̀ⁿ* ‘chew’ were mentioned in §3.2.2 above and are covered in §3.6.3.1 below. In some (*Cv)CvNv* stems, the expected nasalization of the final vowel in the imperative is absent. The likely diachronic sequence was imperative \*(Cv)Cvn → (Cv)Cvⁿ (loss of final \*n with subphonemic vocalic nasalization then becoming phonemic) → *(Cv)Cv* (loss of vocalic nasalization). All relevant stems underwent the first shift (loss of \*n) but only some have (so far) undergone the second shift.

(xx1) Pfv +3Sg Ipfv +3Sg Imprt +3Sg gloss

*kòní kònò kǒ* ‘enlarge’

*sɛ̀bɛ́ sɛ̀bɛ́nà sɛ̀bɛ́* ‘write’ (< Jula)

*làʔàní làʔànàà làʔá* ‘lift with effort’

*sìdàní sìdànà sìdá* ‘burn’

*kùlɔ́nì kùlɔ́nɔ̀ kùlɔ́* ‘tie’

*gìlénī gìlénà gìlé* ‘hang up’

There is apparently some inter-informant variation in which stems are affected. It is not clear whether there is any predictor (phonological or morphological) for which stems denasalize and which don’t. Comparison of imperative *sìdá* ‘burn’ above with imperative *sìdáⁿ* ‘ascend!’ (imperfective *sìdánà* ) should dispel any thoughts of a phonological predictor. Truong’s lexical notes include *sìtàⁿ* ‘burn’ and *láʔāⁿ* ‘raise’ (cf. ‘lift with effort’ above), but it is not clear whether he meant these as abstract underlying representations or as surface forms.

As shown in §3.6.3.1 below, the word-final \*n that was lost in these imperatives reappears when a vowel-initial pronominal is encliticized. This prevents *vv*‑Contraction from applying.

### Processes affecting vowels and consonants

#### Final Truncation in imperative verbs

Imperative and imperfective forms of verbs are generally closely related, but the ending of the imperative stem is shorter than than of the imperfective. A vowel or an entire syllable at the end of the imperfective is absent from the imperative.

There are two analytical options: a) the imperfective adds a suffix to the basic stem, which is identical or similar to the imperative; b) the imperative undergoes final truncation. Some examples are in (xx1). Further data are in chapter 10.

(xx1) Ipfv (3Sg) Imprt (Sg) gloss

a. long versus short vowel

*dɛ̀ɛ̀ dɛ̌* ‘heat (sth)’

*bɔ̄ɔ̄ bɔ̄* ‘exit, go out’

*bàà bǎ* ‘put down’

*kpààⁿ kpǎⁿ* ‘kill’

*nɛ̀nɛ́ɛ̀ nɛ̀nɛ́* ‘taste (sth)’

*dòʔòyáà dòʔòyá* ‘shrink (sth)’

b. final *Nv* versus zero

*kònò kǒ* ‘expand (sth)’

*bɛ̀nà bɛ̌ⁿ* ‘draw water’

*kànà kǎⁿ* ‘ruin (sth)’

*gbàʔàlánà gbàʔàlá* ‘become thin; dry off’

c. final high vowel

*jìɛ̀ jǐ* ‘see; get’

*bàlà bàlì* ‘accept, consent’

*tùwɔ̂ⁿ tǔⁿ* ‘apply hide covering’

*bìlɛ̀ bìlí* ‘give’

The examples in (xx1a) involve a final long vowel in the imperfective corresponding to a short vowel in the imperative. One could derive either from the other, by a lengthening or a shortening rule.

In (xx1b), at first sight it looks impossible to derive the imperfective from the imperative, since there is no correlation of final nasalized vowel in the imperative with the final *nv* syllable in the imperfective; note also ‘kill’ in (xx1a) and ‘apply hide covering’ in (xx1c). However, the imperatives in (xx1b), including those like ‘expand (sth)’ that otherwise end in an oral vowel, “grow” a final *n* when phrased with a following enclicized vowel-initial pronominal (xx2a). This does not happen with the lexical nasalized vowels in ‘kill’ or ‘apply hide covering’ (xx2b‑c).

(xx2) a. *sàá kòn= [á kɛ̀ⁿ]*

house enlarge.Imprt [3SgHum for]

‘Expand-2Sg the house for him/her!’ (*sàà* ; /kǒn à/ ?)

b. *klāá kpàⁿ [á kɛ̀ⁿ]*

mouse kill.Imprt [3SgHum for]

‘Kill-2Sg the mouse for him/her!’

c. *è tùⁿ [á kɛ̀ⁿ]*

3SgNonh apply.hide.Imprt [3SgHum for]

‘Cover-2Sg it with hide for him/her!’

One option is to argue that the *n* is the final underlying segment of the imperative, which is probably etymologically correct, see §3.6.2.5 above. In this case, one could simply add a final vowel to the imperative to produce the imperfective. However, it is not clear how the final vowel quality of the imperfective could be predicted from the vocalism of the imperative, either in (xx1b) or (xx1c) above. Furthermore, an alternative analysis of *kòn á* in (xx2a) above is to transcribe *kò=ná*, treating the *n* as added to the encliticized 3Sg pronoun by *n*‑Epenthesis §3.6.3.2.

I therefore opt for a subtractive derivation of the imperative from the imperfective. The key is to delete the final vocalic mora (short vowel, or lengthening of a long vowel); this can be followed by Final *n*-Deletion and any other indicated processes affecting consonants that have become word-final.

#### *n*-Epenthesis

Third-person object pronouns begin with *n* when directly preceded by a subject pronoun. The *n* is not found in other forms of the same pronouns (subject, possessor), and does not occur in object pronouns following nonpronominal subjects, or in clause-initial position (imperatives). Typical forms (omitting some tonal variants) are in (xx1).

(xx1) category subject etc. object after pronominal subject

3SgHum *à ná*

3SgNonh *è ní*

3PlHum *ààⁿ náàⁿ*

3PlNonh *èèⁿ níìⁿ*

The addition of *n* is accompanied by a shift in vowel quality from *e* to *i* in the nonhuman forms. The same shift occurs after future *sà* (§10.2.2.xxx), resulting in 3SgNonh *sí=ì* and 3PlNonh *sí=ììⁿ*.

Since the additional *n* occurs chiefly in pronoun-pronoun combinations, it could be thought of as a linker between pronominal subjects and objects (§3.7.3). For example, 2Sg→3SgHumObj could be transcribed *wō-n-í* rather than as *wō ní*. The latter is the transcription I generally use.

For the possibility that *n*‑Epenthesis is at work in imperatives followed by vowel-initial pronominal PPs, see the preceding section.

## Clitics and linkers

### Proclisis and enclisis of pronominals

I refer loosely to the most common pronominal forms, for example 1Sg *mā*, human 3Sg *à*, and nonhuman 3Pl *èèⁿ*, as “proclitics.” However, there is a mismatch between syntax and phonology in this respect. Consider a construction of the type (xx1), typical of clause-adjunctions.

(xx1) [Pron1 Vb1] [Pron2 Vb2]

Syntactically and semantically, each pronoun functions as subject of its clause and it is bracketed with the following verb as shown. This bracketing is also reflected tonally, in that the category of the pronoun (+3Sg versus ‑3Sg) has a tonal effect on at least the onset of the verb (and sometimes the entire verb).

However, the segmental phonology favors enclisis (in the form of *vv*‑contraction) of Pron2 to Vb1, across the syntactic brackets. Disregarding the syntactic brackets, the result is (xx2), where = indicates enclisis (contraction).

(xx2) Pron1 Vb1=Pron2 Vb2

This segmental enclisis occurs in all combinations of the type …X [Pron Y], where X is any word within the same intonation group, and Y is more or less anything (verb, VO, postposition, possessum, discourse particle).

If we include a floating tone T associated with the pronoun that docks on the following word, we can formalize the input-output relationship as (xx3).

(xx3) input: …X] [Pron+T Y…

output: …X=Pron TY…

An example is (xx5), where the relevant words are shown in underlying form under their surface outputs. The floating LH‑tones (in one analysis) associated with human 3Sg *à* are realized on the possessed noun to its right. However, /à/ itself contracts with /wèé/ to produce [wɛ̀ɛ́].

(xx4) *mā ní wɛ̀ɛ́ [[∅ sàá] mà]*

wèé [[à+LH sàà

1Sg 3SgNonh go.Pfv [[3SgHum house] on]

‘I went to his/her house.

This type of phonological enclisis is noticeable only when the pronominal in question begins with a vowel, permitting vv‑Contraction with the final vowel of the preceding word. Third person pronominals are vowel-initial in most syntactic contexts: human 3Sg *à*, human 3Pl *ààⁿ*, nonhuman 3Sg *è*, nonhuman 3Pl *èèⁿ*. However, in some positions (chiefly preverbal objects after nonzero subject) these pronominals “grow” an initial *n* that blocks *vv*‑Contraction, see *n*‑Epenthesis §3.6.3.2. Among 1st/2nd person categories, 2Pl *ēēⁿ* is vocalic, while other categories consonant-initial forms in most contexts (1Sg *mā*, 2Sg *wō*, 1Pl *mùʔùⁿ*). However, as subjects of adjoined clauses and as reflexives within a clause, all pronominals have vocalic form (e.g. 1Sg *mā* is replaced by *āⁿ* as reflexive).

### Enclitics

In contrast to the segmental phonological enclisis just described, there are a few independent morphemes that are always encliticized. They are not second-position (Wackernagel’s) enclitics, and each occurs in a fixed position (xx1).

(xx1) Syntactic enclitics

a. *=rĒʔ* (i.e. *=rēʔ* ~ *=rɛ̄ʔ* ) negative (clause-final)

b. *=Ē* (i.e. *=ē* ~ *=ɛ̄* ) ‘it is’ (identificational)

c. [H+=∅] (i.e. floating H-tone) imperfective or ‘be’ (hosted by subject)

The first two of these have a vowel that acquires its ATR value by harmonizing with the final vowel of the host word. The third is a floating tone that docks on the host.

### Linkers

Linkers are morphemes (or phonological modifications) that apply to specific combinations of the type X Y → X-Link-Y. In the relevant Jalkunan cases, the linker is structurally associated with the Y element, but its phonological realization depends on the particular linker.

*n*‑Epenthesis (§3.6.3.2) is a possible case. It inserts initial *n* primarily in third person object pronouns, e.g. human 3Sg *ná* (compare the usual proclitic *à* ). There is no general epenthesis rule of the type /v1v2/ → *v*1*-n-v*2, so a morphosyntactically determined linker analysis is possible.

Also relevant are processes that occur in words preceding *nàà* ‘here’ and *dè* ‘there (definite)’, but not other spatiotemporal adverbs such as *bá* ‘over there’. In predicate function (‘be here/there’), a linking enclitic *=ń* or *=ǹ* appears on the subject, following the regular ‘be’ enclitic /H+=∅/ which is realized as an H‑tone. The spatial adverb is clause-final, followed only by sentence enclitics like negative *=nĒʔ*. If the subject is a singular noun or other NP ending in a nominal suffix (due to the ‘be’ enclitic), the suffix changes its vowel from a (or assimilated *ɔ* ) to *e* (xx1b). Other subjects, including pronouns like 3Sg *à*, show no vocalic change. See §11.2.3.2 for more examples and details.

(xx1) a. *zàkíì=∅=ń nàà* / *dè*

Zaki=be=Link here / there.Def

‘Zaki is present here/there-Definite.’

c. *tàgà-ré=∅=ǹ nàà*

sheep-Nom=be=Link here

‘The sheep-Sg is here.’ (< *tàgà-rá* )

One might reconstruct \*in or \*ni with uncertain tone, but if this is correct the original function of the element (locational ‘be’ perhaps?) is unclear.

In adverbial function, *nàà* ‘here’ and *dè* ‘there (definite)’ are again clause-final, followed only by sentence enclitics like negative *=nĒʔ*. Preceding verbs and most other elements elements undergo a terminal modification, shifting vowel quality from ‑ATR to +ATR, lengthening a short vowel, and merging +3Sg and ‑3Sg tones.

(xx2) input with adverb gloss

a. *sā séé nàà* ‘Come here/there!’

*à sɛ̌ à séé nàà* ‘He/she came here/there.’

*mā sɛ́ mā séé nàà* ‘I came here/there.’

*má=∅ sà sáá má=∅ séé nàà* ‘I will come here/there.’

*má=∅ sè-yá má=∅ sè-yéé nàà* ‘I am coming here/there.’

b. *bɔ̄ bóó nàà* ‘Exit (=leave) here/there!’

*à bɔ̀ɛ́ à bóó nàà* ‘He/She exited here/there.’

*mā bɔ́ɛ́ mā bóó nàà* ‘I exited here/there.’

*má=∅ sà bɔ́ɔ́ má=∅ bóó nàà* ‘I will exit here/there.’

c. *bà béé nàà* ‘Fall here/there!’

*à bɛ̌ à béé nàà* ‘He/She fell here/there.’

*mā bɛ́ mā béé nàà* ‘I fell here/there.’

*má=∅ sà bàà má=∅ sà béé nàà* ‘I will fall here/there.’

d. *fìdí fìdí nàà* ‘Run here/there!’

*à fìdí à fídī nàà* ‘He/She ran here/there.’

*mā fídī mā fídī nàà* ‘I ran here/there.’

*má=∅ sà fìdɛ́ɛ̀ má=∅ sà fídì nàà* ‘I will run here/there.’

e. *sìdáⁿ sìdàń nàà* ‘Ascend here/there!’

*à sìdánī à sìdán̄ nàà* ‘He/She ascended here/there.’

*mā sídánī mā sìdán̄ nàà* ‘I ascended here/there.’

*má=∅ sà sìdànà má=∅ sìdá-n̄ nàà* ‘I will ascend here/there.’

If there are postverbal constituents, such as NPs, PPs, or some adverbs, they too are affected by such modifications.

(xx3) final element with adverb gloss of final element

a. *… tàgà-rá … tàgà-réǹ nàà* ‘a/the sheep-Sg’

*… tàgà-rá-àⁿ-n̄ … tàgà-rá-àⁿ-ń nàà* ‘(the) sheep-Pl’

*… ɲáā-nà … ɲáā-nèè nàà* ‘(a/the) woman’

*… ɲáā-nà-àⁿ-n̄ … ɲáā-nà-àⁿ-ń nàà* ‘(the) women’

*… mā-n̄ … mā-n̄ nàà* ‘me’

*… à-yà … à-yéé nàà* ‘him/her’

b. *… [à dɛ̀] … [à déé] nàà* ‘with him/her’

*… [ààⁿ dɛ́]*  *… [ààⁿ déé] nàà* ‘with them’

*… [à mà] … [à méé] nàà* ‘on him/her’

*… [ààⁿ má]*  *… [ààⁿ méé] nàà* ‘on them’

*… [è tɔ̀] … [è tóó] nàà* ‘in it’

*… [èèⁿ tɔ́] … [èèⁿ tóó] nàà* ‘in them’

*… [è dù] … [è dúú] nàà* ‘in it’

*… [èèⁿ dú]*  *… [èèⁿ dúú] nàà* ‘in them’

However, temporal adverbs like *fî* ‘today’ follow the ‘here’ or ‘there’ adverb and so are unaffected.

## Tones

There are three tone levels, H[igh], M[id], and L[ow]. Contour tones on single syllables are HL, HM, LH, and MH. I have no clear evidence of ML or LM contours on single syllables.

Using *x* for any vowel, the tone diacritics used here are those in (xx1).

(xx1) *x́* H

*x̀* L

*x̄* M

*x̂* HL

*x̌* LH

*x᷆* HM

*x᷇* MH

There are no ML- or LM-toned syllables.

My use of *x᷆* (HM, i.e. high falling to mid) is distinct from “correct” IPA usage of this diacritic, where it is “mid falling.” This does not create ambiguities in Jalkunan, which lacks ML (“mid falling”) syllables.

Where a syllable contains a long vowel, I add a tonal diacritic to each symbol. For example, long *aa* can appear as level-toned *áá* (H), *àà* (L), or *āā* (M); as bitonal *áà* (HL), *áā* (HM), *àá* (LH), and *āá* (MH); and as tritonal *àâ* or equivalently *ǎà* (LHL).

Where a syllable contains a short vowel and a coda sonorant, I put a tonal diacritic on the sonorant only if its tone differs from that of the vowel. Thus level-toned *án*, *àn*, and *ān*, but contour-toned *áǹ*, *àń*, and so forth. The letter *l* does not lend itself to accents, so a contour tone must be indicated on the vowel: *âl*, *ǎl*, *a᷆l*, *a᷇l*.

### Lexical tone patterns

#### Lexical tone melodies for unsegmentable noun stems

The lexical melodies for noun stems are shown in (xx1). (The lexical melody is overridden when a possessor is added.)

Representations of melodies can be stem-level or full, the latter including the tone of the nominal suffix when it is present. The suffixal tone is shown in parentheses. For example, corresponding to /L/ stem-level melody is the full melody /L(H)/.

When the stem-melody ends in an L‑ or M‑tone, the suffixal tone is predictable. I indicate this by the double-headed arrow, as in /L/ ⇒ /L(H)/, and in most contexts I use the simpler label /L/ for the melody. However, in some stem-melodies ending in H‑tone, there is a lexically specified (i.e. otherwise unpredictable) choice between (H) and (L). In these cases, the suffixal tone is always included in the melodic formula, e.g. /H(L)/ and /H(H)/.

Stems ending in L‑tone are classified in (xx1). The suffix is H‑toned in all cases, so the suffixal tone can be omitted in formulae for lexical melodies.

(xx1) melody stem with suffix gloss

a. stem ends in L‑tone

/L/ ⇒ /L(H)/ *bù* *bù-rɔ́* ‘excrement’

*sàà* *sàà-rá* ‘house’

*bòʔò bòʔò-rá* ‘ashes’

*jɔ̀lɔ̀kɔ̀ jɔ̀lɔ̀kɔ̀-rɔ́* ‘chain’

/HL/ ⇒ /HL(H)/ *kápɔ̀n* *kápɔ̀n-ná* ‘daba (type)’

*ɲɔ́kɔ̀ʔrɔ̀ ɲɔ́kɔ̀ʔr-ɔ́* ‘face’

*kpásùʔùⁿ kpásùʔù-ná* ‘week’

*kókóbàʔà kókóbàʔà-rá* ‘leper’

/LHL/ ⇒ /LHL(H)/ *mìsírì* *mìsírì-rá* ‘mosque’

*tɔ̀ɔ́lɔ̀* *tɔ̀ɔ́lɔ̀-rɔ́* ‘okra’

Stems ending in M‑tone are in (xx2). If the entire stem is M‑toned, M‑Spreading extends the M‑tone to the suffix (xx2a). However, if the stem ends in a falling HM tone sequence, the suffix is L‑toned (xx2b). This tone-dropping also applies to following modifiers.

(xx2) melody stem with suffix gloss

a. stem with level M‑tone

/M/ ⇒ /M(M)/ *jū jū-rɔ̄* ‘millet’

*gbāā* *gbāā‑rā* ‘stick’

*bāʔā bāʔā-rā* ‘porridge’

*kɔ̄lɔ̄kɔ̄ kɔ̄lɔ̄kɔ̄-rɔ̄* ‘talk (n)’

*tūlūkānā tūlūkān-nā* ‘gold’

b. stem ending in falling …HM‑tone (stem must be at least bimoraic)

/HM/ ⇒ /HM(L)/ *féē féē-rà* ‘calabash’

*bu᷆l bu᷆l-là* ‘inheritance’

*búʔūⁿ búʔū-nà* ‘liver’

*bɛ́ʔrɛ̄ bɛ́ʔr-à* ‘yam’

*múúlī múūl-là* ‘ridge in field’

*nínáʔāⁿ nínáʔā-nà* ‘scorpion’

/LHM(L)/ ⇒ /MHM(L), in two subgroups:

*CvvCv* *bɛ̀ɛ́nī bɛ̀ɛ́nī-nà* ‘sesame’

~ *bɛ̀ɛ́n-nā* (see comment below)

*tɔ̀ɔ́lɔ̄ tɔ̀ɔ́lɔ̄-rɔ̀* ‘okra’

~ *tɔ̀ɔ́l-lā* (see comment below)

*longer* *jàbálā jàbálā-rà* ‘white cowpea’

~ *jàba᷆l-lā*

*sùkár̄ sùkár̄-rà* ‘sugar’

*bànɛ́ʔɛ̄ bànɛ́ʔɛ̄-rà* ‘fatigue’

*ɲàʔálī ɲàʔa᷆l-là* ‘grain of sand’

/MHM/ ⇒ /MHM(L) *jāŋgbálā jāŋgbál-à* ‘tail’

Stems ending in G‑tone are in (xx3). Those in (xx3a) have H‑toned suffix. They are either level H‑toned throughout, or end with two H‑toned syllables (a terminal Cv́L syllable with final sonorant is treated as two syllables on the assumption of syncope). The stems in (xx3b) have L‑toned suffix. Some of them are level H‑toned (except for the suffix), indicating that the distinction between /H(H)/ and /H(L)/ is unpredictable from the tones of the stem itself and must be lexically marked. The other stems in (xx3b) are contoured, with a single terminal H‑toned syllable on the stem.

(xx3) melody stem with suffix gloss

a. stem with final H‑tone, plus H‑toned suffix

/H(H)/ *dí dí-rá* ‘child’

*náá náá-ná* ‘sauce’

*kɔ́l kɔ́l-ɔ́* ‘agama lizard’

*jóʔó jóʔó-rá* ‘Jula (person)’

/LH(H)/ (stems are *Cv̀Cv́Cv́* or syncopated *Cv̀Cv́C* with final sonorant)

*sìnáʔáⁿ sìnáʔá-ná* ‘roselle’

*màkár màkár-rá* ‘pity (n)’

e. stem with final H‑tone, plus L‑toned suffix

/H(L)/ *jíⁿ jí-nà* ‘market’

*bé bé-rà* ‘uncle’

*kpɛ́sɛ́ kpɛ́sɛ́-rà* ‘chewstick’

*wáátí wáátí-rà* ‘time’

*hɛ́ɛ́rɛ́ hɛ́ɛ́rɛ́-rà* ‘well-being’

*fɔ́rɔ́bɔ́ fɔ́rɔ́bɔ́-rɔ̀* ‘ox’

*dúníɲá dúníɲá-nà* ‘world’

/LH(L)/ (these stems end in a single H‑toned *Cv* syllable)

*jùfá jùfá-rà* ‘pocket’

*sìzó sìzó-rà* ‘scissors’

*pɔ̀sɔ́n pɔ̀sɔ́n-nɔ̀* ‘poison (n)’

*gbāājéⁿ gbāājɛ́-nà* ‘tea’

*dɔ̀ʔɔ̀rɔ́ dɔ̀ʔɔ̀rɔ́-rɔ̀* ‘heat’

*ɲɔ̀ʔɔ̀mɛ́ ɲɔ̀ʔɔ̀mɛ́-nà* ‘camel’

/MH/ ⇒ /MH(L) *gbātá gbātá-rà* ‘shed’

*nāŋgɔ́ nāŋgɔ́-rà* ‘garden’

*ɲāmākú ɲāmākú-rɔ̀* ‘ginger’

/LMH/ ⇒ /LMH(L) *kɔ̀lɔ̄sí kɔ̀lɔ̄sí-rà* ‘rosary’

*bòyākí bòyākí-rà* ‘guava’

/HLH/ ⇒ /HLH(L) *dáŋkùtɔ́ dáŋkùtɔ́-rɔ̀* ‘nape’

*gbɛ́lɛ̀má gbɛ́lɛ̀má-nà* ‘cassava’

‘Sesame’ and ‘okra’, the bisyllabic *Cv̀v́Cv̄* stems in the /LHM(L)/ category above that are subject to optional syncope before the nominal suffix, would be expected to have unsyncopated *Cv̀v́Cv̄-Cv̀* and syncopated *Cv̀v᷆C-Cv̀*, so that the fall from H to M is audible in the coda to the long first syllable. Unsyncopated *Cv̀v́Cv̄-Cv̀* is correct (*bɛ̀ɛ́nī-nà*, *tɔ̀ɔ́lɔ̄-rɔ̀* ), but my assistant preferred syncopated *Cv̀v́C-Cv̄* for these relatively short stems, thus *bɛ̀ɛ́n-nā* for expected #*bɛ̀ɛ́n̄-nà* and *tɔ̀ɔ́l-lā* for expected #*tɔ̀ɔ᷆l-là* with the M‑tone on the onset of the geminated *ll*.

(xx5) illustrates the three-way tonal distinction for monosyllabic nouns with a single tone.

(xx5) type gloss isolation ‘two \_’s’ ‘I saw \_’

/H(H)/ ‘breast’ *cíí-ná cííⁿ flā mā cííⁿ jɛ̌*

/M/ ⇒ /M(M)/ ‘hair’ *cīī-nā cīīⁿ flā mā cīíⁿ jɛ̌*

/L/ ⇒ /L(H)/ ‘village’ *sàà-rá sàà flā mā sàá jɛ̌*

/L/ is most easily distinguished from both H‑toned ‘breast’ and M‑toned ‘hair’ by its rising as opposed to level pitch in the isolation form. /M/ is distinguished from /H/ by its rising pitch before words beginning in L‑tone, represented here by ‘I saw \_\_’.

(xx6) repeats /H/ ‘breast’ from the preceding array and adds two new stems.

(xx3) type gloss isolation ‘two \_’s’ ‘I saw \_’

/H(H)/ ‘breast’ *cíí-ná cííⁿ flā māⁿ cííⁿ jɛ̌*

/H(L)/ ‘wall’ *kógó-rɔ̀* *kógó flā māⁿ kógó jɛ̌*

/HM/ ⇒ /HM(L)/ ‘calabash’ *féē-rà féé flā māⁿ féē jɛ̌*

/H(H)/ is distinguished from /H(L)/ by the tone of the suffix in the isolation form (they have similar effects on following modifiers). /HM/ is distinguished from /H(L)/ by its stepwise descending pitch in the isolation form. This distinction cannot be made when the stem is monomoraic *Cv́‑*, hence suffixed *Cv́‑Cv̀*, which is too short to allow stepwise descending pitch to be audible (there are no #*Cv᷆Cv̀* words in Jalkunan). An example is *jíⁿ* ‘market’, suffixed form *jí-nà*. This stem could theoretically either be /H(L)/ or /HM/ ⇒ /HM(L)/, in the latter case with the M unrealized. For bureaucratic purposes I classify such stems as /H(L)/.

#### Lexical tone patterns for adjectives and numerals

Adjectives normally do not occur in isolation. As predicates they are replaced by inchoative verbs, and within NPs they normally follow nouns. In N-Adj combinations, the tones of the adjective are subject to tonal ablaut, making it difficult to determine their lexical tones. The analysis of adjectives and N-Adj combinations in §6.3.1 suggests that adjectives have lexical tone melodies /L/, /M/, /H(L)/, /HM(L)/, and /H/. The falling melodies H(L)/ and /HM(L)/ are the most common.

Numerals may occur either with or without a modified noun. When they occur along their lexical tones are easily heard. Simple (monomorphemic) numerals from ‘2’ to ‘10’ have either /M/ or /H/ melody, while *dúlì* ‘1’ is /HL/. *wàʔà* ‘thousand’ is /L/-toned. In N-Num combinations, numerals are subject to tonal ablaut similar to that affecting adjectives.

### Grammatical tone patterns

#### Grammatical tones for verb stems

Verbs occur in several tonal forms depending on the inflectional category. In general, the imperfective stem is the most useful indicator of lexical tones. Intransitive imperfectives follow the imperfective subject enclitic (floating H‑tone) or future *sà*, and so have only a single tonal form. Angled brackets as in <HL> indicate contour tones in a single syllable.

(xx1) Imperfective tones (noncomposite intransitives)

melody syllable sequence example (Ipfv)

a. monosyllabics

/L/ L *bàà* ‘fall’

/H/ H *sɔ́ɔ́* ‘enter’

b. bisyllabics

/L/ L.L *kànà* ‘be ruined’

/LHL/ L.<HL> *fìdɛ́ɛ̀* ‘run’

/HL/ H.L *gbɔ́gɔ̀* ‘(dog) bark’

/H/ H.H *díbɛ́* ‘be extinguished’

c. trisyllabics

/L/ L.L.L [absent]

/LHL/ L.H.L *jàʔánà* ‘descend’

/HL/ H.H.L *télénà* ‘go straight’

/H/ H.H.H *láʔánáá* ‘return’

d. quadrisyllabics (uncommon)

/L/ L.L.L.L [absent]

/LHL/ L.L.H.L *gbàʔàlánà* ‘dry off; become thin’

/HL/ H.H.H.L *ɲáʔámíà* ‘err’

/H/ H.H.H.H [absent]

Each OV transitive (verb with preverbal objects) has two imperfective tonal forms depending on whether the preceding object is treated as +3Sg or ‑3Sg as defined in §3.8.3.4. It is not entirely obvious that one> or the other of these forms is lexically basic. Therefore both are shown in (xx2) along with a suggested melody in partially formulaic notation with @ as a variable.

(xx2) Imperfective tones (noncomposite transitives)

melody syllable sequence example (Ipfv)

+3Sg -3Sg

a. monosyllabics

/@/ L H *bàà* ~ *báá* ‘put down’

/@HL/ <LHL> <HL *kɔ̀ɔ̂* ~ *kɔ́ɔ̂* ‘count’

b. bisyllabics

/@/ L.L H.H *bàʔrà* ~ *báʔrá* ‘hit’

/@HL/ L.<HL> H.<HL> *dɛ̀rɛ̂* ~ *dɛ́rɛ̂* ‘squeeze’

c. trisyllabics

/@/ L.L.L H.H.H *dùdɔ̀là* ~ *dúdɔ́lɔ́* ‘point at’

/@HL/ L.H.L H.H.L *gìlénà* ~ *gílénà* ‘hang up’

/@H/ L.L.H H.H.H *wòlòbáá* ~ *wólóbáá* ‘pick out’

d. quadrisyllabics (uncommon)

/@/ L.L.L.L H.H.H.H [absent]

/@HL/ L.L.H.L H.H.H.L *fìrìkíɛ̀* ~ *fíríkíɛ̀* ‘hobble (animal)'

" L.H.H.L H.H.H.L *dùtɔ́ʔɔ́nɔ̀* ~ *dútɔ́ʔɔ́nɔ̀* ‘cover with blanket’

/@H/ L.L.L.H H.H.H.H [absent]

Among ambi-valent (labile) verbs, intransitive /L/ and /H/ merge as transitive /@/, suggesting that the floating tones relevant to transitives submerge these pure tonal melodies. Monosyllabic examples: *bàà* ‘fall’ and transitive *bàà* ~ *báá* ‘put down’, *sɔ́ɔ́* ‘enter’ and transitive *sɔ̀ɔ̀* ~ *sɔ́ɔ́* ‘put in’. Bisyllabic examples: *kànà* ‘be ruined’ and transitive *kànà* ~ *káná* ‘ruin’, *díbɛ́* ‘be extinguished’ and transitive *dìbɛ̀* ~ *díbɛ́* ‘extinguish’. A trisyllabic example is *láʔánáá* ‘get up’ and transitive *làʔànàà* ~ *láʔánáá* ‘life, raise’.

#### Grammatical tones for noun stems

The lexical tone melodies of nouns are described in §3.7.xxx above. The tones of the noun may be modified by tone sandhi processes, principally Final Tone-Raising (LL#L becomes LH#L).

More interestingly, nouns undergo tonal ablaut processes when preceded by a possessor. This takes the form of word-level tone overlays {L}, {H}, or {LH} on the noun (including its nominal prefix if present). The choice between overlays depends on the lexical tone melody and alienable/inalienable status of the possessum and on the grammatical category of the possessor.

When the possessor is an M‑toned pronoun (1Sg *ma*̄, 2Sg *wo*̄, 2Pl *ēē* ), inalienable nouns also surface as M‑toned.

#### Grammatical tones for adjectives and numerals

N-Adj and N-Num combinations subject both the noun and the modifier to construction-specific tonal ablaut patterns. In the modifier, /M/ and /H/ melody may drop to L under some conditions. These patterns are discussed in detail in §6.3.1.1 and §6.4.2.

### Tone sandhi processes

#### Final Tone-Raising (LL#L-to-LH#L, MM#L-to-MH#L)

This rule dissimilates a final L‑ or M‑tone to H‑tone at a boundary before an L‑tone. It is most systematic when the word on the left has at least two moras. Examples are the proclitic pronouns *mùʔùⁿ* (1Pl), *ēēⁿ* (2Pl), *ààⁿ* (human 3Pl) and *èèⁿ* (nonhuman 3Pl), which become *mùʔúⁿ*, *ēéⁿ*, *àáⁿ*, and *èéⁿ*, respectively, before an L‑tone.

Monomoraic *Cv* pronouns 1Sg *mā*, 2Sg *wō*, human 3Sg *à*, and nonhuman 3Sg *è*, do not undergo Final-Tone Raising. However, monomoraic nouns like *wù* ‘head’ do undergo it: *mā wǔ jìɛ́* ‘I saw a/the head’.

Final Tone-Raising of the LL#L-to-LH#L at noun-adjective boundaries is exemplified by *ɲùʔúⁿ gbòʔò‑rá* ‘black wrap (garment)’ from L‑toned *ɲùʔùⁿ* ‘wrap (n)’, see (xx2) in §6.3.1.1. There happen to be no clear examples of LL#L-to-LH#L in noun-numeral combinations (§6.4.2.1), since numerals begin with M‑ or H‑tones. MM#L-to-MH#L does not occur in noun-modifier cmbinations, since M‑toned nouns are raised by a special morphophonemic (ablaut) process to {H} before all adjectives and numerals.

Warning: subject NPs and pronouns of LL or MM type can also have their final mora raised by the floating H‑tone of the imperfective and ‘be’ enclitics. These combinations are homophonous to forms that have undergone Final Tone-Raising. Orthographically, I distinguish the floating H cases by transcribing *mùʔúⁿ=∅*, etc., showing a segmentally null (but tonally non-null) enclitic. This potential ambiguity does not apply in other than subject function.

#### H-Leveling

This process accounts for the spreading of H‑tone rightward up to a word-boundary. The typical effects are those in (xx1).

(xx1) HM#L → HH#L

HM#M → HH#M

This process is systematic is not fully productive. In particular, it does not apply to HM-toned nouns before the nominal suffix (*tán̄* → *tán̄-nà* ‘deep basket’, *wárī* → *wár̄‑rà* ‘money’, *búgū* → *búgū‑rɔ̀* ‘Fulbe hut’).

HM#L → HH#L is seemingly observed in noun-adjective combinations, e.g. *kúrūⁿ* ‘boat’ in *kúrúⁿ gbòʔò‑rá* ‘black boat’, *kúrúⁿ kàn-nà* ‘red boat’, and *kúrúⁿ gbɔ̀‑rá* ‘big boat’, see (xx2) through (xx5) in §6.3.1.1. It is also observed in noun-numeral combinations, e.g. *kúrúⁿ flà* ‘two boats’ and *kúrúⁿ sòòlò* ‘five boats’ §6.4.2.1). However, interpretation of the tones in these noun-modifier combinations is difficult. Except for ‘black boat’, the examples just given involve tone-dropped modifiers, the basic forms being *kān-nā*, *gbɔ́‑rà*, *flā*, and *sóóló*. Furthermore, M‑toned nouns shift by tonal ablaut to {H} before all modifiers, and if we attribute the same {H} to the lexically HM‑toned nouns, we don’t need HM#L → HH#L tone sandhi. So it is difficult to determine where tonal ablaut leaves off and tone sandhi begins.

Also HM-toned are -3Sg intransitive perfective *CvCv* verbs like intransitive *fídī* ‘ran’ in e.g. *mā fídī* ‘I ran’. The CvCv shape readily allows H‑tones in non-perfective forms (imperative, imperfective), so the HM tones of *fídī* are distinctive. When another word follows, I hear *fídī* (HM) before H‑tone (xx2a), but *fídí* (HH) before M‑ and L‑tone (xx2b‑c), as suggested in (xx1) above.

(xx2) a. *mā fídī sí-sàⁿ*

1Sg run.Pfv now

‘I ran now.’

b. *mā fídí [kālā làʔà-rá]*

1Sg run.Pfv [neighborhood place-Nom]

‘I ran to the neighborhood.’

c. *mā fídí nàà*

1Sg run.Pfv here

‘I ran here.’

Since there is no issue of tonal ablaut in these verbal examples, they are the best guide to H‑Leveling as tone sandhi.

#### M-Spreading, (minor) H‑Spreading, and Tone-Polarization

Consider the unsuffixed noun and adjective stems, and the corresponding forms with nominal suffix, in (xx1). The nominal suffix is required in certain morphosyntactic positions (§6.1.2).

(xx1) stem suffixed gloss

a. M-toned noun or adjective

*dāā dāā-rā* ‘mouth’

*fīlī fīl-lā* ‘dust’

*kɔ̄ŋɔ̄lī kɔ̄ŋɔ̄l-lā* ‘bohor reedbuck’

*kānā kān-nā* ‘red’

b. H‑toned noun or adjective

*suffix is H‑toned, /H/ melody*

*nígí* *nígí-rá* ‘leech’

*súmáá* *súmáá-ná* ‘long’

*suffix is L‑toned, /H(L)/ melody*

*kpɛ́sɛ́* (+L) *kpɛ́sɛ́-rà* ‘chewstick’

*gbé* (+L) *gbé-rà* ‘fresh’

c. L-toned noun or adjective

*kpìì* *kpìì-rá* ‘baobab leaves’

*gbòʔò* *gbòʔò-rá* ‘black’

d. contour-toned noun or adjective

*mìsírì* *mìsírì-rá* ‘mosque’

*nɔ́ʔɔ̀sí* (+L) *nɔ́ʔɔ̀sí-rà* ‘chameleon’

*kúmā* (+L) *kúmā-nà* ‘cold’

It is clear that M‑Spreading occurs in (xx1a), since the M‑toned form of the suffix occurs exclusively after M‑toned stems. There are no lexical exceptions (i.e. no M‑toned stems that do not have an M‑toned suffix). The basic formula is /x̄ y/ → /x̄ ȳ/, where the macron indicates M‑tone.

The possible H‑Spreading in (xx1b) is more doubtful. Leaving aside the M‑Spreading cases in (xx1), the nominal suffix appears in H‑toned form (*‑rá* etc.) after some H‑toned stems and all stems whose final syllable is L‑toned. It appears in L‑toned form (*‑rà* etc.) after the remaining H‑toned stems, and after contour-tones stems ending in H‑ or M‑tone. This ragged distribution makes it difficult to determine the underlying tone of the suffix.

If we opt for underlying L‑toned /‑rà/, we might argue for an H‑Spreading rule to account for *nígí-rá* and *súmáá-ná* in (xx1b), and for a very limited Tone Polarization rule to account for the H‑toned suffix in *kpìì-rá* and *gbòʔò-rá* in (xx1c) and *mìsírì-rá* in (xx1d). The formulae would be /#x́ y/ → #*x́ ý* (H‑Spreading) with # = stem onset to exclude contour-toned stems, and /…x̀ ỳ/ → …*x̀ ý* (Tone Polarization), respectively. To account for the remaining cases of L‑toned suffix, we could posit a floating L associated lexically with the second subset of H‑toned nouns, accounting for *kpɛ́sɛ́-rà* and *gbé-rà* in (xx1b), and associated automatically to stems with final …LH and final …HM contours. On this aspect, see Floating L‑Docking (§3.8.3.xxx).

That M‑Spreading is a more productive process is confirmed by the fact that it also applies to several combinations beginning with M‑toned pronominal proclitics (1Sg *mā*, 2Sg *wō*, and 2Pl *ēēⁿ* ). Some of these are listed and exemplified in (xx2).

(xx2) M‑Spreading involving M‑toned pronominal

gloss comparisons

a. PPs (§8.1-3)

*mā kɛ̄ⁿ* ‘for me’ *mùʔùⁿ kɛ́ⁿ* ‘for us’

*à kɛ̀ⁿ* ‘for him/her’

b. inalienable possession (§6.2.2)

*mā kɔ̄yī(-rā)* ‘my belly’ *mùʔùⁿ kɔ́yí(-rá)* ‘our belly’

*à kɔ̀yì(-rá)* ‘his/her belly’

*mā kɔ̀ⁿ(-nɔ́)* ‘my honey’ (alienable)

c. negative perfective verbs (§10.3.1.1)

*mā bɛ̄ɛ̄=rɛ̄ʔ* ‘I didn’t fall’ *mā bɛ́(ɛ́)* ‘I fell’

*mùʔùⁿ bɛ́ɛ́=rɛ̄ʔ* ‘we didn’t fall’

*à bɛ̀ɛ̀=rɛ̄ʔ* ‘he/she didn’t fall’

d. negative future verbs (§10.3.2.3)

*mā sā sáá=rɛ̄ʔ* ‘I won’t come’ *mùʔùⁿ sá sáá=rɛ̄ʔ* ‘we won’t come’

*má=∅ sà sáá* ‘I will come’

e. positive plural imperative (§10.

*ēēⁿ fīdī* ‘run!-2Pl’ *fìdí* ‘run!-2Sg’

*ēēⁿ bí fìdì=rēʔ* ‘don’t-2Pl run!’

f. *kú* auxiliary (§15.1.1.1)

*mā kū jìímàà* ‘I begin to weep’ *mùʔùⁿ kú jìímàà* ‘we begin to weep’

*à kú jìímàà* ‘he/she begins to weep’

g. perfective pseudo-reflexive (middle) (§10.1.1.3)

*mā nāāⁿ sɛ́ʔɛ̄* ‘I sat’ *mùʔúⁿ nààⁿ sɛ́ʔɛ̄* ‘we sat’

*à ná sɛ̀ʔɛ́* ‘he/she sat’

*mā ná bàʔrí* ‘I hit-Past him/her’

*mā sɛ́(ɛ́)* ‘I came’

Among the combinations where an M‑toned pronominal fails to spread the M‑tone to a following word are ordinary perfective S‑V intransitives (subject-verb) and S‑O‑V transitives (subject-object or object-verb), and alienable possessives (possessor-possessum). Some of these are illustrated in the right column of (xx2) above.

While the syntax of M‑Spreading is somewhat idiosyncratic, the fact that it occurs with inalienable but not alienable possession is revealing. Inalienable possession is (typologically) a tighter morphosyntactic relationship than alienable possession. This suggests that M‑Spreading applies to a narrowly circumscribed domain, unlike productive tone-sandhi processes that can apply across a wide range of word and phrase boundaries.

In the same vein, it is interesting that adjectives with lexical /M/ melody form tonal terraces with a following nominal suffix, and that when the adjective drops to L‑tone under the influence of a preceding noun, it brings the tone of the suffix down with it. Thus *kānā* ‘red’ (including brown), suffixed *kān‑nā* (after M‑Spreading), and noun-adjective combination *kpɛ́sɛ́ kàn-nà* ‘red chewstick’. Compare this with a lexically H‑toned adjective *súmáá* ‘long’: suffixed *súmáá-ná*, noun-adjective *kpɛ́sɛ́ sùmàà-ná* ‘long chewstick’. *kān‑nā* drops as a whole to *kàn‑nà*, and therefore remains tonally flat. When *súmáá-ná* drops, only the stem is affected (*sùmàà* ), and the tone of the nominal suffix is determined **afterwards**, so it is H‑toned after the now L‑toned adjective, just as it is H‑toned after an L‑toned noun like

#### Floating-L Docking (certain nouns and adjectives)

Some nouns and adjectives have lexical tone melodies that include a final floating L‑tone that is realized, if at all, on a suffix or on a following word.

Consider (xx1), which presents several nouns in their bare form, along with their suffixal form and their combinations with the M‑toned adjective ‘red’ and the H‑toned adjective ‘long’.

(xx1) noun gloss suffixed ‘red’ ‘long’

a. *yíʔé* ‘fish’ *yíʔé-rá yíʔé kān-nā yíʔé ꜜsúmáá-nā*

*gbāā* ‘stick *gbāā-rā gbāā kān-nā gbāā súmáá-nā*

*ɲùʔùⁿ* ‘wrap (n)’ *ɲùʔù-ná ɲùʔùⁿ kān-nā ɲùʔùⁿ súmáá-ná*

b. *kpɛ́sɛ́* ‘chewstick’ *kpɛ́sɛ́-rà kpɛ́sɛ́ kàn-nà kpɛ́sɛ́ sùmàà-nà*

*kúrūⁿ* ‘boat’ *kúrú-nà kúrúⁿ kàn-nà kúrúⁿ sùmàà-nà*

*tòfá* ‘boat’ *tòfá-rà tòfá kàn-nà tòfá sùmàà-nà*

*mōtó* ‘motorcycle’ *mōtó-rà mōtó kàn-nà mōtó sùmàà-nà*

The stems in (xx1a) are followed by H‑toned suffixes and modifiers, though in the case of ‘fish’ the adjective is downstepped. Those in (xx1b) are followed by L‑toned suffixes and modifiers. This suggests that all of the stems in (xx1) are followed by a lexically specified following L‑toned element that is realized either on the nominal suffix or on the entire following modifier.

#### Tonal effects of +3Sg versus -3Sg on following words

A somewhat similar, but not lexically specified, process takes the form of a pervasive split between two classes of NPs (including pronouns) that have different tonal effects on a following possessum, verb, or postposition. The consistent groupings are those in (xx1). By “regular singular NPs” is meant any NP that would, in isolation, end in the nominal suffix (*‑rà* or variant).

(xx1) nonpronominal NPs pronominals

a. ‑3Sg, followed by H‑tone

plural NPs 1Pl, 3Pl (human and nonhuman)

personal names

b. +3Sg, followed by L‑tone

regular singular NPs 3Sg (human and nonhuman)

Omitted from this inventory are 1Sg, 2Sg, and 2Pl pronominals. This is because, in their basic forms, they are M‑toned, and the process of M‑Spreading applies to the following element (postposition, inalienable possessum, imperative verb). This masks their belonging to one or another of the more abstract groups in (xx1). See, for example, the postposition paradigms in chapter 8, the inalienable part of the possessed noun paradigms in §6.2.2.1‑3, and the 1Sg object of imperative in (xx1) in §4.3.1.3. However, there are some following elements that do not undergo M‑Spreading after 1Sg, 2Sg, and 2Pl pronominals. These elements are alienable possessums and nonimperative verbs.

Alienable possessums are indirectly relevant to the issue at hand, since they undergo tonal ablaut for all possessor categories. The relevant point here is that there is a split between 3Sg possessor and all other possessors. 3Sg possessors (nonpronominal and pronominal) control {LH} overlay on the possessum. For lexically L‑toned alienable possessums, this is indistinguishable from the {LH} controlled by other possessors (§6.2.2.1). However, lexically M‑toned and H‑toned alienable possessums appear with the same {LH} overlay after 3Sg possessors, but have {L} overlay with other possessors (all plurals, plus 1Sg and 2Sg); see §6.2.2.2‑3 below. This shows that another part of the tonal morphosyntax makes the division in (xx2).

(xx2) nonpronominal NPs pronominals

a. -3Sg, followed by {LH} alienable possessum (all lexical tonal types)

plural NPs 1Pl, 2Pl, 3Pl (human and nonhuman)

personal names 1Sg, 2Sg

b. +3Sg, followed by {L} alienable possessum (unless lexically L‑toned)

regular singular NPs 3Sg (human and nonhuman)

In other words, here it’s +3Sg against -3Sg, rather than all singulars against all plurals.

Stronger evidence that the split is +3Sg versus -3Sg comes from combinations of pronominal subjects with perfective intransitive verbs, and combinations of pronominal objects with transitive verbs. M-Spreading does not apply in these combinations.

The only nonimperative verbs that can directly follow the subject, without an intervening aspectual particle or enclitic, are perfective intransitives. These verbs have a tone pattern beginning LH after a 3Sg pronoun or regular singular NP, and a tone pattern beginning H after all other pronouns (including 1Sg and 2Sg) and all plural pronouns and NPs plus personal names and other singular NPs that cannot end in the nominal suffix. For example, the paradigm of perfective ‘fell’ in (xx3) in §10.2.1.1 distinguishes only two tonal forms of the verb, +3Sg *bɛ̌* and -3Sg *bɛ́*. A subset of that paradigm, showing the behavior of 1Sg and 2Sg, is reproduced here as (xx3).

(xx3) a. -3Sg

*mā bɛ́* ‘I fell’

*wō bɛ́* ‘you-Sg fell’

*mùʔùⁿ bɛ́* ‘we fell’

*ēēⁿ bɛ́* ‘you-Pl fell’

*ààⁿ bɛ́* ‘they (human) fell’

b. +3Sg

*à bɛ̌* ‘he/she fell’

The split falls along the same lines in combinations of pronominal objects with transitive verbs. For example, in perfective paradigms of transitives like ‘hit’, 1Sg and 2Sg objects have either M‑ or L‑toned form, depending on the subject category. In either case, the following verb begins with H‑tone (*báʔrī* ‘hit’), as it does when it follows any plural object (pronominal or nonpronominal) or a personal name. By contrast, 3Sg objects (pronouns and regular NPs) require a following verb beginning with L‑tone (*bàʔrí* ‘hit’). Subject category does not affect verbal tones in these transitives since the subject is not adjacent to the verb. In (xx4a), 1Sg object *mā* or *mà* and 2Sg object *wō* or *wò* is followed by H‑initial *báʔrī*, the same tonal form used after plural objects in (xx4b). 3Sg human object *ná* and regular singular NPs are followed by L‑initial *bàʔrí* (xx4c). For fuller data and analysis see especially §4.3.1.3.

(xx4) a. *wō mà báʔrī* ‘You-Sg hit-Past me.’

*à mā báʔrī* ‘He/She hit-Past me.’

*mā wò báʔrī* ‘I hit-Past you-Sg.’

*à wō báʔrī* ‘He/She hit-Past you-Sg.’

b. *ēéⁿ mùʔùⁿ báʔrī* ‘You-Pl hit-Past us.’

*à dí-rá-àⁿ báʔrī* ‘He/She hit-Past the children.’

c. *mā ná bàʔrí* ‘I hit-Past him/her.’

*à ná bàʔrí* ‘He/She hit-Past him/her.’

*mùʔùⁿ dí bàʔrí* ‘We hit-Past the child.’

The evidence shows that there is a pervasive distinction between +3Sg and ‑3Sg (including 1Sg and 2Sg) with respect to tonal effects on following elements. In those contexts where 1Sg, 2Sg, and 2Pl (the three M‑toned pronominals) trigger M‑Spreading, this masks the assignment of these three categories to the +3Sg and ‑3Sg division, which therefore reduces to singular versus plural.

The category “+3Sg” in the +3Sg versus ‑3Sg split is limited to NPs based on ordinary nouns (those that can end in the nominal suffix, even when the suffix is absent). It does not include personal names. For example, the personal name *bákàrì* is followed by the H‑toned form of a postposition, as in (xx5a), and by the H‑initial form of an immediately following verb, as in (xx5b‑c). As alienable possessor, *bákàrì* also imposes {L} rather than {LH} tone on a following possessum. In all these respected, *bákàrì* patterns with the ‑3Sg side of the split.

(xx5) a. *mā sɛ́ [bákàr dɛ́]*

1Sg come.Pfv [B with]

‘I have brought Bakari.’

b. *bákàr bɛ́*

B fall.Pfv

‘Bakari fell.’

c. *mā bákàr báʔrī*

1Sg B hit.Pfv

‘I hit Bakari.’

d. *bákàr wùl-à*

B dog-Nom

‘Bakari’s dog’

The tonal effects of +3Sg and ‑3Sg NPs also affect immediately following nouns. This happens in perfective transitives, where no inflectional morphemes intervene between subject and preverbal object. Both /H/-melody *yíʔé* ‘fish’ and /L/-melody *wùlà* ‘dog’ have different tonal forms, beginning with L‑tone after +3Sg subject NP in (xx6a) and beginning with H‑tone after ‑3Sg subject NPs in (xx6b). The second syllable of *wùlá* in (xx6a) has undergone Final Tone-Raising before the L‑initial verb. The second-syllable H‑tone in *wúlá* in (xx6b) could also be due to Final Tone-Raising (presumably still at the /wùlà/ stage) or it could reflect application of the H‑tone controlled by the preceding ‑3Sg subject to the entire L‑toned sequence /wùlà/.

(xx6) a. *dí yìʔé* / *wùlá dɔ̀ní*

child fish / dog eat.meat.Pfv

‘A/The child ate a/the fish-Sg/dog.’

b. *dí-rá-àⁿ yíʔé* / *wúlá dɔ̀ní*

child-Nom-Pl fish / dog eat.meat.Pfv

‘(The) children ate a/the fish-Sg/dog.’

There are four possible ways to describe these tonal effects.

(xx7) a. +3Sg NPs have a floating L‑tone that docks on the following word;

b. ‑3Sg NPs have a floating H‑tone that docks on the following word;

c. both (a) and (b);

d. +3Sg and ‑3Sg are abstract syntactic categories that induce ablaut effects on following words.

Analyses (xx7a‑c) are conventional phonological solutions. Underlying phonological segments and tones are posited. Tone sandhi, in the form of a second floating-tone docking rule, takes care of the surface outputs. (xx7d) is a morphotonological analysis involving categorially controlled ablaut effects. This is probably the wisest choice, but I do not insist on it.

#### LH-to-L before nonlow tone

Word-final rising-toned <LH> syllables flatten to L‑toned before a nonlow (H or M) tone. This affects monosyllabic +3Sg perfective verb forms like *mɛ̌* ‘did’ and *dɛ̌* ‘said’ (xx1a‑b).

(xx1) a. *ēēⁿ [kú ɲɛ̀] mɛ̀ [mā kɛ̄ⁿ]*

2Pl [thing good] do.Pfv [1Sg Benef]

‘You-Pl have done a good thing for me.’ (2016\_02 @ 02:08)

b. *à dɛ̀ é!*

3SgHum say.Pfv hey!

‘He said, “hey!” ’ (2016\_02 @ 01:15)

This process occurs frequently before negative enclitic *=rĒʔ*, sometimes along with other changes. For example, *à sɛ̌* ‘he/she came’ is negated as *à sɛ̀ɛ̀=rɛ̄ʔ* (variant *à* *sèè=rēʔ* ) ‘he/she didn’t come’.

Bisyllabic L.H-toned stems are not systematically flattened before a nonlow tone. For example, *à bùlí* ‘he/she returned’ is negated as *à bùlú=rēʔ* ‘he/she didn’t return’, preserving the L.H syllable sequence.

There is likewise no systematic flattening of falling tones before an L‑tone. For example, *á=∅ fìdɛ́ɛ̀* ‘he/she runs’ is negated as *á=∅ fìdɛ́ɛ̀=rɛ̄ʔ* ‘he/she doesn’t run’. Similarly, *mā náàⁿ nágī* ‘I asked them’ is negated as *mā náàⁿ nágī=rēʔ* ‘I didn’t ask them.’

#### Leftward H‑Shift

This process converts word-initial LHL to HL in prosodically light *Cv(v)* and *CvCv* words. It occurs in conjunction with contraction involving a following element.

Clear examples of this involve *Cv̀Cv́* verbs (preceded by +3Sg NPs) when they contract with a following vowel. For example, *à bàlí* ‘he/she accepted’ combines with nonhuman 3Sg postverbal object pronoun *ì-yà* as shown in (xx1a). The leftward shift of the H‑tone results in word-level homophony with the corresponding ‑3Sg (here, human 3Pl) form of the verb, which already begins in an H‑tone (xx1b).

(xx1) a. *à bál= ì‑yà*

/bàlí/

3SgHum accept.Pfv Nonh-3Sg

‘He/She agreed to/accepted it (proposal or invitation).’

b. *ààⁿ bál= ì-yà*

/bálī/

3PlHum accept.Pfv Nonh-3Sg

‘They agreed to/accepted it.’

Leftward H‑Shift also applies to the first of two verbs in tightly-knit clause adjunctions, where it has the effect of suppressing the usual distinction between {LH} overlay on +3Sg perfective verbs and the H‑initial tones of ‑3Sg perfective verbs. For example, the simple mail clause *è fìdí* ‘it ran’ shows the usual {LH} tones for a +3Sg perfective verb, but the H‑tone shifts leftward in the adjunction construction (xx2a).

(xx2) *[è fíd=] [ì sɔ́]*

[3SgNonh **run.Pfv**] [3SgNonh enter.Adjn]

‘It (=animal) ran in.’ (< /è fìdí/ plus /è sɔ́/)

Leftward H‑Shift does not apply to trisyllabic stems. For example, *Cv̀Cv́Cv̄* and *Cv̀Cv́Cv̀* stems retain their initial L‑tone regardless of contractions with following words. See (xx2a‑b) in §15..2.1.2.

## Continuity-marking clause-final M‑toned prolongation

The final vowel in the word ending an intonation group (typically a clause or two closely adjoined clauses, occasionally a smaller phrasal constituent) is prolonged slightly in M‑toned form to indicate continuity with a following intonation group. The latter usually follows in short order, but hesitation pauses are possible. I indicate this using phonological rather than special intonational notation.

Two examples of this occur in textual passage (xx1). Postposition ‘under’ shifts from *kúdɔ́* (‑3Sg tonal form) to *kúdɔ́ɔ̄* at the end of the first full intonation group. Postposition *dù* (+3Sg tonal form) shifts to *dǔū* (i.e. phonetic [dùúū]) at the end of the second group. Examples like *dǔū* suggest that a final L‑toned syllable can sometimes “overshoot” on the high side before finishing at M‑tone level.

(xx1) B: *bon*, *èèⁿ táʔá cíɛ́ [cíī dò] kúdɔ́ɔ̄],*

B: well, 3PlNonh go.Adjn arrive.Pfv [[thicket one] **under**],

*èèⁿ táʔá sɔ́ɔ́ [[cíi ꜜmí] dǔū],*

3PlNonh go.Adjn enter.Adjn [[thicket Dem] **in**],

*èèⁿ [jɛ̀rɛ́ dì-rá-àⁿ] séé ꜜjí,*

3plNonh [lion child-Nom-Pl] lie.down.VblN see.Adjn,

B: “Well, they went and arrived under (=at) a thicket (dense forest). They went into that thicket. They saw the lion cubs lying down.’ (2016\_02 @ 01:10))

This continuity intonation is very common with perfective verbs. Like other verbs, perfectives are usually final in clauses and therefore in intonation groups. Even in elicitation of simple perfective positive verb forms, my assistant very often produced forms with this feature. This was especially the case for perfectives in final *í* like *jàmúlí(ī)* ~ *jámúlí(ī)* ‘change’, where the M‑toned prolongation is shown in parentheses. The prolongation is absent when negative enclitic *=rĒʔ* is added: +3Sg *jàmùlí=rēʔ* and ‑3Sg *jámúlí=rēʔ* ‘didn’t change’.

# Nominal, pronominal, and adjectival morphology

## Nouns

### Simple nouns and suffixes

Most nouns may occur with or without a nominal suffix (-Nom in interlinears). The primary form of the suffix is *-ra* (tones depend on those of the stem). Both the consonant and the vowel are subject to changes. The tap *r* becomes *n* after a nasal syllable (e.g. *na* or *baⁿ* ) or after a nasal consonant (due to syncope of a final vowel). After *l*, the tap *r* either disappears, typical of monosyllabic *Cvl* stems as in *wùl-á* ‘dog’, or assimilates and becomes *l*, typical of nomonosyllabics such as *CvCvl(v)* stems as in *dàʔàl-lá* ‘mat’. The vowel *a* of the suffix assimilates to *ɔ* after a syllable with a back rounded vowel {*u o ɔ*}.

As explained more fully in chapter 6 on NP structure, the presence or absence of the nominal suffix, and if present its location (suffixed to the noun or to a following modifier), depends on what other modifiers occur in the NP, and on the syntactic function (subject, object, possessor, complement of postposition, etc.) of the NP as a whole. For present purposes one can think of the suffixed form as the independent (or absolute) form of the noun, obligatory in citation and other independent forms and frequent as clausal subject. The bare (unsuffixed) form is used when the noun is followed by certain modifiers (which in some cases themselves bear the nominal suffix), when the unmodified noun is directly governed by a transitive verb or by a postposition, and under some conditions optionally for subjects.

Nouns with no following modifier may be pluralized by adding plural suffix ‑àⁿ after the nominal suffix (which in this case is obligatory). A further plural nominal suffix *-nū* is added to ‑àⁿ, but only in specific syntactic positions. Thus *dí-rá* ‘child’, plural *dí-rá-àⁿ* or *dí-rá-à-nū* ‘children’ depending on syntactic position. *dí-rá-à-nū* may be apocopated to *dí-rá-à-n̄*, resulting in a final heavy HLM-toned syllable.

#### Simple monotonal nouns

(xx1) presents suffixed, pre-modifier, direct object (before an L‑initial verb such as *jɛ̌* ‘saw’), and plural forms of simple (uncompounded) nouns of monotonal (noncontoured) melody, i.e. /H/, /M/, and /L/. For the first two, the suffix adopts the tone of the stem, resulting in H-H and M-M at word level (xx1a‑b). The hyphens in H-H etc. represent the morpheme boundary. An /L/-toned stem, by contrast, has an H‑toned suffix (xx1c). This suggests that independent nouns require at least one nonlow tone. Before *jìɛ́* ‘saw’, what would otherwise be a final L or M tone on the noun becomes rising LH or MH.

(xx1) gloss suffixed modified ‘saw X’ plural

a. H-H < H

‘child’ *dí-rá dí dí dí-rá-à-nū*

‘water’ *yí-rá yí yí yíí-rá-à-nū*

‘father’ *jɛ́ⁿ-ná jɛ́ⁿ jɛ́ⁿ jɛ́ⁿ-ná-à-nū*

b. M-M < M

‘stick’ *gbāā-rā gbāā gbāá gbāā-rā-à-nū*

‘belly’ *kɔ̄yī-rā kɔ̄yī kɔ̄yí kɔ̄yī-rā-à-nū*

‘foot’ *kpɔ̄-rɔ̄ kpɔ̄ kpɔ᷇ kpɔ̄-rɔ̄-ɔ̀-nū*

‘millet’ *jū-rɔ̄ jū ju᷇ jū-rɔ̄-ɔ̀-nū*

‘hand’ *bɔ̄l-ɔ̄ bɔ̄l bɔ̄l-ɔ̄ bɔ̄l-ɔ̄ɔ̀-nū*

c. L-H < L

‘head’ *wù-rɔ́ wù wǔ wù-rɔ́ɔ̀-nū*

‘sheep’ *tàgà-rá* *tàgà* *tàgá* *tàgà-ráà-nū*

‘bull’ *yìgì-rá* *yìgì* *yìgí yìgə̀-ráà-nū*

‘goat’ *bàà-rá* *bàà* *bàá* *bàà-ráà-nū*

‘stone’ *kùgù-rá* *kùgù* *kùgú* *kùgù-ráà-nū*

‘house’ *sàà-rá sàà sàá sà:-ráà-nū*

‘dog’ *wùl-á wùl wùl-á wùl-áà-nū*

‘mat’ *dàʔàl-lá dàʔàl(ì) dàʔàlí dàʔàl-láà-nū*

#### Simple bitonal nouns

A minority of simple (uncompounded) nouns have a contoured (generally bitonal) melody, either falling (xx1a‑c) or rising (xx1d‑e). After a noun with falling melody (including LHM), the nominal suffix is L‑toned (xx1a‑c). A *CvCv* suffixed form from *Cv̂* or *Cv̂l* noun is realized as *Cv́Cv̀*, since a nonfinal short *Cv* syllable cannot bear a contour tone. A noun with /LH/ melody, even if bisyllabic, shifts its final H‑tone onto the suffix (xx1d-e).

(xx1) gloss suffixed modified ‘saw X’ plural

a. HM-L < HM

‘maize’ *sɔ́nɔ̄-nɔ̀ sɔ́nɔ́ sɔ́nɔ̄* *sɔ́n̄-nɔ̀ɔ̀-nū*

*sɔ́n̄-nɔ̀* (syncopated)

‘woman’ *ɲáā-nà ɲáá ɲáā ɲáàⁿ-nàà-nū*

‘mother’ *níì-nà níí níī níìⁿ-nàà-nū*

b. H-L < HL

‘road’ *cál-à cél cál-à cál-àà-nū*

c. LHM-L < LHM

‘man’ *dìkín̄-nà dìkíní dìkínī dìgín-nàà-nū*

~ *dìkín* ~ *dìkín̄*

d. L-H < LH

‘rope’ *mɔ̀-nɔ́ mɔ̀ mɔ̌ mɔ̀-nɔ́ɔ̀-nū*

variant: *mɔ̀ɔ́n-nà* *mɔ̀ɔ́n-nàà-nū*

‘person’ *mìʔì-ná mìʔìⁿ mìʔíⁿ mìʔⁿì-náà-nū*

variant: *mɛ̀ʔɛ̀-ná mɛ̀ʔɛ̀ⁿ mɛ̀ʔɛ̀ⁿ mɛ̀ʔⁿɛ̀-náà-nū*

also cpd: *dá-mɛ̄ʔ-nà dá-mɛ̄ʔn dá-mɛ̄ʔ-nàà-nū*

#### Vocatives

A few nouns denoting close relationships have a vocative form distinct from the regular referential form. A first singular possessor is understood but not overt in the vocative.

(xx1) referential vocative gloss of vocative

*nɔ̀ŋɔ̀ nàà* ‘(my) friend!’

*jɛ́ⁿ bàá* ‘Dad!’

*níí* ~ *néé náà* ‘Mom!’

*gūūᵇ kɔ̀r-cyɛ̄* ‘elder brother!’

*dóʔó dɔ́ʔɔ́-cyɛ̄* ‘younger brother!’

Plurals do not seem to be in use, but my assistant did accept *nàà-nū* ‘friends!’ as vocative.

#### ‘So-and-so’ (*wɔ́-rɔ́* )

‘So-and-so’ forms (French *un tel*, etc.) are functions over personal names, in vocative and referential function. Example: ‘if someone bumps into you, tell him “Hey So-and-So, …”.’

The Jalkunan form is *wɔ́-rɔ́* ‘So-and-so’, plural *wɔ́-rɔ́-nǔ* ~ *wɔ́-rɔ́-ň*. This form is also used by hunters to avoid uttering the name of an animal they are hutning or have just killed.

An example occurs in text 2016\_02 @ 01:33.

## Derived nominals

### Diminutive nouns with suffix *-lī* ~ *-nī*

A number of nouns have a diminutive derivation with suffix *‑lī* ~ *‑lì*, or *‑nī* ~ *‑nì* after a nasal syllable (*Nv*, *Cvⁿ* ). If the input noun has a final sonorant-vowel syllable, the sonorant is deleted and the vowels contract into a long vowel. The vocalism of *kpúú‑lī* ‘toe’ is probably analogical to that of *búú‑lī* ‘finger’, but a sound-symbolic preference for long high vowels in diminutives may also be at work, as more clearly in *wíí‑lī* ‘puppy’. Except for ‘rope’, the typical tone patterns are either (L)H‑toned stem plus M‑toned suffix (from non-L‑toned input), or all L‑toned (from L‑toned input).

Diminutives can denote a small instance of a normally larger entity (xx1a), a digit as opposed to a hand or foot (xx1b), or a juvenile human (xx1c) or animal (xx1d). A special application to ethnicities is in (xx1e).

(xx1) noun gloss diminutive gloss

a. *gbāā* ‘stick, wood’ *gbáá-lī* ‘twig’

*mɔ̀ⁿ* ‘rope’ *mɔ̀ɔ́-nī* ‘rope’

*jɛ̀nɛ́* ‘shed, booth’ *jɛ̄ɛ̄-nī* ‘small shed/booth’

b. *bɔ̄lɔ̄* ‘hand’ *búú-lī* ‘finger’

*kpɔ̄* ‘foot’ *kpúú-lī* ‘toe’

c. *kāmélē* ‘adult man’ (25-40) *káméé-lī* ‘young man’ (to age 20)

*dīkínī* ‘man’ *díkíí-nī* ‘young boy’ (to age 10)

*kàʔrà* ‘unmarried woman’ *kàà-lì* ‘young girl’ (to adolescence)

d. *wùl* ‘dog’ *wíí-lī* ‘puppy’

*tèʔè* ‘chicken’ *tìʔí-lī* ‘chick’

*tàgà* ‘sheep’ *tàgà-lì* ‘lamb’

e. *kòò* ‘Natioro person’ *kòò-lì* ‘Wara person’

The Natioro and Wara are two relatively small-population ethnic groups living north and northwest of Blédougou. Their languages, distantly related to the core Gur language family, seem to be closely related.

For similar diminutives of adjectives, see §4.5.xxx below.

A number of nouns that have a diminutive-like ending such as *lī*, and that have senses compatible with diminution or that are often expressed by diminutives in other languages of the zone, but that do not correspond to an unsuffixed noun (known to me), are in (xx2). The cases in (xx2a) seem likely to be original diminutives; *díkáálī* ‘young girl’ is very similar to *díkíí-nī* ‘young boy’ in (xx1c) above. The cases in (xx2b) are less likely.

(xx2) noun gloss

a. *díkáálī* ‘young girl’

*jìmíílī* ‘ant’

*kɔ́ɔ́lī* ‘kidney’

*dūūnī* ‘wide-mouthed gourd’

*cèŋálī* ‘star’

*ɲàʔálī* ‘grain of sand’

*bɛ̀ɛ́nī* ‘fonio (grain)’

*tàfyɛ́lī* ‘square palm-leaf fan’

*wàʔálī* ‘stool’

*dàʔàlì* ‘mat’

*màʔàlì* ‘knife’

b. *fìlàní* ‘twin’

*dàʔàlí* ‘mat’

*múúlī* ‘ridge in plowed field’

*sàfàlì* ‘donkey’

*tùmùlì* ‘shea-tree caterpillar’ (also *tùmùlù* )

As a short high vowel following an unclustered sonornant, the suffixal *ī* is often deleted by apocope (including presuffixal syncope). Representative forms of one diminutive noun are in (xx3).

(xx3) diminutive suffixed ‘I saw X’ ‘two X’s’ gloss

*búú-lī búū-l-là mā búū-l jɛ̌ búúl flà* ‘finger’

*mā búú-lī jɛ̌*

### Verbal nouns

The most clearly nominal derivative of a verb stem has no overt derivational suffix but does allow the nominal suffix (*‑rà* or variant) to be added in those syntactic positions that allow it. This verbal noun occurs as a complement in certain constructions (xx1).

(xx1) a. PP complement of *bàlà* ‘prevent (from)’ with postposition *mà* ‘on’ (§17.xxx);

b. NP complement of *bálìyà* ‘consent (to)’ (§17.xxx).

The form of this verbal noun depends on the syllable count of the verb. Verbal nouns of nonmonosyllabic verbs are in (xx2), along with the main indicative forms. For the intransitives, disregard “ +3Sg” in column headings except perfective.

(xx2) Nonmonosyllabic verbal nouns

VblN Pfv +3Sg Ipfv +3Sg Imprt +3Sg gloss

bare suffixed

a. intransitive

*fìdì fìdì-rá fìdí fìdɛ́ɛ̀ fìdí* ‘run’

*sɛ́nī sɛ́n̄-nà sɛ̀níī sɛ̀nà sɛ̄ⁿ* ‘sprout’

*wálī wa᷆l-là wàlíī wálà wālī* ‘shout’

*sìdánī sìdán̄-nà sìdánī sìdánà sìdáⁿ* ‘ascend’

*jàʔánī jàʔán̄-nà jàʔánī jàʔánà jàʔáⁿ* ‘descend’

*bànɛ́ʔɛ̄ bànɛ́ʔɛ̄-nà bànɛ́ʔɛ̄ⁿ bànáʔàⁿ bànɛ̄ʔɛ̄ⁿ* ‘get tired’

b. transitive

*tìgì tìgì-rá tìgí tìgɛ̀ tìgí* ‘pound in mortar’

*tòʔrì tòʔr̀-rá tòʔrí tòʔrɔ̀ tòʔrí* ‘sell’

*kùlɔ́nī kùlɔ́n̄-nà kùlɔ́nì kùlɔ́nɔ̀ kùlɔ́* ‘tie’

For these nonmonosyllabic verbs, the verbal noun is most closely related to the perfective and specifically the 3Sg form (which begins with L‑tone). There is no change in ATR value.

Verbal nouns of monosyllabics are illustrated in (xx3).

(xx3) Monosyllabic verbal nouns

VblN Pfv 3Sg Ipfv 3Sg Imprt 3Sg gloss

bare suffixed

*séé séé-rá sɛ̌ sáá sā* ‘come’

*bóó bóó-rá bɔ̀ɛ́ bɔ́ɔ́ bɔ̄* ‘exit (v)’

*bèè bèè-rá bɛ̌ bàà bà* ‘fall’

*mèè mèè-rá mɛ̌ màà mǎ* ‘do’

*sòò sòò-rá sòíī sɔ̀ɔ̀ sǒ* ‘wait for’

Here the vocalism of the verbal noun is strictly +ATR. The best predictor of the form of the verbal noun for monosyllabics is the imperfective. Cee verbal nouns of stems with Caa imperfective might seem to point instead to perfective *Cɛ̌* with its mid-height vowel. However, given that the verbal noun has a +ATR ablaut overlay, imperfective Caa is at least as good a predictor of *Cee* verbal noun as perfective *Cɛ̌* is. This is because *e* is the +ATR counterpart of *a* as well as *ɛ*. Furthermore, the imperative matches the verbal noun in vowel length and tone, whereas the perfective and imperative do not.

For compound verbal nouns, see §5.xxx.

### Deadjectival abstractive nouns

(xx1a‑b) gives some examples of nouns denoting abstract adjectival qualities. They appear to be verbal nouns derived from related inchoative verbs (‘become ADJ’).

(xx1) VblN with suffix gloss inchoative (Ipfv)

a. *sɔ̀ɔ̀ⁿ-bèè sɔ̀ɔ̀ⁿ-bèè-rá* ‘length, height’ *sɔ̀ɔ̀ⁿ-bàà*

*tòò-bèè tòò-bèè-rá* ‘depth’ *tòò-bàà*

b. *kóní kón-ná* ‘size, bigness’ *kónó*

*kānā kān-nā* ‘redness’ *kánná* (< *káníná* )

### Instrument nominals absent

No derivational mechanism for deriving uncompounded instrument nominals (e.g. ‘blower’, ‘scraper’) is known.

For compounds specifying the function of an entity, see §5.1.xxx below.

### Uncompounded agentives (*X míʔī-nà* )

It is possible to create an agentive from a simple verbal noun, or other noun denoting an activity type, plus *míʔī-nà* ‘person’.

(xx1) a. *klénī* ‘hunt (n), hunting (n)’

b. *klén̄ míʔī-nà* ‘hunter’

However, in practice occupational agentives are always compounds of the type ‘iron-hitting person’, i.e. similar to (xx1b) except that the initial element is itself a compound whose initial denotes a characteristic object and whose final is a nominal form of a verb. See §5.1.xxx for discussion and examples.

### Lexically reduplicated noun stems

A large number of noun stems have two or more identical adjacent syllables or two-syllable sequences by and therefore have a reduplicative appearance. In general the unreduplicated form does not occur separately. The CvCv examples are artuably too short to be clearly analysed by native speakers as reduplicative (xx1a‑b). Those with bimoraic reduplication are more obvious and I indicate this by hyphenation. These are mostly flora-fauna terms, including onomatopoeic bird and insect names (xx1c‑d).

(xx1) a. *kùkù* ‘stone’

*nɔ̄nɔ́* ‘milk’

*tòtó* ‘giant pouched rat’

*tɛ́tɛ́* ‘tick’

*sūⁿsūⁿ* ‘spur-winged goose’

*bíbí* ‘winged termite’

*búⁿbúⁿ* ‘red kapok tree’

*gìⁿgíⁿ* ‘eagle-owl’

b. *sɛ̀sɛ̀lɛ̀* ‘tree sp.’ (*Cassia*)

*lɛ́lɛ́bɛ́* ‘pot-scraper’

*kàkàlà* ‘awned grass sp.’ (*Loudetia simplex*)

*sésègélē* ‘awned grass sp.’ (*Loudetia togoensis*)

c. *kááⁿ-kààⁿ* ‘pied crow’

*pɔ̀tɔ̀-pɔ̀tɔ́* ‘jatropha tree’

*kìlí-kìlì* ‘piapiac (bird)’

*ŋmɛ́ɛ́-ŋmɛ̀ɛ̀* ‘spur-winged lapwing’

*mɛ́n-mɛ́n* ‘weaver ant’ (*Oecophylla*)

*vɔ̀ɔ̀ⁿ-vɔ̄ɔ̄ⁿ* ‘mud-dauber wasp’

d. *màʔá-màʔànì* ‘bug in maize flowers’

There are also several compounds of which one segment is reduplicated.

(xx1) a. *dɔ́ɔ́n̄-pɔ̀pɔ̀rɔ̀* ‘thorny tree’ (*Flacourtia*)

b. *mɛ́nɛ́-mɛ́nɛ́-jɛ̀ⁿ* ‘bush sp.’ (*Cochlospermum*)

*táá-blàʔà-blàʔà* ‘firefly’ (cf. *tāā* ‘fire’)

A possible case of reduplication with a vocalic change is the initial in *níínàà-tùʔùgú* ‘praying mantis’. This type of reduplication is fairly common in languages of the zone but this is the only Jalkunan example I know of.

## Pronouns

### Basic personal pronouns

The categories are first, second, third (human), and third (nonhuman), crossed with a binary singular/plural distinction. The sections below describe their forms as subjects, objects, possessors, and postpositional complements. For reflexive possessor forms, which segmentally merge first person with third human, and second person with third nonhuman, see §18.1.1.

#### Subject pronominals

Subject pronouns occur in simple form in the same clause-initial position as subject NPs. Nonpronominal NPs are not doubled by (resumptive) 3Sg or 3Pl subject pronouns.

Subject pronouns are followed by the inflectional (aspectual) particles if there is one. If not, they are followed by the first word of the VP, either an object NP or an intransitive verb. There are some tonal interactions between subject pronouns and following words or inflectional particles. The forms in (xx1) are basic.

(xx1) Subject pronouns

regular

a. singular

*1st/2nd*

1Sg *mā*

2Sg *wō*

*3rd*

3SgHum *à*

3SgNonh *è*

b. plural

1Pl *mùʔùⁿ*

2Pl *ēēⁿ*

3PlHum *ààⁿ*

3PlNonh *èèⁿ*

The plural in (xx1b) are bimoraic and either M‑ or L‑toned, so before an L‑tone they are subject to Final Tone-Raising, resulting in *mùʔúⁿ*, *ēéⁿ*, *àáⁿ*, and *èéⁿ*.

There is one textual example in which è‑yàá occurs instead of nonhuman 3Sg reflexive è ní. See text 2016\_02 @ 02:12. This may be related to the better-attested but still just occasional use of è‑yà in preverbal object function. è‑yà is consistently found only in postverbal object function.

Further detail on these pronominals in combinations where they precede verbs or inflectional particles are given in chapter 10.

In clause adjunctions of the same-subject type [X Vb1] [Pronx Vb2-Adjn], the second subject is a pronominal coindexed with the first subject X (which may be an NP or a pronoun). The Pronx forms for 1st/2nd persons in this construction (§15.2.1.3) differ from the regular subject pronouns given above. Specifically, 1Sg and 1Pl are *(ì)n*, and 2Sg is *í* plus floating M‑tone.

#### Possessor pronouns

The possessor pronouns are identical to the subject pronouns. They precede the possessum, without a genitive morpheme. The paradigm, and examples with ‘sickle’ and ‘father’ are in (xx1).

(xx1) Possessor pronouns

possessor *wùrɔ̀tɔ̀-rɔ́* ‘sickle’ *jɛ́-ná* ‘father’

a. singular

*1st/2nd*

1Sg *mā* *mā wùrɔ̀tɔ̀-rɔ́* *mā jɛ̄-nā*

2Sg *wō* *wō wùrɔ̀tɔ̀-rɔ́ wō jɛ̄-nā*

*3rd*

3SgHum *à à wùrɔ̀tɔ̀-rɔ́ à jɛ̀-ná*

3SgNonh *è è wùrɔ̀tɔ̀-rɔ́ è jɛ̀-ná*

b. plural

1Pl *mùʔùⁿ mùʔúⁿ wùrɔ̀tɔ̀-rɔ́ mùʔùⁿ jɛ́-ná*

2Pl *ēēⁿ ēéⁿ wùrɔ̀tɔ̀-rɔ́ ēēⁿ jɛ̄-nā*

3PlHum *ààⁿ àáⁿ wùrɔ̀tɔ̀-rɔ́ ààⁿ jɛ́-ná*

3PlNonh *èèⁿ èéⁿ wùrɔ̀tɔ̀-rɔ́ èè jɛ́-ná*

The tones of the possessed noun are not directly relevant to this section. The details are complex and depend on alienability and on the number category of the possessor. See §6.2 for details.

If the possessor of a non-subject NP in a clause is coindexed with the clausemate subject, it takes reflexive form. See §18.1.1.1 for details.

#### Preverbal object pronouns

This section describes regular (nonreflexive) objects. When the preverbal object is coindexed with the clausemate subject, the object takes full or reduced reflexive form. For full reflexive objects, including *yéʔré*~ *yɛ́ʔrɛ́*, see §18.1.2.2. Reduced reflexive objects, not including *yéʔré*~ *yɛ́ʔrɛ́*, occur in pseudo-reflexive clauses (§10.1.1.3), similar to middle (mediopassive) reflexives in Romance languages.

Regular object pronouns resemble subject and possessor pronouns, but show more variation in form, mainly because of morphophonological interaction with preceding subject pronouns or NPs, or with intervening inflectional particles. This section covers preverbal objects. Postverbal objects (without a postposition) are independent pronouns (§4.3.xxx below).

We begin by considering object pronouns that occur clause-initially. This is only possible with objects of singular-addressee positive imperative verbs, which have zero subject and no overt inflectional morpheme. All pronominal categories except 2Sg and 2Pl may occur clause-initially in this context. (2Sg and 2Pl objects of imperatives take reflexive form, §18.1.1.) Examples with singular imperative ‘hit!’ and clause-initial object pronoun are in (xx1).

(xx1) Preverbal object pronouns

a. singular

*1st/2nd*

1Sg *mā bāʔrī* ‘Hit-2Sg me!’

2Sg —

*3rd*

3SgHum *à bàʔrì* ‘Hit-2Sg him/her!’

3SgNonh *è bàʔrì* ‘Hit-2Sg it!’

b. plural

1Pl *mùʔùⁿ báʔrí* ‘Hit-2Sg us!’

2Pl —

3PlHum *ààⁿ báʔrí* ‘Hit-2Sg them (human)!’

3PlNonh *èèⁿ báʔrí* ‘Hit-2Sg them (nonhuman)!’

The object pronouns in (xx1) are identical to the corresponding subject and possessor pronouns. We therefore infer that 2Sg *wō* and 2Pl *ēēⁿ*, with M‑tones, would also occur as such clause-initially if they were allowed syntactically.

In most cases, objects are preceded directly either by the subject NP or pronoun (perfective), by the subject plus imperfective /H+=∅/ enclitic (present, progressive), by future particle *sà*, or by prohibitive particle *bí*. This section focuses on the forms used in perfective-aspect clauses. The forms of object pronouns that follow the enclitic and the particles mentioned are best presented in the relevant sections of chapter 10.

In (xx2), what are elsewhere M‑toned 1Sg and 2Sg pronouns appear in either M‑toned form (after an L‑tone) or in L‑toned form (after an H‑ or M‑tone). Singular nonpronominal subjects may appear in suffixed or unsuffixed form. The verb takes H‑initial form, as it does following objects other than 3Sg pronouns and singular nouns.

(xx3) 1Sg/2Sg object pronouns after various subjects (perfective)

‘X hit me’ ‘X hit you-Sg’

a. pronominal subjects

*object L‑toned*

1Sg — *mā wò báʔrī*

2Sg *wō mà báʔrī* —

2Pl *ēéⁿ mà báʔrī* —

*object M‑toned*

3SgHum *à mā báʔrī à wō báʔrī*

3SgNonh *è mā báʔrī è wō báʔrī*

1Pl — *mùʔùⁿ wō báʔrī*

3PlHum *ààⁿ mā báʔrī ààⁿ wō báʔrī*

3PlNonh *èèⁿ mā báʔrī èèⁿ wō báʔrī*

b. nonpronominal subjects (< *mɛ̀ʔɛ̀ⁿ*, *fūgū*, *jóʔó*, *sáléⁿ*, *ɲɔ́ʔɔ̀mɛ́* )

‘person’ *mɛ̀ʔɛ̀-ná mà báʔrī* *mɛ̀ʔɛ̀-ná wò báʔrī*

*mɛ̀ʔɛ́ⁿ mà báʔrī* *mɛ̀ʔɛ́ⁿ wò báʔrī*

‘blind one’ *fūgū-rá mà báʔrī fūgū-rá wò báʔrī*

*fūgú mà báʔrī* *fūgú wò báʔrī*

‘Jula person’ *jóʔó-rá mà báʔrī jóʔó-rá wò báʔrī*

*jóʔó mà báʔrī* *jóʔó wò báʔrī*

‘labeo fish’ *sálé-ná mà báʔrī sálé-ná wò báʔrī*

*sáléⁿ mà báʔrī* *sáléⁿ wò báʔrī*

‘camel’ *ɲɔ́ʔɔ̀mɛ́-nà mā báʔrī ɲɔ́ʔɔ̀mɛ́-nà wō báʔrī*

*ɲɔ́ʔɔ̀mɛ́ mà báʔrī ɲɔ́ʔɔ̀mɛ́ wò báʔrī*

An alternative 2Sg preverbal object pronominal *ē* occurs in formulaic imprecations such as wishes and blessings, as in *álé= ē ɲɛ́ sɔ̀* ‘May God have you enter (there) in good health!’ (§10.5.3.2). This is likely an archaism. If so, it is likely that 2Sg *wō* is an innovation, at least in object function.

In (xx4), 3Sg pronouns are the objects. The verb is therefore L‑initial. After a pronominal subject, these object pronouns begin with a semi-epenthetic linking consonant *n* not found in the subject pronouns, and the tone is high. One could also analyse this as a subject-object linking morpheme *n-*, but since it only occurs with third person object pronouns it belongs to the morphology or morphophonology. The overt vowel in the nonhuman 3Sg object is *i* rather than *e*, hence *ní* when combined with the linker. Nonpronominal subjects require the nominal suffix (*‑rà* or variant) in these combinations, perhaps motivated by the fact that these object pronouns begin with short vowels. Human 3Sg subject acting on 3Sg object (human or nonhuman) has variant forms without the linker *n* (*á* instead of *à ná* or *à é* instead of *à ní* ). The H‑tone of *á* or *é* suggests that they may be contractions historically, i.e. \*à (n)á → *á* and \*à (n)í → *é*, but in this scenario one would have expected long vowels, and *í* rather than *é* for the nonhuman object.

With nonpronominals subjects, the final *a/ɔ* of the nominal suffix contracts with nonhuman 3Sg *ì* (or perhaps *è* ) to form long *ee* (xx4b, right-hand column). The clitic boundary symbol = indexes *vv*‑Contraction between subject and object.

(xx4) 3Sg object pronouns after various subjects

‘X hit him/her’ ‘X hit it’

a. pronominal subjects

1Sg *mā ná bàʔrí* *mā ní bàʔrí*

2Sg *wō ná bàʔrí* *wō ní bàʔrí*

3SgHum *à ná bàʔrí à ní bàʔrí*

~ *á bàʔrí* ~ *á bàʔrí*

3SgNonh *è ná bàʔrí è ní bàʔrí*

~ *é bàʔrí* ~ *é bàʔrí*

1Pl *mùʔùⁿ ná bàʔrí* *mùʔùⁿ ní bàʔrí*

2Pl *ēēⁿ ná bàʔrí* *ēēⁿ ní bàʔrí*

3PlHum *ààⁿ ná bàʔrí ààⁿ ní bàʔrí*

3PlNonh *èèⁿ ná bàʔrí èèⁿ ní bàʔrí*

b. nonpronominal subjects

‘person’ *mɛ̀ʔɛ̀ⁿ-ná= à bàʔrí* *mɛ̀ʔɛ̀ⁿ-né= è bàʔrí*

‘blind one’ *fūgū-rá= à bàʔrí fūgū-ré= è bàʔrí*

‘Jula person’ *jóʔó-rá= à bàʔrí jóʔó-ré= è bàʔrí*

(xx5a) illustrates the relationship between contracted and uncontracted 3Sg-on-3Sg subject-object combinations. The H‑tone of *á* in the short version (xx2a) comes from the object pronoun in the full form (xx5b) or (xx5c), but its vowel quality comes from the subject pronoun in the full form. Therefore (xx5a) clearly has human 3Sg subject, but its object is ambiguously human or nonhuman 3Sg. The full forms (xx5b‑c) do make this humanness distinction.

(xx5) a. *á bàʔrí(ī)*

3SgHum.3SgObj hit.Pfv

‘He-or-she hit-Past him-or-her/it.’ (two variants)

b. *à ná* *bàʔrí*

3Sg 3SgHumObj hit.Pfv

‘He-or-she hit-Past him-or-her.’

b. *à ní* *bàʔrí*

3Sg 3SgNonhObj hit.Pfv

‘He-or-she hit-Past it.’

There are occasional examples in the recorded texts of what appears to be nonhuman 3Sg *ì-yà* and 3Pl *ì-yǎ‑āⁿ* in preverbal object position. Singular *ì-yà* is regular in postverbal position (generally contracting with the verb). It was never produced in preverbal object position in elicitation. Given how the *e* ~ *i* alternation works in pronominal forms, it is likely that the isolation forms are *è‑yà* and *è‑yǎ‑āⁿ*. However, the initial vowel is lost by contraction in the examples I have. Initial-vowel loss is also common with focal or logophoric 3Sg *à‑wò* (human) and *è‑wò* (nonhuman). The relevant textual examples of preverbal *è‑yà* and *è‑yǎ‑āⁿ* are in (xx6).

(xx6) a. *èéⁿ (è-)yà bègè sísàāⁿ*

3PlNonh (Nonh-)3SgObj cut.Pfv now

‘They cut it now.’ (2016\_02 @ 04:39)

b. *á ∅-yǎ-āⁿ bɔ́ dóò*

3SgHum Nonh-3Obj-Pl take.out.Adjn also

‘She took them (inanimate) out.’ (2016\_04 @ 00:52)

In (xx7), the objects are plural pronominals. For nonhuman 3Pl object, in the rightmost column replace *náàⁿ* (after pronominal subject) by *níìⁿ*, e.g. *mā níìⁿ báʔrī* ‘I hit them (nonhuman)’, and replace *ààⁿ* (after nonpronominal subject) by *èèⁿ*, e.g. *mɛ̀ʔɛ̀-ná èèⁿ báʔrī* ‘the person hit them (nonhuman)’. 2Pl *ēēⁿ* is dropped to *èèⁿ* directly after a 3Sg subject, but it lacks the epenthetic or linking *n* and therefore remains segmentally (as well as tonally) distinct from nonhuman 3Pl *níìⁿ*.

(xx7) Plural object pronouns after various subjects

‘X hit us’ ‘X hit you-Pl’ ‘X hit them (human)’

a. pronominal subjects

1Sg — *mā ēēⁿ báʔrī mā náàⁿ báʔrī*

2Sg *wō mùʔùⁿ báʔrī* — *wō náàⁿ báʔrī*

3SgHum *à mùʔùⁿ báʔrī à èèⁿ báʔrī à náàⁿ báʔrī*

*áàⁿ báʔrī*

3SgNonh *è mùʔùⁿ báʔrī è èèⁿ báʔrī è náàⁿ báʔrī*

1Pl — *mùʔùⁿ ēēⁿ báʔrī mùʔùⁿ náàⁿ báʔrī*

2Pl *ēéⁿ mùʔùⁿ báʔrī* — *ēēⁿ náàⁿ báʔrī*

3PlHum *ààⁿ múʔúⁿ báʔrī ààⁿ ēēⁿ báʔrī ààⁿ náàⁿ báʔrī*

3PlNonh *èèⁿ múʔúⁿ báʔrī èèⁿ ēēⁿ báʔrī èèⁿ náàⁿ báʔrī*

b. nonpronominal subjects

‘person’ *mɛ̀ʔɛ̀ⁿ-ná* …

*… mùʔùⁿ báʔrī … ēēⁿ báʔrī … ààⁿ báʔrī*

‘blind one’ *fūgū-rā* …

*… mùʔùⁿ báʔrī … ēēⁿ báʔrī … ààⁿ báʔrī*

‘Jula person’ *jóʔó-rá* …

*… mùʔùⁿ báʔrī … ēēⁿ báʔrī … ààⁿ báʔrī*

In one greeting formula it appears that 2Pl object *ēēⁿ* is expanded as *nīīⁿ*, with the same initial n and the same vowel raising as in nonhuman 3Pl object *nììⁿ*.

(xx8) *kpɛ́ nīīⁿ kéē dè*

what? 2PlObj have there.Def

This is ‘What (trouble) has (=has afflicted) you-Pl there?

#### Independent, logophoric, and predicative pronouns

The independent forms in (xx1) can be used in isolation, i.e. not as arguments of a verb. They also occur as postverbal objects. In 1Sg *mā‑n̄* and 2Sg *wō‑n̄*, the nasal suffix is usually not extendible word-finally, but it keeps the M‑tone of the pronominal and it is occasionally pronounced syllabically as *‑nū*.

In the 3Sg and 3Pl forms, a distinction is made between independent pronouns, which can have the same functions as e.g. 1Sg *mā‑n̄*, and logophoric pronouns, which are coindexed to a quoted author (§18.3. For human 3Sg, the only difference between independent *à-wò-n(ù)* and logophoric *à-wò* is the presence of the final *-n(ù)* in the former. Likewise for nonhuman 3Sg *è-wò-n(ù)* and logophoric *è-wò*. For human 3Pl, the two functions are expressed by unrelated forms. Independent *àà-n̄* ~ *àà-nū* is just the regular human 3Pl proclitic *ààⁿ* plus the independent pronominal suffix *-nū*. By contrast, the human 3Pl logophoric is *à‑mǎāⁿ*. Likewise nonhuman 3Pl independent *èè-n̄* ~ *èè-nū* and logophoric *è‑mǎāⁿ*.

(xx1) Independent and logophoric pronouns

isolation ‘it’s \_\_’

a. 1st/2nd

1Sg *mā-n* *mā-ní(ī)*

2Sg *wō-n* *wō-ní(ī)*

1Pl *mùʔú-n(ú)* *mùʔúⁿ-ní(ī)*

2Pl *ēē-n(ū)* *ēēⁿ-ní(ī)*

2Pl *mǎà-n̄ mǎà-ní(ì)*

b. 3Sg

*3SgHum*

Logo *à-wò*

Indep *à-wò-n(ù) à-wò-ní(ī)*

Logo Indep [= Indep]

*3SgNonh*

Logo *è-wò*

Indep *è-wò-n(ù)* *è-wò-ní(ī)*

Logo Indep [= Indep]

c. 3Pl

*3PlHum*

Logo *à-mǎā*

Indep *àà-n̄* ~ *àà-nū àà-ní(ī)*

LogoIndep *à-mǎā-n̄ à-mǎā-ní(ī)*

*3PlNonh*

Logo *è-mǎā*

Indep *èè-n̄* ~ *èè-nū èè-ní(ī)*

LogoIndep *è-mǎā-n̄ è-mǎā-ní(ī)*

#### Pronouns with discourse-functional particles

Examples with ‘too’ and topical ‘as for’ are in (xx1). Among 1st/2nd persons the usual proclitic form is used (xx1a), while full independent pronouns are not in common use in this combination. For third person, there is a choice between simple pronominal clitics (xx1b) and emphatic-logophoric pronouns (xx1c).

(xx1) Pronouns with discourse-functional particles

‘\_\_ too’ ‘as for me’

a. 1st/2nd persons

1Sg *mā dōʔō mā kɔ̄nī*

2Sg *wō dōʔō wō kɔ̄nī*

1Pl *mùʔùⁿ dóʔó mùʔúⁿ kɔ́ní*

2Pl *ēēⁿ dōʔō ēēⁿ kɔ̄nī*

b. simple third person

3SgHum *à dòʔó* *à kɔ̀ní*

3SgNonh *è dòʔó è kɔ̀ní*

3PlHum *ààⁿ dóʔó ààⁿ kɔ́ní*

3PlNonh *èèⁿ dóʔó èèⁿ kɔ́ní*

c. independent/logophoric third person

3SgHum *à-wò dóʔó à-wò kɔ́ní*

3SgNonh *è-wò dóʔó è-wò kɔ́ní*

3PlHum *à-mǎāⁿ dōʔō à-mǎāⁿ kɔ̄nī*

3PlNonh *è-mǎāⁿ dōʔō è-mǎāⁿ kɔ̄nī*

#### Postverbal object pronouns

Postverbal NPs occur in bare form (without postpositions), can function as indirect objects of ‘give’ or ‘show’ or as postverbal objects of a few verbs like *báʔrá* or *màʔà* ‘touch’ (§11.1.2.2).

(xx1) a. *à bàʔŕ dí-rá*

3SgHum touch.Pfv child-Nom

‘He/She touched the child.’ (< *bàʔrí* )

b. *à bàʔŕ mā-n̄*

3SgHum touch.Pfv 1Sg-Indep

‘He/She touched me.’

The pronominal forms used in this context are in (xx2). Except for 3Sg they are identical to independent pronouns.

(xx1) Postverbal object pronouns

1Sg *mā-n̄*

2Sg *wɔ̄-n̄*

1Pl *mùʔⁿú-ń*

2Pl *ēē-n̄*

3SgHum *à-yà*

3SgNonh *ì-yà*

3PlHum *àà-ń* ~ *àà-nú*

3PlNonh *èè-ń* ~ *èè-nú*

#### 2Pl function of *mǎā*

The 3Pl logophoric forms *à-mǎā* (human) and *è-mǎā* (nonhuman) are suppletive, or at least have an *m* not present in the usual 3Pl pronominals (human *ààⁿ*, nonhuman *èèⁿ*).

The presumably etymologically related form *mǎā*, without a vocalic prefix, can optionally replace 2Pl *ēēⁿ* in any function (e.g. subject, object, possessor, postpositional complement). This replacement is moderately common in my assistant’s speech in elicited utterances as well as natural speech. *mǎàⁿ* is treated like other plural pronouns in terms of its tonal effect on following words.

(xx1) a. *mǎā sɛ́*

2Pl come.Pfv

‘You-Pl came.’

b. *zàkíì mǎā báʔrī*

Z 2Pl hit.Pfv

‘Zaki hit you-Pl.’

c. *mǎā=∅ sà sáá*

2Pl=Ipfv Fut come.Ipfv

‘You-Pl will come.’

d. *mǎā kɔ́ní*

2Pl Topic

‘as for you-Pl, …’

e. *mǎā dòʔó*

2Pl too

‘you-Pl too’

f. *àáⁿ tàgá bìlé mǎā-n*

3PlHum sheep give.Pfv 2Pl-Indep

‘They gave a sheep to you-Pl.’

The relationship between variant 2Pl *mǎā* and 3Pl logophoric or focalized *à‑mǎā* (human) and *è‑mǎā* (nonhuman) raises the issue whether 2Sg *wō* (invariant for subject position and nearly so in other nonreflexive contexts) might be related to the *‑wò* morpheme in 3Sg logophoric or focalized *à‑wò* (human) and *è‑wò* (nonhuman). This is worth pursuing, since the alternative 2Sg form ē, regular in reflexives and (with H‑tone) in subjects of adjoined clauses, and still used in object function in imprecations, have a better Mandé pedigree, making *wō* appear to be innovative. The semantic-pragmatic basis for a connection between second person on the one hand and third person logophoric-focalized is left as an exercise for the reader.

## Determiners

There is no definite determiner ‘the’ apart from demonstratives. NPs without determiners can be translated as indefinite or definite depending on context.

### Demonstratives

#### ‘This/that’ (*mí* )

The all-purpose demonstrative is *mí*, with nominal suffix *mí‑nà*. The plural is *mí‑nà‑àⁿ*, or *mí‑nà‑à‑nū* with nominal suffix. The use of the nominal suffix depends on the higher syntactic environment.

The demonstrative may be used absolutely, i.e. as a one-word NP. It may also follow a noun (and any adjective or numeral). Examples in (xx1) are with *sàà* ‘house’, *gbāā* ‘stick’, and *yíʔé* ‘fish’.

(xx1) a. *sàà mí-nà* ‘this house’

*gbāā mí-nà* ‘this stick’

*yíʔé mí-nà* ‘this fish’

b. *sàà mí-nà-à-nū* ‘these houses’

*gbāā mí-nà-à-nū* ‘these sticks’

*yíʔé mí-nà-à-nū* ‘these fish’

#### ‘This/that’ (*mìí* ) plus near- and far-distal particles

An alternative demonstrative form *mìí* occurs in independent (citation) forms and predicates, but not in NPs that have subject, object, or other functions within clauses and phrases. It is followed by *nɛ̀* or *bà*. The choice between the two is spatial, with *nɛ̀* the unmarked form and *bà* a marked form denoting a second location farther away; compare demonstrative adverbs *nàà* ‘here’ and *bá* ‘over there’. The plural of *mìíⁿ* is *mìí-īⁿ*, with a nasalized plural ending similar to plural suffix *-àⁿ* and variants for nouns. The tones of singular *mìí nɛ̀* and *mìí bà* could derive from /mìì …/ by Final Tone-Raising, but since the rising tone pattern also occurs in the plural it is best to take it as lexical.

Examples are in (xx1). *sàà* ‘house’ and *gbāā* ‘stick’ undergo Final Tone-Raising before the initial L‑tone of *mìíⁿ*.

(xx2) unmarked distant

a. *sàá mìí nɛ̀* *sàá mìí bà* ‘that house’

*gbāá mìí nɛ̀* *gbāá mìí bà* ‘that stick’

*yíʔé mìí nɛ̀* *yíʔé mìí bà* ‘that fish’

b. *sàá mìí-īⁿ nɛ̀ sàá mìí-īⁿ bà* ‘those houses’

*gbāá mìí-īⁿ nɛ̀ gbāá mìí-īⁿ bà* ‘these sticks’

*yíʔé mìí-īⁿ nɛ̀ yíʔé mìí-īⁿ bà* ‘these fish’

### Demonstrative adverbs

#### Locative adverbs

Some basic spatial adverbs are in (xx1). Some contain demonstrative *mí*. Near-distant *làʔà-mí-tɔ̀* is based on *làʔà-dò* ‘place’.

(xx1) form gloss

a. *nàà* ‘here’

*nà mí nɛ̀* ‘here’ (*mí* ‘this’)

b. *bá* ‘over there’

c. *dè* ‘there’ (discourse-definite)

d. *nɛ̀* ‘here/there’ (weak demonstrative, phrase-final)

*nàà* and *dè* combine in phonologically irregular ways with some preceding words. As predicates (‘be here’, ‘be there’), these two adverbs require a linking enclitic *=ń*, as in *zàkíì=∅=ń dè* ‘Zaki is present there’. As nonpredicative adverbs, verbs and some other elements have modified or extended forms that can also be analysed as linking enclitics. The modifications may involve vowel lengthening, shift from ‑ATR to +ATR, and H‑tone. Some examples are in (xx2).

(xx2) regular with *dè* or *nàà* gloss

*sā sé=é nàà* ‘Come here!’

*ē wǎ ē wè=é dè* ‘Go there!’

*à bùlí à búl=ú dè* ‘He/She went back there’

*ààⁿ búlī ààⁿ búl=ú dè* ‘They went back there.’

The linking enclitics in (xx2) are difficult to segment since they are modifications of input vowels, but the enclitic notation does warn readers that an extension due to the spatial adverb has occurred.

On linkers see §3.7.3.

#### Emphatic and approximative demonstrative adverbs

My assistant indicated that emphatic ‘right here’ and approximative ‘around here’ are best expressed using *làʔà* ‘place’ with a demonstrative. In (xx1a), “in this place” (perhaps accompanied by a gesture) is more emphatic than the simple adverb *nàà* ‘here’. He phrased ‘(somewhere) around here’ as “here near this place” (xx1b) or “(somewhere) around this place” (xx1c).

(xx1) a. *à bɛ̀ [[làʔà mí] tɔ̀]*

3SgHum fall.Pfv [[**place Dem] in**]

‘He/She fell right here.’

b. *à bɛ̀ [[làʔà mí] gìlé nàà]*

3SgHum fall.Pfv [[place Dem] **near** here]

‘He/She fell (somewhere) around here.’

c. *[[làʔà mí fáⁿ] tɔ̀]*

[[place Dem **around**] in]

‘somewhere around here’

Version (xx1c) is also the basis for a textual example with a relative clause ‘the place around which …’ (2016\_04 @ 03:45).

### Presentatives (‘here’s/there’s …!’)

The basic presentative construction is *X=∅ nɛ̀* ‘here’s X!’ or ‘there’s X!’ Here /H+=∅/ is the locational ‘be’ enclitic.

(xx1) a. *zàkíī=∅ nɛ̀*

Z=be here’s

‘Here’s/There’s Zaki.’

b. *[dí kpɛ́ʔr-à-áⁿ]=∅ nɛ̀*

[child small-Nom-Pl]=be here’s

‘Here’s the young child!’

Pronominal forms include *má=∅ nɛ̀* ‘here I am’, *á=∅ nɛ̀* ‘here/there he/she is!’, and *àáⁿ=∅ nɛ̀* ‘here/there they are!’

The final *nɛ̀* may combine with a trueverb, such as ‘come’ and ‘sleep’. In this case I gloss /H+=∅/ as imperfective (=Ipfv), as usual before present, future, and progressive verbs, but it is arguably the same morpheme as locational ‘be’.

(xx2) a. *zàkíī=∅ sè-yá nɛ̀*

Z=Ipfv come-Prog here’s

‘Here comes Zaki!’

b. *mùʔúⁿ=∅ sè-yá nɛ̀*

Z=Ipfv come-Prog here’s

‘Here we come!’

c. *á=∅ ɲìí bè-yá nɛ̀*

3SgHum=Ipfv sleep(n) fall-Prog here’s

‘There he is, sleeping!’ (French *le voilà qui dort!* )

French counterparts *voici X* and *voilà X* are derived from the imperative of the verb ‘see’, and another option in Jalkunan is based on the imperative of ‘look (at)’, with the focal entity as object.

(xx1) a. *zàkíì lé*

Z look.Imprt

‘Look-2Sg at Zaki (over there)!’

b. *dí lě*

child look.Imprt

‘Look-2Sg at the child (over there)!’

c. *dí-rá-àⁿ lé*

child-Nom-pl look.Imprt

‘Look-2Sg at the children (over there)!’

## Adjectives

For NP exemplars used as modifiers, e.g. ‘fresh grass’ in the sense ‘green’, see §5.2.2.

### Simple adjectives

Adjectives follow nouns. In an N-Adj combination with no following modifiers, the nominal suffix *‑rà*, *‑nà*, etc. is added once, to the adjective. The plural suffix *-àⁿ* and variants, and in favorable syntactic contexts its own nominal suffix *‑nū*, are added to the “singular” nominal suffix.

In N-Adj combinations, tonal changes may apply to the noun and/or the adjective. Some of these are predictable tone-sandhi processes. Others are morphosyntactically conditioned ablaut processes. A full discussion of N-Adj combinations and relevant tonal processes is in §6.xxx below. There I argue that the lexical tones of the adjective are best identified by having them follow L‑toned nouns. I assume that analysis here. However, the focus at the moment is on the semantic classes of primary adjectives (excluding deverbal adjectives).

(xx1) semantic type adjective suffixed gloss

a. color *gbòʔò* *gbòʔò-rá* ‘black’

*kānā kān-nā* ‘red’

*kpēē kpēē-rā* ‘white’

b. dimension *gbɔ́* *gbɔ́-rà* ‘big’

*kpɛ́ʔrɛ̄* *kpɛ́ʔr-à* ‘small’

*gbáʔálá* *gbáʔálá-rà* ‘thin’

*súmáá súmáá-ná* ‘long’

*gúnī* *gúnī-nà* ‘short’

~ *gūn̄-nà*

*bá-kúnī bá-kúnī-nà* ‘short’

~ *bá-kún̄-nà*

c. temperature *táā táā-rà* ‘hot’

*kúmā* *kúmā-nà* ‘cold’

d. evaluation *ɲɛ́ ɲɛ́-nà* ‘good’

*kítā kítā-rà* ‘bad’ (*t* ~ *d* )

e. state *gbé gbé-rà* ‘fresh’

*kútɔ̄* *kútɔ̄-rɔ̀* ‘old’ (*t* ~ *d* )

*wútɔ̄* *wútɔ̄-rɔ̀* ‘new’ (*t* ~ *d* )

f. miscellaneous *wéé* *wéé-rà* ‘other’

### Diminutive adjectives with *-lī* ~ *-nī*

The *-lī* suffix (nasalized variant *-nī* ) that forms nominal diminutives (§4.2.1) is also productive with basic adjectives. The adjective *kpíí-lī* ‘small’ is only attested in diminutive form.

The construction N Adj-Dim where an otherwise ordinary adjective is morphologically diminutivized occurs chiefly with flora-fauna species terms that end in ‘red’ (including brown), ‘white’, or ‘black’. The same N‑Adj combinations do not usually occur without diminutive marking, and in some cases the noun itself is not attested elsewhere. Examples not including obvious bahuvrihis are in (xx1).

(xx1) N Adj-Dimin noun gloss

a. *kāā-nī* ‘red-Diminutive’ < *kānā* ‘red’

*diminutive adjective M‑toned*

*màʔá-màʔà kāā-nī* ‘red bishop (bird)’

*wáʔrá kāā-nī* *wáʔrà* ‘hawk’ ‘buzzard’

*tòòlù kāā-nī* *tòòlù* ‘bat’ ‘fruit bat sp. (*Micropteropus*)’

*jáá kāā-nī jáá* ‘duiker’ ‘red-flanked duiker (mammal)’

*diminutive adjective L‑toned*

*tɔ̀ʔr kàà-nú* *tɔ̀ʔrɔ̀* ‘frog’ ‘reed frog’

*diminutive adjective H‑toned*

*jìmíílī káá-ní* *jìmíílī* ‘ant’ ‘small brown ant sp.’

b. *kpēē-lī* ‘white-Diminutive’ < *kpēē* ‘white’

*diminutive adjective M‑toned*

*jáá kpēē-lī jáá* ‘duiker’ ‘bush duiker (mammal)’

c. *gbōʔō-lū* ‘black-Diminutive’ < *gbòʔò* ‘black’

*diminutive adjective M‑toned*

*jáá gbōʔō-lū jáá* ‘duiker’ ‘yellow-backed duiker’

See also the noun-adjective bahuvrihi compounds in (§5.2.1.1).

It is also possible for an already diminutive noun to take a nondiminutive adjective, as in *gbáá‑lì kānā* ‘tree spp. (*Monotes*, *Hymenocardia*)’, literally “stick-Dim red.” See also ‘small brown ant sp.’ at the end of (xx1a) above.

### Deverbal adjectives with *tɔ́* ~ *tɔ́ⁿ*

Many adjectival senses have no dedicated adjectival form. Instead, the “adjective” is constructed by adding *tɔ́* ~ *tɔ́ⁿ* (apparently in free variation), suffixed *tɔ́‑rɔ́* ~ *tɔ́‑nɔ́*, to a form of the corresponding intransitive (inchoative) verb. The known cases are in (xx1). The modifying form shown is the surface form after *sɛ́ⁿ* ‘thing’, representing nouns that have a final floating L (cf. suffixed *sɛ́‑nà* ‘thing’).

(xx1) verb (Ipfv) after *sɛ́ⁿ* ‘thing’ gloss

a. modifying form of verb ends in *i* (or zero after syncope)

*bàʔàlánà bàʔàlán ꜜtɔ́-rɔ́* ‘skinny’

*díá, jàà dì tɔ́-rɔ́* ‘sweet’

*fɛ́ɛ́nà fɛ̀ɛ́nì tɔ́-rɔ́* ‘full’

*kónó kòn tɔ́-rɔ́* ‘fat; wide’

*nɔ́ʔɔ̀ⁿ nùʔùⁿ tɔ́-rɔ́* ‘smooth; soft’

*ŋùnɔ̀ ŋùnì tɔ́-rɔ́* ‘sour’

*ɲíʔɛ́náá ɲìʔèn(ì) tɔ́-rɔ́* ‘wet’

*tɔ̀lɔ̀ tòl-tɔ́rɔ́* ‘rotten’

b. modifying form of verb ends in *ee*

*cáá cèè tɔ́-rɔ́* ‘ripe (and hard)’

*dɛ̀ɛ̀ dèè tɔ́-rɔ́* ‘hot’

*gbàà gbèè tɔ́-rɔ́* ‘hard; difficult’

*fyɛ́ɲɛ́ɛ̀ fyɛ̀ɲéé ꜜtɔ́-rɔ́* ‘weak; lightweight’

*júgúyáà jùgùyéé ꜜtɔ́-rɔ́* ‘nasty’

*compositive verbs with -bàà*

*fòʔò-bàà fòʔò-bèè tɔ́-rɔ́* ‘distant’

*kùdɔ̀-bàà kùdɔ̀-bèè tɔ́-rɔ́* ‘heavy’

*nɛ̀ɛ̀-bàà nɛ̀ɛ̀-bèè tɔ́-rɔ́* ‘bitter’

*tòò-bàà tòò-bèè tɔ́-rɔ́* ‘deep’

c. modifying form of verb ends in low or back vowel

*mɔ̀ɔ̂ mòò tɔ́-rɔ́* ‘cooked’

*kàʔáá kàʔà tɔ́-rɔ́* ‘coarse’

The vocalism of the forms of the verb before *tɔ́-rɔ́* is generally related to that of the perfective stem of the verb. Except for ‘coarse’ (xx1c), the vowel quality at least of the final syllable of the verb shifts to +ATR.

Nouns of /H/ or /L/ melodies require adjectival forms beginning with H‑tone, replacing the L‑tone in the forms shown: *(yíʔé/yìgì)* *kúdɔ́-béé tɔ́-rɔ́* ‘(fish/cow) heavy’, etc. Nouns of /M/ melody spread the M‑tone into the modifying form: klāā *kūdɔ̄-bēē tɔ̄-rɔ̄* ‘heavy mouse’.

## Numerals

### Cardinal numerals

#### ‘1’

Numeral ‘1’ is *dúlì*. A preceding noun omits its final suffix.

(xx1) with ‘1’ gloss suffixed singular

*wùl dúlì* ‘one dog’ *wùl-á*

*kùgù dúlì* ‘one stone’ *kùgù-rá*

*gbāā dúlì* ‘one stick’ *gbāā-rā*

*dí dúlì* ‘one child’ *dí-rá*

In counting (‘1, 2, 3, …’) ‘1’ is *dúúlì* with long vowel.

#### ‘2’ to ‘10’

The numerals from ‘2’ to ‘10’ are shown in (xx1). There is no plural marking, and no nominal suffix. The “counting” forms are used in recited numerals without modified nouns (‘1, 2, 3, …’). They are the most reliable indicator of lexical tone. Numerals ‘6’ to ‘9’ appear to contain a frozen formative *ma-* plus a version, often irregular, of ‘1’ to ‘4’, respectively. This points to an original base of ‘5’. This morphology is most transparent for ‘8’ vis-à-vis ‘3’.

(xx1) gloss counting lexical tone

‘2’ *flā* /M/

‘3’ *sīgbō* /M/

‘4’ *nāānī* /M/

‘5’ *sóóló* /H/

‘6’ *mī-īlō* /M-MM/

‘7’ *mà-álā* /L-HL/

‘8’ *mà-sīgbō* /L-H/

‘9’ *má-nānì* /H-ML/

‘10’ *táá* /H/

When these numerals are added to a noun (or adjective), the *mà‑* formative in ‘7’ and ‘8’ is raised to H‑tone (the same formative in ‘9’ is already H).

Examples with /L/-melody noun *kùgù* ‘stone’ (suffixed singular *kùgù‑rá* ) are in (xx2).

(xx2) gloss ‘stone’ tone change

‘2’ *kùgù flā*

‘3’ *kùgù sīgbō*

‘4’ *kùgù nāānī*

‘5’ *kùgù sóóló*

‘6’ *kùgù mī-īlō*

‘7’ *kùgù má-álā* yes

‘8’ *kùgù má-sīgbō* yes

‘9’ *kùgù má-nānì*

‘10’ *kùgù tāā*

Combinations with /M/-melody noun *gbāā* ‘stick’ (suffixed *gbāā-rā* ) are in (xx3).

(xx3) gloss ‘stick’ tone change

‘2’ *gbāā flā*

‘3’ *gbāā sīgbō*

‘4’ *gbāā nāānī*

‘5’ *gbāā sōōlō*

‘6’ *gbāā mī-īlō*

‘7’ *gbāā má-álā* yes

‘8’ *gbāā má-sīgbō* yes

‘9’ *gbāā má-nānì*

‘10’ *gbāā tāā*

Combinations with /H/-melody noun *yíʔé* ‘fish’ (suffixed *yíʔé‑rá* ) are in (xx4)

(xx4) gloss ‘fish’ tone change

‘2’ *yíʔé flā*

‘3’ *yíʔé sīgbō*

‘4’ *yíʔé nāānī*

‘5’ *yíʔé sóóló*

‘6’ *yíʔé mī-īlō*

‘7’ *yíʔé má-álā* yes

‘8’ *yíʔé má-sígbō* yes

‘9’ *yíʔé má-nānì*

‘10’ *yíʔé tāā*

When a noun with final floating L-tone is followed by a numeral, the L‑tone is realized on the numeral. The exception is ‘9’, the only numeral ‘2’ to ‘10’ that consistently has a falling tone pattern. Floating L‑Docking with these numerals involves more extensive spreading than that seen in N-Adj combinations, since here it wipes out underlying nonlow tones rather than merely pushing them rightward. (xx5) illustrates with *ɲáāⁿ* ‘woman’ (suffixed *ɲáā-nà* ), whose lexical melody is /HM(L)/.

(xx5) gloss ‘woman’ tone change

‘2’ *ɲáá flà* yes

‘3’ *ɲáá sìgbò* yes

‘4’ *ɲáá nàànì* yes

‘5’ *ɲáá sòòlò* yes

‘6’ *ɲáá mì-ìlò* yes

‘7’ *ɲáá mà-àlà* yes

‘8’ *ɲáá mà-sìgbò* yes

‘9’ *ɲáá má-nānì*

‘10’ *ɲáá tàà* yes

In careful speech, the underlying nonlow tones of the numerals in (xx5) may reappear. It is likely that variation in pronunciation of these combinations occurs in natural speech.

#### Decimal/vigesimal multiples (‘20’ to ’200’) and combinations

The multiples of ‘10’ are given in (xx1). The system is actually vigesimal, with *jálámā* ‘20’ taking the compound initial forms *jén-* (in ‘30’) and *jáāⁿ-* (elsewhere) before single-digit numerals. Odd-numbered decimals above ‘20’ add *‑r‑tàà* (after *flā* ‘2’ and *sīgbō* ‘3’) or *‑tàà* (after higher decimals). *‑tàà* also occurs in irregular ‘30’, where it has similar additive sense (‘plus 10’), and in ‘200’, where it has direct scope over ‘20’ (20x10 = 200). The use of different allomorphs for ‘20’ avoids homophony between ‘30’ (’20 plus 10’) and ‘200’ (‘ten 20s’). This final *‑tàà* is L‑toned and therefore triggers Final Tone-Raising of preceding L‑ and M‑toned stems (‘50’, ‘70’, ‘130’, ‘170’). Phonetically, H and M tones following *jáāⁿ* are downstepped, but in *jáāⁿ-sóóló-tàà* ‘110’ the middle stem *‑sóóló‑* is still higher-pitched than *‑tàà*, and in *jáāⁿ‑má‑álà* ‘140’ *má‑á* is higher-pitched than *là*, so I do not attribute the lowered pitch of e.g. *‑sóóló‑* to Floating-L Shift triggered by *jáāⁿ‑*.

(xx1) gloss form

‘10’ *táá*

‘20’ *jálámà*

‘30’ *jén-tàà*

‘40’ *jáāⁿ-flā*

‘50’ *jáāⁿ-flā-ŕ-tàà*

‘60’ *jáāⁿ-sīgbō*

‘70’ *jáāⁿ-sīgbō-ŕ-tàà*

‘80’ *jáāⁿ-nāānī*

‘90’ *jáāⁿ-nāāń-tàà*

‘100’ *jáāⁿ-sóóló*

‘110’ *jáāⁿ-sóóló-tàà*

’120’ *jáāⁿ-mī-īlō*

‘130’ *jáāⁿ-mī-īló-tàà*

‘140’ *jáāⁿ-má-álà*

‘150’ *jáāⁿ-má-álà-tàà*

‘160’ *jáāⁿ-má-sīgbō*

‘170’ *jáāⁿ-má-sīgbō-ŕ-tàà*

‘180’ *jáāⁿ-má-nānì*

‘190’ *jáāⁿ-má-nānì-tàà*

‘200’ *jáāⁿ-táá*

Single-digit numerals may follow the decimal and vigesimal terms to form composite numerals like ‘11’ and ‘56’. In such combinations the decimal terms take the forms illustrated in (xx2). ‘10’ adds what looks like the nominal suffix *-rā* (i.e. /tāā‑rā/ raised to *-rá* before the single-digit term, which is dropped to {L}.

(xx2) gloss ‘10 plus …’ digit

‘11’ *tāā-rá dùlì* *dúlì*

‘12’ *tāā-rá flà* *flā*

‘13’ *tāā-rá sìgbò* *sīgbō*

‘14’ *tāā-rá nàànì* *nāāní*

‘15’ *tāā-rá sòòlò* *sóóló*

‘16’ *tāā-rá mì-ìlò* *mī-īlō*

‘17’ *tāā-rá mà-àlà* *mà-álà*

‘18’ *tāā-rá mà-sìgbò* *mà-sígbó*

‘19’ *tāā-rá mà-nànì* *má-nānì*

while all higher decimal terms add a linking morpheme *tú*, arguably raised from /tù/ before the tone-dropped single-digit term.

(xx2) gloss ‘20 plus …’ ’30 plus …’ digit

‘21/31’ *jálámà tú dùlì* *jáāⁿ-sīgbō-ŕ-tàà tú dùlì* *dúlì*

‘22/32’ *jálámà tú flà* *jáāⁿ-sīgbō-ŕ-tàà tú flà* *flā*

‘23/33’ *jálámà tú sìgbò* *jáāⁿ-sīgbō-ŕ-tàà tú sìgbò* *sīgbō*

‘24/34’ *jálámà tú nàànì* *jáāⁿ-sīgbō-ŕ-tàà tú nàànì* *nāāní*

‘25/35’ *jálámà tú sòòlò* *jáāⁿ-sīgbō-ŕ-tàà tú sòòlò* *sóóló*

‘26/36’ *jálámà tú mì-ìlò* *jáāⁿ-sīgbō-ŕ-tàà tú mì-ìlò* *mī-īlō*

‘27/37’ *jálámà tú mà-àlà* *jáāⁿ-sīgbō-ŕ-tàà tú mà-àlà* *mà-álà*

‘28/38’ *jálámà tú mà-sìgbò* *jáāⁿ-sīgbō-ŕ-tàà tú mà-sìgbò* *mà-sīgbō*

‘29/39’ *jálámà tú mà-nànì* *jáāⁿ-sīgbō-ŕ-tàà tú mà-nànì* *má-nānì*

#### ‘Thousand’

‘Thousand’ is either *wàʔà* or *búúlī*, the latter also meaning ‘finger’. For ‘1000’, the numeral ‘1’ is added to the ‘thousand’ term. After *wàʔà*, single-digit terms from ‘2’ to ‘5’ are tone-dropped. They, along with ‘6’ to ‘8’ which already begin in an L‑tone, induce Final Tone-Raising to *wàʔá* (left data column). After *búúlī*, ‘2’ and ‘3’ are tone-dropped but others are not (right data column).

(xx1) gloss with *wàʔà* with *búúlì* ‘finger’

‘1000’ *wàʔà dúlì búúlī dúlì*

‘2000’ *wàʔá flà búúlī flà*

‘3000’ *wàʔá sìgbò búúlī sìgbò*

‘4000’ *wàʔá nàànì búúlī nāānī*

‘5000’ *wàʔá sòòlò búúlī sóóló*

‘6000’ *wàʔá mì-ìlò búúlī mì-ìlò*

‘7000’ *wàʔá mà-álà búúlī mà-álà*

‘8000’ *wàʔá mà-sīgbō búúlī mà-sīgbō*

‘9000’ *wàʔà má-nānì búúlī má-nānì*

’10,000’ *wàʔá tàà* *búúlī tāā*

#### Currency

In native languages of the zone, currency is counted in a unit equal to 5 francs CFA (the smallest coin in use). Therefore 100 FCFA is expressed as *wár jálámà* ’20 money units’. The unit term is *wárī* (suffixed *wár̄-rà*).

There is also a special term *kùmɔ́l* meaning ‘2000 francs CFA’. To specify exactly this amount, the phrasing is *kùmɔ́l dúlì* with *dúlì* ‘1’. *kùmɔ́l flā* is ‘4000 francs CFA’, and so forth.

#### Reduplicated or iterated distributive numerals

As in many other languages of the zone, numerals are initially reduplicated (*Cv-*) or completely iterated to express distributivity (‘two each’, ‘two by two’, ‘two at a time’, etc.). Reduplication occurs with ‘1’ and ‘4’ through ‘7’. ‘4’ and ‘5’ have the same unusual tone pattern in their reduplicated forms, in spite of having different tones in their baic forms. Iteration occurs with ‘3’ and ‘8’ to ‘9’. Since ‘2’ and ‘10’ are usually monosyllabic, the distinction between reduplication and iteration is moot for them. The form for ‘10’ is irregular segmentally, but has the same tones as those for ‘4’ and ‘5’. (xx1) shows the distributive form used in isolation (as an adverb), and that used after the noun *mìʔìⁿ* ‘person’, as in *mìʔìⁿ flá-flā* ‘two people at a time’. Forms that begin with L‑tone in isolation begin with H‑tone after *mìʔìⁿ*.

(xx1) numeral gloss distributive

isolation after *mìʔìⁿ* ‘person’

*dúlì* ‘1’ *dú-dúlì dú-dúlì*

*flā* ‘2’ *flà-flā flá-flā*

*sīgbō* ‘3’ *sìgbò-sīgbō sígbó-sīgbō*

*nāānī* ‘4’ *ná-nāānī ná-nāānī*

*sóóló* ‘5’ *só-sōōlō só-sōōlō*

*mī-īlō* ‘6’ *mì-mī-īlō mí-mī-īlō*

*mà-álà* ‘7’ *mà-má-álà má-má-álā*

*mà-sīgbō* ‘8’ *mà-sīgbō-mà-sīgbō má-sīgbo-má-sīgbō*

*má-nānì* ‘9’ *má-nānì-má-nānì má-nānì-má-nānì*

*táá* ‘10’ *táá=nāā táá-nāā*

Historically, the irregular consonantism in *táá-nàà* ‘ten each’ may be a historical vestige of a variant (not used by my assistant) for simple *táá* ‘10’ that had a nasalized vowel and may still have it dialectally (Truong’s lexicon renders ‘10’ as *tāⁿ* ).

(xx2) illustrates one context that distributive numerals can be used in. Here the distributive is attached to *miʔìⁿ* ‘person’ even though this is redundant.

(xx2) *mìʔì-ná-àⁿ sɛ́ [miʔìⁿ flá-flā]*

person-Nom-Pl come.Pfv [person two-two]

‘The people came two by two (two at a time).’

*dú-dūlī* ‘one by one’ can also mean ‘scattered, here and there (isolated, infrequent)’.

### Ordinal adjectives

#### ‘First’ (*dáálá* ) and ‘last’ (*kùdɔ́rɔ̀mà-nà* )

‘First’ as modifying adjective (not adverb) is *dáálá*, with nominal suffix *dáálá-rá*, obscurely related to *dúlì* ‘1’. Examples are *sɛ́ⁿ dààlà-rá* ‘the first thing’ (the noun has a floating L) and *dí dáálá‑rá* ‘the first child’ (< *dí‑rá* ).

#### Other ordinals (suffix *-ɲa-*)

The forms are given here with the nominal suffix. The ordinal suffix is usually M‑toned and requires an M‑toned nominal suffix. In ‘sixth’, however, the whole stem including *‑ɲà‑* is L‑toned, so the suffix is H‑toned *‑ná*.

(xx1) form gloss

a. single-digit numeral

*flā‑ɲā‑nā* ‘second’

*sīgbō-ɲā-nā* ‘third’

*náání-ɲā-nā* ‘fourth’

*sóóló-ɲā-nā* ‘fifth’

*mì-ìlò-ɲà-ná* ‘sixth’

*mà-álà-ɲā-nā* ‘seventh’

*mà-sīgbō-ɲā-nā* ‘eighth’

*má-nànì-ɲā-nā* ‘ninth’

*táá-ɲā-nā* ‘tenth’

b. decimal

*jálámà-ɲā-nā* ‘twentieth’

c. decimal plus single-digit numeral

*tāā-rá dùlì-ɲā-nā* ‘eleventh’

d. hundred

*jáāⁿ-sóóló-ɲā-nā* ‘hundredth’

### Fractions and portions

The noun *gùⁿ* (with nominal suffix *gù-nɔ́* ) has a range of translations including ‘piece’ or ‘half’. It is a homonym of ‘mortar (for pounding)’.

# Nominal and adjectival compounds

## Nominal compounds

A considerable number of forms functioning as noun stems are transparently composite, in the sense that one or both elements can be identified. In other cases just one element is attested elsewhere, and in still others no element can be identified but the noun sounds like a compound due to multisyllabicity or tonal pattern.

In the two most productive patterns for transparent compounds, the final has either {HM(L)} overlay with L surfacing on the nominal suffix or on a following word (§5.1.1 just below) or {LH} overlay (§5.1.2). Minor compound patterns are best left to the lexicon.

### Noun-noun compounds with {HM(L)}-toned finals

This construction is typical of transparent right-headed noun-noun compounds, i.e. where the compound final denotes a class of entities and the compound initial denotes something associated with the relevant subclass.

Compounds with *bɔ̄l‑ɔ̄* ‘hand’ as initial are in (xx1). The regular compound initial is bōl with +ATR vowel. The finals have …HM(L) tone. The form in (xx1d) shows a different initial (originally diminutive) and LH-toned final (see the following section).

(xx3) Initial is *bɔ̄l‑ɔ̄* ‘hand’

compound gloss final

a. noun-noun with recognizable final

*final already HM(L) toned*

*bōl-kláā-rà* ‘ring (on finger)’ *kláā-rà* ‘ring’

*bōl-kóō-rà* ‘back of hand’ *kóō-rà* ‘back’

*final becomes HM(L) toned*

*bōl-cíī-nà* ‘hair on hand’ *cīī-nā* ‘hair’

*bōl-bíī-nà* ‘elbow’ *bìì-ná* ‘rump (in butchery)’, cf. *kpɔ̄-bíī-nà* ‘ankle’

b. noun plus verbal noun

*bōl-dégē-rà* ‘menstruation’ *dègà* ‘not fit, be unable to enter’

c. noun plus final not attested as simple noun

*bōl-sābárā-rà* ‘palm (with fingers)’ cf. *kpɔ̄-sābárā-rà* ‘sole’

d. archaic initial, cf. diminutive *búū-l* (*búú-lī* ), final LH-toned

*búlú-ɲìn-ná* ‘fingernail’ cf. *kpúlí-ɲìn-ná* ‘toenail’

(variant *búlí-ɲìn-ná* )

Other compounds with HM(L) final are in (xx2). This pattern is common with compounds ending in life-form terms such as ‘snake’ and ‘fish’.

(xx2) a. *kàà-yíʔē-rà* ‘spiny eel (*Mastacembelus*)’ *kàà-rá* ‘snake’

*yíʔé-rá* ‘fish’

b. *cì-káā-rà* ‘snake sp. (*Psammophis*)’ (? *cìì-rá* ‘borassus palm’)

*kàà-rá* ‘snake’

c. *kùgù-sáā-rà* ‘stone house’ *kùgù-rá* ‘stone, rock’

*sàà-rá* ‘house’

For compounds of this type with spatial PP as initial, see §5.1.8.

### Possessive-type compounds with {LH}-toned finals

In this type, the initial is a noun (without nominal suffix), keeping its lexical tones. The final is a noun and has LH-tones overlaid on its lexical tones. {LH} is elsewhere the overlay on possessed nouns following a +3Sg possessor. For example, *sàà‑rá* ‘house’ combines with *dāā‑rā* ‘mouth’ to form *sàà dàà‑rá* ‘doorway’. As in this case, whole-part relationships are typical of this compound type.

The first set has ‘millet’ as initial (xx1).

(xx1) Initial is *jū* ‘millet’

compound gloss final

a. noun-noun with recognizable final

*final already LH*

*jū-fì-ná* ‘millet flowers’ *fì-ná* ‘flower’

*jū-jùl-ɔ́* ‘millet leaf’ *jùl-ɔ́* ‘stick’

*jū-ɲàmà-ná* ‘millet root’ *ɲàmà-ná* ‘root’

*final becomes LH*

*jū-dì-rá* ‘grain of millet’ *dí-rá* ‘child’

(variant: *jú-dí-rà* )

*jū-gbàà-rá* ‘millet stem or head’ *gbāā-rā* ‘stick’

*jū-yì-rá* ‘millet sap (juice)’ *yí-rá* ‘water’

*jū-bùl-lá* ‘millet grub’ *búl-lá* ‘grub’

b. noun plus specialized compound final

*jū-kū-nɔ̄* ‘millet plant’ (cpd. final only)

Most of the compounds of ‘millet’ have LH-toned final (xx1a), respecting the {LH} overlay associated with preceding +3Sg words. The exception is *jū‑kū‑nɔ̄* (variant *jū‑kū‑nā*) in (xx1b), where the M‑tone of *jū* spreads into the final. This final combines with many flora-species terms to denote the entire plant. It is not attested as an independent noun in this sense, though *kù‑nɔ́* is the name of one tree species (*Diospyros*).

Similar compounds for ‘peanut’ are in (xx2). The initial keeps its L.L.H tone sequence. ‘Peanut plant’ (xx2b) is tonally compatible with the compounds in (xx2a).

(xx2) Initial is *càʔàcí-rà* ‘peanut’

compound gloss final

a. noun-noun with recognizable final

*final already LH*

*càʔàcí-bà-ná* ‘peanut greens’ *bà-ná* ‘palm frond’

*càʔàcí-tò-rɔ́* ‘peanut shell (pod)’ *tò-rɔ́* ‘shell’

*final becomes LH*

*càʔàcí-nàà-ná* ‘peanut sauce’ *náá-ná* ‘sauce’

b. noun plus specialized compound final

*càʔàcí-kù-ná* ‘peanut plant’ (cpd. final only)

The next set (xx3) has *álā* ‘sky; God’ (suffixed *ál-là* ) as initial. The initial flattens to H‑tone before the L‑initial final.

(xx3) Initial is *ál-là* ‘sky; God’

compound gloss final

a. noun-noun with recognizable final

*final already LH*

*álá-jɔ̀ɔ̀‑rɔ́* ‘vine (*Cassytha*)’ *jɔ̀ɔ̀-rɔ́* ‘fishnet’

*álá-kpɔ̀l-ɔ́* ‘sky’ *kpɔ̀l-ɔ́* ‘skin’

*álá-yìgì-rá* ‘cloud’ *yìgì-rá* ‘cow’

*álá-màʔàl-lá* ‘rainbow’ *màʔàl-lá* ‘knife’

b. noun-verb-noun

*álá-pɛ̀rɛ́n̄-ká-nà* ‘thunder (n)’ *pɛ́rɛ́nà* ‘make noise’, *káⁿ* ‘voice’

*álá-màʔà-ká-nà* ‘thunder (n)’ *màʔà-káⁿ* ‘speak-voice’

c. final obscure or unattested separately

*álá-mìʔì-mìʔìl-á* ‘velvet mite’ (? *mìʔìⁿ* ‘person’)

*álá-tìʔíl-lá* ‘helmet-shrike (bird)’ (unattested)

### Compounds with final verbal noun

For simple verbal nouns, see §4.xxx. Transitive verbal nouns may incorporate an unmodified object noun to form a compound verbal noun. The default compound final is *méé-* ~ *mèè-* from the verb *màà* ‘do’, whether or not this verb is part of a standard collocation with the incorporated noun (xx1a). Other compound verbal nouns have the regular transitive verb as final and a representative incorporated noun as initial (xx1b). The tone of the verb stem, e.g. *méé-* ~ *mèè-*, is spread from the initial, but in the case of H-H combinations the second element may be lightly downstepped (not shown).

(xx1) a. *mùù-mèè mùù-mèè-ná* ‘farm work’ (“field-doing”)

*dòò-mèè dòò-mèè-ná* ‘dancing’ (“dance-doing”)

*tígí-méé tígí-méé-rá* ‘mortar-pounding’

*bɛ́n-méé bɛ́n-méé-rá* ‘water-drawing’

b. *sígí-séé sígí-séé-rá* ‘singing’

*fóʔó-téé fóʔó-téé-rá* ‘rifle-shooting’

*sàà-sèè sàà-sèè-rá* ‘building, construction’

*yíʔé-sóʔó yíʔé-sóʔó-rá* ‘fishing’

In such compounds, tone sandhi (Final Tone-Raising) does not apply at the boundary between initial and final; see ‘farm work’ and ‘dancing’ in (xx1a) above.

### Agentive compounds with *míʔī-nà* final

Compounds denoting persons who have a distinctive occupation or other behavior are generally three-part compounds consisting of a characteristic object, a transitive verb in perfective (or arguably verbal noun) form but with final vowel shifted to +ATR, and the noun ‘person’ in the form *míʔīⁿ*, suffixed *míʔī‑nà* (xx1a). Person’ has lexical /L/ melody as seen in uncompounded *mìʔìⁿ* ~ *mɛ̀ʔɛ̀ⁿ*, but in agentives it has {HM(L)} overlay, showing that agentives are a special case of the noun-noun compound type described in §5.1.1 above. ‘Since some transitive verbs have multiple senses, changing the compound initial (representing the object) can completely change the meaning of the agentive (xx1b‑c). ‘Do’ occurs not only when the agentive is based on a noun-verb collocation that already includes ‘do’, like ‘dancer’ and ‘farmer’, but also as a device to create agentives from transitive verbs without an overt object, as in ‘seller’ and ‘buyer’ (xx1d). Thus a seller is a ‘selling-doer’ (xx1d).

(xx1) agentive gloss verb

a. *fóʔó-tēē míʔī-nà* ‘rifle-shooter’ *tɛ̀ɛ̀* ‘shoot’

*tùlù-bàʔrì míʔī-nà* ‘iron-beater’ *báʔrá* ‘hit’

*gbàà-bègè míʔī-nà* ‘woodworker’ *bɛ̀gɛ̀* ‘cut’

*sóʔó-tòʔrì míʔī-nà* ‘woodseller’ *tòʔrɔ̀* ‘sell’

*gùn-tìgì míʔī-nà* ‘mortar-pounder’ *tìgɛ̀* ‘pound’

*yí-bɛ̀n míʔī-nà* ‘water draw-er’ *bɛ̀nà* ‘draw water’

*sìbì-kpèèⁿ míʔī-nà* ‘animal-killer (hunter)’ *kpààⁿ* ‘kill’

*kpɔ̀l-tùùⁿ míʔī-nà* ‘leatherworker’ *tùwɔ̂ⁿ* ‘apply hide’

b. *sígí-séé míʔī-nà* ‘song-singer’ *sàà* ‘sing; build’

*sàà-sèè-míʔī-nà* ‘house-builder’ *sàà* ‘sing; build’

c. *ɲùʔúⁿ-sɔ̀lì míʔī-nà* ‘clothes-sewer/-weaver’ *sɔ̀lɔ̀* ‘weave; sew’

*wù-sɔ̀lì míʔī-nà* ‘hair-braider’ *sɔ̀lɔ̀* ‘weave; sew’

d. *dòò-mèè míʔī-nà* ‘dance-dancer’ *màà* ‘do’

*mùù-mèè míʔī-nà* ‘farmer’ *màà* ‘do’ (= ‘cultivate’)

*tóʔrí-mēē míʔī-nà* ‘seller’ *màà* ‘do’

*sànì-mèè míʔī-nà* ‘buyer’ *màà* ‘do’

These decriptive agentives, e.g. ‘iron-beater’ (i.e. ‘blacksmith’), are distinct from caste names like *tɔ̀ⁿ* ‘member of blacksmith caste’, *jɛ̀lɛ̀* ‘member of potter caste’, and *fɔ̀nɔ̀* ‘member of leatherworker caste’. These denote social categories that are often associated with the relevant trade.

### Compounds with *dí* ‘child’ and *bōō* ‘fruit’

For animal species, diminutives are often used to denote juveniles (‘chick’, ‘puppy’); see §4.xxx. An alternative is a compound with *dí* ‘child’, such as *wùl dì* ‘puppy’.

For trees, ‘fruit’ is *bōō*, and this is often compounded: *máʔr̄ bòò* ‘mango fruit’, *bòyākí bòò-rá* ‘guava fruit’.

### ‘Owner of X’ compounds (*māā-nā* )

*māā-nā* ‘owner’ (including the nominal suffix) can create a range of compounds denoting either a proprietor of an entity (such as a selling stand or rifle), or a nominal characteristic such as a beard or a hunched back. Usually *māā-nā* is M‑toned, but in (xx1b) it is L‑toned.

(xx1) a. *dāā-kíīⁿ* ‘beard’ *dāā-kííⁿ māā-nā* ‘bearded one’

*tàbàl* ‘table, stand’ *tàbàl māā-nā* ‘stand seller’

*màrfá* ‘rifle’ *màrfá māā-nā* ‘rifleman’

*kɔ̄yī* ‘belly’ *kɔ̄yī māā-nā* ‘potbellied or pregnant one’

b. *jègì* ‘hump’ *jègì màà-ná* ‘hunchback’

### Instrumental relative compounds (‘oil for rubbing/for eating’)

If an entity has two or more subtypes with distinct functions, the subtypes can be distinguished by adding a compound final based on a verb. The final consists of a form of the verb plus ‑mī- (with nominal suffix *‑mī-nà* ). This morpheme is presumably related to *màà* ‘do’ (perfective *mɛ̀ɛ́*, imperative *mɛ̌* ). Functional subtypes of *yí* ‘water’ and *télé* ‘oil’ are in (xx1).

(xx1) compound gloss based on verb

a. *yí míí-mī-nà* ‘drinking water’ *myɛ̀ⁿ* ‘drink’ (Pfv *mǐīⁿ* )

*yí wéé-mī-nà* ‘water for bathing’ *wɛ̀ɛ̀* ‘bathe’

b. *télé kúní-mī-nà* ‘eating (cooking) oil’ *kùnò* ‘eat (meal)’

*télé móó-mī-nà* ‘rubbing oil’ *mɔ̀ɔ̀ⁿ* ‘rub’

### Compounds with PP initials

Many flora-fauna species are defined by habitat, and some diseases are defined by bodily location. These concepts lend themselves to expression by compounds of the type [X-Postp]-Y, for example “[water-in]-bird” = ‘aquatic bird (sp.)’. The postposition is *dù* or *tɔ̀* ‘in’ or Some examples are in (xx1).

(xx1) compound gloss literal

a. *[gɔ̀l-tɔ̀]-kláā* ‘shaggy swamp rat’ “[river-in]-mouse”

*[sàà-tɔ̀]-tóólū* ‘insectivorous bat’ “[house-in]-bat”

*[kɔ̄yī-tɔ̀]-tɛ́ⁿ* ‘stomach ulcer’ “[belly-in]-wound”

b. *[mùù-dù]-káāⁿ* ‘grass sp. (*Microchloa*)’ “[field-in]-grass”

*[fīdī-dū]-kpá* ‘false zaban’ “[thicket-in]-zaban”

*[cíí-dù]-címíílī* ‘brown babbler’ “[dense.foliage-in]-sparrow”

*[dùgù-dù]-tólóká* ‘wild fig’ “[the.bush-in]-fig.tree”

*[dùgù-dù]-dándálī* ‘wild yam’ “[the.bush-in]-yam”

*[yí-dù]-nínáʔáⁿ* ‘water scorpion (insect)’ “[water-in]-scorpion’

A tonal characteristic of these compounds is that Final Tone-Raising fails to apply within the PP. As a separate PP, ‘in the bush’ is *dùgú dù* and ‘in the field’ is *mùú tɔ̀*, while ‘in/at the house’ is *sàá tɔ̀* and ‘in/at the river’ is *gɔ̀lɔ́ tɔ̀*. The final syllable/mora of the noun in these PPs is raised to H, but this does not happen in the compounds.

Instead, if the final does not already begin with an H-tone, its initial tone is raised. In (xx1b), this has happened in *[cíí-dù]-címíílī* ‘brown babbler’ < *cìmíílī* ‘sparrow’ and in *[dùgù-dù]-tólóká* ‘wild fig’ < *tòlókā* ‘fig tree’. Another example: L‑toned *wùl* ‘dog’ becomes HM-toned in *[dùgù-dù]-wúlā* ‘jackal’, i.e. “[the.bush-in]-dog”. These tone patterns show that the final is of /HM/ type, belonging to the class of compounds covered in §5.1.1 above.

## Adjectival compounds

In addition to the adjectives covered in the sections below, see §4.5.3 for deverbal adjective modifiers with *tɔ́* ~ *tɔ́ⁿ*.

### Bahuvrihi compounds [n̄ â] or [n̄ nûm]

In bahuvrihi compounds, the initial is a noun denoting a feature of the referent, such as a body part, and the final is an adjective or numeral modifying the feature. The bahuvrihi itself may modify the referent noun or may be used by itself as a noun.

#### With adjectival compound final [n̄ â]

In (xx1), the bahuvrihi ‘black-headed’ modifies the noun ‘sheep’. Both ‘head’ and ‘tail’ shift their onsets to H-toned. After ‘head’, ‘black’ shifts from LL to HM(L), the final L expressed on the nominal suffix. In ‘black-tailed’, the final falling HM tones of *jāŋgbálā* ‘tail’ requires a following L‑toned ‘black’.

(xx1) *tàgà wú-gbóʔō-rà* / *jáŋgbálá-gbòʔò-rá*

sheep head-black-Nom / tail-black-Nom

‘black-headed/black-tailed sheep’ (< *wù*, *gbòʔò*, *jāŋgbálā* )

Some bahuvrihis that turned up in lexical elicitation are in (xx2).

(xx2) form gloss literal

a. noun-adjective(-diminutive) bahuvrihi as modifying adjective

*wáʔrá kpɔ̀ⁿ-kāā-nī* ‘gabar goshawk’ “hawk foot-red-Dim”

*yíʔé jɛ́ⁿ-káná* ‘characin (fish)’ “fish tail-red”

*jìbì jɛ́ⁿ-sùmàà* ‘parakeet’ “parrot tail-long”

b. noun-adjective(-diminutive) bahuvrihi as independent noun

*jɛ́ⁿ-kpēē-lī* ‘white-tailed mongoose’ “tail-white-Dim”

*jɛ́ⁿ-sùmàà* ‘whydah (bird)’ “tail-long”

#### With numeral compound final [n̄ nûm]

A numeral may fill the final spot in a bahuvrihi, often after a body-part noun (xx1).

(xx1) *yìgì wú-flāā-rā* / *wú-sīgbōō-rā* / *wú-táā-rà*

cow head-two-Nom / head-three-Nom / head-ten-Nom

‘two-/three-/ten-headed cow’

### Exemplars as adjectives

Two color terms outside the core white-black-red trio appear to contain a morpheme *‑má‑*, with nominal suffix *‑má‑nà*. In one case the preceding stem is already composite (xx1a). There is also another compound adjective (xx1c).

(xx1) after floating L elsewhere gloss

a. *bìⁿ-kɛ̀ɛ̀nɛ̀-má(-nà) bíⁿ-kɛ́ɛ́nɛ́-má(-nà)* ‘green’

b. *bùlɔ̀rà-má(-nà) búlɔ́rá-má(-nà)* ‘blue’

c. *yɛ̀ʔrɛ̀-fóʔó(-rá) yɛ́ʔrɛ́-fóʔó(-rá)* ‘yellow’

‘Green’ is generally expressed in languages of the zone as ‘fresh grass’, i.e. a noun-adjective NP that functions semantically as a modifier for another noun. ‘Fresh grass’ is expressed as *kááⁿ gbé-rà* in Jalkunan (*kāāⁿ* ‘grass’, *gbé* ‘fresh’). The language does have another noun *bíⁿ* ‘grass, straw’, but the second element in *bìⁿ-kɛ̀ɛ̀nɛ̀-má(-nà)* is not otherwise attested.

‘Blue’ terms in the zone seem to go back to the brand name (based on French *bleu*) of a modern detergent product.

‘Yellow’ is the noun-adjective combination ‘néré tree’ plus ‘powder, flour’. It refers to the bright yellow powdery substance inside pods of this tree (*Parkia biglobosa*), which is familiar since it is edible with a sweet taste.

All of these terms are of the exemplar type, taking an object from the lived environment (vegetation, detergent) as the prototype for the color.

# Noun Phrase structure

## Organization of NP constituents

### Linear order

The unpossessed NPs in (xx1) are headed by *sàà* ‘house’, which is followed in most examples by an adjective and/or a numeral.

This section focuses on linear order of key elements within NPs. The examples also happen to bring out the distribution of the nominal suffix (-Nom) and of the plural suffix. The nominal suffix is allowed in some but not other clause-level syntactic environments; it will be discussed in following sections rather than here.

(xx1) example type

a. *sàà-rá*  [n]

house-Nom

‘(a) house’

b. *sàà-rá-à-nū* [n]

house-Nom-Pl-Nom

‘houses’

c. *sàà ɲɛ́-nà* [n-a]

house good-Nom

‘(a) good house’

d. *sàà ɲɛ́-nà-à-nū* [n-a]

house good-Nom-Pl-Nom

‘good houses’

e. *sàà dúlì* [n-num]

house one

‘one house’

f. *sàà sīgbō* [n-num]

house three

‘three houses’

g. *sàà ɲɛ́ⁿ dúlì* [n-a-num]

house good one

‘one good house’

h. *sàà ɲɛ́ⁿ sīgbō* [n-a-num]

house good three

‘three good houses’

The linear order so far is N-Adj-Num.

(xx2) a. N (Adj) -Nom (-Pl)

b. N (Adj) Dem

A demonstrative (‘this/that’) may follow the N-Adj-Num sequence (xx3).

(xx3) a. *sàà mī-nà* [n-dem]

house Dem-Nom

‘this house’

b. *sàà mī-nàà-n̄* [n-dem]

house Dem-Nom-Pl

‘these houses’

c. *sàà ɲɛ́ⁿ mī-nà* [n-a-dem]

house good Dem-Nom

‘this good house’

d. *sàà ɲɛ́ⁿ mī-nà-àn̄* [n-a-dem]

house good Dem-Nom-Pl

‘these good houses’

e. *sàà sīgbō mī-nà-àn̄* [n-num-dem]

house three Dem-Nom

‘these three houses’

The examples in (xx4) add the universal quantifier (‘all’) to the various NPs types already given. Addition of ‘all’ has no effect on the form of the preceding elements. The type (xx4c) with numeral plus ‘all’ was difficult to elicit, except with a following verb, whereupon ‘all’ takes the form *bùʔù*.

(xx4) a. *sàà-rá-āⁿ búʔú-nū* [n-quant]

house-Nom-Pl all-Pl

‘all (of) the houses’

b. *sàà ɲɛ́-nā-àⁿ búʔú-nū* [n-a-quant]

house good-Nom-Pl all-Pl

‘all (of) the good houses’

c. *sàà sīgbō búʔú-nū* [n-num-quant]

house three all-Pl

‘all three (of the) houses’

d. *sàà sīgbō mī-nà-àⁿ búʔú-nū* [n-num-dem-quant]

house three Dem-Nom-Pl all

‘all three of these houses’

### Distribution of singular nominal suffix (*‑rà* etc.)

Forms of singular nouns with and without a nominal suffix are given in §4.1. It remains to specify the morphosyntactic contexts in which the suffix occurs.

The first issue is where the nominal suffix occurs within the NP, when it does occur. The suffix can be added to an unmodified noun (xx1a), or to an NP-final adjective or demonstrative (xx1b‑c). In general it is not present when the NP ends in a numeral (xx1d).

(xx1) a. *sàà-rá*

house-Nom

‘(a/the) house’

b. *sàà ɲɛ́-ná*

house big-Nom

‘(a/the) big house’

c. *sàà mī-nà*

house Dem-Nom

‘this house’

d. *sàà sīgbō*

house three

‘three houses’

The syntactic functions that require, allow, or disallow the nominal suffix are summarized in (xx2).

(xx2) a. require or allow the suffix

independent function (citation form, preclausal topic)

subject of clause immediately before most object pronouns

subject of clause immediately before inflectional suffix

subject of clause immediately before numeral as object

right (final) conjunct in ‘X and Y’ conjunction

b. disallow the suffix

preverbal object

subject of clause immediately before verb or noun-headed object

complement of postposition

left (first) conjunct in ‘X and Y’ conjunction

possessor before possessed noun (possessum)

before discourse-functional morphemes

For examples of these syntactic positions and further discussion (especially of subject function), see §6.1.4‑5 below. The “singular” nominal suffix is also part of the plural suffix complex, see the following section. In this combination, the “singular” nominal suffix is protected by virtue of being nonfinal in the word, and it its presence is not subject to syntactic restrictions.

### Distribution of plural nominal suffix (*‑nū* )

The plural suffix *-àⁿ* is added to the noun plus the singular nominal suffix, forming suffix combinations like *‑nà‑àⁿ*, *‑rà‑àⁿ*, and *‑rá‑àⁿ* depending on the form of the singular nominal suffix. The plural has its own nominal suffix *‑nū*, hence *‑àⁿ‑nū* in combinations like *‑nà‑àⁿ‑nū*.

(xx1) gloss singular plural

unsuffixed suffixed unsuffixed suffixed

a. ‘woman’ *ɲáāⁿ ɲáā-nà ɲáā-nà-àⁿ ɲáā-nà-à-nū*

b. ‘sheep’ *tàgà tàgà-rá tàgà-rá-àⁿ tàgà-rá-à-nū*

The syntactic contexts requiring, allowing, and disallowing the singular nominal suffix are similar to those that apply to the plural nominal suffix. However, the plural suffix is more restricted than the singular suffix in subject NPs. Relevant data are in the following two sections.

### Nominal suffixes in subject function

In subject function, a singular NP that is capable of ending in a nominal suffix (e.g. N, N‑Adj, N‑Dem) takes the nominal suffix when immediately followed by some but not other elements.

The nominal suffix is not allowed on subjects that are immediately followed by nonpronominal objects (xx1a‑b), or that are followed directly by (intransitive) verbs (xx2a‑b). Here as elsewhere # means ungrammatical.

(xx1) a. *ɲáāⁿ ( #ɲáāⁿ-nà) tàgá jɛ̌*

woman (#woman-Nom) sheep see.Pfv

‘(A/The) woman saw a/the sheep.’

b. *ɲáāⁿ-nà-áⁿ (* #*ɲáā-nà-à‑nū) tàgá jɛ̌*

woman-Nom-Pl (#woman-Nom-Pl-Nom) sheep see.Pfv

‘(The) women saw a/the sheep.’

(xx2) a. *ɲáāⁿ (* #*ɲáāⁿ-nà) sɛ̌*

woman (#woman-Nom) come.Pfv

‘(A/The) woman came.’

b. *ɲáāⁿ-nà-àⁿ (* #*ɲáā-nà-à‑nū) sɛ́*

woman-Nom-Pl (#woman-Nom-Pl-Nom) come.Pfv

‘(The) women came.’

In transitives with pronominal object directly following the subject, the cliticization of the object pronoun onto the noun favors presence of the nominal suffix. The details are somewhat messy, and the plural nominal suffix is much more restricted than the singular nominal suffix. There may be more variation than is suggested by the following account.

(xx3a‑b) have human 3Sg object *à* in cliticized form. For singular ‘sheep’ as subject, the clitic requires the (singular) nominal suffix on the subject (xx3a). However, plural ‘sheep’ as subject occurs in the unsuffixed form *tàgà-rá-āⁿ*, contracting with cliticized object pronoun *=à* as *tàgà-rá-āⁿ=āⁿ* (xx3b). In this and following examples the ungrammatical forms of the subject NP are omitted; the points to note are the presence/absence of “-Nom” immediately preceding the object pronoun (cliticized or not).

(xx3) a. *tàgà-rá=à jɛ̌*

sheep-Nom=3SgHum see.Pfv

‘The sheep-Sg saw him/her.’

b. *tàgà-rá-āⁿ=āⁿ jɛ̌*

sheep-Nom-Pl=3SgHum see.Pfv

‘The sheep-Pl saw him/her.’

The pattern is similar with human 3Pl object *ààⁿ* (xx4a‑b). However, the pile-up of *a*‑vowels in the plural-subject combination (xx4b) leads to further vocalic contractions, so that (xx4a) and (xx4b) are indistinguishable in allegro speech. The two are only slightly distinct (tonally) from (xx3b) above.

(xx4) a. *tàgà-rá=ààⁿ jɛ́*

sheep-Nom=3PlHum see.Pfv

The sheep-Sg saw them.’

b. *tàgà-rá(-āⁿ)=ààⁿ jɛ́*

sheep-Nom(-Pl)=3PlHum see.Pfv

‘The sheep-Pl saw them.’

1Sg, 2Sg, and 2Pl object pronouns likewise require the word-final nominal suffix on singular subjects, but not on plural subjects (xx5a‑b).

(xx5) a. *tàgà-rá mā* / *wō jɛ᷄*

sheep-Nom 1Sg / 2Sg see.Pfv

‘The sheep-Sg saw me/you-Sg.’

b. *tàgà-rá ēeⁿ jɛ́*

sheep-Nom 2Pl see.Pfv

‘The sheep-Sg saw you-Pl.’

c. *tàgà-rá-āⁿ mā* / *wō jɛ̌*

sheep-Nom-Pl 1Sg / 2Sg see.Pfv

‘The sheep-Pl saw me/you-Sg.

1Pl object *mùʔùⁿ*, the most noun-like of the pronouns prosodically, can take either suffixed or unsuffixed singular subjects, and (like other pronouns) takes the unsuffixed form of a plural subject (xx6a‑b). In (xx6b) its own tones are raised by the preceding plural NP.

(xx6) a. *tàgá* / *tàgà-rá mùʔùⁿ jɛ́*

sheep / sheep-Nom 1Pl see.Pfv

‘The sheep-Sg saw us.’

b. *tàgà-rá-āⁿ múʔúⁿ jɛ́*

sheep-Nom-Pl 1Pl see.Pfv

‘The sheep-Pl saw us.’

In perfective transitives (S-O-V… order), if the object consists of or begins with a numeral (i.e. when the implied noun heading the object NP is omitted), the subject optionally has the nominal prefix. This makes little sense syntactically, but it has the advantage of pre-empting a mis-parsing in which the numeral is taken to be part of the subject. See (xx1) in §19.2.1.4 (“hare took one”) for a textual example.

When the subject is followed by imperfective enclitic /H+=∅/, i.e. H‑tone (not always overt) without segments, the suffix is overt with singular but not plural subject. This applies to present, future, and progressive clauses. Examples with future *sà* are (xx7a‑b).

(xx7) a. *tàgà-rá=∅ sà sā*

sheep-Nom=Ipfv Fut come.Ipfv

‘The sheep-Sg will come.’

b. *tàgà-rá-āⁿ=∅ sà sā*

sheep-Nom=Ipfv Fut come.Ipfv

‘The sheep-Sg will come.’

The same applies to subjects with /H+=∅/ followed only by a locational expression in the ‘be (somewhere)’ construction.

### Nominal suffixes in other syntactic functions

For a summary of syntactic functions disallowing the nominal suffix on the final word of an NP, see (xxx) in §6.1.3 above. Examples illustrating these contexts will now be given. Here as elsewhere # means ungrammatical.

Preverbal object NPs may not end in a nominal suffix (xx1a‑b).

(xx1) a. *mā ɲáāⁿ (* #*ɲáā-nà) jɛ̌*

1Sg woman (#woman-Nom) see.Pfv

‘I saw a/the woman.’

b. *mā ɲáāⁿ-nà-àⁿ (* #*ɲáā-nà-à‑nū) jɛ́*

1Sg woman-Nom-Pl (#woman-Nom-Pl-Nom) see.Pfv

‘I saw (the) women.’

NPs functioning as complements of postpositions may not end in a nominal suffix (xx2a‑b).

(xx2) a. *mā sɛ́ [ɲáāⁿ* *(* #*ɲáā-nà) dɛ̀]*

1Sg come.Pfv [woman (#woman-Nom) with]

‘I came with (=brought) a/the woman.’

b. *mā sɛ́ [ɲáāⁿ-nà-àⁿ* *(* #*ɲáā-à‑nū) dɛ́]*

1Sg come.Pfv [woman-Nom-Pl (#woman-Nom-Pl-Nom) with]

‘I came with (=brought) saw (the) women.’

The left conjunct of an ‘X and Y’ conjunction may not end in a nominal suffix (xx3a‑b). The right conjunct, not at issue here, may or may not end in a nominal suffix, depending on the syntactic function of the entire conjoined NP.

(xx3) a. *ɲáāⁿ* *(* #*ɲáā-nà) bùʔù mā-n*

woman (#woman-Nom) and 1Sg-Indep

‘(a/the) woman and me’

b. *ɲáāⁿ-nà-àⁿ (* #*ɲáā-nà-à‑nū) búʔú mā-n*

woman-Nom-Pl (#woman-Nom-Pl-Nom) and 1Sg-Indep

‘(the) women and me’

A possessor NP may not end in a nominal suffix. The following possessum, not at issue here, may or may not end in a nominal suffix, depending on the syntactic function of the entire possessed NP.

(xx4) a. *ɲáāⁿ (* #*ɲáā-nà) tàgà-rá*

woman (#woman-Nom) sheep-Nom

‘(a/the) woman’s sheep’

b. *ɲáāⁿ-nà-àⁿ (* #*ɲáā-nà-à‑nū) tàgà-rá*

woman-Nom-Pl (#woman-Nom-Pl-Nom) sheep-Nom

‘(the) women’s sheep’

.

The discourse particle *dòʔò* ‘also, too’ likewise disallows nominal suffixes (xx5a‑b).

(xx5) a. *ɲáāⁿ* *(* #*ɲáā-nà) dòʔò*

woman (#woman-Nom) also

‘(a/the) woman too’

b. *ɲáāⁿ-nà-àⁿ (* #*ɲáā-nà-à‑nū) dóʔó*

woman-Nom-Pl (#woman-Nom-Pl-Nom) also

‘(the) women too’

## Possession

### Addition of a possessor to an NP

The possessor precedes the noun (and the postnominal modifiers). Addition of the possessor allows a nonsingular numeral to add the nominal and plural suffixes that are omitted in unpossessed NPs ending in a numeral.

(xx1) a. *ádámáⁿ sàà-rá* [poss-n]

A house-Nom

‘Adama’s house’

b. *wō sàà-rá-āⁿ* [poss-n]

2Sg house-Nom-Pl

‘your-Sg houses’

c. *wó sàà sígbó-rá-āⁿ* [poss-n-num]

2Sg house three-Nom-Pl

‘your-Sg three houses’

d. *wō sàà ɲɛ́ sīgbō*  [poss-n-a-num]

*sígbó-rá-āⁿ*

2Sg house good three(-Nom-Pl)

‘your-Sg three good houses’

e. *wō sàà-rá-āⁿ búʔú-nū* [poss-n-quant]

2Sg house-Nom-Pl all

‘all your-Sg houses’

### Alienable and inalienable possession

The alienable/inalienable distinction is made in some but not all possessor-possessum combinations. Where the distinction is overt, it is expressed by tones on the possessum. Inalienables are kin terms and body parts.

The data in the following sections can be summarized in (xx1).

(xx1) possessum alienable possessor inalienable possessor

+3Sg -3Sg M +3Sg -3Sg M

/L/ LH LH LH LH H M

/M/ LH L L LH H M

/H/ LH L L LH H M

The generalizations are those in (xx2).

(xx2) a. +3Sg possessor always requires {LH};

b. M-Spreading occurs in inalienable but not alienable possession;

c. inalienable ‑3Sg possessors control {H} on the possessum;

d. alienable ‑3Sg (including M) possessors control {LH} on /L/, and /L/ on /M/ or /H/

#### Lexically all-L‑toned nouns as possessums

Noun stems that consist of L‑toned syllables always have an H‑toned nominal suffix, e.g. *wù-rɔ́* ‘head’, *ɲùʔù-nɔ́* ‘wrap (n)’.

(xx1) shows the tonal behavior of these nouns when they follow an M‑toned possessor pronoun (1Sg, 2Sg, or 2Pl). Inalienables (all examples known to me with this lexical tone melody are body parts) become M‑toned. This is attributable to M‑Spreading, with the M‑tone originating in the possessor (xx1a). Alienables have the same tones as when unpossessed (xx1b).

(xx1) L‑toned noun as possessum after M‑toned possessor pronoun

noun gloss ‘my \_\_’ ‘your-Sg \_\_’ ‘your-Pl \_\_’

a. inalienables

*wù-rɔ́* ‘head’ *mā wū-rɔ̄ wō wū-rɔ̄ ēēⁿ wū-rɔ̄*

*ɲì-ná* ‘blood’ *mā ɲī-nā wō ɲī-nā ēēⁿ ɲī-nā*

*sɔ̀-nɔ́* ‘heart’ *mā sɔ̄-nɔ̄ wō sɔ̄-nɔ̄ ēēⁿ sɔ̄-nɔ̄*

*nùʔù-nɔ́* ‘intestine’ *mā nūʔū-nɔ̄ wō nūʔū-nɔ̄ ēēⁿ nūʔū-nɔ̄*

b. alienables

*kɔ̀-nɔ́* ‘bird’ *mā kɔ̀-nɔ́ wō kɔ̀-nɔ́ ēēⁿ kɔ̀-nɔ́*

*gù-nɔ́* ‘mortar’ *mā gù-nɔ́ wō gù-nɔ́ ēēⁿ gù-nɔ́*

*mɔ̀-nɔ́* ‘rope’ *mā mɔ̀-nɔ́ wō mɔ̀-nɔ́ ēēⁿ mɔ̀-nɔ́*

*tù-rɔ́* ‘millet cake’ *mā tù-rɔ́ wō tù-rɔ́ ēēⁿ tù-rɔ́*

*tòʔò-rá* ‘pot, jar’ *mā tòʔò-rá wō tòʔò-rá ēēⁿ tòʔò-rá*

*ɲùʔù-nɔ́* ‘wrap (n)’ *mā ɲùʔù-nɔ́ wō ɲùʔù-nɔ́ ēēⁿ ɲùʔù-nɔ́*

(xx2) shows combinations of these nouns with 1Pl and 3Pl (human and nonhuman) possessor pronouns. In their basic (underlying) form, these pronouns are L‑toned and bimoraic. Inalienable nouns, including the nominal suffix, are subject to an {H} overlay after these possessors (xx2a). Alienables have the same tones as when unpossessed. Since the alienable possessums begins with an L‑tone, a preceding bimoraic L‑toned possessor undergoes the tone sandhi rule Final Tone-Raising (e.g. *mùʔùⁿ* → *mùʔúⁿ* ).

(xx2) L‑toned noun as possessum after other plural possessor pronouns

noun gloss ‘our \_\_’ ‘their \_\_’

human nonhuman

a. inalienables

*wù-rɔ́* ‘head’ *mùʔùⁿ wú-rɔ́ ààⁿ wú-rɔ́ èèⁿ wú-rɔ́*

*ɲì-ná* ‘blood’ *mùʔùⁿ ɲí-ná ààⁿ ɲí-ná èèⁿ ɲí-ná*

*sɔ̀-nɔ́* ‘heart’ *mùʔùⁿ sɔ́-nɔ́ ààⁿ sɔ́-nɔ́ èèⁿ sɔ́-nɔ́*

*nùʔù-nɔ́* ‘intestine’ *mùʔùⁿ ɲúʔú-nɔ́ ààⁿ ɲúʔú-nɔ́ èèⁿ ɲúʔú-nɔ́*

b. alienables

*kɔ̀-nɔ́* ‘bird’ *mùʔúⁿ kɔ̀-nɔ́ àáⁿ kɔ̀-nɔ́ èéⁿ kɔ̀-nɔ́*

*gù-nɔ́* ‘mortar’ *mùʔúⁿ gù-nɔ́* *àáⁿ gù-nɔ́ èéⁿ gù-nɔ́*

*mɔ̀-nɔ́* ‘rope’ *mùʔúⁿ mɔ̀-nɔ́ àáⁿ mɔ̀-nɔ́ èéⁿ mɔ̀-nɔ́*

*tù-rɔ́* ‘millet cake’ *mùʔúⁿ mɔ̀-nɔ́* *àáⁿ mɔ̀-nɔ́ èéⁿ mɔ̀-nɔ́*

*tòʔò-rá* ‘pot, jar’ *mùʔúⁿ tòʔò-rá* *àáⁿ tòʔò-rá èéⁿ tòʔò-rá*

*ɲùʔù-nɔ́* ‘wrap (n)’ *mùʔúⁿ ɲùʔù-nɔ́* *àáⁿ ɲùʔù-nɔ́ èéⁿ ɲùʔù-nɔ́*

After 3Sg possessor pronouns, lexically all-L‑toned nouns undergo no overt tonal changes. There is also no tonal or other distinction between inalienable and alienable. Comparison with nouns of other tone classes (see the following sections) suggests that the rising tone pattern of the possessed forms, both alienable and inalienable, actually involves an {LH} tone overlay. For the nouns in (xx3), the result is accidental homophony of possessed and unpossessed forms.

(xx3) L‑toned noun as possessum after 3Sg possessor pronoun

noun gloss ‘his/her \_\_’ ‘its \_\_’

a. inalienables

*wù-rɔ́* ‘head’ *à wù-rɔ́ è wù-rɔ́*

*ɲì-ná* ‘blood’ *à ɲì-ná è ɲì-ná*

*sɔ̀-nɔ́* ‘heart’ *à sɔ̀-nɔ́ è sɔ̀-nɔ́*

*nùʔù-nɔ́* ‘intestine’ *à nùʔù-nɔ́ è nùʔù-nɔ́*

b. alienables

*kɔ̀-nɔ́* ‘bird’ *à kɔ̀-nɔ́ è kɔ̀-nɔ́*

*gù-nɔ́* ‘mortar’ *à gù-nɔ́* *è gù-nɔ́*

*mɔ̀-nɔ́* ‘rope’ *à mɔ̀-nɔ́ è mɔ̀-nɔ́*

*tù-rɔ́* ‘millet cake’ *à tù-rɔ́* *è tù-rɔ́*

*tòʔò-rá* ‘pot, jar’ *à tòʔò-rá* *è tòʔò-rá*

*ɲùʔù-nɔ́* ‘wrap (n)’ *à ɲùʔù-nɔ́* *è ɲùʔù-nɔ́*

It is difficult to determine whether the {LH} overlay also applies to the possessum when the nominal suffix is absent for syntactic reasons. A form like *à wù‑rɔ́* ‘his head’ appears as *à wǔ* without the suffix. However, because singular possessed NPs like ‘his head’ are syntactically +3Sg, and so require that the following word begin with an L‑tone, the rising tone in *à wǔ* could be accounted for by Final Tone-Raising, i.e. by tone sandhi.

#### Lexically all-M‑toned nouns as possessums

In (xx1), ‘my’ represents the M‑toned pronouns (including 2Sg and 2Pl), ‘his/her’ represents the two L‑toned 3Sg pronouns, and ‘our’ represents the L‑toned plural pronouns (1Pl, 3PlHum, 3PlNonh). Again, inalienable is distinct from alienable, except in the 3Sg forms.

The 3Sg possessors control a rising {LH} overlay on the possessum, whether alienable or inalienable. Unlike the case with L‑toned noun stems (preceding section), this overlay is audible for the M‑toned nouns.

The inalienables have the same tone patterns with these all‑M‑toned nouns as with the all‑L‑toned nouns described above. M‑toned possessors like ‘my’ spread the M‑tone into the noun, including the nominal suffix. L‑toned plural possessors require an all‑H‑toned possessum.

For alienables, both ‘my’ and ‘our’ possessor types control {L} on the possessum. In the ‘our’ type, the L‑toned possessor must therefore undergo Final Tone-Raising before the L‑initial possessum.

(xx1) M‑toned noun as possessum after possessor pronouns

noun gloss ‘my \_\_’ ‘his/her\_\_’ ‘our \_\_’

a. inalienables

*kpɔ̄-rɔ̄* ‘leg’ *mā kpɔ̄-rɔ̄ à kpɔ̀-rɔ́ mùʔùⁿ kpɔ́-rɔ́*

*kɔ̄yī-rā* ‘belly’ *mā kɔ̄yī-rā à kɔ̀yì-rá mùʔùⁿ kɔ́yí-rá*

*gɔ̄gɔ̄-rɔ̄* ‘chest’ *mā gɔ̄gɔ̄-rɔ̄ à gɔ̀gɔ̀-rɔ́ mùʔùⁿ gɔ́gɔ́-rɔ́*

b. alienables

*kɔ̄-nɔ̄* ‘honey’ *mā kɔ̀-nɔ̀ à kɔ̀-nɔ́ mùʔúⁿ kɔ̀-nɔ̀*

*jū-rɔ̄* ‘millet’ *mā jù-rɔ̀ à jù-rɔ́ mùʔúⁿ jù-rɔ̀*

*bāʔā-rā* ‘porridge’ *mā bàʔà-rà à bàʔà-rá mùʔúⁿ bàʔà-rà*

*kɔ̄lɔ̄kɔ̄-rɔ̄* ‘talk (n)’ *mā kɔ̀lɔ̀kɔ̀-rɔ̀ à kɔ̀lɔ̀kɔ̀-rɔ́ mùʔúⁿ kɔ̀lɔ̀kɔ̀-rɔ̀*

#### Lexically all-H‑toned nouns as possessums

The nouns in (xx1) are H‑toned, including the nominal suffix. The possessed forms of these nouns have the same tone patterns as the M‑toned nouns discussed in the preceding section. 3Sg possessors require {LH} overlay on both alienable and inalienable nouns. Inalienables undergo M‑Spreading after M‑toned possessor pronouns like ‘my’, and have an {H} overlay after other plural possessor pronouns like ‘our’. Alienables drop to {L} after both the ‘my’ and ‘our’ types, and the nominal suffix is included in the {L}.

(xxx) H‑toned noun as possessum after possessor pronouns

noun gloss ‘my \_\_’ ‘his/her\_\_’ ‘our \_\_’

a. inalienables

*ɲí-ná* ‘tooth’ *mā ɲī-nā à ɲì-ná mùʔùⁿ ɲí-ná*

*sú-nɔ́* ‘nose’ *mā sū-nɔ̄ à sù-nɔ́ mùʔùⁿ sú-nɔ́*

*jɛ́-ná* ‘father’ *mā jɛ̄-nā à jɛ̀-ná mùʔùⁿ jɛ́-ná*

*dí-rá* ‘child’ *mā dī-rā* *à dì-rá* *mùʔùⁿ dí-rá*

*tóʔó-rá* ‘name’ *mā tōʔō-rā à tòʔò-rá mùʔùⁿ tóʔó-rá*

b. alienables

*yí-rá* ‘water’ *mā yì-rà à yì-rá mùʔúⁿ yì-rà*

*bí-ná* ‘grass’ *mā bì-nà à bì-ná mùʔúⁿ bì-nà*

*yíʔé-rá* ‘fish’ *mā yìʔè-rà à yìʔè-rá mùʔúⁿ yìʔè-rà*

#### Tone of modifiers following inalienably possessed noun

In this section the issue is the tonal treatment of Poss-N-Adj and Poss-N-Num combinations.

In simple possessor-possessum combinations, the possessor undergoes no tonal changes other than simple tone sandhi (Final Tone-Raising before L‑toned possessum). The possessum does undergo tonal ablaut, after which the possessum (with or without its final nominal suffix) has one of the following tone patterns, using bisyllabics as examples: MM, HH, LL, , LH. Of these, MM and HH are limited to inalienable possession, LL is limited to alienable possession, and LH occurs in both types of possession.

(xx1) a. MM (inalienable only, M‑toned pronominal possessor)

‘my head’ *mā wū-rɔ̄*

‘my tooth’ *mā ɲī-nā*

b. HH (inalienable only, plural possessor)

‘our head’ *mùʔùⁿ wú-rɔ́*

‘our tooth’ *mùʔùⁿ ɲí-ná*

c. LL (alienable only, -3Sg possessor)

‘my millet’ *mā jù-rɔ̀*

‘my fish’ *mā yìʔè-rà*

‘our millet’ *mùʔúⁿ jù-rɔ̀*

‘our fish’ *mùʔúⁿ yìʔè-rà*

d. LH

*-3Sg, alienable only*

‘my rope’ *mā mɔ̀-nɔ́*

‘our rope’ *mùʔúⁿ mɔ̀-nɔ́*

*3Sg, alienable or inalienable*

‘his/her head’ *à wù-rɔ́*

‘his/her tooth’ *à ɲì-ná*

‘his/her rope’ *à mɔ̀-nɔ́*

‘his/her millet’ *à jù-rɔ́*

‘his/her fish’ *à yìʔè-rá*

When an adjective is added to a possessor-possessum combination, we need to determine whether the domain of the ablaut overlay that applies to the possessum includes the adjective.

(xx2) presents Poss-N-Adj combinations. In (xx2a), M‑Spreading into the noun feeds into the rule that M‑toned nouns are raised to H‑toned before modifiers. The noun is therefore H‑ rather than M‑toned before the adjective, and no M‑Spreading into the adjective can occur. The adjective therefore has its lexical tones.

In (xx2b‑c), the possessum has a level-toned ablaut overlay {H} or {L}. This overlay extends to the end of the adjective, erasing the adjective’s lexical tones (xx2a‑c). In the case of {H}, the adjective is downstepped (xx2b).

By contrast, the {LH} overlay stops at the possessum, while the adjective takes its lexical tones. This is true for both -3Sg (xx2d) and +3Sg (xx2e) possessors. Moreover, the {LH} overlay on the noun is flattened to {L}, but the L‑toned noun does not undergo Final Tone-Raising before an L‑toned adjective (‘our black rope’, ‘his/her black fish’).

(xx2) Poss-N-Adj combinations

a. possessum M‑toned (*mā ɲī-nā* ‘my tooth’)

*mā ɲí gbòʔò-rá* ‘my black tooth’ *gbòʔò* ‘black’

*mā ɲí kān-nā* ‘my red tooth’ *kānā* ‘red’

*mā ɲí ꜜsúmáá-ná* ‘my long tooth’ *súmááⁿ* ‘long’

b. possessum H‑toned (*mùʔùⁿ ɲí-ná* ‘our tooth’)

*mùʔùⁿ ɲí ꜜgbóʔó-rá* ‘our black tooth’ *gbòʔò* ‘black’

*mùʔùⁿ ɲí ꜜkán-ná* ‘our red tooth’ *kānā* ‘red’

*mùʔùⁿ ɲí ꜜsúmáá-ná* ‘our long tooth’ *súmááⁿ* ‘long’

c. possessum L-toned (*mùʔúⁿ yìʔè-rà* ‘our fish’)

*mùʔúⁿ yìʔè gbòʔò-rà* ‘our black fish’ *gbòʔò* ‘black’

*mùʔúⁿ yìʔè kàn-nà* ‘our red fish’ *kānā* ‘red’

*mùʔúⁿ yìʔè sùmàà-nà* ‘our long fish’ *súmááⁿ* ‘long’

d. possessum LH-toned, -3Sg possessor (*mùʔúⁿ mɔ̀-nɔ́* ‘our rope’)

*mùʔúⁿ mɔ̀ gbòʔò-rá* ‘our black rope’ *gbòʔò* ‘black’

*mùʔúⁿ mɔ̀ kān-nā* ‘our red rope’ *kānā* ‘red’

*mùʔúⁿ mɔ̀ súmáá-ná* ‘our long rope’ *súmááⁿ* ‘long’

e. possessum LH-toned, +3Sg possessor (*à yìʔè-rá* ‘his/her fish’)

*à yìʔè gbòʔò-rá* ‘his/her black fish’ *gbòʔò* ‘black’

*à yìʔè kān-nā* ‘his/her red fish’ *kānā* ‘red’

*à yìʔè súmáá-ná* ‘his/her long fish’ *súmááⁿ* ‘long’

In simple N-Num combinations without a possessor, regular tone sandhi applies (including Floating L‑Docking), but there is no tonal ablaut as such. When a possessor is added, the obvious issue (as with Poss-N-Adj above) is whether the tone overlay that the possessor imposes on the possessed noun stops with that noun or also extends to the numeral. It turns out, however, that there is also a morphological issue. In Poss-N-Num combinations, unlike simple N‑Num, the numeral is often (though not always) provided with a plural suffix, which (as always) requires a preceding nominal suffix. The plural suffix *‑àⁿ* may itself be followed by a final nominal suffix *‑n̄* ~ *‑nū*, in syntactic positions that allow it.

(xx3) illustrates Poss-N-Num combinations. (xx3a) and (xx3d‑e) are tonally parallel to (xx2a) and (xx2d‑e) above. (xx3b‑c) show that the ablaut overlay {H} or {L} does not extend to the numeral, so here there is a divergence between (xx3b‑c) and (xx2b‑c) above.

(xx3) Poss-N-Num combinations

a. possessum M-toned (*mā ɲī-nā* ‘my tooth’)

*mā ɲí sīgbō-rā-à-n̄* ‘my three teeth’ *sīgbō* ‘3’

*mā ɲí ꜜsóól-lá-à-n̄* ‘my five teeth’ *sóóló* ‘5’

*mā ɲí mà-sīgbō-rā-à-n̄* ‘my eight teeth’ *mà-sīgbō* ‘8’

b. possessum H‑toned (*mùʔùⁿ ɲí-ná* ‘our tooth’)

*mùʔùⁿ ɲí sīgbō-rā-à-n̄* ‘our three teeth’ *sīgbō* ‘3’

*mùʔùⁿ ɲí ꜜsóól-lá-à-n̄* ‘our five teeth’ *sóóló* ‘5’

*mùʔùⁿ ɲí mà-sīgbō-rā-à-n̄* ‘our eight teeth’ *mà-sīgbō* ‘8’

c. possessum L-toned (*mùʔúⁿ yìʔè-rà* ‘our fish’)

*mùʔúⁿ yìʔè sīgbō-rā-à-n̄* ‘our three fish’ *sīgbō* ‘3’

*mùʔúⁿ yìʔè sóól-lá-à-n̄* ‘our five fish’ *sóóló* ‘5’

*mùʔúⁿ yìʔè má-sīgbō-rā-à-n̄* ‘our eight fish’ *mà-sīgbō* ‘8’

d. possessum LH-toned, -3Sg possessor (*mùʔúⁿ mɔ̀-nɔ́* ‘our rope’)

*mùʔúⁿ mɔ̀ sīgbō-rā-à-n̄* ‘our three ropes’ *sīgbō* ‘3’

*mùʔúⁿ mɔ̀ sóól-lá-à-n̄* ‘our five ropes’ *sóóló* ‘5’

*mùʔúⁿ mɔ̀ má-sīgbō-rā-à-n̄* ‘our eight ropes’ *mà-sīgbō* ‘8’

e. possessum LH-toned, +3Sg possessor (*à yìʔè-rá* ‘his/her fish’)

*à yìʔè sīgbō-rā-à-n̄* ‘his/her three fish’ *sīgbō* ‘3’

*à yìʔè sóól-lá-à-n̄* ‘his/her five fish’ *sóóló* ‘5’

*à yìʔè má-sīgbō-rā-à-n̄* ‘his/her eight fish’ *mà-sīgbō* ‘8’

For *sóóló*, alongside the apocopated *sòòl-lá-à-n̄* there is an unreduced variant *sòòlò‑rá‑à‑n̄*.

### Recursive possession

In combinations of the type [X’s Y]’s Z, possession is recursive. The nominal suffix occurs only on the final possessum Z. Therefore the nominal suffix in ‘my cat’ or ‘my uncle’ in (xx1b) is absent in (xx1c).

(xx1) a. *jàŋgbáā wù-rɔ́*

cat head-Nom

‘the head of the cat’

b. *mā jàŋbáā-rà / bé-rà*

1Sg cat-Nom / uncle-Nom

‘my cat/uncle’

c. *[mā jàŋbáā / bé] wù-rɔ́*

[1Sg cat/uncle] head-Nom

‘the head of my cat/my uncle.’

### Default possessum (*mì* )

The morpheme *mì* is used when no specific possessum is overt, compare English *mine*, French *le mien*, etc. In syntactic positions requiring the nominal suffix, the form is singular *mì-nà*, plural *mì-ná-àⁿ-nū*. Singular *mì-nà* does not show the expected H‑toned suffix *‑ná* after L‑toned stem, but the H‑tone does emerge in the plural form. In other positions, *mì* is subject to Final Tone-Raising (mǐ ) if followed by an L‑tone.

(xx1) Pronouns with default possessum *mì*

with suffix without suffix

*mā mì-nà mā mì*

*mùʔúⁿ mì-nà mùʔúⁿ mì*

*wō mì-nà wō mì*

*ēéⁿ mi-nà ēéⁿ mi*

*à mì-ná à mǐ*

*è mì-ná è mǐ*

*àáⁿ mì-nà àáⁿ mì*

*èéⁿ mì-nà èéⁿ mì*

NP possessors take *mì* ~ *mí* based on the usual +3Sg versus ‑3Sg distinction. The suffixed singulars are then *mì‑ná* and *mí‑nà*, respectively. Thus *dí mì-ná* ‘the child’s’, *dí-rá-àⁿ mí-nà* ‘the children’s’, *zàkíì mí-nà* ‘Zaki’s’.

Examples with default possessums as subjects are in (xx2). The nominal suffix is of course absent in this position. *mì* is subject to Final Tone-Raising (*mǐ* ) before an L‑tone, but the rise is not always audible and *mǐ* is sometimes realized as [mī].

(xx2) a. *[mā mǐ] sɛ̌*

[1Sg Poss] come.Pfv

‘Mine has come.’

b. *[mā mì] né wěē*

[1Sg Poss] 3SgNonhObj go.Pfv

‘Mine has gone (away).’ (variant of *ní wěē* )

In non-subject functions (e.g. object or nonsubject possessor), the possessor takes reflexive form if it is coindexed with the subject (xx3).

(xx3) a. *mā [nāáⁿ mǐ] dɔ̀ní*

1Sg [1SgRefl Poss] eat.meat.Pfv

‘I have eaten (=devoured) mine.’

b. *bákàr= [áà mǐ] dɔ̀ní*

B [3SgHumRefl Poss] eat.meat.Pfv

‘Bakari has eaten (=devoured) his (own).’ (/bákàrì à mì dɔ̀ní/)

c. *mā [[nāáⁿ mǐ] wǔ] tèê*

1Sg [[1SgRefl Poss] head] shatter.Pfv

‘I have shattered (=crushed) the head of mine (=my lion cub).’ (2016\_02 @ 01:42)

For the use of this default possessum construction in predicates with ‘it is X’ enclitic (‘it’s mine’, etc.), see §11.5.3.2.

## Core NP (noun plus adjective)

### Noun plus regular adjective

In the combination N-Adj, the nominal suffix and plural suffix, if allowed by the higher syntactic construction, are added to the adjective and the noun stem is bare.

(xx1) a. *ɲáā-nà*

woman-Nom

‘a/the woman’

b. *ɲáāⁿ ɲɛ̀-ná*

woman good-Nom

‘a/the good woman’

c. *ɲáāⁿ ɲɛ̀-ná-à-nū*

woman good-Nom-Pl-Pl-Nom

‘(the) good women’

Tonal interactions in N-Adj combinations are described with examples in the following sections. (xx2) anticipates thoese sections and summarizes the results. Lexical melodies of the adjective are shown in the leftmost column, using lowercase. Lexical melodies of the noun are shown on top, in uppercase. The hyphen indicates the break between the stem and the nominal suffix, so H l-h means H‑toned noun followed by L‑toned adjective with H‑toned nominal suffix.

(xx2) Noun-adjectival tonal patterns (summary)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | *noun* | | | | | |
| *adj* | /H/  /M/ | | /L/ | /H(L)/  /HM(L)/ | /LH/ | /MH/ |
| /m/ | H m-m | | L m-m,  L l-h | H l-l | LH l-l | MH l-l |
| /l/ | H l-h | | LH l-h,  L l-h | H l-h | LH l-h | MH l-h |
| /h/ | H ꜜh-h | | L hh-h |
| /h(l)/ | H h-l | | L h-l |
| /hm(l)/ | H hm-l | | L hm-l |

Light shading indicates that a Final Tone-Raising has applied. This and low-level downstep in H ꜜh-h are the only tonal modifications on adjectives that follow a level-toned noun (/H/, /M/, or /L/). Factoring this out, the following generalizations can be made.

(xx3) a. Before an adjective, an M‑tone in the modified noun that is not followed by an H‑tone within the noun shifts to H‑tone (/M/ merges with /H/, /HM(L)/ merges with /H(L)/;

b. Nouns with contoured (non-level) melodies after (a) shift /m/ adjectives to l‑l (so that even the suffix is L‑toned);

c. The same nouns with contoured (non-level) melodies after (a) shift all other adjectives to /l‑h/ (i.e. to regular /l/ with H‑toned suffix);

d. There are two types of /L/ melody nouns, one of which irregularly merges tonally with a following l or m adjective to form L l-h, the other being phonologically regular.

Most of the processes in (xx3) are akin to tone-sandhi rules but are arguably morphologically specialized. (xx3a) could be treated as a special case of H‑Leveling (§3.8.3.2). (xx3c) could be analysed phonologically as Floating-L Docking (§3.8.3.3), which applies in the same way to noun-suffix combinations. (xx3b) is the same process as (xx3c), with the further twist that M‑Spreading has previously applied to the adjective-suffix combination, forming a tonally flat terrace, so when the floating L lowers the tones of the adjective the lowering also extends to the suffix.

#### Tones of noun-adjective combinations

Adjectives representing various tonal types are in (xx1). The lexical tones for ‘red’ and ‘black’ are unmistakable, but those of the other four require discussion.

(xx1) adjective tones with suffix gloss

*kānā* /m/ *kān-nā* ‘red’

*gbòʔò* /l/ *gbòʔò-rá* ‘black’

*súmááⁿ* /h/ *súmáá-ná* ‘long’

*gbɔ́* /h(l)/ *gbɔ́-rɔ̀* ‘big’

*táā* /hm(l)/ *táā-rà* ‘hot’

*wúdɔ̄* /hm(l)/-invariant *wúdɔ̄-rɔ̀* ‘new’

We now combine the adjectives in (xx1) with nouns of various tone classes. Apologies for semantically nonsensical combinations. We must jointly consider tonal processes affecting the noun (other than low-level tone sandhi) and those affecting the adjective.

The most straightforward case is the /l/‑toned ‘black’ (xx2). In the “N‑adj tones” column, any tones of the noun that are different from those in isolation (i.e. in the “N tones” column) are underlined.

(xx2) *gbòʔò* ‘black’ (/l/ melody)

noun N tones with Adj N-adj tones gloss

*yíʔé* /H/ *yíʔé gbòʔò-rá* H l-h ‘fish’

*gbāā* /M/ *gbāā gbòʔò-rá* M l-h ‘stick’

*ɲùʔùⁿ* /L/ *ɲùʔúⁿ gbòʔò-rá* LH l-h ‘wrap (n)’

*mìʔìⁿ* /L/ *mìʔìⁿ gbòʔò-rá* L l-h ‘person’

*kpɛ́sɛ́* /H(L) / *kpɛ́sɛ́ gbòʔò-rá* H l-h ‘chewstick’

*kúrūⁿ* /HM(L) / *kúrúⁿ gbòʔò-rá* H l-h ‘boat’

*tòfá* /LH/ *tòfá gbòʔò-rá* LH l-h ‘brick’

*mōtó* /MH/ *mōtó gbòʔò-rá* MH l-h ‘motorcycle’

‘Black’ has invariant L‑toned form throughout, but there are some tonal processes affecting the preceding noun. ‘Wrap (n)’ goes from L.L to L.H before an L‑tone by Final Tone-Raising (§3.8.4.1). The merger of /M/ with /H/ nouns, and that of /HM(L)/ with /H(L)/ nouns, is typical of all N‑Adj combinations.

In (xx3), the adjective is lexically /m/‑toned. There is now a split into two sets of surface forms, one with M‑toned adjective (xx3a) and the other with L‑toned adjective (xx3b). I take the former to indicate the lexical tones, especially since the L‑toned noun ‘wrap (n)’ is part of (xx3a).

(xx3) *kānā* ‘red’ /m/

noun N tones with Adj N-adj tones gloss

a. adjective M‑toned

*yíʔé* /H/ *yíʔé kān-nā* H m-m ‘fish’

*gbāā* /M/ *gbāā kān-nā* M m-m ‘stick’

*ɲùʔùⁿ* /L/ *ɲùʔùⁿ kān-nā* L m-m ‘wrap (n)’

*mìʔìⁿ* /L/ *mìʔìⁿ kàn-ná* L l-h ‘person’

b. adjective L‑toned

*kpɛ́sɛ́* /H(L)/ *kpɛ́sɛ́ kàn-nà* H l-l ‘chewstick’

*kúrūⁿ* /HM(L)/ *kúrúⁿ kàn-nà* H l-l ‘boat’

*tòfá* /LH/ *tòfá kàn-nà* LH l-l ‘brick’

*mōtó* /MH/ *mōtó kàn-nà* MH l-l ‘motorcycle’

The split between the adjectival tones in (xx3a) and (xx3b) correlates with the tones of the nominal suffix following the same nouns when unmodified. The nouns in (xx3a) have non-low nominal suffixes (*yíʔé‑rá*, *gbāā‑rā*, *ɲùʔù‑ná* ). Those in (xx4b) have L‑toned suffixes (*kpɛ́sɛ́‑rà*, *kúrú‑nà*, *tòfá‑rà*, *mōtó‑rà* ).

This suggests that the nouns in (xx3b), but not those in (xx3a), come with an associated floating L‑tone that is realized either on the nominal suffix or, failing that, on the following modifier.

The paradigms of ‘big’ (representing monomoraic *Cv* stems) in (xx4) and ‘hot’ (representing bimoraic or heavier stems) in (xx5) split into one set of combinations with H-initial (all‑h or hm) adjective and another with L‑toned adjective due to a floating L‑tone from the noun. ‘Big’ is *gbɔ́‑rà* in (xx4a) and *gbɔ̀‑rá* in (xx4b). ‘Hot’ is *táā‑rà* in (xx5a) and *tàà‑rá* in (xx5b). The tones of these adjectives correlate with the tones of the nominal suffixes when added directly to the relevant unmodified nouns. There is also a small class of *CvCv* adjectives represented by *wúdɔ̄* ~ *wútɔ̄* ‘new’ in (xx6) that have the same hm(l) tones as ‘hot’ in (xx5a), but do not shift to l-h after nouns with floating L. This type is labeled “hm(l)-invariant.”

(xx4) *gbɔ́* ‘big’ /h(l)/ (suffixed *gbɔ́-rà* ~ *gbɔ́-nà* )

noun N tones with Adj N-adj tones gloss

a. adjective h-l

*yíʔé* /H/ *yíʔé gbɔ́-rà* H h-l ‘fish’

*gbāā* /M/ *gbāā gbɔ́-rà* M h-l ‘stick’

*ɲùʔùⁿ* /L/ *ɲùʔùⁿ gbɔ́-rà* L h-l ‘wrap (n)’

*mìʔìⁿ* /L/ *mìʔiⁿ gbɔ́-rà* L h-l ‘person’

b. adjective l-h

*kpɛ́sɛ́* /H(L)/ *kpɛ́sɛ́ gbɔ̀-rá* H l-h ‘chewstick’

*kúrūⁿ* /HM(L)/ *kúrúⁿ gbɔ̀-rá* H l-h ‘boat’

*tòfá* /LH/ *tòfá gbɔ̀-rá* LH l-h ‘brick’

*mōtó* /MH/ *mōtó gbɔ̀-rá* MH l-h ‘motorcycle’

(xx5) *táā* ‘hot’ /hm(l)/

noun N tones with Adj N-adj tones gloss

a. adjective hm-l

*yíʔé* /H/ *yíʔé táā-rà* H hm-l ‘fish’

*gbāā* /M/ *gbāā táā-rà* M hm-l ‘stick’

*ɲùʔùⁿ* /L/ *ɲùʔùⁿ táā-rà* L hm-l ‘wrap (n)’

*mìʔìⁿ* /L/ *mìʔìⁿ táā-rà* L hm-l ‘person’

b. adjective l-h

*kpɛ́sɛ́* /H(L)/ *kpɛ́sɛ́ tàà-rá* H l-h ‘chewstick’

*kúrūⁿ* /HM(L)/ *kúrúⁿ tàà-rá* H l-h ‘boat’

*tòfá* /LH/ *tòfá tàà-rá* LH l-h ‘brick’

*mōtó* /MH/ *mōtó tàà-rá* MH l-h ‘motorcycle’

(xx6) *wútɔ̄* ~ *wúdɔ̄* ‘new’ /hm(l)/-invariant

noun N tones with Adj N-adj tones gloss

adjective hm-l (regardless of preceding noun type)

*yíʔé* /H/ *yíʔé wútɔ̄-rɔ̀* H hm-l ‘fish’

*gbāā* /M/ *gbāā wútɔ̄-rɔ̀* M hm-l ‘stick’

*ɲùʔùⁿ* /L/ *ɲùʔùⁿ wútɔ̄-rɔ̀* L hm-l ‘wrap (n)’

*mìʔìⁿ* /L/ *mìʔìⁿ wútɔ̄-rɔ̀* L hm-l ‘person’

*kpɛ́sɛ́* /H(L)/ *kpɛ́sɛ́ wútɔ̄-rɔ̀* H hm-l ‘chewstick’

*kúrūⁿ* /HM(L)/ *kúrúⁿ wútɔ̄-rɔ̀* H hm-l ‘boat’

*tòfá* /LH/ *tòfá wútɔ̄-rɔ̀* LH hm-l ‘brick’

*mōtó* /MH/ *mōtó wútɔ̄-rɔ̀* MH hm-l ‘motorcycle’

Comparing ‘big’ and ‘hot’ to the consistently L‑toned ‘black’ in (xx2) above, we see that taking ‘big’ and ‘hot’ to be lexically L‑toned on the basis of (xx4b) and (xx5b) would not work. Instead, these stems are lexically H(L) or HM(L) toned, as seen in (xx4a) and (xx5b), and become L‑toned after the noun types that have an associated floating L‑tone. ‘New’ is like ‘hot’ except that it is unaffected by a floating L coming in from the noun.

‘Long’ is the most tonally complex of the adjectives considered here. It surfaces with H, downstepped H, and L tones (xx7). Since its tonal forms are distinct both from the clearly L‑toned ‘black’ in (xx2) above and from the clearly M‑toned ‘red’ in (xx3) above, ‘long’ is best analysed as lexically H‑toned. This is the tonal form that it has after a level-toned noun (xx6a). Its L‑toned form *sùmàà‑ná* in (xx6b) can be explained in the same way as L‑toned *gbɔ̀‑rá* ‘big’ and *tàà‑rá* ‘hot’ in (xx4b) and (xx5b) above, viz., as due to a floating L‑tone associated with the nouns. In (xx7a). M‑toned ‘flour’ merges tonally with the H‑toned ‘fish’. Then both of these nouns induce a drop in the adjectival tones from H to downstepped ꜜH.

(xx7) *súmáá* ‘long’ /h/

noun N tones with Adj N-adj tones gloss

a. adjective h-h

*yíʔé* /H/ *yíʔé ꜜsúmáá-ná* H ꜜh-m ‘fish’

*gbāā* /M/ *gbāā súmáá-ná* M ꜜh-m ‘stick’

*ɲùʔùⁿ* /L/ *ɲùʔùⁿ súmáá-ná* L h-h ‘wrap (n)’

*mìʔìⁿ* /L/ *mìʔìⁿ súmáá-ná* L h-h ‘person’

b. adjective l-h

*kpɛ́sɛ́* /H(L)/ *kpɛ́sɛ́ sùmàà-ná* H l-h ‘chewstick’

*kúrūⁿ* /M(L)/ *kúrúⁿ sùmàà-ná* H l-h ‘boat’

*tòfá* /LH/ *tòfá sùmàà-ná* H l-h ‘brick’

*mōtó* /MH/ *mōtó sùmàà-ná* H l-h ‘motorcycle’

The downstepped H in (xx6a) sounds impressionistically like M‑tone. However if ‘long fish’ were #*yíʔé sūmāā-nā* with M‑toned adjective, and therefore #*yíʔé sūmāā* without the nominal suffix, its final syllable would be affected by Final Tone-Raising before an L‑tone. However, *ꜜsúmááⁿ* in (xx1) has level pitch.

(xx1) *mā [yíʔé ꜜsúmáá] jìɛ́*

1Sg [fish long] see.Pfv

‘I saw a/the long fish.’

#### Inventory of basic adjectives by tonal type

The basic adjectives (excluding morphologically complex deverbal adjectives) are organized into tonal types in (xx1). As with nouns, H(L) and HM(L) are not distinguishable in monosyllabic stems. Together they constitute the predominant tonal type for simple adjectives. The forms shown are those that follow an L‑toned noun.

(xx1) tone melody adjective suffixed gloss

a. /L/ *gbòʔò gbòʔò-rá* ‘black’

b. /M/ *kānā* *kān-nā* ‘red’

*kpēē* *kpēē-rā* ‘white’

c. /H(L)/

*gbɔ́* *gbɔ́-rà* ‘big’

*gbé gbé-rà* ‘fresh’

*ɲɛ́ ɲɛ́-nà* ‘good’

*ná ná-nà* ‘foreign’

d. /HM(L)/ *táā táā-rà* ‘hot’

*kúmā* *kúmā-nà* ‘cold’

*kítā kítā-rà* ‘bad’ (*t* ~ *d* )

*kútɔ̄* *kútɔ̄-rɔ̀* ‘old’ (*t* ~ *d* )

*gúnī* *gúnī-nà* ‘short’

~ *gūn̄-nà*

*bá-kúnī bá-kúnī-nà* ‘short’

~ *bá-kún̄-nà*

e. /HM(L)/-invariant *kpɛ́ʔrɛ̄* *kpɛ́ʔr-à* ‘small’

*wútɔ̄* *wútɔ̄-rɔ̀* ‘new’ (*t* ~ *d* )

f. /H/ *ná ná-ná* ‘foreign’

*kú kú-rɔ̀* ‘dead’

*wéé wéé-rá* ‘other’

*dáálá dáál-lá* ‘first’

*súmáá súmáá-ná* ‘long’

*gbáʔálá gbáʔálá-rá* ‘thin; dry’

~ *gbáʔál-lá*

#### Adjective sequences

The combinations in (xx1) include a noun and two adjectives (in some cases a different adjectival order would be preferred, but we are here focusing on tones). The first stage of derivations is tonal adjustments involving the noun and the first adjective, as though the second adjective were absent. Nouns with associated floating L, like *kpɛ́sɛ́* ‘chewstick’, drop tones of any immediately following adjective, and if the adjective itself normally has a floating L (*táā* ‘hot’), the floating tone is eliminated. H‑toned *súmáá* ‘long’ is downstepped after an H‑toned noun. An L‑toned noun undergoes Final Tone-Raising before an L‑toned adjective.

After this first stage, the first adjective is L‑toned in (xx1a), M‑toned in (xx1b), H‑toned in (xx1c), HM-toned with floating L in (xx1d), and downstepped H‑toned in (xx1e). The next stage is the interaction between the two adjectives.

In (xx1a) the first adjective retains this L‑tone, even (unexpectedly) in the combination with an L‑toned second adjective (‘black long chewstick’). Instead of regular Final Tone-Raising, which would produce the incorrect #*kpɛ́sɛ́ sùmàá gbòʔò‑rá*, the first adjective remains L‑toned (as though still under the thrall of the floating L from the noun), and the tonal dissimilation is achieved by raising gbòʔò from L to M.

In (xx1b), the M‑toned first adjective kānā is raised to H‑toned, just as M‑toned nouns are raised before any adjective. This in turn forces downstep on the following H‑toned *súmáá-ná*.

No changes occur in (xx1c), where each word surfaces with its underlying tones.

In (xx1d), *táā* (plus floating L) has not been modified in the first stage, so it levels to H‑toned and its floating L drops the tones of the second adjective.

In (xx1e), *súmáá* has been downstepped in the first stage. No further changes occur when the second adjective is added. That downstepped H *ꜜsúmáá* rather than M‑toned sūmāāⁿ is the correct analysis is shown by the fact that it does not undergo Final Tone-Raising before the L‑toned adjective *gbòʔò* ‘black’.

(xx1) a. *kpɛ́sɛ́ kpèè súmáá-ná* ‘long white chewstick’

*kpɛ́sɛ́ gbòʔò súmáá-ná* ‘long black chewstick’

*kpɛ́sɛ́ gbòʔò gbɔ́-rà* ‘big black chewstick’

*kpɛ́sɛ́ sùmàà ɲɛ́-nà* ‘good long chewstick’

*kpɛ́sɛ́ sùmàà gbōʔō-rā* ‘black long chewstick’

*ɲùʔúⁿ gbòʔò gbɔ́-rà* ‘big black wrap’

b. *yíʔé káná ꜜsúmáá-ná* ‘long red fish’

*yíʔé káná gbɔ́-rà* ‘big red fish’

c. *ɲùʔùⁿ súmááⁿ gbɔ́-rà* ‘big long wrap’

*ɲùʔùⁿ súmááⁿ kān-nā* ‘red long wrap’

d. *ɲùʔùⁿ táá gbɔ̀-rá* ‘big hot wrap’

*yíʔé táá sùmàà-ná* ‘long hot fish’

e. *yíʔé ꜜsúmáá gbɔ́-rà* ‘big long fish’

*yíʔé ꜜsúmáá gbòʔò-rá* ‘black long fish’

These tonal processes apply in the same way to N-Adj-Num sequences (§6.4.xxx).

### Expansions of adjective

#### Adjectival intensifiers

Predicate adjectives (really adjectival verbs) can be intensified with *bélé* ‘pass’ (xx1a‑b).

(xx1) a. *yí dèê bélé*

water become.hot pass

‘The water is very hot.’

b. *yí-rá-àⁿ déê bélé*

water-Nom-Pl become.hot pass

‘The waters are very hot.’

The same ‘pass’ verb is common in comparatives (chapter 12).

#### ‘Good to eat’

In (xx1), the adjectival predicate (inchoative adjectival verb) is modified by a postverbal noun in adverbial function indicating the context.

(xx1) *yēgē-kúⁿ dì kūmɛ̄ɛ̄-nā*

tree be.sweet meal-Nom

‘The tree is good to eat.’

## NPs including a numeral

The forms of numerals are given and discussed in §4.6 above.

### Nominal suffixation in the presence of a numeral

In the absence of a numeral, a simple noun has a nominal suffix (*‑rà* or variant). in isolation and in some phrasal contexts. It is pluralized by adding a plural suffix *-àⁿ*, to which may be added, in isolation and in a few syntactic contexts, an additional nominal suffix. Thus *dí* ‘child’, with suffix *dí‑rá*, plural *dí‑rá‑àⁿ* ‘children’, with suffix *dí‑rá‑àⁿ‑nū*. If an adjective follows the noun, the nominal suffix and (if semantically correct) the plural suffix are attached to the adjective: *dí ɲɛ́-nà-àⁿ* or suffixed *dí ɲɛ́-nà-àⁿ* ‘good children’. See §4.xxx for details.

When a numeral is added to the mix, both the nominal suffix and the (redundant) plural suffix are dropped.

(xx1) a. *dí (* #*dí-rá-àⁿ* ) *dúlì*

child (#child-Nom) one

‘one child’

b. *dí (* #*dí-rá-àⁿ* )  *flā*

child (#child-Nom-Pl two

‘two children’

c. *dí ɲɛ́ⁿ (* #*ɲɛ́-rà-àⁿ* ) *flā*

child good (#good-Nom-Pl) two

‘two good children’

### Tones of noun plus numeral

#### Noun plus unsegmentable numeral

Morphologically noncomposite numerals are M‑toned or H‑toned. M‑toned numerals are *flā* ‘2’, *sīgbō* ‘3’, and *nāānī* ‘4’. H‑toned numerals are *sóóló* ‘5’ and *táá* ‘10’. For bimorphemic ‘6’ to ‘9’ see the following section.

The tonal patterns in N-Num combinations are similar to those of N-Adj combinations described above.

Combinations of M‑toned numerals with nouns of various tone classes are in (xx1). The numeral remains M‑toned after level-toned nouns, i.e., the nouns that take a non-low nominal suffix when unmodified: *yíʔé-rá* ‘fish’, *gbāā-rā* ‘stick’, *ɲùʔù-ná* ‘wrap (n)’ (xx1a).

(xx1) Nouns with M‑toned ‘2’, ‘3’, and ‘4’

noun N tones with Num N-num tones gloss

a. numeral M‑toned

*yíʔé* HH *yíʔé flā / sīgbō / nāānī* HH m(m) ‘fish’

*gbāā* MM *gbāā flā / sīgbō / nāānī* MM m(m) ‘stick’

*ɲùʔùⁿ* LL *ɲùʔùⁿ flā / sīgbō / nāānī* LL m(m) ‘wrap (n)’

b. numeral L‑toned

*kpɛ́sɛ́* HH(L) *kpɛ́sɛ́ flà / sìgbò / nàànì* HH l(l) ‘chewstick’

*kúrūⁿ* HM(L) *kúrúⁿ flà / sìgbò / nàànì* HH l(l)) ‘boat’

*tòfá* LH *tòfá flà / sìgbò / nàànì* LH l(l) ‘brick’

*mōtó* MH *mōtó flà / sìgbò / nàànì* MH l(l) ‘motorcycle’

The H‑toned numerals combine with the same nouns in (xx2). The H‑tones of the numerals are heard as such after a level-toned noun, except for downstep after H (xx2a). They drop to L after nouns with a final floating L (xx2b).

(xx2) Nouns with H‑toned ‘5’ and ‘10’

noun N tones with Num N-num tones gloss

a. numeral H-toned (sometimes downstepped)

*yíʔé* HH *yíʔé ꜜsóóló* / *ꜜtáá* HH m(m) ‘fish’

*gbāā* MM *gbāā sóóló* / *táá* MM m(m) ‘stick’’

*ɲùʔùⁿ* LL *ɲùʔùⁿ sóóló* / *táá* LL h(h) ‘wrap (n)’

b. numeral L‑toned

*kpɛ́sɛ́* HH(L) *kpɛ́sɛ́ sòòlò* / *tàà* HH l(l) ‘chewstick’

*kúrūⁿ* HM(L) *kúrúⁿ sòòlò* / *tàà* HH l(l) ‘boat’

*tòfá* LH *tòfá sòòlò* / *tàà* LH l(l) ‘brick’

*mōtó* MH *mōtó sòòlò* / *tàà* MH l(l) ‘motorcycle’

#### Noun plus bimorphemic numeral ‘6’ to ‘9’

Numerals ‘6’ to ‘9’ are bimorphemic, consisting of initial *ma-* or *mi‑* representing the base ‘5’ (but unrelated to *sóóló* ‘5’ or to *bɔ̄lɔ̄* ‘hand’) plus a more or less distorted form of ‘1’ through ‘4’.

‘7’ to ‘9’ are bimorphemic beginning with *mà‑* ~ *má‑*. The last numeral in this sequence, *má-nānì* ‘9’, is unique in resisting any tonal changes; it is a kind of tonal island unto itself. The other two have *má‑* drop to *mà‑* after nouns associated with a floating L‑tone (xx3b). The remaining syllables, *‑álà* for ‘7’ (irregularly related to *flā* ‘2’) and *‑sīgbō* (identical to ‘3’), are invariant tonally.

(xx3) Nouns with bimorphemic numerals ‘7’ to ‘9’

noun N tones with Num N-num tones gloss

a. numeral begins with H‑toned *má-*

*yíʔé* HH *yíʔé má-álà* HH hl ‘fish’

*yíʔé má-sīgbō* HH hmm

*yíʔé má-nānì* HH hml

*gbāā* MM *gbāā má-álà* MM hl ‘flour’

*gbāā má-sīgbō* MM hmm

*gbāā má-nānì* MM hml

*ɲùʔùⁿ* LL *ɲùʔùⁿ má-álà* LL hl ‘wrap (n)’

*ɲùʔùⁿ má-sīgbō* LL hmm

*ɲùʔùⁿ má-nānì* LL hml

b. numeral begins with L‑toned *mà-* (‘7’, ‘8’) or H-toned *má-* (‘9’)

*kpɛ́sɛ́* HH(L) *kpɛ́sɛ́ mà-álà* HH lhl ‘chewstick’

*kpɛ́sɛ́ mà-sīgbō* HH lmm

*kpɛ́sɛ́ má-nānì* HH hml

*kúrūⁿ* HM(L) *kúrúⁿ mà-álà* HH lhl ‘boat’

*kúrúⁿ mà-sīgbō* HH lmm

*kúrúⁿ má-nānì* HH hml

*tòfá* LH *tòfá mà-álà* LH lhl ‘brick’

*tòfá mà-sīgbō* LH lmm

*tòfá má-nānì* LH hml

*mōtó* MH *mōtó mà-álà* MH lhl ‘motorcycle’

*mōtó mà-sīgbō* MH lmm

*mōtó má-nānì* MH hml

*mī‑īlō* ‘6’ is even more opaque, though etymologically it presumably consists of a variant of *mà‑* ~ *má‑* plus a variant of *dúlì* ‘1’. However, unlike ‘7’ to ‘9’, *mī‑īlō* patterns tonally as though unsegmentable. Therefore, like ‘2’ to ‘4’, it has stem-wide M‑toned and L‑toned forms.

(xx2) Nouns with ML-toned ‘6’

noun N tones with Num N-num tones gloss

a. entire numeral is M‑toned

*yíʔé* HH *yíʔé mī-īlō* HH m(m) ‘fish’

*gbāā* MM *gbāā mī-īlō* MM m(m) ‘flour’

*ɲùʔùⁿ* LL *ɲùʔùⁿ mī-īlō* LL mm ‘wrap (n)’

b. entire numeral is L‑toned

*kpɛ́sɛ́* HH(L) *kpɛ́sɛ́ mì-ìlò* HH ll ‘chewstick’

*kúrūⁿ* HM(L) *kúrúⁿ mì-ìlò* HH ll ‘boat’

*tòfá* LH *tòfá mì-ìlò* LH ll ‘brick’

*mōtó* MH *mōtó mì-ìlò* MH ll ‘motorcycle’

#### N-Adj-Num sequences

The combination N-Adj-Num behaves tonally like N-Adj-Adj. First, tonal operations apply between the noun and the first adjective. Nouns like ‘chewstick’ with associated floating L drop the tones of the first adjective, also erasing any floating L associated with this adjective (‘hot’). H‑toned *súmááⁿ* becomes M‑toned after an H‑toned noun like ‘fish’. An L‑toned noun undergoes Final Tone-Raising before an L‑tone (*ɲùʔùⁿ* → *ɲùʔúⁿ* ).

This is then the input to the next stage, where the two adjectives interact tonally. H‑toned *sóóló* ‘5’ drops to L‑toned after an adjective with undeleted floating L (*táā* ‘hot’), and the HM-tones of *táā* flatten to H. M‑toned *kpēē* ‘white’ and *kānā* ‘red’ are raised to H‑toned before any numeral.

(xx1) a. *kpɛ́sɛ́ kpèè sóóló* ‘five white chewsticks’ (< *kpēē* )

*kpɛ́sɛ́ tàà sóóló* ‘five hot chewsticks’ (< *táā* )

*ɲùʔúⁿ gbɔ̀ʔɔ̀ sóóló* ‘five black wraps’

*yíʔé kpéé ꜜsóóló* ‘five white fish’ (< *kpēē* )

*yíʔé táá sòòlò* ‘five hot fish’ (< *táā* )

*ɲùʔùⁿ súmááⁿ ꜜsóóló* ‘five long wraps’

*yíʔé sūmāāⁿ sóóló* ‘five long fish’

b. *yíʔé káná sīgbō* ‘three red fish’

*kpɛ́sɛ́ tàà sīgbō* ‘three hot chewsticks’

*yíʔé táá sìgbò* ‘three hot fish’

*ɲùʔùⁿ súmááⁿ sīgbō* ‘three long wraps’

## NP with determiner

### Noun plus demonstrative *mí*

The basic demonstrative *mí* was described in §4.4.1.

(xx1) a. *wùlà*  *mí(-nà)*

dog Dem(-Nom)

‘this/that dog’

b. *wùlà*  *mí-nà-àⁿ(-nū)*

dog Dem-Nom-Pl(-Nom)

‘these/those dogs

c. *dí ꜜmí(-nà)*

child Dim(-Nom)

‘this/that child’

b. *dí ꜜmí-nà-àⁿ(-nū)*

dog / child Dem-Nom-Pl(-Nom)

‘these/those children’

### Noun plus specific indefinite *dò* ‘one’

*[X dò]* where X is a noun means ‘a (certain/specific) X’. *dò* is likely related to numeral *dúlì* ‘1’. *[X dò]* occurs at the introduction of a discourse reference into a narrative or other extended discourse. Although the NP ending in dò is third singular referentially, it behaves like ‑3Sg NPs in its tonal effect on following words.

(xx1) *èèⁿ kú klé-nà,*

3PlNonh begin hunt(n)-Nom,

*bon*, *èèⁿ táʔá [yálá dò] jíɛ́*

well, 3PlNonh go.Adjn [hole **one**] see.Pfv

‘They (hare and hyena) were hunting. Well, they went and saw **a hole**.’ (< *yálā* ) (2016\_02 00:49)

*dò* is always L‑toned in this construction (i.e. modifying a noun), and can trigger Final Tone-Raising on the noun: *sàá dò* ‘a house’ (*sàà* ), *kùgú dò* ‘a stone’ (*kùgù* ).

*dò* can occur absolutely, i.e. without a modified noun, in the sense ‘one’ (as in ‘I saw one yesterday’) or, with reference to masses, ‘some’ (as in ‘I have brought you some’).

(xx2) *è táʔá dò bílí= íyà,*

3SgNonh go.Adjn **one** give.Ipfv 3SgNonh

*[yálā tòó] dè*

[hole in] there

‘He (=hare) went and gave some (more) to him (=hyena).’ (2006\_02 03:35)

There is a plural *dó-ōⁿ* ‘certain ones’. It is used in a set-partitioning context, as in ‘some stayed here, (while) some (others) left’.

(xx3) *ààⁿ sá cíɛ́ dàmààná,*

3PlHum come.Adjn arrive.Adjn D,

*dó-ōⁿ bó-yà dè, [ààⁿ sá],*

**certain-Pl** exit=Link there.Def, [3PlHum come.Adjn]

‘When they (had) arrived in Damana (village), some (of them) left there, they came …’ (2016\_01 00:47)

This plural *dó-ōⁿ* should be distinguished from the phonetically similar *dǒō* that functions as an extended form of *dò* with a linker *=n̄*, before *nàà* ‘now’ or *dè* ‘there (definite)’.

(xx4) *ààⁿ wár̄ bìlí [mɛ̀ʔɛ́ⁿ dǒō]=n̄ nàà*

3PlHum money give.Pfv [person one]=Link here

‘They gave money to someone here.’

## Universal and distributive quantifiers

### Universal ‘all’ (*bùʔù* ~ *búʔú* )

This universal quantifier can be used with countable or with mass NPs (xx1a‑b). The tonal form is *búʔú* except *bùʔù* after 3Sg (pronoun or regular NP) and *būʔū* after M‑toned pronominal. With a countable NP, it may add a nominal suffix *‑nú* (→ *‑nū* after the M‑toned variant) where syntactically allowed, including in isolation or clause-finally. With a mass NP, the suffixed form is *bùʔù‑ná*. (These forms suggest an earlier nasalized form \*bùʔùⁿ ~ \*búʔúⁿ.)

(xx1) a. *[dí kpɛ́ʔr-à-àⁿ búʔú] wèê*

[child small-Nom-Pl all] go.Pfv

‘All of the children have gone.’

b. *[kɔ̀-nɔ́-ɔ̄ⁿ] [jú bùʔù] dɔ́nī*

[bird-Nom-Pl] [millet all] devour.Pfv

‘The birds ate all the millet.’

c. *à tàgá bìlí [mùʔùⁿ búʔú-nú]*

3SgHum sheep give.Pfv [1Pl all-Nom]

‘He/She gave the sheep-Sg to us all.’

In (xx1c), *mùʔùⁿ* does not undergo Final Tone-Raising before *bùʔù-nú*.

The full set of pronominal combinations is in (xx2).

(xx2) a. M-toned pronominal

*ēēⁿ būʔū-nū* ‘all of you-Pl’

b. 3Sg pronominal

*è bùʔù-nú* ‘all of it (nonhuman)’

c. other -3Sg pronominal

*mùʔùⁿ búʔú-nú* ‘all of us’

*ààⁿ búʔú-nú* ‘all of them (human)’

*èèⁿ búʔú-nú* ‘all of them (nonhuman)’

A variant *bìgì-ná* ‘entirety’ for *bùʔù-ná* was recorded in a text (2016\_01 03:20).

### Distributive ‘each’

*bùʔù* ~ *búʔú* ‘all’ can also be used in distributive contexts. In (xx1), the speaker gave 200 units (= 1000 francs CFA) to each child, not a total of 200 units to the children as a group.

(xx1) *mā jáāⁿ-tàá bìlí [dí kpɛ́ʔrɛ̄ dù-dúlì bùʔù-nú]*

1Sg 200 give.Pfv [child small one-one each-Nom]

‘I gave 200 (currency units) to each child.’

The distributivity is expressed mainly by keeping ‘small child’ singular in form, and by adding the reduplicated numeral ‘one’, i.e. ‘one by one, one at a time, singly’ (§4.6.1.xxx).

# Coordination

## NP coordination

### NP conjunction (‘X and Y’) with *bùʔù* ~ *búʔú*

The conjunctive particle is *bùʔù* ~ *búʔú*, often reduced to e.g. *bùʔ* in allegro speech. *bùʔù* occurs after +3Sg NPs, *búʔú* after ‑3Sg NPs. Either variant of the conjunction is itself treated as ‑3Sg for purposes of its own tonal effect on the following word (unless there is prosodic break). When the left conjunct is an NP that could otherwise end in a nominal suffix, the suffix is omitted. A plural left conjunct likewise omits final nominal suffix *‑nū* (xx1c). When the entire conjoined NP is uttered in isolation or in a position requiring nominal suffixes, the suffixes may occur on the right conjunct. In (xx1b), *tàgà* becomes *tàgá* before the L‑toned *bùʔù* by Final Tone-Raising.

(xx1) a. *díkín bùʔù ɲáā-nà*

man and woman-Nom

‘(a/the) man and (a/the) woman’ (cf. suffixed *díkín̄-nà* )

b. *tàgá bùʔù báá-rá*

sheep and goat-Nom

‘(a/the) sheep and (a/the) goat’ (cf. suffixed *tàgà-rá*, *bàà-rá* )

c. *díkín̄-nà-àⁿ búʔú ɲáā-nà-à-nū*

man-Nom-Pl and woman-Nom-Pl

‘(the) men and women’

When the coordinands are pronouns, the left conjunct has simple form, while the right conjunct has full independent form with suffix *‑n*. H‑toned *búʔú* is used after 3Pl and (usually) 1Pl, but also in some combinations with 1Sg or 2Sg as right conjunct.

(xx1) a. *mā búʔú wɔ̄-n*

1Sg and 2Sg-Indep

‘me and you-Sg’

b. *à bùʔù mā-n*

3SgHum and 1Sg-Indep

‘he/she and me’

c. *ààⁿ búʔú mùʔú-nū*

3PlHum and 1Pl-Indep

‘they and us’

d. *mùʔùⁿ búʔú ēē-nū*

1Pl and 2Pl-Indep

‘we and you-Pl’ (also variant with *mùʔúⁿ* )

e. *ámádù búʔú mā-n*

A and 1Sg

‘Amadou and me’

### *tú* ‘along with’

In one textual segment of the type *X, tú Y* with a pause after X, tú appears to be a kind of afterthough conjunction: ‘X, along with Y’. The speaker is explaining the subject of a tale that he is about to narrate. It is notable that ‘hyena’ has its nominal suffix as it would in isolation.

(xx1) *súrúkú-rà, tú cǐⁿ dè*

hyena-Nom, along.with hare there.Def

‘(Tale of) hyena, along with hare.’ (2016\_02 @ 00:38

### ‘X and Y’ with a modifier or postposition

Non-quantifying modifiers such as adjectives and demonstratives that have scope over all conjuncts are repeated on each conjunct. In other words, conjunction of NPs occurs at a high syntactic level. This is illustrated by the demonstrative in (xx1a) and the adjective ‘black’ in (xx1b).

(xx1) a. *[ɲáá mí-nà-àⁿ] búʔú [dígín mí-nà-áⁿ]=∅*

[woman Dem-Nom-Pl] and [man Dem-Nom-Pl]=Ipfv

*sí=í wàá*

Fut=3SgNonhObj go.Ipfv

‘These women and (these) men will go.’

b. *[ɲáā gbòʔò-rá-àⁿ] búʔú [dígíní gbòʔò-rá-āⁿ]=∅*

[woman Nom-Pl] and [man black-Nom-Pl]=Ipfv

*sí=í wàá*

Fut=3SgNonhObj go.Ipfv

‘The black women and (black) men will go.’

When the universal quantifier *bùʔù* ~ *búʔú* has scope over the entire conjoined NP, it is not usually repeated on each conjunct. This may be due in part to its homophony with (or its secondary use as) the ‘and’ conjunction (xx2). In theory this could be parsed as ‘[(some/the) women] and [(all) the men] …’, but the normal interpretation is with wide scope.

(xx2) *[[ɲáā-nà-àⁿ búʔú dígíní] bùʔù] sí=í wàá*

[[woman-Nom-Pl and man] all Fut=3SgNonhObj go.Ipfv

‘All the women and men will go.’

If a numeral has scope over the entire conjoined NP, no single-clause construction is available. My assistant rephrased ‘Six men and women will go’ as (xx3), using ‘people’ as the quantified noun and reducing ‘men and women’ to an extraposed clarifying comitative PP in partitive-like function.

(xx3) *[[mɛ̀ʔɛ̀ⁿ mī-īlō] sí=í wàá]*

[[person six] Fut=3SgNonhObj go.Ipfv

*[[dígín bùʔù ɲáā] dò]*

[[man and woman] with]

‘Six people will go, out of male(s) and female(s).’

When a possessor has scope over both or all conjuncts, as in ‘X’s [Y and Z]’, if the possessor is repeated it normally takes the form of a reflexive possessor (§18.1.1). This is clear in the case of 1st/2nd person possessors, most of which have distinct forms for reflexive possessor (xx4a). There is no overt difference for third person possessors, but I assume that here too the possessor is reflexive (xx4b). A conjunction of the type ‘X and [X’s Y]’, where the first conjunct is coindexed to the possessor of the second conjunct, also has a reflexive possessor (xx4c).

(xx4) a. *[mā jɛ́ⁿ] bùʔù [āⁿ níī-nà]*

[1Sg father] and [1SgRefl mother-Nom]

‘my father and (my) mother’

b. *[zàkíì jɛ́ⁿ] bùʔù [á nìì-ná]*

[Z father] and [3SgHumRefl mother-Nom]

‘Zaki’s father and (his) mother’

c. *mā būʔā= [āⁿ jɛ́-ná]*

1Sg and [1SgRefl father-Nom]

‘I and my father’

I have also heard cases where the repeated pronominal possessor is elided, but where the second possessum raises its stem tone. Therefore (xx4a) with repeated pronominal possessor has a variant (xx4b) with zero second possessor but with a tone shift on ‘goat’ that effectively indexes the covert presence of a possessor.

(xx4) a. *[mā tàgà-rá-àⁿ bùʔù āⁿ bàà-rá-àⁿ] wèé*

[1Sg sheep-Nom-Pl and 1SgRefl goat-Nom-Pl] go.Pfv

‘My sheep-Pl and (my) goats have gone away.’

b. *[mā tàgà-rá-àⁿ bùʔù ∅ báá-rá-àⁿ] wèé*

[1Sg sheep-Nom-Pl and ∅ goat-Nom-Pl] go.Pfv

‘My sheep-Pl and (my) goats have gone away.’

Postpositions need not be repeated after each conjunct.

(xx1) *à sɛ̀ [[té bùʔù sùkár̄] dɛ̀]*

3SgHum come.Pfv [tea and sugar] with]

‘He/She brought tea and sugar.’

## Disjunction (*wálímà*, *wáā* )

Disjunction (‘or’) is closely related to yes/no interrogation. *wálímà* ‘or’ occurs in paired two-sentence interrogatives, where the second sentence is disjunctive to the first.

(xx1) *wō sà táʔáā, wálímà wō sà túū nàà*

2Sg Fut go.Ipfv, **or** 2Sg Fut stay.Ipfv here

‘Will you do, or will you stay?’

When the disjuncts in an interrogative context are NPs, a disjunction *wāà* may be used.

(xx2) *mā-n wāà zàkíì*

1Sg-Indep or Z

‘(Do you want) me or Zaki?’

In practice, disjunction of NPs and similar constituents is difficult to elicit. French cues containing them usually led to rephrasings like (xx3a‑b) with a topic-like preposed conjoined NP in partitive function, followed by a sentence with a single NP resuming the two.

(xx3) a. *[[yíʔé bùʔù síbí] dɛ̀] wō ɲɔ̀ⁿ dɔ́nɔ́*

[[fish and meat] with] 2Sg which? eat.Ipfv

‘Between fish and meat, what do you-Sg eat?’

b. *[zàkíì bùʔù bákàrì flāā dò]*

[Z and B two with]

*[mìʔìⁿ dúlí] sí= í wàá*

[person one] Fut= 3SgNonhObj go

‘Between the two of Zaki and Bakari, one person will go.’

An alternative is to use *ou bien* more or less as in French. This is now quite common in local languages.

# Postpositions and adverbials

Jalkunan has a full set of postpositions, which combine with preceding NPs to form postverbal adverbial phrases of various types. The NP occurs without its word-final nominal suffix. Before an L‑toned postposition, a noun ending in two or more L‑ or M‑toned moras is subject to Final Tone-Raising.

## Dative and benefactive

### No dative postposition with ‘give’ or ‘show’

There is no dative postposition for the indirect object (recipient) of ‘give’ or ‘show’. The indirect object is expressed by a bare postverbal NP.

(xx1) a. *mā wár̄ bìlí zàkí*

1Sg money give.Pfv **Z**

‘I gave the money to Zaki.’

b. *mā wár̄ bìlì wɔ̄-n*

1Sg money give.Pfv **2Sg-Indep**

‘I gave you-Sg the money.’

c. *mā sàá dùdɔ̀l [āⁿ jɛ̄-nā]*

1Sg house show.Pfv **[1Sg father-Nom]**

‘I showed the house to my father.’

### Dative *mà* ~ *má* after ‘say’

Dative postposition *mà* occurs with the indirect object of ‘say’ verbs.

(xx1) a. *mā [n-í bùʔù] tɔ́ʔɛ̀ [bákàrì mà]*

1Sg [Obj-3SgNonh all] say.Pfv [B **Dat**]

‘I told it all (=everything to Bakari.’

b. *mā síní tɔ̀ʔɛ̀ [ɲáāⁿ mà]=nɛ̄ʔ*

1Sg anything say.Pfv [woman **Dat**]=Neg

‘I didn’t say anything to the woman.’ (< *sínī* )

c. *mā síní tɔ̀ʔɛ̀ [ɲáā-nà-àⁿ má]=nɛ́ʔ*

1Sg anything say.Pfv [woman-Nom-Pl **Dat**]=Neg

‘I didn’t say anything to the women.’

For *mà* as a spatial postposition ‘on’, see §8.3.2.4.

### Benefactive *kɛ̀ⁿ* ~ *kɛ́ⁿ*

The complement of this postposition is an NP denoting to the beneficiary of an action. The forms are *kɛ̀ⁿ* after 3Sg, *kɛ́ⁿ* after -3Sg except *kɛ̄ⁿ* by M-Spreading after M‑toned pronominal.

(xx1) a. *wō sɛ́ [tē dɛ̀] [mā kɛ̄ⁿ]*

2Sg come.Pfv [tea with] [1Sg **Ben**]

‘You-Sg brought me some/the tea.’

b. *mā bāā-rá mèyà [ámádú kɛ̀ⁿ]*

1Sg work(n)-Nom do.Ipfv [A **Ben**]

‘I work for Amadou.’

For the sense ‘chez, at the place of X’, see §8.3.xxx below.

## Instrumental and comitative

### Instrumental-comitative *dɛ̀* ~ *dɛ́*

The form is *dɛ̀* after +3Sg, *dɛ́* after -3Sg except *dɛ̄* after M‑toned pronominal. In (xx1), the complement of *dɛ̀* ~ *dɛ́* denotes an instrument.

(xx1) a. *mùʔùⁿ gbāá bègé [jén dɛ̀]*

1Pl stick cut.Pfv [ax **Inst**]

‘We chopped the wood with an ax.’

b. *mā kàá bàʔrà [kùkú dɛ̀]*

1Sg snake hit.Ipfv [stone **Inst**]

‘I hit-Present the snake with a stone.’ (< *kùkù* )

c. *ààⁿ sɔ́ɛ́ [fàgá dɛ̀]*

3Pl enter.Pfv [force **Inst**]

‘They entered by force.’ (= ‘They barged in.’) (< *fàgà* )

This postposition is also part of the ‘bring’ and ‘take (there)’ constructions. The verb is intransitive ‘come’ or ‘go’, followed by a PP with *dɛ̀* ~ *dɛ́* denoting the theme (the transported entity).

(xx2) a. *sā [té dɛ̀]*

come.Imprt [tea **Inst**]

‘Bring the tea!’

b. *sīnì má sà tāʔā [tàgá dɛ̀] jí-nà*

tomorrow 1Sg Fut go.Ipfv [sheep **Inst**] market-Nom

‘Tomorrow I will take (=convey) the sheep-Sg to the market.’

The -3Sg form is *dɛ́*, as in *tàgà-rá-àⁿ dɛ́* ‘with the sheep-Pl’.

As predicate following ‘be’ subject enclitic, PPs with *dɛ̀* ~ *dɛ́* denote temporary possession (custody), see §11.5.2.1.

### Comitative *dò* ~ *dó*

The forms are *dò* after +3Sg, *dó* after -3Sg except *dō* after M‑toned pronominal. This postposition normally takes a human complement, denoting accompaniment.

(xx2) a. *mā bāārá mèyà [zàkí dò]*

1Sg work(n) do.Prog [Z **Comit**]

‘I work with Zaki.’ (< *bāārā* )

b. *mā bāārá mèyà [dí-rá-àⁿ dó]*

1Sg work(n) do.Prog [child-Nom-Pl **Comit**]

‘I work with (the) children.’ (< *bāārā* )

c. *bákàrì tèʔè-yá [mā dō]*

B go.Prog [1Sg **Comit**]

‘Bakari is going (on a trip) with me.’

PPs with *dò* ~ *dó* may occur as predicates after the ‘be’ subject enclitic, denoting co-presence (accompaniment), see §11.5.2.2. PPs with *dò* ~ *dó* also occur optionally, instead of a bare NP, as “object” of ‘want’ (§11.2.6.xxx), and in this construction nonhuman NPs are common as postpositional complement.

For *dò* ~ *dó* with the temporal noun ‘day’, see (xx1a) in §15.2.1.1 (‘On the day when you came’).

*dò* ~ *dó* is distinct from NP‑final specific indefinite *dò* (§6.5.2).

## Spatuitemporal postpositions

### Locative, allative, and ablative functions

As generally in languages of the zone, the distinction between static locative (‘in’, ‘at’, ‘on’), allative (‘to’), and ablative (‘from’) is expressed by verbs and other predicates, not by PPs. (xx1a‑c) illustrate this for the postposition tɔ̀ ‘in’.

(xx1) a. *má=∅ [sàá tɔ̀]*

1Sg=be [house in]

‘I am in the house.’ (< *sàà* )

b. *mà sɔ́ [sàá tɔ̀]*

1Sg enter.Pfv [house in]

‘I went into the house.’ (< *sɔ́ɛ́*, *sàà* )

c. *mà bɔ́ [sàá tɔ̀]*

1Sg exit.Pfv [house in]

‘I went out from the house.’ (< *bɔ́ɛ́, sàà* )

### Temporal adverbs and place names without a postposition

Simple temporal adverbs like ‘at night’ and ‘during the dry season’ are expressed with postverbal nouns, with their nominal suffix but without a postposition (xx1a‑b).

(xx1) a. *má bāārā ma᷇ⁿ kùmàyèlémà-nà=nɛ̄ʔ*

1Sg work(n) do.Ipfv dry.season-Nom=Neg

‘I don’t work in (during) the dry season.’

b. *zàkí bāārā màⁿ kóʔn̄-nà*

Z work(n) do.Ipfv night-Nom

‘Zaki works at night.’

Place names likewise generally occur without a postposition, as with the village/city names in (xx2). However, *jálsá‑dù* ‘Blédougou’ may itself contain a frozen locative ending.

(xx2) *má=∅ jàlsà-dù / bɔ̀bɔ́*

1Sg=be Blédougou / Bobo

‘I am in Blédougou / Bobo Dioulasso.’

One term for ‘village’ is *kúnú*. The suffixed form *kún-ná* can function as a locational without a postposition.

(xx3) *má=∅ kún-ná*

1Sg=be village-Nom

‘I am in in the village.’

### Basic monosyllabic locative postpositions

#### Locative *tɔ̀* ~ *tɔ́* ‘in’

This postposition places the moveable entity (trajector) inside a container or other bounded space. In addition to (xx1a‑b) see also the examples in §8.3.1 above.

(xx1) a. *mā kɔ᷇ⁿ sɔ̀ [bɔ̀ɔ̀rɔ́ tɔ̀]*

1Sg honey put.Pfv [sack in]

‘I put the honey in the sack.’

b. *mā ní wɛ̀ɛ́ bààⁿfɔ́rɔ̀ [káár tɔ̀]*

1Sg 3SgNonhObj go.Pfv B [bus **in**]

‘I went to Banfora by (=in the) bus.’

c. *má [kálá tɔ̀]*

1Sg=be [home in]

‘I am at home.’

As with other monosyllabic postpositions, this one has L‑toned form *tɔ̀* after a +3Sg NP or pronoun as illustrated above, and an H‑toned form *tɔ́* after -3Sg NPs and pronouns, except *tɔ̄* by M-Spreading after M‑toned pronominals. Compare *bɔ̀ɔ̀rɔ́ tɔ̀* ‘in the sack’ in (xx1a) above with its plural in (xx2).

(xx2) *bɔ̀ɔ̀-rɔ́-ɔ̀ⁿ tɔ́*

sack-Nom-Pl in

‘in (the) sacks’

This postposition may be used in in temporal PPs denoting an enclosing interval.

(xx3) *[è sòʔó] tɔ̀*

[3SgNonh day] in

‘on that day’

#### Locative *dù* ~ *dú* ‘in, inside of’

This postposition combines with nouns that denote an enclosing field (not a container as such). Examples are in (xx1).

(xx1) locative gloss noun

*kàáⁿ dù* ‘in the bush (outback)’ *kààⁿ*

*mùú dù* ‘in the field’ *mùù*

*yí dù* ‘in the water’ *yí*

*yēgē-kūⁿ dù* ‘in the tree’ *yēgē-kūⁿ*

The -3Sg variant *dú* occurs in *mùù-ná-àⁿ dú* ‘in the fields’.

#### Locative *mà* ~ *má* ‘on’

This postposition described position on, or motion onto or from, a horizontal or vertical surface, or on a large object that can be thought of as having a surface.

(xx1) a. *kùgù-rá=∅ [dàʔàlí mà]*

stone-Nom=be [mat on]

‘The stone is on the mat.’

b. *zàkí séʔní [kùgú mà]*

Z sit.Pfv [stone on]

‘Zaki is sitting on a rock.’

c. *sīŋāān-ná=∅ [sàà-gúⁿ mà]*

gecko-Nom=be [wall on]

‘The gecko is on the wall.’

d. *kùkú bɛ̀ [mā mā]*

stone fall.Pfv [1Sg on]

‘The stone fell on me.’ (< *bɛ̌* )

e. *kùkù-rá-àⁿ má*

stone-Nom-Pl on

‘on the stones’

For dative use of *mà* with ‘say’, see §8.1.2.

#### *kɛ̀ⁿ* ~ *kɛ́ⁿ* ‘chez’

This postposition means ‘chez X’, i.e. ‘at the house/place of X’. For benefactive function, see §8.1.3.

(xx1) a. *mùʔúⁿ wà [zàkíì kɛ̀ⁿ]*

1Pl go [Z chez]

‘Let’s go to Zaki’s place!’

b. *[dí kpɛ́ʔr-à-àⁿ] kɛ́ⁿ*

[child young-Nom-Pl] chez

‘at the children’s place’

#### *glà* ~ *glá* ‘next to’

This postposition denotes position very close to the landmark. It need not be to the side of the landmark (so I gloss ‘next to’ rather than ‘beside’). The postposition is L‑toned after singular nouns (of any tone melody) as shown by Final Tone-Raising on a preceding L- or M-toned noun (xx1).

(xx1) tones noun gloss PP gloss

/L/ *sàà* ‘house’ *sàá glà* ‘next to the house’

/M/ *gbāā* ‘stick’ *gbāá glà* ‘next to the stick’

/H/ *yíʔé* ‘fish’ *yíʔé glà* ‘next to the fish’

After a plural NP the postposition is H‑toned *glá*.

(xx2) *gbāā-rá-àⁿ glá*

stick-Nom-Pl next.to

‘next to the sticks’

Pronominal examples are in (xx3). The M‑toned pronouns spread the M‑tone into the postposition (xx3a). The remaining pronouns follow the singular/plural division seen in nouns (xx3b‑c).

(xx3) a. *mā glā* ‘next to me’

*wō glā* ‘next to you-Sg’

*ēēⁿ glā* ‘next to you-Pl

b. *mùʔùⁿ glá* ‘next to us’

*ààⁿ glá* ‘next to them (human)’

*èèⁿ glá* ‘next to them (nonhuman)’

c. *à glà* ‘next to him/her’

*è glà* ‘next to it’

Examples are in (xx4).

(xx4) a. *bákàrí=∅ [mā glā]*

B=be [1Sg next.to]

‘Bakari is next to me.’

b. *è sáʔá [bákàrì glà*]

3SgNonhObj sit.Imprt [B next to]

‘Sit down next to Bakari!’ (‘sit’ is pseudo-transitive)

One could argue for a representation *gìlà*. If so, syncope to *glà* is more or less automatic.

#### *kìnà* ~ *kíná* ‘in front of’

This is the literal ‘in front of’ postposition denoting a spatial relationship. M‑toned pronouns (1Sg, 2Sg, 2Pl) spread the M‑tone into the postposition (1Sg *mā kīnā*, 2Sg *wō kīnā*, 2Pl *ēēⁿ kīnā* ). For other pronouns, and for all nouns, the form is *kìnà* after a singular, and *kíná* after a plural.

(xx1) a. *má=∅ [sàá kìnà]*

1Sg=be [house in.front.of]

‘I am in front of the house.’

b. *má=∅ [ɲáā-nà-àⁿ kíná]*

1Sg=be [woman-Nom-Pl in.front.of]

‘I am in front of the women.’

c. *è sáʔá [mā kīnā]*

3SgNonhObj sit.Imprt [1Sg in.front.of]

‘Sit down in front of me!’

This postposition is most felicitous when the landmark has a front-back orientation (person, animal, house). However, it can be used with unoriented landmarks (a tree, a well) to denote position relative to the axis linking the landmark to an observer’s position. (xx2) would make sense if the 3Sg referent is close to the well but on such an observational axis.

(xx2) *á=∅ [kɔ̀líⁿ kìnà]*

3SgHum=be [well(n) in.front.of]

‘He/She is in front of the well.’ (< *kɔ̀lìⁿ* )

*kìnà* is also used with the verb ‘fear, be scared of’. This phrasing is more spatially concrete than that of English.

(xx1) *mā jóⁿ-yá [zàkíì kìnà]*

1Sg fear-Prog [Z in.front.of]

‘I am scared of Zaki.’

#### *ɲáà* ‘in the presence of’

When the context is ‘in the presence of X’ where X is a respected individual or office-holder, rather than simple spatial ‘in front of X’, *ɲáà* is used. Unlike normal postpositions, this one is invariant tonally.

(xx1) *àáⁿ ɲàà tɔ́ʔɔ́ [màà ɲáā]*

3PlHum cause tell.Adjn [owner in.presence]

‘They explained the matter in the presence of the chief.’ (2016\_03 10:46)

#### *fúúlú* ‘between’

This postposition appears to require a plural landmark, whether a simple plural pronoun or noun or the conjunction of two singulars. The form is therefore always H‑toned *fúúlú*.

a. *[mā búʔú wō] fúúlú*

[1Sg and 2Sg] between

‘between you-Sg and me’

b. *mùʔùⁿ fúúlú*

1Pl between

‘between us’

c. *[zàkí bùʔù bákàrì] fúúlú*

[Z and B] between

‘between Zari and Bakari’

#### *kpà* in temporal expressions

This morpheme is attested in expressions with temporal nouns (‘day’, ‘year’, etc.), either by itself (functioning like a postposition) or preceding locative *tɔ̀* ~ *tɔ́*.

(xx1) a. *[è sòʔó kpà] tɔ́*

[3SgNonh day Loc] in

‘on that day’ (< *sóʔó* )

b. *[è ɲɛ̀ɛ́ kpà] mā cɛ́ [sàá dù]*

[3SgNonh year Loc] 1Sg Past [house in]

‘In that year, I was away (traveling).’

See also the complex postposition *kpǎ-mà* ~ *kpá-mà* indicating goal or pursued target (§8.4.3).

### Complex and multisyllabic spatial postpositions

#### *gbɔ̀lɔ̀kɔ̀* ~ *gbɔ́lɔ́kɔ́* ‘over/above’ or ‘on top of’

This postposition is L‑toned *gbɔ̀lɔ̀kɔ̀*, becoming *gbɔ̄lɔ̄kɔ̄* after M‑toned pronominal (e.g. *mā gbɔ̄lɔ̄kɔ̄* ‘above me’) and *gbɔ́lɔ́kɔ́* after other plural pronouns and nonpronominal NPs. The sense can be ‘over/above X’, denoting position on a vertical axis passing through the landmark X but no contact, or ‘on top of X’, involving contact.

(xx1) a. *kɔ̀-nɔ́-ɔ̄ⁿ=∅ [sàá gbɔ̀lɔ̀kɔ̀]*

bird-Nom-Pl=be [house above]

‘The birds are (in flight) over the house.’

b. *kɔ̀-nɔ́-ɔ̄ⁿ=∅ [sàà-rá-àⁿ gbɔ́lɔ́kɔ́]*

bird-Nom-Pl=be [house-Nom-Pl above]

‘The birds are (in flight) over the houses.’

c. *bákàr sìdánī [sàá gbɔ̀lɔ̀kɔ̀]*

B ascend.Pfv [house on.top.of]

‘B has gone up onto the house (=the roof).’

#### *kùtɔ̀* ~ *kútɔ́* ‘under’

This postposition is *kùtɔ̀*, becoming *kūtɔ̄* after an M‑toned pronoun (*mā kūtɔ̄* ‘under me’) and *kútɔ́* after other plural pronouns and NPs. It might contain locative *tɔ̀* ~ *tɔ́* etymologically.

(xx1) a. *kùgù-rá=∅ [dàʔàlí kùtɔ̀]*

stone-Nom=be [mat under]

‘The stone is under the mat.’

b. *kùgù-rá=āⁿ [dàʔàl-lá-àⁿ kútɔ́]*

stone-Nom=be [mat under]

‘The stones are under the mats.’

#### *kùtɔ́rɔ́ mà* ~ *kútɔ́rɔ́ mà* ‘behind’

This is a complex postposition combining *mà* ‘on’ with a stem *kùtɔ́rɔ́*, variants *kūtɔ̄rɔ̄* (after M‑toned pronoun) and *kútɔ́rɔ́* (after other plural pronouns and all plural nonpronominal NPs). One suspects that *kùtɔ́rɔ́* originated as a noun meaning ‘back (of body)’ or ‘base’. Its historical relationships to *kóō* ‘back (of body)’ and to the final in *tàá-kùdù* ‘foundation (of house)’ are unclear.

(xx1) a. *má=∅ [[sàá kùtɔ́rɔ́] mà]*

1Sg=be [[house behind] on]

‘I am in front of the house.’

b. *má=∅ [[ɲáā-nà-àⁿ kútɔ́rɔ́] mà]*

1Sg=be [[woman-Nom-Pl behind] on]

‘I am in front of the women.’

c. *è sáʔá [[mā kūtɔ̄rɔ̄] mà]*

3SgNonhObj sit.Imprt [[1Sg behind] on]

‘Sit down behind me!’

#### *cɛ̌ŋgɔ̀-rɔ̀* ~ *cɛ́ŋgɔ̀-rɔ̀* ‘in the middle of’

‘In the middle of X’ is expressed by a possessed form of *cɛ́ŋgɔ̀* ~ *cɛ́ŋŋɔ̀* ‘middle’, ending in its nominal suffix, rather by than a PP as such. The *g* is often elided, but if so the nasal is prolonged and the metrical shape is preserved. The suffixed form *cɛ́ŋgɔ̀‑rɔ̀* ~ *cɛ́ŋŋɔ̀‑rɔ̀* always has suffixal *r* rather than nasalized *n*.

(xx1) a. *cálā cɛ̀ŋ́gɔ̀-rɔ̀*

road middle-Nom

‘in the middle of the road’

b. *cál-à-àⁿ cɛ́ŋgɔ̀-rɔ̀*

road-Nom-Pl middle-Nom

‘in the middle(s) of the roads’

### Temporal postpositions

#### Temporal uses of ‘in front of’ and ‘behind’

‘In front of’ can mean ‘before’, and ‘behind’ can mean ‘after’, when combined with an NP used as a temporal reference point.

(xx1) a. *sér̄ kìnà*

prayer in.front.of

‘before the prayer’

b. *[sér kùtɔ́rɔ́] mà*

[prayer behind] on

‘after the prayer’

‘Over’ and ‘under’ are not attested in a temporal (or abstract quantitative) sense, as in ‘over (=more than)’ or ‘under (=less than)’ a quantity.

#### *fō* ~ *fɔ̄* ‘until/all the way to’

*fō* ~ *fɔ̄* precedes rather than follows the adverb or NP that it has scope over. The sense may be spatial (‘all the way to’) or temporal (‘until’). It is often emphatic.

(xx1) a. *mā fídī bààⁿfɔ́rɔ̀ [fō jàlsà-dù]*

1Sg run.Pfv Ba [**until** Bl]

‘I ran from Banfora (city) all the way to Blédougou.’

b. *mùʔúⁿ sà wál màà [fɔ̄ síní]*

1Pl Fut work(n) do.Ipfv [**until** tomorrow]

‘We’ll work until tomorrow.’

For a different function of *fɔ̄*, perhaps from French *il faut*, see §17.1.4.

#### *fùùrù* ‘until, within (time span)’

This morpheme is not strictly speaking a postposition and does not show tone variation. It occurs in temporal phrases beginning with a temporal adverb meaning ‘from now, hence(forth)’, such as *sánī* or *yàní*, continuing with an NP denoting a duration, and ending with *fùùrù*.

(xx1) a. *mùʔúⁿ sà kwéēⁿ bègé màà]*

1Pl Prog crops cut do.Ipfv]

*sánī [[yēé kpèn-dáā] fùùrù]*

from.now [[month end(v)-Nom] **until**]

‘We’ll harvest the crops within a month from now.’

b. *má sī-ì wàá kúnú*

1Sg Prog-3SgNonhObj go.Ipfv village

*yàní [kpásòʔò flā] fùùrù*

from.now [week two] **until**

. ‘I will go to the village within two weeks.’

#### *wɔ̀nɔ̀* ~ *wɔ́nɔ́* ‘still on (a topic)’

This postposition is used in a construction with locational ‘be’. It presupposes that the subjects (often plural) have been discussing a topic.

(xx1) a. *mùʔúⁿ=∅ [ꜜní wɔ̀nɔ̀]*

1Pl=be [3SgNonh **still.on**]

‘We are still talking about it.’

b. *mùʔùⁿ [ní wɔ̀nɔ̀]=nɛ̄ʔ*

1Pl [3SgNonh **still.on**]=Neg

‘We are not still talking about it.’

Textual example: 2016\_02 @ 04:51.

## Purposive and possessive postpositions

### Purposive-causal ‘for, because of’ (*kùdù* ~ *kúdú* )

In (xx1a), ‘for money’ can be expressed by either the instrumental postposition *mà* or the dedicated purposive postposition *kùdù*. Only *kùdù* occurs in (xx1b), where ‘for God’ means in effect ‘without expectation of (earthly) reward’.

(xx1) a. *mā wálí mè-yá [wár mà* / *kùdù ]*

1Sg work(n) do-Prog [money **with** / **for**]

‘I work for money.’

b. *mā wár̄ bìl= áyà [álà kùdù]*

1Sg money give.Pfv 3SgHum [God **for**]

‘I gave him/her some money for God (=freely).’ (< /bìlí àyà/)

### Custodial *wù* ~ *wú*

This postposition is used after a verb of putting something into something, and specifies that the container (e.g. a pocket or bag worn with a neck strap) is in the custody (temporary possession) of the complement. Since the complement is usually coindexed with the clausemate subject (‘X put Y in [X’s pocket/bag]’), the complement is often a reflexive pronominal.

(xx1) *càʔàcí cí= [ì wùū]*

peanut put.mass [3SgNonhRefl with.self]

‘He (=hare) put (a bunch of peanuts) in (his pocket/bag)’ (2016.02 at 01:42)

Examples including the reflexive pronominal paradigm are in (xx2) and (xx3). The verbs are perfectives *bɛ́/bɛ̌* ‘put (object) down’ and *cyɛ́/cyɛ̌* ‘put or pour (mass, many small objects) in’.

(xx2) *mā ní bà= [àⁿ wú]* ‘I put it in (e.g. pocket/bag)’

*mùʔùⁿ ní bà= [àⁿ wú]* ‘We put it in.’

*wō ní bè= [è wú]* ‘You-Sg put it in.’

*ēēⁿ ní bè= [èⁿ wú]* ‘You-Pl put it in.’

*à ní bà= [á wù]* ‘He/She put it in.’

*ààⁿ ní bá= [àⁿ wú]* ‘They-Hum put it in.’

*è ní bè= [é wù]* ‘It put it in.’

*ààⁿ ní bé= [èⁿ wú]* ‘They-Nonh put it in.’

(xx3) *mā càʔàcí cyɛ̀= [ɛ̀ⁿ wú]* ‘I put peanuts in (e.g. pocket)’

*mùʔúⁿ càʔàcí cyɛ̀= [ɛ̀ⁿ wú]* ‘We put peanuts in.’

*wō càʔàcí cì= [ì wú]* ‘You-Sg put peanuts in.’

*ēēⁿ càʔàcí cì= [ìⁿ wú]* ‘You-Pl put peanuts in.’

*à càʔàcí cyɛ́= [ɛ̀ wù]* ‘He/She put peanuts in.’

*ààⁿ càʔàcí cyɛ́= [ɛ̀ⁿ wú]* ‘They-Hum put peanuts in.’

*è càʔàcí cí= [ì wù]* ‘It put peanuts in.’

*ààⁿ càʔàcí cí= [ìⁿ wú]* ‘They-Nonh put peanuts in.’

### Purposive *kpǎ-mà* ~ *kpá-mà* or *kpǎ-ɲɔ̀* ~ *kpá-ɲɔ̀*

This postposition functioning synchronically more or less like a single postposition. It can mean ‘for’ (purposive) or ‘in(to) the presence of (someone)’. It can express the target of ‘pursue’. In general it denotes the goal or target. Forms are *kpǎ-mà* (after +3Sg), *kpā-mà* (after M‑toned pronominal), and *kpá-mà* (after other ‑3Sg).

(xx1) a. *[mā sɛ́] [wár̄ kpá-mà]*

[1Sg come.Pfv] [money **for**]

‘I came for the money.’

b. *[mā sɛ́] [wō kpā-mà]*

[1Sg come.Pfv] [2Sg **for**]

‘I came to you (into your presence).’

c. *jàr-rá=∅ sí=í sàà [mā kpā-mà]*

lion-Nom=Ipfv Fut=3SgNonhRefl pursue.Ipfv [1Sg **following**]

‘The lion will pursue me.’

A variant *kpǎ-ɲɔ̀* ~ *kpá-ɲɔ̀* is also attested in the ‘follow/pursue’ context.

The variant *kpǎ-mà* ~ *kpá-mà* is probably a frozen combinations of *kpáná* ‘follow’ (in adjoined form *kpáⁿ* ) and an original PP with postposition *mà* ‘on’ such as human 3Sg *à mà*. It is no longer possible to insert a postpositional complement before *‑mà* in *kpá‑mà*. The verb *kpáná* still exists, but it requires one of the postpositions illustrated in (xx1) above.

(xx2) *mā kpánī [zàkíì kpá-mà* / *kpá-ɲɔ̀]*

1Sg follow.Pfv [Z **following**]

‘I followed Zaki.’

### *ná* after plural ethnicity name

This postposition follows plural ethnicity names and is therefore always H‑toned. It is attested with the verb ‘exit’ in the sense ‘extend beyond’.

(xx1) *mā bɔ́ [jàl-á-àⁿ-ǹ* / *kòò-rá-àⁿ* / *bɔ̀bɔ́-rà-àⁿ* / *bàl-lá-àⁿ ná]*

1Sg exit.Pfv [Jali-/Natioro-/Bobo-/Senoufo-Nom.Pl ethnicity]

‘I went beyond the Jali/Natioro/Bobo/Senoufo ethnicity.’

### *kósòⁿ* ‘because of’

kósòⁿ is a noun-like element that functions like a postposition ‘because of’, explaining a reason or cause. It is tonally invariant: *mā kósòⁿ* ‘because of me’, dí *kósòⁿ* ‘because of the child’, etc.

*kósòⁿ* occurs in the expression *wò kósòⁿ* with focalized 3Sg complement (or possessor) in the sense ‘that [focus] ’s why …’. See §13.4.1 on resumptive focalizations of this type.

## Other adverbs (or equivalents)

### ‘Like, similar to’ (*gbɔ́-nɔ̀* )

*gbɔ́-nɔ̀* appears to be a noun (with nominal suffix *-nɔ* pointing to *gbɔ́ⁿ* as the stem). It immediately follows an NP denoting the comparandum. There are no tonal interactions like those in possessor-possessum combinations.

(xx1) a. *wó=∅ wálí màà [ɲáāⁿ gbɔ́-nɔ̀]*

2Sg=Ipfv work(n) do.Ipfv [woman manner-Nom]

‘You-Sg work like a woman.’

b. *má=∅ wálí màà [à gbɔ́-nɔ̀]*

1Sg=Ipfv work(n) do.Ipfv [3SgHum manner-Nom]

‘I work like him/her.’

### Extent (‘a lot’, ‘a little’)

Words with these meanings can be adverbs (non-argument postverbal nouns) or, in some cases, NPs capable of functioning as arguments (subjects, preverbal objects).

*fɛ́ɛ́ⁿ* ‘a lot’ can be either an adverb (xx1a) or an NP (xx1b).

(xx1) a. *à jìímɛ̄ fɛ́ɛ́ⁿ*

3SgHum weep.Pfv **a.lot**

‘He/She wept a lot.’

b. *à fɛ́ɛ́ⁿ bìlí mā-n̄*

3SgHum **a.lot** give.Pfv 1Sg-Indep

‘He/She gave me a lot.’

For ‘a little’ the adverb (postverbal noun) is *nɛ̄ʔɛ̄kɛ̄* ‘a little’ (xx2a‑b).

(xx1) a. *à jìímɛ̄ nɛ̄ʔɛ̄kɛ̄*

3SgHum weep.Pfv **a.little**

‘He/She wept a little.’

b. *á bìlí mā-n̄ nɛ̄ʔɛ̄kɛ̄*

3SgHum give.Pfv 1Sg-Indep **a.little**

‘He/She gave me a little.’

The noun *dɔ̀ɔ̀nì* can mean ‘a little’ or, in temporal contexts, ‘a little while’ (hence ‘soon’).

(xx3) a. *[à dɔ̀ɔ̀nì bílí mā-n̄]*

[3SgHum **a.little** give.Pfv 1Sg-Indep]

‘He/She gave me a little.’

b. *[sánī dɔ̀ɔ̀nì] [zàkíì=∅ ꜜsáá]*

[by **a.little**] [Z=Ipfv come.Ipfv]

‘Zaki will come by (=within) a little while.’

### ‘Exactly’ (*kpéʔé-nū* ~ *kpèʔè-nù* )

Exactness of a quantity is specified by adding *kpéʔé-nū* after the numeral. After the numeral ‘1’ the form is *kpèʔè-n(ù)*.

(xx1) a. *tàgà jáāⁿ-flā*

sheep twenty-two

‘forty sheep’

b. *[tàgà jáāⁿ-flā kpéʔé-nū] tóʔrí*

[sheep twenty-two exactly] sell.Imprt

‘Sell-2Sg exactly forty sheep’

c. *[tàgà dúlí kpèʔè-n] tóʔrí*

[sheep twenty-two exactly] sell.Imprt

‘Sell-2Sg exactly forty sheep’

For the sense ‘precisely X’ (i.e. X and no-one else) where X denotes a person or other referent, see the emphatic ‘X himself’ construction in §18.1.2.3.

### Evaluation

#### ‘Well’ and ‘badly’

Evaluations of how well an activity was performed are phrased not with adverbs like English *well* and *badly*, rather by adding evaluative adjectives to a nominal complement. Only *ɲɛ́* ‘good’ is common; the clause containing it can be negated to translate ‘bad(ly)’.

(xx1) a. *á=∅ [ꜜwálí ɲɛ́] màà*

3SgHum=Ipfv [work(n) good] do.Ipfv

‘He/She works well.’ (lit. “… does good work”)

b. *ààⁿ=∅ [sígí ɲɛ́] sàà=rɛ̄ʔ*

3PlHum=Ipfv [song good] sing.Ipfv=Neg

‘They sang badly.’ (lit. “… sang bad songs”)

#### ‘Proper, right, (socially) normal’ (*ɲàànɛ́ɛ̀* ~ *ɲáánɛ́ɛ̀* )

A predicate characterizing an action as socially correct (normal, proper, right), or with negation as incorrect, is expressed by variants of imperfective *ɲàánà* ~ *ɲáánà* ‘become good/better, improve’. The form used is *ɲàànɛ́ɛ̀* ~ *ɲáánɛ́ɛ̀*, trimmed to *ɲààná=* ~ *ɲááná=* before the negative enclitic.

(xx1) a. *[á=∅ mì mè-yà]*

[3SgHum=Ipfv Rel do-Prog]

*[è ɲàànɛ́ɛ̀* / *ɲààná=nɛ̄ʔ]*

[3SgNonh **be.normal**.Ipfv / **be.normal**=Neg]

‘What he/she is doing is normal / isn’t normal.’

b. *èèⁿ ɲáánɛ́ɛ̀* / *èèⁿ ɲááná=nɛ̄ʔ*

3PlNonh **be.normal**.Ipfv / **be.normal**=Neg

‘They (e.g. actions) are normal / aren’t normal.’

### Manner adverbs (‘like this/that’)

The basic noninterrogative manner adverb (‘like this/that’, ‘so’, ‘thus’) is *nánɛ̄*. It may be historically connected in some way with *nàà* ‘here’ and *nɛ̀* ‘here/there’.

(xx1) a. *è mà nánɛ̄*

3SgNonh do.Imprt **like.this**

‘Do-2Sg it like this!’

b. *bí wálí mà nánɛ̄=nɛ̄ʔ*

Proh work(n) do.Imprt **like.this**=Neg

‘Don’t-2Sg work (do the work) like that!’

There is also an adverb *yààlàà* ‘thus’. It occurs in a narrative where it resumes a situation that has been described, before the next foregrounded event appears.

(xx2) *donc ààⁿ túú yààlàā, …*

so 3PlHum stay.Pfv thus, …

‘So, they remained thus (=in that situation), (until) ….’ (2016\_04 @ 00:23)

### Spatiotemporal adverbials

#### Temporal adverbs

Some of the major temporal adverbs are in (xx1).

(xx1) a. *fì* ‘today; nowadays’

*lò* ‘yesterday; formerly, in the old days’

*wòsɔ́ʔɔ̄ⁿ tɔ̀* ‘day before yesterday’

*wòsɔ́ʔɔ̄ⁿ tó→ dè* ‘a few/several days ago’

*káātɔ̀* ‘now’

*sísàⁿ* ‘now’ (< Jula), see §19.xxx

b. *síní* ‘tomorrow; in the future’

*síní kɛ́nɛ́* ‘day after tomorrow’

*síní kɛ́nɛ́ kútɔ́rɔ̀-mà* ‘second day after tomorrow’ (third from today)

c. *bùlù* ‘last year’

*wò ɲɛ́ɛ̀ mà é→ dè* ‘a few/several years ago’

*ɲɛ̄ɛ̄-wè* ‘next year’

*ɲìnà* ‘this year’

(xx2) a. *[mùʔúⁿ=∅ sà kwééⁿ-bègé màà]*

[1Pl=Ipfv Fut crops-cut.VblN do.Ipfv]

*ɲàní [yēē dúlì]*

from.now [month one]

‘We’ll harvest the crops one month from now.’ (< *kwéēⁿ*, *bègè* )

b. *[mùʔúⁿ=∅ sà wálí màà]*

[1Pl=Ipfv Fut work(n) do.Ipfv do

*ɲánì [yēē dúlì] tú [kpásòʔr̀ flā]*

from.now [month one] plus [week two]

‘We’ll do the work in a month plus a couple of weeks (=a month and a half) from now.’

#### Spatial adverbs

The following are the main spatial adverbs.

(xx1) a. *álà mà* ‘above, upward, on top’

*dòʔó mà* ‘below, down, under’

b. *wòrò-dúgú* ‘in the south’ (“kola nut place”)

*kɔ̀ʔɔ̀-dúgú* ‘in the north’ (“salt place”)

*tál-bàà tɔ́-nɔ̀* ‘in the west’ (“sun-fall at”)

*tál-fìdɛ̀ tɔ́-nɔ̀* ‘in the east’ (“sun-set at”)

c. *kùdɔ́rɔ́ mà* ‘in the rear’

*kìnà* ‘forward; in front’

‘Right hand’ is *tùkùnì bɔ́l-ɔ̀* with *bɔ̄lɔ̄* ‘hand’ and a compound initial or possessor. ‘Left hand’ is *nɔ̀kɔ̀lɔ̀ bɔ́l-ɔ̀*.

#### ‘(Go) straight’ (*télénà* )

Adverbial ‘straight, directly (to somewhere)’ in the context of motion is expressed by the intransitive verb ‘go straight’ with imperfective *télénà* and perfective *tèlénī* ~ *télénī*, rather than by an adverb.

(xx1) *mùʔùⁿ télénī fɔ̄ jàlsàdù*

1Pl go.straight.Pfv all.the.way Blé

‘We went straight (=directly) to Blédougou (village).’

#### ‘Apart, separate’ (*dáná* )

The adverb *dáná* may occurs after an NP, or more typically in parallelistic constructions repeated after two contrasting NPs.

(xx1) *ɲáā-nà-áⁿ=∅ dáná, dígí-nà-áⁿ=∅ dáná*

woman-Nom-Pl=Ipfv apart, man-Nom-Pl=Ipfv apart

‘Women and men separate(ly)’

Such a phrase is usually attached as a kind of adverbial adjunct to some main clause, but it has its own sentence-like prosody.

#### ‘Always’ and ‘never’

There is no dedicated adverb ‘always’. The sense is expressed by ‘(at) all time(s)’ (xx1a). Similarly, there is no dedicated ‘never’ adverb. The sense is roughly expressed by an emphatic construction whose core sense is ‘not … at all’ (xx1b).

(xx1) a. *á=∅ [wálí ɲɛ́] màà [wáʔátí bùʔù-nū]*

3SgHum=Ipfv [work(n) good] do.Ipfv [**time all**-Pl]

‘He/She always does good work.’

b. *á=∅ [wálí ɲɛ́] màà fɛ́sɛ́-fɛ́sɛ́=rɛ̄ʔ*

3SgHum=Ipfv [work(n) good] do.Ipfv **at.all**=Neg

‘He/She never does good work.’

#### ‘Still’, ‘(not) yet’ (*tɔ́ɔ́* )

‘Still’ and, under negation, ‘(not) yet’ is expressed by *tɔ́ɔ́* ‘stay’. See §15.1.2.2 for discussion and examples.

#### ‘By, between now and’ (*sánì* and *yàní* )

*sánì* followed by a temporal expression defines a time interval beginning with the present, cf. French *d’ici* or German *bis*.

(xx1) *[sánì wúláára] [zàkíì=∅ ꜜsáá]*

[from.now evening] [Z=Ipfv come.Ipfv]

‘Zaki is coming by (=no later than) this evening.’

There is also a synonym *yàní*, see (xx1b) in §8.3.6.3.

#### ‘Already’ (*kàbáⁿ* , *náánì* )

These two elements meaning ‘already’ may occur separately or in combination.

(xx1) a. *bákàr tɛ́ʔ=*

B go.Pfv

*[à búl=] [ɔ̀ sá] kàbáⁿ*

[3SgHum return.Adjn] [3SgHum come.Adjn] **already**

‘Bakari went and has already come back.’

b. *à kú [mɛ̀ʔɛ́ⁿ kpà-mà] náánī*

3SgHum begin [person following] **already**

‘He/She is already stalking the person’ (2016\_04 @ 00:39)

c. *[mí-nà-àⁿ [yí dù] kàbáⁿ náánī dóō]*

[Dem-Nom-Pl [water in] **already already** too]

‘(She saw that) those (women) were already in the water.’ 2016\_04 @ 00:48)

### Expressives

Jalkunan does not seem to make much use of lexical expressive adverbials. The two tales that have been transcribed have plenty of nonlexical interjections of the “ah!” and “ooh!” type.

There is, however, one good example of a lexical expressive in one tale:

(xx1) *wábáẁ, é fìdì*

whoosh!, 3SgNonh run.Adjn.Defoc

‘Whoosh! He (=warthog) ran away.’ (2016\_02 @ 04:54)

The translation ‘whoosh!’ is misleading since the English form is a kind of onomatopoeia, whereas *wábáẁ* is a an expressive adverb with a lexical sense and non-iconic (arbitrary) phonological form. There are probably more such forms that would turn up in a larger text collection.

# Verbal derivation

## Reversive verb derivation absent

No reversive derivation or productive reversive phrase type was observed. Reversive-like senses are expressed by dedicated lexical items or by semantic extensions. Both ‘unlock’ and ‘open (door)’ are phrased as *dɛ̀ɛ̂* ‘open (door)’, which can also be used in the sense ‘uncover, remove blanket from (sb)’. ‘Take out’ is simply the transitive use of ‘exit, go out’, with no derivational morpheme. There is a dedicated lexical item for ‘untie’ (*fɛ̀ɛ̀nàà* ), used as reversive for the phonologically unrelated ‘tie, bind’ (*kùlɔ́nà*) as well as ‘hobble (animal, with rope)’ (*fìrìkíyà*).

## Morphological causative derivation absent

There is no productive morphological causative. For alternations, using the same ambi‑valent verbs, like intransitive ‘fall’ and transitive ‘knock down’, see §9.xxx below.

If no simple lexical item can express the sense intended, a periphrastic causative using the verb ‘put down’ (imperfective *bàà* ) and a postverbal nominalized verb can be used.

(xx1) *mā ná bɛ̀ fìdì-rá*

1Sg 3SgHumObj put.down.Pfv run.VblN-Nom

‘I made him/her run.’

## Morphological passive derivation absent

There is likewise no morphological passive derivation. If a specific agent is overt, it is the subject. There is no difference in Jalkunan between ‘I was robbed by the bus driver’ and ‘The bus driver robbed me.’ Nonspecific agency is expressed by ‘they’ as subject (xx1).

(xx1) *ààⁿ mā jɔ́ɛ̀ⁿ*

3Pl 1Sg rob.Pfv

‘I was robbed.’ (“They robbed me.”)

## Ambi-valent (labile) verbs without suffixal derivation

Ambi-valent (or labile) verbs can be used intransitively and transitively by definition. Since transitive objects are nonzero, the existence of a preverbal object is sufficient to indicate transitive status of the verb. Such verbs are very common in Jalkunan. ‘Fall’ and ‘cause to fall, knock down’ are exemplified in (xx1).

(xx1) a. *à bɛ̌*

3SgHum fall.Pfv

‘He/She fell.’

b. *mā ná bɛ̌*

1Sg 3SgHumObj fall.Pfv

‘I made him/her fall.’

Some of the most common ambi-valent verbs are in (xx2). In the “verb” column the forms given are perfective (+3Sg), then imperfective. If the imperfective is M- or H‑toned in the intransitive it becomes L‑toned (shown in parentheses) in the transitive (+3Sg).

(xx2) Pfv / Ipfv gloss (intr) gloss (tr)

*bɛ̌* / *bàà* ‘fall’ ‘knock down, put down’

*bɔ̀ɛ́* / *bɔ́ɔ́* *(bɔ̀ɔ̀)* ‘exit, go out’ ‘take out’

*sɔ̀ɛ́* / *sɔ́ɔ́* *(sɔ̀ɔ̀)* ‘enter’ ‘put in’

*kpɛ̌ⁿ* / *kpááⁿ (kpààⁿ)* ‘die’ ‘kill’

*kàʔrí* / *káʔrá (kàʔrà)* ‘snap, be broken’ ‘snap, break (sth)’

*bìí* / *bíɛ́ (bìɛ̀)* ‘(fire) be lit’ ‘light (fire)’

## Deadjectival inchoative and factitive verbs

Most basic adjectives have an associated verb that can be used as inchoative (‘X become ADJ’) or factitive (‘Y make X become ADJ’). Using the imperfective as citation form for the verbs, we see that factitives differ from inchoatives only in having the usual +3Sg versus ‑3Sg tonal form, which does not apply to intransitive verbs. The +3Sg imperfective of the factitive is parenthesized in the right-hand column of (xx1).

(xx1) adjective gloss inchoative (factitive)

a. clearly related

*kpēē* ‘white’ *kpɛ́ɛ́ (kpɛ̀ɛ̀)*

*kānā* ‘red’ *kánáná* ~ *kánná (kànnà)*

*gbɔ̀ʔɔ̀* ~ *gbòʔò* ‘black’ *gbɔ̀ʔɔ̀ (gbɔ̀ʔɔ̀)*

*ɲɛ́* ‘good’ *ɲàánà (ɲàánà)*

*gbáʔálá* ‘thin’ *gbàʔàlánà*

*kúmā* ‘cold’ *kúmà (kùmà)*

*kítā* ‘bad’ *kìtàlíà (kìtàlíà)*

*gúnī* ‘short’ *gùnɔ̀ (gùnɔ̀)*

b. suppletive or doubtfully related

*táā* ‘hot’ *dɛ̀ɛ̀ (dɛ̀ɛ̀)*

*súmááⁿ* ‘long’ *sɔ̀ɔ̀ⁿbàà (sɔ̀ɔ̀ⁿbàà)*

*kútɔ̄* ‘old’ *kɔ̀ʔrìyáà*

A number of other verbs also denote intransitive changes of state, but do not correspond to any of the few true (morphologically simple) adjectives in the language. One can, however, use relative clauses based on such verbs as nominal modifiers. Parenthesized forms are +3Sg factitives (transitives).

(xx2) inchoative (factitive) gloss

*ɲīʔɛ̄nāā (ɲìʔɛ̀nàà)* ‘become wet’

*dóʔóyáà (dòʔòyáà)* ‘shrink, become small’

*tɔ̀lɔ̀* ‘rot’

*jáá (jàà)* ‘become sweet, delicious’

*kónó* *(kònò)* ‘grow, become big, widen’

*gbàʔàlánà (gbàʔàlánà)* ‘dry off’

*gbàà (gbàà)* ‘become difficult or expensive’

*nɛ̀ɛ̀bàà (nɛ̀ɛ̀bàà)* ‘become bitter(-tasting)’

*ŋùnɔ̀ (ŋùnɔ̀)* ‘become sour’

## Incorporated object in compound verbs

Since there is a preverbal object slot that, for OV transitives, is often filled by an unsuffixed noun, it is difficult to distinguish object-verb sequences from compounds of a verb with incorporated object. A further difficulty is that possessors are not morphologically marked.

(xx1) *má=∅ sárā mùú mè-yá*

1Sg=Ipfv tobacco field do-Prog

‘I grow tobacco.’

Here the options are a) to treat *sárā mùú*, whether analysed as a nominal compound (‘tobacco-field’) or as a possessed NP (‘tobacco’s field’, ‘field of tobacco’), as the object of ‘do’, or b) to analyse *mùú* as an incorporated noun, leaving *sárā* as a true syntactic object.

If we take ‘tobacco’ out, the result is (xx2).

(xx2) *má=∅ mùú mè-yá*

1Sg=Ipfv field do-Prog

‘I do farming.’

Here the options are a) to treat ‘field’ as a conventionalized object of ‘do’, or b) to analyse *mùú* as an incorporated noun, making the noun-verb combinations a derived intransitive verb (cf. *to duck-hunt* versus *to hunt ducks*).

A pronominal object is also possible. In (xx3), ‘it’ could be a specific crop mentioned in preceding discourse.

(xx3) *má=∅ nì mùú mè-yá*

1Sg=Ipfv 3SgNonh field do-Prog

‘I grow it.’

Here a stronger case can be made for taking ‘field-do’ as a compound verb functioning syntactically as transitive, with *nì* as its direct object. However, even here *nì* can also be parsed as a possessor of ‘field’, since there is no difference in form between an object proclitic to a verb and a possessor proclitic to a noun. A possessed noun reading would entail that ‘its field’ in (xx3) above is the preverbal object (and no noun-verb compound need be recognized). This type of possessed NP analysis is clear in cases like (xx4) where for semantic reasons *nà* cannot be construed as a direct object ‘him/her’ (as in #‘I work-do him’).

(xx3) *má=∅ [nà wàlí] mè-yá*

1Sg=Ipfv [3SgHum work] do-Prog

‘I do his/her work.’

The absence of case-marking of objects, and of overt possessive morphemes, leaves only tone patterns as possible evidence to distinguish simple object nouns before simple transitive verbs from incorporated objects in noun-verb compounds (whether transitive or intransitive). In (xx3) above, work (*wálí* ) has the {LH} overlay associated with +3Sg possessors. In (xx4), it has the {L} overlay associated with alienable ‑3Sg possessors, but then undergoes Final Tone-Raising before the initial L‑tone of the verb.

(xx4) *á=∅ [mā wàlí] mè-yá*

3SgHum=Ipfv [1Sg work] do-Prog

‘He/She does my work.’

Returning to (xx1) above, the LH tones of *mùú* ‘field’ (lexical *mùù* ) could be due to Final-Tone Raising before an L‑tone, as clearly in (xx2) above, or they could reflect the {LH} overlay on possessums following +3Sg possessor (‘tobacco’). (xx5) shows perfective VPs with ‘bury’ and a pronominal object. The issue is whether *kù* ‘corpse’ is incorporated into the verb *sɔ̀ɛ́* ~ *sɔ́ɛ́* ‘put in (perfective)’, or is possessed by the pronoun. For example, is the 1Sg version literally ‘corpse-put me’ (compound) or ‘put [my corpse]’ (possessum)?

(xx5) *mā kú sɔ́ɛ́* ‘buried me’ (variant *mā kū sɔ̄ɛ̄* )

*ná kù sɔ́ɛ́* ‘buried him/her’

*náàⁿ kú ꜜsɔ́ɛ́* ‘buried them (human)’

In (xx5) the pronoun has a clear tonal effect on *kù* ‘corpse’, reflecting the +3Sg/‑3Sg opposition. This is clearly compatible with a possessive reading as in ‘put [my/his-or-her/their corpse(s)’. However, the forms in (xx5) are tonally distinct from those in (xx6), which have the same morphemes but which clearly involve possession. To begin with, the verb now has the LH tone of a perfective verb following a +3Sg object. Secondly, M‑Spreading has applied to ‘my corpse’. Third, ‘his/her corpse’ has LH-toned noun, which can be ascribed either to an {LH} overlay (controlled by a +3Sg possessor) or to Final Tone-Raising (tone sandhi).

(xx6) *[mā kū] sɔ̀ɛ́* ‘put my corpse in’

*[ná kǔ] sɔ̀ɛ́* ‘put his/her corpse in’

*[náàⁿ kú] sɔ̀ɛ́* ‘put their corpse in’

These considerations suggest that (xx5) represents a transitive compound construction [NPobj N‑Vb], while (xx6) represents a regular transitive construction with possessed object [[Poss N] obj Vb]. Nevertheless, the incorporated noun in the compound is partially independent of the verb in its tonal treatment, for example being subject to M‑Spreading from a pronominal object.

Some other cases that initially look like compounds pattern tonally as possessed object constructions. For example, ‘scare’ and ‘bother’ in (xx7‑8) behave tonally like (xx6) rather than (xx5) above.

(xx7) *mā jāá bègé* ‘scared me’

*ná jàá bègé* ‘scared him/her’

*náàⁿ jáá bègé* ‘scared them (human)’

(xx8) *mā ɲa᷇ kpàní* ‘bothered me’

*ná ɲǎ kpàní* ‘bothered him/her’

*náàⁿ ɲá kpàní* ‘bothered them (human)’

Further examples of verb-verb compounds are discussed in §15.3.1-2.

# Verbal inflection

## Inflection of regular indicative verbs

### Valency

#### Intransitive and transitive

For purposes of this chapter, the relevant distinction is between intransitive verbs (defined here as verbs that do not take a preverbal object) and transitive verbs (those that do take a preverbal object). Given this definition, intransitives are distinctive in that, in the perfective, they directly follow the subject without an intervening inflectional morpheme or object NP. Similarly, they intransitive verbs occur clause-initially in the imperative. For a more complex and syntactically oriented presentation of valency, see §11.xxx.

Some verbs that translate as transitive, and that normally take a postverbal complement of some sort, are (morphologically) intransitive in the sense that they do not allow a preverbal object. In (xx1a‑b), the “object” takes the form of a postverbal PP. In (xx1c‑d), the verbs normally require an NP object, but it appears postverbally (with no postposition). The forms are imperative.

(xx1) a. *sā [sùkár̄ dɛ̀]*

come.Imprt [sugar with]

‘Bring (the) sugar!’

b. *bī [gbāá dɛ̀]*

hold.Imprt [stick with]

‘Hold the stick!’

c. *bàlì wár̄-rà*

accept.Imprt money-Nom

‘Take (accept) the money!’

d. *báʔrī dàʔàl-lá*

touch.Imprt mat-Nom

‘Touch the mat!’

#### Pseudo-transitive verb ‘go’ (*wàá* )

There are two verbs translatable as ‘go’. One is *táʔá*, whose morphosyntax is that of a simple intransitive verb. The other is *wàá*, which takes an obligatory but apparently nonreferential nonhuman 3Sg object. The distinction can be observed in the imperative, where only *wàá* takes an obligatory object pronoun.

(xx1) verb (Sg Pfv) gloss imperative

a. *wàá* ‘go’ *è wǎ*

b. *táʔá* ‘go’ *táʔá*

The pro-forma nonhuman 3Sg “object” of a pseudo-transitive occurs in some but not all syntactic environments. The perfective aspect conjugations of pseudo-transitive ‘go’, true intransitive ‘come’, and true transitive ‘hit’ (here with a true nonhuman 3Sg object) are in (xx2). The pseudo-transitive has an overt nonhuman 3Sg object *ní* only in (xx2a) for 1Sg and 2Sg subject, where it aligns with the transitive. With other subject categories, the pseudo-transitive has no overt object and aligns segmentally with the intransitive paradigm (xx2b). However, in this case the subject gets a final H‑tone unless it ends in a falling HM pattern. I therefore posit a /H+=∅/ enclitic in (xx2b), phonologically identical to the subject enclitic in imperfective and future constructions, but here functioning as an allomorph of nonhuman 3Sg object *ní*. The verb form *wěē* is (xx2b) is clearly perfective, compare imperfective *á=∅ nì wàá* ‘he/she goes’ and future *á=∅ sí=ì wàá* ‘he/she will go’.

(xx2) Perfective paradigms including pseudo-transitive ‘go’

subject ‘go’ ‘come’ ‘hit it’

a. 1Sg/2Sg

1Sg *mā ní wěē mā sɛ́ mā ní bàʔrí*

2Sg *wō ní wěē wō sɛ́ wō ní bàʔrí*

b. other

1Pl *mùʔúⁿ=∅ wěē mùʔùⁿ sɛ́ mùʔùⁿ ní bàʔrí*

2Pl *ēéⁿ=∅ wěē ēēⁿ sɛ́ ēēⁿ ní bàʔrí*

2Pl *mǎā=∅ wěē mǎā sɛ́ mǎā ní bàʔrí*

3SgHum *á=∅ wěē à sɛ̌ à ní bàʔrí*

3SgNonh *é=∅ wěē è sɛ̌ è ní bàʔrí*

3PlHum *àáⁿ=∅ wěē ààⁿ sɛ́ ààⁿ ní bàʔrí*

3PlNonh *èéⁿ=∅ wěē èèⁿ sɛ́ èèⁿ ní bàʔrí*

The object marker also occurs overtly before a perfective pseudo-transitive verb when directly preceded by a nonpronominal NP, provided that the NP can end in the nominal suffix (if so, the suffix is obligatory). Pseudo-transitive (xx3a) has the same morphology as true transitive (xx3b). In both, the nonhuman 3Sg object pronoun takes the allomorph *èⁿ*, which contracts with the vowel of the nominal suffix. The pronoun is transcribed as a clitic, and is not separately pronounceable.

(xx3) a. *dí-ré= èⁿ wěē*

child-Nom 3SgNonh go.Pfv

‘The child went.’ (< *dí-rá* )

b. *dí-ré= èⁿ bàʔríī*

child-Nom 3SgNonh go.Pfv

‘The child hit it.’ (< *dí-rá* )

The structure in (xx3a) is paralleled in (xx4a), where an adjective is added to the subject noun. This is because adjectives can take the nominal suffix, which in this construction is obligatory. By contrast, noun-numeral sequences (xx4b) and personal names (xx4c) do not have the nominal affix as subject NPs, and there is no nonhuman 3Sg object marker between them and pseudo-transitives.

(xx4) a. *[tàgà gbɔ́-rè=] èⁿ wěē*

[sheep big-Nom] 3SgNonh go.Pfv

‘The big sheep-Sg went.’ (< *gbɔ́-rɔ̀* )

b. *[tàgà flá]=∅ wěē*

[sheep two]=3SgObj go.Pfv

‘Two sheep went.’

c. *àmàdú=∅ wěē*

A=3SgObj go.Pfv

‘Amadou went.’

When the verb is preceded by a nonzero inflectional particle, the pro forma nonhuman 3Sg object is again obligatory before a pseudo-transitive (xx5a). Compare true intransitive (xx5b).

(xx5) a. *dí-rá=∅ sí-ì wàá*

child-Nom=Ipfv Fut-3SgNonh go.Ipfv

‘The child will go.’

b. *dí-rá=∅ sà sáá*

child-Nom=Ipfv Fut come.Ipfv

‘The child will come.’

*wàá* ‘go’ verb is one of the verbs that shows an ATR alternation in the perfective. Clause-finally the +ATR form with *e*‑vowel is used (xx6a‑b). Clause-medially the unmarked form is ‑ATR with *ɛ*‑vowel (xx6a‑d), unless the following element (such as *dè* ‘there’ or *nàà* ‘here’) requires a +ATR preceding form (xx6e).

(xx6) a. *á=∅ wěē*

3SgHum=3Sg go.Pfv

‘He/She went (away).’

b. *àáⁿ=∅ wěē*

3PlHum=3Sg go.Pfv

‘They went (away).’

c. *á / àáⁿ=∅ wɛ̀ɛ́ [sìbí dɛ̀] bá*

3SgHum/3PlHum=3SgObj go.Pfv [meat with] over.there

‘He-or-she/They took the meat over there.’

d. *á=∅ wɛ̀ɛ́ jàlsà-dù*

3SgHum=3Sg go.Pfv Blédougou

‘He/She went to Blédougou.’

e. *á=∅ wèé dè*

3SgHum=3Sg go.Pfv there.Def

‘He/She went there-Definite.’

#### Pseudo-reflexive (middle) verbs

These verbs have an obligatory object coindexed to the subject. They resemble pseudo-reflexive verbs in Romance languages. For preverbal reflexive object pronominals, see §18.1.2.2 and preceding sections.

(xx1) verb (3Sg Ipfv) gloss imperative

a. motion

*jɔ̀ʔrɔ̀* ‘jump’ *ē jōʔrī*

*kìyàⁿ* ‘fly away’ *ē kìⁿ*

*mùńnà* ‘crawl’ *ē mūnī*

b. stance

*sàà* ‘lie down’ *ē sā*

*bàlà* ‘stand; stop’ *ē bāl*

*sàʔà* ‘sit’ *ē sāʔā*

*cònjólà* ‘squat’ *ē cōnjōlō*

*sòⁿsóʔrà* ‘squat’ *ē sōⁿsōʔrī*

*mààsá* ‘bow, bend over’ *ē māāsā*

This pseudo-reflexive pattern is regular for basic stance verbs. However, most basic motion verbs are simple intransitives. For example, their imperatives occur with no preverbal morphemes (xx2).

(xx2) verb gloss imperative

*sáá* ‘come’ *sā*

*bɔ́ɔ́* ‘exit’ *bɔ̄*

*sɔ́ɔ́* ‘enter’ *sɔ̄*

*sìdánà* ‘ascend’ *sìdá*

*jàʔánà* ‘descend’ *jàʔáⁿ*

*fìdɛ̀* ‘run’ *fìdí*

*cíɛ́* ‘arrive’ *cī*

Perfective paradigms of two pseudo-reflexive verbs are in (xx3).

(xx3) Perfective pseudo-reflexive paradigms

subject ‘sit’ ‘jump’

a. M-toned pronominal

1Sg *mā nāāⁿ sɛ́ʔɛ̄ mā nāāⁿ jóʔrī*

2Sg *wō nīī sɛ́ʔɛ̄ wō nīī jóʔrī*

2Pl *ēēⁿ nīīⁿ sɛ́ʔɛ̄ ēēⁿ nīīⁿ jóʔrī*

b. falling-toned pronominal

2Pl *mǎā nììⁿ sɛ́ʔɛ̀ mǎā nììⁿ jóʔrī*

c. 3Sg pronominals

3SgHum *à ná sɛ̀ʔɛ́* ~ *á sɛ̀ʔɛ́ à ná jòʔrí*  ~ *á jòʔrí*

3SgNonh *è ní sɛ̀ʔɛ́* ~ *é sɛ̀ʔɛ́ è ní jòʔrí*  ~ *é jòʔrí*

d. other plural pronominals

1Pl *mùʔúⁿ nààⁿ sɛ́ʔɛ̄ mùʔúⁿ nààⁿ jóʔrī*

3PlHum *ààⁿ náàⁿ sɛ́ʔɛ̄ ààⁿ náàⁿ jóʔrī*

3PlNonh *èèⁿ níìⁿ sɛ́ʔɛ̄ èèⁿ níìⁿ jóʔrì*

Paradigms for ‘sit’ in various non-perfective inflections (present, future, progressive) are in (xx4). One small detail to notice is the tones of *sá=àⁿ* and *sí=ìⁿ* in the 3Pl future examples, versus *sà=àⁿ* (1Sg, 1Pl) and *sì=ìⁿ* (2Pl).

(xx4) Non-perfective pseudo-reflexive paradigms for ‘sit’

subject ‘sit(s)’ ‘be sitting’

‘will sit’

a. M-toned pronominal

1Sg *má=∅ nààⁿ sáʔá má=∅ nààⁿ séʔé-yá*

*má=∅ sà=àⁿ sáʔá*

2Sg *wó=∅ nìì sáʔá wó=∅ nìì séʔé-yá*

*wó=∅ sì=ì sáʔá*

2Pl *ēéⁿ=∅ nììⁿ sáʔá ēéⁿ=∅ nììⁿ séʔé-yá*

*ēéⁿ=∅ sì=ìⁿ sáʔá*

b. falling-toned pronominal

2Pl *mǎā=∅ nììⁿ sáʔá mǎā=∅ nììⁿ séʔé-yá*

*mǎā=∅ sì=ìⁿ sáʔá*

c. 3Sg pronominals

3SgHum *á=∅ nà sàʔà á=∅ nà sèʔè-yá*

*á=∅ sá=á sàʔà*

3SgNonh *é=∅ nì sàʔà é=∅ nì sèʔè-yá*

*é=∅ sí=í sàʔà*

d. other plural pronominals

1Pl *mùʔúⁿ=∅ nààⁿ sáʔá mùʔúⁿ=∅ nààⁿ séʔé-yá*

*mùʔúⁿ=∅ sà=àⁿ sáʔá*

3PlHum *àáⁿ=∅ nààⁿ sáʔá àáⁿ=∅ nààⁿ séʔé-yá*

*àáⁿ=∅ sá=àⁿ sáʔá*

3PlNonh *èéⁿ=∅ nììⁿ sáʔá èéⁿ=∅ nììⁿ séʔé-yá*

*èéⁿ=∅ sí=ìⁿ sáʔá*

### Structure of verbal paradigms

#### Stem alternations for intransitive verbs

Each verb has four basic stems: perfective, imperfective, progressive, and imperative. The progressive has a suffix *‑yá*. The three other stems have less transparently affixal structure, but differ chiefly in their final segment(s), especially the final vowel. We can posit a primary perfective/imperfective split, and think of the imperative as (usually) a shortened form of the imperfective.

Additional tonal variants are created by interactions with preceding NPs (including pronouns). This applies to all stems of transitive verbs, and to perfectives of intransitives. By contrast, imperfective and progressive forms of intransitive verbs are always immediately preceded by an inflectional morpheme, which does not affect verb tones. Imperative forms of intransitives are clause-initial. For intransitives, therefore, no NP-induced tonal effects on verbs occur except for perfectives.

Further tonal and segmental modifications are created by tone sandhi and some other processes involving a following negative enclitic or by a following word. Such details are presented elsewhere.

Examples of intransitive paradigms follow. (xx1) has perfectives ending in *e* or *ɛ* (E‑stem). For perfectives, the tonal form that follows a -3Sg NP is under the one that follows a +3Sg NP.

(xx1) Intransitives (E-stem perfective)

Pfv Ipfv Imprt Prog gloss

*cɛ̀ɛ́ cáá* — *cé-yá* ‘ripen, harden’

*cɛ́*

*gbɛ̀ɛ́ gbàà* — *gbè-yá* ‘become difficult’

*gbɛ́*

*jɛ̀ɛ́ jáá* — *jé-yá* ‘become sweet’

*jɛ́ɛ́*

*sɛ̀ɛ́ sáá sā sé-yá* ‘come’

*sɛ́ɛ́*

*kpɛ̀ɛ́ⁿ kpááⁿ kpāⁿ kpéⁿ-yá* ‘exit’

*kpɛ́ɛ́ⁿ*

*bɛ̀ɛ́ bàà bà bè-yá* ‘fall’

*bɛ́ɛ́*

*kpɛ̀ɛ́ kpɛ́ɛ́ kpɛ̌ kpé-yá* ‘turn white’

*kpɛ́ɛ́*

*dɛ̀ɛ́ dɛ̀ɛ̀* dɛ̌ *dè-yá* ‘get hot’

*dɛ́ɛ́*

*bɔ̀ɛ́ bɔ́ɔ́ bɔ̄ bó-yá* ‘exit’

*bɔ́ɛ́*

*sɔ̀ɛ́ sɔ́ɔ́ sɔ̄ só-yá* ‘enter’

*sɔ́ɛ́*

*kìɛ́ kiɛ́ kī kí-yá* ‘arrive’

*kíɛ́*

*tɛ̀ʔɛ́ táʔá tāʔā tèʔè-yá* ‘go’

*tɛ́ʔɛ̄*

*dɛ̀ʔɛ́(ɛ̄) dàʔà dàʔà dèʔè-yá* ‘escape’

*dɛ́ʔɛ̄(ɛ̄)*

*kùmɛ́ kúmà* — *kùmá-yà* ‘cool off’

*kúmɛ̄ⁿ* ~ *kùmé-yà*

*bèlé(ē) bɛ́lɛ́ bēlē bélé-yá* ‘pass’

*bélē(ē)*

*ɲìnɛ́ ɲìnâ ɲìnà ɲìné-yà* ‘forget’

*ɲínɛ̄*

*gbɔ̀ʔɛ́ gbɔ̀ʔɔ̀ gbɔ̀ʔɔ̀ gbòʔò-yá* ‘turn black’

*gbɔ́ʔɛ̄*

*tòló(ē) tɔ̀lɔ̀ tólò tòlò-yá* ‘rot’

*tólē*

*jìímɛ̄ jìímàà jìímà jìímè-yà* ‘weep’

*jíímɛ̄*

*bànɛ́ʔɛ̄ⁿ bánɛ́ʔɛ̄ⁿ bànáʔàⁿ bànéʔé-yà* ‘get tired’

*bánɛ́ʔɛ̄ⁿ*

*dòʔòyéē dóʔóyáà dóʔóyà dóʔóyé-yà* ‘shrink’

*dóʔóyéē*

*kɔ̀ʔrìyéē kɔ̀ʔrìyáà kɔ̀ʔrìyá kɔ̀ʔrìyé-yà* ‘grow old’

*kɔ́ʔríyéē*

The intransitives in (xx2) have perfectives ending in *i* (I‑stem).

(xx2) Intransitives (I-stem perfective)

Pfv Ipfv Imprt Prog gloss

*bìí bíɛ́* — *bí-yá* ‘be lit’

*bíī*

*bùlí(ī) búlɔ́ būlū búlú-yá* ‘go back’

*búlī(ī)*

*dìbí díbɛ́* — *díbí-yá* ‘be extinguished’

*díbī*

*fìdí fìdɛ́ɛ̀ fìdí fìdí-yà* ‘run’

*fídī*

*kòní kónó kō kóní-yá* ‘grow’

*kónī*

*gùníī gùnò gǔⁿ gùnì-yá* ‘become short’

*gúníī*

*ŋùníī ŋùnɔ̀* — *ŋùnì-yá* ‘become sour’

*ŋúníī*

*ɲàánī ɲàánà ɲǎ ɲàánì-yà* ‘improve’

*ɲáánī*

*mììlíī míílíyà mīīlī míílí-yà* ‘think’

*míílíī*

*jàʔánī jàʔánà jàʔáⁿ jàʔánì-yà* ‘descend’

*jáʔánī*

*sìdánī sìdánà sìdá sìdánì-yà* ‘ascend’

*sídánī*

*kànàní kán(á)ná* — *kánání-yá* ‘turn red’

*kánání*

*kìtàlíī kìtàlíyà* — *kìtàlí-yà* ‘worsen’

*kítálíī*

*gbàʔàlánī gbàʔàlánà gbàʔàlá gbàʔàlání-yà* ‘become thin; dry’

*gbáʔálánī*

(xx3) gives fuller sets of forms for a few intransitives, including negative forms.

(xx1) category ‘come’ ‘fall’ ‘descend’

Pfv +3Sg *sɛ̀ɛ́ bɛ̀ɛ́ jàʔánī*

Pfv +3Sg Neg *sèè=rēʔ bɛ̀ɛ̀=rɛ̄ʔ jàʔán=nēʔ*

~ *sɛ̀ɛ̀=rɛ̄ʔ*

Pfv -3Sg *sɛ́ɛ́ bɛ́ɛ́ jáʔánī*

Pfv -3Sg Neg *séé=rēʔ bɛ́ɛ́=rɛ̄ʔ jáʔán=nēʔ*

~ *sɛ́ɛ́=rɛ̄ʔ* ~ *béé=rēʔ*

Ipfv *sáá bàà jàʔánà*

Ipfv Neg *sáá=rɛ̄ʔ bàà=rɛ̄ʔ jàʔánà=nɛ̄ʔ*

Prog *sé-yá bè-rá jàʔánì-yà*

Prog Neg *sé-yá=rɛ̄ʔ bè-yá=rɛ̄ʔ jàʔánì-yà=rɛ̄ʔ*

Imprt *sā bà jàʔáⁿ*

Proh *bí sā=rɛ̄ʔ bí bà=rɛ̄ʔ bí jàʔà=nɛ̄ʔ*

Imprt Pl *ēēⁿ sā ēēⁿ bā ēēⁿ jāʔāⁿ*

Proh Pl *ēēⁿ bí sā=rɛ̄ʔ ēēⁿ bí bà=rɛ̄ʔ ēēⁿ bí jàʔà=nɛ̄ʔ*

Verbal noun *sēē bó bà jāʔānī*

#### Stem alternations for transitive verbs

Transitive verbs have paradigms similar to those described above for intransitives. However, all of their forms (including imperfective, progressive, and imperative) are preceded by NPs and therefore have two tonal variants, one with initial L‑tone and the other with initial H‑tone. The difference between intransitives and transitives is striking in the imperfectives, for example. Intransitives (including monosyllabics and *CvCv*) have a single imperfective form, whose tone is lexically assigned. Transitives monosyllabics and most *CvCv* stems have predictable L‑toned and H‑toned forms, correlated with the category of the preceding NP. Many transitives of these light shapes therefore have no lexically specified tones. However, heavier stems such as *CvvCv* and *CvCvCv* do have lexically specified tones in noninitial syllables.

(xx1) Transitives (E-stem perfective)

Pfv Ipfv Imprt Prog gloss

*bɛ̀ɛ́ bàà bǎ bè-yá* ‘put down’

*bɛ́ɛ́ báá bá bé-yā*

*jɛ̀ɛ́ jàà jǎ jè-yá* ‘sweeten’

*jɛ́ɛ́ jáá já jé-yá*

*dɛ̀ɛ́ dɛ̀ɛ̀ dɛ̌ dè-yá* ‘heat (sth)’

*dɛ́ɛ́ dɛ́ɛ́ dɛ́ dé-yá*

*mɛ̀ɛ́ mɛ̀ɛ̀ mɛ̌ mè-yá* ‘hear’

*mɛ́ɛ́ mɛ́ɛ́ mɛ́ mé-yá*

*bɔ̀ɛ́ bɔ̀ɔ̀ bɔ̌ bò-yá* ‘remove’

*bɔ́ɛ́ bɔ́ɔ́ bɔ́ bó-yá*

*mɔ̀ɛ́ mɔ̀ɔ̀ mɔ̀ɔ́ mò-yá* ‘rub’

*mɔ́ɛ́ mɔ́ɔ́ mɔ́ɔ́ mó-yá*

*jìɛ́ jìɛ̀ jǐ jì-yá* ‘see’

*jíɛ́ jíɛ́ jí jí-yá*

*dɔ̀ɛ́ⁿ dɔ̀ɔ̂ⁿ dɔ̀ɔ́ⁿ dòⁿ-yá* ‘step on’

*dɔ́ɛ̄ⁿ dɔ́ɔ̂ⁿ dɔ́ɔ́ⁿ dóⁿ-yá*

*jɔ̀ɛ́ⁿ jɔ̀ɔ̂ⁿ jɔ̀ɔ́ⁿ jòⁿ-yá* ‘rob’

*jɔ́ɛ̄ⁿ jɔ́ɔ̂ⁿ jɔ́ɔ́ⁿ jóⁿ-yá*

*yěē yɛ̀ɛ̂ yèé yè-yá* ‘send (sb)’

*yéē yɛ́ɛ̂ yéé yé-yá*

*fìɛ́ fìɛ̂ fìɛ́ fè-yá* ‘send (sb)’

*fíɛ̄ fíɛ̂ fíɛ́ fé-yá*

Similar paradigms for transitive verbs with I‑stem perfectives are in (xx2).

(xx2) Transitives (I-stem perfective)

Pfv Ipfv Imprt Prog gloss

*kìí kìɛ̀ kìí kì-yá* ‘sow’

*kíī kíɛ́ kíí kí-yá*

*mìí mìɛ̀ mǐ mì-yá* ‘drink’

*míī míɛ́ mí mí-yá*

*dèíī dɛ̀ɛ̀ dèí dè-yá* ‘open’

*déīī dɛ́ɛ́ déí dé-yá*

*kèéī kɛ̀ɛ̀ kèé kè-yá* ‘call’

*kéēī kɛ́ɛ́ kéé ké-yá*

*jùlí jùlɔ̀ jùlí jùlì-yá* ‘push’

*júlī júlɔ́ júlí júlí-yá*

*bàʔrí bàʔrà bàʔrí bàʔrì-yá* ‘hit’

*báʔrī báʔrá báʔrí báʔrí-yá*

*sìní sìnà sǐⁿ sìnì-yá* ‘dig’

*sínī síná síⁿ síní-yá*

*fààlíī fààlà fààlí fààlí-yà* ‘gather up’

*fáálíī fáálá fáálí fáálí-yá*

*sɛ̀ɛ̀ní sɛ̀ɛ̀nà sɛ̀ɛ́ⁿ sɛ̀ɛ̀nì-yá* ‘collect wood’

*séénī sɛ́ɛ́ná sɛ́ɛ́ⁿ sɛ́ɛ́ní-yá*

*kùlɔ́nì kùlɔ́nɔ̀ kùlɔ́ kùlɔ́nì-yà* ‘tie’

*kúlɔ́nì kúlɔ́nɔ̀ kúlɔ́ kúlɔ́nī-yā*

*dìmìní dìmìnàà dìmí dìmìnì-yá* ‘hurt (sb)’

*dímíní dímínáá dímí dímíní-yá*

A few fuller transitive paradigms including negative forms are in (xx2). ‘Put is the same stem as ‘fall’ in (xx1) above, i.e. it is one of many ambi‑valent (labile) stems. In the sense ‘put down’ it is not accompanied by the noun *bó* and has a different verbal noun. The tone of transitive verbal nouns, like that of indicative verbs, depends on the category of the preceding object.

(xx3) category ‘taste’ ‘put down’ ‘push’

Pfv +3Sg *nɛ̀nɛ́ɛ̄ bɛ̀ɛ́ jùlí*

Pfv Neg +3Sg *nɛ̀nɛ́ɛ̄=nɛ̄ʔ bɛ̀ɛ̀=rɛ́ʔ jǔl=lēʔ*

Pfv -3Sg *nɛ́nɛ́ɛ̄ bɛ́ɛ́ júlī*

Pfv Neg -3Sg *nɛ́nɛ́ɛ̄=nɛ̄ʔ bɛ́ɛ́=rɛ́ʔ júl=lēʔ*

Ipfv +3Sg *nɛ̀nɛ́ɛ̀ bàà jùlɔ̀*

Ipfv +3Sg Neg *nɛ̀nɛ́ɛ̀=nɛ̄ʔ bàà=rɛ́ʔ jùlɔ̀=rɛ́ʔ*

Ipfv -3Sg *nɛ̀nɛ́ɛ̀ báá júlɔ́*

Ipfv -3Sg Neg *nɛ́nɛ́ɛ̀=nɛ̄ʔ báá=rɛ̄ʔ júlɔ́=rɛ̄ʔ*

Prog +3Sg *nèné-yā bè-yá jùlì-yá*

Prog +3Sg Neg *nèné-yā=rɛ̄ʔ bè-yá=rɛ̄ʔ jùlì-yá=rɛ̄ʔ*

Prog -3Sg *néné-yā bé-yā júlí-yā*

Prog -3Sg Neg *néné-yā=rɛ̄ʔ bé-yā=rɛ̄ʔ júlí-yā=rɛ̄ʔ*

Imprt -3Sg *nɛ̀nɛ́ bà jùlí*

Proh Sg *nɛ̀nɛ́=nɛ̄ʔ bà=rɛ́ʔ jùl=léʔ*

Imprt Pl *nɛ́nɛ́ bá júlí*

Proh Pl *nɛ́nɛ́=nɛ̄ʔ bá=rɛ̄ʔ júl=lēʔ*

VblN *nɛ́nɛ́* ~ *nɛ̀nɛ̀ béé* ~ *bèè júlí* ~ *jùlì*

#### Analysis of verb-stem alternations

The imperfective is the best option for a citation form, since it often has lexical information that is masked in the other forms. For example, a final vowel in the imperfective may be converted to a front vowel in the perfective and clipped off in the imperative. For intransitives, the tone of the imperfective is also unpredictable and therefore lexically specified, while that of the perfective in particular is determined by the preceding NP.

Relevant inflectional morphemes that can occur next to the verb are post-subject inflectional morphemes on the left and the negative enclitic on the right. The post-subject morphemes are future *sà* (and variants), imperfective /H+=∅/, and prohibitive *bí*. They immediately precede intransitive verbs but are separated from transitive verbs by the object. The negative enclitic is added to the final word of the clause, which is often (but not always) the verb.

The post-subject particles do not interact tonally with the verb. Addition of the negative enclitic directly to the verb is useful in checking the latter’s vowel length and tone. However, the negative enclitic does induce some phonological changes in the verb form. First, final perfective diphthongs are truncated when the verb is not clause-final, including when it is followed only by the negative enclitic. For example, *ɔɛ* or *oi* lose their second element. Second, especially in monosyllabic and CvCv perfectives, ‑ATR vowels are optionally shifted to +ATR before the negative enclitic. This then feeds back into the enclitic itself, which is subject to ATR Harmony. Both of these phenomena are illustrated by *bɔ̀ɛ́* ‘exited’ becoming negative *bɔ̀ɔ̀=rɛ̄ʔ* varying with *bòò=rēʔ* ‘did not exit’.

The perfective stem ends in a front vowel {*i e ɛ*}. As just shown, when this vowel is the final element in a perfective diphthong, it is deleted except when clause-final. The imperfective normally ends in a low or ‑ATR vowel from the set {*ɛ a ɔ*}, infrequently +ATR *o*. All known verbs with final *e(e)* in the perfective and imperative, and most with final *o* in the perfective and imperative, shift this vowel to the ‑ATR counterpart or to *a* in the imperfective (xx1). In (xx1), all verb forms are of the +3Sg tonal type if transitive, or if perfective intransitive. However, our focus here is on vowel qualities.

(xx1) imperative perfective imperfective gloss

+3Sg or intr +3Sg +3Sg or intr

a. shift to ‑ATR in imperfective

*wě wěē wɛ̀ɛ̀* ‘bathe (sb)’

*tě těē tɛ̀ɛ̀* ‘shatter (sth)’

*yě yěē yɛ̀ɛ̂* ‘send on mission’

*dèé dèíī dɛ̀ɛ̂* ‘open’

*bègé bègé bɛ̀gɛ̀* ~ *bègà* ‘cut’

*dàkó dàkóī dàkɔ́ɔ̀* ‘catch (sth thrown)’

b. no shift to ‑ATR in imperfective

*kō kòní kónó* ‘grow’

*lě lèní lènà* ‘look at’

*sèʔrí sèʔrí sèʔrà* ‘sweep’

The progressive systematically shifts ‑ATR vowels to +ATR (in the broad sense, including high vowels). Therefore even stems that have ‑ATR vowels in the positive imperative, perfective, and imperfective shift it to +ATR before progressive *‑yá*. The known exceptions are multisyllabic verbs with an initial ‑ATR vowel, and may be morphologically segmentable.

(xx1) imperative perfective imperfective progressive gloss

a. +ATR in progressive only

*dɛ̌ dɛ̀ɛ́ dɛ̀ɛ̀ dè-yá* ‘heat (sb)’

*mɔ̀ɔ́ mɔ̀ɛ́ mɔ̀ɔ̀ mó-yā* ‘rub’

b. initial ‑ATR in heavy stem preserved in progressive

*kɔ̀ʔrìyá kɔ̀ʔrìyéē kɔ̀ʔrìyáà kɔ̀ʔrìyé-yà*

The imperative is usually closely related to the imperfective. However, where the perfective and imperfective diverge in vocalism (simple ATR shift, or perfective *i* versus imperfective ‑ATR or low vowel), the imperative sides with the perfective. Factoring this out, the imperative is best derived from the imperfective by stem-final reduction (shortening a final long vowel, deleting a final short vowel). See §3.5.3 for fuller discussion.

### Reduplicated verb stems

Some verbs have a reduplicative appearance. Those with a monosyllabic repeated segment are least transparently reduplicative (xx1a), but in some cases might have been shortened by syncope. Those with at bisyllabic repeated segment are more obvious (xx1b). There is an iconic element insofar as most verbs in (xx1b) denote actions that tend to be repetitive or prolonged in real life (xx1b). Two examples are iterations of independently occurring verbs, adding an emphatic or repetitive element (xx1c).

(xx1) a. *CvN-* or *Cvⁿ-*

*gbèŋgbéà* ‘hammer (sth)’

*pɛ̀mpɛ́ʔrà* ‘engage energenticially in (activity)’

*sòⁿsɔ́ʔrà* ‘squat’

*possibly syncopated from CvCv-*

*jɛ́njɛ́ná* ‘(group) scatter’

b. *lèkè-lékà* ‘tickle’

*mɛ̀nɛ̀-mɛ́nɛ̀* ‘grope, feel one’s way’

*mùgù-múgɔ̀* ‘break up lumps’

*ŋùnù-ŋúnɔ̀* ‘groan’ or ‘murmur’

*yɛ̀gɛ̀-yɛ́gɛ̀* ‘(chicken) scratch the ground’

*yùgù-yúgɔ̀* ‘shake (sth)’

*kòlòŋ-gólónà* ‘roll’

*múnú-múnnɔ̀* ‘spin, rotate’

c. *bègè-bégà* ‘chop (with ax)’ *bɛ̀gɛ̀* ~ *bègà* ‘cut’

*dɛ̀n-dɛ́nà* ‘stalk (one’s prey)’ *dɛ́ná* ‘follow’

The data show that the reduplicant does not exceed CvCv‑ shape even when the base is trisyllabic. ‘Stalk (one’s prey) in (xx1c) confirms that CvL‑ reduplicant may have been syncopated. The forms shown in (xx1a‑c) are imperfective, so the base ends in {*a* *ɔ* *ɛ*}, but this vowel is not copied onto the reduplicant, which is invariant across TAM inflections.

## Negation

### Clause-final negative enclitic *=rĒʔ* (*=rēʔ* ~ *=rɛ̄ʔ* )

The all-purpose negative enclitic *=rɛ̄ʔ*  ~ *=rēʔ* (or variant, see below) is used with all types of predicate, including negative imperatives (prohibitives). On the segmentability of the final glottal stop, see §10.2.2 below.

The enclitic is hosted by the otherwise clause-final word. It is therefore separated from the verb only if there is a postverbal constituent such as a bare postverbal NP (xx1a) or a PP (xx1b).

(xx1) a. *mùʔúⁿ wɛ̀ɛ́ bòbó=rēʔ*

1Pl go.Pfv Bobo=**Neg**

‘We didn’t go to Bobo (city).’

b. *mā dō-sɛ́ [kòó mà]=nɛ̄?*

1Sg add.Pfv [salt on]=**Neg**

‘I didn’t add salt.’

Since Jalkunan is an S-infl-O-V-X-Neg language, the postverbal position X is often vacant, and the negative clitic is therefore very often hosted by the verb.

Both the consonant and the vowel of the enclitic are subject to phonological alternations. The citation form *=rĒʔ* takes the tap *r* as basic, and is neutral as to *ɛ* versus *e*. Since tap *r* is not normally allowed word-initially, and since the *r* in *=rĒʔ* is subject to the same kind of modifications as seen with nominal suffix *‑rà* (and variants), I transcribe the negative morpheme as an enclitic rather than as a free particle.

*r*‑Nasalization (§3.xxx) converts *r* to *n* after a nasal syllable, such as *Na* or *Caⁿ*, i.e. after a syllable with nasal consonant onset or one with a nasalized vowel. It also applies when the enclitic directly follows a nasal consonant, though this occurs after apocope of a final vowel and so reduces to the *Na* case.

(xx1) a. *à ɲìnɛ́ [sìbí mà]=nɛ̄ʔ*

3SgHum forget.Pfv [meat on]=**Neg**

‘He/She didn’t forget the meat.’

b. *à kpɛ̀ɛ̀=nɛ̄ʔ*

3SgHum die.Pfv=**Neg**

‘He/She didn’t die.’ (< *kpɛ̌ⁿ* )

c. *ɲùʔù-nɔ́-ɔ̀ⁿ* *gbáʔálán=nēʔ*

garmet-Nom-Pl dry.off.Pfv=Neg

‘The clothes didn’t dry.’ (< *gbáʔálánī* )

*r*‑Lateralization (§3.xxx) occurs only when the tap *r* is immediately preceded by *l*, after apocope of a final vowel. The result is an *ll* cluster over the enclitic boundary (xx2a). This process also occurs when the expected result after apocope would be *rr* (xx2b). Apocope in these examples is optional, so fuller forms like *bàʔrí=rēʔ* are also possible, and preferred in careful speech.

(xx2) a. *mā nāàⁿ bál=lēʔ*

1Sg 1SgRefl stand.Pfv=Neg

‘I didn’t stand/stop.’ (< *bálī* )

b. *mā ná bǎʔl=lēʔ*

1Sg 3SgHum hit.Pfv=Neg

‘I didn’t hit him/her.’ (< *bàʔrí* )

ATR Harmony (§3.xxx) determines the surface vowel quality of the enclitic, *ɛ* or *e*. However, when the enclitic directly follows a verb, the verb itself optionally shifts from ‑ATR to +ATR, thus *à sɛ̀ɛ̀=rɛ̄ʔ* ~ *à sèè=rēʔ* ‘he/she didn’t come’. After any such shift, but before apocope, the enclitic has *ɛ* after a syllable with {*a ɛ ɔ*}, and *e* after a syllable with {*i u e o*}. That is, *a* is treated as ‑ATR and high vowels are treated as +ATR. Apocope of the final word of the host word applies after ATR Harmony.

(xx3) host-final V positive negative gloss

a. ‑ATR

*a* *é sà sāā* *è sá ꜜsáá=rɛ̄ʔ* ‘it will (not) come’

*ɛ* *mā ní jìɛ́* *mā ní jìɛ̀=rɛ̄ʔ* ‘I did (not) see it’

*ɔ* *ē sà tɔ̀lɔ̀* *è sá tɔ̀l=lɛ̄ʔ* ‘it will (not) rot’

b. +ATR

*i* *ē bālī bí=í bāl=lēʔ* ‘(don’t) stop!’

*é kǐīⁿ* *é kìí=nēʔ* ‘it did (not) fly’

*u* *è kǔⁿ* *bí=í kù=nēʔ* ‘(don’t) eat it!’

*è gǔⁿ* *bí=í gù=nēʔ* ‘(don’t) shorten it!’

*e* *è lě* *bí=í lè=rēʔ* ‘(don’t) look at it!’

*é=∅ wěē* *é=∅ wèé=rēʔ* ‘it went/didn’t go’

*è tòlóē è tòló=rēʔ* ‘it rotted’

*o* *è dàkó* *bí=í dàkó=rēʔ* ‘(don’t) catch it!’

The tone of the enclitic is consistently M when clause-final. Adding the enclitic makes it easy to confirm tonal markings, except for final <LH>-toned syllables (on which see below). The negative enclitic also makes it easy to determine the basic vowel length of the stem-final syllable of verbs.

(xx4) host tones positive negative gloss

a. monosyllabics

H *èèⁿ dɛ́ɛ́* *èèⁿ dɛ́ɛ́=rɛ̄ʔ* ‘they got/didn’t get hot’

(~ *déé=rēʔ* )

*mā náàⁿ jíɛ́* *mā náàⁿ jíɛ́=rɛ̄ʔ* ‘I saw/didn’t see them’

(~ *jíé=rēʔ* )

L *á=∅ nàà* *á=∅ nàà=nɛ̄ʔ* ‘he/she is(n’t) here’

M *á=∅ sà sáá à sá ꜛsáá=rɛ̄ʔ* ‘he/she will (not) come’

*má=∅ sà sáá mā sà sáá=rɛ̄ʔ* ‘I will/won’t come’

*á=∅ sà bɔ́ɔ́* *à sá ꜜbɔ́ɔ́=rɛ̄ʔ* ‘he/she will (not) exit’

(~ *bóó=rēʔ* )

<HM> *èèⁿ bíī* *èèⁿ bíī=rēʔ* ‘they caught/didn’t catch fire’

<LH> *è dɛ̀ɛ́* *è dɛ̀ɛ̀=rɛ̄ʔ* ‘it got/didn’t get hot’

(~ *dèè=rēʔ* )

*è bìí* *è bìí=rēʔ* ‘it caught/didn’t catch fire’

b. nonmonosyllabics

LL *é =∅ sà tɔ̀lɔ̀* *è sá tɔ̀lɔ̀=rɛ̄ʔ* ‘it will (not) rot’

(~ *tòlò=rēʔ* )

HH *sóóló=∅=è* *sóólóó=∅=rēʔ* ‘it’s (not) five’

*yíʔé-rɛ́=∅=ɛ̀* *yíʔé-rá=∅=rɛ̄ʔ* ‘it’s (not) a fish’

*é=∅ sà kónó* *è sá ꜜkónó=nēʔ* ‘it will (not) grow’

MM *mī-īló=∅=è* *mī-īló=∅=rēʔ* ‘(not) six’

*jū-rɔ́=∅=ɛ̀* *jū-rɔ́=∅=rɛ̄ʔ* ‘it is(n’t) millet’

*gbāā-rɛ́=∅=ɛ̀ gbāā-rá=∅=rɛ̄ʔ* ‘it is(n’t) a stick’

LH *à fìdí* *à fìdí=rēʔ* ‘he/she ran’

*wùl-á=∅=ɛ̀* *wùl-á=∅=rɛ̄ʔ* ‘it is(n’t) a dog’

*bòbó=∅=è bòbó=∅=rēʔ* ‘it is(n’t) Bobo Dioulasso (city)’

HM *ààⁿ fídī* *ààⁿ fídī=rēʔ* ‘they ran’

*è kìtàlíī* *è kìtàlí=rēʔ* ‘it got worse’

*mā ná bàʔrí* *mā ná bàʔrí=lēʔ* ‘I hit him/her’

HL *jí-nà=∅=ɛ̀ jí-nà=∅=nɛ̄ʔ* ‘it is(n’t) a market’

<LH>-toned syllables, which occur in +3Sg forms of many perfective and imperative verbs, flatten to L before the enclitic (xx5a‑c). This avoids surface *Cv̌Cv̄* and *Cv̀v́Cv̄* sequences. When an apparent *Cv̀v́* verb instead preserves its rising tones before the negative enclitic, which happens with *Cìí* verbs, this suggests that these forms are structurally bisyllabic, i.e. /Cì.(y)í/ (xx5d).

(xx5) a. positive imperative *è gǔⁿ* ‘Shorten it!’

prohibitive *bí=í gù=nēʔ* ‘Don’t shorten it!’

b. positive perfective *à sɛ̀ɛ́* ‘He/She came.’

negative perfective *à sɛ̀ɛ̀=rɛ̄ʔ* ‘He/She didn’t come.’

(~ *sèè=rēʔ* )

c. positive perfective *mā ná jìɛ́* ‘I saw him/her.’

negative perfective *mā ná jìɛ̀=rɛ̄ʔ* ‘I didn’t see him/her.’

(~ *jìè=rēʔ* )

d. positive perfective *è bìí* ‘It caught fire.’

*è bìí=rēʔ* ‘It didn’t catch fire.’

### Status of the glottal stop in negative *=rĒʔ*

Although the negative enclitic is always heard with the glottal stop when clause-final, there is some evidence that the glottalization is detachable from the enclitic.

First, the yes/no interrogative enclitic may be added after the negative enclitic. In other combinations, the interrogative enclitic has forms like *=à* ~ *=ɔ̀* and *=yà* (§13.2.1). The combination of the negative and interrogative enclitics is *=r=à* ~ *=r=ɔ̀*.

(xx1) a. *àáⁿ=∅ tǔ kà=r=à*

3PlHum=Ipfv millet.cakes want=Neg=Q

‘Don’t you-Sg like millet cakes?’ (*tù* )

b. *ààⁿ búlɔ́=r=ɔ̀*

3PlHum return.Ipfv=Neg=Q

‘Won’t they go back?’

There is also a textual passage where a negative clause ending in negative *=rĒʔ* is paired with a contrastive positive clause that has a final glottal stop (xx2). This raises the possibility that the final glottal is, or was formerly, a truth-conditional emphatic that has now come to occur almost entirely in negative statements.

(xx2) *[[mɛ̀ʔɛ́ⁿ bùʔù] sɛ́=ʔ] [[ɲáā kúdɔ̄ mí] sèè=rēʔ]*

[[person all] come.Pfv] [[woman old Dem] come.Pfv=Neg]

‘All the (other) people came, but that old woman didn’t come.’ (2016\_04 @ 03:00)

The situation is complicated by the use in local Jula of final glottal stops in a range of sentence types.

### Tonal reverberations of clause-final negation

The presence of a clause-final negator has some unexpected reverberations for the morphotonology of the beginning of the clause.

(xx1) ‘they’ ‘he/she’ ‘I’

a. perfective

*ààⁿ sɛ́ɛ́* [ààⁿsɛ́] *à sɛ̀ɛ́* [à sɛ̌] *mā sɛ́ɛ́* ‘came’

*ààⁿ sɛ́ɛ́=rɛ̄ʔ à sɛ̀ɛ̀=rɛ̄ʔ* *mā sɛ̄ɛ̄=rɛ̄ʔ* ‘didn’t come’

b. present (imperfective stem begins with H‑tone)

*àáⁿ=∅ ꜜsáá á=∅ sáá má=∅ sáá* ‘come(s)’

*ààⁿ sáá=rɛ̄ʔ à sáá=rɛ̄ʔ mā sāā=rɛ̄ʔ* ‘do(es)n’t come’

c. future

*àáⁿ=∅ sà sáá á=∅ sà sáá má=∅ sà sáá* ‘will come’

*ààⁿ sá ꜜsáá=rɛ̄ʔ à sá ꜜsáá=rɛ̄ʔʔ mā sā sáá=rɛ̄ʔ* ‘won’t come’

d. present (imperfective stem begins with L‑tone)

*àáⁿ=∅ bàà á=∅ bàà má=∅ bàà* ‘falls’

*àáⁿ bàà=rɛ̄ʔ á bàà=rɛ̄ʔ má bàà=rɛ̄ʔ* ‘do(es)n’t fall’

e. progressive

*àáⁿ=∅ sè-yá á=∅ sè-yá má=∅ sè-yá* ‘are/is coming’

*ààⁿ sé-yá=rɛ̄ʔ à sé-yá=rɛ̄ʔ mā sé-yá=rɛ̄ʔ* ‘aren’t/isn’t coming’

Only minor phonological modifications are observed in negative perfectives (xx1a). LH-toned *sɛ̀ɛ́* flattens to *sɛ̀ɛ̀* before the M‑toned enclitic; see LH-to-L before nonlow tone (§3.8.3.6). Monosyllabic *Cvv* tends to be heard in shortened form as *Cv* prepausally, but the long vowel is clear when the negative enclitic is added.

In the non-perfective inflections, however, there are two important tonal changes. First, the imperfective subject enclitic /H+=∅/, consisting of a floating H‑tone, disappears in most negative combinations. Therefore human 3Pl *ààⁿ*, which combines with the floating H‑tone as /ààⁿ H/ → *àáⁿ* in the positive examples in (xx1b‑e), is heard as L‑toned *ààⁿ* in the negative examples in (xx1b,c,e). Likewise, human 3Sg *à* is raised to /à H/ → *á* in the positive examples in (xx1b‑e), but not in the negative examples in (xx1b,c,e). The tones show that the imperfective enclitic (floating H) is present in the positive but not negative versions.

Second, in (xx1c,e), an unexpected H‑tone shows up on the word following the subject. The future marker *sà* is raised to *sá* in the future negative without exception (xx1c), see §10.3.2.3. Intransitive progressives which otherwise begin with an L‑tone begin with an H‑tone (xx1e), see §10.3.2.4.

Given the dropping of the floating H‑tone of the subject enclitic and the appearance of H‑tone on the post-subject word in (xx1c,e), the negative forms in (xx1b) are expected, but those in (xx1d) are tonally anomalous. The only difference in inputs is that the imperfectives differ in tone: *sáá* ‘comes’ (xx1b), *bàà* ‘falls’ (xx1c). In *àáⁿ bàà=rɛ̄ʔ* ‘they don’t fall’ (xx1d), we don’t need the floating H‑toned *=∅*, since Final Tone-Raising would raise the second mora of *ààⁿ* in /ààⁿ bàà/ anyway. However, the H‑toned human 3Sg *á* in *á bàà=rɛ̄ʔ* ‘he/she doesn’t fall’ and 1Sg *má* in *má bàà=rɛ̄ʔ* ‘I don’t fall’ (xx1d) falsely suggest that the floating H‑tone is present here. If taken at face value, this would require transcriptions like 3Sg *á=∅ bàà=rɛ̄ʔ* and 1Sg *á=∅ bàà=rɛ̄ʔ*, and by extrapolation 3Pl *àáⁿ=∅ bàà=rɛ̄ʔ*. Yet the floating H‑tone is absent in (xx1b) before H‑toned imperfective *sáá* in what is syntactically and semantically the same construction. By contrast, the true imperfective subject enclitic (floating H) raises final M and L tones of subjects regardless of the initial tone of the following word.

These considerations suggest that what is going on in *á bàà=rɛ̄ʔ* ‘he/she doesn’t fall’ and *má bàà=rɛ̄ʔ* ‘I don’t fall’ (xx1d) is best modeled as a morphosyntactically conditioned extension of Final Tone-Raising (a tone sandhi process), rather than as an anomalous use of imperfective subject enclitic /H+-∅/. This raising process would apply anyway in 3Pl *àáⁿ bàà=rɛ̄ʔ* ‘they don’t fall’, so what we need is a special provision, limited to non-perfective negative clauses and a few other contexts, allowing the rule to apply also to in /à bàà=rɛ̄/ → *á bàà=rɛ̄ʔ* ‘he/she doesn’t fall’ and /mā bàà=rɛ̄/ → *má bàà=rɛ̄ʔ*. That a special provision is needed is due to the fact that Final Tone-Raising does not automatically apply to human 3Sg *à* (or nonhuman 3Sg *è*) before L‑toned words. It does not apply before a perfective positive verb in *à bɛ̀ɛ́* ‘he/she/I fell’ or in *à sìdánì* ‘he-or‑she/I ascended’, before a perfective negative verb in *è dɛ̀ɛ̀=rɛ̄ʔ* ‘it didn’t catch fire’, or before an object noun in *à wùlá dɔ̀ní* ‘he-or‑she/I ate dog (meat)’.

Further examples of negative present sentences, this time transitives with an object noun directly following the subject, are in (xx2a‑c). Again, the subject pronoun undergoes Final Tone-Raising only before an L‑tone (xx2a), and does not undergo it before M‑ or H‑tones (xx2b‑c).

(xx2) a. *àáⁿ* / *á* / *má wùlá dɔ̀nɔ̀=nɛ̄ʔ*

3PlHum / 3SgHum / 1Sg dog eat.meat.Ipfv=Neg

‘They/He-or-she/I do(es)n’t eat dog (meat).’ (< *wùlà* )

b. *ààⁿ* / *à* / *mā yíʔé dɔ̀nɔ̀=nɛ̄ʔ*

3PlHum / 3SgHum / 1Sg fish eat.meat.Ipfv=Neg

‘They/He-or-she do(es)n’t eat fish.’

c. *ààⁿ* / *à* / *mā gbāá dɔ̀nɔ̀=nɛ̄ʔ*

3PlHum / 3SgHum / 1Sg wood eat.meat.Ipfv=Neg

‘They/He-or-she do(es)n’t eat wood.’

See also the data on positive versus negative experiential perfects in §15.1.1.3.

## Indicative tense-aspect categories

This section covers perfective, present, future, and progressive verbs, which are expressed within verbal morphology (in some cases along with the imperfective subject enclitic).

Some additional tense-aspect categories are expressed by constructions including auxiliaries:

* inceptive (‘begin VPing’) with *kú* (§15.1.1.1);
* durative with *tɔ́ɔ́* or *túú*(§15.1.1.2)
* experiential perfect with *dú* (§15.1.1.3);

### Perfective

There is one basic perfective category. The perfective is the standard way to report an already completed (i.e. past) event.

(xx1) a. *māⁿ sìbí dɔ̀níī*

1Sg meat eat.meat.Pfv

‘I ate (the) meat.’

b. *á= ∅ wèé bòbó*

3Sg= 3SgNonhObj go.Pfv Bobo

‘He-or-she went to Bobo (city).’

#### Subjects of perfective verbs

Subjects of perfective verbs, pronominal and nonpronominal, have their regular tones (subject to local tone sandhi processes). Thus 1Sg pronoun *mā*, 3Pl pronoun *ààⁿ*, and so forth. This distinguishes perfectives from imperfectives, which require a tonal enclitic morpheme /H+=∅/, i.e. segmental zero plus H‑tone.

#### Form of perfective verb

The perfective is expressed by the E/I‑stem of the verb, with no post-subject inflectional particle. The E/I‑stem ends in a front vowel from the set {*i e ɛ*}, which may be subject to deletion. Some verbs end in mid-height *e* or *ɛ*, the choice depending on ATR category of the stem. ‑ATR *ɛ* optionally becomes +ATR *e* when followed by negative enclitic *=rĒʔ*, by past *kɛ́*, and by some other elements. Other stems have final *i*.

For each intransitive or transitive perfective stem there are two tonal forms, based on the pervasive split between +3Sg and ‑3Sg NPs and pronouns (§3.8.3.5). The +3Sg form begins with an L‑tone, the ‑3Sg form with an H‑tone. Some examples involving morphologically intransitive verbs (those with no preverbal object) are in (xx1), with imperfective forms shown for comparison.

(xx1) Perfective verbs (intransitive, prepausal)

+3Sg -3Sg gloss

a. ends in *ɛ*

*monosyllabic*

*bɛ̀ɛ́ bɛ́ɛ́* ‘fall’

*dɛ̀ɛ́ dɛ́ɛ́* ‘get hot’

*sɛ̀ɛ́ sɛ́ɛ́* ‘come’

*kpɛ̀ɛ́ⁿ kpɛ́ɛ́ⁿ* ‘die’

*bɔ̀ɛ́* *bɔ́ɛ́* ‘exit’

*sɔ̀ɛ́* *sɔ́ɛ́* ‘enter’

*nonmonosyllabic*

*ɲìnɛ́* *ɲínɛ̄* ‘forget’ (VO)

*dɛ̀ʔɛ́* *dɛ́ʔɛ̄* ‘escape’

*tɛ̀ʔɛ́* *tɛ́ʔɛ̄* ‘go’

b. ends in *e* (rare)

*tòlóē tólēē* ‘rot’

~ *tòléē*

c. ends in *i* (stems with final *Cv*)

*CvCv stem*

*bùlí búlī* ‘return’

*fìdí fídī* ‘run’

*CvCvCv stem*

*sìdánī sídánī* ‘ascend’

*jàʔánī jáʔánī* ‘descend’

d. ends in *i* (stems with final *Cvv*)

*Cvv stem*

*ɲǐī ɲíī* ‘spend night’

*CvCvv stem*

*mììlíī míílíī* ‘think’

Perfectives ending in short *í* ~ *ī*, like ‘return’ and ‘run’, are sometimes extended as *íī* ~ *īī*, mimic-ing lexical final long vowels like *íī* ~ *íī* in verbs like ‘think’. In principle, the final long vowel in *bùlíī* ‘returned’ should occur only in continuity intonation in discourse, while that in *mììlíī* ‘thought’ should be regular in all clause-final or isolation pronunciations (cf. imperfectives *bùlɔ̀* and *mììlíà* ). However, there is some raggedness in my data on this point, and the distinction is not so clean as these considerations suggest. For example, one would expect consistent perfective *fìdíī* for ‘ran’, since imperfective *fìdɛ́ɛ̀* has *CvCvv* shape, but in fact the perfective usually ends in a short vowel (*fìdí ).*

Perfective forms ending in {*ī ē ɛ̄ ɛ́* }, like those in (xx1), occur prepausally, i.e. in isolation and clause-finally. Clause-medially, a final front vowel marking the perfective is subject to deletion when it is part of a long vowel or diphthong. For example, *bɔ̀ɛ́* ‘exited’ (+3Sg) becomes *bɔ̀*. Before the negative enclitic such forms have long vowels, suggesting a monophthongization process, e.g. /ɔɛ/ → *ɔɔ*, as in *bɔ̀ɔ̀=rɛ̄ʔ* ~ *bòò=rēʔ* ‘did not exit’ (+3Sg).

As with all verbs, the negative enclitic is hosted directly by the verb only if there are no postverbal constituents. If the verb and the negative enclitic are separated, the form of the perfective verb is not influenced by the enclitic. (xx2) compares clause-final and clause-medial (exemplified by negative) perfective forms, and gives imperfective counterparts for comparison.

(xx2) final negative

+3Sg -3Sg +3Sg -3Sg Ipfv gloss

a. final *ī* trimmed medially

*bùlí búlī bùlú=rēʔ búlū=rēʔ búlɔ́* ‘return’

*ɲǐī ɲíī ɲìí=rēʔ ɲíí=rēʔ ɲìɛ̀* ‘spend night’

*mììlíī míílíī mììlíí=rēʔ míílíí=rēʔ míílíà* ‘think’

*sìdánī sídánī sìdáǹ=nēʔ sídáǹ=nēʔ sìdánà* ‘ascend’

b. final *ē* trimmed medially

*tòlóē tólēē tòló=rēʔ tólō=rēʔ tɔ̀lɔ̀* ‘rot’

~ *tòléē*

c. final *ɛ* in *ɔɛ* trimmed medially

*bɔ̀ɛ́* *bɔ́ɛ́ bɔ̀ɔ̀=rɛ̄ʔ bɔ́ɔ́=rɛ̄ʔ bɔ́ɔ́* ‘exit’

*bɛ̀ɛ́ bɛ́ɛ́ bɛ̀ɛ̀=rɛ̄ʔ bɛ́ɛ́=rɛ̄ʔ bàà* ‘fall’

*dɛ̀ɛ́ dɛ́ɛ́ dɛ̀ɛ̀=rɛ̄ʔ dɛ́ɛ́=rɛ̄ʔ dɛ̀ɛ̀* ‘get hot’

When the final {*ī ē ɛ̄ ɛ́* } is deleted, the underlying length of the final vowel is revealed. For example, although *bùlíī* ‘returned’ and *mììlíī* ‘thought’ both end in *íī*, when the negative enclitic is added we see that ‘return’ ends in *Cv* while ‘think’ ends in *Cvv*. This distinction is confirmed out by their imperfectives (*búlú* and *mììlíà* ). We might therefore analyse the perfectives (omitting initial tones) as underlying /bulúī/, /ɲiíī/, /miilííī/, /sidánī/, /tolóē/, /bɔɔɛ́/, /bɛɛɛ́/ (or perhaps /baaɛ́/), and /bɔɔɛ́/. This way, the underlying vowel length appears automatically when the final vowel is trimmed off.

Clause-finally and in isolation, monosyllabic perfectives like those in (xx2c) above are pronounced with short vowels. For example, ‘got hot’ is heard as [dɛ̌] (+3Sg) and [dɛ́] (‑3Sg), and ‘exited’ is heard as [dɔ̯ɛ̌] (+3Sg) and [dɔ̯ɛ́] (‑3Sg). That these are structurally long vowels is shown by their negative forms (and confirmed by their imperfectives). I do not indicate the phonetic shortening in my normal transcription.

A sample intransitive perfective paradigm is (xx3), using ‘fall’. The initial tone of the verb is determined by the +3Sg or ‑3Sg category of the preceding subject, except that M‑toned pronominals (1Sg, 2Sg, 2Pl) spread the M‑tone. All negative forms have optional variants with +ATR vowels (e.g. 3Sg *bèè=rēʔ* ).

(xx3) Perfective paradigm (intransitive)

X ‘X fell’ ‘X didn’t fall’

a. -3Sg perfective

*pronouns, M-toned*

1Sg *mā bɛ́ɛ́ mā bɛ̄ɛ̄=rɛ̄ʔ*

2Sg *wō bɛ́ɛ́ wō bɛ̄ɛ̄=rɛ̄ʔ*

2Pl *ēēⁿ bɛ́ɛ́ ēēⁿ bɛ̄ɛ̄=rɛ̄ʔ*

*pronouns, L-toned*

1Pl *mùʔùⁿ bɛ́ɛ́ mùʔùⁿ bɛ́ɛ́=rɛ̄ʔ*

3PlHum *ààⁿ bɛ́ɛ́ ààⁿ bɛ́ɛ́=rɛ̄ʔ*

3PlNonh *èèⁿ bɛ́ɛ́ èèⁿ bɛ́ɛ́=rɛ̄ʔ*

*plural noun*

‘people’ *mɛ̀ʔɛ̀-ná-àⁿ bɛ́ɛ́ mɛ̀ʔɛ̀-ná-àⁿ bɛ́ɛ́=rɛ̄ʔ*

*personal name*

‘Bakari’ *bákàr bɛ́ɛ́ bákàr bɛ́ɛ́=rɛ̄ʔ*

b. +3Sg perfective

*pronouns*

3SgHum *à bɛ̀ɛ́ à bɛ̀ɛ̀=rɛ̄ʔ*

3SgNonh *è bɛ̀ɛ́ è bɛ̀ɛ̀=rɛ̄ʔ*

*singular nouns*

‘person’ *mɛ̀ʔɛ́ⁿ bɛ̀ɛ́* *mɛ̀ʔɛ́ⁿ bɛ̀ɛ̀=rɛ̄ʔ* (< *mɛ̀ʔɛ̀ⁿ* )

‘wall’ *kógó bɛ̀ɛ́ kógó bɛ̀ɛ̀=rɛ̄ʔ*

‘fish’ *yíʔé bɛ̀ɛ́* *yíʔé bɛ̀ɛ̀=rɛ̄ʔ*

‘onion’ *jābá bɛ̀ɛ́* *jābá bɛ̀ɛ̀=rɛ̄ʔ* (< *jābā* )

‘brick’ *tòfá bɛ̀ɛ́* *tòfá bɛ̀ɛ̀=rɛ̄ʔ*

Perfective forms for transitives that can take a range of objects are in (xx4).

(xx4) Perfective paradigm (transitive)

positive negative

+3Sg -3Sg +3Sg -3Sg Ipfv (+3Sg) gloss

a. ends in *ɛ*

*monosyllabic*

*bɛ̀ɛ́ bɛ́ɛ́ bɛ̀ɛ̀=rɛ̄ʔ bɛ́ɛ́=rɛ̄ʔ bàà* ‘put down’

*dɛ̀ɛ́ dɛ́ɛ́ dɛ̀ɛ̀=rɛ̄ʔ dɛ́ɛ́=rɛ̄ʔ dɛ̌ɛ̄* ‘heat (sth)’

*cìɛ́ cíɛ́ cìɛ̀=rɛ̄ʔ cíɛ́=rɛ̄ʔ cìɛ̀* ‘put (in sth)’

*dɔ̀ɛ́ⁿ dɔ́ɛ̄ⁿ dɔ̀ɔ́=nɛ̄ʔ dɔ́ɔ̄=nɛ̄ʔ dɔ̌ɔ̀ⁿ* ‘step on’

*jɔ̀ɛ́ⁿ jɔ́ɛ̄ⁿ jɔ̀ɔ́=nɛ̄ʔ jɔ́ɔ̄=nɛ̄ʔ jɔ̌ɔ̀ⁿ* ‘rob’

*nonmonosyllabic CaCa, ɛ extends to initial syllable*

*dɛ̀ʔɛ́ɛ̄ dɛ́ʔɛ̀ɛ̀ dɛ̀ʔɛ́=rɛ̄ʔ dɛ́ʔɛ̄=rɛ̄ʔ dáʔá* ‘let go’

*sɔ̀ʔɛ́ɛ̄ sɔ́ʔɛ̄ɛ̄ sɔ̀ʔɔ́=rɛ̄ʔ sɔ́ʔɔ̄=rɛ̄ʔ sɔ̀ʔɔ̀* ‘catch’

*mɔ̀mɔ́ɛ̄ⁿ mɔ̀mɔ́ɔ̄=nɛ̄ʔ mɔ̀mɔ́ɔ̀ⁿ* ‘carry on back’

*mɔ́mɔ́ɛ̄ⁿ mɔ́mɔ́ɔ̄=nɛ̄ʔ*

b. ends in *i*

*gìlénī gílénī gìlén̄=nēʔ gílén̄=nēʔ gìlénà* ‘hang up’

*bàʔrí báʔrī bǎʔl=lēʔ ba᷆ʔl=lēʔ bàʔrà* ‘hit’

(variants *bàʔŕ=rēʔ*, *báʔr̄=rēʔ* )

*dàkóī dákóī dàkóō=rēʔ dákóō=rēʔ dàkɔ̂* ‘catch (sth thrown)’

Examples with ‘he/she hit X’ are in (xx5). The variants with *á ∅* instead of *à ná* or *à ní* for 3Sg object are likely due to elision of the H‑toned object (*ná*, *ní* ) and transfer of the remaining H‑tone onto the subject (*à* → *á* ). The variant *á ààⁿ* for expected *à ààⁿ* may be a special case of Final Tone-Raising (before an L‑tone).

(xx3) X ‘he/she hit X’ ‘he/she didn’t hit X’

a. take “other” perfective form

*pronouns*

1Sg *à mā báʔrī à mā báʔr̄=rēʔ*

2Sg *à wō báʔrī à wō báʔr̄=rēʔ*

1Pl *à mùʔùⁿ báʔrī à mùʔùⁿ báʔr̄=rēʔ*

2Pl *à ēēⁿ báʔrī à ēēⁿ báʔr̄=rēʔ*

3PlHum *á ààⁿ báʔrī á ààⁿ báʔr̄=rēʔ*

~ *à náà(à)ⁿ báʔrī* ~ *à náà(à)ⁿ báʔr̄=rēʔ*

3PlNonh *á èèⁿ báʔrī á èèⁿ báʔr̄=rēʔ*

~ *à níì(ì)ⁿ báʔrī* ~ *à níì(ì)ⁿ báʔr̄=rēʔ*

*plural noun*

‘people’ *à mɛ̀ʔɛ̀-ná-àⁿ báʔrī à mɛ̀ʔɛ̀-ná-àⁿ báʔr=rēʔ*

b. 3Sg perfective form

*pronouns*

3SgHum *à ná bàʔrí à ná bàʔŕ=rēʔ*

~ *á ∅ bàʔrí* ~ *á ∅ bàʔŕ=rēʔ*

3SgNonh *à ní bàʔrí à ní bàʔŕ=rēʔ*

~ *á ∅ bàʔrí* ~ *á ∅ bàʔŕ=rēʔ*

*singular nouns*

‘person’ *à mɛ̀ʔɛ́ⁿ bàʔrí* *à mɛ̀ʔɛ́ⁿ bàʔŕ=rēʔ* (< *mɛ̀ʔɛ̀ⁿ* )

‘wall’ *à kógó bàʔrí* *à kógó bàʔŕ=rēʔ* (< *kógō* )

‘fish’ *à* *yìʔé bàʔrí* *à* *yìʔé bàʔŕ=rēʔ* (< *yíʔé* )

‘onion’ *à jābá bàʔrí* *à jābá bàʔŕ=rēʔ* (< *jābā* )

‘brick’ *à tòfá bàʔrí* *à tòfá bàʔŕ=rēʔ* (< *tòfá* )

For the perfective paradigm of pseudo-transitive ‘go’, see §10.1.1.2.

### Imperfective positive system

The present (no preverbal inflectional particle) and future (preverbal inflectional particle *sà* ) both make use of the imperfective stem; the two are distinguished by a post-subject particle *sà* which occurs in the future. The comparison of perfective and imperfective stems shows that the imperfective generally shows a lexically unpredictable vowel quality.

The other indicative category, progressive, has a suffix *‑yà* ~ *‑yá* and no preverbal inflectional particle.

In some cases, the vocalism of the imperative resembles the imperfective stem, but in other cases the imperative is truncated or ends in *i* versus *a* different vowel for the imperfective.

#### Enclitic /H+=∅/ on subjects in the imperfective system

In comparison with perfectives, imperfective-system predicates (present, future, and progressive) require a form of the subject pronoun with the final (or only) tone raised. Conjugation paradigms of the present are in (xx1); the transcription will be amended later in this section.

(xx1) ‘exit (v)’ ‘fall’

1Sg *má ꜜbɔ́ɔ́ má bàà*

2Sg *wó ꜜbɔ́ɔ́ wó bàà*

1Pl *mùʔúⁿ ꜜbɔ́ɔ́ mùʔúⁿ bàà*

2Pl *ēéⁿ ꜜbɔ́ɔ́ ēéⁿ bàà*

3SgHum *á ꜜbɔ́ɔ́ á bàà*

3SgNonh *é ꜜbɔ́ɔ́ é bàà*

3PlHum *àáⁿ ꜜbɔ́ɔ́ àáⁿ bàà*

3PlNonh *èéⁿ ꜜbɔ́ɔ́ èéⁿ bàà*

The tone-raising occurs not only before L‑tones (‘fall’), but also before H‑tones (‘exit’), which are downstepped in this combination. In the paradigm of ‘fall’, the tones of the plural subject pronouns could be accounted for by Final Tone-Raising, since the verb begins with an L‑tone. However, this would not account for the other subject tones for ‘fall’, and it would not account for any of the subject tones for ‘exit’. It is therefore necessary to recognize an enclitic /H+=∅/, segmentally zero but with an H‑tone that is realized on the final mora (or only mora in some cases) of the pronoun. (xx1) can therefore be revised notationally as (xx2). The presence of *=∅* in the transcription is a hint that the H‑tone has attached to the host pronoun.

(xx2) ‘exit (v)’ ‘fall’

1Sg *má=∅ ꜜbɔ́ɔ́ má=∅ bàà*

2Sg *wó=∅ ꜜbɔ́ɔ́ wó=∅ bàà*

1Pl *mùʔúⁿ=∅ ꜜbɔ́ɔ́ mùʔúⁿ=∅ bàà*

2Pl *ēéⁿ=∅ ꜜbɔ́ɔ́ ēéⁿ=∅ bàà*

3SgHum *á=∅ ꜜbɔ́ɔ́ á=∅ bàà*

3SgNonh *é=∅ ꜜbɔ́ɔ́ é=∅ bàà*

3PlHum *àáⁿ=∅ ꜜbɔ́ɔ́ àáⁿ=∅ bàà*

3PlNonh *èéⁿ=∅ ꜜbɔ́ɔ́ èéⁿ=∅ bàà*

/H+=∅/ also occurs after nonpronominal subject NPs. It is audible in (xx3a). For nouns like ‘fish’ in (xx3b) that already end in an H‑tone, there is no audible change. Singular nouns with falling HL or ML tone contours also show no consistent tonal effect attributable to /H+=∅/ (xx3c‑d).

(xx3) a. *bákàrí=∅ ꜛbɔ́ɔ́* / *bàà*

B=Ipfv exit.Ipfv / fall.Ipfv

‘Bakari goes out/falls (regularly).’ (< *bákàrì* )

b. *yíʔé-rá=∅ ꜛbɔ́ɔ́* / *bàà*

fish-Nom=Ipfv exit.Ipfv / fall.Ipfv

‘The fish goes out/falls (regularly).’ (< *yíʔé-rá* )

c. *jàŋgbáá-rà=∅ bɔ́ɔ́* / *bàà*

cat-Nom=Ipfv exit.Ipfv / fall.Ipfv

‘The cat goes out/falls (regularly).’

d. *búʔū-nà=∅ bɔ́ɔ́* / *bàà*

liver-Nom=Ipfv exit.Ipfv / fall.Ipfv

‘The liver come out/falls (regularly).’

When the subject is a plural noun, if the isolation form ends in L‑toned *‑rà‑àⁿ*, there is a final rise due to the /H+=∅/ enclitic (xx4a). If the isolation form ends in HL‑toned *‑rá‑àⁿ*, I hear the form with imperfective enclitic as *‑rá‑àⁿ=∅* with no overt tonal effect of the enclitic, or sometimes as *‑rá‑āⁿ* with final M‑tone (xx4b). In the latter case, /H+=∅/ limits the fall of the final mora to M rather than L.

(xx4) a. *jàŋgbáá-rà-áⁿ=∅ yíʔé dɔ̀nɔ̀*

cat-Nom-Pl=Ipfv fish eat.meat.Ipfv

‘(The) cats eat fish.’

b. *yíʔé-rá-àⁿ=∅ bɔ́ɔ́* / *bàà*

~ *yíʔé-rá-āⁿ=∅*

fish-Nom-Pl=Ipfv exit.Ipfv / fall.Ipfv

‘(The) fish-Pl go out/fall (regularly).’

The imperfective enclitic /H+=∅/ is also regular on subjects followed by future particle *sà* (xx5a).

(xx5) *má=∅* / *mùʔúⁿ=∅* / *àáⁿ=∅ sà bɔ́ɔ́*

1Sg=Ipfv / 1Pl=Ipfv / 3PlHum=Ipfv Fut exit.Ipfv

‘I/we/they will go out.’

Imperfective subject clitic /H+=∅/ prevents +3Sg and -3Sg subjects from having their distinct tonal effects on following words. Therefore the distinction between 3Sg and 3Pl subject in imperfective (xx6a) has no tonal effect on the object ‘fish’. By contrast, in the perfective counterparts (xx6b‑c), ‘fish’ has different tones (L.H versus H.H) depending on the category of the immediately preceding subject.

(xx6) a. *á=∅* / *àáⁿ=∅ ꜜyíʔé dɔ̀nɔ̀*

3SgHum=Ipfv/3PlHum**=Ipfv** **fish** eat.meat.Ipfv

‘He/She eats fish.’ (< *yíʔé* )

b. *à yìʔé dɔ̀ní*

3SgHum **fish** eat.meat.Pfv

‘He/She ate a/the fish.’

c. *ààⁿ yíʔé dɔ̀ní*

3PlHum fish eat.meat.Pfv

‘They ate a/the fish.’

Further imperfective examples are in (xx7).

(xx7) a. *é=∅ ꜜyí mìyàⁿ*

3SgNonh=Ipfv water drink.Ipfv

‘It (=sheep) drinks water.’

b. *á=∅ ꜜnínáʔā kpààⁿ*

3SgHum=Ipfv scorpion kill.Ipfv

‘He/She kills a scorpion (regularly).’

c. *á=∅ bāʔá mìyàⁿ*

3SgHum=Ipfv porridge drink.Ipfv

‘He/She drinks porridge.’ (< *bāʔā* )

d. *á=∅ ju᷇ kùnɔ̀*

3SgHum=Ipfv millet eat.Ipfv

‘He/She eats millet.’ (< *jū* )

e. *á=∅ kūmɛ̄ɛ́ⁿ kùnɔ̀*

3SgHum=Ipfv meal eat.Ipfv

‘He/She eats a meal.’ (< *kūmɛ̄ɛ̄ⁿ* )

f. *má=∅* / *mùʔúⁿ=∅* / *àáⁿ=∅ ꜜyíʔé dɔ̀nɔ̀*

1Sg=Ipfv / 1Pl=Ipfv / 3PlHum=Ipfv fish eat.meat.Ipfv

‘I/we/they eat fish.’

g. *á=∅ ààⁿ báʔrá*

3SgHum=Ipfv 3PlHum hit.Ipfv

‘He/She hits them (regularly).’

h. *jàŋgbáá-rà=∅ yíʔé dɔ̀nɔ̀*

cat-Nom=Ipfv fish eat.meat.Ipfv

‘A/The cat eats fish.’

i. *bákàrí=∅ ꜜyíʔé dɔ̀nɔ̀*

B=Ipfv fish eat.meat.Ipfv

‘Bakari eats fish.’

Imperfective enclitic /H+=∅/ can be equated morphemically with the locational ‘be’ subject enclitic /H+=∅/, exemplified in (xx4).

(xx4) *bákàrí=∅ [kálá tɔ̀]*

B=be [home in]

‘Bakari is at home.’

However, the identification is not complete, since the ‘be’ subject enclitic (unlike the imperfective subject enclitic) has the segmentally overt form *=ń* after some types of NP; see §11.2.3.1 below for details.

#### Present

The subject is followed by enclitic /H+=∅/, which adds an H‑tone (not always audible after nonpronominal subjects) to subject pronouns and requires a final nominal suffix on noun-headed subject NPs. The verb is in the imperfective positive verb form without further inflectional morphology. Intransitive verbs, which always follow the enclitic /H+=∅/, have a single invariant imperfective form, not varying tonally (or otherwise) by subject category. Regular (OV) transitive verbs are preceded by the object and therefore have two distinct tonal forms, depending on whether the object is +3Sg or -3Sg (§3.8.4.4).

This inflectional category is a general present, for example describing regularly occurring activities.

(xx1) a. *sóʔóó-sòʔò má=∅ ꜜná bàʔrà*

day-day 1Sg=Ipfv 3SgHumObj hit.Ipfv

‘Every day I hit-Present him/her.’

b. *sóʔóó-sòʔò má=∅ nààⁿ báʔrá*

day-day 1Sg=Ipfv 3PlHumObj hit.Ipfv

‘Every day I hit-Present them.’

c. *má=∅ sìbí bègà*

1Sg=Ipfv meat cut.Ipfv

‘I (regularly) cut-Present (the) meat.’ (< *sìbì* )

d. *má=∅ ꜜyíʔé-rá-àⁿ bégá*

1Sg=Ipfv fish-Nom-Pl cut.Ipfv

‘I (regularly) cut-Present (the) fish-Pl.’

e. *ɲɛ́ɛ́-ɲɛ̀ má=∅ ꜜní wàá bòbó*

year-year 1Sg=Ipfv 3SgNonhObj go.Ipfv Bobo

‘Every year I go to Bobo (city).’

Conjugation paradigms of the present forms of two intransitive verbs with initial L‑tone are in (xx1). They illustrate the tone-raising enclitic on the subject (inaudible on singular ‘woman’ because of its falling tone pattern), and the constant form of the imperfective verb. For additional paradigms see the preceding section.

(xx2) ‘run’ ‘descend’

1Sg *má=∅ fìdɛ́ɛ̀ má=∅ jàʔánà*

2Sg *wó=∅ fìdɛ́ɛ̀ wó=∅ jàʔánà*

1Pl *mùʔúⁿ=∅ fìdɛ́ɛ̀ mùʔúⁿ=∅ jàʔánà*

2Pl *ēéⁿ=∅ fìdɛ́ɛ̀ ēéⁿ=∅ jàʔánà*

3SgHum *á=∅ fìdɛ́ɛ̀ á=∅ jàʔánà*

3SgNonh *é=∅ fìdɛ́ɛ̀ é=∅ jàʔánà*

3PlHum *àáⁿ=∅ fìdɛ́ɛ̀ àáⁿ=∅ jàʔánà*

3PlNonh *èéⁿ=∅ fìdɛ́ɛ̀ èéⁿ=∅*

‘woman’ *ɲáā-nà=∅* …

… *fìdɛ́ɛ̀* … *jàʔánà*

‘women’ *ɲáā-nà-áⁿ=∅* …

… *fìdɛ́ɛ̀* … *jàʔánà*

Two more paradigms, this time with intransitive verbs whose imperfectives begin with H‑tone, are in (xx3). The H‑tone is downstepped after the final H‑tone of the subject.

(xx3) ‘think’ ‘go’

1Sg *má=∅ ꜜmíílíyà má=∅ ꜜtáʔá*

2Sg *wó=∅ ꜜmíílíyà wó=∅ ꜜtáʔá*

1Pl *mùʔúⁿ=∅ ꜜmíílíyà mùʔúⁿ=∅ ꜜtáʔá*

2Pl *ēéⁿ=∅ ꜜmíílíyà ēéⁿ=∅ ꜜtáʔá*

3SgHum *á=∅ ꜜmíílíyà á=∅ ꜜtáʔá*

3SgNonh *é=∅ ꜜmíílíyà é=∅ ꜜtáʔá*

3PlHum *àáⁿ=∅ ꜜmíílíyà àáⁿ=∅ ꜜtáʔá*

3PlNonh *èéⁿ=∅ ꜜmíílíyà èéⁿ=∅ ꜜtáʔá*

‘woman’ *ɲáā-nà=∅* …

… *míílíyà*

‘women’ *ɲáā-nà-áⁿ=∅* …

… *ꜜmíílíyà*

In the case of ‘go’, the downstepped H sounds more like L than M, but it behaves as H‑toned phonologically. It does not undergo Final Tone-Raising before an L‑tone, and its pitch is higher than that of a following M‑toned negative enclitic *=rɛ̄ʔ*.

(xx4) a. *má=∅ ꜜtáʔá bòbó*

1Sg=Ipfv go.Ipfv B

‘I go (regularly) to Bobo Dioulasso.’

b. *má=∅ ꜜtáʔá=rɛ̄ʔ*

1Sg=Ipfv go.Ipfv=Neg

‘I don’t go.’

A sample of intransitives showing positive/negative relationships in the present is in (xx5).

(xx5) Intransitive imperfectives

positive negative gloss

a. H-toned

*bɔ́ɔ́ bɔ́ɔ́=rɛ̄ʔ* ‘exit (v)’

*sɔ́ɔ́ sɔ́ɔ́=rɛ̄ʔ* ‘enter’

*kpááⁿ kpáá=nɛ̄ʔ* ‘die’

*sáá sáá=rɛ̄ʔ* ‘come’

*táʔá táʔá=rɛ̄ʔ* ‘go’

*búlɔ́ búlɔ́=rɛ̄ʔ* ‘go back’

b. L-toned

*bàà bàà=rɛ̄ʔ* ‘fall’

*dɛ̀ɛ̀ dɛ̀ɛ̀=rɛ̄ʔ* ‘become hot’

c. contour-toned

*fìdɛ́ɛ̀ fìdɛ́ɛ̀=rɛ̄ʔ* ‘run’

*míílíà míílíà=rɛ̄-?* ‘think’

*sìdánà sìdánà=nɛ̄ʔ* ‘ascend’

*jàʔánà jàʔánà=nɛ̄ʔ* ‘descend’

A sample transitive conjugation is (xx6). The tonal form of the verb depends on the category of the immediately preceding object: *bàʔrà* after +3Sg, *báʔrá* after -3Sg. The third person object pronouns have their usual *n*‑initial form, and (since they begin with an H‑tone) they are downstepped after the H‑tone of the imperfective subject enclitic.

(xx6) object ‘he/she hits \_\_’

a. 1Sg *á=∅ mà báʔrá*

2Sg *á=∅ wò báʔrá*

2Pl *á=∅ èèⁿ báʔrá*

1Pl *á=∅ mùʔùⁿ báʔrá*

3PlHum *á=∅ ꜜnáàⁿ báʔrá*

3PlNonh *á=∅ ꜜníìⁿ báʔrá*

‘the children’ *á=∅ dí-rá-àⁿ báʔrá*

‘Bakari’ *á=∅ bákàrì báʔrá*

b. 3SgHum *á=∅ ꜜná bàʔrà*

3SgNonh *á=∅ ꜜní bàʔrà*

‘the child’ *á=∅ dí bàʔrà*

More examples of transitive presents are in (xx7)

(xx7) Transitive imperfectives

positive negative gloss

+3Sg -3Sg +3Sg -3Sg

a. level-toned

*bàʔrà báʔrá bàʔr̀=rɛ̄ʔ báʔŕ=rɛ̄ʔ* ‘hit’’

*bɛ̀gɛ̀ bɛ́gɛ́ bɛ̀gɛ̀=rɛ̄ʔ bɛ́gɛ́=rɛ̄ʔ* ‘cut’

*bìlɛ̀ bílɛ́ bìlɛ̀=rɛ̄ʔ bílɛ́=rɛ̄ʔ* ‘give’

*bɔ̀nɔ̀ bɔ̀nɔ̀ bɔ̀nɔ̀=nɛ̄ʔ bɔ́nɔ́=nɛ̄ʔ* ‘pour out’

*dùtɔ̀lɔ̀ dútɔ́lɔ́ dùtɔ̀lɔ̀=rɛ̄ʔ dútɔ́lɔ́=rɛ̄ʔ* ‘point at’

*dìmìnàà dímínáá dìmìnàà=nɛ̄ʔ dímínáá=nɛ̄ʔ* ‘hurt (sb)’

b. contour-toned

*dàkɔ̂ dákɔ̂ dàkɔ́ɔ̀=rɛ̄ʔ dákɔ́ɔ̀=rɛ̄ʔ* ‘catch (sth thrown)’

*kùlɔ́nɔ̀ kúlɔ́nɔ̀ kùlɔ́nɔ̀=nɛ̄ʔ kúlɔ́nɔ̀=nɛ̄ʔ* ‘tie’

*dùtɔ́ʔɔ́nɔ̀ dútɔ́ʔɔ́nɔ̀ dùtɔ́ʔɔ́nɔ̀=nɛ̄ʔ dútɔ́ʔɔ́nɔ̀=nɛ̄ʔ* ‘cover (sb)’

*fìrìkíyɛ̀ fíríkíyɛ̀ fìrìkíyɛ̀=rɛ̄ʔ fíríkíyɛ̀=rɛ̄ʔ* ‘hobble (animal)’

#### Future (*sà* )

Future particle *sà* occurs in post-subject position, preceding any objects as well as the verb, which takes the same imperfective form as in the present. The positive conjugation is straightforward. In the positive, the subject has the imperfective /H+=∅/ subject enclitic, as also in the present and progressive paradigms, and the future particle *sà* is L‑toned. In the negative conjugation, there is no enclitic on the subject. The M‑toned subject pronouns spread the M into the future particle, which in this case surfaces as *sā* (xx1a). The other pronouns are followed by H‑toned *sá* (xx1b).

(xx1) subject ‘will run’ ‘will not run’

a. 1Sg *má=∅ sà fìdɛ́ɛ̀ mā sā fìdɛ́ɛ̀=rɛ̄ʔ*

2Sg *wó=∅ sà fìdɛ́ɛ̀ wō sā fìdɛ́ɛ̀=rɛ̄ʔ*

2Pl *ēéⁿ=∅ sà fìdɛ́ɛ̀ ēēⁿ sā fìdɛ́ɛ̀=rɛ̄ʔ*

b. 1Pl *mùʔúⁿ=∅ sà fìdɛ́ɛ̀ mùʔùⁿ sá fìdɛ́ɛ̀=rɛ̄ʔ*

3SgHum *á=∅ sà fìdɛ́ɛ̀ à sá fìdɛ́ɛ̀=rɛ̄ʔ*

3SgNonh *é=∅ sà fìdɛ́ɛ̀ è sá fìdɛ́ɛ̀=rɛ̄ʔ*

3PlHum *àáⁿ=∅ sà fìdɛ́ɛ̀ ààⁿ sá fìdɛ́ɛ̀=rɛ̄ʔ*

3PlNonh *èéⁿ=∅ sà fìdɛ́ɛ̀ èèⁿ sá fìdɛ́ɛ̀=rɛ̄ʔ*

c. ‘the child’ *dí-rá=∅ sà fìdɛ́ɛ̀ dí-rá sá fìdɛ́ɛ̀=rɛ̄ʔ*

‘the children’ *dí-rá-āⁿ=∅ sà fìdɛ́ɛ̀ dí-rá-àⁿ sá fìdɛ́ɛ̀=rɛ̄ʔ*

In (xx2), the imperfective verb is H‑toned *táʔá*. In the negative conjugation, it is downstepped after the H‑toned variant *sá* (xx2b). In the negative column of (xx2a), the sā appears to drop slightly in pitch before the H‑toned verb. I take this to be a low-level dissimilation, and notice that 2Pl *ēēⁿ* has flat pitch, as it would before an M (or H) tone rather than an L‑tone.

(xx2) subject ‘will go’ ‘will not go’

a. 1Sg *má=∅ sà táʔá mā sā táʔá=rɛ̄ʔ*

2Sg *wó=∅ sà táʔá wō sā táʔá=rɛ̄ʔ*

2Pl *ēéⁿ=∅ sà táʔá ēēⁿ sā táʔá=rɛ̄ʔ*

b. 1Pl *mùʔúⁿ=∅ sà táʔá mùʔùⁿ sá ꜛtáʔá=rɛ̄ʔ*

3SgHum *á=∅ sà táʔá à sá ꜜtáʔá=rɛ̄ʔ*

3SgNonh *é=∅ sà táʔá è sá ꜛtáʔá=rɛ̄ʔ*

3PlHum *àáⁿ=∅ sà táʔá ààⁿ sá ꜛtáʔá=rɛ̄ʔ*

3PlNonh *èéⁿ=∅ sà táʔá èèⁿ sá ꜛtáʔá=rɛ̄ʔ*

c. ‘the child’ *dí-rá=∅ sà táʔá dí-rá sá ꜛtáʔá=rɛ̄ʔ*

‘the children’ *dí-rá-āⁿ=∅ sà táʔá dí-rá-àⁿ sá ꜛtáʔá=rɛ̄ʔ*

Transitive verbs are preceded by an object (NP or pronoun). The verb is therefore separated from the future particle *sà* and does not interact with it tonally. The verb is imperfective in form (as in the present) and has the usual tonal variants depending on whether it is immediately preceded by a +3Sg object (including a singular NP based on a regular noun) or by a -3Sg object (everything else). ‘Hit’ is therefore L‑toned in (xx3a) but H‑toned in (xx3b).

(xx3) a. *má=∅ sà dí bàʔrà*

1Sg=Ipfv Fut child hit.Ipfv

‘I will hit the child.’

b. *má=∅ sà dí-rá-àⁿ báʔrá*

1Sg=Ipfv Fut child-Nom-Pl hit.Ipfv

‘I will hit the children.’

However, the object immediately follows *sà*, and we must consider the interactions between *sà* and object pronouns.

We have seen above that *sà* itself is L‑toned after all subjects in the positive conjugation. (xx4) shows how this *sà* combines with object pronouns in positive transitives. In (xx4a), the usually M‑toned pronouns become H‑toned as objects after *sà*. Since in this construction they are always followed by an H‑initial verb, this verb is downstepped. In (xx4b‑d), the other object pronouns have their usual L‑toned forms. The future particle is L‑toned *sà* before 1st/2nd person objects (xx4a‑b), but becomes H‑toned *sá* before third person objects (xx4c‑d). Nonhuman third person forms have vowel quality *i* rather than *e* in the contraction. In 3Pl object forms *sá=à(à)ⁿ* and *sí=ì(ì)ⁿ*, the length of the object pronoun vowel is usually not audible because of the contraction with the vowel of *sá*.

(xx4) Object pronouns in the positive transitive future

object *sà* plus object example with ‘he/she hit’

a. 1Sg *sà má* *á=∅ sà má ꜜbáʔrá*

2Sg *sà wó* *á=∅ sà wó ꜜbáʔrá*

2Pl *sà ééⁿ á=∅ sà ééⁿ ꜜbáʔrá*

b. 1Pl *sà mùʔùⁿ á=∅ sà mùʔùⁿ báʔrá*

c. 3PlHum *sá=à(à)ⁿ á=∅ sá=à(à)ⁿ báʔrá*

3PlNonh *sí=ì(ì)ⁿ á=∅ sí=ì(ì)ⁿ báʔráà*

d. 3SgHum *sá=à* *á=∅ sá=à bàʔrà*

3SgNonh *sí=ì á=∅ sí=ì baʔrà*

When a future clause is negated, we saw above that there is a split in subject pronouns between those that take *sā* (due to M‑Spreading) and those that take *sá*. This tonal split has no effect on a following object pronoun. Using 1Sg *mā sā* (or, with first person object, 2Sg *wō sā*) and human 3Sg *à sá* as examples, (xx5) shows how these combine with object pronouns. The verb is ‘hit’ in all examples. In (xx5a), the three normally M‑toned pronouns become L‑toned. The other object pronouns have their usual L‑toned forms (xx5b‑c). Therefore all object pronouns in the future negative are L‑toned.

(xx5) Object pronouns in the negative future transitive

object *mā/wō sā* plus object *à sá* plus object

a. 1Sg *wō sā mà báʔrá-rɛ̄ʔ à sá mà báʔrá=rɛ̄ʔ*

2Sg *mā sā wò báʔrá-rɛ̄ʔ à sá wò báʔrá=rɛ̄ʔ*

2Pl *mā sā èèⁿ báʔrá-rɛ̄ʔ à sá èèⁿ báʔrá=rɛ̄ʔ*

b. 1Pl *wō sā mùʔùⁿ báʔrá-rɛ̄ʔ* *à sá mùʔùⁿ báʔrá=rɛ̄ʔ*

3PlHum *mā sā=à(à)ⁿ báʔrá-rɛ̄ʔ à sá=à(à)ⁿ báʔrá=rɛ̄ʔ*

3PlNonh *mā sī=ì(ì)ⁿ báʔrá-rɛ̄ʔ à sí=ì(ì)ⁿ báʔrá=rɛ̄ʔ*

c. 3SgHum *mā sā=à bàʔrà-rɛ̄ʔ à sá=à bàʔrà=rɛ̄ʔ*

3SgNonh *mā sī=ì bàʔrà-rɛ̄ʔ á sí=ì bàʔrà=rɛ̄ʔ*

*sà* occurs most often in predications about the future. However, some elicited and textual examples appear to denote processes in progress. See, for example, (xx1b) in §15.3.3 (“From yesterday through today”). In the following textual example, at a critical point in a narrative hyena is stuck in a pit:

(xx6) *súrúkú-rɔ̀=∅ sí=ì jìɛ́*

hyena-Nom=Ipfv Fut=3SgNonh see.Ipfv

‘Hyena was considering (how to escape).’ (2016\_02 @ 02:19)

#### Progressive (*-yà* ~  *-yá* )

The progressive is expressed by its own special verb form ending in *‑yá ~ -yà*. The subject has the same /H+=∅/ enclitic as the other imperfective system categories. The subject pronouns therefore have the same H‑toned form in progressive (xx1a) as in present (xx1b), in contrast to their non-high tonal forms in perfective (xx1c).

(xx1) a. *má=∅* / *á=∅ sìbí bègè-yá*

1Sg / 3SgHum meat cut-Prog

‘I am/He-or-she is cutting (the) meat.’ (< *sìbì* )

b. *má=∅* / *á=∅ sìbí bègà*

1Sg / 3SgHum meat cutIpfv

‘I cut/He-or-she cuts the meat (regularly).’

c. *mā* / *à sìbí bègé(è)*

1Sg / 3SgHum meat cut.Pfv

‘I/He-or-she cut-Past the meat.’

Intransitive progressives have only a single tonal form, since progressive verbs directly follow the subject with its imperfective clitic. These intransitive progressives begin in L‑tone. If there is no lexical tone contour on the stem itself, this continues to the suffix, which is H‑toned. If there is a lexical LH contour on the stem, it is respected, and the tone falls to L on the suffix. The vocalism of the progressive is closely related to that of the perfective, except that ‑ATR vowels shift to +ATR. Examples showing intransitive progressives and their morphophonological relationship to the +3Sg perfective and to the (invariant) imperfective are in (xx2).

(xx2) Intransitive progressives compared to imperfective & perfective

Prog Pfv +3Sg Ipfv gloss

a. *ɔ* to *o* before *-ya* suffix

*bò-yá* *bɔ̀ɛ́ bɔ́ɔ́* ‘exit’

*sò-yá* *sɔ̀ɛ́ sɔ́ɔ́* ‘enter’

b. *a* to *e* before *-ya* suffix

*sè-yá* *sɛ̌ sáá* ‘come’

*kpèⁿ-yá* *kpɛ̌ⁿ kpááⁿ* ‘die’

*dè-yá* *dɛ̌ dɛ̀ɛ̀* ‘become hot’

*ɲìné-yà ɲìnɛ́ ɲìnâ* ‘forget’ (Verb X)

*tèʔè-yá* *tɛ̀ʔɛ́ táʔá* ‘go’

*jìímè-yá jìímɛ̄ jìímàà* ‘weep’

c. *i* or *u* before *-ya* suffix

*imperfective ends in a*

*sìdánī-yà* *sìdánī sìdánà* ‘ascend’

*jàʔánī-yà* *jàʔánī jàʔánà* ‘descend’

*imperfective ends in ɛ*

*mììlí-yà* *mììlíī míílíà* ‘think’

*fìdí-yà* *fìdíì fìdɛ́ɛ̀* ‘run’

*imperfective ends in ɔ*

*bùlù-yá* *bùlíì búlɔ́* ‘go back’

Transitive progressives, like other transitive verbs, are subject to tonal modifications based on whether the immediately preceding object is +3Sg or -3Sg as explained in §3.xxx and elsewhere.

(xx3) a. *má=∅ ꜜná bàʔrì-yá*

1Sg=∅ 3SgHumObj hit-Prog

‘I am hitting him/her.’

b. *má=∅ ꜜnáàⁿ báʔrí-yà*

1Sg=∅ 3PlHumObj hit-Prog

‘I am hitting them.’

Some further examples of the forms of transitive progressives are in (xx4).

(xx4) progressive +3Sg progressive -3Sg Ipfv +3Sg gloss

*bè-yá bé-yà* *bàà* ‘put down’

*dè-yá dé-yà* *dɛ̀ɛ̀* ‘heat (sth)’

*dòⁿ-yá dóⁿ-yà* *dɔ̌ɔ̀ⁿ* ‘step on’

*jǒⁿ-yà jóⁿ-yà* *jɔ̌ɔ̀ⁿ* ‘rob’

*bàʔrì-yá báʔrí-yá* *bàʔrà* ‘hit’

*sòʔò-yá sóʔó-yà* *sɔ̀ʔɔ̀* ‘catch’

*mòmó-yà mómó-yà mɔ̀mɔ́ɔ̀* ‘carry on back’

Intransitive positive and negative conjugations are in (xx5).

(xx5) subject ‘am going out’ ‘am not going out’

a. 1Sg *má=∅ ꜜbó-yá má=∅ ꜜbó-yá=rɛ̄ʔ*

2Sg *wó=∅ ꜜbó-yá wó=∅ ꜜbó-yá=rɛ̄ʔ*

2Pl *ēéⁿ=∅ ꜜbó-yá éⁿ=∅ ꜜbó-yá=rɛ̄ʔ*

b. 1Pl *mùʔúⁿ=∅ ꜜbó-yá mùʔúⁿ=∅ ꜜbó-yá=rɛ̄ʔ*

3SgHum *á=∅ ꜜbó-yá á=∅ ꜜbó-yá=rɛ̄ʔ*

3SgNonh *é=∅ ꜜbó-yá é=∅ ꜜbó-yá=rɛ̄ʔ* 3PlHum *àáⁿ=∅ ꜜbó-yá àáⁿ=∅ ꜜbó-yá=rɛ̄ʔ*

3PlNonh *èéⁿ=∅ ꜜbó-yá èéⁿ=∅ ꜜbó-yá=rɛ̄ʔ*

c. ‘the child’ *dí-rá=∅ ꜜbó-yá dí-rá=∅ ꜜbó-yá=rɛ̄ʔ*

‘the children’ *dí-rá-āⁿ=∅ bó-yá dí-rá-àⁿ bó-yá=rɛ̄ʔ*

## *ciɛ̀* ~ *ciɛ́* ‘was/were’ and past morpheme *kɛ́*

Either the verb *ciɛ̀* ~ *ciɛ́* ‘was/were’, replacing the imperfective or ‘be’ subject enclitic /H+=∅/, or clause-final past morpheme *kɛ́*, shifts the temporal perspective from the moment of speaking to some point or interval in the past. These are especially useful with stative predicates that do not mark aspect (perfective versus imperfective).

Any construction anchored on present time (present, future, or progressive) with imperfective subject clitic /H+=∅/ or the homophonous locational ‘be’ clitic has a past-time counterpart with *cìɛ̀* ~ *cíɛ́* ‘was/were’ replacing this clitic. *cìɛ̀* ~ *cíɛ́* therefore occurs in immediate post-subject position. The tone alternations depend on the preceding NP in the usual ‑3Sg versus +3Sg split. By contrast, past morpheme *kɛ́* is clause-final (in the past perfect, §10.4.xxx below) and has no relationship to subject enclitics.

The verb ‘leave, abandon’ (imperfective *kàà* ) has perfective *kɛ̀* ~ *kɛ́*, which is suggestively similar to the clause-final past morpheme *kɛ́*. Similarly, the verb ‘arrive’ has perfective *cìɛ́* ~ *cíɛ́* and imperfective *cíɛ́*, and might be connected historically to the ‘was/were’ verb.

### Past-time form of copula construction

(xx1a‑c) are past-time versions of clauses with final copula. There is no imperfective or ‘be’ enclitic on the subject in either positive or negative forms.

(xx1) a. *dáálá è cìɛ̀ jíⁿ kùⁿ*

previously 3SgNonh **be.Past** market Cop

‘It was a market previously.’

b. *mùʔùⁿ cíɛ́ ɲáā-nà-àⁿ kúⁿ*

1Pl **be.Past** woman-Pl Cop

‘We were women.’

c. *mùʔùⁿ cíɛ́ ɲáā-nà-àⁿ kúⁿ=nēʔ*

1Pl **be.Past** woman-Pl Cop

‘We were not women.’

(xx1a) corresponds to present-time *jí-ꜜnɛ́=ɛ̀* ‘it’s a market’ with identificational ‘it is’ enclitic and covert “subject” (§11.2.1.1), while (xx1b) corresponds to *mùʔúⁿ=∅ ɲáā‑nà‑àⁿ* *kúⁿ* ‘we are women’ (§11.2.2.1). In other words, the present-time opposition between the ‘it is’ construction and the copula construction is neutralized in the past-time forms. There is no imperfective enclitic (H‑tone) on the subject in (xx1a‑b).

### Past-time form of locational ‘be (somewhere)’

(xx1a‑c) illustrate past time forms of the locational ‘be (somewhere)’ construction. The ‘be’ enclitic, whether *=ń* or just a floating H‑tone, is absent from the subject.

The ‘was/were’ verb *cìɛ̀* ~ *cíɛ́* is subject to ATR modifications. *cíéé* in (xx1a) is due to the following *nàà* ‘here’. There is also some tendency for *ɛ* to shift to *e* in a +ATR environment (xx1d).

(xx1) a. *mā* / *bákàrì* / *à cíéé nàà*

1Sg / B / 3Sg **be.Past** here

‘I / Bakari /He-or-she was here.’

b. *tàgá cìɛ̀ [mùú dù]*

sheep **be.Past** [field in]

‘The sheep-Sg was in the field.’

c. *tàgà-rá-àⁿ cíɛ́ [mùú dù]*

sheep-Nom-Pl **be.Past** [field in]

‘The sheep-Pl were in the field.’

d. *yíʔé cìè [yí dù]*

fish **be.Past** [water in]

‘The fish-Sg was in the water.’

Negative past-time forms are in (xx2a‑b).

(xx2) a. *à cìɛ̀ [mùú dù]=rēʔ*

3Sg **be.Past** [field Loc]=Neg

‘He/She was not in the field.’

b. *bákàrì cíɛ́ [mùú dù]=rēʔ*

B **be.Past** [field Loc]=Neg

‘Bakari was not in the field.’

### Past-time forms of ‘know’ and ‘want’

With ‘know’, cf. §11.2.6.xxx, the past morpheme *kɛ́* follows the predicate. The perfective form *sɔ̀* ‘know’, which occurs in present-time contexts, becomes +ATR *sòò* before *kɛ́*.

(xx1) a. *mā* / *à ní sòò kɛ́*

1Sg/3SgHum 3SgNonhObj know.Pfv **Past**

‘I/He-or-she knew it.’

b. *mā* / *à ní sòò kɛ́=rɛ̄ʔ*

1Sg/3SgHum 3SgNonhObj know **Past**

‘I/He-or-she didn’t know it.’

The past-time version of ‘want’ is illustrated in (xx2). *cìɛ̀* ~ *cíɛ́* ‘was/were’ replaces the imperfective enclitic that occurs on the subject in the present-time version (§11.2.6.xxx).

(xx2) a. *mùʔùⁿ cíɛ́ yí kà*

1Pl **be.Past** water want

‘We wanted some water.’

b. *mùʔùⁿ cíɛ́ yí kà=rɛ̄ʔ*

1Pl **be**.**Past** water want

‘We didn’t want water.’

### Past-time forms of possessive predicates

Past-time forms are in (xx4). The ‘was/were’ form of ‘be’ is used.

(xx4) a. *tàgá cìɛ̀ [mā ká]*

sheep **be.Past** [1Sg Poss]

‘I had a sheep.’

b. *wár̄ cìɛ̀ [mà ká]=rɛ̄ʔ*

money **be.Past** [1Sg Poss]=Neg

‘I didn’t have any money.’

The past-time form of the ‘Y belong to X’ construction (§11.5.3) is illustrated in (xx2a‑b).

(xx2) a. *[sàà mí] cìɛ̀ [bákàrí mì] kùⁿ*

[house Dem] **be.Past** [B Poss] be

‘This/That house was Bakari’s.’

b. *[sàà mí] cìɛ̀ [bákàrí mì] kùⁿ=nēʔ*

[house Dem] **be.Past** [B Poss] be=Neg

‘This/That house was not Bakari’s.’

### Past-time forms of comparatives

Past morpheme *kɛ́* follows the main verb and precedes *bèlé* ‘pass’ which specifies an asymmetrical comparison (xx1). This construction may be used in any asymmetrical comparative clause type. For present-time counterparts see §12.1.

(xx1) a. *[mā mɔ̌] sɔ̀ɔ̀ⁿbɛ̀ kɛ́ bèlé [wō mì-nà]*

[1Sg rope] become.long.Pfv **Past** pass.Pfv [2Sg Poss-Nom]

‘My rope was longer than yours-Sg.’

b. *à fɔ̀ⁿ kɛ́ [(blé) mā-n]*

3SgHum better **Past** [(pass.Pfv) 1Sg-Indep]

‘He/She was better than me.’

c. *à fɔ̀ⁿ kɛ́ [(blé) mā-n]=nēʔ*

3SgHum better **Past** [(pass) 1Sg-Indep]=Neg

‘He/She was not better than me.’

### Past habitual (positive and negative)

‘Was/were’ replacing ‘be’ turns a present form (§10.3.2.1‑2) into a past habitual, denoting a recurrent or stable situation that does not extend into the here-and-now of the speech event. ‘Was/were’ precedes the simple imperfective verb, effectively replacing the imperfective subject enclitic /H+=∅/.

(xx1) a. *bákàrì cíɛ́ bàà*

B **be.Past** fall.Ipfv

‘Bakari used to fall (frequently).’

b. *bákàrì cíɛ́ bàà=rɛ̄ʔ*

B **be.Past** fall.Ipfv

‘Bakari didn’t use to fall (frequently).’

### Future-in-past

Adding ‘was/were’ to a simple future construction (with future particle *sà* ) describes an eventuality that was, or seemed likely to be, imminent at the reference time in the past. ‘Was/were’ replaces imperfective subject enclitic /H+=∅/ and takes the form *cí* before *sà*.

(xx1) a. *bákàrì cí sà bàà*

B **be.Past** Fut fall.Ipfv

‘Bakari was going to/was about to fall.’

b. *bákàrì cí sà bàà=rɛ̄ʔ*

B **be.Past** Fut fall.Ipfv=Neg

‘Bakari wasn’t going to/was about to fall.’

### Past progressive (positive and negative)

Addition of ‘was/were’ to a progressive clause adopts the perspective of a specific point in the past.

(xx1) a. *mā cíɛ́ sìbí bègè-yá*

1Sg **be.Past** meat cut-Prog

‘I was cutting (the) meat.’ (< *sìbì* )

b*. mā cíɛ́ sìbí bègè-yá=rɛ̄ʔ*

1Sg **be.Past** meat cut-Prog=Neg

‘I wasn’t cutting (the) meat.’

### Past perfect (positive and negative)

By shifting the temporal reference point into the past, a simple perfective verb (e.g. ‘I ate’) becomes a past perfect (‘I had [already] eaten’). Here the past morpheme follows the inflected verb. Monosyllabic perfectives like *sɛ̀ɛ́* ~ *sɛ́ɛ́* ‘came’ and *bɔ̀ɛ́* ~ *bɔ́ɛ́* ‘exited’ have long +ATR vocalism before *kɛ́*.

(xx1) a. *mā sìbí dɔ̀nì kɛ́*

1Sg meat eat.meat.Pfv **Past**

‘I had eaten (the) meat.’ (*sìbì* , *dɔ̀ní*)

b. *mā sìbí dɔ̀nì kɛ́=rɛ̄ʔ*

1Sg meat eat.meat.Pfv **Past**=Neg

‘I hadn’t eaten (the) meat.’

c. *mā séé* / *bóó ꜜkɛ́*

1Sg come./exit.Pfv Past

‘I had come/gone out.’

### Past experiential perfect (positive and negative)

‘Was/were’ may be added to an experiential perfect clause (§10.3.1.2). The sense is that the event in question had occurred at some point before the reference time in the past. The imperfective subject enclitic /H+=∅/ is replaced by ‘was/were’, which therefore immediately follows the subject (xx1a).

A negative counterpart was somewhat problematic. My assistant was somewhat uncomfortable with the expected parallel negative form (xx1b), and suggested an alternative phrasing including a perfective form of ‘stay, remain’ (xx1c), see §15.1.1.2. A literal gloss would be something like “I had remained [(I) not seeing an elephant].”

(xx1) a. *mā cíɛ́ gbǎⁿ jìì dú*

1Sg **be.Past** elephant see.Pfv ExpPf

‘I had (once) seen an elephant.’

b. *mā cíɛ́ gbǎⁿ jìì dú=rēʔ*

1Sg **be.Past** elephant see.Pfv ExpPf

‘I had never seen an elephant.’

c. *mā tóó cíé [ŋ́ gbǎⁿ jìɛ̀=rɛ̄ʔ]*

1Sg stay.Pfv **be.Past** [1Sg elephant see.Pfv=Neg]

‘I had never seen an elephant.’

### Past stative (absent)

My assistant did not approve of combinations of stative forms of stance verbs (ending in *ní* ) with the past morpheme. He preferred a past perfect based on the perfective form of the active verb, with the resulting state implied rather than stated.

(xx1) *mìʔì-ná-àⁿ séʔé ꜜkɛ́*

person-Nom-Pl sit.Pfv **Past**

‘The people had sat down (=were seated).’

## Imperatives and Hortatives

### Commands

#### Imperatives and prohibitives

Each verb has an imperative form. It is generally closely related to the imperfective, but shorter at the end, suggesting a truncation process (subtractive morphology), see §3.xxx for discussion. The negatic enclitic *=rĒʔ* may be added to form the prohibitive. As in other negative clauses, if there is a postverbal constituent such as a PP, the verb and the (clause-final) negative enclitic are separated.

The positive singular-addressee imperative consists simply of the verb, with no overt subject pronominal (xx1a). The positive plural-addressee imperative has the regular 2Pl subject *ēēⁿ*, which commonly triggers M‑Spreading into the verb (xx1b). In the prohibitive, in addition to the clause-final negative enclitic, there is a post-subject inflectional morpheme *bí* (xx1c). This morpheme may be preceded by 2Pl *ēēⁿ* to produce a plural-addressee prohibitive (xx1d).

(xx1) a. *fìdí* ‘run-2Sg!’

b. *ēēⁿ fīdī* ‘run-2Pl!’

c. *bí fìdì=rēʔ* ‘don’t-2Sg run!’

d. *ēēⁿ bí fìdì=rēʔ* ‘don’t-2Pl run!’

Examples of intransitive imperatives and prohibitives are in (xx2). Many singular imperatives are LH‑toned, flattening to L‑toned before the negative enclitic. The imperfective is given for comparison. H‑toned imperfectives correspond to M‑toned imperatives.

(xx2) Imperatives

imperative prohibitive Ipfv gloss

Sg Pl Sg Pl

a. imperfective H‑toned

*sɔ̄ ēēⁿ sɔ̄ bí sɔ̄=rɛ̄ʔ ēēⁿ bí sɔ̄=rɛ̄ʔ sɔ́ɔ́* ‘enter’

*bɔ̄ ēēⁿ bɔ̄ bí bɔ̄=rɛ̄ʔ ēēⁿ bí bɔ̄=rɛ̄ʔ bɔ́ɔ́* ‘exit’

*sā ēēⁿ sā bí sā=rɛ̄ʔ ēēⁿ bí sā=rɛ̄ʔ sáá* ‘come’

*kpāⁿ ēēⁿ kpāⁿ bí kpāⁿ=nɛ̄ʔ ēēⁿ bí kpāⁿ=nɛ̄ʔ kpááⁿ* ‘die’

*táʔá ēēⁿ tāʔā bí tāʔā=rɛ̄ʔ ēēⁿ bí tāʔā=rɛ̄ʔ táʔá* ‘go’

b. imperfective L‑toned

*bà ēēⁿ bā bí bà=rɛ̄ʔ ēēⁿ bí bà=rɛ̄ʔ bàà* ‘fall’

*dàʔà ēēⁿ dāʔā bí dàʔà=rɛ̄ʔ ēēⁿ bí dàʔà=rɛ̄ʔ dàʔà* ‘escape’

c. imperfective contour-toned

*fìdí ēēⁿ fīdī bí fìdì=rēʔ ēēⁿ bí fìdì=rēʔ fìdɛ́ɛ̀* ‘run’

*mīīlì ēēⁿ mīīlì bí mīīlī=rēʔ ēēⁿ bí mīīlī=rēʔ míílí-yà* ‘think’

*jìímà ēēⁿ jīīmà bí jìímà=nɛ̄ʔ ēēⁿ bí jìímà=nɛ̄ʔ jìímàà* ‘weep’

*sìdá ēēⁿ sīdā bí sìdà=rɛ̄ʔ ēēⁿ bí sìdà=rɛ̄ʔ sìdánà* ‘ascend’

*jàʔáⁿ ēēⁿ jāʔāⁿ bí jàʔà=nɛ̄ʔ ēēⁿ bí jàʔà=nɛ̄ʔ jàʔánà* ‘descend’

*sā* ‘come!’ becomes *sēē* in the combination *sēē nàà* ‘come here’. *ē wǎ* ‘go!’ likewise becomes *ē wèé* in the combination *ē wèé dè* ‘go there (definite)!’.

In all transitive imperatives, the tonal form of the verb is subject to the usual variation, beginning with L‑tone after +3Sg object and with H‑tone after -3Sg object. (xx3) shows the +3Sg forms.

(xx3) a. *è bàʔrí*

3SgNonh hit.Imprt

‘Hit-2Sg it!’

b. *ēéⁿ ∅ bàʔrí*

*ēēⁿ ní bàʔrí*

2Pl 3SgNonh hit.Imprt

‘Hit-2Pl it!’ (two variants)

c. *ɛ̄ɛ́ⁿ ∅ bàʔrí*

*ēēⁿ ná bàʔrí*

2Pl 3SgHum hit.Imprt

‘Hit-2Pl him/her!’ (two variants)

d. *bí=í bàʔr̀=rēʔ*

Proh=3SgNonh hit.Imprt=Neg

‘Don’t-2Sg hit it!’ (variant *bàʔl=lēʔ* )

e. *ēēⁿ bí=í bàʔr̀=rēʔ*

2Pl Proh=3SgNonh hit.Imprt=Neg

‘Don’t-2Pl hit it!’

(xx4) shows the -3Sg forms, here nonhuman 3Pl.

(xx4) a. *èèⁿ báʔrí*

3PlNonh hit.Imprt

‘Hit-2Sg them (nonhuman)!’

b. *ēēⁿ= è(è)ⁿ báʔrí*

*ēēⁿ níìⁿ báʔrí*

2Pl 3PlNonh hit.Imprt

‘Hit-2Pl them (nonhuman)!’ (two variants)

c. *ɛ̄ɛ̄ⁿ= ɛ̀(ɛ̀)ⁿ báʔrí*

*ēēⁿ náàⁿ báʔrí*

2Pl 3PlHum hit.Imprt

‘Hit-2Pl them (nonhuman)!’ (two variants)

d. *bí=ì(ì)ⁿ báʔŕ=rēʔ*

Proh=3PhNonh hit.Imprt=Neg

‘Don’t-2Sg hit them (nonhuman)!’

e. *ēēⁿ bí=ì(ì)ⁿ báʔŕ=rēʔ*

2Pl Proh=3SgNonh *hit.Imprt=Neg*

‘Don’t-2Pl hit them (nonhuman)!’

Additional transitive examples are in (xx5). The imperfectives given for comparison are the 3Sg forms (beginning with L-tone). The prohibitive inflectional morpheme *bí* and objects are omitted.

(xx5) imperative prohibitive Ipfv gloss

+3Sg -3Sg +3Sg -3Sg

*dɛ̌ dɛ́ dɛ̀=rɛ̄ʔ dɛ́=rɛ̄ʔ dɛ̀ɛ̀* ‘heat’

*jǐ jí jì=rēʔ jí=rēʔ jyɛ̀* ‘see’

*bǎ bá bà=rɛ̄ʔ bá=rɛ̄ʔ bàà* ‘put down’

*kpǎⁿ kpáⁿ kpà=nɛ̄ʔ kpá=nɛ̄ʔ kpààⁿ* ‘kill’

*bɔ̌ bɔ́ bɔ̀=rɛ̄ʔ bɔ́=rɛ̄ʔ bɔ̀ɔ̀* ‘remove’

*bàʔrí báʔrí bàʔr̀=rēʔ báʔŕ=rēʔ bàʔrà* ‘hit’

*fɛ̀ɛ́ⁿ fɛ́ɛ́ⁿ fɛ̀ɛ̀=nɛ̄ʔ fɛ́ɛ́=nɛ̄ʔ fɛ̀ɛ̀nàà* ‘untie’

*dùtɔ́ʔɔ́ⁿ dútɔ́ʔɔ́ⁿ dùtɔ́ʔɔ́=nɛ̄ʔ dútɔ́ʔɔ́=nɛ̄ʔ dùtɔ́ʔɔ́nò* ‘shut’

*fìrìkí fíríkí fìrìkì=rē? fíríkí=rēʔ fìrìkíyà* ‘hobble (animal)

The few verbs that have +ATR perfectives (at least prepausally) but ‑ATR imperfectives are +ATR in the imperative. In (xx6), both the imperfective and perfective are 3Sg forms.

(xx6) imperative prohibitive Pfv Ipfv gloss

+3Sg -3Sg +3Sg -3Sg

*wě wé wè=rēʔ wé=rēʔ wěē wɛ̀ɛ̀* ‘bathe (sb)’

*tě té tè=rēʔ té=rēʔ těē tɛ̀ɛ̀* ‘shatter (sth)’

*yě yé yè=rēʔ yé=rēʔ yěē yɛ̀ɛ̂* ‘send on mission’

*dèé déé dèè=rēʔ déé=rēʔ dèéī dɛ̀ɛ̂* ‘open’

*bègé bégé bègè=rēʔ bégé=rēʔ bègé bɛ̀gɛ̀* ‘cut’

#### Imperative verb after future *sà*

Although imperatives normally occur without future tense marking, there is a textual passage where this combination occurs.

(xx1) *àáⁿ=∅ sɔ̀rɔ́= [ɔ̀ⁿ sí=ìⁿ yálí]*

3PlHum=Ipfv do.then.Ipfv [3PlHum Fut=3PlNonh take.**Imprt**]

“(She said:) We were then going to take them afterwards.’ (2016\_04 @ 01:23)

### Hortatives

#### Hortative (1Pl plus imperative or quoted imperative)

The hortative has overt 1Pl subject *mùʔùⁿ*. The verb is the quoted imperative for intransitives (hence M‑toned), and the regular imperative for transitives (tone depends on +3Sg versus -3Sg preceding object). There is no distinction between singular and nonsingular addressee.

(xx1) a. *mùʔúⁿ wà*

1Pl go.Imprt

‘Let’s go!’ (pseudo-transitive)

b. *mùʔùⁿ bɔ̄* / *būlū* / *fīdī* / *ɲīnā* / *sīdāⁿ*

1Pl exit(v)/return/run/forget/ascend.Imprt

‘Let’s go out/go back/run/forget/go up!’

c. *mùʔùⁿ kūmɛ̄ɛ̄ kùⁿ*

1Pl meal eat.Imprt

‘Let’s eat (a meal)!’

d. *mùʔùⁿ wùlá bàʔrì*

1Sg dog hit.Imprt

‘Let’s beat the dog!’

#### Hortative negative (1Pl plus *bí* )

The hortative negative has the initial 1Pl subject pronoun, but is otherwise identical to the prohibitive: imperative stem, preverbal particle *bí*, clause-final negative enclitic *=rEʔ*.

(xx1) a. *mùʔùⁿ bí wà=rɛ̄ʔ* / *bà=rɛ̄ʔ*

1Pl Proh go.Imprt=Neg / fall.Imprt=Neg

‘Let’s not go!’

b. *mùʔùⁿ bí wùlá bàʔr=lɛ̄ʔ*

1Sg Prof dog hit.Imprt=Neg

‘Let’s not beat the dog!’

### Quoted deontics (imperative and hortative)

#### Quoted imperative

An original imperative may be quoted. The higher quotative verb is *dɛ̀* ~ *dɛ́*. Examples are in (xx1a‑b).

(xx1) a. *zàkíì dɛ́ [mā sā* / *fīdī sísàⁿ]*

Z say.Pfv [1Sg come./run.QuotImprt now]

‘Zaki told me to come/to run now.’

b. *mā dɛ́ [à sā* / *fīdī]*

1Sg say.Pfv [3SgHum come./run.QuotImprt]

‘I told him/her to come/to run.’

c. *mā dɛ́ [ààⁿ sā* / *fīdī]*

1Sg say.Pfv [3PlHum come./run.QuotImprt]

‘I told them to come/to run.’

Forms of intransitive verbs used as quoted imperatives are in (xx2).

(xx2) quoted Imprt imperfective imperative gloss

a. monosyllabic

*imperative M‑toned*

*bɔ̄ bɔ́ɔ́ bɔ̄* ‘exit (v)’

*sā sáá sā* ‘come’

*sɔ̄ sɔ́ɔ́ sɔ̄* ‘enter’

*imperative L‑toned*

*bā bàà bà* ‘fall’

*kā kàà kà* ‘abandon’

b. nonmonosyllabic

*imperative M‑toned*

*tāʔā táʔá tāʔā* ‘go’

*būlū búlɔ́ būlū* ‘return’

*wālī wálà wālī* ‘shout’

*mīīlī míílíyà mīīlī* ‘think’

*imperative LH‑toned*

*fīdī fìdɛ́ɛ̀ fìdí* ‘run’

*sīdā sìdánà sìdáⁿ* ‘ascend’

The quoted imperative is closely related to the regular imperative rather than to the imperfective. This is seen in the final vowel of nonmonosyllabics ‘run’, ‘return’, and ‘shout’, and in the absence of the third syllable *Cà* in ‘ascend’ and ‘think’. However, the quoted imperative differs tonally from the imperfective in some cases (‘fall’, ‘run’, ‘ascend’).

Transitive examples are in (xx3). The imperative and the quoted imperative use the same imperative stems, with their depending on whether the preceding object NP is +3Sg or -3Sg. There is no special quoted imperative verb form for transitives. I will therefore use “QuotImprt” in interlinears only for intransitives.

(xx3) a. *mā dɛ́ [à dí bàʔrì]*

1Sg say.Pfv [3SgHum child hit.Imprt]

‘I told him/her to hit the child.’

b. *mā dɛ́ [à dí-rá-àⁿ báʔrí]*

1Sg say.Pfv [3SgHum child-Nom-Pl hit.Imprt]

‘I told him/her to hit the childred.’

For more on quoted imperative clauses, see §17.1.4.1.

#### Imprecations and blessings

Imprecations and blessings of the type ‘may God VERB X!’ have a structure similar to that of quoted imperatives, but they lack the higher ‘say’ clause. The unusual 2Sg object pronominal *ē* (instead of *wō* ) is typical of such formulae.

(xx1) *álé= ē ɲɛ́ sɔ̀*

God 2Sg good put.in.Imprt

‘May God have you enter (there) in good health!’ (< *álà* )

#### Quoted prohibitive

A quoted prohibitive includes regular prohibitive forms including the prohibitive particle *bí*. A subject pronoun, not present in the regular prohibitive, is added.

(xx1) a. *bí fìdì=rēʔ*

Proh run.Imprt=Neg

‘Don’t-2Sg run!’

*mā dɛ́ [à bí fìdì=rēʔ]*

1Sg say.Pfv [3SgHum Proh run.QuotImprt=Neg

‘I told him/her not to come/not to run.’

#### Quoted hortative

A quoted hortative has the same form as a regular hortative. However, if the original ‘we’ did not include the current speaker or addressee, the subject pronominal category is adjusted from 1Pl to human 3Pl (xx1b).

(xx1) a. *zàkíì dɛ̌ [mùʔúⁿ wà]*

Z say.Pfv [**1Pl** go.Imprt]

‘Zaki said, let’s go!’

b. *zàkíì dɛ̀ [bákàr mà] [àáⁿ wà]*

Z say.Pfv [B on] [**3PlHum** go.Imprt]

‘Zaki said to Bakari, let’s go!’

# Clause and predicate structure

## Clausal constituents

There is no case-marking as such, except that object pronouns have some distinctive forms. Subjects, preverbal objects, and postverbal objects are clearly distinguished by linear position and other properties.

### Subjects

#### Subjects in indicative main clauses

The subject NP (whether noun-headed or pronominal) occurs clause-initially, preceded optionally by setting adverbs like ‘yesterday’ (which may also occur postverbally). Subjects always precede preverbal direct objects. The two are adjacent but always in this linear order in simple perfective transitives (xx1a). Subjects are also immediately followed by imperfective subject enclitic /H+=∅/, realized overtly (if at all) as a final H‑tone on the subject (xx1b). Future particle *sà* immediately follows this imperfective enclitic, preceding a preverbal object if one is present (xx1c).

(xx1) a. *mā yíʔé dɔ̀níī*

**1Sg** fish eat.meat.Pfv

‘I ate a/the fish.’

b. *má=∅ yíʔé dɔ̀nɔ̀*

**1Sg**=Ipfv fish eat.meat.Ipfv

‘I eat fish.’ (< /mā H+=∅ …/)

c. *má=∅ sà yíʔé dɔ̀nɔ̀*

**1Sg**=Ipfv Fut fish eat.meat.Ipfv

‘I will eat a/the fish.’

NPs otherwise ending in the nominal suffix (*‑rà* or variant) omit this suffix in subject function (as in many other functions), except in some combinations with pronominal object clitics.

(xx2) *tàgá bɔ̀ɛ́*

**sheep** exit(v).Pfv

‘A/The sheep-Sg went out.’ (< *tàgà*, suffixed *tàgà-rá* )

Other than this, there is no special morphology for subject NPs or pronouns. For example, subject pronominal proclitics like 1Sg *mā* in (xx1a‑c) above have the same form as corresponding possessor proclitics. Variation in the forms is due to phonological processes, such as Floating-H Docking in (xx1b‑c) above.

The subject of a clause may bind a reflexive object (preverbal or postverbal); see §18.1.2.1.

#### Subjects of imperative and hortative verbs

Imperatives and hortatives have subjects with the same syntactic properties as subjects of indicative clauses. Although singular-addressee imperatives have no overt subject (xx1a), the covert subject may bind a reflexive if the verb is transitive (xx1b).

(xx1) a. *bɔ́*

exit(v).Imprt

‘Go-2Sg out!’

b. *[ē yéʔré] bàʔrì*

[2SgRefl **self**] hit.Imprt

‘Hit-2Sg yourself!’

Hortatives of the first person inclusive type (‘Let’s go!’) have overt 1Pl subjects; see §10.6.2.1.

#### Meteorological and temporal subject-verb collocations

Some meteorological and temporal expressions are subject-verb collocations.

(xx1) a. *kóʔró bɛ̌*

night fall.Pfv

‘Night has fallen.’ = ‘It’s gotten dark out.’

b. *sláá yèlèní*

daytime day.break.Pfv

‘Day has broken.’ = ‘It’s gotten light out.’

c. *káⁿ sɛ̀ɛ́*

rain(n) rain.fall.Pfv

‘It rained.’

d. *káⁿ bàlíī*

rain(n) stand.Pfv

‘The rain has stopped.’

e. *yí-kɔ́ sɔ̀ɛ́*

rainy.season enter.Pfv

‘The rainy season has begun.’

f. *tálá fìdɛ́*

sun regrow.Pfv

‘The sun rose.’

g. *tálá bɛ̌*

sun fall.Pfv

‘The sun set.’

#### Emotional and physiological subject-verb collocations

Some terms for emotions and body functions also involve subject-verb collocations. In (xx1a), *bɔ́ʔɔ̄ⁿ* appears to be a specialized variant, attested only in this collocation, of *búʔūⁿ* ‘liver’.

(xx1) a. *[zàkíì bɔ́ʔɔ̄ⁿ] làʔàní*

[Z **liver**] get.up.Pfv

‘Zaki is angry.’ (lit. “Zaki’s liver has arisen.”)

b. *[zàkíì kɔ́yí] jà= áyà*

[Z **belly**] become.good= 3SgHumObj

‘Zaki is happy.’ (< /jɛ̌ àyà/)

c. *[mā súⁿ] tèé*

[1Sg **nose**] be.shattered.Pfv

‘I have a nosebleed.’

#### Physiological states (‘be hungry’ etc.)

Physiological states of persons are normally expressed with the name of the state (hunger, etc.) as subject, with ‘be’ enclitic (floating H‑tone) and therefore with the nominal suffix. The experiencer follows as a postverbal NP, for example an independent pronoun. The construction is therefore literally “hunger is me.”

(xx1) a. *kòʔò-rá=∅ mā-n̄*

hunger-Nom=be 1Sg-Indep

‘I am hungry.’

b. *mìkál-à=∅ mā-n̄*

thirst-Nom=be 1Sg-Indep

‘I am thirsty.’

c. *fùnɛ́n-ná=∅ mā-n̄*

heat(n)-nom=be 1Sg-Indep

‘I am (=feel) hot.’ (also with *dɔ̀ʔɔ̀rɔ́-rà* for synonym *fùnɛ́n-ná* )

d. *ɲìì-ná=∅ mā-n̄*

sleep(n)-Nom=be 1Sg-Indep

‘I am sleepy.’

With ‘cold (n)’, the favored construction has an explicit verb ‘exit (v), go/come out’ (xx2a). This may be to avoid confusion with a verbless construction that has the conventional sense ‘have fever (malaria)’ (xx2b).

(xx2) a. *kùmāā-ná=∅ ꜜbɔ́ɔ́ mā-n̄*

cold(n)-Nom=Ipfv exit.Ipfv 1Sg-Indep

‘I am (=feel) cold.’

b. *kùmāā-ná=∅ mā-n̄*

cold(n)-Nom=Ipfv 1Sg-Indep

‘I have fever (malaria).’

### Transitives and ditransitives

#### Preverbal objects of OV verbs

Most transitive verbs require a preverbal object (noun-headed or pronominal). The object follows the subject and any subject enclitics or post-subject inflectional particles (such as future *sà* ). As with subjects, possessors, and postpositional complements, a preverbal object NP that would otherwise end in the nominal suffix *‑rà* (or variant) omits it.

(xx2) *mā tàgá bɔ̀ɛ́*

1Sg **sheep** take.out(v).Pfv

‘I took the sheep-Sg out.’ (< *tàgà*, suffixed *tàgà-rá* )

There is some morphological specialization of object pronouns. In particular, third person pronominal objects have forms beginning in *n* that do not occur in other functions. There are also some slightly irregular tonal alternations in pronominal subject-object combinations. The details vary depending on the clause-level inflectional category (perfective, present, future, progressive); see §4.3.1.3 and the various sections in §10.3 for data and discussion.

#### Postverbal objects of VO verbs

Some verbs have an object-like postverbal NP with no postposition, but no preverbal object. They are like intransitive verbs that allow a postverbal complement, and the tones of the verb bring this out.

If the postverbal object is noun-headed, it retains a final nominal suffix. If the postverbal object is pronominal, it has independent pronoun form for 1st/2nd person categories and for 3Pl, and special forms for 3Sg, namely human *àyà* and nonhuman *ìyà* (§4.3.1.5).

The regular OV transitive verb *bàʔrà* ~ *báʔrá* means ‘hit’. The same verb, but with imperfective *báʔrá*, occurs as a VO verb meaning ‘touch’. It has a synonym with the same syntax, namely *màʔà* ‘touch’.

(xx1) a. *má=∅ sà báʔr= àyà*

1Sg=Ipfv Fut touch.Ipfv 3SgObj

‘I will touch him/her.’ (< *báʔrá* )

b. *má=∅ sà báʔrá ꜜdí-rá*

1Sg=Ipfv Fut touch.Ipfv child-Nom

‘I will touch the child.’

c. *ɲáā mɛ̀ʔɛ́ mā-n̄*

woman touch.Pfv 1Sg-Indep

‘The woman touched me.’

Other VO verbs are *sɔ́ɔ́* ‘help (someone)’, *kpáná* in the sense ‘be adjacent to, abut’, and bɛ́lɛ́ in the sense ‘pass, go past (something)’.

(xx2) a. *má=∅ sà sɔ́ɔ́ wō-n*

1Sg=Ipfv Fut help.Ipfv 2Sg-Indep

‘I will help you-Sg.’

b. *mùʔùⁿ kpánī [zàkíì kpá-mà]*

1Pl follow.Pfv [Z following]

‘We pursued Zaki.’

#### Postverbal indirect objects and adverbial nouns

Postverbal NPs also occur in indirect object function with ditransitive ‘give’ and ‘show’. The full clause is of the form [subject-inflection-X-verb-Y], where X is the theme (object given or shown) and Y is the recipient. Y occurs as a postverbal NP without a postposition.

(xx1) *[mā nɔ̀ŋɔ́] tàgá bìlí mā-n̄*

[1Sg friend] sheep give.Pfv **1Sg-Indep**

‘My friend gave me a sheep.’

See §8.1.1 for more examples. Other indirect objects do have PP form (xx2). The common benefactive postposition is *kɛ̀ⁿ* ~ *kɛ́ⁿ* (§8.1.3(.

(xx2) *má=∅ sà sáá [téé dɛ̀] [wō kɛ̄ⁿ]*

1Sg=Ipfv Fut come.Ipfv [tea with] [2Sg **for**]

‘I will bring you-Sg some tea.’

#### Ditransitives

Ditransitive verbs ‘give’ and ‘show’ combine the characteristics of OV and VO transitives. The preverbal object denotes the theme (entity transferred or shown). The postverbal object, with no postposition or other case-marking, denotes the recipient. If the recipient is a pronoun it takes independent (i.e. prepausal) form.

(xx1) a. *à tàgá blé / dùdɔ̀lí mā-n*

3SgHum sheep give.Pfv/show.Pfv 1Sg-Indep

‘He/She gave/showed me a sheep.’

b. *zàkíì dɛ̀ [wō tàgá bl= ɛ́-wò-ǹ]*

Z say.Pfv [2Sg sheep give.Pfv Hum-Logo-Indep]

‘Zakix said that you-Sg gave a sheep to himx.’ (< /bìlé à-wò-ǹ/)

#### Verb-PP collocations

Some postpositions form what amount to collocations with verbs. One important combination is ‘come’ or ‘go’ plus a PP with instrumental-comitative *dɛ̀* ~ *dɛ́* ‘with’, meaning ‘bring’ or ‘convey, deliver, take (sth/sb, there)’. Either of the two stems for ‘go’, intransitive *táʔá* or pseudo-transitive *wàá*, may be used in this construction. Examples in (xx1a‑c) used sìbì ‘meat’ as the theme (transferred entity).

(xx1) a. *sā [sìbí dɛ̀]*

come.Imprt [meat with]

‘Bring-2Sg the meat!’

b. *è wà [sìbí dɛ̀] bá*

3SgNonh go.Imprt [meat with] over.there

‘Take-2Sg the meat over there!’

c. *tāʔā [sìbí dɛ̀] bá*

go.Imprt [meat with] over.there

‘Take-2Sg the meat over there!’

‘Hold’ is another sense that requires this postposition (xx2a). The ‘with’ postposition is required with ‘add’ (xx2b). In the sense ‘pursue (someone)’, *kpáná* requires a PP with purposive *kpá-mà* (xx2c).

(xx2) a. *bī [gbāá dɛ̀]*

hold.Imprt [stick with]

‘Hold-2Sg (onto) the stick!’

b. *à dò-sɛ́ [sùkár̄ mà]*

3SgHum add.Pfv [sugar with]

‘He/She added some sugar.’

c. *mùʔùⁿ kpánī [zàkíì kpá-mà]*

1Pl follow.Pfv [Z Purp]

‘We pursued Zaki.’

#### Verbs used with onomatopoeias

The verb *màʔà* (elsewhere ‘touch’) may occur preceding an imitation of a sound, cf. English *it went “blurp!”* (xx1a). An alternative is to combine *cìɛ̀* ~ *cíɛ́* ‘say, utter’ with *tɔ̀ʔɔ̀* ‘say (something)’, flanking the imitation of the sound.

(xx1) a. *mómi᷆l-là=∅ mèʔè-yá “* [sound] *”*

vehicle-Nom=Ipfv make.sound-Prog

‘The car is going “[sound]” ’

b. *mómílī cìɛ̀ “* [sound] *” tɔ̀ʔɔ̀*

vehicle say.Pfv say.Adjn

‘The car went “[sound]” ’

#### Lexicalized object-verb combinations

As in other languages there are many object-verb collocations.

In (xx1a‑b), the noun *wéé* (variants *wèè* after 3Sg NP/pronoun, *wēē* after M‑toned pronominal) combines with verb *kéē* (perfective) or *kéà* (imperfective) to mean ‘be healthy, be cured, be feeling better (recovering from illness/injury). Its negation is the normal way to say ‘be sick’. Neither noun *wéé* nor verb *kéē* is attested elsewhere.

(xx1) a. *à sà wéé kéà*

3SgHum Fut health be.healthy.Pfv

‘He/She is healthy; he/she has recovered (from illness/injury).’

b. *à wèè kéé=rēʔ*

3SgHum health be.healthy.Pfv=Neg

‘He/She is sick (not healthy).’

Some verbs combine with many objects in ways reminiscent of English *get*, *pick*, *take*, and the like. The verb *bàà* (imperfective) means ‘fall’ as intransitive, and its mos straightforward sense as transitive is ‘put down’ and related senses (‘knock down’, ‘lay out [mat]’, ‘[sun] set’). It combines naturally enough with *yálá* ‘egg’ to form *yálá bàà* ‘lay(s) egg’. However, it also combines with a range of other objects in more abstract senses.

(xx2) collocation glos noun

*fɔ̌ⁿ bàà* ‘have fun, play (v)’ *fɔ̀ⁿ* ‘fun (n)’

*ɲìí bàà* ‘sleep (v)’, also ‘freeze’ *ɲìì* ‘sleep (n)’

*kpáʔā bàà* ‘shout (v), cry out’ *kpáʔā* ‘shout (n)’

*gàáⁿ bàà* ‘wage war, fight (v)’ *gààⁿ* ‘combat (n)’

*nùú bàà* ‘draw a line’ *nùù* ‘tracks’

*dí bàà* ‘(plant) bear ripe fruit’ *dí* ‘child’

*dàà-núúlī bàà* ‘spit without hawking’ *dàà-núúlī* ‘saliva’

*símí bàà* ‘breathe’ *símí* ‘breath’

*òòlú bàà* ‘ululate, cry for joy’ *òòlú* ‘women’s ululation’

*àlàmàń bàà* ‘assess a fine’ *àlàmàń* ‘fine (n)’

The interansitive verb *bɔ́ɔ́* ‘exit, go out, leave’ has a transitive counterpart *bɔ̀ɔ̀* ~ *bɔ́ɔ́* ‘take out, remove’, with extended senses ‘take off, doff (a garment)’ and ‘pick (any fruit)’. It also occurs in a range of specific collocations.

(xx3) collocation glos noun

*kōlōkō bɔ̀ɔ̀* ‘cough (v)’ *kōlōkō* ‘cough (n)’

*káā bɔ̀ɔ̀* ‘hawk and spit’ *káā* ‘spittle’

*kɔ́ⁿ bɔ̀ɔ̀* ‘collect honey from apiary’ *kɔ́ⁿ* ‘honey’

*táʔálí bɔ̀ɔ̀* ‘walk’ *táʔálí*  ‘walking (n)’

Another versatile verb that occurs in multiple contexts is *sàà* (imperfective), distinct from ‘come’ (imperfective *sáá* ). As intransitive, *sàà* it combines with subject *káⁿ* ‘rain (n)’ to mean ‘rain (v)’, as in *káⁿ sɛ̀ɛ́* ‘it rained’. As reflexive verb it means ‘lie down’, as in *mā nāāⁿ sɛ́ɛ́* ‘I lay down’. As a transitive verb its most general sense is ‘build’, but it can also mean ‘set out (garment) to dry in sun’. It also has the transitive collocations in (xx4).

(xx4) *sígí sàà* ‘sing (a song)’ *sígí* ‘song’

*cɛ́ⁿ sàà* ‘tell a story’ *cɛ́ⁿ* ‘tale’

#### Cognate nominals

Jalkunan does not make extensive use of cognate nominals as objects of verbs, e.g. ‘sing a song’, ‘run a run’, etc. One possible case is bó, in the combination bó bàà ‘fall’. The verb bàà has a range of senses including ‘put down’ and intransitive ‘be put (somewhere)’. Addition of bó clarifies the sense.

## ‘Be’, ‘become’, ‘have’, and other statives and inchoatives

### ‘It is’ clitics

#### Identificational ‘it is X’ (*=ɛ̀*, *=ɛ̄*, *=è*, *=ē*, *=ī* )

The ‘it is’ enclitic occurs in clauses of the simple type ‘it is X’, where ‘it’ denotes a referent established by discourse or physical context and X provides further identification of this referent.

The examples given below suggest that the ‘it is X’ enclitic, consisting of a front vowel with M‑ or L‑tone, is added after the locational ‘be’ subject enclitic /H+=∅/, which consists only of a floating H‑tone. Subject pronouns take independent form, e.g. 1Sg *mā‑n̄(ū)*, and in the case of third person pronouns they take independent focal form. The *‑n̄(ū)* independent pronominal suffix combines with the ‘it is X’ enclitic as phonetic [māníī], transcribed *mā-ní=∅=ī* and analysed as /mā-nū=H=ī/. Likewise, nominal subjects have the nominal suffix (*‑rà* or variant) where morphologically possible (i.e. with common nouns but not personal names).

The ‘it is X’ enclitic itself takes the form *=ī* after a high vowel (/ū=∅=ī/ in pronouns contracts as *í=∅=ī* (xx1a,d,e).

(xx1) a. *mā-ní=∅=ī*

1Sg-Indep=be=it.is

‘It’s me.’

b. *bákàrí=∅=ī*

B=be=it.is

‘It’s Bakari.’ (< *bákàrì* )

c. *àmàdú=∅=ì*

A=be=it.is

‘It’s Amadou.’ (*ámádù* )

d. *à-wò-ní=∅=ì*

Hum-3SgFoc-Indep=be=it.is

‘It’s him/her.’

e. *à-mǎā-ní=∅=ì*

Hum-3SPlFoc-Indep=be=it.is

‘It’s them (human).’

If the preceding stem is a noun that cannot take nominal suffix (as with personal names), if it ends in a mid-height or low vowel, the ‘it is X’ enclitic is *=ē* ~ *=ɛ̄*. The choice between the two variants depends on the ATR quality of the stem (xx2a). Recall that a is ‑ATR. It usually combines with the enclitic as *ɛ́=∅=ɛ̀* (xx2b).

(xx2) a. *kóló=∅=ē*

K=be=it.is

‘It’s Kolo (personal name).’

b. *wámàrɛ́=∅=ɛ̄*

W=be=it.is

‘It’s Wamara (personal name).’ (*wámàrà* )

If X is a common noun, as is often the case, the clitic follows the nominal suffix whether the noun is singular or plural. The result for singular nouns is always *‑rɛ́=∅=ɛ̀* or (if the stem is nasal) *‑nɛ́=∅=ɛ̀*, in either case with final L‑tone (xx2a‑c). In (xx2c) the floating L‑tone, audible in suffixed *gí‑nà*, is realized as downstep. Corresponding plurals have *‑à-ní=∅=ī* (from *-à-nū* ) with final M‑tone (xx2d).

(xx3) a. *tàgà-rɛ́=∅=ɛ̀*

sheep-Nom=be=it.is

‘It’s a sheep.’ (< *tàgà-rá* )

b. *ɲáā-nɛ́=∅=ɛ̀*

woman-Nom=be=it.is

‘It’s/She’s a woman.’ (< *ɲáā-nà* )

c. *jí-ꜜnɛ́=∅=ɛ̀*

market-Nom=be=it.is

‘It’s a/the market.’ (< *jí-nà* )

d. *tàgà-rá-à-ní=∅=ī*

sheep-Nom-Pl-Nom=be=it.is

‘It’s/They’re sheep-Pl.’

This construction should be conducive semantically to specific indefinite *dò* (§6.5.2). However, I have observed this combination, which is realized as *-dòé=∅=ē*, only with the semantically light nouns *sɛ́ⁿ* ‘thing’ (suffixed *sɛ́-nà* ), where it seems to be obligatory, and *mɛ̀ʔɛ̀ⁿ* and variants ‘person’ (suffixed *mɛ̀ʔɛ̀-ná* ), where it is optional.

(xx3) a. *sɛ́ⁿ-dòé=∅=ē*

thing-other=be=it.is

‘It’s something.’ (#*sɛ́‑ꜜnɛ́=ɛ̀* rejected by assistant)

b. *mɛ̀ʔɛ́ⁿ-dòé=∅=ē*

person-other=be=it.is

‘It’s someone.’ (*mɛ̀ʔɛ̀-nɛ́*=be=*ɛ̀* also possible)

For past time, the construction with identificational enclitic is replaced by one *cìɛ̀* ~ *cíɛ́* ‘was/were’ and copula *kùⁿ* ~ *kúⁿ* flanking the predicate nominal (§10.5.1).

#### ‘It is not X’ (*=rĒʔ* )

The ‘it is X’ construction described above is negated by attaching the all-purpose negative enclitic *=rĒʔ* (i.e. *=rɛ̄ʔ* ~ *=rēʔ* depending on ATR value of the preceding syllable) to the X element. The morphology and tones of the X NP are the same as in the positive, so I again postulate that the locational ‘be’ subject enclitic /H+=∅/ is present before the negative enclitic.

(xx1) a.. *mā-ní=∅=nēʔ*

1Sg-Indep=it.is=Neg

‘It isn’t me.’ (< /mā-nī=H=rĒʔ/)

b. *bákàŕ=∅=rēʔ*

Bakari=it.is=Neg

‘It isn’t Bakari.’ (< *bákàrì* )

c. *tàgà-rá=∅=rɛ̄ʔ*

sheep-Nom=it.is=Neg

‘It’s not a sheep.’

d. *ɲáā-nà=∅=nɛ̄ʔ*

woman-Nom=it.is=Neg

‘It’s not a woman.’

e. *tàgà-rá-à-ń=∅=nēʔ*

sheep-Nom=it.is=Neg

‘It’s/They’re not sheep-Pl.’ (< /-nū=H=/)

### Copula

#### Positive ‘X is Y’ (*kùⁿ* ~ *kúⁿ* )

The copula is *kùⁿ* (+3Sg subject) or *kúⁿ* (-3Sg subject). The construction is *X=‘be’ Y kuⁿ* meaning ‘X is Y’. X here is the starting point, such as a pronoun, and it takes the ‘be’ subject enclitic. A singular noun as X therefore has the nominal suffix (xx1c), though plural nouns omit the final nominal suffix ‑nū (xx1b,d). A pronoun in X function takes regular proclitic form, e.g. 1Sg *mā* becoming *má=∅*, not independent *mā‑n̄* (xx1a). Y specifies a class to which X belongs or an identity that X is coreferential with. Y does not take the word-final nominal suffix before *kùⁿ*.

(xx1) a. *má=∅ ɲáāⁿ* / *tàgá kùⁿ*

1Sg=be woman / sheep Cop

‘I am a woman/a sheep.’

b. *mùʔúⁿ=∅ ɲáā-nà-àⁿ* / *tàgà-rá-àⁿ kúⁿ*

1Pl=be woman- / sheep-Nom-Pl Cop

‘We are women/sheep-Pl.’

c. *ɲáā-nà=∅ bàláⁿ kùⁿ*

woman-Nom=be Senoufo Cop

‘The woman is a Senoufo (ethnicity).’ (< *bàlàⁿ* )

d. *ɲáā-nà-áⁿ=∅ bàl-láⁿ-àⁿ kúⁿ*

woman-Nom-Pl=be Senoufo-Nom-Pl Cop

‘The women are Senoufos (ethnicity).’ (< *ɲáā-nà-àⁿ* )

e. *má=∅ bákàr kúⁿ*

1Sg=be Bakari Cop

‘I am a Bakari (name).’

For past time, e.g. ‘we were women’, see §10.5.1.1.

#### Negative ‘X is not Y’ (*kù=nēʔ*, plural *kú=nēʔ* )

‘X is Y’ (preceding section) is negated by adding the negative enclitic *=rĒʔ*. The ‘be’ subject enclitic is absent, as in some other imperfective negative constructions. Because of the nasality of *kùⁿ* ~ *kúⁿ*, the enclitic always takes nasal form *=nēʔ*.

(xx1) a. *mā ɲáāⁿ kù=nēʔ*

1Sg woman Cop=Neg

‘I am not a woman.’

b. *mùʔùⁿ ɲáā-nà-àⁿ* / *tàgà-rá-àⁿ kú=nēʔ*

1Pl woman- / sheep-Nom-Pl Cop=Neg

‘We are not women/sheep-Pl.’

### Existential and locative quasi-verbs and particles

The past-time counterpart of the locational ‘be’ construction, e.g. ‘I was (somewhere)’, replaces the ‘be’ enclitic, whether just /H+=∅/ or with additional nasal linker *=ń*, by the past morpheme *cɛ̀* (or variant), see §10.5.1.2. The following subsections are for present or generalized time.

#### Positive ‘X is present (somewhere)’

The construction treated here is of the form ‘X be [location]’, with any locational phrase (‘here’, ‘in the village’, etc.). Except in the specific cases of ‘be here’ and ‘be there’, locational ‘be’ is expressed by the subject enclitic /H+=∅/. This may be identified morphemically with the imperfective subject enclitic /H+=∅/. Examples with noun-headed subjects are in (xx1).

(xx1) a. *bákàrí=∅ [mùú* / *yí dù]*

B=be [field / water in]

‘Bakari is (present) in the field/in the water.’ (< *mùù* )

b. *búgū-rà-áⁿ=∅ [dùgú dù]*

hut-Nom-Pl=be [the.bush in]

‘The huts are (out) in the bush.’ (< *dùgù* )

c. *tàgà-rá-àⁿ=∅ [mùú dù]*

sheep-Nom-Pl=be [field in]

‘The sheep are in the field.’ (< *mùù* )

d. *ɲáā-nà-áⁿ=∅ [bíŋí tɔ̀]*

woman-Nom-Pl=be [granary in]

‘The women are inside the granary.’

e. *dìgín̄-nà-áⁿ=∅ [yí dù]*

man-Nom-Pl=be [water in]

‘The men are in the water.’

Pronoun subjects also show the final H‑tone even before an H‑tone, showing that the ‘be’ enclitic is present.

(xx2) *má* / *mùʔúⁿ* / *àáⁿ* / *ēéⁿ* / *á =∅ [yí dù]*

1Sg / 1Pl / 3Pl / 2Pl / 3SgHum =be [water in]

‘I am/we are/they are/you-Pl are/he-or-she is in the field.’

(< *mā* / *mùʔùⁿ* / *ààⁿ* / *ēēⁿ* / *à* )

#### ‘X is here/there’ with linker *=ń* ~ *=ǹ*

When the locational expression is a simple demonstrative adverb *nàà* ‘here’ or *dè* ‘there (definite)’, locational ‘be’ is seemingly expressed by an enclitic whose most common tonal form is *=ń* (variant *=ín*) instead of (just) by segmentally zero /H+=∅/. In addition, a final nominal suffix (e.g. *‑rà* ) in singular nouns shifts its vowel to *e*. This points to an underlying form /=ín/ (xx3c). However, there is no similar vocalic change of final *a* in plural nouns or in pronouns (xx3d‑e).

Because of the tones in combinations like human 3Sg [áń] rather than rising #[àń], I assume that the enclitic *=ń* is added after the /H+=∅/ enclitic, which accounts for raising /à/ to *á*. This interpretation reduces *=ń* to the status of a linker. In this light, it is doubtful that *=ń* is itself intrinsically H‑toned, as opposed to just bearing the H‑tone of the /H+=∅/ under favorable conditions. In fact, the linker is heard as L‑toned *=ǹ* when preceded by an H‑toned (but not contour-toned) vowel (xx3c,e).

(xx3) a. *zàkíì=∅=ń dè*

Z=be=Link there.Def

‘Zaki is present (here/there).’

b. *bákàr=∅=ń nàà*

B=be=Link here

‘Bakari is here.’

c. *tàgà-ré=∅=ǹ nàà*

sheep-Nom=be=Link here

‘The sheep-Sg is here.’ (< *tàgà-rá* )

d. *tàgà-rá-āⁿ=∅=ń nàà*

sheep-Nom-Pl=be=Link here

‘The sheep-Pl are here.’

e. *á=∅=ǹ* / *má=∅=ǹ nàà*

3SgHum= / 1Sg=be=Link here

‘He-or-she is / I am here.’

f. *àá=∅=n nàà*

3PlHum=be=Link here

‘They are here.’ (heard approximately as [àāń])

Because the nasal linker is found only with ‘here’ and ‘there’, and not with other spatial adverbs like *bá* ‘over there’ (see just below), an alternative analysis of the nasal as the initial segment of the demonstrative adverbs is not unreasonable. However, representations like *ńnàà* and *ńdè* would have unique syllabic shapes in Jalkunan, and in adverbial (as opposed to predicative) function a different linker such as *=e* is used. Another reason for the enclitic analysis is that the tone of the nasal depends on that of the preceding word.

#### ‘X is over there’ (*bá* )

For the distant deictic category (‘over there’), a special predicative form *bá* occurs, after /H+=∅/. There is no nasal linker.

(xx1) a. *bákàrí=∅ ꜜbá*

B=be over.there

‘Bakari is over there.’

b. *àáⁿ=∅ ꜜbá*

3PlHum=be over.there

‘They are over there.’

c. *bákàrí=∅ ꜜbá=rɛ̄ʔ*

B=be over.there=Neg

‘Bakari isn’t over there.’

#### Negative ‘X is not present/X is absent (somewhere)’

The positive ‘X is present (somewhere)’ (preceding section) is negated by adding negative enclitic *=rĒʔ* in its usual range of variants to the locational expression (i.e. clause-finally). My assistant omitted the *=ń* linker before *dè* ‘there (definite)’ but not before *nàà* ‘here’ (xx1d‑e).

(xx1) a. *á* / *àáⁿ [mùú dù] =rēʔ*

3SgHum/3PlHum [field Loc] =Neg

‘He-or-she is/They are not in the field.’ (< *à* )

b. *bákàr* / *ààⁿ [yí dù] =rēʔ*

B / 3PlHum [water Loc] =Neg

‘Bakari is not/They are not in the water.’ (*bákàrì* )

c. *tàgà-rá* / *tàgà-rá-àⁿ [yí dù] =rēʔ*

sheep-Nom / sheep-Nom-Pl [water Loc] =Neg

‘The sheep-Sg is not/The sheep-Pl are not in the water.’

d. *zàkíì=ń nàà =nēʔ*

Z=be=Link here =Neg

‘Zaki is not here.’

e. *zàkíì dè =rēʔ*

Z there.Def =Neg

‘Zaki is absent (from here/there).’

The ‘be’ subject enclitic is absent in these negative sentences. For example, in (xx1b) there is no sign of a floating H‑tone in *bákàr* (compare *bákàrí=∅* in positive counterparts) or in human 3Pl *ààⁿ* (compare *àá=∅* in positive counterparts). This suggests that the H‑tone in á and àáⁿ in (xx1b) is conditioned by the following L‑tone in ‘field’ (*mùù* ), i.e. is a special case of Final Tone-Raising, rather than reflecting the ‘be’ subject enclitic, which raises the final tone of the subject regardless of the tone of the following syllable. However, regular nouns do take the nominal suffix in this construction, as seen with singular *tàgà-rá* in (xx1c), not #*tàgà*.

### Other stative locational and positional quasi-verbs

#### Stative locational quasi-verbs (‘be in/on’) absent

Expressions like ‘X be in/on/at Y’ where Y is a spatial reference (‘in the fields’, ‘on the mat’, etc., are expressed by predicate PPs. The subject takes the ‘be’ enclitic /H+=∅/. There are no semantically stative verbs with meanings like ‘be in’ or ‘be on’.

(xx1) a. *kùgù-rá=∅ [dàʔàlí mà]*

stone-Nom=be [mat on]

‘The stone is on the mat.’

b. *ɲáā-nà-áⁿ=∅ [mùú dù]*

woman-Nom-Pl=be [field in]

‘The women are in the field(s).’

See §11.2.3.1 for more examples.

#### Stative stance/position verbs

The active (i.e. aspectually marked) verb ‘sit (down)’ is *sàʔà* (perfective *sɛ̀ʔɛ́* ~ *sɛ́ʔɛ̄* ). It has stative forms denoting stable position as shown in (xx1).

(xx1) a. *ààⁿ séʔéní*

3PlHum sit.Stat

‘They are sitting (=seated).’

b. *à sèʔèní*

3SgHum sit.Stat

‘He/She is sitting (=seated).’

(xx2) shows the relationships between active and stative forms of the primary stance verbs. The statives end in *ní*. The vowel quality of the preceding stem is based on that of the active perfective rather than that of the active imperfective. However, it shifts to +ATR, presumably under the influence of *ní* (since high vowels are treated as +ATR).

(xx1) active stative (3Sg) gloss

Ipfv Pfv (3Sg)

*sàʔà sɛ̀ʔɛ́ sèʔèní* ‘sit’

*bàlà bàlí bàlní* ‘stand’

*sàà sɛ̌ sèèní* ‘lie down’

From a text I can add another stative verb, *bèèní* (+3Sg) ~ *bééní* (‑3Sg), related to *bàà* ‘put down’ (perfective *bɛ̀ɛ́* ~ *bɛ́ɛ́* ) and intransitive *bàà* ‘fall’.

(xx1) *cíí-ná-àⁿ bééní kɛ́nɛ́ɲènà*

breast-Nom-Pl be.put.down.Stat outside

‘The breasts were (=had been) set down outside (of the water).’

My assistant did not approve of combinations of these stative forms with the past morpheme. He instead preferred past perfect forms based on the active perfective; see §10.5.1.xxx.

### ‘Stay’, ‘become’, and ‘happen’ predicates

#### ‘Stay, remain’ (*tɔ́ɔ́* )

This is a regular (aspect-marking) verb. The basic forms are perfective *tɔ̀ɛ́* ~ *tɔ́ɛ́* (subject to the usual trimming clause-medially) and imperfective *tɔ́ɔ́*.

(xx1) a. *à tɔ̀ kúnú* / *bá*

3SgHum stay.Pfv village / over.there

‘He/She stayed in the village / over there.’

b. *á=∅ sà tɔ́ɔ́ ꜜkúnú* / *ꜜbá*

3SgHum=Ipfv Fut stay.Ipfv village / over.there

‘He/She will stay in the village / over there.’

The high-frequency demonstrative adverbs ‘here’ and ‘there (definite)’ require a variant *túú* in both perfective and imperfective contexts. These two adverbs require similar +ATR extensions on verbs and some other elements (§4.4.2.1).

(xx1) a. *à túú nàà* / *dè*

3SgHum stay.Pfv here / there.Def

‘He/She stayed here/there.’

b. *á=∅ sà túú nàà* / *dè*

3SgHum=Ipfv Fut stay.Ipfv here / there.Def

‘He/She will stay here/there.’

#### ‘Become, be transformed into’ (*jámúlɔ̀* )

‘X become (=be transformed into) Y’ where Y is an NP denoting a type of entity is expressed by the verb *jámúlɔ̀* (imperfective) or *jàmúlí* ~ *jámúlí* (perfective). This is followed by the Y NP and by the copula *kùⁿ* ~ *kúⁿ* (xx1a‑b). The transitive counterpart ‘X transform Z into Y’ adds an object before *jámúlɔ̄* (xx1c).

(xx1) a. *à jàmúlí [mìʔìⁿ kpēé] kùⁿ*

3SgHum be.transformed.Pfv [person white] Cop

‘He/She turned into a white person.’

b. *á=∅ sà jámúlɔ̀ [mìʔìⁿ kpēé] kùⁿ*

3SgHum=Ipfv Fut be.transformed.Ipfv [person white] Cop

‘He/She will turn into a white person.’

c. *mā zàkíì jámúlí [mìʔìⁿ kpēé] kùⁿ*

1Sg Z transform.Pfv [person white] Cop

‘I turned Zaki into a white person.’

#### ‘Happen’

‘Happen, take place, occur’ with reference to an event is expressed by *máá* ‘be done’, i.e. the intransitive counterpart of *màà* ~ *máá* ‘do’, compare French *se faire*.

(xx1) *[ accident dò] mɛ́ɛ́*

[accident one] be.done.Pfv

‘An accident happened.’

### Mental and emotional statives

#### ‘Know’ (*sɔ̀*  etc)

This is a transitive verb that takes a preverbal object, typically nonhuman 3Sg (*ní* and variants) in the sense ‘it’ referring to some state of affairs (xx1a‑b). Variants without *ní* object (xx1c) are elicitable with difficulty and do not appear to be in common use. For present-time knowledge the perfective is used: *sɔ̀* (+3Sg) pr *sɔ́* (‑3Sg). The subject does not have an imperfective enclitic.

(xx1) a. *mā* / *mùʔùⁿ* / *ààⁿ ní sɔ̀*

1Sg / 1Pl /3PlHum 3SgNonhObj know.Pfv

‘I/We/They know (it).’

b. *mā* / *mùʔùⁿ ń sɔ̀=rɛ̄ʔ*

1Sg / 1Pl 3SgNonhObj know.Pfv=Neg

‘I/We don’t know it.’ (< *ní* )

c. *mùʔúⁿ* / *àáⁿ sɔ̀=rɛ̄ʔ*

1Pl / 3PlHum know.Pfv=Neg

‘We/They don’t know (it).’

d. *à yǐ sɔ̀*

3SgHum water know

‘He/She knows the water.’ (*yí* )

The past-time perfective has *sòò kɛ́*, see §10.5.1.3.

An imperfective *sɔ̀ɔ̀* (+3Sg object) or *sɔ́ɔ́* (‑3Sg object) is elicitable, for example in future contexts (‘will know’). Similarly, an imperative *sɔ̌* (3Sg object) or *sɔ́* (3Pl object) was elicited. The imperfective *sɔ̀ɔ̀* ~ *sɔ́ɔ́* is homophonous with that of ‘wait’ (perfective *sòíī* etc.).

#### ‘Want, like’ (*kà* ~ *ká* )

In simple clauses with NP object (‘want it’, ‘want that’, ‘want what?’), this is a transitive verb. The perfective form *kà* ~ *ká* occurs in this construction when it has reference to the present time. The subject has the final H‑tone of the imperfective enclitic.

(xx1) a. *wó=∅ ꜜkpɛ́ kà*

2Sg=Ipfv what? want

‘What do you want?’

b. *mùʔúⁿ=∅ ꜜyí kà*

1Pl=Ipfv water want

‘We would like some water.’

c. *má=∅ yíʔé kà=rɛ̄ʔ*

1Sg=Ipfv fish want=Neg

‘I don’t like/want fish.’

The “object” may take specific indefinite form with *dò*.

(xx2) *mā [gbāá dò] ká(=rɛ̄ʔ)*

1Sg [stick one] want(=Neg)

‘I want/don’t want a stick.’

For future time the following was elicited. I interpret *máá* as an intransitive counterpart of (imperfective) *màà* ‘do’, i.e. ‘be done, happen’. The construction is therefore “we will happen to want water tomorrow.”

(xx3) *mùʔúⁿ=∅ sà máá yí kà síní*

1Pl=Ipfv Fut be.done.Ipfv water want tomorrow

‘Tomorrow we will want some water.’

For past time (‘wanted’), see §10.5.1.4.

With a clausal complement (‘want to go’, ‘want X to go’), the verb normally takes imperfective form *kɔ́ɔ́* ~ *kɔ̀ɔ̀* and is followed by the complement (§17.1.1).

## Quotative verb

### ‘Say’ (tɔ̀ʔɔ̀, cìɛ̀, dɛ̀ ~ dɛ́ )

As transitive verb with a nonhuman 3Sg object, or other NP object such as ‘that’, the ‘say’ verb is *tɔ̀ʔɔ̀* or *cìɛ̀* (imperfective forms).

(xx1) a. *mā ní tɔ̀ʔɛ́ɛ̄*

1Sg 3SgHumObj say.Pfv

‘I said it.’

b. *mā ní cìɛ́*

1Sg 3SgHumObj say.Pfv

[= (a)]

The ‘say’ verb used with a following quotation is *dɛ̀* (+3Sg) or *dɛ́* (‑3Sg), in the perfective positive only (i.e. when the quoted matter was actually uttered or thought by someone). This verb combines with a preceding subject, as in *è dɛ̀* ‘it (animal) said: “…” ’. It is replaced by *tɔ̀ʔɔ̀* under negation (xx2b).

(xx2) a. *à dɛ́= [á-wò sà sáá*

3Sg say.Pfv [Hum-3SgLogo Fut come.Ipfv

‘Hex/Shex said that hex/shex would come.’ (< /dɛ̀ á-wò/)

b. *á =∅ tòʔó=rēʔ [à-wò sà sáá]*

3Sg 3SgObj say.Pfv=Neg [Hum-3SgLogo Fut come.Ipfv]

‘Hex/Shex didn’t say that hex/shex would come.’

For the tonal and segmental phonology of *dɛ̀* ~ *dɛ́* in combination with a following third person subject pronoun, see §17.1.2 below.

## Adjectival predicates

Perfective forms of deadjectival inchoatives (‘become ADJ’), see §9.5, can function like stative predicates. In other words, ‘X became long/short’ can mean ‘X is long/short’.

(xx1) a. *[mā mɔ̌] sɔ̀ɔ̀ⁿ-bɛ́ɛ́* / *gùníī*

[1Sg rope] become.long.Pfv / become.short.Pfv

‘My rope is long/short.’

b. *[mā mɔ̌] sɔ̀ɔ̀ⁿ-bɛ̀ɛ̀=rɛ̄ʔ* / *gǔn=nēʔ*

[1Sg rope] become.long.Pfv=Neg / become.short.Pfv=Neg

‘My rope is not long/short.’ (/gùní=nēʔ/)

## Possessive predicates

### ‘X have Y’ (*kà* ~ *ká* )

In the basic predication of possession ‘X have Y’, the possessum Y is the subject and ends in the ‘be (somewhere)’ enclitic /H+=∅/. This is followed by the possessor X and a possessive morpheme which takes L‑toned form *kà* (+3Sg) or *ká* (‑3Sg). Some examples are in (xx1).

(xx1) a. *tàgà-rá=∅ [mā ká]*

sheep-Nom=be [1Sg Poss]

‘I have a sheep.’

b. *tàgà-rá=∅ [bákàr ká]*

sheep-Nom=be [B Poss]

‘Bakari has a sheep.’

c. *tàgà-rá-āⁿ=∅ [bákàr ká]*

sheep-Nom-Pl=be [B Poss]

‘Bakari has some sheep.’ (contracted from /bákàrí kà/ ?)

d. *bákàrí=∅ [mā ká]*

B=be [1Sg Poss]

‘I have Bakari.’

e. *dí-rá=∅ [tàgá kà]*

child-Nom=be [sheep Poss]

‘The sheep has a child (=lamb).’

f. *dí-rá=∅ [tàgà-rá-àⁿ ká]*

child-Nom=be [sheep-Nom-Pl Poss]

‘The sheep-Pl have a child (=lamb).’

The paradigm is (xx2). The 3Sg form is pronounced *à kà* in isolation but is heard as *ŋ̀ kà* in allegro speech after a vowel (such as that of the nominal suffix of a noun).

(xx2) a. M-toned pronouns

1Sg *mā ká*

2Sg *wō ká*

2Pl *ēēⁿ ká*

b. other plural pronouns

1Pl *mùʔùⁿ ká*

3PlHum *ààⁿ ká*

3PlNonh *èèⁿ ká*

c. 3Sg pronouns

3SgHum *à kà* ~ (… *ŋ̀ kà* )

3SgNonh *è kà*

d. singular noun

‘sheep-Sg’ *tàgá kà*

e. plural noun

‘sheep-Pl’ *tàgà-rá-àⁿ ká*

The predicate is negated in the usual way by adding enclitic *=rɛ̄ʔ* clause-finally. The noun ‘money’ as subject optionally simplifies from *wár̄-rá=∅* (xx2b) to *wár̄* (xx2a).

(xx3) a. *wár̄ [mā ká]=rɛ̄ʔ*

money [1Sg Poss]=Neg

‘I don’t have any money.’

b. *wár̄-rá=∅ [à kà]=rɛ̄ʔ*

money-Nom=be [3SgHum Poss]=Neg

‘He/She doesn’t have any money.’

c. *wár̄-rá=∅ [mùʔùⁿ ká]=rɛ̄ʔ*

money-Nom=be [1Pl Poss]=Neg

‘We don’t have any money.’

For past-time counterparts with past morpheme *cɛ̀* preceding the combination of subject and *kà* ~ *ká*, see §10.5.1.4.

### ‘X be with Y’

#### Predicate is PP including postposition *dɛ̀* ‘with’

For instrumental-comitative *dɛ̀* ~ *dɛ́* see §8.2.1. The phrasing ‘X be [with Y]’ can be used to describe attributes, temporary (xx1a) or inherent (xx1b). A PP based on postposition *dɛ̀* ~ *dɛ́* ‘with’ is the predicate. The possessor is the subject. The postpositional complement may be an alienable possession (‘rope’) or an inherent attribute (‘horn’).

(xx1) a. *tàgà-rá=∅ [mɔ̀ɔ́-n dɛ̀]*

sheep-Nom=be [rope-Dim **with**]

‘The sheep has a rope on it.’ (< *mɔ̀ɔ́-nī* )

b. *tàgà-rá=∅ [gbǒ dɛ̀]*

sheep-Nom=be [horn **with**]

‘The sheep has horns.’ (< *gbò* )

#### Predicate is PP including compitative PP with *dò* ~ *dó*

For the comitative postposition *dò* ~ *dó* see §8.2.2. Comitative PPs may be predicative after the ‘be’ subject enclitic or the past marker, denoting co-presence (accompaniment). The subject and postpositional complement are usually both human but the subject may be extended to animals. In negative versions (xx1c), the ‘be’ enclitic is absent, note the tones of ‘Bakari’, but nominal subjects (‘sheep’) do show the nominal suffix.

(xx1) a. *tàgà-rá=∅ / bákàrí=∅ [mā dō]*

sheep-Nom=be / B=be [1Sg **with**]

‘A sheep/Bakari is with me.’ (i.e. ‘I have a sheep/Bakari with me.’)

b. *tàgá cìɛ̀ [mā dō]*

sheep-Nom be.Past [1Sg **with**]

‘A sheep was with me.’

c. *tàgà-rá / bákàr [mā dō] =rēʔ*

sheep-Nom=be / B=be [1Sg **with**] =Neg

‘A sheep/Bakari is not with me.’

### ‘Y belong to X’ predicates

#### *Y=*‘be’ *[X mǐ] kùⁿ* ‘belongs to X’

In this construction, the possessum Y is the known starting point, and its belonging to X is predicated. Y is the subject, with ‘be’ subject enclitic (final H‑tone), and this subject must be overt (minimally a proclitic pronoun). The subject is followed by the possessor X, the default possessum *mì* (invariant for number), and the copula *kùⁿ*. The combination /mì kùⁿ/ is subject to Final Tone-Raising to *mǐ kùⁿ*. The tone rise is difficult to articulate on a *Cv* morpheme and the tendency is to flatten it phonetically into a pitch level similar to M‑tone. It is most easily heard after an L‑tone as in human 3Sg *à mǐ kùⁿ* ‘(it) is his/hers’. Since *kùⁿ* always follows mǐ in this construction, *kùⁿ* is tonally invariant for possessum number. If X is a nonpronominal NP, it omits the nominal suffix before *mì kùⁿ* (xx1d). However, the subject Y does have the nominal suffix where morphologically possible.

(xx1) a. *[sàà mí-nà]=∅ [bákàrí mǐ] kùⁿ*

[house Dem-Nom]=be [B Poss] Cop

‘This/That house is Bakari’s.’

b. *[sàà mí-nà-àⁿ]=∅ [bákàrí mǐ] kùⁿ*

*[zàkíì mǐ] kùⁿ*

[house Dem-Nom-Pl]=be [B/Z Poss] Cop

‘These/Those houses are Bakari’s/Zaki’s.’

c. *[sàà mí-nà]=∅ [ɲáā-nà-áⁿ mǐ]] kùⁿ*

[house Dem-Nom]=be [woman-Nom-Pl Poss] Cop

‘This/That house belongs to the women.’

d. *[sàà mí-nà]=∅ [ɲáā mǐ]] kùⁿ*

[house Dem-Nom]=be [woman Poss] Cop

‘This/That house belongs to the women.’

e. *bákàrí=∅* / *é=∅ [mā mǐ] kùⁿ*

B=be / 3SgNonh=be [1Sg Poss] Cop

‘Bakari/It belongs to me.’

f. # *[mā mǐ] kùⁿ*

# [1Sg Poss] Cop

[intended sense: ‘It belongs to me.’]

The pronominal paradigm is (xx2).

(xx2) 1Sg *[mā mǐ] kùⁿ*

2Sg *[wō mǐ] kùⁿ*

1Pl *[mùʔúⁿ mǐ] kùⁿ*

2Pl *[ēéⁿ mǐ] kùⁿ*

3SgHum *[à mǐ] kùⁿ*

3SgNonh *[è mǐ] kùⁿ*

3PlHum *[àáⁿ mì] kùⁿ*

3PlNonh *[èéⁿ mì] kùⁿ*

Negative examples are (xx3a‑b). It is identical to the positive version except for addition of the clause-final negative enclitic and the absence of the ‘be’ subject enclitic, hence *bákàr* (< *bákàrì* ) rather than *bákàrí=∅* in (xx3b).

(xx3) a. *[sàà mí-nà] [bákàrí mǐ] kùⁿ=nēʔ*

[house Dem-Nom] [B Poss] be=Neg

‘This/That house is not Bakari’s.’

b. *bákàr [mā mǐ] kùⁿ =nēʔ*

B [1Sg Poss] Cop =Neg

‘Bakari doesn’t belong to me.’

For past-time counterparts, see §10.5.1.4.

#### *(Y) [X mì-nɛ́]=∅=ɛ̀* ‘(it) is X’s’

This is simply the ‘it is X’ construction where instead of a simple NP X we have a default possessum for the possessor X, i.e. ‘X’s (possession)’ (§6.2.4). The default possessum after pronouns is *mì*, here with nominal suffix *mì‑ná*, combining with the ‘be’ enclitic and the ‘it is’ enclitic as *mì-nɛ́]=∅=ɛ̀*. The plural is regular: *mì‑nà‑àⁿ‑ní=∅=ī.* In this construction, the “subject” Y is optional and when overt it can be considered a preclausal topic.

(xx1) a. *sàà-rá [mā mì-nɛ́]=∅=ɛ̀*

house-Nom [1Sg Poss-Nom]=be=it.is

‘The house is mine.’

b. *[mā mì-nɛ́] =∅ =ɛ̀*

[1Sg Poss-Nom] =be =it.is

‘It’s mine.’

c. *[mā mì-nà-àⁿ-ní] =∅ =ī*

[1Sg Poss-Nom-Pl-Nom] =be =it.is

‘They’re mine.’

# Comparatives

## Asymmetrical comparatives

### Adjectival verb plus *blé* ‘(sur)pass’

Adjectival predicates (e.g. ‘X be long/short’) are expressed by perfective forms of inchoative verbs, see §9.5 and §11.4.1. (xx1b) is a comparative based on the simple noncomparative clause (xx1a). It features the adjoined verb *bèlé* (~ *bélē* ) ‘pass’, cf. English *surpass*. It is often syncopated to *blé* especially in comparative constructions. The ‘pass’ verb is immediately followed by the comparandum, which functions syntactically as postverbal object. The same ‘pass’ verb in simple noncomparative clauses also optionally takes a postverbal object, as in ‘X passed Y’. Negation is by the usual clause-final negative enclitic (xx1c).

(xx1) a. *[mā mɔ̌] sɔ̀ɔ̀ⁿ-bɛ̀ɛ́*

[1Sg rope] become.long.Pfv

‘My rope is long/short.’ (*mɔ̀ⁿ* )

b. *[mā mɔ̌] sɔ̀ɔ̀ⁿ-bɛ̀ [blé [wō mì-nà]]*

[1Sg rope] become.long.Pfv [**pass**.Adjn [2Sg Poss-Nom]]

‘My rope is longer than yours-Sg.’

c. *[mā mɔ̌] sɔ̀ɔ̀ⁿ-bɛ̀ [blé [wō mì-nà]]=nɛ̄ʔ*

[1Sg rope] become.long.Pfv [**pass**.Adjn [2Sg Poss-Nom]]=Neg

‘My rope is not longer than yours-Sg.’

For past-time contexts, see §10.5.1.5.

### Nonadjectival verb plus *blé* ‘(sur)pass’

The same construction is used when the main predicate is a nonadjectival verb. The main clause has its usual complements, and is followed by the ‘pass’ clause with postverbal object.

(xx1) a. *zàkíì kūmɛ̄ɛ̄ kùnò [blé mā-n]*

Z meal eat.Ipfv [**pass**.Adjn 1Sg-Indep]

‘Zaki eats more food than I (do).’

b. *zàkíì [wár̄ fɛ́ɛ́ⁿ] bìlí mā-n [blé bákàrì]*

Z [money much] give.Pfv 1Sg-Indep [**pass**.Adjn 1Sg-Indep]

‘Zaki gave me more money than Bakari (did).’

‘Zaki gave more money to me than (to) Bakari.’

Note the ambiguity of (xx1b), depending on whether Bakari is construed as a giver or as a taker.

### ‘Be better’ (*fɔ̀ⁿ ~ fɔ́ⁿ* )

In this construction, the predicate is *fɔ̀ⁿ ~ fɔ́ⁿ*, obeying the usual +3Sg (L‑tone) versus ‑3Sg (H‑tone) pattern for monosyllabic verbs. *blé* ‘pass’ is redundant in this case but it is optionally present.

(xx1) a. *zàkíì fɔ́ⁿ [(blé) mā-n]*

Z **better** [(**pass.Adjn**) 1Sg-Indep]

‘Zaki is better than me.’

b. *à fɔ̀ⁿ [(blé) mā-n]*

3SgHum **better** [(**pass.Adjn**) 1Sg-Indep]

‘He/She is better than me.’

c. *à fɔ̀ⁿ [(blé) mā-n]=nēʔ*

3SgHum **better** [(**pass.Adjn**) 1Sg-Indep]=Neg

‘He/She is not better than me.’

Quantitative ‘more’ is expressed using the main verb ‘abound, be many/much’ and the usual ‘pass’ phrase.

(xx2) a. *jàŋgbáā fɛ́ɛ́nī [blé wùl-á-àⁿ-nū]*

cat **abound**.Pfv [**pass.Adjn** dog-Nom-Pl-Nom]

‘There are more cats than dogs.’

b. *ààⁿ fɛ́ɛ́nī [blé mùʔú-nū]*

3Pl **abound**.Pfv [**pass.Adjn** 1Pl-Indep]

‘There are more of them than of us.’

For past time (with *cɛ́* preceding *blé* ), see §10.5.1.5.

### ‘Best’

No dedicated single-clause superlative construction was elicited. (xx1) is not overtly superlative, but in context can have this implication.

(xx1) *zàkíì [[sìgì-sèè mɛ́ʔɛ̄ⁿ] ɲɛ̌] kùⁿ*

Z [[song-sing.VblN person] **good**] Cop

‘Zaki is a good singer.’ (→ ‘Zaki is the best singer’).

To get an unambiguously superlative reading, a set must be specified as a preposed topic-like NP in partitive function, followed by a regular comparative clause.

(xx2) *[sìgì-sèè mɛ́ʔɛ̄-nà-àⁿ búʔú-nú] zàkíì fɔ́ⁿ*

[song-sing.Vbln person-Nom-Pl all-Nom] Z **better**

‘Out of all the singers, Zaki is better (=the best).’

### ‘A fortiori’ (*càʔá dóò* )

The sense ‘all the more so’ is expressed by *càʔá dóò* in this textual passage (hyena speaking).

(xx1) *[mìʔíⁿ ɲàyí] dì kúⁿ íìⁿ,*

[person tears] become.delicious.Pfv Cop oh!,

*[è sìbí] càʔá dóò,*

[3SgNonh meat] **all.the.more too**,

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‘(If) someone’s (=an animal’s) tears are delicious, its meat all the more so.’

## Symmetrical comparatives

### ‘Be equal, same’ (*dúlí kùⁿ* )

*dúlí* (< *dúlì* ‘1’) plus copula *kuⁿ* means ‘be equal’. As usual with the copula, the subject has the ‘be’ enclitic.

(xx1) a. *[bákàri búʔú zàkíì]*

[B and Z]

*sɔ́ɔ́ⁿ-béé ká-nà=∅ dúlí kùⁿ*

become.long.VblN have.VblN-Nom=be **equal** Cop

‘Bakari and Zaki are of the same height (=are equally tall).’

b. *[[zàkíì búʔú mā] dɛ̀]*

[[Z and 1Sg] with]

*[mùʔùⁿ búʔú] wár-māā hákɛ́=∅ dúlí kùⁿ*

[1Pl all] money-owner degree=be **equal** Cop

‘With (=between) Zaki and me, we are both equally rich.’

# Focalization and interrogation

## Focalization

There is no relinearization of constituents when one of them is focalized, except that ‘why?’ may be fronted. There is no focus morpheme, but 3Sg and 3Pl pronouns use independent rather than regular (e.g. proclitic) forms when focalized. Perfective intransitive verbs have a special M‑toned form following focalized subjects. In some other clause types there is no way to overtly indicate constituent focalization.

### Subject focalization (M-toned verb, third person pronouns)

The distinction between ‘X fell’ and subject-focalized ‘It was X [focus] who fell’ is expressed by the tones of the verb. In unfocalized main clauses, a perfective intransitive verb has LH tones after a regular +3Sg NP or pronoun (xx1a) and a form beginning with H‑tone after a -3Sg NP or pronoun (xx1b‑c). Personal names like Zaki are treated as -3Sg for this purpose (xx1d).

(xx1) a. *à bɛ̀ɛ́* / *bɛ̀ɛ̀=rɛ̄ʔ*

3SgHum fall.Pfv / fall.Pfv=Neg

‘He/She fell / didn’t fall.’

b. *ààⁿ bɛ́ɛ́* / *bɛ́ɛ́=rɛ̄ʔ*

3PlHum fall.Pfv / fall.Pfv=Neg

‘They fell / didn’t fall.’

c. *mā bɛ́ɛ́* / *bɛ́ɛ́=rɛ̄ʔ*

1Sg fall.Pfv / fall.Pfv=Neg

‘I fell / didn’t fall.’

d. *zàkíì bɛ́ɛ́* / *bɛ́ɛ́=rɛ̄ʔ*

Z fall.Pfv / fall.Pfv=Neg

‘Zaki fell / didn’t fall.’

When the subject is focalized, the perfective has an M‑toned subject-focus (SbjFoc) form for all subject categories. In addition, a 3Sg subject pronoun takes a focalized (in other contexts logophoric) form with *‑wò* rather than the proclitic form, hence singular *à‑wò* (human) as in (xx2a) or *è-wò* (nonhuman). A 3Pl subject pronoun takes the form *à‑mǎāⁿ* (human) as in (xx2b) or *è‑mǎāⁿ* (nonhuman). My assistant did not accept regular nouns like ‘sheep’ or ‘woman’ in this construction.

(xx2) a. *à-wò bɛ̄* / *bɛ̄ɛ̄=rɛ̄ʔ*

Hum-3SgFoc fall.Pfv.**SbjFoc** (=Neg)

‘It was / wasn’t he-or-she [focus] who fell.’

b. *à-mǎāⁿ bɛ̄* / *bɛ̄ɛ̄=rɛ̄ʔ*

Hum-3PlFoc fall.Pfv.**SbjFoc** (=Neg)

‘It was / wasn’t they [focus] who fell.’

c. *mā bɛ̄* / *bɛ̄ɛ̄=rɛ̄ʔ*

1Sg fall.Pfv.**SbjFoc** (=Neg)

‘It was / wasn’t I [focus] who fell.’

d. *zàkíì bɛ̄* / *bɛ̄ɛ̄=rɛ̄ʔ*

Z fall.Pfv.SbjFoc (=Neg)

‘It was / wasn’t Zaki [focus] who fell.’

Monosyllabic stems like ‘fall’ have simple M‑toned form under subject focus. Bisyllabics have forms like *fīdīì* ‘ran’ and *sīdānīì*, with a terminal fall from M to L.

This tonal marking of subject focus on the verb is limited to perfective intransitives. It does not apply to present, future, or progressive inflections even for intransitives. Therefore the only indicator of subject focalization is the form of third person subject pronouns. (xx3a‑b) are positive future clauses with human 3Sg and 3Pl subject focus, respectively. They are negated as (xx3c‑d), respectively, showing the usual tonal changes of the future negative.

(xx3) a. *à-wó=∅ sà bàà*

Hum-3SgFoc=Ipfv Fut fall.Ipfv.SbjFoc

‘It’s he-or-she [focus] who will fall.’ (*à-wò* )

b. *à-mǎāⁿ=∅ sà bàà*

Hum-3PlFoc=Ipfv Fut fall.Ipfv.SbjFoc

‘It’s they [focus] who will fall.’

c. *à-wò sá=∅ bàà=rɛ̄ʔ*

Hum-3SgFoc Fut=Ipfv fall.Ipfv.SbjFoc =Neg

‘It isn’t he-or-she [focus] who will fall.’

d. *à-mǎāⁿ sá=∅ bàà=rɛ̄ʔ*

Hum-3PlFoc Fut=Ipfv fall.Ipfv.SbjFoc =Neg

‘It isn’t they [focus] who will fall.’

For other subject categories (1st/2nd person pronouns, nonpronominal third persons) there is no overt distinction between unfocalized and focalized clauses in these non-perfective categories (xx4).

(xx4) a. *má=∅ sà bàà*

1Sg Fut fall.Ipfv

‘I will fall.’ or ‘It’s I [focus] who will fall.’

b. *zàkíì=∅ sà bàà*

Z Fut fall.Ipfv

‘Zaki will fall.’ or ‘It’s Zaki [focus] who will fall.’

c. *mā sā=∅ bàà=rɛ̄ʔ*

1Sg Fut=Ipfv fall.Ipfv=Neg

‘I won’t fall.’ or ‘It isn’t I [focus] who will fall.’

d. *zàkíì sá=∅ bàà=rɛ̄ʔ*

1Sg Fut=Ipfv fall.Ipfv=Neg

‘Zaki won’t fall.’ or ‘It isn’t Zaki [focus] who will fall.’

Even in perfectives, if the verb is transitive, so that the subject is not adjacent to the verb, the verb does not distinguish unfocalized and focalized subjects. The distinction can be made by the choice of simple or focalized third person subject pronoun, so (xx5a‑b) clearly have focalized subjects. No distinction can be made for 1Sg or other subjects, so (xx5c) could have either an unfocalized or a focalized subject.

(xx1) a. *à-wò sìbí dɔ̀níī* / *dɔ̌n=nēʔ*

Hum-3SgIndep meat eat.meat.Pfv (=Neg)

‘It was(n’t) he-or-she [focus] who ate (the) meat.

b. *à-mǎāⁿ sìbí dɔ̀níī* / *dɔ̌n=nēʔ*

Hum-3PlIndep meat eat.meat.Pfv (=Neg)

‘It was(n’t) they [focus] who ate (the) meat.

c. *mā sìbí dɔ̀níī* / *dɔ̌n=nēʔ*

1Sg meat eat.meat.Pfv (=Neg)

‘I ate/didn’t eat (the) meat.’

or ‘It was(n’t) I [focus] who ate (the) meat.’

d. *tàgá sìbí dɔ̀níī* / *dɔ̌n=nēʔ*

sheep meat eat.meat.Pfv (=Neg)

‘The sheep-Sg ate/didn’t eat (the) meat.’

or ‘It was(n’t) the sheep-Sg [focus] who ate (the) meat.’

In (xx1a), *à-wò* does not undergo Final Tone-Raising.

### Focalization of preverbal objects

The form of the transitive verb does not by itself index focalization of a preverbal object (or subject), except in the ‘why?’ construction (§13.1.4). Object focalization can be expressed by the form of a third person object pronoun in the same way as for subjects (xx1a‑b).

(xx1) a. *mā ná-wò báʔrìì*

1Sg HumObj-3SgFoc hit.Pfv

‘It was him-or-her [focus] that I hit.’

b. *mā nā-mǎāⁿ báʔrìì*

1Sg HumObj-3PlFoc hit.Pfv

‘It was them [focus] that I hit.’

There is no overt distinction between unfocalized and focalized objects for other categories (xx2a‑b).

(xx2) a. *à mā báʔrīī*

3SgHum 1Sg hit.Pfv

‘He/She hit me’ or ‘It was me [focus] who(m) he/she hit.’

b. *mā zàkíí báʔrīī*

1Sg Z hit.Pfv

‘I hit Zaki.’ or ‘It was Zaki [focus] that I hit.’

### Focalization of postverbal NPs

As with preverbal objects, postverbal objects and postpositional complements can mark focalization only by using independent third person pronouns. The postverbal human 3Sg object is unfocalized in (xx1a) but focalized in (xx1b).

(xx1) a. *mā tàgá bíl= à-yà*

1Sg sheep give.Pfv Hum-**3SgObj**

‘I gave a/the sheep-Sg to him/her.’ (< /bìlí à-yà/)

b. *mā tàgá bíl= ɛ̀-wò-ǹ*

1Sg sheep give.Pfv Hum-**3SgFoc**-Indep

‘It was him-or-her [focus] that I gave the sheep to’ (< /bìlí à-wò-n/)

The complement of the postposition is unforcalized in (xx2a) but focalized in (xx2b).

(xx2) a. *mā sé= [(è)èⁿ dɛ́]*

1Sg come.Pfv [**3PlNonh** with]

‘I brought them (e.g. sheep).’ (< /sɛ́ èèⁿ/)

b. *mā sé= [è-mǎāⁿ dɛ́]*

1Sg come.Pfv [**Nonh-3PlFoc** with]

‘It was them [focus] (e.g. sheep) that I brought.’ (< /sɛ́ è-mǎāⁿ/)

### Defocalized (perfective) adjoined verb

*kpɛ́ kùdù* ‘why?’ (“for what?”) appears to be the only WH-interrogative that can move from postverbal to clause-initial position. This fronting is optional but common for ‘why?’. When it is fronted, a following perfective intransitive verb is optionally modified, shifting to L‑tone and trimming a final vocalic segment. In (xx1), therefore, a shortened and L‑toned form *bɔ̀* may occur instead of the regular perfective verb *bɔ́ɛ̄*.

(xx1) *[kpɛ́ kùdù] wō bɔ́ɛ̄ / bɔ̀*

[**what?** for] 2Sg exit.Pfv / exit.**Adjn.Defoc**

‘Why did you-Sg come/go up?’

Other defocalized verbs in this construction include *sà* ‘come’ and *sìdà* ~ *sìdàⁿ* ‘ascend’, see (xx2b) in §13.2.3. These forms are identical segmentally to the adjoined form (§15.2.1.1), which trims final vowels in the same way. However, intransitive verbs with H‑toned imperfectives (*sáá* ‘come’, *bɔ́ɔ́* ‘exit’) keep the H‑tone in the regular adjoined form (*sá*, *bɔ́* ), whereas all defocalized adjoined verbs are L‑toned (*sà*, *bɔ̀* ).

A focalized subject apparently does not induce this tonal defocalization of the verb, though the presence of an interrogative enclitic makes the morphology nontransparent. See (xx1c) in §13.2.2 below.

### Topic then focalized resumptive

One common discourse strategy is to present an NP as topic, or to describe an abstract situation, then resume it with a focalized third person pronoun. This is especially common in ‘that’s why …’ contexts, i.e. explaining a purpose or cause. For abstractions as well as nonhuman entities the pronoun is *è-wò* ‘it’, but the vocalic prefix is sometimes elided to leave just *wò*.

(xx1) a. *[à mā kɔ́ɔ́nīī]*

[3SgHum 1Sg insult.Pfv]

*[wò kósòⁿ] mā ná bàʔrì*

[**3SgFoc** because] 1Sg 3SgHumObj hit.Pfv

‘He/She insulted me, that [focus] ’s why I hit him/her.’

b. *[tàgà síbī-rà] mā nì-wò ká*

[sheep meat-Nom] 1Sg NonhObj-**3SgFoc** want

‘Sheep meat, that [focus] ’s what I like/want.’

c. *jàlsà-dù mùʔúⁿ=∅ téʔ= [é-wò dé]*

Blédougou 1Pl go.Ipfv [Nonh-**3SgFoc** there.Def]

‘Blédougou, that [focus] ’s where we’re going.’

## Interrogatives

### Polar and tag questions

#### Polar (yes/no) interrogatives (*yà* )

The yes/no interrogative marker has variants *yà* (as in Jula) and contracted *=à* ~ *=ɔ̀*. The *yà* variant is exemplified in (xx1). Monosyllabic *Cvv* verbs are usually shortened to *Cv* before *yà*. This includes elision of the final *ɛ* in *Cɔɛ* perfectives, e.g. that of *bɔ́ɛ́* ~ *bɔ̀ɛ́* ‘exited’ which becomes *bɔ́ yà* ~ *bɔ̌ yà* (xx1a‑b) The underlying *ɛ* does, however, prevent contraction to #*bɔ́=ɔ̀* ~ #*bɔ̌=ɔ̀*. In effect, the underlying /ɛ/ becomes, or fuses with, the *y* of the interrogative allomorph *yà*. Other verbs ending in *ɛ*, including *Ciɛ* perfectives, retain the *ɛ* before *yà* (xx1c‑d).

(xx1) a. *zàkíì* / *dí-kpɛ́ʔr-à-àⁿ* / *wō sɛ́* / *bɔ́ yà*

Z / child-young-Nom-Pl / 2Sg come/exit.Pfv **Q**

‘Did Zaki/the children/you-Sg come/go out?’ (< *sɛ́ɛ́*, *bɔ́ɛ́* )

b. *dí sɛ̌/bɔ̌ yà*

child come/exit.Pfv **Q**

‘Did the child come/go out?’ (< *sɛ̀ɛ́*, *bɔ̀ɛ́* )

c. *à sìdánī* / *tɛ̀ʔɛ́* / *cìɛ́ yà*

3SgHum ascend.Pfv/go.Pfv/arrive.Pfv **Q**

‘Did he/she go up/go/arrive?’

d. *wō tāá jìɛ́=yà*

2Sg fire see.Pfv=Q

‘Did you-Sg see the fire?’

The contracting (encliticized) variant *=à* ~ *=ɔ̀* is exemplified in (xx2). Contraction is clear in (xx2a), where *bɔ́ɔ́* combines with *=à* as *bɔ́=ɔ̀* (there is no underlyng *ɛ* in the imperfective of this verb). It is more difficult to determine whether enclisis/contraction occurs after *a* in (xx2b), but since nasalization extends to the end of *kpáⁿ=àⁿ* I encline toward a contraction analysis. There is no contraction (or other evidence of enclisis) after *ɛ* (xx2c).

(xx2) a. *zàkíì=∅ sà bɔ́=ɔ̀*

Z=Ipfv Fut exit.Pfv=**Q**

‘Will Zaki come/go out?’ (< *bɔ́ɔ́* )

b. *á=∅ sà sá=à* / *ɲìná=à* / *kpáⁿ=àⁿ*

3SgHum=Ipfv Fut come.Ipfv=**Q** / forget.Ipfv=**Q** / die.Ipfv=**Q**

‘Will he/she come/forget/die?’ (< *sáá*, *ɲìnáà*, *kpááⁿ* )

c. *á=∅ sà cíɛ́* / *fìdɛ́ à*

3SgHum=Ipfv Fut arrive.Ipfv/run.Ipfv **Q**

‘Will he/she arrive/run?’ (*fìdɛ́ɛ̀* )

In the preceding examples, the interrogative particle immediately followed the verb. In (xx3), it follows a postverbal constituent. When it contracts with preceding H‑toned *á* or *ɔ́*, neither the long vowel nor the initial H‑tone of the particle is audible after contraction: *…á=à*, *…ɔ́=ɔ̀* (xx3a‑b). However, when it contracts with preceding L‑toned *à* or *ɔ̀* the result is a long <LHL> syllable: *…à=â*, *…ɔ̀=ɔ̂* (xx3c). (xx3d) illustrates *àà* after personal names, which triggers LL#L-to-LH#L with ‘Bakari’ and ‘Amadou’. /zàkíì àà/ is realized as *zàkí áà*.

(xx3) a. *káⁿ sɛ̀ kún-ná=à*

rain(n) rain-fall.Pfv village-Nom=**Q**

‘Has it rained in the village?’ (< *kún-ná* )

b. *wō ní b(ì)lí kɔ̀-nɔ́=ɔ̀*

2Sg 3SgNonhObj give.Pfv bird-Nom=**Q**

‘Did you-Sg give it to the bird?’ (< *kɔ̀-nɔ́* )

c. *wō ní bɛ̀ [sàá tɔ̀]=ɔ̂* / *[dàʔàlí mà]=â*

2Sg 3SgNonhObj put.Pfv [house in]=**Q** / [mat on]=**Q**

‘Did you-Sg put it in the house/on the mat?’

d. *wō ní bìlí bákàrí àà*

*àmàdú àà*

*zàkí áà*

2Sg 3SgNonhObj give.Pfv Z **Q**

‘Did you-Sg give it to Bakari/Amadou/Zaki?’ (< *bákàrì*, *àmàdù*, *zàkíì* )

e. *wō ní b(ì)lí zàkí* / *ámádù àâ*

2Sg 3SgNonhObj give.Pfv Z / A **Q**

‘Did you-Sg give it to Zaki?’ (< *zàkíì )*

For clause-final *wà* ‘whether’ in quoted polar interrogatives, see §13.2.9.2 below. This morpheme may be related to *wálímà* ‘or’ just illustrated.

#### Negative polar interrogative

In an overtly disjunctive interrogative (‘yes or no?’), both clauses have at least a subject and regular inflected verb. Often the second clause is the negation of the first. (Negative interrogatives were difficult to elicit except in this construction.) The combination of negative enclitic *=rēʔ* ~ *=rɛ̄ʔ* and the interrogative particle is realized as *=r=à*.

(xx1) *wó=∅ sà táʔá=à,*

2Sg=Ipfv Fut go.Ipfv=**Q**,

*wálímà wō sā táʔá=r=à*

or 2Sg Fut go.Ipfv=**Neg=Q**

‘Will you-Sg go, or won’t you (go)?’

#### Negative imperfective interrogative *=rɛ̀=ɛ̄ⁿ* as hortative

In (xx1), a negative interrogative with the special form *=rɛ̀=ɛ̄ⁿ* instead of *=r=à* produces a kind of negative present interrogative clause, literally ‘Do we not take the lion cubs?’. It functions as a (positive) hortative, cf. English *Shall we not …?* with rhetorical-question force.

(xx1) *mùʔúⁿ [jɛ̀rɛ́ dì-rá-àⁿ] yálá=rɛ̀=ɛ̄ⁿ*

1Pl [lion child-Nom-Pl] take.Ipfv=**Neg=Q**

‘Shall we not take the lion cubs?’ (2-16\_02 @ 01:15)

#### Approval tag question (*kɛ̀* )

Clause-final *kɛ̀* (distinct from past morpheme *kɛ́* ) is attested in textual passages where it appears to function as a tag yes-no question marker asking the listener to confirm his/her approval for the speaker’s next action, or to approve the speaker’s statement.

(xx1) W: [I want you to tell it to me.]

S: *[jàlì-kú dù] dɔ́ʔɔ́ kɛ̀*

[Jalkunan in] also **tagQ**

‘In Jalkunan (language), right?’ (2016\_01 @ 00:12)

(xx2) *má=∅ sà bél-dɛ̀ kɛ̀*

1Sg=Ipfv Fut begin.Ipfv **tagQ**

‘Shall I begin (telling the tale)? (2016\_02 @ 00:38)

*kɛ̀* may also follow a negative interrogative with enclitic complex *=r=à*. See (xx2) in §15.1.1.5.

### ‘Who?’ (*māʔāⁿ*, *māʔā-nǐ* )

Content interrogatives like ‘who?’, ‘what?’, ‘how?’, ‘when?’, and ‘which?’ are intrinsically focal.

The human interrogative noun is *māʔāⁿ*, usually in the extended form *māʔā-nǐ* (→ *māʔā‑nì* before H‑tone). If ‘who?’ is subject and the predicate is clause-final, a final interrogative enclitic consisting of a floating L‑tone is added. It is inaudible if the final word already ends in an L‑tone, but is audible in other cases, for example after perfective verbs (xx1c-d).

(xx1) a. *māʔā-nǐ=∅=ì=∅*

**who?**-Indep=be=it.is=Q

‘Who is it?’

b. *māʔā-nǐ= nɛ̀=∅*

**who?**=Indep=be there=Q

‘Who is it?’ (variant *māʔá nɛ̀* )

c. *māʔā(-nì) sɛ́=ɛ̀ / tɛ́ʔɛ́=ɛ̀ / bɔ́=ɛ̀* / *fídí=ì*

**who?**-Indep come./go./exit./run.Pfv.SbjFoc=Q

‘Who came/went/went out/ran?’ (< *sɛ́, tɛ́ʔɛ́, bɔ́ɛ́, fídī )*

d. *māʔāⁿ bɔ́ fì*

who? exit(v).Pfv today

‘Who went out today?’

e. *māʔā-nì sàá nɛ̀ / =ɛ̀*

**who?**-Indep house there / =Q

‘Whose house is that?’

f. *zàkíì māʔāⁿ báʔrì=ì*

Z **who?** hit.Pfv=Q

‘Who(m) did Zaki hit?’

g. *zàkíì māʔā-nì báʔrì=ì*

Z **who?** hit.Pfv= Q

‘Who(m) did Zaki hit?’

h. *wō māʔāⁿ jíɛ́=ɛ̀*

2Sg **who?** see.Pfv=Q

‘Who(m) did you-Sg see?’

(variant *wō máʔá-nì jíɛ́=ɛ̀* )

If the queried individuals are known to be nonsingular, a specifically plural form *māʔā-āⁿ* or *máʔá-nì-ìⁿ* may be used (xx2).

(xx2) *māʔā-nì=ì / māʔā=āⁿ sɛ̄=ɛ̀*

**who?**-Indep-Pl / who?-Pl come.Pfv.SbjFoc=Q

‘Who-Pl came?’

### ‘What?’ (*kpɛ́* ), ‘with what?’, ‘why?’

The nonhuman interrogative noun is *kpɛ́* ‘what?’.

(xx1) a. *kpɛ́ mɛ̄=ɛ̀*

**what?** be.done.Pfv.SbjFoc=Q

‘What happened?’

b. *wō kpɛ́ jíɛ́=ɛ̀*

2Sg **what?** see.Pfv=Q

‘What did you-Sg see?’

c. *kpɛ́=∅ nɛ̀*

**what?**=be that

‘What’s that?’

d. *kpɛ́=∅=ɛ̀*

**what?**=be=it.is

‘What is it?’

e. *wó=∅ sà kpɛ́ kùnò*

2Sg=Ipfv Fut **what?** eat.Ipfv

‘What will you-Sg eat?’

‘With what?’ and ‘why?’ are PPs containing ‘what?’

(xx2) a. *wó=∅ mùú màà [kpɛ́ dɛ̀]*

2Sg=Ipfv field cultivate.Ipfv [**what?** with]

‘What do you-Sg do farm work with?’ (< *mùù* )

b. *[kpɛ́ kùdù] wō sà* / *sìdà*

[**what?** for] 2Sg come./ascend.Adjn.Defoc

‘Why did you-Sg come/go up?’

The verb forms in (xx2b) are defocalized adjoined verbs in perfective function, identical segmentally to regular adjoined verb forms (e.g. *sá* ‘come’, *sìdà* ‘ascend’) but always L‑toned.

A circumlocation for ‘why?’ is illustrated in (xx3). The final verb is again a defocalized perfective.

(xx3) *[kpɛ́ bóō dè] [ēéⁿ sà* / *bɔ̀* / *sìdà]*

[**what?** exit.Pfv there.Def] [2Pl come./exit./ascend.Pfv.Defoc]

‘What happened there (so that) you-Pl came/went out/went up?’

### ‘Where?’ (*mì , dóò* )

The simple interrogative locative adverb is *mì*. As an adverb it occurs postverbally.

(xx1) a. *wó=∅ mì*

2Sg=be **where?**

‘Where are you-Sg?’

b. *wó=∅ ꜜtáʔá mì*

2Sg=Ipfv go.Ipfv **where?**

‘Where are you-Sg going?’

c. *wō bɔ́ mì*

2Sg exit.Pfv **where?**

‘Where did you leave?’ (=Where are you from?) (< *bɔ́ɛ́* )

d. *mùʔúⁿ=∅ sà kūmɛ̄ɛ́ kùnɔ̀ mì*

1Pl=Ipfv Fut meal eat.Ipfv **where?**

‘Where will we eat?’

For the synonymous *làʔá ɲɔ̀ⁿ tɔ́* ‘in which place?’ see §13.2.xxx below. This is the only ‘where?’ form that my assistant accepts in predicative function (‘it’s where?’).

A clause-final word *dóò* can also mean ‘be where?’ It may be related to *dè* ‘there (definite)’.

(xx2) *ààⁿ dóò*

3PlHum be.where?

‘Where are they?’

### ‘How?’ (*mànâ* )

The manner interrogative is *mànâ*. As an adverb it occurs postverbally.

(xx1) a. *mùʔúⁿ=∅ sí=ì màà mànâ*

1Pl=Ipfv Fut=3SgNonhObj do.Ipfv **how?**

‘How (=What) will we do?’

b. *mǎāⁿ=∅ mùú màà mànâ*

2Pl=Ipfv field cultivate.Ipfv **how?**

‘How do you-Pl do farm work?’

c. *é=∅ mànâ*

3SgNonh=be **how?**

‘How is it?’

d. *à mànâ*

3SgHum **how?**

‘What’s up?’

### ‘How much/many?’ (*sòló* ~ *sóló* )

The quantificational interrogative is *sòló*, heard with this rising tone pattern in isolation and after nouns like *ɲáā* ‘woman’ with HM(L) and similar falling tone patterns. In other combinations it is *sóló*.

(xx1) a. *sòló=∅=è*

**how.much?**=be=it.is

‘How much is it?’

b. *[tàgà sóló]=∅ wō ká=à*

[sheep **how.many?**]=Ipfv 2Sg Poss=Q

‘How many sheep do you-Sg have?’

Further examples showing the tone split are in (xx2).

(xx2) a. *sòló* after +3Sg

*ɲáā sòló=è* ‘It’s how many women?’

b. *sóló* after -3Sg

*dí sóló=è* ‘It’s how many children?’

*yíʔé sóló=è* ‘It’s how many fish?’

*tàgà sóló=è* ‘It’s how many sheep?’

*sàà sóló=è* ‘It’s how many houses?’

*mùʔùⁿ sóló* ‘how many of us?’

The distributive adverbial is *sòlò-sóló=è* ‘it’s how much (each)?’. The ordinal is *sóló=ɲá* ‘how many-eth?’ (French *quantième*).

### ‘Which?’ (*ɲɔ̀* )

The adjectival interrogative ‘which?’ is *ɲɔ̀*. Its L‑tone can induce Final Tone-Raising on the preceding noun; there are no other tonal interactions.

(xx1) *wó=∅ [[sàá ɲɔ̀] tɔ́]=ɔ̀*

2Sg=be [[house **which?**] in]=Q

‘Which house are you-Sg in?’

Some other important interrogative expressions are based on ‘which?’ after a semantically light noun. The combination with *làʔà* ‘place’ and locative postposition, i.e. ‘in which place?’, functions as a synonym of *mì* ‘where?’ (§13.2.4 above).

(xx2) *[wō sàà-rá]=∅ [[làʔá ɲɔ̀] tɔ́]*

[2Sg house-Nom]=be [[place **which?**] Loc]

‘Where is your-Sg house?’

For ‘when?’ interrogatives with forms of the ‘(at) which time’ type, see the following section.

### ‘When?’ (*wáʔátí ɲɔ̀-nɔ̀* )

The most general temporal adverbial interrogative is a combination of the noun ‘(point in/period of) time’ with the interrogative adjective ‘which?’

(xx1) *wó=∅ sàà [wáʔátí ɲɔ̀-nɔ̀]*

2Sg=Ipfv come.Ipfv [**time** **which?**-Nom]

‘When do you-Sg come?’

Other similar combinations can be made by using a different temporal noun, as in *súʔúⁿ ɲɔ̀-nɔ̀* ‘which day?’.

### Quoted interrogative

#### Quoted content interrogative

Content interrogatives are replaced under quotation by the corresponding semantically light noun (‘who?’ → ‘person’, ‘where?’ → ‘place’, etc.). This noun is the (internal) head of a relative clause, which may be preposed as a topical NP. For example, ‘I don’t know [who will go]’ is expressed as ‘the person who will go, I don’t know it.’ The final ‘it’ in this translation is nonhuman singular, denoting the abstract proposition.

(xx1) a. *[[mɛ̀ʔɛ́ⁿ mì]=∅ sí=ì wàà],*

[[**person** Rel]=Ipfv Fut=3SgNonh go.Ipfv],

*mā ní sɔ̀=rɛ̄ʔ*

1Sg 3SgNonhObj know.Pfv=Neg

‘Who will go, I don’t know (it).’

b. *[mùʔúⁿ=∅ sà ɲìɛ̀ [[làʔá mì] tɔ́]],*

[1Pl=Ipfv Fut spend.night.Ipfv [[**place** Rel] in]]

*mā ní sɔ̀=rɛ̄ʔ*

1Sg 3SgNonhObj know.Pfv=Neg

‘Where we will spend the night, I don’t know (it).’

#### Quoted polar interrogative (*wà* )

If the quoted interrogative is a yes/no interrogative, the quoted clause ends in *wà* ‘whether’.

(xx1) *[mùʔúⁿ=∅ sà ɲìí nàà wà]*

[1Pl=Ipfv Fut spend.night.Ipfv here **whether**]

*mā ní sɔ̀=rɛ̄ʔ*

1Sg 3SgNonhObj know.Pfv=Neg

‘Whether we will spend the night here, I don’t know (it).’ (< *ɲìɛ̀* )

# Relativization

Relative clauses in Jalkunan are referentially restrictive (not parenthetical). The relative is internally headed.

## Basics of relative clauses

The major features of Jalkunan relative clauses are summarized below.

* the head NP remains in its regular position within the relative clause (*in situ*);
* there is no “upstairs” head NP outside of the relative clause proper;
* relative marker *mì* is attached at the end of the head NP;
* the head NP lacks the nominal suffix (*-rà* etc.);
* the head NP is pluralized by changing *mì* to *mǐ-īⁿ* ;
* headless relatives have *mì* or *mǐ-īⁿ* without an overt noun;
* an intransitive perfective verb takes M‑toned form (as in subject focalization) after a subject head NP;
* the entire relative clause may be an argument in a larger sentence, or it may be preposed as a topical NP, later resumed by a third person pronoun.

## Relative marker *mì*

Relative marker *mì* is added at the end of the head NP. Its L‑tone distinguishes it from demonstrative *mí* ‘this, that’. It is homophonous to interrogative *mì* ‘where?’, and (more interestingly) to default possessum *mì*.

Relative *mì* does not normally allow the nominal suffix even in favored syntactic environments. However, I do have a textual example with apparently suffixed *mì‑nà* (2016\_02 @ 04:22).

The plural of relative *mì* is *mì-īⁿ*. Plurality is not otherwise marked on the head NP. Thus *sàá mì* ‘the house that …’, plural *sàá mì-īⁿ* ‘the houses that …’.

*mì* belongs to the ‑3Sg rather than +3Sg category in terms of its tonal effect. As a result, following words that are sensitive to this binary distinction have forms beginning in H‑tone. This applies, for example, to transitive verbs following *mì* in a preverbal object, like *bàʔrí* ~ *báʔrī* ‘hit (perfective)’ in *wō [yìgí mì] báʔrī* ‘the cow that you-Sg hit-Past’, see §14.5.2 below for mark-up, and to postpositions, like *dɛ̀* ~ *dɛ́* ‘with’ in *mùʔùⁿ gbāá bègé [[jéné mì] dɛ́]* ‘the ax with which we chopped the wood’, see §14.5.5 below for mark-up. Plural *mǐ-īⁿ*, like all plural NPs, also belongs to the ‑3Sg category.

## Head NP

The internal head NP may include a numeral, in which case the plural form of the relative marker (*mǐ-īⁿ*) is required (xx1a). The internal head may also include the ‘all’ quantifier *bùʔù* ~ *búʔú*, which follows *mǐ-īⁿ* (xx1b).

(xx1) a. *[[yìgì flāā mì-īⁿ] bɛ̄] èéⁿ=∅ mì*

[[**cow two Rel-Pl**] fall.Pfv] 3PlNonh=be where?

‘Where are the two cows that fell?’

b. *[wó=∅ [sàá mǐ-īⁿ bùʔù] jíí-yá nɛ̀]*

[2Sg=Ipfv [**house Rel-Pl all**] see-Prog there]

*zàkíì mí-nà-àⁿ-nū=ỳ*

Z Poss-Nom=it.is

‘All the houses that you-Sg see (there) are Zaki’s.’

The usual immediately postnominal demonstrative *mí* does not co-occur with the segmentally identical relative *mì*. Instead, my assistant added a minimal demonstrative adverb *nɛ̀* after the relative-clause verb to express this combination, as in (xx2a‑b) and in (xx1b) above.

(xx2) a. *[wó=∅ [sàá mì] jíí-yá nɛ̀]*

[2Sg=Ipfv [house **Rel**] see-Prog **there**]

*zàkíì mí-nɛ́=∅=ɛ̀*

Z Poss-Nom=be=it.is

‘The house that you-Sg see there is Zaki’s.’ (< /mí-ná=ɛ̀/)

b. *[wó=∅ [sàá mì-īⁿ] jíí-yá nɛ̀]*

[2Sg=Ipfv [house **Rel-Pl**] see-Prog **there**]

*zàkíì mí-nà-àⁿ-nú=∅=ī*

Z Poss-Nom-Pl-Nom=be=it.is

‘The houses that you-Sg see there are Zaki’s.’

### Restrictions on the head of a relative clause

A pronoun may function as internal head, though the relative is topicalized in the examples I have and a resumptive pronoun occurs in the following main clause.

(xx1) a. *[[mùʔúⁿ mǐ-īⁿ]=∅=ǹ nàà]*

[[**1Pl** **Rel**-Pl-Nom]=be=Link here]

*[mùʔùⁿ sá=∅ ꜜtáʔá=rɛ̄ʔ]*

[1Pl Fut=Ipfv go.Ipfv=Neg]

‘We who are here, we will not go.’

b. *[[mā mí]=∅=ǹ nàà] [mā sā táʔá=rɛ̄ʔ]*

[[**1Sg Rel**] =be=Link here] [1Sg Fut go.Ipfv=Neg]

‘I who am here, I will not go.’

### Conjoined NP as head

When a conjoined NP like ‘men and women’ in (xx1a) becomes a relative head, relative marker *mì* (plural *mì-īⁿ* ) may be added to both conjuncts (xx1b‑c), though in elicitation the marker was sometimes limited to the second conjunct. My assistant added a resumptive 3Pl subject pronoun *ààⁿ* in (xx1b‑c), but it is encliticized to the preceding right conjunct.

(xx1) a. *[dígí-nà-àⁿ búʔú ɲáā-nà-áⁿ] ɲùʔùⁿ báʔrī*

[man-Nom-Pl and woman-Nom-Pl] Recip hit.Pfv

‘The men and the women fought (each other).’

b. *[[dígí mǐ-īⁿ] búʔú [ɲáā mǐ-āⁿ=]] ààⁿ ɲúʔúⁿ báʔrī]*

[[man **Rel**-Pl] and [woman **Rel**-Pl]] **3PlHum** Recip hit.Pfv]

*àáⁿ=∅ mì*

3PlHum=be where?

‘Where are the men and the women who fought (each other)?’

(*mì-āⁿ=ààⁿ* < /mì-īⁿ ààⁿ/)

c. *[[dīgínī mì] búʔú [ɲáā mì=] áàⁿ ɲúʔúⁿ báʔrī]*

[[man **Rel**] and [woman **Rel**] 3PlHum Recip hit.Pfv]

*àáⁿ=∅ mì*

**3PlHum**=be where?

‘Where are the man and the woman who fought (each other)?’

### Headless relatives

Headless relatives did not readily occur in elicited utterances but popped up in recorded narratives. (xx1a‑b) are subject relatives.

(xx1) a. *mì jàlsàdù sɛ́ʔɛ́ɛ̄*

Rel-Pl Blédougou establish.Pfv

‘the one (=person) who established (=founded) Blédougou’ (2016\_01 01:28)

b. *mǐ-īⁿ jàlsà-dù sɛ́ʔɛ́ɛ̄*

Rel-Pl Blédougou establish.Pfv

‘the ones (=people) who established (=founded) Blédougou’ (2016\_01 02:34)

(xx2) is an object relative. The head is not actually zero here, but it is limited to (underlying) object pronoun *è* (nonhuman 3Sg).

(xx2) *bon*, *[cì-né= [è mì] bóó] [∅ bàlì]*

well, [hare-Nom [3SgNonh] Rel take.out.Pfv] [3SgNonh stand.Pfv]

‘Well, the one (lion cub) that hare took out stood up.’ (2016\_02 02:12)

[< /cì-ná [è mì] bɔ́ɛ́ [è bàlí]/ ]

## M-toned perfective verb in subject relatives

As in subject focalization, subject relativization requires that an intransitive perfective verb (the only verb type that can immediately follow the subject without an intervening enclitic or inflectional morpheme) be M‑toned.

(xx1a‑b) are regular perfective intransitive main clauses. The verb ‘came’ is LH-toned after a +3Sg subject, and H‑toned after a -3Sg subject. After the relativized subjects in (xx1c‑d), the verb has M‑tone in both cases. The interlinear has “Pfv.SbjFoc” as in focalization.

(xx1) a. *dìgínī sɛ̀ɛ́*

man come.Pfv

‘A/The man came.’

b. *dìgín̄-nà-àⁿ sɛ́ɛ́*

man-Nom-Pl come.Pfv

‘(The) men came.’

c. *[dìgínī mì sɛ̄] á=∅ mì*

[man Rel come.**Pfv.SbjFoc**] 3SgHum=be where?

‘Where is the man who came?’

d. *[dìgín̄ mǐ-īⁿ sɛ̄] á=∅ mì*

[man Rel-Pl come.**Pfv.SbjFoc**] 3SgHum=be where?

‘Where are the men who came?’

The M‑tone is easier to hear if a negative enclitic is added.

(xx2) a. *dìgínī mì sɛ̄ɛ̄-rɛ̄ʔ*

man Rel come.Pfv.SbjFoc

‘the man who didn’t come’

b. *dìgín̄ mǐ-īⁿ sɛ̄ɛ̄-rɛ̄ʔ*

man Rel-Pl come.Pfv.SbjFoc

‘the men who didn’t come’

## Grammatical relation of relativized-on NP

### Subject relative clause

The simple main clause in (xx1a) becomes a relative clause in (xx1b). In both cases, *yìgì* ‘cow’ lacks its nominal suffix (*yìgì-rá* ).

(xx1) a. *yìgí bɛ̌*

cow fall.Pfv

‘A/The cow fell.’

b. *[[yìgí mì] bɛ̄] é=∅ mì*

[[**cow Rel**] fall.Pfv] 3SgNonh=be where?

‘Where is the cow that fell?’

Examples involving negation are (xx2a‑b).

(xx2) a. *yìgí bɛ̀ɛ̀=rɛ̄ʔ*

cow fall.Pfv

‘A/The cow didn’t fall.’

b. *[[yìgí mì] bɛ̄ɛ̄=rɛ̄ʔ] é=∅ mì*

[[**cow Rel**] fall.Pfv=Neg] 3SgNonh=be where?

‘Where is the cow that didn’t fall?’

The subject becomes plural in (xx3a‑b). The polarity is positive as in (xx1a‑b) above. The plural suffix appears on the relative marker.

(xx3) a. *yìgì-rá-àⁿ bɛ́ɛ́*

cow-Nom-Pl fall.Pfv

‘A/The cows fell.’

b. *[[yìgí mì-īⁿ] bɛ̄] èéⁿ=∅ mì*

[[**cow Rel-Pl**] fall.Pfv] 3PlNonh=be where?

‘Where are the cows that fell?’

Negative counterparts of the plural-subject type are (xx4a‑b).

(xx4) a. *yìgì-rá-àⁿ bɛ̄ɛ̄=rɛ̄ʔ*

cow-Nom-Pl fall.Pfv

‘A/The cows didn’t fall.’

b. *[[yìgí mì-īⁿ] bɛ̄ɛ̄=rɛ̄ʔ] èéⁿ=∅ mì*

[[**cow Rel-Pl**] fall.Pfv] 3PlNonh=be where?

‘Where are the cows that didn’t fall?’

Further examples are in (xx5). In (xx5b‑c) note that the object proclitics are *á* and *áàⁿ*, not their *n*-initial variants *ná* and *náà*.

(xx5) a. *[mɛ̀ʔɛ́ⁿ mì-īⁿ] n̄ nàà] ààⁿ sá tàʔá=rɛ̄ʔ*

[**person Rel-Pl**] be here] 3PlHum Fut go.Ipfv.Neg

‘The people who are here, they won’t go.’

b. *[[kàá mì] á ɲìní]*

[[**snake Rel**] 3SgHum.Obj] bite.Pfv]

*é=∅ mì*

3SgNonh=be where?

‘Where is the snake that bit him/her?’

c. *[[kàá mì-∅] áàⁿ ɲínī]*

[[snake Rel] 3PlHum.Obj] bite.Pfv

*èéⁿ=∅ mì*

3SgNonh=be where?

‘Where are the snakes that bit them?’

### Preverbal object relative clause

The object remains in its usual preverbal position, and ends in relative *mì*.

(xx1) a. *mā yìgí bàʔríī*

1Sg cow hit.Pfv

‘I hit-Past a/the cow.’

b. *[wō [yìgí mì] báʔrì] é=∅ mì*

[2Sg [**cow Rel**] hit.Pfv] 3SgNonh=be where?

‘Where is the cow that you-Sg hit-Past?’

c. *[wō [sàá mì] jīā] [zàkíì mì-nɛ́]=∅=ɛ̀*

[2Sg [**house** **Rel**] see.Ipfv] [Z Poss-Nom]=be=it.is

‘The house that you-Sg see belongs to Zaki.’

Plural objects are in (xx2).

(xx2) a. *mā yìgì-rá-àⁿ báʔrīī*

1Sg cow-Nom-Pl hit.Pfv

‘I hit-Past a/the cows.’

b. *[wō [yìgí mì-īⁿ] báʔrī] èéⁿ=∅ mì*

[2Sg [**cow Rel-Pl**] hit.Pfv] 3PlNonh=be where?

‘Where are the cows that you-Sg hit-Past?’

Negative counterparts of singular-object (xx1a‑b) are (xx3a‑b).

(xx3) a. *mā yìgí bàʔŕ=rēʔ*

1Sg cow hit.Pfv=Neg

‘I didn’t hit a/the cow.’

b. *[wō [yìgí mì] báʔr̄=rēʔ] é=∅ mì*

[2Sg [**cow Rel**] hit.Pfv=Neg] 3SgNonh=be where?

‘Where is the cow that you-Sg didn’t hit?’

Negative counterparts of plural-object (xx2a‑b) are (xx4a‑b).

(xx2) a. *mā yìgì-rá-àⁿ báʔr̄=rēʔ*

1Sg cow-Nom-Pl hit.Pfv=Neg

‘I didn’t hit a/the cows.’

b. *[wō [yìgí mì-īⁿ] báʔr̄=rēʔ] èéⁿ=∅ mì*

[2Sg [**cow Rel-Pl**] hit.Pfv=Neg] 3PlNonh=be where?

‘Where are the cows that you-Sg didn’t hit?’

A default (indefinite) nonhuman object, cf. English *what I ate*, is often expressed as ‘thing’.

(xx3) *[mā [sɛ́ⁿ mì] kúnì] sìbì-rá=∅=rɛ̄ʔ*

[1Sg [**thing** **Rel**] eat.Pfv] meat-Nom=be=Neg

‘What I ate wasn’t meat.’

### Possessor relative clause

A possessor may be relativized on. (xx1a) has a possessed NP as subject. In (xx1b) the possessor (‘man’) is relativized on. This is distinct from relativizing on the entire possessed NP with the possessum ‘house’ as NP-head (xx1c).

(xx1) a. *[[dígín̄ mí] sàá] bɛ̀ɛ́*

[[man Dem] house] fall.Pfv

‘This man’s house fell (collapsed).’

b. *[[dígíń mǐ] sàá bɛ̀] á=∅ mì*

[**man Rel**] house fall.Pfv] 3SgHum=be where?

‘Where is the man whose house fell?’

c. *[[dígín̄ mí] sàá mì bɛ́] é=∅ mì*

[man Dem] **house Rel** fall.Pfv] 3SgNonh=be where?

‘Where is this man’s house that fell?’

It isn’t immediately clear from these examples whether or not the ‘house’ has normal possessum tones in (xx1b) as it clearly has in (xx1a) and (xx1b). This is because the LH‑tones in *sàá* could either reflect the /LH/ tone overlay on possessums (after 3Sg possessor), or be due to tone sandhi (Final Tone-Raising, i.e. LL#L-to-LH#L before L‑toned relative *mì* ).

The situation is clarified in (xx2a‑b). Unpossessed ‘father’ is *jɛ́-ná* including the nominal suffix. It becomes *jɛ̀-ná* by {LH} possessum tone overlay in (xx2a). When the possessor ‘(the) man’ is relativized on, ‘father’ reverts to its lexical (unpossessed) tones (xx2b).

(xx2) a. *dígíní jɛ̀-ná*

man **father-Nom**

‘(the) man’s father’

b. *[[dígín mì] jɛ́-n= é wèê] á=∅ mì*

[[man Rel] **father-Nom** 3SgNonh go.Pfv] 3SgNonh=be where?

‘Where is the man whose father went away?’ (< /jɛ́-ná è/)

In other words, relativizing on the possessor breaks the normal syntactic bond between possessor and possessum.

### Postverbal object or adverb relative clause

A postnominal NP (object or adverb) may also be relativized on. In (xx1), a manner adverbialial noun is the head.

(xx1) *jàlsà-dù sɛ́ʔɛ́ [sèʔè-cógō mì]*

Blédougou sit.Pfv [sit.VblN-manner **Rel**]

‘(I ask you about) the way Blédougou was settled.’ (2016\_01 @ 00:02)

### Relativization on the complement of a postposition

The NP complement of a postposition may be relativized on. Main clause (xx1a) has an instrumental PP. The postposition has its +3Sg tonal form (*dɛ̀*) since the complement is a regular singular noun (‘ax’). In (xx1b) the complement NP is relativized on. The relative morpheme intervenes between this NP and the postposition itself. The postposition then takes its -3Sg tonal form (*dɛ́* ).

(xx1) a. *mùʔùⁿ gbāá bègé [jéné dɛ̀]*

1Pl stick cut.Pfv [ax Inst]

‘We chopped the wood with an ax.’

b. *[mùʔùⁿ gbāá bègé [jéné mì] dɛ́]]*

[1Pl stick cut.Pfv [[**ax Rel**] Inst]]

*é=∅ mì*

3SgNonh=be where?

‘Where is the ax with which we chopped the wood.’

For spatiotemporal adverbial relative clauses of this structure, see §15.2.1.1 (temporal) and §15.3.1 (spatial).

# Multiverb constructions and adverbial clauses

## Auxiliary-like constructions with aspectual value

Some constructions combine a regular VP denoting an eventuality type with what appears to be another verb in auxiliary function. The sense is aspectual in a broad sense (including perfect).

*kú* and *tɔ́ɔ́* precede the main VP, while *dú* follows it.

#### Durative inceptive *kú* plus imperfective

A durative inceptive construction with *kú* after the subject, followed by an imperfective VP but without the imperfective subject enclitic /H+=∅/, is common in narrative. It indicates the the onset and extended duration of a backgrounded activity such as motion. *kú* is not attested as a verb in simple clauses. It has no transparent relationship to any regular verb, though it has some phonological similarity to *kɔ̀ɔ̀* ‘give’.

The pronominal paradigm of ‘begin extended weeping’ is (xx1). The form is *kú*, except *kū* by M‑Spreading after an M‑toned subject pronominal (xx1a). The imperfective verb begins with an L‑tone in all cases.

(xx1) ‘Begin extended weeping’

a. 1Sg *mā kū jìímàà*

2Sg *wō kū jìímàà*

2Pl *ēēⁿ kū jìímàà*

b. 1Pl *mùʔùⁿ kú jìímàà*

3SgHum *à kú jìímàà*

3SgNonh *è kú jìímàà*

3PlHum *ààⁿ kú jìímàà*

3PlNonh *èèⁿ kú jìímàà*

c. ‘the child’ *dí-rá kú jìímàà*

‘the children’ *dí-rá-àⁿ kú jìímàà*

A textual example (among several) is (xx2).

(xx2) *[[kɔ̀rɔ̀ lɛ̀] bélé]*

[[elder.brother warthog] pass.Adj

*[è kú [yálā mí] sìnà]*

[3SgNonh **begin** [hole Dem] dig.Ipfv]

‘Elder brother warthog moved over and began digging that hole’ (2016\_02 03:20)

#### *tɔ́ɔ́* (*túú*) ‘stay’ as durative auxiliary (‘keep doing’)

The verb ‘stay, remain (somewhere)’ is *tɔ́ɔ́* in the imperfective (citation form). In the relevant adjoined constructions it occurs with variants including *tòò* ~ *tóó* and *tùù* ~ *túú*. It can be used abstractly to emphasize duration of a situation. (xx1) is a typical example of a narrative filler after a situation has been described, preceding the next foregrounded event.

(xx1) *donc ààⁿ túú yààlàā, …*

so 3PlHum **stay**.Adjn thus, …

‘So they remained thus (=in that situation), ….’ (2016\_04 @ 00:23)

The human 3Sg counterpart is *à túú yààlà(ā)* with the same H‑toned adjoined verb form *túú*.

A construction with the ‘stay’ verb plus a perfective clause is the best way to translate ‘still’ (positive) or ‘(not) yet’ (negative).

(xx2) a. *[é=∅ sí=í bà fì]*

[3SgNonh Fut=3SgNonh fall.Ipfv today]

*[à tóó] [wèè kéé=rēʔ]*

[3SgHum **stay.Adjn**] [health be.healthy.Pfv]=Neg

‘Up to today (=even now), he/she’s still sick’

b.. *zàkíì tɔ́ɔ́ sɛ̀ɛ̀=rɛ̄ʔ*

Z **stay.Adjn** come.Pfv=Neg

‘Zaki hasn’t come yet.’ = ‘Zaki still hasn’t come.’ (variant *sèè=rēʔ* )

c. *zàkíì tɔ́ɔ́ [kūmɛ̄ɛ́ⁿ kùn]=nēʔ*

Z **stay.Adjn** [meal eat.Pfv]=Neg

‘Zaki hasn’t eaten (a meal) yet.’

The ‘stay’ verb can also be added before the *kú* construction described in the preceding section. The sense is ‘keep VP-ing’ (xx3).

(xx3) *[ààⁿ tɔ́ɔ́] [(à)àⁿ kú dòó màà]*

[3PlHum **stay**.Adjn] [3PlHum begin dance(n) do.Ipfv]

*[ààⁿ tɔ́ɔ́] [(à)àⁿ kú cíí-ná-àⁿ contrôler ],*

[3PlHum **stay**.Adjn] [3PlHum begin breast-Nom-Pl check]

‘They (=the people) kept dancing. They (=girl and young man) kept checking their (=the women’s) breasts.’ (2016:-4 @ 01:57)

*tɔ́ɔ́* ‘stay’ may also occur with a verbal-noun complement. In this case, *tùù* ~ *túú* is followed by a morpheme *ni* that continues the same tone (*tùù-nì* ~ *túú‑ní* ) (xx4a‑c).

(xx4) a. *à tùù-nì mùù-mèè-rá*

3SgHum **stay**.Adjn field-do.VblN-Nom

‘He/She keeps farming.’

b. *ààⁿ* / *mā túú-ní mùù-mèè-rá*

3PlHum/1Sg **stay**.Adjn field-do.VblN-Nom

‘They/I keep farming.’

c. *ààⁿ túú-ní [mā bāʔr-rā]*

3PlHum **stay**.Adjn [1Sg hit.Vbl-Nom]

‘They keep hitting me.’

The *-ni* element is obscure. Compare *sánì* ‘by, no later than’ (§8.5.6.7) and perhaps *nī* ‘if’ in conditional antecedents (§16.1).

#### Experiential perfect ‘have ever’ (*dú* )

The sense ‘have (ever)’ is expressed by a *dú* following a main verb in perfective form. Monosyllabic main verbs shift their vowel to +ATR. The subject is followed by the imperfective enclitic /H+=∅/, reflecting the fact that an experiential perfect denotes a state extending into the present.

(xx1) a. *wó=∅ gbǎⁿ jìì* / *kpèèⁿ* / *bèè* / *sànì* / *bàʔr(ì) dú=wɔ̀*

2Sg=Ipfv elephant see./kill./put.down/buy./hit.Pfv **ExpPf**=Q

‘Have you-Sg ever seen/killed an elephant?’ (< *gbàⁿ* )

(verbs *jìɛ́*, *kpɛ̀ɛ́ⁿ*, *bɛ̀ɛ́*, *sàní*, *bàʔrí* in +3Sg perfective form)

b. *má=∅* / *àáⁿ=∅ yíʔé jìì / kpèèⁿ dú*

1Sg=Ipfv / 3PlHum=Ipfv fish see / kill **ExpPf**

‘I/They have (once) seen/killed a fish.’

As the paradigm of ‘have (ever) ascended’ in (xx2) shows, the form of the verb plus *dú* is invariant for subject category.

(xx2) a. 1Sg *má=∅ sìdán̄ ꜜdú*

1Pl *mùʔúⁿ=∅ sìdán̄ ꜜdú*

b. 2Sg *wó=∅ sìdán̄ ꜜdú*

2Pl *ēéⁿ=∅ sìdán̄ ꜜdú*

c. 3SgHum *á=∅ sìdán̄ ꜜdúⁿ*

3PlHum *àáⁿ=∅ sìdán̄ ꜜdú*

d. 3SgNonh *é=∅ sìdán̄ ꜜdú*

3PlNonh *èéⁿ=∅ sìdán̄ ꜜdú*

Negative versions add the usual clause-final negative enclitic. The imperfective subject enclitic is now absent, as seen clearly in (xx3b). The tones of 3Pl *àáⁿ* and of 3Sg *á* in (xx3a) are arguably due to tone sandhi (an expanded form of Final Tone-Raising), see §10.2.3.

(xx3) a. *àáⁿ* / *á sìdán̄ ꜜdú=rēʔ*

3PlHum / 3SgHum ascend.Pfv ExpPf=Neg

‘They have/He-or-she has not ever gone up.’

b. *ààⁿ* / *à yíʔé jìì dú=rēʔ*

3PlHum / 3SgHum fish see.Pfv ExpPf=Neg

‘They have/He-or-she has not ever seen a fish.’

#### *tàà* ~ *táá* with ‘arrive’

This auxiliary is attested only in perfective clauses with following *cìɛ́* ‘arrived’. There seems to be little semantic difference between forms with and without *tàà* ~ *táá*. Etymologically, *tàà* ~ *táá* may be a contraction of the adjoined (and imperfective) verb *táʔá* ‘go’, but if so the two forms of ‘go’ have diverged synchronically. A further difficulty is that *cìɛ́* itself could be parsed as perfective or adjoined (or for that matter imperfective, which however wouldn’t fit the context).

(xx1) a. *ààⁿ táá cìɛ́*

3PlHum go(?) arrive.Pfv

‘They arrived.’ (2016\_04 @ 02:03)

b. *à tàà cìɛ́*

3SgHum go(?) arrive.Pfv

‘He/She arrived.’

#### *sí* in interrogative

This element occurs in a text in a clause ending with tag question marker *kɛ̀* (xx1). It follows the subject, like future *sà*. The latter occurs in combinations like *sí=ì* when contracted with following object pronouns. However, both the form and the sense of the two morphemes are divergent. I gloss *sí* provisionally as “Q” in interlinears since it is attested only in a question.

(xx1) *è sí wō ká kɛ̀*

3SgNonh Q 2Sg have tagQ

‘You-Sg must have it, don’t you?’ (2016\_04 @ 03:12)

The context is that one woman is interrogating another woman concerning a stolen item. (xx1) amounts to an accusation that the addressee stole the item and still has it in her possession. My assistant offered a negative counterpart (xx2).

(xx1) *è sí wō ká=r=à kɛ̀*

3SgNonh Q 2Sg have=Neg=Q tagQ

‘You must not have it, right?’

## Clause adjunction

With this term I refer to multi-verb constructions in which the second clause has a) a reduced subject pronoun coindexed to the subject of the first clause, and b) an “adjoined” form of the verb not marked for TAM category. Contractions involving the first verb and the pronominal subject of the second clause are common and can obscure the underlying representations. There is also sometimes a complementizer-like morpheme *à* at the beginning of the second clause. It too gets involved in vocalic contractions, and it is not always possible to determine whether it is present.

The two clauses may denote co-events belonging to a single complex event (as in ‘fall’ plus ‘descend’ meaning ‘fall down’), or sequenced events (as in ‘go and come back’).

### Forms of verbs and subject pronouns in adjunctions

#### Adjoined verb form in the second (adjoined) clause

The verb in the noninitial clauses in this construction is segmentally identical to the imperative, but may differ tonally. Intransitive examples showing the relationship between the adjoined verb form and the primary main-clause forms are in (xx1). The tonal form of the adjoined verbs does not vary by preceding pronominal-subject category except when affected by M-Spreading.

(xx1) Form of verb in adjoined clause (intransitive)

Pfv -3Sg Ipfv Imprt adjoined gloss

a. *sɛ́ sáá sā sá* ‘come’ *bɔ́ɛ́ bɔ́ɔ́ bɔ̄ bɔ́* ‘exit’

*sɔ́ɛ́ sɔ́ɔ́ sɔ̄ sɔ́* ‘enter’

*bɛ̌ bàà bà bà* ‘fall’

b. *búlī búlɔ́ būlū búlú* ‘return’

c. *jáʔánī jàʔánà jàʔáⁿ jàʔàⁿ* ‘descend’

*sídánī sìdánà sìdáⁿ sìdàⁿ* ‘ascend’

*fídīī fìdɛ́ɛ̀ fìdí fìdì* ‘run’

OV transitive verbs are in the rightmost columns of (xx2). Only +3Sg forms are shown for the main-clause forms in the other columns. The adjoined forms show the same +3Sg/‑3Sg tonal opposition as transitive verbs in other inflectional categories, depending on the category of the preceding object.

(xx2) Pfv +3Sg Ipfv +3Sg Imprt +3Sg adjoined gloss

+3Sg -3Sg

*dɔ̀ní dɔ̀nɔ̀ dɔ̌ⁿ dɔ̀ⁿ* *dɔ́ⁿ* ‘eat (meat)’

*bùgú bùgɔ̀ bùgú bùgù* *búgú* ‘skin (animal)’

*sàní sànà sǎⁿ sàⁿ* *sáⁿ* ‘buy’

*tòʔrí tòʔrɔ̀ tòʔrí tòʔrì* *tóʔrí* ‘sell’

Examples occur in various sections of this chapter.

#### Form of the verb in the first (main) clause

The first verb in the adjunction structure has a regular TAM form, for example perfective. However, in addition to *vv*‑Contraction, a tonal modification is observed if the stem has no more than two syllables (*Cvv*, *CvCv*). In simple clauses, human and nonhuman +3Sg subject pronouns control an {LH} overlay on an immediately following verb: *à bɛ̀ɛ́* ‘he/she fell’, *è bɛ̀ɛ́* ‘it fell’, *à fìdí* ‘he/she ran’, *è fìdí* ‘it ran’. All -3Sg pronominal categories begin with H‑tone, e.g. *bɛ́(ɛ́)* and *fídī*. In clause adjunctions, the first verb usually contracts with the reduced subject of the following second clause. The usual {LH} overlay after +3Sg subjects then appears to disappear with verbs of one or two moras, and the first verb ends up with initial H‑tone (*bɛ́=*, *fídī=*), just as it does after -3Sg subjects. For example, ‘run’ has the same tones with nonhuman 3Sg subject in (xx1a) as it does with the corresponding plural subject in (xx1b).

(xx1) a. *[è fíd=] [ì sɔ́]*

[3SgNonh **run.Pfv**] [3SgNonh enter.Adjn]

‘It (=animal) ran in.’ (< /è fìdí/ plus /è sɔ́/)

b. *[èèⁿ fíd=] [ììⁿ sɔ́]*

[3PlNonh **run.Pfv**] [3PlNonh enter.Adjn]

‘They (=animals) ran in.’

This is not a categorial merger. Rather, it results from Leftward H‑Shift (§3.8.3.7) applying to the +3Sg forms. That no categorial merger is involved is seen more clearly when the the first clause of an adjunction has a trisyllabic. +3Sg *sìdánī* ‘ascended’ remains distinguishable (though barely) from -3Sg *sídánī*, even as first verb in an adjunction (xx2a‑b).

(xx2) a. *[è sìdán=] [í jàʔàⁿ]*

[3SgNonh ascend.Pfv] [3SgNonh descend.Adjn]

‘It (=animal) went up and came (back) down.’

b. *[mùʔùⁿ sídánì=] [ín jàʔàⁿ]*

[1Pl ascend.Pfv] [1Pl descend.Adjn]

‘We went up and came (back) down.’

#### Form of coindexed second subject pronoun in adjoined clause

The second subject pronoun usually combines phonologically with the first verb by *vv*‑Contraction. Except in artificially deliberate speech style, uncontracted examples like human *… fídí (á)àⁿ …* in (xx1b) are limited to a few vocalic sequences like *i a*.

(xx1) a. *[wō bé=] [é jàʔàⁿ]*

[2Sg fall.Pfv] [2Sg descend.Adjn]

‘You-Sg fell down.’

b. *[ààⁿ fídī] [(à)àⁿ sɔ́]*

[3PlHum run.PPfv] [3PlHum enter.Adjn]

‘They ran in.’

We cannot, however, account for all of the forms simply by allowing *vv*‑Contraction to apply to regular subject proclitic forms. In (xx1a), for example, we might have expected #*[wō bɛ́ɛ́] [wō jàʔàⁿ]* or a contraction thereof. It would be difficult to account for the actual *[wō bé=][é jàʔàⁿ]* simply by regular phonology. Even if /bɛ́ɛ́ wō/ could contract, we should get a form with falling tone, say #*béē*, instead of *bé=é*.

A slightly idealized paradigm for second subject in adjunctions is (xx2). The “typical form” column shows representative contracted forms. The “underlying” forms are suggestions, since contractions make them difficult to determine.

(xx2) Second subject in clause adjunctions

category in adjoined clause in simple clause

typical form underlying

a. 1Sg *=(ì)n* /ìn/ *mā*

1Pl *=(ì)n* /ììn/ *mùʔùⁿ*

b. 2Sg *=í* /é +M/ *wō*

2Pl *=íⁿ* /ééⁿ +M/ *ēēⁿ*

c. 3HumSg *=à*, *=ɔ̀* /à/ *à*

3HumPl *=àⁿ*, *=ɔ̀ⁿ* /ààⁿ/ *ààⁿ*

d. 3NonhSg *=ì* /è/ *è*

3NonhPl *=ìⁿ* /èèⁿ/ *èèⁿ*

Some observations:

(xx3) a. Underlying vowel-length is usually masked by contraction;

b. 1Sg and 1Pl have unique suppletive forms /ìn/ and /ììn/ with final nasal consonant (not just vowel nasalization) and +ATR vowel;

c. The ATR split in this paradigm is human third person (‑ATR) versus all others (+ATR);

d. 2Sg has a suppletive form /é/, segmentally similar to *ē* as 2Sg reflexive possessor or pseudo-reflexive object;

e. 2Sg/2Pl forms are H‑toned, not M‑toned as elsewhere, but they come with a floating M‑tone that drops the tone of a following H‑tone (but does not affect a following L‑ or M‑tone);

f. The usual +3Sg versus ‑3Sg tonal effect on the verb is absent (3Sg subject, like 3Pl and first person, allows following L‑ or H‑tones)

The second-person floating M can be seen at work in the (a) and (b) examples in (xx4‑6). In (xx4) observe the tones of *yíʔé* ‘fish’ and *kúmání* ‘sparrow’, which remain H‑toned in (xx4c‑d) but drop to M‑toned /yīʔē/ and /kūmānī/ in (xx4a‑b). The M‑tones of the final syllables then undergo Final Tone-Raising before the L‑toned verb.

(xx4) a. *[wō búl=] [ú yīʔé* / *kūmāní dɔ̀ⁿ]*

[2Sg return.Pfv] [2Sg fish / sparrow eat.meat.Adjn]

‘You-Sg again ate a fish.’ (/búlī é/, *yíʔé*, *kúmání* )

b. *[ēēⁿ búlú=] [íⁿ yīʔé* / *kūmāní dɔ̀ⁿ]*

[2Pl return.Pfv] [2Pl fish / sparrow eat.meat.Adjn]

‘You-Pl again ate a fish/sparrow.’

c. *[à búl=] [ɔ̀ yíʔé* / *kúmání dɔ̀ⁿ]*

[3SgHum return=] [3SgHum fish / sparrow eat.meat.Adjn]

‘He/She again ate a fish/sparrow.’

d. *[à búl=] [ɔ̀ yíʔé-rá-àⁿ dɔ́ⁿ]*

[3SgHum return=] [3SgHum fish-Nom-Pl eat.meat.Adjn]

‘He/She again ate fish-Pl.’

In (xx5) observe the tones of *báʔrí* ~ *báʔŕ* ‘touch’ (adjoined). With second-person subject, the initial syllable of this verb drops to M. The final syllable remains H‑toned *bāʔŕ* (< /bāʔrí/), showing that it has its own tonal autosegment. The H‑toned form *báʔŕ* occurs with non-second-person subjects (xx5c‑d).

(xx5) a. *[wō búl= [ú bāʔŕ mā-n]*

[2Sg return.Pfv] [2Sg touch.Adjn 1Sg-Indep]]

‘You-Sg again touched me.’

b. *[ēēⁿ búlú=] [íⁿ bāʔŕ mā-n]*

[2Pl return.Pfv] [2Pl touch.Adjn 1Sg-Indep]

‘You-Pl again touched me.’

c. *[à búl=] [ɔ̀ báʔŕ mā-n]*

[3SgHum return=] [3SgHum touch.Adjn 1Sg-Indep]

‘He/She again touched me.’

In (xx6), observe the tone of *sá* ‘come’ (basic adjoined form), whose drop to *sā* after second-person subject (xx6a‑b) is easier to hear when negative *=rɛ̄ʔ* is added.

(xx6) a. *[wō búl=] [ú sā(=rɛ̄ʔ)]*

[2Sg return.Pfv] [2Sg come.Adjn(=Neg)]

‘You-Sg again came/didn’t again come.’

b. *[ēēⁿ búlú=] [íⁿ sā(=rɛ̄ʔ)]*

[2Pl return.Pfv] [2Pl come.Adjn(=Neg)]

‘You-Pl again came/didn’t again come.’’

c. *[à búl=] [ɔ̀ sá(=rɛ̄ʔ)]*

[3SgHum return=] [3SgHum come.Adjn(=Neg)]

‘He/She again came.’

In deliberate speech, including “informant-ese,” the second clause may be upgraded to its normal main-clause form, e.g. with 1Pl *mùʔùⁿ* instead of *(ì)n*. An example of this is (xx1c) in §15.2.2.3 (‘You-Sg helped us go up.’).

#### Complementizer *à* ‘that’ in clause adjunctions

A complementizer-like morpheme whose basic form is *à* occurs occasionally in certain constructions resembling clause adjunctions. Because of contractions it is difficult to determine its distribution. This is especially so when the second subject has the same vowel quality: human 3Sg *à* or its plural *ààⁿ*. However, complementizer *à* does not seem to be usual in ordinary adjunctions.

Examples that do include audible *à* in adjunction-like constructions are (xx1a‑b) in §15.2.2.3, where the first verb is ‘help’. This verb is unusual among those that occur in adjunction-like constructions, insofar as the subjects of the two clauses are not coindexed. A more difficult example of this ‘help’ construction, showing the effects of contraction, is (xx1), with human 3Pl second subject *ààⁿ*.

(xx1) *[mā sɔ́ dí-kpɛ́ʔr-à-àⁿ-n=]*

1Sg help.Pfv child-young-Nom-Pl-Indep]

*[ā àáⁿ sìdà]*

[that 3PlHum ascend.Adjn]

‘I helped the children go up.’

The relevant input can plausibly be taken to be /…-à-àⁿ-nū à ààⁿ sìdà/. This portion is heard as [àànāàáⁿsìdà], and the rather long [āàáⁿ] in the middle is compatible with the presence of *à* ‘that’ before the second subject.

Complementizer *à* ‘that …’ is more robustly attested with factive complements of ‘hear (that …)’ (§17.1.3.1) and in quoted clauses ‘say (that …)’ (§17.2.1).

### Clause adjunction expressing a single complex event

#### Adjoined co-event clauses

In (xx1a), the clauses ‘he/she fell’ and ‘he/she descended’ are combined into a single clause, pronounced with no prosodic break and therefore with the second pronominal subject contracting with the final vowel of the first verb. (xx1b) has the same content except for 1Sg subjects. In this construction, the two clauses denoted co-events, i.e. different aspects of what is probably conceptualized as a single event. In many such combinations the second verb denotes direction of motion while the first verb denotes a more general action.

(xx1) a. *[à bá=] [à jàʔàⁿ] [yí dù]*

[3SgHum fall.Pfv] [3SgHum descend.Adjn] [water in]

‘He/She fell down into the water.’ (</à bɛ̌ à jàʔàⁿ/)

.

b. *[mā bé=] [ǹ jàʔàⁿ] [yí dù]*

[1Sg fall.Pfv] [!Sg descend.Adjn] [water in]

‘I fell down into the water.’ (</mā bɛ́ èⁿ jàʔàⁿ/ )

The full set of pronominal subjects for this combination is in (xx2), omitting the final PP ‘into the water’.

(xx2) a. 1Sg *mā bé= (ì)ǹ jàʔàⁿ*

1Pl *mùʔùⁿ bé= (ì)ǹ jàʔàⁿ*

b. 2Sg *wō bé= é jàʔàⁿ*

2Pl *ēēⁿ bé= (é)éⁿ jàʔàⁿ*

c. 3SgHum *à bá= à jàʔàⁿ*

(variant *bɛ́= ɛ̀* )

3PlHum *ààⁿ bá= (à)àⁿ jàʔàⁿ*

d. 3SgNonh *è bé= è jàʔàⁿ*

3PlNonh *èèⁿ bé= (è)èⁿ jàʔàⁿ*

Similar combinations of ‘run’ with ‘enter’ are in (xx3a‑b). The tone pattern of ‘ran’ is H‑initial in 3Sg (xx3a) due to application of Leftward H‑Shift (§3.8.3.7) to /fìdí/, merging with the already H‑initial tones of 1Sg (xx3b).

(xx3) a. *[à fíd=] [ɛ̀ sɔ́]*

[3SgHum run.Pfv] [3SgHum enter.Adjn]

‘He/She ran in.’ (< /à fìdí à sɔ́/ )

b. *[mā fíd=] [ìn sɔ́]*

[1Sg run.Pfv] [1Sg enter.Adjn]

‘I ran in.’ (</mā fídī àⁿ sɔ́/)

The full pronominal paradigm is (xx4).

(xx4) a. 1Sg *mā fíd= ìn sɔ́*

1Pl *mùʔùⁿ fíd= ìn sɔ́*

b. 2Sg *wō fíd= í sɔ̄*

(uncontracted variant *wō fídī é sɔ̄* )

2Pl *ēēⁿ fíd= (í)íⁿ sɔ̄*

(uncontracted variant *wō fídī ééⁿ sɔ̄* )

c. 3SgHum *à fíd= ɛ̀ sɔ́*

3PlHum *ààⁿ fídī (à)àⁿ sɔ́*

d. 3SgNonh *è fíd= ì sɔ́*

3PlNonh *èèⁿ fídī= (ì)ìⁿ sɔ́*

Notice that 2Sg is distinguished from nonhuman 3Sg by the tones of the second pronoun and that of the second verb, and likewise for 2Pl versus nonhuman 3Pl.

#### *búlɔ́* ‘return’ plus adjoined clause (‘do again’)

The verb *búlɔ́* ‘return, go back’ (perfective *bùlí* ~ *búlī* ) may combine with a following adjoined clause of the type described above. In this combination, *búlɔ́* means ‘repeat, VP again’ with no reference to motion (xx1b). If motion is in fact involved, it is expressed by the second verb (xx1a).

(xx1) a. *[à búl=] [ɔ̀ sá]*

[3SgHum **return**.Pfv] [3SgHum come.Adjn]

‘He/She came again.’ (/à bùlí à sá/)

b. *[à búl=] [ɔ̀ kūmɛ̄ɛ̄ kùⁿ]*

[3SgHum **return**.Pfv] [3SgHum meal eat.Adjn]

‘He/She ate (a meal) again.’

A pronominal-subject paradigm of ‘X came again’ is (xx2). The back rounded vocalism in ‘return’ is carried over into the contracted vowels. The association in clause adjunctions of +ATR with human third person only is evident. The 3Sg forms have undergone Leftward H‑Shift (§3.8.3.7) from /bùlí/.

(xx2) a. 1Sg *mā búl= ùn sá*

1Pl *mùʔùⁿ búl= ùn sá*

b. 2Sg *wō búl= ú sā*

2Pl *ēēⁿ búl= úúⁿ sā*

c. 3SgHum *à búl= ɔ̀ sá*

3PlHum *ààⁿ búl= (ɔ̀)ɔ̀ⁿ sá*

d. 3SgNonh *è búl= ù sá*

3PlNonh *èèⁿ búl= ùùⁿ sá*

#### ‘Help’ (*sɔ́ɔ́* ) plus adjoined clause

The VO transitive verb ‘help’ in simple clauses takes a postverbal object. This may be expanded by adding an adjoined clause. The adjoined clause may begin with *à* ‘that’ (§15.2.1.4), which encliticizes to and contracts with a final *-nū* of pronouns or plural nouns. For example, if there is an internal prosodic break in (xx1a), it occurs after *mā-n ā*. The examples in (xx1) end in adjoined *sìdà* ‘ascend’, whose L‑tones favor Final Tone-Raising on a preceding morpheme.

(xx1) a. *[zàkíì sɔ́ mā-n] [ā ń sìdà]*

[Z help.Pfv 1Sg-Indep] [**that** 1Sg ascend.Adjn]

‘Zaki helped me go up.’ (< /mā-nū à (ì)ǹ sìdà/)

b. *[mā sɔ́ zàkíì] [á= ∅ sìdà]*

Z help.Pfv 1Sg-Indep] [**that**= 3SgHum ascend.Adjn]

‘I helped Zaki go up.’ (< /à à sìdà/)

c. *[wō sɔ́ mùʔù-nū] [mùʔúⁿ sìdà]*

2Sg help.Pfv 1Pl-Indep] [1Pl ascend.Adjn]

‘You-Sg helped us go up.’

d. *[mā sɔ́ dí-kpɛ́ʔr-à-àⁿ-n=]*

1Sg help.Pfv child-young-Nom-Pl-Indep]

*[ā àáⁿ sìdà]*

[**that** 3PlHum ascend.Adjn]

‘I helped the children go up.’ (< /-à-àⁿ-nū à/)

#### Adjoined *kàʔrà* ~ *káʔrá* ‘finally VP’

In simple main clauses, *kàʔrà* ~ *káʔrá* (imperfective) means ‘break, snap (sth)’ (transitive) or ‘(e.g.) stick snap’ (intransitive). As an adjoined verb, it combines with the preceding VP to mean ‘VP finally’ or ‘eventually VP’, implying a period of time before the event is completed. Two occurrence of *káʔrá* are in textual passage (xx1).

(xx1) *à sɛ̀ káʔrá sísàⁿ,*

3SgHum come.Pfv **do.finally**.Adjn now,

*à sè tɔ́rɔ́ káʔrá,*

3SgHum come.Pfv while **do.finally**.Adjn,

‘She eventually came (=arrived). While she was finally coming (=arriving) there, (no! The dance was in progress).’ (2016\_04 @ 03:17)

### Clause adjunction expressing event sequences

#### Simple same-subject event sequences

Two sequenced events with the same agent may combine loosely to form a macro-event. In (xx1a‑b) the macro-event has been completed, so the first clause is perfective, but the first clause may be in any TAM category. The second clause has an adjoined verb form that is not specified for tense-aspect (xx1a). In (xx1b) the adjoined clause is itself a two-clause adjunction.

(xx1) a. *[zàkíì sɛ́] [à búlú]*

[Z come.Pfv] [3SgHum return.**Adjn**]

‘Zaki came and went back.’

b. *[zàkíì tɛ́ʔɛ́] [à búl=] [ɔ̀ sá]*

[Z go.Pfv] [3SgHum return.**Adjn**] [3SgHum come.**Adjn**]

‘Zaki went and came back.’ (/à búlú à sá/)

Two adjoined clauses occur in the textual passage (xx2).

(xx2) *súrúkú bòó= [wò má] sísàⁿ, kɔ̀rɔ̀ —*

hyena exit.Pfv [3Sg on] now, [false start]

*èéⁿ fìdì, èéⁿ= ∅ wà*

3PlNonh run.**Adjn**, 3PlNonh 3SgObj go.**Adjn**

‘Hyena came out from that (hole) now. Elder brother—. They (=hyena and hare) ran, they went (away).’ (2016\_02 @ 05:02)

In narratives, the adjoined clause type can become a generalized narrative form, not necessarily closely connecting the relevant event to previous events. This is because tense-aspect marking is mostly unnecessary in describing events that are understood to be sequenced in time, as in most narratives. Adjoined clauses therefore compete with simple perfective clauses. In (xx2) above, the two adjoined clauses represent a restart of the narrative after a false start.

Additional textual examples, not closely tied to a preceding event, are (xx3a‑c). In (xx3c) I cannot determine whether the French loan *commencer* is also in adjoined form.

(xx3) a. *cì-ná búlú [wò má] sísàāⁿ*

hare-Nom=Ipfv return.**Adjn** [3Sg on] now

‘Hare went back to it (=hole) now.’ (2016\_02 @ 04:59)

b. *wábáẁ, é fìdì*

woosh!, 3SgNonh run.**Adjn**

‘Woosh! He ran away.’ (2016\_02 @ 04:54)

In (xx4a‑b), the time frame (expressed only in the first clause) is future. This has no effect on the form of the second clause.

(xx4) a. *[zàkíì sà táʔá] [à búlú]*

[Z Fut go.Ipfv] [3SgHum return.**Adjn**]

‘Zaki will go and return (=come back).’

b. *[zàkíì sà sáá] [à búlú]*

[Z Fut come.Ipfv] [3SgHum return.**Adjn**]

‘Zaki will come and go back.’

When the subject is a 1st/2nd person pronominal, the nonfinal clauses have reduced forms of the subject pronoun; see §15.2.1.3 above.

(xx5) a. *[mā téʔ=] [èn búl=] [ùn sá]*

[1Sg go.Pfv] [**1Sg** return.Adjn] [1Sg come.Adjn]

‘I went and came back.’ (/mā tɛ́ʔɛ́ ìn búlú ìn sá/)

b. *[mùʔùⁿ téʔ=] [èn búl=] [ùn sá]*

[1Pl go.Pfv] [**1Pl** return.Adjn] [1Pl come.Adjn]

‘We went and came back.’

c. *[wō téʔ=] [é būl=] [ú sā]*

[2Pl go.Pfv] [**2Sg** return.Adjn] [2Sg come.Adjn]

‘You-Sg went and came back.’ (< /wō tɛ́ʔɛ́ é būlū é sā/ )

d. *[ēēⁿ téʔé=] [éⁿ būl=] [(ú)úⁿ sā]*

[2Pl go.Pfv] [**2Pl** return.Adjn] [2Pl come.Adjn]

‘You-Pl went and came back.’ (< /tɛ́ʔɛ́ ééⁿ būlū ééⁿ sā/)

When the two clauses are transitive and share an object, the relevant NP appears once, before the first verb. This creates an apparent combination of a subject proclitic immediately followed by a transitive verb, e.g. ‘eat meat’ in (xx6a). This appearance is deceptive, since the tonal form of the final verb is determined by the object category (+3Sg versus -3Sg). Therefore I posit an underlying 3Sg object in the second clause in each of (xx6a‑c) and assume that it has been deleted either by vv‑Contraction (xx6a‑b) or, with first person subject, perhaps by syncope (xx6c).

(xx6) a. *[ààⁿ síbí sìdà=] [àáⁿ= ∅ dɔ̀ⁿ]*

[3PlHum meat burn.Pfv] [3PlHum **3SgObj** eat.meat.Adjn]

‘They roasted and ate the meat.’ (< /sìdàní ààⁿ è dɔ̀ⁿ/ )

b. *[à sìbí sìd=] [á ∅ dɔ̀ⁿ]*

[3PlHum meat burn.Pfv] [3PlHum **3SgObj** eat.meat.Adjn]

‘They roasted and ate the meat.’ (< /sìdàní à/)

c. *[mā sà tàgá fòlò-sá] [ŋ́ ∅ bùgù]*

[1Sg Fut sheep slaughter.Ipfv] [1Sg **3SgObj** skin(v).Adjn]

‘I will slaughter and skin (and butcher) the sheep-Sg.’

In the first clause, which carries the TAM marking, the verb takes its usual main-clause form, subject to contraction at the right edge, attributable to enclisis of the pronominal subject of the noninitial clause (xx7a‑b).

(xx7) a. *[zàkíì sìdán=] [á jàʔàⁿ]*

[Z ascend.Pfv] [3SgHum descend.**Adjn**]

‘Zaki went up and came (back) down.’ (< /sìdánī/ )

b. *[zàkíì sɔ́=] [à bɔ́]*

[Z enter.Pfv] [3SgHum exit.**Adjn**]

‘Zaki went in and came (back) out.’ (< /sɔ́ɛ́/ )

The adjunction construction may also have an imperative first verb (xx8). In (xx8b), *dè* ‘there (definite)’ requires a modified (H‑toned) form of the preceding word (§4.4.2.1).

(xx8) *sē= [é būlū]*

come.Imprt [2Sg return.**Adjn**

‘Come-2Sg (here) and (then) go back!’ (< /sā é būlū/)

*sē= [é búl=ú dè]*

come.Imprt [2Sg return.**Adjn**=Link there.Def]

‘Come-2Sg (here) and (then) go back there!’ (< /sā ē būlú(ē) dè/)

#### Adjoined *kàà* ‘leave, abandon’

This verb may be adjoined to a preceding clause, usually one denoting transportation or positioning (xx1a‑b). The adjoined clause with ‘leave’ has the adjoined form *kà*. Final Tone-Raising applies to pronominal subjects of ‘leave’.

(xx1) a. *[mā tòʔó bɛ̀=]*

[1Sg waterjar put.down.Pfv]

*[ŋ́ kè= é-yè=è dè]*

[1Sg **leave.Adjn** Nonh-3SgObj=Link there.Def]

‘I put down the waterjar and left it there.’ (< /tòʔò bɛ̌/, /ŋ́ kà è-yà dè/ )

[*è-yà* with /a/ → *ee* before *dè* ]

b. *[à tɛ̀ʔɛ́ [mā dɛ̀]]*

[3Sg go.Pfv [1Sg with]]

*[á kà mā-n̄ dè]*

[3SgHum **leave.Adjn** 1Sg-Indep there.Def]

‘He/She took me and left me there.’

### Negation of clause adjunction

When an adjunction construction expressing a single complex event is negated, there is a single instance of the clause-final negative enclitic, at the end.

(xx1) *[à búl=] [ɔ̀ sá]=rɛ̄ʔ*

[3SgHum return.Pfv] [3SgHum come.Adjn]=**Neg**

‘He/She did not come (back) again.’

## Verb-verb compounds

### Verb combinations

If the second verb in an adjunction-like construction is not preceded by even a reduced subject pronominal, so that the two verbs are directly adjacent, we can speak of verb-verb compounds.

In (xx1), ‘run’ and ‘exit’ are adjacent. *fìdì* is the regular adjoined form for the verb ‘run’; here it undergoes regular Final Tone-Raising to *fìdí* before L‑toned *bɔ̀* ‘exit’. The unusual feature is the tone of *bɔ̀*, since its normal adjoined form is *bɔ́*, preserving the lexical H‑tone also found in imperfective *bɔ́ɔ́*.

(xx1) *súrúkú-rɔ̀ commencer è fìdí bɔ̀*

hyena-Nom begin 3SgNonh run.**Adjn** exit.**Adjn**

‘Hyena began running away.’ (2016\_02 @ 02:27)

No subject pronominal may intervene between *fìdí* and *bɔ̀* in this construction: *èèⁿ* *fìdí bɔ̀* ‘they (animals) ran away’, *mùʔúⁿ fìdí bɔ̀* ‘we ran away’.

### Frozen but possibly composite verb stems

There are also many stems that function as simple verbs but that may be at least etymologically composite. Criteria for distinguishing compound intransitive verbs from object-verb collocations are given in §9.5.1.

For example, two verbs (one of which has two variants) appear to begin with an element *wòlò‑* ~ *wóló‑*. All forms given are imperfective.

(xx1) *wòlò-báá* ‘pick out (selectively)’ or ‘untangle’

*wòlò-máá* [variant of *wòlò-báá* ]

*wòlò-kónò* ‘welcome (a guest)’ or ‘encounter’

The second elements might be related to *bàà* ‘put down’, *màà* ‘do’, and possibly *kónó* ‘become wide’. There is also a verb *wòlònàà* ‘strip off (leaves)’.

Several inchoative verbs related to adjectives end in ‑*bàà* or ‑*màà* are in (xx2).

(xx2) *fòʔò-bàà* ‘go far away’

*kùdɔ̀-bàà* ‘become heavy’

*nɛ̀ɛ̀-bàà* ‘become bitter’

*sɔ̀ɔ̀ⁿ-bàà* ‘become long’

*tòò-bàà* ‘become deep’

Some other verbs that may be composite, at least etymologically, are in (xx3).

(xx3) a. *nùʔùⁿ-yáà* ‘get better’ (adjective *núʔúⁿ tɔ́* )

*jùgù-yáà* ‘become nasty’ (adjective *júgúyéé tɔ́* )

b. *dàà-sɔ̀* ‘be familiar with (place)’

*dàà-sɔ́ʔɔ́* ‘begin’

c. *dá-ꜜkááⁿ* ‘(sth) finish, end’

*dá-ꜜkpááⁿ* ‘die’ (cf. *kpááⁿ* ‘die’)

d. *bèl-màà* ‘treat, care for (medically)’

*dó-ꜜsáá* ‘add’

*kù-sɔ́ɔ́* ‘bury’ (*kù* ‘corpse’)

*màà-kúmà* ‘rinse’ (cf. *kùmà* ‘make cold’)

*mà-dímínà* ‘wound (sb)’ (cf. *dìmìní* ‘hurt (sb)’)

## Temporal adverbial clauses

### Temporal relative clause (‘[at] the time when …’)

A temporal noun (‘time’, ‘day’, ‘year’, etc.) may be relativized on to produce a temporal adverbial clause (‘the time/day/year when …’). In Jalkunan the relevant postposition is optionally present (‘at the time/on the day/in the year when …’). The postposition is present in (xx1a) but not in (xx1b). For relativization on the NP complement of a postposition, see §14.3.4.

(xx1) a. *[wō sɛ́ [[ꜜsóʔó mì] dó]*

[2Sg come.Pfv [[**day Rel**] with]

*mā téʔé ꜜkɛ́ [sàá dù]*

1Sg go.Pfv Past [house in]

‘On the day when you-Sg came, I had gone away on a trip.’

b. *[[ɲɛ̄ɛ́ mì] [mā nɔ̀ŋɔ́] dɛ̀-kɛ́ⁿ]*

[[year Rel] [1Sg friend] finish.Pfv]

*mā wál mɛ̀ɛ̀=nɛ̄ʔ*

1Sg work(n) do.Pfv=Neg

‘The year my friend passed away, I didn’t do any work.’

### Backgrounded imperfective or progressive clauses

An imperfective-type clause may function as background to another without an overt subordinator. Progressive clauses lend themselves well to this background character (xx1).

(xx1) *[zàkíì cíɛ́ sò-yà] [mā kú bɔ́ɔ́]*

[Z be.Past enter-**Prog**] [1Sg begin exit.Ipfv]

‘(As) Zaki was entering, I began to leave.’

Other temporally unbounded clauses may also be used in this way, such as the simple present in (xx2).

(xx2) *mā ɲìí màà, gbɔ̄-nɔ̄ sà sɔ́ɔ́*

1Sg sleep(n) do.**Ipfv**, thief-Nom Fut enter.Ipfv

‘While I was sleeping, the thief was about to enter.’

If there is a spatial separation between two activities, a construction with *tɔ́rɔ́* ‘while’ may be used. See §15.3.5 and (xx1) in §15.2.2.4. However, my assistant did not accept this construction in a context like that of (xx2) where the sleeper was presumably inside the house that was about to be broken into.

### ‘Since …’ clauses (*kàbí* )

A simple ‘since …’ clause can be formed by preposing *kàbí* ‘since’ to a regular perfective clause (xx1a). A more elaborate version of e.g. ‘since yesterday’ (with implied ‘until today’) is a two-clause combination ‘it took it (=picked it up) yesterday (and) ‘it will put it down today’ (xx1b). This “pick up … put down” construction occurs widely in languages of the zone.

(xx1) a. *[kàbí mā sɛ́] mā tɔ́= [ɔ̄ⁿ wéé]=rēʔ*

[**since** 1Sg come.Pfv] 1Sg yet [1SgRefl bathe.Pfv]=Neg

‘Since I came, I haven’t bathed (yet).’ (< *tɔ́ɔ́ āⁿ* )

b. *[é yàlí lò]*

[3SgNonh.3SgNonh take.Pfv yesterday)

*[è sí=í bà fì]*

[3SgNonh Fut=3SgNonhObj put.down.Ipfv today

*mā tóō kūmɛ̄ɛ̄ kùń=nēʔ*

1Sg yet meal eat.Pfv=Neg

‘From yesterday through today, I haven’t eaten.’

### Chronological reversal (‘before …’ clauses)

#### With *sɔ̀rɔ̀* ‘do then’

‘Before …’ with clausal scope is expressed using the auxiliary verb *sɔ̀rɔ̀* (imperfective, not attested in perfective form), which means ‘do then’ (cf. English *proceed to VP*). The subject takes the imperfective enclitic. *sɔ̀rɔ̀* is followed by an adjoined clause with reduced pronominal-subject proclitic.

(xx1) a. *[mùʔùⁿ sɔ́]*

[1Pl enter.Pfv]

*[ká-ná=∅ sɔ̀r [∅ sá]]*

[rain-Nom=Ipfv **do.then**.Ipfv [3SgNonh rain.fall.Adjn]]

‘We went in before the rain fell.’

b. *[zàkíì è wěē]*

[Z 3SgNonh go.Pfv]

*[má=∅ sɔ̀rɔ̀= [n sá]]*

[1Sg=Ipfv do.then.Ipfv [1Sg come.Adjn]]

‘Zaki went away before I came.’

c. *[ɲùʔù-ná-àⁿ wé]*

[garment-Nom-Pl wash.Imprt]

*[é=∅ sɔ̀r= [í ∅ wà]]*

[2SgRefl=Ipfv do.then.Ipfv [2Sg 3SgNonh go.Adjn]]

‘Wash the clothes before you-Sg go.’

Expanding from ‘before I came’ in (xx1b) above, its full pronominal paradigm is (xx2). My assistant had some difficulties with the first person forms in particular. The second person forms (xx2b) differ sharply in tones.

(xx2) ‘Before \_ came’

a. 1Sg *má=∅ sɔ́r= ɔ̀ⁿ sá*

1Pl *mùʔúⁿ=∅ sɔ́r= ɔ̀ɔ̀ⁿ sá*

b. 2Sg *wó=∅ sɔ̀r= í sà*

2Pl *ēéⁿ=∅ sɔ̀r= ííⁿ sà*

c. 3SgHum *á=∅ sɔ̀r= (ɔ̀) sá*

3SgNonh *é=∅ sɔ̀r= ∅ sá*

d. 3PlHum *àáⁿ=∅ sɔ̀r= ɔ̀ɔ̀ⁿ sá*

3PlNonh *èéⁿ=∅ sɔ̀r= ììⁿ sá*

#### With *tɔ̄=nɛ̄ʔ* ‘not yet’

An alternative ‘before …’ clause probably originated as a construction of the type ‘(while) X had not yet VPed’. Synchronically we have preclausel *fɔ̄* ‘all the way to, until’, then the positive clause followed by *tɔ̄=nɛ̄ʔ*. Compare *à tɔ̀ɔ̀=rɛ̄ʔ* ‘he/she did not remain’. However, the short vowel of *tɔ̄* and its linear position suggest that it is now an adverbial particle ‘yet’ rather than a verb.

(xx1) *bon*, *fɔ̄ èèⁿ cíɛ́ [jɛ̀rɛ́ mà] tɔ̄=nɛ̄ʔ,*

well, until 3PlNonh arrive.Pfv [lion on] **yet=Neg**,

*èèⁿ cíɛ́ sísàāⁿ, cǐⁿ dɛ̀ [súrúkú màā], …*

3PlNonh arrive.Pfv now, hare say.Pfv [hyena on], …

‘Well, before they reached the lion, (before) they arrived now, hare said to hyena: …’ (2016\_02 @ 00:33)

#### *tɔ̄ⁿ* ‘first’ (adverb)

The nasal in *tɔ̄=nɛ̄ʔ* ‘not yet’ (see preceding section) presupposes a nasalized vowel in *tɔ̄ⁿ*. The form *tɔ̄ⁿ* without the negative enclitic is in fact attested clause-finally in positive clause, in the adverbial sense ‘first’ (i.e. before another event).

(xx2) *mā ná lè tɔ̄ⁿ*

1Sg 3SgHum see.Imprt **first**

‘Let me look at him first (=before you do)!’ (2016\_02 @ 03:04)

### *tɔ́rɔ́* ~ *tɔ́nɔ́* ‘while’

This particle can be glossed ‘while’. It anticipates a paired second clause that expresses a simultaneous activity in a distinct location.

(xx1) *mā cíɛ́ bàrí-mèè tɔ́rɔ́,*

1Sg speak.Pfv conversation **while**,

*gbɔ̄-nɔ̄ sà sɔ́ɔ́ [sàá tɔ̀]*

thief-Nom Fut enter(v).Ipfv [house in]

‘While I was conversing (elsewhere), the thief was entering the house.’

One can catch the flavor of this by rephrasing the translation as ‘I was conversing (outside); meanwhile, the thief was entering the house.’ See also (xx1) in §15.2.2.4. If there is no spatial separation, the backgrounded clause is a simple progressive or present main clause (§15.3.1).

*tɔ́rɔ́* ~ *tɔ́nɔ́* in the sense ‘while’ may also follow verbal nouns, in durative complements of perception verbs (§17.1.3.2).

*tɔ́rɔ́* ~ *tɔ́nɔ́* also occurs in purposive clauses (§17.5.1).

## Spatial and manner adverbials

### Spatial adverbial clause (‘where …’)

A spatial adverbial clause (‘where …’) takes the form of a postpositional relative clause (§14.3.4).

(xx1) *[mùʔùⁿ ɲíī [[làʔá mì] tɔ́]]*

[1Pl spend.night.Pfv [[**place Rel**] in]]

*é= ∅ fòʔò-bɛ́*

3SgNonh 3SgNonhRefl be.distant.Pfv

‘The place where we spent the night is far away.’

### Manner adverbial clause (*kómì* ‘as’)

The noun *cógō* ‘manner’ can take a verbal-noun complement. The resulting NP can function as an NP argument in a higher clause (xx1).

(xx1) *mā [sàá-dèè cógó] sɔ̀ɔ̀=rɛ̄ʔ*

1Sg [house-open.VblN **manner**] know.Pfv=Neg

‘I don’t know how to open the door (to the house).’

*kómì* ‘as’ (French *comme*) may be preposed to a regular clause (without *cógō* ) as a manner adverbial (xx2).

(xx2) *má=∅ wàlí mè-yá*

1Sg=Ipfv work(n) do-Prog

*[kómì zàkíì=∅ wàlí mè-yá]*

[as Z=Ipfv work(n) do-Prog

‘I work like (=the same way) Zaki works.’ (*wàlì* )

For preclausal *èmmɛ̀ kómì*, see §19.2.2.3.

# Conditional constructions

## Hypothetical conditional with *nī* ‘if’

### Regular antecedent clause

Examples are in (xx1). Particle *nī* (sometimes heard as *nē=* in contractions) is clause-initial in the antecedent. The consequent clause is a regular main clause, normally future, present, or imperative. The verb form in the antecedent clause (“.Antec” in interlinears) is discussed below.

(xx1) a. *nī ká-ná=∅ sā,*

if rain(n)-Nom=Ipfv rain.fall.Antec,

*mùʔúⁿ=∅ sà sɔ́ɔ́*

1Pl=Ipfv Fut enter.Ipfv

‘If it rains, we’ll go in.’

b. *nī wō kā mā-n̄,*

if 2Sg abandon.Antec 1Sg-Indep,

*má=∅ wò kpááⁿ*

1Sg=Ipfv 2Sg kill.Ipfv

‘If you-Sg leave me, I’ll kill you.’

c. *nī zàkíì mā báʔrī,*

if Z 1Sg hit.Antec,

*má=∅ nì wàá*

1Sg=Ipfv 3SgNonhObj go.Ipfv

‘If Zaki hits me, I’ll go away.’

d. *nī wō bóó bà,* *lāʔā*

if 2Sg fall(n) fall.Antec, get.up.Imprt

‘If you-Sg fall, get up!’

e. *nī ààⁿ búl=ú dè,*

if 3PlHum return.Antec=Link there.Def,

*àáⁿ=∅ sà= ààⁿ kpááⁿ*

3PlHum=Ipfv Fut 3PlHum kill.Ipfv

‘If they go back there, they (=others) will kill them.’

(/būlū/ modified by the following *dè* )

### Form of verb in antecedent clause

(xx1a,b,e) in the preceding section have intransitive verbs in the antecedent. (“Intransitive” here includes VO transitives.) The antecedent functions semantically as perfective, and there is no imperfective subject enclitic. However, the verb is not the usual perfective one.

Additional forms of intransitive verbs in the antecedent (rightmost data column), compared to other forms of the same verbs, are in (xx1) below. The form shown for ‘fall’ occurs when the preverbal cognate nominal *bóó* is omitted.

(xx1) Form of verb in conditional antecedent (intransitive)

Pfv -3Sg Ipfv Imprt adjoined ‘if’ gloss

a. *sɛ́ sáá sā sá* *sā* ‘come’ *bɔ́ɛ́ bɔ́ɔ́ bɔ̄ bɔ́* *bɔ̄* ‘exit’

*sɔ́ɛ́ sɔ́ɔ́ sɔ̄ sɔ́* *sɔ̄* ‘enter’

*bɛ̌ bàà bà bà* *bā* ‘fall’

b. *bùlí búlɔ́ būlū búlú* *būlū* ‘return’

c. *jáʔánī jàʔánà jàʔáⁿ jàʔàⁿ* *jāʔāⁿ* ‘descend’

*sídánī sìdánà sìdá sìdà* *sīdā* ‘ascend’

*fìdí fìdɛ́ɛ̀ fìdí fìdì* *fīdī* ‘run’

The data show that the form in conditional antecedents is segmentally identical to the imperative, but it is M‑toned even when the imperative is L or LH-toned.

If the antecedent clause is an OV transitive, the antecedent form of the verb is identical to the imperative, with tones depending on the category (+3Sg or ‑3Sg) of the preceding object.

(xx2) a. *nī mā dí bàʔrì* / *jì* / *jàʔàⁿ*

if 1Sg child hit./see./take.down.Antec

‘if I hit/see/take down the child’

b. *nī mā dí-rá-àⁿ báʔrí* / *jí* / *jáʔáⁿ*

if 1Sg child-Nom-Pl hit./see./take.down.Antec

‘if I hit/see/take down the children’

## ‘Even if …’ (*álì* )

*álì* ‘even’ may replace *nī* ‘if’ in the antecedent. In this case, the speaker asserts that whether or not the antecedent event is realized, the consequent event will be realized.

(xx1) *[álì ká-ná ꜜkú sáá síní]*

[**even** rain(n)-Nom begin rain.fall.Ipfv tomorrow]

*[má=∅ nì wàá [mùú dù]]*

[1Sg=Ipfv 3SgNonhObj go.Ipfv [field in]]

‘Even if it rains tomorrow, I’ll go to the field(s).’ (*mùù* )

## Willy-nilly and disjunctive antecedents (‘whether X or Y …‘)

In this construction, two juxtaposed antecedents have complementary truth conditions. Typically the second is the negation of the first, but it may also denote some other mutually exclusive state of affairs. The consequent eventuality is asserted as independent of realization of the antecedent eventualities. The particle *wò* ‘whether’ occurs at the end of both clauses, following even the negative enclitic. In the combination *=rĒʔ* plus *wò*, the negative enclitic drops its final glottal stop, which occurs only at clause boundaries.

(xx2) *[káⁿ sɛ̌ wò] [káⁿ sèè=rē wò]*

[rain(n) rain.fall.Pfv **whether**] [rain(n) rain.fall.Pfv=Neg **whether**]

*[má=∅ nì wàá [mùú dù]]*

[1Sg=Ipfv 3SgNonh go.Ipfv [field in]]

‘Whether it rains or doesn’t rain, I’ll go to the field(s).’

## Counterfactual conditional

Adding past particle *kɛ́* or past-time *cìɛ̀* ~ *cíɛ́* ‘was/were’ converts a simple conditional into a counterfactual. Both the antecedent and the consequent are time-shifted by one or the other of these forms. In (xx1), the antecedent has *kɛ́* and the consequent has *cìɛ̀*.

(xx1) *[nī káⁿ dɔ̀ɔ̀n sé ꜜkɛ́]*

[if rain(n) a.little rain.fall.Pfv **Past**]

*[sɔ́nɔ́ cìɛ̀ ɲàá-nà]*

[maize **be.Past** goodness-Nom]

‘If it had rained a little, the maize (crop) would have been good.’

A somewhat complex textual example is (xx2). It was spoken as a concluding “moral” for a long tale, describing how women used to be able to take off their breasts for washing, and the events that ended that situation.

(xx2) *né= é cì kɛ́ wɔ́ʔrɔ́*

if 3SgNonh can.Pfv **Past** be.removed.Adjn

*mɛ̀ʔɛ̀-ná-àⁿ cíɛ́ tɔ́= [ɔ̀ⁿ kú*

person-Nom-Pl **be.Past** stay.Ipfv [3PlHum begin

*[mɛ̀ʔɛ̀-ná-àⁿ cíí-ná-àⁿ] jɔ́ⁿ]*

[person-Nom-Pl breast-Nom-Pl] steal.Adjn]

‘If it (=breasts) could (still) be taken off, people would constantly steal (other) people’s breasts.’ (2016\_04 @ 03:42)

# Complement and purposive clauses

## Full-clause complements

### ‘Want’ (*kɔ́ɔ́* ~ *kɔ̀ɔ̀* ) with clausal complement

#### Same-subject imperfective clause

For simple transitive ‘want’ with NP object see §11.2.6.2. If the complement is clausal, a further distinction is made between same- and different-subject constructions. In both subtypes, the second clause has an overt subject.

Same-subject examples are in (xx1a‑c). The subordinated clause is in the present form (imperfective subject enclitic, imperfective form of verb). In (xx1b), the negative enclitic occurs at the very end but has scope over the entire construction.

(xx1) a. *má=∅ kɔ̀ɔ̀ [má=∅ ꜜní wàà kúnú]*

1Sg=Ipfv want.Ipfv [1Sg=Ipfv 3SgNonhObj go.Ipfv village]

‘I want to go to the village.’

b. *má=∅ kɔ̀ɔ̀ [má=∅ ꜜní wàà kún]=nēʔ*

1Sg=Ipfv want.Ipfv [1Sg=Ipfv 3SgNonhObj go.Ipfv village]=Neg

‘I don’t want to go to the village.’

c. *má=∅ kɔ̀ɔ̀ [má=∅ fìdɛ́ɛ̀]*

1Sg=Ipfv want.Ipfv [1Sg=Ipfv run.Ipfv]

‘I want to run.’

Combinations of ‘want’ with different pronouns in the same-subject subtype are in (xx2). The subjects of the two clauses are coindexed in these combinations. The second 1st/2nd person subject pronouns after *kɔ̀ɔ̀* are not reduced, indicating that the subject pronouns are not encliticized to *kɔ̀ɔ̀* in the fashion of many adjunction constructions. However, adjunction-like enclisis and tonal modifications do occur for 3Pl second subject; note the falling tones on the subject pronouns (xx2d). In the 3Sg cases, the second subject is logophoric in form (human *à‑wò*, nonhuman *è‑wò* ).

(xx2) Same-subject ‘want to run’

a. 1Sg *má=∅ kɔ̀ɔ̀ [má=∅ fìdɛ́ɛ̀]*

1Pl *mùʔúⁿ=∅ kɔ̀ɔ̀ [mùʔúⁿ=∅ … fìdɛ́ɛ̀]*

b. 2Sg *wó=∅ kɔ̀ɔ̀ [wó=∅* *… fìdɛ́ɛ̀]*

2Pl *ēéⁿ=∅ kɔ̀ɔ̀ [ēéⁿ=∅ … fìdɛ́ɛ̀]*

c. 3SgHum *á=∅ kɔ̀ɔ́= [ɔ̀-wò=∅ … fìdɛ́ɛ̀]*

3SgNonh *é=∅ kòó= [ò-wò=∅ … fìdɛ́ɛ̀]*

d. 3PlHum *àáⁿ=∅ kɔ̀= [ɔ́ɔ̀ⁿ=∅ … fìdɛ́ɛ̀]*

3PlNonh *èéⁿ=∅ kɔ̀ɔ̀ [éèⁿ=∅ … fìdɛ́ɛ̀]*

#### Different-subject imperative clause

‘Want’ also allows combinations with disjoint subjects. In this case, the complement is imperative rather than present (imperfective). The imperfective subject enclitic is therefore absent. Since (by stipulation) the subjects are not coindexed in this subtype, a 3Sg subject pronoun in the subordinated clause has ordinary (nonlogophoric) form. Compare same-subject logophoric (xx1a) with different-subject nonlogophoric (xx1b).

(xx1) a. *zàkíì=∅ kɔ̀ɔ́= [ɔ̀-wò=∅ fìdɛ́ɛ̀]*

Z=Ipfv want.Ipfv [**3SgHum.Indep**=Ipfv run.**Ipfv**]

‘Zakix wants ∅x to run.’ (< /kɔ̀ɔ̀ à-wò/)

b. *zàkíì=∅ kɔ̀ɔ̀= [à fìdí]*

Z=Ipfv want.Ipfv [**3SgHum** run.**Imprt**]

‘Zakix wants him/hery to run.’

Different-subject combinations are tabulated in (xx2). No phonological enclisis has been observed. The subject of ‘want’ is open-ended and is not shown, but it must be distinct from that of the subordinated clause. The tones of the imperative verb ‘run’ follow the usual pattern tonal: LH after +3Sg, HH after -3Sg except MM after M‑toned pronoun.

(xx2) Different-subject ‘want’

a. M-toned subject pronouns

1Sg *… kɔ̀ɔ̀ [mā fīdī]*

2Sg *… kɔ̀ɔ̀ [wō fīdī]*

2Pl *… kɔ̀ɔ̀ [ēēⁿ fīdī]*

b. other plural subject pronouns

1Pl *… kɔ̀ɔ̀ [mùʔùⁿ fídí]*

3PlHum *… kɔ̀ɔ̀ [ààⁿ fídí]*

3PlNonh *… kɔ̀ɔ̀ [èèⁿ fídí]*

c. 3Sg subject pronouns

3SgHum *… kɔ̀ɔ̀ [à fìdí]*

3SgNonh *… kɔ̀ɔ̀ [è fìdí]*

### ‘Know that …’ plus factive complement clause

For the verb ‘know’ see §11.2.6.1. This verb takes a preverbal NP object, usually a nonhuman 3Sg object pronoun (*ní* or variant). This can be elaborated by adding a factive clause, in main-clause form. For example, (xx1a) is easily embedded into (xx1b).

(xx1) a. *[mā jɛ́ⁿ] sɛ̀ɛ́*

[1Sg father] come.Pfv

‘My father came/has come.’

b. *mā ń sɔ̀ [[mā jɛ́ⁿ] sɛ̀ɛ́]*

1Sg 3SgNonhObj **know**.Pfv [[1Sg father] come.Pfv]

‘I know that my father has come.’

Since the complement of ‘know’ is a kind of thought quotation, it can take a logophoric pronoun coindexed with the knower. The logophoric human 3Sg pronoun *à-wò* in (xx2a) expresses this coindexation. Logophoric human 3Pl *á‑mǎāⁿ* does likewise in (xx2b). The alternative is a simple (non-anaphoric) 3Pl pronoun (xx2c), which is obligatory for disjoint reference and optional for coindexed reference. See §17.1.1 and §17.1.3 on the morphophonological difficulties of analysing such combinations.

(xx2) a. *zàkíì í sɔ̀*

Z 3SgNonhObj know.Pfv

*[á-wò=∅ sí=í wàá]*

[**Hum-3LogoSg**=Ipfv Fut=3SgNonhObj go.Ipfv]

‘Zakix knows that hex will go.’

b. *dí-kpɛ́ʔ-rà-áⁿ=∅ sɔ̀*

child-small-Nom-Pl=?? know

*[á-màâⁿ=∅ sí=í wàá]*

[**Hum-3LogoPl**=Ipfv Fut=3SgNonhOjb go.Ipfv

‘The childrenx know that theyx will go.’

c. *dí-kpɛ́ʔ-rà-áⁿ=∅ sɔ̀*

child-small-Nom-Pl=?? know

*[áàⁿ=∅ sí=í wàá]*

[**3PlHum**=Ipfv Fut=3SgNonhOjb go.Ipfv

‘The childrenx know that theyx/y will go.’

### ‘See (find, hear) that …’

#### With factive (propositional) complement

Verbs of propositional recognition such as ‘see (that …)’, ‘hear (that …)’, and ‘find, discover (that …)’ take regular main clauses as complements denoting facts (states of affairs). The complementizer *à* is sometimes present, as in (xx1a) and probably before contraction in (xx1c). A coindexed 3Sg subject takes logophoric form (xx1c).

(xx1) a. *mā ní mɛ̀ɛ̀ [à zàkíì sɛ̀ɛ́]*

1Sg 3SgNonhObj hear.Pfv [**that** Z come.Pfv]

‘I heard that Zaki has come.’

b. *mā tíʔ= [í jìɛ̀]*

1Sg go.Pfv [3SgNonh see.Adjn]

*[mìʔì-ná-àⁿ wɛ́ɛ́ [mùú dù]]*

[person-Nom-Pl go.Pfv [field in]]

‘I went and found that the people had gone to the fields.’ (variant *wéé* )

c. *á ∅ mɛ̀*

3SgHum 3SgObj hear.Pfv

*[á ∅-wò sá ꜜtáʔá=rɛ̄ʔ]*

[that Hum-3SgLogo Fut go.Ipfv=Neg]

‘Hex heard that hex isn’t going.’ (< *mɛ̌*, *à à-wò* )

#### Direct-perception type

When the speaker reports having seen an actual event, the complement may be reduced to an imperfective VP with its agent appearing in object position (xx1a).

(xx1) a. *mā zàkíì jíɛ́ bɔ́ɔ́* / *sáá* / *bàà*

1Sg Z see.Pfv exit(v).Ipfv / come.Ipfv / fall.Ipfv

‘I saw Zaki going out/coming/falling.’

b. *mā zàkíì jíɛ́ [dí-kpɛ́ʔr-à-àⁿ báʔrá]*

1Sg Z see.Pfv [child-small-Nom-Pl hit.Ipfv]

‘I saw Zaki hitting the children.’

It is also possible to add *tɔ́rɔ́* ~ *tɔ́nɔ́* ‘while’ (§15.3.5) to a verbal noun (§4.2.2) complement, emphasizing the durative or progressive aspect of the event.

(xx2) *mā zàkíì jíɛ́ [ꜜbóó* / *ꜜséé* / *bèè tɔ́nɔ́]*

1Sg Z see.Pfv [exit./come./fall.VblN **while**]

‘I saw Zaki going out/coming.’

For *tɔ́rɔ́* ~ *tɔ́nɔ́* in purposive clauses, see §17.5.1.

### Obligational (*fɔ̄* ‘it must be’) with present or future clause

A preposed *fɔ̄*, which suspiciously resembles French *il faut* but might also be identified with *fɔ̄*, ‘all the way to, until’ (§8.3.12), functions as an impersonal ‘it must be that …’ and is followed by a present or future clause.

(xx1) *fɔ̄ [má=∅ nì wàà kúnú]*

**must** [1Sg=Ipfv 3SgNonhObj go.Ipfv village]

‘I must go to the village.’

## Quotative complements

A perfective indicative main clause like (xx1a) may function without change as quotation after a verb of saying if there is no update of indexicals (xx1b).

(xx1) a. *káⁿ sɛ̀ kúnú*

rain(n) rain.fall.Pfv village

‘It rained in the village.’

b. *zàkíì dɛ̀ [káⁿ sɛ̀ kúnú]*

Z say.Pfv [rain(n) rain.fall.Pfv village]

‘Zaki said that it rained in the village.’

However, some adjustments of original clauses are made when they are quoted. The following sections discuss ‘that’ complementizers, pronominal adjustments, and and clause-level TAM adjustments.

### *à* as quotative ‘that’ complementizer

A quoted indicative clause optionally begins with *à* ‘that’. In the majority of elicited quoted indicative clauses, *à* was absent (at least segmentally), but my assistant indicated in each case that it could be added. It is present in (xx1a) but not in the synonymous (xx1b).

(xx1) a. *zàkíì dɛ́ [à bákàrí=∅ sà sáá]*

Z say.Pfv [that B Fut come.Ipfv]

‘Zaki said that Bakari will come.’

b. *zàkíì dɛ́ [bákàrí=∅ sà sáá]*

Z say.Pfv [B=Ipfv Fut come.Ipfv]

‘Zaki said Bakari will come.’

A possible etymological source for the *à* ‘that’ complementizer is suggested by its relationship to 3Sg pronouns. When the subject of a quoted indicative clause is a logophoric 3Sg pronoun that is coindexed with the quoted author of the quotation, there is some ambiguity as to whether initial *à* in the quoted clause is the ‘that’ complementizer or the first morpheme in human 3Sg independent pronoun *à‑wò* in logophoric function. The *à* is audible, but ambiguous, in (xx2a). It is often absent, or at least inaudible, as in (xx4b). Its absence/inaudibility could be attributed to *vv*‑Contraction. It is possible that variation between audible and inaudible *à* in 3Sg pronoun *à‑wò* in such contracting environments led to reanalysis of *à* as an optional ‘that’ complementizer and its extension to quoted clauses with other subjects, like ‘Bakari’ in (xx1a) above.

(xx2) a. *zàkíì dɛ́ [à wò sà sáá]*

Z say.Pfv [(that) 3SgLogo Fut come.Ipfv]

or: *[à-wò*

[Hum-3SgLogo

‘Zakix said that hex will come.’

b. *zàkíì dɛ́ [wò sà sáá]*

Z say.Pfv [3SgLogo Fut come.Ipfv]

[= (a)]

It may be that complementizer *à* is lurking in at least some quoted clauses where it is unrealized segmentally. In (xx3a‑b), *dɛ́* is structurally H‑toned since it follows a personal name (which is treated as -3Sg in its tonal effect on a following verb). However, its pitch is not as high as would be expected. This suggests the possibility that the quoted clauses begin with underlying L‑toned complementizer /à/ that contracts with *dɛ́*. Alternatively, the status of *dɛ̀* ~ *dɛ́* as a high-frequency grammatical element, already reflected in its brevity, has a slight depressing effect on its pitch.

(xx3) a. *bákàrì dɛ́ [zàkíì=∅ sà sáá]*

B say.Pfv [Z=Ipfv Fut come.Ipfv]

‘Bakari said Zaki will come.’

b. *zàkíì dɛ́ [bákàrí=∅ sà sáá]*

Z say.Pfv [B=Ipfv Fut come.Ipfv]

‘Zaki said Bakari will come.’

### Combination of *dɛ̀* ~ *dɛ́* ‘say’ with third person subject pronoun

Examples like (xx1a‑b) show that there is no morphosyntactic difference in TAM marking when the clause is quoted. The quoted clause in (xx1b) has the same imperfective verb form and the same imperfective subject enclitic as the unquoted (xx1a), in both present and future versions.

(xx1) a. *bákàrí=∅ (sà) yíʔé dɔ̀nɔ̀*

B=Ipfv (Fut) fish eat.meat.Ipfv

‘Bakari eats/will eat fish.’

b. *mā dɛ́ [(à) bákàrí=∅ (sà) yíʔé dɔ̀nɔ̀]*

1Sg say.Pfv [(that) B=Ipfv (Fut) fish eat.meat.Ipfv]

‘I said that Bakari eats/will eat fish.’

However, when the quoted clause of the imperfective aspectual family (present, future, progressive) begins with a third person subject pronoun (*à*, *è*, *ààⁿ*, *èèⁿ* ), the resulting tones require explanation. The relevant combinations including the imperfective subject enclitic are shown in (xx2).

(xx2) unquoted quoted imperfective

Pfv Ipfv ‘he/she said \_\_’ ‘I said \_\_’

3SgHum *à* *á=∅ à dɛ́ à=∅ mā dɛ́ à=∅*

3SgNonh *è* *é=∅ à dɛ́ è=∅ mā dɛ́ è=∅*

3PlHum *ààⁿ* *àáⁿ=∅ à dɛ́ (à)àⁿ=∅ mā dɛ́ (à)àⁿ=∅*

3PlNonh *èèⁿ* *èéⁿ=∅ à dɛ́ (è)èⁿ=∅ mā dɛ́ (è)èⁿ=∅*

What all the ‘he/she said \_\_’ and ‘I said \_\_’ combinations have in common is that the imperfective enclitic does not have the usual final-tone raising effect as seen in unquoted clauses. This aspect of the problem can be explained provided we can account for the falling tone patterns in the morphemes preceding the enclitic. This is because suffixed nouns with falling final tone pattern, like *ɲáā‑nà* ‘woman’, also show no tonal effect when the imperfective enclitic is added: *ɲáā‑nà=∅*.

Consider first the ‘I said \_\_’ column. Here the ‘say’ verb is H‑toned *dɛ́* by virtue of following a ‑3Sg subject pronoun, here 1Sg *mā*. We can therefore posit underlying forms like those in (xx3). The null sign is omitted from surface forms.

(xx3) underlying surface

3SgHum /mā dɛ́ à H/ *mā dɛ́=à*

3SgNonh /mā dɛ́ è H/ *mā dɛ́=è*

3PlHum /mā dɛ́ ààⁿ H/ *mā dɛ́=(à)àⁿ*

3PlNonh /mā dɛ́ èèⁿ H/ *mā dɛ́=(è)èⁿ*

These forms can be understood if the third person subject pronoun (*à*, etc.) first encliticizes to the ‘say’ verb *dɛ́*, producing falling tone patterns, as in *dɛ́=à*. In the plural combinations, the length of the pronominal vowel is reduced, except in careful speech, so that /dɛ́ ààⁿ/ is effectively treated as *dɛ́=àⁿ*. When the floating H‑tone of the imperfective subject clitic is added to this falling-toned cluster, it has no effect.

Now consider the ‘he/she said \_\_’ column in (xx2) above. Here we would expect L‑toned *dɛ̀* ‘said’ since it follows a +3Sg subject, but in fact the usual pronunciation is with H‑toned *dɛ́*, as in the ‘I said \_\_’ forms.

Since the third person proclitics are all underlyingly L‑toned, one possibility is that *dɛ̀* undergoes Final Tone-Raising to *dɛ́* before an L‑tone, prior to (and preventing) docking of the floating H of the imperfective enclitic (xx4)

(xx4) ‘He/She said that …

3SgHum…’ 3SgNonh…’ 3PlHum…’ 3PlNonh…’

/à dɛ̀ à H/ /à dɛ̀ è H/ /à dɛ̀ ààⁿ H/ /à dɛ̀ èèⁿ H/ underlying

/à dɛ́ à H/ /à dɛ́ è H/ /à dɛ́ ààⁿ H/ /à dɛ́ èèⁿ H/ tone-raising

/à dɛ́=à H/ /à dɛ́=è H/ /à dɛ́=(à)àⁿ H/ /à dɛ́=(è)èⁿ H/ enclisis

/à dɛ́=à/ /à dɛ́=è/ /à dɛ́=(à)àⁿ/ /à dɛ́=(è)èⁿ/ no docking of H

The derivation of these forms becomes even more complex if we posit the presence of the complementizer *à*. The underlying forms would now be of types (xx5a‑b).

(xx5) /mā dɛ́ à ààⁿ H/ ‘I said that they (will) …’

/à dɛ̀ à àà H/ ‘he/she said that they (will) …’

*vv*-Contraction can account for the reduced vocalism, but the underlying presence of an additional *à* allows for alternative ways to analyse the tone patterns. In particular, when *à* ‘that’ occurs between two L‑toned syllables, it could undergo Final Tone-Raising, and then trigger Leftward H‑Shift, which typically occurs in conjunction with *vv*-Contraction.

(xx6) ‘He/She said that …

3SgHum…’ 3PlHum…’

/à dɛ̀ à à H/ /à dɛ̀ à ààⁿ H/ underlying

/à dɛ̀ á à H/ /à dɛ̀ á ààⁿ H/ tone-raising

/à dɛ́=à H/ /à dɛ́=(à)àⁿ H/ Leftward H‑Shift and *vv*-Contraction

/à dɛ́=à/ /à dɛ́=(à)àⁿ/ no docking of H

Yet another wrinkle is the possibility that *dɛ̀* in 3Sg *à dɛ̀* ‘he/she said’ is underlying /dɛ̌/, consistent with the usual +3Sg {LH} overlay on verbs. The final H‑tone might end up being the overt H‑tone of *dɛ́* in (xx4) above. This would make Final Tone-Raising unnecessary, and would also make it moot whether the *à* complementizer is present.

(xx7) ‘He/She said that …

3SgHum…’ 3PlHum…’

/à dɛ̌ à H/ /à dɛ̌ ààⁿ H/ underlying

/à dɛ́=à H/ /à dɛ́=(à)àⁿ H/ Leftward H‑Shift and *vv*-Contraction

/à dɛ́=à/ /à dɛ́=(à)àⁿ/ no docking of H

Some examples showing the combinations of ‘say’ with 3Sg subject proclitic and with a noun-headed subject NP plus the imperfective subject enclitic are in (xx8).

(xx8) a. *bákàr dɛ́ [=à=∅ / tàgà-rá=∅ yíʔé dɔ̀nɔ̀]*

B say.Pfv [3SgHum=Ipfv/sheep=Ipfv fish eat.meat.Ipfv]

‘Bakarix said that he-or-shey/(the) sheep eats fish.’

b. *bákàr dɛ́ [=à=∅ / tàgà-rá=∅ sà yíʔé dɔ̀nɔ̀]*

B say.Pfv [3SgHum=Ipfv/sheep=Ipfv Fut fish eat.meat.Ipfv]

‘Bakarix said that he-or-shey/(the) sheep will eat fish.’

c. *bákàr dɛ́ [=à=∅ / tàgà-rá=∅ yíʔé dònù-yá]*

B say.Pfv [3SgHum=Ipfv/sheep=Ipfv fish eat.meat.Prog]

‘Bakarix said that he-or-shey/(the) sheep is eating fish.’

The phonology of the ‘be (present)’ subject enclitic is the same as that of the homophonous and arguably identical imperfective subject enclitic /H+=∅/. The ‘be’ enclitic is followed by a locational expression (‘be here’, etc.) as in (xx9).

(xx9) a. *á=∅ / tàgà-rá=∅ [mùú dù]*

3SgHum=/sheep-Nom=be [field in]

‘He-or-she/(the) sheep-Sg is in the field(s).’

b. *bákàr dɛ́= [à=∅ / tàgà-rá==∅ [mùú dù]]*

B say.Pfv [3SgHum=/sheep-Nom=be [field in]]

‘Zakix said that he-or-shey/(the) sheep is in the field(s).’

### Pronominal category adjustments in quotations

In ordinary main clauses, most pronouns are proclitics (subject, object, postpositional complement, possessor). When an original main clause is quoted, pronominal categories are modified in two ways (xx1a‑b).

(xx1) a. original 1Sg pronouns are replaced by logophoric 3Sg pronouns;

b. other original pronouns are updated if they refer to the current speaker or addressee.

The effect of (xx1a) can be seen when indicative sentence (xx2a) with 1Sg subject is quoted (xx2b). The form of the subject pronoun in the quoted clause is logophoric 3Sg pronoun *à-wò* rather than the usual human 3Sg subject proclitic *à*. The latter does occur in (xx2c), where the subject of the main and quoted clauses are disjoint.

(xx2) a. *má=∅ sà sáá*

1Sg=Ipfv Fut come.Ipfv

‘I will come.’

b. *zàkíì dɛ́= [(à-)wò sà sáá]*

child-Nom-Pl say.Pfv [Hum-3SgLogo Fut come.Ipfv]

‘Zakix said that hex would come.’

c. *zàkíì dɛ́= [à sà sáá]*

child-Nom-Pl say.Pfv [3SgHum Fut come.Ipfv]

‘Zakix said that hey/shey would come.’

For more detail on logophoric pronouns, see §18.3.

The 2Sg subject in (xx3a) is updated as a 1Sg subject pronoun in (xx3b), since the addressee in (xx3a) is identical the current speaker of (xx3b). The subscript indexes for the free translations in (xx3a) and (xx3b) are coordinated.

(xx3) a. *wō mà báʔrī*

2Sg 1Sg hit.Pfv

‘You-Sgy hit-Past mex.’ (addresseed by X to Y)

b. *zàkíì dɛ́ [à mā nā-wò báʔrī]*

Z say.Pfv [that 1Sg HumObj-3SgLogo hit.Pfv]

‘Zakix said that Iy hit-Past himx.’ (spoken by Y)

My assistant did not update original second person vocatives in this manner. The original 2Sg independent pronoun *wō‑n̄* in (xx4a) has vocative function (compare simple prohibitive *bí sā=rɛ̄ʔ* ‘don’t come!’ without an overt 2Sg subject pronoun). When the original addressee becomes the current speaker, (xx3a) can be quoted as (xx4b). The vocative is still 2Sg *wō‑n̄*, not 1Sg *mā‑n̄*.

(xx4) a. *wō-n̄ bí sā=rɛ̄ʔ*

2Sg-Indep Proh come.Imprt=Neg

‘(Hey) you-Sgy, don’t-2Sgy come!’ (addresseed by X to Y)

b. *zàkíì dɛ́ [mā mā] [wō-n̄ bí sā=rɛ̄ʔ]*

Z say.Pfv [1Sg with] [2Sg-Indep Proh come.Imprt=Neg

‘Zakix said to mey, “(hey) you-Sgy, don’t-2Sgy come!” ’ (spoken by Y)

### Jussive complement (reported imperative or hortative)

#### Quoted imperative

There is a quoted imperative (in interlinears “QuotImprt”) verb form, closely related segmentally to the regular imperative stem but M‑toned for all intransitive verbs, see §10.6.3.1.

(xx1) a. *bà*

fall.Imprt

‘Fall-2Sg!’

b. *mā dɛ́ [à bā]*

1Sg say.Pfv [3SgNonh fall.QuotImprt

‘I told him/her to fall.’

Representative intransitive quoted imperatives with various subject pronouns are shown in (xx2). These would all be embedded in a quotative context as in (xx1b) above.

(xx2) 1Sg 1Pl 3SgHum 3PlHum gloss

*mā bā mùʔùⁿ bā à bā ààⁿ bā* ‘fall’

*mā sā mùʔùⁿ sā à sā ààⁿ sā* ‘come’

*mā būlū mùʔùⁿ būlū à būlū ààⁿ būlū* ‘return’

*mā fīdī mùʔùⁿ fīdī à fīdī ààⁿ fīdī* ‘run’

*mā sīdā mùʔùⁿ sīdā à sīdā ààⁿ sīdā* ‘go down’

There is no special quoted imperative verb form for transitives. (xx3a,c) are transitive imperatives, and (xx3b,d) are their quoted counterparts. The regular imperative stem is used in both contexts, with the usual tonal distinction (*bàʔrì* ~ *báʔrí* ) depending on whether the preceding NP (the object) is + 3Sg or -3Sg.

(xx3) a. *tàgá bàʔrì*

sheep hit.Imprt

‘Hit-2Sg the sheep-Sg!’ (< *tàgà* )

b. *à dɛ̀ [mā tàgá bàʔrì]*

3SgHum say.Pfv [1Sg sheep hit.Imprt]

‘He/She told me to hit the sheep-Sg.’

c. *tàgà-rá-àⁿ báʔrí*

sheep-Nom-Pl hit.Imprt

‘Hit-2Sg the sheep-Pl!’

d. *à dɛ̀ [mā tàgà-rá-àⁿ báʔrí]*

3SgHum say.Pfv [1Sg sheep-Nom-Pl hit.Imprt]

‘He/She told me to hit the sheep-Ph.’

#### Quoted prohibitive

The quoted prohibitive consists of the unquoted (main-clause) prohibitive, as in (xx1a), plus an overt subject and the framing ‘say’ clause (xx1b).

(xx1) a. *bí bà=rɛ̄ʔ* / *sā=rɛ̄ʔ*

Proh fall.Imprt=Neg / come.Imprt=Neg

‘Don’t-2Sg fall/come!’

b. *à dɛ̀ [mā bí bà=rɛ̄ʔ* / *sā=rɛ̄ʔ]*

3SgHum say.Pfv [1Sg Proh fall.Imprt=Neg / come.Imprt=Neg]

‘He/She told me not to fall/come.’

#### Quoted hortative

The quoted hortative is based on the main-clause hortative. The ‘say’ clause may have an overt indication of who was addressed (‘X said to me, “…” ’). The hortative clause has an overt plural subject, updated for current speech-event participant roles. See §10.6.3.4 for examples.

## VP complements

### ‘Be able to, can’ (*cíɛ́* )

#### *cíɛ́* with imperfective VP complement for nonpast time

In present-time contexts, as in English *X can VP*, the subordinated event is potential but unactualized. The invariant verb *cíɛ́* follows a subject NP with imperfective enclitic and is itself followed by a subjectless imperfective VP. *cíɛ́* is identical in form to the imperfective of ‘arrive’. The complement may be omitted if obvious (xx1e).

(xx1) a. *àáⁿ=∅ cíɛ́ sìdánà / sáá*

3PlHum=Ipfv can.Ipfv ascend.Ipfv / come.Ipfv

‘They can go up/come.’

b. *àáⁿ=∅ cíɛ́ sìdánà=nɛ̄ʔ / sáá=rɛ̄ʔ*

3PlHum=Ipfv can.Ipfv ascend.Ipfv=Neg / come.Ipfv=Neg

‘They can’t go up/come.’

c. *àáⁿ=∅ cíɛ́ [ꜜwálí màà]*

3PlHum=Ipfv can.Ipfv [work(n) do.Ipfv]

‘They can do the work.’

d. *wó=∅ cíɛ́ sàá=à*

2Sg=Ipfv can.Ipfv come.Ipfv=Q

‘Can you-Sg come?’

e. *má=∅ cíɛ́=rɛ̄ʔ*

1Sg=Ipfv can.Ipfv=Neg

‘I can’t.’

The future counterpart has a similar structure but adds the future particle *sà*.

(xx2) a. *àáⁿ=∅ sà cíɛ́ sìdánà* / *sáá*

3PlHum=Ipfv Fut can.Ipfv ascend.Ipfv / come.Ipfv

‘They will be able to go up/come.’

b. *àáⁿ=∅ sà cíɛ́ sìdánà=nɛ̄ʔ / sáá=rɛ̄ʔ*

3PlHum=Ipfv Fut can.Ipfv ascend.Ipfv / come.Ipfv

‘They will not be able to go up/come.’

c. *àáⁿ=∅ sà cíɛ́ [ꜜwálí màà]*

3PlHum=Ipfv Fut can.Ipfv [work(n) do.Ipfv]

‘They will be able to do the work.’

#### *cìɛ́* ~ *cíɛ́* plus adjoined clause for past time

For past time, which implies that the eventuality denoted by the subordinated clause was in fact realized, the ‘can’ (= ‘arrive’) verb takes perfective form *cìɛ́* ~ *cíɛ́* and there is no imperfective subject enclitic. *cìɛ́* ~ *cíɛ́* is followed not by a VP as in nonpast contexts, rather by an adjoined clause (§15.1) that begins with a (sometimes reduced) subject pronoun (xx1a‑b).

(xx1) a. *ààⁿ cíɛ́ [àáⁿ sìdà]*

3PlHum can.Pfv [3PlHum ascend.Adjn]

‘They were able to go up.’

b. *ààⁿ cíɛ́ [(à)àⁿ sá=rɛ̄ʔ]*

3PlHum can.Pfv [3PlHum come.Adjn=Neg]

‘They were not able to come.’

c. *ààⁿ cíɛ́ [(à)àⁿ wálí mà]*

3PlHum can.Pfv [3PlHum work(n) do.Adjn]

‘They were able to do the work.’

Combinations of (perfective) *cìɛ́* ~ *cíɛ́* and adjoined clauses, emphasizing how *cíɛ́* interacts phonologically with the following adjoined subject proclitic, are in (xx2). The tones of *cíɛ́* are invariant. The drop of *sá* ‘come’ to *sā* in second-person forms is regular in adjunctions. The vowel length of 1Pl and 3Pl subject proclitics is partially respected. 1Sg *mā cí= íⁿ sìdà* has undergone H‑Leveling (§3.8.4.2) from /cí= ìⁿ/ before an L‑tone, but 1Pl /cí= ììⁿ/ preserves a falling contour before *sìdà*. The 3Pl forms actually show Final Tone-Raising before L‑toned *sìdà*, an even clearer sign that their vowels are treated as long.

(xx2) ‘could go up’ ‘could come’

a. 1Sg *mā* *cí= íⁿ sìdà mā cí= ìⁿ sá*

1Pl *mùʔùⁿ cí= (ì)ìⁿ sìdà cí= ìⁿ sá*

b. 2Sg *wō cí= í sìdà wō cí= í sā*

2Pl *ēēⁿ cí=íⁿ sìdà ēēⁿ cí=íⁿ sā*

c. 3SgHum *à cí= ɛ̀ sìdà à cí= ɛ̀ sá*

3SgNonh *è cí= ì sìdà è cí= ì sá*

d. 3PlHum *ààⁿ cí= ɛ̀ɛ́ⁿ sìdà ààⁿ cí= (à)àⁿ sá*

3PlNonh *èèⁿ cí= ìíⁿ sìdà èè cí= (ì)ìⁿ sá*

## Nominal complements

### Time-of-day verbs plus nominal complement

‘Spend the (whole) daytime’ is expressed as ‘make fall the afternoon’ (xx1a). ‘Spend the (whole) night’ is expressed as ‘do the night’. A main clause with such a predicate may co-occur with a following verbal noun which denotes an activity that filled the relevant time interval.

(xx1) a. *mā wúlá bɛ̀ mùù-mèè-ná*

1Sg afternoon make.fall.Pfv field-do.VblN-Nom

‘I spent the day farming.’

b. *zàkíì kóʔró mɛ̀ dòò-mèè-ná*

Z night do.Pfv dance- do.VblN-Nom

‘Zaki spend the night dancing.’

### ‘Prevent’ (*bàlà* ) plus PP complement

The verb ‘prevent, block, obstruct’ is imperfective *bàlà* ~ *bálá* and perfective *bàlí* ~ *bálì*. Its preferred complement is a PP with postposition *mà* ‘on’ following a nominal form of the main verb. For nonmonosyllabic verbs, this form is identical to the 3Sg form of the perfective beginning with L‑tone, see *fìdí*, *sìdánì*, and *tòʔrí* in the examples below. Monosyllabic verbs have a long-voweled +ATR form, respecting the H or L tone of the imperfective, e.g. *sáá* ‘come’ → *séé*, *bàà* ‘fall’ → *bèè*, *bɔ́ɔ́* ‘exit’ → *bóó*. The L‑toned forms undergo Final Tone-Raising before L‑toned *mà*.

(xx1) a. *kā-nā mā bálì*

rain-Nom 1Sg prevent.Pfv

*[[séé* / *bóó* / *bèé* / *fìdí* / *sìdánì] mà]*

[[come/exit/fall/run/ascend.VblN] on]

‘The rain prevented me from coming / going out / falling / running / going up.’

b. *è mā bálì …*

3SgNonh 1Sg prevent.Pfv

*… [wálí-méé mà]*

… [work(n)-do.VblN on]

*… [tàgá-tòʔrí mà]*

… [sheep-sell.VblN] on]

‘It prevented me from … doing the work/selling the sheep.’ (< *màà* ‘do’)

c. *è mā bálì [sóó mà] [sàá tɔ̀]*

3SgNonh 1Sg prevent.Pfv [enter.VblN on] [house in]

‘It prevented me from entering the house.’ (< *sɔ̄* )

### ‘Cease’ (*bàlà* ) plus preverbal verbal noun complement

The same verb (imperfective *bàlà* ) illustrated above in the sense ‘prevent’ can also mean ‘cease, no longer engage in (an activity)’. In this sense it is preceded by an object in the form of a verbal noun (xx1a). In (xxb) we see an alternative phrasing with just ‘beer’ as postverbal object of ‘fall’, while the verb ‘drink’ is understood but not overt.

(xx1) a. *mā [dí-kpɛ́ʔr-à-àⁿ]-báʔrí bàlíī*

1Sg [child-young-Nom-Pl]-hit.VblN prevent.Pfv

‘I have stopped hitting children.’

b. *mā bɛ́ dɔ̀lɔ́*

1Sg fall.Pfv beer

‘I’ve given up beer.’

### ‘Consent’ (*bàlà* or *sɔ̌ɔ̀ⁿ* ) with verbal-noun complement

The verb ‘accept, receive’ (imperfective *bàlà*, perfective *bàlí* ~ *bálī* ) takes a verbal-noun complement with final nominal suffix (*‑rá* and variants) (xx1a‑b). The clausal complement may be replaced by a nonhuman 3Sg pronoun *ì-yà* (xx1c‑d). In (xx1c‑d), /bàlí ì-yà/ is realized as *bál= ì-yà* after Leftward H‑Shift.

(xx1) a. *à bàlí séé-rá* / *bóó-rá* / *bèè-rá* / *fìdì-rá* / *sìdán̄-nà*

3SgHum accept.Pfv come./exit./fall./run./ascend.VblN-Nom

‘He/She agreed to come/to come out/to fall.’

b. *à bàlí [wálí méé-rá]*

3SgHum accept.Pfv [work(n) do.VblN-Nom]

‘He/She agreed to do the work.’

c. *à bál= ì‑yà*

3SgHum accept.Pfv Nonh-3Sg

‘He/She agreed to/accepted it (proposal or invitation).’ (/bàlí ì-yà/)

d. *á=∅ sà bál= ì‑yà*

3SgHum=Ipfv Fut accept.Pfv Nonh-3Sg

‘He/She will agree to/accept it (proposal or invitation).’

The verb *sɔ̌ɔ̀ⁿ* ‘accept (doing), be willing (to do)’ has the same syntax.

(xx2) b. *à sɔ̀ɔ́ⁿ [ꜜwálí méé-rá]*

3SgHum accept.Pfv [work(n) do.VblN-Nom]

‘He/She agreed to do the work.’

c. *à sɔ́ɔ́ⁿ ì‑yà*

3SgHum accept.Pfv Nonh-3Sg

‘He/She agreed to/accepted it (proposal or invitation).’ (/sɔ̀ɔ́ⁿ ì-yà/)

### ‘Forget’ (*ɲìnáà* ) with verbal-noun complement

This verb (imperfective *ɲìnáà*, perfective *ɲìnɛ́* ~ *ɲínɛ̄* ) can take a postverbal object denoting the forgotten entity (xx1a). In the sense ‘forget [to VP]’, the object is a verbal noun (xx1b).

(xx1) a. *mā ɲínɛ̄ zàkíì*

1Sg forget.Pfv Z

‘I forgot Zaki.’

b. *à ɲìnɛ́ séé-rá*

3SgHum forget.Pfv come.VblN-Nom

‘He/She forgot to come.’

### ‘Be afraid to’ (*jɔ́ɔ́ⁿ* ) with verbal-noun or future complement

In simple ‘X fear Y’ clauses, the verb *jɔ́ɔ́ⁿ* (imperfective form) ‘fear, be afraid of’ takes a PP complement with postposition *kìnà* ~ *kíná* ‘in front of’. If the complement is a same-subject VP (‘be afraid to’), it is in verbal-noun form (xx1a). If the complement is a full clause with disjoint subject (‘be afraid that …’), it thas the form of a complete future clause. A logophoric 3Sg pronoun expresses a non-subject that is coindexed to the subject of ‘be afraid’ (xx1b).

(xx1) a. *zàkíì=∅ jɔ́ɔ́ⁿ séé-ré=é nàa*

Z=Ipfv be.afraid.Ipfv come.VblN-Nom=Link here

‘Zaki is afraid to come here.’ (*séé-rá* )

b. *zàkíì=∅ jóⁿ-yá*

Z=Ipfv be.afraid.Prog

*[má=∅ sà= (à-)wò báʔrá]*

[1Sg=Ipfv Fut Hum-3Sg.Indep hit.Ipfv]

‘Zakix is afraid that I will hit himx.’

### ‘Begin’ (*dàà-sɔ́ʔɔ̀* ) with verbal noun complement

This OV transitive verb takes an object denoting an activity. This object may be a simple noun like ‘(a) dance’ or a verbal noun. *dàà-sɔ́ʔɔ̀* is likely composite etymologically, compare *sɔ̀ʔɔ̀* ~ *sɔ́ʔɔ́* ‘catch’.

(xx1) a. *à wálā dàà-sɔ́ʔɛ̄*

3SgHum shout(n) begin.Pfv

‘He/She began to shout.’

b. *má=∅ sà wálí-méé dàà-sɔ́ʔɔ́*

1Sg=Ipfv Fut work(n)-do.VblN begin.Ipfv

‘I will begin to do the work.’

c. *kūmēē-kúní dàà-sɔ́ʔɔ́*

meal-eat.VblN begin.Imprt

‘Begin-2Sg eating!’

### ‘Finish’ (*dá-kááⁿ* ) with verbal-noun subject or complement

(xx1a) is a simple transitive sentence. To indicate that the action is completed, one option is a verbal noun as object, followed by transitive ‘finished’ (xx1b). Transitive forms include *dɛ̀-kɛ́ⁿ* ~ *dɛ́-kɛ́ⁿ* (perfective) and *dà-kááⁿ* ~ *dá-ꜜkááⁿ* (imperfective), plus variants with *g* for *k*. In *dá-ꜜkááⁿ*, except when followed by the negative enclitic, a slight downstep is audible (suggesting segmentation). Alternatively, the agent may be the intransitive subject of ‘finish’, followed by a postverbal object in the form of a verbal noun (xx1c‑d).

(xx1) a. *mā làʔá sèʔríī*

1Sg place sweep.Pfv

‘I swept (the place).’

b. *mā làʔà-sɛ̀ʔrí dɛ̀-gɛ́ⁿ*

1Sg place-sweep.VblN finished

‘My sweeping (the place) has finished.’

c. *má=∅ sà làʔá-sɛ̀ʔr dá-ꜜkááⁿ*

1Sg=Ipfv Fut place-sweep.VblN finish.Ipfv

‘I will finish sweeping (the place).’

d. *mā dɛ̄-gɛ́ⁿ làʔà-sɛ̀ʔrì-rá*

1Sg finish.Pfv place-sweep.VblN-Nom

‘I have finished sweeping (the place).’

e. *à dɛ̀-gɛ̀ⁿ kūmɛ̄ɛ̄-kūn-nā*

3SgHum finish.Pfv meal-eat.VblN-Nom

‘He/She finished eating.’ (< *dɛ̀-kɛ́ⁿ* )

## Purposive, causal, and locative clauses

### Same-subject purposive clause (*tɔ́rɔ́* ~ *tɔ́nɔ́* )

Adding *tɔ́rɔ́* ~ *tɔ́nɔ́* to the verb of a VP that follows a motion clause expresses purpose. If there is a postverbal constituent as in (xx1d), *tɔ́rɔ́* is not clause-final. The main verb is in perfective form, but monosyllabic perfectives shift to +ATR, with long vowel.

(xx1) a. *[zàkí= ì wɛ̀ɛ̀] [kūmɛ̄ɛ́ kùn tɔ́rɔ́]*

[Z 3SgNonh go.Pfv] [meal eat.Pfv **Purp**]

‘Zaki went (there) to eat.’ (*kùnì* )

b. *[mā sɛ́] [wál sɛ́ɛ́n̄ tɔ́rɔ́]*

[1Sg go.Pfv] [work(n) look.for.Pfv **Purp**]

‘I came to look for a job.’ (*sɛ́ɛ́nī* )

c. *[à sɛ̀] [yí bɛ́n̄ tɔ́rɔ́]*

[3SgHum come.Pfv] [water draw.water.Pfv **Purp**]

‘He/She came to draw water (at a well).’

d. *[mā sɛ́] [ꜜsóó tɔ́rɔ́ wō-n]*

[1Sg go.Pfv] [help.Pfv **Purp** 2Sg-Indep]

‘I came in order to help you-Sg.’

Note also *á wèé [klén̄ tɔ̀nɔ̀]* ‘he/she went hunting’, with *klén̄* ‘hunt (noun)’.

*tɔ́rɔ́* ~ *tɔ́nɔ́* also means ‘while’ in backgrounded durative clauses, see §15.3.5 and (xx2) in §17.1.3.2. This raises the possibility that e.g. ‘I came to look for a job’ (xx1b) should be compared to English *I came looking for a job*. However, in the other examples of (xx1) such a translation would be awkward.

### Causal (‘because’) clause (*bùgɔ́ɔ́rɛ̄* )

In (xx1), *bùgɔ́ɔ́rɛ̄* ‘because’ is followed by a regular indicative clause explaining the reason or motive for the eventuality denoted by the preceding main clause.

(xx1) *[má=∅ sà tɔ́ɔ́ [sàá tɔ̀]]*

[1Sg=Ipfv Fut stay.Ipfv [house in]]

*bùgɔ́ɔ́rɛ̄ zàkíì wéé kéé=rēʔ*

because Z health(n) be.healthy.Pfv=Neg

‘I will stay at the house, because Zaki is sick.’

# Anaphora

## Reflexive

### Reflexive possessor

This construction occurs when the possessor of a nonsubject NP is coindexed with the clausemate subject. In this context, the possessor is always pronominal. The basic forms, subject to modifications due to contractions and morpheme fusion, are those in (xx1). The n‑initial variants occur in preverbal object NPs following the subject (but not after the future particle); see §18.1.1.4 below for details. Nonreflexive forms are shown for comparison. Reflexive possessors are limited to nonsubject NPs and are therefore always non-clause-initial, except in singular-addressee imperatives as in *[ē jɛ́ⁿ] nàkì* ‘ask your-Sg father!’. Therefore the regular forms (those without initial *n*) usually undergo *vv*‑Contraction with the preceding word. This masks the length of the long vowels in the plural forms. In practice, therefore, 1Sg and 1Pl reflexive possessor forms are often indistinguishable in regular as well as *n*‑initial reflexive possessor series, so the 1Sg/1Pl opposition in the “regular” column is idealized and arguably misleading. Other possessor-number oppositions (2Sg/2Pl, human and nonhuman 3Sg/3Pl) rely more on nasalization than on length.

(xx1) reflexive possessor nonreflexive

regular *n*‑initial

1Sg *āⁿ nāāⁿ mā*

2Sg *ē* ~ *ī nīī wō*

1Pl *āāⁿ nāāⁿ mùʔùⁿ*

2Pl *ēēⁿ* ~ *īīⁿ nīīⁿ ēēⁿ*

3SgHum *à ná à*

3SgNonh *è* ~ *ì ní è*

3PlHum *ààⁿ náāⁿ* ~ *nāāⁿ ààⁿ*

3PlNonh *èèⁿ* ~ *ììⁿ níīⁿ* ~ *nīīⁿ èèⁿ*

The third person categories have essentially the same forms in reflexive and nonreflexive function. Since the third person categories are those for which reflexives would have the greatest disambiguating function (*He saw himself* versus *He saw him*), disambiguation does not seem to play a role here. Instead, the reduction occurs in the 1st/2nd person possessors. It takes the unusual form of an almost total segmental (but not tonal) merger of first person with human third person, and of second person with nonhuman third person. The segmentally merged forms remain distinct due to the generalization of M‑tone among 1st/2nd persons, versus the regular L‑tone for third persons. The only segmental difference is that the 1Sg form is nasalized while the human 3Sg form is not. The relationships are brought out by rearranging the categories in the fashion of (xx2).

(xx2) Reflexive possessors

M-toned

L‑toned

1Sg *āⁿ*

3SgHum *à*

1Pl *āāⁿ*

3PlHum *ààⁿ*

2Sg *ē* ~ *ī*

3SgNonh *è* ~ *ì*

2Pl *ēēⁿ* ~ *īīⁿ*

3PlNonh *èèⁿ* ~ *ììⁿ*

Though the basic 3Sg reflexive forms are *à* (human) and *è* (nonhuman), my assistant sometimes nasalizes their vowels. In the case of human 3Sg *à* ~ *àⁿ*, the nasalized variant differs only tonally from 1Sg reflexive possessor *āⁿ*.

This sound-symbolic merger of third human with first person, and of third nonhuman with second person, results in a typologically extraordinary binary category. Whether it is unique in the world’s languages I cannot say. Parallels may be hard to find in other Mande languages, most of which do not distinguish ±human or ±animate in third person pronouns. Diachronically, one suspects that the starting point for the Jalkunan development was the segmental identity of 2Pl *ēēⁿ* with nonhuman 3Pl *èèⁿ*, and perhaps formerly of archaic 2Sg object variant ē (preserved only in imprecations) with nonhuman 3Sg *è*. If this is correct, the pattern (segmental identity, M versus L tone) then spread analogically to first person forms, with 1Sg *mā* determining their ‑ATR value.

Except for objects in imperatives with second person possessor, as in ‘Help your father!’, reflexive possessors do not occur clause-initially. Since they begin with vowels, and since preceding words normally end in vowels, they are generally subject to *vv*‑Contraction.

Teasing apart the reflexive possessor vowels from their contractions with the final vowels of preceding words, (xx3) presents paradigms for alienables. The tones of the possessums are what we would expect for these nouns based on the patterns described in §6.2.2 above. The {LH} tone overlay for possessums after 3Sg possessors is regular. Rising tones in forms like *āáⁿ* and *àáⁿ* are due to Final Tone-Raising (tone sandhi) before an L‑tone.

(xx3) Reflexively possessed alienables

‘fish’ (*yíʔé* ) ‘bird’ (*kɔ̀ⁿ* ) ‘fire’ (*tāā* )

1Sg *āⁿ yìʔè-rà āⁿ kɔ̀-nɔ́ āⁿ tàà-rà*

2Sg *ē yìʔè-rà ē kɔ̀-nɔ́ ē tàà-rà*

1Pl *āáⁿ yìʔè-rà āáⁿ kɔ̀-nɔ́ āáⁿ tàà-rà*

2Pl *ēéⁿ yìʔè-rà* *ēéⁿ kɔ̀-nɔ́ ēéⁿ tàà-rà*

3SgHum *à yìʔè-rá à kɔ̀-nɔ́ à tàà-rá*

3SgNonh *è yìʔè-rá è kɔ̀-nɔ́ è tàà-rá*

3PlHum *àáⁿ yìʔè-rà àáⁿ kɔ̀-nɔ́ àáⁿ tàà-rà*

3PlNonh *èéⁿ yìʔè-rà èéⁿ kɔ̀-nɔ́ èéⁿ tàà-rà*

(xx4) shows forms for inalienables. The notable point is that M‑Spreading does not occur after M‑toned possessors, so 1st/2nd person reflexive possessors have the same tonal effects on following inalienable nouns as do 3Pl reflexive possessors. The result is that all inalienably possessed nouns have {H} overlay after 1st/2nd as well as 3Pl possessors (i.e. after all -3Sg reflexive possessors), versus {LH} after +3Sg reflexive possessors. For example, 1Sg reflexive *āⁿ jɛ́-ná* ‘my (own) father’ in (xx4) shows no M‑Spreading and has the same nominal tone as *ààⁿ jɛ́-ná* ‘their father’, while nonreflexive *mā jɛ̄-nā* ‘my father’ does show M‑Spreading (§6.2.1).

(xx4) Reflexively possessed inalienables

‘father’ (*jɛ́ⁿ* ) ‘child’ (*dí* )

1Sg *āⁿ jɛ́-ná āⁿ dí-rá*

2Sg *ē jɛ́-ná ē dí-rá*

1Pl *āāⁿ jɛ́-ná āāⁿ dí-rá*

2Pl *ēēⁿ jɛ́-ná* *ēēⁿ dí-rá*

3SgHum *à jɛ̀-ná à dì-rá*

3SgNonh *è jɛ̀-ná è dì-rá*

3PlHum *ààⁿ jɛ́-ná ààⁿ dí-rá*

3PlNonh *èèⁿ jɛ́-ná èèⁿ dí-rá*

Reflexive possessors also occur on noninitial conjuncts in conjoined NPs, either of the type ‘X’s [Y and Z]’ phrased as ‘[X’s Y] and [Reflx Z]’, or of the type ‘X and [X’s Y]’, phrased as ‘X and [Reflx Y]. See (xx4a,c) in §7.1.1.3 for examples.

#### Reflexive possessor of postverbal NP

In (xx1), the relevant possessum is postverbal, so there are no morphological interactions with inflectional morphemes that follow the subject. Vocalic contractions are indexed by the enclitic boundary symbol =.

(xx1) a. *mā wár̄ bìl= [ààⁿ jɛ́-ná]*

1Sg money give.Pfv [**1SgRefl** father-Nom]

‘I gave (the) money to my father.’

(/wárī +L bìlí āⁿ/ → (/wárī +L bíl= āāⁿ/) → *wár̄ bìl=ààⁿ*

b. *wō sà wár̄ bìlì= [ì jɛ́-ná]*

2Sg Fut money give.Ipfv [**2SgRefl** father-Nom]

‘You-Sg will give the money to your father.’ (< *bìlɛ̀ ī* )

c. *wár̄ blì= [ì jɛ́-ná]*

money give.Imprt [**2SgRefl** father-Nom]

‘Give-2Sg the money to your father!’

#### Reflexive postpositional complements

The reflexive forms used in postpositions are identical to the reflexive possessor forms. The reflexive noun *yéʔré* found in subject-object reflexives is absent.

(xx2) a. *mā dèrèké jìà= [āⁿ kūtɔ̄]*

1Sg boubou see.Pfv [**1SgRefl** under]

‘I found the boubou (=garment) under me.’ (< *dèrèkè*, *jyɛ̌* )

b. *ēēⁿ dèrèké jì= [īīⁿ kūtɔ̄]*

2Pl boubou see.Pfv [2PlRefl under]

‘You-Pl found the boubou under yourselves.’

c. *wō dèrèké jì= [ī kūtɔ̄]*

2Sg boubou see.Pfv [2SgRefl under]

‘You-Sg found the boubou under yourself.’

#### Reflexive possessors in conjunctions

In a conjunction of the type ‘X and X’s Y’, where the possessor inside the right conjunct ‘X’s Y’ is coindexed with the left conjunct X, reflexive possessor forms are used. This is observable when X is a first or second person pronoun (xx1a), and is moot when X is a third person pronoun or NP (xx1b).

(xx1) a. *[mā būʔā= [āⁿ jɛ́-ná]] =∅ ꜜsáá síní*

[1Sg and [1SgRefl father-Nom]=Ipfv come.Ipfv tomorrow

‘I and my father are coming tomorrow.’ (< *bùʔù* )

b. *[bákàrì búʔá= [á dòʔò-rá]=∅*

[B and [3SgHumRefl younger.brother-Nom]=Ipfv

*ꜜsáá síní*

come.Ipfv tomorrow

‘Bakarix and hisx brother are coming tomorrow.’ (< *búʔú* )

#### Reflexive possessor of preverbal object

In the examples to follow, the possessed NP is a preverbal object, so the construction in Jalkunan is of the type [1Sgx Infl [Reflx N]]’. The pronominal subject, inflectional morpheme (if any), and reflexive possessor can become partially fused.

In (xx1), *kɔ̄yī* ‘belly’ (inalienable) and *bāʔā* ‘porridge’ take their regular possessed tonal forms, namely *kɔ́yí* (except 3Sg possessed *kɔ̀yí* ), and *bàʔà* (except 3Sg possessed *bàʔá* ). *bàʔà* becomes *bàʔá* secondarily by Final Tone-Raising before an L‑tone.

(xx1) a. *mā [nāāⁿ kɔ́yí] jìɛ́*

1Sg [1SgRefl belly] see.Pfv

‘I saw my belly.’

b. *mā* *[nāáⁿ bàʔá] jìɛ́*

1Sg [1SgRefl porridge] see.Pfv

‘I saw my porridge.’

c. *mùʔùⁿ [nāāⁿ kɔ́yí] jìɛ́*

1Pl [1stPoss belly] see.Pfv

‘We saw our belly.’

d. *mā* *[nāáⁿ bàʔá] jìɛ́*

1Sg [1PlRefl porridge] see.Pfv

‘We saw our porridge.’

e. *à [ná kɔ̀yí] jìɛ́*

3SgHum [3SgHumRefl belly] see.Pfv

‘Hex saw hisx (own) belly.’

(variant *á [∅ kɔ̀yí] jìɛ́* )

f. *à [ná bàʔá] jìɛ́*

3SgHum [3SgHumRefl porridge] see.Pfv

‘Hex saw hisx (own) porridge.’

(variant *á [∅ bàʔá] jìɛ́* )

g. *ààⁿ [náāⁿ kɔ́yí] jìɛ́*

3PlHum [3PlHumRefl belly] see.Pfv

‘Theyx saw theirx (own) belly.’

h. *ààⁿ [náāⁿ bàʔá] jìɛ́*

3PlHum [3PlHumRefl porridge] see.Pfv

‘Theyx saw theirx (own) porridge.’

Combinations of subjects, inflectional morphemes, and reflexive possessors for preverbal objects are in (xx2). As usual, the present and future have an imperfective enclitic /H+=∅/ on the subject. In the perfective and present, which have no nonzero inflectional morpheme separating subject from object, *n* separates them. This is the same *n* that occurs in combinations of a pronominal subject with a third-person pronominal object (e.g. human 3Sg *ná* ). The *n* does not occur in the future, which has a nonzero inflectional morpheme *sà*.

(xx2) perfective present future imperative

1Sg *mā nāāⁿ má=∅ nāāⁿ má=∅ sà=àⁿ* —

2Sg *wō nīī wó=∅ nīī wó=∅ sì=ì ∅ ē*

1Pl *mùʔùⁿ nāāⁿ mùʔú=∅ nāāⁿ mùʔúⁿ=∅ sà=àⁿ* —

2Pl *ēēⁿ nīīⁿ ēéⁿ=∅ nīīⁿ ēéⁿ=∅ sì=ìⁿ ēēⁿ nīī*

3SgHum *à ná á=∅ ꜜná á=∅ sá=á* —

~ *á*

3SgNonh *è ní é=∅ ꜜní é=∅ sí=í* —

~ *é*

3PlHum *ààⁿ náāⁿ àáⁿ=∅ nāāⁿ àáⁿ=∅ sá=āⁿ* —

3PlNonh *èè níīⁿ èéⁿ=∅ nīīⁿ èéⁿ=∅ sí=īⁿ* —

Sg NP *(n)á =∅ (n)á =∅ sá=à*

Pl NP *(n)áā =∅ (n)áā*  *=∅ sá=āⁿ*

Etymologically, 1Sg \*nā āⁿ was probably distinct from 1Pl \*nā āāⁿ, and 2Sg \*nī ī was probably distinct from 2Pl \*nī īīⁿ, but *vv*‑Contraction and the neutralization of vocalic nasality after a nasal consonant have led to mergers. 2Sg and 2Pl are still distinguished by nasality in the future combinations (*sì=ì* versus *sì=ìⁿ* ).

In (xx3) the subjects are nonpronominal NPs.

(xx3) a. *zàkí [ná wùlá] bàʔrí*

Z [3SgHumRefl dog] hit.Pfv

‘Zakix hit-Past hisx (own) dog.’

b. *[zàkí bùʔù bákàrì] náāⁿ wùlá bàʔrí*

[Z and B] 3PlHumRefl dog hit.Pfv

‘Zakix and Bakariy hit theirxy (own) dog.’

Imperative and prohibitive examples are in (xx4).

(xx4) a. *ē wùlá bàʔrì*

2SgRefl dog hit.Imprt

‘Hit-2Sg your-Sg dog!’

b. *bí= [í wùlá / dóʔō] bàʔr=léʔ*

Proh [2SgRefl dog/younger.brother] hit.Imprt=Neg

‘Don’t-2Sg hit your dog/your younger brother!’

c. *ēēⁿ bí= [(í)íⁿ wùlá / dóʔō] bàʔr=léʔ*

2Pl Proh [2PlRefl dog/younger.brother] hit.Imprt=Neg

‘Don’t-2Pl hit your dog/your father!’

### Reflexive nonsubject argument (*yéʔré*~ *yɛ́ʔrɛ́* )

Explicit subject-object reflexives of the ‘X hit X’s self’ type, i.e. with coindexed subject and object, require a reflexively possessed noun *yéʔré*, comparable to *-self* in English reflexives. *yéʔré* is also used as an emphatic (§18.1.2.3 below) but not as an ordinary noun. A ‑ATR variant *yɛ́ʔrɛ́* is also used occasionally by my assistant. A following verb treats *yéʔré* like 3Sg pronouns and nouns, so the verb is L- or LH‑toned depending on inflectional category.

(xx1) a. *mā [nāāⁿ yéʔré] bàʔrí*

1Sg [1SgRefl **self**] hit.Pfv

‘I hit-Past myself.’

b. *mā sà= [àⁿ yéʔré] bàʔrà*

1Sg Fut= [1SgRefl **self**] hit.Ipfv

‘I will hit myself.’

#### Reflexive postverbal NP

In (xx1), the reflexive is a postverbal NP, so the reflexive possessor pronoun lacks the initial *n* and contracts with the final vowel of the verb.

(xx1) a. *mā báʔr= [àⁿ yéʔré]*

1Sg touch.Pfv [1SgRefl **self**]

‘I touched myself.’ (< *báʔrī* )

b. *ēéⁿ=∅ sà báʔré= [(ē)ēⁿ yɛ̄ʔrɛ̄*]

2Pl=Ipfv Fut touch.Ipfv [2PlRefl **self**]

‘You-Pl will touch yourselves.’ (< *báʔrá* )

#### Reflexive preverbal object

The paradigm for indicative clauses with a reflexive preverbal object is (xx1). The basic tonal form is *yéʔré*, becoming *yèʔré* with the {LH} pattern associated with 3Sg subjects. M‑toned *yēʔrē* in the 1Sg and 2Sg perfective is due to M‑Spreading from M‑toned pronominals. This *yēʔrē* becomes *yēʔré* before an L‑tone by regular Final Tone-Raising, as in (xx1a) above.

(xx1) perfective present progressive

1Sg *mā nāāⁿ yēʔrē má=∅ nààⁿ yéʔré má=∅ sààⁿ yéʔré*

2Sg *wō nīī yēʔrē wó=∅ nìì yéʔré wó=∅ sìì* *yéʔré*

1Pl *mùʔùⁿ nāāⁿ yéʔré mùʔú=∅ nààⁿ yéʔré mùʔúⁿ=∅ sààⁿ yéʔré*

2Pl *ēēⁿ nīīⁿ yéʔré ēéⁿ=∅ nììⁿ yéʔré ēéⁿ=∅ sììⁿ yéʔré*

3SgHum *à ná yèʔré á=∅ ná yèʔré á=∅ sáá yèʔré*

*á yèʔré*

3SgNonh *è ní yèʔré é=∅ ní yèʔré é=∅ síí yèʔré*

3PlHum *ààⁿ náàⁿ yéʔré àáⁿ=∅ nààⁿ yéʔré àáⁿ=∅ sáàⁿ yéʔré*

3PlNonh *èè níìⁿ yéʔré èéⁿ=∅ nììⁿ yéʔré èéⁿ=∅ síīⁿ yéʔré*

Sg NP *(n)á yèʔré =∅ ná yèʔré =∅ sáá yèʔré*

Pl NP *(n)áàⁿ yéʔré =∅ nààⁿ yéʔré =∅ sáàⁿ yéʔré*

The imperative is illustrated in (xx2a‑b).

(xx3) a. *ē yéʔré bàʔrì*

2SgRefl self hit.Imprt

‘Hit yourself!’

b. *ēēⁿ nīīⁿ yéʔré bàʔrì*

2Pl 2PlRefl self hit.Imprt

‘Hit yourselves!’

#### Emphatic nonreflexive use of *yéʔré*~ *yɛ́ʔrɛ́*

In (xx1), *yéʔré* added directly to an NP (here a pronoun) functions somewhat like emphatic, nonreflexive *myself* in English, though in this case I prefer to translate with the adverb *personally*. There is no anaphoric link to the subject or other antecedent. Instead, the point is that Zaki refuses to speak to anyone else, such as an underling.

(xx1) *zàkíì kɔ́= [ɔ̀-wó kɔ̀lɔ̀kɔ́ ciɛ̀]*

Z want.Pfv [Hum-3SgLogo talk(n) speak.Adjn]

*[[mā yéʔré] dɛ̀]*

[1Sg **self**] with]

‘Zaki wants to speak with me personally.’ (< *à-wò* )

## Reciprocal

### Reciprocals (*ɲùʔùⁿ* )

This morpheme behaves like a possessed inalienable, compare (xx1a) in §6.2.2.1. Its morphosyntax resembles that of reflexive *yéʔré*. However, as a preverbal object it allows more contractions than *yéʔré* does with pronominal subjects. The sense is reciprocal (‘each other’).

#### Reciprocal postverbal object

In (xx1), the reciprocal phrase is a postverbal object.

(xx1) a. *mùʔùⁿ báʔr= [āāⁿ ɲūʔūⁿ]*

1Pl touch.Pfv [1PlRefl **Recip**]

‘We touched each other.’ (< *báʔrī* )

b. *ēēⁿ báʔr= [īīⁿ ɲūʔūⁿ]*

2Pl touch.Pfv [2PlRefl **Recip**]

‘You-Pl touched each other.’

c. *ààⁿ báʔr= [ààⁿ ɲúʔúⁿ]*

3PlHum touch.Pfv [3PlHumRefl **Recip**]

‘They touched each other.’

#### Reciprocal preverbal object

The paradigm for combinations of preverbal reciprocal objects with various (always plural) subjects and with post-subject inflectional morphemes is (xx1).

(xx1) Reciprocals

perfective present progressive

1Pl *mùʔùⁿ nāāⁿ ɲūʔūⁿ mùʔú=∅ nààⁿ ɲúʔúⁿ mùʔúⁿ=∅ sààⁿ ɲúʔúⁿ*

*mùʔà=àⁿ ɲúʔúⁿ*

2Pl *ēēⁿ nīīⁿ ɲūʔūⁿ ēéⁿ=∅ nììⁿ ɲúʔúⁿ ēéⁿ=∅ sììⁿ ɲúʔúⁿ*

3PlHum *ààⁿ náàⁿ ɲúʔúⁿ àáⁿ=∅ náàⁿ ɲúʔúⁿ àáⁿ=∅ sáàⁿ ɲúʔúⁿ*

3PlNonh *èè níìⁿ ɲúʔúⁿ èéⁿ=∅ níìⁿ ɲúʔúⁿ èéⁿ=∅ síīⁿ ɲúʔúⁿ*

Pl NP *(n)áàⁿ ɲúʔúⁿ =∅ náàⁿ ɲúʔúⁿ =∅ sáàⁿ ɲúʔúⁿ*

*∅ ɲùʔùⁿ*

A transitive verb following *ɲùʔùⁿ* takes its -3Sg form, beginning with an H‑tone, e.g. *báʔrī* ‘hit (perfective)’.

The variant *∅ ɲúʔúⁿ* after plural noun (which then ends in plural *-àⁿ* ) might be thought of as a contraction, but the tonal patterns are not completely consistent with this. The two variant constructions are illustrated in (xx2a‑b).

(xx2) a. *dí-rá-àⁿ [náàⁿ ɲúʔúⁿ] báʔrī*

child-Nom-Pl [3PlHumRefl **Recip**] hit.Pfv

‘The children hit-Past each other.’

b. *dí-rá-àⁿ ∅ ɲùʔùⁿ báʔrī*

child-Nom-Pl ∅ **Recip** hit.Pfv

[=(a)]

*ɲùʔùⁿ* in (xx2b) is tonally distinct from *ɲúʔúⁿ* in (xx2a). The absence of an overt “possessor” in (xx2b) suggests that the noun is lexically L‑toned *ɲùʔùⁿ*, though in the majority of actual sentence examples it becomes *ɲūʔūⁿ* by M‑Spreading or *ɲúʔúⁿ* by tonal ablaut (as inalienably possessed by a -3Sg possessor).

## Logophoric third person pronouns

### Third person singular logophoric

Logophoric 3Sg pronouns may occur in subject position to indicate coindexation with the author of the quotation. When simple main clause (xx2a) is quoted, replacing the simple human 3Sg *à* by logophoric 3Sg pronoun *à-wò* tells the listener that the quoted author (Zaki) is sick (xx2b). If this replacement is not made, the reference is to a third person other than Zaki (xx2c).

(xx1) a. *à wèè kéé=rēʔ*

**3SgHum** health(n) be.healthy.Pfv=Neg

‘He/She is sick.’

b. *zàkíì dɛ́= [ɛ̀-ẁ(ò) wèè kéé=rēʔ]*

Z say.Pfv [Hum-**3SgLogo** health(n) be.healthy.Pfv=Neg]

‘Zakix said that hex is sick.’ (/dɛ́ à-wò/)

c. *zàkíì dɛ́ [à wèè kéé=rēʔ]*

Z say.Pfv [**3SgHum** health(n) be.healthy.Pfv=Neg]

‘Zakix said that hey/shey is sick.’

The same procedure may be used with nonsubject pronouns. Addition of logophoric *‑wò* marks coindexation when added to human 3Sg preverbal object *ná* (xx2a). This distinguishes it from (xx2b) where the reference is to a distinct third person.

(xx2) a. *zàkíì dɛ̀ [wō ná-wò báʔrí]*

Z say.Pfv [2Sg HumObj-**3SgLogo** hit.Pfv]

‘Zakix said that you-Sg hit himx.’

b. *zàkíì dɛ̀ [wō ná bàʔrí]*

Z say.Pfv [2Sg **3SgHumObj** hit.Pfv]

‘Zakix said that you-Sg hit himy/hery.’

For postverbal objects, the distinction is made by using the third person logophoric pronoun in independent form (including the final *‑n̄* ) to mark coindexation (xx3a), versus the usual postverbal object form *à‑yà* in uncoindexed contexts (xx3b).

(xx3) a. *zàkíì dɛ̀ [wō báʔr= à-wò-ǹ]*

Z say.Pfv [2Sg touch.Pfv Hum-**3SgLogo-Indep**]

‘Zakix said that you-Sg touched himx.’

b. *zàkíì dɛ̀ [wō báʔr= à-yà]*

Z say.Pfv [2Sg touch.Pfv **3SgHumOb**j]

‘Zakix said that you-Sg touched himy/hery.’

Similarly, in PPs the logophoric pronoun (human 3Sg *à-wò* ) marks coindexation in (xx3a), while the simple human 3Sg proclitic *à* is not coindexed (xx3b).

(xx3) a. *zàkíì dɛ̀ [wō s= [á-wɔ̀ dó]]*

Z say.Pfv [2Sg come.Pfv [Hum-**3SgLogo** with]]

‘Zakix said that you-Sg came with himx.’ (< /sɛ́ à-wɔ̀/)

b. *zàkíì dɛ̀ [wō sá= [à dò]]*

Z say.Pfv [2Sg come.Pfv [**3SgHum** with]

‘Zakix said that you-Sg came with himy/hery.’ (< /sɛ́ à dò/)

The same is true of possessors of nonsubject NPs (xx4a‑b).

(xx4) a. *zàkíì dɛ̀ [[à-wò wùlá=] è wèê]]*

Z say.Pfv [[Hum-**3SgLogo** dog] 3SgNonh go.Pfv]]

‘Zakix said that hisx dog went away’

b. *zàkíì dɛ̀ [[à wùlá=] è wèê]]*

Z say.Pfv [[**3SgHum** dog] 3SgNonh go.Pfv]]

‘Zakix said that hisy/hery dog went away’

### Third person plural logophorics

(xx1a) has a 1Pl subject pronoun. When it is quoted, it is expressed as a 3Pl logophoric based on *mǎā*, i.e. human *à‑mǎā* (xx1b), in animal tales also nonhuman *è‑mǎā*. If there is no coindexation, the simple human 3Pl *ààⁿ* is used (xx1c).

(xx1) a. *mùʔúⁿ=∅ sà sáá*

1Pl=Ipfv Fut come.Ipfv

‘We will come.’

b. *dí-rá-àⁿ dɛ́ [à-mǎāⁿ sà sáá]*

child-Nom-Pl say.Pfv [Hum-**3PlLogo** Fut come.Ipfv]

‘The childrenx said that theyx would come.’

c. *dí-rá-àⁿ dɛ́ [àáⁿ sà sáá]*

child-Nom-Pl say.Pfv [**3PlHum** Fut come.Ipfv]

‘The childrenx said that theyy would come.’

An example with 3Pl logophoric independent pronoun as postverbal object (of a ditransitive verb) is (xx2).

(xx2) *dí-rá-àⁿ dɛ́ [wō tàgá bìlé à-mǎā-n]*

child-Nom-Pl say.Pfv [2Sg sheep give.Pfv Hum-**LogPl**-Indep]

‘The childrenx say that you-Sg gave a sheep to themx.’

### First and second persons

No logophoric use of independent pronouns occurs with 1st/2nd persons (xx5a‑b). There is no need for overt coindexation with main-clause subject in (xx5b) since the reference of each occurrence of a 1st/2nd person pronouns is directly indexed to the participants in the speech event.

(xx5) a. *mā dɛ̄ [mā wēē kéé=rēʔ]*

1Sg say.Pfv [1Sg health(n) be.healthy.Pfv=Neg]

‘I said that I was sick.’

b. *wō dɛ̄ [wō wēē kéé=rēʔ]*

2Sg say.Pfv [2Sg health(n) be.healthy.Pfv=Neg]

‘You-Sg said that you-Sg were sick.’

# Grammatical pragmatics

## NP-final discourse-functional elements

### *kɔ́ní* ‘as for’ (topic)

This particle follows NPs, usually clause-initial or preclausal, that switch from one topical referent to a new one. The form is *kɔ́ní* except *kɔ̄nī* after M‑toned pronouns. The *-n* suffix (or variant) that occurs in independent pronouns is absent.

(xx1) independent ‘as for X’

a. M‑toned pronouns

1Sg *mā-n* *mā kɔ̄nī*

2Sg *wō-n* *wō kɔ̄nī*

2Pl *ēē-n* *ēēⁿ kɔ̄nī*

b. other pronouns

1Pl *mùʔú-n(ú)* *mùʔúⁿ kɔ́ní*

2Pl *máà-ǹ máà kɔ́ní*

3SgHum *(à) wɔ̀-n* *à wò kɔ́ní*

3SgNonh *è wɔ̀-n* *è wò kɔ́ní*

3PlHum *àà-ń*, *àà-nú ààⁿ kɔ́ní*

3PlNonh *èè-ń*, *èè-nú èèⁿ kɔ́ní*

### ‘Also’ and ‘again’

#### ‘Also, too’ (*dòʔò* ~ *dóʔó* )

This particle is added to pronouns and other NPs. Noun-headed NPs are exemplified in (xx1a‑b). They show the usual tonal effect of +3Sg versus -3Sg (here 3Pl) NPs. The larger NP ending in *dòʔò* ~ *dóʔó* is treated tonally as ‑3Sg, so both ‘the child too’ and ‘the children too’ require H‑toned *sɛ́* ‘came’ (xx1c‑d), contrast *dí sɛ̌* ‘a/the child came’.

(xx1) a. *dí dòʔò*

child too

‘the child too’

b. *dí-rá-àⁿ dóʔó*

child-Nom-Pl too

‘the children too’

c. *[dí dòʔò] sɛ́ɛ́*

[child too] come.Pfv

‘The child too came.’

c. *[dí-rá-àⁿ dóʔó] sɛ́ɛ́*

[child-Nom-Pl too] come.Pfv

‘The child too came.’

The pronominal paradigm is (xx2). M‑toned *dōʔō* occurs by assimilation in (xx2a). The -3Sg form *dóʔó* is the only possibility in (xx2b). L‑toned *dòʔò* occurs after falling-toned *mǎā* as the variant ‘you-Pl’ pronoun (xx2c). 3Sg pronouns have optional *‑wò* for focalization (or logophoricity). The ‘also’ particle is H‑toned after *wò*, otherwise L‑toned.

(xx2) Pronominal paradigm of ‘also, too’

a. 1Sg *mā dōʔō*

2Sg *wō dōʔō*

2Pl *ēēⁿ dōʔō*

b. 1Pl *mùʔùⁿ dóʔó*

3PlHum *ààⁿ dóʔó*

3PlNonh *èèⁿ dóʔó*

c. 2Pl *mǎā dòʔò*

d. 3SgHum *à‑wò dóʔó* ~ *à dòʔò*

3SgNonh *è-wò dóʔó* ~ *è dòʔò*

#### ‘Again’ (*dòʔò* ~ *dóʔó* )

There are two ways to say e.g. ‘X came again.’ One is a two-clause construction with ‘return, repeat’ as the first verb (§15.xxx). The second is with *dòʔò* ~ *dóʔó* at the end of the subject NP. Simple perfective examples are in (xx1).

(xx1) a. *[à dòʔò] sɛ́*

[3SgHum again[ come.Pfv

‘He/She came again.’

b. *[mā dōʔō] sɛ́*

[1Sg again] come.Pfv

‘I came again.’

c. *[mùʔùⁿ dóʔó] sɛ́*

1Pl again come.Pfv

‘We came again.’

When an overt post-subject inflectional morpheme (imperfective tonal enclitic and/or future particle) is present, we can see that *dòʔò* ~ *dóʔó* is part of the subject NP.

(xx2) *[à dòʔó]=∅ sà sáá*

[3SgHum again]=Ipfv Fut come.Ipfv

‘He/She will come again.’

Possible ambiguity between the senses ‘X come again’ and ‘[X too] come’ can be avoided by using the alternative construction with ‘return’ in the ‘again’ sense.

#### ‘No longer’ (*dɔ́ʔɔ́=rɛ̄ʔ* )

‘Not again’ or ‘no longer’ can be expressed by clause-final *dɔ́ʔɔ́=rɛ̄ʔ*, i.e. ‘again’ plus the negative enclitic.

(xx1) *cíí-ná-àⁿ cíɛ́ wɔ́ʔrɔ́ dɔ́ʔɔ́=rɛ̄ʔ*

breast-Nom-pl can.Ipfv be.detached.Ipfv again=Neg

‘Breasts could no longer be taken off.’ (2016\_04 @ 03:37)

### ‘Only’ (*kpèʔè-* ~ *kpéʔé-* )

This element is added at the end of an NP to indicate that the predication applies to no referent other than the overt one. It takes the form *kpèʔè* after a numeral, and a slightly augmented form *kpèʔè‑n* ~ *kpéʔé-n* after other NPs.

(xx1) a. *à [jáāⁿ-táá kpèʔè] bìlí mā-n̄*

3SgHum [twenty-ten only] give.Pfv 1Sg-Indep

‘He/She gave me only 200 (currency units).’

b. *mā [jàlsàdù kpéʔé-n] jíɛ́*

1Sg [Blédougou only-Indep] see.Pfv

‘I saw Blédougou only.’

c. *[mā kpèʔè-ǹ] sɛ́*

[1Sg only-Indep] come.Pfv

‘Only I came.’

d. *[mā tàgá kpèʔè-n] mā ká*

[1Sg sheep only-Indep] 1Sg have

‘I have only my sheep-Sg.’

## Preclausal or clause-initial discourse markers

### Paragraph introducers

#### ‘Well, …’ (*bon*)

As a clause-initial discourse particle marking a shift in time or location, French *bon* occurs frequently in narrative recordings. It is unstressed, sometimes almost inaudible on tapes, and optionally followed by a slight pause. (xx1) occurred in the middle of a narrative, preceded by ‘(Hare) knew where a lion was lying.’

(xx1) *bon*, *èèⁿ táʔá cíɛ́ [cíī dò] kúdɔ́ɔ̄], …*

well, 3PlNonh go.Adjn arrive.Pfv [[thicket one] under], …

‘Well, they went and arrived under (=at) a thicket (dense forest), …’ (2016\_02 @ 01:10)

#### *è-yá sɔ̀rɔ̀* ‘now (it happened that …’)

*è-yá sɔ̀rɔ̀*, usually abbreviated as *yá sɔ̀rɔ̀*, occurs preclausally in the sense ‘now it happened that …’, where English now is used as a narrative break marker (rather than a time adverb). It contains *è‑yà* (variant nonhuman 3Sg pronoun) and *sɔ̀rɔ̀* ‘do then’, which is featured in ‘before …’ clauses (§15.3.4.1).

(xx1) *[yá sɔ̀rɔ̀] [à dòʔò]*

[**3SgFoc do.then.Ipfv**] [3SgHum too]

*cíɛ́ [káméē-l dò] ká*

be.Past [young.man-Dim one] have

‘Now (it happened that) she also had a young man (=fiancé).’ (2016\_04 @ 00:29)

#### *kàà-sɔ̀rɔ̀* ‘now (it happened that …’)

This functions in the same way as *yá sɔ̀rɔ̀* and contains the same element *sɔ̀rɔ̀*, but the initial element is opaque. The form is said to occur in Jula as well.

(xx1) *nàà! mùʔúⁿ ∅ wà,*

friend! 1Pl 3SgNonhObj go.Imprt,

*kàà-sɔ̀rɔ̀, cì-náā, [false start omitted]*,

**it.happened.that**, hare-Nom,

*è [jɛ̀rɛ́* *bòò láʔà] dàà-sɔ̀*

3SgNonh [lion exit.VblN place] know(place).Pfv

‘(Hyena said:) “Friend, let’s go!” Now it happened that hare knew the lion’s exit place.’ (2016\_02 @ 01:04)

#### *wálàà* ~ *wàláà* ‘there it is!’

French *voilà* in the form *wálàà* ~ *wàláà* and variants, can be used to confirm an interlocutor’s comment that fits with what the speaker has been saying (cf. one use of English *there you are!*). It can also be a simple hesitation marker or paragraph opener. In (xx1) it is one of three discourse markers, probably indicating speaker hesitation before a clarification of the preceding discourse.

(xx1) *èèⁿ bé= [(è)èⁿ wú],*

3PlNonh put.in.Pfv [3PlNonhRefl Custod],

*wálàà, bon*, *sísàⁿ cì-ná dúlì yàlíī*

okay, well, now hare-Nom one take.Pfv

‘They (=hare and hyena) put (the lion cubs) in their custody (i.e. in sacks). There it is, well, now, hare took one (and hyena took the other).’ (2016\_02 @ 01:15/01:24)

### Clause-initial intensifiers

#### ‘Lo, …’ (*jàʔá* )

This particle occurs clause-initially or preclausally, framing a surprising or dramatic event in a narrative. (xx1) is a textual example. Hyena had been told to do something else with the powdered salt so his action was surprising.

(xx1) *é! jàʔá súrúkú kòò-fóʔó mɔ̀gɛ́ɛ̄*

hey! lo! hyena salt-powder suck.Pfv

‘Hey, lo! hyena sucked the powdered salt.’ (2016.02 @ 03:25)

#### ‘Even’ (*álì, fō* )

Clause-initial *álì*, the local variant of a widespread regional form, means ‘even’. It usually has primary scope over the subject (xx1a). For VP or other non-subject scope, a different phrasing including a distinct form like *fō* ‘all the way to, as far as’ (also clause-initial) must be used (xx1b).

(xx1) a. *álì dí-kpɛ́ʔrɛ̀ cíɛ́ [[wálí mí] màà]*

**even** child-small can.Ipfv [[work(n) Dem] do.Ipfv]

‘Even a small child can do this work.’

b. *[mā ɲírā] ŋùnù kɛ́, [sɛ́ⁿ dò] kùdù,*

[1Sg face] be.sour.Pfv Past, [thing one] for

*fō mā jíímɛ̄*

**all.the.way.to** 1Sg weep.Pfv

‘I was sad (“my face was sour”), because of something, to the point that I wept.’

### Discourse-continuity markers

#### *donc* ‘so’

French *donc* is used somewhat like *bon*, but it is much less common in my texts. It appears to indicate continuity, more or less as in French. (xx1) follows a description of a situation, and tells us that the situation continued for a while.

(xx1) *donc ààⁿ túú yààlàā, …*

so 3PlHum **stay**.Adjn thus, …

‘So they remained thus (=in that situation), ….’ (2016\_04 @ 00:23)

This is background material and is followed by a new section in the narrative.

#### *èmmɛ̀ kómì* ‘so’

These two particles occur together in preclausal position. *kómì* is probably French *comme* ‘as, like’. The following clause generally summarizes preceding discourse.

(xx1) *èmmɛ̀ kómì ààⁿ cíɛ́ gàáⁿ bàà*

so like 3PlHum be.Past combat(n) wage.Ipfv

‘(They also waged war.) So, they used to wage war.’ (2016\_01 @ 03:05)

### Adversative discourse markers

#### ‘But, …’ (*mɛ̀* )

Clause-initial *mɛ̀* (French *mais*) occurs several times in the texts. An example:

(xx1) *[fóʔó-tèè mɛ́ʔɛ̄-nà-àⁿ-ní]=ī,*

[gun-shoot.VblN person-Nom-Pl-Nom]=it.is,

*mɛ̀ [ààⁿ dóʔó] cíɛ́ gàáⁿ bàà*

but [3PlHum too] be.Past war(n) wage.Ipfv

‘They were hunters, but they also waged war (=were warriors).’ (2016\_01 @ 02:56)

#### ‘Otherwise’ (*nóò-tɛ́*, *yàbùgɔ́rɛ̄ⁿ* )

These clause-initial discourse elements are difficult to parse. The first is exemplified in (xx1). We might venture *nī* ‘if’ and *wò* 3Sg focus pronoun as possible components.

(xx1) *wō-ní=ì nóò-tɛ́ mā cí wàá kúnú*

2Sg-Indep=it.is **otherwise** 1Sg be.Past go.Ipfv village

‘It’s you, otherwise I would have gone home.’

The second is exemplified in (xx2). The context is similar to that for *nóò-tɛ́*.

(xx2) *zàkíì mā só?éē*

Z 1Sg catch.Pfv

*yàbùgɔ́rɛ̄ⁿ mā cíɛ́ bákàrì báʔrá*

**otherwise** 1Sg be.Past B hit.Ipfv

‘Zaki caught (=restrained) me, otherwise I would have hit Bakari.’

*yàbùgɔ́rɛ̄ⁿ* can also function as clause-initial ‘anyway, …’, coming back to the main discourse theme after a digression. See 2016\_01 @ 02:24.

#### Self-correction *àfɔ̄* ‘or rather’

An example is (xx1).

(xx1) *[(à)àⁿ wɛ́ [gɔ̀lɔ́ tɔ̀]] hɛ́ⁿ,*

[3PlHumRefl bathe.Adjn [river in] oops!,

*àfɔ̄ n= áàⁿ kú ꜜtáʔá*

or.rather if 3PlHum begin go.Ipfv

‘When they went to bathe in the river, oops! rather when they started out …’ (2016\_04 @ 00:06)

## Clause-final discourse-functional morphemes

### ‘Now’ (*sísàⁿ* )

In narrative, *sísàⁿ* ‘now’ (also in Jula and perhaps a borrowing) is very common clause-finally. Its discourse function is to mark a slight temporal interval between the just described eventuality and a new event. Since it often looks forward to the next clause, it often has continuity intonation (terminal prolongation and M‑tone), transcribed *sísàāⁿ*.

(xx1) *bon*, *èèⁿ [jɛ̀rɛ́ dì-rá-àⁿ] séé jíɛ́ sísàāⁿ,*

well, 3PlNonh [lion child-Nom-Pl] lie.down.Pfv see.Pfv **now**,

*è dɛ̀ é!*

3SgNonh say.Pfv hey!

‘Well, they saw the (two) lion cubs lying down now. He (=hare) said, “hey, …” ’ (2016\_02 @ 01:15)

### Emphatic *dɛ̄ʔ*

Clause-final *dɛ̄ʔ* is rather general emphatic. In (xx1), it indicates mild surprise.

(xx1) *[wō ɲàyí] dì dɛ̄ʔ,* mon vieux

[2Sg tears] become.delicious.Pfv Emph, my old man

‘Man, your tears sure are tasty!’ (2016\_02 @ 04:04)

In (xx2), there may be an admonitive element in addition to simple emphasis.

(xx2) *má=∅ [[wō síbí] dò] ká dɛ̄ʔ*

1Sg=Ipfv [[2Sg meat] with] want Emph

‘I sure want (to eat) a piece of your flesh!’ (2016\_01 @ 04:29)

## Greetings

Several Jula greetings are in use. An example is *àní sɔ̀gɔ́ mà* ‘good morning’ and its reply *àm báà*. In some other cases there is a slight difference in pronunciation. A greeting for a person at work or in the fields is *ànì céè*, a slight prosodic variation on Jula *ànì cé→*. An arriving visitor or returning traveler is greeted with *è dáⁿsè*.

An extended greeting sequence occurs at the beginning of text 2016\_02. The examples below were elicited to supplement that.

Departing travelers are sent off with a blessing for a safe return. Such formulae are somewhat difficult to parse. The subject is *álā* ‘God’, in this context /álá/ before *vv*‑Contraction. In (xx1a), the 2Sg object is *ē* rather than *wō*. In (xx1b) the 2Pl object *ēēⁿ* is regular. ‘Put you in’ is understood as meaning ‘bring you back (here)’.

(xx1) a. *álé= ē ɲɛ̄ sɔ́*

God 2Sg good put.in

‘May God put you-Sg (back) in well!’

b. *álé= (ē)ēⁿ ɲɛ̄ sɔ́*

God 2Sg good put.in

‘May God put you-Pl (back) in well!’

An alternative blessing, not presupposing a return, is (xx2).

(xx2) *álá cálá nùʔùⁿ-yá*

God road make.good.Imprt

‘May God make the road good (=safe)!’

Some wishes expressed during condolence visits to the bereaved survivors of a deceased person are in (xx3).

(xx3) a. *álá hín= à-yà*

God relieve.Imprt Hum-3Sg

‘May God relieve him/her.’

b. *álá [kùtɔ́rɔ́ má] kùmà*

God [behind on] cool.Imprt

‘May God cool (=be mild to) what follows (=the survivors)!’

Good wishes for life and health during the next year, like (xx4), are given on major religious holidays.

(xx4) *álá ɲɛ̄ɛ̄-wè bílí mùʔù-nū*

God next.year give.Imprt 1Pl-Indep

‘May God give us (all) next year!’

# Texts

I recorded seven texts from three speakers in October 2017. I have so far transcribed and translated texts 01, 02, and 04. The first is an account of the settlement of Blédougou. The second is an animal tale, and the third is a tale about proto-humans.

## Text 2016\_01: History

narrator: Traore Soungalo (S) with Traore Wamara (W)

00:02 W: *má=∅ kɔ̀ɔ̀ [mā wò náká*

W: 1Sg=Ipfv want.Ipfv [1Sg 2Sg ask.Ipfv

*[[jàlsà-dù séʔé cógō] mà]],*

[[Blédougou sit.VblN manner] on]],

*[jàlsà-dù sɛ́ʔɛ́ [sèʔè-cógō mì]],*

[Blédougou sit.Pfv [sit.VblN-manner Rel]],

*má=∅ kɔ̀ɔ̀ [dě wō tɔ́ʔɔ́ [mā mā]]*

1Sg=Ipfv want.Ipfv [that 2Sg say.Imprt [1Sg on]]

W: ‘I want to ask you-Sg about the manner of settling of Blédougou. The way (=how) Blédougou was settled, I want you-Sg to tell (it) to me.’

00:12 S: *[jàlì-kú dù] dɔ́ʔɔ́ kɛ̀,*

S: [Jalkunan in] also tagQ,

W: *[jàlì-kú dù]*

W: [Jalkunan in]

S: ‘In Jalkunan (language) too?’

W: ‘(Yes,) in Jalkunan.

*[kɛ̀ tag question §13.2.1.2]*

00:14 S: *[[jàlsà-dù sɛ́ʔɛ́ sèʔè cògò yá mì]=yà],*

S: [[Blédougou sit.Pfv sit.Vbl manner ?? Rel]=Q

*jàl-á-àⁿ cíɛ́ [fóʔó-tèè mɛ́ʔɛ̄-nà-àⁿ] kúⁿ*

Jali-Nom-Pl be.Past [powder-shoot.VblN person-Nom-Pl] Cop,

S: ‘The way Blédougou was settled? The Jali people were hunters (“powder-shooters”).

00:21 S: *jàl-á-àⁿ bɔ́ɔ́ màndé,*

S: Jali-Nom-Pl exit.Pfv Mande,

*[ààⁿ bélé=] [àáⁿ wà kāŋgāⁿ],*

[3PlHum pass.Adjn] [3PlHum go.Adjn K],

S: ‘The Jali people left (=came from) Mande. They proceeded to go to Kankan.

*[bɔ́ɛ́ ‘exited’; Mande refers to the area in southern Mali and northern Guinea-Conakry where the medieval Mande Empire was loosely centered]*

00:28 S: *[ààⁿ dóʔó] cíɛ́*

S: [3PlHum also] be.Past

*gààⁿ* — *[kɛ̀lɛ̀-másá-rà-àⁿ] kúⁿ,*

fight(n) — [fight(n)-king-Nom-Pl] Cop,

*ààⁿ búlú [[(à)àⁿ kútɔ́rɔ́] mà],*

3PlHum return.Adjn [[3PlHumRefl behind] on],

S: ‘They were also warrior kings. They turned around and went back.’

*[< Jula kɛ̀lɛ̀-másâ ‘warrior king’]*

00:33 S: *[ààⁿ sá], [ààⁿ sá ꜜbélé]*

S: [3PlHum come.Adjn], [3PlHum come.Adjn pass]

*[ààⁿ táʔá] [(à)àⁿ sáʔá kóròwáárī-wààŋgóló],*

[3PlHum go.Adjn] [3PlHum sit.down.Adjn Côte d’Ivoire-Ouanggolo],

S: ‘They came, they came and they kept going and they settled at Côte d’Ivoire-Ouangolo.’

*[Ouangolodougou, or Ouangolo for short, denotes a pair of villages, one on each side of the Burkina-Côte d’Ivoire border, so the country names are used as compound initials to specify which one]*

00:40 S: *jàlsà-dù dúʔúɲín-nɛ́=ɛ̀, jàl-á-àⁿ-nū,*

S: Blédougou land-Nom=it.is, Jali-Nom-Pl-Nom,

*ààⁿ bɔ́ɛ́ kómì [fóʔó-tèè mɛ́ʔɛ́-nà-àⁿ-nū]=ỳ,*

3PlHum exit.Pfv as [powder-shoot.VblN person-Nom-Pl-Nom]=it.is,

*ààⁿ sɛ́ fɛ́ɛ́ní=yà dè,*

3PlHum come.Pfv become.many=Link there.Def,

S: ‘It’s Blédougou’s land. They left (=came from) (there). The Jali (people), as they were hunters, they came and multiplied there.’

*[dùʔùɲìnì ‘country’ ]*

00:47 S: *[ààⁿ bélé] [ààⁿ sá dàmààná],*

S: [3PlHum pass.Adjn] [3PlHum come.Adjn D],

*ààⁿ sá cíɛ́ dàmààná,*

3PlHum come.Adjn arrive.Adjn D,

*dó-ōⁿ bóó=yà dè, [ààⁿ sá],*

certain-Pl exit=Link there.Def, [3PlHum come.Adjn],

*[ààⁿ sá=] [ààⁿ sáʔá jàlsà-dù],*

[3PlHum come.Adjn] [3PlHum sit.Adjn Blédougou],

S: ‘They moved on and came to Damana. When they (had) arrived in Damana, some (of them) left there, they came, they came and sat (=settled) in Blédougou.’

*[Damana, large village SE of Blédougou near Côte d’Ivoire border]*

00:59 S: *bon, ŋ́ jàlkù-rɔ́ɔ̄,*

S: well 1Pl Jalkunan-Nom,

*mùʔúⁿ=∅ ꜜnì màʔà jàlsà-dù*

1Pl 3SgNonhObj name(v).Ipfv Blédougou

S: ‘Well, (in) our Jalkunan (language), we call it (=Blédougou village) *jalsadu*.’

*[ŋ́ reduced from mùʔùⁿ 1Pl]*

01:04 S: *jál-á-àāⁿ, jál-á-àⁿ fɛ́ɛ́nī kéē nàà,*

S: tsetse-Nom-Pl, tsetse-Nom-Pl become.many.Pfv Past here,

*[wò kósòⁿ] ààⁿ dɛ́ jàlsà-dù,*

[3SgFoct because] 3PlHum say.Pfv Blédougou,

*[jál-á-àⁿ sàá] dù,*

[tsetse-Nom-Pl house] in,

S: ‘Tse-tse flies, There were lots of tse-tse flies here. That’s why they said (=called the village) *jalsadu*, (contracted from) “in the house (=village) of the tse-tse flies”.’

*[jálá ‘tse-tse fly’; Past kɛ́ → kéē before nàà, also transcribable ké=ē nàà with encliticized linker]*

01:11 S: *bon, jóʔó-kú-rɔ̀, à-mààⁿ dɛ́ béré-dùgù,*

S: well, Jula-language-Nom, Hum-3Pl say.Pfv stick-village,

*[mɛ̀ʔɛ̀ⁿ kpèè-rá-àⁿ] ∅ jàmúlī,*

[person white-Nom-Pl] 3SgObj change.Pfv,

B: ‘Well, in Jula (language), it’s they (=Jula people) [focus] who say (=call the village) *béré‑dùgù* (“wooden.stick-village”). The white people changed it.’

*[à-mǎāⁿ 3PlHum focused pronoun]*

01:18 S: *ààⁿ ní màʔàⁿ,* Blédougou*,*

S: 3PlHum=Ipfv 3SgNonhObj say.Adjn, B,

*nóòtɛ́ [è tòʔònì béré-dùgù],*

otherwise [3SgNonh be.named B],

*jàl-kù-rɔ́ɔ̄, jàlsà-dù, [jál-á-àⁿ sàá] dù,*

Jalkunan-Nom, J, [tsetse-Nom-Pl house] in,

S: ‘(And) they called it Blédougou. Otherwise, it was (originally) named *béré-dùgù*. In Jalkunan (language), *jàlsàdù*, (from) “in the house (=village) of the tse-tse flies”.’

01:28 S: *jàlsà-dù [séʔé kú-rɔ̀] nɛ̀,*

S: Blédougou [sit.Vbl matter-Nom] here,

*mì jàlsàdù sɛ́ʔɛ́ɛ̄, dràmànù-gbɛ́,*

Rel Blédougou establish.Pfv, DG,

*à-wò jàlsàdù sɛ́ʔɛ́ɛ̄,*

Hum-3Sg Blédougou establish.Pfv,

*[à sá] [dɔ̀ɔ̀rɛ́ bòlò],*

[3SgHum come.Adjn] [D give.birth.Adjn],

‘There’s the (manner of) Blédougou’s settling. The one who established Blédougou, (he was) Dramanu Gbe. It was he [focus] who established Blédougou. He (then) came and gave birth to (=had a child) Doore.’

*[à-wò human 3Sg focus; dɔ̀ɔ̀rɛ̀ (name)]*

01:42 W: *èmmɛ̀ kómì dràmànù-gbɛ́ dɔ̀ɔ̀rɛ̀ bólōē,*

W: so like DG D give.birth.Pfv,

*[dràmànù-gbɛ́ dì-kàmà-ná]=∅ [dɔ̀ɔ̀rɛ́ dɛ̀]*

[DG child-male-Nom]=be [D with]

S: *dɔ̀ɔ̀rɛ́ dɛ̀, [dràmànù-gbɛ́ dì-kàmà-ná]=∅ [dɔ̀ɔ̀rɛ́ dɛ̀]*

S: D with, [DG child-male-Nom]=be [D with]

W: ‘So it’s like Dramanu Gbe gave birth to (=had a son) Dore. Dramanu Gbe’s son was (named) with (=by) Doore.’

S: ‘(He was called) with Doore. Dramanu Gbe’s son was (named) with Doore.’

*[dɛ̀ ‘with’ here with names, cf. ‘by the name of X’]*

01:57 S: *dɔ̀ɔ̀rɛ̀ dì-kàmà-náā, cɔ̀ⁿʔɔ̀ŋú dɛ̀,*

S: D child-male-Nom, Tch with,

*cɔ̀ⁿʔɔ̀ŋú dì-kàmà-náā, è-wó [sìbírì dɛ̀],*

Tch child-male-Nom, Nonh-3Sg [S with],

*[sìbírì dì-kàmà-ná] [kùgùlì dɛ́],*

[S child-male-Nom [K with],

S: Doore’s son, (he was named) with Tcho’ongou. Tcho’ongou’s son, (he was named) with Sibiri. Sibiri’s son (was named) with Kuguli.

*[è-wò here for expected human à-wò]*

02:11 S: *kùgùlì dì-kàmà-náā, è-wó [sèédù dɛ́],*

S: K child-male-Nom, Nonh-3Sg [S with],

*mùʔúⁿ bàlàŋkúdù à zàmplé,*

1Pl Senoufo.language 3SgHum Z

*mɛ̀ à tòʔònì sèédù*

but 3Sg be.named.Pfv Seydou

S: ‘Kuguli’s son, (he was named) with Seydou. We, in Senoufo language he (was called) Zample, but he was (really) called Seydou.’

*[mɛ̀ = French mais]*

02:20 S: *wáláā, kùgùlì dì-kàmá dɔ̀ʔɔ́,*

S: so.there, K child-male too,

*[è-wò dóʔó] [bàjárà dɛ́],*

[Nonh-3Sg too] [B with],

*à-wò dɛ́-kpɛ́ⁿ káātɔ̀,*

Hum-3Sg die.Pfv now,

S: ‘So there. Kuguli’s son too (=his other son), he too (was named) with Badiara. It was he (=Badiara) [focus] who died recently.’

*[My assistant clarifies: Badiara was the son of Kuguli the elder son of Sibiri, while Seydou was son of Baba the younger son of Sibiri, i.e. Seydou and Badiara were paternal cousins]*

02:29 S: *sòlòmánī, [mɛ̀ʔɛ́ⁿ mǐ]=∅ [jàlsà-dù sàà-màá] kùⁿ fì,*

S: S, [person Rel]=be [Blédougou house-chief] Cop today,

*è-wó [sòlòmán̄ dɛ́],*

Nonh-3Sg [S with],

S: ‘(As for) Suleyman, the person who is the village chief today, he is (named) with Suleyman.

*[sàà-màà ‘village chief’]*

02:34 S: *wáláā, mǐ-īⁿ jàlsà-dù sɛ́ʔɛ́ɛ̄,*

S: so.there, Rel-Pl Blédougou establish.Pfv,

*ààⁿ bélé, è-wó nɛ̀,*

3PlHum pass.Adjn, Nonh-3Sg here,

*yàbùgɔ́rɛ̄ⁿ ɲàŋkóʔrósààdù, jàl-á-àⁿ-ń=∅ dè,*

anyway N, Jal-Nom-Pl-Nom=be there.Def,

S: ‘So there. The ones who established Blédougou, they have passed (away), that [focus] is it. Anyway, at Niankorodougou, Jali people are present.’

*[Niankorodougou is 14 km south of Blédougou]*

02:44 S: *à-màà tóʔó ꜜkɛ́ɛ́ sùrɔ̀jìgì-gbɛ́,*

S: Hum-3Pl name name(v).Pfv SG,

*à-màà tóʔó kɛ̀ɛ̀ sùrɔ̀jìgì-gbɛ́, ɲàŋkóʔrósààrɛ̀,*

Hum-3Pl name call.Ipfv SG, N,

S: ‘They [focus] call(ed) him Surojigi Gbe. They call(ed) his name Surojigi Gbe, (at) Niankorodougou.’

*[cf. à mǎāⁿ tóʔó kɛ̀ɛ̀ ‘their name was called’]*

02:50 S: *jàl-á-àⁿ-nū mɛ̀ à-mààⁿ kónténì*

S: Jali-Nom-Pl-Nom but Hum-3PlFoc count.Pfv

*ɲàŋkóʔrósààrɛ̀ déé-dè,*

Niankorodougou there.Def-there.Def,

‘The Jali people, however, they are counted (=considered to be) (from) Niankorodougou there.’

*[kónténì < French compter, in Jalkunan kɔ̀ɔ̂ ‘count; consider’]*

02:56 S: *[jàlsà-dù séʔé-kùdɔ̀-rɔ́]=∅ [mí dɛ̀],*

S: [Blédougou establish.VblN-reason-Nom]=be [Dem with],

*è-wó nɛ̀ [fóʔó-tèè mɛ́ʔɛ̄-nà-àⁿ-ní]=ī,*

Nonh-3Sg here [gun-shoot.VblN person-Nom-Pl-Nom]=it.is,

*mɛ̀ [ààⁿ dóʔó] cíɛ́ gàáⁿ bàà,*

but [3PlHum too] be.Past war(n) wage.Ipfv,

S: ‘The explanation (reason) of Blédougou’s establishment is with this. That [focus] is it, they were hunters, but they also waged war (=were warriors).’

*[kúdɔ̄ ‘reason, explanation’, gààⁿ ‘combat (n)’; ‘hunter’ is literally ‘gun-shooter’ so it easily transitions to ‘warrior’]*

03:05 W: *èmmɛ̀ kómì ààⁿ cíɛ́ gàáⁿ bàà,*

W: so like 3PlHum be.Past combat(n) wage.Ipfv,

S: *wàláà, kɛ̀lɛ̀-másáẁ, gààⁿ-māsá-rà-àⁿ-n̄,*

S: so.there, war(n)-king, war(n)-king-Nom-Pl-Nom,

*fóʔó-tèè mɛ́ʔɛ̄-nà-àⁿ-n̄*

gun-shoot.VblN person-Nom-Pl-Nom

W: *fóʔó-tèè mɛ́ʔɛ̄-nà-àⁿ-n̄*

W: gun-shoot.VblN person-Nom-Pl-Nom

W: ‘So, they used to wage war.’

S: ‘That’s it. Warrior kings, warrior kings, (and) hunters.’

W. ‘Hunters.’

*[kɛ̀lɛ̀-másáẁ ‘war king’ is Jula, Jalkunan equivalent is gààⁿ-māsá]*

03:16 W: *[ààⁿ dóʔó] cíɛ́ gàáⁿ màà,*

W: [3PlHum too] be.Past war(n) do.Ipfv,

S: *wàláà*

S: so.there

W: *[dóówèè dóʔó]=∅ dè dɔ́ʔɔ́=rɛ̄ʔ*

W: [nothing again]=be there.Def again=Neg

W: ‘They also made war.’

S: ‘That’s it.’

W: ‘There’s nothing more.’

03:20 S: *dóówèè, [jàlsà-dù séʔé-kùdɔ́ bùʔú] nɛ̀,*

S: nothing, [Blédougou establish.VblN-reason all] there,

*mɛ̀ jàlsà-dùū, [màrà mí kúrr bùʔù-nú]*

but Blédougou, [commune Dem oldest all-Pl]

*jàlsà-dù kúrr bìgì-ná,*

Blédougou oldest all-Nom,

S: ‘Nothing. There (you have) all the explanation of the establishment of Blédougou. But Blédougou is the oldest of all (villages) of this commune. Blédougou is the oldest of all.’

*[A commune is an administrative divisions including several villages; kúrr with unusual final trill (but note variant kùrú below) seems to be an expressive adverbial]*

03:27 W: *jàlsá kùrú [màrà mí bùʔù-ná]*

W: Blédougou oldest [commune Dem all-Nom]

S: *kúrr bùʔù-ná,*

S: oldest all-Nom,

W: ‘Blédougou is the oldest (village) in this whole commune.’

S: ‘The oldest of all (of the commune).’

*[jàlsà variant of jàlsà-dù]*

03:31 W: *súdúū*

W: Sindou

S: *súdúū, [é ∅ sòʔóó nàà]*

S: Sindou, [3SgNonh 3SgObj catch.Pfv here],

*[è tíʔ=] [í bàà fō→* —*],*

[3SgNonh go.Pfv] [3SgNonh put.down.Ipfv until —,]

*fō→ wàⁿ* — *[fō→ kóròwáárì* —*, ɲàŋkàràmádùgù],*

until Wan[golo]— [until Côte d’Ivoire—, N],

*[è bùʔú]=∅ [jàl dùʔùɲìní] kùⁿ*

[3SgNonh all]=be [Jali territory] Cop

W: ‘(As for) Sindou.’

S: ‘Sindou, it caught it here, it went and put it down all the way to—, all the way to Wan[golo]— all the way to Côte d’Ivoire, (to) Niankaramadougou (village). It’s all Jali territory.’

*[súdú ‘Sindou’ is the provincial capital, 16 km driving distance northeast of Blédougou; speaker started to say ‘all the way to Ouangolo’ then corrected; /*è tɛ̀ʔɛ́ [è bàà]*/ ; dùʔùɲìnì ‘territory’]*

03:42 W: *ɲàŋkàràmádùgù*

W: N

S: *ɲàŋkàràmádùgù, [è bùʔú]=∅ [jàl dùʔùɲìní] kùⁿ,*

S: N, [3SgNonh all]=be [Jali territory] Cop,

*parce que wàŋgóló, jàl-á-àⁿ-ń=∅ dè,*

because W, Jali-Nom-Pl-Nom=be there.Def,

W: ‘Niankaramadougou.’

S: ‘Niankaramadougou. It’s all Jali territory.’

03:48 S: *jàl-á-àⁿ-n̄, [jàlá mǐ-īⁿ] séʔé kéē dè,*

S: Jali-Nom-Pl-Nom, [Jali Rel-Pl] sit.Pfv Past there.Def

*[mùʔùⁿ bùʔ]= ɔ́ɔ̀ⁿ sɔ́,*

[1Pl all] 3PlHum know.Pfv,

S: ‘Jali (people), the Jali who settled there, we all know them.

*[past kɛ̀ → kéē before dè ;* /bùʔù ààⁿ/*]*

03:52 S: *[[jàl dùʔùɲìní] màáⁿ] tòʔò kɛ́ fàà,*

S: [[Jali territory] owner] name Past F,

*[[jàl dùʔùɲìní] màáⁿ] tòʔò kɛ́ fàà,*

[[Jali territory] owner] name Past F,

W: *fàà*

W: F

S: ‘The name of the owner of the Jali territory (in Ouangolo) was Fa. The name of the owner of the Jali territory (in Ouangolo) was Fa.’

W: ‘Fa.’

03:59 S: *mɛ̀ [jàl dǐ]=ī,*

S: but [Jali child]=it.is,

*[fàà sí ꜜkpáⁿ] mɛ̀ bēmá=∅ [[nà nùú] tɔ̀]*

[F come.Pfv die.Adjn] but B=be [[3Sg place] in]

S: ‘But (he was) a child (=native) of Jali. Fa came (=went) and died, but Bema is in his tracks (=has taken his place).’

*[sí for sɛ́ ‘came’, bēmā (name), nùù ‘tracks, trail’ and hence ‘place, position’]*

04:03 W: *[fàà sá ꜜkpáⁿ]*

W: [F come.Pfv die.Adjn]

S: *bēmá=∅ [[nà nùú] tɔ̀]*

S: B=be [[3Sg place] in]

W: *bēmá=∅ [[nà nùú] tɔ̀]*

W: B=be [[3Sg place] in]

S: *à nùú, [à nùú] tɔ̀*

S: 3SgHum place, [3SgHum place] in

W: *bēmá=∅*

W: B=be

S: *[à nùú] tɔ̀*

S: [3SgHum place] in

W: *[à nùú] tɔ̀*

W: [3SgHum place] in

W: ‘Faa came (=went) and died.’

S: ‘Bema is in his tracks (=has taken his place).’

W: ‘Bema is in his tracks (=has taken his place).’

S: ‘His tracks. In his tracks.’

W: ‘Bema is.’

S: ‘In his tracks.’

W: ‘In his tracks.’

*[sá for sɛ́ ‘came’]*

04:07 W: *èè, jàl dǐ, èmmɛ̀ kómì* —

W: eh, Jali child, so like —

S: *jàl* —*, [fàà dí-kámá-nɛ́]=ɛ̀*

S: Jali —, [F child-male-Nom]=it.is

W: *[fàà dí-kámá-ná]* —

W: [F child-male-Nom]

S: *bēmā dè*

S: B there.Def

W: *bēmā dè*

W: B there.Def

W: ‘Eh, a child (=native) of Jali, so as—’

S: ‘Jali—. He’s Fa’s son.’

W. ‘Fa’s son ….’

S: ‘… is Bema there.’

W: ‘… is Bema there.’

04:13 W: *wàŋgóló*

W: W

S: *wàŋgóló, kóròwáárì, [jàl dùʔùɲìnɛ́]=ɛ̀,*

S: W, Côte d’Ivoire, [Jali territory]=it.is,

W: ‘Ouangolo (village).’

S: ‘Ouangolo, (in) Côte d’Ivoire, it’s Jali territory.’

04:21 W: *èmmɛ̀ kómìì, [jàlsà-dù séʔé cógó bùʔú]=∅* —

W: so like, [Blédougou sit manner all]=be] —

S: *[è bùʔú]=∅ nɛ̀,*

S: [3SgNonh all]=be there,

W: *èmmɛ̀ kómì jàlsà-dù mɛ́ɛ́*

W: so like Blédougou be.made.Pfv

*kómì è kúrù [lámínī mí sàá fɛ̀ɛ̀ⁿ]*

like 3SgNonh oldest [surroundings Dem house many]

S: *kúrr bùʔù-nú, jàlá kúrr bùʔù-nú,*

oldest all-Pl, Jali oldest all-Pl,

W: ‘So the entire manner of Blédougou’s establishment is—’

S: ‘It’s all there.’

W: ‘So like Blédougou was made, like it’s the oldest (village) of many (=all) the villages of the surrounding area.’

S: ‘The oldest of all. The oldest of all Jali (country).’

04:31 S: *nē= ē bɔ̄ [jàl-á-àⁿ ná], wáʔrá-rá-àⁿ-n̄*

S: if 2Sg exit.Antec [Jali-Nom-Pl ethnicity] Wara-Nom-Pl-Nom

W: *wáʔrá-rá-àⁿ-n̄*

W: Wara-Nom-Pl-Nom

S: *wáʔrá-rá-àⁿ-n̄, nàcɔ̀r-r-ɔ́-ɔ̀ⁿ-n̄,*

S: Wara-Nom-Pl-Nom, Natioro-Nom-Pl-Nom,

[person Rel-Pl] Fut follow.Ipfv 1Pl-Indep

S: ‘If you-Sg go beyond the Jali ethnicity, the Wara people.’

W: ‘Wara people.’

S: ‘The Wara people (and) the Natioro people.’

*[wáʔrá*, *nàcɔ̀rɔ̀]*

04:38 S: *[mɛ̀ʔɛ́ⁿ mǐ-ī] sà dɛ́ná mùʔù-nū,*

S: [person Rel-Pl] Fut follow 1Pl-Nom,

*è-wó=∅ [[kùmáʔánì mɛ́ʔɛ̄-nà-àⁿ] dɛ́],*

Nonh-3Sg=be [[Konadougou person-Nom-Pl] with],

W: *kùmáʔánì mɛ́ʔɛ̄-nà-àⁿ-n̄*

W: Konadougou person-Nom-Pl-Nom

S: ‘The people who come after us, that [focus] is (with) the people of Konadougou.

W: ‘The people of Konadougou.’

04:44 S: *[mā kɔ̀ní] mì sɔ́ [jàlsà-dù kú-rɔ̀]*

S: [1Sg Topic] Rel know.Pfv [Blédougou matter-Nom]

*è-wó=∅ nɛ̀*

Non-3Sg=be there

S: ‘As for me, what I know about the matter of Blédougou, that [focus] is it.’

## Text 2016\_02: Tale of hyena, hare, and lion

narrator: Traore Be (B), with Traore Wamara (W)

00:00 W: *àní sɔ̀ɣɔ́ mà*

W: Good morning [< Jula]

B: *àm báà*

B: [reply]

W: *kùnù-mɛ́ʔɛ́-nà-àⁿ-ń=∅ dóò*

W: village-person-Nom-Pl=be be.where?

B: *[ààⁿ búʔú]=∅=ǹ dè*

B: [3PlHum all]=be=Link there.Def

W: *kpɛ́ nīīⁿ ké=ē dè*

W: what? 2Pl have=Link there.Def

B: *[ààⁿ búʔú]=∅=ǹ dè*

B: [3PlHum all]=be=Link there.Def

W: *kùnù-mɛ́ʔɛ́-nà-àⁿ-ń=∅ dóò*

W: village-person-Nom-Pl-Nom=be be.where?

B: *[ààⁿ búʔú]=∅=ǹ dè*

B: [3PlHum all]=be=Link there.Def

W: *dí-rá-àⁿ-ń=∅ dóò*

W: child-Nom-Pl-Nom=be be.where?

B: *[ààⁿ búʔú]=∅=ǹ dè*

B: [3PlHum all]=be=Link there.Def

W: *ɲáā-nà-àⁿ-ń=∅ dóò*

W: woman-Nom-Pl-Nom=be be.where?

B: *[ààⁿ búʔú]=∅=ǹ dè*

B: [3PlHum all]=be=Link there.Def

W: *dí-rá-àⁿ-ń=∅ dóò*

W: child-Nom-Pl-Nom=be be.where?

B: *[ààⁿ búʔú]=∅=ǹ dè*

B: [3PlHum all]=be=Link there.Def

W: ‘Good morning.’

B: [reply]

W: ‘Where are the people of the village (=family)?’

B: ‘They are all there.’

W: ‘What (trouble) has (=has afflicted) you-Pl there?’

B: ‘They are all there.’

W: ‘Where are the children?’

B: ‘They are all there.’

W: ‘Where are the women?’

B: ‘They are all there.’

W: ‘Where are the children?’

B: ‘They are all there.’

*[the opening greetings are in Jula (green); kpɛ́ nīīⁿ kéē dè contains 2Pl ēēⁿ with unusual nasal onset (cf. third-person objects with initial n) and ká ‘have’ modified to ké=ē before dè ‘there’]*

00:12 B: *kpɛ́=∅=ǹ dè*

B: what?=be=Link there.Def

W: *sínī=nēʔ*

W: anything=Neg

B: *[kìdà gbɔ́] =∅ dóò*

B: [old.man] =be be.where?

W: *á=∅=ǹ dè*

W: 3Sg=be=Link there.Def

B: *[ɲàà kúdɔ̄] bùʔù-ń*

B: [woman old] all-Pl

W: *á=∅=ǹ dè*

W: 3Sgbe=Link there.Def

B: ‘What (problem) is there?’

W: ‘Nothing is there?’

B: ‘And the old man (=your father)?’

W: ‘He is there.’

B: ‘And all the old women (=your mother)?’

W: ‘She is there.’

00:18 W: *sɔ́ʔɔ́n̄-nɔ̀*

W: morning-Nom

B: *sɔ́ʔɔ́n̄-nɔ̀ kíbɛ́rɛ́ɛ̀, sín̄ dè=rēʔ*

B: morning-Nom greeting, anything there=Neg

W: *ànì-ké tìbɛ̀-rá,*

W: thanks greeting-Nom,

*àlá mùʔùⁿ jɛ́mɛ́,*

God 1Pl help.Imprt,

*àlá mùʔùⁿ sábábú ɲà,*

God 1Pl cause make.good.Imprt,

*àlá mùʔùⁿ gɛ́ríyɛ́ʔɛ́ fɛ̀ɛ̀ⁿ*

God 1Pl luck untie.Imprt

W: ‘(What news) in the morning?’

B: ‘Morning greetings. There is nothing.’

W: ‘Thanks for the greetings. May God help us, may God keep us on the right track, may God untie (=release) our luck.’

*[ànì-ké < Jula; kìbɛ̀rɛ́ɛ̀ ‘(morning) greeting’; sàbàbú ‘cause, reason’ and gɛ̀rìyɛ̀ʔɛ̀ ‘luck’ are tone-raised by mùʔùⁿ ; transitive imprecations use the imperative stem §10.6.3.2]*

00:28 W: *kìdá=∅ dè=rēʔ*

W: trouble=be there=Neg

*má=∅ kɔ̀ɔ̀*

1Sg=Ipfv want.Ipfv

*[wō [cɛ́ⁿ dò] sá [mā kɛ̄ⁿ]]*

[2Sg [tale one] narrate.Imprt [1Sg Benef]]

*kómì mā míɛ̄ [cɛ́ⁿ mɛ̀]*

like 1Sg do.long.time.Pfv [tale hear.Adjn]

*má=∅ kɔ̀ɔ̀ [wō [dùgù-dù]-[síbī-rà-àⁿ] cɛ́ⁿ ꜜsá]*

1Sg=Ipfv want.Ipfv [2Sg [the.bush-Loc]-[meat-Nom-Pl] tale narrate.Imprt]

W: ‘There’s no trouble. I would like you to tell a tale for me, as I have not heard a tale for a long time. I want you to tell a story of wild animals.’

*[kómì < French comme ]*

00:38 B: *mā ní mɛ̌,*

B: 1Sg 3SgNonhObj hear.Pfv,

*má=∅ sà bél-dɛ̀ kɛ̀,*

1Sg=Ipfv Fut begin.Ipfv tagQ,

*bon*, *má=∅ sà [cɛ́ⁿ mì] sàà,*

well, 1Sg=Ipfv Fut [tale Rel] narrate.Ipfv,

*súrúkú-rà, tú cǐⁿ dè,*

hyena-Nom, along.with hare there.Def,

*má=∅ sí= ì-wò cɛ́ⁿ ꜜsáá*

1Sg=Ipfv Fut= Nonh-3Sg tale narrate,

B: ‘I have understood. Shall I begin? Well, the story that I will tell, (it’s a tale of) hyena, along with hare. I will tell that tale about it.’

*[cìⁿ ‘hare’]*

00:49 B: *bon*, *súrúkú* — *súrúkú bùʔù cì-náā,*

B: well, hyena— hyena and hare-Nom,

*èèⁿ tɛ́ʔɛ́ klén̄-tɔ̄-rɔ̄, èèⁿ kú klé-nà,*

3PlNonh go.Pfv hunt(n)-Nom, 3PlNonh begin hunt(n)-Nom,

*bon*, *èèⁿ táʔá [yálá dò] jíɛ́,*

well, 3PlNonh go.Adjn [hole one] see.Pfv,

B: ‘Well, hyena, hyena and hare. They went hunting. They were hunting. Well, they went and saw a hole.’

*[klénī ‘hunting’ or more generally ‘going around in the bush’; yálā ‘hole’; dò introducing a new discourse referent]*

00:57 B: *bon*, *cǐⁿ dɛ̀ [súrúgú mà],*

B: well, hare say.Pfv [hyena on],

*[yálá ꜜmí-nà] wó=∅ ꜜcíɛ́ sóō nǎā*

[hole this-Nom] 2Sg=Ipfv can enter.Ipfv here

*súrúkú dɛ̀, é! dɔ́ʔɔ́-cíɛ́,*

hyena say.Pfv, eh! younger.brother,

*má=∅ sà cíɛ́ ꜜsɔ́ɔ́ [[yálá ꜜmí] tɔ̀]=rɛ̄ʔ,*

1Sg=1Sg Fut can enter.Ipfv [[hole this] in]=Neg,

B: ‘Well, hare said to hyena, “This hole, can you enter (it) here?” Hyena said, “Younger brother, I won’t be able to enter (=fit into) this hole.” ’

*[/*sɔ́ɔ́ nàà*/ → sóō nàà ‘here’, dɔ́ʔɔ́-cíɛ́ vocative of dóʔó ‘younger brother’ §4.1.1.3]*

01:04 B: *nàà! mùʔúⁿ wà, kàà-sɔ̀rɔ̀,*

B: friend! 1Pl go.Imprt, it.happened.that,

*cì-náā, è jɛ̀rɛ́* —

hare-Nom, 3SgNonh lion— [false start]

*è [jɛ̀rɛ́* *bòò láʔà] dàà-sɔ̀,*

3SgNonh [lion exit.VblN place] know(place).Pfv,

B: (Hyena:) “Friend, let’s go!” Now it happened that hare, *[false start omitted]* he knew the lion’s exit place (=entrance to lion’s den).’

*[nàà! vocative of nɔ̀ŋɔ̀ ‘friend’; kàà-sɔ̀rɔ̀ < Jula]*

01:10 B: *bon*, *èèⁿ táʔá cíɛ́ [cíī dò] kúdɔ́ɔ̄],*

B: well, 3PlNonh go.Adjn arrive.Pfv [[thicket one] under],

*èèⁿ táʔá sɔ́ɔ́ [[cíī mí] dǔū],*

3PlNonh go.Adjn enter.Adjn [[thicket Dem] in],

*èèⁿ [jɛ̀rɛ́ dì-rá-àⁿ] séé ꜜjí,*

3plNonh [lion child-Nom-Pl] lie.down.VblN see.Adjn,

B: “Well, they went and arrived under (=at) a thicket (dense forest). They went into that thicket. They saw the lion cubs lying down.’

01:15 B: *bon*, *èèⁿ [jɛ́rɛ́ dì-rá-àⁿ] séé jíɛ́ sísàāⁿ,*

B: well, 3PlNonh [lion child-Nom-Pl] lie.down.Pfv see.Pfv now,

*è dɛ̀ é!, mùʔúⁿ [jɛ̀rɛ́ dì-rá-àⁿ] yálá=rɛ̀=ɛ̄ⁿ,*

3SgNonh say.Pfv hey!, 1Pl [lion child-Nom-Pl] take.Ipfv=Neg=Q,

*èéⁿ=∅ [jɛ̀rɛ́ dì-rá-àⁿ] yálí sísàⁿ,*

3PlNonh=Ipfv [lion child-Nom-Pl] take.Pfv now,

*èèⁿ bé= [(è)èⁿ wú],*

3PlNonh put.in.Pfv [3PlNonhRefl Custod],

B: ‘Well, they saw the (two) lion cubs lying down now. He (=hare) said, “hey, shall we not take the lion cubs?’ They took the lion cubs now, they put (the cubs) in their custody (i.e. in sacks).”

*[bɛ́ɛ́ ‘put’ (perfective); custodial postposition wù ~ wú ‘in the custody of (in a sack or pocket)’]*

01:24 B: *wálàà, bon*, *sísàⁿ cì-ná dúlì yàlíī,*

B: there.it.is!, well, now hare-Nom one take.Pfv,

*[súrúkú-rà dúlì yàlì] [èèⁿ kú ꜜtáʔá]*

[hyena-Nom one take.Pfv] [3PlNonh begin go.Ipfv]

‘There it is, well, now hare took one and hyena took one (=the other). They went away then.’

01:28 B: *èèⁿ kú táʔá klén̄-tɔ̄rɔ̄ sísàⁿ,*

B: 3PlNonh begin go.Ipfv hunt(n) now,

*bon*, *èèⁿ táʔá wòlò-kónó [jɛ̀rɛ́ dɛ̀ɛ̄],*

well, 3PlNonh go.Adjn encounter.Adjn [lion with],

B: ‘Now they set off hunting. Well, they went and encountered (=met with) the lion.’

01:33 B: *bon*, *fɔ̄ èèⁿ cíɛ́ [jɛ̀rɛ́ mà] tɔ̄=nɛ̄ʔ,*

B: well, until 3PlNonh arrive.Pfv [lion on] yet=Neg,

*èèⁿ cíɛ́ sísàāⁿ, cǐⁿ dɛ̀ [súrúkú màā],*

3PlNonh arrive.Pfv now, hare say.Pfv [hyena on],

*é! nàà! mùʔùⁿ wɔ́-rɔ́-n̄ kpááⁿ=nɛ̀=ɛ̄ⁿ,*

hey! friend! 1Pl so.and.so-Pl kill.Ipfv=Neg=Q,

*mùʔúⁿ=∅ ꜜkpáⁿ bùgɔ́rɛ̀ɛ̄,*

1Pl=Ipfv kill.Imprt otherwise=Q,

*mùʔúⁿ=∅ ꜜkpáⁿ= [ǹ bà= [(ā)āⁿ wú]],*

1Pl=Ipfv kill.Imprt [1Pl put.Adjn= [1PlRefl Custod]],

B: ‘Well, before they reached the lion, (before) they arrived now, hare said to hyena: “Shall we not kill the so-and-sos? Let’s kill (them), otherwise—. Let’s kill and put (them) in our custody (=in sacks)!” ’

*[Hunters use wɔ́-rɔ́ ‘so-and-so’ (plural wɔ́-rɔ́-nǔ* ~ *wɔ́-rɔ́-ň) as a euphemism for the name of whatever animal they have killed; =rɛ̀=ɛ̄ⁿ negative interrogative as hortative; mùʔúⁿ=∅ ꜜkpááⁿ reduced from mùʔùⁿ níìⁿ ꜜkpáⁿ ‘let’s kill them-Nonhuman!’; 1Pl ǹ as second subject in same-subject adjoined clause]*

01:42 B: *bon*, *cì-ná [è bɔ̀lɔ́] sɔ̀ [bórókó tɔ̀ɔ̄],*

B: well, hare-Nom [3SgNonhRefl hand] put.in.Pfv [sack in]

*càʔàcí* — *càʔàcí cí= [ì wùū],*

peanut — peanut put.Pfv [3SgNonhRefl with.self]

*é=∅ càʔàcí tèè,*

3SgNonh=Ipfv peanut snap.open.Ipfv,

*é! nàà mā [[nāáⁿ mǐ] wǔ] těē,*

hey! friend 1Sg [[1SgRefl Poss] head] shatter.Pfv,

B: ‘Well, hare put his hand (=paw) into the sack. There were (unshelled) peanuts in it (=sack). He cracked open a peanut (by pressing on the tip of the shell). (Hare said): “Hey, friend! I have shattered (=crushed) the head of mine (=my lion cub)!” ’

*[tè < těē ; cracking open a peanut shell imitates the sound of crushing a skull; bɔ̀lɔ́ < bɔ̄l(ɔ̄) ‘hand’, sɔ̀ < sɔ̀ɛ́ ‘put in’; cí= < ciɛ́ ‘pour into’, i.e. ‘put’ when the object is a bunch or mass of grains or other small objects like peanuts; nāá mì ‘mine’ (reflexive), cf. nīí mì ‘yours’ (reflexive)]*

01:49 B: *bon*, *súrúkú wō nánámá,*

B: well, hyena 2Sg idiot,

*[wō dóʔó bùlù] sísàāⁿ,*

[2Sg again all] now,

*[ē mì] wǔ] tèè,*

[2SgRefl Poss] head] shatter.Pfv,

*é ∅ bè= [é wù] [jūfá tòó] dè,*

3SgNonh 3SgObj put.Pfv [3SgNonhRefl Custod] [pocket in] there,

B: ‘ “Well, hyena, you idiot (=gullible one). You too now, (you) have shattered the head of yours (=your lion cub).” He (=hyena) put it in his pocket there.’

*[quotation is addressed by the narrator to hyena as character in the story, bè=é < /*bè è wù*/, tɔ̀ → tòò before dè ]*

01:54 B: *èèⁿ kú wàá,*

B: 3PlNonh begin go.Ipfv,

*èèⁿ táʔá kíɛ́ sísàāⁿ,*

3PlNonh go.Adjn arrive.Pfv now,

*èèⁿ táʔá wòlòkó [jɛ̀rɛ́ dɛ̀],*

3PlNonh go.Adjn encounter [lion with],

B: ‘They went (=continued on) then. They went and arrived now, they went and encountered the lion.’

01:58 B: *èèⁿ táʔá [jɛ̀rɛ́ jìɛ́ɛ̀],*

B: 3PlNonh go.Adjn [lion see.Pfv],

*é jɛ̀ré= èèⁿ jáá yàlà,*

hey! lion 3PlNon frighten.Adjn take.Adjn,

*é kɔ̀r jɛ̀rɛ́, è bɔ́ mì,*

Hey elder.brother lion, 3SgNonh exit(v).Pfv where?

*mùʔùⁿ bɔ́ [klén̄ tɔ̀rɔ̀],*

1Pl exit.Pfv [hunt(n) Purp],

B: ‘They went and they saw the lion. Hey, the lion frightened them. (Hare said:) “Hey elder brother lion, where are you coming from? We have gone out to hunt.’

02:05 B: *mǎā=∅ bɔ́ mì,*

B: 2Pl=Ipfv exit(v).Pfv where?

*kómì ḿ=∅ sá [[wō dí-rá-àⁿ] jíɛ́]*

as 1Pl=Ipfv come.Adjn [[2Sg child-Nom-Pl] see.Pfv]

*ààⁿ kú jìímǎā,*

3PlHum begin weep.Ipfv,

*[wó tɔ̀] mùʔùⁿ níìⁿ yálí,*

[3SgFoc in] 1Pl 3PlNonhObj take.Pfv,

B: ‘(Lion:) “Where have you come from?” (Hare:) “We came and saw your cubs, they were weeping. That [focus] ’s why we took (them).” ’

*[< jìímàà ‘weep’ (Ipfv) ]*

02:08B: *mùʔúⁿ=∅ sà= ààⁿ bílí= yà,*

B: 1Pl=Ipfv Fut 3PlHum give.Ipfv 3Sg NonhObj,

*wálà ḿʔ ēēⁿ [kú ɲɛ̀] mɛ̀ [mā kɛ̄ⁿ],*

there! oh! 2Pl [thing good] do.Pfv [1Sg Benef]

*èèⁿ bɔ́,*

3PlNonh take.out.Imprt,

B: ‘(Hare:) “We will give them to him (=you).” (Lion:) “Oh, you-Pl have done something good for me. Take-2Sg them out!”

*[‘give’ with postverbal object denoting the recipient; cubs are here treated pronominally as though human; bílí=yà < bílɛ́ ìyà ; kú instead of sɛ́ⁿ ‘thing’ in kú ɲɛ̀ ; èèⁿ bɔ́ is addressed to hare (not hare and hyena), compare ēēⁿ èèⁿ bɔ́ pronounced [*éè(:)ⁿbɔ́*] addressed to two persons]*

02:12 B: *bon*, *[cì-né= [è mì] bóó]*

B: well, [hare-Nom [3SgNonh] Rel take.out.Pfv]

*[∅ bàlì],*

[3SgNonh stand.Pfv],

*è-yàá bál= [[è kpɔ̀-rɔ́] mà],*

3SgNonh stand.Pfv [[3SgNonhRefl foot-Nom] on],

B: ‘Well, the one (=cub) that hare took out stood up. It stood on its feet.’

*[bóó ∅* *< /*bɔ́ɛ́ è*/; [è yàá] bàlí variant of è ní bàlí ‘it stood’, cf. nonhuman 3Pl [èèⁿ yàà] níìⁿ bálī’;* /bàlí è/ *contracts as bál= è ; [è kpɔ̀-rɔ́] mà with optional nominal suffix before postposition ]*

02:16 B: *bon*, *súrúkú-rɔ̀ [è mìí] bɔ̀ɔ̄,*

B: with, hyena-Nom [3SgNonhRefl Poss] take.out.Pfv,

*é=∅ bàlì — è cí=*

3SgNonh=Ipfv stand.Pfv — 3SgNonh be.able.Pfv

*[[ì bàlì [è kpɔ̀-rɔ́] mà]]=nɛ̄ʔ,*

[[3SgNonh stand.Pfv [3SgNonhRefl foot-Nom] on]]=Neg,

*[è wú] tèê*

[3SgNonh head] be.shattered

B: ‘Well, hyena took his (lion cub) out. It stood—. It couldn’t stand on its feet. Its head was shattered (crushed).’

02:19 B: *è dɛ̀ àý!, nàà [à mànâ],*

B: 3SgNonh say.Pfv hey!, friend! [3SgHum how?],

*àý!, áà, bon*, *súrúkú-rɔ̀=∅ sí=ì jìɛ́,*

hey!, ah!, well, hyena-Nom=Ipfv Fut=3SgNonh see.Ipfv,

*cógóyá wèé-yà=rɛ̄?,*

way.to.escape go-Prog=Neg,

B: ‘He (=lion) said, “Hey, friend, how is it? (=what’s up?). Hey, ah!” Well, hyena was considering (how to escape), (but) there was no way out (way to escape).’

*[à mànâ ‘what’s up?’ §13.2; ‘will see it’ in the sense ‘considered (what to do)’]*

02:27 B: *súrúkú-rɔ̀=∅ commencer è fìdí bɔ̀,*

B: hyena-Nom=Ipfv begin 3SgNonh run.Adjn exit.Adjn.Defoc,

*jɛ̀r-rá=∅ kpáⁿ [súrúkú kpǎ-ɲɔ̀],*

lion-Nom=Ipfv follow.Adjn [hyena following],

B: ‘Hyena began to run away. Lion followed his tracks.’

*[‘begin’ probably adjoined verb after subject with imperfective enclitic, likewise ‘follow’ in the second clause]*

02:30 B: *bon cǐn dɛ̀ [súrúkú mà],*

B: well hare say.Pfv [hyena with],

*nàà mā [yálā mì] dúdɔ᷆l wō-nū dɛ́ʔ,*

friend 1Sg [hole Rel] show 2Sg-Indep Emph,

*[è-wò láʔā] lè dɛ́ʔ,*

[Nonh-3Sg place] look.at.Imprt Emph,

B: ‘Well, hare said to hyena: “friend, the hole that I showed you, you should look at it (carefully).” ’

02:34 B: *nàà mā [yálā mì] dúdɔ᷆l wō-nū,*

B: friend 1Sg [hole Rel] show 2Sg-Indep,

*[è-wò láʔà] lè dɛ́ʔ,*

[Nonh-3Sg place] look.at.Imprt Emph,

B: ‘(Hare, repeating:) “friend, the hole that I showed you, you should look at it (carefully).” ’

02:36 B: *bon sísàāⁿ,*

B: well now,

*súrúkú-rɔ̀=∅ táʔá [yálā mí] jì sísàⁿ,*

hyena-Nom go.Ipfv [hole Dem] see.Adjn now,

*è sɔ̀ [[yálā mí] tɔ̀],*

3SgNonh enter.Pfv [[hole Dem] in],

*è sɔ̀ sísàⁿ [[yálā mí] tɔ̀],*

3SgNonh enter.Pfv now [[hole Dem] in],

B: ‘Well, now, hyena went and saw that hole now. He went into that hole. He went into that hole now.’

02:40 B: *[jɛ̀r-rá=∅ tíʔ=] [í bǎl dāà],*

B: [lion-Nom=Ipfv go.Adjn] [3SgNonh stand.Adjn mouth],

*bon [ààⁿ flāā-rā]*

well [3PlHum two-Nom]

*máʔà-nìí=∅ sà [yálā mí] sìnà,*

who?-Indep=Ipfv Fut [hole Dem] dig.Ipfv,

*è-yà mìʔíⁿ jìɛ̀=rɛ̄ʔ,*

Nonh-3Sg person see.Pfv=Neg,

B: ‘The lion went and stopped at the edge (of the hole).’ Well, who (=which one) of the two of them (lion and hare) would dig up that hole? They didn’t find anyone (to dig).’

*[adjoined verb (variant of táʔá ‘go’) after subject with imperfective enclitic; The ‘who?’ question is the narrator’s wondering, not a quotation]*

02:46 B: *bon kɔ̀rɔ̀ lɛ̌, [dùgù-dù]-[ʃíyɛ̄-rà],*

B: well, elder.brother warthog, [the.bush-Loc]-[pig-Nom],

*wō sɛ́ klé tàʔà bóó dè,*

2Sg come.Pfv walk.around go exit(v) there,

B: ‘Well, big brother warthog, you came walking around and you went and appeared (=came out) there.’

*[kɔ̀rɔ̀ lɛ̌ ‘(my) older brother warthog’ < Jula, cf. Jalkunan mā gùùⁿ ʃíyɛ̄-rà ]*

02:50 B: *è dɛ̀ é, kɔ̀rɔ̀ lɛ̌,*

B: 3SgNonh say.Pfv hey!, elder.brother warthog,

*sē nà-mí-nɛ̀,*

come.Imprt here,

*cɔ́ẁ súrúkú sɔ̀ [yálā mí-nà]*

oh! hyena enter.Pfv [hole Dem-Nom]

*sī= ī sìíⁿ [mā kɔ̄],*

come.Imprt 3SgNonh dig [1Sg give],

B: ‘He (=lion) said, “hey!, elder brother warthog! Come here! Oh, hyena has gone into this hole. Come and dig him out to give (him) to me!” ’

*[warthog is a good digger; <* /sē ì/ *]*

02:56 B: *bon, [dùgù-dù]-[síyɛ̄-rà] sé [wò má] sísàⁿ,*

B: well, [the.bush-Loc]-[pig-Nom] come.Pfv [3Sg on] now,

*è kú [yálā mí] sìnà,*

3SgNonh begin [hole Dem] dig.Ipfv,

B: ‘Well, warthog came (there) now. He began digging that hole.’

02:59 B: *è-wó=∅ [yálā mí] sìnì-yà sísàāⁿ,*

B: Nonh-3SgFoc=Ipfv [hole Dem] dig-Prog now

*bon, cì-ná=∅ sí=ì jìɛ́ɛ̄,*

well, hare-Nom=Ipfv Fut=3SgNonh see.Ipfv,

*[dùgù-dù]-[síyɛ̄-rà] =∅ sà cíɛ́ [súrúkú màa᷆],*

[the.bush-Loc]-[pig-Nom]=Ipfv Fut arrive.Ipfv [hyena with],

B: ‘It was he [focus] who was digging up that hole now. Well, hare was about to see him (=hyena). Warthog was about to reach hyena.’

03:04 B: *è búlú sísàⁿ,*

B: 3SgNonh return.Adjn now,

*è dɛ̀ [kɔ̀rɔ̀ lɛ̌]*

3SgNonh say.Pfv [elder.brother warthog]

*bə̄-dè bə̄-dè bə̄-dè, mā ná lè tɔ̄ⁿ,*

get.away! get.away! get.away!, 1Sg 3SgHumObj look.at.Imprt first,

B: ‘He (=hare) turned around now. He said, “elder brother warthog, get away from there! Let me look at him first!” ’

*[bə̄-dè specialized contraction of bō dè ‘go out/away from there!’; lě ‘look at’ (imperative after +3Sg)]*

03:09 B: *é ∅ màà-sáá káʔrá sísàⁿ,*

B: 3SgNonh 3SgRefl bend.over do.finally now,

*è súrúkú lè [yálā tɔ̀ɔ̄]*

3SgNonh hyena look.at.Pfv [hole in]

*é kòò-fóʔó bìl= í-yà,*

3SgNonh.3SgObj salt-powder give.Pfv Nonh-3SgObj,

B: ‘He (=hare) bent over eventually. He looked at hyena in the hole. He (=hare) gave him (=hyena) some powdered salt.’

*[màà-sáá ‘bend over’ includes sáá ‘come’; < /*bìlí è-yà*/ ]*

03:13 B: *è kòò-fóʔó bìl= í-yàā,*

B: 3SgNonh salt-powder give.Pfv Nonh-3Sg,

*è dè= [é mà] sísàⁿ [kòò-fóʔó mí-nà] nɛ̀,*

3SgNonh say.Pfv [3SgNonh with] now [salt-powder Dem-Nom] here’s,

B: ‘When he had given him the powdered salt, he (=hare) said to him (=hyena) now, “Here’s the powdered salt.” ’

03:16 B: *nɛ̌, ní kɔ̀rɔ̀ lɛ̌*

B: here’s, if elder.brother warthog

*sí=ì wùú sɔ̀ɔ̀ [wàʔàtí mì-nà],*

Fut=3SgNonh head put.in.Ipfv [time Rel-Nom],

*é=∅ kòò-fóʔó fìɛ́ [ɲíl-là-àⁿ tɔ̄],*

3SgNonh=Ipfv salt-powder toss [eye-Nom-Pl in],

B: ‘(Hare:) “Here it is. When elder brother warthog puts his head (in the hole), you (=hyena) must toss powdered salt in (warthog’s) eyes!” ’

*[fìɛ́ < Jula ]*

03:20 B: *bon, è bóó bàl, kɔ̀rɔ̀ jàrá* —

B: well, 3SgNonh exit(v) stand.Pfv, elder.brother lion—,

*[[kɔ̀rɔ̀ lɛ̀] bélé]*

[[elder.brother warthog] pass.Adjn]

*[è kú [yálā mí] sìnà],*

[3SgNonh begin [hole Dem] dig.Ipfv],

*búgúrì búgúrì búgúrì*

digging.sound

B: ‘Well, he (=hare) stood aside. Elder brother lion— (correction) elder brother warthog moved over and began digging that hole, buguri! buguri! buguri! (sound of digging)’

03:25 B: *é! jàʔá súrúkú kòò-fóʔó mùgɛ́ɛ̄,*

B: hey! lo! hyena salt-powder suck.Pfv,

*bon, é jìɛ̀ [é=∅ nì sìnì-yá]*

well, 3SgNonh.3SgObj see.Pfv [3SgNonh=Ipfv 3SgNonhObj dig.Prog]

*[é=∅ nì sìnì-yá]*

[3SgNonh=Ipfv 3SgNonhObj dig.Prog]

*[é=∅ nì sìnì-yá],*

[3SgNonh=Ipfv 3SgNonhObj dig.Prog],

B: ‘Hey, lo! hyena sucked the powdered salt. He (=hare) saw him (=warthog) digging it, digging it, digging it.’

03:31 B: *[lip smack]* *cì-ná sí=ì jìɛ́,*

B: [lip smack] hare-Nom Fut=3SgNonhObj see.Ipfv,

*mā nɔ̀ŋɔ̀-nɔ́ kɛ̀, à wɔ̀mí mùgɛ́ɛ̄,*

1Sg friend Top, 3SgHum Dem suck.Pfv,

‘Tsk! Hare considered what to do. (Hare, to himself:) “My comrade (=hyena) has sucked that (=salt).

03:35 B: *é tɔ̀nɔ́ [bèlè dɔ́ʔɔ́] sísàⁿ,*

B: 3SgNonh.3SgRefl approach [pass too] now

*è táʔá dò bílí= íyà,*

3SgNonh go.Adj one give.Ipfv 3SgNonh

*[yálā tòó] dè*

[hole in] there

B: ‘He (=hare) approached (the hole) again now. He went and gave some (more) to him (=hyena).

*[‘approach’ is a pseudo-reflexive verb, cf. Spanish acercarse; yálā tɔ̀ ‘in the hole’, prolonged before dè ‘there’]*

03:39 B: *bon, sísàāⁿ [kɔ̀rɔ̀ lɛ̀] dóʔó commencer,*

B: well, now [elder.brother warthog] too begin,

*[è kú sìnà] [è kú sìnà],*

[3SgNonh begin dig.Ipfv] [3SgNonh begin dig.Ipfv],

B: ‘Well, now elder brother warthog too began. He was digging, he was digging.’

*[‘began’ in Jalkunan: dàà-sɔ́ʔɔ́]*

03:42 B: *bon, á! súrúkú sí=ì jìɛ̀,*

B: well, ah! hyena Fut=3SgNonh see.Ipfv,

*é=∅ kòò-fóʔó bɔ̀ɔ̄,*

3SgNonh=Ipfv salt-powder take.out.Ipfv,

*é=∅ cìɛ̀ jɛ̀rɛ́ ó súrúkú,*

3SgNonh=Ipfv put.Ipfv lion oh! hyena,

*é=∅ cìɛ̀ [[kɔ̀rɔ̀ lɛ̀] ɲi᷆l-là-àⁿ] tɔ́],*

3SgNonh=Ipfv pour.Ipfv [[elder.brother warthog] eye-Nom-Pl] in],

*[dùgù-dù]-síyɛ́ ɲi᷆l-là-à-nū sísàⁿ,*

[the.bush-in]-pig eye-Nom-Pl-Nom now,

B: ‘Well, ah!, hyena considered what to do. He took out the powdered salt. He put (it) in lion’s—oh, hyena, he sprayed (it) into elder brother warthog’s eyes, (into) warthog’s eyes now.’

03:48 B: *éʔéʔéʔé [sɛ́ⁿ dò] bɛ́ [[mā ɲi᷆l] tɔ̀],*

B: eh-eh! [thing one] fall.Pfv [[1Sg eye] in],

*[sɛ́ⁿ dò] bɛ́ [[mā ɲi᷆l-là-àⁿ] tɔ̀],*

[thing one] fall.Pfv [[1Sg eye-Nom-Pl] in],

B: ‘(Warthog:) “Ouch! Something has fallen into my eye! Something has fallen into my eyes.” ’

03:51 B: *bon, jɛ̀rɛ́ dɛ̌, s= [ē dɛ̀]*

B: well, lion say.Pfv, come.Imprt [3SgNonh with]

*mā ní fìɛ́ ń lè,*

1Sg 3SgNonhObj blow 3SgNonh look.at,

B: ‘Well, lion said (to warthog), “bring it (=your eyes), so I may blow on it and look at it.” ’

*[<* /sā [è dɛ̀]/ *, ń <* /ní/ *]*

03:56 B: *è-wò [sìɛ́ ŋílì] fìɛ̀ púù!*

B: 3SgNonh [pig eye] blow.Pfv poof!

*kòò-rá=∅ wóʔrí bèé [[è ɲílī] tɔ̀],*

salt-Nom=Ipfv fall.off fall.Pfv [[3SgNonh eye] in],

*[jɛ̀rɛ́ ɲílī] tɔ̀, [jɛ̀rɛ́ dàá] tɔ̀,*

[lion eye] in, [lion mouth] in,

B: ‘He (=lion) blew into pig’s (=warthog’s) eyes, poof! The salt fell out into his eye(s), into lion’s eye(s), into lion’s mouth.’

04:04 B: *è→ ìyé→, kɔ̀rɔ̀ lɛ̌,*

B: oh! hey!, elder.brother warthog,

*[wō ɲàyí] dì dɛ̄ʔ,* mon vieux,

[2Sg tears] become.delicious.Pfv Emph, my old man,

B: ‘(Lion said:) “oh, hey! Elder brother warthog! Man, your tears sure are tasty!’

04:08 B: *bon, dóʔó kiⁿ, kǐⁿ dɛ̀ɛ̂,*

B: well, younger.brother hare, hare say.Pfv,

*ɛ́ɛ̀! kɔ̀rɔ̀ lɛ̌, ɛ́ɛ̀! jɛ̀rɛ́,*

hey! elder.brother warthod, hey! lion,

*wō nánámá kùⁿ fà,*

2Sg idiot Cop no?,

B: ‘Well, younger brother hare, hare said: “Hey, elder brother warthog! Hey, lion! You (=lion) are an idiot, aren’t you?” ’

04:14 B: *[mìʔíⁿ ɲàyí] dì kúⁿ íìⁿ,*

B: [person tears] become.delicious.Pfv Cop oh!,

*[è sìbí] càʔá dóò,*

[3SgNonh meat] all.the.more too,

*[è sìbí] dì dɛ̄ʔ*

3SgNonh meat become.delicious.Pfv Emph

B: ‘(Hare said:) “(If) someone’s (=an animal’s) tears are delicious, its meat all the more so, its meat is (all the more) delicious!” ’

*[*/dǐ/*; copula kúⁿ used here as a kind of connector between two clauses; càʔá dóò* *‘all the more, a fortiori’]*

04:17 B: *áàⁿ, bon, kù-rɔ́=∅ bùlù-yà sísàⁿ,*

B: ah, well, thing-Nom=Ipfv return-Prog now,

*jɛ̀rɛ́ [syɛ̀ɛ́ mà] sísàⁿ,*

lion [pig on] now,

B: ‘Ah, well, the situation was turning around (=being inverted) now, on lion—(correction:) on pig (=warthog) now.’

04:22 B: *[dóó ciⁿ] búlú,*

B: [younger.brother hare] return.Pfv,

*é=∅ wàà [jɛ̀rɛ́ kɛ̀ⁿ],*

3SgNonh=3SgNonh go.Ipfv [lion chez],

*[[kɔ̀rɔ̀ lɛ̀] síbí] dì*

[[elder.brother warthog] meat] become.delicious.Pfv

*[cógó-yá mì-nà] páʔ,*

[manner Rel-Nom] (interjection),

*è-yà dì bìlé ɲàyí-rà,*

3SgNonh become.delicious.Pfv pass tears-Nom,

B: ‘Younger brother hare went back. He went to lion’s place (=den). (Hare to lion:) “The way elder brother warthog’s meat is tasty, it is tastier than tears.’

*[cógó-yá mì-nà equivalent to cógó mì ]*

04:29 B: *è téʔé [∅-wò má] sísàⁿ,*

B: 3SgNonh go.Pfv [Nonh-3SgFoc on] now,

*èèⁿ búlúū, è dɛ̀ á!, kɔ̀rɔ̀ lɛ̀ɛ́,*

3PlNonh return.Pfv, 3SgNonh say.Pfv ah!, elder.brother warthog,

*má=∅ [[wō síbí] dò] ká dɛ̄ʔ,*

1Sg=Ipfv [[2Sg meat] one] want Emph,

B: ‘That [focus] ‘s why they went now. They went back (to the hole). He (=lion) said, “Ah! Elder brother warthog, I sure want (to eat) a piece of your flesh!’

04:35 B: *èéⁿ màʔàlí bɔ̀ sísàⁿ,*

B: 3PlNonh knife take.out.Pfv now,

*èéⁿ=∅ [[syɛ̀ɛ́ wɔ̀ʔrɔ́ bǔⁿ] dò] bégē,*

3SgNonh=Ipfv [[pig thigh flesh] one] cut.Pfv,

B: ‘They (=lion and hare) took out a knife then. They cut a (piece of) flesh out of the warthog’s thigh.’

*[‘flesh’ usually sìbì-búⁿ with ‘meat’ as initial, but here in compound with the more specific body-part ‘thigh’]*

04:39 B: *èéⁿ (è-)yà bègè sísàāⁿ,*

B: 3PlNonh Nonh-3SgObj cut.Adjn now,

*é bìlì [dóʔó cì-náā],*

3SgNonh.3SgObj give.Pfv [younger.brother hare-Nom],

*[é ∅ sìdà],*

[3SgNonh 3SgObj roast.Imprt],

B: ‘They cut it now. He (=lion) gave it to younger brother hare for him (=hare) to roast it.’

*[* /è-yà/ *for the usual ní nonhuman 3Sg preverbal object ]*

04:43 B: *é kòò-fóʔó bɔ̀,*

B: 3SgNonh salt-powder take.out.Adjn,

*é ∅ fùùⁿvúní= [í mà],*

3SgNonh 3SgObj sprinkle.grains.Pfv [3SgNonh on]*,*

*[é ∅ bìl= í-yà],*

[3SgNonh 3SgObj give.Pfv Nonh-3SgObj],

B: ‘He (=hare) took out the powdered salt. He sprinkled it (=salt) on it (=flesh), and he gave it to him (=lion).’

04:45 B: *jɛ̀r-ré= è-yà dɔ̀níī,*

B: lion-Nom Nonh-3SgObj eat.meat.Pfv,

*è dɛ̀ íīì!* mon vieux, *ìyà,*

3SgNonh say.Pfv ooh! my.old.man, oh!,

*á [kɔ̀rɔ̀ lɛ̌]*

ah! [elder.brother warthog]

*[wō sībī yéʔré] dǐī,*

[2Sg meat self] be.sweet.Pfv,

B: ‘Lion devoured it (=meat). He said “ooh, my old man, oh, ah elder brother warthog, your meat (itself) is delicious!” ’

*[< wō sībī* ‘your meat/flesh’*, dǐ ]*

04:51 B: *èéⁿ=∅ [ꜜní wɔ̀nɔ̀],*

B: 3PlNonh=be [3SgNonhObj still.on],

*[kɔ̀rɔ̀ lɛ̌] sí=ī jìáā,*

[elder.brother warthog] Fut=3SgNonh see.Ipfv,

*kú mí-nàā, é=∅ sà lábán= [ì gbɔ̀lɔ̀kɔ̀],*

matter Dem-Nom, 3SgNonh=Ipfv Fut end.up.Ipfv [3SgNonh on.top.of]

B: ‘They were (talking) about it. Elder brother warthog considered it, that matter (=situation). It would end up (landing) on him.’

*[wɔ̀nɔ̀ variant of wɔ̀nù , lábánà < Jula lábâⁿ, gbɔ̀lɔ̀kɔ̀ ~ gbɔ́lɔ́kɔ́ ‘on’]*

04:54 B: *wábáẁ, é fìdì,*

B: whoosh!, 3SgNonh run.Adjn.Defoc,

*jɛ̀r-ré= èⁿ s= [é kpǎ-ɲɔ̀]*

lion-Nom= 3SgNonhRefl go.Pfv [3SgNonh for(goal)]

*[s= [é kpǎ-ɲɔ̀]] [s= [é kpǎ-ɲɔ̀]*

[go.Pfv [3SgNonh for(goal)] [go.Pfv [3SgNonh for(goal)]

B: ‘Whoosh! He (=warthog) ran away. Lion pursued him, pursued him, pursued him.’

*[é fìdì adjoined form, for perfective è fìdíī ‘it ran’, é H‑toned by special Final Tone-Raising; /*sɛ̌ [è kpá-ɲɔ̀]/ *as a complex treated as a pseudo-reflexive verb, jàr-ré= èⁿ nasalized variant of jɛ̀r-ré=è ]*

04:59 B: *cì-ná=∅ búlú [wò má] sísàāⁿ,*

B: hare-Nom=Ipfv return.Adjn [3Sg on] now,

*è dɛ̀ [súrúkú màā], nàà, nàà,*

3SgNonh say.Pfv [hyena on], friend!, friend!

*bɔ́, bɔ́, bɔ́, bɔ́,*

exit.Imprt, exit.Imprt, exit.Imprt, exit.Imprt,

B: ‘Hare (who initially accompanied lion on the pursuit of warthog) went back to it (=hole) now. He said to hyena: “friend, friend! Come out! Come out!” ’

*[adjoined verb with imperfective subject enclitic; cf. cǐⁿ bùlí(ī) ‘hare returned’ ]*

05:02 B: *súrúkú bòó= [wò má] sísàⁿ, kɔ̀rɔ̀ —*

B: hyena exit.Pfv [3Sg on] now, [false start]

*èéⁿ fìdì, èéⁿ wà,*

3PlNonh run.Adjn.Defoc, 3PlNonh go.Adjn.Defoc,

B: ‘Hyena came out from that (hole) now. Elder brother—. They (=hyena and hare) ran, they went (away).’

*[bɔ̀ɛ́ ‘exited’; èéⁿ fìdì* and *èéⁿ wà are defocalized adjoined verbs]*

05:05 B: *èèⁿ cíɛ́ cál-à,*

B: 3PlNonh arrive.Pfv road-Nom,

*è dɛ̀ nàà [mā kpɛ́ tɔ̀ʔɔ́ [wō mā]],*

3SgNonh say.Pfv friend! [1Sg what? say.Pfv [2Sg on]],

B: ‘They reached (a point on) the road. He (=hare) said: “friend, what did I say to you-Sg?” ’

*[tɔ̀ʔɔ́ for tɔ̀ʔɛ́ (perfective)]*

05:07 B: *nàà, è cíɛ́ tɔ́ʔɔ́=rɛ̄ʔ cɔ̂w,*

B: friend!, 3SgNonh be.able.Pfv be.said.Ipfv=Neg oh!,

*mā dɛ́ [[yálā mí] dòʔòyéē],*

1Sg say.Pfv [[hole Dem] become.small.Pfv],

*jàʔà má=∅ ꜜcíɛ́ [sɔ́ɔ́ [[yálā mí] tɔ̀]],*

lo! 1Sg=Ipfv can.Ipfv [enter.Ipfv [[hole Dem] in]],

B: ‘(Hyena said:) “friend, it could not be said, oh! I said that that hole is small. Lo, I was able to go into that hole.” ’

05:11 B: *á mā mì jíɛ́ɛ̄,*

B: ah! 1Sg Rel see.Pfv,

*ḿ ∅ bè= [[é-wò láʔā] tɔ̀],*

1Sg 3SgObj put.down.Pfv [[Nonh-3Sg place] in],

*[è-wò láʔā-rà] nɛ̀*

[Nonh-3Sg place-Nom] there

B: ‘Ah! What I saw, I have put (it) down in its place. There is its place.’

*[reduced from mā ní bɛ̌ [è-wò … ; variant of the standard tale ending is ‘I picked it up, I have put it (back) down’]*

## Text 2016\_04: A brief history of breasts

narrator: Traore Lassina (L) with Traore Wamara (W)

00:00 L: *wálàà má=∅ sà mí bàà*

L so.there 1Sg=Ipfv Fut Dem put.down.Imprt

*[[dáálá-mā míʔī-nà-à] má],*

[[old.times person-Nom-Pl-Nom] on],

L: ‘I will put down (=tell) this (story) about old-time people.’

00:03 L: *dáálá-mā-na᷇ā, kàà-l-á-āⁿ*

L: old.times-Nom, young.woman-Dimin-Nom-Pl

*cíɛ́ ꜜtáʔ= [(à)àⁿ wɛ́ [gɔ̀lɔ́ tɔ̀]],*

be.Past go.Ipfv [3PlHumRefl bathe.Adjn [river in]],

L: ‘In the old days, (adolescent) girls used to go and bathe in the river.’

*[kàà-lì ‘girl’, diminutive < kàʔrà ‘young woman’]*

00:06 L: *[né= ààⁿ tāʔā]*

L: [if 3PlHum go.Antec]

*[(à)àⁿ wɛ́ [gɔ̀lɔ́ tɔ̀]] hɛ́ⁿ,*

[3PlHumRefl bathe.Adjn [river in] oops!,

*àfɔ̄ n= áàⁿ kú ꜜtáʔá*

or.rather if 3PlHum begin go.Ipfv

*[ààⁿ= (ààⁿ) wéé tɔ́nɔ́]*

[3PlHum 3PlHumRefl bathe.Adjn Purp]

L: ‘When they went to bathe in the river, oops! rather when they started out in order to bathe, …’

*[*/ní ààⁿ/; *àfɔ́* (< Jula) *in self-corrections; wɛ́ɛ́ ‘bathe’→ wéé ]*

00:10 L: *ààⁿ cí gòl-dàà-rá,*

L: 3PlHum arrive.Adjn river-mouth-Nom,

*ààⁿ= [áàⁿ cíí-ná-àⁿ] wúʔr=*

3PlHum [3PlHumReflPoss breast-Nom-Pl take.off.Pfv

*[ààⁿ sā],*

[3PlHum set.out.to.dry.Adjn],

L: ‘They would then arrive at the river bank and take their breasts off and set them out in the sun to dry.’

00:12 L: *àáⁿ=∅ sɔ̀rɔ̀ [àáⁿ jàʔàⁿ [yí dù]],*

L: 3PlHum=Ipfv do.then.Ipfv [3PlHum descend.Adjn [water in]],

*ààⁿ náàⁿ tímí [ààⁿ wɛ́]*

3PlHum 3PlHumReflObj do.well.Pfv [3PlHum bathe.Adjn]

*ààⁿ bɔ́ [∅ kàʔrà] sísàⁿ,*

3PlHum exit.Pfv [3PlHum break.Adjn] now,

L: ‘They would (then) proceed to go down into the water. They bathed well. Then they finally came out (of the water).’

*[sɔ̀rɔ̀ ‘do then’ in ‘before …’ clause paired with another clause, §15.2.4; kàʔrà ‘break’ adjoined to another verb means ‘do eventually’ with no paired clause]*

00:16 L: *n= áàⁿ bɔ́ dóò,*

L: if 3PlHum exit.Antec also,

*[ààⁿ dóʔó]=∅ sà cíí-ná-àⁿ wé [èèⁿ dáná],*

[3PlHum too]=Ipfv Fut breast-Nom-Pl wash.Ipfv [3PlNonh apart]

L: ‘When they came out, they also washed the breasts separately.’

00:19 L: *ààⁿ néèⁿ nɔ́ʔrí [[èèⁿ núú] tɔ̀],*

L: 3PlHum 3PlNonhObj put.back [[3PlNonh place] in],

*àáⁿ=∅ sɔ̀rɔ̀ [ààⁿ sá [kélé mà]],*

3PlHum=Ipfv do.then.Ipfv [3PlHum come.Adj [courtyard on]],

L: ‘They put them (=breasts) on in their place, before they came home.’

*[nɔ̀ʔrɔ̀ ‘affix, post (e.g. on wall)’]*

00:23 L: *donc ààⁿ túú yààlàā,*

L: so 3PlHum stay. thus,

*[ɲáā kúdɔ́ dò] cíéé dè,*

[woman old one] be.Past there.Def,

*à-màⁿ cíɛ́ [[kàà-lí dò] kpá-mà],*

Hum-3Sg Past [[young.woman-Dimin one] goal]

*á=∅ ꜛná dɛ̀n-dɛ́nà,*

3Sg=Ipfv 3SgHumObj stalk.Ipfv,

L: ‘So, they remained thus (=in that situation). There was an old woman there. She was after a (certain) girl. She was stalking her.’

*[yààlàà ‘thus’; dɛ̀n-dɛ́nà* *‘stalk (one’s prey)’, lexicalized reduplication of dɛ́ná ‘follow’]*

00:29 L: *[yá sɔ̀rɔ̀] [kàà-lì mí dòʔóō],*

L: [now do.then.Ipfv] [young.woman-Dim Dem too],

*[yá sɔ̀rɔ̀] [à dòʔò] cíɛ́ [káméē-l dò] ká,*

[now do.then.Ipfv] [3SgHum too] be.Past [young.man-Dim one] have,

L: ‘Now (it happened that) the girl too, now (it happened that) she also had a young man (=fiancé).’

*[(è-)yá sɔ̀rɔ̀ ‘now (it happened that)’ as preclausal discourse marker]*

00:33 L: *[à cìì-ná-àⁿ ɲɛ́ɛ̄,*

L: [3SgHum breast-Nom-Pl be.good.Pfv]

*èèⁿ bálí [bàlì cógō-rà],*

3PlHum stand.Pfv [stand manner-Nom]

L: ‘Her breasts were beautiful, they stood the right way (=didn’t sag).’

00:35 L: *àáⁿ wɛ̌ɛ̄ [[ààⁿ cíí-ná-àⁿ] kpɔ́-ɲɔ̀] sísàⁿ*

L: 3PlHum go.Pfv [[3PlHum breast-Nom-Pl] goal] now

*ààⁿ tú [[yí wèè-rá] dò],*

3PlHum remain.Pfv [water bathe.VblN-Nom] with],

*[ɲáā kúdɔ́ dòʔɔ̀] bóó dè,*

[woman old too] exit.Pfv there,

L: ‘They (= women) went after (=looking for) their breasts now. They kept bathing. The old woman too left there (=the village).

00:39 L: *wó=∅ sɔ̀ɔ̀ mìʔì-ná=∅ kú mìʔíⁿ dɛ̀nnɛ́nà*

L: 2Sg=Ipfv know.Ipfv person-Nom=Ipfv begin person stalk.Ipfv

*à kú [mɛ̀ʔɛ́ⁿ kpà-mà] náánī,*

3SgHum begin [person following] already,

L: ‘You-Sg know that (if) someone is stalking someone, (if) he/she is already stalking the person …’

*[náán̄* ~ *náánī ‘already’]*

00:44 L: *wó=∅ sɔ̀ɔ̀*

L: 2Sg=Ipfv know.Ipfv

*[á=∅ ꜜná* — *] [á=∅ ꜜná* — *]*

[3SgHum=Ipfv 3SgHumObj —] [3SgHum=Ipfv 3SgHumObj —]

*á=∅ [fɛ̀ɛ̀lɛ́ bùʔù] lájɛ̀ní bègà*

3SgHum=Ipfv [method all] pile.up cut.Ipfv

*pour que á=∅ màà [cògò-yá mì]*

so.that 3Sg=Ipfv be.done.Ipfv [manner Rel]

*à ná jì,*

3SgHum 3SgHumObj see.Imprt,

L: ‘You-Sg know that he/she will accumulate and cut (=use) any methods, in order to find a way (for him/her) to get him/her.’

*[lájɛ̀ní < Jula, cf. Jalkunan céé-ɲùʔùmá ‘pile up’]*

00:48 L: *ààⁿ tú= [∅-yà kɔ̀nɔ̀] dóò,*

L: 3PlHum stay.Pfv [Nonh-3Sg still.on] too,

*à téʔé jì*

3SgHum go.Pfv see.Adjn

*[mí-nà-àⁿ [yí dù] kàbáⁿ náánī dóō]*

[Dem-Nom-Pl [water in] already already too]

L: ‘They were still like that (=in that situation). She (=old woman) went and saw that those (women) were already in the water.’

*[bèèní ~ béénī stative < bàà ‘put down’]*

00:52 L: *cíí-ná-àⁿ bééní kɛ́nɛ́ɲè-ná,*

L: breast-Nom-Pl be.put.down.Stat outside,

*à [kàà-lí cìì-ná-àⁿ] wólóbá,*

3SgHum [young.woman-Dim breast-Nom-Pl] choose.Adjn,

*á yǎ-āⁿ bɔ́ dóò,*

3SgHum 3PlNonhObj take.out.Adjn also,

L: ‘The breasts were (=had been) set down outside (of the water). She picked out the breasts of the young woman. She took them out.’

*[bééní stative < bàà ‘put down’ §11.2.4.2; nonhuman 3Pl preverbal object è‑yǎ‑āⁿ ]*

00:57 L: *[à [ná mì-ná-àⁿ] bɔ́]*

L: [3SgHum [3SgHumObj Poss-Nom-Pl] take.out.Adjn]

*[á= ∅-yààⁿ sá*

[3SgHum Nonh-3Pl set.out.Adjn

*[[[kàà-lí mǐ] nùú] tɔ̀]]*

[[[young.woman-Dim Poss] place] in]],

*à sá [[kàà-lí cìì-ná-àⁿ] dɛ́]*

3SgHum come.Adjn [[young.woman-Dim breast-Nom-Pl] with

*[kélé mà]*

[courtyard on]

L: ‘She (=old woman) took off her own (breasts), and she laid them down in the place of the young woman’s (breasts). She brought the girl’s breasts to the courtyard (=to her home).’

01:01 L: *[kàá-l dòʔò] sɛ́ɛ̄,*

L: [young.woman-Dim too] come.Pfv,

*jùⁿ-ɲɔ̀ʔɔ̀-ɲáā* — *[jùɲɔ̀ʔɔ̀-máá-ná-àⁿ búʔú-n=]*

co.wife-woman — [co.wife-owner-Nom-Pl all-Nom-Pl]

*[áàⁿ cíí-ná-àⁿ] yálī,*

[3PlHumRefl breast-Nom-Pl] take.Pfv,

L: ‘The girl came also (to where the breasts had been left). The co-wives (=her companions), the co-wives all took their breasts.’

*[‘co-wives’ here used loosely to mean ‘(woman’s) companions’ cf. ɲámùʔù ‘comrade, peer’]*

01:05 L: *[à-wó mì-nà-àⁿ] jéé=rēʔ,*

L: [Hum-3Sg Poss-Nom-Pl] see.Pfv=Neg,

*à [[[ɲáá kúdɔ́] mì-ná-àⁿ] béé= jí*

3SgHum [[[woman old] Poss-Nom-Pl] be.put.down.VblN see.Pfv]

*[[[à-wó mì] bèè láʔā-rà*

[[[Hum-3SgFoc Poss] be.put.down.Pfv place-Nom

L: ‘She (=the girl) didn’t find hers. She found the old woman’s (breasts) put down where her own (breasts) had been put down.’

*[ [X nɔ̀ɔ́] tɔ̀ variant of [X nùú] tɔ̀ ‘in the place of X’]*

01:09 L: *á= (à)àⁿ yálī,*

L: 3SgHum 3PlObj take.Pfv,

*à sɔ́ɔ̀ⁿ níìⁿ nɔ́ʔrí*

3SgHum accept.Pfv 3PlNonhObj affix

*[[[à mí] nɔ̀ʔrì] núú-nɔ̀]=nɛ̄ʔ*

[[[3Sg Poss] affix.VblN] place-Nom]=Neg

*[à s=] [éèⁿ dɛ́] [kélé mà],*

3SgHum come.Pfv] [3PlNonh with] [courtyard on,

L: ‘She picked them (=breasts) up. She was unwilling to attach them in the place for attaching her own (breasts). She brought them into the courtyard (=to her home).’

*[could also be phrased [[à wó]] mì] nùù-nɔ́ with logophoric 3Sg; negative =nɛ̄ʔ with scope over entire clause including ‘accept’; <* [à sɛ̌] [èèⁿ dɛ́] *]*

01:12 L: *[à sá=]*

L: [3SgHum come.Adjn]

*[à sí=ìⁿ dɔ́lɔ́ kàméē-l-là],*

[3SgHum Fut=3PlNonh show.Ipfv young.man-Dim-Nom]

L: ‘She came and was going to show them to the young man (=fiancé).’

01:14 L: *à dɛ̀ á!*

L: 3SgHum say ah!

*[mùʔùⁿ kɔ́ní] ꜜtɛ́ʔɛ́ fì [yí dù]*

[1Pl Topic] go.Pfv today [water in]

*[mùʔúⁿ=∅ ꜜtáʔ=] [āⁿ wɛ́ɛ́]]*

[1Pl=Ipfv go.Ipfv] [1PlRefl bathe.Ipfv]

L: ‘She said: “ah! We went to the water today. We (regularly) go (there) to bathe.” ’

01:17 L: *ŋ̀ táʔá ꜜcíɛ́, wó=∅ sɔ̀ɔ̀*

L: 1Pl go.Adjn arrive.Adjn 2Sg=Ipfv know.Ipfv

*mùʔúⁿ=∅ dɛ̀lɛ́*

1Pl=Ipfv be.accustomed=Ipfv

*kɔ̀= [ɔ̀ⁿ cíí-ná-àⁿ] bɔ́,*

begin [1PlRefl breast-Nom-Pl] take.out.Adjn,

*àáⁿ=∅ sɔ̀rɔ́= [ɔ̀ⁿ táʔ= [(à)àⁿ wé]]*

1Pl=Ipfv do.then.Ipfv [1Pl go.Adjn [1PlRefl bathe.Adjn]

L: ‘(Girl:) We arrived (there). You-Sg know that we are accustomed to taking off our breasts before we go (into the water) to bathe.” ’

*[* /kú ààⁿ/ *]*

01:22 L: *nī mùʔùⁿ [nààⁿ wéé] dà-káⁿ,*

L: if 1Pl [1PlRefl bathe.VblN] finish.Antec,

*mùʔúⁿ=∅ sɔ̀rɔ́ sá*

1Pl=Ipfv do.then.Ipfv come.Adjn

*[cíí-ná-àⁿ wé [èèⁿ dáná]]*

[breast-Nom-Pl wash.Adj [3PlNonh apart]

L: ‘(Girl:) “When we had finished bathing, we proceeded to come to wash our breasts separately.” ’

01:23 *àáⁿ=∅ sɔ̀rɔ́= [ɔ̀ⁿ sí=ìⁿ yálí]*

3PlHum=Ipfv do.then.Ipfv [3PlHum Fut=3PlNonh take.Imprt]

*[ààⁿ níìⁿ nɔ́ʔrí [[(ì)ìⁿ nùú] tɔ̀]],*

[1Pl 3PlNonhObj affix.Pfv [[3PlNonh place] in]],

L: ‘(Girl:) “We were then going to take them afterwards. We put them (=breasts) on in their place.” ’

*[imperative yálí after future particle §10.5.1.2]*

01:25 L: *mā sɛ́, bùʔú mì jíɛ́,*

L: 1Sg come.Pfv, all Poss see.Pfv,

*mā [nááⁿ mí] jìɛ̀=rɛ̄ʔ,*

1Sg [1SgRefl Poss] see.Pfv=Neg,

L: ‘(Girl:) “I came. Everyone (else) saw (=found) theirs. I didn’t see (=find) mine.” ’

01:27 L: *mɛ̀ [mā mì jíɛ́ [[[áⁿ mì] nùú] tɔ̀]]*

L: but [1Sg Rel see.Pfv [[[1SgRefl Poss] place] in]]

*è-wó nɛ̀,*

Nonh-3Sg here,

L: ‘(Girl:) “But what I found in the place of my own, that [focus] is it.” ’

01:29 L: *à dɛ̀ bāāsí=ɛ̀=rɛ̄ʔ*

L: 3SgHum say.Pfv problem=it.is=Neg

*àáⁿ=∅ sà kélénà, sàà-màà-ná-àⁿ kɛ̀ⁿ,*

1Pl=Ipfv Fut take.a.walk.Ipfv, house-owner-Nom-Pl chez,

L: ‘He (=young man) said, “it’s no problem. We’ll take a walk, to the house of the village chiefs.” ’

01:34 L: *[nī ààⁿ kīī dè]*

L: [if 3PlHum arrive.Antec there.Def]

*ààⁿ kú nàg cíé màà,*

3PlHum begin ask.Ipfv speak 3Pl,

*[nī= è jī] [mi ká] [à ná-màà* — *]*

[if 3SgNonh be.seen.Antec] [Rel have] [3SgHum 3PlHumObj —],

*ààⁿ níìⁿ dáʔá-rà,*

3SgHum 3PlNonhObj dispossess.VblN-Nom,

L: ‘When they arrived there, they began to ask. (Young man:) “if it is found, the one who has (it), (what about) our taking them away (from him)?” ’

*[cíɛ́ ‘speak’; [à ná-màà* — *] is a false start]*

01:38 L: *à dɛ̀ ɔ̀ⁿʔɔ́ɔ̀ⁿ,*

L: 3SgHum say.Pfv yes!,

*slāā yèlèníī, àáⁿ=∅ wèé*

daytime day.break.Pfv, 3PlHum=3SgNonh go.Pfv

*[[sàà dààlá] mà], mìʔì-ná-àⁿ láʔā-rà,*

[[house first] on], person-Nom-Pl place-Nom,

L: ‘(Girl:) “Yes!” Day broke. They went to the first house (=neighborhood), the place of the people (=where people were).’

01:43 L: *ààⁿ táʔá cíí=yà dè*

L: 3PlHum go.Adjn arrive.Adjn=Link there.Def

*[cìndá ꜜmí-nà],*

[neighborhood Dem-Nom],

*[ààⁿ bélé] [ààⁿ sɔ́] [sàà-màá kɛ̀ⁿ]],*

[3PlHum pass.Adjn] [3PlHum enter.Adjn [house-owner chez]],

L: ‘They went and arrived there, (in) that neighborhood. They went on and entered the house of the neighborhood chief.’

*[The village was divided into neighborhoods (quartiers), each with its own chief]*

01:46 L: *ààⁿ sɔ́ [sàà-màá kɛ̀ⁿ],*

L: 3PlHum enter.Adjn [house-owner chez]],

*àáⁿ ɲàà tɔ́ʔɔ́ [màà ɲáā],*

3PlHum problem tell.Adjn [owner in.presence],

L: ‘When they entered the house of the chief, they explained the problem.’

01:48 L: *[à màà]*

L: [3SgHum owner]

*[ná mɛ̀ʔɛ̀-ná-àⁿ bùʔù] kéēī,*

[3SgHumReflPoss person-Nom-Pl] all call.Pfv,

*è-yá sɔ̀rɔ́, [cāl-má dòʔò] táʔá mǐ kɛ̀,*

Nonh-3Sg do.then, [husband too] go.Adjn Rel Past,

*á=∅ sàlì-féé yàlá= bɔ̀ʔɔ̀,*

3Sg=Ipfv guitar-calabash take.Ipfv hold.Adjn,

L: ‘The chief called all his people. When the husband too went, he took a guitar with him.’

*[cf. 3Pl subject àá=∅ sàlì-féé yàlá= [(à)àⁿ bɔ́ʔɔ̀], bɔ̀ʔɔ̀ ‘hold’ used only in adjunction to ‘take’ etc.]*

01:53 L: *à tèʔè cíɛ́ kàʔrà sísàⁿ,*

L: 3SgHum go.Pfv arrive..Adjn do.finally now,

*[á=∅ sìgí kɛ̀ɛ̄], [à kú sàlí bàʔrà],*

[3SgHum=Ipfv song sing.Ipfv], [3SgHum begin guitar beat.Ipfv]

L: ‘Eventually he arrived now. He began singing, he began playing the guitar.’

01:57 L: *mɛ̀ʔɛ̀-ná-àⁿ=∅ sàà*

L: person-Nom-Pl come.Ipfv

*[ààⁿ tɔ́ɔ́] [(à)àⁿ kú dòó màà]*

[3PlHum stay.Adjn] [3PlHum begin dance(n) do.Ipfv]

*[ààⁿ tɔ́ɔ́] [(à)àⁿ kú cíí-ná-àⁿ contrôler ],*

[3PlHum stay.Adjn] [3PlHum begin breast-Nom-Pl check]

L: ‘The people were coming. They (=the people) kept dancing. They (=girl and young man) were checking their (=the women’s) breasts.’

01:59 L: *né= ààⁿ jì [mí ꜜká],*

L: if 3PlHum see.Antec [Rel have],

*àáⁿ=∅ nì dàʔà,*

3Pl=Ipfv 3SgNonhObj take.away.Ipfv,

L: ‘In case they saw (it) on the one who had (it), they would take it away.’

02:03 L: *ààⁿ táá cìɛ́ premièrement,*

L: 3PlHum go(?) arrive.Pfv first,

*ààⁿ ná-màà kéèì dóò,*

3PlHum HumObj-3PlFoc call.Pfv also,

L: ‘They (girl and boy) arrived for the first time. It was them (=dancers) [focus] that they (girl and boy) called.’

*[tàà ~ táá now an auxiliary used with ‘arrive’ §15.1.1.4, see also 02:38 below]*

02:06 L: *à-màà sɛ́ sísàāⁿ,*

L: Hum-3Pl come.Pfv now,

*ààⁿ sígí commencer,*

3PlHum song begin,

L: ‘It was they (villagers) [focus] who came now. They (=girl and boy) began the song.’

02:10 L: *à dɛ̀*

L: 3SgHum say.Pfv

*kó nnɛ́rí wéè*

friend hey!

*ŋ̀ká yégé-yégé túnúnà*

my breasts be.lost

*kó nnɛ́rí wéè*

friend hey!

*ŋ̀ká yégé-yégé túnúná*

my breasts be.lost

L: ‘She said (=sang)

[song]

“Hey friend,

My breasts are lost.

Hey friend,

My breasts are lost.”

*[song (green type) is in a kind of archaic Jula]*

02:15 L: *è-yáá-sɔ̀rɔ̀ cíí-ná*

L: it.happened.that breast-Nom

*[dáárámā míʔī-nà-àⁿ]=∅ cíí kɛ̀ɛ̀ [kó yégé-yégé]*

[old.times person-Nom-Pl]=Ipfv breast call.Ipfv [ breast]

L: ‘It happens that breast, the people of old called breast “ko yege-yege.” ’

02:18 L: *kó nnɛ́rí wéè*

friend hey!

*ŋ̀ká yégé-yégé túnúná*

my breasts be.lost

*kó nnɛ́rí wéè*

friend hey!

*ŋ̀ká yégé-yégé túnúná*

my breasts be.lost

L: ‘She said (=sang)

“Hey friend,

My breasts are lost.

Hey friend,

My breasts are lost.”

*[the song is in a kind of Jula with some Jalkunan features]*

02:22 L: *né tùⁿ yéŋká*

1Sg Past have

*yégé-yégé blà [kɔ̀ dáá-rà]*

breasts put.down [pond edge-Nom]

*jàʔá ŋ̀ká yégé-yégé túnúná*

lo! my breasts be.lost

L: ‘(She sang:)

“I had (them).

I put my breast(s) down on the edge of the pond

Lo, my breasts are lost.”

02:26 L: *cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

L: ‘(She sang:)

“cegekuru cegekuru” (repeated)

02:30 L: *há! [(è-)yà mɛ̀ʔɛ̀-ná-àⁿ bùʔ=]*

L: ha! [Nonh-3Sg person-Nom-Pl all]

*á= (à)àⁿ pɛ́m-pɛ́ʔrà [dòó mà] kàrà-sáⁿ,*

3PlHum 3PlHumRefl be.energetic [dance(n) do.Adjn] only,

L: ‘Ha! All of the people (on the other side), they were energetically dancing.’

*[pɛ́m-pɛ́ʔrà reflexive verb ‘be energetically occupied (in an activity)’, followed by verbal noun or imperfective clause, especially ‘dance’ or ‘do farming’ (no intransitive examples elicitable)]*

02:33 L: *[[à dòʔó] lè]*

L: [[3SgHum too] look.Pfv]

*[àáⁿ= ∅ jìà dè=rēʔ,*

[3PlHum 3PlObj see.Pfv there.Def=Neg],

*[[ààⁿ dóʔó] bélé] [àáⁿ=∅ wàà kíná],*

[[3PlHum too] pass.Adjn] [3PlHum=Ipfv go.Adjn ahead],

L: ‘She looked again. They didn’t see (them) there. They went on ahead.’

02:38 L: *[ààⁿ dóʔó] táá cìɛ́,*

L: [3Pl too] go(?) arrive.Pfv,

*àáⁿ= ∅ sál sàà-màà-ná,*

3PlHum 3SgObj inform.Pfv house-owner-Nom,

L: ‘They again arrived (there). They explained it to (=informed) the chief.’

*[tàà ~ táá (§15.1.1.4), see 02:03 above; preverbal object of sálí is 3SgNonh in abstract sense ‘it’]*

02:40 L: *[[à-màà dóʔó] mɛ̀ʔɛ̀-ná-àⁿ bá]*

L: [[Hum-3PlFoc too] person-Nom-Pl commission.Adjn]

*[àáⁿ= ∅ tɔ̀ʔɔ̀ [[kálá mìʔíⁿ bùʔù] má]]*

[3PlHum 3SgObj tell.Ipfv [[neighborhood person all] on]]

‘He (=chief) also commissioned the people. They (girl and boy) told it to all the people of the neighborhood.’

02:42 L: *[[ààⁿ búʔú dóʔó] ꜜbɔ́],*

L: [[3PlHum all too] exit.Adjn],

*[ààⁿ dóʔó] sá cìɛ́, à dɛ̀,*

[3PlHum too] come.Adjn arrive.Adjn, 3SgHum say.Pfv,

‘They (=people) all left then. They (girl and boy) came (there) again. She said (=sang):’

02:44 L: *kó nnɛ́rí wéè*

friend hey!

*ŋ̀ká yégé-yégé túnúná*

my breasts be.lost

*kó nnɛ́rí wéè*

friend hey!

*ŋ̀ká yégé-yégé túnúná*

my breasts be.lost

L: ‘She said (=sang)

“Hey friend,

My breasts are lost.

Hey friend,

My breasts are lost.”

*[the song is in a kind of Jula with some Jalkunan features]*

02:49 L: *né tùⁿ yéŋká*

1Sg Past have

*yégé-yégé blà [kɔ̀ dáá-rà]*

breasts put.down [pond edge-Nom]

*jàʔá ŋ̀ká yégé-yégé màyè dɛ̀ʔ*

lo! my breasts be.lost

L: ‘(She sang:)

“I had (them).

I put my breast(s) down on the edge of the pond

Lo, my breasts are lost.”

*[this repetition used màyè dɛ̀ʔ instead of túnúná ‘become lost’ ]*

02:54 L: *cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

*cɛ́gɛ́kùrù cɛ́gɛ́kùrù*

L: ‘(She sang:)

“cegekuru cegekuru” (repeated)

02:58 L: *bon*, *àáⁿ= ∅ jíí=yà dè dɔ̄ʔɔ̄=rɛ̄ʔ,*

L: well, 3PlHum 3PlObj see.Pfv=Link there.Def again=Neg,

*[ààⁿ dóʔó] wà kíná dɔ́ʔɔ́ bèlè,*

[3PlHum too] go.Adjn ahead too pass.Adjn,

L: ‘Well, they didn’t find them there either. They went on ahead.’

*[bèlè ‘pass’ probably transitive adjoined bèlè ~ bélé here, compare intransitive adjoined bélé]*

03:00 L: *[ààⁿ táʔá cíí=yà dè]*

L: [3PlHum go.Adjn arrive.Adjn=Link there.Def]

*ààⁿ sígí commencer dɔ̀rɔ̀ŋ,*

3PlHum song begin as.soon.as,

*[[mɛ̀ʔɛ́ⁿ bùʔù] sɛ́=ʔ]*

[[person all] come.Pfv]

*[[ɲáā kúdɔ̄ mí] sèè=rēʔ],*

[[woman old Dem] come.Pfv=Neg],

L: ‘They went and arrived there. As soon as they began singing, all the (other) people came, but that old woman didn’t come.’

*[Glottal at end of sɛ́=ʔ ‘(they) came’ is in parallel with that of the contrasting negative marker =rĒʔ in the paired clause]*

03:04 L: *jáʔ= à=∅=ǹ dè,*

L: lo! 3SgHum=be=Link there.Def,

*sàà-màá dɛ̀ áy!, à-mí dóò,*

house-owner say.Pfv hey!, Hum-Dem be.where,

L: ‘(Then) lo!, there she was. The chief said, “hey! where is she?” ’

*[<* /jàʔá á=∅=ǹ dè/*]*

03:07 L: *[à kɔ̀ní] [kélé mèé dè]*

L: [3SgHum Topic] [courtyard on there]

*ààⁿ ná kèéī,*

3PlHum 3SgHumObj call.Pfv

L: ‘(The people said:) “As for her, she is in the courtyard.” They called her.’

*[[kélé mà] plus dè]*

03:09 L: *[[sàà-màá yèʔnà] láʔá]*

L: [[house-owner self] get.up.Adjn]

*[∅ wǎ= [à kpá-mà]]*

[3SgHum go.Adjn [3SgHum goal]

L: ‘The chief himself got up and went for (=to find) her.’

03:10 L: *[ààⁿ dóò] wō kéē*

L: [3PlHum also] 2Sg call.Pfv

*kɔ̀lɔ̀gɔ́ cìɛ́ɛ̄,*

talk(n) speak.Imprt,

L: ‘(Chief:) “They have called for you-Sg. Speak!”

03:12 L: *[mɛ̀ʔɛ́ⁿ bùʔù sá] [wō tú=ū dè],*

L: [person ll come.Adjn] [2Sg stay.Adjn=Link there.Def]

*wōtùmáfɛ̀ɛ̀ è sí wō ká kɛ̀,*

guilty.one 3SgNonh Q 2Sg have tagQ,

L: ‘(Chief:) “Everybody (else) came (but) you stayed there. (You) look guilty, You-Sg must have it (=the pair of breasts), don’t you?’

*[ tɔ́ plus dè ; wōtùmáfɛ̀ɛ̀ said to be a Jula expression identifying the guilty party; sí in emphatic question with tag kɛ̀ (§15.1.1.5)]*

03:14 L: *[áⁿʔáⁿʔáⁿ é (à-)wò ká=rɛ̄ʔ]*

L: [unh-unh! 3SgNonh (Hum-)3Sg have=Neg

*[à-wó=∅ sàà]*

[Hum-3Sg=Ipfv come.Ipfv]

L: ‘(Old woman:) “Unh-unh! I don’t have it. I am coming.” ’

*[logophoric à-wò ]*

03:17 L: *à sɛ̀ káʔrá sísàⁿ,*

L: 3SgHum come.Pfv do.finally.Adjn now,

*à sè tɔ́rɔ́ káʔrá*

3SgHum come.Pfv while do.finally.Adjn

*non dòó bèèní-yà réŋ,*

no! dance(n) be.put.Stat-Prog Prog,

L: ‘She eventually came (=arrived). While she was belatedly coming (=arriving), no! The dance was in progress (here).’

*[bèèní-yà progressive of stative of bàà ‘put down’; tɔ́rɔ́ ‘while’ implies a spatial separation of this event and the other one, cf. English meanwhile (§15.3.5); réŋ not otherwise attested but seems to be associated with ‘be put’]*

03:20 L: *à commencer [dòó dɛ̀] cɛ́lífòòrù*

L: 3SgHum begin [dance(n) with] middle.of.way

*à kú [séé dɛ̀],*

3SgHum begin.Ipfv [come.VblN with],

*fɔ̄ à cìì-ná-à flɛ́ [à kìnà],*

until 3SgHum breast-Nom-Pl throw.Ipfv [3Sg in.front.of],

L: ‘She began dancing on the way as she was coming, so much so that her breasts were thrown in front of her.’

*[flɛ́ ~ fílɛ́ ‘throw (them)’]*

03:25 L: *[kàá-l dòʔò] ká=yè dè péw!*

L: [young.woman-Dim too] leave.Adjn=Link there.Def totally

*[à tú dòò-rá káʔrá sísàⁿ]*

[3SgHum remain.Pfv dance(n)-Nom do.finally.Adjn now]

*[kàà-lá mùnù= [à ɲɔ́kɔ̀ʔr-ɔ̀] yéw!],*

[young.woman-Dim veer.Adjn] [3Sg face-Nom] Emph!],

L: ‘The girl left it (=said nothing) entirely. She continued dancing. The girl (while dancing) moved over directly in front of her (=old woman).’

*[cf. ká-yè nàà ‘left here’]*

03:29 L: *[á= [∅ cìì-ná-àⁿ=] sámá=]*

L: [3SgHum [3SgHum breast-Nom-Pl] pull.Adjn]

*[(à)àⁿ bɔ́ [[èèⁿ núú] tɔ̀],*

[3PlNonh take.out.Adjn] [[3PlNonh place] in],

*[á [∅ mì-ná-àⁿ bl= á-y= [è dè]*

[3SgHum [3SgHum Poss-Nom-Pl] give.Adjn Hum-3Sg [Link there.Def]

L: ‘She pulled off her (=old woman’s) breasts from their place (on the old woman).’

*[<* /sámá] [èèⁿ bɔ́] *; <* /bìlì à-yà [è dè]/ *]*

03:33 L: *à bùʔù [cāl* —

L: 3SgHum and husband —

*[kámélé màà-ná=] (à)àⁿ ɲúʔúⁿ yál=*

[young.man owner-Nom] 3PlHum Recip take.Adjn

*[(à)àⁿ sá [kélé mà]],*

[3PlHum come.Adjn [courtyard on]],

L: ‘She and (the) husband— (or rather) (she and) the young man took each other (=rode) and came into the courtyard (=home).’

*[< yálí ]*

03:37 L: *è-wò mɛ́ sààbú kùⁿ nɛ̀,*

L: Nonh-3Sg do.Pfv reason Cop there,

*cíí-ná-àⁿ cíɛ́ wɔ́ʔrɔ́ dɔ́ʔɔ́=rɛ̄ʔ,*

breast-Nom-pl can be.detached.Adjn again=Neg,

L: ‘That [focus] is what caused (that) breasts could not be taken off any longer.’

*[sààbú variant of sàbàbú ‘reason, cause’ ]*

03:40 L: *cíí-ná-àⁿ kɔ́lí [[(è-)wò súʔúⁿ] tɔ̀]*

L: breast-Nom-pl be.stuck [[Nonh-3Sg day] in]

*èèⁿ ciɛ́ wɔ́ʔrɔ́ dɔ́ʔɔ́=rɛ̄ʔ,*

3PlNonh can be.removed.Adjn again=Neg,

L: ‘Breasts were (permanently) attached, on that day. They could not be taken off thereafter.’

*[kɔ́lí < French (se) coller ‘be firmly attached, be glued’ via Jula, cf. Jalkunan nɔ́ʔrɔ́]*

03:42 L: *né= é cì kɛ́ wɔ́ʔrɔ́*

L: if 3SgNonh can Past be.removed.Adjn

*mɛ̀ʔɛ̀-ná-àⁿ cíɛ́ tɔ́= [ɔ̀ⁿ kú*

person-Nom-Pl Past stay.Ipfv [3PlHum begin

*[[mɛ̀ʔɛ̀-ná-àⁿ cíí-ná-àⁿ] jɔ́ⁿ]*

[[person-Nom-Pl breast-Nom-Pl] steal.Adjn]

L: ‘If it (=breasts) could (still) be taken off, people would constantly steal (other) people’s breasts.’

*[counterfactual conditional using Past morphemes]*

03:45 L: *mā mí jìɛ́ [làʔá mì fáⁿ tɔ̀]*

L: 1Sg Dem see.Pfv [place Rel around in]

*mā ní-yà bé= [é dè]*

1Sg NonhObj-3Sg put.down.Pfv [Link there]

L: ‘The place around which I saw (=found) this (tale), I have put it (back) down there.’

*[standard tale ending]*

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