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

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# Introduction

## The Gur family

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.

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 lingua francas 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 Tiéfo, the process of Jula-ization dates from the end of the 19th Century. The result is that Tiefo varieties are now threatened with extinction.

### The Tiefo (*cɛ̀fɔ́* ) languages

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

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

Neither Manessy (1981, 1982) nor Naden (1989) were able to place Tiefo within the recognized genetic subgroups of Gur. Naden includes Tiefo, Viemo, Toussian, Wara, and Natioro in a loose group of SW Burkina languages whose genetic relationship to “Central Gur” is “improbable” (p. 149). Naden does not address the issue whether this set of languages is itself a genetic division, or just a basket of languages awaiting classification.

We therefore provisionally assume that Tiefo is either an isolate (i.e. with no demonstrable genetic relatives), or that it constitutes its own peripheral subgroup of Gur. Its premature disappearance, feared by Manessy three and a half decades ago, would have been a serious loss.

Fortunately, Tiefo (like Mark Twain) seems to have outlived its obituary. The first major effort was Kerstin Winkelmann’s fine dissertation on Tiefo-D (Winkelmann 1996), which focuses on phonology, nominal and verbal morphology (including vestiges of noun classes), and includes a short but valuable lexicon. It is written in German, limiting its accessibility to non-Germanophone readers.

Winkelmann did make short visits to Noumoudara and Nyafogo, complementing her primary work in Daramandougou, sometime in 1990-1994, more than twenty years ago. She gathered enough Tiefo-N material to conclude that it was a different language from and mutually unintelligible with Tiefo-D. However, she concluded (incorrectly) that Tiefo-N was already beyond salvation. She found it impossible even 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).

Tiefo studies reached their low point in 2008, when the Endangered Languages Documentation Project at SOAS funded a Burkina scholar to the tune of £6K to do fieldwork on Tiefo. The individual in question produced nothing and has not been seen since.

When the project I have led since 2005 on Dogon and other languages of Mali fled to the safe haven of Bobo Dioulasso during the Tuareg rebellion of 2012, we not only continued our ongoing work with Malian informants who traveled with us, we also began sniffing around for possible fieldwork opportunities in SW Burkina. In this context we took a long-shot chance and checked out the Tiefo situation. 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 informants. We did, however, confirm that the Tiefo-N variety of Noumoudara was beyond salvation.

My own initial work on Tiefo-N was limited to flora-fauna terminology, one of my specialties. Abbie Hantgan, a veteran of our project who had done fieldwork in Mali on the Bangime language isolate, and a competent speaker of Bambara (very close to Jula), undertook emergency fieldwork on Tiefo-N to see what could be salvaged. When she departed for a new project at SOAS in January 2014, she left behind materials for a Tiefo-N dictionary and grammar but no finished works. We also discovered a Burkina linguistics student, Aminata Ouattara, an ethnic Tiefo (but not native speaker) who was interested in documenting Tiefo‑N in particular. We supported her studies at University of Ouagadougou in the hope that she would be able to take over the bulk of the fieldwork. Things didn’t work out quite as we hoped, since Ouattara’s heavy obligations to support family members led her to take a non-linguistic job in Djibo (far northern Burkina) during ’13-’14.

After Ouattara returned to her linguistic studies, I was able to reunite with her and carry out joint fieldwork sessions both in Nyafogo for a few days in January 2016, and in our rather more comfy Bobo Dioulasso base for 16 days in August 2016, with the two key elderly Tiefo-N informants.

Frankly, the fieldwork is very difficult, given the age of our speakers, and the fact that their only other language is Jula. Nevertheless, we have been able to put together a basic grammar and a substantial lexical spreadsheet for Tiefo-N that would have astonished Manessy and perhaps even Winkelmann.

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

(xx1) Noms des villages tiéfo

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 (in part)

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

The Tiefo-N name for Bobo Dioulasso is *sàmìʕàⁿ*.

Our GPS coordinates for the main villages follow. The “quartiers” (neighborhoods) of Daramandougou are actually separated by several kilometers.

(xx2) a. Tiéfo-N

Nyafogo 10 53.203 04 22.725

Noumoudara xxx xxx

b. Tiéfo-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) can 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 is oriented toward the south. The only local market they participate in is that of Tiefora, and the big city they are oriented toward is Banfora rather than Bobo.

## 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 defines the geography. The cliffs range from high and steep to more gentle, and there are two passes where a 4x4 or a motorcycle can navigate the slopes. Daramandougou is cut off by particularly steep cliffs, while Nyafogo is blessed by being not too far from one of the passes.

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) 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 practices: onion, garlic, lettuce, tomato, chili pepper, sweet potato, and cassava.

There is rather little contact between Nyafogo and Daramandougou, despite their physical proximity. Nyafogo is oriented toward Bobo, Daramandougou toward Tiefor and Banfora. The dirt roads between Nyafogo and Daramandougou are in bad shape even now.

## 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 (Gur)
* 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. Fulbe women come into the villages to sell milk and butter. Jula is the common language.

## History

The Tiefo were a 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, which were spared the worst of the massacres.

## Previous scholarship on Tiefo

### Winkelmann

Winkelmann was part of a Frankfurt-based 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). She made several field trips in the period 1990-1994, mainly in Daramandougou, with visits to Noumoudara and one to Nyafogo. Winkelmann’s dissertation (1998) consists of a grammar (pp. 1-215) focusing on phonology and basic morphology, a Tiefo-D/German lexicon (pp. 216-249) with limited comparisons to Tiefo-N, and a reverse German-Tiefo-D index (pp. 250-259). I abbreviate this work henceforth as W98.

### Acknowledgements

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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 worked with them both in Nyafogo and in our base in Bobo Dioulasso.

We thank the people of Tiefo villages, especially our host Lameen Ouattara, 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;
* in nouns, pharyngeal *ʕ* is common intervocalically at the beginning of third or fourth syllables from the left, and can arguably be analysed as a positional allophone of *ɣ* ;
* *ʔ* occurs word-fnally as a negative morpheme on verbs.
* labial velars (*k͡p*, *g͡b*, *ŋ͡m*) occur stem-initially, in some cases derivable from /kw/ etc.

I 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].

(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}.

## Voyelles

### 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 discusses possible vestiges of \*a (‑ATR) versus \*ʌ (+ATR) in Tiefo-D verb-stem alternations.

### 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 I write as Cɔ̯ɛy could be analysed as /Cɔy/, with labialization decreasing at mid-syllable.

## 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). 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). I will use *á*, *ā*, and *à*, 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.

Tiefo-N also has three tone levels, but they pattern differently from what W98 reports for Tiefo-D. Whereas Tiefo-D 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 may 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, and one rising tone LH. Examples of all the Tiefo-N syllable tone possibilities using monosyllabic words are in (xx2).

(xx2) type example gloss

H *wúú* ‘death’

M *gō* ‘be (present)’

L *mɛ̀ɛ̀* ‘okra’

HL *yáà* ‘co-wife’

HM *bíīⁿ* ‘roof’

LH *dɛ̀ɛ́* ‘sauce’

As noted elsewhere, there is a constraint against all-M‑toned noun stems.

## 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. I 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 clearly audible schwa-like vowel. A full pronunciation with one of the regular short vowels is usually also possible.

Some examples involving verb stems:

(xx1) imperfective perfective gloss

a. *jɔ̄rɔ̄ jɔ̀rɔ̀* ~ *jə̀rɔ̀* ‘swallow’

*kárá kə́rɛ̀* ‘exchange’

fashion, reduction to schwa applies to C\_lv

### Syncope

Alternations involving syncope feature the lateral *l*. The typical target of syncope is the schwa in word-initial Cəlv, where v is any vowel.

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

Two now 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, in other stems including verbs we either have a *kw* that remains unfused (xx1b), cf. also There are also cases of kw and so forth that do not fuse into labial velars (xx1b), as also in *kwɔ́làʕá* ‘good’ versus predicative *kò* ‘be good’, or 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 I 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). In these cases *l* occurs before *a*. As usual, Cəlv syncopates to Clv while Cərv does not syncopate, but this is likely a secondary development rather than the cause of the *r/l* alternation. Quite a few 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 favoring 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-D 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/ if monosyllabic. Nonmonosyllabics may be any of these, plus /HLH/, /LHL/, or /LHM/. There is no /M/ melody for noun stems.

The lexical melody is usually realized without change. However, tones of nouns are dropped to {L} after *dí* in possessive constructions.

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 write with HM tones, e.g. Cv́Cv̄v̄, but we are free to interpret such words as having /H/ melody structurally.

Examples 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 needs to 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.

(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* ‘pone’

*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 is rather irregular, with many pairings that are clearly learned as such rather than resulting from productive morphophonological processes. Both tones and segments are affected. Because of these irregularities, we do not speak of lexical melodies of verbs. Details are reserved for the chapter on verb morphology.

### Tone sandhi processes

#### LH#H-to-LL#H

LH-toned words whose final H is limited to a final mora or syllable flatten to L-toned before an H‑tone. This is observable in N-Adj combinations and in N-N compounds. It affects everything from monosyllabics like *dɛ̀ɛ́* ‘sauce’ to trisyllabics like *fɔ̀ⁿfɔ̀ní* ‘viper’. Examples with dígínā ‘one’ are *fɔ̀fɔ̀nì dígínā* ‘one viper’ and *dɛ̀ɛ̀ dígínā* ‘one sauce’. The process also applies before adjectives, as in *fɔ̀fɔ̀nì sáŋgbə́rāⁿ* ‘a big viper’, and in general before any word beginning in H‑tone.

It does not apply to LH\* nouns such as *lɛ̀múrú* ‘lemon’, whose H‑tone begins on a nonfinal syllable: *lɛ̀múrú dígínā* ‘one lemon’.

#### <LH>-to-H

Under conditions not well understood, a monomoraic word like ɲǔ ‘water’ appears to flatten to H‑toned (ɲú ) before another word. An example is ɲú bàɣà ‘wanting water’ in (xx1a) in §10.3.2.

#### 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 and pluralization

Manessy (1982: 144) already identified cases of Tiefo‑D nouns that contain now-frozen noun-class suffxes: *‑gV* ~ *‑ŋV*, *‑de*, *‑nu* ~ *‑ru*, *‑ne* ~ *‑ni*, *‑e*, *‑a*, *‑ɲo*, *‑ri*, *‑n*. See the detailed commentary in W98: 106.

In Tiefo-N the primary pluralization process is prolongation of the final vowel. A few nouns have irregular plurals. Most nouns also have an optional vocalic prefix, either *à*, *ò*, or *è*, that could be taken as a kind of noun-class marker.

### 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’

Prolonged forms of already long vowels may introduce quasi-syllabic breaks. 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 among many are in (xx2a). 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

*bɔ̌ⁿ bɔ̀ɔ́→* ‘monitor lizard’

*cɔ̀ⁿ cɔ̀→* ‘bird (any)’

*m̀láⁿ m̀lá→* ‘millet beer’

*yóōⁿ yóō→* ‘crocodile’

*bɔ́ɣɔ̄ⁿ bɔ́ɣɔ̄→* ‘dog’

*ɲɔ́rɔ̀ⁿ* *ɲɔ́rɔ̀→* ‘friend’

b. nasalization retained in plural

*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 *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’

### Deverbal agentives (*‑wì* )

Verbs form agentives with suffix *‑wì*, distinct from H‑toned *‑wí* in denominal ‘owner of Y’ compounds. 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.xxx.

### 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. There is no subject marking.

Infinitival VPs are used in same-subject action sequences, see §13.1.4.

## 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).

(xx1) independent proclitic

subject possessive

1Sg *ɲí ŋ́ ŋ̀*

2Sg *mì ŋ̀* (< \*m̀) *ŋ̀* ~ *m̀*

3Sg Hum *kā ŋ̄, kà ŋ́*

3SgNonHum *ā* —

3Sg (strong) *bō*

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 post-pausally before a consonant as syllabic labialized [ŋʷ].

Independent forms can replace proclitics, which helps to distinguish 1Sg, 2Sg, and 3Sg proclitics. The independent third person pronouns *bō* and *bòó* are here labeled “strong.” When they replace a regular third person proclitics, they may have logophoric-subject functions. In (xx2a), *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=3Sg [that **3Sg** Fut come.Pfv]

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

b. *ŋ́ fó=é [dè kà bí bà]*

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

‘I said that I 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.

(xx1) Enclitic object pronouns

1Sg *=ýⁿ*

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

3Sg Hum *=ò*, *=ɔ̀*

indefinite *=(y)àʕà*

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 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) *círè* (Pfv) *cə́rá* (Ipfv)

1Sg *círè=ýⁿ cə́r=āyⁿ*

2Sg *cír=òw(ⁿ) cə́r=ɔ̄wⁿ*

3Sg *cír=ò cə́r=ɔ̄*

indefinite *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) *kpà* (Pfv) *kō* (Ipfv)

1Sg *kpà=ýⁿ kò=ýⁿ*

2Sg *kp=ɔ̀wⁿ kò=wⁿ*

3Sg Hum *kp=ɔ̀ k=ò*

3SgNonHum *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) *klâ* (Pfv) *kə́rù*

1Sg *kl=áȳⁿ kúrū=ȳⁿ*

2Sg *kl=ɔ́w̄ⁿ kúrū=w̄ⁿ*

3Sg Hum *kl=ɔ̂ kúr=ū*

indefinite *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 could 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 be postnominal modifiers or predicates. In the latter function, in some cases they are just variants of the modifiers; in others, they are lexically distinct inchoative verbs loosely related to the modifying adjective.

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.

(xx1) *(à) wùù bí→ / sáŋbə́ráⁿ / kwɔ́làʕá / yɔ́bàʕá*

(Pref) house small / big / good / black

‘une maison petite/grosse/bonne/noire’

Relationships between modifying and predicate adjectives are of two basic types, leaving inchoative verbs apart.

(xx2) shows a type where the predicate has a form of the adjective directly following the subject pronoun, which for these adjectives is *kàʕà* (usually reduced to *kà* ) in the 3Sg form. Regular 1st/2nd person subject proclitics like 1Sg *ŋ́* are also used, but 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.

(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’

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 adjecives in (xx3) were regularly elicited with this predicative type.

(xx3) modifying ‘it is …’ gloss

*ʃíyⁿàʕáⁿ à ɲáʕáⁿ gō* ‘red’

*wàɣáⁿ à wàɣáⁿ gō* ‘wide’

*yɔ́bàʕá* *à yɔ́w gō* ‘black’

*yɔ́bɔ̀*

*wálāʕā* *à wáláʕá gō* ‘dry’

*wálāw*

*fíyⁿàʕáⁿ à fíŋéyáʕáⁿ gō* ‘white’

For ‘heavy’, both predicates are attested. In modifying function, it 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*

## Numerals

### ‘1’

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

### ‘2’ to ‘9’

(xx1) presents our data (from Nyafogo) in the far-right column, alongside the transcriptions from 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’. ‘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. 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 is presumably 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 are potentially interesting historically given the frequen dropping of intervocalic *r*.

(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. 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 appears with L‑tone before an H‑tone.

(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* )

Initials with a final rising tone are subject to flattening to L‑toned before an H‑tone, as in (xx1d-e).

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’

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 suffix *‑wì* (see just below).

### Compound agentives

For simple agentives with *-wì* added to an {H}‑toned verb, see §3.1.4. 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, allowing 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 *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 *-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’

b. *à wùú kwɔ́-làʕá jɔ̄ⁿ*

Pref house good two

‘two good houses’

c. *à wùú jɔ̄ⁿ ŋwɔ́ʕɔ̀ⁿ*

Pref house two Dem

‘these two houses’

d. *à wùú ŋwɔ́ʕɔ̀ⁿ bjɛ́*

Pres house Dem all

‘all these houses’

## Vocalic prefix before noun

Most nouns can be preceded by a vocalic prefix (or proclitic). This is either *à*, *ò*, or *è* depending on the noun. There is no simple semantic or phonological principle for the choice of vowel. *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 fairly common though never 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), noting the surface vowel quality of ‘see’ (perfective). With some difficulty, we then elicit *ò bàwáⁿ* ‘elephant’ and *è bóīⁿ* ‘granary’ as independent forms. (xx1b) likewise 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 a/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.

Hantgan reported that the vocalic prefix is absent when the noun is followed by a numeral or other quantifier (HaG14: 28).

Some nouns have an optional nasal onset that can appear in isolation and that functions roughly like a vocalic prefix. Compare *dùrú* in (xx2a) with *ǹ‑dùrú* in (xx2b). However, these nouns also appear to have a detachable vocalic prefix that contracts with a preceding verb (xx2c).

(xx2) 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, W98: 135 reported that the “articles” *ʔē* (singular) and *ʔō* (plural, not common) are 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. Other than LH#H-to-LL#H tone sandhi there are no special morphotonological processes. For the forms of adjectives, as modifiers and as predicates, see §3.3 above.

## Demonstratives

### ‘This, that’

There is no distinction between proximate and distant. Demonstratives are added to already number-specified nouns, and do not themselves mark number. Examples: *dɔ̀ɛ̀y ŋɔ́ɔ̀ⁿ* ‘this man’, *dɔ̀-rɔ̀ ŋɔ́ɔ̀ⁿ* ‘these men’, *yà ŋɔ́ɔ̀ⁿ* ‘this woman’, *wùù ŋɔ́ɔ̀ⁿ* ‘this house’ (< *dɔ̀ɛ́y*, *dɔ̀-rɔ̀ɔ́*, *yǎ*, *wùú* ). 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) proclitique suffixe

1Sg *ŋ̀*

1Pl *è*

2Sg *m̀ -ɛ̀*

2Pl *nà*

3Sg *ŋ́*

3Pl *ó*

The *-ɛ̀* suffix is an optional for 2Sg possessor. It is used more systematically for 2Sg complement of postpositions.

An optional genitive-like morpheme *dí* can be 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’.

Examples of genitive function (and 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*

d. *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’

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

Quantifiers follow the modified noun. They include *byɛ́* ‘all’, pyé ‘many/much’, *jɔ́ʕɔ̄* ‘(a) few/a little’, and yíbí ‘(a) few/a little’ (diminutive). They are often emphatic in discourse context and may be prolonged intonationally (→).

(xx1) a. *bɔ́ɣɔ̄ⁿ byɛ́*

dog all

‘all (the) dogs’

b. *bɔ́ɣɔ̄ⁿ pyé→*

dog many/much

‘many dogs’

c. *bɔ́ɣɔ̄ⁿ jɔ́ɣɔ̄→*

dog a.few

‘(a) few dogs’

with ‘men’, ‘people’

# NP coordination

## ‘X and/with Y’

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* can also function as an instrumental or comitative preposition (§7.2).

## ‘X or Y’

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?’

# Postpositions

Most adpositions are postposed to NPs. The exception is *nà* ‘with, any’ which is preposed.

## 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

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, and’ can have instrumental or comitative function: *nà yèyàʕá* ‘with (=by means of) an ax’, *nà yǎ* ‘with (=in the company of) a woman’.

(xx1) a. *ŋ̀ kpâ 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.’

### ‘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 noncentriptal (itive) direction, the stative (resultative) fyê is preferred to dynamic (aspect-marking) sē\\sà ‘go’: fyê ‘have gone, be gone’, fyé [nà X] ‘take/have taken X (there)’.

‘Zaki will take it 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 as well as dynamic (motion) contexts.

(xx1) a. *ŋ̀ 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 *ŋ́ yɛ̄yⁿ ŋ́ ʃīⁿ ŋ́ ʃyɛ̄*

3Pl *ó yɛ̄yⁿ ó ʃīⁿ ó ʃyɛ̄*

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

## 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.

(xx1) *ŋ̀ bà [sɔ́ȳⁿ lè ʃyɛ́]*

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

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

## Possession and desire

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

A tonally distinct postposition bàɣà occurs in predications of desire: X want *[Y bàɣà]* ‘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 slightly 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.

(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’

*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)’

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’.

## 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 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* ‘s*plit, 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

*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 HM\\HL

*dúgúmā dúgúmà* ‘stir, mix, confuse’

*páɣánī páɣánì* ‘hurry’

*sáɣánāⁿ sáɣánàⁿ* ‘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 to *e/ɛ*, and those where it shifts to *a*, but there are also a couple of cases with *ɔ*. In bisyllabics, both vowels are affected 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 (which may otherwise be covert).

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). Although we take the perfective to be marked, in these verbs an ATR value that is covert in the imperfective, with *a*-vowels, becomes overt in the perfective. Following up on some astute comments by Winkelmann for Tiefo‑D, one might infer that an earlier stage of Tiefo distinguished two low vowels by ATR, as Proto-Gur probably did. 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 has been reduced to shwa (before *r*) or syncopated (before *l*). In two cases, CaCa

(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’

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*.

*(xx2)*  imperfective perfective gloss

a. trisyllabics

*CaCaCa imperfective (all treated as +ATR)*

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

*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)’

*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 ʃū̀rè ~ 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) and either *g* or, in nasalized environments, *ŋ*. Those in (xx3b) have stable *ŋ*.

(xx3) imperfective perfective gloss

a. *g alternating with ɣ or ŋ*

*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*

*dúŋáⁿ dúŋɛ̀ⁿ* ‘lick’

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

The wastebasket in (xx4) presents verbs that have some similarity to the preceding types. In (xx4a) it is possible that the medial consonant in the perfective was deleted intervocalically in the imperfective. In (xx4), syncope from Cvlv to Clv is not complete with C = *m*.

*(xx4)*  imperfective perfective gloss

*a. ʃyáⁿ ʃɛ́nɛ̀* ‘lie down’

*sɔ̀ⁿ sùŋɛ̀ ~ sùŋà* ‘work (v)’

*tú túlɛ̀* ‘spit’

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

### 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)’

*fíì 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*)’*

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)’

ʃìrìʃírí-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-*sá-*là* ‘reply’ (compound verb)

*nārāⁿ-sā nā(rā)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 (xx3a), bisyllabics in (xx3b). The deadjectival verb ‘become small(er)’ is not nasalized but takes *‑nà* (xx3c).

(xx3) imperfective perfective gloss

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

*dàⁿ dà-nà* ‘arrive’

*gbāⁿ gbā-nà* ‘sew’

*kpāⁿ kpā-nà* ‘scrape, scratch’

*m*àⁿ *mà-nà* ‘laugh (v)’

*n*àⁿ *nà-nà* ‘stone-grind; crush’

*n*áⁿ *ná-nà* ‘tend *(livestock)’*

*sāⁿ ~ sɔ̄ⁿ sá-nà* ‘sort (grains)’

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

*kāɣāⁿ kāɣā-nà* ‘encounter’

*kə̀ràⁿ kà*rə́*-nà* ‘read’

*mɔ́ɣɔ́ⁿ mɔ́ɣɔ́-nà* ‘suck’

*ɲān*īⁿ *ɲānī-nà* ‘pester, annoy’

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

### *ʃyáⁿ\\ʃɛ́nɛ̀* ‘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, in which case this would be a vowel-mutating verb with perfective CɛCɛ.

A somewhat similar case is ‘expel, drive out’, for which *nɔ̀rɔ̀ⁿ* is attested as imperfective and *nɔ̀nɔ̀* or *nɔ̀rɔ̀ⁿ* as perfective. One possibility is that *nɔ̀nɔ̀* is contracted from \*nɔ̀rɔ̀‑nɔ̀. The other is that this is simply 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* ‘??’

*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 ~* tə̄rī *tə̀rì-bà* ‘(sb) slip’

*Cvy imperfective (probably < \*Cvrv)*

pɛ̄ypɛ́rɛ́*-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. *bə́*rí *bə́rí-mà* ‘roll along; beat (tomtom)’

*kə́*rī *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.

# 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 (xx1). One can immediately see that the labels “perfective” and “imperfective” for the verb-stem alternation are oversimplified.

|  |  |  |
| --- | --- | --- |
|  | positive | negative |
| perfective | ***Pfv*** | Ipfv |
| imperfective | Ipfv | ***Pfv*** |
| future | ***Pfv*** | Ipfv |
| imperative | Ipfv | Ipfv |
| hortative | Ipfv | ? |
| infinitive, §3.1.4 | Ipfv | (n.a.) |
| agentive, §3.1.3 | ***Pfv*** | (n.a.) |

## 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).

(xx1) pronominal subject proclitic in perfective positive

*ŋ́* 1Sg

*é*  1Pl

*ŋ̀* 2Sg

*nā* 2Pl

*ŋ̄* 3SgHum

*ā* 3SgNonhum

*ō* 3Pl

In this paradigm, the pronominal proclitics for first and second persons can be analysed as slightly reduced forms of the corresponding independent pronouns. In particular, the two series agree in the tones of the pronominal element. For third person, independent pronouns are not closely related to proclitics.

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

A clause-final glottal stop -ʔ is added to the final verb in most negative predicates.

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. The 3Pl form *wɔ̀ɣɔ́* may derive from a reduced variant of 3Pl independent pronoun *bòó* combined with a spirantized variant of *kàá* (i.e. \*bò-kǎ ), but synchronically it is best considered a portmanteau.

(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 (human, non-human)

*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* ).

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

subject perfective negative imperfective positive

3Sg *kà yígí-ʔ ŋ̄ wɔ̀ɣɔ̀ yígí*

3Pl *wɔ̀ɣɔ̀ yígí-ʔ ō wɔ̀ɣɔ̀ yígí*

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

## Imperfective

The phrase-level imperfective inflectional category can be glossed as general imperfective (nonpast habitual) or progressive, cf. French *il court* ‘he runs (habitually)’ or ‘he is running’.

### Imperfective positive

The imperfective positive is expressed by the inflectional morpheme *wɔ̀ɣɔ̀* preceding the verb in the imperfective stem. The subject (either a nonpronominal NP or a pronominal-subject proclitic) precedes *wɔ̀ɣɔ̀*. An example with NP subject is (xx1).

(xx1) *zàkí wɔ̀ɣɔ̀ sē / yígí*

Z Ipfv go.Ipfv / get.up.Ipfv

‘Zaki goes (is going)/gets up (is getting up).’

The pronominal-subject paradigm is (xx2).

(xx2) imperfective positive

*ŋ́ wɔ̀ɣɔ̀* 1Sg

*é wɔ̀ɣɔ̀* 1Pl

*ŋ̀ wɔ̀ɣɔ̀* 2Sg

*nā wɔ̀ɣɔ̀* 2Pl

*ŋ̄ wɔ̀ɣɔ̀* 3SgHum

*ā wɔ̀ɣɔ̀* 3SgNonH

*ō wɔ̀ɣɔ̀* 3Pl

*wɔ̀ɣɔ̀* is tonally distinct from *wɔ̀ɣɔ́*, the portmanteau for 3Pl perfective negative. However, before an H‑tone the portmanteau *wɔ̀ɣɔ́* drops its tones to become *wɔ̀ɣɔ̀*, as in *wɔ̀ɣɔ̀ yígí* ‘get(s) up’. There is no confusion at phrasal level, because imperfective *wɔ̀ɣɔ̀* is always preceded by a nonzero subject (nonpronominal or pronominal), while the 3Pl perfective portmanteau *wɔ̀ɣɔ́* cannot be. The key examples in (xx2) in §9.1.2 above are marked up below as imperfective (xx3a‑b) and 3Pl perfective negative (xxc).

(xx3) a. *ŋ̄ wɔ̀ɣɔ̀ yígí*

3Sg Ipfv get.up.Ipfv

‘He/She gets up.’

b. *ō wɔ̀ɣɔ̀ yígí*

3Pl Ipfv get.up.Ipfv

‘They get up.’

c. *wɔ̀ɣɔ̀ yígí‑ʔ*

3Pl.PfvNeg get.up.Ipfv-Neg

‘They didn’t get up.’

### Imperfective negative

The imperfective negative morpheme is *máɣàⁿ*, usually contracted to *mâⁿ*, after a nonpronominal subject NP. As shown in the pronominal-subject paradigm (xx1), most pronominal proclitics (but not 2Sg) require the same surface variant *máɣàⁿ* of the inflectional morpheme. The verb is in the perfective (not imperfective) stem.

(xx1) imperfective negative

*máɣàⁿ* 1Sg

*é máɣàⁿ* 1PlExcl

*yáɣá máɣàⁿ* 1PlIncl

*màɣáⁿ*  2Sg

*nà máɣàⁿ* 2Pl

*kà máɣàⁿ* 3Sg (human or nonhuman)

*wɔ̀ɣɔ̀ máɣàⁿ* 3Pl

The 2Pl proclitic is L‑ rather than M‑toned in this paradigm. 3Sg *kà* is also L‑toned, but it has no M‑toned variant elsewhere. The L‑tone of 3Pl *wɔ̀ɣɔ̀* (compare *wɔ̀ɣɔ́* for 3Pl subject in the perfective negative) is attributable to the LH#H-to-LL#H tone sandhi process. Since 3Pl *wɔ̀ɣɔ̀* ~ *wɔ̀ɣɔ́* is already negative, the 3Pl imperfective negative combination *wɔ̀ɣɔ̀ máɣàⁿ* is arguably a double negation, at least etymologically.

The usual 1Sg proclitic (elsewhere *ŋ́*) and the usual 2Sg proclitic (elsewhere *ŋ̀* ) are absent in this paradigm. Arguably they present underlyingly but are deleted by phonological rule before the nasal *m*. Instead, the distinction between 1Sg and 2Sg is made by transferring the L‑tone from 2Sg *ŋ̀* onto the first syllable of the inflectional morpheme and shifting the latter’s initial H‑tone onto its second syllable, hence 2Sg *màɣáⁿ* versus 1Sg *máɣàⁿ*. One could assume that the H‑tone of 1Sg *ŋ́* is similarly transferred rightward, but since *máɣàⁿ* already begins with an H‑tone there is no audible change.

In the 3Sg, the usual proclitic *ŋ̄* is replaced by *kà*, avoiding any possible homophony with 1Sg or 2Sg. Although this 3Sg *kà* is homophonous to one variant of 3Sg perfective negative *kàá* ~ *kǎ*, namely *kà* (before an H‑tone), at phrase level there is no possibility of confusing the 3Sg imperfective negative *kà máɣàⁿ* with 3Sg perfective negative *kà*.

A few examples are in (xx2). *yígà* is the perfective stem of ‘get up’.

(xx2) ‘Does not get up’ or ‘is not getting up’

subject imperfective negative

NP (Zaki) *zàkí máɣàⁿ yígà‑ʔ*

1Sg *máɣàⁿ yígà‑ʔ*

2Sg *màɣáⁿ yígà‑ʔ*

3Sg *kà máɣàⁿ yígà‑ʔ*

3Pl *wɔ̀ɣɔ̀ máɣàⁿ yígà‑ʔ*

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

### Past imperfective

A past imperfective is expressed by adding past particle tì between the subject and the imperfective morpheme wɔ̀ɣɔ̀.

(xx1) a. zàkí tì wɔ̀ɣɔ̀ bə́rā

Z Past Ipfv sweep.Ipfv

‘Zaki was sweeping.’

b. xxx

‘Zaki was not sweeping.’

For past imperfectives in backgrounded temporal adverbial clauses, see §13.xxx.

## 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.

(xx1) futur

NP *bī* NP

*(á) ŋ́ bī* 1Sg

*é bī* 1Pl

*(à) ŋ̀ bí* 2Sg

*nà bí* 2Pl

*ŋ̀ bí* 3SgHum

*à bí* 3SgNonHum

*kà bí* 3Sg

*wɔ̀ɣɔ̀ bí* 3Pl

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 imperfective negative by the form of the verb stem, which is “perfective” in the imperfective negative but “imperfective” in the future negative.

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

subject imperfective negative future 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*

‘Go’ in (xx3) likewise shows how the verb stem distinguishes the two negative categories.

(xx3) a. *máɣàⁿ sà‑ʔ*

1Sg.IpfvNeg go.Pfv-Neg

‘I do not go/am not going.’

b. *máɣàⁿ sē‑ʔ*

1Sg.IpfvNeg go.Ipfv-Neg

‘I will not go.’

with ‘come’?

## Imperative

### Imperative positive

The imperative positive for singular addressee consists of the imperfective stem, without a pronominal proclitic or a preceding inflectional morpheme. Since the imperfective stem does not otherwise occur in this bare 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.

(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

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).

Only positive hortatives have been recorded.

# 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 Ipfv jump.Ipfv

‘I jump/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)’. Statives do not distinguish aspect (perfective vs. imperfective).

(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.’ (i.e. in standing position, French *debout*)

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 ʃɛ́-nɛ̀ xxx 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)

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)

past stative (jè, tì)

negative nonpast stative

negative past stative

### Transitive verbs

These include the usual impact transitives, along with 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 this, 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 verbs (‘give’, ‘show’)

‘Give’ is expressed primarily by the verb *sɔ̄ɣɔ̄\\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 *sɔ̄ɣɔ̄\\sɔ̀ɣɔ̀*. This second verb functions like a dative preposition in other languages (xx1b‑c).

(xx1) a. *sɔ̄ɣɔ̄ [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 àà sɔ̄ɣɔ̄ [è bíklé] ŋɔ̀ⁿ làmínì*

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

‘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).

The verb ‘show’ is ḿlàⁿ~mə́làⁿ\\ḿlɛ̀ⁿ~mə́lɛ̀ⁿ. It has the same syntax as *sɔ̄ɣɔ̄\\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*

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

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

For examples with ‘give’ see §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 seems to have a semi-frozen 3Sg object enclitic.

(xx1) a. *kà fó(=é) cè*

Neg say.Ipfv(=3Sg) thing

‘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 bó bī sà ŋwíⁿ*

Zaki Neg say.Pfv=3Sg 3Sg Fut go.Pfv village

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

## Existance and possession

### Location and existence

*gō* ‘be (somewhere), exist’ requires a locational complement. The default locational in this construction is *mā* ‘there (discourse-definite)’, which might be compared with English 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 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.

(xx2) a. *ŋ́ jè sàmyàʕàⁿ*

1Sg be.Past Bobo Dioulasso

‘I was in Bobo Dioulasso’

b. *ŋ́ àá jè sàmyàʕàⁿ*

1Sg Neg be.Past Bobo Dioulasso

‘I was not in Bobo.’

### 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 cɛ̀fɔ́*

1Sg Cop Tiefo

‘I am a Tiefo.’ (cf. W98: 206)

b. xxx

‘I am not a Tiefo’

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

The identificational ‘it is’ is enclitic *=ỳ* (positive) or invariant particle tɛ̄ (negative). 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’s 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. *jə̀rôⁿ bō=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*

1Pl it.is.not

‘It isn’t us.’

### Possession

#### ‘Y has X’

The possessum X is the subject. The predicate consists of gō ‘be (somewhere), exist’ plus the M‑toned morpheme *bāɣā* (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 bāɣā]*

sheep be [1Sg Poss]

‘J’ai un mouton.’

b. *báⁿ gō [zàkí bāɣā]*

sheep be [Z Poss]

‘Zaki has a sheep.’

c. *báⁿ má gō [ŋ́ bāɣā]*

sheep Neg be [1Sg Poss]

‘I don’t have a sheep.’

d. *báⁿ jè [ŋ́* / *zàkí bāɣā]*

sheep be.Past [1Sg/Z Poss]

‘I/Zaki had a sheep.’

e. *báⁿ kà jè [ŋ́ bāɣā]*

sheep Neg be.Past [1Sg sheep]

‘I/Zaki didn’t have a sheep.’

#### ‘X belongs to Y’

When the possessum X is known and the possessor is to be predicated, a construction of the form (X) Y dé=ȳ is used. Here dé is related to genitive dí (§xxx) and other possession-related forms such as dó ‘(the) share (of sb)’ (possessed only). The =ȳ is the identificational enclitic =ỳ, here in M‑toned form (suggesting an underlying ML tone for dé ).

The sense is ‘X belongs to Y’, where Y is a pronoun or a nonpronominal NP. The pronominal paradigm is that of a postposition, hence the 2Sg suffix ‑(y)ɛ̀. The tones of first and third person pronominals are those of possessors (not subjects).

(xx1) 1Sg *ŋ̀ dé=ȳ*

1Pl *è dé=ȳ*

2Sg *dé-yɛ̀=ỳ*

2Pl *nā dé=ȳ*

3Sg *ŋ́ dé=ȳ*

3Pl *ó dé=ȳ*

Examples are in (xx2).

(xx2) a. [è lě] [zàkí dé=ȳ]

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

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

b. [ò sòóŋ̀] [ó dé=ȳ]

[Pref horse] [3Pl Poss=it.is]

‘The horse is mine.’

c.

‘The horse was mine.’

d.

‘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 quite 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 sē ‘where?’.

(xx1) *zàkí fyé ŋwíⁿ kɔ̄ⁿ*

Zaki go.Stat village already

‘Zaki has already gone to the village.’

### ‘Want’

‘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 of bàɣà distinguish the whole construction from the ‘Y have X’ construction (§10.2.4.1), which has the form X gō [Y bāɣā] with mid-toned postposition (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]

Neg be [Z wanting]

‘I don’t want Zaki.’

c. *ŋ̄ gō bàɣà [nà dí]*

3Sg be wanting [Infin eat]

‘He/She wants to eat.’

### ‘Know’

There are two ‘know’ verbs, both stative. The basic one is *kɔ̀ⁿ* ‘know’, both *savoir* (with a clausal complement or a pronoun or demonstrative referring to a fact) and *connaître* (with a referential NP as complement).

The other is *jī*, whose primary sense is ‘be aware of (sth, sb)’. This is the cognate of the primary Tiefo-D ‘know’ verb.

# 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, or an independent (not proclitic) pronoun as shown in (xx1).

(xx1) 1Sg *ɲí nè* ~ *ɲí lè*

1Pl *é-yò lè*

2Sg *mì nè* ~ *mì lè*

2Pl *nā-yò lè*

3Sg *bō lè*

3Pl *bòó lè*

### Subject focalization

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

(xx1) a. *jə̀rôⁿ 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* *jə̀rôⁿ*

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 postpositional complement

elicit

## Interrogatives

### Polar (yes/no) interrogative

The clause-final interrogative particle wà, also 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?’

### Content interrogatives

The WH-interrogative remains in its normal syntactic position rather than being fronted.

#### ‘Who?’ (*jə̀rɔ̂ⁿ* )

*jə̀rɔ̂ⁿ* ‘who?’ is illustrated in §11.1.1 (subject) and §11.1.2 (object).

#### ‘What?’ (*byē* )

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

(xx1) *m̀ gō [[byē (lè)] bàɣà]*

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

‘What do you-Sg want?’ (see §10.3.2)

#### ‘Where?’ (sē, já-tàʕày)

Tiefo-N distinguishes 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 sē, 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) is allative.

(xx1) a. *ŋ̄ glâ sē*

3Sg exit.Pfv whither?

‘Where did/does he/she come from?’

b. *ō sìgìⁿ‑mà sē*

3Pl run.Pfv whither?

‘(To) where did they run?’

sē is homophonous to the imperfective form of ‘go’.

In static (non-motion) locative contexts, ‘where?’ is *játàʕày* ‘where?’. It is somewhat obscurely segmentable into interrogative já- (cf. jà-sí‑ŋà ‘where?’) 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. *yáɣà 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.

(xx1) ŋ̀ bà jà-sí

2Sg come.Ipfv when?

‘When are you-Sg coming?’

#### ‘How?’ (màⁿká )

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

### ‘How much/many?’

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

(xx1) *ŋ̄ də̀rà [báⁿ dígínā] gyè*

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

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

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

#### ‘Which?’

The interrogative adjective, identifying an individual from a set, is jìnàʕá ‘which?’.

(xx1) *ŋ̄ gō [də́ráʕá jìnàʕá]*

3Sg be [courtyard which?]

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

# Relativization

## Relativization of a constituent in a clause

Relative pronoun *jùrɔ̀ⁿ*, invariant for number, occurs at the end of the head NP.

### 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 sē*

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

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

c. *[nám-yo jùrɔ̀ⁿ súgà] ō gō sē*

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

‘The children who fell, where are they?’

inanimate subject

### Object relatives

There are two types of object relative.

#### 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 dò. The construction

(xx1) *ŋ́ bà nà [[ò ɲú] ɲā dò]*

1Sg come.Pfv with [[Pref water] drink.Pfv Rel]

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

#### Ordinary object relatives

(xx1) a. xxx

‘Zaki hit a child.’

b. xxx

‘Where is the child that Zaki hit?’

### Possessor relative

(xx1) a. xxx

‘The man’s house fell.’

b. xxx

‘Where is the man whose house fell?’

### Postpositional complement relative

Instrumental PP examples:

(xx1) a. xxx

‘Zaki cultivates with a hoe.’

b. xxx

‘Where is the hoe that Zaki cultivates with?’

Locative PP examples:

(xx2) a. xxx

‘They cook millet cakes in a pot.’

b. xxx

‘Where is the pot that they cook millet cakes in?’

# Multi-verb constructions

## Tight and loose verb-verb combinations

For ‘bring’ and ‘take/deliver (there)’ see §7.2.2.

### Tight (inseparable) verb-verb compounds

A few lexical items functioning as verbs can be segmented into two verb stems, tightly fused together. We can detect the segmentation by observing that both parts have perfective-imperfective alternations 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 (xx1a‑b). A special case is durative iterations of a single stem (xx1c), generally 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. kə́rú-kə́rū — ‘grope, feel one’s way’

kə́rù klâ ‘touch’

d. yɔ̄-dūnū yɔ̀-bà-dùnù ‘knock down’

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

e. súgú-dɔ̄ɣɔ̄ sɔ́ɣɔ́-dɔ̄ɣɔ̄ ‘help (sb)’

súgú sɔ́ɣɔ́ ‘catch’

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 nārāⁿ-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*

1Sg Neg catch.Ipfv-??.Ipfv Z

‘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]*

Zaki Neg put.Ipfv-be.wrong.Ipfv [[Pref the.bush] in]

‘Zaki didn’t get lost in the bush.’

### Loose (separate) verb-verb combinations

For ‘give’ and ‘show’ constructions, which involve one inflected verb and an invariant perfective verb form that functions like a dative preposition. The two verbs in each of these constructions are routinely separated by the NP denoting the theme (the object shown or given). See the examples in §10.1.5.

## Same-subject constructions

### ‘Be able to’ (pòyⁿ )

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 verbal complement (in imperfective form), pùrⁿù is replaced by pòyⁿ, which is also stative. 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 pòyⁿ following imperfective verb is (xx1a).

(xx1) a. zàkí sē pòyⁿ

Z go.Ipfv be.able

‘Zaki can go.’

b. xxx

‘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).

#### Action 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’) 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.’

b. *zàkí súgà [ná yígí]*

Z fall.Pfv [Infin get.up.Ipfv]

‘Zaki fell and got back up.’

This construction can also be used in imperatives, where 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!’

#### 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 unrelated but overlap in time.

(xx2) *[ŋ̄ wɔ̀ɣɔ̀ bé] [ná wō [à yìrìí]]*

[3Sg Ipfv 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 sɔ̀ɛ́ɛ́ⁿ-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’. There is also a biclausal causative 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, perhaps 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)]

These caterpillars (*Cirina butyrospermi*) are commercialized, cooked, and heavily consumed around Bobo Dioulasso in July-August.

In a second version, where the lower clause denotes motion, the lower subject is expressed as a comitative phrase (‘with X’).

(xx2) a. *zàkí jàɣà bà [nà ýⁿ]*

Z put.Pfv come.Pfv [with 1Sg]

‘Zaki made me come.’

b. *ŋ́ jàɣà bà [nà zàkí]*

1Sg put.Pfv come.Pfv [with Z]

‘I made Zaki come.’

category of bà (try with ‘go’)

### 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 refers to placing the blade on an anvil and striking it with a hammer or mallet, so 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’)

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.

(xx1) *zàkí yì-rà*

Zaki enter-Pfv

*jà-sí-ŋà ŋ́ tì wɔ̀ɣɔ̀ jōlà*

when? 1Sg Past Ipfv sleep.Ipfv

‘Zaki came in while I was sleeping.’

## Purposive clauses

A common construction is a motion verb (‘go’, ‘come’, etc.) plus a clausal complement expressing the purpose of the motion event. The motion verb is repeated in echo-like infinitival form (ná plus imperfective stem), followed by 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 sɔ̀ɛ̀ɛ́]]]*

[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 sɔ̀ɛ̀ɛ́]]]*

[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.

Some high-frequency combinations of conjugated verb plus infinitival verb function like compounds. An example is ‘get up’ and infinitival ‘sit down’, which combine to mean ‘change places (seats)’ (xx2a). The infinitival morpheme ná is optionally omitted in the imperative (xx2b).

(xx2) a. *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.’

b. *yígí [(ná) tə̄rāⁿ fándè]*

get.up.Ipfv [(Infin) sit.Ipfv there]

‘Get up and sit (=move to another seat) over there!’

## 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* 3SgNonHum

*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

The complementizer *tá* ‘that’ occurs at the beginning of the subordinated clause, which otherwise have 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 Neg go.Ipfv-Neg]

‘I know that Zaki didn’t go.’

# Anaphora

This chapter deals with anaphoric elements that require coindexation with a specific antecedent NP.

## 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*

2Pl *nā myâⁿ*

3Sg *ŋ̀ myâⁿ*

3Pl *ò myâⁿ*

Examples are in (xx2). Plural-subject examples are ambiguous between reflexive and reciprocal readings (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 bō (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).

(xx1) a. *zàkí jà [bó bī bà]*

Z say.Pfv [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.’

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. *zàḱ jà [kà bí bà]*

Z say.Pfv [3Sg Fut come.Pfv]

‘Zaki said that he/she (=someone else) will come.’

‘Zaki said that you hit him.’

# Grammaticalized discourse markers

## Discourse markers

### Topicalization (*kwɛ̀yⁿ* )

*kwɛ̀yⁿ* follows a preclausal topicalized constituent. If this constituent is pronominal, it takes independent prominal form: *ɲí kwɛ̀yⁿ* ‘as for me, …’.

### ‘X too’

*gó* ‘also, too’ occurs phrase-finally (xx1a‑b). In (xx1a), 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. xxx

‘Zaki too has come.’

‘I too went/will go.’

### ‘Even’ (*yɛ̀rɛ́* )

*yɛ̀rɛ́* ‘even’ follows the relevant NP or independent pronoun

(xx1) *ɲí yɛ̀rɛ́*

1Sg even

‘even I/me’

### ‘Only’ (myɛ̂ nè )

This is expressed by adding *myɛ̂ⁿ* and the focus particle (here nè ) to the relevant constituent.

(xx1) *[ɲí mýɛ̀ⁿ nè] bà*

[1Sg only Foc] come.Pfv

‘Only I have come.’

### ‘But’

xxx

## 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 Lamine

‘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!’

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