**Short grammar of Tiefo-N of Nyafogo (Burkina Faso)**

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October 2016 version

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color code:

dark red regular transcriptions for Tiefo-N

blue regular transcriptions for Tiefo-D

green not italic: phonetic transcriptions (in brackets) or underlying representations (in slashes); transcriptions for other languages (italic); reconstructions (after \*)

red temporary notes to ourselves (items for correction or checking)

orange temporary cross-refs to examples in other sections

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# Introduction

## Language background

### Gur languages

Gur (in French usually *voltaïque*) is a large language family consisting of approximately 50 languages. Dense concentrations of these languages, are in SW Burkina and adjacent parts of neighboring countries. The major city in SW Burkina is Bobo Dioulasso; other cities are Banfora, Dédougou, Gaoua, and Sindou. Large swaths of northern Burkina are occupied ty the Gur languages Mooré and Gourmantche. The family extends across northern Ghana to Togo, Benin, and western Nigeria. Gur is thought to be most closely related to Senoufo languages, which straddle the border area between Mali, Burkina, and Côte d’Ivoire. They are thought to be part of the vast Niger-Congo superfamily which also includes Kwa, Kru, Bantoid, Bantu, and (according to some) Mande and Atlantic.

The linguistic geography and the substantial differences among neighboring languages suggest that SW Burkina is part of the original homeland of Gur languages. However, SW Burkina is also home to several Mande languages, which likely spread into the area more recently.

Jula (Dioula) in particular has become the dominant lingua franca of SW Burkina, and it and closely related varieties, such as Bambara, are lingue franche in neighboring Mali and northern Côte d’Ivoire. The non-Jula languages of SW Burkina are at various stages of endangerment due to the Jula juggernaut. In the case of Tiefo, the process of Jula-ization dates from the end of the 19th Century. The result is that all Tiefo varieties are now threatened with extinction.

### The Tiefo (*cɛ̀fɔ̂* ) languages

We distinguish two languages, Tiefo-N treated in this document, spoken in Niafogo and with dialectal differences until recently in Noumoudara, and Tiefo‑D, spoken in Daramandougou. The distinction (using different labels) was established by Winkelmann (1998), who studied Tiefo-D in some detail.

Neither Manessy (1981, 1982) nor Naden (1989) was able to place Tiefo (then treated as a single language) within the main genetic subgroups of Gur. Naden includes Tiefo, Viemo, Toussian, Wara, and Natioro in a loose group of SW Burkina languages whose genetic subgrouping with “Central Gur” is “improbable” (p. 149). Naden does not address the issue whether this set of languages might itself constitute a genetic subgroup, or is just a basket of languages awaiting classification. We therefore tentatively assume that Tiefo constitutes its own peripheral subgroup of Gur.

The ethnic name at least in Nyafogo is *cɛ̀fɔ̂* ‘Tiefo (person)’, plural *cɛ̀fɔ́ɔ̀→*, and ‘Tiefo language’ is the compound *cɛ̀fɔ́‑mìì* (or *cɛ̀fɔ́‑mìyì* ).

### Tiefo villages

The Tiefo villages with their Tiefo-N names are in (xx1).

(xx1) Names of Tiefo villages

official name village people

a. Tiefo-N

Nyafogo *ɲáɣáfɔ̀ɣɔ̀ⁿ ɲáɣáfɔ̀ɣɔ̀ⁿ* \\ *ɲáɣáfɔ̀ɣɔ̀→*

Noumoudara *tə́ráʕāⁿ tə́ráʕāⁿ* \\ *tə́ráʕā→*

b. Tiefo-D

Daramandougou *káɣà(-lě)* *káɣà* \\ *káɣà→*

c. formerly Tiefo-speaking, on the plateau west of the cliffs

Me *mɛ̀ɛ́ màɣá* \\ *màɣá→*

Maturku *mátòò* ~ *mátyòò mát(y)òò* \\ *mát(y)òò→*

Samogan —

Tien —

Kodala —

d. formerly Tiefo-speaking, in the plains east of the cliffs

Koumandara *ʃíyɛ̀yⁿ* *ʃíyɔ̀ⁿ* \\ *ʃíyɔ̀→*

Dege-dege *dègèdègè dègèdègè-ɲɔ́ⁿ* \\ *-by-ó→*

Derege *dɛ̀rɛ̀gbɛ̀ dɛ̀rɛ̀gbɛ̀* \\ *dɛ̀rɛ̀gbɔ̀→*

Laranfiera *làɣàⁿfyɛ̀lá làɣàⁿfyɛ̀* \\ *làɣàⁿfyɔ̀→*

Musubadugu *ʃíkìyàʕà*

Sidéradougou — (partially Tiefo)

Despite its name and geographical proximity, Tiéfora village on the highway from Banfora to Gaouwa is of Karaboro rather than Tiefo ethnicity (and language), as Winkelmann already observed.

The Tiefo-N name for Bobo Dioulasso, the biggest city in the zone, is *sàmìyàʕàⁿ*.

Our GPS coordinates for the main villages follow. The “quartiers” (neighborhoods) of Daramandougou are actually separated by several kilometers. Coordinates are in degrees (north latitude, west longitude), minutes, and decimal fractions of minutes.

(xx2) a. Tiefo-N

Nyafogo 10 53.203 04 22.725

Noumoudara xxx xxx

b. Tiefo-D (“quartiers” of Daramandougou)

Sounougou 10 49.745 04 30.982

Santoko 10 50.005 04 32.013

Flaso 10 49.245 04 32.544

Jinejan 10 49.267 04 33.648

Biton 10 48.707 04 31.190

Bofoboso 10 49.426 04 30.997

Masaso 10 50.200 04 32.594

Winkelmann’s map (1998: 17) may be consulted for further detail.

The people of Nyafogo participate in a five-day market cycle that defines their “week”. The sequence is Péni, Nyafogo, Bobo Dioulasso, Dar Salami, and Noumoudara. All but Nyafogo are on the Bobo to Banfora highway on the plateau west of the cliffs.

Daramandougou, by contrast, is oriented toward the south. The only local market they participate in is that of Tiéfora, and the larger city they are oriented toward is Banfora rather than Bobo. Therefore even today Nyafogo and Daramandougou have relatively little contact with each other.

### Neighboring languages

Besides Jula, the dominant lingua franca which is eating up the native languages of the zone, neighboring languages are the following:

* to the NW on the plateau: Northern Toussian (Gur)
* to the north: Bobo (Mande)
* farther to the NW: Viemo (Gur)
* to the south: Eastern Karaboro (Senoufo)
* to the SE (beginning with Sidéradougou): Dogosé (Gur)

Nyafogo and the other predominantly Tiefo villages also host minorities speaking the Mande languages Bobo and Seenku, and the Gur languages Turka and Mossi. There are also some small groups of Fulbe cattle herders in the bush near Nyafogo. Fulbe women come into the villages to sell milk and butter.

Jula is the lingua franca for nearly all interethnic communication.

## Environment

There is a heavy rainy season May to September, followed by a long dry season from October to April.

The cliffs running along an axis just east of the Bobo-Banfora highway define the geography. The cliffs range from high and steep to lower and more gentle, and there are two passes north of Nyafogo where a 4x4 or a motorcycle can navigate the slopes going up or down. However, Daramandougou is cut off by particularly steep cliffs and it is too far from the passes to make much use of them.

The “plateau” west of the cliffs can therefore be distinguished from the “plains” to their east. The Bobo to Banfora highway and villages including Noumoudara are on the plateau, while both Nyafogo and Daramandougou are in the plains. In Tiefo‑N, *pɛ̀tɛ̀ɛ́ⁿtɔ̄ⁿ* denotes the plains, and *já:‑ʃīⁿ* the plateau.

Both on the plateau and in the plains, the main crops cultivated are maize (the staple grain) and cotton (the main cash crop), followed by sorghum, sesame, peanut, okra, cowpea (*Vigna unguiculata*), and roselle (*Hibiscus sabdariffa*). During the dry season, some vegetable gardening is practiced: onion, garlic, lettuce, tomato, chili pepper, sweet potato, and cassava.

There is rather little contact between Nyafogo and Daramandougou, despite their physical proximity. As mentioned, Nyafogo is oriented northward toward Bobo, Daramandougou southward toward Tiéfora and Banfora. The pistes between Nyafogo and Daramandougou are in bad shape even now and are used mainly by motorcycles.

## History

The Tiefo were a locally formidable military power until the late 19th Century. There exists even now a military museum in Noumoudara, the former center of Tiefo power, where one can view weapons and torture instruments. This village still boasts a “war chief” in addition to an administrative chief.

The key event in the history of the Tiefo was the invasion led by the Jula chief Samori Touré in 1897. Much of the Tiefo population, especially on the plateau, was massacred (Hébert 1958; Winkelmann 1995, 1996). This led to the rapid linguistic Jula-ization of Tiefo country. The remaining vestiges of the Tiefo languages occur in Nyafogo (Tiefo-N) and Daramandougou (Tiefo-D) on the plains below and east of the cliffs, which were spared the worst of the massacres.

## Previous scholarship on Tiefo

Gabriel Manessy, the leading comparative Gur scholar of the early 1980’s had feared that Tiefo (not then subdivided) was dead: “Le tyefo est selon toute apparence une langue en voie d’extinction, peut-être éteinte aujourd’hui” (1982: 143). Manessy lamented the sad state of its documentation, which at that time consisted of one manuscript (not available to us) by R. P. André Prost with 140 words and 80 short sentences collected “dans des conditions difficiles auprès d’un vieillard édenté, par l’intermédiaire d’un interprète qui parlait le dyula, mais non le tyéfo” (1982: 143). Manessy was nonetheless able to confirm that Tiefo belonged to Gur by lexical comparisons.

Fortunately, Tiefo (like Mark Twain) seems to have outlived its obituary. The first major work on a Tiefo language was Kerstin Winkelmann’s fine dissertation on Tiefo-D (Winkelmann 1996). She was part of a German research group that worked on Gur languages of SW Burkina and that had a special interest in noun-class markers in nouns (Miehe et al. eds. 2012).

Winkelmann’s fieldwork was done in the period 1990-1994, more than twenty years ago. She focused heavily on Tiefo-D in Daramandougou, but she also made short visits to Noumoudara and Nyafogo. She gathered enough Tiefo‑N material to conclude (correctly) that it was a different language from, and mutually unintelligible with, Tiefo-D. However, she also concluded (incorrectly) that Tiefo-N was already beyond salvation, especially in Nyafogo. She found it impossible to elicit Tiefo-N noun plurals (“die von den Informanten nicht gebildet werden konnten”) or more than very few forms (“nur sehr wenige Formen”) from verb paradigms. She therefore described the informants as “Semisprecher” (Winkelmann 1995:3,14).

Winkelmann’s dissertation (1998) consists of a grammar (pp. 1-215) focusing on phonology and basic morphology of Tiefo-D, a Tiefo-D/German lexicon (pp. 216-249) with some comparisons to Tiefo-N, and a reverse German-Tiefo-D index (pp. 250-259). This work is cited henceforth as W98.

An SIL sociolinguistic survey (Berthelette & Berthelette 2001) based on a stay in Daramandougou and a short trip to Noumoudara, gave an overly optimistic picture of the vitality of Tiefo-D, confirmed that Tiefo-N was down to a few old people in Noumoudara, and did not mention any signs of linguistic life at Nyafogo.

Tiefo studies reached their low point in 2008, when the Endangered Languages Documentation Project at SOAS funded a Burkina scholar to the tune of £6000 to do fieldwork on Tiefo. The individual in question produced no documents, deposited no data, and has not been heard of since.

## Our fieldwork on Tiefo-N

The project Heath has led since 2005 on Dogon and other languages and with which Hantgan was affiliated made a “strategic withdrawal” to the safe haven of Bobo Dioulasso during the Tuareg rebellion of 2012 in Mali. In SW Burkina, we not only continued our ongoing work with Malian informants who traveled with us, we also began sniffing around for possible local fieldwork opportunities. In this context we took a chance and checked out the Tiefo situation.

Hantgan and Heath had the good fortune to encounter Ouattara, a linguistics student at the University of Ouagadougou and an ethnic Tiefo (but not a native speaker) who was interested in documenting Tiefo‑N in particular. It turned out, to our pleasant surprise, that not only was Tiefo-D still somewhat viable (being used within a large extended family in Daramandougou), but there were also a couple of elderly people in Nyafogo who could still serve as Tiefo‑N informants. We did, however, confirm that the Tiefo-N variety of Noumoudara was extinct and unrecoverable.

Based on our initial division of labor, Heath elicited the flora-fauna terminology for Tiefo-N (as he did for several other SW Burkina languages) and did most of the species identifications; Hantgan (who can communicate in Jula) began informant work with the Nyafogo speakers (mostly at our base in Bobo); and the project supported Ouattara’s studies in Ouagadougou and brief field trips by her to Nyafogo.

Completion of the fieldwork was delayed by Ouattara’s heavy family obligations, which led her to take an NGO job in northern Burkina in 2013-’14, and by Hantgan’s departure in January 2014 to a new postdoc position at SOAS involving fieldwork in Senegal. Hantgan left behind materials for a Tiefo-N dictionary and grammar (2013ms, 2014ms) but no finished works.

After Ouattara returned to her linguistic studies in 2015, Heath was able to reunite with her and carry out joint fieldwork. We spent a few days in Nyafogo during Heath’s Christmas break in January 2016. We then brought the two elderly speakers to our Bobo base for intensive joint fieldwork totalling 5-6 weeks in August and again in October 2016. During this time we went over Hantgan’s manuscripts to glean items, especially lexical, that were not already in our own materials.

This English-language document was written by Heath. Most of the Tiefo‑N data in it was collected in joint elicitation sessions including Heath and Ouattara. During these sessions, Ouattara played a crucial role in clarifying morphosyntax, lexical semantics, and tones. Heath is responsible for errors and mistranscriptions. We are disseminating this work now in order to make our results available in a timely fashion. Ouattara will continue to work on Tiefo-N independently and her dissertation and other works (likely in French) may supercede this document in part. She has been transcribing texts as well as adding to her grammatical and lexical materials.

The fieldwork has required considerable patience on all of our parts, given the age of our speakers and the fact that their only other language is Jula. Nevertheless, thanks to their enthusiasm, Hantgan’s willingness to undertake a demanding fieldwork task, and Ouattara’s perseverence, we have been able to put together a basic grammar and a substantial lexical spreadsheet for Tiefo-N that would (we think) have pleased and surprised Manessy and Winkelmann.

## Acknowledgements

Heath, Hantgan, and Ouattara gratefully acknowledge funding from the National Science Foundation (USA.), Documenting Endangered Languages (DEL) program, especially BCS-1263150 (2013-17). Heath also acknowledges support from the University of Michigan, Dept. of Linguistics and African Studies Center.

Our primary informants, thought to be the last fluent speakers of Tiefo-N, have been Mr. Assory Ouattara (born 1947) and Mrs. Dongui Ouattara (born 1936).

We thank the people of Tiefo villages, especially our host Lameen Ouattara, a moderately competent Tiefo-N speaker who also participated in the Nyafogo field sessions. We also have fond memories for the hospitality afforded us in Noumoudara and Daramandougou.

# Phonology

## Consonants

The inventory is (xx1), in IPA.

(xx1) IPA

stops/affricates

voiceless *p t tʃ k k͡p*

voiced *b d dʒ g g͡b*

fricatives/approximants

voiceless *f s*

voiced  *ɣ ʕ*

nasal stops *m n ɲ ŋ ŋ͡m*

lateral  *l*

tap  *ɾ*

glides (semivowels) *w j*

glottal  *ʔ*

Comments:

* *ɾ* (tap) occurs only intervocalically (VrV, C=erV, VCrV);
* /g/ between two *a* or *ɔ* vowels spirantizes to *ɣ* especially after the first syllable of a stem;
* /g/ sometimes varies with *ŋ* in a nasalized environment;
* in nouns, pharyngeal *ʕ* is common intervocalically at the beginning of third or fourth syllables from the left, and is arguably analysable as a positional allophone of *ɣ* ;
* *ʔ* occurs word-fnally as a negative morpheme on verbs.
* labial velars (*k͡p*, *g͡b*, *ŋ͡m*) occur stem-initially, and in a few cases are synchronically derivable from /kw/ etc.

We use the practical orthography in (xx2). The consonants for which non-IPA symbols are used are preceded by →. Ligatures are omitted for labial velars. Note especially *y* = IPA [j] and *y* = IPA [dʒ].

(xx2) Orthography

stops/affricates

voiceless *p t* → *c k* → *kp*

voiced *b d* → *j g* → *gb*

fricatives/approximants

voiceless *f s*

voiced  *ɣ ʕ*

nasal stops *m n ɲ ŋ* → *ŋm*

lateral  *l*

tap → *r*

glides (semivowels) *w* → *y*

glottal *ʔ*

Some consonants reconstructed for Proto-Gur (Naden 1989) are absent. These are \*v and voiced implosives \*{ɓ ɗ ʄ}.

## Vowels

### Vowel length and prolongation

Vowel length is phonemic in all positions in a word. Cvv is distinct from Cv, CvCvv is distinct from CvCv, etc.

In addition, Tiefo-N uses intonation-like prolongation as the productive pluralization of nouns. Even already long vowels can be prolonged, as with *wùú* ‘house’, plural *wùú→*. In cases like this, the prolongation may include a quasi-syllable break, as in [wù.ú→] ~ [wù-wú→].

### Oral vowels

Like other languages of the zone, Tiefo-N has seven vowel qualities. The ATR opposition is limited to mid-height. The vowel qualities in (xx1) have phonemically distinct short and long forms.

(xx1) high *i u*

mid +ATR  *e o*

mid -ATR  *ɛ ɔ*

low  *a*

High vowels are ATR-neutral may combined with either +ATR or ‑ATR vowels within a stem. Proto-Gur is reconstructed with ±ATR extended to high and low vowels (Rennison 1992). W98 (pp. 35-37) identifies indirect vestiges of \*a (‑ATR) versus \*ʌ (+ATR) in Tiefo-D imperfective/perfective alternations, which for some Ca verbs are *e/a* and for others are *ɛ/a*. One of these is Tiefo‑D *bē\\bà* ‘come’; see the discussion of irregular Tiefo-N *bà* and *bé* in §8.3 below. The abundant Tiefo‑N alternations involving imperfective a and perfective e or ɛ are also relevant; see the lists of verb alternations in §8.5.1 below.

The sequence /eo/, which occurs in combinations of a verb ending in *e* plus an encliticized object pronoun *=ò* or nominal prefix *ò*, is sometimes pronounced [øː] with a front rounded articulation.

(xx2) *pló=ò* ~ *plǿ=ø̀* ‘jabbed him/her’

< /plê=ò/

### Nasal vowels

Nasalization is indicated by superscript *ⁿ* after the vowel. Mid vowels can be nasalized only if ‑ATR (*ɛⁿ* or *ɔⁿ* ).

(xx1) Nasalized vowels

*iⁿ uⁿ*

*ɛⁿ ɔⁿ*

*aⁿ*

### Vowel sequences

In addition to combinations of vowels with peripheral glides (Cyo, Coy, etc.), there are some cases of Cɔ̯ɛ (often in word-final Cɔ̯ɛy) and of Co̯e which have a partially desyllabified mid-vowel. What we write as Cɔ̯ɛy could be analysed as /Cɔy/, with labialization decreasing during the syllabic nucleus.

## Syllables

Syllables are Cv, Cvv, , Cvw (or Cvwⁿ), Cvy (or Cvyⁿ), Cvŋ, and Cvvŋ, plus counterparts of any of these with initial CL (L = *l w y*) replacing simple C. While *l* may form part of a Cl cluster, tap *r* cannot form #Cr clusters. However, in Cvrv and longer stems, the first vowel is often reduced to a schwa before the tap *r*. In all these formulae, vv represents a long vowel or tautosyllabic vowel sequence.

## Correspondences between Tiefo-N and -D

Although the two languages have similar consonant and vowel inventories, and many cognates, the relationship between cognate words is often disguised by sound changes. W98 gives the examples in (xx1); we use blue for Tiefo‑D. The Tiefo-N examples (mostly from Noumoudara) are shown here with the tone markings from W98 (except that M-tone is overtly marked). One important correspondence is Tiefo‑D intervocalic glottal stop *ʔ* for Tiefo-N *g*. We note also *c* for *s*, and *d* for affricate *j*.

(xx1) gloss Tiefo-D (W98) Tiefo-N (W98)

‘river’ *blāʔā* ~ *blā bárágà* ~ *bálágà*

‘household’ *dráⁿ dárāgá*

‘hair’ *brà(ʔà) bàgàlē*, *bàràì*

‘dog’ *būɔ̰̄* *bɔ̄ⁿʔɔ̄ⁿ*, *bɔ̄ⁿɔ̄ⁿ*

‘skin’ *cēʔē sērēgē*

‘urine’ *cīcí sīsīū*

‘millet cake’ *cùrū sūrū*

‘sun(light)’ *dè jàgā*, *yèà*

‘elder brother’ *dɛ̄ jɔ́*

## Tones

### Inventory and transcription

W98 reports three tone levels for Tiefo-D. Using *a* as the vowel, she transcribes *á* (high), *a* (mid), and *à* (low). We will use *á*, *ā*, and *à* for Tiefo-D, even in citing data from Winkelmann, making the mid tone explicit. Tiefo-D has some atonal morphemes that really should be transcribed without tonal diacritics in their lexical form.

Changing the color we use *á*, *ā*, and *à* for Tiefo-N, including the occasional datum cited from Winkelmann. Tiefo-N also has three tone levels, but they pattern differently from what W98 reports for Tiefo-D. Whereas Tiefo-D reportedly has many M‑toned nouns, Tiefo-N does not. (xx1) shows two minimal trios reported by W98 (p. 71) for Tiefo-D, and their Tiefo-N counterparts. Parenthesized Tiefo-N words are not cognate and should be disregarded here.

(xx1) Tiefo-D Tiefo‑N

a. *dɛ́* ‘body’ (*kɛ́dì* )

*dɛ̄* ‘brother’ *dɛ̌* ‘elder sibling’

*dɛ̀* ‘field’ (*fíyáʕā* )

b. *só* ‘pail’ *sóóŋ*

*sō* ‘pig’ *sòý*

*sò* ‘horse’ *sòóŋ̀*

In these and some other cases, Tiefo-D M‑tone corresponds to rising tone (orthographic v̌ or v̀v́) in Tiefo-N. As this suggests, M‑tone is not regular for monosyllabic nouns in Tiefo-N. For nouns, it occurs only as part of HM sequences. On the other hand, grammatical particles and verb forms may be M‑toned.

Contour tones within a syllable in Tiefo-N are two types of falling tone: HL and HM, one rising tone LH, and (rarely) a bell-shaped tone LHL. Examples of all the Tiefo-N syllable tone possibilities using monosyllabic words are in (xx2).

(xx2) type example gloss

a. monotonal

H *wúú* ‘death’ (compare *wùú* ‘house’)

M *gō* ‘be (present)’

L *mɛ̀ɛ̀* ‘okra’

b. contoured

*bitonal*

HL *yáà* ‘co-wife’

HM *bíīⁿ* ‘roof’

LH *dɛ̀ɛ́* ‘sauce’

*tritonal*

LHL *sòóŋ̀* ‘horse’

## Phonological processes

### Affrication and palatalization

As in Tiefo-D, there is partial (subphonemic) affrication of *t* and *d* before *i* and *y*. However, *ti* remains distinct from *ci*, and so forth. We will generally disregard subphonemic affrication in transcriptions.

### Reduction of vowel to schwa

A short vowel is typically reduced toward schwa, but not syncopated entirely, in the environment C\_rv with a tap *r* and word-initial C. These sequences typically surface as Cərv with a shortened but still audible schwa-like vowel. A full pronunciation with one of the regular short vowels is usually also possible.

An example with a verb stem is *tə̀rà\\tə̀rè* ‘ask (sb, to do sth)’; additional examples are in (xx1c) in §8.5.1.

### Syncope

Historically, \*Cvlv is the probable source for stems that are now Clv in Tiefo‑N. In such cases there is no synchronic evidence for a /Cvlv/ underlying representation. An example is the verb *klē\\klè* ‘clap (hands)’; for more examples see (xx1d) in §8.5.1. If this historical interpretation is correct, the difference between \*Cvrv and \*Cvlv is that the reduction of the first vowel is partial (to schwa) in the first case and total in the second. See the actual verb-stem alternations of the type Cərv\\Clv in §2.6.6 below. Bisyllabics like *blákā\\blékè* ‘be cured’ may likewise derive from trisyllabic etyma via syncope before l.

However, there is no fully productive synchronic rule of the type word-initial Cvlv → Clv. Counterexamples include *wúlà\\wúlè* ‘flip, turn over (calabash)’ *kúlā\\kúlè* ‘(baby) crawl’, and *jōlà\\jōlè* ‘sleep (v)’. Nor is syncope required in the medial syllable of CvCvlv, as shown by numerous trisyllabic verbs like *sɔ̄ɣɔ̄lā\\sɔ̄ɣɔ̄lè* ‘fear, be afraid’; see (xx2a) in §8.5.1.

### Secondary formation of labial velars from /kw gw ŋw/

Two synchronically irregular perfective/imperfective alternations of the type *ko/kp* and *ku/kp* suggest a no longer productive process converting velar plus *w* (representing desyllabified *o* or *u*) into a labial velar: /kw/ → *kp* (xx1a). One infers the possibility of parallel /gw/ → *gb* and /ŋw/ → *ŋm*. However, other cases of *kw* etc. that do not fuse into labial velars, as with *kɔ̀ⁿ\\kwɛ̀ⁿ* ‘understand’ (xx1b), compare *kwɔ́làʕá* ‘good’ versus predicative *kò* ‘be good’. Conversely, many stems have invariant labial velar {*kp gb ŋm*} that does not alternate with a Cw cluster (xx1c).

(xx1) imperfective perfective gloss

a. *kō kpà* ‘hit’

*kú kpâ* ‘cut’

b. *kɔ̀ⁿ kwɛ̀ⁿ* ‘understand’

*kɔ̄* ~ *kwɔ̄ kā-bà* ‘end, be used up’

c. *ŋmā ŋmɛ̀* ‘(baby) suckle’

*gbā gbà* ‘split (wood)’

*kpá kpá-là* ‘weep’

See W98: 62 for comparable cases in Tiefo-D, including two *gu/gb* alternations.

In these labial velars, the velar and labial articulations overlap and a click-like effect is produced by suction. There is no distinction between velar-labial consonant cluster sequences and labial velars, so we omit the ligature in transcriptions.

However, occasional fluctuation between co-articulated *ŋm* or *gw* and sequential *ŋw* or *gw* was observed in less common stems. For example, ‘sparrowhawk’ was heard both as *gbɛ́y* with labial velar and as *gwɛ́y* with stop-semivowel sequence.

### Intervocalic liquid-deletion

Tap r is subject to sporadic deletion intervocalically, resulting in vowel contraction (vrv → vv). There are some doublets with and without medial r in the vocabulary. The nominal plural by prolongation of the final vowel or sonorant likely originated as reduction of plural suffix \*‑rv (with echo vowel copied from the stem-final) and contraction, usually forming a pure long vowel. The rhotic suffix is well-preserved in Tiefo-D.

There are also some perfective/imperfective verb stem alternations in which one form lacks a medial *r* found in another form. The *r*-less form appears to “grow” a final *y* (xx1a). In a few cases it is *l* rather than *r* that drops (xx1b).

(xx1) imperfective perfective gloss

a. *dɛ́y də́rá* ‘be full’

*dōy* ~ *dɔ̄rɔ̄* ~ *də̄rɛ̄ də̀rà* ‘buy’

*kpɔ̄rɔ̄* ~ *kpɔ̄y* *kpɛ̀rà* ~ *kpɔ̀rɔ̀* ‘uproot’

*géȳⁿ*~ *gérēⁿ* ~ *gə́rēⁿ géré-mà* ‘stir with stirring stick’

*jɔ̄y jɔ̀rà* ‘(bird) peck’

b. *mɛ́yⁿ mlâⁿ* ‘inflate’

*pòyⁿ plàⁿ* ‘succeed’

*tú túlɛ̀* ‘spit’

For cases where medial *r* is stable in a verb stem, see the following section.

In the case of *bə́rí\\bí-là* ‘ask’, if we take *-là* as a perfective suffix (as with many other verbs), we have a further example of *r*‑deletion.

### *r/l* alternations

Some verbs show *r/l* alternations in their perfective/imperfective pairings (xx1a). Some of the alternations are of the form Cərv versus Clv (presumably syncopated from original \*Cəlv). Several other verbs have stable *l* (xx1b) or stable *r* (xx1c).

(xx1) imperfective perfective gloss

a. *bə́rú blâ* ‘be wrong’

*fɛ̀rè flà* ‘cover’

*gə́rú glâ* ‘exit (v)’

*kə́rù klâ* ‘touch’

*kɔ́rɔ́ⁿ* ~ *ká* *klâⁿ* ‘chew’

*sírí sílà* ‘be/do for a long time’

b. *klàⁿ klɛ̀ⁿ* ‘tilt’

*plé plê* ‘jab’

c. *kpɛ́rɛ́ kpɛ́rɛ̀* ‘descend’

*mə́rⁿɛ́ mɛ́rⁿà* ‘throw’

*pə̄rɛ̄ pɛ̀rɛ̀* ‘adhere’

### *g/ŋ* and *g/ɣ/ʕ* alternations and *g/ŋ*-deletion

Intervocalic *g* may shift to *ŋ* in a nasalized environment.

(xx1) imperfective perfective gloss

*sìgìⁿ ~ sìŋì sìgì-mà* ‘run’

Voiced fricative *ɣ* (velar, approximately) patterns as a spirantized allophone of *g* between two *a* or *ɔ* vowels. The degree of frication (turbulence) is slight in any position (see below on further lenition to *ʕ* ). Actual alternations occur in verb stems (xx2a). The relationship between the two may be obscured by the separate alternation of *g* with *ŋ* (xx2b). For example the perfective of ‘pay’ likely derives from \*nìgɛ̀ⁿ, compare the variants for ‘shout’ (xx2b).

(xx2) imperfective perfective gloss

a. *dɔ̀ɣɔ̀ dìgɛ̀* ‘follow; hear’

*kláɣā klégè* ‘become short(er)’

*sáɣáⁿ sígèⁿ* ‘rub on’

*súgú sɔ́ɣɔ́* ‘catch’

*tígɛ̄ⁿ tígɛ̄ⁿ* ~ *tíŋɛ̀* ‘heat (sth)’

b. *nàɣàⁿ nìŋɛ̀* ‘pay (sb)’

*fàɣàⁿ fìgɛ̀ⁿ* ~ *fìŋɛ̀* ‘shout’

*tàɣàⁿ* ~ *tìgɛ̀ⁿ* ~ *tìŋɛ̀ tìŋɛ̀* ~ *tàɣàⁿ* ‘ignite’

In ‘fall’ (xx3a), medial *g* appears to have disappeared entirely. The same is true of *ŋ* in (xx3b), but given the *g/ŋ* alternations we have seen, it may be that what was originally deleted was \*g in \*sùgɛ̀ⁿ or \*sùgàⁿ. In neither of these cases was the \*g in the vocalic environment that favored spirantization to *ɣ*, so what actually happened diachronically is obscure.

(xx3) imperfective perfective gloss

a. *só súgà* ‘fall’

b. *sɔ̀ⁿ sùŋɛ̀* ~ *sùŋà* ‘work (v)’

Tiefo-N has many nouns and adjectives with shapes like CvCaʕa and CvCɔʕɔ, where *ʕ* is our effort to capture the similarity between a lenited \*ɣ and the famous Arabic pharyngeal consonant. In this position, i.e. at the onset of the third or later syllable of a polysyllabic word, frication is inaudible, and the phonetic output is best described as having a long pharyngealized [aˤ] or [ɔˤ], i.e. as [CvCaˤː] or [CvCɔˤː]. The relationship between this and the glottal stop reported by W98 for Tiefo-D in similar positions is worth exploring.

### *n/r* alternations

Intervocalic *n* optionally lenites slightly to a tap *r*, preserving nasality in (at least) the following vowel. Presumably the actual process is reduction of nasal stop *n* to nasalized tap *rⁿ*, followed by redistribution of the nasal feature. Examples involving aspect pairings for verbs are in (xx1). We noticed quite a few cases like these in our lexical work but did not collect them intensively.

(xx1) imperfective perfective gloss

a. *nānà* ~ *nāràⁿ nɛ̀nɛ̀* ~ *nɛ̀rɛ̀ⁿ* ‘make (sth); fix’

b. *ɲínà* ~ *ɲíràⁿ* *ɲínè* ~ *ɲírèⁿ* ‘receive, accept’

## Tonology

### Tonal melodies of nouns

Monosyllabic Tiefo-N nouns may have lexical melodies /H/, /HL/, /HM/, and /LH/. Nonmonosyllabics may be any of these, plus /HLH/, /LHL/, or /LHM/. There is no /M/ melody for noun stems. Note that slashes /…/ enclose lexical tone melodies.

The lexical melody is usually realized without change. However, tones of nouns are dropped to {L} after *dí* in possessive constructions. Curly brackets {…} enclose grammatically conditioned (ablauted) tone overlays.

Since there is no distinction between /HL/ and /ML/ in nouns, an argument could be made that what we transcribe as /HL/ might alternatively be analysed as /ML/. However, HL and ML patterns are distinguishable in verbs, and we hear the relevant nouns as HL-toned.

A distinction should be made between true /HM/, which is limited to light stems (Cvv, CvL with L = {*w y ŋ*}, or CvCv), and a surface HM that results from partial tone-lowering of the final syllable of an /H/-melody sequence in a heavy nonmonosyllabic such as CvCvv or CvCvCv. For such heavy stems there is no opposition between /H/ and /HM/ melodies; we transcribe with HM tones, e.g. Cv́Cv̄v̄, but we are free to interpret such words as having /H/ melody structurally.

Examples of the lexical melodies with light stems:

(xx1) a. Cv

/H/ *báⁿ* ‘sheep’

/HL/ *kâ* ‘day’

/L/ *pùⁿ* ‘powder’

/LH/ *cɔ̌* ‘hole’

/M/ — —

b. CLv

/H/ *bló* ‘rain (n)’

/L/ *flɔ̀* ‘baobab (tree)’

/LH/ *fwɔ̌* ‘fish’

/M/ — —

c. CvL

/H/ *tɔ́wⁿ* ‘iron’

/HL/ *búỳⁿ* ‘spring (water)’

/HM/ *bɛ́ȳⁿ* ‘winnowing van’

/L/ *pɛ̀yⁿ* ‘foot’

/LH/ *dɔ̀ẃ* ‘cut (wound)’

/M/ — —

d. Cvv

/H/ *tííⁿ* ‘granary roof’

/HL/ *yáà* ‘co-wife’

/L/ *mɛ̀ɛ̀* ‘okra’

/LH/ *dɛ̀ɛ́* ‘sauce’

/M/ — —

e. CvvN(N = *ŋ*, all known examples)

/H/ *kóóŋ* ‘door (as object)’

/HM/ *dóōŋ* ‘fontanel’

/LHL/ *sòóŋ̀* ‘horse’

f. CvCv

/H/ *gbéné* ‘cassava’

/HL/ *bíkà* ‘fetish (idol)’

/HM/ *ládɔ̄ⁿ* ‘mistletoe’

/L/ *jàkà* ‘manner’

/LH/ *bàwáⁿ* ‘elephant’

/M/ — —

g. CLvvN (only example)

/LHL/ *plòóŋ̀* ‘grasshopper’

Examples with heavy stems follow. Keep in mind the remarks above about the lack of distinction between /HM/ and /H/ for heavy stems. For trisyllabic and longer stems, /LH/ melody must be subdivided into /L\*H/ and /LH\*/, and /HL/ melody needs to be subdivided into /H\*L/ and /HL\*/, depending on whether the tone break occurs at the first or at the last syllable/mora boundary. The asterisk \* indicates that the tone just to its left may be repeated. Thus /L\*H/ includes bisyllabic L.H and trisyllabic L.L.H, while /LH\*/ includes bisyllabic L.H and trisyllabic L.H.H. They converge in the bisyllabic case but are distinguishable with longer stems.

(xx2) a. CvCvv

/H(M)/ *dímīī* ‘large oven’

/HBʟ/ *ʃítòòⁿ* ‘middle’

/LH\*/ *bìtííⁿ* ‘saddle’

/L\*H/ *fùwàáⁿ* ‘aluminum’

/LHM/ *kàkóōⁿ* ‘donkey’

/LHL/ *bìtáàⁿ* ~ *bìtɔ́ɔ̀ⁿ* ‘leopard’

b. CvCvCv

/H(M)/ *búgúnɛ̄* ‘groundnut’

/H\*L/ *sɔ́ʕɔ́kà* ‘hawk’

/HL\*/ *sísɔ̀ʕɔ̀* ‘young man’

/HLH/ *sákɔ̀ʕɔ́ⁿ* ‘enemy’

/L/ *kòròbà* ‘parrot’

/LH\*/ *lèmúrú* ‘lemon’

/L\*H/ *dìyɔ̀ʕɔ́* ‘cockroach’

/LHM/ *sèdúdū* ‘coucal (bird)’

/LHL/ — —

c. other

/HLH/ *báráʕàá* ‘pond’

*wáàm-bí* ‘orphan’ (derived)

The shape CvCvL (with L = *w*, *y*, *ŋ*) does distinguish /H/ melody from /HM/ melody, unlike CvCvv which does not. CvCvL must therefore be classified as prosodically light, like CvCv. Examples of CvCvL are in (xx3).

(xx3) CvCvL

/H/ *ɲɔ́rɔ́wⁿ* ‘thirst’

/HM/ *kɔ́tɔ̄w* ‘scraping tool’

/HL/ *ɲóròwⁿ* ‘shade’

/L/ *pɔ̀rɔ̀w* ‘shoulderbag’

/LH/ *gbɔ̀yɔ́wⁿ* ‘African eggplant’

*kòròẃⁿ* ‘forehead (bone)’

/LHL/ *sàwóẁⁿ* ‘cat’

### Tonal and segmental ablaut in verbs

Verbs have two stem forms, which we label perfective and imperfective although this oversimplifies their respective distributions. The relationship between perfective and imperfective forms is rather irregular, with many pairings that are clearly learned as such rather than being predictable by productive morphophonological processes. Both tones and segments are typically involved in the stem alternations. Because of these irregularities, we do not speak of lexical melodies of verbs. Details are reserved for chapter 8 on verb morphology.

### Tone sandhi processes

#### LH#H-to-LL#H and LH#L-to-LL#H

LH-toned words whose final H is limited to a terminal mora or syllable flatten to L‑toned when closely phrased with a following word. This is observable in N-Adj combinations and in N-N compounds. The initial element ranges from monosyllabics like *dɛ̀ɛ́* ‘sauce’ to trisyllabics like *fɔ̀ⁿfɔ̀ní* ‘viper’. Examples of LH#H-to-LL#H with *dígínā* ‘one’ are *fɔ̀fɔ̀nì dígínā* ‘one viper’ and *dɛ̀ɛ̀ dígínā* ‘one sauce’. The process also applies before adjectives, as in *fɔ̀ⁿfɔ̀nì sáŋgbə́ráʕáⁿ* ‘a big viper’, and in general before any word beginning in H‑tone.

In LH#L-to-LL#H, the H‑tone shifts from the final syllable or mora of the first element onto the second element. As a result, many adjectives have at least two tonal forms, one of them (following /…LH/ nouns) is due to this process. In N-Adj combinations affected by this, the adjective sometimes has an HL pattern with just the first syllable raised to H. In other N‑Adj combinations, the adjective has an all‑H or HM pattern, suggesting that the entire stem is raised. An example of such an adjective is ‘white’, which occurs in L‑toned form in *sày fìyàʕàⁿ* ‘white earth’ and in HM-toned form in *yèyàʕà fíyāʕāⁿ* ‘white ax’ < *yèyàʕá*.

The decoupling of the final H‑tone from the first element does not apply to LH\* nouns such as *lɛ̀múrú* ‘lemon’ whose H‑tone extends over two or more syllables: *lɛ̀múrú dígínā* ‘one lemon’.

#### HM#(H)-to-HH#(ꜜH)

HM-toned nouns with a single M‑toned syllable or mora flatten to H‑toned when closely phrased with a following word, as in N-Adj combinations. If the following word is all‑H‑toned, it is downstepped.

(xx1) a. *bɔ́ɣɔ̄ⁿ* ‘dog’

b. *bɔ́ɣɔ́ⁿ ꜜfyɔ́ⁿ* ‘white dog’

#### <LH>-to-H

Under conditions not well understood, a monomoraic <LH>-toned word like *ɲǔ* ‘water’ flattens to H‑toned (*ɲú* ) before another word. An example is *ɲú bàɣà* ‘wanting water’ in (xx1a) in §10.3.2. Another is the initial element in agentive compound *yìrí-wólá-wì* ‘singer’, cf. noun *yìrìí* ‘song’ (§4.2.3). This process applies regularly to 3Sg independent pronoun *bǒ* in nonfinal position in clauses.

However, monomoraic <LH>-toned words may also undergo LH#H-to-LL#H or LH#L-to-LL#H (§2.7.3.1) when phrased with a following word. An example of this is *ʃì* *fíyɛ̀yⁿ* ‘white millet’ from *ʃǐ* ‘millet’, see (xx1c) in §5.3.

#### Tone-dropping after possessive *dí*

Nouns drop to L-toned after *dí* in the possessive sequence X *dí* Y ‘the Y of X’.

(xx1) noun 3Sg possessor

*lɛ̀múrú ŋ̀ dí lɛ̀mùrù* ‘his/her lemon’

*kèyàʕá ŋ̀ dí kèyàʕà* ‘his/her meat’

*díyáʕāⁿ ŋ̀ dí dìyàʕàⁿ* ‘his/her fire’

# Nouns, pronouns, and nominal modifiers

## Nouns

### Noun classes

Manessy (1982: 144) already identified cases of Tiefo‑D nouns that contain now-frozen noun-class suffixes:

*‑gV* ~ *‑ŋV*, *‑de*, *‑nu* ~ *‑ru*, *‑ne* ~ *‑ni*, *‑e*, *‑a*, *‑ɲo*, *‑ri*, *‑n*.

See the detailed commentary in W98: 106.

However, the synchronic system of noun classes revolves around the “vocalic prefix,” either *à*, *ò*, or *è*. We write it as a separate word since it tends to encliticize to the preceding word if there is one. Often the vocalic prefix is absent clause-initially (i.e. for subject NPs). The class determines which 3Sg pronominal proclitic is used to represent the nouns, for example as subject proclitics in positive inflections: O-class and all humans take *ŋ̄*, A-class nonhumans take *ā*, and E-class nouns (all nonhuman) take *ē*. There is still a semi-productive concord system in certain adjectives and the demonstratives.

Kin terms are difficult to elicit with a prefix since they are normally possessed. Possessors precede possessums and do not allow a vocalic prefix.

#### O-class nouns

The O-class is common for adult humans (xx1a) and animals (xx1b). There are also several important inanimates (xx1c). There is no consistent phonological signature for the O-class, but a fair number of the stems do end in a back rounded vowel or *w*.

(xx1) a. human O-class

*ò yǎ* ‘woman’

*ò dɔ̯ɛ̀ý* ‘man’

*ò sùⁿ* ‘blacksmith’

*ò tòmí* ‘chief’

*ò dɛ̌* ‘elder sibling’

*ò ná-mí* ‘child’

b. nonhuman animate O-class

*ò sɔ́rɔ́mɔ̄ⁿ* ‘fly (n)’

*ò wú* ‘bush duiker (mammal)’

*ò plòóŋ̄* ‘grasshopper’

*ò bárákà* ‘animal (any)’

*ò ḿlāāⁿ* ‘chicken’

*ò cɔ̀ⁿ* ‘bird (any)’

*ò fwɔ̌ⁿ* ‘fish (any)’

*ò bɔ́ɣɔ̄ⁿ* ‘dog’

*ò dìdú* ‘louse’

*ò sàwóẁⁿ* ‘cat’

*ò bìŋɔ́* ‘baboon’

*ò sǒmbì* ‘ground squirrel’

c. inanimate O-class

*ò ŋɔ́ɣɔ́ⁿ-bī* ‘star’

*ò sùúⁿ* ‘medication’

*ò ɲǔ* ‘water’

*ò nǔ* ‘oil, butter, (animal) fat’

*ò bló* ‘rain (n)’

*ò yó* ‘tree’

*ò sà-pùⁿ* ‘sand’

*ò fɛ́ⁿ* ‘fonio (cultivated grain)’

*ò póẁⁿ* ‘grass, herbaceous plant’

*ò míyɔ́nɔ̄* ‘rice’ (also ‘hippo’)

*ò jùsúūⁿ* ‘thread; cotton’

*ò kàsù* ‘sorghum’

*ò tìgícɔ̀ⁿ* ‘sesame’

*ò pɔ̀ⁿ* ‘rear end’

#### A-class nouns

The A-class has some human nouns (xx1a). It is the favored class for body parts (xx1b). There are many A-class inanimates (xx1c). A recognizable subset of A‑class nouns have final *ʕa* or *ʕɔ*, often more specifically final *yaʕa* or *yɔʕɔ*, and are trisyllabic or longer (sometimes CCvʕv by syncope < \*CvCvʕv) . It is possible that this ending is related to the noun *à yáɣá* ‘thing’ (xx1c). However, many A‑class nouns have no special phonological signature.

(xx1) a. human A-class

*à ɲɔ́ⁿ* ‘person’ (plural *ò ɲɔ́→* or *ò dyó→*)

*à kásɛ̀ⁿ* ‘white person’ (plural *ò kásɔ̀→*)

*à kà* ~ *kàɣà* ‘mother’

*à tɛ́nɛ́* ‘aunt’

b. A-class body parts and inalienables

*à ŋmá* ‘head’

*à kɛ́dì* ‘body’

*à mɔ̯ɛ́ỳⁿ* ‘nose’

*à júgú* ‘eye(s)’

*à wíí* ‘bone’

*à tòy* ‘ear’

*à kùrùú* ‘belly’

*à kúrúú* ‘navel’

*à ɲɔ̯ɛ́yⁿ* ‘heart’

*à kɛ̀rɛ̀ý* ‘hand’

*à pɛ̀yⁿ* ‘foot’

*à yéyⁿ* ‘name’

c. nonhuman A-class

*à yáɣá* ‘thing’ (plural *è yɛ́→*)

*à júú* ‘dance’

*à níí* ‘odor’

*à sɔ́ẁ* ‘hat; head shawl’

*à wùú* ‘house’

*à díⁿ* ‘cloud’ or ‘filth’

*à dí* ‘food’

*à fə́rɛ́y* ‘moon’

*à fə̀rɛ̀ý* ‘garment’

*à sùŋá* ‘morning’

*à dòẃⁿ* ‘disease’

*à bítɔ́ɔ̄* ‘leaf’

*à dɔ̀ɣɔ́* ‘kola nut’

*à dáɣánī* ‘wood’

*à tə̀rèýⁿ* ‘ladder’

*à kàméyⁿ* ‘yam’

*à nɛ̀rɛ́yⁿ* ‘large grindstone’

*à kúrūūⁿ* ‘boat’

*à sɛ̀rɛ̀yⁿ* ‘rock’

*à pɔ́ɣɔ̀w* ‘stick (n)’

*à pɔ̀rɔ̀w* ‘shoulderbag’

*à bìrgíí* ‘mud brick’

*à sàràbɔ́wⁿ* ‘charcoal’

d. nonhuman A-class, with final *ʕa* or *ʕɔ*

*à ŋmìyàʕá* ‘market’

*à ɲùyɔ̀ʕɔ́ⁿ* ‘wind (n)’

*à pìyàʕáⁿ* ‘knife’

*à léyáʕā* ‘smoke’

*à yèyàʕá* ‘ax’

*à kàràʕá* ‘rainy season’

*à yèyàʕà* ‘sun, day’

*à fíyáʕā* ‘field’

*à wíyàʕà* ‘snake’

*à tìyàʕá* ‘place’

*à nìyɔ̀ʕɔ́ⁿ* ‘mouth’

*à díyáʕāⁿ* ‘fire’

*à dìyɔ̀ʕɔ́* ‘cockroach’

*à də́ráʕā* ‘courtyard’ (variant *à də́rììⁿ* )

*à ʃìnɔ̀ʕɔ́ⁿ* ‘ashes’

*à kèyàʕá* ‘meat’

*à b(í)láʕā* ‘dust’

*à p(ù)wɔ̀ʕɔ́* ‘porridge’

*à pàrⁿàʕàⁿ* ‘hunger’

*à báráʕàá* ‘pond’

*à kàníyáʕá* ‘sickle’

#### E-class nouns

All E-class nouns are inanimate. Nearly all to end in a front vowel or *y*, which likely reflecting an original suffix (word-final *y* often alternates with *e/ɛ*, including E-class object clitics). However, other nouns ending in these segments are O‑ or A‑class (see the lists above).

(xx1) a. human E-class

[none]

b. E-class body parts (final front vowel or *y* )

*è káɣáyⁿ* ‘tooth’

*è bàɣày* ‘hair’

c. other E-class inanimates (final front vowel or *y* )

*è lě* ‘house compound with courtyard’

*è píⁿ* ‘excrement’

*è ʃîⁿ* ‘time, moment’

*è ŋmɛ́* ‘egg’

*è yéé* ‘gear’

*è dɛ̀ɛ́* ‘sauce’

*è ŋwɛ̀ɛ́* ‘balafon (native xylophone)’

*è sɔ̯ɛ̀ɛ́* ‘work (n)’

*è bóȳⁿ* ‘granary’

*è dɛ̀ýⁿ* ‘twig’

*è tɛ̀ýⁿ* ‘daybreak’

*è sàýⁿ* ‘thorn’

*è júwìⁿ* ‘fun, amusement’

*è sìgɛ́* ‘fatigue’

*è sùŋɛ̀ɛ́* ‘shea tree (*Vitellaria*)’

*è bàràýⁿ* ‘daba (hoe)’

*è sáŋày* ‘maize, corn’

*è kárày* ‘calabash’

*è bíklé* ‘money’

*è lékpàʕày* ‘prayer, holy day’

d. other E-class inanimates (not ending in front vowel or *y* )

*è sùsú* ‘millet cakes’

#### Class changes from singular to plural

Scattered in the lists above are a few nouns that change classes between singular and plural. The most important cases are in (xx1). These may be vestiges of a once more productive system of classes distinguishing singular from plural.

(xx1) singular plural gloss

a. *à yáɣá è yɛ́→* ‘thing’

b. *à ɲɔ́ⁿ* *ò ɲɔ́→* ‘person’ (see below)

*à kásɛ̀ⁿ ò kásɔ̀→* ‘white person’

#### ‘Person’ (*à ɲɔ́ⁿ* ) and suppletive plurals (*ò ná-wò*, *ò dyó→*)

This noun was mentioned in the preceding subsection as one that changes from singular A‑class *à ɲɔ́ⁿ* to plural O‑class *ò ɲɔ́→*. However, the morphologically regular (prolongation) plural *ò ɲɔ́→* is less common than two other suppletive plurals.

(xx1) a. singular

*(à) ɲɔ́ⁿ*

b. plural

(*ò) ɲɔ́→* (uncommon)

*(ò) ná-wò*

*(ò) dyó→*

“Singular” *(à) ɲɔ́ⁿ* is used with a following numeral: *(à) ɲɔ́ⁿ ꜜsáⁿ* ‘three people’. An irregular plural *(ò) ná-wò* occurs in universally quantified *(ò) ná-wò byɛ́* ‘everyone’. In the absence of a quantifier, either *(ò) ná-wò* or *(ò) dyó→* may mean ‘people’.

The initial root in *ná-wò* is etymologically related to that of singular *ná‑mí* ‘child’, plural *ná‑my‑ó→* ‘children’. Compare Tiefo-D *ná‑bí* ‘person’ (whose plural can also mean ‘children’) and *ná‑dɛ̀* ‘old person’ (W98: 237, hyphens added).

*(ò) dyó→* strikingly resembles the human and O‑class plural form *díò→* of the specific indefinite quantifier ‘a certain (one)’ (§5.7). However, the two differ tonally and cannot be directly equated synchronically.

### Nominal plurals

The “plural” form is most common with count nouns. It can also be used with mass nouns to denote increased volume (‘lots of X’).

Most nouns are pluralized by prolongation of the final vowel or sonorant nucleus. This ranges from simple vowel length to a more intonation-like prolongation (even of already long vowels). We represent this by → (xx1). Short contour-toned vowels are split orthographically into two vowels in these plurals, as with ‘woman’.

(xx1) Sg Pl gloss

*yǎ yàá→* ‘woman’

*ɲɔ́ⁿ-yà ɲɔ́ⁿ-yà→* ‘female friend’

*ŋmá ŋmá→* ‘head’

*kɛ́dì kɛ́dì→* ‘body’

*wúú wúú→* ‘bone’

*tòy tòy→* ‘ear’

*cɛ̀fɔ̂ cɛ̀fɔ́ɔ̀→* ‘Tiefo (person)’

Prolonged forms of already long vowels may introduce quasi-syllabic breaks, detected by observing a stress-like pulse in the middle of the long vowel. For example, *wúú→* can be realized as [wú.ú→] or even as [wú.wú→].

Most nouns that end in nasalized vowels in the singular denasalize them in the plural. Examples from among many are in (xx2a). All known exceptions are in (xx2b). Most of these are Cvv monosyllabics that transition to *e* or *o* quality at the end of the prolongation. In ‘totem’, the nasalization originated in the rhotic (\*n → *rⁿ*) rather than in the vowels, which could account for the preservation of nasalization in the plural.

(xx2) Sg Pl gloss

a. denasalized plurals (selected examples, productive)

*bɔ̌ⁿ bɔ̀ɔ́→* ‘monitor lizard’

*cɔ̀ⁿ cɔ̀→* ‘bird (any)’

*m̀láⁿ m̀lá→* ‘millet beer’

*yóōⁿ yóō→* ‘crocodile’

*bɔ́ɣɔ̄ⁿ bɔ́ɣɔ̄→* ‘dog’

*ɲɔ́rɔ̀ⁿ* *ɲɔ́rɔ̀→* ‘friend’

*kàkóōⁿ* *kàkóō→* ‘donkey’

b. nasalization retained in plural (all known examples)

*díⁿ díⁿé→* ‘filth’

*féⁿ féⁿó→* ‘fonio (grain)’

*píⁿ píⁿé→* ‘excrement’

*tə̀ràýⁿ tə̀ràýⁿ→* ‘totem’

Two nouns have irregular plurals with a suffix *-rɔ*, matching a much more productive plural type in Tiefo-D. The noun ‘man’ in (xx3a) also occurs as a compound final or adjectival modifier denoting males.

(xx3) Sg Pl gloss

a. *dɔ̀ɛ́y dɔ̀-rɔ̀ɔ́→* ‘man’

*ɲɔ́ⁿ-dɔ̀ɛ̀y ɲɔ́ⁿ-dɔ̀-rɔ̀→* ‘male friend’

b. *gbɛ́y gbɔ́-rɔ́→* ‘sparrowhawk’

Nouns ending in agentive *-wì* or diminutive *-bí* (or tonal variant), and *ná-mí* ‘child’ and related forms, have a plural with *-yo→*, whose *y* is probably the desyllabified final *i* of the stem or suffix. In addition, *ɲɔ́ⁿ* ‘person’ may be pluralized either directly as (denasalized) *ɲɔ́→*, or suppletively as *dyó→*.

(xx4) Sg Pl gloss

a. *kwáⁿ-wì kwáⁿ-dyóó→* ‘(an) acquaintance’

(also *kɔ́ⁿ-wì* etc.)

b. *ŋɔ́ɣɔ́ⁿ-bī* *ŋɔ́ɣɔ́ⁿ-b-yō→* ‘star’

c. *ná-mí ná-m-yó* ‘child’/‘children’

d. *ɲɔ́ⁿ ɲɔ́→, dyóó→* ‘person’/‘people’

A few nouns are attested with different final vowel qualities in the singular and plural (the latter sometimes functioning more as a collective).

(xx5) Sg Pl gloss

a. *káⁿsɔ̀ʕɔ̀ⁿ káⁿsàʕà* ‘hunter’

b. *bítɔ́ɔ̄ bítɛ́ɛ̄* ‘leaf’

c. *kásɛ̀ⁿ kásɔ̀→* ‘white person’

d. *blákɛ̄ blákā→* ‘hare’

### Deverbal agentives (*‑wì* )

Verbs form agentives with suffix *‑wì*, distinct from H‑toned *‑wí* in denominal ‘owner of Y’ compounds (§4.2.2). The verb stem is raised to {H} overlay. The examples in (xx1) have no compound initials.

(xx1) agentive gloss verb (Ipfv\\Pfv) gloss (verb)

*dɔ́rɔ́-wì* ‘buyer’ *dɔ̄rɔ̄* (etc.)*\\dɛ̀rù* ‘buy’

*byélá-wì* ‘farmer’ *byé\\byé-là* ~ *-rà* ‘cultivate’

*júlá-wì* ‘seller’ *jō\\jōlà* ‘sell’

*sɛ́rɛ́-wì* ‘woodworker’ *sɛ̄rɛ̄\\sɛ̀rɛ̀* ‘carve’

*dúwáⁿ-wì* ‘sick person’ *dɔ̄ⁿ\\dùwàⁿ* ~ *dàⁿ* ‘hurt’

(~ *dúgáⁿ-wì* )

*júrá-wì* ‘dancer’ *jú\\jú-là* ‘dance’

*kɔ́ⁿ-wì* ‘acquaintance’ *kɔ̀ⁿ* (stative) ‘know’

*ʃyáⁿ-wì* ‘weaver’ *ʃíⁿ\\ʃyâⁿ* ‘weave’

*téré-wì* ‘child beggar’ *tə̀rà\\tə̀rè* ‘ask’

*túgáⁿ-wì* ‘teacher’ *tùŋà\\tùŋà* ‘teach’

In spite of some moderately irregular correspondences, it is clear from (xx1) that the perfective stem is the usual basis for the agentive.

Agentives can function as modifiers of other nouns. (xx3) exemplifies with head nouns *cɔ̀ⁿ* ‘bird’ and *kàɣá* ‘griot, person of caste’.

(xx3) agentive gloss verb (Ipfv\\Pfv) gloss (verb)

*cɔ̀ⁿ yó-plá-wì* ‘woodpecker’ *plá\\plê* ‘jab’

*kàɣá tá-wì* ‘leatherworker’ *tà\\tà* ‘join, link’

For agentives with a compound initial, see §4.2.3.

### Infinitive (*ná* )

A verb, or a verb phrase such as verb plus object (pronominal or nominal), may be nominalized by preposing *ná* to the imperfective stem of the verb. An H‑toned monosyllabic imperfective is dropped a notch to M‑toned. There is no subject marking. For ‘come’, of the two imperfective stems available, *bà* rather than *bé* (the latter used after progressive *wɔ̀ɣɔ̀* ) occurs in the infinitive (xx1b). Transitive infinitives occur preferentially with an overt pronominal or NP object, though object-less infinitive can be elicited (xx1c).

(xx1) infinitive Ipfv Pfv gloss of verb

a. *ná sē sē sà* ‘go’

*ná sìgìⁿ sìgìⁿ ~ sìŋì sìgì-mà* ‘run’

*ná cīⁿ cíⁿ cí-nà* ‘become small’

b. *ná bà bà, bè bà* ‘come’

c. *ná plā plá plê* ‘jab’

*ná plɔ̄=ɔ̄ pló=ō pló=ò* ‘jab him/her’

*ná fī zàkí fí zàkí fíyà zàkí* ‘take Zaki’

Infinitival VPs are used in same-subject event sequences (§13.2.2.1) and in purposive clauses (§13.5).

## Pronouns

### Independent and proclitic pronouns

(xx1) presents the independent forms of pronouns, along with proclitics in subject function (preceding verbs or auxiliaries) and in possessive function (directly preceding nouns). Notice the delicate tonal distinctions in singular subject proclitics, which are partially flipped in possessor function. The *kà* variant 3Sg subject proclitic is used in negative inflections (§9.1.2, §9.2.2, §9.3.2) and optionally in the future positive (§9.3.1).

(xx1) independent proclitic

subject possessor

1Sg *ɲí ŋ́ ŋ̀*

2Sg *mì ŋ̀* (< \*m̀) *ŋ̀* ~ *m̀*

3Sg Hum, 3SgO *kā ŋ̄, kà ŋ̄*

3SgA — *ā, kà* —

3SgE — *ē, kà* —

3Sg (strong) *bǒ* — —

1PlExcl *é-yò é è*

1PlIncl — *yá(ʕ)á* —

2Pl *nā-yò*, *nó-yò, nɔ̄-yɔ̀ nā nā*

3Pl — *ō ó*

3Pl (strong) *bòó* — —

The inclusive form *yá(ʕ)á* is not obligatory. Proclitics of segmental form *ŋ* are syllabified postpausally before a consonant as syllabic labialized [ŋʷ].

As subject, independent 3Sg *bǒ* generally flattens to H‑toned *bó* except when prepausal. Combinations with inflectional particles are future *bó bī*, imperfective *bó wɔ̀ɣɔ̀*, perfective negative *bó kà* ~ *bó wà*, and imperfective negative *bó máɣàⁿ*. The rising tone in *bǒ* is audible prepausally (e.g. as clause-final object) and in isolation.

Independent forms optionally replace proclitics, which helps to distinguish 1Sg, 2Sg, and 3Sg proclitics. The independent third person pronouns *bǒ* and *bòó* are here labeled “strong.” When they replace regular third person proclitics, they may have logophoric-subject functions. In (xx2a), *bǒ* (here *bó* ) functions logophorically since it is coindexed with the quoted author (Zaki). In (xx2b), *kà* is the regular 3Sg pronominal since it is not coindexed.

(xx2) a. *zàkí fó=é [dè bó bī bà]*

Zaki say.Ipfv=3SgE [that **3Sg** Fut come.Pfv]

‘Zaki says/said that he (=Zaki) will come.’

b. *ŋ́ fó=é [dè kà bí bà]*

1Sg say.Ipfv=3SgE [that **3Sg** Fut come.Pfv]

‘I said that he/she will come.’

### Object enclitics

In object function, pronominals are encliticized to the verb. The nonhuman form *=(y)aʕa* occurs chiefly in the perfective as an indefinite inanimate object marker. The 3Sg nonhuman forms are used with certain verbs like ‘know’, ‘say’, and ‘see’, while some others use the human 3Sg for all objects.

(xx1) Enclitic object pronouns

1Sg *=ýⁿ*

2Sg *=wⁿ* (requires preceding *o* or *ɔ*)

3SgHum, 3SgO *=ò*, *=ɔ̀*

3SgA *=(y)àʕà*

3SgE *=ỳ* (after *ɔ ɛ a*)

*=è* (after *o e*)

*=:̀* (tone, after *u i*)

1Pl *=é, =ɛ́*

2Pl *=nā*

3Pl *=ɔɔ*, *=oo*

The clitics that begin with a vowel contract with the stem-final vowel of the verb, and there is some tone sandhi. These processes are exemplified by the paradigms below, beginning with ‘look at’ in perfective and imperfective form in (xx2). The perfective of this verb ends in +ATR *e*, and induces harmonization of the mid-height vowels in 2Sg, 3Sg, 1Pl, and 3Pl forms. The imperfective ends in *a*, which is treated as ‑ATR, so the contracted mid-height vowels are ‑ATR.

(xx2) ‘look at’ *círè* (Pfv) *cə́rá* (Ipfv)

1Sg *círè=ýⁿ cə́r=āyⁿ*

2Sg *cír=òw(ⁿ) cə́r=ɔ̄wⁿ*

3SgHum, 3SgO *cír=ò cə́r=ɔ̄*

3SgA *cír=àʕà*

1Pl *círè=é cə́r=ɛ̄ɛ̄*

2Pl *círè=nā cə́rá=nā*

3Pl *cír=òò cír=ɔ̄ɔ̄*

Combinations with ‘hit’, perfective and imperfective, are these:

(xx3) ‘hit’ *kpà* (Pfv) *kō* (Ipfv)

1Sg *kpà=ýⁿ kò=ýⁿ*

2Sg *kp=ɔ̀wⁿ kò=wⁿ*

3SgHum, 3SgO *kp=ɔ̀ k=ò*

3SgA *kpì=yàʕà* —

1Pl *kp=ɛ̀ɛ́ kò=é*

2Pl *kpà=nā kó=nā*

3Pl *kp=ɔ̀ɔ̀ k=òò*

Combinations with ‘touch’, perfective and imperfective, are these::

(xx4) ‘touch’ *klâ* (Pfv) *kə́rù*

1Sg *kl=áȳⁿ kúrū=ȳⁿ*

2Sg *kl=ɔ́w̄ⁿ kúrū=w̄ⁿ*

3SgHum, 3SgO *kl=ɔ̂ kúr=ū*

3SgA *kl=áʕà* —

1Pl *kl=ɛ́ɛ̄ kúr=ēē*

2Pl *klá=nā kúrú=nā*

3Pl *kl=ɔ́ɔ̀ kúr=ūū*

There is no logophoric third person object pronoun. In (xx5), the 3Sg object clitic on the verb may refer either to the clausemate subject ‘Zaki’ or to another third person.

(xx5) *zàkí jà [ŋ́ k=ò]*

Zaki say.Pfv [1Sg hit.Pfv=3Sg]

‘Zaki said that I hit him/her.’

## Adjectives

Adjectives may function as postnominal modifiers or predicates. Several modifying adjectives have multiple forms. To some degree they still correlate with the prefix class of the noun (*è*, *à*, or *ò* ), but there is much flux in usage.

Examples of modifying adjectives after *wùú* ‘house’ are in (xx1). The noun drops to L‑tone before a H tone, by a regular tone sandhi process (§2.7.3.1). The nominal prefix, if present, is not repeated on the adjective.

(xx1) *(à) wùù yíbī→* / *bí→* / *sáŋgbə́ráʕáⁿ* / *kwɔ́làʕá* / *yɔ́bàʕá*

(Pref) house small / tiny / big / good / black

‘une maison petite/grosse/bonne/noire’

There are two ways to make an adjective into a predicate. First, there are stative predicate constructions. For some adjectives these constructions feature the same form of the adjective used as modifier, preceded (for 3Sg subject) by *kàʕà*. For other adjectives the construction has what appears to be an original nominalization plus *gō* ‘be’, e.g. “its redness exists.” Many adjectives also have an associated inchoative verb (e.g. ‘become big’ or ‘become bigger’), denoting a completed or incremental change of state. These behave like ordinary intransitive verbs, with full perfective and imperfective paradigms.

The paradigms of adjectives can be quite messy, with unpredictable phonological changes or even outright suppletion. Where no dedicated modifying adjective is shown, one can be concocted in the form of a participle from the inchoative verb. Likewise, if a stative predicate is absent it can be replaced by a perfective inchoative (‘has become ADJ’).

We present adjectives in small semantically based groups. The first group denotes overall size (xx2). For ‘big’, the longest form *sáŋbə́ráʕáⁿ* tends to be emphatic. Likewise, *yíbí* ‘small’ is regularly prolonged as *yíbī→* for emphasis, showing that this is source of *bí→* ‘tiny’. Recall that prosodically heavy stems with HM tone contours are structurally H‑toned and may be phonetically H‑toned when phrased with a numeral or other following word. The labels O, A, and E are suggestions as to the original concord function of the variants, and they are not consistently used in that fashion. See §5.3 for arrays of actual N‑Adj combinations, which bring out the imperfect concord between the classes of nouns (defined by their vocalic prefixes) and adjectival forms.

(xx2) modifying stative inchoative gloss

a. *sáŋgbwɛ̄yⁿ* (O) *tû túgà\\túgè* ‘big’

~ *sáŋbə́ráwⁿ*

*sáŋbə́ráʕáⁿ* ~ *sàŋbə̀ràʕàⁿ* (A)

*sáŋgbə́ráyⁿ* (E)

b. *yíbí* ~ *yíbī→ à cííⁿ gō cíⁿ\\cí-nà* ‘small’

c. *bí→* — — ‘tiny’

d. — — *kábá\\kɛ́bɛ̀* ‘many’

‘Big’ and ‘small’ are suppletive. In each cse, the stative and inchoative are phonologically related to each other but both are unrelated to the modifying adjective. *yíbī→* and *bí→* ‘tiny’ have the prolonged pronunciation typical of expressive adverbials (“ideophones”). The verb *kábá\\kɛ́bɛ̀* ‘multiply, increase, become abundant’ has no modifying or stative counterpart, cf. the adverbial quantifer *pyé→* ‘many, much, a lot’ (§5.6).

Next are scalar dimensions (xx3). ‘Long’ is suppletive. When there are tonal variants like *sɔ̀rɔ̀wⁿ* ~ *sɔ́rɔ̄wⁿ*, the form beginning in H‑tone is typically the result of Tone Shift.

(xx3) modifying stative inchoative gloss

a. *sɔ̀yⁿ* (O) *kàʕà sɔ̀ɛ̀yⁿ jāŋà\\jɛ̄ŋɛ̀* ‘long, tall, far’

*sɔ̀rɔ̀wⁿ* ~ *sɔ́rɔ̄wⁿ* (A)

*sɔ́rɛ̄yⁿ* ~ *sɔ́rɔ̄yⁿ* ~ *sɔ̀rɔ̀yⁿ* ~ *sɔ̀ɛ̀yⁿ* (E)

b. *klá kàʕà klá kláɣā\\klégè* ‘short’

c. — — *nɔ́\\nɔ́-mà* ‘thin, slender’

d. *jìràày kàʕà jírā* — ‘thin, meager’

~ *kàʕà jílā*

e. *cɔ́ⁿ kàʕà cɔ̂ⁿ cɔ́ŋɛ̄\\cɔ́ŋɛ̀* ‘deep’

Next is taste (xx4). Food terms are mostly A-class, so these adjectives are usually in the A-class form. However, some nouns that can take taste adjectives, like *ŋmɛ́* ‘egg’, are E-class.

(xx4) modifying stative inchoative gloss

a. *díyāʕāⁿ* (A) *kàʕà dáⁿ dáɣāⁿ\\dígɛ̀ⁿ* ‘sweet, delicious’

*dáyīⁿ* (E)

b. *tɛ̂ⁿ*  *tɛ̂ⁿ\\tɛ̂ⁿ* ‘bitter’

c. *ɲáɣámɛ̄yⁿ à ɲáɣámá gō ɲáɣámá\\ɲáɣámɛ̀* ‘sour’

Next is color (xx5). It is easier to identify O, A, and E variants of the modifying adjectives by their form than to describe their actual distribution.

(xx5) modifying stative inchoative gloss

a. *fyɔ́ⁿ à fíyéyáʕáⁿ gō fíŋá\\fíŋɛ̀* ‘white’

~ *fíyɔ̄wⁿ* (O)

*fíyáʕāⁿ* ~ *fìyàʕàⁿ* (A)

*fìyɛ̀yⁿ* ~ *fíyɛ̀yⁿ* (E)

b. *sɛ̀ⁿ* ~ *syɔ̀ⁿ à ɲáɣáⁿ gō ɲáɣáⁿ\\ɲáɣàⁿ* ‘red, brown’

~ *sìyɔ̀ɔ́ⁿ* (O)

*sìyàʕáⁿ* ~ *síyāʕāⁿ* ~ *sìyàʕàⁿ* (A)

*síyɛ́yⁿ* ~ *síyɛ̄yⁿ* ~ *sìyɛ̀yⁿ* (E)

c. *yɔ̀bɔ̀* ~ *yɔ́bɔ́ à yɔ́w gō yɔ́\\yɔ́-bà* ‘black’

~ *yɔ́bɔ̄w* (O)

*yɔ́bāʕā* ~ *yɔ̀bàʕà* ~ *yɔ́báʕá* (A)

*yɔ́báy* ~ *yɔ́bày* ~ *yɔ́bāy* (E)

Next, temperature and speed. ‘Cold’ and ‘slow’ are expressed by the same adjective.

(xx6) modifying stative inchoative gloss

a. *ɲúrɔ̄wⁿ à ɲíríⁿ gō ɲíní\\ɲínā* ~ *ɲírāⁿ* ‘cold, slow’

b. *fùú* ~ *fúū à tígɛ̀ⁿ gō tígɛ̄ⁿ\\tígɛ̀ⁿ* ~ *tíŋɛ̀* ‘hot’

~ *fùù*

c. *páɣánī* — *páɣánī\\páɣánī* ‘fast’

Next, texture and wetness (xx7). ‘Wet (garment)’ and ‘fresh (grass)’ are related modifying adjectives. There is a suppletive verb for ‘wet’, though its participle *pá dɔ̀ɣɔ̀* can also be used as a modifier.

(xx7) modifying stative inchoative gloss

a. *kàʕá-nà à kàʕá-là*  ‘coarse’

b. *náʕánā à náʕá-nàʕàŋ gō*  ‘hard, difficult’

*náʕánāyⁿ*

c. —  *fōyⁿ\\flàⁿ* ‘smooth’

d. *bə́rīī*~ *bə̀rìì* *pā\\pà* ‘wet; ‘fresh (grass)’

e. *wálāw à wáláʕá gō wálá\\wálè* ‘dry’

*wálāʕā* (A)

The remaining adjectives are lumped together in (xx8).

(xx8) modifying stative inchoative gloss

a. *dɛ̀ ŋ̀ yìràà gō yə̀rà\\yə̀rɛ̀* ~ *yɛ̀* ‘old’

*díyáʕá* ~ *dìyàʕà* (A)

b. *fùɔ̀ⁿ ~ fúɔ̀ⁿ* (OA) *ā gō fúɔ̀ⁿ jà fúɔ̀ⁿ* ‘new’

*fùɛ̀yⁿ ~ fúɛ̀yⁿ* (E)

c. *dúgú-māʕāⁿ kàʕà dúgū dúgā\\dúgè* ‘heavy’

~ *à dúwàʕà gō*

d. *fɔ́ɣɔ́-māʕāⁿ kàʕà fɔ́ɣɔ́-mā fɔ́ɣɔ́mā\\fɔ́ɣɔ́mɛ̀* ‘soft; lightweight’

e. *kòlò* (O) *kàʕà kò*  ‘good’

*kwɔ́lāʕā* ~ *kwɔ̀làʕà* (A)

*kwólāy* (E)

f. *kàɣàý* (E) *è kàɣàý yè*  ‘unripe’

~ *káɣāy*

g. *blákà kaʕà blâ blákā\\blékè* ‘easy’

h. *díì* ‘other’

## Numerals

### ‘1’

The numeral ‘1’ is *dígínā*. It follows the noun, if the noun is overt. The same form is used in the counting cycle ‘1, 2, 3, …’. W98 (p. 145) reports *díŋá* for the extinct Noumoudara dialect.

### ‘2’ to ‘9’

(xx1) presents our data (from Nyafogo) in the far-right column, alongside Winkelmann’s transcriptions for the two Tiefo‑N dialects (W98: 145-146). Unlike nouns, numerals allow M‑tone (see ‘2’).

(xx1) W98: Noumoudara W98: Nyafogo our Tiefo-N

‘2’ *jɔ̄ⁿ jūʔɔ̄ⁿ jɔ̄ⁿ*

‘3’ *sáⁿ sáá sáⁿ*

‘4’ *ŋɔ̄ɔ̄ ŋwōʔō ŋ(w)ɔ̄ʕɔ̄ⁿ*

‘5’ *kāⁿ kàⁿ kàⁿ*

In isolation, ‘2’ has an extended form *jɔ̄ⁿ-mī* ‘2’. This form is optionally used in the counting cycle.

‘6’ to ‘9’ consist of ‘5’ plus ‘1’ to ‘4’. *kàⁿ* mutates slightly to *kɛ̀ⁿ* in this combination. There is a suppletive, or at least heavily phonologically distorted, form for ‘1’ in the composite numeral ‘6’ (cf. *dígínā* ‘1’). ‘3’ is denasalized from *sáⁿ* to *sá*, as in Tiefo-D (W98: 145-146).

(xx2) ‘6’ *kɛ̀-ní*

‘7’ *kɛ̀ⁿ-jɔ̄ⁿ*

‘8’ *kɛ̀ⁿ-sá*

‘9’ *kàⁿ-ŋɔ̄ʕɔ̄ⁿ*

### ‘10’ to ‘100’

*kɛ̌y* ‘10’ is presumably part of the etymological content of *kpàýⁿ* ‘20’. This in turn, in the slightly mutated form *kpɛ̀ýⁿ*, is the base for ‘40’, ‘60’, ‘80’, and ‘100’, which simply add digits from ‘2’ to ‘5’ to the ‘20’ term. A 20-based numeral system is known as vigesimal. The odd-numbered decimals ‘30’ to ‘90’ add *nà támí* to the next lower 20-based decimal term. This consists of *nà* ‘and, with’ and what functions as a suppletive term for ‘10’. The few relevant forms from W98 are included in the inner columns. The apparent tap *r* in the W98 Nyafogo forms is interesting historically given the frequent replacement of the final rhotic syllabic in bisyllabic verb stems by word-final y (*Cvrv* → *Cvy*), see §2.6.5 above.

(xx1) W98: Noumoudara W98: Nyafogo our Tiefo-N

‘10’ *kɛ̄ⁿ kɛ̄r̀ kɛ̌y*

‘20’ *kpāⁿ kpār̀ kpàýⁿ*

‘30’ *kpàýⁿ nà támí*

‘40’ *kpāⁿ-jɔ̄ⁿ kpɛ̄ⁿ-jɔ̄ⁿ kpɛ̀ýⁿ-jɔ̄ⁿ*

‘50’ *kpɛ̀ýⁿ-jɔ̄ⁿ nà támí*

‘60’ *kpɛ̀ýⁿ-sāⁿ*

‘70’ *kpɛ̀ýⁿ-sāⁿ nà támí*

‘80’ *kpɛ̀ýⁿ-ŋɔ̄ʕɔ̄ⁿ*

‘90’ *kpɛ̀ýⁿ-ŋɔ̄ʕɔ̄ⁿ nà támí*

‘100’ *kpɛ̀ýⁿ-kàⁿ*

*nɛ̀*, a variant of *nà* ‘and, with’, is used in combinations of a decimal term and a single-digit term: *kɛ̌y nɛ̀ dígínā* ‘11’, *kɛ̌y nɛ̀ jɔ̄ⁿ* ‘12’.

### ‘Thousand’ and ‘million’

‘Thousand’ is *wɔ̀ɣɔ́* in combination with a following single-digit or other numeral. The LH tone pattern drops regularly to all-L before an H‑tone by regular tone sandhi (§2.7.3.1). Examples are *wɔ̀ɣɔ̀ dígínā* ‘one thousand’ and *wɔ̀ɣɔ́ jɔ̄ⁿ* ‘two thousand’.

### Ordinals

‘First’ as ordinal adjective is *yèɲɔ́*, which has no phonological relationship to *dígínā* ‘1’. Its mix of +ATR and ‑ATR vowels suggests that it may have originally been composite.

Other ordinals are formed by adding suffix *-dó* to the numeral: *jɔ̄ⁿ‑dó* ‘second’, *sáⁿ‑dó* ‘third’, *ŋɔ̀ɣɔ̀ⁿ‑dó* ‘fourth’.

# Nominal compounds

## Ordinary compounds

Below are some compounds whose initial is *bɛ̌yⁿ* ‘the bush, the brousse’. This initial, like other /LH/ stems, appears with level L‑tone before an H‑tone (xx1d‑e) by tone sandhi (§2.7.3.1).

(xx1) a. *bɛ̀ýⁿ-nɔ̯ɛ̀ýⁿ*

the.bush-guinea.fowl

‘wild guinea-fowl’ (< *bɛ̌yⁿ*, *nɔ̯ɛ̀ýⁿ* )

b. *bɛ̀ýⁿ-sàwóō*

the.bush-cat

‘wild cat’ (< *bɛ̌yⁿ*, *sàwóò* )

c. *bɛ̀ýⁿ-sɔ̀ý*

the.bush-pig

‘warthog’ (< *bɛ̌yⁿ*, *sɔ̀ý* )

d. *bɛ̀yⁿ-bɔ́ɣɔ̄ⁿ*

the.bush-dog

‘wild dog, jackal’ (< *bɛ̌yⁿ*, *bɔ́ɣɔ̄ⁿ* )

e. *bɛ̀yⁿ-yó*

the.bush-tree

‘tree(s) of the bush (< *bɛ̌yⁿ*, *yó* )

Examples ending in body-part terms are in (xx2-e). The final is lexically H‑toned, but it drops to L‑toned as compound final after an initial that is H‑, HM‑, or LH‑toned (xx2a‑c). The HM‑toned initial flattens to H‑toned in this combination (xx2b). The LH‑toned initial flattens to L‑toned, as though the final were still H‑toned. Initials of other tone classes do not result in special morphotonological processes (xx2d‑f).

(xx2) a. *báⁿ-ŋmà*

sheep-head

‘sheep’s head’ (< *báⁿ*, *ŋmá* )

b. *bɔ́ɣɔ́ⁿ-ŋmà*

dog-head

‘dog’s head’ (< *bɔ́ɣɔ̄ⁿ* , *ŋmá* )

c. *sòy-ŋmà*

pig-head

‘pig’s head’ (< *sòý* , *ŋmá* )

d. *sàwóẁⁿ-ŋmá*

cat-head

‘cat’s head’ (< *sàwóẁⁿ*, *ŋmá* )

e. *[sé-nɔ̀]-ŋmá*

[catfish]-head

‘catfish’s head’ (< *sé-nɔ̀*, *ŋmá* )

f. *cɔ̀ⁿ-ŋmá*

bird-head

‘bird’s head’ (< *cɔ̀ⁿ*, *ŋmá* )

Before an L‑toned final like ‘foot’, initials present their regular tones.

(xx3) a. *bɔ́ɣɔ̄ⁿ-pɛ̀yⁿ*

dog-foot

‘dog’s foot’ (< *bɔ́ɣɔ̄ⁿ*, *pɛ̀yⁿ* )

b. *báⁿ-pɛ̀yⁿ*

sheep-foot

‘sheep’s foot’ (< *báⁿ*, *pɛ̀yⁿ* )

c. *cɔ̀ⁿ-pɛ̀yⁿ*

bird-foot

‘bird’s foot’ (< *cɔ̀ⁿ*, *pɛ̀yⁿ* )

The prefix vowel that precedes the compound (especially as post-verbal object) is determined by the initial.

## Possessive-type compouds

### ‘X’s Y’

Other compounds take the form of a possessor-possessum NP.

(xx1) *sàɲèyàʕà-wùú*

God-house

‘God’s house; sacrificial altar’ (< *sàɲèyàʕà* ‘God’, *wùú* ‘house’)

### ‘Owner of Y’ (*-wí* )

These compounds (or derivatives) end in *-wí*. After a heavy H‑toned noun it is heard as *-wī* with the usual automatic H‑to-M drop.

(xx1) initial gloss ‘owner of Y’ gloss

*wùú* ‘house’ *wùù-wí* ‘homeowner, head of household’

*lě* ‘compound’ *lè-wí* ‘head of housing compound’

*sàýⁿ* ‘thorn’ *sàyⁿ-wí* ‘thorny’

*də́rììⁿ* ‘courtyard’ *də́rììⁿ-wí* ‘courtyard owner’

*búỳⁿ* ‘spring’ *búỳⁿ-wí* ‘owner of a spring’

*tìyàʕá* ‘place’ *tìyàʕà-wí* ‘owner of a landholding’

*béréyⁿ* ‘tomtom’ *béréyⁿ-wī* ‘owner of tomtom(s)’

*bíklé* ‘money’ *bíklé-wī* ‘owner of money’

The plural is *-wí-yō→* or with prolonged vowel.

The ‘owner’ construction is distinct from the deverbal agentive with L‑toned suffix *‑wì* (see below and §3.1.3).

### Compound agentives (*-wì* )

For simple agentives with *-wì* added to an {H}‑toned verb, see §3.1.3. Agentives lend themselves to compounding, with incorporated objects that designate a typical or pro-forma object.

(xx3) agentive gloss verb (Ipfv\\Pfv) gloss (verb)

initial

*yìrí-wólá-wì* ‘singer’ *wō\\wō-là* ‘sing’

*yìrìí* ‘song’

*náⁿ-dáná-wì* ‘cowherd’ *náⁿ\\ná-nà* ‘drive (livestock)’

*náⁿ* ‘cow’

*wɔ̀ɣɔ̀-náná-wì* ‘goatherd’ *náⁿ\\ná-nà* ‘drive (livestock)’

*wɔ̀ɣɔ́* ‘goat’

*béréyⁿ-blá-wì* ‘tomtom player’ *bə́rí\\bə́rí-mà* ‘beat (tomtom)’

*béréyⁿ* ‘tomtom’

*sùúⁿ-dìyà-wì* ‘healer’ *dē\\dìyà* ‘do’

*sùúⁿ* ‘medication’

*sùùⁿ-glé-wì* ‘herbalist’ *glâ\\glê* ‘take out’

*sùúⁿ* ‘medication’

## Bahuvrihi compounds

In a bahuvrihi, both initial and final have their regular tonal form, except for low-level tone sandhi.

(xx1) a. *ɲɔ́ⁿ kùrù-sáŋbə́ráⁿ*

person belly-big

‘fat person’ (< *kùrùú* )

b. *ɲɔ́ⁿ ŋmá-sáŋbə́ráⁿ*

person head-big

‘big-headed person’ (< *ŋmá* )

## Diminutives

The basic diminutive noun ‘child’ is *(à) ná-mí* ‘child’ (plural *ná-my-ó→*). This may already be a diminutive derivative, since uncompounded *náⁿ* ‘child’ is also attested (but uncommon, and unfortunately homophonous with ‘cow’).

Some other lexified diminutives are *sɔ́-mìì* ‘pestle’ (cf. *sɔ̯ɛ́y* ‘mortar’), *kɔ́‑mìì* ‘finger’ (cf. *kɛ̀rɛ̀ý* ‘hand’), and *ɲɔ́-mìì* ‘toe’. These all have singular *-mìì* becoming plural *‑my-ò→*.

A somewhat more productive diminutive is with *-bì* (xx1) or *-bí* (xx2). The latter includes *‑bī* after a heavy H‑toned stem (‘star’).

(xx1) diminutive gloss related

a. /HL/ or /HM/ to {H}

*tígɛ́ⁿ-bì* ‘honey bee’ *tígɛ̀yⁿ* ‘honey’

*kárá-bì* ‘small calabash’ *kárày* ‘calabash’

*bɔ́ɣɔ́ⁿ-bì* ‘puppy’ *bɔ́ɣɔ̄ⁿ* ‘dog’

b. /LH/ to {H}

*nɛ́rɛ́ⁿ-bì* ‘small grindstone’ *nɛ̀rɛ́yⁿ* ‘large grindstone’

*núnúⁿ-bì* ‘tongue’ *nùnúⁿ* ‘tongue’

c. no tone change

*júgú-bì* ‘(an) eye’ *júgú* ‘eyes’

*kónèy-bì* ‘(a) word’ *kónèy* ‘talk (n)’

*pɔ̀ⁿ-téréy-bì* ‘(one) buttock’ *pɔ̀ⁿ-téréy* ‘buttocks’

*sɛ̀rɛ̀-bì* ‘small stone’ *sɛ̀rɛ̀yⁿ* ‘rock’

*sìɲíríⁿ-bì* ‘young gecko’ *sìɲíríⁿ* ‘house gecko’

d. no independently attested source

*wáàm-bí* ‘orphan’

~ *wɔ́m-bì*

*yú-bì* ‘ring (on finger)’

*búwɔ́ⁿ-bì* ‘kidney’ *búwɔ́ʕɔ̄ⁿ* ‘back’

*dáⁿ-ɲíríⁿ-bì* ‘ember’ *díyⁿáʕāⁿ* ‘fire’

(xx2) diminutive gloss related

*ʃèm-bí* ‘cross-beams’

*ŋɔ́ɣɔ́ⁿ-bī* ‘star’

*bátyààⁿ-bí* ‘arrow’ *bátyààⁿ* ‘bow’

*dìgɛ̀-bí* ‘pit of shea-tree fruit’

*dɔ̀ɣɔ̀-bí* ‘(one) kola nut’ *dɔ̀ɣɔ́* ‘kola (nuts)’

*dúléyⁿ sàⁿ-bí* ‘point of fishhook’ *sàýⁿ* ‘thorn’

The plural of *-bì* is *-by-ò→*. The plural of *-bí* is *-by-ó→*.

# Noun phrase (NP)

## Order of elements within an NP

The maximal linear structure of an unpossessed NP is:

(xx1) vocalic prefix - noun - adjective - numeral - demonstrative - quantifier

Examples are in (xx2).

(xx2) a. *à wùú kwɔ́-làʕá*

Pref house good

‘a good house’ [pref n adj]

b. *à wùú kwɔ́-làʕá jɔ̄ⁿ*

Pref house good two

‘two good houses’ [pref n adj num]

c. *à wùú jɔ̄ⁿ ŋwɔ́ʕɔ̀ⁿ*

Pref house two Dem

‘these two houses’ [pref n num dem]

d. *à wùú ŋwɔ́ʕɔ̀ⁿ bjɛ́*

Pres house Dem all

‘all these houses’ [pref n dem quant]

## Vocalic prefix before noun

Most nouns may be preceded by a “vocalic prefix.” We use the term “prefix” loosely, since it often encliticizes to a preceding word, and we therefore transcribe it as a separate word. The prefix is either *à*, *ò*, or *è* depending on the noun. There is no simple semantic or phonological principle for the choice of vowel. Most human nouns have *ò*. *è* is the least common, does not seem to occur with human nouns, and tends to occur with nouns that contain an *e* or *ɛ* vowel. Another observation is that nouns (mostly trisyllabic) ending in *ʕa* usually have *à* as prefix. So there are hints of an original noun-class agreement system, but it is far from systematic synchronically. Entries for noun stems in our lexicon indicate the vowel, if we have been able to elicit it.

Elicitation is not easy since some nouns are in practice not pronounced with a prefix in isolation (citation form) or clause-initially. For other nouns, the prefix is common though not obligatory in these positions. For example, ‘snake’ but not ‘elephant’ has an overt prefix in (xx1a). The vocalic prefix (if the noun has one) is most reliably elicitable when the noun functions as direct object following a verb like *ɲɛ̄\\ɲà* ‘see’. In this combination the prefixal vowel contracts with the final vowel of the verb. The quality of the contracted vowel depends on that of the prefix vowel (except for ATR value), and therefore allows us to identify the noun’s prefixal vowel quality. In other words, the prefix ends up as a kind of object-agreement enclitic on the preceding verb. For example, we identify the prefix as *ò* for ‘elephant’ based on (xx1b) and as *è* for ‘granary’ based on (xx1c), extrapolating from the surface vowel quality of ‘see’ (perfective). With some difficulty, we then elicit *ò bàwáⁿ* ‘elephant’ and *è bóīⁿ* ‘granary’ as independent forms. (xx1b) confirms *à* for ‘snake’.

(xx1) a. *bàwáⁿ* / *à wíyáʕà ɲà=ýⁿ*

elephant / Pref snake see.Pfv=1Sg

‘A/The elephant/snake saw me.’

b. *ŋ́ ɲɔ̀=[ɔ̀ bàwáⁿ]*

1Sg see.Pfv=[Pref elephant]

‘I saw an/the elephant.’

c. *ŋ́ ɲà=[à wíyàʕà]*

1Sg see.Pfv[=Pref snake]

‘I saw a/the snake.’

d. *ŋ̀ ɲɛ̀=[ɛ̀ bóīⁿ]*

1Sg see.Pfv=[Pref granary]

‘I saw a/the granary.’

Personal names normally lack vocalic prefixes. However, in postverbal object position they are sometimes treated like ‘elephant’.

Elicitation of examples involving verbs, like (xx1b‑d), was difficult with our informants. There was a tendency to replace forms like *ɲɔ̀=ɔ̀*, *ɲà=à*, and *ɲɛ̀=ɛ̀*, including the prefix for the following noun, with a 3Sg pronominal object form. In this case, it meant a tendency to generalize *ɲɔ̀=ɔ̀*, which is the form for ‘saw him/her’, without a nominal object. This is likely an artefact of elicitation, where an informant switched between NP and 3Sg pronouns as utterances were repeated. The object may be indefinite on the first occurrence (‘I saw an elephant’), but beginning with the second it has become definite and may be pronominalized. So the whole sequence could go something like ‘I saw an elephant’ followed by ‘I saw it’, followed in turn (after we asked the informant to include ‘elephant’) by ‘I saw it, the elephant’.

Hantgan noticed that the vocalic prefix is absent when the noun is followed by a numeral or other quantifier (2014ms: 28). Indeed, ‘snake’ usually has the prefix clause-initially, see (xx1a) above, but it is dropped when a numeral is added (xx2a). Similarly, the distinction in contracted vowel between verb and object in (xx1b‑c) above disappears when a numeral is added to ‘elephant’ and to ‘snake’ (xx2b‑c). However, the remarks in the preceding paragraph concerning repetitions make clause-initial cases more reliable.

(xx2)a. *[(* # *à* ) *wíyáʕà jɔ̄ⁿ] ɲà=ýⁿ*

[(#Pref) snake two] see.Pfv=1Sg

‘A/The elephant/snake saw me.’

b. *ŋ́ ɲà [bàwáⁿ jɔ̄ⁿ]*

1Sg see.Pfv [elephant two]

‘I saw two elephants.’

c. *ŋ́ ɲà [wíyàʕà jɔ̄ⁿ]*

1Sg see.Pfv[=Pref snake]

‘I saw a/the snake.’

Some nouns have an optional nasal onset that can appear in isolation and that functions roughly like a vocalic prefix. Compare *dùrú* in (xx3a) with *ǹ‑dùrú* in (xx3b). These nouns also appear to have the usual vocalic prefix that encliticizes to a preceding verb, even when the noun has the nasal element (xx3c).

(xx3) a. *dùrú dígínā*

mouse one

‘one mouse’

b. *ǹ-dùrú ɲà=ýⁿ*

Nasal-mouse see.Pfv=1Sg

‘A/The mouse saw me.’

c. *ŋ́ ɲɔ̀=[ɔ̀ ŋ̀-dùrú]*

1Sg see.Pfv=[Pref Nasal-mouse]

‘I saw a/the mouse.’

See also *ŋ̀-bló* ‘rain (n)’, pronounced [m̀bló], in (xx1) in §13.6.3.

For the extinct dialect of Noumoudara, Winkelmann reported (W98: 135) that the “articles” *ʔē* (singular) and *ʔō* (plural, not common) were homophonous with the corresponding third person possessor forms: *ʔē nābī* ‘(a/the) child’ ou ‘his/her/its child’, *ʔō yāā nāⁿbīō* ‘the children of the women’.

## Noun and adjective

Adjectives and similar modifiers such as relative clauses follow the noun. As indicated in §3.3 above, some adjectives still have up to three distinct segmental forms, one roughly associated with human and O-class nouns, one roughly associated with A-class nouns, and one roughly associated with E-class nouns. In other words, what was probably once a productive class-concord system has not completely disappeared. However, even adjectives that still have two or three forms do not deploy them strictly in this manner. Depending on the adjective, the old O‑class or the old A-class form may be generalizing, or one or other of the forms may have become semantically specialized (e.g. emphatic in the cases of ‘big’ and ‘small’).

In (xx1) we show examples of how nouns and adjectives combine, with emphasis on tones. Nouns ending in rising /LH/ tones (‘house’, ‘millet’, ‘ax’) shift the H‑tone onto the adjective by a regular tone sandhi process. Nouns ending in slightly falling /HM/ tones (‘dog’) flatten to H‑toned, but induce downstep on a following H‑toned adjective (‘white’, ‘small’). See HM#(H)-to-HH#(ꜜH) (§2.7.3.2).

The data here show partial correlations of adjectival forms with nominal classes (O, A, and E). Among the O‑class nouns in (xx1a), ‘tree’ is the most strict in respecting concord, while ‘dog’ and ‘bird’ seem to stray from this in the adjective ‘long’. Among the A‑class nouns in (xx1b), ‘house’ and ‘ax’ obey regular concord the most, while ‘stone’ has some E‑class adjectives. Among the E‑class nouns in (xx1c), ‘millet’ and ‘chewstick’ obey regular concord, while ‘earth’ has A‑class forms. Elicitation of these combinations was difficult and there is more variation in adjectival forms than is presented here.

(xx1) noun gloss ‘white’ *fyɔ́ⁿ* ‘small’ *yíbī→*

‘red’ *sɛ̀ⁿ* ‘black’ *yɔ̀bɔ̀*

‘long’ *sɔ̀yⁿ* ‘hot’ (*fùú* )

a. O-class

(*ò) bɔ́ɣɔ̄ⁿ* ‘dog’ *bɔ́ɣɔ́ⁿ ꜜfyɔ́ⁿ bɔ́ɣɔ́ⁿ ꜜyíbí*→

*bɔ́ɣɔ́ⁿ sɛ̀ⁿ bɔ́ɣɔ́ⁿ yɔ̀bɔ̀*

*bɔ́ɣɔ́ⁿ sɔ̀yⁿ bɔ́ɣɔ́ⁿ fùú*

(*ò) cɔ̀ⁿ* ‘bird’ *cɔ̀ⁿ fyɔ̀ⁿ cɔ̀ⁿ yíbī→*

*cɔ̀ⁿ syɔ̀ⁿ* ~ *sɛ̀ⁿ cɔ̀ⁿ yɔ̀bɔ̀*

*cɔ̀ⁿ sɔ̀ɛ̀yⁿ cɔ̀ⁿ fùú*

*(ò) yó* ‘tree’ *yó fíyɔ̄wⁿ yó yíbī→*

*yó sìyɔ̀ɔ́ⁿ ~ sɛ̀ⁿ yó yɔ́bɔ̄w*

*yó sɔ̀rɔ̀wⁿ yó fùú*

b. A-class

(*à) wùú* ‘house’ *wùù fíyáʕāⁿ wùù yíbī→*

*wùù síyāʕāⁿ wùù yɔ́bāʕā*

*wùù sɔ́rɔ̄wⁿ wùù fúū*

(*à) wíyàʕà* ‘snake’ *wíyàʕà fyɔ́ⁿ wíyàʕà yíbī→*

*wíyàʕà sìyàʕáⁿ wíyàʕà yɔ̀bàʕà*

*wíyàʕà sɔ̀rɔ̀wⁿ wíyàʕà fùú*

(*à) sɛ̀rɛ̀yⁿ* ‘stone’ *sɛ̀rɛ̀yⁿ fyɔ́ⁿ sɛ̀rɛ̀yⁿ yíbī→*

*sɛ̀rɛ̀yⁿ síyɛ́yⁿ sɛ̀rɛ̀yⁿ yɔ́báy*

*sɛ̀rɛ̀yⁿ sɔ̀rɔ̀wⁿ sɛ̀rɛ̀yⁿ fùù*

(*à) yèyàʕá* ‘ax’ *yèyàʕà fíyāʕāⁿ yèyàʕà yíbī→*

*yèyàʕà síyāʕāⁿ yèyàʕà yɔ́bāʕā*

*yèyàʕà sɔ́rɔ̄wⁿ yèyàʕá fùú*

c. E-class

(*è) ʃǐ* ‘millet’ *ʃì* *fíyɛ̀yⁿ* ʃí *yíbī→*

*ʃì síyɛ̄yᵐ* ʃì *yɔ́bày*

*ʃì sɔ́rɔ̄yⁿ ʃì fúū*

(*è) sày* ‘earth’ *sày fìyàʕàⁿ sày yíbī→*

*sày sìyàʕàⁿ sày yɔ́báʕá*

— *sày fùú*

(*è) gbɛ́sɛ́yⁿ* ‘chewstick’ *gbɛ́sɛ́yⁿ fìyɛ̀yⁿ gbɛ́sɛ́yⁿ yíbī(→)*

*gbɛ́sɛ́yⁿ sìyɛ̀yⁿ gbɛ́sɛ́yⁿ yɔ́bāy*

*gbɛ́sɛ́yⁿ sɔ̀rɔ̀yⁿ gbɛ́sɛ́yⁿ fùú*

*wíyàʕà* ‘snake’ is optionally truncated to *wá* before an adjective: *wá yɔ̀bàʕa* ‘black snake’.

The plural is marked (by prolongation and sometimes by vowel-quality change) on the adjective (xx2b,d,e). The noun is generally not overtly pluralized, but nouns that have a segmentally distinct plural optionally use it before the adjective (xx2c).

(xx2) a. *wùù fíyáʕāⁿ*

house white

‘(a/the) white house’

b. *wùù fiyⁿɛ̄→*

house white.Pl

‘white houses’

c. *dɔ̯ɛ̀ý sɛ̀ⁿ*

man red

‘a red (=brown-skinned) man

d. *dɔ̀-rɔ̀ɔ́→ / dɔ̯ɛ̀ý sìyɔ̀→*

man.Pl / man red.Pl

‘red (=brown-skinned) men’

e. *cɔ̀ⁿ sìyɔ̀→*

bird red.Pl

‘red birds’

## Demonstratives

### ‘This, that’ (*ŋɔ́ɔ̀ⁿ* , *ŋɔ̯ɛ́ɛ̀ⁿ* )

There is no distinction between proximate and distant. Demonstratives are added to already number-specified nouns, and do not themselves mark number. Examples: *dɔ̯ɛ̀y ŋɔ́ɔ̀ⁿ* ‘this man’, *dɔ̀-rɔ̀ ŋɔ́ɔ̀ⁿ* ‘these men’, *yà ŋɔ́ɔ̀ⁿ* ‘this woman’, *wùù ŋɔ́ɔ̀ⁿ* ‘this house’ (< *dɔ̯ɛ̀ý*, *dɔ̀-rɔ̀ɔ́*, *yǎ*, *wùú* ). An E-class form *ŋɔ̯ɛ́ɛ̀ⁿ* is attested in *è sɔ̯ⁿɛ̀ɛ̀ ŋɔ̯ɛ́ɛ̀ⁿ* ‘this work’ (< *sɔ̯ⁿɛ̀ɛ́* ).

Nouns with a final rising tone flatten to L-tone by regular tone sandhi before the initial H‑tone of the demonstrative.

### Demonstrative adverbs

*fáⁿ* ‘here’, *fánè* ‘over there’, *mā* ‘there (discourse-definite)’.

## Possession

A pronominal possessor may be expressed by a proclitic preceding the possessum. For 2Sg there is also another option, a suffix *-ɛ̀*. For all pronominal categories it is also possible to use the independent form of the pronoun as possessor.

The proclitic series differs tonally from the segmentally similar subject proclitics. First person proclitics are L‑toned as possessors (versus H‑toned as subjects). The situation is reversed for third person categories, which have H‑toned possessor proclitics and M‑toned subject proclitics. Second person proclitics are L‑toned as possessors (like the L‑toned subject proclitic for 2Sg, but unlike the M‑toned subject proclitic for 2Pl).

(xx1) proclitic suffix

1Sg *ŋ̀*

1Pl *è*

2Sg *m̀ -ɛ̀*

2Pl *nà*

3Sg *ŋ̄*

3Pl *ō*

The *-ɛ̀* suffix is optional for 2Sg possessor. It occurs systematically for the 2Sg complement of postpositions (§7.3.2)

An optional genitive-like morpheme *dí* is optionally inserted between the possessor (even if a proclitic pronominal) and the possessum. It imposes {L} overlay on the following noun. It may be related etymologically to the noun *dì* (unpossessed) or *dɔ́ɣɔ́* ~ *dó* (possessed) meaning ‘(someone’s) share’, cf. also the possessive predicate pattern *X dé=ȳ* ‘it belongs to X’ (§10.2.4.2).

Examples of genitive function, also illustrating the tone-dropping of the possessum, are in (xx2).

(xx2) a. *è dí kìyàʕà* ‘our meat’ < *kìyàʕá*

b. *ŋ̀ dí dìyⁿàʕàⁿ* ‘my fire’ < *díyⁿáʕāⁿ*

c. *zàkí dí dìyⁿàʕàⁿ* ‘Zaki’s fire’ < *díyⁿáʕāⁿ*

Using *báⁿ* ‘sheep’ as possessum, there are no less than five possibilities for expressing 2Sg possessor: independent pronoun *mì* (xx3a), proclitic *m̀* (xx3b), proclitic plus genitive *dí* (xx3c), independent pronoun plus genitive *dí* (xx3d) and suffix *‑ɛ̀* (xx3e).

(xx3) ‘your-Sg sheep’

a. *mì báⁿ*

b. *m̀ báⁿ*

c. *m̀ dí bàⁿ*

d. *mì dí bàⁿ*

e. *báⁿ-ɛ̀*

Further examples of possessor-possessum combinations:

(xx4) a. *ɲí / ŋ̀ báⁿ*

1Sg sheep

‘my sheep’

b. *bò dí bàⁿ*

3Sg Poss sheep

‘his/her sheep’

c. *[ŋ̀ táⁿ] báⁿ*

[1Sg father] sheep

‘my father’s sheep’

If the possessum is omitted (e.g. because already known in context), the semantically minimal noun *dɔ́ɣɔ́* ‘possession; (someone’s) share’ replaces it.

(xx5) *ŋ̀ dɔ́ɣɔ́*

1Sg share(n)

‘mine’ (French *le mien* etc.)

## Quantification (‘all’, ‘many/much’, ‘few/little’)

Quantifiers follow the modified noun, and are compatible with a vocalic prefix preceding the noun. They include *byɛ́* ‘all’, *pyé* ‘many/much’, *jɔ́ʕɔ̄* ‘(a) few/a little’, and *yíbí* ‘(a) few/a little’ (diminutive). Intonationally prolonged variants are regular with ‘many/much’ (*pyé→*), fairly common with ‘all’ (*byɛ́→*), and possible with ‘a few’ (*jɔ́ʕɔ̄→*). There is no conspicuous final-vowel prolongation of plurals for nouns like ‘dog’ before these quantifiers (xx1a‑c). However, nouns that have a segmentally distinct plural, like ‘man’, use the plural form before these quantifiers (xx1d).

(xx1) a. *ò bɔ́ɣɔ̄ⁿ byɛ́*

Pref dog all

‘all (the) dogs’

b. *ò bɔ́ɣɔ̄ⁿ pyé→*

Pref dog many/much

‘many dogs’

c. *ò bɔ́ɣɔ̄ⁿ jɔ́ɣɔ̄→*

Pref dog a.few

‘(a) few dogs’

d. *ò dɔ̀-rɔ̀ɔ̀ byɛ́* / *pyé→* / *jɔ́ɣɔ̄→*

Pref man-Pl all / many / a few

‘all the men/many men/a few men’

## Specific indefinite *díì* ‘a certain’ (~ *dî*, plural *díò→*)

This morpheme may follow a noun and any inner modifiers. It is not common enough to be comparable to English indefinite singular *a(n)*. It is closer to English unstressed *some*, but it occurs with singular as well as plural nouns. NPs with *díì* can be glossed ‘a certain X’ or plural ‘certain Xs’. That is, these NPs are indefinite but specific. They typically introduce a discourse referent that will be picked up later by a regular pronoun.

This form can be used with any noun but it is most frequent in combinations with *yáɣá* ‘thing, object’, *cě* ‘matter, thing (abstract)’, and *ɲɔ́ⁿ* ‘person’ (compare English *something*, *someone/somebody*).

(xx1) a. *(è) yáɣá díì* ‘a certain thing/object’ or ‘something’ (specific)

*(è) cè díì* ‘a certain matter’

*(è) cè díè→* ‘certain matters’

b. *(à) wùù díì* ‘a certain house’

*(à) wùù díè→* ‘certain houses’

c. *(à) ɲɔ́ⁿ dî* ‘a certain person’ or ‘someone’ (specific)

*(ò) ɲɔ́ⁿ díò→* ‘certain people’ or ‘some people’ (specific)

Singular *díì* and plural *díè→* are used with E-class and nonhuman A-class nouns, *dî* and *díò→* with human nouns and with nonhuman O‑class nouns. As the examples above show, the presence of *díì* or variant does not preclude the vocalic prefix.

*díò→* differs tonally from suppletive plural noun *(ò) dyó→* ‘people’ (§3.1.1.5). Their historical relationship is unclear.

# NP coordination

## ‘X and/with Y’ (*nà* )

The particle *nà* ‘with, and’ is placed between the two conjuncts.

(xx1) *[dɔ̀ɛ́y nà yá] bà*

[man with woman] come.Pfv

‘A man and a woman (< *yǎ*) came.’

*nà* also functions as an instrumental or comitative preposition (§7.2).

## ‘X or Y’ (*tà* )

Particle *tà* ‘or’ is placed between the two disjuncts. This construction is normally accompanied by an interrogative particle after both disjuncts.

(xx1) *dɔ̀ɛ́y wà tà yá wà*

man Q or woman Q

‘a man? or a woman?’

# Adpositions

Most adpositions are postposed to NPs. For pronominal paradigms of the postpositions see §7.3.2. The exception is instrumental-comitative *nà* ‘with, any’ which is preposed; it is also the ‘and’ conjunction (§6.1).

## Dative and benefactive

### Indirect object with ditransitive verb

The indirect object in a typical ditransitive is expressed by a verb *ŋɔ̄ⁿ\\ŋɔ̀ⁿ*  combined with a preceding verb like ‘give’ or ‘show’. *ŋɔ̄ⁿ\\ŋɔ̀ⁿ*  by itself means ‘help (with money)’, see §10.1.5 for examples with ‘show’ and ‘give’.

### Benefactive objects (*bāɣā*, *ŋɔ̄ⁿ… nɔ̀* )

Two constructions are recorded in which a kind of benefactive object is added to an already complete clause.

In (xx1), the postposition *bāɣā*, also found in the ‘have’ construction (§10.2.4.1), functions like a benefactive, though literally it indicates that the referent in question will end up possessing the object given (xx1).

(xx1) *ŋ́ bà nà [ò ɲǔ] [[ŋ̀ kà] bāɣā]*

1Sg come.Pfv with [Pref water] [[1Sg mother] **Poss**]

‘I have brought water for my mother.’

The second construction includes *ŋɔ̄ⁿ\\ŋɔ̀ⁿ* ‘help (with money)’, here in imperfective form *ŋɔ̄ⁿ*, plus what appears to be a benefactive postposition *nɔ̀* (xx2). The verb *ŋɔ̄ⁿ\\ŋɔ̀ⁿ* is also part of the two-part ‘give’ construction (§10.1.5). A motion verb in the first clause (in this example ‘come’) is repeated in infinitival form before *ŋɔ̄ⁿ*, cf. (xx1a‑b) in §13.5.

(xx2) *ŋ́ bà nà [ò ɲǔ]*

1Sg come.Pfv with [Pref water]

*[ná bà [ŋɔ̄ⁿ [[ŋ̀ kà] nɔ̀]*

[Infin come.Ipfv [**help.Ipfv** [[1Sg mother] **for**]

‘I have brought water for my mother.’

## Instrumental or comitative (*nà* )

### Simple instrumental/comitative phrases

*nà* ‘with’ is a preposition (not a postposition). It may have instrumental or comitative function: *nà yèyàʕá* ‘with (=by means of) an ax’, *nà yǎ* ‘with (=in the company of) a woman’.

(xx1) a. *ŋ̄ kpà dáɣánī [nà yèyàʕá]*

3Sg hit.Pfv wood [**with** ax]

‘He cut the wood with an ax.’

b. *ŋ́ byé-rà [nà zàkí]*

1Sg cultivate-Pfv [**with** Z]

‘I cultivated (=farmed) with Zaki.’

For the use of *nà* as the basic ‘and’ conjunction, see §8.1 below.

### ‘Bring’ and ‘take (there)’

Directionally-specified predicates of conveyance (‘bring’, ‘take/deliver [there]’) are expressed by combining ‘come’ or ‘go’ with a comitative *nà* phrase. For centripetal (ventive) direction: *bà* ‘come’ (perfective=imperfective), *bà [nà X]* ‘bring (=come with) X’. For noncentripetal (itive) direction, the stative (or resultative) *fyê* is preferred to dynamic (aspect-marking) *sē\\sà* ‘go’ in reports of recent events: *fyê* ‘have gone, be gone’, *fyé [nà X]* ‘take/have taken X (there)’. Regular *sē\\sà* ‘go’ must be used in other inflectional contexts such as negatives and futures (xx1a‑b).

(xx1) a. *zàkí kǎ sē nà= [à síkə̀rí]=ʔ*

Z PfvNeg go.Ipfv **with** [Pref sugar]=Neg

‘Zaki didn’t take the sugar (there).

b. *zàkí bī sà nà= [à síkə̀rìí]*

Z Fut go.Pfv **with** [Pref sugar]

‘Zaki will take the sugar (there).’

## Spatial postpositions

### Primary locative postpositions (*tɔ̀ⁿ* and *wúrí* )

Postposition *tɔ̀ⁿ* is a general locative ‘in X’ or ‘at X’. Specifically ‘inside X’ is expressed by *wúrí*. These locative postpositions can be used in stative (‘in’) as well as dynamic (‘to’, ‘from’) contexts.

(xx1) a. *ŋ̄ gō [[à wùú] tɔ̀ⁿ]*

3Sg be [[Pref house] **in**]

‘He is in the house.’

b. *zàkí fyê [[è lè] wúrí]*

Z go.Stat [[Pref compound] **inside**]

‘Zaki has gone into the house (housing compound).’ (< *lě* )

### Other spatial postpositions

The remaining postpositions are mostly spatial. Those in (xx1) appear to be single morphemes (we know of no decomposition of *pwɛ̀yⁿtɔ́* though it sounds like a compound). The postposition in (xx1b) is a compound.

(xx1) a. *X ʃyɛ́* ‘behind X’

 *X yɛ̀yⁿ* ‘in front of X’ (< *yɛ̌* ‘face’)

 *X sáɣáy* ‘under X; near X’

*X pwɛ̀yⁿtɔ́* ‘under X’ (< *pwɛ̀yⁿtɔ́* ‘lower buttocks’)

 *X kírīīⁿ* ‘beside X’

 *X ʃīⁿ* ‘on X; over X’

*X&Y ʃítòòⁿ* ‘between X and Y’

 b. *X ŋmúⁿ-táʕày* ‘above, over’ (< *ŋmá* ‘head’, *tìyàʕá* ‘place’)

Postpositions can follow nonpronominal NPs or proclitic pronouns (which have the same tonal form as possessor proclitics, §5.5, as opposed to subject pronouns). Independent pronouns are also possible, but are less common than proclitics. For 2Sg the usual proclitic *ŋ̀* ~ *m̀* is not used with postpositions; instead, a suffix *‑ɛ̀* is added. This suffix is also possible, but not obligatory, with possessed nouns. Sample paradigms are in (xx3). 2Pl *ná* in the ‘on’ paradigm is unexpected but was double-checked.

(xx3) ‘in front of’ ‘on’ ‘behind’

1Sg *ŋ̀ yɛ́yⁿ ŋ̀ ʃíⁿ ŋ̀ ʃyɛ́*

1Pl *è yɛ́yⁿ è ʃíⁿ è ʃyɛ́*

2Sg *yɛ́-ɛ̀ ʃíⁿ-yɛ̀ ʃyɛ́-ɛ̀*

2Pl *nà yɛ̀ýⁿ* *ná ʃīⁿ* *nà ʃyɛ́*

3Sg *ŋ̄ yɛ̄yⁿ ŋ̄ ʃīⁿ ŋ̄ ʃyɛ̄*

3Pl *ō yɛ̄yⁿ ō ʃīⁿ ō ʃyɛ̄*

Examples of independent pronouns with ‘on’ are: 1Sg *ɲí ʃīⁿ*, 2Sg *mì ʃīⁿ*, and 3Pl *bòó ʃīⁿ*.

### Absence of overt locative postposition

Especially in high-frequency locational expressions that do not focus on precise spatial configurations, a bare postverbal NP may be interpreted as locative.

(xx1) a. *ŋ́ gō [è sɔ̯ɛ̀ɛ́]*

1Sg be [Pref work(n)]

‘I am at work.’

b. *ŋ́ gō [è lě]*

1Sg be [Pref house.compound]

‘I am at home.’

## Goal and cause

The noun *yéyⁿ* ‘name’ can be used as a postposition meaning ‘in the name of X, on account of X, for the sake of X’, where X is a person.

There is no dedicated purposive postposition ‘for X’. However, the ‘behind X’ postposition can be used in a purposive context. Cf. English *what is he really after?*

(xx1) *ŋ̄ bà [sɔ́ȳⁿ lè ʃyɛ́]*

3Sg come.Pfv [gold Foc **behind**]

‘It is/was gold [focus] that he/she came for.’

The ‘why?’ interrogative *bíè-já* contains *bíè* ‘what?’ plus an element *já*. Here it seems to function like a frozen purposive postposition. However, *já-* also occurs as an interrogative morpheme in a few combinations like *já-tàʕày* ‘where?’, so its synchronic function and even its etymological origin in *bíè-já* ‘why?’ are not transparent.

## Possession and desire

Postpositional phrase *X bāʕā* occurs in predications of possession: Y is *[X bāʕā]* means ‘X has Y’. See §10.2.4.1 for examples.

A distinct postposition *bàɣà* occurs in predications of desire: *X want* *[Y bàɣà]* means ‘X wants Y’. See §10.3.2.

# Verb morphology

## Imperfective and perfective stems

Verbs have two forms that we call imperfective and perfective. The terminology is misleading, since the two stems are distributed over the various phrase-level tense, aspect, mood, and negation (TAMN) categories in a somewhat complex fashion described in the following chapter. Here we are concerned with the relationship between the forms of perfective and imperfective stems.

In general the perfective stem is marked. Sometimes it has a -Cv or similar suffix not present in the imperfective stem. However, in other cases the two have the same syllabic shape and differ in some idiosyncratic way. The differences can be tonal, vocalic, and to a limited extent consonantal.

The full citation form of a verb is exemplified by *gbā\\gbà* ‘split (wood), shatter’ and by *fwɔ́\\fwɔ́-là* ‘blow’. The imperfective stem is given first, followed by the separator \\ and the perfective stem. In contexts where the meaning rather than morphology is relevant, we sometimes use the imperfective as the citation form.

## Verbs with identical imperfective and perfective stems

Some verbs do not distinguish the two stems. Possible reasons for this are a) the verb is borrowed (from Jula or other source); b) an original aspectual split has been lost as the language declines in vitality; c) the imperfective is tonally L- or HL-toned and ends in *a* or *e/ɛ* so that it already fits the usual tonal and vocalic targets typical of perfectives (see the next few sections below). Variants due to optional *n/r* alternations are disregarded in determining whether the stems are identical, but it is possible that individual speakers might specialize one variant as imperfective and another as perfective.

(xx1) imperfective perfective gloss

a. L-toned

*monosyllabic*

*dà dà* ‘crumple, wrinkle’

*pàⁿ pàⁿ* ‘clear (a field)’

*tà tà* ‘join, link (end to end)’

*bisyllabic*

*bàɣà bàɣà* ‘hang (sth) up’

*də̀rà də̀rà* ‘lock (door)’

*dɔ̀ɣɔ̀ dɔ̀ɣɔ̀* ‘boil (e.g. rice) in a pot’

*gbɛ̀rɛ̀ gbɛ̀rɛ̀* ‘hold and lift (sb)’

*mànì mànì* ‘build’

*nɔ̀rɔ̀ⁿ nɔ̀nɔ̀* ~ *nɔ̀rɔ̀ⁿ* ‘drive away, expel’ (see §8.6.2)

*sòrò sòrò* ‘defecate’

*sɔ̀ɣɔ̀ sɔ̀ɣɔ̀* ‘give; send (on mission)’

*ʃɔ̀nì ʃɔ̀nì* ‘guard, watch over’

*tàɣàⁿ~tìŋɛ̀~tìgɛ̀ⁿ tàɣàⁿ~tìŋɛ̀* ‘ignite, light (fire)’

*tàmà tàmà* ‘measure; doubt’

*tə̀rè tə̀rè* ‘set (sth) next to (sth)’

*tɔ̀ɣɔ̀ tɔ̀ɣɔ̀* ‘char, burn to a crisp’

*tùŋà tùŋà* ‘learn or teach (a trade)’

b. HL-toned

*monosyllabic*

*flɔ̂ ~ flâ flɔ̂ ~ flâ* ‘untie, undo’

*tê tê* ‘put (pot) up on fire’

*tɛ̂ⁿ tɛ̂ⁿ* ‘become bitter-tasting’

*bisyllabic*

*cónì cónì* ‘collect, gather together’

*dáɣà dáɣà* ‘marry (sb)’

*dálò dálò* ‘feed (sb)’

*páŋɔ̀ páŋɔ̀* ‘taste’

*sókòyⁿ sókòyⁿ* ‘bark (v)’

*súnà súnà* ‘bump, head-butt’

*trisyllabic*

*fɔ́rɔ́mà fɔ́rɔ́mà* ‘greet’

c. H-toned

*páⁿ páⁿ* ‘scoop out (e.g. sauce)’

*yáɣá yáɣá* ‘squeeze, press’

Some other verbs initially appeared to belong to this verb type, but further study revealed a distinct form (usually perfective). We suspect that there is a process underfoot whereby aspect-marked forms of less common verbs are beginning to neutralize. The sign of this is usually that one variant is limited to the perfective, while another is imperfective but can spill into perfective functions.

Cases like those in (xx1) above are distinct from those where the verb has a defective paradigm and so does not even have two aspect-marked stems. This is the case with one of the ‘say’ verbs (xx2a), and expressively iterated stems like that in (xx2b) that only occurs in strongly imperfective contexts.

(xx2) a. *jà* ‘say’ perfective only

b. *kə́rú-kə́rū* ‘grope along’ imperfective only

In addition, statives do not mark aspect, and so they have no imperfective-perfective split. This applies both to derived statives (related to dynamic verbs) and to defective stative-only (quasi-)verbs (§10.1.2.2).

## *bà* and *bé* ‘come’

This is the only verb that does not follow the normal distribution of imperfective and perfective stems across the various phrasal inflectional categories (TAMN) as described in the following chapter. The form is *bà* not only in those TAMN categories calling for the perfective stem, but also in most of those calling for the imperfective stem, such as imperative *bà* ‘come!’. The exception is the imperfective with preverbal *wɔ̀ɣɔ̀*, which requires a special form *bé*, as in *ŋ́ wɔ̀ɣɔ̀ bé* ‘I am coming’. For the *a/e* alternation, also found for the cognate in Tiefo‑D, see §2.2.2 above.

## Imperfective and perfective differ by tone only

In all cases where the two stems differ only by tone, the perfective is slightly lower in tone than the imperfective. Since the perfective is generally marked (often by suffixes, see later in this chapter), one can envisage a tone-dropping process applied to the imperfective to produce the perfective.

One popular pattern for mono- and bisyllabic stems is M\\L, affecting both syllables of bisyllabics (xx1a). The two other patterns are for stems of at least two (usually exactly two) syllables. These are HM\\HL (xx1b) and H\\HL (xx1c), where the nonfinal syllables of the perfective remain H while the final syllable drops to L. The trisyllabics with HM\\HL in (xx1d) are probably of H\\HL rather than true HM\\HL type, since they are heavy enough to make the third of three H‑toned syllables automatically drop a notch.

(xx1) imperfective perfective gloss

a. M\\L

*monosyllabic*

*gbā gbà* ‘split, shatter’

*klē klè* ‘clap (hands)’

*ŋɔ̄ⁿ ŋɔ̀ⁿ* ‘give’

*pā pà* ‘moisten’

*sɔ̄ⁿ sɔ̀ⁿ* ‘implant’

*wā wà* ‘rot, stink’

*bisyllabic*

*jāɣā jàɣà* ‘put down, abandon’

*jɔ̄rɔ̄ jə̀rɔ̀ ~ jɔ̀rɔ̀* ‘swallow’

*kāɣāⁿ kàɣàⁿ* ‘make peace’

*pāɣā pàɣà* ‘push’

*pə̄rɛ̄ pə̀rɛ̀* ‘stick, adhere’

*sāɣā sàɣà* ‘tremble’

*sɛ̄rɛ̄ sɛ̀rɛ̀* ‘carve out’

*yāɣā yàɣà ‘vomit’*

d. HM\\HL

*cɔ́ŋɛ̄ cɔ́ŋɛ̀* ‘become deep’

*mánā mánà* ‘rinse’

*mínā mínà* ‘sprinkle’

*míŋ(g)áⁿ míŋ(g)àⁿ* ‘fan (sb, sth)’

*tígɛ̄ⁿ tígɛ̄ⁿ ~ tíŋɛ̀ⁿ* ‘get hot’

c. H\\HL

*də́rɛ́ ~ dɛ́rɛ́ dɛ́rɛ̀* ‘grow up’

*kpɛ́rɛ́ kpɛ́rɛ̀* ‘descend’

*ɲáɣáⁿ ɲáɣàⁿ* ‘redden’

*ɲíráⁿ ɲínà ~ ɲíràⁿ* ‘build’

*pɔ́ɣɔ́ pɔ́ɣɔ̀* ‘open (door)’

*wɔ́ɣɔ́ wɔ́ɣɔ̀* ‘(liquid) solidify’

d. heavy H(M)\\HL

*dúgúmā dúgúmà* ‘stir, mix, confuse’

*páɣánī páɣánì* ‘hurry’

*sáɣánāⁿ sáɣánà* ~ *sáɣánɛ̀* ‘wrestle (sb)’

e. heavy M\\ML

*sōrōbā sōrōbà* ‘insult (sb)’

## Imperfective and perfective differ by vocalic ablaut (at least)

Other verbs distinguish imperfective from perfective by vocalic mutations (ablaut). The two most common subtypes are those where the perfective shifts at least its final vowel to *e/ɛ* (§8.5.1) and those where it shifts to *a* (§8.5.2), but there are also a handful of cases with *ɔ* (§8.5.3) In bisyllabics, both vowels are affected by vocalic ablaut in some cases, in others only the final vowel shifts.

Changes in vocalism can also lead to changes in consonants. Alternations involving *g* and either *ɣ* or *ŋ* are especially common. In addition, medial *l* and *r* may induce reduction or syncope of a preceding vowel, or they themselves may be zeroed in one of the aspect-marked forms.

Many of the verbs dealt with in the subsections below, under the rubric of vocalic ablaut, also show tonal changes like those that appear in pure form in the preceding section.

The distinction between stem-final *a*, *ɔ*, and *e/ɛ* can be blurred when the verb is transitive, since in this context it is normally followed either by a third person object enclitic (3Sg *=o* ~ *=ɔ*, 3Pl *=oo* ~ *=ɔɔ* ) or by a noun which may be preceded by a vocalic prefix (*à* *ò* or *è*). The vocalic enclitic or prefix normally contracts with the stem-final vowel. The ATR value of the stem dominates, but other features of the contracted vowel are those of the enclitic or suffix. To identify the stem-final vowel of a transitive verb, it is best to elicit combinations of the verb with 1Sg clitic *=ýⁿ* or with a personal name. However, we had some difficulty nailing down final vowels of transitives. There is no comparable difficulty with intransitive verbs.

### Perfective with final *e/ɛ*

This vocalic mutation is very common. The final vowel, or both vowels of some bisyllabics, shift(s) in the perfective to *e* or *ɛ*, the choice depending on the ATR-harmonic value of the stem. If the imperfective has *a*, its ATR‑harmonic value is otherwise covert, but it is likely a vestige of an original distinction between \*a (‑ATR) and \*ʌ (+ATR) which later fell together as *a* ; see §2.2.2 for discussion.

Monosyllabics are in (xx1a). The cases where imperfective C(L)aCa clearly becomes perfective C(L)eCe or C(L)ɛCɛ, so that both vowels mutate, are in (xx1b). The examples in (xx1c) with medial *r* and in (xx1d) with (originally) medial *l* are probably of the same type as in (xx1b), but the original initial vowel is usually reduced to shwa (before *r* ) and is syncopated (before *l* ). In two cases, CaCa imperfectives shift only the final vowel, resulting in CaCe (xx1e).

(xx1) imperfective perfective gloss

a. monosyllabics

*+ATR perfective e*

*là lè* ‘gather (things)’

*+ATR perfective e, applies to the initial in a verb-verb compound*

*lá-báɣá lé-bàɣà* ‘keep spinning (getting dizzy)’

*-ATR perfective ɛ*

*ŋmā ŋmɛ̀* ‘(baby) suckle’

*-ATR*, *extra semivowel in perfective before ɛ*

*kɔ̀ⁿ kwɛ̀ⁿ* ‘understand’

*ʃìⁿ ʃyɛ̀ⁿ* ‘fart (v)’

b. from *a…a* to *e…e* or *ɛ…ɛ*

*+ATR perfective e…e*

*blákā blékè* ‘be cured, recover from illness’

*kláɣā klégè* ‘become short(er)’

*-ATR perfective ɛ…ɛ*

*jāŋà jɛ̄ŋɛ̀* ‘become long(er)’

*kábá kɛ́bɛ̀* ‘become many, multiply’

*kábá kɛ́bɛ̀* ‘increase (intr), get bigger’

*nānà ~ nāràⁿ nɛ̀nɛ̀ ~ nɛ̀rɛ̀ⁿ* ‘make, manufacture; fix’

*pámá pɛ́mɛ̀* ‘(people) assemble, gather’

*sārāⁿ sɛ̀rɛ̀ⁿ* ‘(butter) melt; (sb) waste away’

*wàrà wɛ̀rɛ̀ ~ wə̀rɛ̀* ‘break off a piece of; split (nut)’

*yàɣà yàɣà ~ yɛ̀gɛ̀* ‘snap, break (twig)

c. medial *r* inducing reduction to schwa

*+ATR perfective …e*

*tə̀rà tə̀rè* ‘ask (sb, to do sth)’

*-ATR perfective …ɛ*

*bə́rā bə́rɛ̀* ‘sweep (v)’

*də̀rà də̀rɛ̀* ~ *dɛ̀rɛ̀* ‘divide, rip’

*kárá ~ kə́rá kə́rɛ̀* ‘exchange’

*nə́ráⁿ ~ nə́rāⁿ nɛ́nɛ̀* ‘wash (clothes)’

*tə̄rāⁿ tə̀rɛ̀ⁿ* ‘sit down’

*yə̀rà yə̀rɛ̀ ~ yɛ̀* ‘get old’

d. original medial *l* has induced syncope

*+ATR perfective …e*

*blā blè* ‘carry (baby, sack) on back’

*glâ glê* ‘take out’

*klā klè* ‘shell (e.g. peanuts); hatch (egg)’

*plá plê* ‘jab; puncture’

*-ATR perfective …ɛ*

*klàⁿ klɛ̀ⁿ* ‘tilt’

*-ATR perfective …ɛ, syncope optional after m*

*ḿlàⁿ ~ mə́làⁿ ḿlɛ̀ⁿ ~ mə́lɛ̀ⁿ* ‘show, indicate’

e. CaCa shifts only the final vowel

*+ATR perfective …e*

*pālà pālè* ‘forget about (sb, sth)’

*wálá wálè* ‘(sth) dry off

In (xx2a), we see that trisyllabics limit the vowel mutation to the final syllable, even when all the vowels in the imperfective are *a*. (xx2b) shows bisyllabics that similarly limit the mutation to the final syllable; the first syllable has {*i u o*}, in some cases reduced to schwa before *r*. Most of the trisyllabics end in *lv* and there are a few cases of *mv*. These may be frozen derivational suffixes.

(xx2) imperfective perfective gloss

a. trisyllabics

*CaCaCa imperfective (all treated as +ATR)*

*kāɣālà kāɣālè* ‘ruin, damage (sth)’

*ɲáɣámā ɲáɣámɛ̀* ‘become sour’

*páɣálā páɣálè* ‘entrust’

*sàɣàlà sàɣàlè* ‘lay out; set out to dry’

*tàɣàlà tàɣàlè* ‘stay close to’

*tāɣālà tāɣālè* ‘step on (sb's foot)’

*wáɣálā wáɣálè* ‘become robust; (grain head) ripen’

*yáɣálā yáɣálè* ‘accompany (departing guest); hold out (hand)’

*other nonfinal vowels, +ATR*

*dúgúlā dúgúlè* ‘hide’

*jígílā jígílè* ‘shake; sift’

*other nonfinal vowels, -ATR*

*fɔ́ɣɔ́mā fɔ́ɣɔ́mɛ̀* ‘become light(er), lose weight’

*sòròbà sòròbɛ̀* ‘squat’

*sɔ̄ɣɔ̄lā sɔ̄ɣɔ̄lè* ‘fear, be afraid’

b. bisyllabic with final *a* to *e/ɛ*

*cə́rá* ~ *círá círè* ‘look at’

*cónā cónè* ‘cook (meal)’

*dúgā dúgè* ‘become heavy’

*jōlà jōlè* ‘sleep (v)’

*jūŋà jùŋɛ̀* ‘speak, talk’

*kōlà ~ kōrà kōlè ~ kōrè* ‘turn out well, become good’

*kúlā kúlè* ‘(baby) crawl’

*ɲə́ráⁿ ɲə́rɛ̀ⁿ* ‘stand, stop; (rain) cease’

*ɲínà ~ ɲíràⁿ ɲínè ~ ɲírèⁿ* ‘accept, take possession of’

*ɲìŋà ɲìŋɛ̀* ‘wake up’

*ŋúnā ŋúnè* ‘groan’

*ʃírá ʃīrè* ‘whiten; (day) break’

*ʃìrà ~ ʃə̀rà ʃìrè ~ ʃə̀rè* ‘shave (sb’s head)’

*ʃùrà ʃùrè ~ ʃə̀rè* ‘carry on head’

*túgà túgè* ‘become big(ger)’

*wúlà wúlè* ‘flip, turn over (calabash)’

The verbs in (xx3a) have a medial velar. We observe alternations of *ɣ* between two *a* or *ɔ* vowels in the imperfective, versus either *g* or, in nasalized environments, *ŋ* after *i*. The verb *sɔ̀ⁿ\\sùŋɛ̀* ‘work’ (§8.6.2.2) may have formerly been of a similar type but with *u* instead of *i*. The verbs in (xx3b), by contrast, have stable *ŋ*.

(xx3) imperfective perfective gloss

a. *g alternating with ɣ and/or with ŋ (cf. §2.1)*

*dáɣāⁿ dígɛ̀ⁿ* ‘become sweet, good-tasting’

*dɔ̀ɣɔ̀ dìgɛ̀* ‘follow; hear’

*fàɣàⁿ fìgɛ̀ⁿ* ~ *fìŋɛ̀* ‘shout’

*nàɣàⁿ nìŋɛ̀* ‘pay (sb)

*sáɣáⁿ sígèⁿ* ‘apply, rub on (oil)’

b. stable *ŋ*

*dúŋá dúŋɛ̀* ‘lick’

*fíŋá fíŋɛ̀* ‘whiten, become white(r)’

### Perfective with final *a*

This is the other common vocalic mutation. For some monosyllabic verbs, imperfective Cv changes to Ca (xx1a). Those of the form Ci, however, have perfective Cya as the high vowel is desyllabified. There are isolated cases of Cu → Cwa and of Cɛ → Cya (xx1c). In two verbs of Cu and Co shape where C is velar k, the expected #kwa fuses into kpa with labial velar [k͡pa] (xx1d). The Cv imperfectives in (xx1e) have bisyllabic perfectives Ciya or Cuwa (in that latter case alongside a Ca variant). Finally, ‘fall’ in (xx1f) goes from Co to Cuga. Overall, these forms suggest that a can function as a perfective suffix rather than as an ablaut mutation.

(xx1) imperfective perfective gloss

a. *tú tâ* ‘slash earth (with pick-hoe)’

*wú wā* ‘die’

*dû dâ* ‘sow (seeds), plant’

*ɲɛ̄ ɲà* ‘see’

*ɲɔ̄ ɲà* ‘drink’

*sē sà* ‘go’

*tú yē tá yè* ‘bury (sth)’ (compound verb)

b. *fíⁿ fyâⁿ* ‘(seed) germinate’

*píⁿ pyâⁿ* ‘extinguish (fire)’

*ʃí ʃyâ* ‘become dizzy’

*ʃī ʃyà* ‘be born; urinate’

*ʃîⁿ ʃyâⁿ* ‘wait’

*ʃíⁿ ʃyâⁿ* ‘weave; braid’

c. *fó fwâ* ‘say’

*pɛ̄ⁿ pyàⁿ ~ pyɛ̀ⁿ* ‘stay’

d. *kō kpà* ‘hit; kill’

*kú kpâ* ‘cut’

e. *dē dìyà* ‘do; become’

*dí díyà* ‘eat (meal)’

*fí fíyà* ‘take, receive’

*dɔ̄ⁿ dùwàⁿ ~ dàⁿ* ‘bite’

f. *só súgà* ‘fall’

Other examples of shift to final a in the perfective are bisyllabics (no trisyllabics are attested). Those in (xx1a) and the Cvrv verbs in (xx1b) are more or less regular, except for a variable tendency for Cvrv to shift to Cvy in the imperfective.

(xx2) imperfective perfective gloss

a. *fyɛ̄ⁿ fyàⁿ* ‘lean on; hold by squeezing’

*mánà ~ máỳⁿ mánà* ‘winnow by shaking’

*mīyɛ̄ⁿ mìyàⁿ* ‘burn; roast’

*ɲíní ɲínā ~ ɲírāⁿ* ‘(sth) cool off’

*ɲíní ɲínā ~ ɲírāⁿ* ‘moisten’

*tīgī tìgà* ‘pour (sth) out; spit’

*yígí yígà* ‘get up’

b. *də̀rì də̀rà* ‘go across (river, pond)’

*də́rúⁿ də́ràⁿ* ‘(water) drip; scoop’

*dɛ́y də́rà* ‘fill’

*dōy*~*dɔ̄rɔ̄~də̄rɛ̄ də̀rà* ‘buy’

*jɔ̄y jɔ̀rà* ‘(bird) peck’

*kpɔ̄rɔ̄ ~ kpɔ̄y kpə̀rà ~ kpə̀rɔ̀* ‘uproot (weed, small plant)’

*mə́rⁿɛ́ mə́rⁿà* ‘throw

*tə̀rɔ̀ⁿ tə̀ràⁿ ~ tə̀rɔ̀ⁿ* ‘count’

*yúrō ~ yóȳ yúrà ~ yīrà* ‘call’

In (xx3a‑b), however, in addition to the same sporadic shift to imperfective Cvy, *r* in the imperfective is replaced by *l* in the perfective. In most cases, expected #Cvla syncopates to Cla (xx3a), but we have one example where Cvla surfaces as such (xx3b).

(xx3) imperfective perfective gloss

a. *bēy blà* ‘get tired; ripen, be cooked’

*bə́rú blâ* ‘be wrong’

*fə̀rè flà* ‘cover; shut (door)’

*gúrú ~ gə́rú glâ* ‘go out; depart, leave (a place)’

*kə́rù klâ* ‘touch’

*kɔ́rɔ́ⁿ ~ ká klâⁿ* ‘chew’

*mɛ́yⁿ mlâⁿ* ‘swell; inflate’

*pòyⁿ plàⁿ* ‘succeed (in doing*)’*

*fōyⁿ flàⁿ* ‘become smooth; become fine (powder)’

b. *sírí sílà* ‘be/do long time’

### Perfective with final *ɔ*

A small number of verbs have perfectives with final *ɔ* shifted from imperfective *o* (xx1a) or *u* (xx1b).

(xx1) imperfective perfective gloss

a. *bó bwɔ̂* ‘tie; braid’

b. *bú bwɔ̂* ‘get, obtain, gain’

*súgú sɔ́ɣɔ́* ‘catch; hold’

*súgú dɔ̄ɣɔ̄ sɔ́ɣɔ́ dɔ̄ɣɔ̄* ‘help (to do sth)’ (compound verb)

## Verbs with a perfective suffix

In this section we present verbs that have a clearcut syllabic suffix. Three basic types can be distinguished. One has *-là* (variant *-rà*) or -*nà* if nasalized, another has *-bà*, and a third has *-mà*. The fact that these suffixes are all of the shape -Cà makes one wonder whether the verbs with apparent mutation of the stem-final vowel to a might reflect a \*-Cà suffix whose consonant has been lost.

### Perfective *-là* ~ *-rà* or *-nà*

#### *-là* ~ *-rà* after unnasalized stem

The most common variant in this group is *‑là*. For some verbs it is heard as *‑rà*, and our two principal informants sometimes disagreed on which liquid was correct. The tone and segmental form are carried over from the imperfective.

(xx1a) shows *‑là* or *‑rà* after monosyllabic stems. (xx1b) has bisyllabics. Perfective *bí‑là* for ‘ask’ in (xx1b) is probably contracted from \*bírí‑là.

(xx1) imperfective perfective gloss

a. *byé byé-rà ~ byé-là* ‘cultivate (a field); whistle’

*fɔ́ fɔ́-là* ‘winnow in wind’

*fwɔ́ fwɔ́-là* ‘blow’

*jò jò-là* ‘have fun’

*jō jō-là* ‘sell; add’

*jú jú-là* ‘dance (v)’

*kpá kpá-là* ‘weep, cry’

*lā lā-rà* ‘believe’

*tú tú-là* ‘dig’

*wó wó-là* ‘do the follow-up harvest’

*wō wō-là* ‘sing; narrate (a tale)’

*yē yì-rà* ‘enter; put in; wear (garment)’

*yɛ́ yɛ́-rà* ‘walk’

*yī yī-rà ~ yī-là* ‘jump; fly away’

b. *bə́rí bí-là* ‘ask’

*dāŋā dāŋā-là* ‘curse (sb)’

*ʃìrì ʃìrì-là* ‘disperse (intr)’

Some verbs of this class are bi- or trisyllabic with an LH-tone pattern that is not found with verb stems of the invariant, tone-lowering, or final-vowel mutating classes described above (xx2a). These may be borrowings, or frozen compounds. The two cases in (xx2b) may be frozen compounds. The verbs in (xx2c) are clearly composite, as shown by the fact that the initial and final are separately perfectivized, even though it may not be possible to separately gloss the two elements.

(xx2) imperfective perfective gloss

a. *dɔ̀nɔ́ dɔ̀nɔ́-rà ~ dɔ̀nɔ́-là* ‘injure, wound’

*jàⁿfá jàⁿfá-là* ‘betray (sb), renege on (sb)’

*màkírí màkírí-là* ‘(griot) praise (a noble)’

*yàfá yàfá-là* ‘forgive, pardon’

*yātóy yātóy-là* ‘pass by’

*yèflá yèflá-là* ‘fill, load’

b. *kāɣāⁿ-sā kàɣàⁿ-sā(-là)* ‘reply’ (compound verb)

*nārāⁿ-sā nà(rà)ⁿ-sā(-là)* ‘escape’ (frozen compound)

c. *gbā-dɔ́ gbà-dɔ́-rà* ‘divide’

*gbày-dūrù gbà-rà-dùrù* ‘make fall, knock down’

*jāɣā-bə́rú jàɣà-bə́rú-là* ‘get lost’

#### Perfective *‑nà* after nasalized stem

There are a number of verbs whose suffix is *‑nà*. In most cases the unsuffixed imperfective is nasalized, so we take *‑nà* to be the form taken by *‑là* after a nasalized stem. Monosyllabics are in (xx1a), bisyllabics in (xx1b).

(xx1) imperfective perfective gloss

a. *cíⁿ cí-nà* ‘pull, drag (sb, sth)’

*cíⁿ cí-nà ~ cí-rⁿà* ‘become small(er)’

*dàⁿ dà-nà* ‘arrive’

*gbāⁿ gbā-nà* ‘sew’

*kpāⁿ kpā-nà* ‘scrape, scratch’

*mà mà-nà* ‘laugh (v)’

*nà nà-nà* ‘stone-grind; crush’

*ná ná-nà* ‘tend (livestock)’

*sāⁿ ~ sɔ̄ⁿ sá-nà* ‘sort (grains)’

b. *fǐⁿtɔ̄ⁿ fǐⁿtɔ̀-nà* ‘shut up, be quiet’

*kāɣāⁿ kāɣā-nà* ‘encounter’

*kàràⁿ kàrá-nà* ‘read’ (also *kə̀ràⁿ*, *kàrɛ́-nà* )

*mɔ́ɣɔ́ⁿ mɔ́ɣɔ́-nà* ‘suck’

*ɲānī ɲānī-nà* ‘pester, annoy’

### Verbs with apparently truncated imperfectives

In a small number of verbs, it appears to be possible that the imperfective lost a final syllable due to sound shifts (deletion of medial nasal or \*l), resulting in the synchronic appearance that the perfective has a suffix.

#### *ʃyáⁿ\\ʃyɛ́nɛ̀* ‘lie down’

How this verb fits into verb classes is unclear. To take the *nɛ̀* as a variant of suffix *‑nà* is one possibility, but the vocalism of both syllables would then be irregular. Etymologically there may have been a stem-medial *n* in the imperfective that has dropped (\*ʃyáná ), in which case this would be a vowel-mutating verb with perfective CɛCɛ, see (xx1b) in §8.5.1.

#### *sɔ̀ⁿ\\sùŋɛ̀* ‘work’

This verb also appears to have lost a medial nasal or possibly \*ɣ in the imperfective. The shift in vowel quality (*ɔ̀* versus *u*) resembles those between *a* or *ɔ* and *i* in some Cvg/ŋv stems with medial velar such as *dɔ̀ɣɔ̀\\dìgɛ̀* ‘follow; hear’ and other examples in (xx3a) in §8.5.1 above. One might therefore reconstruct the imperfective as \*sɔ̀ɣɔ̀ⁿ or \*sɔ̀ŋɔ̀.

This verb is regularly collocated with noun sɔ̯ⁿɛ̀ɛ́ ‘work (n)’.

#### *tú\\túlɛ̀* ‘spit’

In this verb, it would seem that a medial *l* has been dropped in the imperfective (\*túlv́ ). Depending on what final vowel we reconstruct (e.g. \*túlá or \*túlɛ́ ) this would be a tone-only alternation (§8.4). A complicating factor is that tú (less so túlɛ̀ ) is onomatopoeically “correct” for this sense.

#### *nɔ̀rɔ̀ⁿ* ~ *nɔ̀yⁿ\\nɔ̀nɔ̀* ~ *nɔ̀rɔ̀ⁿ* ‘expel’

For ‘expel, drive out, chase away’, *nɔ̀rɔ̀ⁿ* and *nɔ̀y* are attested as imperfective and *nɔ̀nɔ̀* or *nɔ̀rɔ̀ⁿ* as perfective. Given that some bisyllabics with nasals have perfective suffix -nà ~ -rⁿà (§8.6.1.2), there is a possibility that the perfective of ‘expel’ was originally suffixed \*nɔ̀rɔ̀‑nà. However, this could alternatively just be another case of alternation of *n* and *r*.

### Perfective *-bà* or *‑mà*

These perfective suffixes are usually related to each other as nonnasal (oral) versus nasal, like *-là* versus *-nà* as described in §8.6.1 above.

#### Perfective *-bà* after unnasalized stem

None of the stems that take *-bà* in the perfective are nasalized. They include a few monosyllabics with back rounded vowel (xx1a), one of which (‘end’) shifts to *a* before the suffix. There are several bisyllabics mostly ending in a high vowel (xx1b). HM flattens to HH before the suffix; see ‘fight’ and ‘gin’ in (xx1b).

(xx1)imperfective perfective gloss

a. monosyllabic

*stable vowel and tone*

*sɔ́ sɔ́-bà* ‘pound (sth) in mortar’

*yɔ́ yɔ́-bà* ‘become black; (night) fall’

*tɔ̄ tɔ̄-bà* ‘hide (oneself)’

*stable vowel but tone is lowered*

*yɔ̄ yɔ̀-bà* ‘forge (blade)’

*yɔ̄ dūnū~dūrūⁿ yɔ̀-bà dùnù~dùrùⁿ* ‘knock down’

*shifting vowel*

*kɔ̄ ~ kwɔ̄ kā-bà* ‘end, be used up’

b. bisyllabic

*HM becoming HH-L*

*dáɣā dáɣá-bà* ‘fight, quarrel’

*tə́rī tə́rí-bà* ‘gin (cotton)’

*other verbs (tones stable)*

*fə́rɛ́ fə́rɛ́-bà* ‘steal; knead (dough)’

*ʃírí ʃírí-bà* ‘sneeze’

*tə́rí tə́rí-bà* ‘rub on (sth)’

*tə́rú ~ tú túrú-bà* ‘hunt fish, go fishing’

*yírí yírí-bà* ‘shape into a ball’

*irregular (-bà spreading into imperfective)*

*tə̀rì-bà ~ tə̀rì tə̀rì-bà* ‘(sb) slip’

*Cvy imperfective (probably < \*Cvrv)*

*pɛ̄y pɛ̄rɛ̄-bà*, *pɛ̄y-bà* ‘lean shoulder against (wall)’

*wɔ̄y wɔ̄y-bà* ‘cough (v)’

#### Perfective *-mà* after nasalized stem

In most cases, the suffix *-mà* occurs with verbs whose imperfective is nasalized, whether monosyllabic (xx1a) or bisyllabic (xx1b). However, there are also two verbs whose imperfective ends in oral *i* (xx1c).

(xx1) imperfective perfective gloss

a. monosyllabic

*nɔ́ nɔ́-mà* ‘become thin’

*sáⁿ sá-mà* ‘thresh; beat’

b. bisyllabic

*HM becoming HH-L*

*gérēⁿ~gə́rēⁿ~géȳⁿ géré-mà* ‘stir w. stick; spin (thread)’

*máɣāⁿ máɣá-mà* ‘roll up’

*other verbs (tones stable)*

*būgūⁿ būgū-mà* ‘look for’

*fə́ríⁿ~fíríⁿ~fíní fírí-mà~fíní-mà* ‘think about’

*kéyⁿ kéré-mà~kéé-mà* ‘go up’

*ɲúgúⁿ~ɲúŋú ɲúgú-mà~ɲúú-mà* ‘press (oil, juice); choke’

*ɲúŋúⁿ ɲúŋú-mà* ‘squeeze; draw (milk)’

*ŋɔ́rⁿɔ́ ŋɔ́rⁿɔ́-mà* ‘fold, bend, curve, twist’

*sìgìⁿ~sìŋì sìgì-mà* ‘run’

*tàɣàⁿ~tìŋɛ̀~tìgɛ̀ⁿ tìgì-mà* ‘(light) shine; flash’

c. *bə́rí bə́rí-mà* ‘roll along; beat (tomtom)’

*kə́rī kə́rí-mà ‘*go back; spin, turn’

One observation is that the medial *g/ŋ* alternation in imperfectives seems to be avoided in the perfective, which is attested only with *g*, see ‘run’ and ‘shine’, perhaps also ‘press’, in (xx1b). In other words, the suffixal *m* absorbs the nasalization of the stem.

## Suppletion (*jà\\dē* ‘happen’)

The intransitive verb ‘happen, occur, take place’ is at least synchronically suppletive with imperfective *jà* and perfective *dē*. The case for an original nonsuppletive verb whose two stems have diverged by sound changes is based on the phonetic proximity of *j* and *d*, and the vocalism which follows the *a/e* pattern found with many verbs (§8.5.1). On the other hand, L‑toned imperfectives are not normally paired with M‑toned perfectives, and a *j/d* split would be more plausible with *j* before a front vowel and *d* before a back or low vowel rather than the opposite.

Another *dē*, possibly related historically, occurs in a possessive predicate construction; see (xx2) in §10.2.5.2.

# Phrase-level verbal inflection

The previous chapter showed that each nonstative verb has two forms at word level, imperfective (relatively unmarked) and perfective (relatively marked). At phrase-level, these word forms combine with preceding grammatical particles to express the following categories:

(xx1) a. indicative

perfective perfective negative

imperfective imperfective negative

future future negative

b. modal

imperative prohibitive (imperative negative)

hortative hortative negative

The indicative inflections also have pronominal-subject conjugations, expressed by proclitics (optionally replaced by independent pronouns).

A schematic summary of the distribution of imperfective (Ipfv) and perfective (***Pfv***) stems within the phrase-level inflections and the productive deverbal derivations is Table 1. Given the use of the “perfective” form of the verb occurs in the future, the labels “perfective” and “imperfective” for the verb-stem alternation are oversimplified.

|  |  |  |
| --- | --- | --- |
|  | positive | negative |
| perfective | ***Pfv*** | Ipfv |
| imperfective | Ipfv | Ipfv |
| progressive | Ipfv | Ipfv |
| future | ***Pfv*** | ***Pfv*** |
| imperative | Ipfv | Ipfv |
| hortative | Ipfv | Ipfv |
| infinitive, §3.1.4 | Ipfv | |
| agentive, §3.1.3 | ***Pfv*** | |

Table 1: Use of perfective & imperfective verb stems

The subject pronominals used in positive and negative inflections are summarized in (xx1), excluding cases where 1Sg *ŋ́* and 2Sg *ŋ̀* are deleted by (morpho-)phonological rule before the initial nasal of a negative marker. 2Pl shows a minor tonal change from positive to negative. 3Sg and 3Pl show suppletion, and 3Sg *kà* in negatives replaces three distinct class-marked positive pronominals. The “negative” forms are also optionally used in the future positive.

(xx2) pronominal subject proclitic in perfective positive

positive all negative category

*ŋ́* 1Sg

*é*  1Pl

*ŋ̀* 2Sg

*nā* *nà* 2Pl

*ŋ̄ kà* 3SgHum, 3SgO

*ā*  *kà* 3SgA

*ē* *kà* 3SgE

*ō wɔ̀ɣɔ́* ~ *wɔ̀ɣɔ̀* 3Pl

3Pl pre-negative *wɔ̀ɣɔ́* ~ *wɔ̀ɣɔ̀* are not free variants, rather there is some ambiguity as to which one is underlyingly correct. *wɔ̀ɣɔ́* is the 3Pl perfective negative portmanteau; one can argue whether the final H‑tone is due to contraction from e.g. /wɔ̀ɣɔ̀ kǎ/ or whether it is an intrinsice part of the 3Pl morpheme. In 3Pl negative *wɔ̀ɣɔ̀ máⁿ* and related forms, either *wɔ̀ɣɔ́* or *wɔ̀ɣɔ̀* could be the underlying form because of the LH#H-to-LL#H tone sandhi process.

All simple negative clauses end in a clause-final negative enclitic *=ʔ*. It is therefore hosted by the verb if there is no postverbal constituent. If there is a postverbal object or PP the enclitic is hosted by the final word.

## Perfective

The perfective expresses events that are conceptualized as completed (bounded), generally in the past.

### Perfective positive

The perfective positive is expressed by the perfective stem of the verb, with no inflectional particles. The stem is preceded by a nonpronominal subject NP or, in its absence, by a pronominal-subject proclitic (xx1), with no intervening inflectional morpheme.

(xx1) Perfective positive paradigm

*ŋ́* 1Sg

*é*  1Pl

*ŋ̀* 2Sg

*nā* 2Pl

*ŋ̄* 3SgHum, 3SgO

*ā* 3SgA

*ē* 3SgE

*ō* 3Pl

A few examples are in (xx2). Observe the three-way tonal distinction between 1Sg *ŋ́* (reduced from *ɲí* ), 2Sg *ŋ̀* (reduced from independent *mì* ), and 3Sg *ŋ̄*.

(xx2) ‘got up’

subject perfective positive

1Sg *ŋ́ yígà*

2Sg *ŋ̀ yígà*

3Sg *ŋ̄ yígà*

NP (Zaki) *zàkí yígà*

### Perfective negative

After a nonpronominal subject, the preverbal perfective negative particle is *kàá* in careful pronunciation, but is usually shortened to *kǎ* (phonetically sometimes *kā* without a clearly contoured pitch). The same form, beginning with *k*, is heard when the subject is a 3Sg pronoun (in this paradigm, zero). After a pronominal-subject proclitic that ends in a vowel or that consists of a nasal, the initial *k* is pronounced *g* or is elided entirely.

(xx1) perfective negative

*ŋ́ (g)ǎ* ~ *ŋ́ (g)à(á)* 1Sg

*é (g)ǎ* ~ *é (g)à(á)* 1Pl

*ŋ̀ (g)ǎ* ~ *ŋ̀ (g)àá* 2Sg

*nà gǎ* ~ *nà gàá* 2Pl

*kǎ ~ kàá* 3Sg (all classes)

*wɔ̀ɣɔ́* 3Pl

Before an H‑tone, the LH-toned negative particle (or a reduction thereof) drops to L‑toned. Thus *kǎ bà‑ʔ* ‘he/she didn’t come’ with LH‑toned particle, but *kà yígí‑ʔ* ‘he/she did not get up’. This is also the case with the 3Pl portmanteau: *wɔ̀ɣɔ́ bà‑ʔ* ‘they didn’t come’, but *wɔ̀ɣɔ̀ yígí‑ʔ* ‘they did not get up’. L‑toned *wɔ̀ɣɔ̀* is homophonous with imperfective (positive) inflectional morpheme *wɔ̀ɣɔ̀* (§9.2.1 below). Aside from the final glottal stop in negative, the two can be distinguished since the 3Pl perfective negative *wɔ̀ɣɔ́* ~ *wɔ̀ɣɔ̀* includes a pronominal subject and is therefore not preceded by a subject NP or pronoun, while imperfective *wɔ̀ɣɔ̀* is always preceded by a subject (such as 3Sg *ŋ̄* or 3Pl *ō* ). Compare the three combinations in (xx2) that include *wɔ̀ɣɔ̀*.

(xx2) Selected pronominal-subject forms of ‘get up’

subject perfective negative imperfective positive

3SgHum *kà yígí-ʔ ŋ̄ wɔ̀ɣɔ̀ yígí*

3Pl *wɔ̀ɣɔ̀ yígí-ʔ ō wɔ̀ɣɔ̀ yígí*

NP (Zaki) *zàkí kà yígí-ʔ zàkí wɔ̀ɣɔ̀ yígí*

## Imperfective

There is a simple imperfective without a special inflectional particle. It is distinct from the future and from the progressive, both of which do involve inflectional morphemes.

### Simple imperfective

The imperfective form of the verb stem may directly follow the subject to constitute an imperfective used as a general present (habitual or continuous).

(xx1) a. *ŋ́ sɔ̀ⁿ [=ỳ sɔ̯ɛ̀ɛ́] sàmìyàʕàⁿ*

1Sg work(v) [Pref work(n)] Bobo

‘I work in Bobo Dioulasso.’

b. *zàkí ʃyáⁿ fáⁿ*

Z lie.down.Ipfv here

‘Zaki sleeps here (regularly).’

The “progressive” rather than the simple imperfective is used in some contexts where the English simple present (*he runs*) would be used.

### Imperfective negative (*máⁿ* )

The imperfective negative morpheme is *máⁿ*. Its pronominal paradigm is (xx1). The initial 1Sg *ŋ́* and 2Sg *ŋ̀* are usually not heard. The distinction is made instead by the tones of the negative morpheme; we can think of the pronominals as floating H and L tones that dock on the negative morpheme. As in other negative paradigms, special forms are used for third person pronouns: 3Sg *kà* (neutralizing all noun classes) and 3Pl *wɔ̀ɣɔ̀*.

(xx1) Imperfective negative

*máⁿ* (< /ŋ́ máⁿ/) 1Sg

*é máⁿ* 1Pl

*yáɣá máⁿ* 1PlIncl

*mǎⁿ* (< /ŋ̀ máⁿ/) 2Sg

*nà máⁿ* 2Pl

*kà máⁿ* 3Sg (all classes)

*wɔ̀ɣɔ̀ máⁿ* 3Pl

NP *máⁿ* NP

The verb takes the morphological imperfective form.

(xx1) a. *kà máⁿ ʃyáⁿ*

3Sg IpfvNeg lie.down.Ipfv

‘He/She doesn’t sleep (here)’

b. *máⁿ bárā=ʔ*

1Sg.IpfvNeg sweep.Ipfv=Neg

‘I don’t sweep.’

*c. wɔ̀ɣɔ̀ máⁿ bárā=ʔ*

3Pl IpfvNeg sweep.Ipfv=Neg

‘They don’t sweep.’

The same negative forms with *máⁿ* can function to negate statives, e.g. *(ŋ́) máⁿ gō …* ‘I was not (there)’ (§10.2.1).

## Progressive

The progressive is somewhat more general than the English progressive, but is constrained by the imperfective (normal in habitual present contexts) and the future.

### Progressive positive

The progressive positive is expressed by the inflectional morpheme *wɔ̀ɣɔ̀* preceding the verb, which takes its imperfective form. The subject (either a nonpronominal NP or a pronominal-subject proclitic) precedes *wɔ̀ɣɔ̀*. Examples are (xx1a‑b).

(xx1) a. *zàkí wɔ̀ɣɔ̀ sē / yígí*

Z Prog go.Ipfv / get.up.Ipfv

‘Zaki is going / is getting up.’

b. *ŋ́ wɔ̀ɣɔ̀ bárā*

1Sg Prog sweep.Ipfv

‘I am sweeping.’

The pronominal-subject paradigm is (xx2). The class-marked *ē wɔ̀ɣɔ̀* does not seem to be used frequently; E-class nouns may take the A-class form.

(xx2) Progressive positive

*ŋ́ wɔ̀ɣɔ̀* ~ *ɲáɣàⁿ* 1Sg

*é wɔ̀ɣɔ̀* 1Pl

*ŋ̀ wɔ̀ɣɔ̀* 2Sg

*nā wɔ̀ɣɔ̀* 2Pl

*ŋ̄ wɔ̀ɣɔ̀* 3SgHum, 3SgO

*ā wɔ̀ɣɔ̀* 3SgA

*ē wɔ̀ɣɔ̀* 3SgE

*ō wɔ̀ɣɔ̀* 3Pl

The examples below contrast progressive *wɔ̀ɣɔ̀* (xx3a‑b) from 3Pl perfective negative *wɔ̀ɣɔ́*, which becomes *wɔ̀ɣɔ̀* by tone sandhi in (xx3c). As mentioned earlier, one can parse correctly by observing the presence/absence of clause-final negative enclitic *=ʔ*, and by noting the absence of a preverbal subject in (xx3c).

(xx3) a. *ŋ̄ wɔ̀ɣɔ̀ yígí*

3Sg Prog get.up.Ipfv

‘He/She gets up.’

b. *ō wɔ̀ɣɔ̀ yígí*

3Pl Prog get.up.Ipfv

‘They get up.’

c. *wɔ̀ɣɔ̀ yígí‑ʔ*

3Pl.PfvNeg get.up.Ipfv=Neg

‘They didn’t get up.’

### Progressive negative

The full form of the progressive negative has *máⁿ wɔ̀ɣɔ̀*, consisting of imperfective negative *máⁿ* and progressive *wɔ̀ɣɔ̀*. There are various assimilated and contracted variants: *mɔ́ⁿ wɔ̀ɣɔ̀*, *máɣàⁿ*, and *mɔ́ɣɔ̀ⁿ*.

The pronominal proclitics have the same forms as in the (simple) imperfective negative, including the special negative variants of the 3Sg and 3Pl pronominals. The 2Pl proclitic is L‑toned. The 2Sg subject form is *màɣáⁿ* with the L‑tone of 2Sg /m̀/ expressed on the first syllable of /máɣàⁿ/, pushing the latter’s H‑tone to its final syllable.

The pronominal paradigm is (xx1), showing full and contracted variants.

(xx1) Progressive negative

full form contracted category

*(ŋ́) máⁿ wɔ̀ɣɔ̀* *(ŋ́) máɣàⁿ* 1Sg

*é máⁿ wɔ̀ɣɔ̀* *é máɣàⁿ* 1PlExcl

*yáɣá máⁿ wɔ̀ɣɔ̀* *yáɣá máɣàⁿ* 1PlIncl

*màɣáⁿ*  *màɣáⁿ* 2Sg

*nà máⁿ wɔ̀ɣɔ̀* *nà máɣàⁿ* 2Pl

*kà máⁿ wɔ̀ɣɔ̀* *kà máɣàⁿ* ~ *kà mɔ́ɣɔ̀ⁿ* 3Sg (all classes)

*wɔ̀ɣɔ̀ máⁿ wɔ̀ɣɔ̀* *wɔ̀ɣɔ̀ máɣàⁿ* 3Pl

NP *máⁿ wɔ̀ɣɔ̀* NP *máɣàⁿ* NP

The verb takes its morphological imperfective form. A few examples are in (xx2). After 1Sg independent pronoun ɲí (not the proclitic), the negative morpheme is L‑toned *màɣàⁿ* (xx2b).

(xx2) a. *máⁿ wɔ̀ɣɔ̀ bárā*

1Sg.IpfvNeg Prog sweep.Ipfv

‘I am not sweeping.’

b. *ɲí màɣàⁿ bárā=ʔ*

1Sg ProgNeg sweep.Ipfv=Neg

‘Me, I am not sweeping.

The contracted forms in the paradigm (xx1), but with the perfective rather than imperfective stem of the verb, functions as future negative (§9.3.2, below).

### Past progressive

A past progressive is expressed by adding past particle *tì* between the subject and the progressive morpheme *wɔ̀ɣɔ̀* (xx1a). It is negated as *tì máⁿ wɔ̀ɣɔ̀*, which is often contracted phonetically to [tìmɔ́ɣɔ̀ⁿ].

(xx1) a. *zàkí tì wɔ̀ɣɔ̀ bə́rā*

Z Past Prog sweep.Ipfv

‘Zaki was sweeping.’

b. *zàkí tì máⁿ wɔ̀ɣɔ̀ bə́rā=ʔ*

Z Past IpfvNeg Prog sweep.Ipfv=Neg

‘Zaki was not sweeping.’

For past progressives in backgrounded temporal adverbial clauses, see §13.4.

## Future

### Future positive

The future positive morpheme is *bī* after a nonpronominal subject NP. The pronominal subject paradigm is (xx1), where orthographic *ŋ bi* (omitting the tones) is pronounced [mbi]. The verb takes the perfective (not imperfective!) form. The 3Pl proclitic is *wɔ̀ɣɔ̀* rather than *ò* or *ō*.

Third person and 2Pl pronominal proclitics have L- rather than M-tone in this paradigm, but after these L‑toned proclitics the tone of the inflectional morpheme is raised from *bī* to *bí*. In spite of their tonal neutralization, 2Sg *ŋ̀* and 3Sg *ŋ̀* are usually (but not always) distinguished by the addition of an addition particle *a*, found only in the future positive, before the 2Sg proclitic. The particle also frequently appears before 1Sg proclitic *ŋ́*. In both cases, the particle *a* adopts the tone of the following proclitic. Any remaining ambiguities can be resolved by using an independent pronoun instead of a proclitic. In the 3Sg, *kà* (also used in negative paradigms) is more common than *ŋ̀*, and for 3SgA and 3SgE the most common form is *kàʕà* with the A-class marker following *kà*.

(xx1) Future

*(á) ŋ́ bī* 1Sg

*é bī* 1Pl

*yáʕá bī* 1Pl inclusive

*(à) ŋ̀ bí* 2Sg

*nà bí* 2Pl

*ŋ̀ bí* ~ *kà bí* 3SgHum, 3SgO

*à bí* ~ *kàʕà bí* 3SgA

*è bí* ~ *kàʕà bí* 3SgE (uncommon)

*wɔ̀ɣɔ̀ bí* 3Pl

NP *bī* NP

Some examples are in (xx2).

(xx2) a. *zàkí bī sà*

Z Fut go.Pfv

‘Zaki will go.’

b. *(á) ŋ́ bī yígà*

(Fut) 1Sg Fut get.up.Pfv

‘I will get up.’

c. *(à) ŋ̀ bí yígà*

(Fut) 2Sg Fut get.up.Pfv

‘You-Sg will get up.’

d. *ŋ̀ / kà bí yígà*

3Sg Fut get.up.Pfv

‘He/She will get up.’

### Future negative

The future negative has the same inflectional morpheme *máɣàⁿ* as the imperfective negative, with the same pronominal paradigm. Recall that *máɣàⁿ* is usually contracted to *mâⁿ* except in careful speech.

(xx1) Future negative

*máɣàⁿ* 1Sg

*é máɣàⁿ* 1PlExcl

*yáɣá máɣàⁿ* 1PlIncl

*màɣáⁿ*  2Sg

*nà máɣàⁿ* 2Pl

*kà máɣàⁿ* 3Sg (human or nonhuman)

*wɔ̀ɣɔ̀ máɣàⁿ* 3Pl

The future negative is distinguished from the progressive negative by the form of the verb stem, which is “perfective” in the future negative (as in the future positive) but “imperfective” in the progressive negative (as in the progressive positive).

(xx2) Selected pronominal-subject forms of ‘get up’

subject future negative progressive negative

1Sg *máɣàⁿ yígà‑ʔ máɣàⁿ yígí‑ʔ*

2Sg *màɣáⁿ yígà‑ʔ màɣáⁿ yígí‑ʔ*

3Pl *wɔ̀ɣɔ̀ máɣàⁿ yígà‑ʔ wɔ̀ɣɔ̀ máɣàⁿ yígí‑ʔ*

NP (Zaki) *zàkí máɣàⁿ yígà‑ʔ zàkí máɣàⁿ yígí‑ʔ*

Examples of the future negative are in (xx3).

(xx3) a. *súgúnā zàkí máɣàⁿ sà-ʔ*

tomorrow Z FutNeg go.Pfv=Neg

‘Tomorrow Zaki will not go.’

b. *súgúnā máɣàⁿ bɛ́rɛ̀=ʔ*

tomorrow 1Sg.FutNeg sweep.Pfv=Neg

‘Tomorrow I will not sweep.’

c. *màɣáⁿ sà‑ʔ* / *bà-ʔ*

2Sg.IpfvNeg go.Pfv/come.Pfv

‘You will not go / come.’

## Imperative

### Imperative positive

The imperative positive for singular addressee consists of the imperfective stem, with no preceding pronominal proclitic or inflectional morpheme. Since the imperfective stem does not otherwise occur in this bare, clause-initial form, it can only be interpreted as imperative.

The imperative positive for plural addressee adds 2Pl *nà* in L‑toned form before the imperfective stem.

(xx1) gloss Imprt Sg Imprt Pl

‘go’ *sē nà sē*

‘get up’ *yígí nà yígí*

‘fall’ *só nà só*

Contrast mid-toned 2Pl *nā* in indicatives. The tonal distinction *nà* versus *nā* is important with verbs like *bà* ‘come’ (the most common verb in imperatives) that have identical perfective and imperfective stems (xx2a‑b).

(xx2) a. *nā bà*

2Pl come.Pfv

‘You-Pl came.’

b. *nà bà*

2Pl come.Ipfv

‘Come!-2Pl’

For 2Sg, the difference for verbs like ‘come’ is presence/absence of 2Sg subject proclitic *ŋ̀*, which is absent from imperatives (xx3a‑b).

(xx3) a. *ŋ̀ bà*

2Sg come.Pfv

‘You-Sg came.’

b. *bà*

come.Ipfv

‘Come!-2Sg’

For most other verbs, the perfective and imperfective stems are audibly distinct, so imperatives are immediately recognizable.

### Imperative negative (prohibitive)

The prohibitive has its own inflectional morpheme *báá*, followed by the imperfective stem. There is no overt 2Sg pronominal when the addressee is singular. Plural addressee is marked by preposing L‑toned *nà*, as in the positive imperative. The usual clause-final negative enclitic *=ʔ* is present; if there is no postverbal constituent it is hosted by the verb.

(xx1) gloss Proh Sg Proh Pl

‘go’ *báá sē‑ʔ nà báá sē‑ʔ*

‘get up’ *báá yígí‑ʔ nà báá yígí‑ʔ*

‘fall’ *báá só‑ʔ nà báá só‑ʔ*

## Hortative

### Positive hortative (*é bì* )

The hortative (‘let’s VP!’) requires a 1Pl subject. It is expressed by the same particle *bī* found in the future positive. However in the hortative the verb stem is imperfective, versus perfective in the future positive.

(xx1) a. *é bì sē*

1Pl Fut go.Ipfv

‘Let’s go!’

b. *é bī sà*

1Pl Fut go.Pfv

‘We will go.’

In the hortative, the future particle may be elided, hence *é sē* ‘let’s go!’ as an alternative to (xx1a).

### Negative hortative (*è bàá* )

In the negative, the 1Pl proclitic is L‑toned, and future *bī* is replaced by a special negative form *bàá* used only in the hortative negative.

(xx1) *è bàá sē=?*

1Pl HortNeg go.Ipfv=Neg

not ‘Let’s go!’

# Simple clauses

## Intransitive, transitive, ditransitive

### Order of constituents

The basic order is SVO, whether the subject and object are nonpronominal NPs (xx1a) or pronominals (xx1b). In the latter case, pronominal objects are clearly enclitic, and one could argue that pronominal subjects are proclitic, but they occur in the same linear position as full NPs.

(xx1) a. *zàkí də̀rà [báŋ jɔ̄ⁿ]*

Z buy.Pfv [sheep two]

‘Zaki bought two sheep.’

b. *ō kpà=ýⁿ*

3Pl hit.Pfv=1Sg

‘They hit me.’

### Intransitive verbs

Intransitive verbs may be dynamic (active) or stative.

#### Dynamic (active) intransitives

Dynamic verbs denote events that take place in a time interval, and occur in the full set of TAMN phrases (xx1).

(xx1) a. *zàkí yī-rà*

Z jump.Pfv

‘Zaki jumped.’

b. *ŋ́ wɔ̀ɣɔ̀ yī*

1Sg Prog jump.Ipfv

‘I am jumping.’

Some common meteorological and time-of-day combinations are in (xx2). In each case the subject NP expresses the specific sense and the verb is a general one also used in other contexts.

(xx2) a. *[(ò) bló] bà*

[(Pref) rain(n)] come.Pfv

‘It rained.’

b. *[(à) yèyàʕà] yígà / súgà*

[(Pref) sun] get.up.Pfv / fall.Pfv

‘The sun rose/set.’

c. *bə́rīī yɔ́-bà*

night become.black.Pfv

‘Night fell.’ (i.e. it got dark out)

d. *[è tɛ̀ýⁿ] ʃīrè*

[Pref daybreak] become.white.Pfv

‘Day broke.’ (i.e. it became light out just before dawn)

#### Stative intransitives

Some states are expressed by adjectival predicates, on which see §xxx.

Verbs of stance have distinct stative and dynamic forms. The statives combine with *gō* ‘be (somewhere)’ and its past form *jè* ‘was (somewhere)’, whose main function is described in §10.2.1. Statives do not distinguish aspect (perfective vs. imperfective). Dynamic ‘stand up’ in perfective form in (xx1a) is followed by various tense and polarity forms of its stative counterpart ‘be standing’ (French *être debout*).

(xx1) a. *ō ɲə́rɛ̀ⁿ*

3Pl stand.Pfv

‘They stood up.’ or ‘They stopped (=came to a halt).’

b. *ō ɲínáʕáⁿ gō*

3Pl stand.Stat be

‘They are standing.’

c. *ō ɲínáʕáⁿ máⁿ gō=ʔ*

3Pl stand.Stat IpfvNeg be=Neg

‘They are not standing.’

d. *ō ɲínáʕáⁿ jè*

3Pl stand.Stat Past

‘They were standing.’

e. *ō ɲínáʕáⁿ kàá jè=ʔ*

3Pl stand.Stat PfvNeg Past=Neg

‘They were not standing.’

Dynamic/stative alternations are in (xx2). For the dynamic verbs, both aspectual stems are shown.

(xx2) dynamic Ipfv dynamic Pfv stative gloss (dynamic)

a. *ɲɛ́ráⁿ ɲə́rɛ̀ⁿ ɲínáʕáⁿ gō* ‘stand, stop’

b. *tə̄rāⁿ tə̀rɛ̀ⁿ tə̀ràʕáⁿ gō* ‘sit down’

c. *ʃyáⁿ ʃyɛ́-nɛ̀ ʃíyáʕáⁿ gō* ‘lie down’

Other verbs that are intrinsically stative and have no dynamic forms are in (xx3).

(xx3) a. *gō* ‘be/exist (somewhere)’ (§10.2.1), copula (§10.2.2)

also part of ‘want’ (§10.3.2) and ‘have’ (§10.2.4.1)

*jè* past counterpart of *gō*

b. *jī* ‘know about, be aware of’ (§10.3.3)

*kɔ̀ⁿ* ‘know’ (§10.3.3)

c. *pòyⁿ* ‘can, be able to’ (after another verb/VP)

*pùrⁿù* ‘be able’ (without another verb/VP)

d. *blā* ‘be better’

e. *fó* ‘it is necessary (that …)’ (< French *il faut* ?)

f. *fyê* ‘be gone’ (suppletes *sē/sà* ‘go’, §10.3.1)

#### Adjectival predicates

Relationships between modifying adjectives (§3.3) and corresponding predicates (‘be big’ etc.) are of two basic types, leaving inchoative verbs apart.

(xx2) shows a type where the form used in predicates is identical to that used as modifying adjective. In the predicate, the adjective directly follows the subject pronoun, which for these adjectives is *kàʕà* (usually reduced to *kà* ) in the 3Sg form.

(xx2) modifying ‘3Sg is…’ gloss

a. *cɔ́ⁿ kàʕà cɔ̂ⁿ* ‘deep’

b. *tɛ̂ⁿ kàʕà tɛ̂ⁿ* ‘bitter’

c. *sɔ̀rɛ̀yⁿ kàʕà sɔ̀ɛ̀yⁿ* ‘long; distant’

*sɔ̀rɔ̀wⁿ*

*sɔ̀rɔ̀yⁿ*

d. *díyⁿáʕāⁿ kàʕà dáⁿ* ‘delicious, sweet’

e. *sáŋgbə́ráyⁿ* *kàʕà tû* ‘big’

*sáŋgbə́ráwⁿ*

*sáŋgbə́rááⁿ*

f. *kwɔ́làʕá kàʕà kò* ‘good’

g. *blákà kàʕà blâ* ‘easy, cheap’

Regular 1st/2nd person subject proclitics like 1Sg *ŋ́* may also be used instead of 3Sg *kàʕà*. The 3Pl form is *wɔ̀ɣɔ̀* (*wɔ̀ɣɔ̀ tû* ‘they are big’). This pattern is regularly elicited for the adjectives shown. Some adjectives have multiple forms in modifying function, suggesting vestiges of a noun-class agreement system.

In a second predicative type, *gō* ‘be (present)’ is the actual predicate, preceded by a form (perhaps originally a noun) of the adjective, which in turn is preceded by a regular subject pronoun (not a possessor), here illustrated with 3Sg Nonhuman *à* (others include 1Sg *ŋ́* and 3Sg Human *ŋ̀* ). The adjectives in (xx3) were regularly elicited with this predicative type.

(xx3) modifying ‘it is …’ gloss

a. *ʃíyⁿàʕáⁿ à ɲáʕáⁿ gō* ‘red’

b. *wàɣáⁿ à wàɣáⁿ gō* ‘wide’

c. *yɔ́bàʕá* *à yɔ́w gō* ‘black’

~ *yɔ́bɔ̀*

d. *wálāʕā* *à wáláʕá gō* ‘dry’

~ *wálāw*

e. *fíyⁿàʕáⁿ à fíŋéyáʕáⁿ gō* ‘white’

For ‘heavy’, both predicates are attested. In modifying function, this adjective takes a suffix *-máʕá* also found in *fɔ́ɣɔ́-māʕāⁿ* ‘soft; lightweight’, cf. verb *fɔ́ɣɔ́‑mā* ‘be soft, lightweight’.

(xx3) modifying ‘it is …’ gloss

*dúgú-māʕāⁿ kàʕà dúgū* ‘heavy’

*à dúwàʕà gō*

### Transitive verbs

These include the usual impact transitives, but also perception verbs.

(xx1) a. *ō kpà=ýⁿ*

3Pl hit.Pfv=1Sg

‘They hit me.’

b. *ō ɲà=ýⁿ*

3Pl see.Pfv=1Sg

‘They saw me.’

### Ambi-valent (labile) verbs

In the absence of a productive causative or mediopassive derivation at word level, it is quite normal for a Tiefo-N verb to have both intransitive and transitive uses. The typical pattern is that an external agent is added to the intransitive to create the transitive, cf. English *X broke* (“middle” or “unaccusative” intransitive) versus *Y broke X*. In addition to action verbs like ‘break’, the pattern applies also to some motion verbs.

(xx1) a. *ō yì-rà*

3Pl enter.Pfv

‘They went in.’

b. *ō yì-rà=ýⁿ*

3Pl enter.Pfv=1Sg

‘They put/took me in.’

However, some intransitive motion verbs have other ways to generate transitive equivalents. ‘X bring Y’ is expressed as ‘X come [with Y]’ (xx2a), and the transitive *glâ\\glê* ‘take out’ is distinct from (though irregularly related to) intransitive ‘exit’ *gúrú~gə́rú\\glâ* (xx2b).

(xx2) a. *ō bà [nà [ò ɲǔ]]*

3Pl come.Pfv [with [Pref water]]

‘They brought (the) water.’

b. *ō glê [ò bɔ̄ɣɔ̀ⁿ]*

3Pl take.out.Pfv [Pref dog]

‘They took the dog out.’

### Ditransitive two-verb combinations (‘give’, ‘show’)

‘Give’ is expressed primarily by the verb *sɔ̀ɣɔ̀\\sɔ̀ɣɔ̀* (xx1a‑c). If the recipient NP is overt, it follows a second verb *ŋɔ̄ⁿ\\ŋɔ̀ⁿ*, which in this construction occurs only in the perfective stem *ŋwɔ̀* regardless of the inflectional category of *sɔ̀ɣɔ̀\\sɔ̀ɣɔ̀*. This second verb functions like a dative preposition in other languages (xx1b‑c).

(xx1) a. *sɔ̀ɣɔ̀ [è bíklé]*

give.Ipfv [Pref money]

‘Give (the) money!’

b. *ŋ́ sɔ̀ɣɔ̀ [è bíklé] ŋɔ̀ⁿ làmínì*

1Sg give.Pfv [Pref money] give.Pfv L

‘I gave (the) money to Lamine.’

c. *ŋ́ àá sɔ̀ɣɔ̀ [è bíklé] ŋɔ̀ⁿ làmínì=ʔ*

1Sg PfvNeg give.Ipfv [Pref money] give.Pfv L=Neg

‘I didn’t give (the) money to Lamine.’

Elsewhere *ŋɔ̄ⁿ\\ŋɔ̀ⁿ* occurs by itself as a simple transitive verb in the sense ‘help out (sb) with a gift (esp. money)’, cf. English *bail out* or *support* (financially). For its part, *sɔ̀ɣɔ̀\\sɔ̀ɣɔ̀* as a simple transitive verb means ‘send (sb, e.g. on an errand or mission)’.

The verb ‘show’ is *ḿlàⁿ~mə́làⁿ\\ḿlɛ̀ⁿ~mə́lɛ̀ⁿ*. It has the same syntax as *sɔ̀ɣɔ̀\\sɔ̀ɣɔ̀* ‘give’ (xx2a‑c).

(xx2) a. *mə́làⁿ [è bíklé]*

give.Ipfv [Pref money]

‘Show (the) money!’

b. *ŋ́ mə́làⁿ [è bíklé] ŋɔ̀ⁿ làmínì*

1Sg show.Pfv [Pref money] give.Pfv L

‘I showed (the) money to Lamine.’

c. *ŋ́ àà mə̀làⁿ [è bíklé] ŋɔ̀ⁿ làmínì=ʔ*

1Sg PfvNeg show.Ipfv [Pref money] give.Pfv L=Neg

‘I didn’t show (the) money to Lamine.’

In some other lexicalized two-verb constructions, the two are fused into compound-like verbs. The two then cannot be separated by other elements, unlike the case with ‘give’ and ‘show’. Examples are in §13.1.2 below.

### Quotative verb (‘say’)

The verb ‘say’ is *fó\\fwá* before a direct object NP (xx1a). With a following quotation, if it denotes an actual reported utterance (as it usually does) the invariant form *jà* is used (xx1b). We can think of *jà* as a suppletive perfective positive form. In negative and non-past contexts we are back to *fó\\fwá* (xx1c). The most common form of the latter is *fó=é*, which has a semi-frozen nonhuman 3Sg object enclitic.

(xx1) a. *kà fó(=é) cè=ʔ*

PfvNeg say.Ipfv(=3SgE) thing=Neg

‘He/She didn’t say anything.’

b. *zàkí jà bó bī sà ŋwíⁿ*

Zaki say.Pfv 3Sg Fut go.Pfv village

‘Zaki said that he (=Zaki) will go on a trip.’

c. *zàkí kà fó=é(=ʔ)*

Zaki PfvNeg say.Pfv=3SgE(=Neg)

*dè bó bī sà ŋwíⁿ*

that 3Sg Fut go.Pfv village

‘Zaki didn’t say that he (=Zaki) will go on a trip.’

In (xx1c), the negative glottal stop is present only when there is a pause after ‘say’.

## Existance and possession

### Location and existence (*gō*, *jè* )

*gō* ‘be (somewhere), exist’ and its past-time form *jè* occur in locational-existential predications and in statives.

In locational function, which can spill over into existence as the location loses specificity, the default locational is *mā* ‘there (discourse-definite)’. This can be compared with English unstresssed *there* in existential (not presentational) *there is/are X*. A more specific locational like *fáⁿ* ‘here’ or a spatial PP is also possible (xx1c). If the subject is pronominal, *gō* may be preceded by either a proclitic or an independent pronoun. As a stative verb, *gō* is negated by *máɣàⁿ*, often reduced to *mâⁿ*.

(xx1) a. *(gō) mā* ‘be present, exist (here)’

1Sg *ŋ́ gō mā*

2Sg *mì gō mā*

b. *máɣàⁿ* (~ *mâⁿ*) *gō mā* ‘be absent, not exist’

c. *nā gō sàmyàʕàⁿ*

2Pl be Bobo Dioulasso

‘You-Pl are in Bobo Dioulasso.’

For past time, positive or negative, *gō* is replaced by *jè*. Its negation is *kàá jè* ~ *kà jè* (3Sg) or pronominal variant.

(xx2) a. *ŋ́ jè sàmyàʕàⁿ*

1Sg be.Past Bobo Dioulasso

‘I was in Bobo Dioulasso’

b. *ŋ́ àá jè sàmyàʕàⁿ=ʔ*

1Sg PfvNeg be.Past Bobo Dioulasso=Neg

‘I was not in Bobo.’

*gō* and *jè* and their negations also occur in a stative construction, typically with a stative form of a stance verb like ‘sit’, ‘stand’, or ‘lie down’. For examples see §10.1.2.2.

### Nominal copula (‘X is [a] Y’)

*gō* ‘be’, this time in copula rather than locational-existential function, precedes the predicate noun or NP.

(xx1) a. *ŋ́ gō cɛ̀fɔ̂*

1Sg Cop Tiefo

‘I am a Tiefo.’ (cf. W98: 206)

b. *ŋ́ máⁿ gō cɛ̀fɔ̂=ʔ*

1Sg IpfvNeg Cop Tiefo=Neg

‘I am not a Tiefo.’

c. *é gō cɛ̀fɔ́ɔ̀→*

1Sg Cop Tiefo.Pl

‘We are Tiefo-s.’

d. *é máⁿ gō cɛ̀fɔ̂=ʔ*

1Sg IpfvNeg Cop Tiefo.Pl=Neg

‘We are not Tiefo-s’

e. *ŋ́ jè byérá-wì*

1Sg be.Past farmer

‘I was a farmer.’

f. *ŋ́ àá jè byérá-wì=ʔ*

1Sg IpfvNeg be.Past farmer=Neg

‘I was not a farmer.’

Comparison of (xx1c) and (xx1d) shows that the noun Tiefo has its prolonged plural form in the positive utterance, but the final negative glottal *=ʔ* blocks the prolongation.

### ‘Become (something)’ (*jà\\dē* )

Future-time ‘X will be a Y’ implies a transition, and is expressed by ‘will become’. The ‘become’ verb is *jà\\dē*. The following complement is an NP, not an adjective.

(xx1) a. *ŋ́ bī jà byérá-wì*

1Sg Fut become farmer

‘I will be/become a farmer.’

b. *zàkí jà byérá-wì*

Z become farmer

‘Zaki became a farmer.’

c. *zàkí kǎ dē byérá-wì=ʔ*

Z PfvNeg become farmer=Neg

‘Zaki did not become a farmer.’

d. *dē cɛ̀fɔ̂ / byérá-wì*

become.Ipfv Tiefo / farmer

‘Become-2Sg a Tiefo/a farmer!’

### Identification (‘it’s X’, ‘it isn’t X’)

The identificational ‘it is’ is enclitic *=ỳ* (positive) or invariant particle *tɛ̄=ʔ* (negative, including the glotaal negative enclitic). Usually the “subject” is a known entity whose identity is to be clarified, as in ‘it (=the person knocking at the door) is me’ or ‘it was the butler (who did it)’. In the usual case where the identificational morpheme is added to a pronoun, the latter takes independent pronominal form.

(xx1) a. *jə̀rɔ̌ⁿ bǒ=ỳ*

who? 3Sg=it.is

‘Who is it?’ (e.g. said to someone knocking on the door)

b. *ɲí=ỳ*

1Sg=it.is

‘It’s me.’ (reply to [a])

c. *é-yò tɛ̄=ʔ*

1Pl it.is.not=Neg

‘It isn’t us.’

### Possession

#### ‘Y has X’ (*gō … bāʕā* )

In this construction, the possessum X is the subject. The predicate consists of *gō* ‘be (somewhere), exist’ plus the M‑toned morpheme *bāʕā* (xx1a‑c). This morpheme can be interpreted as a specialized postposition. The sense is ‘Y has (an) X’ rather than ‘(The) X belongs to Y’. The possessum X is often indefinite, being thereby introduced into the discourse, as in ‘Y has (an) X’ in other languages. It follows that *gō* ‘be’ should be taken in locational-existential rather than copular sense: ‘X exists/is present [belonging to Y]’ rather than ‘X is [Y’s possession], X belongs to Y’. As elsewhere, *gō* is replaced by *jè* in past-time contexts (xx2d‑e).

(xx2) a. *báⁿ gō [ŋ́ bāʕā]*

sheep be [1Sg Poss]

‘I have a sheep.’

b. *báⁿ gō [zàkí bāʕā]*

sheep be [Z Poss]

‘Zaki has a sheep.’

c. *báⁿ máⁿ gō [ŋ́ bāʕā]=ʔ*

sheep IpfvNeg be [1Sg Poss]=Neg

‘I don’t have a sheep.’

d. *báⁿ jè [ŋ́* / *zàkí bāʕā]*

sheep be.Past [1Sg/Z Poss]

‘I had/Zaki had a sheep.’

e. *báⁿ kà jè [ŋ́ bāʕā]=ʔ*

sheep PfvNeg be.Past [1Sg Poss]=Neg

‘I didn’t have a sheep.’

#### ‘X belongs to Y’ (*dé=ȳ* , *dó* )

When the possessum is known and the possessor is to be indicated, a construction of the type “it’s Y’s possession” or (with overt X) “X is Y’s possession” is used. The noun that we here gloss as ‘possession’ is *dóó* ~ *dɔ́ɣɔ́*. The +ATR variant *dóó* shifts to *e*-vowels in these predicative constructions.

In the first version, the ‘it is’ enclitic *=ỳ* is is added to *Y dé*. This is pronounced *[Y dé]=ȳ* with M‑toned enclitic, perhaps suggesting underlying /de᷆/ with HM tones. I take *dé* here to be a mutation from *dóó* (variant *déé* ), rather than as perfective *dē* ‘happened, took place’ (§8.7), but both *déé* and *dē* occur (together) in a similar construction (see just below). There need be no overt mention of X, though it may occur as a preposed topic. The 2Sg form has a suffixal possessor.

(xx1) *(X,) [Y dé]=ỳ*

1Sg *ŋ̀ dé=ȳ* ‘It’s mine.’

1Pl *è dé=ȳ* ‘It’s ours.’

2Sg *dé-yɛ̀=ỳ* ‘It’s yours-Sg.’

2Pl *nā dé=ȳ* ‘It’s yours-Pl.’

3Sg *ŋ́ dé=ȳ* ‘It’s his/hers.’

3Pl *ó dé=ȳ* ‘It’s theirs.’

This is negated as *ŋ̀ dé tɛ̄=ʔ* ‘it’s not mine’ and so forth.

Another version, exemplified in (xx2), adds a final morpheme *dē* instead of the ‘it is’ clitic. The only other *dē* in our data is the perfective of the suppletive verb *jà/dē* ‘happen, take place’ (§8.7). When the possessor Y is pronominal, it may be in proclitic possessor form, as in (xx1) above, or in independent pronoun form. The ‘possession’ noun can take the form of either *dɔ́ɣɔ́* or *déé*. X may be omitted or occur as a preclausal topic.

(xx2) (X,) [*Y dɔ́ɣɔ́] dē* (X,) [*Y déé] dē*

1Sg *ŋ̀ dɔ́ɣɔ́ dē* *ŋ̀ déé dē* ‘It’s mine.’

*ɲí dɔ̄ɣɔ̄ dē*

1Pl *è dɔ́ɣɔ́ dē è déé dē* ‘It’s ours.’

*é-yò dɔ́ɣɔ́ dē*

2Sg *mì dɔ́ɣɔ́ dē dé-yɛ́ dē* ‘It’s yours-Sg.’

2Pl *nā dɔ́ɣɔ́ dē nā déé dē* ‘It’s yours-Pl.’

*nā-yò dɔ́ɣɔ́ dē*

3Sg *ŋ̄ dɔ́ɣɔ́ dē ŋ̄ déé dē* ‘It’s his/hers.’

3Pl *ō dɔ́ɣɔ́ dē ō déé dē* ‘It’s theirs.’

*bòò dɔ́ɣɔ́ dē bòò déé dē*

The fuller construction in (xx3) has X (NP or pronominal clitic), *gō* ‘be’ in copular or locational function, and a possessed form of *dóó*. *gō* requires a subject, minimally a pronominal. Since there is no overt predicative element such as *=ỳ* or *dē*, and since *gō* often precedes a locational expression, one could argue that *dóó* functions in this construction somewhat like a postposition ‘in the possession of’.

(xx3) *X gō [Y dóó]*

1Sg *X gō [ŋ̀ dóó]* ‘X is mine/belongs to me.’

1Pl *X gō [è dóó]* ‘X is ours/belongs to us.’

2Sg *X gō [dó-yāʕā]* ~ *[dé-yāʕā]* ‘X is yours/belongs to you-Sg.’

~ *X gō [dó-yɛ̄]*

2Pl *X gō [nā dóó]* ‘X is yours/belongs to you-Pl.’

3Sg *X gō [ŋ̄ dóó]* ‘X is his-or-hers/belongs to him-or-her.’

3Pl *X gō [ō dóó]* ‘X is theirs/belongs to them.’

This is negated regularly, with *máⁿ gō* ‘not be’. Clause-final negative *=ʔ* shortens *dóó* to produce *dó=ʔ*. For past time ‘X was mine’, etc. gō is replaced by its regular past counterpart *jè*.

A few examples of *dé=ȳ* and *dóó* are in (xx4).

(xx4) a. *[è lě] [zàkí dé=ȳ]*

[Pref housing.compound] [Z Poss=it.is]

‘The house (and courtyard) belongs to Zaki.’

b. *[ò sòóŋ̀] gō [ò dóó]*

[Pref horse] be [3Pl Poss]

‘The horse is theirs.’

c. *[ò sòóŋ̀] máⁿ gō [ŋ̀ dó]=ʔ*

[Pref horse] IpfvNeg be [1Sg Poss]=Neg

‘The horse isn’t mine.’

## Stative predicates

Statives derived from dynamic (active) verbs of stance like ‘sit’ and ‘stand’ were discussed in §10.1.2.2. In this section we present defective, stative-only (quasi-)verbs, and adjectival predicates.

Statives, whether derived or underived (defective), do not distinguish aspect categories (perfective, imperfective). They are negated by *máɣàⁿ* ~ *mâⁿ*, elsewhere the imperfective (and future) negative morpheme.

### *fyê* ‘be gone’

The active verb *sē\\sà* ‘go’ has an apparently noncognate (i.e. suppletive) stative counterpart *fyê* ‘be (already) gone, be out (=not at home)’. It is common in contexts where the motion event has been completed, so its frequency is greater than that of its English translation equivalent, which has no such requirement. One advantage of using *fyê* is that it avoids any possibility of confusing imperfective *sē* ‘go’ with interrogative *sê* ‘(to) where?’.

(xx1) *zàkí fyé ŋwíⁿ kɔ̄ⁿ*

Zaki go.Stat village already

‘Zaki has already gone to the village.’

### ‘Want’ (*gō … bàɣà* )

‘X want Y’ with an NP complement Y is expressed by subject (X), then *gō* ‘be’, then what looks vaguely like a PP of the form *[Y bàɣà]*. The L‑tones and the fricative *ɣ* of *bàɣà* distinguish the ‘X want Y’ construction from the ‘Y have X’ construction (§10.2.4.1), which has the form *X gō [Y bāʕā]* with M-toned postposition and pharyngeal *ʕ* (xx1a‑b). If the complement is a verb phrase (‘X want [to VP]’), *bàɣà* directly follows *gō*, and precedes an infinitival complement (xx1c).

(xx1) a. *ŋ̄ gō [ɲú bàɣà]*

3Sg be [water wanting]

‘He/She wants some water.’ (< *ɲǔ* )

b. *mâⁿ gō [zàkí bàɣà]=ʔ*

IpfvNeg be [Z wanting]=Neg

‘I don’t want Zaki.’

c. *ŋ̄ gō bàɣà [nà dí]*

3Sg be wanting [Infin eat]

‘He/She wants to eat.’

### ‘Know’ (*kɔ̀ⁿ* ) and ‘be aware of’ (*jī* )

There are two ‘know’ verbs, both stative. The basic one is *kɔ̀ⁿ* ‘know’, mainly equivalent to French *savoir* (with a clausal complement or a pronoun or demonstrative referring to a fact). It behaves like a perfective verb.

(xx1) a. *ŋ́ gàá kɔ̀ⁿ*

1Sg PfvNeg know

‘I don’t know (the answer).’

b. *ŋ́ kɔ̀ⁿ [tá zàkí fyê]*

1Sg know [that Z go.Stat]

‘I know that Zaki has gone.’

c. *zàkí kǎ kɔ̀ⁿ=ỳⁿ=ʔ*

Z PrvNeg know=3SgE=Neg

‘Zaki doesn’t know it.’

The other is *jī*, whose primary senses are ‘be aware of (sth, sb)’ and ‘be acquainted with (sb)’. This is the cognate of the Tiefo-D ‘know’ verb recorded by Winkelmann.

(xx2) a. *ŋ́ jī zàkí*

1Sg know Z

‘I know Zaki.’

b. *ŋ́ jù=ù*

1Sg know=3SgObj

‘I know him.’

c. *zàkí mâⁿ jì=ýⁿ=ʔ*

Z IpfvNeg know=1SgObj=Neg

‘Zaki doesn’t know me.’

For factive clausal complements (‘know that …’), see §13.7 below.

# Focalization

## Focalization of a constituent in an indicative clause

The focus particle is *lè*, optionally nasalizing to *nè* in a nasal environment. It follows the focalized constituent, which remains in its normal linear position. The focalized constituent may be an NP.If it is a pronoun, it takes independent (not proclitic) form. The pronominal paradigm is therefore (xx1).

(xx1) 1Sg *ɲí nè* ~ *ɲí lè*

1Pl *é-yò lè*

2Sg *mì nè* ~ *mì lè*

2Pl *nā-yò lè*

3Sg *bó lè*

3Pl *bòó lè*

### Subject focalization

An addressee who is asked question (xx1a) may reply with (xx1b) or (xx1c).

(xx1) a. *jə̀rɔ̌ⁿ bī sà*

who? Fut go.Pfv

‘Who will go?’

b. *[ɲí nè] bī sà*

[1Sg **Foc**] Fut go.Pfv

‘It’s I [focus] who will go.’

c. *[zàkí lè] bī sà*

[Zaki **Foc**] Fut go.Pfv

‘It’s Zaki [focus] who will go.’

### Focalized object

The focalized object remains in its normal postverbal position. The focus particle optionally follows it. If the object is a pronoun, it takes independent (not enclitic) pronominal form whether or not the focus particle is overt (xx1b). This distinguishes object focus from a simple transitive with no focalized constituent, which does have enclitic object pronouns (xx1c).

(xx1) a. *zàkí kpà* *jə̀rɔ̌ⁿ*

Zaki hit.Pfv who?

‘Who did Zaki hit?’

b. *zàkí kpà [ɲí (nè)]*

Zaki hit.Pfv [1Sg (**Foc**)]

‘It was me [focus] who Zaki hit.’

c. *zàkí kpà=ýⁿ*

Zaki hit.Pfv=1Sg

‘Zaki hit me.’

### Focalized adverb

In (xx1a), ‘here’ is focalized by repetition on both left and right edges of the clause. However, the more usual and more productive construction has Focus particle *lè* with the adverb clause-finally (xx1b). Negation is with *lè tɛ̄-ʔ* (xx1c).

(xx1) a. *fáⁿ yáʕá bī sùŋɛ̀ [è sɔ̯̀ⁿɛ̀ɛ́] fáⁿ*

**here** 1PlIncl Fut work.Pfv [Pref work(n)] **here**

‘It is here [focus] that we will work.’

b. *yáʕá bī sùŋɛ̀ [è sɔ̯̀ⁿɛ̀ɛ́] [è lě lè]*

1PlIncl Fut work.Pfv [Pref work(n)] [Pref compound **Foc**]

‘It’s in the village [focus] that we will work.’

c. *yáʕá bī sùŋɛ̀ [è sɔ̯̀ⁿɛ̀ɛ́]*

1PlIncl Fut work.Pfv [Pref work(n)]

*[fáⁿ lè tɛ̄=ʔ]*

[here **Foc** it.is.not=Neg]

‘It is not here [focus] that we will work.’

## Interrogatives

### Polar (yes/no) interrogative

The clause-final interrogative particle *wà*, also present in Jula, is exemplified in (xx1a‑b).

(xx1) a. *m̀ bí sà ŋwíⁿ wà*

2Sg Fut go.Pfv village **Q**

‘Will you travel (=go on a trip)?’

b. *zàkí bī bà fánè wà*

Zaki Fut come.Pfv here **Q**

‘Will Zaki come here?’

For *wà* in parallel disjunctive questions, see §6.2.

### Content interrogatives

The WH-interrogative remains in its normal syntactic position (*in situ*) rather than being fronted.

#### ‘Who?’ (*jə̀rɔ̌ⁿ* )

*jə̀rɔ̌ⁿ* ‘who?’ is illustrated in §11.1.1 (subject) and §11.1.2 (object). It has a contracted variant *jɔ̀ɔ́ⁿ*. The plural can be expressed as *jɛ̀rɔ̀ɔ́→* (denasalized and optionally prolonged), or by adding a 3Pl pronoun as *jɛ̀rɔ̌ⁿ bòó*.

(xx1) a. *[à wùù ŋɔ́ɔ̀ⁿ] [jə̀rɔ̌ⁿ dɔ̄ɣɔ̄]=ỳ*

[Pref house Dem] [who? Poss]=it.is

‘Whose house is this?’

b. *à ŋ̀ bí bà [nà jə̀rɔ̌ⁿ]*

Fut 2Sg Fut come.Pfv [with who?]

‘Who will you come with?’

c. *jə̀rɔ̀ɔ́ bī bà*

who.Pl Fut come.Pfv

‘Who-Pl will come?’

d. *[[jə̀rɔ̌ⁿ bò] wùù] súgà*

[[who? 3Sg] house] fall.Pfv

‘Whose-Pl house fell?’

#### ‘What?’ (*bíè* )

*bíè* ‘what?’ is exemplified in (xx1).

(xx1) a. *m̀ gō [[bíè (lè)] bàɣà]*

2Sg be [[**what?** (Foc)] wanting]

‘What do you-Sg want?’ (see §10.3.2)

b. *ŋ̀ wɔ̀ɣɔ̀ byé [à fíyáʕā] [nà bíè]*

2Sg Prog cultivate.Ipfv [Pref field] [with **what**?]

‘What do you cultivate/are you cultivating with?’

c. *bíè-já m̀ bà sàmìyàʕàⁿ*

why? 2Sg come.Pfv Bobo

‘Why did you come to Bobo?’

#### ‘Where?’ (*sê*, *já-tàʕày*)

Tiefo-N makes a basic distinction between allative ‘whither?’ (or ablative ‘whence?’) from static locative ‘where?’. The distinction between trajectory (motion) and static location is made by verbs, not by postpositions or interrogative adverbs.

‘Whither?/whence?’ is *sê*, and is used with a motion verb (usually ‘go’ in allative sense, ‘exit, go out’ in ablative sense) to specify either the starting or ending point of a trajectory. (xx1a) is an ablative context, (xx1b‑c) are allative. (xx1d) shows that *sê* is optionally extended to static position (‘be’) in contexts where motion is presupposed.

(xx1) a. *ŋ̄ glâ sê*

3Sg exit.Pfv **whither?**

‘Where did/does he/she come from?’

b. *ō sìgìⁿ‑mà sê*

3Pl run.Pfv **whither?**

‘(To) where did they run?’

c. *nā wɔ̀ɣɔ̀ sē sê*

2Pl Prog go.Ipfv **whither?**

‘Where are you-Pl going?’

d. *[[námí jùrɔ̀ⁿ] súgà] ŋ̄ gō sê*

[[child Rel] fall.Pfv] 3Sg be where?

‘The child who fell, where is he/she?’ (implying motion)

*sê* is nearly homophonous to the imperfective form of ‘go’.

In static (non-motion) locative contexts, ‘where?’ is most often *já-tàʕày* ‘where?’ It is somewhat obscurely segmentable into interrogative *já-* (cf. *jà-sí‑ŋà* ‘when?’) amd compound final *-tàʕày* ‘place’ loosely related to the noun *tìyàʕá* ‘place’.

(xx2) a. *ŋ̀ gō já-tàʕày*

2Sg be **where?’**

‘Where are you-Sg?’

b. *à gō já-tàʕày*

3SgA be where?

‘Where is it (e.g. house)?’

c. *yáʕá bī jōlè já-tàʕày*

1Pl.Incl Fut sleep.Pfv **where?**

‘Where will we sleep?’

#### ‘When?’ (*jà-sí-ŋà*, *jà-sí* )

‘When?’ is *jà-sí-ŋà*, or slightly reduced *jà-sí*. The *já-* element also occurs in one of the ‘where?’ interrogatives (preceding section).

(xx1) *ŋ̀ bà jà-sí*

2Sg come.Ipfv **when?**

‘When are you-Sg coming?’

#### ‘How?’ (*màⁿká* )

The manner-adverbial interrogative is *màⁿká* ‘how?’

(xx1) *yáʕá bī kéré-mà [à dùgùù] màⁿká*

1PlIncl Fut go.up.Pfv [Pref hill] **how?**

‘How will we climb the hill?’

#### ‘How much/many?’ (*gyē* )

The quantificational interrogative is *gyē* ‘how much/many?’

(xx1) 1. *ŋ̄ də̀rà [báⁿ dígínā] gyē*

3Sg buy.Pfv [sheep one] **how.much?**

‘How much did he/she buy a sheep for?’

2. *[bló gyē lè] bà [[à fíyáʕā] wúrí]*

[rain(n) **how.much?** Foc] come.Pfv [[Pref field] inside]

‘How much rain fell in the fields?’

The frequent combination of *gyè* with *bíklé* ‘money’ is abbreviated *bí gyè*.

#### ‘Which?’ (*jìnàʕá* )

The interrogative adjective, identifying an individual from a set, is *jìnàʕá* ‘which?’ (xx1a). With human referents, however, ‘who?’ is juxtaposed to a singular human noun (xx1b).

(xx1) a. *ŋ̄ gō [də́ráʕá jìnàʕá]*

3Sg be [courtyard **which?**]

‘He/She is (=dwells) in which courtyard (=housing complex)?’

b. *ná-mí* / *dɔ̯ɛ̀ý jə̀rɔ̌ⁿ bī sà*

child / man **who?** Fut go.Pfv

‘Which child/man will go?’

# Relativization

## Relativization of a constituent in a clause

The relative pronouns are in (xx1).

(xx1) a. *jə̀rɔ̌ⁿ* ~ *jùrɔ̌ⁿ* human, nonhuman O-class

b. *jə̀rɛ̀ýⁿ* nonhuman E-class

c. *jìnàʕá* nonhuman A-class

d. *jə̀rⁿɔ̀ɔ́* ~ *jùrⁿɔ̀ɔ́* plural

Compare interrogative *jə̀rɔ̌ⁿ* ‘who?’ (§11.2.2.1). The final rising tone is leveled to L‑tone before an H‑tone.

The relative pronoun is positioned at the end of the relativized-on NP, which remains *in situ* (i.e. in its normal position within main clauses).

### Subject relatives

The main clause (xx1a) is converted into a relative clause in (xx1b). The plural equivalent of (xx1b) is (xx1c).

(xx1) a. *[námí dé] súgà fáⁿ*

[child a.certain] fall.Pfv here

‘A (certain) child fell here.’

b. *[[námí jùrɔ̀ⁿ] súgà] ŋ̄ gō sê*

[[child Rel] fall.Pfv] 3Sg be where?

‘The child who fell, where is he/she?’

c. *[[nám-yó jùrⁿɔ̀ɔ̀] súgà] ō gō sê*

[child-Pl Rel.Pl] fall.Pfv] 3Pl be where?

‘The children who fell, where are they?’

### Object relatives

There are two types of object relative.

#### Ordinary object relatives

The simple main clause (xx1a) is converted into an object relative (xx1b). The parallel example (xx1c) shows that the relativizer *jə̀rɔ̌ⁿ* is compatible with nonhuman as well as human heads.

(xx1) a. *zàkí kpà [nā-mī dî]*

Z hit.Pfv [child a.certain]

‘Zaki hit a (certain) child.’

b. *zàkí kpà [nā-mī jə̀rɔ̌ⁿ] ŋ̄ gō sê*

Z hit.Pfv [child **Rel**] 3Sg be where?

‘Where is the child that Zaki hit?’

c. *zàkí kpà [sɛ̀rɛ̀-bì jə̀rɔ̌ⁿ] ŋ̄ gō sê*

Z hit.Pfv [stone-child **Rel**] 3Sg be where?

‘Where is the rock that Zaki hit?’

#### Instrumental (function-specifying) relatives (*dò* )

In this construction, an entity (here, ‘water’) is specified for function by a verb (here, ‘drink’). The noun occurs in its usual form. The verb is followed by possessive element *dòò* or *dɔ̀ɣɔ̀*. These are L‑toned variants of *dóó* ~ *dɔ́ɣɔ́* ‘possession’.

(xx1) *ŋ́ bà nà [[ò ɲǔ] ɲā dòò]*

1Sg come.Pfv with [[Pref water] drink.Pfv **Poss**]

‘I have brought water to drink (=drinking water).’

b. *[à fɛ̀rɛ̀y] nɛ́rⁿɛ́ dɔ̀ɣɔ̀*

[Pref clothing] wash.Pfv **Poss**

‘clothes for washing (=to be washed)’

### Possessor relative

The relative marker jə̀rɔ̌ⁿ directly follows the possessor, separating it from the possessum. Main clause (xx1a) is converted into possessor relative (xx1b).

(xx1) a. *[[ŋ̀ dɔ̯ɛ̀ý] wùù] súgà*

[[Poss man] house] fall.Pfv

‘The man’s house fell.’

b. *[[ŋ̀ dɔ̯ɛ̀ý jə̀rɔ̌ⁿ] wùù] súgà, ŋ̄ gō sê*

[[Poss man **Rel**] house] fall.Pfv, 3Sg be where?

‘Where is the man whose house fell?’

### Postpositional complement relative

Instrumental PP examples are (xx1b,d,e), in each case following a relevant main clause.

(xx1) a. *zàkí wɔ̀ɣɔ̀ byé [nè= [è bàràýⁿ]]*

Z Prog cultivate.Ipfv [with [Pref daba]]

‘Zaki cultivates (does farm work0 with a daba (hoe).’

b. *zàkí wɔ̀ɣɔ̀ byé nè= [è bàràýⁿ jə̀rɛ̀ýⁿ]*

Z Prog cultivate.Ipfv with [Pref daba Rel]

*ē gō sê*

3SgE be where?

‘Where is the hoe that Zaki cultivates with?’

c. *zàkí wɔ̀ɣɔ̀ kú [à dáɣánī] [nà= [à yèyàʕá]]*

Z Prog cut.Ipfv [Pref wood] [with [Pref ax]]

‘Zaki cuts wood with an ax.’

d. *zàkí wɔ̀ɣɔ̀ kú [à dáɣánī] [nà= [à yèyàʕá jìnàʕá]]*

Z Prog cut.Ipfv [Pref wood] [with [Pref ax Rel]]

*ā gō sê*

3SgA be where?

‘Where is the ax that Zaki cuts the wood with?’

e. *[ò yàá wɔ̀ɣɔ̀ cónā [nɔ̀= [ɔ̀ féⁿ]]*

[Pref woman.Pl] Prog cook.Ipfv [with [Pref fonio]]

‘The women cook with fonio (grain).’

f. *[ò yàá wɔ̀ɣɔ̀ cónā [nɔ̀= [ɔ̀ féⁿ jə̀rɔ̌ⁿ]]*

[Pref woman.Pl] Prog cook.Ipfv [with [Pref fonio Rel]]

*ŋ̄ gō sê*

3SgO be where?

‘Where is the fonio (grain) that they women cook with?’

(xx2b) is a locative PP relative, based on main clause (xx2).

(xx2) a. *ŋ̄ wɔ̀ɣɔ̀ cónā sùsú [[à ʃìtɔ̀ʕɔ̀wⁿ] wúrí]*

3Sg Prog cook.Ipfv millet.cake [[Pref pot] inside]

‘He/She cooks millet cakes in a pot.’

b. *ŋ̄ wɔ̀ɣɔ̀ cónā sùsú [[à ʃìtɔ̀ʕɔ̀wⁿ jìnàʕá] wúrí]*

3Sg Prog cook.Ipfv millet.cake [[Pref pot Rel] inside]

*ā gō sê*

3SgA be where?

‘Where is the pot that he/she cooks millet cakes in?’

# Multi-verb constructions

## Tight and loose verb-verb combinations

‘Bring’ and ‘take/deliver (there)’ are expressed as ‘come with’ and ‘go with’, see §7.2.2. ‘Give’ and ‘show’ are two-verb constructions, with a main verb ‘give’ or ‘show’ and a second verb that is separated from the first verb and that functions somewhat like a dative marker, see §10.1.5.

### Tight (inseparable) verb-verb compounds

A few lexical items functioning as verbs can be segmented into two verb stems, tightly fused together, allowing no intervening element. We detect the segmentability by observing that each part has a perfective-imperfective alternation of the sort elsewhere fond in simple verb stems.

In a few cases one or both of the components also occurs independently as a simple verb. In such cases the component(s) is/are shown under the compound (xx1a‑c). A special case is durative iterations of a single stem like *kə́rú-kə́rū* (xx1e), a construction that appears to be limited to imperfective positive clauses.

(xx1) imperfective perfective gloss

a. *jāɣā-bə́rú jàɣà-bə́rú-là* ‘become lost, lose one’s way’

*jāɣā jàɣà* ‘put down, leave/abandon’

*bə́rú blâ* ‘be wrong’

b. *gbā-dɔ́ gbà-dɔ́-rà* ‘divide (into parts)’

*gbā gbà* ‘split; shatter’

c. *yɔ̄-dūnū yɔ̀-bà-dùnù* ‘knock (sb) down’

*yɔ̄ yɔ̀-bà* ‘(blacksmith) forge (blade, by striking with hammer)

d. *súgú-dɔ̄ɣɔ̄ sɔ́ɣɔ́-dɔ̄ɣɔ̄* ‘help (sb)’

*súgú sɔ́ɣɔ́* ‘catch’

e. *kə́rú-kə́rū* — ‘grope, feel one’s way’

*kə́rù klâ* ‘touch’

In other compound-like sequences the components do not occur separately. Therefore the only evidence for segmentation is their unusually heavy form (three or four syllables, not including trisyllabics ending in a sonorant-vowel syllable) and/or what appears to be separate morphophonological marking of aspect in the two parts (vocalic mutations, tone changes, perfective suffixation).

The strongest candidates are in (xx2a‑b). In (xx2b) it is possible that the final element is the same (at least etymologically) in both examples.

(xx2) imperfective perfective gloss

a. *gbày-dūrù gbà-rà-dùrù* ‘knock down, cause to fall’

*lá-báɣá lé-bàɣà* ‘keep spinning around’

b. *kāɣāⁿ-sā kàɣàⁿ-sá(-là)* ‘reply’

*nārāⁿ-sā nàràⁿ-sā(-là)* ‘escape’

Some other possible, but unclear, cases are in (xx3a‑b). In (xx3a), the issue is whether the mutation to *e* in both syllables is interpreted to reflect separate mutations in two parts of a verb-verb compound, or a single stem-wide mutation. In (xx3b), suspicion of a bipartite morphology is raised by the otherwise unusual LH or MH tone contour, and by the fact that the possible second element (*jàⁿ‑fá*, *mà‑kírí*, *yā‑tóy*, *yè‑flá* ) begins with an obstruent. Etymologically, some of these may be Jula borrowings (clearly so in the case of ‘betray’), but they could still be treated synchronically as bipartite.

(xx3) imperfective perfective gloss

a. *blákā blékè* ‘be cured’

*kláɣā klégè* ‘become short(er)’

b. *jàⁿfá jàⁿfá-là* ‘betray’

*màkírí màkírí-là* ‘(griot) praise (sb)’

*yātóy yātóy-là* ‘go past’

*yèflá yèflá-là* ‘fill’

(xx4) illustrates the morphosyntax of one of the clearly compound sequences, ‘help’ from (xx1e) above. The first element means ‘catch’, the second (invariant in form) is obscure.

(xx4) a. *ŋ́ sɔ́ɣɔ́-dɔ̄ɣɔ̄ zàkí*

1Sg catch.Pfv-??.Pfv Z

‘I helped Zaki.’

b. *ŋ́ gà súgú-dɔ̄ɣɔ̄ zàkí=ʔ*

1Sg PfvNeg catch.Ipfv-??.Ipfv Z=Neg

‘I didn’t help Zaki.’

The ‘become lost’ from (xx1a) above consists of ‘put’ and ‘be wrong’.

(xx5) a. *zàkí jàɣà-bə́rú-là [[à bɛ̀yⁿ] wúrí]*

Z put.Pfv-be.wrong.Pfv [[Pref the.bush] in]

‘Zaki got lost in the bush.’ (< *bɛ̀ýⁿ* )

b. *zàkí kǎ jāɣā-bə́rú [[à bɛ̀yⁿ] wúrí]=ʔ*

Zaki PfvNeg put.Ipfv-be.wrong.Ipfv [[Pref the.bush] in]=Neg

‘Zaki didn’t get lost in the bush.’

## Same-subject constructions

### ‘Be able to’ (*pɔ̀rɔ̀ⁿ* ~ *pɔ̀yⁿ* )

In the absence of a verbal complement, ‘be able’ is expressed by the stative verb *pùrⁿù*, as in *ŋ́ pùrⁿù* ‘I can’. When there is a preceding verbal complement (in imperfective form), *pùrⁿù* is replaced by *pɔ̀rɔ̀ⁿ* ~ *pɔ̀yⁿ*, which is also stative, and this is attached directly to the verb (preceding any postverbal constituents). More or less free alternations between the shapes Cvrv and Cvy are common in Tiefo-N verbal morphology; for examples see (xx2b) and (xx3a) in §8.5.2.

An example of *pɔ̀yⁿ* following imperfective verb is (xx1a).

(xx1) a. *zàkí sē pɔ̀yⁿ*

Z go.Ipfv be.able

‘Zaki can go.’

b. *zàkí kú pɔ̀rɔ̀ⁿ [à kèyàʕá]*

Z cut.Ipfv be.able [Pref meat]

‘Zaki can cut the meat.’

### Infinitival constructions

If two events have the same agent (subject), the first event is expressed as an ordinary indicative clause in whatever inflectional category is relevant (e.g. perfective positive, imperative). The second event is expressed as an invariant infinitival verb-phrase, i.e. with infinitival *ná* followed by the imperfective stem of the verb and any clausemate constituents (§3.1.4). We distinguish sequenced events from simultaneously overlapping events.

#### Event sequences

In (xx1), the two same-agent actions are sequenced in time, though the sequence is sufficiently routinized (‘go and come back’, ‘fall down and get back up’, ‘get up and sit down’ = move over) to have some overall coherence.

(xx1) a. *zàkí sà [ná bà]*

Z go.Pfv [Infin come.Ipfv]

‘Zaki went and came back.’

b. *kà bí sà [ná bà]*

3Sg Fut go.Pfv [Infin come.Ipfv]

‘He/She will go and come back.’

c. *ŋ́ sē [ná bà]*

1Sg go.Ipfv [Infin come.Ipfv]

‘I am going and coming back.’

d. *zàkí súgà [ná yígí]*

Z fall.Pfv [Infin get.up.Ipfv]

‘Zaki fell and got back up.’

e. *ŋ̀ yígà [ná tə̄rāⁿ fándè]*

3Sg get.up.Pfv [Infin sit.Ipfv there]

‘He/She got up and sat (=moved to another seat) over there.’

This construction also occurs in imperatives. The first verb is in the imperfective stem with no preposed elements. In this construction, the infinitival morpheme *ná* is optional.

(xx2) a. *sē [(ná) bà]*

go.Ipfv [(Infin) come.Ipfv]

‘Go and come back!’

b. *só [(ná) yígí]*

fall.Ipfv [(Infin) get.up.Ipfv]

‘Fall and get back up!’

c. *yígí [(ná) tə̄rāⁿ fándè]*

get.up.Ipfv [(Infin) sit.Ipfv there]

‘Get up and sit (=move to another seat) over there!’

#### Simultaneous co-events

The same construction with the second verb in infinitival form is used when the two actions by the same agent are simultaneous or overlap, i.e. constitute co-events abstracted from a single event. In (xx1), ‘jump’ and ‘fall’ combine to mean ‘jump (all the way) down’.

(xx1) a. *ŋ̄ yī-là [ná só]*

3Sg jump.Pfv [Infin fall.Ipfv]

‘He/She jumped down.’

b. *yī [ná só]*

jump.Ipfv [Infin fall.Ipfv]

‘Jump down!’

In (xx2), the two actions (motion and singing) are independent but overlap in time.

(xx2) *[ŋ̄ wɔ̀ɣɔ̀ bé] [ná wō [à yìrìí]]*

[3Sg Prog come.Ipfv] [Infin sing [Pref song]]

‘He/She came while singing (a song).’

### ‘Begin’ plus complement

‘Begin X’ is expressed in Tiefo-N as ‘take (receive) the mouth of X’, with *nìyɔ̀ʕɔ́ⁿ* ‘mouth’ as a compound final (heard as L‑toned). The initial (X) is either a noun that can denote an activity, or an imperfective stem of a verb (which is arguably an infinitive with the usual infinitival *ná* omitted).

(xx1) a. *ŋ̄ fíyà [è sɔ̯ɛ̀ɛ́ⁿ-nìyɔ̀ʕɔ̀ⁿ]*

3Sg take.Pfv [Pref work(n)-mouth]

‘He/She began (to) work.’

b. *ŋ̄ fíyà [à byé-nìyɔ̀ʕɔ̀ⁿ]*

3Sg take.Pfv [Pref cultivate.Ipfv-mouth]

‘He/She began (to) cultivate (=do farm work).’

a. *ŋ̄ fíyà [à yī-nìyɔ̀ʕɔ̀ⁿ]*

3Sg take.Pfv [Pref jump.Ipfv-mouth]

‘He/She began (to) jump.’

## Different-subject constructions

### Different-subject event sequences

When two events, with different agents/subjects, are combined, each has the form of an independent clause. There is no subordinating or linking element, though the combination may be prosodically seamless.

(xx1) *[ŋ́ kpà zàkí] [ŋ̄ fyê]*

[1Sg hit.Pfv Z] [3Sg go.Stat]

‘I hit Zaki and (then) he went away.’

### Periphrastic causatives with *jāɣā\\jàɣà* ‘put’

As indicated in §10.1.4, there are many ambi-valent (labile) verbs with alternative intransitive and (more or less causative) transitive senses, like ‘enter’ and ‘put in’. Alternatively, there is also an explicitly causative biclausal construction. The higher clause has an inflected form of *jāɣā\\jàɣà* ‘put (down); leave (sth)’.

In what is probably the most common version, the notional lower-clause agent is expressed as an upstairs direct object of ‘put down; leave’. The lower clause is then expressed either as a nominalized verb, such as a compound with incorporated object (xx1a), or as an inflected clause with a subject pronominal coindexed to the raised main-clause object (xx1b).

(xx1) a. *zàkí jàɣà=ýⁿ sɔ̀gɔ̀làʕà-díì*

Z put.Pfv=1Sg caterpillar-eat.Nom

‘Zaki made me eat the shea-tree caterpillars.’ (< *sɔ̀gɔ̀làʕá* )

b. *zàkí jàɣà=ýⁿ*

Z put.Pfv=1Sg

*[ŋ́ díyà sɔ̀gɔ̀làʕá]*

[1Sg eat.Pfv caterpillar]

[=(a)]

By the way, these caterpillars (*Cirina butyrospermi*) are commercialized, roasted or boiled, and heavily consumed around Bobo Dioulasso in July-August. When cooked, they are crunchy and very tasty with a little salt or a dipping sauce! They have a major annual festival in Bobo.

In a second version of this construction, if the lower clause denotes motion, the lower subject is expressed as a comitative phrase (‘with X’) (xx2a‑b). In a third, the lower subject appears as object of ‘put’ and is followed by an infinitival complement (xx2c).

(xx2) a. *zàkí jàɣà bà [nà ýⁿ]*

Z put.Pfv come.Pfv [with 1Sg]

‘Zaki made me come.’

b. *ŋ́ jàɣà bà* / *sē [nà zàkí]*

1Sg put.Pfv come/go.Ipfv [with Z]

‘I made Zaki come.’

c. *ŋ́ jàɣà zàkí [ná bà* / *sē]*

1Sg put.Pfv Z [Infin come/go.Ipfv]

‘I made Zaki come.’

### Possible different-subject verb-verb compounds

Some apparently transitive verb-verb compounds might be analysable as combinations of a transitive verb followed by an intransitive. Compounds by their nature are somewhat opaque so we do not insist.

Consider the two compounds meaning ‘knock down’ in (xx1d) and (xx2a) in §13.1.1 above, repeated here as (xx1a‑b).

(xx1) imperfective perfective gloss

a. *yɔ̄-dūnū yɔ̀-bà-dùnù* ‘knock down’

b. *gbày-dūrù gbà-rà-dùrù* ‘knock down, cause to fall’

In (xx1a) the initial is *yɔ̄\\yɔ̀-bà* ‘(blacksmith) forge (blade)’, which denotes the act of placing the blade on an anvil and striking it with a hammer or mallet. The common denominator with ‘knock down’ is the act of striking hard. In (xx1b) the initial is obscure, though vaguely similar in form and meaning to *gbā\\gbà* ‘split (wood); shatter’. The finals in (xx1a) and (xx1b) are slightly distinct in form, but might have a common origin. Semantically, ‘knock down’ would make sense if decomposed into ‘X hit Y’ and ‘Y fall’. If we analyse them in this way, (xx1a) above would give rise to examples formated as in (xx2a‑b).

(xx2) a. *[ŋ́ yɔ̀-bà dùnù zàkí*

[1Sg strike.Pfv fall Z]

‘I knocked Zaki down.’

b. *yɔ̄ dūnū zàkí*

strike.Ipfv fall.Ipfv Z

‘Knock Zaki down!’

## Temporal adverbial clauses

### ‘While’ background clauses

An eventuality (process, state) that serves as temporal background of a foregrounded event is expressed by an adverbial clause beginning with *jà-sí-ŋà* ‘when?’, which is also used in interrogatives (§11.2.2.4). Whether the subjects of the two clauses are coindexed does not matter. In (xx1a) the adverbial clause is a past progressive (§9.2.3).

(xx1) a. *zàkí yì-rà*

Zaki enter-Pfv

*jà-sí-ŋà ŋ́ tì wɔ̀ɣɔ̀ jōlà*

when? 1Sg Past Prog sleep.Ipfv

‘Zaki came in while I was sleeping.’

b. *zàkí bī yì-rà*

Zaki Fut enter-Pfv

*jà-sí-ŋà ŋ́ wɔ̀ɣɔ̀ jōlà*

when? 1Sg Prog sleep.Ipfv

‘Zaki will come in while I am (=will be) sleeping.’

### Imperfective complement of perception verbs

A simple imperfective main clause may function as complement of a higher ‘see’ verb (xx1a). With ‘hear’, a compound nominal is preferred as the complement (xx1b).

(xx1) a. *ŋ́ ɲà [[à wàtírìì] wɔ̀ɣɔ̀ sē]*

1Sg see.Pfv [[Pref vehicle] Prog go.Pfv]

‘I saw the vehicle (as it was) leaving.’

b. *ŋ́ dígɛ̀ [ò ná-my-ó→ [kpá-lá]-mìì]]*

1Sg hear.Pfv [Pref child.Pl [weep.Pfv]-sound]]

‘I heard the children’s weeping.’

## Purposive clauses

A matrix-clause motion verb (‘go’, ‘come’, etc.) may combine with a clausal complement expressing the purpose of the motion event. The motion verb is repeated in echo-like infinitival form (*ná* plus imperfective stem, §3.1.4), followed by a clause containing another verb in its imperfective stem (plus any relevant complements) expressing the purpose.

(xx1) a. *ŋ́ bà fánè*

1Sg come.Pfv here

*[ná bà [dē [è sɔ̯ɛ̀ɛ́ⁿ]]]*

[Infin come.Ipfv [do.Ipfv [Pref work(n)]]]

‘I have come here in order to work (“do work”).’

b. *zàkí fyê wàgàdúgú*

Z go.Stat O

*[ná sē [būgūⁿ [è sɔ̯ɛ̀ɛ́ⁿ]]]*

[Infin go.Ipfv [look.for.Ipfv [Pref work(n)]]]

‘Zaki has gone to Ouagadougou in order to look for work.’

For another example of infinitival echoing of a motion verb, see (xx2) in §7.1.2, where however the purposive complement is nominal rather than clausal.

## Conditional construction

*ní* ‘if’ defines a clause as the antecedent in a conditional. It is immediately followed by a subject NP or by a pronominal-subject enclitic. The pronominal paradigm is (xx1).

(xx1) *níí=ŋ́* 1Sg

*ní é* 1Pl

*ní ŋ̀* 2Sg

*ní nāⁿ* 2Pl

*ní=ì* 3SgHum

*ná=à* 3SgNonh

*nó=ò* 3Pl

### Hypothetical (future) conditional

In the usual conditional, referring to nonpast events, the antecedent is normally in the perfective and the consequent is in the future.

(xx1) a. *[ní ŋ̀ súgà] [à ŋ̀ bí dɔ̀nɔ́-là]*

[**if** 2Sg fall.**Pfv**] [Fut 2Sg **Fut** injure.Pfv]

‘Si you-Sg fall, you’ll be hurt.’

b. *[ní zàkí súgà] [kà bī dɔ̀nɔ́-là]*

[**if** Z fall.**Pfv**] [3Sg **Fut** injure.Pfv]

‘If Zaki falls, he’ll be hurt.’

### Counterfactual

If the antecedent event (and therefore the consequent) failed to take place in the past, the construction is counterfactual. The past morpheme *tì* is added to both antecedent and consequent. Future *bī* appears in L‑toned form (*tì bì* ) in the consequent.

(xx1) *jànà [ní ŋ̀ tì súgà [[cɔ̌ ŋɔ́ⁿ] wúrí]]*

yesterday [of 2Sg Past fall.Pfv [[hole Dem] in]]

*[ŋ̀ tì bì wā]*

[2Sg Past Fut die.Pfv]

‘If you had fallen into this hole yesterday, you would have died.’

### ‘Even if’

The particle *hàlí* ‘even’ occurs at the beginning of the antecedent, replacing *ní* ‘if’.

(xx1) *hàlí ŋ̀-bló bà,*

même rain(n) come.Pfv,

*á ŋ́ bì sà [à fíyáʕā]*

Fut 1Sg Fut go.Pfv [Pref field]

‘Even if it rains (tomorrow), I’ll go to the fields.’

## Factive complement of ‘know’ and perception verbs (*tá*, *dè* )

With ‘know (that)’ and ‘see (that)’, the nonquotative complementizer *tá* ‘that’ occurs at the beginning of the subordinated clause, which otherwise has main-clause form.

(xx1) a. *[ŋ́ kɔ̀ⁿ] [tá ŋ̀ gō mā]*

[1Sg know.Stat] [that 2Sg be there.Def]

‘I know that you-Sg are present.’

b. *[ŋ́ kɔ̀ⁿ] [tá zàkí gō mā]*

[1Sg know.Stat] [that Z be there.Def]

‘I know that Zaki is present.’

c. *[ŋ́ kɔ̀ⁿ] [tá zàkí kǎ sē-ʔ]*

[1Sg know.Stat] [that Z PfvNeg go.Ipfv-Neg]

‘I know that Zaki didn’t go.’

d. *ŋ́ tì kàá kɔ̀ⁿ=yⁿ [tá ŋ̀ gō sàmìyàʕàⁿ]*

1Sg Past PfvNeg know=3SgE [that 2Sg be Bobo.Dioulasso]

‘I didn’t know that you-Sg were in Bobo.’

e. *ŋ́ ɲà [tá [à wàtírìì] fyê]*

1Sg see.Pfv [that [Pref vehicle] go.Stat

‘I see (=have seen) that the vehicle has left.’

With ‘hear (that)’, the complementizer is *dè* ‘that’, as with quotative complements.

(xx1) *ŋ́ dígɛ̀=ỳ [dè ŋ̀ gō sàmìyàʕàⁿ]*

1Sg hear.Pfv=3SgE [that 2Sg be Bobo.Dioulasso]

‘I heard that you-Sg were in Bobo.’

# Anaphora

This chapter deals with anaphoric elements that require coindexation with a specific antecedent NP. It does not cover ordinary third person pronominals.

## Reflexive

A reflexive object is expressed by a pronominally possessed form of the noun-like element *myâⁿ*. The pronominal proclitic is L‑toned in this construction, so *ŋ̀ myâⁿ* can mean ‘myself’, ‘yourself’, or ‘his/herself’. There is little chance of real ambiguity since the subject position is obligatory in indicative clauses. The paradigm is (xx1).

(xx1) 1Sg *ŋ̀ myâⁿ*

1Pl *è myâⁿ*

2Sg *ŋ̀ myâⁿ* ~ *m̀ myâⁿ*

2Pl *nā myâⁿ*

3Sg *ŋ̀ myâⁿ*

3Pl *ò myâⁿ*

Examples are in (xx2). Plural-subject examples are here translated as reflexives but they can also be reciprocals (see the following section).

(xx2) a. *zàkí kpɔ̀ [ŋ̀ myâⁿ]*

Z hit.Pfv [3Sg Refl]

‘Zaki hit/killed himself.’

b. *[ò sísàʕà kpà [ò myâⁿ]*

[Pref young.man] hit.Pfv [3Pl Refl]

‘The young men killed themselves.’

c. *é bī kpà [è myâⁿ]*

1Pl Fut hit.Pfv [1Pl Refl]

‘We will kill ourselves.’

## Reciprocal

The same reflexive forms can also function as reciprocals. While singular subjects can only have reflexive objects, plural subjects can have either reflexive or reciprocal objects. The resulting ambiguity is not serious in most contexts, where reciprocal readings are usual.

(xx1) a. *ná-m-yó→ kpà [ò myâⁿ]*

child-Pl hit.Pfv [Pref Recip]

‘The children hit each other (=fought).’

b. *dídī é ɲɛ̄ [è myâⁿ]*

last.year 1Pl see.Pfv [1Pl Recip]

‘We saw each other last year.’

## Third-person logophoric

The independent third person pronouns *bǒ* (3Sg) and *bòó* (3Pl), when they occur in subject position instead of the usual third-person proclitic pronominals, can have logophoric interpretations if the clause in question is quoted. In a logophoric relationship, the ascribed author of the quotation is coindexed with the third-person subject pronoun. In other words, the original utterance had a 1Sg or 1Pl pronominal that is converted into a quoted logophoric third person.

This is only the case when the ascribed author is a third party, not the current speaker or addressee. We therefore get an independent third person pronoun in logophoric subject function in (xx1a‑b), but not in (xx1c). An independent third person pronoun may also be used in lower-clause object function (xx1d), though we not sure how systematically.

(xx1) a. *zàkí jà [(dè) bó bī bà]*

Z say.Pfv [(that) 3Sg Fut come.Pfv]

‘Zaki said that he (=Zaki) will come.’

b. *ná-my-ó→ jà [bòó bī bà]*

child-Pl say.Pfv [3Pl Fut come.Pfv]

‘The children said that they (=the children) will come.’

c. *ŋ́ jà [ŋ́ bī bà]*

1Sg say.Pfv [1Sg Fut come.Pfv]

‘I said that I will come.’

d. *zàkí jà [(dè) ŋ̀ kpà bǒ]*

Z say.Pfv [(that) 2Sg hit.Pfv 3Sg]

‘Zakix said that you-Sg hit-Past himx.’

Of course ordinary third person subject pronouns are used in quotations where the subject is not coindexed to the ascribed author (xx2a‑b). The occurrence of a proclitic rather than independent third-person subject pronominal in (xx2d) tells the listener that the referent of this pronominal is not the same as that of the author (Zaki).

(xx2) a. *ŋ́ jà [kà bí bà]*

1Sg say.Pfv [3Sg Fut come.Pfv]

‘I said that he/she will come.’

b. *zàkí jà [kà bí bà]*

Z say.Pfv [3Sg Fut come.Pfv]

‘Zaki said that he/she (=someone else) will come.’

# Grammaticalized discourse markers

## Discourse markers

### Topicalization (*kɔ̀ní* )

*kɔ̀ní* (as in Jula) follows a preclausal topicalized constituent. If this constituent is pronominal, it takes independent prominal form: *ɲí kɔ̀ní* ‘as for me, …’, *zàkí kòní* ‘as for Zaki, …’.

### ‘X too’ (*gó* )

*gó* ‘also, too’ occurs phrase-finally (xx1a‑b). In (xx1a‑b), the subject is expressed by an independent (not proclitic) pronoun, indicating that the subject is the focus.

(xx1) a. *ɲí bà gó*

1Sg come.Pfv also

‘I too have come.’

b. *ɲí bī sà gó*

1Sg be go.Pfv also

‘I too will go.’

### ‘Self’ (*yɛ̀rɛ́* )

*yɛ̀rɛ́* ‘self’ follows the relevant NP or independent pronoun. The sense is that X rather than some other entity will fulfill the predicate.

(xx1) a. *[ɲí yɛ̀rɛ́] bī sà*

[1Sg self] Fut go.Pfv

‘I myself will go.’

a. *[zàkí yɛ̀rɛ́] bī sà*

[Z self] Fut go.Pfv

‘Zaki himself will go.’

### ‘Even’ (*hàlí* )

*hàlí* ‘even’ (a widespread regional form) can precede an NP (including an independent pronoun). In (xx1) the ‘even’ phrase functions as a preclausal topic.

(xx1) [*hàlí ɲí] ɲáɣàⁿ dē pɔ̀rɔ̀ⁿ= [ỳ sɔ̯ⁿɛ̀ɛ́]*

[even 1Sg] 1Sg.Ipfv do.Ipfv be.able [Pref work(n)]

‘Even I can do this work.’ (*=ỳ* < *è*, *ɲáɣàⁿ* variant of *ŋ́ wɔ̀ɣɔ̀* )

### ‘Only’ (*míɛ̀ⁿ* )

This is expressed by adding *míɛ̀ⁿ* after the relevant constituent. It may combine with the focus particle as *míɛ̀ⁿ nè* (xx1a).

(xx1) a. *[ɲí míɛ̀ⁿ nè] bà*

[1Sg only Foc] come.Pfv

‘Only I have come.’

b. *zàkí dí [à síyáʕāⁿ] míɛ̀ⁿ*

Z eat.Ipfv [Pref toad] only

‘Zaki only eats toads.’

### ‘But’ (absent)

In clause sequences like (xx1) where there is an adversarial relationship between the content of the two clauses, no overt ‘but’ particle is used.

(xx1) *[kà kúlɛ̄] [kà máⁿ yɛ́]*

[3Sg crawl.Ipfv] [3Sg IpfvNeg walk.Ipfv]

‘It (=baby) can crawl, (but) it can’t walk.'

## Greetings

The morning greeting is (xx1a), ending with a vocative naming the addressee. The interlocutor replies with the same formula. The following sequence is (xx1b‑d).

(xx1) a. *bàsáàⁿ làmínì*

good.morning L

‘Good morning Lamine!’ (cf. *sùgáⁿ* ‘morning’)

b. *mì yígà→*

2Sg get.up.Pfv

‘You-Sg have arisen.’ (< *yígà* )

c. *ŋ̀ yígà, ŋ́ ɲà kúùⁿ*

1Sg get.up.Pfv 1Sg see.Pfv today

‘I have arisen, I have seen (=reached) today.’

d. *díyáʕāⁿ ŋɔ̀ⁿ súgúnā*

fire give.Pfv tomorrow

‘May fire (=God) give (us) tomorrow!’

# References cited

Berthelette, John & Carol Berthelette. 2002. Sociolinguistic survey report for the Tiefo language. Technical report, SIL International. online:

<http://www.sil.org/resources/archives/9174>

Hantgan, Abbie. 2013ms. Tiefo dictionary. [manuscript December 2013].

Hantgan, Abbie. 2014ms. A grammar of Tiefo. [manuscrit January 2014].

Hébert, J. (R. P.) 1958. Une page d’histoire voltaïque: Amoro chef des Tiefo. *Bulletin de l’IFAN* 20 (Série B, 3-4), 377-405. Dakar: IFAN (Institut Français d’Afrique Noire).

Manessy, Gabriel. 1981. Les langues voltaïques. In: Jean Perrot (ed.), *Les langues dans le monde ancien et moderne, Afrique sub-saharienne*, 103-110. Paris: Éditions du CNRS.

Manessy, Gabriel. 1982. Matériaux linguistiques pour servir à l’histoire des populations du sud-ouest de la Haute-Volta. *Sprache und Geschichte in Afrika* 4, 95-164.

Miehe, Gudrun, Brigitte Reineke & Kerstin Winkelmann (eds.). 2012. *Noun class systems in Gur languages*, tome 1, *Southwestern Gur languages (without Gurunsi)*; tome 2, *North central Gur languages*. Cologne: Köppe.

Naden, Anthony. 1989. Gur. In: John Bendor-Samuel & Rhonda Hartell (eds.), *The Niger-Congo languages: A classification and description of Africa’s largest language family*, Lanham/New York/London: University Press of America, 140-168.

Rennison, John R. 1992. Welche Vokale hatte das Proto-Gur? Überlegungen anhand der Vokalharmonie und Vokalassimilation in Koromge und Mòore. In: Erwin Ebermann, E. R. Sommerauer & K. E. Thomanek (éds.), *Komparative Afrikanistik: sprach-, geschichts- und literaturwissenschaftliche Aufsätze zu Ehren von Hans J. Mukarovski anlässlich seines 70. Geburtstag*, 297-312. Vienna: Afro-Pub.

Winkelmann, Kerstin. 1995. Politik und Sprachverlust: Die Rache der Prinzessin Gimbi und der Niedergang des Dorfes Numudara. In: K. Brunk & U. Greinert-Byer (eds.), *Mensch und Natur in Westafrika: Eine interdisziplinäre Festschrift für Gunter Nagel* (Berichte des Sonderforschungsbereichs 268), 259-267. Frankfurt am Main: Johann Wolfgang Goethe-Universität.

Winkelmann, Kerstin. 1996. Quelques remarques sur l’histoire des Cɛfɔ. *Gur Papers/Cahiers Voltaïques* 1, 165-175.

Winkelmann, Kerstin. 1998. *Die Sprache der Cɛfɔ von Daramandugu (Burkina Faso)*. (Berichte des Sonderforschungsbereichs 268). Frankfurt am Main: Johann Wolfgang Goethe-Universität. ISBN 3-9806129-0-2. [cited as “W98”].