A Grammar of Tebul Ure

Dogon language family
Mali

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color coding (excluding section and chapter headings) as indicated below will permit fast searching; most color coding (especially brown, pink, red) can eventually be eliminated, but for electronically disseminated versions at least the blue and green may be visually helpful and worth keeping.

dark red   text from the template, to be gradually replaced
black   new material typed in for this language
blue   *transcriptions for this language*
green   transcriptions for other languages, reconstructions, and formulas
pink   data to be incorporated later into the section
red   comments to oneself (e.g. data to be elicited, section to be rewritten)
orange   temporary cross-refs to examples in other sections
dk yellow Jamsay forms in sample index, to be replaced by new index

Contents

5

8

11

1 Introduction

1.1 Dogon languages

The Dogon family consists of about 80-100 locally named varieties that linguists have tentatively grouped into approximately 20-25 languages. The languages are spoken is an essentially continuous geographical block comprising the Dogon plateau, the sandy plains that stretch out (especially to the north and east, and the cliffs and lower slopes that separate the plateau from the plains.

Dogon is generally considered to be a division of Niger-Congo, but much remains to be done to establish this firmly, much less determine the position of Dogon within the macro-family.

1.2 Tebul Ure language

Within the larger Dogon family, TU has lexical and grammatical affinities to Yanda Dom, Najamba-Kindige, Tiranige, Dogulu, and probably Mombo and Ampari. It may be that these constitute a large "western" division of Dogon, perhaps along with Bunoge (about which little is currently known).

1.3 Environment

Traditionally, TU was spoken natively only in a closely spaced set of villages on a relatively flat shelf at the summit of the cliffs above the Jamsay-speaking villages of Bamba. Sandy plains stretch out to the south and east, but the plains also cut into the plateau in the form of a narrow valley that reaches to the base of the cliffs near the main TU villages.

The two major zones are therefore the somewhat irregular rocky plateau and the sandy plains, which have quite different ecologies and flora-fauna.

1.4 Geography

This language (abbreviation TU) is spoken in several closely spaced villages on a flat shelf at the edge of the plateau, overlooking a narrow extension of the

sandy plains below. There are also a few TU-speaking villages at the base of the cliffs and slopes where the sandy plains begin. The TB-speaking villages are those in (1).

(1)　　　name　　　　　　　TU name　　　　N lat.//W long.

　　　a. villages on flat shelf near edge of plateau
　　　　　Bedié　　　　　　*bédé*
　　　　　 cluster consisting of …
　　　　　　Bedié Na　　　*bèdè-déŋgé*　　14 41.35//03 06.91
　　　　　　Didimgo　　　*bèdè-dídìm(gò)*　14 41.77//03 06.92
　　　　　　Tabade　　　　*bèdè-tàbàdé:*　　14 41.50//03 06.99
　　　　　Bende　　　　　*béndé*　　　　　14 40.29//03 06.62
　　　　　Dianga　　　　　*ʒă:ⁿ*　　　　　　14 40.89//03 06.14
　　　　　Endekandou　　*èndègàndú*　　　14 40.57//03 05.74
　　　　　Endelgo (abandoned) *èndèlgó*　　14 40.78//03 05.97
　　　　　Mande　　　　　*màndé*　　　　14 41.41//03 06.45
　　　　　Pedouma　　　　*pédúmá*　　　　14 40.98//03 06.13
　　　　　Tombogo　　　　*tómbógó*　　　14 40.97//03 06.55

　　　b. villages at base of cliffs (part of the larger Bamba village cluster)
　　　　　Daga　　　　　　*dà:gá*　　　　　14 39.70//03 05.17
　　　　　Hamdallaye　　　*hámdàlày*　　　14 40.25//03 06.71
　　　　　Saradine　　　　*sáràdí:nè*　　　14 40.43//03 04.64
　　　　　Sarapondou　　　sàrⁿàbòndú　　14 40.90//03 03.91
　　　　　Tene　　　　　　(*bàmbà-)tèndé*　14 41.18//03 03.74
　　　　　Yreban　　　　　*ùlò-bán*　　　==14 40//03 06==

As elsewhere in Dogon country, the trend has been for villages on the edge of the plateau, or on the middle slopes, to move down to the lower slopes or the sandy plains at the base of the cliffs and slopes. This movement has facilitated access to the weekly market at Bamba (Saturday), and to transportation routes and government services. Another motivation has been access to reliable water supplies.

　　Endelgo is abandoned, the residents having moved down to Sarapondou. Pedouma is largely abandoned, with a mere three families living there in 2011; the others have moved down to Sarapondou. Hamdallaye down below was settled by a group from Tombogo. The other villages down below contain people who moved from several upper villages. Yreban was settled recently. Bamba (*bàmá*) includes several Jamsay-speaking villages as well as the TU-speaking villages in (1b).

2

Dianga has two nearly adjacent sections, *jàŋà ná:* and *jàŋà ségé*, but they have a single chief.

1.5 People

The dominant **surname** throughout TU-speaking country is Guindo.

The main **productive activities** are farming and light herding. Millet (*Pennisetum glaucum*) is the staple wet-season crop. Secondary wet-season crops include sorghum, sesame, cow-pea (*Vigna unguiculata*), peanut, and roselle (*Hibiscus sabdariffa*). Dry-season gardening (onion, tobacco) is possible in a few low-lying areas or near small retaining dams. There is small-scale pottery, weaving, carpentry (manufacture of pounding mortars and other wooden objects), and traditional healing in most of the villages. Bedie Na is noted for bone healing.

Neighboring languages are other Dogon languages along with Fulfulde. Jamsay is the main language of the Bamba market, and of a a vast area in the plains stretching through Madougou and on to Koro. Yanda Dom is spoken in several villages on the lower slopes of the cliffs just to the south. On the plateau itself, the main contact language is Tommo-So, which is spoken in a wide area including the Kassa village cluster.

1.6 Previous and contemporary study of Tebul Ure

1.6.1 Previous scholarship

The existence of this language was noted in Calame-Griaule's Dogon dialect survey (1956:67), and in the SIL Dogon languages survey (Hochstetler et al. 2004). Calame-Griaule gave Jamsay and Toro So names for the language but no endonym. The SIL report calls the language "Oru yille."

Roger Blench visited the Tebul Ure area in 2005 as part of his campaign to identify and publicize the endangered languages of the region. His website has pages on the languages that he surveyed. The TU page has a wordlist, a list of TU-speaking villages with coordinates, and a discussion of the information in previous scholarship.

No previous work on the grammar has been done, to my knowledge.

1.6.2 Fieldwork

By the time I began working on Tebul Ure in linguistics project, I was either done or well along with grammatical and lexical study of several other Dogon languages, and had developed a Dogon-specific reference grammar template and a substantial lexical spreadsheet.

As usual I began with a three-day trip in which I met with the assembled elders of the main villages, and went over flora-fauna vocabulary with several of them. This short visit was in 2010. In 2011 I began real grammatical and lexical study. An informant who speaks some French was recruited locally and I worked with him for about 8 days while staying in nearby Yanda. He later came to our Sevare base for two weeks. At that point I had written drafts of the morphology and some simple syntax sections of the grammar, and had a basic vocabulary of some 2000 lexemes (other than flora-fauna). After an interruption due in part to conflict in northern Mali, I resumed working with him in Sevare in 2013.

1.6.3 Acknowledgements

2 Sketch

2.1 Phonology

2.1.1 Segmental phonology

consonants
    nasalized sonorants present? (r^n, y^n, w^n)
vowels
    ATR, vowel-length, nasalized vowels

2.1.2 Prosody

lexical tone patterns
metrical structure (strong and weak positions)
tonosyntax (overriding lexical tones or adding to them)
intonation

2.1.3 Key phonological rules

Nasalization-spreading
Consonantal rules (consonant clusters, metathesis, etc.)
Syncope and apocope of high vowels

2.2 Inflectable verbs

main derivations (Reversive, Causative, Mediopassive)
inflectional categories (tense-aspect, polarity, modals)

2.3 Noun phrase (NP)

linear and tonal relationships of nouns, modifying adjectives, numerals, non-numeral quantifiers, determiners, and possessors (summary)
morphosyntax of possessed NPs

2.4 Case-marking and PPs

Marking of direct and indirect objects (NPs and pronouns)
Accusative morpheme present?
Postpositions
Prepositions (?)

2.5 Main clauses and constituent order

structure of a normal main clause with a few examples
SOV order, usually verb-final (exception: Toro Tegu SOVX)
obligatory clause-initial subject position?
temporal adverbs ('yesterday') usually before or after subject NP?
pronominal-subject expressed by suffix on inflected verb, by prefix on inflected
verb, or by clause-initial pronoun?

2.6 Nominalized clauses and constituent order

verbal-noun (and any similar nominals) as complements
expression of direct object and subject of verbal noun

2.7 Relative clauses

head NP (tone-dropping, Relative marker ?)
determiners and non-numeral quantifiers separated from core NP and numeral,
displaced to post-participial position
verb replaced by participle (agreement in nominal features with head NP?)

2.8 Interclausal syntax

most important clause and VP combinations
direct verb chaining (no special morpheme)
looser VP chains with chaining (subordinating) morpheme
same-subject and different-subject subordinators?
factive and other complement clauses

3 Phonology

3.1 Internal phonological structure of stems and words

3.1.1 Syllables

Basic syllable shapes are *Cv*, *Cv:*, and *CvL* and occasionally *Cv:L* with a final sonorant *L*. In word-initial syllables, the C position may be vacant.

Monosyllabic stems distinguish *Cv* from *Cv:*. See §10.1.3.1 for lists of *Cv* and *Cv:* verbs.

3.2 Consonants

The regular consonants of TU are shown in (xx1) without parentheses. Marginal phonemes are enclosed in parentheses, very marginal ones in double parentheses

(xx1) Consonants

	1	2	3	4	5	6	7	8	9	10
labial	*p*	*b*	*m*	*(f)*	*((v))*		*w*	*w^n*		
alveolar	*t*	*d*	*n*	*s*	*z*	*l*	*r*	*r^n*		
alveopalatal	*c*	*j*	*ɲ*	*((š))*	*((ž))*		*y*	*y^n*		
velar	*k*	*g*	*ŋ*							
laryngeal									*(ħ)*	*((ʔ))*

c is IPA [tʃ], *j* is [dʒ], *š* is [ʃ], *y* is [j].
key to columns: 1. aspirated voiceless stops (c is affricated); 2. voiced stops; 3.nasals, 4. voiceless fricatives (including sibilants); 5. voiced fricatives (including sibilants); 6. laterals; 7-8. unnasalized then nasalized sonorants; 9-10. laryngeals

3.2.1   Alveopalatals (*c*, *j*)

There is some variation between *c* and *k*, and between *j* and *g*, before front vowels. However, for most items I was able to identify a primary pronunciation. Extensive bilingualism with Jamsay, where palatalization to *c* and *j* has tended to generalize before front vowels, is a likely factor on the speech of young Tebul people.

Examples of *k* versus *c* before front vowels are in (xx1).

(xx1)   a.   *sálìkì*   'ablutions'
             kì-kìndé   'ghost'
             kílέ-   'weave (leather strips)'
             kèré   'flute'
             kédé   'cut'
             bárkè   'blessing'
             kédέ   'four'
             kélbá   'African egplant'
             kètέ   'runty'
             kèrèmbú   '(mouth) bit'

        b.   *cíné*   'nose'
             cé-   'shout'
             céndèy   'a little'
             cénd-í: 'turn out well'
             cèrgó   'stem'
             cέ   'thing'
             céndí   'bury'
             cèmdé   'cotton'
             cìndè   'shadow'

        c.   *kíllí ~ cíllí*   'resolve (problem)'
             kílá ~ cílá   'horn'
             kèl-gɔ́ ~ cèl-gɔ́ 'crack, crevice'

Examples of *g* versus *j* before front vowels are in (xx2).

(xx2)   a.   *gìré*   'eyes'
             gàŋgíl-   'rub (eyes)'
             gíndílá   'mane'
             lìgìdú   'cooked leaves'
             dégé   'statuette'
             zìgé-   'take in hand'

	gèr-í:	'divide, share'
	-ge, *-ŋge*	(frozen inanimate Sg suffixes)
b.	*jìná:*	'soil, earth'
	bàrà:jí	'divine reward'
	-jé	characteristic derivational suffix (Pl *-jì-mbó*)
	jě-	'dance' or 'fart'
c.	*jìgìlí-*	'spin, rotate (sth)'

Some word-families have instructive alternations (xx3). Preservation of velars before *i* is common in a metrically weak medial syllable in trisyllabic stems, as in transitive derivatives of the form *CvCv-rí-* and animate plurals of the shape *CvCv-mbO*. In this weak position the distinction between *i* and *u* is blurry, which might explain why palatalization does not occur.

(xx3)	a.	*jènj-í:-*	'(sth) tilt'
		jéŋgà	'be tilted (stative)'
		jèŋgì-rí-	'tilt (sth)'
	b.	*tájí-*	'put on (one's shoe)'
		tágí-rí-	'put on (sb else's shoe)'
		táy	'shoe(s)'
	c.	*íjj-í:-*	'(sb) stop, stand'
		ígí-rí-	'stop (sb)'
	d.	*tígí-rí-*	'call out (names of ancestors)'
		tìgá	(cognate nominal of *tígí-rí-*)
	g.	*zégé*	'fight (n.)' (perhaps originally with *-gé* suffix)
		zèjí-	'fight (v.)'
	e.	*bòjě:*	'slave-snatcher' (sg)
		bògù-mbɔ́	(plural)
	g.	*dùgé ~ dùjě:*	'sorceror'
		dùgù-mbó	(plural)
		dùgó	'cast (spells)'

See also the Sg/Pl medial *nj ~ ŋ* alternations ('chicken', 'griot/healer') in (xx1) in §4.1.1.1.

9

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

Spirantization of *g* to [ɣ] between {*a ɔ*} vowels is not systematic.

3.2.3 Back nasals (*ŋ*, *ɲ*)

ɲ and *ŋ* are distinguishable before *i* and other front vowels. Examples of ɲi are *tɔ́:ɲí-* 'pester' and *(săⁿ) sáɲí-* 'adorn oneself, dress up'. Examples of ŋi are *màŋí-* 'raise (herd of livestock)' and *píŋí-* 'shut (door)'.

3.2.4 Voiceless labials (*p*, *f*)

p is common especially stem-initially: *pâ:* 'long', *pélú* 'ten', *pégɛ́-* 'attach (blade to shaft)'.

f occurs in a few loanwords: *márfá* 'rifle' (ultimately < Arabic), *fùrù-fùrú* 'fritters'.

The 'all' quantifier, also regionally widespread, is pronounced *pú→*.

3.2.5 Laryngeals (*h*, *ʔ*)

h occurs stem-initially in a few loanwords (it is a common consonant in Fulfulde): *hɔ́là:rù* 'trust (n.)', *hàrâm* 'a Muslim holy day', *háccɛ́* 'sin', *hátɛ́-* 'forbid'.

A phonetic glottal stop can appear at the beginning of otherwise vowel-initial words. I have noticed it especially in 2Sg possessor *ú-wɔ̀*, which can be heard as [ʔ(ú)wɔ̀] after a vowel. No initial *Cv-* reduplications have been observed in verbal morphology, so the glottal stops that show up in reduplications of vowel-initial verbs in other Dogon languages are not present in TU.

3.2.6 Sibilants (*s*, *š*, *z*, *ž*)

s is a regular phoneme in TU. Examples: *sá:-* 'take off (garment)', *ságú* 'pounded millet', *sérⁿɛ́-* 'drain', *sɔ́gɔ́* 'pick-hoe'. In verbal suffixes *s* optionally and inconsistently weakens to *z*.

z is also a regular phoneme. Examples: *zɛ́-* '(man) marry (woman)', *zégé zèjí-* 'have a fight', *zègìrá zègǐr-* 'incite', *zùgɔ́-* 'know'.

　　ž (IPA [ʒ]) occurs in the ubiquitous 'gendarme' loanword ʒándárámá.

3.2.7　Nasalized sonorants (r^n, w^n, y^n)

r^n is common intervocalically. In some cases it still alternates with *n*. Examples: *ár^{n}á* 'man', *sír^{n}é-* 'spit (in a jet)', *gò:-bɔ̀r^{n}ɔ́* 'ember'.

　　w^n and y^n occur very commonly in pronominal-subject suffixes on predicates (2Sg *-w^n*, 1Pl/2Pl *-y^n*). w^n is otherwise unattested (*m does not lenite). I have recorded *y^n* in *ɔ́y^n-* 'spin (thread)', *gǒy^n-* 'wait for', *àn-táy^n* 'hand span', *ɛ́y^n* 'tomorrow', *déy^n→* 'apart', *áy^n* 'how?', and intervocalically or finally under the influence of a preceding nasal syllable as in *míy^{n}é-* 'grind into powder' and *sɔ́mɔ̀y^n* 'spices'.

　　None of these nasalized sonorants occurs word-initially.

3.2.8　Consonant clusters

As in other Dogon languages, *CC* clusters are very restricted, except in loanwords.

3.2.8.1　Word- and morpheme-initial *CC* clusters

Initial *NC* including *NN* clusters are uncommon; I can cite *ńdì-* 'give', *ńdé* 'metal, iron', *ńné* (3Sg pronoun), *m̀bá-* 'want', and *m̀bù-gɔ́* 'mouth'.

　　ínjé 'water' was heard with and without the initial *i*.

3.2.8.2　Medial geminated *CC* clusters

A search through the working lexicon produced the cases in (xx1).

(xx1)　*bb*　　—
　　　cc　*háccè*　　　　'sin (n)' (< Fulfulde)
　　　dd　*péddè*　　　　'sheep' (plural *pédù-mbò*)
　　　ff　　—
　　　gg　*ɔ́g-gɔ́*　　　　'rapid'
　　　　　ɔ́ggɔ̀:　　　　'umbilical cord'
　　　　　péggè:　　　　'hitching posts (plural)'

	díggɔ́ (~ *dígúgɔ́*)	'joint'
	zòg-gɔ́	'shard' (pl *zògɛ̌:*)
hh	—	
jj	*íjj-í:-*	'stop, stand'
	zòjj-í:-	'be sprained'
	pójj-í:-	'brush against'
	pɔ́jj-í:-	'die en masse'
	gɔ̀jj-í:-	'carry on shoulder'
	tòjjé	'grandchild'
kk	—	
ll	*mìll-í:-*	'go back'
	cíll-í:-	'fly (away)'
	cíllí-	'resolve (problem)'
	tállí-	're-open (wound)'
	àrⁿà-[dúl-lé]	'thunder'
	séll-í:-	'be healthy' (< Fulfulde)
	tíllây	'sure to happen' (< Fulfulde)
	gállú	'big city' (< Fulfulde)
	bàl-lè:gó	'deadline' (*lè:gó* 'day')
mm	*sémmé*	'rags, tatters'
nn	*jínná:jè*	'djinn, devil' (< Fulfulde)
	ìn-nàmá	'gums' ("tooth-flesh")
ɲɲ	—	
ŋŋ	—	
pp	—	
rr	—	
rⁿrⁿ	—	
ss	—	
tt	*séttâ:n*	'devil (satan)' (< Fulfulde)
ww	—	
wⁿwⁿ	—	
yy	*bɛ̌y-yà-*	'lay down'
	(and other similar Perfective-1a forms)	
yⁿyⁿ	—	
zz	—	

Disregarding known loanwords, and clusters arising at morpheme boundaries, the following comments are germane.

gg may be limited to cases where an original inanimate Sg suffix *-go ~ -gɔ* has become more or less fused to a noun stem, perhaps after syncope of a medial-syllable short high vowel. This is most obvious in *díggɔ́* (~ *dígúgɔ́*).

jj occurs in original *jy or *gy clusters involving either mediopassive derivational suffix *-yv- (cf. TU *-í:-*) on verbs or *-(i)ye 'child' as compound final of nouns. For example, compare *gòjj-í:-* 'carry on shoulder' with Toro Tegu *gògìyó* (imperative) and Nanga *gògíyí-*, and compare *tòjjé* 'grandchild' with Nanga *tèsí-yê*.

ll is the most popular medial geminate. Some examples are loanwords or involve boundary clusters. Some remaining cases (*mìll-í:-, cíll-í:-*) may reflect post-syncope *ly clusters involving mediopassive *-yv-. *For example, compare cíll-í:-* 'fly (away)' with Yanda Dom *kílíyé-*.

3.2.8.3   Medial non-geminate *CC* clusters

Homorganic nasal plus voiced stop clusters are fairly common intervocalically within stems. One example each is given in (xx1).

(xx1)   *mb*   *kùmbó*   'great-great-grandparent'
        nd   *ùndó*   'younger same-sex sibling'
        nj   *zònjé*   'idol, fetish'
        ŋg   *bóŋgó*   'spots on body'

Similar clusters with voiceless stop occur stem-medially only in (probable) loanwords and frozen compounds. I can cite *zóntè* 'fever' (< Fulfulde), *bàntóndó-mbó* 'young men and women, (the) youth', *àlmúncìl* 'imam's respondent' (< Arabic), *málé:ŋkè* 'angel' (< Arabic), *bùŋká:rⁿá* 'reed flute', *yóŋkù* 'vital spirit', and *táŋkà* 'a colonial coin'. Inflectional suffixes like Perfective-1b *-tì-* can follow various stem-final consonants after syncope.

ns occurs in *ánsárá* 'white person', cf. Jamsay *ànìsá:rá-n*. Underlying /ns/ may also be present in cases where a nasalized vowel is followed by *s*, as in *àndà sà:ⁿsó* 'full outback',

In addition to ŋg (see above), various sonorants occur before *g* in nouns and adjectives with (synchronic or frozen) inanimate Sg suffix *-gO or the like: *mg* (*ómgó* 'udder'), *ng* (*kón-gó-* 'cough[n.]'), *lg* (*sàlgó* 'diarrhoea'), *rg* (*cèrgó* 'stem'), *tàygó* 'dancing ground'. I have no examples of *wg*, *wⁿg*, or *yⁿg*.

mn occurs in *émné* 'milk' and *cèmné* 'fun'. TU is the only Dogon language with *mn* in 'milk', but geminated *mm* in Bankan Tey *émmèyⁿ* points to an original cluster.

lt is found in *bèltíyá:* 'harvest pile', probably an original compound.

yr occurs in Fulfulde loan *wáyrí-* 'be a fairly long time'.

3.2.8.4 Medial triple *CCC* clusters

I know of no medial triple *CCC* clusters, though they could occur in Fulfulde loanwords.

3.2.8.5 Final *CC* clusters

I know of no word-final clusters.

3.3 Vowels

The inventory is (xx1). Oral vowels are much more common than nasalized vowels. Nasalized vowels are normally long, but see §3.3.2 for discussion.

(xx1)	short oral	long oral	nasalized (long)
	u	*u:*	*u:^{n}*
	o	*o:*	—
	ɔ	*ɔ:*	*ɔ:^{n}*
	a	*a:*	*a:^{n}*
	ɛ	*ɛ:*	*ɛ:^{n}*
	e	*e:*	—
	i	*i:*	*i:^{n}*

I occasionally use E to represent the set {*ɛ e*} and O to represent the set {*ɔ o*}.

3.3.1 Short and (oral) long vowels

Cv and *Cv:* monosyllabic stems are distinguished. For verbs see §10.xxx.

   In nonmonosyllabic stems, long vowels are fairly common in initial syllables in nouns and verbs: *gò:ndó* 'river', *è:lé:* 'dew'. For nouns and adjectives, long vowels can occur finally as well, though often only in the singular or only in the plural: *lùgǎ:* 'apiary', *tìnɛ̌:* 'firewood', *tìyǎ:* 'basket (from branch strips)', *jìnǎ:* 'loam', *kàlɛ́:* 'neighborhoods' (Sg *kàl-gɔ́*), *gàbɛ̌:* 'tall' (inanimate *gàbù-gɔ́*). Verb stems do not have noninitial-syllable long vowels, but they do combine with some suffixes containing long vowels, e.g. Perfective-1a allomorph *-à:-* and some participial (i.e. noun-like) endings. In trisyllabic and longer stems, medial syllables can have long vowels, but the examples are loanwords, as in *sàlá:tù* 'pre-dawn prayer' (< Arabic via Fulfulde).

3.3.2 Nasalized vowels

Nasalized vowels are fairly uncommon. Examples are in (xx1).

(xx1) $u{:}^n$ $mŭ{:}^n$ 'cut (wound)'
       $o{:}^n$ —
       $ɔ{:}^n$ $pɔ̆{:}^n$ 'fonio (cultivated grain)'
       $a{:}^n$ $gwá{:}^n$ 'chest (body)'
       $ɛ{:}^n$ $ɛ́{:}^n$-   'become tight'
       $e{:}^n$ —
       i^n $tí^n$→   'long ago'

3.3.3 Initial vowels

Stems may begin with a vowel, i.e. with a vacant initial *C* position. Some examples are in (xx1).

(xx1) *u*   *údú*   'air'
      o   *ób-í:*   'sit'
      ɔ   *ɔ̂m*   'hot'
      a   *àrⁿá*   'rain'
      ɛ   *émnɛ́*   *'milk'*
      e   *èré*   'rivalry'
      i   *íjj-í:-*   'stop, stand'

Since *Cv:* is an allowable initial syllable, so is *v:* with the *C* position vacant, though examples are rare: *á:-* 'brew (beer)'. *ɛ́:* 'this way',

3.3.4 Stem-final vowels

All vowel qualities can occur word- and stem-finally in nouns and adjectives.

3.3.5 Vocalic harmony

Within a stem (excluding compounds), ATR harmony is operative. The +ATR vowels are {*e o*}, the -ATR vowels are {*ɛ ɔ*}.

To some extent, ATR harmony extends to suffixes. In nominal and adjectival morphology, inanimate singular *-gO* (§4.1.1.4) and animate plural *-mbO* (§4.1.1.1) harmonize with stem vowels ("O" represents an alternation of *o* with *ɔ*). In verbal morphology, derivational suffixes harmonize, but those inflectional morphemes with syllabic shape behave more like chained verbs and do not harmonize (perfective-2, recent perfect, experiential perfect). Imperfective verbs do not harmonize beyond the basic *-m* formative.

There are a number of cases where a word-family contains stems of different categories that fail to agree in ATR value. This is most conspicuous when a cognate nominal and a verb co-occur, as in *órú-gó ɔ́r-* 'speak, talk' and *zóbú-gó zɔ̀bɔ́-* 'run (a race)'.

agentives/instrument nominals in é: do not require harmony

bè:mě: 'herder'

adjectives *nómè:* 'difficult', *cé:lè*: 'cold'

Within a stem, high vowels {*i u*} may co-occur with either +ATR or -ATR vowels. The low vowel *a* normally associates with +ATR, as in *àdé* 'bird'.

3.3.6   Vocalism of verb-stem alternations

Although not lexically basic, the A/O-stem is the form of the verb found in the majority of inflectional categories. Other surface forms of verb stems are the bare stem (which I take as lexically primary), the E/I-stem (found in the 3Sg subject perfective), and the A-stem (stative).

(xx1)	stem	AN category (examples)
	bare stem	perfective (except 3Sg), perfective-1b and -2, past perfect
	E/I-stem	perfective (3Sg only)
	A/O-stem	imperfective, perfective negative, imperfective negative, imperative, etc.
	A-stem	stative

3.4   Segmental phonological rules

3.4.1   Trans-syllabic consonantal processes

3.4.1.1   Nasalization-Spreading

Forward Nasalization-Spreading from stem to suffix (frequent)
       CvNv plus -Cv > CvNv-C^{n}v
    can be made problematic by the shift *mb > m where we get an m that does not trigger Forward Nasalization-Spreading, similarly *ŋg > ŋ.
     *mbara > mara, in some languages eventually leveled as mar^{n}a
    for this reason, be careful of transcribing y vs. y^n and w vs. w^n word-finally in e.g. may(^{n}), maw(^{n})

Backward Nasalization-Spreading from suffix to stem (infrequent)
    e.g. yv-Nv > y^{n}v-Nv (Toro Tegu)

3.4.1.2   Consonantal metathesis in suffixal derivatives of verbs

apparent or real metathesis (inversion) of C's may occur in certain reversives, especially involving two syllables with {l r r^n}

 e.g. Cvlv-rv- > Cvrv-lv-

    If not clearly metathesized, reserve minor consonantal shifts in reversives etc. to §3.5.5.

3.4.2   Vocalism of suffixally derived verbs

3.4.2.1   Suffixal Vowel-Spreading

    Derivational suffixes on verbs, usually -Cv, often have underspecified vowels that acquire their quality by spreading of features from the left. Or they may be specified for height but not ATR. These processes usually reflect general constraints on the shape of multisyllabic verb stems (allowable vowel sequences).
    e.g. taba-wv > taba-wa
    what if only stem vowel is high {i u}?

3.4.2.2   Presuffixal V$_2$-Raising

stem-final vowel of nonmonosyllabic verb stem shifts to high before suffix?
reflects metrically weak position
often leads to syncope
    e.g. tama-lv > tam(i/u)-la

3.4.3   Other vocalic rules sensitive to syllabic or metrical structure

Any tendency for first vowel in CvNCv to lengthen to Cv:NCv, as in Nanga?

3.4.3.1   Epenthesis

I have not observed epenthesis processes in TU.

3.4.3.2   Syncope

Short high vowels {i u} are subject to syncope, often optional, in metrically
weak medial positions when flanked by single consonants, as especially in
suffixed forms like *CvCi/u-Cv*. The clearest cases are those where syncope
triggers additional consonant cluster adjustments, as in *gìrí-* 'immobilize (sth)'
and its reversive *gìl-lí-* 'allow (immobilized object) to move again', see (xx1e)
in (§9.1) and /rl/ → *ll* (§3.4.xxx).

3.4.4   Apocope

Word-final short high vowels can be deleted under conditions similar to those
for word-internal syncope.

3.4.5   Local consonant sequence rules

3.4.5.1   /rl/→*ll*

When /rl/ come together after syncope in reversive verbs (/Cvri-lí/), §9.1, the
result is *ll.* Examples are *gìl-lí-* 'allow (sth) to move after being immobilized'

from *gìrí-* 'immobilize', and *tál-l-í:-* '(affixed/posted item) come off' from *tár-í:-* 'be affixed'.

3.4.6   Vowel-vowel and vowel-semivowel sequences

tautosyllabic vowel sequences may occur in Perfective verbs that end in diphthong-like /o̩e/, /ɔɛ/, /a̩ɛ/, etc., arguably a stem-final vowel plus an -ɛ ~ -e Perfective morpheme.

vowel sequences that arise in compounds may remain separately articulated (hiatus) or may contract into a long vowel.

vowel sequences may also arise in initial Cv- reduplications of verb stems that begin in a vowel. This seem to be always pronounced with hiatus

3.4.6.1   Hiatus between adjacent vowels in reduplications

Separate articulation of two vowels that come together at a boundary, e.g. in compounds and/or in initial reduplications. May involve a phonetic glottal stop as separator.

3.4.6.2   *vv*-Contraction

Cases where two vowels come together at a boundary and contract to a long or sometimes short vowel (indicate all relevant morphological contexts, with exx. or cross-refs to sections).

Perfectives ending in an e-vowel are difficult to model. They sometimes look like suffixation of -e ~ -ɛ to the stem, especially when a trace of the stem-final vowel is audible. When the stem-final vowel is absent, one could either think of them as suffixation as before (with VV-Contraction), or as an ablaut-like stem change. These perfectives behave quite unlike other clearly suffixal inflections.

3.4.7   Local vowel-consonant interactions

Delete and add subsections below as needed.

3.4.7.1　Vowel-Semivowel Assimilation

examples:
　/i/ > u before any labial (or just before /w/)
　/u/ > i before alveopalatal (or just /y/)

3.4.7.2　Monophthongization (/iy/ to *i:*, /uw/ to *u:*)

occurs syllable-finally; may apply for ex. to verb stems ending with pronominal-subject (or participial) suffix -y or -w.

3.5　Cliticization

There are no second-position clitics. Certain suffix-like elements in verbal morphology can be considered to be phonological clitics, but the distinction between clitic and suffix is not sharp.

　　The 'it is' clitic is manifested as a final L-tone and vowel lengthening added to the NP: *péddè=:* 'it's a sheep' (*péddè*), *tólê:=:* 'it's a pig' (*tólé*). For 1st/2nd person subjects (topics) this is replaced by a regular pronominal-subject suffix (§11.2.1.1). The negative counterpart is *=là-*, which is also conjugatable, e.g. 3Sg *=là:-∅* (§11.2.1.2).

　　The stative negative morpheme (*=ndà-*, 3Sg *=ndà:-∅*) can also be considered to be a clitic, since it is added to an already well-formed predicate (§10.4.2).

　　Finally, the conjugatable past morpheme *=bì-* which is added to various aspect-negation forms of verbs may also be considered a clitic (§10.5.1).

　　= rather than *-* is used as the clitic boundary marker.

3.6　Tones

3.6.1　Lexical tone patterns

3.6.1.1　At least one H-tone in each stem

TU, like many (but not all) Dogon languages, requires that each noun (including spatiotemporal "adverbs"), verb, adjective, numeral, or demonstrative have a H-tone element in its basic form (before grammatical tone overlays). For example, *CvCv* may be *Cv́Cv́*, *Cv́Cv̀*, or *Cv̀Cv́*, but not #*Cv̀Cv̀*.

One could argue, however, whether this constraint applies to lexical representations or to a later stage. Specifically, one could argue whether *C̀vCv́* in some or all cases might be analysed as {L}-toned /C̀vC̀v/, which is then supplied with a final H-tone to satisfy a higher-level constraint.

expressive adverbials can be {L}-toned in some but not all languages that otherwise require a H-tone in each stem. Expressive adverbials are not subject to tone-dropping.

3.6.1.2   Lexical tones of verbs

Verbs of all syllabic shapes are lexically {H} or {LH}. For Cv- verbs, the distinction is partially suppressed, since a complex <LH> tone cannot be expressed audibly on a single mora. However, a lexical distinction between *Cv́-* and *Cv̀-* is manifested in the Perfective-2 (*Cv́-sɔ̀-* versus *Cv̀-sɔ́-*) and in the Experiential Perfect (*Cv́-téré-bì-* versus *Cv̀-téré-bì-*). Verbs of two or more moras (*Cv:-*, *CvCv-*, etc.) audibly distinguish {H} from {LH} across a wider range of inflections, including positive perfectives, e.g Perfective-1b *Cv́:-tì-* versus *Cv̌:-tì-*.

{H} lexical contour is obligatory for stems beginning with **voiceless obstruents**. {LH} contour is obligatory for stems beginning with **voiced obstruents**. Stems that begin with a **sonorant**, or with **no consonant**, divide into {H} and {LH} classes; the tone contour of each such stem must be learned.

For {LH} verbs, the **tone break** is at the right edge, e.g. LLH for trisyllabic stems, LH for bisyllabics (including *C̀vCCv́-* and *Cv̀:Cv́-* as well as *C̀vCv́-*), and <LH> for bimoraic monosyllabics (*Cv̌:-*). These tone patterns are heard before the basic perfective positive forms (except Perfective-2). Because trisyllabics are LLH rather than LHH (as in some Dogon languages), syncope of *CvCvCv-* to *CvCCv-* creates no tonal anomalies in TU of the type found in e.g. Yanda Dom (where *C̀vCv́Cv́-* can syncopate to *Cv̌vCCv́-*, tonally distinct from inherited *C̀vCCv́-*).

zě:- 'bring' has a tonally irregular Third-Person Hortative *zé-lù* for expected regular #*zè-lú*. Its antonym *zǎy-/zo-* 'take, convey' also has a tonally irregular Third-Person Hortative *zây* for expected #*zǎy*. This verb also has an irregular imperative *zá-dà*. These forms are isolated vestiges of a **lexical {HL}** contour that may have once been more consistent for these two verbs. Cognates of these two verbs in other Dogon languages (e.g. Toro Tegu) show similar tonal (and other) irregularities.

Lexical tone contours of verbs are regularly overridden or modified in inflections other than basic positive perfectives.

3.6.1.3 Lexical tone patterns for unsegmentable noun stems

Lexical tones of uncompounded nouns are {H}, {HL}, {LH}, {L}+H, and {LHL}. The difference between {LH} and {L}+H is observable in stems that have a syllabic suffix (inanimate Sg or animate Pl), where the H-tone is carried by the suffix with {L}+H stems but remains on the stem-final in {LH} stems. One can argue that {L}+H stems are really {L}-toned but get a default H-tone on the word-final syllable. Examples are in (xx1).

(xx1)	Sg	Pl	gloss
	a. {H} lexical tone contour		
	zú	*zú-mbò*	'neighbor'
	dɔ́gɔ́	*dɔ́gɔ́-mbɔ̀*	'Dogon'
	dégé		'statuette, idol'
	tólé	*tól-mbò*	'pig'
	tálɛ́		'egg'
	árⁿá	*árⁿá-mbɔ̀*	'man'
	púlá	*púlá-mbɔ̀*	'Fulbe (person)'
	bón-gó	*bón-é:*	'name'
	zémbɛ́	*zémbɛ́-mbɔ̀*	'blacksmith'
	cégéré		'saddle'
	ámbírí	*ámbírí-mbò*	'chief'
	wágádú		'time'
	b. {HL} lexical tone contour		
	bisyllabic		
	péddè	*pédù-mbò*	'sheep'
	dí:nè		'religion'
	HLL		
	púdùrɔ̀		'twilight'
	tɔ́gɔ̀rɔ̀	*tɔ́gɔ̀rɔ̀-mbɔ̀*	'namesake'
	lá:sàrà		'4PM prayer'
	hɔ́là:rù		'trust'
	dúwà:gù		'blessing'
	HHL		
	kórósèl		'first rains'
	málé:ŋkɛ̀	*málé:ŋkɛ̀-mbɔ̀*	'angel'
	jínná:jè	*jínná:jì-mbò*	'djinn, genie'
	c. {LH} lexical tone contour		
	gɔ̀b-ŋgó	*gɔ̀bé:*	'trigger'

òmlé:	*òmlú-mbò*	'parent-in-law'
bŏn-gò	*bòné:*	'tomtom'
àngé	*àngé-mbò*	'friend'
ènjé	*èŋú-mbɔ̀*	'chicken'
mɔ̀:sú	*mɔ̀:sú-mbɔ̀*	'Mossi (person)'

LHH

làsúgɔ́	'mask'
gìŋgírú	'flute'
àdúnó	'world'

LLHH

dɔ̀gɔ̀tɔ́rɔ̀	*dɔ̀gɔ̀tɔ́rɔ̀-mbɔ̀*	'doctor'

{LH} or {L}+H (indeterminate)

<LH>

tă:	'taboo'
gŏ:	'fire'

LH

dàbíl	'magical solution'

LLH

màtàrá:s	'madrasa (Islamic school)'

LLLH

mɔ̀tìlàtɔ́m	'balm'

{H} or {L}+H

jé	'dance(n.)'

d. {LHL} lexical tone contour

<HL>L

să:gà	'alms'

L<HL>

àlmâ:m	*àlmâ:m-bɔ̀*	'imam'
àtêm		'traditions'

LHL

àljénè		'heaven'
làsá:sù		'modern rifle'
sàlá:tù		'pre-dawn prayer'
gùrá:nà		'koranic school'
zàmdílè	*zàmdíl-mbò*	'donkey'

LL<HL>

yàgùrûm	'quivering of biceps'

e. {L}+H

yǎ	*yà-mbɔ́*	'woman'
nǎ:	*nà:-mbɔ́*	'cow'
àdé	*àdù-mbó*	'bird'
ɔ̀gɔ́	*ɔ̀gɔ̀-mbɔ́*	'Hogon (chief)'
gùndɔ́	*gùndɔ̀-mbɔ́*	'slave'
ìnjě:	*ìnjè-mbɔ́*	'dog'
zònjě:	*zòŋù-mbó*	'healer; griot'
àsègé	*àsègè-mbɔ́*	'animal'
ɔ̀gɔ̀ɲɔ̀ŋɔ́	*ɔ̀gɔ̀ɲɔ̀ŋɔ̀-mbɔ́*	'camel'

"Nouns" is interpreted broadly here, including some noun-like adverbs (e.g. 'yesterday')

Aside from compounds, lexical contours of noun stems are typically {H}, {HL}, {LH}, and {LHL}; {HLH} is rare but does occur in Toro Tegu.

Give examples of each type, separately for each syllabic type: Cv (if present), Cv:, CvC, CvCv, CvCCv, Cv:Cv, CvCvCv. Notation: angled brackets as in <LH> for rising or falling tone pattern of a single syllable, hence L<LH> (= LR) means a low-toned syllable plus a rising-toned syllable; curly brackets as in {LH} and {H} for stem-wide contours, whether lexical or overlaid. Terminology: monotonal is e.g. {H}, bitonal is {HL} or {LH}, tritonal is {LHL} or {HLH}.

mention any productive deverbal nominalizations that produce <LHL> tones.
nominals in -y after monosyllabic stem?

3.6.1.4   Lexical tone patterns for adjectives and numerals

Tone contours usually about the same as for nouns, but there are not many monosyllabic or trisyllabic stems.

3.6.1.5 Tone contours or H-tone accent?

Given the constraint against stem-wide lexical {L} contour, one is tempted to think in terms of a H-toned accent, with one syllable or mora marked for accent (with low-level rules then specifying the final output).

For non-verb words there is no obvious way to avoid having to specify that a L-tone precedes and/or follows. If the moras (or syllables) are represented as x's, and x́ is accented, the only possibilities for bimoraic CvCv stems with one accent are x́x and xx́. To account for the three outputs, {H}, {HL}, and {LH}, we would have to add another unaccented type xx. If the latter is realized as {H}, we can get the correct outputs, but how would anyone learn it?

For verbs, in languages where the two basic patterns are {H} and {LH}, an accentual analysis could work. For example, we could equate {H} with H-tone accent, and {LH} with the absence thereof. Or we could equate {LH} with L-tone accent, and {H} with the absence thereof. Either way, we would need rules to account for the remaining surface tones not directly equated with the accent.

3.6.1.6 Possible lexically {L}-toned stems

The constraint on {L} might be shifted from the lexicon to the surface. For example, we might take some {LH} stems to be {L}, with the H-tone later surfacing to satisfy an output constraint. Evidence in favor of this possibility comes from Jamsay nouns where the H-tone appears on the suffix -n (singular) or -m (plural), e.g. dɔ̀ɣɔ̀-ń '(a) Dogon', compare dɔ̀ɣɔ́ without the suffix.

3.6.1.7 Tone-Component location for bitonal noun stems

For bi- and tritonal noun stems, where are the tone breaks in CvCv, Cv:Cv, CvCCv, CvCvC, etc. Before the last syllable (even if heavy) as in C̀vC̀v́: and C̀vĆv́C ? Before the last mora as in C̀vC̀v̌: and C̀vC̀v̌C ? Or before the last vocalic mora as in C̀vC̀v̌: and C̀vĆv́C? In any of these cases, as long as tone-break location is predictable, we could adopt an autosegmental model in which the tone contour and the segmental representation are ontologically separate.

Or is the choice lexically variable? In that case, the autosegmental model will not work cleanly, since we would have to stipulate which syllables/moras the tone elements are associated with.

3.6.1.8 Tone-Component location for tritonal noun stems

Similar to the preceding, paying attention to syllabic structure especially of final syllable. Nouns usually prefer LLH rather than LHH, even in languages that have LHH as the {LH} contour for verbs.

3.6.2 Grammatical tone patterns

Subsections below discuss how the morphology and syntax change the lexical tone contours of stems. Distinguish stem-wide tone overlays (which erase the underlying lexical tone contour) from partial modifications.

3.6.2.1 Grammatical tones for verb stems

The lexical tone contour of a verb stem, usually {H} or {LH}, is audible in the bare stem (used in chaining) and in the positive Perfective forms.

Tone-dropping to {L} may occur before the Perfective Negative and/or the Imperfective Negative. The Imperative and/or the positive Imperfective may raise some or all {LH} toned verbs to {H}, in addition to any segmental changes.

The simple Perfective, and possibly other inflected forms, may drop to {L} after other constituents, especially a focalized constituent. Tone-dropping here is an expression of defocalization of the verb.

In compound agentives, e.g. 'millet-farmer' or 'gazelle-hunter', the verb as compound final may have an overlaid {H} or {LH} contour in addition to any segmental changes.

Relative-clause forms of verbs, whether or not participial in suffixal morphology, involve additional tone-contour changes.

If the system is complex (as in Najamba and Yanda), a tabular summary would help.

3.6.2.2 Grammatical tones for noun stems

NPs are the site of the most systematic tonosyntactic processes, and nouns are the primary targets. Brief discussion here, full discussion in Chapter 6.

A noun is tone-dropped to {L} by a following adjective or demonstrative (in some languages also a definite suffix or an 'each' quantifier), or when it functions as head of a relative.

A noun is subject to a tone contour controlled by a preceding possessor. The contour may be {L}, {HL}, or (especially for prosodically light stems) {H}, rarely {LH} (for some kin terms). For conflicts between right-to-left and left-to-right contours, see Chapter 6.

Nouns are common compound initials and finals. There are several compound types defined by tone contours. Usually one involves tone-dropping the initial to {L} and keeping the regular tones on the final; another usually mimics possessor-possessed constructions. See Chapter 5 for details.

3.6.2.3 Grammatical tones for adjectives and numerals

Adjectives and numerals are subject to tone-dropping controlled by a following demonstrative (in some languages also a definite morpheme), or when the NP they are in is the head NP of a relative.

When a NP consisting of N-Adj or N-Num has a preceding possessor, the possessor-controlled tone contour affects the noun and may also extend to the adjective or numeral. Check both N-Adj and N-Num in combination with both alienable and inalienable possessors (which may differ tonosyntactically).

3.6.3 Tonal morphophonology

3.6.3.1 Autosegmental tone association (verbs)

For non-verb stem-classes such as nouns, the existence of {H}, {HL}, {LH}, and {LHL} stems leaves us with little choice but to recognize these as separate contour types, rather than adopting an accentual model.

To the extent that the location of tone breaks is predictable (as opposed to lexically specified), we can isolate the contours from the segmental level, so that e.g. bàlă: could be represented as bala: combined with an {LH} autosegment.

For verbs, an autosegmental analysis may be attractive. This is because the same model can work for a verb and (some of?) its suffixal derivatives. For example, a C̀vCv́ verb stem might have a C̀vC̀v-Cv́ derivative, if the language prefers tone breaks near the right edge. If we analyse the stem as CvCv plus {LH}, we first add the -Cv suffix to the stem, then we associate {LH} to the trisyllabic result to get C̀vC̀v-Cv́. This analysis is less compelling for languages with tone breaks near the left edge.

3.6.3.2 Phonology of {HL} tone contour

summary of data presented in other sections as to how the {HL} contour is expressed in various word classes and morphological contexts, for example HLL or HHL on trisyllabics.

Consider:
{HL} as lexical contour for nouns, adjectives, numerals.
{HL} as possessed-noun contour.
any {HL} contours in verbal morphology.
{HL} on adjective or numeral as compound final in bahuvrihi compounds ('Blackbeard', 'three-head[ed]').
special tone contours in iterated (fully reduplicated) verbs, e.g. {HL}-{L}-{L}… iterations of verbs to emphasize prolongation of an activity (such as motion) in a story.
The different contexts may involve different ways of applying the H and L components, e.g. HLL versus HHL.

3.6.3.3 Tonal changes in decimal numerals

If there are unusual tonal changes in numerals in decimal terms ('20' to '90'), which begin with 'ten' and add a numeral '2' to '9' (often with phonological mutations), they can be briefly described here.

3.6.3.4 Atonal-Morpheme Tone-Spreading

Suffixes (with shapes like -C and -Cv) and clitics (including some postverbal subordinating particles like 'if') may be atonal (no intrinsic tone) and acquire tone by spreading from the final tone element of the preceding word.
Give a list of such morphemes.

3.6.4 Low-level tone rules

3.6.4.1 Rising-Tone (or: Contour-Tone) Mora-Addition

Word-final /Cv̌/ with rising tone may require lengthening of the vowel (i.e. addition of one mora) to permit the contour tone to be articulated.

In some languages, this lengthening also applies to word-final /Cv̂/ with falling tone, i.e. it applies to all final-syllable contour tones

3.6.4.2   Contour-Tone Stretching

A contour tone (<HL> or <LH>) that occurs on a Cv:L syllable (L = a sonorant) is usually realized with the tone break at the L (i.e. as close as possible to the right edge of the syllable), even when an atonal -L suffix is added to Cv:- or Cv:-.
This involves shifting the tone break slightly to the right, e.g. /Cv̂:-x/ > /Cv̂:-x̀/ (Atonal-Morpheme Tone-Spreading) > Cv́:-x̀ (Contour-Tone Stretching)

3.6.4.3   Final-Tone Resyllabification

If a word-final syllable with contour tone <LH> or <HL> is followed by a clitic that has =Cv shape, the contour tone may divide into an initial tone element that remains on the word-final syllable, and a second tone element that is realized on the clitic (or merges with the clitic's tone if the two tones are identical).
Jamsay examples: êm 'milk', with clitic ém=ì: 'it is milk', ɲě-n 'woman', with clitic ɲè-n=î: 'it is a woman'.

3.6.4.4   Rightward H-Spreading

A high tone may spread to the right within a word, perhaps across a morpheme boundary, e.g. Cv́CvCv̀ > Cv́Cv́Cv̀ and Cv́CvC > Cv́Cv̂C.
In some languages (Nanga) we also get Cv́Cv̀ > Cv́Cv̂ , with falling tone on the final short vowel.

3.6.4.5   Stranded-Tone Re-Linking

If the vowel to which a tone was attached has disappeared due to Syncope or Apocope, the tone is usually reattached to the preceding (or, less often, following) syllable. Thus Cv̀Cv́Cv̀ > Cv̌CCv̀.

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

In languages where a word-final /Cv̌/ is not realized as Cv̌: by Contour-Tone Mora-Addition, and where final short vowels cannot express rising tone, it can surface as Cv́, as the L-tone part of <LH> tone is dropped.

3.7   Intonation contours

3.7.1   Phrase and clause-final terminal contours (↑↓→)

Phrases and clauses may have a marked terminal intonation, mainly on the final syllable. Typically the final pitch is higher than usual (↑) for nonfinal phrases/clauses in pairs or series, and the final phrase/clause in the series ends with a marked pitch drop (↓). The final syllable may also be prolonged (→), with or without a marked pitch rise or fall.

3.7.2   Expressive elements with lexically specified prolongation (→)

This typically applies to expressive adverbials (other than reduplications), and perhaps to a few other forms in each language.
    Jamsay expressive adverbials include dem→ 'straight (trajectory)' and dey^n→ 'apart, separate'. fú→ 'all' is not an expressive adverbial syntactically but it has similar intonation.
    The prolongation usually affects the final segment (vowel in Cv→, sonorant consonant in CvC→). If the prolongation is realized on a nonfinal vowel, put the symbol after the vowel: de→m.

3.7.3   Dying-quail intonational effect ∴

The symbol ∴ is used to indicate dying-quail intonation, which is expressed as prolongation along with a slow fall in pitch (distinct from simple falling tone).
    In Jamsay this is the way to conjoin two NPs (X∴ Y∴ meaning 'X and Y').
    When the underlying phonological tone is (already) low, languages differ as to whether the pitch falls or is steady-state low as the final segment is prolonged.

4 Nominal, pronominal, and adjectival morphology

4.1 Nouns

The system of nominal morphology is similar to that in Najamba.

4.1.1 Simple nouns

The grammatical categories relevant to nouns are animate/inanimate and singular/plural. While many adjectives are compatible with all four combined categories, nouns are typically either animate or inanimate.

Animate nouns regularly distinguish singular (unmarked) from plural (marked by a suffix). Inanimates denoting readily counted entities divide into those that distinguish singular from plural, and those that use the unmarked stem in both singular and plural contexts. For such inanimates, the covert number distinction is expressed when modifiers (including adjectives, demonstratives, and postposed pronominal possessors) are added. For example, the covert plurality of *úló* 'house' can be expressed by a modifying adjective (xx1a-b). Nouns denoting **masses** (sand, salt, water, honey, ashes) are most often treated as plural in such concord (xx1c), suggesting that for inanimates the singular category is marked.

(xx1) a. *ùlò*^L   *jɛ́m-gɔ̀*
            house^L   black-InanSg
            'a black house'

     b. *ùlò*^L   *jɛ́mè:*
            house^L   black.InanPl
            'black houses'

     c. *sɔ̀lmɔ̀*^L   *jɛ́mè:*
            sand^L   black.InanPl
            'black sand'

4.1.1.1   Animate nouns with plural *-mbò* ~ *-mbɔ̀*

For animate nouns (humans and most fauna), the singular is unmarked and the plural has Animate Plural (AnPl) suffix *-mbò* ~ *-mbɔ̀*, the vowel depending on the ATR-harmonic class of the stem. A stem-final vowel in the singular may be shortened before the suffix, and this short vowel may be raised, usually to *u*, which can then be syncopated (after an unclustered sonorant). The tone of *-mbò* ~ *-mbɔ̀* is usually low, but it is raised to H-tone after a {L}+H toned noun.

(xx1)   Sg   Pl   gloss

        a. no change in stem-final vowel
            àsègέ   *àsègè-mbɔ́*   'animal'
            ɔ̀gɔ̀ɲɔ̀ŋɔ́   *ɔ̀gɔ̀ɲɔ̀ŋɔ̀-mbɔ́*   'camel'
            nǎ: *nà:-mbɔ́*   'cow'

        b. stem-final vowel shortened but not raised
            ìnjě: *ìnjè-mbɔ́*   'dog'

        c. stem-final vowel shortened and raised, but not syncopated
          raised to i
            írⁿè: *írⁿì-mbɔ̀*   'goat'
          raised to u
            péddè   *pédù-mbò*   'sheep'
            àdé   *àdù-mbó*   'bird'

        d. already short stem-final vowel raised, but not syncopated
            àbέ   *àbù-mbɔ́*   'orphan'

        e. stem-final short vowel syncopated
          after unclustered liquid
            tólé   *tól-mbò*   'pig'
            zàmdílè   *zàmdíl-mbò*   'donkey'
            èdè-làlé   *èdè-[làl-mbó]*   'midwife'
          after unclustered nasal
            sòmé   *sòm-bó*   'horse'
            yà-kúmè   *yà-kúm-bò*   'unmarried woman'
          after nj reduced to unclustered nasal
            ènjé   *èŋú-mbɔ̀*   'chicken'
            zònjě: *zòŋù-mbó*   'griot' or 'healer'
          after mb that merges with suffixal mb
            bòmbé: *bòm-bó*   'Bombo (person)'

32

For *j/g* and *c/k* alternations, see §3.2.1.

4.1.1.2   Inanimate nouns with no morphological number distinction

Many countable inanimate nouns fail to distinguish singular from plural within nominal morphology itself. In the lexicon, if no plural is given for a noun, it means that my assistant gave the unsuffixed form even in plural contexts. Some examples are in (xx1).

(xx1)   stem   gloss

     cégéré   'saddle'

At the level of NP, such nouns can be marked as singular or plural by modifiers (adjectives, demonstratives, pronominal possessives). That is, the number category is merely covert for such nouns. Singular/plural oppositions at NP level are illustrated for 'saddle' in (xx2).

(xx2)   a.   *cègèrè*^L   *ògú / yí*
           saddle^L   DemSg / DemPl
           'that saddle' / 'those saddles'

      b.   *cègèrè*^L   *sé-ŋgè / sé*
           saddle^L   good-InanSg / good
           '(a) good saddle' / 'good saddles'

      c.   *cégéré*^L   *kɔ̃: / wɛ̃:*
           saddle^L   1SgP.InanSg / 1SgP.InanPl
           'my saddle' / 'my saddles'

4.1.1.3   Inanimates with final-vowel mutations

Some inanimate nouns express plurality by final vowel mutations, involving front/back shifts (keeping ATR values intact), sometimes accompanied by vowel-length shifts.

(xx1)   Sg   Pl   gloss

4.1.1.4   Nouns with final *-go* ~ *-gɔ*

Quite a few inanimate nouns have Inanimate Sg *-go* ~ *-gɔ* (schematically *-gO*), opposed to an unsuffixed plural with a final-vowel mutation to *e:* or *ɛ:* (schematically *E:*). The singular/plural opposition makes segmentation of *-gO* transparent in the cases listed in (xx1).

(xx1)   *-gO* after vowel or nonnasal sonorant

	Sg	Pl	gloss	related form

a. singular *…u-gO*, plural *…E* :
  +ATR

Sg	Pl	gloss	related form
kóbú-gó	*kóbé:*	'shell' etc.	
úndú-gó	*úndé:*	'calabash'	*ùndù-zòg-gɔ́* 'shard'
órú-gó	*ór-é:*	'language'	*ɔ́r ɔ́r-tì-* 'speak'
èdù-gó	*èdé:*	'waterjar'	
bùdù-gó	*bùdé:*	'hole (puncture)'	

  -ATR

Sg	Pl	gloss
tádú-gɔ́	*tádɛ́:*	'straw basket'
mɔ́ndú-gɔ́	*mɔ́ndɛ́:*	'association'

  mixed ATR

Sg	Pl	gloss	related form
dɔ̀n-gó	*dòné:*	'sale'	*dòrⁿɔ́-* 'sell'

b. singular *…C-gO* (after syncope), plural *…E* :
  +ATR

Sg	Pl	gloss	related form
pól-gó	*pólé:*	'knife'	
bón-gó	*bóné:*	'name'	
bǒn-gò	*bòné:*	'tomtom'	*bòn-íyɛ́* 'tapstick"
kólólém-gó	*kólólémé:*	'bell'	

  -ATR

Sg	Pl	gloss
kàl-gɔ́	*kàlɛ́:*	'neighborhood'
kɛ̀l-gɔ́	*kɛ̀lɛ́:*	'ditch, crevice'
cɛ́m-gɔ́	*cɛ́mɛ́:*	'spike, pointed object'

34

zòg-gɔ́   zògé: 'shard'

Some nouns ending in *-gO* have no marked singular/plural distinction as nouns, but belong to word-families that also include stems without *-gO*. In such cases the suffix is at least vaguely segmentable on the noun (xx2).

(xx2)   noun   gloss   related form

   èm-gó   'conversation'   *émé-* 'converse' (verb)
   kón-gó   'cough(n.)'   *kónó-* 'cough' (verb)
   kú-gɔ́   'head'   *kù:-wóló* 'headache'
   móndú-gó   'laughter'   *màndí-* 'laugh' (verb)
   nindù-gó   'breath'   *nìndí-* 'breathe'
   órú-gó   'language'   *ɔ́r-* 'speak'
   sògúr-gó   'gunshot'   *sɔ́gúr-í:* '(rifle) go off'
   zìm-gó   'pain'   *zìmé-* 'hurt, be painful'

ígúl-gó 'height'

There are also some nouns ending in *-gO* for which no suffixless counterpart is known. Here the synchronic segmentation is fairly opaque, but one could argue for it based on the analogy of the more readily segmentable cases in semantically similar domains. In some cases (xx3a), but so far not in others (xx3b), there is comparative evidence that *-gO* was originally segmentable.

(xx3)   noun   gloss   sample cognate

   a. evidence for (original) segmentation
      àndùngó   'gap in teeth'   Yanda Dom *àndòl*
      cèlgɔ́   'crack (gap)'   Yanda Dom *cèl*
      cérgó   'side, end'   Yanda Dom *cédú*
      cèrgó   'stem'   Yanda Dom *kàdù*
      dùgó   'foundation'   Yanda Dom *dù*
      dùrúŋgó   'hooked pole'   Tommo So dùrú
      émbúgó   'drop-trap'   Yanda Dom *èmbù*
      gòŋgó   'courtyard'   Yorno So *gɔ̀nɔ́*
      gòŋgó   'thorn fence'   Jamsay *sì-sè:ŋ gɔ̌ŋ*
      gùdùgó   'skin'   Tommo-so *gùdú*
      gìrè-nòmgó   'face'   Yanda Dom *gìdè-nòm*
      gúndúgó   'stick'   "
      ìnjìrgó   'thirst'   Yanda Dom *ìŋgìnì:*

35

kóbúgó	'apiary'	Yanda Dom *kòbù*
kòmbùgó	'cave'	Yanda Dom *kòm*
kóŋgúlúŋgó	'trigger guard'	Yanda Dom *kóŋòl*
kúdúgó	'handle, shaft'	Yanda Dom *kúzá*
kúndúgó	'(unsplit) log'	Yanda Dom *kúnú*
lólgó	'labor pains'	Yanda Dom *làlú-ŋ òbò*
mìnìyámgó	'fishhook'	Yanda Dom *mìrⁿàm*
nɔ̀mbùgɔ́	'cavity'	Yanda Dom *nɔ̀mù*
nùmà:-kúmbúgó	'fist; handful'	Yanda Dom *nùmà-kúmbò*
péggó	'hitching post'	Yanda Dom *pégù*
pòl-gàŋgó	'fighting knife'	Yanda Dom *pòl-gàŋ*
pógúrúgó	'belt'	Togo Kan *pógùrù*
sàlgó	'diarrhoea'	Yanda Dom *sàlìyèŋ*
sògó	'sweat(n.)'	Tommo So *sŏ:*
tódúgó	'hernia'	Yanda Dom *tózú*
túŋgúrgó	'stool'	Tommo So *túŋgúrú*
ùlò-mbùgó	'doorway'	Ben Tey *ùrò-mɔ̌:* (*mɔ̌:* 'mouth')
wárgó	'ceiling beam'	Togo Kan *wà:rú*
yà-lòlgó	'co-wife'	Yanda Dom *yè-làl*
yù-dúndúlúgó	'millet bundle'	Jamsay *ɲù:-dúnúrⁿúm*
wòlgó	'field'	Togo Kan *wòrú*
wòlùgó	'tendon'	Yanda Dom *wèl*
zómgó	'private field'	Yanda Dom *zŏm*

b. no clear evidence known

éndúgó	'threshold'	
kúndúgó	'back (body)'	Jamsay *gŭn* (?)
ládúgɔ́	'roof'	
lè:gó	'day'	
ómgó	'post-partum seclusion'	
ómgó	'plain millet cakes'	
ómgó	'udder'	
cèlgɔ́	'ditch'	
díníŋgó	'stump'	

ùdù-gó 'sun' matches Najamba *ùjú-ŋgó* (with a class suffix), and synchronic segmentation is supported by *ùdù-pílé-ŋgó* 'sunset; west'. It and has possible cognates without the *-gO* (e.g. Ben Tey *ùsú*) but Yanda Dom *ìzùgè* suggests that the fusion of stem and suffix is older than in the other cases, since Yanda Dom does not usually preserve traces of *-gO.

36

àsògó 'splinter-like chaff' superficially looks like another example, but in this case the comparative analysis goes the other way (Yanda Dom *àsògò*, Jamsay *cèm-sògó*, etc.).

The synchronic relationship between Inanimate Sg *-gO* and Instrument nominal suffix *-ŋgó* (§4.xxx) is unclear.

Basic affixal morphology of nouns

Suffixal categories (absent or vestigial in some languages): human/nonhuman or animate/inanimate; singular/plural distinction usual for the human or animate category, in some languages also for nonhuman or inanimate category.

More complex systems with two or three nonhuman or inanimate classes (especially Najamba).

Najamba -(ŋ)go, -(ŋ)ge singular inanimate suffixes may correspond to frozen syllables (no longer segmentable) in other languages (e.g. Mombo): try 'sun', 'grain'.

Any Cv or Cv: nouns? List, please.

4.1.1.5   Nouns with final *-ŋgó*

-ŋgó is used to derive instrument nominals from verbs, following {LH}-toned stem with final *u* (subject to syncope), see §4.xxx. For some such nominals it is specifically singular, opposed to an unsuffixed plural with stem-final *é:* .

There is another deverbal nominalizer *-ŋgó*, with different stem vocalism, that can be used as a passive in predicative form with 'it is' or 'it is not' clitic (§9.3.2).

Some other nouns with final *ŋgó* (segmentable or not) that have been gleaned from the lexicon are in (xx1).

(xx1)   noun   gloss   comment/related form

   a. related verb exists
   twá:-ŋgó   'beginning'   *tɔ́:-* 'begin'
   tò-ŋgó   'slashing'   phrase *tò-ŋgó tɔ́-* 'slash (earth, with pick-hoe, to plant seeds)', cf. *tɔ̌:* 'seedstock', *tòndì-gìré* '(a) slash in earth'

   b. no related verb
   tíníŋgó   'mortar'   *tìn-íyɛ́* 'pestle'

kóŋgúlúŋgó   'trigger-guard'   Yanda Dom kóŋùl

tíníŋgó 'mortar (for pounding with pestle)' is not synchronically deverbal. Segmentation of the suffix is suggested by *tìn-íyé* 'pestle' (originally 'mortar-child'), but no semantically associated verb is known. Najamba has *túin-gó* 'mortar', plural *túni:*. The situation is complicated by the fact that TU *tíníŋgó* also means 'ladder', perhaps from an originally distinct etymon, cf. Jamsay and Toro Tegu *tìrú* 'ladder'. Traditional ladders and mortars are both carved out of single blocks of wood, so secondary convergence may have been favored by a mix of semantic and phonological similarity.

4.1.1.6   Nouns with final *-jé*, *-njé*

ènjé\\èŋú-mbɔ̀ 'chicken'
zégé zèjí- (zèjí-tì-) 'have a fight'

4.1.1.7   Nouns with final *-ŋgé*, *-gé*, *-ŋgí*, *-ŋgé*

There are only a few examples of these suffixal forms on noun stems, which may belong to the same etymological categories as *-go* and *-ŋgó*. They arguably diverged due to idiosyncratic assimilations to vowels in preceding syllables.

    The cases involving *-ŋgé* in (xx1) are collocations of cognate noun and verb, where the noun has an apparent suffix *-ŋgé*. The two verbs are homophonous (cf. also *jé jě-* 'dance, do a dance').

(xx1)   a.   *jé-ŋgé jě-*   'do the millet harvest'
          b.   *jì-ŋgé jě-*   'fart, let out a fart'

 Cf. Yanda Dom *jèl jèlé* 'do the millet harvest' and *jìŋ jé-* 'let out a fart'. Najamba has *gî: gǐy* 'do the millet harvest' and *gìyè-ŋgó gìyⁿέ* 'let out a fart'.
    A similar case involving *-gé* on the nominal is in (xx2). I know of no cognates in other Dogon languages.

(xx2)   *cé-gé cé-*   'yell, give out a shout'

For *-ŋgí* I can cite only *-ní-ŋgí* in *jìrè-[ní-ŋgí]* 'sleep(n.)', which occurs in collocation with verb *ní:-* 'sleep', as in *jìrè-[ní-ŋgí] ní:-yà-y* 'he/she slept'.
    For *-ŋgé* we have *né-ŋgé* 'food', cf. *né-* 'eat, drink'.

-*ge* and -*ŋge* occur as markers of one inanimate class of nouns in Najamba, distinct from another inanimate class marked by -*go* and -*ŋgo*. This makes me hesitate to declare that TU -*ŋge*, -*ge*, etc., are recent mutations of -*ŋgo* and -*go*. However, I can find no direct connection between the TU stems in question and Najamba nouns of the -*(ŋ)ge*- class.

The alternation of geminated and simple *d* in *péddè* 'sheep', plural *pédù-mbò* suggests that the singular might derive from *péd-gè, cf. Nanga *pèrgé*.

4.1.2   High-frequency nouns ('woman', 'man', 'child', 'person', 'thing')

High-frequency TU nouns whose cognates are often irregular in Dogon languages are given in (xx1). 'Woman' (xx1a) and 'man' (xx1b) are regular. 'Child' (xx1c) and 'person' have (synchronically) suppletive plurals. 'Thing' has no overtly marked plural form.

(xx1)		Sg	Pl	gloss
	a.	*yǎ*	*yà-mbɔ́*	'woman'
	b.	*árⁿá*	*árⁿá-mbɔ̀*	'man'
	c.	*ɛ̀dɛ́*	*ùlɛ́:(-mbò)*	'child'
	d.	*ɲě*	*nù-mbɔ́*	'person'
	e.	*cɛ́*	—	'thing(s)'

For 'person', *ɲě* is the independent form, and *ɲě*- occurs as a kind of human classifier with numerals '2' to '10'. However, it is usually heard as *ɲì* before an adjective, as in *ɲì dɛ́mɛ̀* 'noble, freeborn person'.

For compounds involving 'man' and 'woman', see §5.xxx. For compounds involving 'child', see §5.xxx.

4.1.3   'So-and-so' (àmâ:n, dámbá ɲè)

àmâ:n (perhaps *à-mâ:n*, cf. §4.1.7) is used, as in Jamsay, to mean 'So-and-so' in generic contexts as a variable over personal names. Example: "if you meet someone in the field, you say "Hey So-and-so, come!""

dámbá ɲè, literally 'village's person', can be used as a vocative instead of a real personal name when directed at a fellow villager. It is mainly used among friends.

4.1.4 Initial *Cv-* reduplication in nouns

The languages often have nouns with apparent initial reduplication Cv- (animal names, etc.). The vowel may be fixed (Ci-, perhaps Cu- before a back rounded vowel) or it may be a copy of the initial vowel of the stem.

Typical glosses: 'grasshopper' (generic), 'beetle/bug' (generic), 'hyena', 'hawk (kite)', perhaps 'scorpion'.

List all examples, organizing them by tone contours.

4.1.5 Final reduplications in nouns

Perhaps an occasional noun with an apparent final partial reduplicative segment. Usually the pattern is clear only when there are two or more exx. with similar reduplicative form in the language.

Nanga bɛgiri-bɛ: 'stone partridge' and kɔrɔŋ-kɔ: 'louse'.

Nanga pɛtɛ-pɛy 'grasshopper sp. (Oedaleus)' and sɛŋɛrⁿɛ-sɛyⁿ 'grasshopper sp. (Kraussella)'.

4.1.6 Nouns with full-stem iteration

Many nouns have (frozen) iterative (=full reduplicative) form, e.g. gadu-gadu or pikiri-pikiri, with segments that do not occur in simple (non-iterated) form.

List all examples, organized by tone pattern.

Separately, give all examples of iterations with vowel changes, e.g. piki-paka or three-part piki-paka-piki.

4.1.7 Frozen initial *a-* or *aN-* in nouns

For àmâːn (à-mâːn) see §4.1.3 above.

Give a list of nouns beginning in a- or an- ~ aŋ- that may represent an archaic morpheme (animal and insect names, implements, etc.).

This (native Dogon) pattern may have been fortuitously amplified by Arabic loans, based on a) nouns with Arabic Definite prefix al-, whose /l/ assimilates to

4.2   Derived nominals

4.2.1   Characteristic derivative (*-jé*)

This derivative may be used as a noun or modifying adjective. The input is a noun denoting some attribute, such as a distinctive body part or a medical condition. The input noun drops its tones. It is usually uncompounded (xx1a) but may be a compound (xx1b). *-jé* does not harmonize with the ATR value of the stem. The (animate) plural form is *-jì-mbó*.

(xx1)   noun   gloss   Characteristic   gloss

    a. input noun uncompounded

bèrá:	'belly'	*bèrà:-jé*	'pregnant'
tɔ́m	'hump'	*tɔ̀m-jé*	'hunchback'
sé:	'fat(n.)'	*sè:-jé*	'plump (animal)'
pàŋgá	'power'	*pàŋgà-jé*	'strong, powerful'
dɔ̀rɔ́	'disease'	*dɔ̀rɔ̀-jé*	'sick person, patient'
némé	'leprosy'	*nèmè-jé*	'leper'

    b. input noun compounded

bèyà:-kúlà	'beard'	*bèyà:-kùlà-jé*	'bearded man'

4.2.2   Verbal Nouns (*-lé*, *-í*)

The fully productive verbal noun suffix is *-lé*, after {H}-toned stem. It is used after regular inflectable verb stems. For the tones, note *yáy-lé* 'going' (*yây*) and *zɔ́bú-lé* 'running' (*zɔ̀bɔ́-*), the latter normally with a cognate nominal as {L}-toned compound initial: *[zòb-gò]-[zɔ́bú-lé]* (§5.1.3). Further examples are given in the paradigms in chapter 10. This form with {H}-toned stem is distinct from the purposive-clause verb form with *-lé* following a {L}-toned stem (§17.6.1).

    The verbal noun in *-lé* often competes with another one in suffix *-í*. The suffixal vowel is subject to Apocope after unclustered sonorants. Examples are *zɔ́b-í* 'running' and *yáy-∅* 'going' (/yáy-í/). The *-í* verbal noun is not fully productive; I was unable to elicit it with monosyllabic *Cv* or *Cv:* verbs.

For verbal nouns added to adjectival predicates, as in 'good to eat', see §6.3.3.3.

4.2.3 Deverbal instrument nominals (Sg *-ŋgó*, Pl stem-final *é:*)

Instrument nominals are produced by adding suffix *-ŋgó* to a {LH}-toned form of the verb stem with final *ù*. The corresponding plural, if elicitable, has stem-final *é:*, and this plural form is probably phonologically basic (the +ATR *é:* could account for the consistently +ATR *-ŋgò*). -ATR vowels in nonfinal syllables of the stem are not harmonized with the suffixal vowels.

(xx1)   Instrument Nominals (*-ŋgò*, *é:*)

Sg	Pl	gloss	related form
a. implements			
gɔ̀bú-ŋgó	*gɔ̀bé:*	'trigger'	*gɔ̀bɔ́-* 'pull (trigger)'
sɔ̀gú-ŋgó	—	'button'	*sɔ́gɔ́-* 'button (up)'
(~ *sɔ̌:-ŋgó*)			
pà:dú-ŋgó	—	'(cotton-)card'	*pá:dé-* 'card (cotton)'
b. location			
zɔ̀ŋgú-ŋgó	—	'medical place'	*zɔ̀ŋgú zɔ̀ŋgú-* 'treat (medically)'

These (inanimate) deverbal instrument nominals are morphologically similar to (animate) deverbal agentives, which have stem-final *é ~ ě:* in the singular, and stem-final *ù* followed by Animate Pl *-mbó*. However, the suffixed forms differ tonally in the two cases: instrument *gɔ̀bú-ŋgó* 'trigger' with LH-L tones versus (plural) agentive *ìnjè-[kɔ̀bù-mbó]* 'water-carriers' with LL-H tones (disregarding the compound initial).

   Many instrument nominals have an additional compound initial; see §5.1.5.
   For a distinct -ŋgó added to the A/O-stem

4.2.4   Uncompounded agentives

Agentives clearly related to a corresponding verb, but without compound initials, are in (xx1).

(xx1)   agentive   gloss   verb   gloss

a. irregular vocalism
    bè:mĕ: 'herder'   *bè:mí-*   'tend (livestock)'

b. regular
    dùgé ~ dùjĕ: 'sorceror'   *dùgó-*   'cast spells'
    gùɲé   'thief'   *gùɲè-*   'steal'

Plurals: *bè:m-bó*, *dùgù-mbó*, *gùɲù-mbó*.

'Hunter' is uncompounded *dàndá*, plural *dàndá-mbɔ̀*. *dàndá* is also the noun 'hunting, (a/the) hunt'.

The agentive form of a verb is {LH}-toned, with the final vowel usually mutating to +ATR *é ~ ĕ:* in the singular. Vowels in preceding syllables in the verb stem are unaffected; in particular, -ATR vowels do not harmonize with the +ATR final vowel. Before Animate Pl *-mbó*, the *é ~ ĕ:* mutates to *ù*, and this *ù* is subject to syncope after an unclustered sonorant. 'Herder' has irregular -ATR final vowel *ĕ:* in the singular, but the plural has *-mbó*.

This deverbal agentive is morphologically the animate counterpart of instrument nominals with final *-ŋgó* in the singular (§4.xxx). For instrument nominals, *é:* appears in the (otherwise unsuffixed) plural. However, the two differ in the tones of the suffixed forms, since an unsyncopated stem-final *u* is H-toned before *-ŋgó* but L-toned before Animate Pl *-mbó*.

Agentives are normally compounded, the initial being either a cognate nominal or a noun denoting a prototypical object. Examples are in §5.1.xxx.

4.2.5   Nominalizing suffix *-nɛ́*

This suffix is attested in a few cognate nominals (xx1).

(xx1)   nominal   gloss   related verb

    ày-nɛ́   'fatigue'   *áy-* 'become tired'
    zèbì-nɛ́   'curse(n.)'   *zèbɛ́-* 'curse(v.)'

This formation is historically related to a nominal type with suffix *-n* in Yanda Dom and Najamba. Probable exact matches are TU *ày-nɛ́* with Yanda Dom *ɔ̀ɲì-n* 'fatigue', and TU *zèbì-nɛ́* with Yanda Dom *zèbú-n*. There are no exact correspondences with Najamba forms, but *sòŋgǎ-n* 'curse(n.)' is at least a semantic match.

4.3   Pronouns

4.3.1   Basic personal pronouns

Key forms of personal pronouns are in (xx1).

(xx1)   Personal Pronouns

	indep.	accusative	subject preverbal	suffixed
1Sg	*mí*	*mí-gì*	*mí*	*-m*
1Pl	*í*	*í-gì*	*í*	*-y^n*
2Sg	*ú*	*ú-gì*	*ú*	*-w^n*
2Pl	*bí*	*bí-gì*	*bí*	*-y^n*
3AnSg	*ńné*	*ńné-gì*	*ńné*	*-∅*
3AnPl	*bú*	*bú-gì*	*bú*	[varies by AN category]
InanSg	*kú*	*kú-gì*	*ńné*	*-∅*
InanPl	*yí*	*yí-gì*	*ńné*	*-∅*
Logo/3Refl	*á*	*á-gì*	*á*	*-m*

Accusative *-gì* is optionally omitted, hence *mí* can occur as an alternative to *mí-gì* in 1Sg object function. *-gì* can assimilate to a preceding *u*-vowel, e.g. 3Pl *bú-gì ~ bú-gù*.

kú and *yí* are generally confined to more strongly discourse-definite contexts than other third person pronouns. In weakly discourse-definite contexts, *kú* and *yí* are usually just omitted.

There is no number distinction among logophoric and third person reflexive pronouns. For logophoric subject, *-m* suffixed to the verb is identical in form to the 1Sg subject suffix; see §18.3.1 for discussion and examples.

4.3.2   Personal pronouns as possessors

Pronominal possessors are preposed with kin terms (*ú ^{L}bà* 'your father') and postposed for other nouns (*úló ú-wɔ̀* 'your-Sg house'). For 3Sg possessor there is a suffix -n for kin terms (*bà-ń* 'his/her father'). Most of the postposed forms

were originally composite ('house$_x$ your-thing$_x$', 'dog$_x$ your-creature$_x$'), with a generic noun resuming the main noun, but this analysis is no longer transparent.

The postposed forms are given in (xx2) in §6.2.1.2. The preposed forms are identical to the independent pronouns in §4.3.1 above.

4.3.3 Personal pronouns as complements of postpositions

Accusative forms are given in the preceding section. Accusative *gì* can be considered to be a postposition since it is added at the end of a NP. There is no dative postposition other than the accusative.

Most other postpositions that can occur with the full set of pronominals are of the type 'at [the side of X]', e.g. 'at [my side]'. The pronoun therefore takes possessive form. However, the instrumental-comitative postposition ní: 'with, in the presence of (someone)' does take pronominal complements: *mí ní:* 'with me' (§8.1.2).

4.4 Determiners

4.4.1 Definite and demonstrative morphemes

4.4.1.1 Definite morpheme (*ǹ*)

Definite *ǹ* is exemplified in (xx1). It is a weak discourse-definite element. It follows other NP subconstituents, except the 'all' quantifier. It has no morphological similarity to any demonstrative. It has no tonal effect on the preceding word(s). Since it is nonsyllabic, it cliticizes phonetically to the preceding syllable; however, I write it as a separate word.

(xx1) *úló ǹ*   'the house'
        nǎ: ǹ   'the cow'
        nà:-mbɔ́ ǹ   'the cows'
        nà: bíné: ǹ   'the big cow'
        úló yí-tà:ndú ǹ 'the three houses'
        ùlò mà-gú ǹ   'that house'
        úló kɔ̌: ǹ   'my house'
        úló ǹ pú→   'all the houses'

In the absence of *ǹ*, a noun can (but need not) be interpreted as indefinite.

4.4.1.2 'This/that' (deictic demonstrative pronouns)

There are two deictic categories (proximate and distal), and a (strong) discourse-definite category ('that same/aforementioned X'). These categories are cross-cut by animacy and number.

Inanimate demonstratives are in (xx1). *ò-* ~ *è-* is proximate, *mà-* is distal. *-gú* is Inanimate Sg and is probably related etymologically to discourse-definite *kú*. Likewise, *-ý* is Inanimate Pl and is probably related to discourse-definite *yí*.

(xx1) a. *ò-gú*   'this'
          è-ý   'these'

     b. *mà-gú*   'that (over there)'
          mà-ý^{n}   'those (over there)'

     c. *kú*   'that (definite)'
          yí   'those (definite)'

Animate demonstratives are in (xx2). *ɔ̀-* is proximate, and again *mà-* is distal. *-ḿ* is Animate Sg, and *-bɔ́* is Animate Pl. *-bɔ́* is probably related to *bú*. The definite forms *ńné* and *bú* are identical to the corresponding third person personal pronouns.

(xx1) a. *ɔ̀-ḿ*   'this'
          ɔ̀-bɔ́   'these'

     b. *mà-ḿ*   'that (over there)'
          mà-bɔ́   'those (over there)'

     c. *ńné*   'that (definite)'
          bú   'those (definite)'

'Which?' interrogative adjectives, and related interrogative content words, have similar morphology (§13.2.8).

4.4.1.3 Prenominal discourse-definite *kú* 'that (same)'

In form, *kú* is an inanimate pronoun ('it') that is most often used to resume a discourse-definite situation or entity. As a (pseudo-)possessor preceding a {L}-toned noun, it marks the referent as strongly discourse-definite 'that same X'.

An example is *kú* ^L*gàndà* 'that (same) place'. My assistant, however, rejected the combination of *kú* with a human noun in discourse-definite sense (#*kú ɲè* 'that same person').

He did accept a combination with a real possessor. A preposed possessor keeps its regular tones, rather than being tone-dropped by *kú* (xx1a). Likewise, when a possessed noun is sandwiched between (pseudo-)possessor kú and a real pronominal possessor, the noun is not tone-dropped (xx1b). In other words, in the presence of a real possessor the pseudo-possessor *kú* loses its tonosyntactic control powers.

(xx1)   a.   *[kú   ámádú   ^Lùlò]   èdù=lá-∅*
            [InanP   Amadou   ^Lhouse]   good=not.be-3SgS
            'That house of Amadou's is no good.'

       b.   *[kú   úló   ú-wɔ̀]   èdù=lá-∅*
            [InanP   house   2SgP-InanSg]   good=not.be-3SgS
            'That house of yours is no good.'

4.4.2   Demonstrative adverbs

4.4.2.1   Locative adverbs

Basic demonstrative adverbs are in (xx1).

(xx1)   form   gloss

        a.   *ŋ̀gɔ́*   'here'
            ŋ́gɔ̀   'over there'
            mà-ŋgá   'over there' (deictic)
            mǎ: 'over there' (deictic)
            yé   'there' (discourse-definite)
            yé-bárì   'there' (discourse-definite)

        b.   *gàndà ŋ̀gɔ́*   'around here'
            gàndà mà-ŋgá   'around (over) there'
            gàndà mǎ: 'around there (discourse-definite)'

4.4.2.2   Emphatic and Approximinative modifiers of adverbs

For emphatic 'right here' I recorded *ŋ̀gɔ́ té→* 'exactly here'.

4.4.3 Presentatives ('here's …!')

The regular predicate forms (§11.2.3.2) of deictic demonstratives (§4.4.1.2) can be used as presentatives.

(xx1) a. *[èdù-gó*   *ǹ]*   *ò-gû:=∅*
        [waterjar-InanSg   Def]   Prox-InanSg=it.is
        'Here's the waterjar.'

      b. *[èdé:*   *ǹ]*   *mà-ŷ=∅*
        [waterjar.Pl   Def]   Dist-InanPl=it.is
        'There are the waterjars.'

Alternatively, the demonstrative may function as the focus of the clause, with the verb in defocalized form (§13.1.1.3)

(xx2) *mà-ḿ*   *ńné / sé:dù*   *wà:-m-è:*
       Dist-AnSg   3SgS / Seydou   come-Impf-Prog-DFoc
       'There he / Seydou comes!'

4.5 Adjectives

This section discusses modifying (i.e. attributive) adjectives that occur within NPs. For adjectival predicates, see §11.xxx. For inchoative and factitive (causative) verbs related to adjectives, see §9.xxx.

4.5.1 Adjectival morphology

Those adjectives that are compatible with both inanimate and animate referents have a maximum of three distinct forms, corresponding to four categories as shown in (xx1). *O* represents {*o ɔ*} and *E* represents {*e ɛ*}, depending on the ATR harmonic class of the stem.

(xx1)   category   suffix

      a.   Inanimate Sg   *-gO, -ŋgO, -ŋgE*

b.	Inanimate Pl (none)
	Animate Sg

c.	Animate Pl	*-mbO*

Although the categorially composite category in (xx1b) is listed as unmarked morphologically, it usually ends in a long *E:* (i.e. *e:* or *ɛ:*) which probably reflects contraction of an original class marker *-yɛ. The contraction itself is old, since it has close parallels in Najamba.

The adjectives in (xx2a) belong to this typical TU adjectival type. Those in (xx2b) are of the same type, but are attested only with inanimates, or only with animates, for good semantic reasons. The long *E:* in the unsuffixed forms strongly suggest inclusion in this productive adjective type. The same is true of (xx2c) since 'undiluted' is applied to nouns denoting liquids, which are treated as inanimate plural, so only that form is attested.

Animate Pl *-mbO* reduces to *-bO* after a nasal. Since both *-ŋgO* and *-gO* are well-attested allomorphs of the Inanimate Sg suffix, when we get *-gO* after a nasal we cannot determine which underlying allomorph is involved. Clusters written *nb*, *ng*, and *mg* can be pronounced [nmb], [nŋg], and [mŋg], respectively, in careful speech. The vowels of *-mbO* and *-(ŋ)gO* appear as *o* when they correspond to *e:* in the unsuffixed form, otherwise they appear as *ɔ*.

(xx2)		InanSg	InanPl	AnSg	AnPl	gloss
	a.	*bán-gɔ̀*	*bárⁿɛ̀:* [~ *bánɛ̀:*]	*bárⁿɛ̀:*	*bán-bɔ̀*	'red; ripe (mango)'
		cé:lù-gò	*cé:lɛ̀:*	*cé:lɛ̀:*	*cé:lù-mbò*	'cold, cool'
		dúdù-ŋgɔ̀	*dúdɛ̀:*	*dúdɛ̀:*	*dúdù-mbɔ̀*	'heavy'
		édù-ŋgɔ̀	*édɛ̀:*	*édɛ̀:*	*édù-mbɔ̀*	'good'
		él-ŋgɔ̀	*élɛ̀:*	*élɛ̀:*	*él-mbɔ̀*	'sweet, delicious'
		én-gɔ̀	*érⁿɛ̀:*	*érⁿɛ̀:*	*én-bɔ̀*	'lightweight; thin (wall)'
		gàbù-gɔ́	*gàbɛ̆:*	*gàbɛ̆:*	*gàbù-mbɔ́*	'tall'
		gɔ́m-gɔ̀	*gɔ́mɛ̀:*	*gɔ́mɛ̀:*	*gɔ́m-bɔ̀*	'rotten'
		jém-gɔ̀	*jémɛ̀:*	*jémɛ̀:*	*jém-bɔ̀*	'black (dark)'
		mán-gɔ̀	*márⁿɛ̀:*	*márⁿɛ̀:*	*mán-bɔ̀*	'hard, solid'
		mèndú-ŋgɔ̀	*mèndɛ́:*	*mèndɛ́:*	*mèndú-mbɔ̀*	'slender'
		nóm-gò	*nómɛ̀:*	*nómɛ̀:*	*nóm-bò*	'difficult'
		ɔ̀l-gɔ́	*ɔ̀lɛ̆:*	*ɔ̀lɛ̆:*	*ɔ̀l-mbɔ́*	'wet'
		ɔ́m-gɔ̀	*ɔ́mɛ̀:*	*ɔ́mɛ̀:*	*ɔ́m-bɔ̀*	'hot'
		ɔ́mɔ̀-ŋgɔ̀	*ɔ́mɔ̀:*	*ɔ́mɔ̀:*	*ɔ́mɔ̀-mbɔ̀*	'living, alive'
		ɔ́rⁿɔ́n-gɔ̀	*ɔ́rⁿɔ́nɛ̀:*	*ɔ́rⁿɔ́nɛ̀:*	*ɔ́rⁿɔ́n-bɔ̀*	'smooth, sleek'

	InanSg	InanPl	AnSg	AnPl	gloss
	pá:-ŋgɔ̀	*pâ: ~ páὲ*	*pâ: ~ páὲ*	*pá:-mbɔ̀*	'long'
	píl-gɔ̀	*pílὲ:*	*pílὲ:*	*píl-mbɔ̀*	'white'
	sàm-gɔ́	*sàmĕ:*	*sàmĕ:*	*sàm-bɔ́*	'bad, ugly'
	yágúr-gɔ̀	*yágírὲ:*	*yágírὲ:*	*yágúr-mbɔ̀*	'coarse, rough'
	sé-ŋgὲ	*sé*	*sé*	*sé-mbɔ̀*	'good'
b.	—	—	*bìnέ:*	*bìní-mbɔ̀* (~ *bĭn-bɔ̀*)	'fat, stout'
	—	—	*mɔ̀dĕ:*	*mɔ̀dú-mbɔ̀*	'evil, nasty'
	démbù-gò	*démbè:*	—	—	'thick, massive'
	dùmbù-gó	*dùmbĕ:*	—	—	'blunt (blade)'
	èmbù-gɔ́	*èmbĕ:*	—	—	'narrow'
	gál-ŋgɔ̀	*gálè:*	—	—	'bitter'
	púrúgú-gò	*púrúgè:*	—	—	'tan, off-white'
	sí:-ŋgɔ̀	*síyè:*	—	—	'sharp (point, blade)'
	wέr-gɔ̀	*wέrè:*	—	—	'green, fresh (vegetation)'
	yɔ̀r-gɔ́	*yɔ̀rĕ:*	—	—	'soft'
c.	—	*kùrĕ:*	—	—	'undiluted (milk)'

For 'living, alive', an informant tended to replace animate plural *ɔ́mɔ̀-mbɔ̀* with a quasi-reduplicative form *ɔ́mɔ̀-ɔ́m(b)ɔ̀*.

The adjectives in (xx3a) also belong to this general type, but unlike the *CvCE:-* and longer stems in (xx2) above they have *CvE:* in the unsuffixed form, becoming *Cvy-* before a suffix. The phonological alternations here are similar to those in verbal morpheme in the 3Sg form of the simple Perfective (§10.xxx) and in Defocus forms of verbs in connection with subject focalization (§13.xxx). In *gɔ̀ɛ̆:* the first vowel is briefly articulated or desyllabified, approaching [gwĕ:]. In *wàέ* and *màέⁿ* there is no comparable desyllabification of the first vowel. 'Long' (xx3b) lengthens the *a*-vowel in the unsuffixed form. *pĕ:* 'old' can be analysd as *pè-ĕ:*, by analogy, but I do not hear a separate burst for the second vowel. The two adjectives in (xx3c) have a *Cv-* stem throughout. Of the defective adjectives in (xx3d), *wàĕ* and *sĕ:* belong with (xx3a), *ǹdé* with (xx3c).

(xx3)	InanSg	InanPl	AnSg	AnPl	gloss
a.	*gɔ̆y-gɔ̀*	*gɔ̀ɛ̆:*	*gɔ̀ɛ̆:*	*gɔ̆y-mbɔ̀*	'short'
	pèy-gɔ́	*pĕ:*	*pĕ:*	*pèy-mbɔ́*	'old'

	InanSg	InanPl	AnSg	AnPl	gloss
				(~ pè:-mbɔ)	
	màyⁿ-gɔ́	màɛ́ⁿ	màɛ́ⁿ	màyⁿ-bɔ́	'dry'
b.	pá:-ŋgɔ̀	pá:	pá:	pá:-mbɔ̀	'long'
c.	dé-ŋgè	dɛ́	dɛ́	dɛ́-mbɔ̀	'big'
	sɛ́-ŋgè	sɛ́	sɛ́	sɛ́-mbɔ̀	'good'
d.	wǎy-gɔ̀	wàɛ́	—	—	'wide, spacious'
	—	sě:	—	—	'diluted (milk)'
	ǹdɔ̀-ŋgɔ́	ǹdɛ́	—	—	'empty''

There are also some adjectives that **do not distinguish number for inanimates**, i.e. they do not use Inanimate Sg *-(ŋ)gO* suffix. Those that can also be used with animate nouns do take Animate Pl *-mbO* (xx4a). This is similar to the situation with nouns, where some inanimates have only a single, unsuffixed form used both as singular and plural. The adjectives in (xx3b) probably belong here, but have defective paradigms. In (xx3c), 'deep' appears to have generalized the original Inanimate St form. 'Blue' (xx3d) is a regionally widespread loanword but has been nativized rather better in TU than in most other languages (note the long *è:*), though speakers refrain from adding an Inanimate Sg suffix.

(xx3)	InanSg	InanPl	AnSg	AnPl	gloss
a.	kàndá	kàndá	kàndá	kàndà-mbɔ́	'new'
	nà:rⁿá	nà:rⁿá	nà:rⁿá	nà:rⁿà-mbɔ́	'easy, cheap'
	sègé	sègé	sègé	sègé-mbɔ̀	'small (house)'
b.	bá	bá	—	—	'full (container)'
	bòdòró	bòdòró	—	—	'half-ripe (fruit)'
	ìlɛ́	ìlɛ́	—	—	'ripe; fermented'
	kǒ:	kǒ:	—	—	'unripe, raw'
	—	—	kómbò	kómbò-mbò	'lean, skinny'
	—	—	ná-này	ná-này-mbɔ̀	'respectable'
c.	tó:-ŋgò	tó:	—	—	'deep'
d.	búlè:	búlè:	—	—	'blue'

The forms in (xx5) function more or less like adjectival modifiers but have invariant form. 'Yellow' is really the word for '(bright yellow) flour from pods

of néré tree (*Parkia biglobosa*), which is the exemplar for yellowness throughout the zone.

(xx5)   a.   *yòl-púrⁿ̀ɔ*   'yellow'
        b.   *sɔ̀gɔ̀lɔ́*   'spotted'

                            'young (child, animal)'
                            'young, adolescent (man/woman)'
'adult, full-grown (but not old)'
'old, used (object)'
'fast'
'slow'
'lukewarm, tepid'
'sugary, sweet (e.g. tea)'
'bland-tasting'
'sour, acrid (like lemon)'
'half-curdled (milk)'
'crispy (taste/texture, like sweet-potato strips fried in oil)'
'over-ripe (e.g. mango, soft but still edible)'
'lofty, towering (tree, mountain)'
'foul, bad-smelling (urine, garbage)'
'runty' (unusually short person, breed of goats)

4.6   Numerals

4.6.1   Cardinal numerals

4.6.1.1   'One' (*túrɛ̀:*, *túr-gɔ̀*) and 'other' (*wàndá*)

Forms for 'one' are in (xx1). The animate/inanimate distinction and the long *ɛ:* are typical of adjectives. However, the noun X is not tone-dropped as one would expect before a true adjective: *nǎ: túrɛ̀*: 'one cow', *úló túr(ú)-gɔ̀* 'one house'.

(xx1)   a. modifying a noun (X)
        X túrɛ̀:   'one X (animate)'

<div align="center">

X túr(ú)-gɔ̀   'one X (inanimate)'

</div>

    b. in counting sequence ('1, 2, 3, …'), see §4.6.1.2 below
      tí:-rú

A related form *tùrù* is used as an 'only' particle at the end of NPs (19.4.1).

   'Other' as in 'another/the other (sheep/house)' is wàndá (invariant for animacy and number). The noun is tone-dropped: *nà:* ᴸ *wàndá* 'an-/the other cow', *ùlò* ᴸ *wàndá* 'an-/the other house', *[ùlò wàndà]* ᴸ *yí* 'the other houses'.

4.6.1.2   '2' to '10'

The numerals from '2' to '10' are shown in (xx1) in their postnominal forms. They are preceded by classifying prefixes (similar to those in Yanda Dom). For human reference, either the specifically human form (based on *nɛ̌* 'person') or the more general animate form may be used. Nonhuman animals use only the animate form.

   The prefixes are H- or <LH>-toned. Numeral stems are of two tonal types. One type is {LH} or {LHL} and is tonally stable ('3', '5', '8-9'). The other appears as {H}-toned after *nɛ̌-* and as {L}-toned after *bú-* and *yí-* ('2', '4', '6', '7', '10')

(xx1)	gloss	human	animate	inanimate
	'2'	*nɛ̌-léy*	*bú-lèy*	*yí-lèy*
	'3'	*nɛ̌-tà:ndú*	*bú-tà:ndú*	*yí-tà:ndú*
	'4'	*nɛ̌-kédɛ́*	*bú-kɛ̀dɛ̀*	*yí-kɛ̀dɛ̀*
	'5'	*nɛ̌-nǔm*	*bú-nǔm*	*yí-nǔm*
	'6'	*nɛ̌-kúlé*	*bú-kùlè*	*yí-kùlè*
	'7'	*nɛ̌-sɔ́*	*bú-sɔ̀*	*yí-sɔ̀*
	'8'	*nɛ̌-[gà-gárà]*	*bú-[gà-gárà]*	*yí-[gà-gárà]*
	'9'	*nɛ̌-[gà-gárà]-bà*	*bú-[gà-gárà]-bà*	*yí-[gà-gárà]-bà*
	'10'	*nɛ̌-pélú*	*bú-pèlù*	*yí-pèlù*

The preceding noun (or noun-adjective combination) has its regular tones, as well as its regular plural marking. Numerals do not induce tone-dropping on these preceding words. For example, *yà-mbɔ́* 'women' occurs without change in *yà-mbɔ́ nɛ̌-léy* 'two women'. *nù-mbɔ́* 'people' is grammatical before a human numeral, but it is normally omitted: *nɛ̌-léy* 'two people'.

   In **counting sequences**, there is no preceding noun and no classifying prefix, which allows us to glimpse lexical tones of the various stems. There are

<div align="center">53</div>

special forms for '1' and '2', both ending in *rú*. The numerals that shift between {H}- and {L}-toned forms after classifying prefixes are {H}-toned in the counting sequence. This suggests that they have lexical /H/ melodies.

(xx2)   numeral   in counting sequence

'1'		*tí:-rú*
'2'		*lé:-rú*
'3'		*tà:ndú*
'4'		*kédé*
'5'		*nǔm*
'6'		*kúlé*
'7'		*só*
'8'		*gà-gárà*
'9'		*[gà-gárà]-bà*
'10'		*pélú*

4.6.1.3   Decimal multiples ('10', '20', …) and combinations ('11', '59', …)

Numerals denoting decimal multiples up to '70' are in (xx1). They do not combine with classifying prefixes, so they are invariant across animacy categories. They consist of a rather chewed-up variant of *pélú* '10', plus the relevant single-digit numeral. The '10' initial has the segmental form *pɛ-*, *pɛ:-*, or *pɛga-*. Historically, the reduction to *pé-* in '30' probably reflects syncope and *rt > t*. The reduction to *pɛ:-*, presumably from *pɛga-, occurs before velars but not before coronals. The '10' element is L-toned (*pègà-*, *pè:-*) before single-digit numerals that begin with a H-tone, but it ends with a H-tone (*pé-*, *pègá-*) before a L-tone.

(xx1)   gloss   form

'20'		*pègà-léy*
'30'		*pé-tà:ndú*
'40'		*pè:-kédé*
'50'		*pègá-nǔm*
'60'		*pè:-kúlé*
'70'		*pègà-só*

Like the single-digit terms '2' to '10', decimal multiple terms follow nouns (or noun-adjective combination) that takes their regular plural form: *yà-mbó pè:-kédé* '40 women'.

Composite numerals can be formed by adding a single-digit numeral (without a classifier) to a decimal-multiple term from '10' to '70'. This combination is followed by a unique terminal morpheme *sàgà* (roughly 'plus'). '10' has yet another irregular variant in this construction. The other decimal-multiple terms through '70' are regular, except that their final syllable is raised to H-tone if otherwise L or <HL> ('20', '40', '60'), which is (again) arguably intonational.

(xx2) gloss   with single-digit increment X

'10'	*pé:-nè X sàgà*	
'20'	*pègà-léy X sàgà*	
'30'	*pé-tà:ndú X sàgà*	
'40'	*pè:-kédé X sàgà*	
'50'	*pègá-nǔm X sàgà*	
'60'	*pè:-kúlé X sàgà*	
'70'	*pègà-só X sàgà*	

The single-digit numeral, X in (xx2), is invariant and does not agree with the referent in animacy, but ɲě- optionally precedes the entire sequence (i.e. precedes the decimal term) if the referent is human. The forms of the single-digit numerals after these decimal-multiple terms are given in the right-hand column of (xx3). '1' has no animacy suffixes. '3' has a slightly contracted form. '5' usually contracts the decimal term, so that *-m* appears to be a suffix (or clitic) on the noun.

(xx3) numeral   regular form   after decimal-multiple term

'1'	*túr-è:, túrù-gɔ̀*	*túr(ú) sàgà*
'2'	*léy*	*léy sàgà*
'3'	*tà:ndú*	*tǎ:n sàgà*
'4'	*kédé*	*kédé sàgà*
'5'	*nǔm*	*-m sàgà* (less often: *nǔm sàgà*)
'6'	*kúlé*	*kúlé sàgà*
'7'	*só*	*só sàgà*
'8'	*gà-gárà*	*gà-gárà sàgà*
'9'	*[gà-gárà]-bà*	*[gà-gárà]-bà sàgà*

The reduced *-m* in 'five' triggers further constractions in the preceding numeral. '15' is just *pé-m sàgà*, '25' is *pègà-lê-m sàgà*, and '55' is *pègá-nǔm-∅ sàgà*, where only the final *sàgà* alerts a listener to the otherwise inaudible presence of

-m. Raising of tones of final syllables in the decimal-multiple term does not occur before -m, hence *pὲ:-kέdὲ-m sàgà* '45' and *pὲ:-kúlὲ-m sàgà* '65'.

The decimal-multiple term for '80' requires separate treatment. '90' is expressed as '80' plus '10' (with inanimate prefix *yí-* in unmarked contexts, as in counting sequences).

(xx4) '80' *sùŋgó* (or *dɔ̀gɔ̀-sùŋgó*)
        '90' *sùŋgó yí-pélù*

'80" is the notorious 'Dogon hundred' lexical item. It is more noun-like than the lower decimal-multiple terms, and it has a different microsyntax when it is combined with an incremental single-digit numeral. Here the decimal-multiple and single-digit numerals are rather independent of each other. When the single-digit is '1', the noun appears twice, so '81 cows' is '[cow 80] [cow 1]' (xx5). When the single digit is '2' to '9', it takes the relevant classifying prefix. There is no *sàgà*. *sùŋgó* takes the form *súŋgô:* in such combinations.

(xx5) a. *[nà:-mbɔ́*   *sùŋgô:]* *[nă:*   *túrὲ:]*
           [cow-AnPl   80]   [cow   one.AnSg]
           '81 cows'

      b. *[ìnjὲ-mbɔ́*   *sùŋgô:]*   *bú-nŭm*
           [dog-AnPl   80]   AnPl-five
           '85 dogs'

As noted above, *sùŋgó yí-pélù* '90' is already composite ('80 10'). When it modifies a core NP, the '10' portion shows animacy concord (xx6a). When a further single-digit term is added, the phrasing is of the type '80 cows, 11 (cows)', i.e. with the single-digit term grouped with '10'. The noun ('cows') is optionally repeated (xx6b).

(xx6) a. *[nà:-mbɔ́*   *sùŋgô:]*   *bú-pélú*
           [cow-AnPl   80]   AnPl-10
           '90 cows'

      b. *[nà:-mbɔ́* *súŋgô:]* *[(nà:-mbɔ́)*   *pέ:-nὲ* *túr*   *sàgà]*
           [cow-AnPl 80]   [(cow-AnPl)   10   1   plus]
           '91 cows'

sùŋgó '80', without a compound initial, can also be used in the sense '100', especially in connection with currency. However, in this sense it is usually supplanted by *té:mdὲrὲ*, see below.

4.6.1.4   Large numerals ('100', '1000', …) and their composites

The stems in (xx1) are somewhat noun-like morphosyntactically.

(xx1)   gloss   form

     a. 'hundred'   *té:mdèrè* (<Fulfulde)

     b. 'thousand' *mùdó*

     c. 'million'   *mílyɔ^n* (<French)

These numerals generally omit '1' ('hundred' = '100', 'thousand' = '1,000', 'million' = '1,000,000'). When multiplied by a higher numeral (as in '200' or '2000'), 'hundred' and 'million' are treated like regular quantified-over nouns, so a following single-digit term has Inanimate *yí-* prefix, agreeing with 'hundred' or 'million', not with the referent (xx2a-b). 'Thousand' is followed by the bare numeral (xx2c).

(xx2)   a. *nà:-mbɔ́*   *[té:mdèrè   yí-lèy]*   *pègá-nǔm*
         cow-AnPl   [hundred   Inan-2]   10-5
         '250 cows'

     b. *nà:-mbɔ́*   *[mílyɔ́^{n}*   *yí-nǔm]*
         cow-AnPl   [million   Inan-5]
         '5,000,000 cows'

     c. *nà:-mbɔ́*   *[mùdó*   *tà:ndú]*   *[té:mdèrè yí-nǔm]*
         cow-AnPl   [thousand   3]   [hundred   Inan-5]
         '3,500 cows'

Since not many people have a hundred of anything, much less a thousand or a million, these higher numerals are mainly used in connection with currency.

4.6.1.5   Currency

The currency unit is *bú:dù*, equivalent to 5 francs CFA and originally equivalent to a long-defunct colonial coin (sometimes called the riyal). In the singular, this is pronounced *bù:dù túrú* 'one riyal', denoting the smallest coin (5 FCFA) in

57

circulation. This form is unusual in that *túrú* '1' is treated as an adjective, so it controls tone-dropping on *bú:dù*. The same tones are heard in *bù:dù léy* '2 riyals', which denotes the 10 FCFA coin. Higher numerals combine regularly with *bú:dù*. For example, in *bú:dù yí-tà:ndú* '3 riyals' (15 FCFA), *bú:dù* has its normal tone contour, and the numeral has an Inanimate classifying prefix agreeing with *bú:dù*.

For 'million' and its multiples, one does not multiply by 5 to get the conversion. So 'two million *bú:dù* means '2,000,000 FCFA'.

4.6.2   Ordinal adjectives

4.6.2.1   'First' (*tí:rú*) and 'last' (*dùmdɔ́*)

Ordinal 'first' is *tí:rú*, and 'last, final' is *dùmdɔ́*. Both are adjectives and control tone-dropping on the noun.

(xx1)   a.   *cɛ̀^{L} / dàmbà^L*   *tí:rú*
               thing^L / village^L first
               'the first thing / village'

         b.   *cɛ̀^{L} / dàmbà^L*   *dùmdɔ́*
               thing^L / village^L last
               'the last thing / village'

For adverbial 'firstly, at first' see §8.4.6.2

4.6.2.2   Other ordinals (suffix *-nɛ́*)

The ordinal suffix for numerals higher than '1' is *-nɛ́*, after {L}-toned stem. There are only slight segmental irregularities based on the cardinal forms (syncope of second syllable in '3rd' and '10th', monophthongization in '2nd').

(xx1)   form   gloss

         a. single-digit numeral
            lè:-nɛ́ ~ nè:-r^{n}ɛ́   'second'
            tà:n-nɛ́   'third'
            kèdè-nɛ́   'fourth'
            nùm-nɛ́   'fifth'
            kùlò-nɛ́   'sixth'

sɔ̀-né	'seventh'
gàgàrà-né	'eighth'
gàgàrà-bà-né	'ninth'
pèl-né	'tenth'

b. decimal

pègà-lè:-né	'twentieth'

c. decimal plus single-digit numeral

pé:nè tùrù sàgà-né	'eleventh'
pé:nè lèy sàgà-né	'twelfth'

d. hundred

tè:mdèrè-né	'hundredth'

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

té:mdèrè pègà-lè:-né	'hundred and twentieth'

f. interrogative

àŋgà-né	'how many-eth?' (Fr *quantième*)

Tone-dropping controlled by the suffx does not extend to the decimal term in (xx1c), or to 'hundred' in (xx1e). However, it does apply to the combination of the single-digit term plus *sàgà* in (xx1c).

4.6.3   Fractions and portions

terms meaning 'half' or (more vaguely) 'portion, section, division'.

5 Nominal and adjectival compounds

The compound types in this chapter are distinguished by the word-classes of the initial and final, and by tone-contour. Using n for noun, a for adjective, num for numeral, v for verb, and x for a variable word class (noun, adjective, perhaps adverb), one can represent the types with notation like [x n], [n n], [n v], and (with a suffix) [n v-VblN], with diacritics to mark tones (x́ all high tone, x̂ = falling HL contour, x̌ = rising LH contour, x̀ = all-low tone, x̄ = regular lexical tone). Example: [ǹ n̄] is a noun-noun compound whose initial is dropped to {L} tone contour and whose final has its lexical tones.

5.1 Nominal compounds

5.1.1 Compounds of type [n̄ n̄]

Both the initial and the final are nouns with their regular tones (no special tonal change in compound).
Not a common compound type. Found in Jamsay with 'X-owner' compounds.

5.1.2 Compounds of type [ǹ n̄]

Initial is a noun (perhaps occasionally an adverb) that is tone-dropped, final is a noun with its regular tones. Common. Final is usually the head.
May compete with possessor-type compounds (see below), but if so this type is more typical of the fully lexicalized compounds.

5.1.3 Compounds with final Verbal Noun, type [ǹ v-VblN]

In this combination, the {L}-toned initial either denotes a characteristic object or is a cognate nominal. The final is a verbal noun or cognate nominal and has its usual tones

(xx1) a. *[zòb-gò]-[zɔ́b-í]*   *nôm*
            [run-InanSg]-[run-VblN]   be.difficult

'Running a race is hard.'

b. *[zòb-gò]-[zɔ́bí-lé]*   *nôm*
   [run-InanSg]-[run-VblN]   be.difficult
   [= (a)]

5.1.4 Agentive compounds of type [ǹ v̌] or [ǹ v̂]

This is a special case of [ǹ n̄] compound. The initial is the {L}-toned form of a noun denoting a prototypical object, or a cognate nominal. The compound initial may be slightly reduced in form: the final vowel may be raised to high and perhaps syncopated, an old Inanimate suffix like *-go* is often omitted from the compound. The compound final a {LH}-toned deverbal agentive with the stem-final vowel mutating to *é* (~ *ě:*), regardless of ATR class of the stem (the penult vowel quality is not affected).
sounds like -é:
    One informant (out of two who were checked) fluctuates between {LH} and {HL} tones for the final in some cases (*wà:-wálè* alongside *wà:-wàlé* 'farmer', for example). The data given below show the predominant {LH} melody on the final.

(xx1)   Compound deverbal agentives

	noun plus verb	agentive	gloss
a. initial is cognate nominal			
	zóbú-gó zɔ̀bɔ́- 'run'	*zòbù-zɔ̀bé*	'(fast) runner'
	dɔ̀n-gó dòrⁿɔ́- 'do a sale'	*dɔ̀n-dòné*	'seller'
	èbú-gó ébé- 'do a buy'	*èbì-èbé ~ -èbě:*	'buyer'
	sán sárⁿá- 'pray'	*sàn-sàrⁿé ~ -sàné*	'Muslim'
	ím ímé- 'stutter'	*ìm-ìmé ~ -ìmě:*	'stutterer'
b. initial is noncognate noun			
	ínjé kɔ́bɔ́- 'draw water'	*ìnjè-kɔ̀bé*	'water-carrier'
	kɔ́rⁿɔ́ màdá- 'toss cowry'	*kɔ̀rⁿɔ̀-màdé*	'cowry-tosser'
	(also *sèbé màdé*, agentive *sèbè-màdé*)		
	úló ɔ́ndú- 'build house'	*ùlò-ɔ̀ndé*	'house-builder'

Most *Cv:-* verbs with nonhigh vowels derive from *Cvlv- etyma. The old bisyllabic form is preserved in the agentive compound final *-Cv̀-lě:*. Synchronically, however, *-lě:* functions as a kind of filler syllable, cf. *-lú* with

62

the same verbs in the Third-Person Hortative (§10.6.3.1). The *-Cv̀-lě:* pattern has extended to *ɲǎ:-* 'pick up', which originally had medial *ŋ rather than *l (xx2a), and I know of no *Cv:-* stem with nonhigh vowel that does not have the -lv extensions. The only high-voweled *Cv:-* stem in TU is *ni:-* 'sleep', which does not show the extension. Instead, it has an agentive of the shape *-Cě:* (xx2b).

(xx2)　　　noun plus verb　　　　　agentive　　　　　gloss

   a. *-Cv̀-lé*
    *from original *Cvlv- verb*
    -- final is {LH}-toned

èdέ lǎ:- 'bear child'	*èdè-[là-lé]*	'child-bearing woman'
yǎ lǎ:-m- 'have (=help) woman bear'	*yà-[làl-é]*	'midwife'
kà-kǎl ká 'tell a lie'	*[kà-kàl]-[kà-lé]*	'liar'
kɔ̀ndɔ́ á:- 'brew beer'	*kɔ̀ndɔ̀-[à-lé]*	'beer brewer'
nìmdé bǎ:- 'gather trash'	*nìmdè-[bà-lé]*	'trash collector'
pélú pé:- 'applaud'	*pèl-[pè-lé]*	'applauder'
yɔ́ tó:- 'pound millet'	*yù-[tò-lé]*	'millet pounder'
wá: wǎ:- 'do farm work'	*wà:-[wà-lé]*	'farmer'
yù-wá: wǎ:- 'farm millet'	*[yù-wà:]-[wà-lé]*	'(millet) farmer'

    *from original *Cvŋv- verb*

gɔ̀nɛ̌: ɲǎ:- 'pick up gear'	*gɔ̀n-[ɲà-lé]*	'gear picker-upper'

   b. *-Cě:* from *Cí:-*
    jìrè-[ní-ŋgí] ní:- 'sleep'　　*[jìrè-[nì-ŋgì]]-ně:* 'sleeper'

Cv- verbs with short vowels do not have bisyllabic etyma. Their agentive compound finals have various shapes depending on vowel quality. The only *Cu-* verb (*nú-* 'go in') does not have an agentive form in regular use. The other vowel qualities are represented (xx3). The type with *-Cwě:* (xx3b) reflects the neutralization of /-Co(y)é/ and /-Cɔ(y)é/, structurally parallel to *-Càyé* (xx3c) but desyllabifying the initial {o ɔ} to *w*. In slow pronunciations, an informant actually distinguishes them as *-Còé* and *-Cɔ̀é*, and we will see (just below) that a different resyllabification in the plural also brings out the ATR distinction.

(xx3)　　　noun plus verb　　　　　agentive　　　　　gloss

   a. *-Cě:* from *Cɛ-, Ce-, Ci-*

kɔ̀ndɔ́ ɲέ- 'drink beer'	*kɔ̀ndɔ̀-ɲě:*	'beer drinker'
jé jě- 'dance'	*jè-jě:*	'dancer'
yɔ́ dǐ- 'carry millet'	*yɔ̀-dě:*	'millet carrier'

b. *-Cwě:* from *Cɔ-*, *Co-*

dwá dŏ- 'insult'	*dwà-dwě:*	'insulter'
yɔ́ tɔ́- 'sow millet'	*yɔ̀-twě:*	'millet planter'
ɛ́mnɛ́ dŏ- 'suckle milk'	*ɛ̀mnɛ̀-dwě:*	'nurseling (infant who suckles)'

c *-Càyě:* from *Ca-*

kú-gɔ́ ká- 'shave head'	*kù-kàyě:*	'one who shaves heads'

The final *ě:* in an agentive mutates to a high vowel {*i u*} before Animate Pl *-mbó*. Monosyllabic *-Cě:-* becomes *-Cì-mbó* (xx4c), while all nonmonosyllabic agentives have *u*, which is syncopated after an unclustered medial sonorant. Nevertheless, *-mbó* is always +ATR, harmonizing with the underlying *ě:* rather than with preceding stem vowels, as seen in 'buyers' and 'water carriers' with -ATR penults (xx4a). Singular agentives of type *-Cwě:* recover their underlying *ɔ* or *o* (xx4b).

(xx4)   singular agentive   plural agentive   gloss

a. from bisyllabic final
syncopating (medial unclustered sonorant)

wà:-wálè	*wà:-[wál-mbò]*	'farmer(s)'
kù-kàyé	*kù-[kày-mbó]*	'one who shaves heads'

nonsyncopating

èbì-ébè	*èbì-[èbù-mbó]*	'buyer(s)'
ìnjè-kɔ̀bé	*ìnjè-[kɔ̀bù-mbó]*	'water carrier(s)'
zòbù-zòbé	*zòbù-[zòbù-mbó]*	'(fast) runner(s)'
yùlùgù-bùmbé	*yùlùgù-[bùmbù-mbó]*	'fortune-teller who reads fox tracks'

b. from *-Cwě:*

yɔ̀-twě:	*yɔ̀-[tɔ̀y-mbó]*	'millet planter(s)'
ɛ̀mnɛ̀-dwě:	*ɛ̀mnɛ̀-[dòy-mbó]*	'nurseling(s)'

c. from *-Cě:*

kɔ̀ndɔ̀-ɲě:	*kɔ̀ndɔ̀-[ɲì-mbó]*	'beer drinker(s)'
jè-jě:	*jè-[jì-mbó]*	'dancer'

Plurals with unsyncopated stem-final u after a cluster or an obstruent are *[zòbù-gò]-[zòbù-mbó]* '(fast) runners', *ìnjè-[kɔ̀bù-mbó]* 'water-carriers', and *kɔ̀rⁿɔ̀-[màdù-mbó]* 'cowry-tossers'. Plurals with syncopated stem-final /u/ after an

unclustered sonorant are *sàn-[sàn-bó]* 'Muslims', *ìm-[ìm-bó]* 'stutterers', and *èdè-[làl-mbó]* 'midwives'.

5.1.5   Compound deverbal instrument or locative nominals of type [ǹ v̌-ŋgó]

Instrument nominals without compound initials are covered in §4.2.3. The verb stem appears in {LH}-toned form with final *é:* in the plural (not always elicitable), becoming *ú* with suffix *-ŋgó* in the singular. There is no ATR harmony between these final and suffixal vowels on the one hand and any stem vowels in preceding syllables.

Most compounds of this type denotes instrument. A few denote locations associated with specific activities or body functions. A noun may be added as compound initial, denoting a **prototypical object** that the instrument or tool is applied to.

(xx1)   Compound deverbal instrument nominals

noun plus verb	instrument	gloss
a. initial is noncognate noun		
nonsyncopating		
ĭn bùbɔ́- 'brush teeth'	*ìn-[bùbú-ŋgó]*	'toothbrush, chewstick'
érⁿɛ́ tégírí- 'strain s. ash'	*èrⁿè-[tègùrú-ŋgó]*	'soda-ash filtering pot'
káŋgá dàgá- 'lock door'	*kàŋgà-[dàgú-ŋgó]*	'door lock(n.)'
lǎ: gàgá- 'rub foot'	*cìn là:-[gàgú-ŋgó]*	'stone (pumice) to rub scaly skin on the feet'
syncopating after unclustered medial sonorant		
gǒ: zìyɛ́- 'scoop embers'	*gò:-[zǐy-ŋgó]*	'shard to carry embers'
Cv- extended as Cv̌y-		
ínjé dǐ- 'bathe'	*ìnjè-[dǐy-ŋgó]*	'outhouse for bathing'
àdé tá- 'shoot bird'	*màrⁿà àdì-[tǎy-ŋgó]*	'slingshot' (plastic bird-shooter)
kɔ̀rɔ́ yǎy- 'play b. game'	*kòrò-[yǎy-ŋgó]*	'board game'
Cv:- extended as Cv̀-lú-		
gǒ: pé:- 'strike fire'	*gò:-[pè-lú-ŋgó]*	'flint lighter'
b. initial is cognate nominal		
sùgǎ: súgɔ́- 'defecate'	*sùgà:-[sùgú-ŋgó]*	'area for defecating'

'Flint lighter' is based on the original form of the verb *pɛ́:-*, namely **pɛ́lɛ́-* (several Dogon cognates *péré-* or *pélé-*). See the comments on agentives of Cv:-verbs in §5.1.4 just above.

The compound type described in this section, with {LH}-toned final, differs from another with {H}-toned final and the same *-ŋgó* suffix, see just below.

5.1.6   Initial-headed nominals of type [ǹ v́-ŋgó]

This type superficially resembles the one described in the preceding section. However, this time the final (with suffix *-ŋgó*) is {H}-toned. Semantically, the initial often denotes the logical head (rather than a prototypical object), so the final functions like an adjectival modifier.

Typical examples of this type are in (xx1a). Those in (xx1a) denote spatial configurations (fork or intersection in road) or times of day, but there is very little difference between e.g. 'rising sun' and 'sunrise' or between 'forking road' and 'fork in road'. 'Poisoned' in (xx1c) has an additional morpheme *-sú-*.

(xx1)	compound	gloss	verb
	a. ordinary		
	kɔ̀rɔ̀-[gáy-ŋgó]	'sickle'	*gǎ-* 'cut w. sickle'
	ìnjè-[ɲá-ŋgó]	'water to drink'	*ɲɛ́-* 'eat, drink'
	tàbà-[síndé-ŋgó]	'snuff tobacco'	*síndé-* 'sniff (tobacco)'
	b. positions		
	òdùbà:-[zágíl-ɛ́:-ŋgó]	'fork, intersection'	*zàgíl-í:-* '(road) fork or form intersection'
	ùdù-[tùmbú-ŋgó]	'sunrise'	*túmbú-* '(sun) rise
	ùdù-[pìlí-ŋgó]	'sunset'	*pílé-* '(sun) set'
	c. *-sú-ŋgó*		
	wàrà ɲá-m-sú-ŋgó	'poisoned spear'	*ɲá-mí-* 'cause to drink (i.e. apply liquid poison')
	àrⁿà-[ílá-ŋgó]	'time of year when rains taper off'	
	ɔ̀bàm-nàygó ("sit-stay.up")	'night of 27th Ramadan'	
	ɔ̀bàm-[này-gó] ("sit-stay.up")		

66

5.1.7 Possessive-type compounds [n̄ ǹ], [n̄ n̂], [n̄ ń], and/or [n̄ ň]

This compound type may have the same tone contours as possessor-possessed combinations. Typically the initial has its regular tones, while the final has the tone contour of a possessed noun, i.e. {HL} or all-low depending on the language.

In lexical elicitation, this pattern may appear the first time the informant utters the compound. Sometimes the informant will later repeat it with the [ǹ n̄] pattern, which is typical of more lexicalized compounds.

It is possible that "possessive-type compound" and "possessor-possessed" are not always distinguishable. In the compound, aside from the fact that the "possessor" is usually fixed, it may be that (tono-)syntactic behavior is different from that of the true possessives. Try adding an adjective, or a "true" possessor. Same forms and tones as with possessor-possessed plus an adjective or a second possessor?

5.1.8 Compounds with ŋŋŋ 'child' (and ŋŋŋ 'fruit')

sàgàrà-íyɛ́\\\-úlè 'able-bodied man'

gárí:bù, gàrì:bù-èdɛ́ 'beggar child'

Compounds whose final is the term for 'child'.

In some languages, 'child' also used for 'fruit of X' and similar terms, where X is a tree or other plant sp., and for 'small item associated with X', where X is a (relatively large) implement. Other languages have a distinct term for 'fruit'.

Flora-fauna (esp. bird) terms may include frozen 'child' ending.

5.1.9 Compounds with 'man' (*árⁿá*) and 'woman' (*yǎ*)

'Boy' and 'girl' terms are in (xx1). They are superficially similar but at least etymologically they are built up differently. *árⁿá-yè* 'boy' consists of 'man' plus a compound final originally meaning 'child' (§5.xxx), while 'girl' consists of

'child' plus 'woman/female'. That is, *-yὲ* in 'boy' and *-yέ* in 'girl' are etymologically unrelated. However, the plurals of both 'boy' and 'girl' are (irregularly) related to the suppletive plural *ùlé:(-mbò)* 'children'. The *-mb-* formative is related to Animate Pl *-mbo ~ -mbɔ*.

(xx1)   Sg   Pl   gloss

       árⁿá-yὲ   *árⁿá-mb-ùlὲ*   'boy'
       èdá-yέ   *ùlà:-mb-ílé*   'girl'

Mention adjectives 'male' and 'female' (e.g. after animal terms).

'woman' noun often has irregular forms as a compound initial (try 'young adult woman', 'old woman', 'woman who has just given birth', 'new bride'). This may be distinct from the form used in less lexicalized combinations like 'pretty woman' and 'three women'.

comment on 'man' in similar combinations, even if regular.

Are 'boy' and 'girl' frozen compounds? Give sg and pl for them.

5.1.10   Compounds with *bàŋá* 'owner'

The final and head is based on the noun *bàŋá* 'owner, master', plural *bàŋá-mbɔ̀*. The compound initial is treated as possessor. so 'owner' drops tones.

(xx1)   a.   *úló*   *bàŋà-mbɔ̀*
             house   owner-AnPl
             'the house owner'

        b.   *ándá*   *bàŋà*

start with 'homeowner', 'owner of shop', etc.

may also apply to 'master (of slave)'. Give uncompounded form as in 'I do not have a master'.

May also compete with Characteristic derivative (Chapter 4). E.g. e.g. 'hunchback' = 'owner of hump'.

5.1.11   Loose and tight compounds with *ŋŋŋ* ('authentic', 'entire')

A term (e.g. ná:, dé:), perhaps transparently related to a term for 'mother', may be used as a compound final (or adjective?) in the sense 'authentic (not

false) X', 'principal, main X' (e.g. for the main village of a cluster of villages), or 'entire X (e.g. tree)', especially with terms like 'mango' where the unmarked referent is a fruit. 'Authentic' is especially relevant to species that resemble a less useful or prototypical second species ('jujube', 'indigo'). 'Authentic' or 'primary, main' may also apply to the main neighborhood of a dispersed village cluster.

Also indicate the term for 'false (i.e. nonprototypical) X', e.g. 'false jujube' or 'false wild-grape'. A few cases of this should turn up in the flora-fauna terminology. Typical expressions are of the type 'hyena's jujube', 'squirrel's peanut', 'herder's (wild) grape' on the one hand, and 'hibiscus' slave' on the other.

5.1.12   Natural-species compounds (*X-m/na:-X*)

A few flora-fauna terms (for fauna, mostly grasshoppers and other insects but also one or two herbs or grasses) may have a structure X-ma:-X or X-na:-X, with a linking element separating two iterations of an element X (which may or may not be identifiable with a regular lexical stem).

If this pattern is absent, say so.

5.1.13   Instrumental relative compounds ('oil for rubbing')

ínjé   'water'
    ìnjè ɲá-ŋgò 'drinking water'
    ìnjè ɗé-ŋgò 'bathing water'

nùnó   'oil'
    nùnò ɲá-ŋgò   'cooking oil'
    nùnò párɛ̀:-ŋgò   'rubbing oil'
        pár-í:-tì 'he/she rubbed (oil)'

5.1.14   Other phrasal compounds

any other complex, phrase-like compounds

e.g. 'it sold its mother to buy a tail' (for male whydah birds in breeding plumage)

5.1.15   Unclassified nominal compounds

any that do not fit into the above categories

5.2   Adjectival compounds

5.2.1   Bahuvrihi ("Blackbeard") compounds [ñ â] or [ñ nûm]

Correspond to English compounds with -ed, like 'big-bellied' or 'two-headed'. Final is either an adjective or a numeral. The whole compound describes a person or other entity that is characterized by the modified or quantified noun.
Often bahuvrihi compounds have an initial with its lexical tones, and a final with {HL} contour overlaid. This is tonally different from a noun-adjective combination with the same lexical items ('big belly', 'two heads').

5.2.1.1   With adjectival compound final [ñ â]

give examples
'big-bellied', 'black-headed'

5.2.1.2   With numeral compound final [ñ nûm]

give examples
'two-headed', 'one-eyed'

5.2.2   Compounds of *ŋŋŋ-* 'very' plus adjective

compound-like pattern with an initial meaning 'very' (Nanga ɔ-).
Absent from most Dogon languages.

6 Noun Phrase structure

6.1 Organization of NP constituents

6.1.1 Linear order

The basic linear order of words within NPs is (xx1), with the (head) noun in position zero.

(xx1) -1   preposed possessor, OR preposed demonstrative (*kú*)
       0   (head) noun
       +1   modifying adjective
       +2, +3 possessor pronoun and/or cardinal numeral (in either order)
       +4   demonstrative pronoun or Definite morpheme
       +5   universal quantifier ('all')

    Examples illustrating all pairwise orderings of adjacent elements are in (xx2).

(xx2)   type

    x. *kú*   *ír^{n}ì-mbɔ̀*   [def-n]
       Def   goat-AnPl
       'those (same) goats'

    x. *á:mádú* ^{L}*ìr^{n}ì-mbɔ̀*   [poss-n]
       A ^{L}goat-AnPl
       'Amadou's goats'

    x. *ìr^{n}è:*^{L} *jɛ́mè:*   [n-a]
       goat^L black
       'a black goat'

    x. *ìr^{n}è:*^{L} *jɛ́m-bɔ̀*   *bú-nŭm*   [n-a-num]
       goat^L black-AnPl   AnPl-five
       'five black goats'

    x. *ìr^{n}è:*^{L} *jɛ́m-bɔ̀*   *wɛ̌:-mbɔ̀*   [n-a-poss]

goat^L   black-AnPl   1SgP.AnPl-AnPl
'my black goats'

x.   *írⁿì-mbɔ̀*   *wě:-mbɔ̀*   *bú-nǔm*   [n-poss-num]
     goat-AnPl   1SgP.AnPl-AnPl   AnPl-five
   or:
     írⁿì-mbɔ̀   *bú-nǔm*   *wě:-mbɔ̀*   [n-poss-num]
     goat-AnPl   AnPl-five   1SgP.AnPl-AnPl
     'my five goats'

x.   *[ìrⁿì-mbɔ̀*   *bù-nùm]*^L   *ɔ̀-bɔ́*   [n-num-dem]
     [goat-AnPl   AnPl-five]^L   Prox-AnPl
     'these five goats'

x.   *ìrⁿì-mbɔ̀*^L   *ɔ̀-bɔ́*   *pú→*   [n-dem-'all']
     goat-AnPl^L   Prox-AnPl   all

For optional inversion of adjectives and numerals under certain conditions, see §6.4.2.

‘each’ (distributive quantifier) usually combines with a simple noun (or noun plus adjective): ‘each person’, ‘each big house’. If it occurs later in the NP, it usually means ‘each of …’, as in ‘each of the three women’

6.1.2   Headless NPs (absolute function of demonstratives, etc.)

NPs without an overt noun. Which of the following are possible? Anything unusual about the form?

adjective ('a red one')
numeral ('three')
demonstrative ('this', 'that')
each'
'all'

Give examples in sentences.

Independent Plural (bé) may be identical to a 3Pl (or 2Pl) pronoun, so the issue may be moot.

6.1.3   Bifurcation of relative-clause head NP

If the head NP is clause-internal, the late-NP elements usually appear after the verb, perhaps well-separated from the internal part of the NP. This might perhaps be modeled syntactically by having a Rel node between the NumP and the determiner node, but this would require fairly strange deletions.

Internal portion usually Poss plus NumP, i.e. maximally Poss N-Adj-Num.
Postverbal part usually Dem-Plural-'all'/'each'
Can numerals sometimes appear after the verb?
If postnominal pronominal possessors present, where do they occur?
Cross-ref to fuller discussion, with examples, in chapter on Relativization

6.1.4   Internal bracketing and tone-dropping in unpossessed NP

Leaving possessors out for the time being, the relevant NP components are noun (N), adjective (Adj), numeral (Num), demonstrative (Dem), and 'all', in that (linear) order. Of these, adjectives and demonstratives control tone-dropping on preceding words within the NP. Numerals and 'all' do not interact tonosynactically with other words, except that numerals are targeted by a controller (a demonstrative) to their right. Representative outputs are given formulaically in (xx1), with superscripted ^{L} on the right edge indicating that the word or word-sequence in question has dropped all tones to {L} under the control of the following word. Words without ^{L} are tonally independent, i.e. show their lexical tones. The final word is always tonally free.

(xx1)   N
         N^L Adj
         $[N\ Adj]^L$ Adj
         N Num
         N^L Adj Num
         N^L Dem
         $[N\ Adj]^L$ Dem
         $[N\ Num]^L$ Dem
         $[N\ Adj\ Num]^L$ Dem
         N 'all'
         N^L Adj 'all'
         N Num 'all'
         N^L Dem 'all'

A few examples will be given here; others occur in the relevant sections below. In (xx2) we see that adjectives and demonstratives control tone-dropping on preceding words. The noun is the usual target, but an adjective is also tone-dropped before another adjective (xx2b) or before a demonstrative (xx2d). 'Sheep' is {H}-toned *pédé* lexically'.

(xx2) a. *pèddè*[L]   *bìnɛ́:*
            sheep[L]   big.AnSg
            'a big sheep'

       b. *[pèddè   bìnɛ̀:]* [L]   *jɛ́mɛ̀:*
            [sheep   big]   black
            'a big black sheep'

       c. *pèddè   ɔ̀-ḿ*
            sheep[L]   Prox-AnSg
            'this sheep'

       d. *[pèddè   bìnɛ̀:]*[L]   *ɔ̀-ḿ*
            [sheep   big][L]   Prox-AnSg
            'this big sheep'

Numerals and 'all' do not control tone-dropping on preceding words. A numeral is itself tone-dropped (along with preceding words) when followed by a demonstrative (xx3c). 'All' cannot be followed by a demonstrative.

(xx3) a. *pédù-mbò   bú-tà:ndú*
            sheep-AnPl   AnPl-three
            'three sheep'

       b. *pédù-mbò   pú→*
            sheep-AnPl   all
            'all (the) sheep'

       c. *[pèdù-mbò   bù-tà:ndù]* [L]   *ɔ̀-bɔ́*
            [sheep-AnPl   AnPl-three][L]   Prox-AnPl
            'these three sheep'

   If Adj-Num Inversion occurs in the language, does the N-Num-Adj order result in [N.L Num.L Adj]?
   If there is an 'each' quantifier, does it control tone-dropping? What about 'N Dem each' ?

6.2   Possessives

Nonpronominal NP possessors are always preposed to the possessed NP, in both alienable and inalienable constructions. There is no genitive or possessive morpheme as such. Instead, the preposed possessor controls tone-dropping on the possessed NP.

A pronominal possessor also precedes the possessed NP in the inalienable construction used with kin terms. Otherwise the pronominal possessor is postposed to the core NP (noun plus adjective). Postposed pronominal possessors are still partially segmentable into a pronominal morpheme per se and a possessive classifier (animate/inanimate, singular/plural), but the combinations are not fully transparent.

Inalienable possession: kin terms and a few similar relationship terms ('friend'), which may differ in form from other possessed NPs (alienable).

When the possessor is nonpronominal, it precedes the possessed NP in both alienable and inalienable possession. Usually no Possessive morpheme (cf. English 'of') between possessor and possessed, but Jamsay alienables do have such a morpheme (possessor mà possessed).

When the possessor is pronominal, there may be differences between inalienable and alienable. Sometimes pronominal possessors are postnominal for alienable, but prenominal for inalienable possession. Or all pronominal possessors may be post- or prenominal, but differ in form.

are possessors ever controlloed tonosyntactically by other elements? Try the following:

a) 'your wicked uncle' (i.e. an inalienable with an adjective and with a preposed pronominal possessor that is otherwise H-toned). In several languages a pronominal inalienable possessor is in the domain controlled by an adjective or other postnominal controller, resulting in [PronPoss.L N.L Adj]

b) 'Seydou's wicked uncle'; only Jamsay is known to include a nonpronominal inalienable possessor in the domain controlled by a postnominal controller, resulting in [Seydou.L uncle.L bad.

c) 'your/Seydou's big house'; no cases known where a preposed alienable possessor is in the domain controlled by a postnominal controller

d) various postnominal pronominal possessors (including at least one H-tone element) followed by a demonstrative or relative operator. Here the domain of tone-dropping may include just the appositional or classifying element X like 'thing' in e.g. [house [my thing]], or it may be coextensive with the pronominal possessor (especially when 'my thing' is a fused, unsegmentable

75

form), or it may extend farther left to the possessed noun (or its expansion). I.e. the options are [N [Pron X.L]], [N PronPoss.L], and [N.L PronPoss.L].

6.2.1   Alienable possession

6.2.1.1   Nonpronominal NP as preposed alienable possessor

A preposed possessor NP of an alienable noun (animal, house, etc.) controls **tone-dropping** to {L} on the possessed noun. This is true whether the possessor is a single word, such as a personal name or an undetermined noun, or is itself a multi-word NP (determined, possessed, quantified, etc.). In (xx1), the lexical form of the possessed noun is shown in parentheses.

(xx1)   a.   *á:mádù*   ^L*pèddè*
             A   ^L**sheep**
             'Amadou's sheep-Sg' (*péddè*)

        b.   *[mí*   ^H*bá]*   ^L*ìnjè:*
             [1SgP   ^Hfather]   ^L**dog**
             'my father's dog' (*ìnjɛ̌:*)

        c.   *[nɛ̀*^L   *ɔ̀-ḿ]*   ^L*ùlò*
             [person^L   Prox-AnSg]   ^L**house**
             'this person's house' (*úló*)

'Seydou's house'
'a woman's house'
'[this man's] house'
'the man's house', etc.
    Describe tone contours, with examples.
    Is there a single PTC, e.g. {L} tone contour, or a choice between two or three PTCs?
    In the latter case, what determines which PTC occurs in a given case? Possible factors are: a) whether the possessor is a NP including a determiner and/or a quantifier, or a simple noun or core NP; b) whether the possessor ends in H- or L-tone; c) whether the possessed noun is prosodically light (up to 2 moras) or heavy (3 or more moras).
    If the coexisting PTCs are {H} and {HL}, or {L} and {HL}, is it phonologically reasonable to unify them into a single contour, with the other

surface contour derived by phonological rule? For example, if we get {H} on a prosodically light possessed noun and {HL} on a heavy possessed noun, can we say that the contour is {HL} but that only the {H} part is realized on light possessed nouns? (If trisyllabic CvCvCv is realized as HLL, while bisyllabic CvCv is realized as HH, this won't work.) If the two contours are {HL} and {L}, can we either derive surface {L} by deleting the H-toned element, or derive {HL} from {L} by some kind of tone-spreading? (Usually such phonological analyses don't work well.)

6.2.1.2   Pronominal alienable possessors

A pronominal possessor for an alienable (i.e. anything but a kin term) is **postposed**, following any modifying adjective or numeral but preceding a demonstrative.

(xx1) a. *ùlò*^{L} *bìnɛ́:*   *wě:*
        house^L fat.InanPl   1SgP.InanPl
        'my big houses'

      b. *úló*   *yí-tà:ndú*   *wě:*
        house   InanPl-three   1SgP.InanPl
        'my three houses'

      c. *nà:-mbɔ́*   *bú-tà:ndú*   *wě:-mbɔ̀*
        cow-AnPl   AnPl-three   1SgP.AnPl-AnPl
        'my three cows'

The pronominal originally functioned as possessor of a light noun specified for animacy and number ('critter', 'critters', 'thing', 'things') in apposition to the possessed NP. These light nouns have long since evolved into possessive classifiers. The internal segmentation of the pronoun-classifier combination is now rather opaque. Inanimate plural and animate singular are identical for all pronominal possessors. A **K/W distinction** between Inanimate Sg (*k*-initial) and everything else (*w*-initial) subsists for 1Sg and 3Sg possessors (the two categories that have no pronominal prefix). Even this has been leveled in 1Pl, 2Sg, 2Pl, and 3Pl categories. However, animate plural possessed NPs require Animate Pl suffix *-mbɔ̀* on the possessor: *pédù-mbò wě:-mbɔ̀* 'my sheep-Pl'. The 1Sg pronominal morpheme itself has disappeared segmentally, as in counterparts in some other Dogon languages (Ben Tey, Nanga). 3Sg possessor forms have *-ń* suffixed to the classifying element. (*-ń* occurs without the classifier in inalienable possession, §6.xxx below.) The paradigms are in (xx2).

(xx2) category	InanSg	InanPl	AnSg	AnPl
1Sg	*kɔ̌:*	*wɛ̌:*	*wɛ̌:*	*wɛ̌:-mbɔ̀*
1Pl	*í-gɛ̀*	*í-gɛ̀*	*í-gɛ̀*	*í-gɛ̀-mbɔ̀*
2Sg	*ú-wɔ̀*	*ú-wɔ̀*	*ú-wɔ̀*	*ú-wɔ̀-mbɔ̀*
2Pl	*bí-gɛ̀*	*bí-gɛ̀*	*bí-gɛ̀*	*bí-gɛ̀-mbɔ̀*
3AnSg	*kɔ̀-ń*	*wɛ̀-ń*	*wɛ̀-ń*	*wɛ̀-ń-bɔ̀*
3AnPl	*bú-gɔ̀*	*bú-gɔ̀*	*bú-gɔ̀*	*bú-gɔ̀-mbɔ̀*
InanSg	*kɔ̀-ń*	*wɛ̀-ń*	*wɛ̀-ń*	*wɛ̀-ń-mbɔ̀*
InanPl	*wɛ̀-ń*	*wɛ̀-ń*	*wɛ̀-ń*	*wɛ̀-ń-mbɔ̀*
Logo/3Refl	*à-gà*	*à-gà*	*à-gà*	*à-gà-mbɔ̀*

The third person *-ń* is expanded as *-ní* (subject to lengthening and further tonal changes) in the 'it is' form with final L-tone (*[úló kɔ̀-nî:]=∅* 'it is his/her house') and in conjunctions with final dying-quail intonation (*úló kɔ̀-ní:∴* 'his/her house and …').

The K/W distinction in the 1Sg and 3Sg goes back to a distinction still made in some Dogon languages between *kɔ 'thing' and *yɛ 'things; critter; critters' (cf. *yí-* Inanimate Pl prefix with numerals), though some other data suggest an alternative reconstruction *kɛ 'things'. In forms with pronominal prefixes, it appears that the K and W forms have merged into one or the other of *-wɔ̀*, *-gɛ̀*, and *-gɔ̀*, with the vowel adopting the back/front value of the prefixal vowel.

6.2.1.3   Tone contour of modifiers following an alienably possessed noun

The {L} overlay controlled by a preposed nonpronominal possessor on a possessed noun ('Amadou's house') extends over a following modifying **adjective** as in 'Amadou's big house' (xx1a). There is no clear indication that tone-dropping extends over a **numeral** following the noun. Most numerals have a H-toned classifying prefix and an already {L}-toned stem. The prefix is not tone-dropped due to a possessor. This does not necessarily mean that the numeral stem is not tone-dropped. In most cases it is difficult to tell whether the possessor tone-drops the numeral, since most numeral stems are already {L}-

toned. However, if the optional animate plural *-mbO* is added to the numeral, the lexical tone is clearly audible, as in *tà:ndú-mbɔ̀* 'three' in (xx1b-c).

(xx1) a. *ámàdù*   ^L*[ùlò   dè-ŋgè]*
           A   ^L[house   big-InanSg]
           'Amadou's big house' (*úló*, *dé-ŋgê*)

       b. *ámàdù*   ^L*ùlè: ɲě-tà:ndú-mbɔ̀*
                                            ɲě-tà:ndù
           A   ^Lchildren   Human-six(-AnPl)
           'Amadou's six children' (*ùlé:*)

       c. *ámàdù*   ^L*[ùlè: mɔ̀dù-mbɔ̀]   ɲě-tà:ndú-mbɔ̀*
                                                            ɲě-tà:ndù
           A   ^L[children   nasty-AnPl]   Human-three(-AnPl)
           'Amadou's three nasty children' (*mɔ̀dú-mbɔ̀*)

In the combination Poss-N-Dem, only the noun is tone-dropped. The tone-dropping could be attributed to either the possessor or the demonstrative (or both), so the formula is Poss-^LN^L-Dem.

(xx2) *ámàdù*   ^L*ùlò*^L   *mà-ý*ⁿ
       A   ^Lhouse^L   Dist-InanPl
       'those houses of Amadou' (deictic)

Postposed pronominal possessors (typical of alienable possession) do not control tone overlays, but are included in the domain targeted by a following demonstrative.

(xx3) *[ìrⁿì-mbɔ̀   wè:-mbɔ̀]*^L   *mà-bɔ́*
       [goat-AnPl   1SgP-AnPl]^L   Dist-AnPl
       'those goats of mine' (deictic) (*wɛ̌:-mbɔ̀*)

6.2.2   Inalienable possession

6.2.2.1   Nonpronominal NP as preposed alienable possessor

Nonpronominal NP possessors are preposed, for inalienable as well as alienable nouns: *á:mádú bà* 'Amadou's father', parallel to *á:mádú pèddè* 'Amadou's sheep'. The possessed noun is **tone-dropped** in both cases.

However, if the nonpronominal possessor of a kin term is animate (i.e. human) singular, it is often **resumed** by a suffixed 3Sg possessor form of the kin term: *á:mádú bǎ-n* 'Amadou's father', literally "Amadou father-his." Therefore the pure, unsuffixed, {L}-toned possessed noun is most reliably observed when the possessor is plural, as in *ùlé: bà* 'the father of the children', and its plural *ùlé: bà-mbɔ̀* 'the fathers of the children'.

6.2.2.2 Pronominal inalienable possessors (mostly preposed)

Except for 3Sg, a pronominal possessor is **preposed** to inalienably possessed nouns, and takes the normal nonsuffixal form (independent, preverbal subject). 3Sg possessor, however, is expressed as a simple suffix *-ń* added directly to a {L}-toned noun.

Inalienable possessors are always animate and generally human. There are no classifying elements in the pronominal possessor agreeing with the possessed noun (animate/inanimate, singular/plural). A sample paradigm is that of 'father' in (xx1).

(xx1)   Preposed pronominal possessors with inalienable nouns

category	form	example with 'father'
1Sg	*mí*	*mí bà*
1Pl	*í*	*í bà*
2Sg	*ú*	*ú bà*
2Pl	*bí*	*bí bà*
3Sg	*-ń ~ -ní*	*bà-ń ~ bà-ní*
3Pl	*bú*	*bú bà*
Logo/3Refl	*á*	*á bà*

3Sg *-ń ~ -ní* precedes Animate Pl *-mbO*, the only suffix that it co-occurs with: *bà-ń-bɔ̀* 'his/her fathers'.

Preposed pronominal possessors control {HL} tone overlay on nonmonosyllabic possessed nouns/NPs, but apparent {L} on monomoraic *Cv* and {H} on bimoraic *Cv:*. It is possible that the {L} overlay is really a downstepped {H}. The {HL} overlay contrasts with the {L} overlay controlled by nonpronominal possessors. In (xx2), X stands for any nonpronominal NP possessor ('Amadou', 'my father', etc.).

(xx2) noun gloss X's__ my__ your-Sg__

a. *Cv* possessed noun
bá	'father'	*X* ^{L}*bà*	*mí* ^{L}*bà*	*ú* ^{L}*bà*
sá	'(man's) sister'	*X* ^{L}*sà*	*mí* ^{L}*sà*	*ú* ^{L}*sà*

b. *CvCv* possessed noun
nàr^{n}á	'mother'	*X nàr^{n}à*	*mí* ^{HL}*nár^{n}à*	*ú* ^{HL}*nár^{n}à*
lèdú	'uncle (MoBr)'	*X lèdù*	*mí* ^{HL}*lédù*	*ú* ^{HL}*lédù*

c. heavy possessed noun (trimoraic)
zèŋgé	'great-grandparent'	*X zèŋgè*	*mí* ^{HL}*zéŋgè*	*ú* ^{HL}*zéŋgè*
tòjjé	'grandchild'	*X tòjjè*	*mí* ^{HL}*tójjè*	*ú* ^{HL}*tójjè*
tɔ́gɔ̀rɔ̀	'namesake'	*X tɔ̀gɔ̀rɔ̀*	*mí* ^{HL}*tɔ́gɔ̀rɔ̀*	*ú* ^{HL}*tɔ́gɔ̀rɔ̀*

d. composite possessed noun
bà ^{L} *dé*	'father's elder br.'	*X* ^{L}*[bà dè]*	*mí* ^{HL}*[bá dè]*	*ú* ^{HL}*[bá dè]*

6.2.2.3 Kin terms and similar relationship terms

Kin terms and certain other relationship terms treated as inalienable are listed in (xx1). The 1Sg form is paralleled by the other categories with preposed possessors, while the suffixed 3Sg presents some irregularities.

(xx1) gloss noun after NP 1Sg 3Sg

a. NP possessor not resumed by 3Sg suffix
gloss	noun	after NP	1Sg	3Sg
'father'	*bá*	*X* ^{L}*bà*	*mí* ^{L}*bà*	*bà-ń*
'(man's) sister'	*sá*	*X* ^{L}*sà*	*mí* ^{L}*sà*	*sà-ń*
'mother'	*nàr^{n}á*	*X* ^{L}*nàr^{n}à*	*mí* ^{HL}*nár^{n}à*	*nà-ń*
'uncle' (MoBr)	*lèdú*	*X* ^{L}*lèdù*	*mí* ^{HL}*lédù*	*lèdì-ń*
'grandmother'	*tèré*	*X* ^{L}*tèrè*	*mí* ^{HL}*térè*	*tèrè-ń*
'(woman's) brother'	*sàr^{n}á*	*X* ^{L}*sàr^{n}à*	*mí* ^{HL}*sár^{n}à*	*sàr^{n}à-ń*
'same-sex elder sib'	*dèré*	*X* ^{L}*dèrè*	*mí* ^{HL}*dérè*	*dèrè-ń*
'same-sex y. sib'	*ǹdó*	*X* ^{L}*ǹdò*	*mí* ^{HL}*ńdò*	*ǹdò-ń*
'husband'	*ɔ̀ngɔ́*	*X* ^{L}*ɔ̀ngɔ̀*	*mí* ^{HL}*ɔ́ngɔ̀*	*ɔ̀ngɔ̀-ń*

b. NP possessor resumed by 3Sg *-ń*
gloss	noun	after NP	1Sg	3Sg
'neighbor'	*zú*	*X* ^{L}*zù-ń*	*mí* ^{L}*zù*	*zù-ń*
'cross-cousin'	*té:*	*X* ^{L}*tè:-ń*	*mí* ^{H}*té:*	*tè:-ń*

81

'sib-in-law'	*gá:*	*X* ^L*gà:-ń*	*mí* ^H*gá:*	*gà:-ń*
'pat. grandfather'	*pàpá*	*X* ^L*pàpà-ń*	*mí* ^H*pápá*	*pàpà-ń*
'great grandfather'	*zèŋgé*	*X* ^L*zèŋgè-ń*	*mí* ^H*zéŋgé*	*zèŋgè-ń*
'grandchild'	*tòjjé*	*X* ^L*tòjjè-ń*	*mí* ^H*tójjé*	*tòjjè-ń*
'parent-in-law'	*òmlé:*	*X* ^L*òmlè:-ń*	*mí* ^H*ómlé:*	*òmlè:-ń*
'namesake'	*tógòrò*	*X* ^L*tògòrò-ń*	*mí* ^{HL}*tógòrò*	*tògòrò-ń*
'friend'	*àngé*	*X* ^L*àngè-ń*	*mí* ^H*ángé*	*àngè-ń*
'great great grandf.'	*kùmbó*	*X* ^L*kùmbò-ń*	*mí* ^H*kúmbó*	*kùmbò-ń*

'nephew/nice' (SiCh)	sà-íyɛ́	X sà-ń yɛ̀	mí sá-ìyɛ̀	sà-ń yɛ̀
'co-wife'	yà-lòwé	X yà-lòwè-ń		
			mí yá-lòwè	yà-lòwè-ń
'Mo's y. sister'	nà sĕ:	X nà sɛ̀:	mí nárⁿá sègè	

Animate plural *-mbo* ~ *-mbɔ* can be added. This suffix follows the 3Sg suffix.

(xx2) a. *mí   lédú-mbò*
           1SgP   uncle-AnPl
           'my (maternal) uncles'

       b. *lèdĭ-n-bò*
           uncle-3SgP-AnPl
           'his/her uncles'

Treated as alienable, even in kinship contexts, are *èdɛ́* 'child' and *yǎ* 'woman, wife',

Present a full list of kin terms plus any other relationship terms like 'friend' that constitute a special set of "inalienable" nouns. Give both unpossessed and possessed forms, which should differ in tones. A few may also differ segmentally (final vowel shifts, or a human Sg or Pl suffix occurs only in one of the forms).

List "kinship" terms that are not grammatically inalienable: perhaps 'child', 'wife' (= 'woman'), 'agemate', 'friend', 'co-wife', 'stepmother (= mother's co-wife)'.

6.2.2.4   Tone contour of modifiers following an inalienably possessed noun

With an inalienably possessed noun, a following modifying adjective is not included in the target domain of a possessor-controlled overlay. Instead, the

adjective controls tone-dropping on the noun, and if the possessor is a preposed pronoun, otherwise H-toned, the possessor is included in the target domain of the adjective. Contrast (xx1a) with unmodified *mí* ^{HL}*lédù* 'my maternal uncle'. A nonpronominal possessor like 'Amadou' in (xx1a) is not tone-dropped, and in such combinations the noun could be analysed as being tone-dropped by either or both the possessor and the adjective.

(xx1)   a.   *[mì   lèdù]*^L   *mɔ̀dé:*   *ǹ*
             [1SgP   uncle]^L   nasty   Def
             'my nasty uncle'

        b.   *ámàdù   *^L*lèdù*^L   *mɔ̀dé:*   *ǹ*
             A   ^Luncle^L   nasty   Def
             'Amadou's nasty uncle'

Given that inalienable possessors have very limited control powers, confined to the noun at best, they certainly do not control tones on other postnominal modifiers. The numeral is (xx2a) is therefore tonally unaffected by the possessor. In (xx2b), we see that the special tone overlay controlled by pronominal possessors takes precedence over tone-dropping induced by the demonstrative. In (xx2c), the tonosyntax is subtle but it appears that the demonstrative tone-drops the immediately preceding numeral, which is outside of the domain targeted by the possessor
.

(xx2)   a.   *mí   lédù-mbò   ɲě-tà:ndù*
             ámàdù   lèdù-mbò   "
             1SgP / A   uncle-AnPl   Human-three
             'my/Amadou's three uncles'

        b.   *mí   *^{HL}*lédù   mà-ḿ*
             1SgP   ^{HL}uncle   Dist-AnPl
             'that uncle of mine' (deictic)

        c.   *ámàdù   *^L*lèdù-mbò*^L   *ɲě-kùlè*^L   *mà-bɔ́*
             A   ^Luncle-AnPl^L   Human-six^L   Dist-AnPl
             'those six uncles of Amadou's' (deictic)

The unusual suffixed 3Sg inalienable possessor *-ń* ~ *-ní* is always added to the noun directly, and it may be followed by modifiers (often with final definite *ǹ*). In (xx3a), the adjective controls tone-dropping on the possessed noun, elsewhere *lèdù-ń*. There is no tonal interaction between the possessed noun and the numeral in (xx3c).

(xx3)   a.   *lèdù-n*^L   *mɔ̀dɛ́:*   *ǹ*

uncle-3SgP^L   nasty   Def

'his/her nasty uncle' (*lèdù-ń*)

b.   *lèdù-n*^L   *mà-ḿ*

uncle-3SgP^L   Dist-AnSg

'that uncle of his/hers' (*lèdù-ń*)

c.   *lèdú-mbò-ń*   *ɲě-kúlé*

uncle-AnPl-3SgP   Human-six

'his/her six uncles'

6.2.3   Recursive possession

usually straightforward

'Seydou's dog's head'   *e.g. [[S dog.(H)L] head.(H)L]*
 'my dog's head'   *e.g. [[1SgPoss dog.(H)L] head.(H)L]*
                               or [dog 1SgPoss] head.(H)L]

'Seydou's father's uncle' *e.g. [S father.(H)L] uncle.(H)L]*
'my father's uncle'   *e.g. [1SgPoss father.(H)L] uncle.(H)L]*
                               or [fath

6.3   Core NP (noun plus adjective)

6.3.1   Noun plus regular adjective

The order is noun-adjective. The adjective agrees with the noun in animacy and number, though for some nouns (like *úló* 'house') and some adjectives (like *kàndá* 'new') the distinction between Inanimate Sg and Inanimate Pl is covert. The noun is tone-dropped before the adjective. Besides *úló*, the nouns used here are *úndú-gó* (plural *úndɛ́:*) 'calabash' and *írⁿè:* (plural *írⁿì-mbɔ̀* ~ *ín-bɔ̀*) 'goat'.

(xx1)   a.   *ùlò*^L   *dɛ́-ŋgɛ́*   'big house'
              ùlò^L   *dɛ́*   'big houses'

b.   *ùndù-gò*^L *sɛ́-ŋgɛ́*   'good calabash'
              ùndè:^L   *sɛ́*   'good calabashes'

84

c. *ìrⁿè:* ^L   *kàndá*   'new goat'
    ìn-bɔ̀ ^L   *kàndà-mbɔ́*   'new goats'

d. *ùlò* ^L   *kàndá*   'new house'
    "   "   'new houses'

The end of the noun is optionally reduced before the adjective. This reduction can take the form of **omitting an Inanimate Sg or Animate Pl** suffix (*ìn* ^L *kàndà-mbɔ́*), or reducing e.g. final long *e:* to a short high vowel as though before a suffix (*ùndù* ^L *sɛ́*).

6.3.2   Adjective *gàrá:* 'certain (ones)'

gàrá: is used, often in two parallel phrases, to divide a group into subsets (or individuals), or to divide a mass into portions. The most common form is Animate Pl *gàrà-mbɔ́* (xx1a). Inanimate Pl gàrá: can be used with masses ('water', 'sugar') that are treated grammatically as plurals in TU (xx1b). Animate Sg *gàrá:* occurs in *ɲè gàrá:* 'a certain person' (note the tone-dropped noun). An Inanimate Sg form could not be elicited. *gàrá:* can also be used as an adverb 'sometimes' (by extension 'maybe'), presumably reduced from a noun-adjective phrase with a noun like 'time' (xx1c).

(xx1) a. *gàrà-mbɔ́*   *yé-yà-dà,*
           certain-AnPl   go-Perf1a-3PlS,
           gàrà-mbɔ́   *yé*   *b-è:*
           certain-AnPl   Exist   be-3PlS
           'Some (people) have left, some (others) are (still) around.'

       b. *gàrá:* *yàm-â:-y,*   *gàrá:*   *síyɛ́-ẁ*   *bù-∅*
           some be.ruined-Perf1a-3SgS, **some**   good-<mark>xxx</mark> be-3SgS
           'Some (of it) is spoiled, some (the rest of it) is good.

       c. *gàrá:* *ŋgɔ́* *bírà-m-nè-yⁿ,*   *gàrá:*   *má:*   *bírà-m-nè-yⁿ*
           some here   work-Impf-1PlS, **some**   there   work-Impf-1PlS
           'Sometimes we work here, sometimes (=at other times) we work over there.'

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

In a sequence of noun plus two or more adjectives, the final word keeps its lexical tones and the noun and nonfinal adjectives are tone-dropped.

(xx1) a. *[ùlò   dὲ-ŋgὲ]*^L   *píl-gɔ̀*
         [house   big-InanSg]^L   white-InanSg
         '(a) big white house' (*úló*, *dέ-ŋgέ*)

      b. *[nà:(-mbɔ̀)   bìn-bɔ̀]*^L   *jέm-bɔ̀*
         [cow(-AnPl)   fat-AnPl]^L   black-AnPl
         'big (=fat) black cows' (*nǎ:*, *nà:-mbɔ́*, *bǐn-bɔ̀*)

Unless a noun-adjective combination is more or less lexicalized, the order of adjectives is flexible. One could therefore switch 'big' and 'white' in (xx1a), and 'fat' and 'black' in (xx1b). As in (xx1a-b), only the final adjective would show its lexical tones.

6.3.3.2 Adjectival intensifiers

Brief reference here; full coverage in Chapter 8 under expressive adverbials.

6.3.3.3 'Good to eat'

A verbal noun may be added to an adjectival predicate (xx1).

(xx1) *[kà:*^L   *ɔ̀-ḿ]*   *kúbú-lé*   *ɛ̂l=∅*
         [grasshopper^L   Prox-AnSg]   eat.meat-VblN   sweet=it.is
         'This grasshopper (species) is good to eat.'

6.4 N(-Adj) plus numeral

6.4.1 Ordinary numerals

A core NP (noun, or noun plus one or more adjectives) may combine with a following numeral. Numerals from '2' to '10' have a special set of prefixes to agree with the animacy (human, animate, inanimate) of the core NP (§4.7.1.2).

The Human prefix is identical to _ɲě_ 'person', and is optional after a plural-marked noun (xx1a). The Animate and Inanimate prefixes are used more systematically (xx1b-c). There is no tonal interaction between the numeral and the preceding core NP. Plural noun _nù-mbɔ́_ 'people' is omitted in favor of the Human prefix (xx1d).

(xx1) a. _yà-mbɔ́_   _(ɲě-)nŭm_
        woman-AnPl   (Hum-)five
        'five women'

      b. _cĭn_   _yí-nŭm_
        stone   InanPl-five
        'five stones'

      c. _nàː(-mbɔ̀)_   _bĭn-bɔ̀_   _bú-nŭm_
        cow(-AnPl)   fat-AnPl   AnPl-five
        'five fat cows'

      d. _ɲě-nŭm_
        Hum-five
        'five people'

When a NumP is itself in a tone-dropping position (as when followed by a demonstrative), tone-dropping applies simultaneously to the numeral and to the core NP.

with following demonstrative (and Definite morpheme?), or as head of relative, the core NP and the numeral are (simultaneously, and independently) tone-dropped.

when NP is head of relative clause, numeral remains with head NP inside the clause rather than being shifted to post-participial position.

some languages allow numerals to have a "relay" function, allowing a post-NumP pronominal possessor to control {L} tones on the other words in the NumP. In this case, either the numeral itself appears with {LH} contour, analysable as a continuation of the broader {L} contour plus an extra final H-tone, or it appears with its lexical tones.

6.4.2   Adjective-Numeral Inversion

In the presence of a determiner, possessor, or relative operator (i.e. as head of a relaive clause), an adjective and a numeral are optionally inverted. In the absence of such a reference-restricting element, (xx1a) has fixed N-Adj-Num order. When a demonstrative is added, either N-Adj-Num-Dem (xx1b) or N-Num-Adj-Dem (xx1c) is possible.

(xx1)   a.   *ùlò*^L   *dɛ́*   *yí-nǔm*
             house^L   big.InanPl   InanPl-five
             'five big houses'

        b.   *[ùlò*   *dè*   *yì-nùm]*^L   *yí*
             [house   big.InanPl   InanPl-five]^L   DemDef.InanPl
             'those five big houses'

        c.   *[ùlò*   *yì-nùm*   *dɛ̀]*^L   *yí*
             [house   InanPl-five   big.InanPl]^L   DemDef.InanPl
             [= (b)]

The variant ordering of adjective and numeral in (xx1b-c) suggests that in the presence of a reference restrictor, a numeral is treated syntactically (at least for linearization purposes) as an adjective. It was noted above that in N-Adj-Adj combinations, there is no fixed order of the two adjectives (exept when a N-Adj phrase is lexicalized). When a second adjective is added to (xx1b-c), all six possible orders of the adjectives and the numeral are possible (xx2). The noun and all three following modifiers are tone-dropped.

(xx2)   a.   *[ùlò*   *bìnɛ̀:*   *yì-nùm*   *pìlɛ̀:]*^L   *yí*
             [house   fat.InanPl   InanPl-five   white.InanPl]^L DemDef.InanPl
             'those five big white houses'

        b.   *ùlò bìnɛ̀:   pìlɛ̀:   yì-nùm yí*
        c.   *ùlò pìlɛ̀:   yì-nùm bìnɛ̀:   yí*
        d.   *ùlò pìlɛ̀   bìnɛ̀:   yì-nùm yí*
        e.   *ùlò yì-nùm pìlɛ̀:   bìnɛ̀:   yí*
        f.   *ùlò yì-nùm bìnɛ̀:   pìlɛ̀:   yí*

88

6.5   NP with determiner

6.5.1   Prenominal *ko* 'the (afore-mentioned)'

(Add tone, variably H or L)

>*ko (ku) before a noun is discourse-definite ('that [same] ...')*
>*Is there a tonal distinction (on the following noun) between true Nonhuman or Inanimate possessor ko 'its' and this demonstrative-like ko ?*
>*Can this (originally possessor) element now co-occur with an authentic possessor (NP or pronoun)? If so and if both are prenominal, in which order?*
>*There is potentially a bracketing issue, since a NP-initial ko could have scope over either the immediately following possessor, or over the entire possessed NP. It may be possible to have double ko marking*

>*definite ko plus possessor:*
>*[ko [Seydou X.(H)L]   'that X of Seydou's*
>*[ko [ko X.(H)L]]   'that X of it(s)' (inner ko is possessor)*

>*recursive possession with two definite ko's*
>*[ko [[ko X(H)L] Y.(H)L]]   'that (same) Y of that (same) X'*

6.5.2   Postnominal demonstratives

A postnominal demonstrative pronoun (for the forms, see §4.4.1.2) follows a core NP, a NumP, or a possessed NP. In (xx1), it follows a core NP, i.e. a noun (xx1a) or a N-Adj combination (xx1b). The demonstrative **controls tone-dropping** on at least the final word of the core NP. In (xx1b) we cannot determine whether the adjective or the demonstrative controls tone-dropping on the noun. The forms without the demonstrative are given in parentheses.

(xx1)   a.   *ùlò*^L   *yí*
             house^L   DemDef.InanPl
             'those houses' (*úló*)

     b.   *[ùlò   dè]*^L   *yí*
             [house   big.InanPl]^L   DemDef.InanPl
             'those big houses' (*ùlò*^L *dɛ́*)

In (xx2), the demonstrative follows a NumP. Both the core NP (or at least its final word) and the numeral are tone-dropped under the control of the demonstrative.

(xx2) a. *[ùlò   yì-nùm]*^L   *yí*
           [house   InanPl-five]^L   DemDef.InanPl
           'those five houses' (*úló yí-nŭm*)

       b. *[ùlò   bìnè: yì-nùm]*^L   *yí*
           [house   fat.InanPl   InanPl-five]^L   DemDef.InanPl
           'those five big houses' (*ùlò bìné: yí-nŭm*)

See §6.4.2 above for optional reordering of the adjective and numeral in examples like (xx2b).

   In (xx3), the demonstrative follows a possessed NP. In this combination, the demonstrative does not control tones on preceding words. Instead, **the demonstrative is itself tone-dropped**, e.g. *kù* for *kú*. This happens whether the possessor is pre- or postposed to the core NP.

(xx3) a. *úló   kɔ̌:*   ^L*kù*
           house   1SgP.InanSg   ^LDemDef.InanSg
           'that house of mine'

       b. *[mí   *^H*bá]*   ^L*ùlò*   ^L*kù*
           [1SgP   ^Hfather]   ^Lhouse   ^LDemDef.InanSg
           'that house of my father's'

       c. *ùlò*^L   *bìné:*   *wě:*   ^L*yì*
           house^L   fat.InanPl   1SgP.InanPl   ^LDemDef.InanPl
           'those big houses of mine'

       d. *nà:-mbɔ́   bú-tà:ndú   wě:-mbɔ̀   *^L*bù:*
           cow-AnPl   AnPl-three   1SgP.AnPl-AnPl   ^LDemDef.AnPl
           'those three cows of mine'

For demonstratives following the verbal participle in a relative clause, see §14.xxx.

When a NP functioing as head of a relative clause contains a demonstrative ('this dog that you see'), after bifurcation the demonstrative is separated from the head NP within the clause, and appears (along with other late-NP elements) after the verbal participle. See chapter 14 on relativization.

6.5.3   Postnominal definite morpheme (*ǹ*)

Definite *ǹ* may follow a simple noun (xx1a), a N-Adj core NP (xx1b), a NumP (xx1c), a possessed NP (xx1d-e), or a demonstrative (xx1f). *ǹ* has a single invariant form, not agreeing with the NP in animacy or number. It has no effect on the tones of preceding words.

(xx1)   a.   *úló*   *ǹ*
             house   Def
             'the house', 'the houses'

        b.   *ùlò*^L   *bǐn-gɔ̀*   *ǹ*
             house^L   fat-InanSg   Def
             'the big house'

        c.   *úló*   *yí-tà:ndú*   *ǹ*
             house   InanPl-three   Def
             'the three houses'

        d.   *mí*   ^H*bá*   *ǹ*
             1SgP   ^Hfather   Def
             'my father (definite)'

        e.   *nǎ:*   *wě:*   *ǹ*
             cow   1SgP.AnSg   Def
             'my cow (definite)'

        f.   *nà:*   *ńné*   *ǹ*
             cow   DemDef.AnSg   Def
             'that cow (definite)'

For *ǹ* after a participle in a relative clause, see §14.xxx.

Head NPs of relative clauses are bifurcated. Definite morphemes, like demonstratives and other late-NP elements, occur after the verb(-participle), perhaps some distance from the clause-internal part of the head NP; see §14.6.

6.6   Universal and distributive quantifiers

6.6.1   'All' (*pú→*)

The common universal quantifier ('all') is *pú→*, a regional form (also in Fulfulde and many Dogon languages). The preceding word is normally tone-dropped, but it may be that this is really an intonational effect, lowering the pitch of the preceding word in order to emphasize *pú→*. In (xx1a), for example, 'millet' is separated from *pú→* by a modifier and is not tone-dropped. In (xx1b), 'birds' is tone-dropped (or pitch-lowered) directly before *pú→*.

(xx1)   a.   *[yɔ́   à-gà   pú→]   dɔ̀rⁿɔ́-tì-∅*
                [millet   3Refl-Poss   all]   sell-Perf1b-3SgS
                'He has sold all his millet.'

         b.   *[àdù-mbò^L pú→]   kíll-í:-yà-dà*
                [bird-AnPl^L all]   fly-MP-Perf1a-3PlS
                'All the birds flew away.' (*àdù-mbó*)

pú→ can optionally be treated morphologically like a nonsingular numeral, with a numeral classifying prefix (xx2a-b). Following H-toned *yí-* or *bú-*, *pú→* is pronounced with somewhat lowered pitch, similar to downstep on tonal systems.

(xx2)   a.   *ùlò^L yí-pú→*
                house^L Inan-all
                'all the houses that you-Sg see' (*úlɔ́*)

         b   *ùlè:^{L} bú-pú→*
                house^L An-all
                'all the children that you-Sg see' (*úlé:*)

6.6.2   'Each' (*kámá*)

Distributive 'each' and universal 'all, every' are not consistently distinguished. In (xx1a), the first version has just the singular noun 'child' plus *pú→* 'all, every'. In this combination, the usual pitch-lowering of the preceding word does not apply, possibly because 'each child' is less emphatic than 'all the children'. The alternative, explicitly distributive version has {L}-toned 'child' followed by *kámá* 'each' plus *pú→*.

(xx1) a. *[èdɛ́   pú→] sùŋgó   lêy-lêy   ᴸǹd-à:*
      *[èdɛ̀*ᴸ *kámá   "]   "   "   "*
      [child(ᴸ) each   all]   hundred two-two ᴸgive.Perf-3PlS
      'They gave 200 (riyals, i.e. 1000 CFA) to each child.'

ɲì kámá   (pú→) 'each person'

Some Dogon languages have no specifically distributive
there is not always a sharp semantic distinction between 'each' (distributive)
and 'all' (universal)

the 'each' quantifier is most often directly combined with a core NP (noun plus
any adjectives).

tone-dropping effect on final word in core NP?

partitive construction 'each of us', 'each of those three sheep'

6.6.3   Universal and distributive quantifiers with negation

bàrà-lí-∅   'he didn't help'
péy→ bàrà-lí-∅   'he didn't help at all'

6.7   Accusative (*gì*)

Accusative *gì* can be added to NPs in object function. It is optional, even with pronouns, and is absent in most elicited utterances. It is NP-final, like a postposition, and so it follows any determiners or quantifiers. Objects of imperative verbs are treated like those of indicative verbs.

(xx1) a. *[ìɲjè-mbɔ́   pú→   (gì)]   yí-bù-m*
      [dog-AnPl   all   (Acc)]   see-Past-1SgS
      'I saw the dogs.'

    b. *[mí   (gì)]   yí-bì-∅*
      [1Sg   (Acc)]   see-Past-3SgS
      'He/She saw me.'

c. *[ìnjɛ̌: ǹ (gì)] búndó*
[dog Def (Acc)] hit.Imprt
'Hit-2Sg the dog!'

d. *[ìnjɛ̌:-mbɔ́ pú→ (gì)] búndó*
[dog-AnPl all (Acc)] hit.Imprt
'Hit-2Sg all the dogs!'

7 Coordination

7.1 NP coordination

7.1.1 NP conjunction ('X and Y')

NP conjunction (not applicable to clauses) is expressed prosodically, by lengthening the word-final vowel (or sonorant) of each conjunct and dropping the pitch. This is indicated in transcriptions by adding ∴ ("dying quail" intonation) to the otherwise normally transcribed form. The gloss in interlinears is ".&". The duration and pitch fall are most pronounced on the left conjunct, which is clearly distinct from the simple vowel length and final L-tone of the 'it is' clitic. Conjunctions may be extended by adding a third conjunct (xx1e).

(xx1)   a.   *ú.∴*   *mí.∴*
              2Sg.&   1Sg.&
              'you-Sg and me'
              (phonetic [úūù mîì])

      b.   *yà-mbɔ́.∴*   *árⁿá-mbɔ̀.∴*
              woman-AnPl.&   man-AnPl.&
              'women and men'
              (phonetic [jàmbɔ́ɔ̀árⁿàmbɔ̀ɔ̀])

      c.   *yǎ.∴*   *árⁿà.∴*
              woman.&   man.&
              'a woman and a man'
              (phonetic [jàáàárⁿàà])

      d.   *yɔ̌.∴*   *éyⁿ.∴*
              today.&   tomorrow.&
              'today and tomorrow' (*yɔ̌:*, *éyⁿ*)
              (phonetic [jɔ̀ɔ́ɔ̀éĵⁿj̀ⁿ])

      e.   *yà-mbɔ́.∴*   *árⁿá-mbɔ̀.∴*   *ùlé.∴*
              woman-AnPl.&   man-AnPl.&   children.&
              'women and men and children'
              (phonetic [jàmbɔ́ɔ̀árⁿàmbɔ̀ɔ̀ùléè])

7.1.1.1 Ordering of coordinands

The order of conjuncts is not fixed. For 'you and I' my assistant prefers the order 1Sg, 2Sg (*mí∴ ú∴*) but accepts the other order

7.1.1.2 'X and Y' with a modifier or postposition

A conjoined NP is occasionally combined with a preceding or following possessor that is not repeated on each conjunct, though the repeat phrasing is usually preferred when it is logically possible.

When the unrepeated possessor precedes, my assistant did not apply the usual tone-dropping to the possessed nouns (xx1b). In other words, the conjoined NP constitutes a tonosyntactic island (shown in ⊂…⊃) that cannot be modified tonally. The issue is moot regarding postposed possessors, which do not affect the tones of possessed nouns (xx1a).

(xx1)   a.   *[pédù-mbò∴   írⁿù-mbɔ̀∴   wɛ̆:-mbɔ̀]   yǎy-yà-dà*
           [sheep-AnPl.&   goat-AnPl.&   1SgP-AnPl]   go-Perf1a-3PlS
           'My sheep and goats have gone.'

      b.   *[ámádú   ⊂pédù-mbò∴   írⁿù-mbɔ̀∴⊃]   yǎy-yà-dà*
           [Amadou   ⊂sheep-AnPl.&   goat-AnPl.&⊃]   go-Perf1a-3PlS
           'Amadou's sheep and goats have gone.'

Similarly, when a conjoined NP functions as relative-clause head, it is not subject to tone-dropping. See §14.2.3 for this combination.

Other types of modifier (demonstrative, modifying adjective, 'all') were repeated by my assistant in conjunctions ('the black sheep and the black goats' rather than 'the black [sheep and goats]').

7.1.2 "Conjunction" of verbs or VP's

There are no conjunctions of verbs, VPs, or clauses comparable to the NP conjunction type described above. Instead, various chaining and subordinating constructions occur (§15.1-2).

7.2 Disjunction

7.2.1 'Or' (*mà*) with NPs

The disjunctive particle *mà* can follow both coordinands, so 'X or Y' is expressed as *[X mà] [Y mà]*. In elicited examples, mà is intonationally prolonged (*mà→*) with pronouns but not with other NPs.

The examples in (xx1) are constructed in such a way that the disjunction is clearly among NPs rather than clauses.

(xx1) a. *[lὲːgé pú→][pédé mà] [íné: mà] sὲmà-m-nɔ̀-m*
[day all] [sheep or] [goat or] slaughter-Impf-Impf-1SgS
'Every day I slaughter (either) a sheep or a goat.'

b. *[mí mà→] [ú mà→] éyⁿ mǎ: ò-m-dɔ̀-∅*
[1Sg or] [2Sg or] tomorrow there go-Impf-Impf-3SgS
'You-Sg or I will (i.e. should) go there tomorrow.'

c. *[pédé-mbò bú-tàːndù mà] [bú-kὲdὲ mà] ὲbà-m-nɔ̀-m̀*
*[*sheep-AnPl An-three or] [An-four or] buy-Impf-Impf-1SgS
'I will buy three or four sheep.'

7.2.2 Clause-level disjunction

mà can also be used in clause-level disjunctions. However, in this case there is no clear difference between disjunction and polar interrogation. In elicited examples, *mà* is grouped prosodically with the preceding clause and is intonationally prolonged. It is usually not repeated after the second clause.

(xx1) *[éyⁿ wáː-m̀-nɔ̀-wⁿ mà→] [úló bὲ-m-nɔ̀-wⁿ↑]*
[tomorrow come-Impf-Impf-2SgS or] [house stay-Impf-Impf-2SgS
'Will you come tomorrow, or will you stay at home?'

8   Postpositions and adverbials

The morphologically simple postpositions are instrumental-comitative *ni:* and locative *nè* ~ *rⁿè* and *bàrì*. One could add accusative *gì* (§6.7) which patterns as a postposition.

Some spatial relationships are expressed by intransitive or transitive verbs of position, especially in stative form, rather than by postpositions. Examples are *tárà* 'be on (wall or similar vertical plane)', *dúŋà* 'be (placed) on', *náŋgà* 'be (put) up on', and *túnà* 'be (put) inside/underneath'. These can be combined with simple locative PPs, as in *[nìŋgé rⁿè] náŋgà* 'be (put) on a mat'.

8.1   Dative and instrumental

8.1.1   Dative absent

There is no dedicated dative postposition. Ditransitive 'give' and 'show' treat the recipient as a direct object, with optional accusative *gì* (xx1ab).

(xx1)   a.   *[màŋgòró   túr-gɔ̀]*   *[séydù   gì]*   *ńdá*
                [mango   one-InanSg]   [S   Acc]   give.Imprt
                'Give-2Sg Seydou one mango!'

         b.   *[úló   kɔ̌:]*   *[mí   bà   (gì)]*   *tàgà-m*
                [house   1SgP-Poss.InanSg][1SgP   father   Acc]   show.Perf-1SgS
                'I showed my house to my father.'

Wiith verbs of speaking, the indirect object (i.e. addressee or conversational partner) is expressed with *bènè* 'chez' (§8.2.4).

8.1.2   Instrumental or comitative (*ni:*)

This postposition is used prototypically with tools and similar instruments. The postposition acquires its tone by spreading from the final tone of the complement NP. Instrumental function is illustrated in (xx1).

(xx1) a. *[bé: ní:]   ìnjĕ: púŋgó-tì-m*
[stick   with]   dog   beat-Perf1b-1SgS
'I beat the dog with a stick.'

    b. *[pólgó   ní:]   nàmá   kédé-tì-m*
[knife   with]   meat   cut-Perf1b-1SgS
'I cut (sliced) the meat with a knife.'

    c. *[[àmàdú   ^Lpòlgò]   nì:]   nàmá   kédé-tì-m*
[[A   ^Lknife]   with]   meat   cut-Perf1b-1SgS
'I cut (sliced) the meat with Amadou's knife.'

An alternative is to replace the instrumental postposition with a subordinated verb *ɲà:-gín*, literally 'take (and then …).

    With human (including pronominal) complements, *ni:* means 'with, in the presence of'.

(xx2) a. *[mí   ní:]   bèrú: bù-∅*
[1Sg   with]   near   be-3SgS
'He/She is near/beside me.'

    b. *[í   ní:]   bù-∅*
[1Pl   with]   be-3SgS
'He/She is with us.'

The phrase 'by force' is *pàŋgá ní:*

8.2   Locational postpositions

8.2.1   Locative, allative, and ablative functions

As with other languages of the zone, directionality ('to' or 'from' as opposed to 'in, at') is expressed by verbs rather than by postpositions.

8.2.2   Simple and complex PPs

There are a few simple postpositions. Complex postpositions are generally of the form 'in/at [the X of Y]' or a slight reduction thereof, cf. English *in front/back of* and *beside*. These complex postpositions generally end in locative *nè*.

8.2.3   Basic locative postpositions

8.2.3.1   Locative (*nè* ~ *rⁿè*)

nè occurs in a wide range of locative contexts, and can be translated contextually as 'in, at, on' as well as allative and ablative counterparts. It is the most common locative marker. My assistant sometimes pronounces it as *rⁿè*.

(xx1)   noun   locative   gloss

           dámbá   *dámbá nè*   'in the village'
           sògó   *sògó nè*   'at the well'
           úló   *úló nè*   'in/at the house'
           ládúgɔ́   *ládúgɔ́ nè*   'on the roof'

With nouns denoting locations, like 'village' and 'outback', the locative postposition may be omitted, especially with a verb of stance or motion or with the 'be' quasi-verb.
    An informant rejected the locative postposition with temporal NPs like 'at night' and 'in/during the rainy season' (xx2a).

(xx2)   a.   *dèndɛ́*   *bírá:*   *bírà-ŋù-m*
            night   work(n.)   work-ImpfNeg-1SgS
            'I don't work at night.'

      b.   *zìnɛ́*   *[nù-mbɔ́*   *pú→]*   *ándà*   *ò-m-d-ɛ̀*
            rainy.season   [person-AnPl   all]   field   go-Impf-Impf-3PlS
            'In/During the rainy season, everyone goes to the fields.'

8.2.3.2   Displaced locative (*bàr* ~ *bàrì*)

This postposition is similar in meaning to *nè*. It adds an extra nuance, namely displacement from the current deictic center. Compare English *over* as in *over in Boston*, spoken from a nearby city.

(xx1)   a.   *[dámbá*   *nè / bàr]*   *bù-m*
            [village   in / in]   be-1SgS
            'I am in the village.'

b. *[dámbá   nè / bàr]   ó-ŋù-m*
   [village   in / in]   be-ImpfNeg-1SgS
   'I am not going to the village.'

8.2.3.3   Locative postpositions with place names

Since place names are intrinsically locative, adding a postposition is usually unnecessary. In (xx1a), no postposition appears, but *bàr* occurs in (xx1b). The data were elicited in Sevare. *bàr* appears to be used when the location is displaced from the place of the speech event.

(xx1)   a. *sèwà:ré   bù-∅*
           Sevare   be-3SgS
           'He/She is in Sevare (city).'

        b. *ìnjĕ: [mó:tù   bàr]   bù-∅*
           dog   [Mopti   in]   be-3SgS
           'The dog it in Mopti (city).'

8.2.4   'Chez' (*bènè* ~ *bìnè* ~ *bèrⁿè*)

This postposition could possibly be interpreted as containing locative *nè*. However, *bì* has no independent meaning, and an assistant rejected *[X bì bàr]*. The sense is usually 'chez X', i.e. 'at the house of X' (xx1a) or 'in the presence of X'. A slight extension of 'in the presence of X' is the use of *bìnè* to denote the interlocutor with a verb of speaking (xx1b).

(xx1)   a. *[ú   bènè]   ɲá-m   sɔ̀-m*
           [2Sg   chez]   eat-Impf   have-1SgS
           'I am eating at your house.'

        b. *ǹjé   [ú   bènè]   ɔ̀rì:-∅ꜛ*
           what?   [2Sg   chez]   say.Perf-3SgS
           'What did he/she say to you-Sg?'

The 3Sg form is *ńné bènè* 'chez him/her'.

8.2.5 'Inside X' or 'between X and Y' (*[X(Y)* ^L*bènà: ǹ] nè*)

This complex postposition is literally 'in the interior of X'. It is based on the possessed form of *bènǎ:* 'interior', followed by definite *ǹ* (not always audible) and locative postposition *nè*. The landmark is most often a structure (such as a house) or a container.

(xx1) *[úló   kɔ̌:]*   ^L*bènà:*   *ǹ]*   *nè*
        [house   1SgP.InanSg]   ^Linterior   Def]   Loc
        'inside my house'

To indicate displacement from the current deictic center, *bàr* may be substituted for *nè*.
    An alternative construction when the complement is a simple noun is a nominal compound X^L-bènǎ:, which can be used adverbially by itself, without a postposition.

(xx2) *ùlò*^L*-bènǎ:*   *tùnà-m*
        house^L-interior   be.put.in.Stat-1SgS
        'I am inside the house.'

'**Between** X and Y' is phrased as 'inside X and Y', using the same ^L*bènà: ǹ] nè* sequence but this time with the complement (landmark) a nonsingular NP, for example a plural pronoun (xx3a) or a conjoined NP (xx3b).

(xx3) a. *cǐn   [[bènǎ: í-gè]   nè]   dùŋà-∅*
            stone   [[interior   1PlP-InanSg]   Loc]   be.put.Stat-3SgS
            'The stone is (lying) between us'

       b. *[[[dúmɔ́sán∴   sèwárá∴]   bènà:]   nè]   yé   tùnà*
            [[[Douentza
            'It (a village) is between Douentza and Sevare'

8.2.6 'On (the head of) X' (*[X* ^L*kù-gɔ̀] nè*)

This complex postposition seems to have a fairly literal sense, with a human landmark.

(xx1) *cǐn   [[kú-gɔ́   kɔ̌:]   nè]*
        stone   [[head-Inan   1SgP.InanSg]   in]
        *éllí-gín   *^L*sùgè-∅*

103

fall-and.SS   ^Lgo.down.Perf-3SgS
'A stone fell on my head.'

The 3Sg form is *kú-gɔ́ kɔ̀-ń nè* 'on his/her head'. With nonpronominal NP: *[ámádú ^Lkù-gɔ̀] nè* 'on Amadou'.

Variants with *bàr* are elicitable (*[ámádú ^Lkù-gɔ̀] bàr*) are elicitable.

'On X' where X denotes a surface is often expressed by the simple locative: *ládúgɔ́ nè* 'on the roof', *nìŋgé nè* 'on the mat'.

8.2.7   'Next to, beside X' or 'under X' (*[X ^Ldùgò] nè*)

This complex postposition is based on possessed forms of the noun *dùgó*, which drops tones when it follows the landmark NP. With a human landmark it usually means 'next to, beside'. With an object like a mat or a table it usually means 'under'. (With 'tree', for example, there is no clear difference between 'next to' and 'under'.

(xx1)   a.   *[dùgó   kɔ̌:]*   *nè*
             [side   1SgP.InanSg]   Loc
             'next to me, near me'

        b.   *[dùgó   í-gɛ̀]*   *nè*
             [side   1PlP-InanSg]   Loc
             'next to us'

        c.   *[ámádú   ^Ldùgò]*   *nè*
             [Amadou   ^Lside]   Loc
             'beside Amadou'

        d.   *cǐn*   *[[nìŋgé   ^Ldùgò]   nè]*   *tùnà-∅*
             stone   [[mat   ^Lunder]   Loc]   be.put.Stat-3SgS
             'The stone is under the mat'

Variants with *bàr(ì)* instead of *nè* are elicitable. The adverb is *dùgó nè* 'to the side' or 'underneath'.

8.2.8   'In front of' (*[X ^Ljìrè] nè*)

This complex postposition is based on possessed forms of *jíré* 'front'.

(xx1) a. *jíré*   *kɔ̀-ń*   *nè*
          [front   Poss.InanSg-3SgP]   Loc
          in front of him'

       b. *[jíré*   *kɔ̌:]*   *nè*
          [front   1SgP.InanSg]   Loc
          'in front of me'

       c. *[ámádú*   ^L*jìrè]*   *nè*
          [A   ^Lfront]   Loc
          'in front of Amadou'

Variants with *bàr(ì)* instead of *nè* are elicitable. The adverb is *jíré nè* 'to the side'.

8.2.9 'Behind/after X' (*[X kùndù-gò] nè*)

This complex postposition is based on possessed forms of the noun *kúndú-gó* 'back'.

(xx1) a. *[kúndú-gó*   *kɔ̀-ń]*   *nè*
          [back-InanSg   InanSg-3SgP]   Loc
          'behind him'

       b. *[kúndú-gó*   *kɔ̌:]*   *nè*
          [back-InanSg   1SgPo.InanSg]   Loc
          'behind me'

       c. *[ámádú*   ^L*kùndù-gò]* *nè*
          [Amadou   ^Lback-InanSg] Loc
          'behind Amadou'

This can also be used in the temporal sense 'after X', as in *[láyà* ^L*kùndù-gò] nè* 'after the Feast of the Ram'. However, in this sense there are also competing subordinating constructions such as 'when the Feast of the Ram has taken place'.

The noun *kúndú-gó* by itself can be used adverbially 'in the rear'.

8.2.10 'Over X'

Adverbial 'overhead, up above (in the sky)' can be expressed by any of the nouns *témbé*, *dárⁿá*, or *óngó* (the latter meaning 'sky'), all of which can be directly followed by *bù-* 'be' or other predicate. 'On top' in the sense of 'on the (high) plateau' above the cliffs, as opposed to the plains that begin at the base of the cliffs, is *témbé*.

'Above/over me', for example referring to a bird or an airplane, also involves *témbé*.

(xx1) *àdé* *[mí* *ní:]* *dém→* *témbé* *bù-∅*
       bird [1Sg with] straight **above** be-3SgS
       'The bird is directly above/over me.'

8.2.11 'From X to Y' (*pó→*, *bǎ→*)

Trajectories with starting and ending points can be described using verbs like 'go out, leave' and 'arrive' (or 'come' or 'go'). In (xx1a), the 'go out' verb is chained to a main clause with 'come' (in the sense 'arrive here'). The distance (in time or space) can be emphasized using either of two emphatic particles, the prospective *pó→* 'all the way to, until' (xx1b) or the retrospective *bǎ→* 'since' (xx1c). *pó→* is common in both spatial and temporal contexts, while *bǎ→* is essentially temporal.

(xx1) a. *[bàndàrá* *gò-gín]* *[lǎ:* *ní:]* *sèwárá* *wɔ̀:-m*
           [Bandiagara **go.out**-then] [foot Inst] Sevare come.Perf-1SgS
           'I walked on foot from Bandiagara to Sevare.'

      b. *pó→* *bàndàrá* *yày-m*
           all.the.way Bandiagara go.Perf-1SgS
           'I went as far as Bandiagara.'

      c. *[[ódógón* *bǎ→]* *bírá:* *bírá-m̀]*
           [[early.morning **since**] work(n) work(v)-Impf]
           [nán *dɔ̀-m]*
           [now arrive.Perf-1SgS]
           'I have been working from early morning to now.'

8.3 Purposive *dùgɔ̀* 'for'

This postposition creates PPs that denote the goal of an activity.

(xx1) a.   *[ìdé   dùgɔ̀]   w-à:*
            [honey   Purp]   come.Perf-3PlS
            'They came for the honey.'

       b.   *[bírá: dùgɔ̀]   wɔ̀è-∅*
            [work(n.)   Purp]   come.Perf-3SgS
            'He came for the work.'

For *[ìnjé dùgɔ̀]* 'why?' (for what?) see §13.2.3. For [X *dùgɔ̀*] 'than X' in comparatives, see Chapter 12 *passim*.

   dùgɔ̀ can also be used in a retrospective sense, denoting the cause of a subsequent eventuality (xx2a). It also appears in the phrase 'for God', in connection with a gift or service provided charitably without compensation (xx2b).

(xx2) a.   *[àrⁿá   dùgɔ̀]   zɔ̀b-à*
            [rain   Purp]   run.Perf-3PlS
            'They fled because of the rain.'

       b.   *[ámbà   dùgɔ̀]   zá   mí   ǹdì-∅*
            [God   Purp]   meal   1SgO   give.Perf-3SgS
            'He/She gave me food for (= in the name of) God.'

8.4 Other adverbs (or equivalents)

8.4.1 Similarity ('like X') construction with postposition *ni:*

Adverbial phrases specifying similarity to a landmark (reference object) often involve instrumental-comitative postposition *ni:* 'with' (§8.1.2), either alone (xx1a) or, more clearly, as part of a larger phrase such as a headless relative with 'be' (xx1b).

(xx1) a.   *[mí   ní:]   ŋgó-∅*
            [1Sg   **with**]   not.be-3SgS
            'He/She isn't like me.'

       b.   *[[ńné   bú-ŋgò]   nì:]   bù-m*

       [[3SgS   be-Ppl.Impf]   **with**]   be-1SgS
       'I am like (the way) he/she is.'

My assistant prefers to include the basis for comparison, which changes the syntax (xx2).

(xx2)   a.   *[yà-mbɔ́* ^{L}*òdùbà:]*   *ò-m-dɔ̀*
             [woman-AnPl ^{L}road]   go-Impf-3SgS
             'He walks like a woman.'
             [lit. "he goes (with) women's road (gait)"]

       b.   *[[yà-mbɔ́*   *òré:*   *ɔ́rà-ŋgò]*   *nì:]*
             [[woman-AnPl   word.Pl   speak-Ppl.Impf.InanSg]   with]
             ɔ́rà-m-dɔ̀
             speak-Impf-3SgS
             'He talks like a woman.'
             [lit. "he speaks with (the way) women speak words"]

'Like this/that, thus' is *kú ní:* with inanimate pronoun *kú*, or a simple adverb *ɔ̂y^n*. These forms can resume fuller phrases (xx3).

(xx3)   *[mí*   *bù-ŋgò]*   *ɔ̂y^n*   *bù-∅*
        [1SgS   be-Ppl.Impf.InanSg]   thus   be-3SgS
        'He is like me.'
        [lit. "(the way) I am, thus he is."]

8.4.2   Extent ('a lot', 'a little')

Expressive adverbials are *mĕm→* 'a lot, greatly' and *kéndèy^n→* or *dágám→* 'a little, slightly'. Though adverbial syntactically, they can occur in sentences where 'a lot' or 'a little' translate as objects or other arguments, as with 'give' in (xx1c-d). They do not interact tonally with nouns.

(xx1)   a.   *bírá:*   *mĕm→*   *bìrɛ́-tì-∅*
             work(n)   a.lot   work(v)-Perf1b-3SgS
             'He/She worked a lot.'

       b.   *bírá:*   *kéndèy^n→*   *bìrɛ́-tì-∅*
              work(n)   a.lot   work(v)-Perf1b-3SgS
              'He/She worked a little.

c. *mɛ̌m→*   *mí(-gì)*   *índì-tì-∅*
   a.lot   1Sg(-Acc)   give-Perf1b-3SgS
   'He/She gave me a lot.'

d. *kɛ́ndɛ̀yⁿ→*   *mí(-gì)*   *índì-tì-∅*
   a.little   1Sg(-Acc)   give-Perf1b-3SgS
   'He/She gave me a little.'

8.4.3   Specificity

The usual way of talking about exactness of a number or amount is to use the verb 'arrive, reach' in the sense 'amount to, add up to' (xx1).

(xx1) *[pèdù-mbò ^{L}*   *ú*   *sɔ̀-mbò]*
       [sheep-AnPl ^{L} 2SgS   have-Ppl.AnPl]
       pègá-nǔm   *dɔ̀-s-ɛ́*   *mà→*   *dwà-ndá*
       ten-five   arrive-Perf2-3PlS   or   arrive-PerfNeg.3PlS
       'The sheep that you-Sg have, do they amount to 50 or not?'

8.4.3.1   'Specifically' (*pá→*)

This adverb can be added to a NP, especially a pronoun, in the sense 'precisely X (not anybody else)', 'X in person'. There are no tonosyntactic interactions. In (xx1), 'chief' is resumed by a coindexed third person pronoun, but *ámbírú pá→* without the pronoun is also possible.

(xx1) *ámbírú*   *ńné*   *pá→*   *wá:-m̀-dɔ̀*
       chief   3SgS   specifically come-Impf-3SgS
       'The chief is coming in person.'

8.4.4   Evaluation

8.4.4.1   'Well' and 'badly'

The pure adjectives for 'good' are *sɛ́* and *édè:* (§4.5.1). The latter is distinct from *élè:* 'sweet, delicious'. 'Bad' is *sàmɛ́*. There are no morphological adverbs corresponding to these adjectives. Instead, the adjectives are added to a NP in the clause, perhaps a pro forma cognate nominal.

(xx1)   *[bìrà:^L   sɛ́-ŋgɛ́ / sàm-gɔ́]*   ^L*bìrà-m-dɔ̀*
        [work(n)^L   good-InanSg / bad-InanSg]   ^Lwork(v)-Impf-3SgS
        'He/She does good/bad work.' (i.e. works well/badly)

The verb *dàgá* means 'turn out well, be well made', among other senses.

8.4.5   Manner adverbs

For 'like this' and 'like X', see §8.4.1. For manner adverbial relative clauses see §15.3.2.
    For adverb-like predicative forms of adjectives, see §11.4.1.2. Aside from this, is no morphological process to derive adverbs from other stem classes.

8.4.6   Spatiotemporal adverbials

8.4.6.1   Temporal adverbs

Some of the major temporal adverbs are in (xx1). The major weekly market for the Tebul villages is Bamba, which is on Saturdays, based on the European seven-day week. The important Tommo So markets on the plateau (Kassa, Mori) are on the traditional five-day rotation, as is the minor market in Yanda.

(xx1)   a.   *yɔ̌:*   'today'
             yá: là   'again'
             yéŋgì   'yesterday'
             yé dèmbè tà:ndú   'day before yesterday'
             nân   'now' (temporal)
             ná: gày   'now' (topical, see §19.1.xxx)

        b.   *ɛ́yⁿ*   'tomorrow; in the future'
             èn mé dèrⁿɛ̀   'day after tomorrow'
             dèrⁿɛ̀ gín dèrⁿɛ̀   'second day after tomorrow'
                                              (third from today)
             dèrⁿɛ̀ gín dèrⁿɛ̀ bàlàgà   'third day after tomorrow'
                                              (fourth from today)
             [dèrⁿɛ̀ gín dèrⁿɛ̀] dèmbè tà:n-nɛ́   'fourth day after tomorrow'
                                              (fifth from today)
             [dèrⁿɛ̀ gín dèrⁿɛ̀] dèmbè kɛ̀dɛ̀-nɛ́   'fifth day after tomorrow'
                                              (sixth from tomorrow)

		zúgò		'week'

	c.	*jêl*	'last year'
		nwǎ:	'next year'
		bágònè	'this year'

8.4.6.2 'First' (*tí^n→*)

tí^n→ means 'formerly, in the past'.

(xx1)	*tí^n→*	*nù-mbɔ̀*	*lábá*	*kár^{n}à-mbɔ̀*
	first	person-AnPl	pass	Ppl.Perf-AnPl

'the people who passed on long ago'

8.4.6.3 Spatial adverbs

The following are the main spatial adverbs.

(xx1)	a.	*témbɛ́*	'above, top, summit'
		dùgó	'below, bottom, down'
	b.	*tèŋè-dágá*	'east'
		ùdù-[túmbú-gó]	'west' (< 'sunset')
		dù-dágá	'south'
		tɔ̀mbɔ̀-dá:	'north'
	c.	*kúndú-gó*	'in the rear'
		gíré	'forward; in front'

Aside from 'sunset' = 'west', we see *-dágá ~ -dá:* in the cardinal direction terms in (xx1b). 'East' and 'north' include terms for Dogon ethnicities (Tengou, Tommo).

   gíré 'forward' (xx1c) is tonally distinct from *gìré* 'eye(s)'.

8.4.7 Expressive adverbials (EAs)

For the syntax of EAs, see §11.1.3.1 below. Examples illustrating the syntax are also in §8.4.7.1 just below.

8.4.7.1 'Straight' (*dém→*)

dém→ 'straight', referring either to an object (such as a stick) or to a road or trajectory, is a typical EA. It can also mean 'straight up' or 'towering, lofty' with a vertical emphasis. Nonpredicative adverbial function is illustrated in (xx1a). Predicative forms are exemplified in (xx2b-d.

(xx1) a. *dém→*   ᴸ*yà-dà*
          straight   ᴸgo.Perf-3PlS
          'They went straight (to the destination).'

      b. *bé:*   *dém→*   *bù-∅*
          stick   straight   be-3SgS
          'The stick is straight.'

      c. *dém→*   *ŋgó-∅*
          straight   not.be-3SgS
          'It (stick, road) is not straight.'

      d. *dém→*   *bé-m̀-dɔ̀-∅*
          straight   become-Impf-3SgS
          'It will become straight.'

8.4.7.2 Forms of EAs

Some examples of EAs will be given here to indicate the range of phonological forms as well as typical meanings. First, there are many unreduplicated EAs of one (xx1a), two (xx1b), or three syllables (xx1c). The characteristic phonological feature is intonational prolongation of the final segment (vowel or sonorant).
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(xx1) a. *pá→*   '(door) wide open, gaping'
          ká^n→   '(mouth, hole) wide open, gaping'
          ké^n→   '(mouth) slightly open'
          sɛ́^{n}→   'looking straight at, staring at'
          kǎy^n→   '(eyes) wide open, bulging'
           céw→   'motionless'
          dém^n→   'straight' or 'straight up, towering'
          jěw^n→ ~ jěy^n→   '(eyes) slightly open'

b.　*pàyăwⁿ→*　　'bright point of light in the distance (star, fire)'
　　cè:ⁿlí→　　'(door) ajar, open a crack'

c.　*gògùlí→*　　'(door) rickety, poorly encased'

The shape CvC with final stop and no prolongation is uncommon. The examples in (xx2), which are followed by the verbs íjj-í: 'stop, halt' and tíbɛ́- 'die' respectively, convey abruptness or thoroughness of the action rather than depicting a stable process or situation as in the preceding examples.

(xx2)　　*jík*　　　'(stop) still, dead in one's tracks'
　　　　kák　　　'(die) abruptly, drop dead'

Other EAs are have iterative or reduplicated form, though the base is in most cases not otherwise attested (cf. English *flim-flam*, *riff-raff*). A few do show some relationship to an uniterated stem elsewhere in the lexicon. The EAs in (xx3a) involve full iteration. Those in (xx3b) are similar but also show a vocalic change, with a high vowel in the first iteration shifting to *a* in the second; if there is a third, it repeats the first. The examples in (xx3c) show multiple final -Cv reduplication, the number of repetitions being somewhat flexible. Iterations and reduplications are partially iconic since these EAs denote sequences of repeated sub-events, repetitive sensory patterns, and the like.

(xx3)　a. iterative
　　　　ɲém-ɲém　　　'(rain) drizzle lightly'
　　　　pírú-pírú　　　'(e.g. wounded bird) flop around' (verb *pírígíy*)
　　　　sì:dé-sì:dé　　　'striped' (cf. *sì:lì-gó* 'a stripe')
　　　　tágàlà-tágàlà　　'blotched, having large spots'
　　　　têwⁿ-têwⁿ　　　'spotted, having many small spots'

　　　b. iterative plus shift to *a*
　　　　bírìgù-bárùgù　　'bric-à-brac, junk, miscellaneous items'
　　　　díbù-dàbù-díbù　　'groping (in the dark)'
　　　　jìgí-jàgú　　　'swaying (like elephant, cow, fat woman)'
　　　　yùgú-yàgú　　　'chubby, puffy'
　　　　pìré-pàrá　　　'stumbling along'

　　　c. multiple final *-Cv* reduplication
　　　　wèdédé(dé)　　　'well-lit (place)'
　　　　yègérédédé　　　'well-lit (place)'
　　　　pàdádádá　　　'directed light (shining on one's face)'

113

8.4.8 Reduplicated (iterated) adverbials

8.4.8.1 Distributive adverbial iteration

Numerals are iterated to indicate distributivity ('X as a time', 'X apiece'). The human and inanimate prefixes occur only once, at the beginning. Except for '1', the numeral is {L}-toned in the second occurrence. Nonmonosyllabic numerals ending in *u* ('3', '10') usually syncopate the final syllable in the first occurrence and in the case of '3' this entails a further consonantal reduction. For '1' we might have expected #*túr-tùrù*, pronounced [túꞏtùɹù], but the actual form is *tú-túrú*, looking more like a *Cv-* reduplication. Morphologically complex numerals iterate only the final element (xx1d).

(xx1) a. *ɲě-tú-túrú*　　　　*wɔ̂ꞏ-s-ɛ̀ꞏ*
　　　　　person-**one-one**　　come-Perf2-DFoc
　　　　　'They came <u>one by one</u> [focus].'

　　　b. *ɲě-tǎꞏn-tàꞏndù*　　　　　*jɛ̀-m*
　　　　　person-**three-three**　　kill.Perf-1SgS
　　　　　'I killed them (people) three at a time.'

　　　c. *pédù-mbò*　　　*bú-lèy-lèy＝là꞉*
　　　　　sheep-AnPl　　An-**two-two**=it.is.not
　　　　　'The sheep are not two by two.'

　　　d. *[péꞏ-rⁿɛ̀]-túr-sàgà-sàgà*　　*w-à꞉*
　　　　　[ten]-one-**plus-plus**　　　come.Perf-3PlS
　　　　　'They came eleven at a time.'

　　　e. *àŋgá-àŋgá*　　　　　　*dɔ́nà-m-nù-ẃⁿ*
　　　　　how.many?-how.many?　　see-Impf-Impf-2SgS
　　　　　'For how much each do you sell (them)?'

9   Verbal derivation

9.1   Reversive verbs (*-lí-*)

A reversive verb is derived from an input verb by adding suffix *-lí-*. The sense is to undo the action denoted by the input verb, restoring a prior state. Compare English *un-* in *untie*, *unfold*, etc.

The input verbs that have reversives are overwhelmingly bisyllabic. The presuffixal medial vowel is raised to *i* or (if a preceding vowel is rounded) to *u* if not already a high vowel (xx1b). Mediopassive *-í:* follows the reversive (xx1c). Aside from minor lexical irregularities, /Cvri-lí/ ends up as *Cvl-lí* after syncope and /rl/ → *ll* (xx1e).

(xx1)	input	gloss	reversive	gloss
	a. bisyllabic, input already ends in high vowel			
	tímbí-	'cover (with lid)'	*tímbí-lí-*	'remove lid from'
	píŋí-	'shut (door)'	*píŋí-lí-*	'open (door)'
	gɔ̀ŋgú-	'fence in'	*gɔ̀ŋgù-lí-*	'un-fence'
	kɔ́mbú-	'tie'	*kɔ́mbú-lí-*	'untie'
	tɔ́mbú-	'roll turban'	*tɔ́mbú-lí-*	'unroll turban'
	céndí-	'bury'	*céndí-lí-*	'disinter'
	péndí-	'insert, slide in'	*péndí-lí-*	'remove inserted item'
	tɔ́ŋgú-	'hobble'	*tɔ́ŋgú-lí-*	'unhobble'
	námbí-	'step on'	*námbí-lí-*	'remove foot from'
	mèndí-	'fold'	*mèndì-lí-*	'unfold'
	tíndí-	'prop up'	*tíndí-lí-*	'remove a prop from'
	gùbú-	'hang (on hook)'	*gùbù-lí-*	'take off (hook)'
	b. bisyllabic, input ends in mid or low vowel			
	tóndó-	'bend'	*tóndú-lí-*	'unbend'
	dàgá-	'lock'	*dàgì-lí-*	'unlock'
	dìgé-	'tie (knot)'	*dìgì-lí-*	'untie (knot)'
	mìndé-	'weave (rope)'	*mìndì-lí-*	'unweave (rope)'

mùndó-	'crumple'	*mùndù-lí-*	'uncrumple'
pégé-	'drive in (nail)'	*pégí-lí-*	'remove (nail)'
níndé-	'tangle'	*níndí-lí-*	'untangle'
mìndé-	'roll up (mat)'	*mìndi-lí-*	'bounce back'

c. *mediopassive suffix follows reversive, see also (e) and (f)*

gɔ̀nd-í:-	'be caught in tree'	*gɔ̀ndì-l-í:-*	'be un-caught'

d. */yí/ dropped*

dà:yí-	'cover (object)'	*dà:-lí-*	'uncover (object)'

e. */rl/ → ll, see also (f)*

gìrí-	'immobilize'	*gìl-lí-*	'allow to move'
tár-í:-	'be affixed'	*tál-l-í:-*	'(affixed item) come off'

f. *irregular*

íré-	'forget'	*íl-l-í:-*	'remember'

g. *suppletive*

(various)		*sɔ́ŋgú-lí-*	'unbraid, undo, untie', etc.
(various)		*gò-ndú-*	'take out, remove'

Suppletive *sɔ́ŋgú-lí-* is a rather general 'undo' verb. It is reversive in form but there is no semantically related input. 'Take (sth) out' is *gò-ndú*, irregular causative of *gǒ* 'go out'.

9.2   Deverbal causative verbs

9.2.1   Productive causative with suffix *-mí*

The regular causative is produced by adding *-mí* to the stem.
The productive causative derivative has suffix *-mí*, which often reduced to *-m*. Examples of input/causative relationships are in (xx1). Stem-final /ɛ/ becomes *a* before the suffix. Mediopassive *-í:-* becomes *-ɛ:-* or *-e:-* depending on the ATR harmonic status of the stem. {LH} lexical melody is reapplied to the entire causative stem, with only *-mí-* H-toned. However, the suffixal /i/ is often syncopated, in which case e.g. *zùgà-mí* is heard as.[zùgǎm].

(xx1)   input   gloss   causative   gloss

a. monosyllabic, nonhigh vowel

ɲɛ́	'drink'	*ɲá-mí*	'give drink to (sb)'
yɛ̌	'weep'	*yà-mí*	'cause (sb) to weep'
jɛ̌	'dance'	*jè-mí*	'cause (sb) to dance'
sɛ́:	'sneeze'	*sɛ́:-mí*	'cause (sb) to sneeze'
wǎ:	'do farm work'	*wà:-mí*	'make (sb) do farm work'

b. monoayllabic, high vowel

nú	'enter'	*nú-mí*	'make (sb) enter'
ní:	'sleep'	*ní:-mí*	'put (sb) to sleep'

c. nonmonomosyllabic, final nonhigh vowel

zùgɔ́	'know'	*zùgà-mí*	'inform (sb)'
bàrá	'help'	*bàrà-mí*	'make (sb) help (sb)'

d. nonmonomosyllabic, final high vowel

tímbí	'shut'	*tímbí-mí*	'make (sb) shut (sth)'
ɔ́rú	'speak'	*ɔ́rú-mí*	'make (sb) speak'

e. causative follows mediopassive

bàmb-í:-	'carry on back'	*bàmb-ɛ̀:-mí*	'make (sb) carry (sth)'
ób-í:	'sit down'	*ób-é:-mí*	'have sit, seat'

example of conjugation (inflectable aspect-negation stems) of a regular causative verb

9.2.2   Minor causative suffixes (*-gv-*)

Causatives with minor derivational suffixes are listed in (xx1). See also "transitive" *-rí* in §9.3.

(xx1)   Causatives with Other Suffixes

input	gloss	causative	gloss

a. *-gí*

péndé	'(sth) break'	*péndí-gí*	'break (sth)'
yùlé	'wake up'	*yùlù-gú*	'awaken (sb)'
màrá	'be lost'	*màrì-gí*	'cause (sth) to be lost'

117

b. *-ndú ~ -ndí*

gǒ	'go out'	*gò-ndú*	'take (sth) out'
dǒ	'arrive'	*dɔ̀:-ndú*	'deliver (sth)'
ìlɛ́	'go up'	*ìlà:-ndí*	'take (sth) up'
súgó	'go down'	*sú:-ndú*	'take (sth) down'
táŋgí	'become (sth)'	*tá:-ndú*	'transform (sth) into (sth)'

c. *-lí*

yàmá	'malfunction'	*yàŋgì-lí*	'ruin (sth)'

9.3 Passives

9.3.1 Passive suffix *-mí-*

A homophone of the causative suffix *-mí-* is found with a handful of verbs in agentless passive sense.

(xx1) Passive

	input	gloss	passive	gloss
a.	*yí*	'see'	*yè-mí*	'be seen (see-able)'
	témbí	'encounter'	*témb-ɛ́:-mí*	'be found (findable)'
	bě:	'get'	--	'be gotten (available)'

9.3.2 Passive use of *-ŋgó* nominal

For nominalizations in *-ŋgó* see §4.1.1.5 and §4.2.3. When used as a predicate, with the 'it is' or 'it is not' clitic, a form with *-ŋgó* functions like an imperfective (present or future) passive (xx1a-b). For perfective aspect, the Perfective-2 suffix is added and if the verb is lexically {LH} the L-tone spreads to the end of the stem but not into the suffixes (xx1c-d).
.

(xx1) a. *èdɛ́*   *dɔ́ná-ŋgô=:*
     cloth   sell-Nom=it.is
     'The cloth (fabric) is for sale.'

     b. *dɔ́ná-ŋgó=là:*

118

sell-Nom=it.is.not

'It is not for sale.'

c. *dɔ̀nɔ̀-sú-ŋgô = :*

sell-Perf2-Nom=it.is

'It has been sold.'

d. *dɔ̀nɔ̀-sú-ŋgó = là:*

sell-Perf2-Nom=it.is.not

'It has not been sold.

Other examples are *gídé-ŋgô = :* 'it is to be thrown (away)', *ɲá-ŋgô = :* '(meal) is to be eaten/drunk', *kúbó-ŋgô = :* '(meat) is to be eaten', *díyá-ŋgô = :* 'it is to be carried (on the head)'. For the perfective version, see also *lábá-sú-ŋgô = :* 'it was carved'.

9.4 Mediopassive and Transitive

9.4.1 Alternation of Mediopassive *-í-* and Transitive *-rv-*

A number of verb stems alternate between mediopassive and transitive (roughly causative) forms, both with derivational suffixes. The transitive form has suffix *-rí* (*-rú* after a stem with rounded vowels). The mediopassive has suffix *-í:* (shifting to *-é:* or *-é:* in some aspect-negation inflections depending on the ATR category of the stem). The most common semantic domains are stance, wearing clothing, and carrying and holding. The mediopassive is intransitive or transitive depending on the stem and semantic domain. The transitive adds an object to the array already present in the mediopassive. Examples are in (xx1)

(xx1)	MP	gloss	Tr	gloss
a. stance				
	íjj-í:	'stand up, stop'	*ígí-rí*	'stop (sth)'
	túnj-í:	'kneel'	*túŋgú-rú*	'cause to kneel'
	tónd-í:	'squat'	*tóndó*	'cause to squat'
	jènj-í:	'be tilted'	*jèŋgì-rí*	'tilt (sth)'
b. wearing clothes				
	tɔ́b-í:	'roll on turban'	*tɔ́bí-rí*	'put turban on (sb)'
	kób-í:	'put one's hat on'	*kóbí-rí*	'put hat on (sb)'

c. carrying/holding
    bàmb-í:-   'carry on back'   *bàmbì-rí*   'put on (sb's) back'

d. other
    bànj-í: 'hide (oneself)'   *bàŋgì-rí*   'hide (sb, sth)'
    dìmb-í: 'follow (sth)'   *dìmbì-rí*   'cause to follow'

There are also a number of verbs that have the suffixed transitive form opposed to an unsuffixed simplex form that corresponds semantically to the mediopassive in the previous examples. Many of these verbs are monosyllabic, so it would be phonologically difficult to add mediopassive *-í:* to them. Examples are in (xx2). The semantic domains are similar to those in (xx1) above

(xx1)   MP   gloss   Tr   gloss

a. stance
    bě   'lie down'   *bì-rí*   'put (sb) to sleep'

b. wearing clothes
    tájí ~ táy   'put one's shoes on'   *tágí-rí*   'put shoes on (sb)'

c. carrying/holding
    dǐ   'carry on head'   *dì-rí*   'put on (sb's) head'

d. other
    dě   'bathe'   *dì-rí*   'bathe (sb)'

9.5   Ambi-valent verbs without suffixal derivation

Give a few exx. from the lexicon (if any are found) where a verb is used, without suffixal modification, both transitively and intransitively.
Two types based on semantics:

1. antipassive (unergative) type, with understood or vague direct object omitted
'they ate'
'it's your turn to break (in pool)'

2. passive (unaccusative) type, with agent omitted (theme becomes subject):
cf. English 'it reads well'
'it broke'

9.6   Deadjectival inchoative and factitive verbs

Most adjectives (§4.5.1) have a corresponding cognate inchoative verb ('become ADJ'). Those in (xx1a) have no segmental derivational suffix. The stem-final vowel is predictable in most cases from the nonfinal vowel(s). In (xx1b) the inchoative is morphologically a mediopassive with suffix -í: added directly to the stem. In (xx1c), the mediopassive suffix follows a buffer suffix *-nd-*. A few stems, chiefly those of extra-short shape *Cv*, either have no inchoative or have a suppletive inchoative (xx1d).

(xx1)   adjective   inchoative   gloss

    a. no segmental suffix
     bisyllabic stem
      bár^{n}ɛ: *bàr^{n}á*   'become red'
      gàbɛ̌:   *gàbá*   'become tall'
      ìlɛ́   *ílɛ́*   'ripen'
      jémè: *jèmɛ́*   'become black'
      kómbò   *kómbó*   'become skinny, lean'
      yɔ̀rɛ̌:   *yɔ̀rɔ́*   'become soft'
     Cvy stem
      mà̰ɛ́^{n}   *mǎy^n*   'dry out, become dry'
     Cv stem
      bá   *bǎ*   'become full'
      pɛ̌:   *pɛ́*   'age, get old'

    b. mediopassive *-í:-*
      cé:lè: *cé:l-í:*   'become cold'
      gɔ́mè: *gɔ̀m-í:*   'become rotten, rot'
      nà:r^{n}á   *ná:n-í:*   'become easy, cheap'
      ɔ́mè: *ɔ́m-í:*   'become hot'
      ɔ́r^{n}ɔ́nè: *ɔ́r^{n}ɔ́n-í:*   'become smooth'

    c. *-nd-í:*
      démbè: *dèmbè-nd-í:*   'become massive'
      bìnɛ́:   *bìr^{n}ì-nd-í:*   'become fat'
      dúdè: *dùdɔ̀-nd-í:*   'become heavy'
      dùmbɛ̌:   *dùmbù-nd-í:*   '(blade) become blunt'
      ɛ́dè: *ɛ́dɛ́-nd-í:*   'become good, improve'
      ɛ́lè: *ɛ́lɛ́-nd-í:*   'become sweet'
      ɛ̀mbɛ̌:   *ɛ́mɛ́-nd-í:*   'become narrow'
      ɛ́r^{n}ɛ̀:   *ɛ́r^{n}ɛ́-nd-í:*   'become lightweight'

gálè:	*gàlà-nd-í:*	'become bitter'	
gɔ̀ɛ̌:	*gɔ̀:-nd-í:*	'become short'	
márⁿɛ̀:	*márⁿá-nd-í:*	'become hard, solid'	
mèndé:	*mèndè-nd-í:*	'become slender'	
mɔ̀dɛ̌:	*mɔ̀dɔ̀-nd-í:*	'become nasty'	
ɔ̀lɛ̌:	*ɔ́lɔ́-nd-í:*	'become wet'	
		cf. *témb-í:* 'become wet'	
pá:	*pá:-nd-í:*	'become long'	
pílè:	*pílé-nd-í:*	'become white'	
sègé	*ségé-nd-í:*	'become small'	
		cf. *á:-nd-í:* 'become small'	
sègé	*ségé-nd-í:*	'become small'	
tó:	*tó:-nd-í:*	'become deep'	
wérè:	*wèrè-nd-í:*	'become green'	
contracted			
èmbɛ̌:	*émé-nd-í:*	'become narrow' (*m* < *mb*)	
nómè:	*nóm-d-í:*	'become difficult' (*md* < *mnd*)	

d. suppletive from short *Cv* adjective

sé	*dàgá*	'become good, improve'
dé	*bàr-í:, égá-nd-í:*	'become big, grow'

No inchoative was elicited from *sàmɛ̌:* 'ugly' or from *ǹdé* 'empty'.

Factitives ('X make Y ADJ') are morphologically causatives of the inchoative verbs.

(xx1)   inchoative factitive   gloss

    a. no segmental suffix
      bisyllabic stem

bǎ	*bà:-ndí*	'fill'

9.7   Denominal verbs

Verbs that arguably derive from, and in any case are related to, underived nouns. Glean from dictionary. Try the following (based on Nanga):

(xx1)   noun   gloss   verb   gloss

ŋŋŋ	'load'	ŋŋŋ-	'load (e.g. cart)'
ŋŋŋ	'family name'	ŋŋŋ-	'(griot) chant the ancestry of (sb)'
ŋŋŋ	'forest'	ŋŋŋ-	'(zone) become dense (e.g.after rains)'
ŋŋŋ	'(a) share'	ŋŋŋ-	'share, divide up'
ŋŋŋ	(greeting)	ŋŋŋ-	'greet'
ŋŋŋ	'filth'	ŋŋŋ-	'soil, make dirty'
ŋŋŋ	'injury'	ŋŋŋ-	'injure, wound (someone)'

9.8 Obscure verb-verb relationships

Listed any residual alternations that do not fit into preceding section, with or without comment.

(xx1)   verb   gloss   related verb gloss

ŋŋŋ-	'spend night'	ŋŋŋ-	'greet in morning'

123

10 Verbal inflection

10.1 Inflection of regular indicative verbs

The normal structure of indicative (i.e. not imperative or hortative) verbs is

stem-AN-Subj   or   stem-AN

The stem is immediately followed by an aspect-negation (AN) suffix, the major divisions being perfective/imperfective crosscut by positive/negative. Categories are summarized in §10.1.2.

In most Dogon languages, the AN suffix is directly followed (except in relative clauses and some other subordinated clauses) by a pronominal-subject suffix. The 3Sg suffix is regularly zero. Some languages have reduced suffixal marking of pronominal subject (e.g. just Sg vs. Pl, or 3Pl versus everything else). A few languages have no pronominal-subject suffixes, instead clause-initial independent pronouns, perhaps along with postverbal 3rd person clitics. The structure of pronominal-suffix paradigms is summarized in §10.3.

In several languages the AN suffix may be directly followed by a Past clitic (e.g. = bɛ-). The main pronominal-subject marking is on the Past clitic, but there may also be some marking (e.g. for 3Pl) on the AN suffix. In other languages, the Past morpheme is postposed to the entire inflected verb (Jamsay), or it is absent (Togo Kan).

10.1.1   AN suffixes or chained auxiliary verbs?

The categories in (xx1) are expressed by elements that often appear to be suffixed to the main verb but can be separated from it under some conditions. This suggests a possible analysis as auxiliary verbs.

(xx1)   *dɛ̀-*   Recent Perfect
        tɛ́rɛ́-   Experiential Perfect
        tì-   Perfective-1b

The situation arises in nonsubject relatives with a pronominal subject. In such clauses, a proclitic subject pronoun appears before the verb. The issue is

whether "the verb" for this purpose is the substantive verb plus the inflectional morpheme, or just the inflectional morpheme. For example, in a nonsubject relative involving Recent Perfect *dɛ̀*, the subject pronoun may precede the substantive verb 'eat meal' in (xx2a), or it may intervene between the substantive verb and the Recent Perfect morpheme. In (xx2a) one can argue that *dɛ̀* is suffixed to *ɲέ* or that the two are at least tightly chained. In (xx2b) *dɛ̀* looks more like an independent word, i.e. an auxiliary verb. The fact that both orderings occur suggests that the situation is unstable.

(xx2) a. zà^L mí   ɲέ   dɛ̀^{L} kár^{n}à   ǹ
          meal^L **1SgS**   eat.meal   RecPf^L Ppl.Perf   Def
          'the meal that I have finished eating'

      b. zà^L ɲέ   mí   dɛ̀^{L} kár^{n}à   ǹ
          meal^L eat.meal   **1SgS**   RecPf^L Ppl.Perf   Def
          [= (a)]

A similar choice exists with Experiential Perfect *téré-*, which occurs in main clauses in the combination *-téré-bù-* or *-téré-sɔ̀-*, but takes the form tɛ̀rɛ̀ before *kár^{n}à* in relative clauses.

(xx3) a. gɔ̀nsà:r^{n}à^L mí   yì^L tɛ̀rɛ̀^{L} kár^{n}à   ǹ
          elephant^L **1SgS**   see^L ExpPf^L Ppl.Perf   Def
          'the elephant that I once saw'

      b. gɔ̀nsà:r^{n}à^L yì^L mí   tɛ̀rɛ̀^{L} kár^{n}à   ǹ
          elephant^L see^L **1SgS**   ExpPf^L Ppl.Perf   Def
          [= (a)]

Perfective-1b *tì-* is normally omitted in relative clauses, where the simple form with *kár^{n}à* generalizes. However, in the infrequent case where *tì-* is preserved in a relative, it behaves like the two perfect morphemes just described.

(xx4) a. ìnjɛ̀:^{L} mí   ==bùndò==^{L} tì^L kár^{n}à   ǹ
xx   dog^L **1SgS**   hit^L Perf1b^L Ppl.Perf   Def
          'the dog that I hit-Past'

      b. ìnjɛ̀:^{L} bùndò^L mí   tì^L kár^{n}à   ǹ
          dog^L hit^L 1SgS   Perf1b^L Ppl.Perf   Def
          [= (a)]

Although the data are inconclusive, there is at least some evidence that *dè-*, *téré-*, and *tì-* are separable auxiliaries. The cases where they are not separated from the preceding substantive verb, i.e. the (a) sentences in (xx2-4) above, are compatible either with suffixation or with tight chaining.

The auxiliary analysis might extend to Perfective-2 *-sɔ̀-*, but it is not attested in this form in relatives.

10.1.2   Overview of AN categories

Indicative categories can be organized into four subsystems as shown in (xx1).

(xx1)   a. perfective positive system

              Perfective
              Perfective-1a
              Perfective-1b
              Perfective-2
              Experiential Perfect
              Recent Perfect

    b. imperfective positive system

              Imperfective
              Progressive

    c. perfective negative system

              Perfective Negative
              Experiential Perfect Negative
              Recent Perfect Negative

    d. imperfective negative system

              Imperfective Negative
              Progressive Negative

Evidence for the non-obvious groupings comes from the morphosyntax of relative clauses. For example, the two positive perfect categories join with the perfectives in having *kárⁿà* in relative clauses.

External to the aspect-negation system just summarized are stative verbs, whether derived from regular verbs ('be sitting') or lexical quasi-verbs ('be','have', 'want'), which have only a positive/negative polarity opposition. However, statives have some affinities to the imperfective aspect, again seen most clearly in the form of relative clauses.

There is also a tense system of sorts. The aspect-negation and stative categories are implicitly connected to the time of speaking. The deictic center can be shifted to the past by adding a conjugatable past clitic to the relevant aspect-negation marker, resulting in e.g. past imperfective ('used to eat') and past stative ('was sitting'). There is also a form with this clitic added to a verb without aspect-negation marking that competes to a limited extent with perfective positive verbs.

10.1.3   Verb stem shapes

Underived verbs have from one to three syllables. Derivational suffixes usually add one syllable each (chapter 9). Derived verbs (except perhaps causatives) are often treated for inflectional and phonological-constraint purposes like underived verbs.

*The **bare stem** (or: chaining form) is used in nonfinal position in direct verb chains (§15.1). This can often be taken as the lexical form of the verb (and used as citation form), in the sense that the various AN stems can be predicted from it. However, in some languages, some or all bare stems must end in a high vowel, which can disguise the stems ATR-harmonic value. In this case, another form (e.g. Imperative or simple Perfective) might be used as citation form, but often these have their own inadequacies (neutralization of lexical tone contour, final-vowel neutralization). So for some languages, the citation form is a combination of the bare stem (= chaining form) and the Imperative, e.g. Toro Tegu wùrĭy\\wùrìyó 'bend over'.*

Sections below describe verb-stem shapes, beginning with monosyllabics.

10.1.3.1   Regular *Cv* and *Cv:* verb stems

There are a large number of *Cv-* and *Cv:-* stems with oral vowels. Nasalized vowels are rare in verbs, but I can cite ɛ́ⁿ- '(woman) marry (man)' and homonym 'become tight'. *Cv-* is the regular TU reflex of original *Cv(:)- stems. *Cv:-* verbs are original bisyllabics that have contracted after the loss of a medial consonant (frequently a liquid) between identical nonhigh vowels. Some of them still have bisyllabic features, notably in the A/O-stem. Especially for *Cv-*, the stem vowel is usually non-high, but there are a few (somewhat problematic) Cu- and *Ci-* stems.

Parallel to the distinction between {H} and {LH} verbs stems of two or more syllables, there is a binary tonal distinction among monosyllabic stems. However, the distinction is partially submerged for Cv- stems, because a number of perfective inflections have generalized the H-toned form *Cv́-*. This is

over and above the more general suppression of lexical stem tones in some other inflectional categories, which affects verbs of all shapes. To determine the lexical tone contour of a Cv- verb, we can observe the tones in the form with Perfective-2 *-sɔ̀-*. If we get *Cv́-sɔ̀-*, we have a lexically {H}-toned verb *Cv́-*. If we get *Cv̀-sɔ́-*, we have a lexically {LH}-toned verb, whose citation form is *Cv̌-* even though the H-tone element in the {LH} contour is only realized on a suffixal syllable. *Cv́-* and *Cv̌-* are neutralized to *Cv́-* in Perfective-1b *Cv́-tì-* and Recent Perfect *Cv́ dè-*, so these inflections are not diagnostic for lexical tones of *Cv-* stems. For example, *dɔ̌-* 'insult' has Perfective-2 *dɔ̀-sɔ́-* (which reveals the lexical {LH} contour), but Perfective-1b *dɔ́-tì-* and Recent Perfect *dɔ́ dè-*.

(xx1) organizes monosyllabic verb stems by **tone classes**. The Perfective-2 indicates which are {H}-toned and which are {LH}-toned, based on the Perfective-2. As with nonmonosyllabic verbs, monosyllabic stems beginning with voiceless obstruents are {H}-toned, those beginning with voiced obstruents are {LH}-toned, and those beginning with a sonorant or with no consonant can be either (lexical choice).

(xx1)   Tone classes of *Cv-* and *Cv:-* verb stems

	stem	Perf2	gloss	comment

a. {H}-toned
   Cv́- with initial voiceless obstruent

stem	Perf2	gloss	comment
cé-	cé-sɔ̀-	'shout'	with noun *cé-gé*
ká-	ká-sɔ̀-	'shave'	
kɔ́-	kɔ́-sɔ̀-	'raise (a child)'	
pɛ́-	pɛ́-sɔ̀-	'get old'	
sá-	sá-sɔ̀-	'reply'	(younger speakers)
sá-	sá-sɔ̀-	'knock down (stem)'	
sɔ́-	sɔ́-sɔ̀-	'douse'	
tá-	tá-sɔ̀-	'shoot'	
tá-	tá-sɔ̀-	'avoid taboo'	noun *tǎ:*
tɛ́-	tɛ́-sɔ̀-	'sprout'	
tɛ́-	tɛ́-sɔ̀-	'weaver'	
tí-	tí-sɔ̀-	'send'	
tɔ́-	tɔ́-sɔ̀-	'sow, plant'	with noun *tò-ŋgó*
tɔ́-	tɔ́-sɔ̀-	'spit'	with noun *yò-ínjé*

   Cv́- with initial sonorant or zero

stem	Perf2	gloss	comment
ɛ́ⁿ-	ɛ́ⁿ-sɔ̀-	'(woman) marry (man)'	
ɛ́ⁿ-	ɛ́ⁿ-sɔ̀-	'become tight'	
ná-	ná-sɔ̀-	'spend night'	
nú-	nú-sɔ̀-	'go in'	

ɲɛ́-	*ɲɛ́-sɔ̀-*	'eat, drink'	

Cv́:- with initial voiceless obstruent

pɛ́:-	*pɛ́:-sɔ̀-*	'strike (match)'	Yanda Dom *pɛ́lɛ́-*
pɛ́:-	*pɛ́:-sɔ̀-*	'clap (hands)'	with noun *pɛ́lú* 'applause', Jamsay *pɛ́rɛ́-*
sá:-	*sá:-sɔ̀-*	'coarsely grind'	Jamsay *sárá-*
sa:-	*sa:-sɔ̀-*	'take off (garment)'	
ta:-	*ta:-sɔ̀-*	'lay (egg)'	*tálɛ́* 'egg', Jamsay verb *tárá-*
sɛ́:-	*sɛ́:-sɔ̀-*	'sneeze'	with noun *ìsɛ́*, Yanda Dom *ísíyɛ́-*
tɔ́:-	*tɔ́:-sɔ̀-*	'begin'	Yanda Dom *tɔ́lɔ́-*
tó:-	*tó:-sɔ̀-*	'pound'	Yanda Dom *tóló-*

Cv́:- with initial sonorant or zero

á:-	*á:-sɔ̀-*	'brew (beer)'	Jamsay *árá-*
ɛ́:-	*ɛ́:-sɔ̀-*	'dispossess'	Yanda Dom *ɛ́lɛ́-*
ní:-	*ní:-sɔ̀-*	'sleep'	with noun *jìrè-[ní-ŋgí]* ; Yanda Dom *nìyⁿɛ́-*

b. {LH}-toned

Cv̌- with initial voiced obstruent

bǎ-	*bà-sɔ́-*	'fill'	
bě-	*bè-sɔ́-*	'lie down'	
dě-	*dè-sɔ́-*	'bathe'	
dɔ̌-	*dɔ̀-sɔ́-*	'arrive, approach'	
dɔ̌-	*dɔ̀-sɔ́-*	'insult'	
dǒ-	*dò-sɔ́-*	'bump'	
dǒ-	*dò-sɔ́-*	'suckle'	
zǒ-	*zò-sɔ́-*	'be many, abound'	
gǎ-	*gà-sɔ́-*	'cut (with sickle)'	
gǒ-	*gò-sɔ́-*	'go out'	
jě-	*jè-sɔ́-*	'kill'	
zɛ́-	*zɛ̀-sɔ̀-*	'(man) marry (woman)'	
jě-	*jè-sɔ́-*	'dance'	with noun *jɛ́*
jě-	*jè-sɔ́-*	'harvest (millet)'	with noun *jɛ́-ŋgɛ́*
jě-	*jè-sɔ́-*	'fart'	with noun *jì-ŋgɛ́*
dǐ-	*dì-sɔ́-*	'carry on head'	

Cv̌- with initial sonorant or zero

nɔ̌-	*nɔ̀-sɔ́-*	'hear'	
yě-	*yè-sɔ́-*	'weep'	with noun *yàŋgá*
yǐ-	*yì-sɔ́-*	'see'	

Cv̌:- with initial voiced obstruent

bă:-	bà:-só-	'gather'	Jamsay *bàrá*
bĕ:-	bὲ:-só-	'get'	Yanda Dom *bèlé*
zĕ:-	zὲ:-só-	'bring'	Jamsay *jὲ:rέ*
zŏ:-	zɔ̀:-só-	'look for'	Nanga *jɔ̀rɔ́*

Cv̆:- with initial sonorant or zero

bă:-	bà:-só-	'gather'	Jamsay *bàrá*
lă:-	là:-só-	'give birth'	Jamsay *nàrⁿá*
ɲă:-	ɲà:-só-	'take, pick up'	Jamsay *yàɲá*
wă:-	wà:-só-	'do farm work'	Jamsay *wàrá*
wŏ:-	wɔ̀:-só-	'come'	Yorno So *wèlé-*

Cv:- stems (except *ní:-* 'sleep') have a variant form *Cv-lv-* in agentive compound finals (§5.1.4), and in the Third-Person Hortative (§10.xxx). Historically, the extended variant reflects the original bisyllabic **Cvlv-* form of most of these verbs.

The **vowel quality** of *Cv-* verbs, including the A/O-stem and the E/I-stem, are shown in (xx2). Here, however, tones are removed, since they are often determined by the inflectional suffix independently of vocalsim.

(xx2)   Vocalism of *Cv-* verb sems

basic	A/O-stem	E/I-stem	gloss

a. -ATR *Cɛ-* stems
initial palatal

jɛ-	ja-	jὲ-	'kill'
ɲɛ-	ɲa-	ɲɛ-	'eat, drink'
yɛ-	ya-	yɛ-	'weep'

other initial C

έⁿ-	ɛ̱a-	ὲⁿ-	'(woman) marry (man)'
έⁿ-	ɛ̱a-	ὲⁿ-	'become tight'
pɛ-	pɛ̱a-	pɛ-	'get old'
tέ-	tɛ̱a-	tɛ-	'sprout'
tέ-	tɛ̱a-	tɛ-	'weave'
zɛ-	zɛ̱a-	zɛ-	'weep'

b. -ATR *Cɔ-* stems

dɔ-	dɔ̱a-	dɔ̱ɛ-	'arrive, approach'
dɔ-	dɔ̱a-	dɔ̱ɛ-	'insult'
kɔ-	kɔ̱a-	kɔ̱ɛ-	'raise (a child)'
sɔ-	sɔ̱a-	sɔ̱ɛ-	'douse'
tɔ-	tɔ̱a-	tɔ̱ɛ-	'sow, plant'

tɔ-	tɔ̞a-	tɔ̞ɛ-	'spit'
nɔ-	nɔ̞a-	nɔ̞ɛ-	'hear'

c. +ATR *Ce-* stems

be-	be-	be-	'lie down'
ce-	cè-	ce-	'shout'
de-	de-	de-	'bathe'
je-	je-	je-	'dance'
je-	je-	je-	'harvest'
je-	je-	je-	'fart'

d. +ATR *Co-* stems

do-	do-	do̞e-	'bump'
do-	do-	do̞e-	'suckle'
go-	go-	go̞e-	'go out'

e. *Ca-* stems

ga-	ga-	ga̞ɛ-	'cut (with sickle)'
ka-	ka-	ka̞ɛ-	'shave'
na-	na-	na̞ɛ-	'spend night'
sa-	sa-	sa̞ɛ-	'reply'
ta-	ta-	ta̞ɛ-	'shoot'
ta-	ta-	ta̞ɛ-	'avoid taboo'

f. *Cu-* stems

nu-	nu-	nu̞i-	'go in'

g. *Ci-* stems
initial palatal

yi-	ya-	yi-	'see'

other initial C

di-	di̞a-	di-	'carry on head'
ti-	ti̞a-	ti-	'send'

The A/O-stem requires a shift from *Cɛ-* to *Ce̞a-* (xx2a) from *Cɔ-* to *Cɔ̞a-* (xx2b), and from *Ci-* to *Ci̞a-* (xx2g). Observe that *Cɛ-* but not *Cɔ-* shifts to a +ATR value; these pronunciations are clear in careful speech. The diphthongal forms *Ce̞a-* and *Ci̞a-* simplify to *Ca-* after a palatoalveolar (including *y*). Presumably *Cɔ̞a-* would similarly simplify to *Ca-* after *w*, but there are no relevant examples. There is no vocalic change in the A/O-stems for *Ce-*, *Co-*, *Ca-*, or *Cu-*.

132

In the E/I-stem, *Cɔ-* shifts to *Cɔ̧ɛ-*, *Co-* to *Co̧e-*, *Ca-* to *Ca̧ɛ-*, and *Cu-* to *nu̧i-*. This reflects the structural distinction between final-nonhigh-vowel and final-high-vowel verb stems. There is no change in the vocalism of *Cɛ-*, *Ce-*, or *Ci-*, i.e. stems with a front vowel, but this may disguise an underlying difference between /Cɛ̧ɛ-/ and /Cȩe-/ for the final-nonhigh-vowel verbs and /Ci̧i-/ for *Ci-*.

The vocalism of *Cv:-* verbs is illustrated in (xx3). There are no *Cu:-* stems.

(xx3)   Vocalism of *Cv:-* verb sems

basic	A/O-stem	E/I-stem	gloss
a. -ATR *Cɛ:-* stems			
bɛ:-	*bea-*	*bɛ:-*	'get'
ɛ:-	*ea-*	*ɛ:-*	'dispossess'
pɛ́:-	*pea-*	*pɛ:-*	'strike (match)'
tɛ:-	*tea-*	*tɛ:-*	'make large pile'
zɛ:-	*zea-*	*zɛ:-*	'bring'
b. +ATR *Ce:-* stems			
pé:-	*pe:-*	*pe:-*	'clap (hands)'
sé:-	*se:-*	*se:-*	'sneeze'
c. -ATR *Cɔ:-* stems			
initial w			
wɔ:-	*wa:-*	*wɔɛ-*	'come'
unrounded initial C			
zɔ:-	*zɔa-*	*zɔɛ-*	'look for'
tɔ́:-	*tɔa-*	*tɔɛ-*	'begin'
d. +ATR *Co:-* stems			
to:-	*to:-*	*toe-*	'pound'
e. *Ca:-* stems			
ba:-	*ba:-*	*baɛ-*	'gather'
la:-	*la:-*	*laɛ-*	'give birth'
ɲa:-	*ɲa:-*	*ɲaɛ-*	'take, pick up'
sa:-	*sa:-*	*saɛ-*	'take off (garment)'
sa:-	*sa:-*	*saɛ-*	'coarsely grind'
ta:-	*ta:-*	*taɛ-*	'lay (egg)'
wa:-	*wa:-*	*waɛ-*	'do farm work'

f. *Ci:-* stems (or *Ciy-* ?, see discussion below)

ni:-	*ni:-*	*ni:-*		'sleep'

In the A/O-stem, *Cɛ:-* becomes *Cea-*, and *Ca:-* becomes *Caɛ-*, following the vowel-quality patterns seen with *Cv-* counterparts. *Cɔ:-* becomes *Cɔa-* (difficult to distinguish from *Coa-*) but in the case of *wɔ̌:-* 'come', the initial *w* "swallows" the *ɔ*, producing *wa:-*. This is homophonous with the A/O-stem of *wǎ:-* 'do farm work'. The only *Ci:-* stem, *ní:-* 'sleep', does not break into #*nia-* in the A/O-stem. This suggests the possibility of a lexical representation *níy-* rather than *ní:-*.

In the E/I-stem of *Cv:-* verbs, there are no surprises; the vowel qualities match those for *Cv-* verbs.

My transcriptions recognize a phonological distinction between monomoraic *Co̧e-*, *Cȩa-*, *Ca̧ɛ-*, etc., from *Cv-* verbs (e.g. *go̧e-*) and bimoraic *Coe-*, *Cea-*, *Caɛ-*, etc., from *Cv:-* verbs (e.g. *toe-*). In careful pronunciation, an informant does make these distinctions. In allegro pronunciation, they are difficult to distinguish: *Coe-* and *Cea-* may desyllabify to *Co̧e-* and *Cȩa-*, and the timing distinction between *Ca̧ɛ-* and *Caɛ-* is subtle in the best of cases.

Furthermore, desyllabified mid-height vowels tend to reduce to semivowels {*w y*} in allegro speech, obscuring underlying ATR values, thus *so̧a-* > [swa], *do̧e-* > [dwe], *tȩa-* > [tja].

10.1.3.2   *nú-* 'go in'

This is the only *Cu-* verb. The paradigm is unremarkable except for the imperative form *nwí*.

(xx1)   Paradigm of 'go in'

nú	bare stem
nú-lé	Verbal Noun
nu̧i-	simple Perfective
nú-yà-	Perfective-1b
nú-sɔ̀-	Perfective-2
nú dè-	Recent Perfect
nú-téré-bì-	Experiential Perfect
nù-lí-	Perfective Negative
nú-m̀-dɔ̀-	Imperfective
nú-ŋgò:-	Imperfective Negative
nu̧í	Imperative
nú-lì	Imperative Negative
nú-mɔ́-ǹ	Hortative

In some Dogon languages, 'hear' and 'go in' differ only in tones and merge in some inflectional categories where lexical tones are overridden. In TU, 'hear' is *nɔ̌-*, A/O-stem *nwa-*, so there is always a segmental difference between 'hear' and 'go in'.

10.1.3.3 *yǐ-* 'see'

This verb diverges in vocalism from the few other *Ci-* stems. The A/O-stem *ya-* is what we would expect from #*yě-* or #*yɔ̌-* rather than *yǐ-*, and several cognates in other Dogon languages have a -ATR vowel, e.g. Jamsay *ɛ̌:-* (Pergue dialect *yɛ̌:-*), Najamba *yɛ́-*, Yanda Dom and Toro Tegu *wɔ́-*.

(xx1) Paradigm of 'see'

yí	bare stem
yí-lé	Verbal Noun
yì:-	simple Perfective
—	Perfective-1b or 1a
yì-sɔ́-	Perfective-2
yí dè-	Recent Perfect
yì-tɛ́rɛ́-bì-	Experiential Perfect
yà-lí	Perfective Negative
yá-m̀-dɔ̀-	Imperfective
yá-ŋgò:-	Imperfective Negative
—	Imperative
—	Imperative Negative
yà-mɔ́-ǹ	Hortative

10.1.3.4 Other *Ci-* verbs (*tí-* 'send', *dǐ-* 'carry on head')

Given the irregularity of 'see', we can think of *tí-* 'send' and *dǐ-* 'carry on head' as regular for the shape *Ci-*. As expected from the voicing values of the initial stops, *tí-* is {H}-toned and *dǐ-* is {LH}-toned, the difference being audible in the Perfective-2.

(xx1) Paradigms of 'send' and 'carry on head'

'send'	'carry on head'	
tí-	*dí*	bare stem

tí-lé	*dí-lé*	Verbal Noun
tì:-	*dì:-*	simple Perfective
tí-tì-	*dí-tì-*	Perfective-1b
tí-sɔ̀-	*dì-sɔ́-*	Perfective-2
tí dè-	*dí dè-*	Recent Perfect
tí-téré-bì-	*dì-téré-bì*	Experiential Perfect
tìyà-lí-	*dìyà-lí-*	Perfective Negative
tíyà-m-dɔ̀-	*díyà-m-dɔ̀-*	Imperfective
tíyá-ŋgò:-	*tíyá-ŋgò:-*	Imperfective Negative
tḭá	*dḭá*	Imperative
tḭá-lì	*dḭá-lì*	Imperative Negative
tḭá-mɔ́-ǹ	*dḭà-mɔ́-ǹ*	Hortative

Several cognates of 'carry on head' are bisyllabic, including a Mediopassive suffix (Yanda Dom *dì-yɛ́-*, Togo Kan *dùw-î:-*, Yorno so *dùy-ê:-*). This probably accounts (historically) for the second syllable in A/O-stem *diya*. Cognates of 'send' are variably monosyllabic (e.g. Jamsay *tí:-*) or bisyllabic (e.g. Najamba *tíyɛ́-*).

10.1.3.5 Suppletive verb 'go' (*yǎy-*, *yà-dá*, *o-*)

This verb has two basic stems. On is *yǎ(y)-*, the other is *o-* (lexical tone indeterminate). 'go' and its transitive counterpart *zǎy-* 'convey' share a number of paradigmatic features. Imperative suffix *-da* is limited to these two verbs, but the tone contour diverges in the two cases (*yà-dá*, *zá-dà*). *zǎy-* is ablauted to *zo-* in the inflections where *o-* is the stem used for 'go', raising the possibility that *o-* itself is an ablauted (rather than suppletive) stem. Historically, however, *o-* may derive from an unrelated 'go' verb, cf. Toro Tegu *bò-* 'go (to)', Dogulu *bɔ̀lé-* 'go'.

(xx1)   Paradigm of 'go'

yây	bare stem
yáy-lé	Verbal Noun
yày-	simple Perfective (3Sg)
yǎ-yyà- ~ yé-yà-	Perfective-1a
yày-sɔ́-	Perfective-2
yǎy dè-	Recent Perfect
yày-téré-bì-	Experiential Perfect
ò-lí-	Perfective Negative
ó-m̀-dɔ̀-	Imperfective
ó-ŋgò:-	Imperfective Negative

yà-dá	Imperative
ó-lì	Imperative Negative
ḿbó-ǹ [!]	Hortative

10.1.3.6 Irregular verb *zǎy-* 'take away (convey)'

This verb functions roughly as the causative of *yǎy-* 'go', and the two verbs share some unutual paradigmatic features. The paradigm is (xx1).

(xx1) Paradigm of *zǎy-* 'take away, convey'

zây	bare stem
záy-lé	Verbal Noun
zày-	simple Perfective (3Sg)
zǎy-tì-	Perfective-1b
zày-sɔ́	Perfective-2
zǎy dè-	Recent Perfect
zày-tɛ́rɛ́-bì-	Experiential Perfect
zò-lí-	Perfective Negative
zó-m̀-dɔ̀-	Imperfective
zó-ŋgò:-	Imperfective Negative
zá-dà	Imperative
zó-lì	Imperative Negative
zò-mɔ́-ǹ	Hortative

10.1.3.7 *CvC-* verb stems

There are a number of verb stems that often appear in the form CvC-, whether word-finally or presuffixally. Since C_2 is always a sonorant, and since there is no opposition between *CvC-* and *CvCi-* for a given sonorant C_2, I am inclined to analyse these stems as *CvCi-*, with frequent syncope/apocope of the final short high vowel (§3.xxx). The full form *CvCi-* is elicitable, except when C_2 is *y*. Given the weak metrical position of the second syllable, the distinction between *Cvyi-* and *Cvy-* would be difficult to hear in any case.

The sample paradigm in (xx1) is that of *làyí-* (or *lǎy-*) 'taste'.

(xx1) Paradigm of 'taste'

lây	bare stem
láy-lé	Verbal Noun

lày-	simple Perfective
lǎy-tì-	Perfective-1b
lày-só-	Perfective-2
lǎy dè-	Recent Perfect
lày-téré-bì-	Experiential Perfect
lày-lí-	Perfective Negative
lây-m-dò-	Imperfective
láy-ŋgò:-	Imperfective Negative
láy	Imperative
láy-lì	Imperative Negative
lày-mó-ǹ	Hortative

Certain inflected forms of *yǎy-* 'go' (§10.1.xxx) and *zǎy-* 'take away, convey' (§10.1.xxx) have *Cay-* segmental shape. Some Cv- verbs have an allomorph Cvy- in certain perfective-system inflections, see §10.xxx.

   ní:- 'sleep' might alternatively be represented as *níy-*, which might account for the absence of a-vowels in its A/O-stem *niy-* (§10.xxx above).

   Overall, a case can be made that Cvy- is a valid lexical shape for verbs, but it is not a clearcut call.

10.1.3.8 *nCv-* verb (*ńdí-* 'give')

The only verb stem of this shape is *ńdí-* 'give'. It is treated as bisyllabic, as seen by the tone contour in e.g. Imperfective *ńdà-m-dò-*.

(xx1)   Paradigm of 'give'

ńdí	bare stem
ńdí-lé	Verbal Noun
ǹdì-	simple Perfective
ńdí-tì-	Perfective-1b
ńdí-sò-	Perfective-2
ńdí dè-	Recent Perfect
ńdí-téré-bì-	Experiential Perfect
ǹdà-lí-	Perfective Negative
ńdà-m-dò-	Imperfective
ńdá-ŋgò:-	Imperfective Negative
ńdá	Imperative
ńdà-lì	Imperative Negative
ńdá-mó-ǹ	Hortative

10.1.3.9 Underived bisyllabic stems

The majority of underived verb stems are bisyllabic. *CvCv-* is common, followed by *CvCCv-*, then *Cv:Cv-*, then *Cv:CCv-*. The initial C position may be vacant. Medial CC clusters are mostly homorganic nasal-stop clusters {*mb nd ŋg*}.

    As with mono- and trisyllabic stems, there are two lexical tone classes, {H} and {LH}. Stems beginning with a voiceless obstruent are {H}, those beginning with a voiced obstruent are {LH}, and those beginning with sonorants or with no consonant can be either (lexical choice). Lexical tones are preserved in positive perfective forms, but are partially or fully overridden in some other inflectional categories. A few examples illustrating the syllabic shapes and tone classes are in (xx1).

(xx1)   Syllabic Shapes and Lexical Tones of Bisyllabic Verbs

            stem   gloss

        a. {H}-toned with initial voiceless obstruent
        CvCv-
            kɔ́bɔ́-   'draw water'
            tábá-   'touch'
        CvCCv-
            tómbó-   'jump'
            sémbí-   'sweep'
        Cv:Cv-
            pá:mí-   'understand'
            sá:mí-   'reply' (older speakers)
        Cv:CCv-
            ŋŋŋ   'xxx
            ŋŋŋ   'xxx

        b. {LH}-toned with initial voiced obstruent
        CvCv-
            zòbɔ́-   'run'
            bàrⁿá-   'beat (tomtom)'
        CvCCv-
            zòŋgí-   'treat (medically)'
            dàmbí-   'push'
        Cv:Cv-
            ŋŋŋ   'xxx

Cv:CCv-
  mà:ndí-   'think'
  ŋŋŋ   'xxx

c. {H}- or {LH}-toned with initial sonorant or no consonant
  CvCv-, {H}-toned
    ébé-   'buy'
    ɔbú-   'lay out'
    ŋŋŋ   'xxx
    ŋŋŋ   'xxx
  CvCv-, {LH}-toned
    àbá-   'accept'
    ìré-   'forget'
    ìlɛ́-   'go up'
    ìbé-   'catch'
    ùrɔ́-   'skin and butcher'
    lùgɔ́-   'rinse (mouth)'
    nùŋú-   'sing'
    yàgá-   'fall'
    ŋŋŋ   'xxx
  CvCCv-, {H}-toned
    námbí-   'step on'
    ɔ́ndí-   'build'
    ŋŋŋ   'xxx
  CvCCv-, {LH}-toned
    màndí-   'laugh'   with noun *móndú-gó*
    nìndí-   'breathe'   with noun *nìndì-gó*
    nìŋgé-   'cook (sauce)' with noun *nìŋgé* 'sauce'
    ŋŋŋ   'xxx
  Cv:Cv-, {H}-toned
    ŋŋŋ   'xxx
    ŋŋŋ   'xxx
  Cv:Cv-, {LH}-toned
    ŋŋŋ   'xxx
    ŋŋŋ   'xxx
  Cv:CCv-, {H}-toned
    ŋŋŋ   'xxx
    ŋŋŋ   'xxx
  Cv:CCv-, {LH}-toned
    nɔ́:ndú-   'ignite'
    ŋŋŋ   'xxx

Regarding vocalism, bisyllabic verbs can be divided into two major categories. In one, the **final vowel is nonhigh** {*e ɛ a ɔ o*} and is tightly constrained by the penult vowel. In the other, the **final vowel is high** (basically i, but easily shifting to u to assimilate to nearby segments), regardless of the penult vowel quality. In all underived bisyllabic verbs, the final vowel is short, but the penult vowel may be long.

In the final-nonhigh-vowel class, the possible lexical vowel sequences for CvCv verbs are those in (xx2).

mixed ATR
bèrⁿɛ́- 'become giddy'
zògɔ́- 'shatter'
dògɔ́- 'abandon'
zòbɔ́- 'run'

-ATR
kɔ́bɔ́- 'draw (water)'
ɛ́bɛ́- 'buy'
sɛ́mɛ́- 'slaughter'

+ATR
kédé- 'cut'   sɛmamnum

(xx2)   Vowel sequences for final-nonhigh-vowel *CvCv-* verbs

a. identical non-high vowels
   CeCe, *CɛCɛ*, *CaCa*, *CɔCɔ*, *CoCo*

b. +ATR followed by -ATR mid-height vowel
   CeCɛ, *CoCɔ*

c. high vowel plus mid-height vowel agreeing in backness
   CiCe, *CiCɛ*, *CuCɔ*, *CuCo*

The lexical vocalism changes in the A/O-stem for verbs of this major class that do not already end in {*a o*}. Examples of the various vowel patterns are given in (xx3).

(xx3)   Final-nonhigh-vowel verbs

	basic	A/O-stem	gloss

a. identical non-high vowels
  CaCa-
    bàrá-   bara-   'add'
  +ATR *CeCe- and CoCo-*
    kédé-   kede-   'cut'
    pógó-   pogo-   'thresh'
  -ATR *CɛCɛ- and CɔCɔ-*
    ɛ́bɛ́-   ɛba-   'buy'
    kɔ́bɔ́-   kɔba-   'draw water'

b. +ATR then -ATR mid-height vowel
    bèrⁿɛ́-   berⁿa-   'become giddy'
    dòrⁿɔ́-   dorⁿa-   'sell'

c. high vowel plus mid-height vowel
  CiCe- and CuCo- with final +ATR vowel
    síré-   sire-   'point at'
    súgó-   sugo-   'go down'
  CiCɛ- and CuCɔ- with final -ATR vowel
    ìlɛ́-   ila-   'go up'
    gùɲɔ́-   guɲa-   'steal'

Fuller lists of the two types of *CɛCɛ-* and *CɔCɔ-* stems are in (xx4).

(xx4)   basic   A/O-stem   gloss

    a. *CɛCɛ- and CɔCɔ-*
      CɛCɛ-
        bèrⁿɛ́-   berⁿa-   'become giddy'
      CɔCɔ-
        dògɔ́-   doga-   'abandon'
        dòrⁿɔ́-   dorⁿa-   'sell'
        zògɔ́-   zoga-   'shatter'

    b. *CɔCɔ- and CɛCɛ-*
      CɛCɛ-
        ɛ́bɛ́-   ɛba-   'buy'
        sɛ́mɛ́-   sɛma-   'slaughter'
      CɔCɔ-
        kɔ́bɔ́-   kɔba-   'draw water'

CvCCv-, *Cv:Cv-*, and *Cv:CCv-* verbs favor the final-high-vowel pattern, see below. However, those vowel sequences illustrated above that end in a +ATR vowel are allowed for these heavier verbs (xx5).

(xx5)　　　basic　　　A/O-stem　　　gloss

　　　a. vowel sequence *e…e*
　　　　　émbé-　　　*embe-*　　　'be stronger than'
　　　　　ŋ　　　　　*ŋ*　　　　　'

　　　b. vowel sequence *i…e*
　　　　　pídé-　　　*pide-*　　　'spit in jet'
　　　　　ŋ　　　　　*ŋ*　　　　　'

　　　c. vowel sequence *o…o*
　　　　　tómbó-　　　*tombo-*　　　'jump'
　　　　　ŋ　　　　　*ŋ*　　　　　'

　　　d. vowel sequence *u…o*
　　　　　púŋgó-　　　*puŋgo-*　　　'hit'
　　　　　ŋ　　　　　*ŋ*　　　　　'

This brings us to the final-high-vowel class. Here the penult can be of any vowel quality, but the final vowel is *i* (always so in the imperative), often shifting to u in the presence of a rounded vowel or a labial(ized) consonant. Some *CvCv* stems of these types are in (xx6).

(xx6)　　　basic　　　A/O-stem　　　gloss

　　　a. penult is -ATR
　　　　　ɔ́bú-　　　*ɔbu-*　　　'lay out'
　　　　　jɛ̀rí-　　　*jɛra-*　　　'look'

　　　b. penult is +ATR
　　　　　tórí-　　　*toro-*　　　'authorize'

　　　c. penult is *a*
　　　　　gàní- [găn]　*gan(i)-*　　'put (in)'
　　　　　yàrí-　　　*yara-*　　　'untie'

　　　d. penult is a high vowel
　　　　　gùbú-　　　*gubu-*　　　'hang up'

sírí-	*sira-*	'cook'

For some such stems, the A/O-stem shifts the final vowel to {a *o*}. Others keep the vocalism unchanged. Lists of stems of the two types are in (xx7).

(xx6)   basic   A/O-stem   gloss

    a. A/O-stem does not change vocalism
      penult has back rounded vowel

gùbú-	*gubu-*	'hang up'
dùŋú- [dǔŋ]	*duŋu-*	'put down'
ɔ́bú-	*ɔbu-*	'lay out'
túní- [tún]	*tun(i)-*	'put (in)'

      penult has i (traces of CvCCv shape)

píŋí-	*piŋi-*	'shut (door)' (Imperative *píŋgì*)

    b. A/O-stem shifts to {a *o*}
      penult has front or low vowel

gàyí- [gǎj]	*gaya-*	'bend over backwards'
jɛ̀rí-	*jɛra-*	'look'
sírí-	*sira-*	'cook'
tórí-	*toro-*	'authorize'
yàrí-	*yara-*	'untie'

For heavier bisyllabic stems (*CvCCv-*, *Cv:Cv-*, *Cv:CCv-*), the balance shifts more decisively in favor of the final-high-vowel class. Unless the penult has +ATR {*e o*}, the verb stem is of the final-high-vowel class. In the A/O-stem, the shift of final vowel to {*a o*} occurs in stems with a long vowel, but a long -ATR penult vowel does not then shift to +ATR. Examples are in (xx8).

(xx8)   basic   A/O-stem   gloss

    a. penult is -ATR
      CvCCv

sɛ́mbí-	*sɛmbi-*	'sweep'
yɛ̀mbí-	*yɛmbi-*	'pick out'
zɔ̀ŋgí-	*zɔŋgi-*	'treat (medically)'
sɔ́mbú-	*sɔmbu-*	'congratulate'

      Cv:Cv
      Cv:CCv

nɔ́:ndú-	*nɔ:nda-*	'ignite'

144

b. penult is a
  CvCCv
    dàmbí-   *dambi-*   'push'
  Cv:Cv
    pá:mú-   *pa:ma-*   'understand'
    mà:ndí-   *ma:nda-*   'think'

c. penult is high vowel {*i u*}
    tímbí-   *timbi-*   'cover (with lid)'
    ŋ   *ŋ*   '

Fulfulde and French loans

10.1.3.10 *ŋŋ* 'xxx' *[one such section for each irregular bisyllabic stem]*

(sections can be added, one for each irregular stem, showing representative AN forms)

try 'bring', 'take away, convey' if not monosyllabic

10.1.3.11 Trisyllabic stems

All known trisyllabic stems end in a short high vowel.

 (xx2)   *Trisyllabics with final high vowel*

         stem   *gloss*

    a. initial nonhigh vowel (eii, etc.)

    b. initial high vowel (iii, etc.)

    If there is are CiCiCi and/or CuCuCu/i stems in (xx2b), they should divide into +ATR and -ATR in any AN forms (or the Imperative) that require a final nonhigh vowel. If so, give lists here of stems with CiCiCe, CiCiCɛ, CuCuCo, and CuCuCɔ in these inflected forms. Each such stems should have a citation form showing both stems.
    Briefly indicate conditions under which trisyllabic CvCvCv syncopates a medial high vowel or apocopates a final high vowel, with cross-refs to Chapter 3.

10.2   Positive indicative AN categories

10.2.1   Perfective positive system (including perfect)

10.2.1.1   (Simple) Perfective (E/I-stem in 3Sg)

The simple (or unsuffixed) Perfective consists of a form of the stem, with no other aspect suffix, but ending with the usual pronominal-subject suffixes. It is typically used after a (more or less) focalized nonsubject constituent, so that the verb itself is (more or less) defocalized. Strong focus on another constituent is not required. In the absent of a (more or less) focalized nonsubject constituent, one or other of the suffixally marked perfectives is used. If the subject NP is focused, an unconjugated Defocus form of the verb, ending in *-ὲ:*, is required (§13.1.1.3). The Defocus form resembles, but is not identical to, the 3Sg subject form of the simple perfective, which ends in short {*-e -ε -i*}.

Sample paradigms are in (xx1). For verbs like 'abandon' and 'die' that end in a non-high vowel, the lexical vowel quality is kept in the 1st/2nd person forms. The 3Sg form (except before *de* 'if') shifts final {ɔ o} to {ε e}, but keeps nonfinal vowels intact. The final-vowel shift is audible with 'abandon' but not for 'die', which already ends in *ε*. For verbs that end in a high vowel, like 'build', the 3Sg form ends in *i*. This stem-shape is referred to here globally as the **E/I-stem** of the verb.

The 3Pl form ends in *-à:*, arguably the contraction of a suffix /-a/ with one or other of the stems of the verb. Since the difference between E/I-stems and other stems of a given verb is expressed by the stem-final vowel, contraction with the suffixal vowel in the 3Pl form makes it difficult to determine which stem is involved. There is a special 3Pl form with *-da* used only with 'go' and its

transitive counterpart 'take, convey'. (*-da* reappears in the 3Pl form of the Perfective-1a, which is probably based on 'go'.)

(xx1) category   'abandon'   'die'   'build'   'go'

    1Sg   *dɔ̀gɔ̀-ḿ*   *tìbὲ-ḿ*   *ɔ̀ndù-ḿ*   *yày-ḿ*
    1Pl   *dɔ̀gɔ̀-ý^n*   *tìbὲ-ý^n*   *ɔ̀ndì-ý^n*   *yày-ý^n*
    2Sg   *dɔ̀gɔ̀-ẃ^n*   *tìbὲ-ẃ^n*   *ɔ̀ndù-ẃ^n*   *yày-ẃ^n*
    2Pl   *dɔ̀gɔ̀-ý^n*   *tìbὲ-ý^n*   *ɔ̀ndì-ý^n*   *yày-ý^n*

    3Sg/Inan
    final   *dɔ̀gὲ-∅*   *tìbὲ-∅*   *ɔ̀ndì-∅*   *yày-∅*
    before de   *dɔ̀gɔ̀-∅*   "   "   "
    3Pl   *dɔ̀g-à:*   *tìb-à:*   *ɔ̀nd-à:*   *yà-dà* [!]

Although the E/I-stem is normally restricted to the 3Sg, as shown by 'abandon' and 'die', stem-final +ATR *o* can assimilate in frontness to a following 1Pl/2Pl suffix *-y^n*, as in *bùndè-ý^n* 'we/you-Pl hit' versus e.g. *bùndò-ḿ* 'I hit'.

The sonorant suffixes for 1st/2nd person (*-ḿ, -ý^n, -ẃ^n*) are heard as **H-toned** before *dé* 'if' (whose own H-tone is spread from the suffix). Clause-finally (prepausally), the H-tone is usually not audible except in careful pronunciation. I take this to be intonational clause-final pitch-dropping (typical for defocalized predicates), rather than a matter of phonological tone, but the effect is the same.

Conversely, the 3Sg and 3Pl forms are heard with initial H-tone in careful pronunciation in isolation, e.g. *dɔ́gὲ-∅*, *dɔ́g-à:*. However, clause-finally after other constituents they are heard with low pitch, and since this is the normal position for the simple perfective the low-pitched forms are basic. One could argue, however, that the H-toned forms are lexically basic and that the low-pitched forms reflect intonational pitch leveling under defocus

More examples, especially of monosyllabic stems, are in (xx2).

(xx2) Simple Perfective), *Cv-* and *Cv:-* stems

	verb	Perfective			gloss
		1Sg	3Sg	3Pl	
a.	*Cv-*				
	nú-	*nù-ḿ*	*nùy-∅ ~ nwi-∅*	*nw-à:*	'go in'
	yǐ-	*yì-ḿ*	*yì-∅*	*y(y)-à:*	'see'
	tí-	*tì-ḿ*	*tì-∅*	*ty-à:*	'send'
	ɲɛ́-	*ɲὲ-ḿ*	*ɲὲ-∅*	*ɲy-à:*	'eat, drink'

pέ-	*pὲ-ḿ*	*pὲ-∅*	*pe̩-à:*	'get old'
cé-	*cè-ḿ*	*cè-∅*	*ce̩-à:*	'shout'
dě-	*dè-ḿ*	*dè-∅*	*de̩-à:*	'bathe'
gǒ-	*gò-ḿ*	*go̩è-∅*	*go̩-à:*	'go out'
tɔ́-	*tɔ̀-ḿ*	*tɔ̩è-∅*	*tɔ̩-à:*	'sow'
nɔ̌-	*nɔ̀-ḿ*	*nɔ̩è-∅*	*nɔ̩-à:*	'hear'
ká-	*kà-ḿ*	*kàὲ-∅* [kàὲ]	*k-à:*	'shave'

b. *Cv:-*

ní:-	*nì:-ḿ*	*nì:-∅*	*nìy-à:*	'sleep'
zě:-	*zìyè-ḿ*	*zìyè-∅*	*zìy-à:*	'bring'
sé:-	*sè:-ḿ*	*sè:-∅*	*sìy-à:*	'sneeze'
wɔ̌:-	*wɔ̀:-ḿ*	*wɔ̩è:-∅*	*wɔ̩-à:*	'come'
tó:-	*tò:-ḿ*	*to̩è:-∅*	*to̩-à:*	'pound'
bǎ:-	*bà:-ḿ*	*bàὲ-∅* [bàὲ]	*b-à:*	'gather'

The pronunciation of vowel sequences in such forms is variable, and I have struggled to decide on a normalized transcription. In forms like 3Sg *go̩è-∅* and *tɔ̩è-∅* and 3Pl *go̩-à:* and *tɔ̩-à:*, ATR values are distinguished. *go̩è-∅* sounds like [gwe] with a regular [w] for desyllabified *o̩*, while *tɔ̩è-∅* has a noticeably more open *w*-like sound for *ɔ̩*. There are also alternative pronunciations without the desyllabification, e.g.

       [gòè] and [tɔ̀ὲ]

with the two vowel sounds coarticulated seamlessly (combining to form short, not long, vowels). In the 3Pl forms, I hear no difference between the *w* of *nw-à:* 'they went in' and the *o̩* of *go̩-à:* 'they went out', but the orthographic distinction is useful.

On the other hand, I hear no ATR distinction in the 3Pl forms for *Ce* and *Cɛ* stems, i. when the lexical vowels are {*e ɛ*} instead of {*o ɔ*}. Rather, I hear [Ce̩a:] in all such cases, except when the initial consonant is palatal {*y ɲ*} where I hear [Cja:], see 'eat (meal)' and 'see', as also from *Ci* ('send').

The (clear and possible) *CvC-* stems in (xx3) must deal with how to pronounce the 1st/2nd person sonorant suffixes following a stem-final consonant (whether or not the stem is analysed as lexically *CvC-* or as derived from /*CvCi-*/). After *Cvy-*, the sonorant syllabifies, more clearly in the cases of -yⁿ and -wⁿ than in that of -m, see the fuller paradigm of 'go' in (xx1), above. For example, *yày-ẃⁿ* is heard as [jàjúⁿ]. Cvn- stems, however, require a brief high vowel before *-ḿ*, *-ẃⁿ*, and *-ýⁿ*. It is easiest to hear this in the 1Sg forms shown for 'put' and 'put in' in (xx3b). In corresponding 1Pl, 2Sg, and 2Pl forms (i.e. with a semivowel as suffix), I also hear a (homorganic) short high vowel, and therefore a <LH> tone on the final syllable, as in 2Sg *tùnù-ẃⁿ*, phonetic

[tùnǔ:ⁿ], and in 1Pl/2Pl *tùn-ìý*ⁿ, phonetic [tùnǐ:ⁿ]. The analytical issue is whether underlying /túní-/ fails to delete the final short high vowel in this position, or whether underlying /tún-/ is supplied with a nonlexical epenthetic vowel, see §10.1.xxx.

(xx3)   Simple Perfective, *CvC-* stems

	verb	Perfective			gloss
		1Sg	3Sg	3Pl	

a. Cvy- motion verbs

	yǎy-/o-	*yày-ḿ*	*yày-∅*	*yà-dà*	'go'
	zǎy-/zo-	*zày-ḿ*	*zày-∅*	*zà-dà*	'take, convey'

b. *Cvy-* and *Cvn-* (arguably from bisyllabic /CvCi-/)

	lǎy-	*lày-ḿ*	*lày-∅*	*lày-à*	'taste'
	tún-	*tùnù-m*	*tùn-∅*	*tùn-à:*	'put'
	gǎn-	*gànù-m*	*gàn-∅*	*gàn-à:*	'put in'

Nonmonosyllabic stems pose fewer phonological problems. Examples are in (xx4), see also (xx1) above.

(xx4)   Simple Perfective, bisyllabic and longer stems

	verb	Perfective			gloss
		1Sg	3Sg	3Pl	

a. bisyllabic, final nonhigh vowel

	kédé-	*kèdè-ḿ*	*kèdè-∅*	*kèd-à:*	'cut'
	tábá-	*tàbà-ḿ*	*tàbè-∅*	*tàb-à:*	'touch'
	zòbɔ́-	*zòbɔ̀-ḿ*	*zòbè-∅*	*zòb-à:*	'run'

b. trisyllabic, final nonhigh vowel

	ŋŋŋ	*ŋŋŋ*	*ŋŋŋ*	*ŋŋŋ*	'xxx

c. bisyllabic, final high vowel

	dǔŋ-	*dùŋù-ḿ*	*dùŋì-∅*	*dùŋ-à:*	'put down'
	gùbú-	*gùbù-ḿ*	*gùbì-∅*	*gùb-à:*	'hang'
	jèrí-	*jèrù-ḿ*	*jèrì-∅*	*jèr-à:*	'look'

d. trisyllabic, final nonhigh vowel

	zìgìbí-	*zìgìbì-ḿ*	*zìgìbì-∅*	*zigìb-à:*	'shake'

dɔ̀gɔ̀-∅ dé 'if he has left'

This is either the bare stem (perhaps tone-dropped to {L} or an E-stem ending in {e ɛ} depending on ATR harmonic class. The tones may respect the lexical tone contour (as in the bare stem), or they may drop to {L} (check third person versus 1st/2nd person forms).

The E-stem may be confined to this perfective form (in which case a good case can be made that the -E vowel is a suffix), or it may also extend to the bare stem (in verb chains) and some other forms.

For some languages, this is a basic all-purpose perfective. Such languages may lack the Perfective-1a,b and/or the Perfective-2 entirely, so one can just call this form the Perfective. In Jamsay, it is a defocalized form used when there is at least one overt preceding constituent, especially one that is focalized (overtly or not), so in Jamsay it is called the unsuffixed Perfective.

example of paradigm (use representative verbs)

discussion of morphology
1st-2nd person forms may be distinct as a group from 3Sg and 3Pl in some way
or: there may be a general Sg form opposed to a general Pl form
3Pl may be irregular, or may be the only suffixally marked form
The phonology of the E-stem may be complex, so that Ca:, Co:, and Cɔ: stems have diphthongs: Ca̰ɛ, Co̰e (can be written as Cwe), Cɔ̰ɛ (can be written as Cwɛ).

Is the simple Perfective blocked (or very uncommon) in relative clauses? Or does it just have a special suffixal or tonal form there?

10.2.1.2 Perfective-1a (*-yà-* ~ *-à:-*), Perfective-1b (*-tì-*)

Most verbs have a characteristic suffixed perfective, either Perfective-1a *-yà-* ~ *-à:-* or Perfective-1b *-tì-*. A few verbs occur with neither; in this case, the default perfective is the Perfective-2 or a form with past clitic *=bì-*. Both the perfective-2 and the past can be used with any verb stem.

Perfective-1a is used with basic motion verbs ('go', 'come', 'go in', 'go out', arrive', 'pass by'), stance verbs ('sit down'), deadjectival inchoatives ('become big'), and and some other verbs of a nonkinetic nature ('spend the night', 'die', 'be finished'). Most are intransitive, but a handful ('forget') are syntactically

transitive. Perfective-1b is used with most transitive verbs and with some active intransitives, including verbs of thinking, speaking, and bodily function. Some morphologically mediopassive but syntactically transitive verbs ('carry', 'hold') take the Perfective-1b. Basic perception verbs ('see', 'hear') and a few other non-impact transitives ('understand') do not accept either of these perfectives, and require the Perfective-2 or the past clitic

   Ambi-valent (labile) verbs that have can be either transitive and mediopassive are distinguishable in the Perfective-1 but not elsewhere. For example, *zògɔ́-* 'shatter' can form Perfective-1a *[Y zòg-â:-y]* 'Y (e.g. glass, calabash) shattered' and Perfective-1b *[X Y zògɔ́-tì-∅]* 'X (person) shattered Y'. In other inflectional categories, the two are not distinguished morphologically.

   yǎy- 'go' has Perfective-1a *yǎy-yà-* 'went' in its basic sense. However, in the collocation *íyɛ́ yǎy-* 'play the board game', which no longer has a clear motion component, it is optionally treated as active or transitive and we get Perfective-1b *íyɛ́ yǎy-tì-* 'played the board game' as an alternative to Perfective-1a *íyɛ́ yǎy-yà-*.

   The paradigms are in (xx1). The Perfective-1a variant *-à:-* becomes *-â:-* when it contracts with a stem-final H-toned vowel in an {LH}-toned bisyllabic stem.

(xx1)   category   Perfective-1a   Perfective-1b

        1Sg   *-à:-m ~ -yà-m*   *-tì-m*
        1Pl   *-à:-y^n ~ -yà-y^n*   *-tì-y^n*
        2Sg   *-à:-w^n ~ -yà-w^n*   *-tì-w^n*
        2Pl   *-à:-y^n ~ -yà-y^n*   *-tì-y^n*

        3Sg/Inan   *-à:-y ~ -yà-y*   *-tì-∅*
        3Pl   *-yà-dà*   *-tì-yà*

The suffixal allomorphs of the Perfective-1a with various types of stem are illustrated in (xx2). There is some fluctuation in pronunciation with *Cv-* stems, only a few of which take the Perfective-1a. *Cv-* shifts to *Cvy-* before *-yà-* when the stem is {LH}-toned, allowing the complex tone to be fully articulated on the stem. This extra y occurs optionally in *tá(y)-yà-* from {H}-toned *tá-* '(trap) spring', but was never heard with *nú-* 'go in'. The variant forms *dw-â:-* (for /dɔ-â:/) and *gw-â:-* (for /gɔ-â:/) in (xx2a) could be analysed as contractions of the fuller forms shown next to them, or else as extensions of the *-à:-* allomorph. The latter is regular with (non-mediopassive) bisyllabics whose stems end in a nonhigh vowel (xx2b), where it surfaces as *-à:-* with {H}-toned stems and as *-â:-* with {LH}-toned stems, after contracting with the stem-final short vowel. Allomorph *-yà-* is also found after bisyllabics ending in *i* (xx2b), and after

Mediopassive *-í:-* (xx2c). All trisyllabics known to me that take the Perfective-1a are morphological mediopassives.

(xx2)   Perfective-1a *-yà-*, *-à:-*

	stem	Perfective-1a	gloss
a. *Cv-*			
{H}-toned			
	nú-	*nú-yà-*	'go in'
	tá-	*tá(y)-yà-*	'(trap) spring'
{LH}-toned			
	dǒ-	*dǒy-yà-* ~ *dw-â:-*	'arrive'
	gǒ-	*gǒy-yà-* ~ *gw-â:-*	'go out'
	bě-	*běy-yà-*	'lie down' or 'stay, remain'
	bǎ-	*bǎy-yà-*	'be enough'
b. *Cv:-*			
	ní:-	*ní:-yà-*	'sleep'
	pé:-	*pé:-yà-*	'(rifle) discharge'
	wǒ:-	*wǒy-yà-*	'come'
c. *Cvy-*			
	yǎy-/o-	*yǎy-yà-* ~ *yé-yà-*	'go'
d. bisyllabic			
final nonhigh vowel, {LH}-toned			
	yàgá-	*yàg-â:-*	'fall'
	ìlé-	*ìl-â:-*	'go up'
	wàdá-	*wàd-â:-*	'be left over'
final nonhigh vowel, {H}-toned			
	péndé-	*pénd-à:-*	'(bone) break'
	pɔ́dɔ́-	*pɔ́d-à:-*	'be bruised'
	lábá-	*láb-à:-*	'go past'
	tíbɛ́-	*tíb-à:-*	'die'
final i			
	táŋgí-	*táŋgí-yà-*	'become; cross'
e. mediopassive			
	cíll-í:-	*cíll-í:-yà-*	'be resolved'
	kábíl-í:-	*kábíl-í:-yà-*	'be separated'
	bàrm-í:-	*bàrm-í:-yà-*	'be wounded'

It is possible that at least the *-yà-* allomorph of the Perfective-1a is historically related to *yǎy-* 'go'. Prima facie evidence for this is that the 3Sg form *-yà-y* and the 3Pl form *-yà-dà* are exact matches for the simple Perfective of 'go' (§10.xxx). However, the Perfective-1a is a fairly old formation (cognates in Jamsay and Ben Tey, for example).

The pronominal-suffix paradigm of Perfective-1b *-tì-* is in (xx1) above. There are no special phonological interactions with the stem. *Cv̌-* monosyllabics have H-toned stems, as in the Recent Perfect (but not the Perfective-2 or the Experiential Perfect). A few examples are in (xx3).

(xx3) Perfective-1b *-tì-*

stem	Perfective-1b	gloss
a. *Cv-*, *Cv:-*		
ká-	*ká-tì-*	'shave'
tí-	*tí-tì-*	'send'
jě-	*jé-tì-*	'dance'
jě-	*jé-tì-*	'kill'
ɲé-	*ɲé-tì-*	'eat, drink'
tó:-	*tó:-tì-*	'pound'
b. *Cvy-*		
zǎy-/zo-	*zǎy-tì-*	'take, convey'
lǎy-	*lǎy-tì-*	'taste'
tún-	*tún-tì-*	'put'
c. bisyllabic		
kédé-	*kédé-tì-*	'cut'
tábá-	*tábá-tì-*	'touch'
sémbí-	*sémbí-tì-*	'sweep'
ɔ́ndú-	*ɔ́ndú-tì-*	'build'
d. trisyllabic		
péndí-gí-	*péndí-gí-tì-*	'break'
zìgìbí-	*zìgìbí-tì-*	'shake'

The most likely source of Perfective-1b *-tì-* is the verb *tí-* 'send'. Like the Perfective-1a, however, the formation is fairly old (cognates in Jamsay and Ben Tey).

10.2.1.3 Perfective-2 (*-sɔ̀-*)

The perfective-2 (like past enclitic *=bì-*, see the following section) can be used with any verb. It is most common with perception and mental transitives ('see', 'hear', 'understand') that do not occur in collocations with a cognate nominal object. These verbs do not allow either perfective-1a or perfective-1b and so require Perfective-2 or the past enclitic.

   The basic form of the suffix is *-sɔ̀-*. Unlike perfective-1a/-1b and recent perfect suffixes, but like the experiential perfect, *-sɔ̀-* induces dropping of the tones of a preceding {LH}-toned verb stem to {L}, but the suffix itself becomes H-toned in the process. In other words, the lexical {LH} is realized over the verb plus suffix complex, with the H-toned component appearing on the suffix. Lexically {H}-toned verbs have their full {H}-toned form before the suffix. Since these generalizations apply even to *Cv-* stems, the perfective-2 is useful for determining the lexical tone of *Cv-* stems.

   The synchronic relationship between the perfective-2 and the quasi-verb *sɔ̀-* 'have' is difficult to determine. The perfective-2 is probably ancient within Dogon, and counterparts occur in several (but not all) Dogon languages, e.g. Jamsay *-sà-*.

   The paradigm is (xx1), with *nɔ̌-* 'hear' and *tó:-* 'pound' representing lexically {LH}- and {H}-toned verbs, respectively.

(xx1)   Perfective-2

category	form	'hear'	'pound'
1Sg	*-sɔ́-m*	*nɔ̀-sɔ́-m*	*tó:-sɔ̀-m*
1Pl	*-sɔ́-yⁿ*	*nɔ̀-sɔ́-yⁿ*	*tó:-sɔ̀-yⁿ*
2Sg	*-sɔ́-wⁿ*	*nɔ̀-sɔ́-wⁿ*	*tó:-sɔ̀-wⁿ*
2Pl	*-sɔ́-wⁿ*	*nɔ̀-sɔ́-wⁿ*	*tó:-sɔ̀-yⁿ*
3Sg/Inan	*-sɔ́-∅*	*nɔ̀-sɔ́-∅*	*tó:-sɔ̀-∅*
3Pl	*-s-ɛ̂:*	*nɔ̀-s-ɛ̂:*	*tó:-s-ɛ̀:*

Further examples, using the 3Sg form, are in (xx2). For *Cv-* and *Cv:-* stems, an extensive list is given in .

(xx1)   verb   Perfective-2   gloss

      a. {H}-toned stems
         síré-   *síré-sɔ̀-*   'point at'

súgó-	*súgó-sɔ̀-*	'go down'
tómbó-	*tómbó-sɔ̀-*	'jump'

b. {LH}-toned stems

ìbé-	*ìbè-sɔ́-*	'catch'
gùló-	*gùlò-sɔ́-*	'dig'
bàrá-	*bàrà-sɔ́-*	'add'
zèbé-	*zèbè-sɔ́*	curse'
nùŋú-	*nùŋù-sɔ́-*	'sing'
zɔ̀ŋgú-	*zɔ̀ŋgù-sɔ́-*	'treat'

10.2.1.4 Past perfect (=*bì*-) as a basic past form for some verbs

=*bì*- is a conjugatable enclitic that is added to aspect/negation-marked verbs to shift the reference time from the moment of speaking to a past time, as in the past imperfective ('was sweeping') or past stative ('was sitting', 'used to have'). See §10.5.1.1-6 for full coverage.

The simplest combination morphologically is the past perfect, which consists of the bare stem plus the conjugated enclitic (§10.5.1.3). In addition to the past perfect sense ('had VPed'), this form is used as a basic past-time form ('VPed') for low-transitivity verbs such as 'see' and 'hear' that do not allow the perfective-1a or perfective-1b suffixes. For these verbs, the past perfect competes with perfective-2 -*sà*-, which has something of a present resultative or present perfect flavor ('has VPed', still relevant to the present) while =*bì*- can be used in clauses denoting events at any temporal distance from the present. For example, *nɔ́*=*bù-m* 'I heard' can report something heard some time ago (e.g. yesterday), while perfective-2 *nɔ̀-sɔ́-m* might be used to report a piece of just-heard news, cf. English *I have heard*.

(xx1) Past

category   'say'

1Sg	=*bù-m*	*ɔ́r(ú)*=*bù-m*
1Pl	=*bì-y^n*	*ɔ́r(ú)*=*bì-y^n*
2Sg	=*bù-w^n*	*ɔ́r(ú)*=*bù-w^n*
2Pl	=*bì-y^n*	*ɔ́r(ú)*=*bì-y^n*
3Sg/Inan	=*bì-∅*	*ɔ́r(ú)*=*bì-∅*
3Pl	=*b-à:*	*ɔ́r(ú)*=*b-à:*

10.2.1.5 Experiential Perfect 'have ever' (*-téré-bì-*, *-téré-sɔ̀-*)

The Experiential Perfect specifies that the event in question has occurred at least once in the lifetime of the subject. It generally occurs in connection with events that leave a permanent trace, such as a memory ('have you ever gone to Paris?'). It is common with 'see' and 'hear' as well as 'go'.

In positive clauses, one form of the Experiential Perfect is *-téré꞊bì-*, including Past clitic *꞊bì-*, whose vowel assimilates (*-bù-*) to a following labial(ized) consonant *-wⁿ* or *-m*. {LH}-toned verbs drop to {L} before the suffix. The other variant is *-téré-sɔ̀-*, with the Perfective-2 suffix (and 'have' quasi-verb) *-sɔ̀-*. The paradigm is (xx1).

(xx1)   Experiential Perfect

category	form	'have ever seen'	'have ever seen'
1Sg	*-téré꞊bù-m / -sɔ̀-m*	*yì-téré꞊bù-m*	*yì-téré-sɔ̀-m*
1Pl	*-téré꞊bì-yⁿ / -sɛ̀-yⁿ*	*yì-téré꞊bì-yⁿ*	*yì-téré-sɛ̀-yⁿ*
2Sg	*-téré꞊bù-wⁿ / -sɔ̀-wⁿ*	*yì-téré꞊bù-wⁿ*	*yì-téré-sɔ̀-wⁿ*
2Pl	*-téré꞊bì-yⁿ / -sɛ̀-yⁿ*	*yì-téré꞊bì-yⁿ*	*yì-téré-sɛ̀-yⁿ*
3Sg/Inan	*-téré꞊bì-∅ / -sɔ̀-∅*	*yì-téré꞊bì-∅*	*yì-téré-sɔ̀-∅*
3Pl	*-téré꞊b-à: / -s-ɛ̀:*	*yì-téré꞊b-à:*	*yì-téré-s-ɛ̀:*

Forms of *-téré-bì-* from a sample of stems are in (xx2).

(xx2)   Experiential Perfect

verb	ExpPf	gloss
a. {H}-toned		
ɲé-	*ɲé-téré-bì-*	'eat'
tó:-	*tó:-téré-bì-*	'pound'
kɔ́bɔ́-	*kɔ́bɔ́-téré-bì-*	'draw (water)'
péndí-gí	*péndí-gí-téré-bì-*	'break'
b. {LH}-toned		
gǒ-	*gò-téré-bì-*	'go out'
wǒ:-	*wɔ̀:-téré-bì-*	'come'
yǎy-/o-	*yàgà-téré-bì-*	'fall'

156

yàgá-	*yày-téré-bì-*	'go'
mà:ndí-	*mà:ndì-téré-bì-*	'think'
zìgìbí-	*zìgìbì-téré-bì-*	'shake'

Sentence examples are in (xx3).

(xx3) a. *gònsá:rⁿá yì-téré-bù-m*
elephant   see-ExpPf-Past-1SgS
'I have (once) seen an elephant.'

    b. *ú bàmàkɔ́ yày-téré-bù-wⁿ*
2SgS   B   go-ExpPf-Past-2SgS
'Have you-Sg ever been to Bamako?'

    c. *ú pédé sémé-téré-bù-wⁿ*
2SgS   sheep   slaughter-ExcPf-Past-2SgS
'Have you-Sg ever slaughtered a sheep?'

The negative is common ('have never VPed'). It is *-tèrà-lí-* with Perfective Negative *-lí-* but without Past *=bì-*, see §10.2.3.2.

10.2.1.6   Recent Perfect (*dè-*)

Another option in the perfective system is Recent Perfect *dè-*. This category specifies the (recent) completion of an activity. One typical context is 'I have (already) eaten' when declining an offer to join others at a meal. It can also specify the (recent) successful completion of an activity: 'I have finished doing the job'.

    The paradigm is (xx1).

(xx1)   Recent Perfect

category	form	'eat (meal)'
1Sg	*dè-m*	*ɲé dè-m*
1Pl	*dè-*	*ɲé dè-yⁿ*
2Sg	*dè-*	*ɲé dè-wⁿ*
2Pl	*dè-*	*ɲé dè-yⁿ*
3Sg/Inan	*dè-∅*	*ɲé dè-∅*
3Pl	*d-à*	*ɲé d-à:*

A sample of verbs is in (xx2). Note that the {LH}-toned verbs in this inflection have a stem-final H-tone, unlike the case with the Experiential Perfect, where {LH}-toned stems drop all tones before the suffix.

(xx2)   Recent Perfect

	verb	Recent Perfect	gloss

a. {H}-toned
	ɲέ-	*ɲέ dὲ-*	'eat'
	tó:-	*tó: dὲ-*	'pound'
	kɔ́bɔ́-	*kɔ́bɔ́ dὲ-*	'draw (water)'
	péndí-gí	*péndí-gí dὲ-*	'break'

b. {LH}-toned
	gǒ-	*gó dὲ-*	'go out'
	wɔ̌:-	*wɔ̌: dὲ-*	'come'
	yǎy-/o-	*yàgá dὲ-*	'fall'
	yàgá-	*yǎy dὲ-*	'go'
	mà:ndí-	*mà:ndí dὲ-*	'think'
	zìgìbí-	*zìgìbí dὲ-*	'shake'

The completive sense is exemplified by (xx2a), the recent perfect sense by (xx2b).

(xx2)   a.   *úló*   *ɔ́ndú*   *dὲ-m*
             house   build   RecPf-1SgS
             'I have (recently) finished building (a/the) house.'

        b.   *zá*   *ɲέ*   *dὲ-y^n*
             meal   eat.meal   RecPf-1PlS
             'We have (already) eaten.'

Recent Perfect Negative *dà-lí-* is possible in completion-of-activity contexts like (xx2a), see §10.2.3.3, but in contexts like (xx2b) the regular Perfective Negative is normal.

10.2.1.7 Reduplicated Perfective (absent)

No reduplicated perfective is attested.

10.2.2   Imperfective positive system

10.2.2.1   Imperfective (*-m̀-dɔ̀*, *-m̀-nɛ̀*, *-m̀-nɔ̀*)

This is a broad imperfective. It can specify a future time frame for an eventuality, or it can specify recurrent or habitual repetitions. Its range is circumscribed by progressive constructions which are used to specify an activity in progress ('I am working'), and by the stative ('I am standing').

   The pronominal paradigm is in (xx1). The verb stem and the Imperfective *-m̀-* formative are stable throughout. The *-m̀-* is followed by a second formative whose most basic form is *-dɔ̀*, to judge by the otherwise unsuffixed 3Sg. After 1st/2nd person prefixes, the *d* is nasalized to *n*, and the vowel fronts to *ɛ* before *-y^n*. The 3Pl form ends in a short vowel, unlike 3Pl forms in most other paradigms. All suffixes are L-toned.

(xx1)   Imperfective paradigm

category	form	'goes out'
1Sg	*-m̀-nù-m*	*gó-m̀-nɔ̀-m*
1Pl	*-m̀-nɛ̀-y^n*	*gó-m̀-nɛ̀-y^n*
2Sg	*-m̀-nù-w^n*	*gó-m̀-nɔ̀-w^n*
2Pl	*-m̀-nɛ̀-y^n*	*gó-m̀-nɛ̀-y^n*
3Sg/Inan	*-m̀-dɔ̀-∅*	*gó-m̀-dɔ̀-∅*
3Pl	*-m̀-d-ɛ̀*	*gó-m̀-d-ɛ̀*

The verb takes the A/O-stem, and has {HL} tone contour, with only the first syllable H-toned. For monosyllabics, the Cv- or Cv:- stem combines with the suffixal *-m̀-* to form a <HL>-toned syllable. Examples with stems ending in a nonhigh vowel are in (xx2).

(xx2)   Imperfective (final-nonhigh-vowel class)

verb	Imperfective	gloss
a. *Cv-*, *Cv:-*		
ká-	*ká-m̀-dɔ̀-*	'shave'
á:-	*á:-m̀-dɔ̀-*	'brew (beer)'
dě-	*dé-m̀-dɔ̀-*	'bathe'

159

dɔ̌-	*dɔ̌á-m̀-dɔ̀-*	'arrive' or 'insult'
ɲɛ́-	*ɲá-m̀-dɔ̀-*	'eat, drink'

b. *CvCv-*

dɔ̀gɔ́-	*dɔ́gà-m-dɔ̀-*	'abandon'
kɔ́bɔ́-	*kɔ́bà-m-dɔ̀-*	'draw (water)'
kédé-	*kédè-m-dɔ̀-*	'cut'
yàgá-	*yágà-m-dɔ̀-*	'fall

c. *CvCCv-*

tómbó-	*tómbò-m-dɔ̀-*	'jump'
gùndó-	*gúndò-m-dɔ̀*	'become sterile'

d. *Cv:Cv-*

ŋŋŋ	*ŋŋŋ-*	'xxx
ŋŋŋ	*ŋŋŋ-*	'xxx

e. trisyllabic

ŋŋŋ	*ŋŋŋ-*	'xxx
ŋŋŋ	*ŋŋŋ-*	'xxx

The form is similar with verbs that end in a high vowel (xx3).

(xx3)   Imperfective (final-high-vowel class)

bare stem	Imperfective	gloss

a. *Ci-, Ci:-*

nú-	*nú-m̀-dɔ̀-*	'go in'
tí-	*tí-m̀-dɔ̀-*	'send'
nɪ́:	*nɪ́:-m̀-dɔ̀-*	'sleep'

b. *CvCi-*

lǎy-	*lây-m-dɔ̀-*	'taste'
jèrí-	*jérà-m-dɔ̀-*	'look'
gùbú-	*gúbù-m-dɔ̀-*	'hang up'
ɔ́bú-	*ɔ́bù-m-dɔ̀-*	'lay out'

c. *CvCCi-*

zɔ̀ŋgí-	*zɔ́ŋgì-m-dɔ̀-*	'treat (medically)'
ɔ́ndú-	*ɔ́ndù-m-dɔ̀-*	'build'

d. *Cv:Ci-*
   pá:mú-   *pá:mà-m-dɔ̀-*   'understand'
   mà:ndí-   *má:ndà-m-dɔ̀-*   'think'

e. trisyllabic
   zìgìbí-   *zígìbè-m-dɔ̀-*   'shake'
   péŋgíl-   *péŋgìlè-m-dɔ̀-*   'xxx

10.2.2.2   Reduplicated imperfective (absent)

No reduplicated imperfective forms are attested.

10.2.2.3   Progressive (*-ḿ sɔ̀-*, *-m̀ bù-*)

There are two (present) progressive constructions. One is with Imperfective *-ḿ* (H-toned form) plus *sɔ̀-* 'have', cf. Yanda Dom Progressive *-ḿ zò-*. This seems to be the most common form. The other is similar but replaces 'have' with *bù-* 'be', cf. Yanda Dom Progressive *-ḿ bò-* and Najamba *mbò bò-*.
   The paradigm of *-ḿ sɔ̀-* is (xx1).

(xx1)   Progressive *-ḿ sɔ̀-*

category	form	'be going out'
1Sg	*-ḿ sɔ̀-m*	*gó-ḿ sɔ̀-m*
1Pl	*-ḿ sɔ̀-y^n*	*gó-ḿ sɔ̀-y^n*
2Sg	*-ḿ sɔ̀-w^n*	*gó-ḿ sɔ̀-w^n*
2Pl	*-ḿ sɔ̀-y^n*	*gó-ḿ sɔ̀-y^n*
3Sg/Inan	*-ḿ sɔ̀-∅*	*gó-ḿ sɔ̀-∅*
3Pl	*-ḿ s-ɛ̀:*	*gó-ḿ s-ɛ̀:*

The paradigm of *-ḿ bù-* is (xx1).

(xx1)   Progressive *-ḿ bù-*

category	form	'be taking out'
1Sg	*-ḿ bù-m*	*zó-ḿ bù-m*

1Pl	*-ḿ bì-yⁿ*	*zó-ḿ bì-yⁿ*
2Sg	*-ḿ bù-wⁿ*	*zó-ḿ bù-wⁿ*
2Pl	*-ḿ bì-yⁿ*	*zó-ḿ bì-yⁿ*
3Sg/Inan	*-ḿ bù-∅*	*zó-ḿ bù-∅*
3Pl	*-ḿ b-ɛ̀:*	*zó-ḿ b-ɛ̀:*

10.2.2.4 Future absent

There is no specifically future inflected form like those in Najamba and Toro Tegu. The (simple) imperfective is used in future as well as in general present-time contexts.

10.2.3 Negation of indicative verbs

10.2.3.1 Perfective Negative (*-lí-* ~ *-dí-*)

This category negates the simple Perfective, Perfective-1a and -1b, and Perfective-2, which are not distinguished in the negative. It is also part of the Experiential Perfect Negative *-tɛ̀rà-lí-* (§10.2.3.2) and of the Recent Perfect Negative *dà-lí-* (§10.2.3.3).

The paradigm is in (xx3). The basic form of the Perfective Negative suffix is *-lí-*. After *n*, it becomes *-dí-*. It frequently apocopates to just H-toned *-l* in the 3Sg form. The vowel backs to *u* before labial(ized) *-m* and *-wⁿ* suffixes. The 3Pl form is quite irregular and best considered a portmanteau.

(xx3) Paradigm of Perfective Negative

category	PerfNeg form	'go down'	'put'
1Sg	*-lú-m*	*sùgò-lú-m*	*tùn-dú-m*
1Pl	*-lí-yⁿ*	*sùgò-lí-yⁿ*	*tùn-dí-yⁿ*
2Sg	*-lú-wⁿ*	*sùgò-lú-wⁿ*	*tùn-dú-wⁿ*
2Pl	*-lí-yⁿ*	*sùgò-lí-yⁿ*	*tùn-dí-yⁿ*
3Sg/Inan	*-́l-∅ ~ -lí-∅*	*sùgǒ-l-∅ ~ sùgò-lí-∅*	*tùn-dí-∅*
3Pl	*-ndá*	*sùgò-ndá*	*tùn-dá*

The verb stem is tone-dropped in all cases, as in e.g. Jamsay, but unlike the case in Yanda Dom or Najamba where at least some verbs are {H}-toned before the

suffix. There is no phonological interaction between *-lí-* and the verb stem. The vocalism is that of the A/O-stem.

(xx2)   Perfective Negative (final-nonhigh-vowel class)

	verb	Perfective Neg	gloss
a. *Cv-, Cv:-*			
	ká-	*kà-lí-*	'shave'
	á:-	*à:-lí-*	'brew (beer)'
	dě-	*dè-lí-*	'bathe'
	dǒ-	*dwà-lí-*	'arrive' or 'insult'
	gǒ-	*gò-lí-*	'go out'
	ɲɛ́-	*ɲà-lí-*	'eat, drink'
	tó:-	*tò:-lí-*	'pound'
	wɔ̌:-	*wà:-lí-*	'come'
b. *CvCv-*			
	dògɔ́-	*dògà-lí-*	'abandon'
	kɔ́bɔ́-	*kɔ̀bà-lí-*	'draw (water)'
	kédé-	*kèdè-lí-*	'cut'
	yàgá-	*yàgà-lí-*	'fall'
c. *CvCCv-*			
	tómbó-	*tòmbò-lí-*	'jump'
	gùndó-	*gùndò-lî-*	'become sterile'
d. *Cv:Cv-*			
	ŋŋŋ	*ŋŋŋ-*	'xxx
	ŋŋŋ	*ŋŋŋ-*	'xxx
e. trisyllabic			
	ŋŋŋ	*ŋŋŋ-*	'xxx
	ŋŋŋ	*ŋŋŋ-*	'xxx

(xx3) gives examples involving verbs with final high vowel.

(xx3)   Perfective Negative (final-high-vowel class)

	verb	Perfective Neg	gloss
a. *Ci-, Ci:-*			

nú-	*nù-lí-*	'go in'
tí-	*tìyà-lí-*	'send'
yǐ-	*yà-lí-*	'see'
nî:	*nì:-lí-*	'sleep'

b. *CvCi-*

lǎy-	*làys-lí-*	'taste'
jèrí-	*jèrà-lí-*	'look'
gùbú-	*gùbù-lí-*	'hang up'
ɔ́bú-	*ɔ̀bù-lí-*	'lay out'

c. *CvCCi-*

zɔ̀ŋgí-	*zɔ̀ŋgù-lí-*	'treat (medically)'
ɔ́ndú-	*ɔ̀ndù-lí-*	'build'

d. *Cv:Ci-*

pá:mú-	*pà:mà-lí-*	'understand'
mà:ndí-	*mà:ndà-lí-*	'think'

e. trisyllabic

zìgìbí-	*zǐgìbè-lí-*	'shake'
ŋŋŋ	*ŋŋŋ-*	'xxx

10.2.3.2 Experiential Perfect Negative (*-tèrà-lí-*)

The Experiential Perfect (*-téré-bì-*) is negated as *-tèrà-lí-*, ending with the regular Perfective Negative suffix *-lí-*. Tone-dropping controlled by *-lí-* affects not only the Experiential Perfect suffix but also the preceding verb stem, unlike the case with the Recent Perfect Negative. This is seen with tone-dropped 'slaughter' in (xx1c), compare positive *sémé-téré-bù-m* 'I have (once) slaughtered'.

(xx1) a. *gònsá:rⁿá*   *yì-tèrà-lú-m*
            elephant   see-ExpPf-PerfNeg-1SgS
            'I have never seen an elephant.'

b. *bàmàkɔ́*   *yày-tèrà-ndá*
        B   go-excPf-PerfNeg.3PlS
        'They have never gone to Bamako.'

c. *pédé*   *sèmè-tèrà-lú-m*

sheep   slaughter-ExpPf-PerfNeg-1SgS
'I have never slaughtered a sheep.'

The Experiential Perfect Negative denies that the eventuality has occurred at any time during the lifetime of the subject, and can be translated freely as 'have never VPed'.

10.2.3.3   Recent Perfect Negative (*dà-lí-*)

The Recent Perfect (*dè-*) is negated as *dà-lí-*, including the regular Perfective Negative suffix *-lí-*. The verb stem is not tone-dropped, unlike the case with the Experiential Perfect Negative. The negative form is mainly used in the sense 'have not (yet) finished VP-ing'.

(xx1)   *úló*   *óndú*   *dà-lú-m*
        house   build   RecPf-PerfNeg-1SgS
        'I have not (yet) finished building the house.'

10.2.3.4   Imperfective Negative (*-ŋgò:-, -ŋù-, -ŋì-*)

This form negates the positive Imperfective, denying that the eventuality occurs or will occur in the contextually relevant time span (present to future).

    The paradigm is (xx3). The 3Sg points to a basic suffixal form *-ŋgò:-*, and the 3Pl is derived from this essentially by a vocalic mutation. The 1st/2nd person forms simplify *ŋg* to *ŋ* and shorten and raise the vowel, to *u* before labial(ized) *-m* and *-w^n* and to *i* before *y^n*. The most likely cognate for TU *-ŋgò:-* is Nanga Imperfective Negative *-ŋɔ̀:-*.

(xx3)   Paradigm of Imperfective Negative

category	ImpfNeg	'go up'
1Sg	*-ŋù-m*	*ílá-ŋŋù-m*
1Pl	*-ŋì-y^n*	*ílá-ŋŋì-y^n*
2Sg	*-ŋù-w^n*	*ílá-ŋŋù-w^n*
2PL	*-ŋì-y^n*	*ílá-ŋŋì-y^n*
3Sg/Inan	*-ŋgò:-∅*	*ílá-ŋgò:-∅*
3Pl	*-ŋg-è:*	*ílá-ŋg-è:*

The verb takes the A/O-stem with {H} tone contour before the L-toned suffix. Stems with final nonhigh vowel are illustrated in (xx2).

(xx2)   Imperfective Negative (final-nonhigh-vowel class)

	verb	Impf Neg	gloss
a. *Cv-, Cv:-*			
	ká-	*ká-ŋgò:-*	'shave'
	á:-	*á:-ŋgò:-*	'brew (beer)'
	dě-	*dé-ŋgò:-*	'bathe'
	dǒ-	*dwá-ŋgò:-*	'arrive' or 'insult'
	gǒ-	*gó-ŋgò:-*	'go out'
	ɲɛ́-	*ɲá-ŋgò:-*	'eat, drink'
	tó:-	*tó:-ŋgò:-*	'pound'
	wǒ:-	*wá:-ŋgò:-*	'come'
b. *CvCv-*			
	dògɔ́-	*dógá-ŋgò:-*	'abandon'
	kɔ́bɔ́-	*kɔ́bá-ŋgò:-*	'draw (water)'
	kédé-	*kédé-ŋgò:-*	'cut'
	yàgá-	*yágá-ŋgò:-*	'fall
c. *CvCCv-*			
	tómbó-	*tómbó-ŋgò:-*	'jump'
	gùndó-	*gúndó-ŋgò:-*	'become sterile'
d. *Cv:Cv-*			
	ŋŋŋ	*ŋŋŋ-*	'xxx
	ŋŋŋ	*ŋŋŋ-*	'xxx
e. trisyllabic			
	ŋŋŋ	*ŋŋŋ-*	'xxx
	ŋŋŋ	*ŋŋŋ-*	'xxx

Stems with final high vowels are in (xx3).

(xx3)   Imperfective Negative (final-high-vowel class)

	verb	Impf Neg	gloss
a. *Ci-, Ci:-*			

nú-	*nú-ŋgò:-*	'go in'
tí-	*tíyá-ŋgò:-*	'send'
yǐ-	*yá-ŋgò:-*	'see'
ní:	*ní:-ŋgò:-*	'sleep'

b. *CvCi-*

lǎy-	*láy-ŋgò:-*	'taste'
jèrí-	*jérá-ŋgò:-*	'look'
gùbú-	*gúbú-ŋgò:-*	'hang up'
ɔ́bú-	*ɔ́bú-ŋgò:-*	'lay out'

c. *CvCCi-*

zɔ̀ŋgí-	*zɔ́ŋgú-ŋgò:-*	'treat (medically)'
ɔ́ndú-	*ɔ́ndú-ŋgò:-*	'build'

d. *Cv:Ci-*

pá:mú-	*pá:má-ŋgò:-*	'understand'
mà:ndí-	*má:ndá-ŋgò:-*	'think'

e. trisyllabic

zìgìbí-	*zígíbé-ŋgò:-*	'shake'
ŋŋŋ	*ŋŋŋ-*	'xxx

10.2.3.5 Progressive Negative (*-ḿ sɔ́-ndɔ̀:-*, *-m̀-gò-*)

The Progressive construction with *-ḿ sɔ̀-* is negated as *-ḿ sɔ́-ndɔ̀(:)-*. That is, *sɔ̀-* 'have' is replaced by its regular negative form *sɔ́-ndɔ̀:-* 'not have' (xx1a). Likewise, the Progressive construction with *-ḿ bù-* is negated as *-m̀-gò-* (3Pl *-m̀-g-ὲ:*) where *bù-* 'be (somewhere)' is replaced by a variant of *ŋ̀gó-* 'not be' (somewhere)'. An original combination like *-ḿ ŋ̀gó- would have surfaced phonetically as *-ḿ ꜝgó- with a downstepped high that could later be reinterpreted as L-tone.

(xx1) a. *bírá:* *bírá-m* *sɔ́-ndɔ̀-m*
            work(n.) work-Impf have-Neg-1SgS
            'I am not working.'

      b. *bírá:* *bírà-m̀-gò-m*
            work(n.) work-Impf-not.be-1SgS
            'I am not working.'

10.3 Pronominal paradigms for non-imperative verbs

10.3.1   Subject pronominal suffixes

The pronominal-subject suffixes are those in (xx1). They are exemplified in the paradigms of the various AN inflections given in previous sections. For other pronoun forms, see §4.xxx.

(xx1)   category   suffix

    1Sg $-m$
    1Pl $-y^n$

    2Sg $-w^n$
    2Pl $-y^n$

    3Sg $-\varnothing$
    3Pl   [see below]

Except for 3Pl, these suffixes are quite stable with no allomorphy. However, the preceding AN suffix itself has allomorphy depending on the pronominal-subject category (Imperfective, Imperfective Negative). In such cases, the 1st/2nd person suffixes have one allomorph, distinct from a third person form. Relatively low-level phonological assimilations involving AN and pronominal suffixes are summarized in §10.3.3 below.

list of all 3Pl subject allomorphs in the various AN categories

10.3.2   Nonhuman (or inanimate) versus 3Sg subject

any difference in pronominal-subject suffixes?

perhaps just in Imperfective positive (or Progressive), where some languages use pronominal clitics human/animate wɔ̀ and nonhuman/inanimate kɔ̀ ?

10.3.3   Vowel-consonant interactions of AN and pronominal suffixes

If 1Sg -m, 2Sg -w, and 1Pl -y suffixes are present, there may be some phonological interactions with preceding high vowels, e.g. /i-m/ > u-m, /i-w/ > u-w (heard as [uː]), and /u-y/ > i-y (heard as [iː]). Also, underived or derived

u-w and i-y may monophthongize to [u:] and [i:] respectively. Give cross-refs to relevant sections in Chapter 3.

10.3.4   Tones of subject pronominal suffixes

Are the pronominal-subject suffixes atonal, simply getting their tones by spreading from the preceding morpheme?
This is often the case, but there may be some instances where e.g. 1Sg and 2Sg suffixes have different tones in the same AN category.

10.4   Stative form of verbs (reduplicated and unreduplicated)

A stative stem, not marked for perfective/imperfective aspect, can be derived from many verbs that also have regular paradigms. For example, all verbs denoting stances (sitting, etc.) have stative forms that denote positions ('be sitting, be seated'), while the active inflections (those including aspectual marking) denote acts of taking up positions ('sit down'). Statives can also be formed from transitive verbs of carrying. This section covers such derived stative forms. Be aware of ambiguities (stative or progressive) in English glosses, e.g. 'be sitting'. In this section the stative reading is relevant.

For defective stative quasi-verbs ('have', 'be', etc.) that do not correspond to active verbs, see Chapter 11.

10.4.1   Stative positive

The suffixal paradigm is (xx1). The {HL} tone contour occurs when Existential *yé* (see below) is absent. There is no reduplication.

(xx2)   category   Stative   'be squattng'

	1Sg	*-m*	*tóndà-m*
	1Pl	*-y^n*	*tóndà-y^n*
	2Sg	*-w^n*	*tóndà-w^n*
	2Pl	*-y^n*	*tóndà-y^n*
	3Sg	*-∅*	*tóndà-∅*
	3Pl	*-ɛ̀:*	*tónd-ɛ̀:*

In some cases, the corresponding active verb is morphologically a mediopassive, with suffix *-í:-* (§9.xxx). In other cases, the corresponding active verb has transitive and (suffixed) mediopassive forms, e.g. *págí-* 'tie' and *pág-í:-* 'be(come) tied', and the stative has the valency of the mediopassive. The Mediopassive suffix is dropped in the stative. The stative stem is **always bisyllabic**, has {HL} tone contour, and ends in *a*.

This vocalism is that of the A-stem of active inflections. The A/O-stem is not indicated since there are no cases with final *o*, even with stems that have *o*-vocalism: *tóndà-* 'be curled up', *sómà-* 'be carrying on both shoulders'. The presence of the Mediopassive suffix in the active inflections makes a direct comparison with statives impossible for those verbs. There are also various minor irregularities in stative forms that have no parallels in A/O-stems of active verbs of similar shape. *bě-* 'lie down', which does not have a Mediopassive suffix, has A/O-stem *be-* (*bè-lí-* 'did not lie down') but stative *bé-yà-* 'is lying down'.

(xx2)	gloss	verb	Stative

a. from unsegmentable *Cv(C)Cv-* stem
   [none]

b. from Mediopassive *Cv(C)Cv-yv-* (*-yv-* omitted in stative)
  phonologically regular

	gloss	verb	Stative
	'carry on back'	*bàmb-í:-*	*bámbà-*
	'lie on belly'	*dàb-í:-*	*dábà-*
	'lean against'	*dìd-í:-*	*dídà-*
	'become hooked'	*gùb-í:-*	*gúbà-*
	'become tied'	*kɔ́mb-í:-*	*kɔ́mbà-*
	'become laid out'	*ɔ́b-í:-*	*ɔ́bà-* [homonym below]
	'shut (door)'	*píŋ-í:-*	*píŋà-*
	'carry on shoulders'	*sóm-í:-*	*sómà-*
	'become linked'	*sɔ́b-í:-*	*sɔ́bà-*
	'be on (wall)'	*tár-í:-*	*tárà-*
	'squat, curl up'	*tónd-í:-*	*tóndà-*

  j/g alternation after nasal

	gloss	verb	Stative
	'kneel'	*túnj-í:-*	*túŋgà-*
	'become tilted'	*jènj-í:-*	*jéŋgà-*
	'mount, be put up on'	*nánj-í:-*	*náŋgà-*

  jj/g alternation after vowel

	gloss	verb	Stative
	'stand'	*íjj-í:-*	*ígà-*
	'carry on a shoulder'	*gɔ̀jj-í:-*	*gɔ́gà-*

   o/ɔ alternation in penult
    'sit'   *ób-í:-*   *ɔ́bà* [homonym above]
    'xxx   *ŋŋŋ*   *ŋŋŋ*
    'xxx   *ŋŋŋ*   *ŋŋŋ*

  c *-yà* added to unsuffixed monosyllabic stem
    'lie down'   *bě-*   *bé-yà-*
    'carry on head' *dǐ-*   *dí-yà-* [homonym in (d)]
    '(go to) sleep' *ní:-*   *ní-yà-*
    'xxx   *ŋŋŋ*   *ŋŋŋ*

  d. *-l(v)-* replaced by *-yà* in stative
    'hold'   *jè-l-í:-* *jí-yà-*
    'be put on (a stand)' *dè-l-í:-* *dí-yà-* [homonym in (c)]

Existential *yé* is common but not obligatory with positive statives; see §11.xxx for its syntax. Stative verbs are {L}-toned when preceded by *yé*, thus *ɔ́bà-m* versus *yé ɔ̀bà-m* 'I am sitting'.

  For past statives ('was sitting' etc.) see c10.5.1.6.

10.4.2 Stative Negative (*=ndà-*)

The derived stative is negated by adding a conjugated stative negative clitic *=ndà-* to the positive stem, which takes {H}-toned form. The paradigm is (xx1). Existential *yé* does not occur in negative contexts.

(xx1) category Stative Neg 'not be squattng'

  1Sg   *=ndà-m*   *tóndá=ndà-m*
  1Pl   *=ndà-yⁿ*   *tóndá=ndà-yⁿ*
  2Sg   *=ndà-wⁿ*   *tóndá=ndà-wⁿ*
  2Pl   *=ndà-yⁿ*   *tóndá=ndà-yⁿ*

  3Sg   *=ndà:-∅*   *tóndá=ndà:-∅*
  3Pl   *=nd-è:*   *tóndá=nd-è:*

Although the clitic is usually heard with low pitch, it is phonologically <LH>-toned. The rising tone can be heard when it is followed by a particle like emphatic kǒy, as in *tóndá=ndǎ:-∅ kǒy* 'he/she sure isn't squatting'. It can also be heard, in the long-voweled form *=ndǎ:-*, when the past clitic is added (§10.5.1.6).

Examples are in (xx2). Note especially (xx2b), which is the only way to express '(door) be open'.

(xx2)   a.   *ɔ́bá=ndà-m*
             sit.Stat=StatNeg-1SgS
             'I am not sitting.'

        b.   *píŋá=ndà:-∅*
             be.shut.Stat=StatNeg-3SgS
             'It (door) is not shut (=is open).'

=ndà:- may be compared to *=là:-* 'it is not' with NPs (§11.2.1.2), and to lexically specialized negative endings with defective stative quasi-verbs: *sɔ́-ndɔ̀:-* 'not have', *m̀bí-là:-* 'not want'.

10.5   Temporal clitics and particles

10.5.1   Past clitic (*=bì-*)

Past forms of regular aspect-negation inflections are created by adding a conjugated form of Past clitic *=bì-* to the verb, with an intervening augment. Depending on the particular category, the augment may consist of just Imperfective *-m*, or it may be a fuller augment *=bù-m-* that could be analysed as an encliticized *bù-* 'be' plus the Imperfective augment *-m*. Since the morphology of the full augment is not fully transparent, I will gloss *=bù-m-* as just "Aug[ment]."

The paradigms are as follows (augment tones are subject to change in different aspect-negation categories). *=bù-m-* optionally assimilates to *=bì-m-* before a clitic with i-vowel, and intermediate articulations with front rounded vowel are also heard.

(xx1)   Paradigm of conjugated Past clitic

category	Impf augment	full augment
1Sg	*-m=bù-m*	*=bù-m=bù-m*

1Pl	*-m=bì-y^n*	*=bù-m=bì-y^n ~ =bì-m=bì-y^n*
2Sg	*-m=bù-w^n*	*=bù-m=bù-w^n*
2PL	*-m=bì-y^n*	*=bù-m=bì-y^n ~ =bì-m=bì-y^n*
3Sg/Inan	*-m=bì-∅*	*=bù-m=bì-∅ ~ =bì-m=bì-∅*
3Pl	*-m=b-à:*	*=bù-m=b-à:*

Addition of the Past clitic to an aspect-negation category resets the temporal reference point from the moment of speaking into the past. The known past-time categories are in (xx2).

(xx2)   category   with Past morpheme

positive
Imperfective   Past Imperfective ('used to VP, was about to VP', 'was going to VP'
Progressive   Past Progressive ('was VPing')
Perfective   Past Perfect ('had VPed')
Experiential Perfect Past Experiential Perfect ('had [ever] VP-ed')
Recent Perfect   Past Recent Perfect ('had just VPed')
Stative   Past Stative

negative
Imperfective Neg   Past Imperfective Negative ('did not use to VP', 'was not going to VP', etc.)
Progressive Neg   Past Progressive Negative ('was not VP-ing')
Perfective Neg   Past Perfect Negative ('had not VP'ed')
Exp Perfect Neg   Past Experiential Perfect Negative ('had never VP-ed')
Recent Perfect Neg   Past Recent Perfect Negative ('had not just VP-ed')
Stative Neg   Past Stative Negative

10.5.1.1 Past Imperfective (positive and negative)

The past imperfective can be used in past habitual ('used to VP') and future-in-past ('was going to VP') contexts. However, elicitation often produced past progressive rather than past imperfective forms. The context where past

imperfectives were most reliably produced was consequent clauses in counterfactual conditionals ('would have VPed').

The positive paradigm is in the 'would have gone out' column of (xx1) and can be compared with the 'goes out' version in the central column. The verb takes Imperfective suffix *-m-*, followed by the conjugated form of Past clitic *=bì-*. The *-nù-/-nὲ-/dɔ̀-* formative in the regular imperfective positive is absent.

(xx1)   Past Imperfective positive paradigm

category	form	'goes out'	'would have gone out'
1Sg	*-ḿ=bù-m*	*gó-m̀-nɔ̀-m*	*gó-ḿ=bù-m*
1Pl	*-ḿ=bì-yⁿ*	*gó-m̀-nὲ-yⁿ*	*gó-ḿ=bì-yⁿ*
2Sg	*-ḿ=bù-wⁿ*	*gó-m̀-nɔ̀-wⁿ*	*gó-ḿ=bù-wⁿ*
2Pl	*-ḿ=bì-yⁿ*	*gó-m̀-nὲ-yⁿ*	*gó-ḿ=bì-yⁿ*
3Sg/Inan	*-ḿ=bì-∅*	*gó-m̀-dɔ̀-∅*	*gó-ḿ=bì-∅*
3Pl	*-ḿ=b-à:*	*gó-m̀-d-ὲ*	*gó-ḿ=b-à:*

The negative version is illustrated in (xx3).

(xx*2*)   *tíⁿ→*   *nàmá*   *kúbò-m-gò:=bú-m=bù-m*
         at.first   meat   eat.meat-Impf-ImpfNeg=Aug=Past-1SgS
         'Formerly I didn't use to eat meat.'

The negative paradigm is in the right column of (xx4). Corresponding to *-ŋù-/-ŋì-/-ŋgò:* in the 'doesn't go up' column, the past version has *-m-gò-* (< /-m̀-ŋgò-/)

(xx4)   Past Imperfective Negative paradigm

categ.	PastImpfNeg	'doesn't go up'	'didn't use to go up'
1Sg	*-m-gò:=bù-m=bù-m*	*ílá-ŋù-m*	*ílà-m-gò:=bù-m=bù-m*
1Pl	*-m-gò:=bù-m=bì-yⁿ*	*ílá-ŋì-yⁿ*	*ílà-m-gò:=bù-m=bì-yⁿ*
2Sg	*-m-gò:=bù-m=bù-wⁿ*	*ílá-ŋù-wⁿ*	*ílà-m-gò:=bù-m=bù-wⁿ*
2PL	*-m-gò:=bù-m=bì-yⁿ*	*ílá-ŋì-yⁿ*	*ílà-m-gò:=bù-m=bì-yⁿ*
3Sg	*-m-gò:=bù-m=bì-∅*	*ílá-ŋgò:-∅*	*ílà-m-gò:=bù-m=bì-∅*
3Pl	*`-m-gò:=bù-m=b-à:*	*ílá-ŋg-ὲ:*	*ílà-m-gò:=bù-m=b-à:*

10.5.1.2   Past Progressive (positive and negative)

Conjugated Past clitic =bì- is added to the bù- or sɔ̀- of the progressive (§10.2.2.3) after the augment -m-.

(xx1)   Past Progressive -ḿ sɔ̀-m=bì-

category	form	'is going out'	'was going out'
1Sg	-ḿ sɔ̀-m=bù-m	gó-ḿ sɔ̀-m	gó-ḿ sɔ̀-m=bù-m
1Pl	-ḿ sɔ̀-m=bì-y^n	gó-ḿ sɔ̀-y^n	gó-ḿ sɔ̀-m=bì-y^n
2Sg	-ḿ sɔ̀-m=bù-w^n	gó-ḿ sɔ̀-w^n	gó-ḿ sɔ̀-m=bù-w^n
2Pl	-ḿ sɔ̀-m=bì-y^n	gó-ḿ sɔ̀-y^n	gó-ḿ sɔ̀-m=bì-y^n
3Sg/Inan	-ḿ sɔ̀-m=bì-∅	gó-ḿ sɔ̀-∅	gó-ḿ sɔ̀-m=bì-∅
3Pl	-ḿ sɔ̀-m=b-à:	gó-ḿ s-è:	gó-ḿ sɔ̀-m=b-à:

(xx2)   Past Progressive -ḿ bù-m=bì-

category	regular	'is taking out'	'was taking out'
1Sg	-ḿ bù-m=bù-m	zó-ḿ bù-m	zó-ḿ bù-m=bù-m
1Pl	-ḿ bù-m=bì-y^n	zó-ḿ bì-y^n	zó-ḿ bù-m=bì-y^n
2Sg	-ḿ bù-m=bù-w^n	zó-ḿ bù-w^n	zó-ḿ bù-m=bù-w^n
2Pl	-ḿ bù-m=bì-y^n	zó-ḿ bì-y^n	zó-ḿ bù-m=bì-y^n
3Sg/Inan	-ḿ bù-m=bì-∅	zó-ḿ bù-∅	zó-ḿ bù-m=bì-∅
3Pl	-ḿ bù-m=b-à:	zó-ḿ b-è:	zó-ḿ bù-m=b-à:

In elicitation, there appeared to be much interchange between past imperfective with -m=bì- and past progressive with with bù-m=bì-. An example of the form of the past progressive in a context where one might expect the past imperfective is (xx3).

(xx3)   tí^n→   nàmá   kúbò-m̀   bù-m=bù-m
        at.first   meat   eat.meat-Impf   be-Impf=Past-1SgS
        'Formerly I used to eat meat.'

For the progressive negative (-ḿ sɔ́-ndɔ̀:-, -m̀ gó-) see §10.2.3.5. Past progressive negative examples are in (xx4). The full augment =bù-m- is used before the conjugated past =bì-.

175

(xx4) a. *bírá:*   *bírá-m*   *só-ndɔ̀:=bù-m=bù-m*
       work(n.)   work-Impf   have-Neg=Aug=Past-1SgS
       'I was not working.'

    b. *bírá:*   *bírá-m̀*   *gó-m=bù-m=bù-m*
       work(n.)   work-Impf   not.be-Aug=Aug=Past-1SgS
       'I was not working.'

For additional detail on the morphology of past forms of 'have' and 'be' and their negations, see §10.5.1.6.

sémbí-ḿ   bí-m-bì-∅   'he/she was sweeping' (progressive)
sémbí-ḿ   bí-m-b-à: 'they were sweeping' (progressive)

10.5.1.3 Past or Past Perfect (positive and negative)

The past form of the perfective functions as past perfect ('had VPed') and is used in the antecedent clause of counterfactual conditionals (§16.4). It can also function much like a regular perfective verb ('VPed') specifying past time, particularly with verbs like 'see' and 'hear' that do not allow the Perfective-1a or -1b (§10.xxx).

    In the positive form, Past clitic *=bì-* is added directly to the verb stem, with no overt perfective marking. This corresponds functionally to the various unmarked and suffixally marked perfectives (Perfective-1a, -1b, 2). The corresponding negation is based on a syncopated version of Perfective Negative *-lí-*, plus the augment *=bú-m-* in H-toned form.

(xx1)   Past Perfect *=bì-*

category	'had hit'	'had not hit'
1Sg	*bùndó=bù-m*	*bùndŏ-l=bú-m=bù-m*
1Pl	*bùndó=bì-yⁿ*	*bùndŏ-l=bú-m=bì-yⁿ*
2Sg	*bùndó=bù-wⁿ*	*bùndŏ-l=bú-m=bù-wⁿ*
2Pl	*bùndó=bì-yⁿ*	*bùndŏ-l=bú-m=bì-yⁿ*

176

3Sg/Inan	*bùndó = bì-∅*	*bùndǒ-l = bú-m = bì-∅*
3Pl	*bùndó = b-à:*	*bùndǒ-l = bú-m = b-à:*

10.5.1.4 Past Experiential Perfect

One of the Experiential Perfect forms, that in *-tɛ́rɛ́ = bì-*, already contains past *= bì-* (§10.2.1.5). Nevertheless, an explicitly past version of the Experiential Perfect can be construction by using the augment *= bú-m =* (H-toned). The corresponding negative has the morphology of the past perfect negative (*-l = bú-m = bì-∅*).

(xx1)   a.   *gɔ̀nsá:rⁿá*   *yì-tɛ́rɛ́ = bú-m = bù-m*
               elephant   see-ExpPf-PerfNeg=Aug=Past-1SgS
               '(At that time) I had never seen an elephant.'

        b.   *gɔ̀nsá:rⁿá*   *yì-tɛ̀rɛ̌-l = bú-m = bù-m*
               elephant   see-ExpPf-PerfNeg=Aug=Past-1SgS
               '(At that time) I had never seen an elephant.'

10.5.1.5 Past Recent Perfect (positive and negative)

An informant preferred a version with both Recent Perfect *dè-* and Past clitic *= bì-* conjugated.

(xx1)   a.   *úló*   *ɔ́ndú*   *dè-m = bú-m = bù-m*
               house   build-RecPf-1SgS=Aug=Past-1SgS
               'I had (recently) finished building (a/the) house.'

        b.   *zá*   *ɲɛ́ dè-yⁿ = bú-m = bì-yⁿ*
               meal   eat.meal-RecPf-1PlS=Aug=Past-1PlS
               'We had (already) eaten.'

There were also variants with *dè-* unconjugated, e.g. *ɲɛ́ dè = bú-m = bì-yⁿ* 'we had (already) eaten'.
    A negative example is (xx2). It too is doubly conjugated.

(xx2)   *úló*   *ɔ́ndú*   *dà-lù-m = bú-m = bù-m*
       house   build   RecPf-PerfNeg-1SgS
       'I have not (yet) finished building the house.'

10.5.1.6 Past Stative (positive and negative)

ɔ́bà-m-bì-∅   'he/she was sitting'
ɔ́bà-m-b-à: 'they were sitting'

tíⁿ→   úló   yé   sɔ̀-m-bù-m   'I used to have a house'
úló yé   sɔ̀-m-b-à: 'they had a house'

ɛ̀dɛ́ bì-m-bì-m 'I was a child'
ùlé: bí-m-b-à: 'they were children'

negative:
ɔ́bá-ndǎ: bí-m-bì-∅   'he/she was not sitting'
ɔ́bá-ndǎ: bí-m-b-à: 'they were not sitting'

úló sɔ́-ndɔ̀:   bì-m-bì-m   'I didn't use to have a house'
úló sɔ́-ndɔ̀:   bí-m-b-à: 'they didn't use to have a house'

ɛ̀dɛ́ = lǎ: bì-m-bì-m   'I was not a child'
ùlé: = lǎ: bí-m-b-à: 'they were notchildren'

Statives derived from regular verbs are described in §10.4.1 (positive) and §10.4.2 (negative).

(xx1)   gloss   regular Stative   Past Stative

      positive
        'be sitting'   *yé ɔ̀bà-*   *yé ɔ̀bà-m = bì-∅* (3Sg)
                                        yé ɔ̀bà-m = bù-m (1Sg)
                                        yé ɔ̀bà-m = b-à: (3Pl)

      negative
        'not be sitting' *ɔ́bá = ndǎ:*   *ɔ́bá = ndǎ: = bù-m = bì-∅* (3Sg)
                                        ɔ́bá = ndǎ: = bù-m = bù-m (1Sg)
                                        ɔ́bá = ndǎ: = bù-m = b-à: (3Pl)
                                        ɔ́bá = ndě: = bù-m = b-à: (3Pl)

In the combination *= bù-m = bì-∅* (3Sg negative), the penult vowel may assimilate in frontness to the ultimate, hence *= bì-m = bì-∅.*

Stative quasi-verbs are exemplified in (xx2).

(xx2)	gloss	regular 3Sg	Past

positive
'be (somewhere)' *yé bù-∅*   *yé bù-m = bì-∅* (3Sg)
                               yé bù-m = bù-m (1Sg)
                               yé bù-m = b-à: (3Pl)

'have' *yé sɔ̀-∅*   *yé sɔ̀-m = bì-∅* (3Sg)
                     yé sɔ̀-m = bù-m (1Sg)
                     yé sɔ̀-m = b-à: (3Pl)

'want' *m̀bá-∅*   *mbá = bù-m = bì-∅* (3Sg)
        (3Pl *m̀b-ê:*)   *mbá = bù-m = bù-m* (1Sg)
                         mbá = bù-m = b-à: (3Pl)
                         mb-ê: = bù-m = b-à: (3Pl)

negative
'not be' *ŋ̀gó-∅*   *ŋ̀gó = bù-m = bì-∅* (3Sg)
          (3Pl *ŋ̀gw-ê:*)   *ŋ̀gó = bù-m = bù-m* (1Sg)
                            ŋ̀gó = bù-m = b-à: (3Pl)
                            ŋ̀gw-ê: = bù-m = b-à: (3Pl)

'not have' *sɔ́-ndɔ̀:-∅*   *sɔ́-ndɔ̀: = bù-m = bì-∅* (3Sg)
            (3Pl *sɔ́-nd-ɛ̀:*)   *sɔ́-ndɔ̀: = bù-m = bù-m* (1Sg)
                                sɔ́-ndɔ̀: = bù-m = b-à: (3Pl)
                                sɔ́-ndɛ̀: = bù-m = b-à: (3Pl)

'not want' *m̀bí-là:-∅*   *m̀bí-là: = bì-m = bì-∅* (3Sg)
            (3Pl *m̀bí-l-ɛ̀:*)   *m̀bí-là: = bù-m = bù-m* (1Sg)
                                m̀bí-là: = bù-m = b-à: (3Pl)
                                m̀bí-lɛ̀: = bù-m = b-à: (3Pl)

The conjugated Past clitic *= bì-* is preceded in all of these stative forms by an unconjugated augment, either *-m-* (most of the positive forms) or *= bù-m-* (all of the negative forms, plus positive 'want'). In 'not be sitting', 'not have', and 'not want', the past form for 1st/2nd persons, exemplified here by 1Sg, is clearly based on the 3Sg positive form; note the long *ɔ̀:* and *à:* in the third syllable of *ɔ́bá = ndà: = bù-m = bù-m* 'I was not sitting' and in the second syllables of *sɔ́-ndɔ̀: = bù-m = bù-m* 'I didn't have' and *m̀bí-là: = bù-m = bù-m* 'I didn't want'. In the forms involving the full augment =bu-m- ('want' and all the negative forms),

3Pl subject is indexed optionally on the verb as well as obligatorily in the final conjugated past clitic. This indexing is seen in the *ɛ:* vowels in the third syllable of *ɔ́bá=ndɛ̀:=bù-m=b-à:* 'they were not sitting' and in the second syllables of *sɔ́-ndɛ̀:=bù-m=b-à:* 'they didn't have'. Variants without this 3Pl indexing were also observed. An informant rejected similar indexing in 'was sitting', 'was (somewhere)', and 'had', which have the short augment -m- rather than the full =bu-m- augment.

10.5.2 'Still', 'up to now', '(not) yet'

Expressions translatable as 'still' in the sense of 'up to and including now' are based on *yɔ̌:* 'today', namely *yɔ̌: ɔ̀tùmò* and in some contexts *yɔ̌: là*.

(xx1) a. [*yɔ̌:*   *ɔ̀tùmò]*   *bírá:*   *bírá-ḿ*   *sɔ̀-m*
          [today   still]   work(n.)   work-Impf   have-1SgS
          'He still works.' or 'He is still working.'

      b. *[yɔ̌:*   *ɔ̀tùmò]*   *ńné*   *tɔ̀dǎ-l-∅*
          [today   still]   3SgS   pay-PerfNeg-3SgS
          'He/She still hasn't paid.'

      c. *[yɔ̌:*   *là]*   *zímá-ḿ*   *sɔ̀-wⁿ*   *mà*
          [today   also]   be.sick-Impf   have-2SgS   Q
          'Are you still sick (today)?'

'Not yet' is expressed with *nân* 'now' plus a negative predicate.

(xx2) *nân*   *zá*   *ɲà-lú-m*
        now   meal   eat.meal-PerfNeg-1SgS
        'I haven't eaten yet.'

10.6 Imperatives and Hortatives

10.6.1 Imperatives and Prohibitives

10.6.1.1 Imperative (unsuffixed A/O-stem, plural *-n*)

The imperative stem, which is used without further suffixation for singular addressee, is based on the A/O-stem.

For verbs ending lexically in a **nonhigh vowel**, the imperative stem **becomes {H}-toned**, erasing the lexical distinction between {LH} and {H} stems.

(xx1)   Imperative (final-nonhigh-vowel class)

	verb	Imperative	gloss
a. *Cv-*, *Cv:-*			
	ká-	*ká*	'shave'
	á:-	*á:*	'brew (beer)'
	dě-	*dé*	'bathe'
	dǒ-	*dwá*	'arrive' or 'insult'
	ɲɛ́-	*ɲá*	'eat, drink'
b. *CvCv-*			
	dògɔ́-	*dógá*	'abandon'
	kɔ́bɔ́-	*kɔ́bá*	'draw (water)'
	kédé-	*kédé*	'cut'
	yàgá-	*yágá*	'fall'
c. *CvCCv-*			
	tómbó-	*tómbó*	'jump'
	nìŋgé-	*níŋgé*	'cook (sauce)'
irregular			
	gòndó-	*gòndó*	'take out'
d. *Cv:Cv-*			
	ŋŋŋ	*ŋŋŋ-*	'xxx
	ŋŋŋ	*ŋŋŋ-*	'xxx
e. trisyllabic			
	ŋŋŋ	*ŋŋŋ-*	'xxx

For verbs whose lexical form ends in a high vowel, the imperative ends in *i* rather than *u*, except for stems that shift to an *a*-final form in A/O-stem. Monosyllabics have H-toned imperatives. For nonmonosyllabics, the lexical tone contour appears. There is no merger of {LH} and {H} *CvCv-* stems.

(xx2)   Imperative (final-high-vowel class)

	verb	Imperative	gloss

181

a. *Ci, Ci:*

nú-	*nwí*	'go in'
tí-	*tíyá*	'send'
dǐ-	*díyá*	'carry on head'
nǐ:	*nǐ:*	'sleep'

b. *CvCi-, nCi-*
  final í

làyí-	*làyí*	'taste', phonetic [lǎj]
gùbú-	*gùbí*	'hang up'
ɔ́bú-	*ɔ́bí*	'lay out'

  final á

jèrí-	*jèrá*	'look'
ńdí-	*ńdá*	'give'

c. *CvCCi-*

zòŋgí-	*zòŋgí*	'treat (medically)'
ɔ́ndú-	*ɔ́ndí*	'build'

d. *Cv:Ci-*

pá:mú-	*pá:má*	'understand'
nɔ́:ndú-	*nɔ́:ndá*	'ignite'
mà:ndí-	*mà:ndá*	'think'

e. trisyllabic *CvCvCi-*

zìgìbí-	*zìgìbé*	'shake'
ŋŋŋ	*ŋŋŋ-*	'xxx

For nonsingular addressee, Imperative Plural suffix *-ǹ* is added: *jèrá* becomes *jèrá-ǹ* 'look-2Pl!'. Allomorph *-(ǹ)dè* is used after *n. tún* becomes *tún-ǹdè* 'put-2Pl in!', pronounced [tûndè]. Other examples: *kédé-ǹ* 'cut-2l!', *ɔ́bí-ǹ* 'lay out-2Pl!', *ɔ́ndí-ǹ* 'build-2Pl!'.

Transitivity is the same for imperatives as for indicative clauses. Accusative *gì* is optionally present on object NPs in both types of clause (§6.7). Reflexive objects of the type 'your head' also occur in both types of clause (18.1.1).

10.6.1.2 Prohibitive (*-lì*, plural *ˋl sèndèn*)

The prohibitive, or negative imperative, is expressed by suffix *-lì* for singular addressee. The suffix is added to the A/O-stem of the verb. For monosyllabics, the stem tone is high. Nonmonosyllabics show their lexical tones.

Stems with final nonhigh vowel are illustrated in (xx1).

(xx1)   Prohibitive (final-nonhigh-vowel class)

	stem	Prohibitive	gloss
a.	*Cv-, Cv:-*		
	ká-	*ká-lì*	'shave'
	dě-	*dé-lì*	'bathe'
	dɔ̌-	*dwá-lì*	'arrive' or 'insult'
	ɲɛ́-	*ɲá-lì*	'eat, drink'
b.	*CvCv-*		
	dògɔ́-	*dògá-lì*	'abandon'
	kɔ́bɔ́-	*kɔ́bá-lì*	'draw (water)'
c.	*CvCCv-*		
	tómbó-	*tómbó-lì*	'jump'
	nìŋgé-	*nìŋgé-lì*	'cook (sauce)'
	gòndó-	*gòndó-lì*	'take out'
d.	*Cv:Cv-*		
	ŋŋŋ	*ŋŋŋ-*	'xxx
	ŋŋŋ	*ŋŋŋ-*	'xxx
e.	trisyllabic		
	ŋŋŋ	*ŋŋŋ-*	'xxx

Verbs with final high vowel are illustrated in (xx2).

(xx2)   Prohibitive (final-high-vowel class)

	stem	Prohibitive	gloss
a.	*Ci, Ci:*		
	nú-	*nú-lì*	'go in'
	tí-	*tíyá-lì*	'send'

ní:	*ní:-lì*	'sleep'

b. *CvCi*

làyí-	*làyí-lì*	'taste', phonetic [lăj]
jèrí-	*jèrá-lì*	'look'
ɔ́bú-	*ɔ́bí-lì*	'lay out'

c. *CvCCi-*

zɔ̀ŋgí-	*zɔ̀ŋgí-lì*	'treat (medically)'
ɔ́ndú-	*ɔ́ndí-lì*	'build'

d. *Cv:Ci-*

nɔ́:ndú-	*nɔ́:ndá-lì*	'ignite'
mà:ndí-	*mà:ndá-lì*	'think'

e. trisyllabic *CvCvCi-*

zìgìbí-	*zǐgìbé-lì*	'shake'
ŋŋŋ	*ŋŋŋ-*	'xxx

For nonsingular addressee, -li is reduced to *ˋl* (with L-tone) plus *sèndèn*. Example: *jèrâ-l sèndèn*. For typographic reasons I write a falling tone on the stem-final vowel since the accent does not work on "l."

relationship of Prohibitive suffix to e.g. Stative Negative?
syntax: same as imperative?

10.6.2   Hortatives

10.6.2.1   Hortative (*-mɔ́*, plural *-mɔ́-ǹ*)

The Hortative ('let's VP!') is expressed by a suffix *-mɔ́* for **singular addressee**, or *-mɔ́-ǹ* for **nonsingular addressee**. The form for nonsingular addressee is more common and is the normal response to elicitation cues; I will use it in the lists below. The suffix -n can be equated with Imperative Plural suffix *-ǹ*.

   -mɔ́ follows the A/O-stem of the verb. {H}-toned verbs appear with {H}-tone, while lexically {LH}-toned verbs are {L}-toned before the suffix. There is an irregular form for 'let's go', *ḿbó* (plural *ḿbó-ǹ)* for expected #*ó-mɔ́*.

(xx1)   Hortative (final-nonhigh-vowel class)

verb	Hortative	gloss

184

a. irregular
    yǎy-/o-   *ḿbó-ǹ*   'go'

b. *Cv-*, *Cv:-*
    dě-   *dè-mɔ́-ǹ*   'bathe'
    dǎ-   *dwà-mɔ́-ǹ*   'arrive' or 'insult'
    ɲέ-   *ɲá-mɔ́-ǹ*   'eat, drink'
    wɔ̌:-   *wà:-mɔ́-ǹ*   'come'

b. *CvCv-*
    dògɔ́-   *dògà-mɔ́-ǹ*   'abandon'
    kédé-   *kédé-mɔ́-ǹ*   'cut'
    zě:-   *zìyà-mɔ́-ǹ*   'bring'

c. *CvCCv-*
    tómbó-   *tómbó-mɔ́-ǹ*   'jump'
    gòndó-   *gòndò-mɔ́-ǹ*   'take out'

d. *Cv:Cv-*
    ŋŋŋ   *ŋŋŋ-*   'xxx
    ŋŋŋ   *ŋŋŋ-*   'xxx

e. trisyllabic
    ŋŋŋ   *ŋŋŋ-*   'xxx

Verbs with final high vowel are in (xx2).

(xx2)   Hortative (final-high-vowel class)

       verb   Hortative   gloss

a. *Ci-*, *Ci:-*
    nú-   *nú-mɔ́-ǹ*   'go in'
    yǐ-   *yà-mɔ́-ǹ*   'see'
    dǐ-   *dìyà-mɔ́-ǹ*   'carry on head'
    ní: *ní:-mɔ́-ǹ*   'sleep'

b. *CvCi-*, *nCi-*
    làyí-   *lày-mɔ́-ǹ*   'taste'
    jèrí-   *jèrà-mɔ́-ǹ*   'look'
    ɔ́bú-   *ɔ́bú-mɔ́-ǹ*   'lay out'
    ńdí-   *ńdá-mɔ́-ǹ*   'give'

185

c. *CvCCi-*
   zɔ̀ŋgí-   *zɔ̀ŋgù-mɔ́-ǹ*   'treat (medically)'
   ɔ́ndú-   *ɔ́ndú-mɔ́-ǹ*   'build'

d. *Cv:Ci-*
   mà:ndí-   *mà:ndà-mɔ́-ǹ*   'think'

e. trisyllabic *CvCvCi-*
   zìgìbí-   *zǐgìbè-mɔ́-ǹ*   'shake'

10.6.2.2 Hortative Negative (*-mɔ̂-l*, plural *mɔ̂-l sèndèn*)

A hortative negative is produced by replacing (positive) *-mɔ́* with Hortative Negative *-mɔ̂-l* for singular addressee, and by replacing (positive) *-mɔ́-ǹ* with *-mɔ̂-l sèndèn* for nonsingular addressee. The irregular (positive) hortative *ḿboó* 'let's go!' becomes *ḿbó-mɔ̂-l* 'let's not go!'. Other verbs add *-mɔ̂-l* to the same form of the stem used in the (positive) hortative.

    Morphologically, the hortative negative is the prohibitive of the hortative positive. A few examples of the positive and negative hortative are in (xx1).

(xx1)   verb   Hortative   Hortative Neg   gloss

    a. irregular
       yǎy-/o-   *ḿbó-ǹ*   *ḿbó-mɔ̂-l*   'go'

    b. regular, {H}-toned
       nú-   *nú-mɔ́-ǹ*   *nú-mɔ̂-l*   'go in'
       ɔ́ndú-   *ɔ́ndú-mɔ́-ǹ*   *ɔ́ndú-mɔ̂-l*   'build'
       tómbó-   *tómbó-mɔ́-ǹ*   *tómbó-mɔ̂-l*   'jump'

    c. regular, {L}-toned
       gòndó-   *gòndò-mɔ́-ǹ*   *gòndò-mɔ̂-l*   'take out'
       zìgìbí-   *zǐgìbè-mɔ́-ǹ*   *zǐgìbè-mɔ̂-l*   'shake'

10.6.3   Non-1st person hortatives

10.6.3.1   Third person Hortative (*-y* ~ *-lú*)

This form of the verb is used in **quoted imperatives** ('tell them to come!', 'he says for you/me/him to come') and in **wishes and imprecations** ('may God VP!'). It is not conjugated and therefore has no plural/singular distinction. A pronominal subject may precede it.

The data in (xx1) reveal some morphophonemic complexity. The most unusual detail is the *-lu* suffix that shows up with *Cv:-* verbs (xx1e). Most of these verbs derive from **Cvlv-* bisyllabics, so *-lú* reflects the original second syllable (compare agentive compound finals of the form *-Cv̀-lé* for the same stems, §5.1.4).

The remaining forms in (xx1) can be understood at least historically if we think of a suffix **-y* that fused in many cases with a stem-final vowel as **i*. The occurrence of final *u* rather than *i* in nonmonosyllabic stems reflects the frequent shift from /i/ to u in a weak metrical position in the presence of a labial(ized) consonant. This is because the third-person hortative form is invariably followed by either Quotative *wa* or Interrogative *ma*.

Monomoraic forms (*nú*, *dí*, etc.) are H-toned. Forms of two or more moras show the lexical tone of the stem. There is no point in segregating final-nonhigh-vowel from final-high-vowel stems for this inflectional category, so the data are presented in a single array in (xx1).

(xx1)   Third-Person Hortative (final-nonhigh-vowel class)

verb	Hortative3	gloss

a. *Cv-*, *Cv:-*, and *NCv-* with high vowel unchanged

nú-	*nú*	'go in'
dǐ-	*dí*	'carry on head'
tí-	*tí*	'send'
yǐ-	*yí*	'see'
ní:	*ní:*	'sleep'
ńdí-	*ńdí*	'give'

b. *Cv-* with mid-height front vowel becomes *Ci*

dě-	*dí*	'bathe'
jé-	*jí*	'dance'
yě-	*yí*	'weep'
ɲɛ́-	*ɲí*	'eat, drink'

c. *Cv-* with low or mid-height back vowel becomes *Cv-y*
ká-	*ká-y*	'shave'
dǒ-	*dǒ-y*	'insult'
gǒ-	*gǒ-y*	'go out'
tɛ́-	*tɛ́-y*	'weave'
tɔ́-	*tɔ́-y*	'sow, plant'

d. *Cvy-* unchanged
| *lǎy-* | *lǎy* | 'taste', phonetic [lǎj] |
| *yǎy-/o-* | *yǎy* | 'go' |

   irregularly {HL}-toned
| *zǎy-/zo-* | *zây* [!] | 'take away, convey' |

e. *Cv:-* with nonhigh vowel to *Cv-lu*
á:-	*á-lú*	'brew (beer)'
bǎ:-	*bà-lú*	'gather'
ɲǎ:-	*ɲà-lú*	'take, pick up'
tó:-	*tó-lú*	'pound'
wǎ:-	*wà-lú*	'do farm work'
wɔ̌:-	*wɔ̀-lú*	'come'

   irregularly {HL}-toned
| *zě:-* | *zɛ́-lù* [!] | 'bring' |

f. *CvCv-* becomes *CvCu*
dògɔ́-	*dògú*	'abandon'
kɔ́bɔ́-	*kɔ́bú*	'draw (water)'
kédé-	*kédú*	'cut'
yàgá-	*yàgú*	'fall'
jèrí-	*jèrú*	'look'
ɔ́bú-	*ɔ́bú*	'lay out'

c. *CvCCv-* becomes *CvCCu*
tómbó-	*tómbú*	'jump'
nìŋgé-	*nìŋgí*	'cook (sauce)'
zɔ̀ŋgí-	*zɔ̀ŋgú*	'treat (medically)'
ɔ́ndú-	*ɔ́ndí*	'build'
gòndó-	*gòndú*	'take out'

d. *Cv:Cv-* becomes *Cv:Cu*

pá:mú-	*pá:mú*	'understand'
mà:ndí-	*mà:ndú*	'think'

e. trisyllabic

zìgìbí-	*zǐgìbú*	'shake'

10.6.3.2 Third person Hortative Negative (*-lì*)

This form is used in quoted prohibitives ('he says for me/you/her not to come') and in negative wishes and imprecations ('may God not VP!'). The form is identical to the original prohibitive, but is normally followed by Quotative *wà* (xx1). It may be preceded by a preverbal subject pronoun.

(xx1)   Third-person hortative negative

stem	Prohib	Hort3 Neg	gloss
a. *irregular*			
yǎy-/o-	*ó-lì*	*ó-lì (wà)*	'go'
b. regular			
ɲé-	*ɲá-lì*	*ɲá-lì (wà)*	'eat, drink'
tó:-	*tó:-lì*	*tó:-lì (wà)*	'eat, drink'
wɔ̌:-	*wǎ:-lì*	*wǎ:-lì (wà)*	'come'
zě:-	*zìyá-lì*	*zìyá-lì (wà)*	'bring'
ńdí-	*ńdá-lì*	*ńdá-lì (wà)*	'give'
zòbɔ́-	*zòbá-lì*	*zòbá-lì (wà)*	'run'
ɔ́ndú-	*ɔ́ndí-lì*	*ɔ́ndí-lì (wà)*	'build'
zìgìbí-	*zǐgìbé-lì*	*zǐgìbé-lì (wà)*	'shake'

syntax same as for positive forms?

examples:
    'may he/she not go out!'
    'may they not dig!'
    'may she not eat her mango!'

10.6.4   Quoted hortative (*-ḿ*) and hortative negative (*-mɔ́-lì*)

When the clause quoted represents an original hortative ('let's go!') as opposed to an original imperative (or wish), the suffix *-ḿ* is used. The combination of *-ḿ* plus quotative particle wà could be confused with logophoric subject *-m* plus the same *wà*, but the logophoric subject suffix follows aspect-negation suffixes on the verb while the quotative hortative does not.

   The quoted hortative (QuotHort)suffix is added to the A/O-stem. The suffix is H-toned. A {H}-toned stem has its lexical tones. A {LH}-toned stem is realized with {L}-toned stem plus H-toned suffix. The stem phonology is therefore the same as for hortative *-mɔ́* itself. This suggests that quoted hortative (QuotHort) *-ḿ* can be represented phonologically as /-mi/ or /-mu/, i.e. as morphologically the third-person hortative (see the preceding section) of the actual Hortative. This morphological analysis is supported by the (irregular) form for quoted 'let's go!', namely *ḿbú*.

   (xx1) gives representative forms of the original hortative and its quoted counterpart, the latter furnished with quotative particle *wà*.

(xx1)	verb	Hortative	QuotHort	gloss
a. irregular				
	yǎy-/o-	*ḿbó-ǹ*	*ḿbú (wà)*	'go'
b. regular, {H}-toned				
	nú-	*nú-mɔ́-ǹ*	*nú-ḿ (wà)*	'go in'
	ɲɛ́-	*ɲá-mɔ́-ǹ*	*ɲá-ḿ (wà)*	'eat, drink'
	tó:-	*tó:-mɔ́-ǹ*	*tó:-ḿ (wà)*	'pound'
	ɔ́ndú-	*ɔ́ndú-mɔ́-ǹ*	*ɔ́ndú-ḿ (wà)*	'build'
	tómbó-	*tómbó-mɔ́-ǹ*	*tómbó-ḿ (wà)*	'jump'
c. regular, {L}-toned				
	yǐ-	*yà-mɔ́-ǹ*	*yà-ḿ (wà)*	'see'
	wɔ̌:-	*wà:-mɔ́-ǹ*	*wà:-ḿ (wà)*	'come'
	wǎ:-	*wà:-mɔ́-ǹ*	*wà:-ḿ (wà)*	'do farm work'
	zɛ̌:-	*zɛ̀yà-mɔ́-ǹ*	*zɛ̀yà-ḿ (wà)*	'bring'
	gòndó-	*gòndò-mɔ́-ǹ*	*gòndò-ḿ (wà)*	'take out'
	zìgìbí-	*zìgìbè-mɔ́-ǹ*	*zìgìbè-ḿ (wà)*	'shake'

The **negative** counterpart is *-mɔ́-lì*, reduced to *-mɔ̂-l* before quotative *wà*. The form is morphemically identical to the original form of the hortative negative. Samples of the original and quoted forms are in (xx2).

(xx2)　　　verb　　　Hortative Neg　QHortative Neg　　gloss

　　　　a. irregular
　　　　　yǎy-/o-　　*ḿbó-mɔ̂-l*　　*ḿbó-mɔ̂-l (wà)*　　'go'

　　　　b. regular, {H}-toned
　　　　　nú-　　　　*nú-mɔ̂-l*　　　*nú-mɔ̂-l (wà)*　　'go in'
　　　　　ɔ́ndú-　　*ɔ́ndú-mɔ̂-l*　　*ɔ́ndú-mɔ̂-l (wà)*　'build'
　　　　　tómbó-　　*tómbó-mɔ̂-l*　　*tómbó-mɔ̂-l (wà)*　'jump'

　　　　c. regular, {L}-toned
　　　　　gò-ndó-　　*gò-ndò-mɔ̂-l*　　*gò-ndò-mɔ̂-l (wà)*　'take out'
　　　　　zìgìbí-　　*zìgìbè-mɔ̂-l*　　*zìgìbè-mɔ̂-l (wà)*　'shake'

191

11 Clause, VP, and predicate structure

11.1 Clausal constituents

The basic constituent order is SOV where subject and object are nonpronominal NPs. Setting adverbials like 'yesterday' can occur in any preverbal position. Adverbial phrases that are more tightly embedded into the event scenario occur close to the verb.

11.1.1 Subjects

11.1.1.1 Subjects in indicative main clauses

A subject is required in indicative clauses (but see §11.1.1.4 below). Minimally, the subject is represented by a pronominal-subject suffix on the verb or other predicate, but 3Sg subject is generally unmarked. Nonpronominal subject NPs require 3Sg or 3Pl agreement on the verb. There is no pronominal agreement for nonpronominal object NPs.

Within a clause, the subject functions as antecedent for any reflexive or reciprocal anaphors.

(xx1) a. [nùmǎː   à-gà]   póró-tì-∅
           [hand   **3Refl**-Poss]   cut-Perf1b-3SgS
           'He$_x$ cut his$_x$ hand.'

       b. ùlé: [á   tèmbɔ̀]   púŋgó-tì-yà
           children [3Refl Recip]   hit-Perf1b-3PlS
           'The children hit each other.'

11.1.1.2 Subjects in subordinated clauses

In some subordinated clauses, including (nonsubject) relatives and some factive and quotative clauses, pronominal subjects are not expressed as suffixes on the verb, rather as preverbal proclitic pronominals. In the main clause (xx1a), the

subject is expressed by a suffix on the verb. In the relative clause (xx1b), it is expressed as a 3Sg pronoun ńné.

(xx1) a. péddè   sémé-tì-∅
          sheep   slaughter-Perf1b-**3SgS**
          'He/She slaughtered a sheep.'

      b. [pèddè^L ńné   sémé   kár^{n}à]   àndí   bù-∅
         [sheep^L **3SgS** slaughter Ppl.Perf] where? be-3SgS
         'Where is the sheep that he/she slaughtered?'

In quoted clauses, subjects are generally set off from the remainder of the quoted material. A referential subject is normally clause-initial and is followed by its own quotative subject marker wa→ (§17.1.3.1). The remainder of the quoted clause, i.e. the VP, is followed by its own quotative marker wà (§17.1.3.2).

    Subjecthood is also relevant to switch-reference subordination, since same-subject and different-subject constructions are distinguished (§15.2).

11.1.1.3 Subjects and addressees of imperative and hortative verbs

With imperatives and hortatives, it is necessary to distinguish "subject" from "addressee." Both imperative and hortative ('let's go!') verbs have a plural suffix -ǹ that is not found with any indicative verb category. For hortatives, -ǹ specifically marks the plurality of the addressee, rather than the (always 1Pl) subject. The suffix is therefore absent from 'let's go!' addressed to a single interlocutor. By extension, I assume that -ǹ likewise marks addressee rather than subject number with imperatives.

    In quoted hortatives, where the form of the verb changes to a special quoted hortative form (§10.6.4), if the quotative subject phrase is present it is limited to the relevant addressee category (2Sg or 2Pl).

(xx1) ámádù   [ú / bí   wá→]   ḿbú   wà
      Amadou   [2Sg / 2Pl QuotS] go.QuotHort Quot
      'Amadou said (to you-Sg / you-Pl), let's go!'

By extension, I take the same quotative subject phrase in imperatives to refer to the addressee rather than subject category, though the two arguably converge in this case. (xx2) is an example, also showing the use of a special third-person (i.e. indirect) imperative verb form (§10.6.3.1).

(xx2) ámádù   [ú / bí   wá→]   yǎy   wà
      Amadou   [2Sg / 2Pl   QuotS]   go.3Hort   Quot
      'Amadou said (to you-Sg / you-Pl), go!'

TU lacks transpersonal reflexives of the sort found in Tomo Kan and Togo Kan
(and Russian), so it is difficult to determine whether imperatives have covert,
fully referential subjects (in addition to overtly marked addressees). The only
reflexive forms that allow second person antecedents are those of the 'your
head' type, which are not highly grammaticalized as pure reflexives (they can
be interpreted as referring literally to the body part). For what it's worth, 'your
head' object imperatives are elicitable, see (xx2) in §18.1.1.
    Reciprocal objects are also possible (xx3).

(xx3) [bí   tèmbɔ̀]   púŋgó-ǹ
      [2PlP   Recip]   hit.Imprt-Pl.Addr
      'Hit-2Pl each other!'

Hortatives clearly have 1Pl subjects, including but distinct from the second
person addressee. In (xx4), the reciprocal object phrase is overtly 1Pl, while the
suffix -ǹ on the verb marks addressee plurality

(xx4) [í   tèmbɔ̀]   púŋgó-mɔ́-ǹ
      [**1PlP**   Recip]   hit-Hort-Pl.Addr
      'Let's (me and you-Pl) hit each other!'

Imperatives (as well as hortatives) may also occur in same-subject (SS)
multiclause constructions, which provides further evidence that imperatives
have referential subjects.

(xx5) [yày   né]   wá:
      [go   and.Nonpast.SS]   come.Imprt
      'Go and come-2Sg (back)!'

However, more work is needed on "same-subject" constructions to verify that
they require coindexation of referential subjects, as opposed to the absence of
clearly disjoint subjects.

11.1.1.4 Subjects of lexicalized subject-verb combinations

The subject-verb collocations in (xx1) denote meteorological, seasonal, and
time-of-day events. bá is not attested except in the expressions in (xx1a), all of

195

which denote transitions. The combinations in (xx1b) are also rather frozen. mìrⁿɛ́ (variant mìnɛ́) elsewhere means 'swallow', and the other cases in (xx1b) show idiomatic specialization.

(xx1) a. bá dǒ- (~ bà:-dɔ́: dǒ-)   'rainy weather arrive' (June)
           bá gǒ- (~ bà:-gó: gǒ-)   'rainy weather go out' (October)
           bá dèrⁿé   'night fall'

       b. àrⁿá mìrⁿɛ́   'rain fall' (àrⁿá 'rain')
           gándá ɛ́dɛ́   'day break' (gándá 'place', ɛ́dɛ́ 'become clean')
           dèndɛ́ dèrⁿé 'night fall' (dèndɛ́ 'night', dèrⁿé 'spend mid-day')

The subjects in (xx1a-b) are low in referentiality and have few opportunities to exhibit full subject properties. In the senses indicated they do not take definite or other determiners. They do not lend themselves to reflexive or reciprocal anaphora. However, it is possible to construct same-subject (SS) clause sequences in a few cases (xx2).

(xx2) a. bà:-dɔ́:   [dɔ̀   gín]   yǎy-yà-y
           rainy.weather [arrive **and.Past.SS**] go-Perf1a-3SgS
           'Rainy weather (wet season) came and went.'

       b. àrⁿá   [mìrⁿɛ̀   gín]   íjj-í:-yà-y
           rain(n)   [rain.fall **and.Past.SS**] stand-MP-Perf1a-3SgS
           'Rain fell and then stopped.'

'Be angry' (xx3a-b) looks at first as though 'liver/heart', i.e. the seat of the emotions, is the subject. However, the subject marked by verb suffixation is the human experiencer, e.g. 1Sg in (xx3a), and an overt nonpronominal subject NP denoting the experiencer may precede 'liver/heart' (xx3b). This is quite different from the possessive construction of the type 'Amadou's liver/heart' which does in fact occur in some other emotional expressions, like 'be happy' in (xx3c-d).

(xx3) a. cɛ́ndɛ́   bàrⁿ-â:-m
           liver/heart become.red-Perf1a-1SgS
           'I became angry.'

       b. ámádù   cɛ́ndɛ́   bàrⁿ-â:-y
           Amadou   liver/heart become.red-Perf1a-3SgS
           'Seydou became angry.'

c. [céndέ   kɔ̌:]   έlù-∅
   [liver/heart   1SgPoss.InanSg]   be.sweet-3SgS
   'I am happy.'

d. [ámádù   ᴸcèndὲ]   έlù-∅
   [Amadou   ᴸliver/heart]   be.sweet-3SgS
   'Amadou is happy.'

Nevertheless, in the 'be angry' examples it presumably is 'liver/heart' that 'turns red', calling for the verb bàrⁿá, which means'become red' and by extension 'be hot, blaze' (as well as 'beat [tomtoms]' and '[fruit] ripen'), cf. ùdù-bárⁿà 'hot season'. So the verb selection is based on 'liver/heart' as logical subject, but the morphosyntax treats the human experiencer as subject.

A similar situation occurs in the 'nosebleed' examples (xx4a-b). cìnè-téŋérⁿέ (including cíné 'nose' as compound initial) denotes the blood itself, and the verb 'go out' only makes sense with this as logical subject. But the pronominal-subject suffix, and all other syntactic subject properties, are based on the human experiencer.

(xx4) a. cìnè-téŋérⁿέ   gó-m̀   sɔ̀-m
          nosebleed   go.out-Impf   have-1SgS
          'I am having a bloody nose.' (='My nose is bleeding.')

      b. ámádù   cìnè-téŋérⁿέ   gó-m̀   sɔ̀:-∅
          Amadou   nosebleed   go.out-Impf   have-3SgS
          'Amadou is having a bloody nose.'

11.1.2   Simple transitives

11.1.2.1   Direct objects of simple transitives

There is a fairly well-defined transitive clause type with a subject and a direct object. Order normally SOV (except perhaps for pronominal subjects).
   does the language have an Accusative morpheme (§6.7)?

   impact verbs ('hit', 'cut') should be simple [Subj Obj V]
   perception verbs ('see', 'hear') likewise
   verbs of holding/carrying likewise, but they also have a "middle" voice element expressed in some languages by the Mediopassive suffix, i.e. 'I carry [the baby] (on myself)'. The "middle" element is disregarded by the clause-level syntax.

The distinction between transitive and intransitive is complicated by the existence of many verbs that have a cognate nominal as (apparent) object (§11.1.5.1) or other low-referentiality objects. These normally do not get Accusative marking (in lgs where such a morpheme exists).

11.1.2.2 *ŋŋŋ* 'do' with onomatopoeias and loanwords

The verb ŋŋŋ 'do' can combine with onomatopoiec forms and other low-referentiality noun-like elements. In effect, 'do' allows such elements to become predicates.

examples, e.g. with imitations of animal vocalizations

Dogon languages differ as to whether 'do X' is the productive way to nativize borrowed stems with verb-like meaning from Fulfulde, Bambara, French, etc.. Some languages have many such combinations, other languages generally allow borrowed verbs to be directly conjugated.

examples involving borrowed verbs, and brief discussion of how productive the pattern is.

11.1.2.3 Lexicalized verb-object combinations with low-referentiality objects

Some examples of high-frequency combinations of verb and noncognate object or object-like adjunct are in (xx1). dě- and úmbó- are not otherwise attested.

(xx1) ínjé dě-   'bathe (oneself)' (ínjé 'water')
       kɔ̀mbɔ́ tá-   'wage war' (kɔ̀mbɔ́ 'war', tá- 'shoot')
       cíné úmbó-   'blow one's nose' (cíné 'nose')
       zá ɲě-   'eat (a meal)' (ɲě- also 'drink')

11.1.2.4 Forms of cognate nominals associated with verbs

lexicalized cognate nominal, sharing phonological material with the verb

verbs without a lexicalized cognate nominal can simply use their verbal noun

198

(xx1)   noun   verb   gloss of combination

> *a. monosyllabic*
> *b. bisyllabic, noun {H}*
> *c. bisyllabic, noun {LH}*
> *d. bisyllabic, noun {HL}*
> *e. bisyllabic, noun {LHL}*
> *f. trisyllabic, noun {LH}*
> *g. trisyllabic, noun {HL}*
> *h. trisyllabic, noun {LHL}*

separate table and discussion for cases where
a) there is a change in vocalism from verb to nominal, e.g. e versus E or o versus O
b) the nominal is only partially cognate to the verb (i.e. is a compound, one element of which is cognate; or the verb is based on a modifying adjective)

representative glosses

'build a shed (shelter)'
'avoid, respect (a taboo)'
'give out a whistle'
'tie a knot'
'work, do a job'
'harvest millet, do the millet harvest'
'spend the mid-day'
'roll turban (on head)'
'think a thought'
'(a) death occur'
'make a heap'
'be rivals, have a rivalry'
'dance'
'fart, let out a fart'
'defecate, take a shit'
'speak'
'give a reprimand'
'go search for firewood'
'write, do some writing'

199

'treat (medically), provide care to'
'sing, perform a song'
'compete, be in a race'
'do the second round of weeding'
'double up, have two'
'give a description'
'chew cud'
'(dog) bark'
'(lion, hyena, elephant) roar'
'(plant stem) split into two'
'be stronger (than)'
'divide into halves'
'sneeze'
'speak'
'belch, emit a belch'
'vomit'
'cook a dish including cottonseed'
'gain, make a profit'
'foam, be frothy'
'foam up'
'poke fun at'
'stutter'
'study, go to school'
'pray, perform the Muslim prayer'
'jump, take a jump'
'make a profit'
'preach a sermon'
'spend a half-day (morning)'
'swear an oath' (<Fulfulde)
'tell a story'
'make a payment'
'weep'
'count (recite numbers)'
'be deceptive, trick'
'make an insult'
'forge (tools)'
'stand/ stop in a position'
'clear one's throat'
'ask a question'
'cook (dish with cow-peas, or millet mixed with roselle leaves)'
'yawn, make a yawn'
'let out a groan'

'urinate'
'spit, emit a spit'
'make noise'
'lay egg'
'(woman) emit cry of joy'
'have fun, stage festivities'
'converse, chat'
'utter a formal greeting'
'take animals to pasture'
'do wage labor (by the day)'
'take cows out at night'
'(beggar) sing koranic verses'
'fight, engage in a fight'
'dream a dream'
'snore; (lion) roar'
'have a discussion'
'request, beg'
'make loud noises'
'(animal) bellow'
'formally counsel (a young person)'
'perfume with incense'
'have a rest'

may have vocalic change:

'sow (seeds); sow the seedstock'
'run'
'curse, utter a curse'
'fall down, take a fall'
'pay dues, make a contribution'
'cover oneself with blanket'
'laugh, let out a laugh'
'make an addition (top-off)'
'take a walk'
'crawl, drag oneself'
'hold on one's back'
'do (manual) farm work (in field)'
'(sth unseen) make a noise'

may have partial cognate relationship:

'perform black magic'

'sleep'
'provide assistance to'
'scold'
'take a step'
'emit some slobber, drool'
'build a conical roof'
'clap, applaud'
'draw a line (with the hand)'
'cook ŋŋŋ (lit. "white meal," a millet dish)
'hunt, go on a hunt'
'perform an individual prayer'
'hiccup'
'give out a shout'

irregular cases?

'be afraid'
'stand, be in a position'
'cook sauce'
'lie, tell a lie'

11.1.2.5 Grammatical status of cognate nominal

usually be pro forma, as in 'dance (='do) some dancing'

however, some cognate nominals can be somewhat referential (denoting a bounded unit of activity), and therefore can be quantified over or adjectivally modified.

examples
  'I danced three dances.'
  'They dances a nice dance,'

try with more difficult cases: 'hiccup', 'laugh', 'snore', 'rest'

11.1.3   Clauses with additional arguments and adjuncts

11.1.3.1   Syntax of expressive adverbials (EAs)

Expressive adverbials (EAs), see §8.4.7, may function as one-word adverbial phrases, with no additional morphemes, or they may be made predicative by the addition of an inflectable auxiliary verb. The auxiliaries relevant to EAs are those in (xx1). *bě-* has a full set of positive and negative inflections.

(xx1)   a.   *bù-*   stative positive ('be X')
        b.   *ŋ̀gó-*   stative negative ('not be X')
        c.   *bě-*   inchoative ('become X')

EAs therefore differ syntactically from NPs and from adjectives, which are made predicative in other ways (§xxx, §xxx). EAs are closest syntactically to adverbial phrases, especially locational expressions, which use *bù-* 'be (somewhere), be present' and *ŋ̀gó-* 'not be (somewhere), be absent'. Elsewhere *bě-* means 'stay, remain (somewhere)', so it too is compatible with locationals, though the aspectual sense is different.

For examples of the adverbial and predicative functions see *dém→* 'straight' in §8.4.7.1 below.

11.1.3.2   Adverbial phrases with verbs of motion, being in, and putting

Motion verbs are intransitive, with an optional locational AdvP as an adjunct. The AdvP may be overtly adverbial (e.g. with a locative postposition), but it may also take the (surface) form of a NP, such as a place name.

examples:
    'They went to my village.'
    'They went home.'
    'They went to Bamako.'
    'They came back from the well.'

There may be one or more verbs (perhaps defective stative quasi-verbs) with senses like 'be (put) in(side)' or 'be (put) on' (cross-ref to relevant section of Chapter 10 or 11). Although the specific locative relationship is baked into the verb's sense, the complement may again be an AdvP, with the same qualifications as noted above for motion verbs. The default is the basic locational-existential quasi-verb 'be (somewhere)'.

examples
  'The people are.in(side) the house.' [with a specialized stative]
  'The tea kettle is.on the burner.' [with another specialized stative]
  'I am in Douentza.' [with locational-existenctial]

  Verbs of putting take a direct object and a locational AdvP. They can be modeled semantically, roughly, as [X CAUSE [Y BE [IN/ON Z]]].

examples
  'I put the mangoes under the waterjar.'
  'I put the sugar in the box.'

11.1.3.3   Ditransitives

case frames for 'give', 'show', 'say' ('give' and 'show' may alternate between two distinct case frames, in one of which the recipient is treated as direct object, the other using dative forms)

11.1.3.4   Valency of causatives

  case-frame for causative from intransitive base: 'cause to come', 'cause to go in' (= 'take in'). Should be similar to a simple transitive.

  case-frame for causative from transitive base: 'X cause Y to VERB Z'. Often both Y and Z are marked as direct objects (e.g. with Accusative morpheme, or using pronoun-object clitics).
  try with full NPs, pronouns, and one full NP and one pronoun

11.1.4   Verb Phrase

The category VP (i.e. a clause stripped of its subject and of clause-level inflectional categories) is relevant to certain types of chains, notably direct chains (with no linking morpheme) and explicitly same-subject subordinated clauses. The nonfinal VP (minimally just a verb, but sometimes including non-subject complements) is chained to the final verb (direct chains), or is more loosely preposed to or inserted into the final clause (same-subject subordinated clause).
  For details and examples, see Chapter 15.

11.2   'Be', 'become', 'have', and other statives and inchoatives

In addition to the forms discussed in the sections below, there may be a stative 'be better, be more' quasi-verb, see §12.1.4.

11.2.1   'It is' clitics

The 'it is' clitic has identificational function. An entity whose existence (but not identity) is known is identified in this way. The clitic can be added to personal or place names, common nouns (denoting types of entities), more complex NPs, pronouns and demonstratives, and WH-interrogatives.

The same clitic is often used to focalize a constituent; see Chapter 13.
Usually there are different constructions for making predicates out of adjectives (§11.4) and out of expressive adverbials (§8.4.7, §11.1.3.1)

11.2.1.1   Positive 'it is' ($=\varnothing$)

The clitic is realized as lengthening of a word-final vowel (if not already long) and by a final L-tone element. Either the lengthening or the final pitch drop (or both) is audible on nearly all NPs. However, it is inaudible after a few nouns like 'goat' that already end lexically in a long, L-toned vowel. The relationship between simple nouns stems and the 'it is' form is illustrated in (xx1).

(xx1)   noun (X)   'it's (an) X'   gloss

    a. final short vowel
      L-toned final vowel, lengthening audible
        péddè   *péddè:=∅*   'it's a sheep'
        gùdù-kúlà *gùdù-kúlà:=∅* 'it's (body) hair'
        pùdù-pá:dù *pùdù-pá:dù:=∅* 'it's lungs'
      H-toned final vowel, lengthening and pitch drop audible
        sòmé   *sòmê:=∅*   'it's a horse'
        tólé   *tólê:=∅*   'it's a pig'
        tálé   *tálê:=∅*   'it's an egg'
        yǎ   *yã̀:=∅*   'it's a woman'
        árⁿá   *árⁿâ:=∅*   'it's a man'
        nù-mbɔ́   *nù-mbɔ̂:=∅*   'it's people'
        gùndú   *gùndû:=∅*   'it's a calabash cover'

b. final long vowel

    H-toned final vowel, pitch drop audible

nǎ:	*nǎ:=∅*	'it's a cow'
sɔ̀ŋɔ́:	*sɔ̀ŋɔ̂:=∅*	'it's a spinal cord'

    LH-toned final vowel, pitch drop audible (final <LHL> tone)

lǎ:	*lǎ:=∅*	'it's a foot'
tò-tǒ:	*tò-tǒ:=∅*	'it's a hole (pit)'
ìnjě:	*ìnjě:=∅*	'it's a dog'
cìnǎ:	*cìnǎ:=∅*	'it's a bone'

    L-toned final vowel, no audible change

írⁿè:	*írⁿè:=∅*	'it's a goat'

Examples are in (xx2).

(xx2) a. *ò-gú*   *ǹjê:=∅*
           Prox--InanSg   what?=it.is
           'What is this?'

        b. *ɔ̌-m*   *nâ:=∅ / ìnjě:=∅ / sòmê:=∅*
           Prox-AnSg   cow=it.is / dog=it.is / horse=it.is
           'This is a cow / a dog / a horse.' (*nǎ:*, *ìnjě:*, *sòmé*)

The clitic may be conjugated for 1st/2nd person subject. There is no special 3Pl conjugated form, but since the NP itself is usually marked for plurality there is no 3Sg/3Pl ambiguity. The 1st/2nd person forms are atonal, i.e. they get their surface tones by spreading from the final tone of the stem.

(xx1) category   clitic   with 'blacksmith(s)'

category	clitic	with 'blacksmith(s)'
1Sg	*=m*	*zémbέ=ḿ*
1Pl	*=yⁿ*	*zémbέ-mbɔ̀=ỳⁿ*
2Sg	*=wⁿ*	*zémbέ=ẃⁿ*
2Pl	*=yⁿ*	*zémbέ-mbɔ̀=ỳⁿ*
3Sg	*=̀:*	*zémbὲ:=∅*
3Pl	*=̀:*	*zémbέ-mbɔ̀:=∅*

There is no special inanimate form distinct from 3Sg: *ò-gú cínû:=∅* 'this is a stone' (*cínú*).

11.2.1.2 'It is not' (=*là*-)

The negative counterpart of = `:` 'it is' is =*là* 'it is not'. There is no phonological indication that =*là* is added to = `:` to form a clitic sequence. In particular, there is no lengthening of a short stem-final vowel before =*là* (xx1).

(xx1) a. *ɔ̌-m*   *nǎ:=là:-∅ / ìnjě:=là:-∅ / sòmé=là:-∅*
            Prox-AnSg   cow / dog / horse=it.is.not-3SgS
            'This is a cow / a dog / a horse.'

       b. *zémbé=là-m*
            blacksmith=it.is.not-1SgS
            'I am not a blacksmith.'

The paradigm is (xx2).

(xx1)   category   clitic   with 'blacksmith(s)'

        1Sg   =*là-m*   *zémbé=là-m*
        1Pl   =*là-y^n*   *zémbé-mbɔ́=là-y^n*
        2Sg   =*là-w^n*   *zémbé=là-w^n*
        2Pl   =*là-y^n*   *zémbé-mbɔ́=là-y^n*

        3Sg   =*là:-∅*   *zémbé=là:-∅*
        3Pl   =*là-ɛ̀*   *zémbé-mbɔ̀=là-ɛ̀*

As with stative negative *=ndà-*, which has a similar paradigm (§10.4.2), *=là-* is normally heard with low pitch, but the underlying phonological rising tone is manifested when an emphatic particle (kǒy) or the past clitic *=bì-* is added: *zémbé=lă:-∅ kǒy* 'he sure isn't a blacksmith', *zémbé=lă:-∅=bì-m-bì-∅* 'he wasn't a blacksmith'.

11.2.2   Existential and locative quasi-verbs and particles

11.2.2.1   Existential particle (*yé*)

Existential particle *yé* is immediately preverbal. The particle (and its cognates in the other languages) probably originated as a 'there (definite)' adverb. It is used with **statives** (derived statives from regular verbs, or defective stative quasi-verbs).

   yé is very common with *bù-* 'be' and other predicates of location ('be in', 'be up on', etc.). These predicates can take a specific locational expression, but require *yé* as the default when no such expression is present. With *sɔ̀-* 'have', *yé* is required whether or not a locational expression is present (xx1b-c). *yé* is optional with derived statives such as 'be sitting' (xx1d).

(xx1)   a.   *yé*   *bù-m*
              Exist   be-1SgS
              'I am present (here).'

        b.   *ìnjě:*   *yé*   *sɔ̀-m*
              dog   Exist   have-1SgS
              'I have a dog.'

        c.   *bàmbá*   *úló*   *yé*   *sɔ̀-m*
              B   house   Exist   have-1SgS
              'I have a house in Douentza (town).'

        d.   *ɔ́bà-∅*
              yé   *ɔ̀bà-∅*
              Exist   sit.Stat-3SgS
              'He/She is sitting (seated).'

yé is always H-toned. A following stative with initial H-tone drops to {L} after *yé*. Note *ɔ́bà-* versus *yé ɔ̀bà-* in (xx1d).

yé cannot occur in **negative** clauses, in **relative** clauses, or in positive main clauses that have a **focalized nonverbal constituent** (such as a WH-interrogative).

(xx2) a. (#*yé*)   *ŋ̀gó-ḿ*
                          not.be-1SgS
              'I am not present.'

      b. *úló*   (#*yé*)   *sɔ́-ndɔ̀-m*
              house   have-Neg-1SgS
              'I don't have a house.'

      c. *ăm*   *úló*   (#*yé*)   *s-ɔ̀:*
              who?   house   have-DFoc
              'Who has a house?'

      d. *àndí*   *úló*   (#*yé*)   *sɔ̀-wⁿ*
              where?   house   have-2SgS
              'Where do you-Sg have a house?'

      e. *[ɲèᴸ*   *nǎ:*   (#*yé*)   *sɔ́-mè:]*   *zúgà-m-nù-m*
              [personᴸ   cow   have-Ppl]   know-Impf-1SgS
              'I know someone who has a cow.'

The Existential particle follows object pronominals (xx3). It is not possible to determine relative order versus preverbal subject pronominals, since the Existential particle does not occur in relative clauses.

(xx3) *kú*   *yé*   *sɔ̀-m*
          Inan   Exist   have-1SgS
          'I have it.'

11.2.2.2 Locational-existential 'be (somewhere)' (*bù-*, negative *ŋ̀gó-*)

This stative quasi-verb is used to specify where the subject is. It is often accompanied by a specific locational expression ('I am in the house,' 'I am out in the bush'). In the absene of such a locational, the default locational is Existential *yé*, which in many contexts is understood to be equivalent to 'here' or 'there'. When the location is vague, the construction approaches a pure existential predication 'X exists, X is present (somewhere)'.
    The paradigm is (xx1).

(xx1)   'Be (present)'

category   form

1Sg   *bù-m*
1Pl   *bù-y^n*
2Sg   *bù-w^n*
2Pl   *bù-y^n*

3Sg   *bù-∅*
3Pl   *b-ὲ:*

Examples are in (xx2). The subject may be human, animate, or inanimate.

(xx2)   a.   *[[dámbá   kɔ̌:]   nὲ]   bù-m*
             [[village   1SgP.InanSg]   in]   be-1SgS
             'I am in my village.'

        b.   *á:màdù   yé   bù-∅↗*
             A   Exist   be-3SgS
             'Is Amadou there?'

        c.   *síkɔ̀rɔ̀   yé   bù-∅*
             sugar   Exist   be-3SgS
             'There is some sugar.'

For past time, *bù-* is replaced by a conjugated form of *bù-m = bì-* 'was' (§10.5.1.6). The participial form of *bù-* in relatives is *bù-m-ὲ:* (§14.4.2).

The corresponding **negative** forms are in (xx3). They do not allow Existential *yé*. They may therefore occur with a specific locational, or by themselves. In the latter case, there may be an understood location ('here', 'there'), or the sense may be 'not exist'.

(xx3)   'Not be (present), be absent'

category   form

1Sg   *ŋ̀gó-m*
1Pl   *ŋ̀gó-y^n*
2Sg   *ŋ̀gó-w^n*
2Pl   *ŋ̀gó-y^n*

3Sg ŋ̀gó-∅
3Pl ŋ̀gw-ê:

Examples are in (xx4).

(xx4) a. *[dámbá nè] ŋ̀gó-m*
[village in] not.be-1SgS
'I am not in the village.'

b. *á:màdù ŋ̀gó-∅*
A not.be-3SgS
'Amadou is not present (here/there).'

c. *síkɔ̀rɔ̀ ŋ̀gó-∅*
sugar not.be-3SgS
'There is no sugar.'

For past time, the form is *ŋ̀gó = bù-m = bì-* 'was not (somewhere)', §10.5.1.6.
    More specific verbs are used in senses like 'be in (a container)' or 'be up on X'. See §11.2.3.1 just below.

11.2.3   Other stative locational and positional quasi-verbs

11.2.3.1 'Be in/on' (*gánà-*, *túnà-*, etc.)

Location with specific respect to a container, a well-defined enclosed space, a surface, or a landmark object, is normally expressed by a derived stative verb rather than by *bù-*.

(xx1) a. *ínjé [èdù-gó nè] yé gànà-∅*
water [waterjar-InanSg in] Exist be.put.in.Stat-3SgS
'(The) water is in the waterjar.'

b. *yɔ́ [bɔ̀ríyé nè] yé gànà-∅*
millet [sack in] Exist be.put.in.Stat-3SgS
'(The) millet (grain) is in the sack.'

c. *èdù-gó [úló nè] yé tùnà-∅*
waterjar-InanSg [house in] Exist be.put.Stat-3SgS
'The waterjar is in the house.'

d. *pól-gó*   *[bèndɛ́*   *nè]*   *yé*   *tùnà-∅*
knife-InanSg [shoulderbag   in]   Exist be.put.Stat-3SgS
'The knife is in the shoulderbag.'

The stative verbs in question are summarized in (xx2). The stative form has the sense (except for aspect) and valency of the mediopassive if there is one, rather than those of the transitive. However, the two most common such verbs ('put in' and 'put') have no mediopassive form, and the phonology and morphology of the statives are closer to the transitive than to the mediopassive of the other two verbs.

(xx2)	transitive	gloss	mediop.	stative	gloss
	gǎn-	'put in'	—	*gánà-*	'(liquid, grain) be in (container)'
	tún-	'put'	—	*túnà-*	'(object) be in'
	náŋgí-	'put up on'	*nánj-í:-*	*náŋgà-*	'(object) be up on'
	tárá-	'put on (wall)'	*tár-í:-*	*tárà-*	'be on (wall)'

In the absence of a specific locational, **Existential** *yé* is required. After *yé*, the stative verb is {L}-toned. Thus *yé gànà-∅* and *yé tùnà* 'it is therein'.

11.2.3.2 Demonstrative-based 'be here/there' (*ǒ-m-nè* etc.)

'Be here' and 'be there' can be expressed by combining an existential-locational predicate, i.e. *bù-* 'be (somewhere)' with a demonstrative adverb. However, these senses can alternatively be expressed using demonstrative-based predicate forms. For regular demonstratives, see §4.4.1.2.

    The demonstrative predicates are mostly identical to the ordinary demonstratives, plus the 'it is' clitic. However, the animate singular forms have an ending *-nè*. Forms for third person subject are in (xx1).

(xx1)	demonstrative	gloss	'be (here/there)'
a. inanimate			
	ò-gú	'this'	*ò-gû:=∅*
	è-ý	'these'	*è-ŷ=∅*
	mà-gú	'that (over there)'	*mà-gû:=∅*
	mà-ýⁿ	'those (over there)'	*mà-ŷⁿ=∅*

b. animate

ɔ̀-ḿ	'this'		*ɔ̀-ḿ-nὲ*
ɔ̀-bɔ́	'these'		*ɔ̀-bɔ̂:=∅*
mà-ḿ	'that (over there)'		*mà-ḿ-nὲ*
mà-bɔ́	'those (over there)'		*mà-bɔ̂:=∅*

bɛ̌: is optionally added after the animate Sg predicative form in *-ḿ-nὲ* (xx2a), or after the nonpredicative forms (i.e. without the 'it is' clitic) of the other forms. For animate plural, *bɛ̌:* is replaced by *bù-mbɔ̌:* (xx2d).

(xx2)   a.   *ìnjɛ̌:*   *ɔ̌-m-nὲ*   *bɛ̌:*
              dog   be.here.AnSg   be
              'The dog is here'

       b.   *èdù-gó*   *ò-gú*   *bɛ̌:*
              waterjar-InanSg   Prox-InanSg   be
              'The waterjar is here.'

       c.   *èdé:*   *è-ý*   *bɛ̌:*
              waterjar.Pl   Prox-InanPl   be
              'The waterjars are here.'

       d.   *[ìnjὲ:-mbɔ́*   *ǹ]*   *ɔ̀-bɔ́*   *bù-mbɔ̌:*
              [dog-AnPl   Def]   Prox-AnPl   be-AnPl1
              'The dogs are here.'

In the absence of *bɛ̌:* or *bù-mbɔ̌:*, the predicative forms tend to be presentational in function (§4.4.3).

    For 1st/2nd person subjects, the forms in *-ḿ-nὲ* and *-bɔ́* take pronominal-subject suffixes: *ɔ̀-ḿ-nὲ-m* 'I am here', *ɔ̀-bɔ́-ỳⁿ* 'we are here'.

    For morphologically similar predicates for interrogative 'be where?', see §13.2.4.

11.2.4 'Become', 'happen', and 'remain' predicates

11.2.4.1 'Remain' (*bɛ̌-*, *wàdá-*)

bɛ̌- and *wàdá-* have regular verb paradigms. *bɛ̌-* means 'stay, remain (behind)', i.e. not going anywhere else during the relevant time interval.

(xx1) *[dámbá*   *nὲ]*   *bɛ̌y-yà-m*

[village   in]   stay-Perf1a-1SgS
'I stayed in the village (while others traveled).'

bě- has an accidental homonym 'lie down' due to a secondary phonological convergence. Cf. Yanda Dom *bìyɛ́-* 'remain', *bìyó-* 'lie down'.
    wàdá- means 'remain, be left (over)'.

(xx2)   *zá*   *wádá-ŋgò:-∅*
         meal   remain-ImpfNeg-3SgS
         'There is nothing left of the meal.'

láyà   yéŋgì   bè-m-bì
'the feast of the ram took place yesterday'

yéŋgì   lá: bè-m-bì
'it wasn't yesterday'

'holiday take place'
expressive adverbials

11.2.4.2 'Become, be transformed into' (*táŋgí-*)

táŋgí- 'X become Y' takes a NP complement that is not marked for case.

(xx1)   *àdé*   *táŋgí-yà-y*
         bird   become-Perf1a-3SgS
         'He/She turned into a bird.'

táŋgí- can also mean 'cross (road, river)', '(fire) be lit', and '(bride) be transferred (to husband's house)'. These senses all involve a change in location and/or state.
    The transitive (causative) counterpart is *tá:-ndú-* 'Z transform (X into Y)'.

(xx2)   *àdé*   *ú*   *tá:-ndà-m-nù-m*
         bird   2SgO   become-Caus-Impf-1SgS
         'I will turn you-Sg into a bird.'

tá:-ndú- can also mean 'take X across, cause X to go across', 'transfer (bride, to husband's house)', 'turn on (light)', and 'contaminate, infect'.
    For deadjectival inchoative verbs ('become red/small'), see §9.6. For bě- 'become' with an expressive adverbial, see §11.1.3.1.

11.2.5 Mental and emotional statives

11.2.5.1 'Know' (*zùgɔ́-*)

zùgɔ́- 'know (a fact)' or 'know, be acquainted with (someone)' is a regular verb with a full aspectual paradigm, rather than a defective stative as in some other Dogon languages. Thus Perfective-1b *zùgɔ́-tì-* 'knew, realized', imperfective negative *zúgá-ŋgò:-* 'does not know'.

11.2.5.2 'Want, like' (*m̀bá-* or *nàmá-*, negative *m̀bí-là* or *nàmà-lá*)

'Want, like' is expressed most often by a defective stative quasi-verb *m̀bà-* (compare Nanga *m̀bá-*, Tommo So *m̀bɛ́-*). The negative counterpart 'not want' is *m̀bí-là*, containing a variant of the stative negative suffix.

(xx1)   a.   *ǹjé* $^{\text{L}}$*mbà-w^n↷*
             what? $^{\text{L}}$want-2SgS
             'What do you-Sg want?'

       b.   *[cì kámá]*   *m̀bí-là-m*
             [anything]   want-StatNeg-1SgS
             'I don't want anything.'

The paradigms are in (xx2).

(xx2)   'Want' and 'not want'

category	'want'	'not want'
1Sg	*m̀bá-m*	*m̀bí-là-m*
1Pl	*m̀bá-y^n*	*m̀bí-là-y^n*
2Sg	*m̀bá-w^n*	*m̀bí-là-w^n*
2Pl	*m̀bá-y^n*	*m̀bí-là-y^n*
3Sg	*m̀bá-∅*	*m̀bí-là:-∅*
3Pl	*m̀bá-ɛ̀*	*m̀bí-l-ɛ̀:*

215

There is also another 'want' quasi-verb *nàmá* (3Pl *nàmá-è*), negative *nàmà-lá* with stative negative suffix.

These verbs may take NP objects: *nàmá m̀bí=là-m* 'I don't want (any) meat'. They also take verbal noun complements, on which see §17.xxx.

11.3   Quotative verb

11.3.1   'Say' (*gǐn ~ jǐn*, *ɔ́rú*, *tágá*)

The most common 'say' verb accompanying quoted material is *gǐn ~ jǐn,* imperfective *gínì-m-dɔ̀-*. However, it gets some competion from *ɔ́rú* 'say, speak' and from *tágá* 'say'. *ɔ́rú* does not require quoted material, since it also occurs in the collocation with cognate nominal *órú-gó ɔ́rú* 'speak, talk, do some talking'.

All three 'say' verbs allow perfective-1b -tì- (*gǐn-tì-*, *ɔ́r-tì-*, *tágá-tì-*).

The indirect object (the original addressee) is expressed with postposition *bènè* (§8.xxx).

gǐn ~ jǐn is presumably related historically to *gín*, the past-time same-subject 'and then' subordinator (§15.xxx).

11.4   Adjectival predicates

11.4.1   Positive adjectival predicates

11.4.1.1   Final *u* (or apocopated zero)

One rather common adjectival predicate has a final *u* on the adjective. After an unclustered medial nasal or *y*, the *u* is deleted (by apocope). The lexical tones are preserved.

This construction is not attested for all adjectives. Those that I know of are in (xx1). The modifying form shown next to the predicate is the unsuffixed form (Inanimate Pl or Animate Sg).

(xx1)   predicate   modifying   gloss

        a. final *u* audible
          {HL} melody
            cé:lù   *cé:lè:*   'cold, cool'
            dúdù   *dúdè:*   'heavy'
            ɛ́dù   *ɛ́dè:*   'good'

ɛ́lù	*ɛ́lè:*	'sweet, delicious'
gálù	*gálè:*	'bitter'
pílù	*pílè:*	'white'
yágùrù	*yágírè:*	'coarse, rough'

{LH} melody

gàbú	*gàbě:*	'tall'
mɔ̀dú	*mɔ̀dě:*	'evil, nasty'
yɔ̀rú	*yɔ̀rě:*	'soft'

b. final *u* apocopated

{HL} melody

gɔ̂m	*gɔ́mè:*	'rotten'
mân	*már^{n}è:*	'hard, solid'
nôm	*nómè:*	'difficult'
ɔ̂m	*ɔ́mè:*	'hot'
ɔ́r^{n}ɔ̂n	*ɔ́r^{n}ɔ́nè:*	'smooth, sleek'

Sample paradigms are in (xx2). 3Pl *-ɛ:* has parallels in various inflectional paradigms of verbs. The 3Pl predicative form is homophonous with the *ɛ:*-final form of modifying adjectives when its syllable is L-toned, but when it is H-toned it is usually distinct tonally from the modifying form (*mɔ̀d-ɛ́:* 'they are nasty', *mɔ̀dě:* 'nasty').

(xx1) category 'is heavy' 'is nasty' 'is difficult'

1Sg	*ɛ́lù-m*	*mɔ̀dú-m*	*nómù-m*
1Pl	*ɛ́lì-y^n*	*mɔ̀dí-y^n*	*nómì-y^n*
2Sg	*ɛ́lù-w^n*	*mɔ̀dú-w^n*	*nómù-w^n*
2Pl	*ɛ́lì-y^n*	*mɔ̀dí-y^n*	*nómì-y^n*
3Sg	*ɛ́lù-∅*	*mɔ̀dú-∅*	*nôm-∅*
3Pl	*ɛ́lù-è:*	*mɔ̀d-ɛ́:*	*nóm-è:*

11.4.1.2   {LH(L)} tone contour and final *i ~ y*

This type has an overlaid {LHL} tone contour. Those forms that are based on *Cv(C)CE:* adjectives also raise the final *E:* vowel to *i:*, resulting in *Cv̀(C)Cî:* (xx1a). Those based on *C(v)E:* appear as *Cvy* (xx1b). *Ci:* (xx1c) is probably of the same type, i.e. from /Ciy/.

(xx1)   predicate   modifying   gloss

a. *Cv(C)Cî:*

bìnî:	*bìnέ:*	'fat, stout'
dèmbî:	*démbè:*	'thick, massive'
ὲmbî:	*ὲmbĕ:*	'narrow'

b. *Cṽy*

gɔ̃y	*gɔ̰ĕ:*	'short'
wãy	*wàέ*	'wide, spacious'

c. *Cî:* (or *Cîy*)

sĩ:	*síyè:*	'sharp (point, blade)'

With 1Sg subject: *bìnî:=m̀* I am fat', *gɔ̃y=m̀* 'I am short' (the <LHL> tone is spread out with the final L on the clitic nasal).

Paradigms are in (xx2).

(xx2) category   'is fat'   'is short'

category	'is fat'	'is short'
1Sg	*bìnî:-m*	*gɔ̃y=m̀*
1Pl	*bìnî:-y^n*	*gɔ̃y=ỳ^n*
2Sg	*bínî:-w^n*	*gɔ̃y=ẁ^n*
2Pl	*bìnî:-y^n*	*gɔ̃y=ỳ^n*
3Sg	*bìnî:-∅*	*gɔ̃y-∅*
3Pl	*bìn-ê:*	*gɔ́-ὲ:*

11.4.1.3 *pá:* 'be long'

From *pá:* 'long' the predicative form is <LH>-toned, with no final high vowel or semivowel.

(xx1)   predicate   modifying   gloss

	predicate	modifying	gloss
	pá:	*pá:*	'long'

The paradigm is (xx2).

(xx2) category   'is long'

category	'is long'
1Sg	*pá:-m*

1Pl	*pá:-y^n*
2Sg	*pá:-w^n*
2Pl	*pá:-y^n*
3Sg	*pá:-∅*
3Pl	*p-ă:*

11.4.1.4 Derived expressive adverbial plus *bù-* 'be'

The attested example of a construction with *bù-* 'be' is in (xx1). The adjective takes a derived expressive adverbial (EA) form. *bù-* is regularly used to make EAs predicative (§xxx).

(xx1) predicate   modifying   gloss

ɛ́r^nɛ́-y→ bù-   *ɛ́r^nɛ̀:*   'lightweight; thin (wall)'

11.4.1.5 Copular predicate based on modifying adjective

For a number of adjectives, no specifically predicative form was elicitable. Instead, the regular modifying form, including animacy and number marking, is used as a predicate with the 'it is' clitic. A repetition of the noun ('this mango is a red mango') frequently occurs, and although the repeated noun is not required it suggests that the predicative element is syntactically a NP rather than an adjective as such.

In (xx1), just one representative predicative form is given (Inanimate Sg if possible), but other forms (i.e. for the various animacy and number categories) are also possible.

(xx1) predicate   modifying   gloss

a. sample predicative form is Inanimate Sg
(C)Cv adjective stem
sɛ́-ŋgɛ̀:=∅	*sɛ́*	'good'
dɛ́-ŋgɛ̀:=∅	*dɛ́*	'big'
ǹdɔ̀-ŋgɔ̂:=∅	*ǹdɛ́*	'empty''

other stems
bán-gɔ̀:=∅	*bár^nɛ̀:*	'red; ripe (mango)'
dùmbù-gô:=∅	*dùmbĕ:*	'blunt (blade)'
jɛ́m-gɔ̀=∅	*jɛ́mɛ̀:*	'black (dark)'

219

mày^n-gɔ̂:=∅	*màɛ̌^{n}*	'dry'
ɔ̀l-gɔ̂:=∅	*ɔ̀lɛ̌:*	'wet; fresh (grass)'
pɛ̀y-gɔ̂:=∅	*pɛ̌:*	'old'
púrúgú-gò:=∅	*púrúgè:*	'tan, off-white'
sàm-gɔ̂:=∅	*sàmɛ̌:*	'bad, ugly'
wɛ́r-gɔ̀:=∅	*wɛ́rɛ̀:*	'green'

b. sample predicative form is Inanimate Pl (liquids)

sɛ̃:=∅	*sɛ̌:*	'diluted (milk)'
kùrɛ̌:=∅	*kùrɛ̌:*	'undiluted (milk)'

c. sample predicative form is Animate Sg

ɔ́mɔ̂:=∅	*ɔ́mɔ̀:*	'living, alive'

This construction can be used with any adjective, including those that also have a specifically predicative form as described in preceding sections.

A sample paradigm is (xx2). The third person forms clearly involve the 'it is' clitic, which is manifested by lengthening and a final L-tone element.

(xx1)   category   'is old'

1Sg	*pɛ̌:-m*
1Pl	*pɛ̀y-mbɔ́-y^n*
2Sg	*pɛ̌:-w^n*
2Pl	*pɛ̀y-mbɔ́-y^n*

3rd person
InanSg	*pɛ̀y-gɔ̂:=∅*
InanPl, AnSg	*pɛ̃:=∅*
AnPl	*pɛ̀y-mbɔ̂:=∅*

Does focalization of a constituent (so that the predicate is defocalized) affect the choice of adjectival predicate construction?
examples:
'This house is big/small/red/black.'
'The rope is short/long.'
'The men are fat/slender/heavy/lightweight/good/bad.'
'The meal is good/bad/sweet/bitter/sour.'
'I am/you are/we are/... fat.'
'Who is fat?', 'How is it good?', 'When is it good?'   [focalized]

11.4.2   Negative adjectival and stative predicates (*=lá*)

The various adjectival predicates described in the preceding sections are negated as follows. Simple adjectival predicates add a conjugated form of Stative Negative *=lá-* (xx1a-c). Predicates based on deadjectival expressive adverbials (EAs) are negated by *ŋ̀gó-* 'not be (somewhere)', as usual for negative predicates of EAs (xx1d). Predicates based on (N-)Adj core NPs are negated by *=là:-* 'it is not', as usual with NP predicates.

(xx1)   a.   *[cìn*^L   *ò-gú]*   *dùdù=lá-∅*
             [stone^L   Prox-InanSg]   heavy=StatNeg-3Sg
             'That stone is not heavy.' (cf. *dúdù-∅*, §11.4.1.1)

        b.   *[sùŋgò*^L   *ò-gú]*   *gɔ̀y=lá-∅*
             [rope^L   Prox-InanSg]   short=StatNeg-3Sg
             'That rope is not short.' (cf. *gɔ̀y-∅*, §11.4.1.2)

        c.   *[sùŋgò*^L   *ò-gú]*   *pà:=lá-∅*
             [rope^L   Prox-InanSg]   long=StatNeg-3Sg
             'That rope is not long.' (cf. *pá:-∅*, §11.4.1.3)

        d.   *[cìn*^L   *ò-gú]*   *ér*ⁿ*έ-y→*   *ŋ̀gó-∅*
             [stone^L   Prox-InanSg]   lightweight-Adv   not.be-3SgS
             'That stone is not light(-weight).' (cf. *ér*ⁿ*έy bù-*, §11.4.1.4)

        e.   *[ùlò*^L   *ò-gú]*   *pὲy-gɔ́=là:-∅*
             [house^L   Prox.InanSg]   old-InanSg=it.is.not-3SgS
             'That house is not old.' (cf. *pὲy-gɔ̂:=∅*, §11.4.1.5)

The paradigms are the usual ones for these negative endings.

11.5   Possessive predicates

11.5.1   'X have Y' (*sɔ̀-*)

sɔ̀- 'have' forms predicates of possession, primarily in the sense of ownership. The subject is frequently topical within the larger discourse. In positive main clauses, *sɔ̀-* requires Existential *yé* (xx1a) unless there is a focalized constituent (xx1b).

(xx1)   a.   *[pédú-mbò   bú-tà:ndú]   yé   sɔ̀-m*

[sheep-AnPl   AnPl-three]   Exist   have-1SgS
'I have three sheep.'

b. *ăm*   *pédé*   *sɔ̀-∅*
    who?   sheep   have-3SgS
    'Who has a sheep?'

There is an issue as to whether *sɔ̀-* is lexically L-toned, or is really /sɔ́-/ but subject to tone-dropping. Indeed, tone-dropping does occur on derived stative verbs after Existential *yé* (§10.xxx), and tone-dropping can occur in verbs following focalized constituents (§xxx).

The **negative** counterpart is *sɔ́-ndɔ̀:-*, including a variant of Stative Negative =*ndà:-* (§10.xxx). Existential *yé* is not allowed in negative clauses.

(xx2) *sòmé*   *sɔ́-ndɔ̀-m*
       horse   have-StatNeg-1SgS
       'I don't have a horse.'

The positive and negative paradigms are in (xx3). *yé* is included in the positive.

(xx3) category   'have'   'do not have'

       1Sg   *yé sɔ̀-m*   *sɔ́-ndɔ̀-m*
       1Pl   *yé sɔ̀-y^n*   *sɔ́-ndɔ̀-y^n*
       2Sg   *yé sɔ̀-w*   *sɔ́-ndɔ̀-w^n*
       2Pl   *yé sɔ̀-y^n*   *sɔ́-ndɔ̀-y^n*

       3Sg/Inan   *yé sɔ̀-∅*   *sɔ́-ndɔ̀:-∅*
       3Pl   *yé sw-ɛ̀:* (/sɔ̀-ɛ̀/)   *sɔ́-nd-ɛ̀:*

In careful speech, the 3Pl form of 'have' can be pronounced [sɔ̀ɛ̀].
    For the past-time form ('had X', 'used to have X'), see §10.5.1.6.
    For 'have' in relative clauses, see §14.xxx.
    sɔ̀- 'have' is presumably related at least historically to Perfective-2 *-sɔ̀-* (§10.2.1.3). It also occurs more transparently as part of one of the progressive constructions, that with *-ḿ sɔ̀-* (§10.2.2.3), which is negated as *-ḿ sɔ́-ndɔ̀-* (§10.2.3.5).

11.5.2 'Y belong to X' predicates

In this construction, the subject (which may be topical in the larger discourse) denotes the possessed entity Y. The predicate identifies the owner X. The original construction was of the form "Y [X's thing]=it.is," with 'thing' (or, for animates, 'critter') in apposition to Y. For such possessive classifiers, see §6.xxx. Here as elsewhere, the 'it is' clitic is expressed by lengthening of a final short vowel and by a final L-tone (§11.xxx). In (xx1a), *kɔ̌:* becomes *kɔ̌:=∅* with bell-shaped tone, and *í gɛ̀* becomes *í gɛ̀:=∅* with lengthened final vowel.

(xx1) a. *úló*   *[ăm   kɔ̌:]=∅*
           house   [who?   Poss.InanSg]=it.is
           'The house is whose?' ('…belongs to whom?'), cf. §13.2.2

       b. *úló*   *[í   gɛ̀:]=∅*
           house   [1Pl   Poss]=it.is
           '(The) house is ours.'
           '(The) houses are ours.'

As expected, the negative counterpart adds *=là-* 'it is not', which occurs generally with negative NP predicates (§11.xxx).

(xx2) *nă:*   *[ú   wɔ̀]=là:-∅*
        cow   [2SgS   Poss.An]=it.is.not
        '(The) cow is not yours-Sg.'

11.6 Verb iteration

11.6.1 Uninflected iteration of type [v₁-v₁(-v₁ …)]

If no such iterations have been observed (after transcribing a fair amount of narrative), indicate this here.

Some Dogon languages have a narrative construction where a verb stem is iterated two or more times. The iteration functions as a clause-like background durative segment, counterpoised to a following foregrounded event predication.

The iteration may be inflected or uninflected (bare stems iterated), and if uninflected may have unusual superimposed tone contours.

Jamsay:

a) a simple pattern v̄-v̄ (one iteration, both stems have lexical tone, final verb inflected (unless followed by another chained verb);

b) a pattern v̄-v̀-v̄ (two iterations, medial stems drops tones, final verb inflected (unless followed by another chained verb);

c) a pattern v̂-v̀-v̀, i.e. with {HL} tone overlaid on first occurrence, then {L}-toned forms of the verb, none of the stems with suffixal inflection

type (c) is also observed in Nanga.

if the v̂-v̀-v̀ is observed, how is the {HL} contour on the first occurrence realized when the stem is trisyllabic? HLL or HHL? Cross-ref. to §3.7.3.2.

cross-ref to backgrounded durative and imperfective clauses that involve an overt subordinating morpheme (§15.2 or a subsection thereof).

12 Comparatives

12.1 Asymmetrical comparatives

12.1.1 Verbal predicate with *sìgà* 'more' and *dùgɔ̀* 'than'

The predicate is an ordinary inflected verb, e.g. perfective or imperfective. The comparandum is expressed as the PP [X *dùgɔ̀*], elsewhere a purposive PP (§8.3). The PP is followed by the adverb *sìgà* 'more'.

mí dùgɔ̀　　　sìgà　　bírá:　　bírà-m-dɔ̀
'he works more than I (do)'

nné dùgɔ̀　　　sìgà　　zá　　　ɲá-m̀-nù-m
'I eat more than he does.'

yù-wá: [ú　　　dùgɔ̀]　sìgà　　wá:　　wâ:-m-nù-m
I cultivate more fields that you-Sg (do).

12.1.2 'Be better, be more' (*ìrɛ́*)

ìrɛ́ is a defective stative verb, cf. §11. Its basic sense is 'be more' but in the absence of an explicit basis of comparison the contextual sense is often 'be better'. The comparandum is again expressed as a PP [X *dùgɔ̀*]. A basis for comparison may take the form of a chained verb or other predicate following *ìrɛ́* (xx1b,f), whereupon *ìrɛ́* looks superficially like an invariable adverb. Past clitic forms may be added (xx1e).

(xx1)　a.　*[ú　　　dùgɔ̀]　　ìrɛ́-m*
　　　　　　[2Sg　　Purp]　　be.more-1SgS
　　　　　　'I am better than you-Sg (are).'

　　　b.　*[ú　　dùgɔ̀]　　ìrɛ́　　　gàbú-m*
　　　　　　[2Sg　Purp]　　be.more　be.tall-1SgS
　　　　　　'I am taller than you-Sg (are).'

　　　c.　*máŋkòrò　[kùrá:　　　dùgɔ̀]　　ìrɛ́-∅*

mango   [wild.grape Purp]   be.more-3SgS
'Mangoes are better than wild grapes.'

d. *yà-mbɔ́*   *[árⁿá-mbɔ̀ dùgɔ̀]* *ìré-∅* *ŋgó* *zw-è:*
woman-AnPl [man-AnPl Purp] be.ore here abound.Perf-3PlS
'There are more men than women here.'

e. *tíⁿ→*   *[ú*   *dùgɔ̀]*   *ìré-bù-m-bù-m*
before   [2Sg   Purp]   be.more-be-Impf-Past-1SgS
'I was formerly better than you-Sg (are).'

f. *yɔ́*   *[ú*   *dùgɔ̀]*   *ìrɛ́*   *yé*   *sɔ̀-m*
millet   [2Sg   Purp]   be.more   Exist   have-1SgS
'I have more millet than you-Sg (are).'

12.1.3 'Best' (*édè:*)

The adjective *édè:* 'good' (and other animacy/number forms thereof) can be used in a kind of superlative construction (xx1a-b)

(xx1) a. *[bèrⁿá: í-gè nè]* *[yɔ̀-wà:-wàlè^L édè:]* *ámàdu*
[among 1Pl-Poss Loc] [farmer^L good.AnSg] A
'Amadou is the best farmer among us.'

    b. *[ámàdù: hà:mí:dù:]* *[[yɔ̀-wà:-wàlù]-mbɔ̀^L édù-mbɔ̀]*
[A.& H.&] [[farmer]-AnPl^L good-AnPl]
'Amadou and Hamidou are the best farmers.'

12.2 Symmetrical comparatives

12.2.1 'Equal(ly)' (*cáw-cáw*)

The iterated adverb *cáw-cáw* 'equal(ly)' can be combined with *bù-* to form symmetrical comparative predicates. The domain of comparison may be added as an adjunct noun (xx1a). For 'same age' a lexical item 'agemate' is preferred (xx1b).

(xx1) a. *[í lèy]* *ígúr-gó* *cáw-cáw* *bù-∅*
[1Pl two] height equal be-3SgS
'We two are (of) the same height.'

b. *[í   lèy]   kàràgá*
[1Pl   two]   agemate(s)
'We two are (of) the same age.'

12.3   'A fortiori' (*ŋŋŋ*)

'X, a fortiori Y'
(local French: 'X, a plus forte raison Y')

may be sákkò ~ sáŋkò etc. (regional form shared with e.g. Fulfulde)
or may be of the type represented by wê→y (Yorno So), yé∴ (Jamsay)

examples:
    'I don't have money to buy a goat, much less (buy) a cow.'
    'I don't have anything for myself to eat, never mind (anything) to give you.'

some languages like to include a 'talk, speak' verb:
    'I dont have money to buy a goat, much less talk of (buying) a cow'

13   Focalization and interrogation

13.1   Focalization

Focalization occurs when a nonpredicative constituent is singled out for emphasis, against an otherwise presupposed or understood background. Typical examples are WH-interrogatives, and clauses that are (or could be) used to respond to such a question.

In TU, subject NP focalization is clearly marked by a special form of the verb. Focalization of nonsubject NPs and adverbs is less reliably marked by the use of the simple Perfective (instead of a suffixally marked perfective), and/or by the omission of Existential *yé*. Focalized constituents are not moved.

13.1.1   Basic syntax of focalization

13.1.1.1   Which constituents can and cannot be focalized?

NPs including pronouns and noun-like adverbs are readily focalized.

"Focalization" of the truth of a statement ('I <u>did</u> see an elephant!') is handled by an unrelated system of clause-final Emphatic particles (§19.xxx). There is no mechanism for focalizing a verb or VP.

what constituents can be focalized?
   NP (including pronoun)
   noun-like adverb (e.g. 'yesterday')
   entire PP, or just the NP complement of a postposition (?)

what constituents cannot be focalized using the primary focalization construction? (What construction is used to emphasize them?)
   verb (?)
      try: 'I didn't <u>sell</u> [focus] a goat, I <u>bought</u> a goat.'
   VP, clause (?)
      [truth can be emphasized using Emphatic particles, Chap. 19]
   expressive adverbial (?)
      [always highlighted, so outside the syntactic focalization system]

13.1.1.2 Linear position and form of focalized constituent

A focalized constituent, such as a WH-interrogative, remains in its regular position within the clause. SOV order is maintained with focalized 'who?' as object (xx1a) or subject (xx1b).

(xx1)   a.   *ámàdù*   *ăm*   ^L*yì-∅*
             A   who?   ^Lsee.Perf-3SgS
             'Who(m) did Amadou see?'

        b.   *ăm*   *ámàdù*   ^L*y(y)-è:*
             who?   A   ^Lsee.Perf-SFoc
             'Who saw Amadou?'

is the focalized constituent fronted to clause-initial position?
*   try direct objects and PPs in the presence of a nonzero clause-initial subject NP*
*   'It was me/It was Seydou [focus] that the women saw in the market.'*
*   'It was to you [focus] that I gave the money.'*

Is there some morphological marking on the focalized constituent?
*   e.g. Focus particle after focalized NP*
*   Focus particle usually just a special use of the 'it is' clitic*

13.1.1.3 Form of verb following a focalized constituent

When the **subject is focalized**, the usual pronominal-subject suffixes on the verb are replaced by a special **Defocus** (DFoc) suffix *{-è: -ɔ̀: -à:}*. I interpret this to mark the defocalization of the (backgrounded) predicate. Some negative predicates do not allow such suffixation directly, but can be followed by *b-è:*, the Defocus form of *bù-* 'be'.

The relationship between regular and Defocus forms of verbs in various inflectional categories is summarized in (xx1). Except in the Perfective positive, which is unrelated to the regular marked perfectives, the Defocus form is based on the same stem vocalism as the corresponding regular form. For example, the Perfective Negative, Imperfective, and Imperfective Negative forms are based on the A/O-stem of the verb in the Defocus as well as regular form.

(xx1)   regular   Defocus   category

a. *-yà- ~ -â:* *-ɛ̀:* Perfective-1a
   -tì- " Perfective-1b
   -sɔ̀- *-s-ɛ̀:* Perfective-2
   -tɛ́rɛ́-bì- *-tɛ̀r-ɛ̀:* Experiential Perfect

b. *-lí-* *-l-ɛ̀:* Perfective Negative
   -tɛ̀rà-lí- *-tɛ̀rà-l-ɛ̀:* Experiential Perfect Negative

c. *-m̀-dɔ̀-* *-m-ɛ̀:* Imperfective
   -ḿ sɔ̀- *-ḿ s-ɔ̀:* Progressive

d. *-ŋgò:-* *-ŋgò: b-ɛ̀:* Imperfective Negative

e. *…à-* *…-à:* derived Stative
   bù- *b-ɛ̀:* 'be (somewhere)'
   sɔ̀- *s-ɔ̀:* 'have'
   m̀bà- *m̀b-à:* 'want'

f. *=ndà:-* *=ndà: b-ɛ̀:* negative of derived Stative
   ŋ̀gó- *ŋ̀gó b-ɛ̀:* 'not be (somewhere)'
   sɔ́-ndɔ̀:- *sɔ́-ndɔ̀: b-ɛ̀:* 'not have'
   m̀bí-là:- *m̀bí-là: bɛ̀:* 'not want'

The *-ɛ̀:* suffix for **Perfective** Defocus is clearly unrelated to the marked Perfective-1a, -1b, and -2 suffixes. It has a phonological resemblance to the simple Perfective, but the suffix is always *-ɛ̀:* (not #*-è:* or #*-ì:*). Representative forms are in (xx2). The stem is **dropped to {L}** tone contour.

(xx2) verb Perfective Defocus gloss

a. *Cv-, Cv:-*
   nú- *nù-ɛ̀:* 'go in'
   yǐ- *yì-ɛ̀:* 'see'
   tí- *tì-ɛ̀:* 'send'
   jě- *jì-ɛ̀:* 'kill'
   jě- *jì-ɛ̀:* 'dance'
   gǒ- *gɔ̀-ɛ̀: ~ gw-ɛ̀:* 'go out'
   ká- *kà-ɛ̀:* 'shave'
   zě:- *zì-ɛ̀:* 'bring'
   wǒ:- *wɔ̀-ɛ̀:* 'come'
   tó:- *tò-ɛ̀:* 'pound'

231

b. *CvC-*
yǎy-/o-	*yà-è:*		'go'
zǎy-/zo-	*zà-è:*		'take, convey'
lǎy-	*là-è:*		'taste'
tún-	*tùn-è:*		'put'

c. bisyllabic
tábá-	*tàb-è:*		'touch'
púŋgó-	*pùŋg-è:*		'hit, beat'
dògɔ́-	*dòg-è:*		'abandon'
gùló-	*gùl-è:*		'dig'
ɔ́ndú-	*ɔ̀nd-è:*		'build'

d. trisyllabic
péndí-gí-	*pèndì-g-è:*		'break'
zìgìbí-	*zìgìb-è:*		'shake'

The perfective-2 defocus form is *-s-è:* after {HL}-toned verb stem. Examples are *wɔ̂-s-è:* 'came', *tíbè-s-è:* 'died', and *gúlò-s-è:* 'dug'.

The other category in the perfective positive system that has a Defocus form is the **Experiential Perfect,** which changes from *-téré-bì-* to {L}-toned *-tèr-è:.* A {LH}-toned verb that drops all of its tones before *-téré-bì-* **shifts to {H}** before *-tèr-è:.* There is no change in {H}-toned verbs.

(xx2)	verb	Experiential Perfect		gloss
		regular	Defocus	

a. {LH}-toned verbs
yǐ-	*yì-téré-bì-*	*yí-tèr-è:*		'see'
gùló-	*gùlò-téré-bì-*	*gúló-tèr-è:*		'dig'
zìgìbí-	*zìgìbì-téré-bì-*	*zígíbí-tèr-è:*		'shake'

b. {H}-toned verbs
ká-	*ká-téré-bì-*	*ká-tèr-è:*		'shave'
púŋgó-	*púŋgó-téré-bì-*	*púŋgó-tèr-è:*		'hit, beat'

In the **Perfective Negative**, both the regular and Defocus forms have **{L}-toned A/O-stems** (xx3).

(xx3)	verb	Perfective Negative		gloss
		regular	Defocus	

a. {LH}-toned verbs

wɔ̌:-	*wà:-lí-*	*wà:-l-ɛ̀:.*	'come'
gùló-	*gùlò-lí-*	*gùlò-l-ɛ̀:.*	'dig'

b. {H}-toned verbs

nú-	*nù-lí-*	*nù-l-ɛ̀:*	'go in'
púŋgó-	*pùŋgò-lí-*	*pùŋgò-l-ɛ̀:*	'hit, beat'

For example, {H}-toned *nú-* 'go in' forms regular *nù-lí-∅* 'he/she did not go in' and Defocus form *nù-l-ɛ̀:*, while *wɔ̌:-* 'come' has regular *wà:-lí-∅* 'he/she did not come' and Defocus form *wà:-l-ɛ̀:*.

The **Experiential Perfect Negative** has regular *-tèrà-lí-* (including the Perfective Negative suffix) and Defocus form *-tèrà-l-ɛ̀:*. Whereas the stem is tone-dropped before *-tèrà-lí-*, it is raised to {H} before *-tèrà-l-ɛ̀:* (xx4), just as it is before *-tèr-ɛ̀:* in (xx2) above.

(xx4)   verb   Experiential Perfect   gloss

	regular	Defocus	

a. {LH}-toned verbs

yǐ-	*yì-tèrà-lí-*	*yí-tèrà-l-ɛ̀:*	'see'
gùló-	*gùlò-tèrà-lí-*	*gúló-tèrà-l-ɛ̀:*	'dig'
zìgìbí-	*zìgìbì-tèrà-lí-*	*zígíbí-tèrà-l-ɛ̀:*	'shake'

b. {H}-toned verbs

ká-	*kà-tèrà-lí-*	*ká-tèrà-l-ɛ̀:*	'shave'
púŋgó-	*pùŋgò-tèrà-lí-*	*púŋgó-tèr-ɛ̀:*	'hit, beat'

In the **Imperfective**, the Defocus form is *-m-ɛ̀:*, i.e. *-ɛ̀:* added to the familiar Imperfective suffix *-m*. The Defocus form **drops stem tones to {L}**, unlike the regular form, which has {HL} contour

(xx5)   verb   Imperfective   gloss

	regular (3Sg)	Defocus	

a. {LH}-toned verbs

yǐ-	*yá-m̀-dɔ̀-∅*	*yà-m-ɛ̀:*	'see'
wɔ̌:-	*wá:-m̀-dɔ̀-∅*	*wà:-m-ɛ̀:*	'come'
zòbɔ́-	*zóbà-m-dɔ̀-∅*	*zòbà-m-ɛ̀:*	'run'
zìgìbí-	*zígìbè-m-dɔ̀-∅*	*zìgìbè-m-ɛ̀:*	'shake'

b. {H}-toned verbs

ká-	*ká-m̀-dɔ̀-∅*	*kà-m-ɛ̀:*	'shave'
sémbí-	*sémbì-m̀-dɔ̀-∅*	*sèmbì-m-ɛ̀:*	'sweep'
púŋgó-	*púŋgò-m̀-dɔ̀-∅*	*pùŋgò-m-ɛ̀:*	'hit, beat'

The periphrastic **Progressive** constructions, with *sɔ̀-* 'have' or *bù-* 'be' added to a pronominally uninflected Imperfective main verb with *-m̀*, keep the main verb unchanged and add the Defocus ending to the auxiliary. Thus *sémbú-m̀ sɔ̀-* 'is sweeping' has Defocus form *sémbú-m s-ɔ̀:*, and the alternative form *sémbú-m̀ bù-* 'is sweeping' has Defocus form *sémbú-m b-ɛ̀:*.

The **Imperfective Negative** does not add *-ɛ̀:* to its own suffix *-ŋgò:-*. Instead, *-ŋgò:* is followed by *b-ɛ̀:*. The verb has the same form, i.e. {H}-toned A/O-stem, as before inflected *-ŋgò:-*. For example, *wá:-ŋgò:-∅* 'he/she does/will not go' becomes Defocus *wá:-ŋgò: b-ɛ̀:*.

Stative stems derived from regular verbs have {HL} contour (dropping to {L} after Existential *yé*) and end in a, e.g. *ɔ́bà-* 'be sitting (seated)'. The Defocus counterpart is {L}-toned and lengthens the stem-final vowel: *ɔ̀b-à:*. As for defective stative quasi-verbs, *bù-* 'be (somewhere)' becomes *b-ɛ̀:*, *sɔ̀-* 'have' becomes *s-ɔ̀:*, and *m̀bà-* 'want' becomes *m̀b-à:*.

bù-	*b-ɛ̀:*	'be (somewhere)'
sɔ̀-	*s-ɔ̀:*	'have'
m̀bà-	*m̀b-à:*	'want'

For all **stative negative** predicates, derived or underived, and for *ǹgó-* 'not be (somewhere)', *b-ɛ̀:* is added to the pronominally unsuffixed (i.e. 3Sg) negative form: *ɔ́bá=ndà: b-ɛ̀:* 'is not sitting (defocalized)', *só-ndɔ̀: b-ɛ̀:* 'does not have (defocalized)', *ǹgó b-ɛ̀:* 'is not (somewhere) (defocalized)'.

13.1.1.4 Existential *yé* absent in focalized clauses

Existential particle *yé*, which is required with positive 'be (somewhere)', 'have', and other statives under some syntactic conditions, does not occur in clauses with a focalized nonpredicate constituent. (Likewise it is absent from relative clauses.) For example, *yé* is obligatory in (xx1a), but absent in (xx1b) where the subject is focalized. In (xx1c), the absence of *yé* indicates that something is focalized, and 'dog' the only candidate.

(xx1) a. *ínjɛ̌:*   *yé*   *sɔ̀-m*
           dog Exist   have-1SgS
           'I have a dog.'

234

b.   *ìnjɛ̌:*   *mí*   *sɔ̀:*
     dog   1Sg   have.DFoc
     'It's I [focus] who have a dog.'

c.   *ìnjɛ̌:*   *sɔ̀-m*
     dog   have-1SgS
     'It's a dog [focus] that I have?'

13.1.2 Subject focalization

Subject focalization is clearly signaled by the grammar. If the subject is pronominal, it must appear as an independent pronoun before the verb. The latter does not agree with the focused subject NP; instead, it has a fixed participial form ending in *-ɛ̀:* (or other long vowel) as described in §13.1.3.

If there is also at least one other nonpredicative constituent, a focalized subject NP (or pronoun) tends to occur in immediate preverbal position, though elicited examples sometimes keep the subject in clause-initial position. A focalized subject can even follow an object pronoun. (xx1ab) show the two ordering possibilities in a transitive clause with focalized subject.

(xx1) a.   *ú-gì*   *à-ḿ*   *bùnd-ɛ̀:*
            2Sg-Acc   who?   hit.Perf-DFoc
            'Who [focus] hit-Past you-Sg?'

       b.   *à-ḿ*   *ú-gì*   *bùnd-ɛ̀:*
            who?   2Sg-Acc   hit.Perf-DFoc
            [= (a)]

ăm wɔ̀-ɛ̀:   'Who has come?'
mí wɔ̀-ɛ̀:   'It is I [focus] who came.'
ăm ìnjɛ̌: púŋg-ɛ̀:   'who hit the dog?'
ăm ìnjɛ̌: j-ɛ̀:   'Who killed the dog?'
ăm yà-ɛ̀:   'Who went?'
ăm gw-ɛ̀:   'Who went out?'
ăm nw-ɛ̀:   'Who went in?'

ăm gònsárⁿá yí-tèr-ɛ̀:   'Who has ever seen an elephant?'

ăm wà:-l-ɛ̀:   'Who did not come?'
ăm nù-l-ɛ̀:   'Who has not gone in?'

ăm wà:-m-ὲ: 'Who will come?'
ăm tò:-m-ὲ: 'Who will pound?'
ăm sὲmbì-m-ὲ: 'Who will sweep?'
ăm ɲà-m-ὲ: 'Who will eat?'

ăm sέmbú-ḿ sɔ̀:   'Who is sweeping?'
ăm bírá-ḿsɔ̀:   'Who is working?'
ăm zìgìbé-ḿ sɔ̀:'Who is shaking?'

ăm wá:-ŋgò: 'Who will not come?'
ăm nàmá kúbó-ŋgò: bὲ: 'Who does not eat meat?'

ăm bὲ: 'Who is there?'
ăm ŋ̀gó bὲ: 'Who is not there?'

ăm ɲέ bὲyà-m-ὲ: 'Who can eat?'

ăm nàmá m̀b-à: 'Who wants meat?'
ăm nàmá m̀bí-là: b-ὲ: 'Who doesn't want meat?'

ăm sòmé   sɔ̀:   'Who has a horse?'
ăm sòmé   sɔ́-ndɔ̀: b-ὲ: 'Who doesn't have a horse?'

Summarize features (mostly already briefly mentioned above)
position and any morphological marking of focalized subject
form of verb

several examples
'It is we [focus] who will sweep.'

13.1.3   Object focalization

Unlike subject focalization, object focalization is not reliably indicated by the grammar. Since objects follow subjects anyway, a shift of the focalized object NP to preverbal position would usually not be noticed. The verb is {L}-toned, and suffixally marked perfectives are replaced by the simple perfective, but these forms are common after most nonpredicative constituents, without

requiring any strong focus, so no clearcut verb defocalization is present. A textual corpora might find some asymmetries (focused, unfocused) in the use of accusative *gì*, but no correlation turned up in elicited material. There is no clear indication in (xx1) whether 'sheep' is focused or not.

(xx1)   *pédé*   *(gì)*   *sèmà-m-nù-m*
        sheep   (Acc)   slaughter-Impf-Impf-1SgS
        'I will slaughter a sheep.' [no focus]
        'It's a sheep [focus] that I will slaughter.'

13.1.4 Focalization of PP or other adverb

is entire PP (or just the NP complement) focalized?
position of focalized adverb or PP
form of verb

examples (including spatial, dative, and instrumental)
    'It's to the fields [focus] that I am going.'
    'It was with this [focus] that I worked.'
    'It's to you-Sg [focus] that I said (it).'

13.1.5 Focalization of postpositional complement

Can the NP complement of a postposition be focalized (without focalizing the whole PP)? [usually not, so PP focalization is used even when the postposition is part of the understood background]

example
    'I didn't put it [in the house], I put it [in the granary] [focus]'

13.1.6 Focalization of verb or VP

    [usually the focalization system does not allow for verb or VP focalization, except to the extent that the verb is somewhat focal in sentences with no NP singled out for focus]
    if there is a more overt verb or VP focus construction of some kind, discuss it here

13.2 Interrogatives

13.2.1 Polar (yes/no) interrogatives (*mà*)

In yes/no interrogative clauses, a final *mà* may occur. However, some elicited examples have no overt interrogative morpheme. In addition, the ubiquitous clause-initial *éskə̀* (French *est-ce que*) is now very common in the speech of younger people.

(xx1) *ú* *éy^n* *wá:-m̀-nɔ̀-w^n* *mà*
        2Sg   tomorrow   come-Impf-Impf-2SgS   Q
        'Will you-Sg come tomorrow?'

mà may occur between two clauses representing a choice of mutually exclusive propositions. In cases like (xx2), I hear no prosodic grouping specifically with either the preceding or following verb.

(xx2) *ú* *wá:-m̀-nɔ̀-w^n* *mà* *wá:-ŋù-w^n*
        2Sg   come-Impf-Impf-2SgS   Q/or   come-ImpfNeg-2SgS
        'Are you-Sg coming or aren't you?'

13.2.2 Content (WH) interrogatives

Clauses with content interrogatives (syntactically NPs, adverbs, or adjectives as the case may be) usually end in a syllable with rising intonation, represented by ꜛ.
   The preference is to place the interrogative word or phrase in immediate preverbal position.

13.2.2.1 'Who?' (*à-ḿ*)

'Who?' is *à-ḿ*. Morphologically it is identical to the animate singular 'which?' interrogative (§13.2.8). It is a NP and may be followed by accusative *gì* (always optional) or by a postposition (xx1b,d). It may be a possessor (xx1e); for 'X belongs to who(m)?' see §11.5.2.

(xx1) a. *yéŋgì* *à-ḿ* *wɔ̀è-∅*
            yesterday   who?   come.Perf-3SgS
            'Who came yesterday?'

b. *έbέ   [à-ɱ   (gì)]   yì-w*
    market   [who?   (Acc)]   see.Perf-2SgS
    'Who did you-Sg see in the market?'

c. *[àmàdí   gì]   à-ɱ   jὲ:-∅*
    [A   Acc]   who?   kill.Perf-3SgS
    'Who killed Amadou?'

d. *[à-ɱ   nì:]   bírá: bìrà-m   bù-wⁿ*
    [who?   Inst]   work(n.)   work-Impf   be-2SgS
    'With who(m) are you-Sg working?'

e. *ò-gú   [à-ɱ   úlò:]=∅*
    Prox-InanSg   [who?   house]=it.is
    'Whose house is this?'

Predicative 'be who?' can be expressed by the animate singular predicative form *à-ɱ-nὲ* also used in the sense 'be where?' (§13.2.4). Alternatively, *à-ɱ* can combine with the 'it is' clitic as *à-m̂:=∅* (the clitic lengthens the nasal and adds a final L-tone).

(xx2) a. *ú   à-ɱ-nὲ-wⁿ*
           2Sg   be.who-2SgS
           'Who are you-Sg?'

b. *mà-ɱ   à-m̂:=∅*
    Dist-AnSg   who?=it.is
    'Who is that?'

To make plurality explicit, *à-ɱ* can be conjoined with itself, i.e. 'who and who?'; for conjunction of NPs (prolongation and final L-tone) see §7.1.1.

(xx3) *à-m̂:   à-m̂:   wɔ̀ὲ-∅ꜛ*
        who?.&   who?-&   come.Perf-3SgS
        'Who and who came?' ('Who all came?')

13.2.3 'What?' (*ìnjé ~ c-ìnjè*), 'with what?', 'why?'

'What?' is *ìnjé* or its extension *c-ìnjé*, probably from *cὲ ìnjé* 'what thing?' (*cέ* 'thing' §4.1.2).

(xx1) a. *c-ìnjé*   *zè-wⁿ⁺*
           what?   bring.Perf-2Sg
           'What did you-Sg bring?'

       b. *c-ìnjé*   *ú*   *s-ɔ̀:*
           what?   2SgO   have-DFoc
           'What has (= is the matter with) you-Sg?'

       c. *c-ìnjé*   *[[dúgò   ú-wɔ̀]*   *nè]*   *bàg-ɛ̀:⁺*
           what?   [[beside   2Sg-Poss.InanSg]   Loc]   fall.out.Perf-DFoc
           'What fell on you?'

       d. *ò-gú*   *ìnjê:=∅*
           Prox-InanSg   what?=it.is
           'What is that?'

'With (by means of) what?' is the regular instrumental PP of 'what?'

(xx2) *[cìnjé   nì:]   yù-wá:*   *wà:-m-nɔ̀-wⁿ⁺*
       [what?   Inst]   millet-farming(n.)   do.farming-Impf-Impf-2SgS
       'What do you farm millet with?'

'Why?' is *ìnjé dùgɔ̀*, with the purposive postposition (§8.3)

(xx3) *[ìnjé   dùgɔ̀]   wɔ̀:-wⁿ⁺*
       [what?   Purp]   come.Perf-2SgS
       'Why did you-Sg come?'

13.2.4 'Where?' (*àndí*, *ă-m-nɛ̀:*, *à-bɔ̀:*)

The simple 'where?' adverb is *àndí*. 'Where is/are X?' can be expressed by
adding *bù-* 'be' (xx1b).

(xx1) a. *àndí*   *ò-m-nɔ̀-wⁿ⁺*
           where?   go-Impf-Impf-2SgS
           'Where are you-Sg going?

       b. *í / ú*   *àndí*   *bù-yⁿ*
           1Pl / 2Sg   where?   be-1PlS
           'Where are we / you-Sg?'

    c.   *[nǎ: ǹ]   àndí   dògɔ̀-wⁿ⸴*
       [cow   Def]   where?   leave.Perf-2SgS
       'Where did you-Sg leave the cow?'

àndí can also function as a modifying adjective, similar to *à-gú* and variants 'which?' (§13.2.8). In (xx2), *àndí* is adjectival, and controls tone-dropping on the noun 'village'.

(xx2)   *[dàmbà*ᴸ   *àndí]*   *ò-m-nɔ̀-wⁿ⸴*
       [village^L   where?]   go-Impf-Impf-2SgS
       'Which village are you-Sg going to?'

In addition to adverbial *àndí*, there is a set of conjugatable 'be where?' forms. These are similar in morphological structure to demonstrative-based predicates (§11.2.3.2). They are also identical to 'which?' adjectives (§13.2.8), except that animate singular *-nè* is present and final vowels and *y* are long. Arguably the core sense of these predicates is 'be which (one)?' rather than 'be where?'.

(xx3)   'Be where?' predicates

    a. inanimate
      Sg   *à-gû:=∅*
      Pl   *à-ŷ:=∅*

    b. animate
      Sg   *à-ḿ-nè*
      Pl   *à-bɔ̂:=∅*

Examples are in (xx4). The final falling tones in the forms shown in (xx3) are often overridden by the final pitch rise typical of questions.

(xx4) a. *[ú   bà]   ǎ-m-nè-∅⸴*
       [2SgP   father]   be.where?.Sg-3SgS
       'Where is your-Sg father?'

    b. *ú   ǎ-m-nè-wⁿ⸴*
       2SgS   be.where?.Sg-2SgS
       'Where are you-Sg?'

    c. *[ú   ángè-mbò]   à-bɔ̂:=∅⸴*
       [2SgP   friend-AnPl]   be.where?.Pl
       'Where are your-Sg friends?'

d. *bí*   *à-bɔ́-yⁿꜛ*
    2Pl   be.where?.Pl
    'Where are you-Pl?'

13.2.5 'When?' (*à:rⁿá*)

'When?' is *à:rⁿá.*

(xx1) a. *à:rⁿá*   *wà:-m-nɔ̀-wⁿꜜ*
           when?   come-Impf-Impf-2SgS
           'When will you-Sg come?'

       b. *à:rⁿá*
           when?
           'When (is it)?'

13.2.6 'How?' (*áyⁿ*)

As simple adverb, the form is *áyⁿ*.

(xx1) *áyⁿ*   *ìlà-m-d-ὲ:ꜛ*
       how?   go.up-Impf-Impf-3PlS
       'How will they climb?'

'How' is often expanded with the 'do' verb, i.e. as '(by) doing how?'

(xx2) *[áyⁿ*   *kàn-gìn]*   *úl-à: / íl-ὲ: / ílὲ-m*
       [how?   do-and.SS]   go.up-3PlS / -3SgS / 1SgS
       'How did they / he / I climb?'

13.2.7 'How much/many?' (*àŋgá*)

The usual sense of *àŋgá* is 'how many?', since currency is expressed as a countable noun, unlike the English mass noun *money*. Like 'all' quantifiers, *àŋgá* is somewhat adverb-like, but is still treated as part of the NP. For example, although accusative *gì* is not very common with *àŋgá*, when it does occur it folles *àŋgá* (xx1b).

(xx1) a. *pédú-mbò*   *àŋgá*   *èbɔ̀-w^n*
          sheep-AnPl   how.many?   buy.Perf-2SgS
          'How many sheep did you buy?'

      b. *[ú*   *lédú-mbò*   *àŋgá*   *(gì)]*   *yì-w$^{n↑}$*
          [2SgP   uncle-AnPl   how.many? (Acc)] see.Perf-2SgS
          'How many of your uncles did you see?'

      c. *[[dámbà*   *àŋgá]*   *nè]*   *yày-w$^{n↑}$*
          [[village   how.many?] Loc]   go.Perf-2SgS
          'You went to how many villages?'

      d. *nà:-mbɔ́*   *àŋgá*   *tìb-à:*
          cow-AnPl   how.many   die.Perf-<mark>3PlS</mark>
          'How many cows died?'

Questions about the unit price of items for sale use the distributive iteration *àŋgá-àŋgá* 'how many (currency units) each?'.

    For ordinal *àŋgà-né* 'how many-eth?' see §4.7.2.2.

13.2.8 'Which?' (*à-gú*, *à-ḿ*)

à-gú (inanimate) and *à-ḿ* (animate) are the main 'which?' forms. The morphology is closely related to that of demonstratives, e.g. proximate *ò-gú* (inanimate) and *ɔ̀-ḿ* (animate) 'this' (§4.4.1.2). The forms are also identical or similar to predicative 'be where?' forms (§13.2.4), except that animate singular *-nè* is absent and final vowels and *y* are short. Animate *à-ḿ* is also the 'who?' interrogative (§13.2.2.1).

(xx3)   'Which?' adjectives

      a. inanimate
         Sg   *à-gú*
         Pl   *à-ý*

      b. animate
         Sg   *à-ḿ*
         Pl   *à-bɔ́*

à-gú and are adjectives, and control tone-dropping on a preceding noun within the same NP: *ùlò à-gú* 'which house?' (*úló*), *pèddè â-m* 'which sheep?' (*péddè*).

(xx1) a. *[[mòtò: à-gú] nì:] ò-m-nɔ̀-wⁿ⸽*
      [[motorcycle which?-InanSg] Inst] go-Impf-Impf-2SgS
      'You are going with which motorcycle?'

    b. *[úló ù-wɔ̀] à-gû: =∅*
      [house 2Sg-Poss] which?-InanSg=it.is
      'Your-Sg house is which (one)?'

There appears to be some functional overlap between 'where?' and 'which?' interrogatives. (xx1b), for example, could easily be rephased with a 'where?' interrogative. See also comments on this in §13.2.4.

13.2.9 'So-and-so' (*àmâ:n*)

To avoid mentioning a name (e.g. in a general statement that could apply to anyone), the noun *àmâ:n* 'So-and-so' is used, as also in Jamsay.

13.2.10 Embedded interrogatives

    [bà-ń tíb-à:y mà→] zúgɔ̀-ŋgò:
    'He doesn't know that her father is dead.'

    [[á bà] wɔ̀:-sɔ́ mà→] zúgɔ̀-ŋgò:
    'He doesn't know that his (own) father has come.'

    [ŋ̀gó bù-m mà→] zúgɔ̀-ŋgò:
    'He doesn't know that I am here.'

from content interrogatives

with spatiotemporal noun and relative clause
    [gàndà bú bú-ŋgò] yà-lú-m / zúgɔ̀-ŋù-m
    'I haven't seen / I don't know the place where they are.'

    [wàgàdìńnɛ́ wà:-ŋgò] '… when he/she will come'

with content (WH) interrogative
    [à-ḿ wɔ̀è-∅ mà→] '… who came'

[zà ǹjé ɲà-m-nɔ̀-mᵗ   mà→] '… what meal I will eat'
[c-ìnjé yà-m-nɛ̀-ýⁿᵗ   mà→] '… what we will see'
[âyⁿ   kàn-nɛ́ ìlà-m-dɔ̀   mà→] 'how he/she goes up'
[àŋgá   ɛ́bɛ̀   mà→] 'how much he paid'
[ìnjé   kàn-lé   yày   mà→] 'why he/she went'

245

14   Relativization

14.1   Basics of relative clauses

Relative clauses in TU are referentially restrictive. Their key typological features are these:

- the head NP is seemingly bifurcated into an internal head consisting maximally of Poss-N-Adj-Num, and a coda or tail that follows the verb-participle including determiners and non-numeral quantifiers;
- the internal head NP is subject to tone-dropping;
- there is no relative pronoun or other relative morpheme as such;
- the verb takes participial form, with no subject agreement; the participle is suffixed for animacy/number agreeing with the head NP (not the subject);
- in nonsubject relatives (e.g. object relatives), if the subject is a pronoun it is expressed by a subject pronoun immediately proclitic to the verb; if the subject is nonpronominal there is no resumptive third person clitic;
- there is no head-doubling in the form of a postposed noun synonymous to the internal head.

As in other Dogon languages, "internally-headed" relatives are really just complete NPs (DPs if you will) of the form Poss-N-Adj-Num-Rel-Det-'all' or the like. The relative clause induces tone-dropping on the preceding word(s), after which the Poss-N-Adj-Num sequence slides into the relative clause, occupying the linear position of the coindexed NP within the relative

14.2   Head NP

The head NP is bifurcated. The internal head is maximally Poss-[N-Adj-Num, and is subject to tone-dropping. The remaining late-NP elements, including determiners and non-numeral quantifiers, follow the verb-participle.

14.2.1 Tone-dropping on final word(s) of head NP in relative clause

The examples in (xx1) show tone-dropping on the internal head NP. In (xx1a) the noun *úló* 'house' is tone-dropped to *ùlò*. In (xx1b), the final word in *ùlò*^L *dέ-ŋgέ* 'big house' is tone-dropped to *[[ùlò dὲ-ŋgὲ]*^L. In (xx1c), both words in *yà-mbɔ́ ɲǐ-kúlé* 'six women' are tone-dropped. In (xx1d), *ùlò*^L *dέ yí-kùlè* 'six big houses' is tone-dropped to *[ùlò dὲ yí-kùlè]*^L, with the classifying prefix spared.
.

(xx1) a. *[ùlò*^L *yàgà*^L *sú-ŋgó]*   *àndí*   *bù-∅*
          [house^L fall   go.down-Ppl.InanSg]   where?   be-3SgS
          'Where is the house that fell?' (*úló*)

       b. *[[ùlò*   *dὲ-ŋgὲ]*^L   *yàgà*^L *sú-ŋgó]*   *àndí*   *bù-∅*
          [[house big-InanSg] fall   go.down-Ppl.InanSg] where? be-3SgS
          'Where is the big house that fell?' (*ùlò*^L *dέ-ŋgέ*)

       c. *[yà-mbɔ̀*   *ɲì-kùlè]*^L   *bàgà*^L *kárⁿà-mbɔ̀*   *ǹ]*
          [woman-AnPl   person-six]^L fall.off^L Perf.Ppl-AnPl   Def]
          ==*à*   *bɔ́:*==
          ==where?   be.Pl==
          'Where are the six women who fell off?' (*yà-mbɔ́ ɲǐ-kúlé*)

       d. *[[ùlò*   *dὲ*   *yí-kùlè]*^L   *yàgà*   *kárⁿà]*
          [[house   big   Inan-six]^L   fall   PerfPpl.InanSg]
          àndí   *bù-∅*
          where?   be-3SgS
          'Where is the big house that fell?' (*ùlò*^L *dέ yí-kùlè*)

The basic tonosyntactic formulae for the internal head NPs in the preceding examples are these: N^L (xx1a), [N Adj]^L (xx1b), [N Num]^L (xx1c), and [N Adj Num]^L (xx1d), allowing for preservation of the H-tone on a numeral classifying prefix. The weakest link in this analysis is the numeral. With the most common classifying prefixes, numeral stems are already {L}-toned, as in *yí-kùlè* 'six (inanimate)', so any further tone-dropping would not be audible. Only human forms with classifier *ɲǐ-* ~ *ɲě-* allow {H}-toned numerals. In examples like (xx1c), my informant includes the numeral in the tone-dropping domain in smooth, allegro speech, but in slowed-down "elicitation-ese" the H-toned of the numeral may appear.
     Examples with a preposed possessor are in (xx2). Here the noun is tone-dropped, but this could be attributed either to the preceding possessor or to an immediately following modifier, whether the adjective in (xx2b,e) or the

relative clause in (xx2a,c-d). In such cases I put the superscripted ^{L} on both sides of the affected target. (xx2e) shows the two possible linear orders of the Adj-Num segment.

(xx2) a. *[ámàdù ^{L}ùlò^L yàgà^L kár^{n}à   ̀n] àndí   bù-∅*
       [A ^{L}house^L fall^L Ppl.Perf Def] where be-3SgS
       'Where is Amadou's house that fell?' (*ámàdù ^{L}ùlò*)

   b. *[ámàdù ^{L}[ùlò   dè-ŋgè]^L yàgà^L kár^{n}à   ̀n]*
       [A ^{L}[house big-InanSg]^L fall^L Ppl.Perf   Def]
       àndí   bù-∅
       where?   be-3SgS
       'Where is Seydou's big house that fell?' (*ámàdù ^{L}[ùlò dè-ŋgè]*)

   c. *[ámàdù ^{L}ùlò^L yí-kùlè   yàgà^L kár^{n}à   ̀n] àndí bù-∅*
       [A ^{L}house^L Inan-six   fall^L Ppl.Perf Def] where be-3SgS
       'Where are Amadou's six houses that fell?' (*ámàdù ^{L}ùlò yí-kùlè*)

   d. *[ámàdù ^{L}[ùlè:^{L} ɲè-kùlè]^L yàgà^L kár^{n}à   ̀n]*
       [A ^{L}[children^L Hum-six]^L fall^L Ppl.Perf   Def]
       àndí   b-è:
       where   be-3PlS
       'Where are Amadou's six children who fell?' (*ámàdù ^{L}ùlè: ɲě-kúlé*)

   e. *[ámàdù ^{L}[ùlò   yí-kùlè   dè]^L yàgà^L kár^{n}à   ̀n]*
       [A ^{L}[house Inan-six   big]^L fall^L Ppl.Perf   Def]
   or: *dè   yí-kùlè*
                              big   Inan-six
       àndí   bù-∅
       where   be-3SgS
       'Where are Amadou's six big houses that fell?'
       (*ámàdù ^{L}ùlò yí-kùlè dé*, or *ámàdù ^{L}ùlò dé yí-kùlè*)

14.2.2 Restrictions on the head of a relative clause

The head NP may not be a pronoun ('we who are here' is expressed appositionally as 'we [the people who are here]'), it may not be a determiner or other postparticipial coda element, and it may not be an expressive adverbial.

   The head may be a subject, object, possessor, or postpositional complement (e.g. dative, spatial, instrumental) in the relative clause proper. The entire NP

containing the relative may be definite or indefinite (definite and demonstrative markers may follow the participle).

14.2.3   Conjoined NP as head

When a conjoined NP functions as relative head, the intonational marking of conjunction conflicts with the tone-dropping controlled by the relative clause. To judge by (xx3), the conjoined NP functions as a tonosyntactic island ⊂…⊃, retaining its lexical tones and intonational features (dying-quail ∴ on the final conjunct).

(xx3)   *[⊂árⁿà-mbɔ̀→   yà-mbɔ́∴⊃*
  [⊂man-AnPl.&   woman-AnPl.&⊃
  zégé   zèjì^L   kárⁿà-mbɔ̀   ǹ]
  fight(n)   fight(v)^L   Ppl.Perf-AnPl   Def
  pùrǎ: ɲɛ́-tì-yà
  fine(n)   eat-Perf1b-3PlS
  '[the men and the women who squabbled] were punished.'

Where logically possible, such combinations can be expressed as conjunctions of two entire NPs ('the men who went and the women who went' as opposed to '[the men and women] who went').

14.2.4   Headless relative clause

not very common, since semantically light 'thing', 'person', 'critter', 'place', etc. are commonly overt as relative heads

but examples do occur where the head NP, either a semantically vague element like 'place/situation' or an unspecified or obvious NP, is omitted

for headless relatives as adverbial clauses, see §15.5.3.

14.2.5   Head noun doubled after relative clause

At least for basic nouns like 'place', 'time' ('day'), and 'way, manner', the relevant noun may be repeated after the entire NP containing the relative clause. Essentially this extra head noun resumes the NP and places it more squarely in

the larger clause. The construction occurs in Jamsay and some other Dogon languages and Jamsay influence may be involved here.

My TU examples involve adverbial relatives where the doubling was not present in the utterances initially proposed by my informant, but where he accepted doubled versions that I proposed. The doubled head noun is shown as optional, in parentheses, in (xx1a-b). In (xx1a) both the relative-containing NP and the doubled head noun are marked as definite, further pointing to a resumptive relationship.

(xx1) a. *[gàndà^L mí yàgà^L kár^{n}à ǹ] (gándá ǹ)*
          [place^L 1SgS fall^L Ppl.Perf Def] (**place Def**)
          ŋ́gɔ́=là:
          here=it.is.not
          'The place where I fell is not here.'

    b *[dèn^L mí wɔ̀:^{L} kár^{n}à] (dén-gó ǹ)*
          [day^L 1SgS come^L Ppl.Perf] (day-InanSg Def)
          sɛ̀ll-ìyà-lí bì-m=bì-m
          be.healthy-MP-PerfNeg be-Impf=Past-1SgS
          'The day when I came, I was sick.'

14.3 Preparticipial subject pronoun in non-subject relative

In nonsubject relatives, the subject is not coindexed with the participial (which agrees only with a distinct head NP). If the subject is pronominal, the pronoun appears in the form of an independent pronoun proclitic to the participle. If the subject is already expressed by a full NP, no resumptive proclitic third person pronoun is used.

The forms are given in (xx1) in §4.3.1. They are identical to the independent (citation) forms of pronouns, except that inanimate third person (singular or plural) is merged with (animate) 3Sg *ńné*.

The linear position of the subject pronoun is useful as a syntactic test for some purposes. In particular, the fact that it can intervene between verb stems and certain suffix-like inflectional morphemes (notably marked perfectives such as the recent perfect and experiential perfect) suggests that these inflectional morphemes still have some characteristics of chained verbs, see §10.1.1.

There are many examples of proclitic subject pronouns in the nonsubject relatives presented in the sections below.

14.4 Verbal participle in relative clause

The verb forms used in relative clauses are clearly participial, insofar as they show suffixal agreement with the animacy/number value of the head NP (not the subject). The four main indicative categories have the participial forms in (xx1). For the perfective positive, the forms are not based on the primary verb, rather on a kind of auxiliary *kár^{n}à* (originally 'do'). In the imperfective negative, the conjugated stative quasi-verb 'be' (*bù-*) is added to the imperfective negative verb. The animacy/number suffixes and endings are familiar from nominal and adjectival morphology, but inanimate singular *-(ŋ)gO* is not used after *kár^{n}à* in the perfective positive.

(xx1) a. perfective positive
　　　　kár^{n}à　　　　　　　　Animate Sg, Inanimate Sg and Pl
　　　　kár^{n}à-mbɔ̀　　　　　　Animate Pl

　　　b. imperfective positive
　　　　-m-ɛ̀:　　　　　　　　　Animate Sg, Inanimate Pl
　　　　-m̀-bò　　　　　　　　　Animate Pl
　　　　-ŋ̀gò　　　　　　　　　　Inanimate Sg

　　　c. perfective negative
　　　　-l-ɛ̌:　　　　　　　　　Animate Sg, Inanimate Pl
　　　　-l(ù)-mbó　　　　　　　　Animate Pl
　　　　-l-gó　　　　　　　　　　Inanimate Sg

　　　d. imperfective negative(xx1)
　　　　-ŋ̀gò: b-ɛ̀: (~ *bù-m-ɛ̀:*)　　Animate Sg, Inanimate Pl
　　　　-ŋ̀gò: bù-m-bò　　　　　　Animate Pl
　　　　-ŋ̀gò: bù-ŋgò　　　　　　　Inanimate Sg

The marked inflectional categories (progressive, experiential perfect, etc.) are largely based on these core participial types. Fuller details are given in the next several sections below.

14.4.1 Perfective positive system participles (*kár^{n}à*)

The participial forms for the basic perfective positive are in (xx1). This construction probably developed from a verb-chain including a form of *kán-* 'do'. There is a suffix for animate plural but none for inanimates. A lexically

/LH/-toned verb before *kárⁿà* spreads its L-tone to the end of the stem, while a /H/-toned stem remains H-toned.

The basic participial forms are those in (xx1). There is no suffixally marked inanimate singular form.

(xx1) *kárⁿà* Animate Sg, Inanimate Sg and Pl
  kárⁿà-mbɔ̀ Animate Pl

Subject perfective positive relatives are in (xx2).

(xx2) a. *mòmbò:*^L *ú-gù* *támbú* *kárⁿà* *ǹ*
    scorpion^L 2Sg-Acc kick Ppl.Perf Def
    'the scorpion that stung you-Sg'

  b. *mòmbò:-mbò*^L *mí-gì* *támbú* *kárⁿà-mbɔ̀* *ǹ*
    scorpion-AnPl^L 1Sg-Acc kick Ppl.Perf-AnPl Def
    'the scorpions that stung me'

  c. *cìn*^L *bàgà*^L *kárⁿà* *ǹ*
    stone^L fall^L Ppl.Perf Def
    'the stone that fell off'

Nonsubject perfective positive relatives are in (xx3).

(xx3) a. *ìnjè:*^L *ú* *púŋgó* *kárⁿà* *ǹ*
    dog^L 2SgS beat Ppl.Perf Def
    'the dog that you-Sg hit'

  b. *[gàndà*^L *mí* *yàgà*^L *kárⁿà]* *wàgá*
    [place^L 1SgS fall^L Ppl.Perf] far
    'The place where I fell is far away.'

  c. *ámádù* *ìnjè:*^L *púŋgó* *kárⁿà* *ǹ*
    A dog^L hit Ppl.Perf Def
    'the dog that Amadou hit'

The full set of perfective positive system categories is displayed in (xx4). The marked perfectives, including the perfective-like use of Past *=bì-∅*, are merged into the basic perfective relative-clause forms. However, the Recent Perfect and Experiential Perfect morphemes may occur before *kárⁿà*.

(xx4) category suffix(es)

	in Rel clause	in main clause (3Sg)
Perfective	*kárⁿà*	(E/I-stem in 3Sg)
Perfective-1a	"	*-yà- ~ -à:-*
Perfective-1b	"	*tì-∅*
Perfective-2	"	*-sɔ̀-∅*
Past	"	*=bì-∅*
Recent Perfect	*dɛ̀ᴸ kárⁿà*	*dɛ̀-*
Experiential Perfect	*tɛ́rɛ́ kárⁿà*	*tɛ́rɛ́-bù-, tɛ́rɛ́-sɔ̀-*

Infrequently, Perfective-1b *-tì-* can occur in a relative, resulting in *-tí kárⁿà* (note the H-tone).

14.4.2   Positive imperfective system and stative participles (*-m-ɛ̀:, -ŋgò*)

Subject imperfective positive relatives are in (xx1). *-m-* is an imperfective morpheme, and the verb stem has the A/O-stem vocalism as in the conjugatable main-clause imperfective. Animate Pl *-m̀-bò* is from /-m̀-mbò/ and could alternative be hyphenated as *-∅-mbò*. Inanimate Sg *-ŋ̀gò* could be derived from /-m̀-ŋgò/ by deletion of the first of two nasals, or it could be segmented as *-ŋ̀-gò* with *-ŋ-* functioning as an assimilated surface form (or a specialized allomorph) of imperfective *-m-*. Compare *-l-gò* in corresponding perfective negative participles (following section).

(xx1)   *-m-ɛ̀:*   Animate Sg, Inanimate Pl
        -m̀-bò   Animate Pl
        -ŋ̀gò   Inanimate Sg

Subject imperfective relatives are in (xx2).

(xx2)   a.   *ɛ́yⁿ*   *ɲì*ᴸ   *wá:-m-ɛ̀:*   *ǹ*
             tomorrow   person^L   come-Impf-Ppl.AnSg   Def
             'the person who is coming tomorrow'

        b.   *nù-mbɔ̀*ᴸ   *wá:-m̀-∅-bò*
             person-AnPl^L   come-Impf-Ppl-AnPl
             'people who come'

        c.   *cìn*ᴸ   *bágà-ŋgò*
             stone^L   fall.off-Ppl.ImpfInanSg
             'a stone that is falling (off)'

254

d. *cìn*^L   *bágà-m-ɛ̀:*
stone^L   fall.off-Impf-Ppl.InanPl
'stones that are falling (off)'

e. *ɲì*^L   *yàgà-m-ɛ̀:*^L   *ńné*
person^L   fall-Impf-Ppl.AnSg^L   DemDef.AnSg
'that person who is falling'

f. *yà*^L   *mí*   *zìgìbé-m-ɛ̀:*   *ǹ*
woman^L   1SgO   shake-Imf-Ppl.AnSg   Def
'the woman who is shaking me'

In habitual or general contexts, an informant preferred to (re-)phrase imperfective subject relatives as **agentive compounds** (§5.xxx). In (xx3a), 'children-biter' functions as a modifying adjective for 'dog', accounting for the latter's {L} tone contour. (xx3b) is phrased as 'my [meal-cooker woman]', with 'my' possessing the woman rather than the meals.

(xx3)   a. *[ìnjɛ̀:*^L   *ùlɛ̀:-cèré]*   *m̀bí-là-y*ⁿ
        [dog^L   children-bite.Agent]   want-StatNeg-1PlS
        'We don't want a dog who bites children (children-biter).'

    b. *[[yà*^L   *zà-sìré]*   *wɛ̃̀:]*   *yǎy-yà-y*
        [[woman^L   meal-cook.Agent]   1SgP.AnSg]   go-Perf1a-3SgS
        'The woman who cooks my meals (my meal-cooker) has gone.' (*zá*)

Nonsubject imperfective relatives are in (xx4).

(xx4)   a. *nà:*^L   *ú*   *dɔ́r*ⁿ*á-m-ɛ̀:*   *ǹ*
        cow^L   2SgS   sell-Impf-Ppl.AnSg   Def
        'the cow that you-Sg will sell'

    b. *nà:-mbò*^L   *ú*   *dɔ́r*ⁿ*á-m-bò*   *ǹ*
        cow-AnPl^L   2SgS   sell-Impf-Ppl.AnPl   Def
        'the cows that you-Sg will sell'

    c. *gàndà*^L   *í*   *ní:-ŋgò*
        place^L   1SgS   sleep-Impf.Ppl.InanSg
        'the place where we sleep'

Statives have the same participial endings as imperfectives, but are normally distinguished by vocalism (final *a*) and/or by the absence of mediopassive suffixes. Compare stative (xx5a) with its imperfective counterpart *ób-è:-m-è:* 'who will sit' (with mediopassive *-è:-*).

(xx5)   a.   *ɲì*^L   *ɔ́bà-m-è:*
             person^L   sit.Stat-Impf-Ppl.AnSg
             'a person who is sitting'

        b.   *gàndà*^L   *mí*   *ɔ́bà-ŋgò*
             place^L   1SgS   sit.Stat-Impf.Ppl.InanSg
             'the place where I am sitting'

The full set of imperfective positive system categories is shown in (xx6). *-m-è:* and *-ŋgò* participles are illustrated.

(xx6)   category   suffix(es)
                              in Rel clause   in main clause (3Sg)

        Imperfective   *-m-è:, -ŋgò*   *-m̀-dɔ̀-∅*
        Progressive   *-ḿ sɔ̀-m-è:, -ḿ sɔ̀-ŋgò*   *-ḿ sɔ̀-, -m̀ bù-*
        Stative   *-m-è:, -ŋgò*   (A-stem, no suffix)
        'be'   *bù-m-è:, bù-ŋgò*   *bù-*
        'have'   *sɔ̀-m-è:, sɔ̀-ŋgò*   *(yé) sɔ̀-*
        'want'   *m̀bá bù-m-è:, m̀bá bù-ŋgò*   *m̀bá-∅*

14.4.3   Participles of negative perfective-system verbs (*-l-ě:*)

The participial forms are in (xx1).

(xx1)   Animate Sg   *-l-ě:*   (same as Inanimate Pl)
        Animate Pl   *-l(ù)-mbó*
        Inanimate Sg   *-l-gó*
        Inanimate Pl   *-l-ě:*   (same as Animate Sg)

The participles are based on Perfective Negative *-lí-*, and like it requires the {L}-toned A/O-stem of the verb.
    Subject relatives are in (xx2).

(xx2)   a.   *[ɲì*^L   *wà:-l-ě:*   *ǹ]*   *sèll-ìyà-lí-∅*
             [person^L   come-PerfNeg-Ppl   Def]   be.healthy-MP-PerfNeg-3SgS

256

'The person who didn't come is sick.'

b. *[nù-mbɔ̀*^L   *wà:-l-∅-mbó*   *ǹ]*
[person-AnPl^L   come-PerfNeg-Ppl-AnPl   Def]
sèll-ìyà-ndá
be.healthy-MP-PerfNeg.3PlS
'The people who didn't come are sick.'

c. *[ùlò*^L   *yàgà-l-gó*   *ǹ]*   *àgú:*
[house^L   fall-PerfNeg-Ppl-InanSg]   Def]   which?=it.is
'Which (=where) is the house that didn't fall?'

Nonsubject relatives are in (xx3).

(xx3) a. *pèdὲ*^L   *mí*   *dɔ̀rⁿɔ̀-l-ĕ:*   *ǹ*
sheep^L   1SgS   sell-PerfNeg-Ppl.AnSg   Def
'the sheep that I didn't sell'

b. *lὲ:gò*^L   *bírá:*   *í*   *bìrà-l-gó*   *ǹ*
day^L   work(n.)   1PlS   work-PerfNeg-Ppl.InanSg   Def
'the day when we didn't work'

The full set of perfective negative system categories is given in (xx4). *-l-ĕ:* and *-l-gó* are the featured participles.

(xx4) category   suffix(es)
                                        relative clause
                                  AnSg/InanPl InanSg   main clause

	AnSg/InanPl	InanSg	main clause
Perfective Negative	*-l-ĕ:*	*-l-gó*	*-lí-*
Recent Perfect Negative	*dà-l-ĕ:*	*dà-l-gó*	*dà-lí-*
Experiential Perfect Neg	*-tὲrà-l-ĕ:*	*-tὲrà-l-gó*	*-tὲrà-lí-*

14.4.4 Imperfective and stative negative participles (*-ŋgò: b-ὲ:*)

The participial endings are in (xx1). In this category, participial forms of *bù-* are added to *-ŋgò:*, cf. 3Sg imperfective negative *-ŋgò:-∅* in the regular paradigm. The verb has the A/O-stem as in the regular paradigm.

(xx1) Animate Sg   *-ŋ̀gò:*   *b-ὲ: ~ bù-m-ὲ:*
       Animate Pl   *-ŋ̀gò:*   *bù-m-bò*

257

Inanimate Sg	*-ŋ̀gò:*	*bù-ŋgò*
Inanimate Pl	*-ŋ̀gò:*	*b-ɛ̀: ~ bù-m-ɛ̀:*

Subject relatives are in (xx2).

(xx2) a. *[ɲì*^L   *bírá:*   *bírà-ŋgò:*   *b-ɛ̀: / bù-m-ɛ̀:]*
    [person^L   work(n.)   work-ImpfNeg   be-Ppl.AnSg]
    *m̀bí-là-y*ⁿ
    want-StatNeg-1PlS
    'We don't want a person who doesn't work.'

    b. *[nù-mbɔ̀*^L   *bírá:*   *bírà-ŋgò:*   *bù-m-bò]*
    [person-AnPl^L   work(n.)   work-ImpfNeg   be-Ppl-AnPl]
    *m̀bí-là-y*ⁿ
    want-StatNeg-1PlS
    'We don't want people who don't work.'

    c. *[zàmdìlè*^L   *áy-ŋgò:*   *b-ɛ̀:]*   *m̀bà-y*ⁿ
    [donkey^L   be.tired-ImpfNeg   be-Ppl.AnSg]   want-1PlS
    'We want a donkey who doesn't get tired.'

    d. *[cìn*^L   *zɔ́gà-ŋgò:*   *bù-ŋgò]*   *m̀bà-y*ⁿ
    [stone^L   shatter-ImpfNeg   be-Ppl.InanSg]   want-1PlS
    'We want a rock that doesn't break.'

Nonsubject relatives are in (xx3).

(xx3) a. *pèdè*^L   *mí*   *dɔ́rⁿɔ̀-ŋgò:*   *b-ɛ̀:*   *ǹ*
    sheep^L   1SgS   see-ImpfNeg   be-Ppl.AnSg   Def
    'the sheep that I won't sell'

    b. *lè:gò*^L   *ú*   *wá:-ŋ̀gò:*   *bù-ŋgò*
    day^L   2SgS   come-ImpfNeg   be-Ppl.InanSg
    '(a/the) day when you-Sg don't come'

    c. *kìn*^L   *ú*   *dɔ́rⁿɔ̀-ŋgò:*   *b-ɛ̀:*
    stone^L   2SgS   sell-ImpfNeg   be-Ppl.InanPl
    '(a/the) stone that you-Sg won't sell'

The same participial forms of *bù-* 'be' are used after Stative Negative *=ndà:* (§10.4.2).

(xx4) a. *ɲì*^L   *ígà = ndà:*   *b-ɛ̀:*
     person^L   stand.Stat=StatNeg   be-Ppl.AnSg
     'a person who isn't standing'

    b. *nù-mbɔ̀*^L   *ígà = ndà:*   *bù-m-bò*
     person-AnPl^L   stand.Stat=StatNeg   be-Ppl.AnPl
     'people who aren't standing'

The full set of imperfective and stative negative categories is in (xx5). Only the Animate Sg/Inanimate Pl participle is shown. In all cases *b-ɛ̀:* varies with *bù-m-ɛ̀:*.

(xx5)   category   suffix(es)

category	in Rel clause	in main clause (3Sg)
Imperfective Negative	*-ŋgò: b-ɛ̀:*	*-ŋgò:-∅*
Progressive Negative	*-m̀ gò: b-ɛ̀:*	*-m̀ gò-∅*
Stative Negative	*= ndà: b-ɛ̀:*	*= ndà:-∅*
'not be'	*ǹgó b-ɛ̀:*	*ŋgó-∅*
'not have'	*sɔ̀-ndɔ̀ b-ɛ̀:*	*sɔ̀-ndɔ̀-∅*
'not want'	*m̀bí-là b-ɛ̀:*	*m̀bí-là-∅*

14.4.5   Participle of Past clitic *= bì-*

In its perfective-like uncompounded form, e.g. *yí = bì-m* 'I saw' (§10.2.1.4), the past category is neutralized with other perfective positive forms into relative clauses with *kárⁿà* (§14.4.1). However, when *= bì-* is added to a verb form marked for its own aspect-negation category (§10.5.1), it can be participialized in that combination. An example is the past progressive relative clause (xx1).

(xx1)   *tíⁿ→*   *nàmá*   *ɲì*^L   *kúbò-m*   *sɔ̀-m = b-ɛ̀:*
    at.first   meat   person^L   eat.meat-Impf   have-Impf=Past-Ppl.AnSg
    'a person who was eating (= used to eat) meat'

The participial forms are in (xx2).

(xx2)   Animate Sg   *= b-ɛ̀:*
          Animate Pl   *= ∅-mbò*
          Inanimate Sg   *= bù-ŋgò*
          Inanimate Pl   *= b-ɛ̀:*

14.5 Relative clause involving verb- or VP-chain

Direct chains, where noninitial verbs appear in bare form without an overt subordinator, are fairly restricted in TU (chapter 17). Where they do occur, they can be freely relativized, as with *yàgà súgó* 'fall (and) go down' in (xx1a-b). The final verb is the one that is participialized. In (xx1a) the perfective participial *kár^{n}à* was also originally a chained verb ('do'). In nonsubject relatives with pronominal subjects, the pronominal subject proclitic may appear either before both chained verbs or between them, but it cannot appear immediately before perfective participial *kár^{n}à* (xx1c)

(xx1) a. *ɲì^L*   *yàgà*   *súgó*   *kár^{n}à*   *ǹ*
           person^L fall   go.down   Ppl.Perf   Def
           '(a/the) person who fell down' (*yàgá*)

    b. *ɲì^L*   *yàgà*   *súgó-m-ɛ̀:*   *ǹ*
           person^L fall   go.down-Ppl.Impf-AnSg   Def
           '(a/the) person who will fall down' (*yàgá*)

    c. *lὲ:gò*   *ú*   *yàgà*   *súgó*   *kár^{n}à*   *ǹ*
           day^L 2SgS   fall   go.down   Ppl.Perf   Def
     or: *…*   *yàgà*   *ú*   *súgó*   *…*
           …   fall   2SgS   go.down   …
           'the day (when) you-Sg fell down'
           [but not #… *yàgà súgó ú kár^{n}à …*   ]

14.6 Late-NP elements that follow the verb (or verbal participle)

14.6.1 Determiners (demonstrative and definite)

Many of the relative clauses presented in this chapter show definite *ǹ* following the participle. Since this morpheme is not a tonosyntactic controller, its presence or absence has no effect on the form of the participle (xx1a). If instead of a definite we have a true demonstrative that controls tone-dropping, we get examples like (xx1b-c). In (xx1b), the participle and its proclitic subject pronoun are tone-dropped by the demonstrative. In this example one could even imagine including the head noun 'house' in the target domain. However, this is incorrect; 'house' is tone-dropped as relative head, not as part of the domain controlled by the demonstrative. This is shown by (xx1c), where a non-tone-dropped constituent ('sheep') intervenes between the tone-dropped head noun and the tone-dropped participle.

(xx1) a. *ùlò*^L   *ú*   *yá-ŋgò*   *(ǹ)*
           house^L   2SgS   see-Impf.Ppl.InanSg   (Def)
           '(a/the) house that you-Sg see'

       b. *ùlò*^L   *[ù*   *yà-ŋgò]*^L   *ò-gú*
           house^L   [2SgS   see-Impf.Ppl.InanSg]^L   Prox-InanSg
           'this house that you-Sg see'

       c. *èdè*^L   *pédé*   *zìyà-m-è:*^L   *mà-ḿ*
           child   sheep   bring-Impf-Ppl.AnSg   Dist-AnSg
           'that child (over there) who is bringing a sheep'

14.6.2   Non-numeral quantifiers ('each', 'all')

pú→ 'all' appears to control tone-dropping on the participle and even on the preceding proclitic. As usual with the emphatically pronounced *pú→*, it is difficult to distinguish true tonosyntactic control from intonational pitch dissimilation.

(xx1) a. *ùlò*^L   *[ù*   *yà-m-è:]*^L   *yí-pú→*
           house^L   [2SgS   see-Impf-Ppl.InanPl]^L   Inan-all
           'all the houses that you-Sg see'

       b   *ùlè:*^L   *[ù*   *yà-m-bò]*^L   *bú-pú→*
           house^L   [2SgS   see-Impf-Ppl.InanPl]^L   An-all
           'all the children that you-Sg see'

I was not able to elicit a relative with the rather restricted distributive quantifier *kámá* 'each'

14.7   **Grammatical relation of relativized-on NP**

14.7.1   Subject relative clause

As with all relatives, the head NP (maximally Poss-N-Adj-Num) is internal to the relative clause and is tone-dropped. The distinctive feature of subject relatives is that there can be no proclitic subject pronoun. Instead, the participles animacy/number agreement with the NP functioning simultaneously as head NP

261

and subject is sufficient. There is no difference in participial forms between subject and nonsubject relatives of the sort found in Najamba.

In addition to examples scattered in the sections above, some further examples are in (xx1). (xx1d-e) illustrate the alternative linear orders for subjects and setting adverbials ('tomorrow', 'yesterday')

(xx1) a. *[ɲì*^L *yàgà*^L *kárⁿà* *ǹ]* *tíb-à:-y*
[person^L fall^L Perf.Ppl Def] die-Perf1a-3SgS
'The man who fell has died.'

b. *[yà*^L *nàmá* *zàndì*^L *kárⁿà* *ǹ]* *ámnè:*
[woman meat cook Perf.Ppl Def] where?
'Where is the woman who cooked the meat?'

c. *[yà*^L *yɔ́:* *tò:*^L *kárⁿà* *ǹ]* *ámnè:*
[woman^L millet pound^L Perf.Ppl Def] where?
'Where is the woman who pounded the millet?'

d. *yà*^L *ɛ́yⁿ* *wá:-m-ɛ̀:* *ǹ*
woman^L tomorrow come-Impf-Ppl.AnSg Def
'the woman who is coming tomorrow'

e. *yéŋgì* *yà*^L *wɔ̀* *kárⁿà* *ǹ*
yesterday woman^L come Ppl.Perf Def
'the woman who came yesterday'

14.7.2 Object relative clause

The clause-internal object is tone-dropped in its capacity as the head NP. If the subject is pronominal, it appears as a preverbal subject pronoun rather than as a suffix on the verb. The verb takes the participial form relevant to the AN category. (xx1c) shows that subject-object linear order is retained in object relatives

(xx1) a. *[pèddè*^L *mí* *èbè* *kárⁿà]* *yì-sɔ́-m*
[sheep^L 1SgP buy Ppl.Perf] see-Perf2-1SgS
'I found a/the sheep that I (had) bought.'

b. *[ìnjè:*^L *ú* *pùŋgò* *kárⁿà* *ǹ]* *ăm-nè:*
[dog^L 2SgS beat Ppl.Perf Def] be.where?
'Where is the dog that you-Sg beat?'

c. *úlé:*   *pèdù-mbò* ^L   *zè:*   *kárⁿà-mbɔ̀*   *ǹ*
children   sheep-AnPl^L   bring   Ppl.Perf-AnPl   Def
'the sheep-Pl that the children brought'

d. *[nàmà* ^L   *ú*   *kùbò-l-gó*   *ǹ]*
[meat^L   2SgS   eat.meat-PerfNeg-Ppl.InanSg   Def]
àgú:
be.where?Inan
'Where is the meat that you-Sg didn't eat?'

e. *pèddè*   *í*   *sémá-m-è:*   *ǹ*
sheep   1PlS   slaughter-Impf-Ppl.AnSg   Def
'the sheep-Sg that we will slaughter'

An informant denied that accusative marking on an object head NP is possible. For example, accusative *gì* (never more than optional anyway) is not allowed on 'sheep' or 'dog' in (xx1a-b). This is further evidence that the (partial) clause-internal head NP inside the relative originates outside it as part of the larger NP
.

14.7.3   Possessor relative clause

The possessor NP is relativized on in (xx1a-b). As with other head NPs, the possessor is tone-dropped. The possessed noun takes its regular unpossessed form.

(xx1)   a. *[nì* ^L   *nǎ:*   *tìbè*   *kárⁿà*   *ǹ]*   *ǎm̀:=∅*
[person^L   cow   die   Ppl.Perf   Def]   who?=it.s
'Who is the person whose cow died?'

    b. *[yà* ^L   *úló*   *yàgà*   *kárⁿà*   *ǹ]*   *ǎm̀:=∅*
[woman^L   house   fall   Ppl.Perf   Def]   who?=it.s
'Who is the woman whose house fell?'

14.7.4   Relativization on the complement of a postposition

If the relativized NP functions as complement of a postposition within the relative clause, the postposition is deleted. In (xx1a), for example, 'to (a/the) woman' has a dative postposition. Corresponding relative clauses with 'woman' as head NP lost the postposition (xx1b). A similar pair of main clause and

relative clause (xx1c-d) shows that the instrumental postposition is omitted in the relative.

(xx1) a. *ò-gú*   *[yá   bèrⁿè]   jírⁿì-m-nù-m*
           Dist-InanSg [woman   Dat]   say-Impf-Impf-1SgS
           'I will say that to (a/the) woman.'

       b. *ò-gú*   *yà*ᴸ   *ú*   *jìní-m-è:*   *ǹ*
           Dist-InanSg   woman ᴸ   2SgS   say-Impf-AnSg   Def
           'the woman to whom you will say that'
           [can also be ordered: *yà*ᴸ *ò-gú…*]

       c. *[séy-gɔ́   nì:]*   *tìmǎ:*   *déŋgè-m-nù-m*
           [ax-InanSg   Inst]   wood   chop-Impf-Impf-1SgS
           'I will chop the wood with an ax.'

       d. *[sèy-gɔ̀*ᴸ *tìmǎ: ú   déŋgè-ŋgò*   *ǹ]   à-gú:*
           [ax ᴸ   wood 2SgS chop-Impf.Ppl.InanSg Def] where?-InanSg
           'Where is the ax with which you-Sg will chop the wood?'

Spatial, temporal, and manner adverbial clauses of the form 'the time when/place where/way …" are just special cases of the basic relative construction. See §15.3.1-2 for spatial and manner adverbial clauses, and §15.2.1.1 for temporal adverbial clauses.

15 Verb (VP) chaining and adverbial clauses

A distinction is made between direct chains, where nonfinal verbs are effectively compounded with a final inflected verb, and looser combinations where a subordinated clause or VP is attached to another clause or VP.

15.1 Direct chains (without chaining morpheme)

Direct chains are rather restricted in TU but occur in some combinations involving co-events, i.e. two aspects of the same event. An example is *yàgà súgó* 'fall down' with *yàgá* 'fall' and *súgó* 'go down', conceptualized as a single event rather than as two successive events

(xx1) a. *yàgà*   *súg-à:-y*
           fall   go.down-Perf1a-3SgS
           'He/She fell down.'

      b. *yàgá*   *sùgò-lú-m*
           fall   go.down-PerfNeg-1SgS
           'I didn't fall down.'

      c. *yàgà*   *súgò-ŋù-w^n*
           fall   go.down-ImpfNeg-2SgS
           'You-Sg will not fall down.'

      d. *yágà*   *sùgò-m-nù-m*
           fall   go.down-Impf-Impf-1SgS
           'I will fall down.' (*súgò-m-nù-m*)

These examples already show that some tonal changes occur. *yàgá* 'fall' is a {LH}-toned verb. We observe that the final H-tone is suppressed when the final verb begins with a H-tone (xx1a,c), but is overt when the final verb begins with a L-tone (xx1b). The imperfective (xx1d) is a special case, since here the final verb elsewhere begins with a H-tone, but in this particular construction it shifts to stem-wide {L} while the nonfinal verb shifts to {HL}.

more on tone possibilities

The 'be able to VP' construction is formally a chain of an open-ended VP with *bɛ̌:* 'get, obtain' (§17.5.1).

15.1.1   Chains including *mɔ̀:nd-í:* 'assemble' ('do together')

The mediopassive verb *mɔ̀:nd-í:* 'gather together, assemble' often occurs in loose chains with *gín* (past) or *nɛ́* (nonpast). As construed in TU, the gathering together is an event that precedes the other event or activity

(xx1)   a.   *nù-mbɔ́*   *[mɔ̀:nd-ì:*   *gín]*
          person-AnPl   [**assemble**-MP   and.Past.SS]
          úló   *ɔ́ndù-m-s-ɛ̀:*
          house   build-Impf-xxx-3PlS
          'The people got together and built a house.'

       b.   *nù-mbɔ́*   *[mɔ̀:nd-ì:*   *nɛ́]*
          person-AnPl   [**assemble**-MP   and.Nonpast.SS]
          úló   *ɔ́ndù-m-d-ɛ̀:*
          house   build-Impf-Impf-3PlS
          'The people will get together and build a house.'

[í   kàbú]   bìrà: mɔ́ndú-gɔ́   bìrà-môn

15.2   Temporal adverbial clauses with overt chaining or subordinating morpheme

15.2.1   Adverbial clauses expressing temporal simultaneity or overlap

Subsections in this section may be deleted, combined, split, or rearranged (and reorganized) to suit a particular language.
Indicate in each case (except the relative-clause type) whether the construction requires same subjects in the main and adverbial clauses. How is different subject expressed ('while he was working, we ate')?

15.2.1.1 Noun-headed temporal relative clause ('[at] the time when …')

15.2.1.2 Imperfective subordinator *-m*

The imperfective suffix *-m*, without pronominal-subject conjugation, can be used as a same-subject imperfective background-clause subordinator, basically 'while VP-ing'.

(xx1) a. *[zób-gó   zɔ́bà-m]   [nùŋá: nùŋù-m = bì-∅]*
          [run-InanSg   run(v)-Impf] [song   sing-Impf=Past-3SgS]
          'He was singing as he ran.'

b. *ùlé:*   *[zób-gó*   *zɔ́bà-m]*   *[nùŋá: nùŋù-m＝b-à:]*
children [run-InanSg run(v)-Impf] [song sing-Impf=Past-3PlS]
'The children were singing as they ran.'

alternative PP construction:

[zób-gó nì] [yé nùy-∅]
'He/She ran in.'

[zób-gó nì] [yé nù-m]
'I ran in.'

same-subject requirement?

examples:

[combine with neighboring subsections if not formally distinct]

15.2.1.3 Imperfective *-m* on activity verb plus time-of-day verb

Imperfective subordinator -m is common as a durative complement of verbs like 'spend the night' and 'spend the (mid-)day'. Only the final verb is conjugated for pronominal subject. The two "clauses" are treated prosodically as a unit, and if the final verb is perfective it often appears in the simple perfective, as in defocalized position within a clause. The sense is 'spend the day/night VP-ing' or 'VP all night/day', i.e. where the nonfinal VP denotes an activity that was coextensive with the time interval.

(xx1) a. *[jé*   *jé-m]*   ^L*n-à:*
        [dance(n) dance-Impf] ^Lspend.night.Perf-3PlS
        'They danced all night.'

    b. *[nùŋá:*   *nùŋó-m]*   ^L*nà-m*
        [song   sing-Impf] ^Lspend.night.Perf-1SgS
        'I spent the night singing.'

    c. [*tól*   *tó:-m]*   ^L*dèrⁿɛ̀-y*

[pounding   pound-Impf]   ^Lspend.day.Perf-1PlS
'We pounded (grain in mortars) all day.'

15.2.1.4 'Since …' clauses (perfective relatives)

'Since …' clauses are expressed as (usually headless) perfective adverbial relative clauses, with 'time' as implied head NP (xx1a). Even 'since X' with a NP X is expressed with the same construction, using the verb *gǒ-* 'go out, leave' (xx1b).

(xx1) a. *[[ŋ̀gɔ́   mí   wɔ̀:^L   kárⁿà]   nè]*
            [[here   1SgS   come^L   Ppl.Perf]   Loc]
            [zá   ɲà-lú-m]
            [meal   eat.meal-PerfNeg-1SgS]
            'Since (the time when) I came here, I haven't eaten.'

       b. *[[yéŋgì   gò^L   kárⁿà]   nè]*
            [[yesterday   go.out^L   Ppl.Perf]   Loc]
            [ínjé   dè-lú-m]
            [water   bathe-PerfNeg-1SgS]
            'I haven't bathed since yesterday.'

15.2.2 Adverbial clauses expressing a chronological sequence

15.2.2.1 Clauses with *gín* 'and then' (same subject, anterior, past time)

gín 'after, when' indicates a chronological sequence vis-a-vis the following clause, though sometimes the two are tightly sequences co-events. The entire sequence has been completed. gín occurs only in same-subject clause sequences. The pronominal-subject category is not marked suffixally on the verb with *gín*, but is marked on the verb of the following main clause. Nonpronominal subjects, objects, and other complements shared by both verbs occur once, before the *gín* verb. If the verb of the main clause has no additional complements of its own, it often appears in simple perfective form and it may be tightly phrased with the *gín* clause.

Before *gín*, a lexically /LH/-toned verb spreads its L-tone to the end of the stem, but /H/-toned verbs remain high-toned. The verb may also take perfective-1b (xx1e) or recent perfect form (xx1a) before *gín*.

(xx1) a. *[zá   ɲɛ́   dɛ̀   gín]   ^Lya-dà*

269

        [meal   eat   RecPf-3SgS   **after**]   ^Lgo.Perf-3PlS

        'They ate and (then) went.'

b.   *[yày   gín]   wɔ̀:-m*

     [go   **after**]   come.Perf-1SgS

     'I went and came (back).'

c.   *àdé   [cíll-í: gín]   yǎy-yà-y*

     bird   [fly-MP **after**]   go-Perf1a-3SgS

     'The bird flew away.' (i.e. took off and went)

d.   *[zɔ̀bɔ̀   gín]   [yé   nùy-∅]*

     [run   **after**]   [there.Def   go.in.Perf-3SgS

     'He/She ran in. (i.e. ran and entered)

e.   *zá   zè:-tí   gín,   yǎy-yà-y*

     meal   bring-Perf1b **after**, go-Perf1a-3SgS

     'He/She brought the meal and then went.'

f.   *ámádù   [sùŋgó   ǹ]   bàdà   gín]   púllú-tì-∅*

     Amadou [rope   Def]   pull   after] snap-Perf1b-3SgS

     'Amadou pulled the rope and snapped it.'

More examples are (xx2a-b) in §18.3.1 ("You-Sg said that…") and (xx1b) in §18.4.1 ("The children squabbled…"). There are also some examples in the texts.

    gín is related to the 'say' verb (§xxx). Taken somewhat literally, we can gloss the construction as "saying (recognizing) that S1, S2."

15.2.2.2 Clauses with *né ~ rⁿɛ́* 'and then' (same subject, anterior, future time)

In the examples in (xx1), the subordinated clause with *né* has the same subject as the following clause. The two clauses are chronologically sequenced as with gín clauses, but with *né ~ rⁿɛ́* the time frame for the entire sequence is future or generalized present, i.e. not perfective (completed). The verb in the first clause may be marked for recent perfect, especially in the sense 'have finished VP-ing' (xx1a), or it may be unmarked for aspect. If it is unmarked for aspect, it is tone-dropped (xx1b-c). The following main clause may be indicative (xx1a-b) or imperative (xx1c). When the second clause consists of just a verb, if it is phrased prosodically with the first clause (i.e. without a pause) it may drop tones as though preceded by other constituents within its clause (xx1b).

(xx1) a. *[zá   ɲέ   dὲ*^L *nέ]*   *ó-m-nù-m*
           [meal   eat   RecPf^L and.NonpastSS]   go-Impf-1SgS
           'I will finish eating and (then) go.'

       b. *[yày*^L   *nέ]*   ^L*wà:-m̀-nù-m*
           [go^L   and.NonpastSS]   ^Lgo-Impf-1SgS
           'I will go and come (back).'

       c. *[ɲὲ*^L   *nέ]*   *yà-dá*
           [eat^L   and.NonpastSS]   go-Imprt
           'Eat and go!'

       d. *[yày*^L   *nέ]*   *wâ:-m-nù-m*
           [go^L   and.SS]   come-Impf-Impf-1SgS
           'I will go and come (back).'

       e. *έy*ⁿ   *[wɔ̀:*^L *nέ]*   *[zá   ɲὲ*^L   *nέ]*   *óm-dɔ̀-∅*
           tomorrow [come^L and.SS] [meal eat^L   and.SS] go-Impf-3SgS
           'Tomorrow he/she will come and eat and (then) go (away).

If the second clause is **negative**, the scope of its negation does not extend to the
first clause.

(xx2) a. *[bàmàkɔ́   yày*^L   *nέ]*   *wá:-ŋù-m*
           [B   go^L   and.SS]   come-ImpfNeg-1SgS
           'I will go to Bamako, and I won't come back.'

       b. *[yày*^L   *nέ]*   *wá:-lì*
           [go^L   and.SS]   come-Prohib
           'Don't go and come back!'

15.2.2.3 Clauses with *-à: dé* 'after' (same subject, anterior, future time)

This construction competes with the clause type with *nέ ~ r*ⁿ*έ* described in the
preceding section (§15.2.2.2). Both constructions appear to be limited to clause
sequences denoting future or generalized present events. Both also require that
the subordinated and main clauses have coindexed subjects.
   -à: dé is especially common with the recent perfect (*dέ*) in the sense 'have
(just) finished VPing'. The recent perfect form is therefore *d-à: dé* following a
chained verb denoting the event type. There are several examples of this in Text

2 ("Cotton"). (xx1) in that text also includes *mɔ́:ndú-gɔ́ mɔ̀:ndì-y-à: dé* 'after getting together', showing that *-à: dé* does not only occur in the recent perfect form.

 dé in *-à: dé* is presumably related to conditional *de* 'if' (§16.1). However, the textual examples of *-à: dé* involve simple event sequences with no special emphasis on contingency. The construction is therefore similar to what I have called "pseudo-conditional" constructions in some other Dogon languages.

15.2.2.4 'Worked until got tired' = 'worked for a very long time'

As in other Dogon languages, an emphatic way to emphasize the duration of an activity is to add a loosely chained final verb '(until) get tired'. Actual fatigue may or may not have occurred.

(xx1) a. *[òdùbá:* *yày*^{L} *gín]* *áy-yà-dà*
    [road go^L and.Past.SS] get.tired-Perf1a-3PlS
    'They walked (and walked) until they got tired.'

   b. *[zá* *ɲɛ́* *gín]* *áy-yà-y^n*
    [meal eat and.Past.SS] get.tired-Perf1a-1PlS
    'We ate (and ate) until we got tired.'

15.2.2.5 Clauses with *kár^{n}à* (different-subject, anterior, past)

In this construction, the two events are chronologically sequenced (and normally have some relationship within the narrated situation). The entire sequence is completed (perfective), as with *gín*. However, the two clauses now have different subjects. *kár^{n}à*, a form of *kán-* 'do' also used in perfective relative clauses (§14.xxx), is the crucial linking element. As with perfective relatives, a lexically /LH/-toned verb before *kár^{n}à* spreads its L-tone to the end of the stem. In (xx1a-b), the verb of the first clause is marked for recent perfect. Since the first clause is syntactically a nonsubject relative clause, a pronominal subject is positioned between the main verb and the Recent Perfect morpheme.

(xx1) a. *[[èdé* *ǹ]* *ɲɛ́* *ńné* *dè* *kár^{n}à]*
    [child Def] eat 3SgS RecPf **after**]
    [mí ^{L}*yày-m̀]*
    [1SgS ^{L}go.Perf-1SgS]
    'When the child had finished eating, I went.'

272

b. *[zá   ɲέ   bú   dὲ   kárⁿà] [mí   ᴸyày-m̀]*
[meal eat   3PlS RecPf **after**] [1SgS ᴸgo.Perf-1SgS]
'When they had finished eating, I went.'

c. *[ùdù-gó   ńné   pílé   kárⁿà] [í   nù-yⁿ]*
[sun-InanSg 3SgS sun.set **after**] [1PlS go.in.Perf-1PlS]
'After the sun had set, we went in.'

d. *[ámádù   [sùŋgó   ǹ]   ńné   bàdàᴸ   kárⁿà]*
[Amadou   [rope   Def]   3SgS pullᴸ   **after**]
[[nă: ǹ]   yǎy-yà-y]
[[cow   Def]   go-Perf1a-3SgS
'When Amadou had pulled the cord, the cow got away.'

e. *[zá   ǹ]   ńné   zὲ: kárⁿà, yé   ɲὲ-m*
[meal Def]   3SgS   bring   **after**,   there.Def eat.meal.Perf-1SgS
'After he brought the meal, I ate.'

15.2.2.6 Clauses with *nὲ* (different-subject, anterior, future time)

In this construction, the verb is {HL}-toned, reduced to {H}-tone for monosyllabics, and it is followed by L-toned *nὲ*. The subjects of the two clauses are not coindexed. The event denoted by the *nὲ* clause must precede that denoted by the following main clause. The overall time frame is in the future. The subject is obligatorily represented by a proclitic pronoun, even when it resumes a nonpronominal subject (xx1a).

(xx1) a. *[ámàdù ńné   wɔ́:   nὲ]   [zá   ɲà-m-nὲ-ýⁿ]*
[A   3SgS   come   after.DS] [meal consume-Impf-Impf-1PlS]
'After Amadou comes, we will eat.'

b. *[bírá: bú   bìrὲ-dέ   nὲ]   ó-m-nὲ-yⁿ*
[work(n) 3PlS   work(v)-RecPf   after.DS] go-Impf-Impf-1PlS
'After he/she finishes doing the work, we'll go.'

Additional examples showing the form: *ńné dɔ́gɔ̀ nὲ* 'after he/she leaves (abandons)' (*dɔ̀gɔ́*), *ńné bírὲ nὲ* 'after he/she works' (*bìrέ*), *ńné nú nὲ* 'after he/she enters', *ńné yí nὲ* 'after he/she sees', *zá ńné ɲέ nὲ* 'after he/she eats (a meal)', *bú:dù mí bέ: nὲ* 'after I get some money' (*bĕ:*).

My assistant did not accept *nὲ* in past time contexts ('after he/she finished doing the work, we went'). Instead, *nὲ* was replaced by a headless perfective relative clause with participial *kárⁿà*, as in (xx2).

(xx2) *yéŋgì*   *[bírá:*   *ńné*   *bìrὲ-dὲ*   *kárⁿà]*
        yesterday   [work(n)   3SgS   work(v)-RecPf   Ppl.Perf]
        [zá   ᴸ*ɲὲ-yⁿ]*
        [meal   ᴸconsume.Perf-1PlS]
        'Yesterday when he/she finished doing the work, we ate.'

15.2.2.7 Clauses with *-ŋgó nì* (different-subject, anterior)

In this construction, the subordinated verb has suffix *-ŋgó*, followed by *nì*, possibly a variant of instrumental postposition nì: (§8.1.2). In future time contexts, this construction competes with the *nὲ* construction described above. Unlike *nὲ*, this construction can be used in both future (xx1a) and past (xx1b) time frames.

(xx1)   a.   *[bírá:*   *bú*   *bírá-ŋgó*   *nì]*   *ó-m-nὲ-yⁿ*
             [work(n)   3PlS   work(v)-xx   Loc]   go-Impf-Impf-1PlS
             'After he/she finishes doing the work, we'll go.'

         b.   *[bírá:*   *bú*   *bírá-ŋgó*   *nì]*   *yǎ-yà-yⁿ*
             [work(n)   3PlS   work(v)-xx   Loc]   go-Perf1a-1PlS
             'After he/she finished doing the work, we went.'

15.2.3 Chronological reversal ('before …' clauses)

'Before…' clauses are loosely chained clauses using *tí* as a kind of auxiliary verb specifying that the event in question was completed before the following event. The forms are *tì* ᴸ *né* for nonpast time frames and *tí gín* for past time frames. These forms are regular when the clauses have the same subject (xx1a-b).

(xx1)   a.   *[bírá:*   *bìrέ*   *tì*ᴸ   *né]*
             [work(n)   work(v)   Perfᴸ   and.Nonpast.SS]
             [zá   *ɲá-m̀-nὲ-yⁿ]*
             [meal   eat-Impf-Impf-1PlS]
             'We'll work before we eat.'

274

b. *[bírá: bìrɛ́   tí   gín]*
[work(n)   work(v)   Perf   and.Past.SS]
[zá   ^Lɲè-y^n]
[meal   ^Leat.Perf-1PlS]
'We'll work before we eat.'

When the subjects are different, the later event is construed as an imperfective adverbial clause. For example, in (xx1a-b) the first clause is literally something like "with my father being about to come."

(xx1)   a. *[[mí   ^Hbá]   wá:-ŋgò   nì,*
[[1SgP   ^Hfather]   come-ImpfPpl.InanSg   Inst,
[bírá: bìrɛ́-tì-m]
[work(n)   work(v)-Perf1b-1SgS]
'I worked (and finished) before my father came.'

b. *[[mí   ^Hbá]   wá:-ŋgò   nì,*
[[1SgP   ^Hfather]   come-ImpfPpl.InanSg   Inst,
[bírá: bírà-m-nù-m]
[work(n)   work(v)-Impf-Impf-1SgS]
'I will work before my father comes.'

15.3   Spatial and manner adverbials

15.3.1   Spatial adverbial clause ('where …')

Spatial adverbial clauses are relatives with *gándá* 'place, country' as head, hence in {L}-toned form. Such a clause can function as a NP argument (xx1a), or it can be adverbial (xx1b).

(xx1)   a. *[gàndà^L   mí   yàgà^L   kár^nà   ǹ]   wàgá*
[place^L   1SgS   fall^L   Ppl.Perf   Def]   distant
'The place where I fell is far away.'

b. *[[gàndà^L   mí   yàgà^L   kár^nà   ǹ]   nè]   wàgá*
[[place^L   1SgS   fall^L   Ppl.Perf   Def]   Loc]   distant
'I'm going to the place where I fell.'

15.3.2   Manner adverbial clause ('how …')

A relative clause with ŋŋŋ 'manner' as head NP may function as a NP (xx1.a).
With ŋŋŋ 'like' this can become a manner adverbial clause (xx1.b).

[bìrà ínέ bìrà-ŋgó ǹ nέ] mí kùnì: bíràmnam
'I will work like he works'

nné zɔ̀bà-mɔ̀-ŋgò ɔ̂yⁿ dágá-ŋgò   'if he drives like that it's no good'

examples
    'I work (like) the (same) way he/she works.'
    'The way he drives, we can reach Bamako in one day.'

15.3.3   'From X, until (or: all the way to) Y'

A somewhat specialized construction translatable as an 'until' phrase is based on the uninflected form *dɔ̌y*, related to the Perfective-1a of *dɔ̌* 'arrive (somewhere other than here' (as in *dɔ̌y-yà-y* 'I arrived'). It is tightly chained with a preceding *wɔ̀* (reduced from *wɔ̌:-* 'come') when the terminal point is in the past, and with a preceding *yà* (reduced from *yây* 'go', §10.1.3.5) when the terminal point is in the future.

    The 'until' phrase may be paired with a preceding 'since' or 'starting from' phrase specifying the temporal point of departure. This may be a subordinated clause containing *gɔ̌-* 'go out' in the sense 'begin(ning) with', or a clause with a verb like *tɔ́:-* 'begin'.

(xx1)   a. *[jêl   gò-gín]   [yéŋgì   wɔ̀*[L]   *dɔ̌y]*
               [last.year **go.out**-and.SS] [yesterday **come**[L]   **arrive**]
               bírá: bírá-ḿ   sɔ́-m = bù-m
               work(n.)   work-Impf   have-Impf=Past-1SgS
               'I was working from last year until yesterday.'

       b. *[nân   tɔ̀:-ḿ   dé]   [έyⁿ   yà*[L]   *dɔ̌y]*
               [now   begin-xxx xxx]   [tomorrow **go**[L]   **arrive**]
               bírá: bírà-m-nɔ̀-m
               work(n.)   work-Impf-Impf-1SgS
               'I will work starting now until tomorrow.'

nné-gì bú   là: kárⁿà, mɔ̀-mɔ̀dù-gɔ́, kúnì→ tíbὲ
'from the time he was born he is evil, until he dies'

16 Conditional constructions

In classic conditionals, the eventuality denoted by the antecedent ('if' clause) is a sufficient condition for the eventuality denoted by the consequent. Typically the antecedent takes place before the consequent, and the relationship is more or less causal. However, antecedent clauses may drift from (causal) 'if' to a more purely temporal 'when, after'.

There is often one primary 'if/when' particle (occasionally two with similar sense), and a couple of other substitutes (with core meanings 'all', 'even', 'only')

[Togo Kan and some other languages also use the 'if' particle dè (or a homophone) as a VP-chaining device in imperfective contexts where the two co-events are chronologically sequenced; here dè can be called Pseudo-conditional]

16.1 Hypothetical conditional with *de* 'if'

In this construction, the antecedent eventuality is possible but uncertain. Both antecedent and consequent are normally in the future, or else denote recurrent events that may overlap the present.

When the antecedent denotes a bounded event, it is normally expressed in one of the perfective inflections (positive or negative). We see the Perfective-1b in (xx1a), the Perfective-1a in (xx1b), the simple Perfective in (xx1c), and the Perfective Negative in (xx1d). The consequent is normally imperfective (xx1a-c), but can also be an imperative (xx1d) or hortative. The 'if' morpheme is clause-final *de*, which acquires its tone by spreading from the preceding word.

(xx1)   a. *ú*   *púŋgó-tì-∅*   *dè,*
         2SgO   hit-Perf1b-3SgS   if,
         mí   *ńné*   *lál-ɛ̀:-m-dɔ̀*
         1SgS   3SgO   chase.away-MP-Impf
         'If he/she hits you-Sg, I'll send him/her away.'

      b. *ú*   *bàmàkɔ́* *yǎy-yà-wⁿ*   *dè,* *ú*   *yá-ŋù-m*
         2SgS B   go-Perf1a-2SgS if,   2SgO see-ImpfNeg-1SgS
         'If you-Sg go to Bamako, I won't see you.'

279

c. *ɛ́bɛ́*   ᴸ*yày-ẃⁿ*   *dé,*   *bɔ̀ríyɛ́*   ᴸ*zìyà*
   market   ᴸgo.Perf-2SgS   if,   sack   ᴸbring.Imprt
   'If you-Sg go to the market, bring (back) a sack (of millet)!.'

d. *ú*   *sèll-èyà-lú-wⁿ*   *dé,*
   2SgS   be.healthy-MP-PerfNeg-2SgS   if,
   ú   *zɔ́ŋgɔ̀-m-nù-m*
   2SgO   treat-Impf-1SgS
   'If you-Sg get sick, I will treat you.'
   ["not be healthy" = 'get sick']

temporal context: future or (present) habitual. The antecedent event is possible but uncertain.

most common logical relationship: cause and effect (entailment)
    ('if X, then Y' = 'X is a sufficient condition for Y')

form of 'if/when' particle
    tones spread from final tone of preceding word?

typical aspect categories of antecedent and consequent clauses
    unmarked category for antecedent: perfective (if cause-and-effect conditional)
        --may also be imperfective in some contexts
    unmarked category for consequent: imperfective, future, imperative, hortative

both clauses have normal main-clause form (AN suffix, pronominal-subject suffix)

16.1.1   Regular antecedent clause

verify that the antecedent clause is basically identical to a main clause except for the 'if' particle. pay special attention to pronominal subject marking.

give examples of the normal conditional construction
    'If you-Sg see Amadou in the market, flee!'
    'If he sees Amadou in the market, he will flee.'
    'If Hawa doesn't eat, she will die.'

any unusual patterns in AN marking of antecedent?
preference for one or another of the various perfective-system forms?

16.1.2 'Unless' antecedent

often a regular hypothetical conditional in which the the antecedent clause is negative.

examples
'Unless the rain falls ("if the rain didn't fall") heavily, we cannot sow (millet).'
'Unless the chiefs are here ("if the chiefs are not present"), we cannot slaughter a sheep.'
'Unless you-2Sg do ("f you-2Sg don't do) the farm work, how will you eat?'

16.2   Alternative 'if' particles

16.2.1 'Even if …' (*ŋŋŋ*)

(xx1) *[àrⁿá   mírⁿà-m-dɔ̀   dùgɔ̀]   [ándá   óm-nè-yⁿ]*
       [rain(n)   rain.fall-Impf-3SgS   xxx]   [field   go-Impf-1PlS]
       'Even if it rains, we'll go to the fields.'

usually the 'even' particle (§19.1.4) replaces the 'if/when' particle
[Nanga: the Purposive postposition (or a homonym) is used in this construction]

examples
'Even if he/she comes, he/she won't eat here.'
'Even if you-Sg come, you won't eat here.'
'Even if it rains, we'll go to the field(s).'

16.2.2 'As soon as …' (*ŋŋŋ*)

A particle meaning 'only, just' or the like replaces the ordinary 'if/when' particle
in languages under Fulfulde influence, often tán *(Nanga, Jamsay)*

281

16.3   Willy-nilly and disjunctive antecedents ('whether X or Y …')

16.4   Counterfactual conditional

In a counterfactual conditional, the time frame is the past, the antecedent eventuality did not occur, and it is claimed that had that eventuality occurred, the consequent event would also have occurred. The relationship is normally causal.

The predicate of the antecedent clause contains the Past clitic in any of its combinations, plus *de* 'if'. The predicate of the consequent clause is past imperfective. Either clause, or both, may be negative.

(xx1)   a.   *ôyⁿ*   *zúgà-m = bú-m = bù-m*   *dè,*
    like.that know-Impf=Aug=Past-1SgS   if,
    wá:-ŋgò: = bú-m = bù-m
    come-ImpfNeg=Aug=Past-1SgS
    'If I had known (it was) like that, I would not have come'

  b.   *mí* *púŋgó = bì-∅* *dè,* *ńné* *já-m̀ = bù-m*
    1SgO beat=Past-3Sgs if, 3SgO kill-Impf=Past-1SgS
    'If he had hit me, I would have killed him.'

often both the antecedent and the consequent involve the Past clitic/particle.
*   antecedent: Past Perfect form (simple Perfective plus Past)*
*   consequent: Past Imperfective form*

examples
*   'If the locusts hadn't come, we would have gotten (= were going to get) a lot of millet in the granary.'*
*   'If the doctor had been there, I would have been cured.'*

17 Complement and purposive clauses

17.1 Quotative complements

There are several diagnostics to identify quoted material. Most obviously, the inflected 'say' verb *jìní* may occur, usually at the end of the quotation (xx1a). More often, an uninflected quotative particle *wà* occurs, and this particle may be repeated several times in a multi-clause quotation (xx1b-d). A prolonged variant *wà→* is also common after an independent pronoun representing the subject of the quoted sentences (xx1c). There is no verbal agreement with such overt clause-initial quotative subjects. Finally, any referent coindexed with a third-person author of the quotation (whether of speech or of thought) is represented by a logophoric pronoun. The logophoric takes the form *-m* (pseudo-1Sg, §18.2) suffixed to the verb when it functions as subject of the quoted clause (xx1a-b). Otherwise it takes the form *á*, a third-person anaphoric pronoun also used in reflexives (§18.2), as in (xx1d).

(xx1) a. *ámádù*   *wâ:-m-nù-m*   *jìní = bì-∅*
             A   come-Impf-Impf-LogoS   say=Past-3SgS
             'Amadou$_x$ said he$_x$ will come.'

    b. *ámádù*   *wâ:-m-nù-m*   *wà*
             A   come-Impf-Impf-LogoS   Quot
             'Amadou$_x$ said/says he$_x$ will come.'

    c. *ámàdù*   *[ú*   *wà→]*   *[ńné-gì*   *púŋgó = bù]*   *wà*
             A   [2Sg   QuotS]   [3Sg-Acc   hit=Past]   Quot
             'Amadou$_x$ says that you hit him/her$_y$.'

    d. *ámàdù*   *[ú*   *wà→]*   *[á-gì*   *púŋgó = bù]*   *wà*
             A   [2Sg   QuotS]   [3LogoSg-Acc   hit=Past]   Quot
             'Amadou$_x$ says that you hit him$_x$.'

17.1.1 Direct versus indirect in quotative complements

The aspect-negation category of an original indicative utterance is preserved in quoted speech. For imperatives and hortatives, some morphological

substitutions are made. Other than the quotative particles, there is no 'that' complementizer.

Any first person pronouns in the original utterance are replaced by logophorics in the quotation ('He_x said that he_x …' comes out as "He said Logo …'). Logophoricity is expressed by a combination of the logophoric pronoun *á* and the logophoric-subject suffix *-m* on the verb (identical in form to 1Sg subject in indicatives).

17.1.2 'Say that …' with inflectable 'say' verb

For the forms of 'say' verbs see §11.3.1. These verbs are possible, but generally omitted, when the unconjugated quotative particle *wa* is possible, i.e. in positive reports of past speech by third parties ('he said', etc.). However, in imperfective, imperative, and negative contexts the 'say' verb follows the quotation.

(xx1)   *έy^n*   *ó-m̀-nù-m̄*   *gìn-dí-∅*
        tomorrow   go-Impf-Impf-LogoS   say-PerfNeg-3SgS
        'He didn't say that he will go tomorrow.'

The 'say' verb may take a NP complement subsuming an unspecified quotation.

(xx2)   a.   *ìnjé*   *jìní-∅*
              what?   say.Perf-3SgS
              'What did he/she say?'

       b.   *cì-kámá*   *jìn-dí-∅*
              anything   say-PerfNeg-3SgS
              'He/She didn't say anything.'

17.1.3 Quotative clitics

17.1.3.1 Quotative subject clitic *wa→*

This clitic appears after independent pronouns functioning as subjects of a quoted clause. The usual pronominal-subject marking on the verb, as in main clauses, is blocked when such a clause-initial quotative subject is present (the verb takes the zero form, elsewhere marking 3Sg subject). Logophoric subject marking is redundant and optional, since there is a verbal suffix *-m* (pseudo-1Sg) for logophoric subject (xx1c). Nonpronominal subjects do not normally

get the clitic *wa→* (except when they function as quoted vocatives), and if they are plural they trigger 3Pl subject agreement on the verb (xx1d).

(xx1) a. *[í   wá→]   gùɲù-mbó   wà*
            [1Pl   QuotS]   thief-AnPl   Quot
            '(He_x) says we are thieves.'

    b. *[ú   wá→]   á-gì   zúgà-m-dɔ̀   wà*
            [2Sg   QuotS]   3LogoSg-Acc   know-Impf-Impf   Quot
            '(He_x) says that you know him_x.'

    c. *(á   wá→)   zímà-m-nù-m   wà*
            (LogoSg   QuotS)   be.sick-Impf-Impf-LogoS   Quot
            '(He_x) says that he_x is sick.'

    d. *[ùlé: (wá→)] á-gì   zúgà-m-d-ɛ̀   wà*
            [children (QuotS)] 3LogoSg-Acc know-Impf-Impf-3PlS   Quot
            '(He_x) says that the children know him_x.'

    e. *[ínè: wà→]   yǎy-yà-y   wà*
            [goat   QuotS]   go-Perf1a-3SgS   Quot
            'He/She said that the goat has gone.'

The tone of *wa→* is spread from the left. It is H-toned in (xx1a-d) after a H-tone, but L-toned in (xx1e) after a L-tone.

    Logophoric á wá→ frequently contracts to á→.

17.1.3.2 Clause-final quotative clitic *wà*

A quoted clause representing an actual reported speech event is most often followed by quotative clitic *wà* rather than by a conjugated 'say' verb. It is L-toned even after a H-tone, and it is not prolonged intonationally.

(xx1) a. *[ámádù   (wà→)]   sùgò-lú-∅   wà*
            [Amadou   (QuotS)]   go.down-PerfNeg-3SgS   Quot
            'He/She said that Amadou didn't come down.'
            (usually pronounced [sùgŏlwà])

    b. *ámádù   (á   wá→)   wá:-m̀-nù-m̄   wà*
            Amadou   (LogoSg   QuotS)   come-Impf-Impf-LogoS   Quot
            'Amadou_x said that he_x is coming.'

287

In (xx1b), the quoted logophoric subject *á wá→* is usually omitted since the verb is already marked for logophoric subject.

Clause-final *wà* is omitted when an overt, conjugated 'say' verb is present. It is also not used in negative, future, interrogative, or deontic frames ('He didn't say …'). It is not normally used when the quoted speaker is the current speaker ('I said …').

wà is also used in quoted fragments, for example to express surprise at what an interlocutor has said, or to sollicit confirmation ("Tomorrow?" [did you say?]).

When the quoted material ends in a clause-final emphatic, wà is positioned between the verb and the emphatic.

(xx2) a. àrⁿá   mìrⁿɛ́-tì-∅   wà   kòy
           rain(n)   rain.fall-Perf1b-3SgS   Quot   Emph
           '(He) said, it sure did rain.'

       b. gùɲù-mbó   yé   b-ɛ̀:   wà   dè
           thief-AnPl   Exist   be-3PlS   Quot   Emph
           '(He) said (warned), there are thieves (there)!'

17.1.4 Jussive complement (reported imperative or hortative)

17.1.4.1 Quoted imperative

A quoted imperative normally has two parts. First, the subject of the imperative verb (arguably, the original addressee) is followed by subject quotative particle *wà→*, which is consistently prolonged intonationally. This could be analysed as a quoted vocative, but it is somewhat pro forma since the original command usually did not follow an overt vocative. It is also used even when the command is conveyed by someone else ('Your father says for you to go see him').

This subject/addressee phrase is followed by the main part of the quoted imperative, followed by the unprolonged quotative particle *wà*. The original imperative verb is converted into a third person hortative verb form with a suffix like *-lú* (see §10.6.3.1 for the morphology). There is no marking of addressee plurality.

(xx1) a. *[mí   wá→]   [wɔ̀-lú   wà]*
           [1Sg   QuotS]   [come-3Hort   Quot]
           'He/She told me to come.'

b. *[ámádú   wà→]   [yǎy   wà]*
   [Amadou   QuotS]   [go3Hort   Quot]
   'He/She said for Amadou to come.'

c. *[ùlé: wá→]   [wɔ̀-lú   wà]*
   [children   QuotS]   [come-3Hort   Quot]
   'He/She said for the children to come.'

(xx2) is a quoted prohibitive. The same quotative subject phrase occurs at the beginning. The verb has prohibitive form. Before wà the usual prohibitive suffix *-lì* becomes *-lù*, and its vowel is frequently elided, with L-toned lateral followed directly by *wà*.

(xx2)   *[mí   wá→]   [wǎ:-lù   wà]*
        [1Sg   QuotS]   [come-Prohib   Quot]
        'He/She told me not to come.

17.1.4.2   Embedded hortative

The addressee (2Sg or 2Pl) is treated as the "subject" and is followed by the quotative subject particle. The singular-addressee hortative *-mɔ́* is converted into the third-person hortative form *-mú*, whose *ú* is usually elided before *wà*. Irregular *ḿbó* 'let's-2Sg go!' likewise becomes *ḿbú*, which is too short to allow elision of the *u* (xx1a). The plural-addressee hortative takes its regular form with *-mɔ́-ǹ* (xx1c).

(xx1)   a.   ḿbú   wà
             go.3Hort   Quot
             'He/She said, let's go!' (< *ḿbó*)

        b.   *nân   (ú   wá→)   zá   ɲá-m(ú)   wà*
             now   (2Sg   QuotS)   meal   eat-3Hort   Quot
             'He said, let's eat now!' (*ɲá-mɔ́*)

        c.   *nân   (bí   wá→)   zá   ɲá-mɔ́-ǹ   wà*
             now   (2Pl   QuotS)   meal   eat-3Hort-PlAddr   Quot
             'He said, let's eat now!' (*ɲá-mɔ́-ǹ*)

In the quoted hortative negative, the verb has the same hortative negative form as in main clauses (§10.6.4).

17.2 Factive (propositional) complements

17.2.1 'Know that …' complement clause

There is some variation in my data, likely due to the fact that 'I know' and the like can be parenthetical (unless negated or questioned).

In what appears to be the basic factive clause type, the subject is expressed preverbally (proclitic subject pronoun or full NP), in perfective contexts the verb takes perfective-2 form *-s-ɔ́* or *-s-ɔ̀*, and the only suffixal conjugation of the verb is 3Pl *-s-ɛ́* or *-s-ɛ̀* (short-voweled form). All other pronominal categories take the uninflected form *-s-ɔ́* or *-s-ɔ̀*.
.

(xx1) a. *ámádù*　　*[mí*　　*wɔ̀:-sɔ́]*　　*zúgà-m-dɔ̀-∅*
　　　　　Amadou　　[1SgS　　come-Perf2]　　know-Impf-Impf-3SgS
　　　　　'Amadou knows that I have come.'

　　　b. *[ùlé:*　　*wɔ̀:-s-ɛ́]*　　　　*zúgà-m-nù-m*
　　　　　[children　　come-Perf2-3PlS]　　know-Impf-Impf-1SgS
　　　　　'I know that the children has come.'

In the imperfective positive, imperfective negative, and perfective negative, the verb has its full conjugated form (e.g. 1Sg or 2Pl subject suffix).

17.2.2 'See (find, hear) that …'

17.2.2.1 Direct-perception type (relative-clause complement)

In this construction, the subject of the complement optionally also appears as the direct object of 'say', with accusative marking (xx1a). The complement clause proper takes the form of an imperfective adverbial clause. Pronominal subjects take proclitic form. In (xx1b), the nonpronominal subject 'children' is resumed by a proclitic 3Pl subject pronoun.

(xx1) a. *[jé*　　*ú*　　*jé-m̀]*　　　*ú-gì*　　*yí=bì-∅*
　　　　　[dance(n)　2SgS　dance(v)-Impf]　　2Sg-Acc　　see=Past-3SgS
　　　　　'He/She saw you (as you were) dancing.'

　　　b. *[ùlé:*　　*jé*　　*bú*　　*jé-m̀]*　　　*yí=bì-∅*
　　　　　[children　dance(s)　3PlS　dance(v)-Impf]　　see=Past-3SgS
　　　　　'He/She saw the children dancing.'

17.2.2.2 Recognition (inference, hearsay) construction

Since it is difficult in elicitation to distinguish 'see that' from the other 'see' construction (§17.2.2.1), where the 'see' expression could be taken as parenthetical, I elicited examples with negative clauses. Again, the data are somewhat messy. In (xx1a), the complement of 'see' has regular conjugated perfective negative form. However, in (xx1b-c) we have a preposed 1Sg pronominal subject, similar to the factive construction with 'know'.

(xx1) a. *yàgà-ndá*   *yí=bì-m*
           fall-PerfNeg.3PlS   see=Past-1SgS
           'I saw that they hadn't fallen.'

       b. *[mí   yàgà-lí]*   *yí=bì-∅*
           [1SgS   fall-PerfNeg]   see=Past-3SgS
           'He/She saw that I had not fallen.'

       c. *[mí   péddè   sèmà-lí]*   *yí=bì-∅*
           [1Sg   sheep   slaughter-PerfNeg]   see=Past-3SgS
           'He saw that I had not slaughtered the sheep-Sg.'

17.3   Verbal Noun (and other nominal) complements

Verbal noun complements generally construe the subordinated eventuality as an entity, with no commitment to its having been realized. The verbal noun is not determined or quantified over in any of my examples. Other nominals related to verbs, such as lexicalized cognate nominals (xx1a), may also be used instead of the actual verbal noun with *-lé* (xx1b), though the specific senses may be slightly different. Cognate nominals also co-occur with verbal nouns for many verbs (xx1b).

(xx1) a. *zóbú-gó*   *m̀bá-∅*
           running-InanSg   want-3SgS
           'He/She wants to run', 'He/She likes running.'

       b. *[zóbú-gó   zɔ́bú-lé]*   *m̀bá-∅*
           [running-InanSg   run-VblN]   want-3SgS
           'He wants to run (do some running).'

These nominal complements contrast most directly with those in -ŋgó, which are explicitly future-oriented and hypothetical.

17.3.1   Structure of verbal noun complements

The verbal noun can take its usual nonsubject complements such as object NPs and adverbials. In constructions where the two clauses have coindexed subjects, there is no additional subject marking in the verbal noun complement per se. In those where the subjects are not coindexed, the subject of the complement appears as a possessor of the verbal noun. Examples occur in the sections below on specific main-clause verbs.

17.3.2   'Prevent' (*gá:ndí*) plus verbal noun

Initial attempts to elicit 'X prevented Y from VP-ing' produced circumlocutions like that in (xx1a). The real 'prevent' construction is seen in (xx1b), with verb *gá:ndí* taking a verbal noun complement including a possessor representing the complement's subject.

(xx1)   a.   *[àrⁿá   ńné   wɔ̀:   kárⁿà]*
             [rain(n)   3SgS   come   Ppl.Perf]
             [ír-í: gín]   mìll-í:-yà-m
             [fear-MP   and.Past.SS]   go.back-MP-Perf1a-1SgS
             'It rained, I was afraid, I turned back.'

        a.   *àrⁿá   [yéŋgì   wɔ́:-lé   kɔ̌:]   gà:ndì-∅*
             rain(n) [yesterday come-VblN 1SgP.InanSg] prevent.Perf-3SgS
             'The rain prevented me from coming yesterday.'

17.3.3   'Dare' (*dàrá*) plus verbal noun or *-ŋgó* complement

'Dare to VP', contextually also 'have the nerve/effrontery to VP', is expressed by *dàrá*, cf. Jamsay dà:rá and Yanda Dom dàdú. The subject of the complement is coindexed with that of the main clause. The complement may be a verbal noun (xx1a) or a *-ŋgó* complement (xx1b).

(xx1)   a.   *[ŋ̀gɔ́   wɔ́:-lé]   dàrá-ŋgò:-∅*
             [here   come-VblN]   dare-ImpfNeg-3SgS
             'He doesn't dare come here.'

292

b. *[mí-gì   dɔá-ŋgó]   dárà-m-nù-wⁿ*
[1Sg-Acc   insult-xxx]   dare-Impf-Impf-2SgS
'You-Sg dare to insult me?'

17.3.4 'Consent' (*àb-í:*) plus *-ŋgó* complement

The transitive verb *àbá* 'receipt, accept, take possession of (sth given)' can be used with a complement in the sense 'consent'. In this context it usually takes the mediopassive form *àb-í:*. Since the complement generally denotes a possible future event, the complement is with *-ŋgó*. In (xx1a), the subject of the complement is coindexed with that of the main clause. In (xx1b), the subjects are not coindexed and an overt subject pronoun appears in the complement.

(xx1) a. *ámbúrú   [ŋgɔ́   wá:-ŋgó]   àb-ì:-sɔ́-m   wà*
       chief   [here   come-xxx]   accept-MP-Perf2-LogoS   Quot
       'The chief said he agreed (consented) to come here.'

   b. *[úló   mí   ɔ́ndú-ŋgó]   àb-ɛ̀:-lí-∅*
      [house 1SgS   build-xxx]   accept-MP-PerfNeg-3SgS
      'He didn't consent to (=refused) my building a house.

17.3.5 'Want' (*m̀bá* or *nàmá*) plus verbal noun or *-ŋgó* complemennt

The two 'want' quasi-verbs (§11.2.5.xxx) can take verbal noun complements. When the two clauses have coindexed subjects, no subject marking appears in the verbal noun complement (xx1a-b). If the complement has a noncoindexed subject, it appears as a possessor on the verbal noun (xx1c).

(xx1) a. *[tól   tó:-lé]   m̀bá-ɛ̀*
       [pounding   pound-VblN]   begin-Perf1b-3PlS
       'They want to pound (grain in mortar).'

   b. *[bàmàkɔ́   yáy-lé]   nàmá-∅*
      [B   go-VblN]   want-3SgS
      'He/She wants to go to Bamako.'

   c. *[mí   ᴴbá]   [bàmàkɔ́ yáy-lé   kɔ̌:]   m̀bá-∅*
      [1SgP ᴴfather] [B   go-VblN 1SgP.InanSg]   want-3SgS
      'My father wants me to go to Bamako.'

(lit. "wants my going to Bamako")

Alternatively, the *-ŋgó* complement for a different-subject combination (xx2a) or a same-subject *né* clause (xx2b) can be used.

(xx2) a. *[ŋ̀gɔ́   bírá: mí   bírá-ŋgó]   m̀bá-ɛ̀*
         [here   work(n)   1SgS   work(v)-xxx]   want-3PlS
         'They want me to work here.'

     b. *[ŋ̀gɔ́   bírá: bìrɛ̀   nɛ́]   m̀bá-ɛ̀*
         [here   work(n)   work(v)   and.Nonpast.SS]   want-3PlS
         'They want to work here.

17.3.6 'Forget' (*ìrɛ́*) with *-ŋgó* complement

In the construction 'forget to VP' with coindexed subject, the complement takes -ŋgó. This is of course distinct from a factive complement ('forget that…').

(xx1) a. *[wá:-ŋgó]   ìr-â:-y*
         [come-xxx]   forget-Perf1a-3SgS
         'He/She forgot to come.'

     b. *[ɛ́mnɛ́   ɛ́bá-ŋgó]   ìr-â:-dà*
         [B   go-xxx]   forget-Perf1a-3PlS
         'They forgot to buy milk.'

     c. *ɛ́yⁿ   wá:-ŋgó   írá-lì*
         tomorrow   come-xxx   forget-Prohib
         'Don't-2Sg forget to come tomorrow!'

17.3.7 'Be afraid to/that' (*ír-í:*) plus *-ŋgó* complement

The complement of 'be afraid' is with *-ŋgó*. If the subjects are coindexed there is no further subject marking in the complement (xx1a). If the subjects are not coindexed, the complement is extended by a minimal additional clause with *nà:* (xx1b). This future-oriented construction is distinct from the propositional complement in (xx1c), which takes the form of a regular main clause.

(xx1) a. *[ŋ̀gɔ́   wá:-ŋgó]   ír-í:-yà-y*
         [here   come-xxx]   fear-MP-Perf1a-3SgS

'He/She is afraid to come here.'

b. *[[ńné-gì   púŋgó-ŋgó]   mí   ɲà:]   ír-í:-yà-y*
   [[3Sg-Acc hit-xxx]   1SgS   take]   fear-MP-Perf1a-3SgS
   'He_x is afraid that I may hit him_x.'

c. *[[èdέ   wě:]   bárm-í:-yà-y]*
   [[child   1SgP.AnSg]   be.wounded-MP-Perf1a-3SgS]
   ír-í:-yà-m
   fear-MP-Perf1a-1SgS
   'I'm afraid (=worried) that my child has been hurt.'

17.3.8 'Begin' (*tɔ́:*) plus verbal noun

The verb 'begin' is *tɔ́:*. In the perfective, the regular form is *tɔ́:-tì-* (perfective-1b) in intransitive clauses (as in 'the movie has begun') as well as transitive ones (as in 'I began the work').

   With a VP as complement, the complement verb takes the verbal noun form with suffix -lé, see §4.2.2. The subjects of the two clauses are of course coindexed.

(xx1) a. *[tól   tó:-lé]   tɔ́:-ty-à:*
          [pounding   pound-VblN]   begin-Perf1b-3PlS
          'They started pounding (grain in mortar).'

       b. *[yà-ŋgá   yí-lé]   twá:-lì*
          [weeping(n)   weep-VblN]   begin-Prohib
          'Don't-2Sg start to weep!'

17.3.9 'Finish' (*dùmɔ́*, *dùm-dí*, *dὲ*)

The verb 'finish, end' is intransitive *dùmɔ́* (as in 'the movie is over') or transitive *dùm-dí* with a NP object (as in 'I finished the work'). With a VP complement these verbs are pre-empted by the recent past construction with *dὲ* (§10.xxx).

17.3.10 'Cease' (*dɔ̀gɔ́*) plus verbal noun

'Cease VP-ing', especially in the sense of definitively abandoning an activity or behavior, is expressed by *dɔ̀gɔ́* 'leave, abandon'. The complement is in verbal noun form.

(xx1) a. *[kɔ̀ndɔ́   ɲí-lé]   dɔ̀gɔ́-tì-m*
           [beer   consume-VblN] leave-Perf1b-1SgS
           'I have stopped drinking beer.'

        b. *[ùlé: púŋgú-lé]   dɔ́gà-n*
           [children   hit-VblN]   leave.Impf-Pl.Addr
           'Stop-2Pl beating children!'

17.4   Locative verbal noun or other nominal complement

17.4.1   'Help' (*bàrá*) with -ŋgo complement

bàrá 'add, increase' is also common in the sense 'help, assist (sb, in an undertaking)'. The recipient of the add is the direct object of *bàrá* in the main clause.

(xx1) a. *[úló   ɔ́ndú-ŋgó]   mí-gì   ᴸbàrà*
           [house   build-xxx]   1Sg-Acc   ᴸhelp.Imprt
           '(Please) help me build a house!'

        b. *[[bé: dì ᴸ   nɛ́]   wá:-ŋgó]*
           [[wood   carry.on.head ᴸ and.Nonpast.SS]   come-xxx]
           mí-gì   bàrá＝bì-∅
           1Sg-Acc   help=Past-3SgS
           'He helped me to carry the wood (and come) here.'

17.5   Direct chain complements

17.5.1   'Be able to, can' (*bɛ̌:*) plus directly chained VP

The verb *bɛ̌:* 'get, obtain' is directly chained (§15.xxx) with a preceding open-ended VP in the 'can VP' construction.

(xx1) a. *yágà   bèà-m-dɔ̀-∅*

fall   get-Impf-Impf-3SgS
'He/She can fall' (*yàgá*)

    b.   *súgò   bèà-m-dɔ̀-∅*
        go.down get-Impf-Impf-3SgS
        'He/She can go down' (*súgó*)

    c.   *yàgà   béà-ŋgò:-∅*
        fall   get-ImpfNeg-3SgS
        'He/She cannot fall' (*yàgá*)

    d.   *súgó   béà-ŋgò:-∅*
        go.down get-ImpfNeg-3SgS
        'He/She can't go down'

hà:jú wɔ̀ dímb-ì: bìyà-m-nù-wⁿ

17.6 Purposive, causal, and locative clauses

17.6.1 Purposive clause with -lé after {L}-toned verb

In this construction, the verb of the purposive clause takes {L}-toned form. The stem-final vowel shifts to /i/ where phonologically possible. The stem is followed by suffix *-lé*. If the consonantal environment permits, the stem-final /i/ is syncopated.

This is distinct tonally from the verbal noun with *-lé* following a {H}-toned stem (§4.2.2).

This purposive construction is readily elicited with a motion verb in the main clause. The subjects of the two clauses are normally coindexed, so the purposive clause does not have its own dedicated subject. Other non-verb constituents such as object NPs have their regular form.

(xx1) a. *[yɔ́   tò:-lé]   wɔ̀:-sɔ́-∅*
        [millet   pound-Purp come-Perf2-3SgS
        'She has come in order to pound (the) millet.' (*tó:*)

      b. *[[pèddè^L   ŏm]   èb-lé]   wɔ̀:-sɔ́-∅1*
        [[sheep^L   Prox.AnSg] buy-Purp] come-Perf2-3SgS
        'He/She has come in order to buy this sheep.' (*ébɛ́*)

      c. *[zá   ɲì-lé]   wɔ̀:-s-ɛ́:*

[meal   consume-Purp] come-Perf2-3PlS
'They have come in order to eat.' (*ɲɛ́*)

   d. *[kɔ̀ndɔ́   ɲì-lé]   wɔ̀:-sɔ́-m*
      [millet.beer   consume-Purp]   come-Perf2-1SgS
      'I have come in order to drink beer.' (*ɲɛ́*)

   e. *[èm-gó   èm-lé]   wɔ̀:-s-ɛ́:*
      [chat-InanSg   chat(v)-Purp]   come-Perf2-3PlS
      'They have come in order to chat.' (*émé*)

xx   'I will go there to eat.'

        'I am working so that my children will eat.'

17.6.2   Purposive clauses with *-ŋgo*

xx
   'They came to gather and take away the trash.'
   [nìmdé   bà: nɛ́]   zó-ŋgó wɔ̀:-s-ɛ́:

      'He came to seek money to go (away).'
      [bú:dù zɔ̀:   nɛ́]   ó-ŋgó wɔ̀:-sɔ́-∅

   'let's sit down to eat'
   [ób-é: ǹ]   zá   ɲá-môn

17.6.3   Clauses with Purposive postposition *dùgɔ̀* 'for'

The participial clause with -ŋgó may be followed by the purposive postposition
dùgɔ̀.

(xx1) *[[[ámbírí bènè] óré: ɔ́rá-ŋgó]   dùgɔ̀]*
       [[[chief   chez] words.InanPl speak-Ppl.Impf.InanSg] Purp]
      wɔ̀:-y
      come.Perf-1PlS
      'We have come to speak with the chief.'

298

17.6.4   Causal ('because') clause (*dùgɔ̀*)

The purposive postposition dùgɔ̀ also has causal ('because') functions. With clausal complements, the verb may be a main-clause imperfective (xx1a), an imperfective subordinated clause (xx1b), or a headless perfective relative (xx1c).

(xx1)   a.   *[[àrⁿá   mírⁿà-m-dɔ̀-∅]   dùgɔ̀]   nù-m*
             [[rain(n)   rain.fall-Impf-Impf-3SgS] because]   go.in.Perf-1SgS
             'I went in because it was raining.'

        b.   *[[ùlé: yàŋgá   bú   yá-m̀]   dùgɔ̀]*
             [[children   weeping   3PlS   weep-Impf]   because]
             nù-m
             go.in.Perf-1SgS

        c.   *[[ú   bòn   kárⁿà]   dùgɔ̀]   nù-m*
             [[2SgS   call   Ppl.Perf] because]   go.in.Perf-1SgS
             'I went in because you-Sg (had) called.'

18 Anaphora

18.1 Reflexive

The overt reflexives presented below compete with mediopassive verbs, e.g.
sém-í:-yà-m 'I was cut' or 'I cut myself'.

18.1.1 Reflexive object with *kúgɔ́* 'head'

Reflexive objects of the form 'my/your/his/her head' were elicited from one
informant. For third person, the 3Reflexive possessor form *à-gà* is used (xx1c),
see §18.1.3 below.

(xx1) a. *[kúgɔ́   kɔ̌:]*   bùndò-m
           [head   1SgP.InanSg]   hit.Perf-1SgS
           'I hit myself.'

       b. *[kúgɔ́   í-gɛ̀]*   bùndè-y^n
           [head   1Pl-Poss.InanSg] hit.Perf-1PlS
           'We hit ourselves.'

       c. *[kúgɔ́   à-gà]*   bùndè-∅
           [head   3Refl-Poss.InanSg]   hit.Perf-3SgS
           'He/She hit himself/herself.'

       d. *[kúgɔ́   ú-wɔ̀]*   búndó
           [head   2Sg-Poss.InanSg] hit.Imprt
           'Hit yourself!'

My primary assistant interprets such examples as literally referring to the body
part whenever a physical action is involved. He prefers mediopassive forms of
transitive verbs for reflexive function, e.g. púŋg-í:-yà-m 'I was hit' or 'I hit
myself.' However, he did allow 'head' reflexives in abstract contexts (xx2).

(xx2) *[kúgɔ́   ú-wɔ̀]*   zúgá
       [head   2Sg-Poss.InanSg] know.Imprt
       'Know thyself!'

18.1.2   Reflexive PP complement

The same construction with 'head' can be used as a postpositional complement. Examples are difficult to elicit but (xx1a-b) seem to work

(xx1)   a.   *bú:dù   [[kúgɔ́   kɔ̌:]   bɛ̀rⁿɛ̀]   tì-m*
             money   [[head   1SgP.InanSg]   Dat]   send.Perf-1SgS
             'I sent money to myself.'

        b.   *bú:dù   [[kúgɔ́   à-gà]   bɛ̀rⁿɛ̀]   tì-∅*
             money   [[head   3Refl-Poss]   Dat]   send.Perf-3SgS
             'He sent money to himself.'

18.1.3   3Reflexive possessor (*à-gà*)

Third person reflexive possessor is expressed by *à-gà* (§6.2.1.2) postposed to alienably possessed nouns. Singular and plural possessors are not distinguished in this category (xx1b,d), which also extends to logophorics. If the possessed noun is animate plural, the form is *à-gà-mbɔ̀* (xx1c). The antecedent is normally the clausemate subject. (xx1a) shows nonreflexive 3Sg possessor since it is not coindexed to the subject.

(xx1)   a.   *[pédé   wè-ń]   zɛ̌:-tù-m*
             [sheep   Poss.AnSg-3SgP]   bring-Perf1b-1SgS
             'I brought his/her sheep-Sg.'

        b.   *[pédé   à-gà]   zɛ̌:-tì-∅*
             [sheep   3Refl-Poss.AnSg]   bring-Perf1b-3SgS
             'He brought his (own) sheep-Sg.'

        c.   *[pédú-mbò   à-gà-mbɔ̀]   zɛ̌:-tì-∅*
             [sheep-AnPl   3Refl-Poss.AnPl]   bring-Perf1b-3SgS
             'He brought his (own) sheep-Pl.'

        d.   *ùlé:-mbò   [pédé   à-gà]   zɛ̌:-tì-yà*
             child-AnPl   [sheep   3Refl-Poss.AnSg] bring-Perf1b-3PlS
             'The children brought their (own) sheep-Sg.'

With an inalienably possessed noun, the 3Reflexive form is preposed *á* (§6.2.2.2).

(xx2) a. *[á*   ᴸ*bà]*   *yì-sɔ́-∅*
           [3ReflP   ᴸfather]   see-Perf2-3SgS
           'He has seen his (own) father.'

       b. *ùlé:*   *[á*   ᴸ*bà]*   *yì-s-ɛ́*
           children   [3ReflP   ᴸfather]   see-Perf2-3PlS
           'The children have seen their (own) father.'

18.1.4   No antecedent-reflexive relation between coordinands

There is no anaphoric possessor form in combinations of the type [X and X's Y]. If X is a third person referent, the regular nonanaphoric third person pronominal possessor forms are used. In (xx1), therefore, it is indeterminate whether the 'his' in 'his father' is coindexed with Amadou

(xx1) *[ámàdù∴*   *bà-ní∴]*   *yá-yà-dà*
        [A.&   father-3SgPoss.&]   go-Perf1a-3PlS
        'Amadou$_x$ and his$_{x/y}$ father have gone.'

18.2   Emphatic pronouns

Emphatic pronouns ('I did it myself', etc.) are morphologically associated with reflexives in English and many other languages, so they are described in this chapter.

perhaps two or three types (each gets a subsection)

a) adverbial ŋŋŋ '(by) oneself' after an independent pronoun;
b) numeral 'one' after independent pronoun ('1Sg one' = 'me, alone (by myself)'
c) possessed form of 'head' or other body-part noun ('my head' = 'myself'), though in some languages this might be the simple reflexive form (in which case it belongs in the preceding section); is e.g. 3Pl form 'their head' with singular 'head'?

discuss sense and pragmatic context of each type (for example, 'I did it myself' implies that it might have been expected that other people share in the work, but they did not, = 'I did it alone')

examples (including textual examples, with comments on context); include examples where the emphatic pronoun is direct object or other non-subject
 'He didn't send his son, (rather) he came himself.
 'We will do the farming ourselves.'
 'Hamidou went himself (in person).'
 'She didn't call my son, she called me myself (i.e. directly).'
 'You can't cut up the meat alone.'
 'I can't lift the water jar by myself.'
 'The children can't pick up the water jar by themselves (=without help).'
 'My father cannot do the farming by himself.'
 'We work for ourselves.' (lit.: "we do the work of our head" ?)
 'They work for themselves.'
 'I work for myself.'

18.3 Logophoric and indexing pronouns

18.3.1 Logophoric subject (*-m*)

When the logophoric is subject of its clause, it is expressed not by a clause-initial logophoric pronoun, rather by the suffix *-m* on the verb or other predicate. This is identical in form (including all details of allomorphy) to the 1Sg suffix *-m* used in nonquotative contexts. However, in this logophoric function it is can have a plural as well as singular antecedent, and for any pronominal person in the current speech setting. Note the multiple free translations of (xx1a-b). A clause-initial third-person logophoric pronoun can be added, provided that the referent is neither the current speaker nor current addressee (xx1b).

(xx1) a. *[ú   gì]   pùŋgò-lú-m   wà*
        [2Sg   Acc]   beat-PerfNeg-**LogoS**   say
        'They$_x$ say/said that they$_x$ didn't hit you-Sg.'
        'He/she$_x$ says/said that he/she$_x$ didn't hit you-Sg.'

     b. *(á   gà)   yé ^{L}wà:-m-nù-m   wà*
        (Logo   Topic) Exist ^{L}come-Impf-LogoS   say
        'They$_x$ say/said that, as for them, they$_x$ are/were coming.'
        'He/she$_x$ says/said that, as for him/her$_x$, he/she$_x$ is/was coming.'

304

The logophoric subject marked by *-m* may correspond to the current **addressee**. In this case, if there is an optional clause-initial subject pronoun, it is in the applicable 2Sg or 2Pl form.

(xx2) a. *[wá:-m̀-nù-ḿ   jìnì   gín]   wà:-lú-wⁿ*
        [come-Impf-**LogoS**   say   after] come-PerfNeg-2SgS
        'You-Sg said that you were coming, (but) you didn't come.'

      b. *[bí   wá:-m̀-nù-ḿ   jìnì   gín]   wà:-lí-yⁿ*
        [2PlS   come-Impf-**LogoS**   say   after] come-PerfNeg-2PlS
        'You-Pl said that you were coming, (but) you didn't come.'

The quoted person(s) may also be (or include) the current **speaker**. Again, the quoted clause has invariant *-m* suffix. The optional clause-initial subject pronoun is for 1Sg or 1Pl as applicable.

(xx3) a. *wá:-m̀-nù-ḿ   jìn-dí-m*
        come-Impf-**LogoS**   say-PerfNeg-1SgS
        'I didn't say that I would come.'

      b. *(í)   wá:-m̀-nù-ḿ   jìn-dí-yⁿ*
        (1PlS)   come-Impf-**LogoS**   say-PerfNeg-1PlS
        'We didn't say that we would come.'

'Amadou$_x$ said [Seydou$_y$ said [he-Logo will kill him-Logo]]
(perhaps ambiguous as to which antecedent each logophoric is coindexed to (Seydou kill Amadou, or Amadou kill Seydou); if reflexive pronoun is identical to logophoric pronoun, this sentence should also have two additional readings in which he-Logo is antecedent of him-Refl (Amadou kill Amadou, Seydou kill Seydou).

18.3.2 Nonsubject logophoric (*á*)

In nonsubject position, the logophoric pronoun is á. The difference between logophoric and nonlogophoric third person pronouns is brought out in the jussive examples (xx1a-c). In (xx1a-b), the recipient of the money is not coindexed with the quoted speaker, and regular 3Sg and 3Pl pronouns, respectively, express the recipient (in accusative case). In (xx1c), the recipient is

coindexed with the quoted speaker or speakers. There is no singular-plural distinction in this case.

(xx1) a. *[ńné   gì]   bú:dù   ńdí   wà*
           [3Sg   Acc]   money   give.Hort   Quot
           '(He) says to give money to her.'

       b. *[bú   gì]   bú:dù   ńdí   wà*
           [3Sg   Acc]   money   give.Hort   Quot
           '(He) says to give money to them.'

       c. *[á   gì]   bú:dù   ńdí   wà*
           [Logo   Acc]   money   give.Hort   Quot
           '(He$_x$) says to give money to him(self)$_x$.'
           or: '(They$_x$) say to give money to them(selves)$_x$.'

Logophoric *á* can be the object as in (xx1c) above, with optional accusative marking. It can also be topic, possessor, or postpositional complement (xx2a-c).

(xx2) a. *[á   gà]   ŋ́gɔ̀   bé-m-nù-ḿ   wà*
           [Logo   Topic]   over.there stay-Impf-Impf-LogoS   Quot
           'He$_x$ says that as for him$_x$, he$_x$ will stay there.

       b. [á ^{L}bà]   wǎ:-l-∅   wà
           [LogoP ^{L}father]   come-PerfNeg-3SgS   Quot
           '(He$_x$) says that his$_x$ father has not come.'

       c. *[mí   wà→]   zá   [á   bènè]   ɲè   wà*
           [1Sg   QuotS]   meal   [3Logo   chez]   eat.Perf Quot
           '(He$_x$) says that I ate at his$_x$ place (*chez lui*).'

Textual examples of logophoric *á* overwhelmingly involve third person quoted speakers, like 'he' in (xx3a) and in the preceding examples. My informant rejected logophoric á in self-quotations, so in (xx3b) the object is marked 1Sg rather than logophoric even though coindexed with the quoted speaker. He did use logophoric *á* with a second-person quoted speaker, but only as object (xx3c-d). He did not extend this use of *á* to possessors or to postpositional complements. Therefore 'your father' is nonlogophoric in (xx3d-f), and 'with you' is nonlogophoric in (xx3e). In other words, second person is intermediate between third and first persons in allowing logophoric forms.

(xx3) a. *[ìɲé   dùgɔ̀]   [í   wá→]*

[what? Purp] [1PlS QuotS]
[á gì] ^L*pùŋgò mà→ wà*
[Logo Acc] ^Lhit.Perf Q Quot
'Why did (he_x) say that we hit him_x?'

b. *[[ú wá→] mí púŋgó=bì] jìn-dì-ḿ*
[[2Sg QuotS] 1SgO hit=Past] say-PerfNeg-1SgS
'I didn't say that you-Sg hit me.'

c. *[ìnjé dùgò] [[í wá→]*
[what? Purp] [[1Pl QuotS]
[á gì] púŋgò] jìnù-ẁⁿ mà
[Logo Acc] hit.Perf] say.Perf-2SgS Q
'Why did you-Sg say that we hit you-Sg?'

d. *[ìnjé dùgò] [[ú ^Lbà] wà→]*
[what? Purp] [[2SgP ^Lfather] QuotS]
[á gì] púŋgò] jìnù-ẁⁿ mà
[Logo Acc] hit.Perf] say.Perf-2SgS Q
'Why did you-Sg say that your father hit you?'

e. *[ìnjé dùgò] [[ú ^Lbà] wà→] óré:*
[what? Purp] [[2SgP ^Lfather] QuotS]
[ú ní:] òrì] jìnù-ẁⁿ mà
[2Sg with] speak.Perf] say.Perf-2SgS Q
'Why did you-Sg say that your father spoke with you?'

f. *[ìnjé dùgò] [[[ú ^Lbà] gì]*
[what? Purp] [[[2SgP ^Lfather] Acc]
púŋgò-m] jìnù-ẁⁿ mà
hit.Perf-LogoS] say.Perf-2SgS Q
'Why did you-Sg say that you hit your father?'

18.3.3   Logophorics in stacked quotations

In (xx1) there is just one quotation, with Amadou as author. The verb in the quoted clause has the usual logophoric subject suffix *-m*. In (xx1b), Amadou is quoted as quoting a threat by Seydou against Amadou. The quoted material attributed to Amadou is indented, and that attributed to Seydou is doubly indented. The sense is 'A said [S said [S will kill A]]'. The verb 'kill' is in

logophoric-subject form by virtue of coindexation of the subject with 'Seydou', the closest quotative antecedent. But the object of 'kill' is also logophoric in form, as accusative *á gì*, by coindexation with the highest quotative antecedent (Amadou). My assistant did not allow the higher antecedent to bind the logophoric subject suffix in the presence of the lower antecedent. Therefore in (xx1c) the subject of 'die' is regular 3Sg, not logophoric. If the logophoric subject suffix is used, the subject of 'die' is understood to be the doctor (xx1d).

(xx1) a. *ámádù   a→   [sé:dù   gì]   já-m̀-nù-ḿ*
           Amadou   Logo.QuotS [Seydou Acc] kill-Impf-Impf-LogoS
           jìnì-∅
           say.Perf-3SgS
           'Amadou said that he would kill Seydou.'

       b. *ámádù*
           Amadou
              [sé:dù   wà→]
              [Seydou   QuotS
                   [[á   gì]   já-m̀-nù-ḿ]
                   [[**Logo**   Acc]   kill-Impf-Impf-LogoS]
              jìn-∅]
              say.Perf-3SgS]
           wà
           Quot
           'Amadou_x said that Seydou_y said that he_y would kill him_x.'

       c. *ámádù*
           Amadou
              [dògòtɔ́rɔ́   wá→]
              [doctor   QuotS]
                     tíbà-m-dɔ̀-∅
                     die-Impf-Impf-**3SgS**
              jìn-∅]
              say.Perf-3SgS]
           wà
           Quot
           'Amadou_x said that the doctor said that he_x would die.'

       d. *ámádù*
           Amadou
              [dògòtɔ́rɔ́   wá→]
              [doctor   QuotS]

       tíbà-m-nù-ḿ
       die-Impf-Impf-**LogoS**
    jìn-∅]
    say.Perf-3SgS]
  wà
  Quot
  'Amadou said that the doctor$_y$ said that he$_y$ would die.'

18.3.4 Same-subject relative clauses

When a nonsubject relative has the same third-person subject as the associated main clause, some Dogon languages require that the subject be marked by a 3Reflexive pronoun. This is not the case in TU, where the regular 3Sg or 3Pl subject pronoun is used in this case. An example is (xx1).

(xx1)   *[pèddè^L ńné   èbè^L kár^{n}à   ǹ]   yì-sɔ́-∅*
       [sheep^L 3SgS   buy^L Ppl.Perf.AnSg Def] see-Perf2-3SgS
       'He$_x$ saw (or: found) the sheep-Sg that he$_x$ had bought.'

18.4 Reciprocal

18.4.1 Simple reciprocals (*tèmbɔ̀*)

Reciprocals require a referentially nonsingular subject that is raggedly coindexed with a direct object, a postpositional complement, or the possessor of a nonsubject NP within the same clause. The Reciprocal morpheme is *tèmbɔ̀*, probably derived from an original plural noun meaning 'companions' or the like (cf. Jamsay *tɔ̌:-m*, Najamba *tòmbó*). *tèmbɔ̀* is preceded by a pronoun in (xx1a-b). For third person, the pronoun takes the 3Reflexive form *á* (xx1b).

(xx1) a. *í   tèmbɔ̀   púŋgó-tì-y^n*
           1PlS   each.other   beat-Perf1b-1PlS
           'We hit each other.'

      b. *ùlé: [zèjì^L gíní]*
           children   [fight(v)^L after]
           [á   tèmbɔ̀   púŋgó-tì-yà
           [3Refl   each.other   beat-Perf1b-3PlS
           'The children squabbled and hit each other.'

c. *[dɔ́gɔ́-mbɔ̀:   púlá-mbɔ̀:]*
   [Dogon-AnPl.&   Fulbe-AnPl.&]
   [á   tèmbɔ̀   pá:má-ŋg-è:]
   [3Refl   each.other   understand-Impf-3PlS]
   'Dogon and Fulbe do not understand each other (=do not get along).'

18.4.2 'Together' (*kàbù*)

As an alternative to a construction with the verb *mɔ̀:nd-í:* 'assemble, get together', one can express adverbial 'together' with an inalienably possessed form of *kàbù*, which has {L} tones.

(xx1)   a. *[í   kàbù]   nú-mɔ́-ǹ*
   [1PlP   together]   go.in-Hort-Pl.Addr
   'Let's go in together!'

   b. *[á   kàbù]   nú-yà-dà*
   [3ReflP   together]   go.in-Perf1a-3PlS
   'They went in together.'

á kàbù is used for human and animate third persons. For inanimates the form elicited was *yí-kà pú→*, containing *pú→* 'all'. The 2Pl form is *bí kàbù* 'you together'.

19 Grammatical pragmatics

19.1 Topic

19.1.1 Topic (*kɔ̀nì, gày ~ gà ~ kày ~ kà*)

The particles *kɔ̀nì* and *gày ~ gà ~ kày ~ kà* are interchangeable as Topic morphemes. The topicalized constituent is preposed to the clause and may be set off prosodically. *kɔ̀nì* is said to be used by old persons, while younger speakers have switched to the regionally widespread *gày* and variants.

(xx1) a. *[mí   kɔ̀nì]   wá:-ŋù-m*
         [1Sg   Topic]   come-ImpfNeg-1SgS
         'As for me, I'm not coming.'

      b. *[á   gà]   wá:-ŋù-m   wà*
         [Logo   Topic]   come-ImpfNeg-LogoS   say
         'He/she$_x$ says/said: as for him/her$_x$, he/she$_x$ would/will not come.'

Topic phrases are often set off prosodically and can be considered preclausal, like English *as for X*. However, a topic phrase can occasionally be case-marked as accusative, suggesting that it can function as a constituent within the clause.

(xx2) *[mí-gì   kày]   cì-kámá ^{L}ǹdà-l-∅*
        [1Sg-Acc   Top]   thing-any ^{L}give-PerfNeg-3SgS
        'Me [topic] he didn't give anything to.'

19.1.2 'Now' as topic (*ná:*)

Pre-sentential *ná: gày*, consisting of *ná:* 'now' and topic particle *gày*, is common in texts. It is something of a paragraph opener, though not as strictly reserved for narrative shifts as English unstressed clause-initial *now*. This topical 'now' is distinct from the ordinary temporal adverb *nân* 'now' (as in 'we are going to eat now'), see §8.4.6.1.

19.1.3 'Also' and 'even' (*là*)

This particle occurs phrase-finally, after a NP or adverbial. It is not attested after a verb or other predicate, but it can be added to a cognate nominal or other paired nominal to express the intended sense. The basic function is unemphatic 'also' but it is also used emphatically in the sense 'even'.

(xx1) a. *[ɛ́y^n là]   ò-gú ^{L}ɲà-m-nɛ̀-y^n*
        [tomorrow   too]   Prox-InanSg ^{L}eat-Impf-Impf-1SgS
        'Tomorrow too I will eat this.'

     b. *[mí ^{HL}ángè]   bàmàkɔ́ ^{L}ɔ̀-m̀-dɔ̀,*
        [1SgP ^{HL}friend]   Bamako ^{L}go-Impf-3SgS
        [mí   là] ^{L}ò-m-nù-ḿ
        [1Sg   also]   go-Impf-Impf-1SgS
        'My friend is going to Bamako, and I'm going (there) too!'

     c. *ńné-gì   ndì-ẃ   dè,   [mí-gì   là]   ńdá*
        3Sg-Acc   give.Perf-2SgS if,   [1Sg-Acc   also]   give.Imprt
        'If you give (some) to him/her, give (some) to me too!'

19.2 Preclausal discourse markers

19.2.1 'Well, …' (*hàyà*)

Preclausally, *hàyà* ~ *hà:* is a hesitation expression similar to 'well, …' This is a regionally widespread form.

    With H-tones, *háyá kòy* means 'OK, all right'. It is used for example as a positive response to a request or imperative.

19.2.2 Preverbal emphatic particle (*pɛ́y→*)

The emphatic element *pɛ́y→* '(not) at all' or 'nothing at all' occurs in various positions, ranging from clause-initial to pre-VP to preverbal. It can be thought of as a specialized expressive adverbial. It combines with a following negative clause.

(xx1) a. *ámádù   pɛ́y→   mí-gì ^{L}ǹdà-l-∅*
        Amadou   at.all   1Sg-Acc ^{L}give-PerfNeg-3SgS
        'Amadou didn't give me a damn thing.'

[also *ámádù mí-gì péy→* ^L*ǹdà-l-∅*, *péy→ ámádù mí-gì* ^L*ǹdà-l-∅*]

b. *yéŋgì   péy→ zá   * ^L*ɲà-lù-m*
   yesterday   at.all   meal   eat-PerfNeg-1SgS
   'Yesterday I didn't eat a thing.'
   [also *yéŋgì zá péy→* ^L*ɲà-lù-m*, *péy→ yéŋgì zá* ^L*ɲà-lù-m*]

19.2.3 'But …' (*mè:*, *kà:*)

'But' is either *mè:* (< French mais) or the regionally widespread *kà:* . In both cases, the particle may be grouped prosodically either clause-initially or at the end of the preceding clause. The latter seems to be preferred when the entire sequence is uttered fluently.

(xx1)   *wǒ:=bì-∅   mè:* / *kà:,   zá   ɲǎ-l-∅*
        come=Past-3SgS   **but** / **but**,   meal   eat.meal-PerfNeg-3SgS
        'He/She came but did not eat.'

19.2.4 'Lo, …' (*zákà*)

This particle is used in narrative to highlight a following clause denoting a surprising or climactic event. This too is a widespread regional form (pronounced *jákà* or *jágà* in some other languages).

19.3 Pragmatic adverbs or equivalents

19.3.1 'Again', 'not again'

'VP again' can be expressed with a same-subject anterior subordinated form (*gín* for past time frame, *né* for future) of the verb *píndé* 'go/come back, return'.

(xx1)   a. *[píndé   gín]   zèjí-yà-dà*
           [go.back   and.Past.SS]   fight(v)-Perf1a-3PlS
           'They fought again.'

        b. *[pìndè   nɛ́]   [zèjé-l   sèndèn]*
           [go.back   and.Nonpast] [fight(v)-Prohib   Pl.Addr]
           'Don't-2Pl fight again!'

313

19.4 'Only' particles

19.4.1 'Only' (*sày*, *tùrù*)

There are two 'only' particles, *sày* and *tùrù*. The former is a locally widespread form also found in Jamsay. *tùrù* is probably a variant of the numeral '1' (*túrè:*, *túr-gɔ̀*), see §4.6.1.1. As generally in Dogon languages, 'only' particles are phrased with NPs (including pronouns and adverbs) rather than with predicates. The pragmatic effect of predicative 'only' is in most cases easily expressed by adding the 'only' particle to a cognate nominal or other conventional object noun, as in (xx1).

(xx1) *jìrè-níŋgé*   *tùrù / sày*   *nî:-m-dɔ̀*
        sleep(n)   only   sleep(v)-Impf-3SgS
        'He just sleeps.'

Another way to express 'only' is with a negated main clause plus an 'if it is not …' clause specifying the exception.

(xx1) *[zìné=là:-∅*   *dè]*   *bírá:*   *bírá-ŋŋì-yⁿ*
        [rainy.season=it.is.not-3SgS   if]   work(n)   work-ImpfNeg-1PlS
        'We don't work unless it's the rainy season.'
        (= 'We only work in the rainy season.')

19.5 Phrase-final emphatics

These emphatic particles are arguably postclausal. In particular, when they are included in quoted clauses, quotative particle wà occurs after the verb (i.e. after the VP) while the particle follows; see (xx2) in §17.1.3.1.

19.5.1 Clause-final *kòy* 'sure' (firm agreement or answer)

The regionally widespread clause-final particle *kòy* emphasizes the truth of the proposition, confirming what the interlocutor has said or answering a polar interrogative with an answer more or less expected by the interlocutor. English adverbial *sure* captures the pragmatic nuance.

(xx1) A: *[bí*   *gènè]*   *àrⁿá*   *mìné=bì-∅*
            [2Pl   chez]   rain(n)   rain.fall=Past-3SgS
        B: *é→,*   *mìné=bì-∅*   *kòy*

314

yes,   rain.fall=Past-3SgS   **Emph**
A: 'Did it rain over by you-Pl?'
B: 'Yes, it sure did (rain)!'

19.5.2   Clause-final *dè* (admonitive)

This clause-final emphatic is used in warnings (cf. English clause-final low-pitched *now*) and in statements that may surprise or contradict what the addressee says or is thought to believe.

(xx1)   *[gùnù-mbó   ní:]   hákílè   kán   dè*
        [thief-AnPl   with]   attention   do.Imprt   Emph
        'Watch out-2Sg for thieves now!'

19.6   Greetings

The noun 'greeting, salutation' is *pǒ:* . The transitive verb 'greet (sb)' is *pór*. The two occur in the collocation *pǒ: pór* 'say/give a greeting'.
    The basic time-of-day greetings are in (xx1). The 'good morning' and 'good evening' greetings contain an element $mòy^n$ ~ $môy^n$ that is not recorded elsewhere. ná: is presumably related to *ná* 'spend the night (somewhere)', and dèⁿɛ̀ is similarly related to $dèr^né$ 'spend the mid-day'. Both greetings are therefore retrospective, roughly 'Did you pass the night well?' and 'Did you pass the mid-day well?' In the middle of the day, a non-time-specific 'hello!' expression is used. The reply is in all cases *ô→*, often with considerable intonational prolongation.

(xx1)   A: *ná: mòyⁿ*   'good morning!' (to one or more people)
        B: *ô→*   [reply]

        A: *pǒ→ỳ*   'hello!' (e.g. during the day)
        B: *ô→*   [reply]

        A: *dèrⁿè môyⁿ*   'good evening!'
        B: *ô→*   [reply]

In complete greeting sequences some additional elements may occur. Those I have heard are borrowed from Jamsay.
    Some location- (rather than time-) specific greetings are in (xx2). Those in (xx2a) have some variant of the term 'greet' or 'greeting' preceded by the noun

denoting the location. 'Field' as a regular noun is wòl-gó, plural wòlé:, so in this case there is an unexplained change in its form in the greeting. The cases in (xx2b) are of the form 'you and X', where ∴ (dying-quail intonation) applies to both conjuncts.

(xx2) a. *ǒl pò:*   'hello in the field!'
           ɛ́bɛ́ pǒ→ỳ   'hello in the market!'
           tìbà: pǒ: 'condolences!' ("death greeting!")

       b. *ú∴ bírá∴*   'hello at work!'
           ú∴ ày-nɛ́∴   'hello with fatigue!'

Some additional greetings are in (xx3).

(xx3) a. *úló dènd-é:*   'approach the house!' (welcome to a visitor)
           ámbá ú zérè   'God brought you (back)!' (to a returning traveler)
           zám dènd-é: 'arrive (there) in peace!' (to a departing traveler)

       b. *ámbá   bá-gò-né   gìré   tá:rè*
           God   next.year   eye   show
           'May God show next year to (your) eyes!' (said on major holidays)

Formal Arabic greetings connected with Islam are also in use

20 Text

subordination

When he has eaten we will go.
[ɲɛ́ dɛ̀   dɛ̀]   [í   ó-m-nɛ̀-yⁿ]

relative clauses (spatial adverbial relative)
[(gàndà)   gònsá:rⁿá   mí   yá-m=bú-gó   gándá]   wàgá
'The place where I used to see elephants is far away.'

[gònsá:rⁿá   mí   yì-tɛ́rɛ́-bú-gó   gándá]   wàgá
'The place where I once saw an elephant is far away.'

Text 1 Cows

nà:-mbɔ́   bè:ŋgó   yày-s-ê:,
cow-Pl   pasture   go-Perf2-3PlS,
dèndè-òdú   [séŋgé   nè]   wá:-m̀-dè,
dusk   [pen   Loc]   come-Impf-3PlS,
nà:-ùlé: kɔ́mbò-m-dè,
cow-children   tie-Impf-3PlS,
[[nàrⁿá   nì]   zàŋgè   nɛ́]
[[mother   Def] bring.to.mother   and.Nonpast.SS]
[kɔ̀mbù   nɛ́]   émnɛ́   émà-m-dè
[tie   and.Nonpast.SS] milk(n)   milk(v)-Impf-3PlS

‘The cows go to pasture. At dusk, they come (back) to the pen (made with thorn branches). They (=people) tie the calves. They bring (a calf) to the mother's side, and tie (it), and they draw the milk.’

Text 2 Cotton

(xx1) *yà-pὲ:-mbɔ́*   *mɔ́:ndú-gɔ́*   *mɔ̀:ndì-y-à:*   *dé,*
     woman-old-AnPl   meeting-InanSg   assemble-MP-xxx   if,
cὲmdέ   *pédà-m-dὲ,*
cotton   gin(v)-Impf-3PlS,
cὲmdέ   *pέdέ*   *d-à:*   *dé,*
cotton   gin(v)   RecPf-xxx   if,
pàndé   *pándù-m-dὲ,*
thick.thread   make.thick.thread-Impf-3PlS,
     'When the old women have gotten together together, they gin the cotton. When they have finished ginning the cotton, they make the thick thread (warp).'

(xx2) *pàndé*   *pàndù*   *d-à:*   *dé,*
     thick.thread   make.thick.thread   RecPf-xxx   if,
[bé: nὲ]   *tɔ́mbɔ̀-m-dὲ,*
[stick   Loc]   roll.up-Impf-3PlS,
[bé: nὲ]   *tɔ́mbù*   *d-à:*   *dé,*
[stick   Loc]   roll.up   RecPf-xxx   if,
[ὲdὲ-té: *gì]*   *ńdà-m-dὲ,*
[cloth-weave.Agent   Acc]   give-Impf-3PlS,
     'When they have finished making the thick thread, they roll it up on a stick. When they have rolled it up on the stick, they give it to a weaver.'

(xx3) *ὲdέ*   *téyà-m-dɔ̀,*
     cloth   weave-Impf-3SgS,
ὲdέ   *tέ*   *dὲ-∅*   *dὲ,*
cloth   weave   RecPf-3SgS,
ὲdέ   *dɔ́ná-ŋgô=:*
cloth   sell-Nom=it.is
     'He will weave it. When he has finished weaving the cloth, the cloth is for sale.'

animals: zɔ̀mɔ́-mbɔ̀,   ámbárá-mbɔ̀   tá:-mbɔ̀,   céŋúmbó,
    óy-mbò,   tólù-mbò, ɔ́mɔ́:mbɔ̀,   cé:

Text 3 Hare and Hyena

[this version incomplete]

(xx1) *zɔ̀mɔ̂-:*   *tǎ:-:*
     hare-&   hyena-&
     [ándá   *dàndá*   *ḿbú]*   *wá,*
     [field   hunt   go.3Hort]   Quot,
     Hare and hyena. (Hare said) "let's go hunting."

(xx2) *dàndá*   *yày-gín,*
     hunt(n)   go-and.DS,
     tǎ: *[sàlgí*   *ìbè-m]*   *wà,*
     hyena   [ablution   take-QuotHort]   Quot,
     zɔ̀mɔ́   *[á:*   *sàlgí*   *íbè-ŋù-m*   *wà,*
     hare   [LogoSg   ablution   take-ImpfNeg-LogoS]   Quot,
     tǎ: *íbè-m-nù-m*   *wà,*
     hyena   take-Impf-Impf-LogoS   Quot,
     'They went hunting, then hyena said: "let's do our ablutions (for prayer). Hare said he would not do ablutions. Hyena said he would do (them).'

(xx3) *[ínjé*   *nè]*   *tómbó-gín*   *nwì,*
     [water   Loc]   jump-then   go.in.Perf-3SgS,
     gò-gín   *[dwǎ-l*   *kàn-dí-∅*   *dé]*
     go.out-then   [arrive-PerfNeg   do-PerfNeg-3SgS   if]
     [lábà-l   *kàn-dì-∅],*
     [pass-PerfNeg   do-PerfNeg-3SgS],
 (Fulfulde: *búrà:y ɲáŋkà:y wà*)
     '(Hyena) jumped into the water (of a pond). When he came out, if it wasn't not enough, it wasn't not too much.'
     [Hyena didn't carefully perform ablutions on his hands, feet, and face as usual in Muslim prayer. Instead, he jumped in the water so his entire body was wet.]

(xx4) *ná:*   *kày,*
     now   Topic,
     [[cìndé: *nè]*   *óbí-y-gín]*   *[bàrí*   *bàrà-gín]*
     [[shade   Loc]   sit-MP-then]   [meeting   hold.meeting-then]
     éyⁿ   *ségírá-m*   *wà,*
     tomorrow   meet-Hort   Quot,
     'Now they (animals) sat down in the shade and held a meeting.'

Text 4 My trip

    [[dámbá   kɔ̌:]   nè]   gò-gín]
    [[village   1SgP]   Loc]   go.out-then]
[[[dàmbà   wàndá]   òdùbà:]   nè]   óm-sɔ̀-m,
[[[village   other]   road]   Loc]   go-Perf2-1SgS,
[dámbá   nè]   sé:w   dɔ̀-m,
[village   Loc]   in.health   arrive.Perf-1SgS,
nù-mbɔ́   sé:w   tèmbù-m,
person-AnPl   in.health   find.Perf-1SgS,
[[ùlò-sùgó   wě:]   bàŋà]   sé:w   tèmbù-m
[[house-go.down 1SgP] owner]   in.health   find.Perf-1SgS
    'I left my village and went on the road to another village. I arrived safely. I found the people there in good health. I found my host in good health.

Text 5 Wooden spoon

    [kìlá   kù:wɛ̀:rù]   lábá-sú-ŋgô=:
    [prosopis   spoon]   carve-Perf2-Pass
[[ɲè   [hákílé   wě:]   yì-sí-m-è:]
[[person   [mind   1SgP.AnSg]   see-Perf2-Impf-Ppl.AnSg]
ńdà-m-nù-m]   jìnì-gín]   zɛ̀:-m
give-Impf-Impf-LogoS]   say-then]   bring.Perf-1SgS
    'A spoon of prosopis (wood) was carved. I brought it, saying (=intending) to give it to someone whom my mind sees (=whom I like).'

Text 6 Snakebit

    dèndé   dámbá   mí   ó-m̀,
    night   village   1SgS   go-Impf,
nòndó   mí-gì   kúgó   ńné   kán   kàrⁿà,
snake   1Sg-Acc   hiss   3SgS   do   <mark>do</mark>,
[bé: ɲà:-m-nù-ḿ]   mí   jìn   kárⁿà,
[stick   pick.up-Impf-Impf-1SgS]   1SgS   say   do,
mí   céré-tì-∅,
1SgO   bite-Perf1b-3SgS
[úló   yày-gín]   óé   gàrⁿù-m,
[house   go-then]   medication   put.Perf-1SgS,
wàndá   cì-kámá   mí   kàn-dí-∅,

320

other	thing-any	1SgO	do-PerfNeg-3SgS,
ŋ́gò	*bàdὲ-∅*		
right.there	heal.Perf-3SgS		

    'As I was going along in the village, a snake hissed at me. I intended to pick up a stick, (but) it bit me. I went home and applied a remedy (powder). Nothing else happened to me, it healed right there.'

    [1Pl equivalent: [bé: ɲà:-m-nὲ-ý^n] í jìn kár^{n}à]

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Index

325

327

3. grammar

Nasalization-Spreading, 48
Negative
　　Imperfective, 370
　　Perfective, 368
　　Stative -lá-, 311, 422, 424, 433, 437
　　là, 410
　　là:, 407, 463
　　kùn-ó 'not be in', 421
　　-rá, 436
　　-rɔ́, 417-8
　　scope, 367-8, 460, 531
noun phrase, 224ff.
numeral, 182-8
　　bahuvrihi compounds, 220
obligation, 610
'oil for rubbing', 214
'only', 676-7
ordinal, 187
participle, 182, 491-9, 607
Passive, 332
Past, 375
perception verb, 605-6
Perfect
　　Experiential Perfect, 352
　　Recent Perfect, 353
perfective, 343-49
　　Marked, 347
　　unsuffixed, 344
　　unsuffixed, in participle, 497
　　unsuffixed, in narrative climax, 572
　　reduplicated, 355
　　negative, 368, 369
person
　　3rd as indirect 2nd, 384, 587, 663
　　implied 1st, 384-5
Plural, 140, 254
possessive, 234-42
　　predicates, 434-8
　　in 'before...' clause, 560-4
　　possessor relative, 513
postposition, 288-301
　　relative clause, 515-9