A Sketch of Ibi–so Morphology

a Toro–so dialect

Abbie Hantgan
Indiana University
ahantgan@indiana.edu
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1 Overview

The fieldwork on Ibi-so is being carried out under grant BCS 0853364 from the National Science Foundation (NSF), Documenting Endangered Languages (DEL) program, 2009 -12. The language consultant for Ibi-so is the tireless Nouhoum Kodio from Ibi (Commune de Sangha) and was carried out from June-July and August to mid-September 2012. Due to the instability and insecurity of working in Mali at this time, the data was gathered in Bobo-Diouallso, Burkina Faso. The other members of the collective project have been Jeffrey Heath, PI, Brian Cansler, Samantha Farquharson, Laura McPherson, Kirill Prokhorov, Steve Moran, and the late Stefan Elders.

Ibi-so [íbí–sɔ̀] is a Dogon language spoken in Mali the villages of Ibi, Simero, Madougou, Donno-sogou, Kansanwa, Bodiwaal, and other small villages in the plains. Outside villages call the language Tɔrɔ-sɔ, 'mountain-talk' but the endoynms refer to each village's language (saŋga-sɔ, etc).

This description is organized by morpho-syntactic category rather than feature as many morphemes have more than one morpho-phonological feature. The description is organized as follows: in §2 the relevant Phonological Features of the language are presented with cross-references to the Nominal Morphology in §3 the Verbal Morphology in §4. Section titles are hyperlinked throughout the manuscript so the reader is encouraged to navigate between related sections. Since the data for this description was gathered in a short amount of time, and plans to be continued, notes to the author are left throughout the manuscript and highlighted. Texts which were recorded, transcribed and entered into SIL Fieldworks, and glossed by Ibi-so informant, Nouhoum Kodio and given by his mother, who has resided her entire life in Ibi are included at the end of the description, followed by a lexicon. Comments are most welcome.

2 Phonology

2.1   Consonantal Inventory

The consonant inventory of Ibi-so is shown below.

	bilabial	dental	alveolar	postalveolar	palatal	velar	labiovelar
plosive	p b		t d			k g	
nasal	m		n		ɲ	ŋ	
fricative			s	ʃ ʒ		ɣ	
affricate				dʒ			
approximant			r		j		w
lateral approximant			l				

Most consonants are voiced intervocalically. Voiced velar stops spirantize between two-alike back vowels. Voiceless alveolar fricatives palatize before high, front vowels.

2.2   Vocalic Inventory

The vocalic inventory of Ibi-so is listed as follows in (1):

(1)   Vowel Inventory

/i e ɛ a o ɔ u/

There is a surface [±ATR] contrast between the mid vowels and there is evidence to support that there is an underlying [±ATR] distinction among high and possibly low vowels as well.

Vowel length is phonemic except in the case of monosyllabic words which must be bimoraic due to a minimal word condition. Nasalized vowels were not found among the lexical items elicited, however, the following verbs behave as though they are vowel-final phonologically in that the word-final nasal is not sufficient to resolve the minimal-word condition and are therefore transcribed with a nasalized vowel although it is difficult to determine the status of the nasal.

(2)   Nasalized vowels

a.   dìí^n lie down

b.   níì^n breathe

c.   téè^n chew

d.   déé^n sit

e.   dáá^n hunt

The status of nasal-consonant clusters is discussed below.

2.3   Phonological Processes

In this section the key phonological processes which are discussed in this description are presented. Examples from the following chapters are linked below each subsection.

2.3.1   Clitic and suffix

A clitic differs from a suffix in Ibi-so based on its phonological behavior. Clitics do not harmonize with a root nor does a clitic invoke vowel harmony. Some clitics such as the Plural Clitic may carry their own tones. The Plural Suffix which is attached to certain nouns surfaces with a low tone as does the Plural Clitic. The difference in the two morphemes can be found among Agentive Nominals. The plural suffix [–w] precedes the agentive clitic [=ǹ].[1]

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[1] The morphological consequences of this demarcation are discussed in the following chapters.

2.3.2 OCP Nasal

Additionally, a nasal suffix is impermissible when the root to which it attaches contains a nasal. The Possessive Pronoun Suffix shows an example of allophony between an alveolar nasal [n] and the labiovelar approximant [w]. The Causative is an example of nasal-deletion following a root with a nasal. It is proposed that nasal segments may not co-occur stem-internally. This rule applies to derived environments only as root-internally all polysyllabic roots which begin with a nasal are followed by another nasal. Examples are found in the lexicon, with one counterexample, a borrowing from French, [músɔ̀ɔ̀rɔ̀] 'shawl'.

2.3.3 Nasalization Spreading

Nasalization spreading also occurs at morpheme boundaries. The Reversive Suffix is an example of nasalization spreading from a nasal in the root to the rhotic initial consonant of the suffix [ru]. The Perfective negative aspect clitic has the same shape as the Reversive [ru], yet does not take nasalization from a root unless pronounced pronominals are present in the stem. The Transitive suffix also surfaces with a similar morpheme [ru], yet its behavior differs slightly from the above two mentioned morphemes in that if it follows a root without a nasal, it appears as [nu], and as [r̃u] after a root with a nasal. The transitive suffix vowel also harmonizes with a root whereas the above two do not.

2.3.4 Vowel Harmony

The difference between [+ATR] and [−ATR] vowels is slight and was often difficult to accurately determine. It is possible that the target of harmony is therefore height rather than [±ATR]. Word roots are harmonic for height and [±ATR] with exceptions occurring before nasal codas. Suffixes which trigger vowel harmony in verbs include the derivational suffixes

Transitive, Reversive, and Causative, while inflectional suffixes do not trigger or undergo harmony apart from the final vowel which is epenthesized to the verb root.

2.3.5 Vowel Epenthesis

Obstruent codas are dispreferred in the language. An exception is found among stop codas found in the Perfective aspect. Otherwise, among the majority of stems in the language, which ban obstruent codas a vowel is inserted according to the [ATR] and height/backness values of the vowels in the root, presented in the Vowel Template.

2.3.6 Status of the Mora

Since the above monosyllabic roots are interpreted as being monomoraic, no words may surface with super heavy syllables. Examples are found among Reduplicated Perfective aspect, wherein the reduplicant is a copy of the root-initial consonant plus a high vowel (with backness harmony to the root). A bimoraic root then looses a mora if it would otherwise create a super-heavy syllable.

2.3.7 Tone

Although lexical tone on Noun and Verb roots is unpredictable, as may be noted in the lexicon, most verb stems have a falling tonal contour, where the verb root vowel surfaces with a high tone no matter what its underlying tone and the final mora of the stem surfaces with a low tone. For example, if a stem such as the Progressive Aspect (suffix [–ɛ]) is inflected with the first person singular person suffix [Cv́C–ɛ́–m̀] the person suffix surfaces with a low tone, but with the third person singular suffix, a null morpheme, the low tone falls on the progressive suffix vowel [–ɛ̀]. The falling tonal melody can also be seen as phrase-final lowering, whether a root is accompanied by a suffix or a clitic, as shown in the examples of Focus Possession.

Noun root-tone lowering is found among nominal forms, including the Possessive paradigms. Certain verb stems, for example the Imperative Mood and Past tense which carry a high tonal melody on the verb stems, are susceptible to depressor consonants, whereas initial-voiced stops are followed by a low tone, and initial-voiceless stops are followed by a high tone.

3 Nominal Morphology

3.1   Introduction

Ibi-so, like other Dogon languages, is an aggluntinating language with inflection and derivation processes occurring through the affixation of morphemes to a root. Nouns in Ibi-so are morphologically affected in the following ways:

Singular and Plural noun stems are presented in §3.2 and §3.3 covers various processes concerning Possession, particularly focusing on tonal effects.   Demonstratives are covered in §3.4 and Coordinating conjunctions in §3.5. Adjectives, including Numerals are presented in §3.6. The process of forming Compounds is described in §3.7 and Reduplicated Nouns are presented in §3.8. The process by which a verbs are changed into Agentive Nominals is shown in §3.9 and the instance of Case marking: Accusative is in §3.10.

3.2   Singular and Plural

Most nouns are marked as being plural with the plural clitic [=bɛ].

(3)   Plural Clitic

	Noun	Plural	Gloss
a.	ɲéŋὲ	ɲéŋὲ=bɛ̀	fly
b.	ìʤú	ìʤú=bɛ̀	dog
c.	sìsá	sìsá=bɛ̀	bird
d.	gámmà	gámmà=bɛ̀	cat
e.	péʤú	péʤú=bɛ̀	sheep
f.	tíbú	tíbú=bɛ̀	rock
g.	kíʤέ	kíʤέ=bɛ̀	thing
h.	tíìⁿ	tíìⁿ=bɛ̀	tree

i.   gínní   gínní=bὲ   house

j.   tír̃ù   tír̃ù=bὲ   wood (firewood)

The plural marker is considered a clitic as it has no tonal or vocalic impact on the noun-stem. No animacy distinction has been found yet in Ibi-so, as shown in the animate (a - e) and inanimate nouns (f - j).

Some human nouns take the plural suffix [–w] or are suppletive.

(4)   Irregular nouns ('woman', 'child', 'person', 'thing')

	Noun	Plural	Gloss
a.	ínnὲ	ínnὲ–ẁ	person
b.	ɲáár̃à	ɲá–ẁ	woman
c.	ájnὲ	ár̃ὲ–ẁ	man
d.	íì	úr̃ù	child
e.	íì jàá	úŋɲɔ̀	girl
f.	ájnὲ íì	úr̃ú=bὲ	boy

(note that 'child' in the compounds boy' and 'girl' are reversed)

g.	kídʒέ	same	thing

Some nouns which refer to human terms are (4a - c) are marked with [–w], the singular nouns (d - f) and change in the stem from their plural counterparts. Note that the Agentive Nominals below are marked with the [–w] for plural as well. The fact that all these noun roots have a nasal nasalized or a segment may also contribute to the fact that the plurals vary, although most nouns are not irregular for pluralization as shown above.

Although some Dogon languages do have animacy and other noun class distinctions, the only possible residual noun class marker thus far encountered is the bound noun-ending [nɛ].

12

(5)   Nouns which end in [nɛ]

	Noun	Gloss	Plural
a.	àjnɛ̀	man	ár̃ɛ̀–ẁ
b.	ínnɛ̀	person	ínnɛ̀–ẁ
c.	dògò kínɛ́	back	dògò kínɛ́ ʤɔ́jí
d.	kínɛ̀	liver	kínɛ̀ ʤɔ́jí
e.	nínnɛ̀	tongue	nínnɛ̀ ʤɔ́jí
f.	bénnɛ̀	rib	bɛrɛ bénnɛ̀/ bénnɛ̀ ʤɔ́jí

Although many of these nouns are body parts, the distinction does not seem to be based on inalienablity as inalienable plural nouns take the regular plural suffix. The words which refer to non-body parts (5a - b) are marked with the irregular plural suffix [–w]. Note than most of the nouns with [nɛ] endings are mass nouns, taking the adjective 'a lot' [ʤɔ́jí] (5c - f) to indicate more than one.

3.3   Possession

Among possessed nouns, there are tonal changes. Particularly, a NP as prenominal possessor causes nouns to lose their tones and revert to a default low tone.

The possessive pronouns for nouns other than kin terms are listed here. Note the allomorphy in the second person singular suffix [w ~ n] which is mentioned above.

(6)   Possessive Pronoun Suffix

a.	ɛ̀r̃ɛ́	goat	b.	péʤù	sheep
	ɛ̀r̃ɛ́–mɔ̀	ɛ̀r̃ɛ́–ùmɔ̀		péʤì–mɔ̀	péʤì–ùmɔ̀
	ɛ̀r̃ɛ́–ẁ	ɛ̀r̃ɛ́–ɛ̀w̃		péʤù–ǹ	péʤì–ɛ̀w̃
	ɛ̀r̃ɛ́–wɔ̌	ɛ̀r̃ɛ́–bòⁿ		péʤì–wɔ̌	péʤì –bòⁿ

13

The possessor morphemes all have low tones except for the third person singular. A noun possessor morpheme is not altered tonally from its citation form, however note that the final vowel in (6b) 'sheep' is fronted. A possessed noun does not undergo vowel harmony; compare the vowels in (6a) with (6b). Since the noun is auto-segmentally unaffected by the possessor morpheme, it is considered a [Clitic](#).

Segmentally, the example in (7a) appears with [w] as the second singular possessive clitic, while the example in (7b) surfaces with [n]. Shown here in further examples, [n] is the second person singular possessive allomorph following nouns without nasals.

Nouns without a nasal in the root take the suffix [–ǹ] as the second singular possessive.

(7)   Possessive Pronoun Clitic Allomorphy: [n]

	Noun	2S.POSS	Gloss
a.	ìʤú	ìʤú–ǹ	dog
b.	tórù	tórú–ǹ	bull
c.	péʤù	péʤú–ǹ	sheep
d.	bɔ̀gí	bɔ̀gí–ǹ	belly button

Nouns with a nasal in the root take the second singular possessive suffix allomorph [–ẁ].

(8)   Possessive Pronoun Clitic Allomorphy: [w]

	Noun	2S.POSS	Gloss
a.	náà	náá–ẁ	cow
b.	gámmá	gámmá–ẁ	cat
c.	sɔ̀ŋɔ́	sɔ̀ŋú–ẁ	horse
d.	áɲà	áɲá–ẁ	mouth
e.	bàɲá	bàɲá–ẁ	eating bowl

Nouns with a nasalized liquid in the root also take the suffix allomorph [–ẁ].

(9)   Possessive Pronoun Clitic Allomorphy: [w]

	Noun	2S.POSS	Gloss
a.	àr̃á	àr̃á–ẁ	rain
b.	ɛ̀r̃ɛ́	ɛ̀r̃ɛ́–ẁ	goat
c.	sár̃á	sár̃á–ẁ	broom

However, if a nasal in the root is followed by a consonant, in most cases, the allomorph [–ǹ] is suffixed to the root.

(10)   Possessive Pronoun Clitic Allomorphy: [n]

	Noun	2S.POSS	Gloss
a.	kínɛ́ lómbó	kínɛ́ lómbó–ǹ	heart
b.	ʤàndúrú	ʤàndúrú–ǹ	donkey
c.	nàà gùrɔ́w	nàà gùrɔ́w–ǹ	heifer

In some words, the suffix allomorph [–ẁ] appears even if there is a consonant following a root-internal nasal (10a - b). Cases such as (10b) are very rare among polysyllabic roots, this word being a borrowing from French, in that in the entire lexicon this was one the only instances of a word-initial nasal that is not followed by another nasal in the root.

(11)   Possessive Pronoun Clitic Allomorphy: [w]

	Noun	2S.POSS	Gloss
a.	kámbé	kámbé–ẁ	talisman
b.	káránkáá	káránká–w̃	vestibule
c.	músɔ̀ɔ̀rɔ̀	músɔ̀ɔ̀rɔ́–ẁ	shawl
d.	ʒáŋgínì	ʒáŋgíní–ẁ	body
e.	sármɛ̀	sármɛ́–ẁ	corn

An analysis of this issue will be examined in another manuscript. What remains curious is as to why the nouns 'horse' and 'sheep' change their final vowels from before the possessive suffx. Other nouns which end in a high vowel do not show this same alternation ([íì–ẁ] 'my child').

To indicate focus on the possessed noun, '*my* X', the suffix [jì] is attached to the possessive pronoun suffix.

(12)   Focus Possession

a.	horse /sɔ́ŋù/	sɔ̀ŋù–má–jì	sɔ̀ŋù–ómó–jì
		sɔ̀ŋù–ú–j̃ì	sɔ̀ŋù–έ–w̃ì
		sɔ̀ŋù–w̃ɔ́–j̃ì	sɔ̀ŋù–bɔ́–j̃ì
b.	goat /ὲr̃έ/	ὲr̃ὲ–má–jì	ὲr̃ὲ–ómó–jì
		ὲr̃ὲ–ú–j̃ì	ὲr̃ὲ–έ–w̃ì
		ὲr̃ὲ–w̃ɔ́–j̃ì	ὲr̃ὲ–bɔ́–j̃ì
c.	cat /gámmá/	gàmmà–má–jì	gàmmà–ómó–jì
		gàmmà–ú–j̃ì	gàmmà–έ–w̃ì
		gàmmà–w̃ɔ́–j̃ì	gàmmà–bɔ́–j̃ì
d.	dog /ìʤú/	ìʤù–má–jì	ìʤù–ómó–jì
		ìʤù–ú–j̃ì	ìʤù–έ–w̃ì
		ìʤù–w̃ɔ́–j̃ì	ìʤù–bɔ́–j̃ì

Compare the possessor clitic above with the focus clitics here. While the possessor clitics above all carry low tones, yet before the focus marker [jì], they are all high. Further, note the change in [ATR] values of the possessor clitics and the nasalization (compare 12a - c with

12d) of the focus marker. Thus, it is suggested that the possessive pronoun clitics have underlying high tones which undergo phrase-final lowering word-finally.

While nouns including inalienables are marked with the above clitics as possessors, kin terms or familial relations are marked by <u>pronominal morphemes</u>. Although the pronominal morpheme does not alter the tones of a root to which it precedes, in the case of possessive constructions, the tones the possessed noun are lowered.

(13)   Possessive Pronoun: kin terms

a.   sùŋúr̃ó   younger brother

 mú sùŋùr̃ò ɛ́mɛ̀ sùŋùr̃ò

 ú sùŋùr̃ò ɛ́ sùŋùr̃ò

 wǒ sùŋùr̃ò bɛ́ sùŋùr̃ò

b.   bórù   paternal uncle

 mǔ bòrù ɛ́mɛ̀ bòrù

 ú bòrù ɛ́ bòrù

 wó bòrù bɛ́ bòrù

c.   nìŋú   maternal uncle

 mǔ nìŋù ɛ́mɛ́ nìŋù

 ú nìŋù ɛ́ nìŋù

 wó nìŋù bɛ́ nìŋù

The possessive pronoun is used in the same manner with familial relations, lowering the tone of the noun, and the subsequent plural clitic.

(14)   Possessive Pronoun with Plural for familial relations

	gloss	noun	1ˢᵗ POSS	1ˢᵗ POSS=PL
a.	friend	áȓ̃ŋɛ́	mǔ àȓ̃ŋɛ̀	mǔ àȓ̃ŋɛ̀=bɛ̀
b.	mother	náá	mǔ nàà	mǔ nàà=bɛ̀
c.	father	bàà	mǔ bàà	mǔ bàà=bɛ̀

As with the pronominal constructions above, a noun which precedes another noun and acts as a possessor lowers the tone on the noun, illustrating that the tone-lowering is triggered by the possessive construction rather than a possessive morpheme.

(15)   NP as prenominal possessor

gìníí	ɲàáȓ̃á	ǎjnɛ̀
house	woman	man

a.	séèdù gìnnì	Seydou's house
b.	ɲàáȓ̃á gìnnì	a woman's house
c.	ǎjnɛ̀ gìnnì	the man's house

Here we see that when a noun acts as a prenominal possessor, it deletes the tones on following noun, yet the possessor noun's tones are unaltered.

The scope of the tonal deletion of a constituent which follows a noun possessor is shown here, beginning with a noun which is modified by an adjective and then a number.

(16)   Possessed noun and modifier

gìníí	díjɛ̀	dɛ̀míȓ̃ɛ́	péʤù
house	big	fat	sheep

a.	gínnì díjɛ̀	big house
b.	séèdù gìnnì dìjɛ̀	Seydou's big house
c.	séèdù pɛ̀ʤù dɛ̀mìȓ̃ɛ̀	Seydou's fat sheep

A modifier which follows a possessed noun also undergoes tone lowering.

(17)   Possessed noun, modifier, and numeral

a.   séèdù gìnnì kúrɔj   Seydou's six houses

b.   séèdù gìnnì dìjɛ̀ kúrɔj   Seydou's six big houses

c.   séèdù pɛ̀ʤù dɛ̀mìr̃ɛ̀ kúrɔj   Seydou's six fat sheep

As shown in §(23) numerals do not affect the tone of the noun they modify nor are they affected. Here, we see that the numeral continues to be independent of the possessor-noun-modifier phrase.

(18)   Deixis

a.   séèdù gìnnì n kɔ̂   a house of Seydou there

A deixis marker is not affected by the tonal-deletion of the noun possessor phrase.

(19)   Pronoun plus classifier as post-nominal possessor

Phrase	Gloss
a. gìnní=mɔ̀	my house
b. pɛ́ʤú=bɛ̀	sheep (PL)
c. pɛ́ʤù=mɔ̀	my sheep
d. pɛ́ʤù dɛ́mìr̃ɛ̀=mɔ̀	my fat sheep
e. pɛ́ʤù dɛ́mìr̃ɛ̀=mɔ̀ kúrɔj	my six fat sheep

As shown above, the Possessive Pronoun Suffixs and Plural Clitics, here as (19a - c), do not undergo or cause tonal affects on the noun except that there is a phrase-final tone lowering effect. Note that when the nominal is possessed by a possessive pronoun, even with an intervening adjective (19d) or a following numeral (19e), the tones on each constituent are unaffected.

3.4 Demonstratives

As shown in the demonstrative examples here, the tones of the noun are unaffected by the locative demonstrative.

(20) Locative demonstratives

	Phrase	Gloss		Phrase	Gloss
a.	ɛ̀r̃ɛ́ úw̃ɔ̀	a goat here	d.	ɛ̀r̃ɛ́ jéwò	a goat there
b.	pédʒù̠ úw̃ɔ̀	a sheep here	e.	pédʒì̠ jéwò	a sheep there
c.	sɔ̀ŋú úw̃ɔ̀	a horse here	f.	sɔ̀ŋú jéwò	a horse there

Also note the allomorphy in (20b, e) whereas the final high vowel of the word 'sheep' fronts before the proximal demonstrative.

3.5 Coordinating conjunctions

To conjoin two nouns in a phrase, the conjunction [lèè] is used.

(21) Conjunction 'and'

	Phrase	Gloss
a.	kàdíjà lèè àdámà lèè	Kadija and Adama
b.	ɲàár̃á lèè ájnɛ̀ lèè	a woman and a man
c.	ú lèè mú lèè	you and I
d.	kàdíjà lèè nú lèè íbɛ̀ jáàj	Kadija and Nouhoum left
e.	ɲàár̃á lèè ájnɛ̀ lèè ʥé–ʥɛ́–wŋg–ɛ̀	a woman and a man are arguing

The conjunction 'and' is used after each noun (21a - b, d - e) or prounoun (21c) in a coordinating conjunction phrase. Additionally, note that while the 3rd person plural pronoun is repeated after the subject noun phrase before the verb which is marked for plural in (d), a similar phrase in (21e) does not require the same pronoun.

3.6   Adjectives

Among unpossessed adjective phrases, the final tone of the noun becomes low if it is not already, and there is no change on the modifier.

(22)   Tone on adjective phrases

	Noun	Adjective	Black	White	Big
a.	goat	ɛ̀r̃ɛ́	ɛ̀r̃ɛ̀ dɛ̀mír̃ɛ́	ɛ̀r̃ɛ̀ pírú	ɛ̀r̃ɛ̀ géw̃ù
b.	sheep	pédʒù	pédʒù dɛ̀mír̃ɛ́	pédʒù pírú	pédʒù géw̃ù
c.	horse	sɔ́ŋù	sɔ́ŋù dɛ̀mír̃ɛ́	sɔ́ŋù pírú	sɔ́ŋù géw̃ù

The tone of the example 'goat' (22a) shows the process of final tone-lowering before an adjective most clearly as the final syllable is underlyingly high.

Here, numerals are listed. Note that in counting, the number 'one' differs from its citation form.

(23)   Numerals: túrù (tíì)

	Noun	Noun Numeral	Gloss
a.	pédʒú	pédʒú túrù	sheep
b.	ɛ̀r̃ɛ́	ɛ̀r̃ɛ́ túrù	goat
c.	ɲàár̃á	ɲàár̃á túrù	woman
d.	ǎjnɛ̀	ǎjnɛ̀ túrù	man

Neither the tone on the numeral nor the noun is affected by the addition of a number.

The numerals from '2' to '10' are shown as follows:

(24)   '2' to '10'

lɛ́j

tàánú

nàjí

nùmɔ́r̃ɔ́

kúròj

sɔ́j

gáárà

túwɔ́

pérù

(25)   '11' to '5000'

pérú gúú tír sìgɛ̀	11	pɛ́ númɔ̀r̃ɔ̀	50
pérú gúú léj sìgɛ̀	12	pɛ́ númɔ́r̃ɔ́ tír sìgɛ̀	51
pérú gúú táánù sìgɛ̀	13	pérú kúròj	60
pérú gúú náj sìgɛ̀	14	pérú kúròj tír sìgɛ̀	61
pérú gúú nùmɔ́r̃ɔ́ sìgɛ̀	15	pɛ́ sɔ́j	70
pérú gúú kúròj sìgɛ̀	16	pɛ́ sɔ́j tír sìgɛ̀	71
pérú gúú sɔ́j sìgɛ̀	17	dɔ̀gɔ̀ súŋú	80
pérú gúú gáárà sìgɛ̀	18	dɔ̀gɔ̀ súŋù túrù	81
pérú gúú túwɔ́ sìgɛ̀	19	dɔ̀gɔ̀ súŋù pérú	90
pɛ́ léj	20	dɔ̀gɔ̀ súŋù pérùgù tír sìgɛ̀	91
pɛ́ léj tír sìgɛ̀	21	súŋú	100
pɛ́ táánù	30	súŋú túrú	101
pɛ́ táánù tír sìgɛ̀	31	súŋú léj	200
pɛ́ náj	40	súŋú léj támá túrù	201
pɛ́ náj tír sìgɛ̀	41	súŋú léj támá léj	202
		súŋú tàànù	300
		mùŋú	1000
		mùŋú nùmɔ̀r̃ɔ̀	5000

3.7   Compounds

Compounds in Ibi-so are left-headed.

(26)   Compound nouns

	Nouns	Glosses	Compound	Gloss
a.	tìí; íì	tree; child	tíí^n–íì	fruit
b.	màngórò; íì	mango; child	mángóró–íì	mango fruit
c.	pédʒù; íì	sheep; child	pédʒí–íì	lamb
d.	pédʒù; jáà	sheep; female	pédʒí–jàá	ewe
e.	pédʒù; áɾ̃á	sheep; male	pédʒí–àɾ̃à	male sheep
f.	pédʒù; ?	sheep; ?	pédʒí–dʒàŋú	ram
g.	ròbíné dìí	tap; water	ròbíné–dìì	tap water
h.	ògórò; dìí	well; water	ógóró–dìì	well water
i.	tàgá; dìí	pond; water	tágá–dìì	pond water
j.	nèẃ; dìí	salt; water	néẃ–dìì	ocean

Two nouns are considered a compound in Ibi-so when they semantically and phonologically act as a unit. From these examples it is not possible to determine if vowel harmony is an active process in compounding. Tonally, a compound acts differently from a NP as prenominal possessor . As shown in examples (26a - c), the head of the compound adopts all high tones while the non-head retains its citation-form lexical tones. Examples (26d - e) illustrate compounds in which not only does the head noun surface with all high tones, the non-head noun emerges with the opposite of its lexical tonal melody; high-low becomes low-high (26d) and low becomes high (26e). A third pattern is witnessed among the nouns in (26g - j). The non-head noun surfaces with low tones despite its lexical form, and the head nouns all emerge with high tones save for the example in (26h).

3.8   Reduplicated Nouns

Dogon languages often have nouns with apparent initial reduplication Cv– (animal names, etc.). As shown below, some stems in the Reduplicated Perfective Aspect also use a copy of the root-initial consonant plus the high, front vowel [Ci–].

(27)   Initial Cv– reduplication in nouns

	Noun	Gloss
a.	kì–káá	grasshopper
b.	pì–pílɛ́	beetle/bug
c.	tí–tàà	hyena
d.	tí–tépù	hawk

The tones of nouns have yet to be investigated in detail, thus the author is unsure at this point of the tonal variation found on the reduplicant.

3.9   Agentive Nominals

The agentive is formed by attaching the agentive clitic [=ǹ] to a verb root. An underlying mid vowel underspecified for backness or [ATR] features is epenthesized between the agentive clitic and the root so as to ensure that all syllables are of the type CV. As discussed in detail below, the Verb Root determines the vowel which is inserted. The quality of the agentive stem vowel is determined by the vowel(s) in the verb root's spreading of its height, backness, and [ATR] features as shown below. The final tone of the noun stem becomes high, and the agentive suffix has a low tone. The agentive stem takes the irregular plural suffix [–w], which suffixes between the final vowel and the agentive clitic [=n].

(28)   Agentive clitic and plural suffix

	Root	Agentive SG	Agentive PL	Gloss
a.	gɔɔ	gɔ̀–gɔ́–ɔ́=ǹ	gò–gó–ó–w=ǹ	dance
b.	ʤɔŋ	ʤ ù–ʤ ɔ́ŋ–ɔ́=ǹ	ʤ ù–ʤ ɔ́ŋ–ɔ́–w=ǹ	heal
c.	dʊb	dùb–ɔ̀ dúb–ɔ́=ǹ	dùb–ɔ̀ dúb–ɔ́–w=ǹ	forge
d.	gàà kún	gàà kún–ó=ǹ	gàà kún–ó–w=ǹ	dye (indigo)
e.	bɪr	bìr–ɛ̀ bír–ɛ́=ǹ	bìr–ɛ̀ bír–ɛ́–w=ǹ	work
f.	wajɪŋg	wàjíŋg–ɛ́=ǹ	wàjíŋg–ɛ́–w=ǹ	(chop) butcher
g.	taʤu tɪ	tăʤ ù tíj–ɛ́=ǹ	tăʤ ù tíj–ɛ́–w=ǹ	weave (basket)
h.	dege lab	dègè láb–á=ǹ	dègè láb–á–w=ǹ	sculpt (statue)
i.	teme ma	tèmè má–á=ǹ	tém–é má–á–w=ǹ	make mason (brick)
j.	toroj ma	tòròj má–á=ǹ	tòròj má–á–w=ǹ	potter (pot)
k.	buji ba	bùjì bá–á=ǹ	bùjì bá–á–w=ǹ	drummer (drum)
l.	dáá^n	dà ná–á=ǹ	dà ná–á–w=ǹ	hunt
m.	ni	nìì ní–í=ǹ	nìì ní–í–w=ǹ	sing
n.	guw̃	gù–gùw̃–ɛ́=ǹ	gù–gùw̃–ɛ́–w=ǹ	steal

Mid vowels in a root have a surface contrast for [±ATR] and spread their value to the epenthesized vowel as shown in examples (28a - b). Although there evidence to support an underlying [±ATR] feature contrast among high vowels [i u] in Ibi-so, all high vowels surface with the value [+ATR]. High, back vowels spread their backness and underlying [–ATR] or [+ATR] feature to the epenthesized agentive vowel as shown in examples (28c) - (28d) respectively, and underlying [–ATR] front, high vowels in (28e - g). Roots with low vowels (28h), spread their low feature onto the agentive epenthesized vowel. Roots of the type /CV/

(28i - m), copy their final vowel before the agentive suffix. The example in (28n) is an exception to the above stated generalizations in that the epenthesized vowel does not match the root vowel in terms of its backness feature.

The fact that the plural marker precedes the agentive marker is unusual as inflectional morphology usually follows derivational. However, if the plural suffix is interpreted as being a suffix, while the agentive marker is presented as a clitic, the analysis is somewhat more straightforward. Otherwise, if both markers were interpreted as being suffixes, the plural morpheme would have to be seen as being infixed between the agentive and the root.

3.10 Case marking: Accusative

Transitive phrases take the accusative suffix [–n] on the object noun.

(29)   Accusative Case

a.	lág	hit	aa.	ant	reprimand
	mǔⁿ íì láɣ–áŋgɛ́–m̀	I hit a child		mǔ íí–<u>n</u> àntɔ́ tɔ́ŋ–gɛ́–m̀	I reprimand a child
b.	sinn	carry on back	bb.	irob	breast feed
	mǔ íì sínn–ɛ́w̃gɛ́–m̀	I carry a child on my back		mǔ íì–<u>n</u> iro ob–oŋg–ɛ́–m̀	I breast feed a child
c.	dʒɛnn	take	cc.	na	give birth
	mǔ íì dʒɛ́n–ɛ́w̃gɛ́–m̀	I take a child		mǔ íì na–w̃ŋg–ɛ́–m̀	I give birth to a child

The accusative suffix can only be seen when the verb is vowel-initial; compare (29a - c) with (29aa - cc). Curiously, not all verbs display the accusative suffix as shown with the vowel-initial verb, 'buy' below, and preceded by various objects, both animate and inanimate.

(30)   Lack of Accusative Case Marker

a.   ɛb   buy

mǔ ɛ́r̃ɛ́ ɛ́b–ɛ̀w̃gɛ́–m̀   I am buying a goat

mǔ téj ɛ́b–ɛ̀w̃gɛ́–m̀   I am buying tea

mǔ ídʒí ɛ́b–ɛ̀w̃gɛ́–m̀   I am buying a dog

mǔ tî íì ɛ́b–ɛ̀w̃gɛ́–m̀   I am buying fruit

4 Verbal Morphology

As mentioned <u>above</u>, Ibi-so is an aggluntinating language. Verb stems are inflected and derived mostly through the addition of suffixes to a verb <u>root</u>.

4.1   Slot template

The following combinations illustrate the placement of elements in the verb stem.

(31)   Combinations of affixes

1 mǔúǹíì   sínnìr̃úm

mǔ-	ú-	-ǹ	íì	sínn	-ì	-r̃ú	-m
1S	2S	Accusative	child	carry baby on back	stative	neg	1S
child				I carry baby on back			

I did not put a child on her back.

2 íì   dògón kúnnɔ̀r̃úm

íì	dògón	kúnn	-ɔ̀		-r̃ú	-m
child	back	insert	Final mid vowel		neg	1S
child	back	I did not put				

I did not put the child on your back.

3 tááŋ   pìnnɛ́r̃úm̀

tááŋ	pìnn	-ɛ́		-r̃ú	-m̀
door	close	Final front, mid vowel		neg	1S
door	I did not close				

I shut the door.

4 súnn   nààr̃ú   gónntùm̀

súnn	nàà	-r̃ú	gónn	-tù	-m̀
rope	braid (rope)	reversive	take off, take out	pfv	1S
rope	unbraid		I took out		

I unbraided the rope.

5 súnn   nààr̃ú   gònnòrúm̀

  súnn   nàà   -r̃ú   gònn   -ò   -rú   -m̀

  rope   braid (rope)   reversive   take off, take out   Final mid vowel   neg   1S

  rope   not braid   I did not take out

I did not unbraid the rope.

6 múwóǹsúnn   nààr̃áẃ

  mú-   wó-   -ǹ   súnn nàà   -r̃á   -ẃ

  1S   3PL   Accusative   rope braid (rope)   reversive   transitive

  I   make unbraid

gònnòbóm̀

gònn   -ò   -bó   -m̀

take off, take out   Final mid vowel   pst   1S

I take off

I made you unbraid the rope.

7 wóǹsúnn   nààr̃ú

  wó-   -ǹ   súnn nàà   -r̃ú

  3PL   Accusative   rope braid (rope)   reversive

  rope   not braid

gònnòr̃úḿ

gònn   -ò   -r̃ú   -ḿ

take off, take out   Final mid vowel   neg   1S

I did not take off

I did not make you unbraid the rope.

8 wóntébúrú

  wó-   -n   téb   -ú   -rú

  3PL   Accusative   bend   Final high, back vowel   reversive

  I am unbending you

gònòŋgém̀

gòn   -ò   -ŋgɛ́   -m̀

take off, take out   Final mid vowel   prog   1S

take off, take out

I am standing you up.

9 wóntébúrú

wó-	-n	téb	-ú	-rú
3PL	Accusative	bend	Final high, back vowel	reversive

 I am unbending you

gúgóndóm̀

gú-	gó	-n	-dó	-m̀
take off, take out	take off, take out	transitive	fut	1S

I will take out

I will unbend you.

Therefore, the following verbal template shows the placement of constituents in the verb stem although tense, aspect, and mood overlap (see <u>negative </u>) with marking for subject. While the pronouns remain the same for each TAM category, the final vowel of the verb root, the negative marker, and the pronominal suffixes differ among the categories.

(32)   Verb template

(pronoun)		(object)	RED–	ROOT	FV	–TAM	NEG	DERIV	pronominal	PL
mǔ	1S	same	Ci/u	μμ		<u>PERF</u>	ru	<u>REV</u>		
ǔ	2S					<u>PAST</u>		<u>MP</u>		
wó	3S					<u>IMPERF</u>		<u>CAUS</u>		
ɛ́mɛ́	1P					<u>IMPER</u>				
ɛ̀ɛ́	2P					<u>PROG</u>				
bɛ̀ɛ́	3P					<u>HABIT</u>				

The following vocalic template shows a basic illustration of the vowels which are associated with each TAM and derivational stem.

(33)   Vowel template

chaining			isolation			inflectional			derivational		
ROOT	ɛ/ɪ	ɛ	ROOT	ɛ/ɪ	u	ROOT	ɛ/ɪ	u	ROOT	ɛ/ɪ	ɛ
	e/i	i		e/i	u		ɔ/ʊ	u		ɔ/ʊ	ɔ
	o/u	u		o/u	u		o/u	u		o/u	o
	ɔ/ʊ	ɔ		ɔ/ʊ	u		e/i	u		e/i	e
	a	a		a	u		a	u		a	a

4.2   Verb Root: Chaining Form

It is proposed that most verbs, (excluding CVV and CVN roots), in Ibi-so and all Dogon

languages are underlyingly CVC and emerge with a final vowel due to a high-ranked constraint

banning syllable codas. The surface final vowel is determined by the underlying root vowel's

features and the TAM of the verb. Therefore, the verb root in Dogon is an abstract concept that

is determined from the behavior of the verb stem in various inflectional and derivational stems.

In Ibi-so, verb roots may be garnered by examining the chaining form, an uninflected verb which

is chained to a 'dummy' verb such as 'want' or 'can', and the imperative mood stem. The

former shows the tone of the verb root while the latter illustrates its vocalism.

Verb roots with underlying mid, [–ATR] vowels surface with a copy of the root vowel as

the final vowel in both imperative and citation stems. Depressor consonants affect the tones of

the imperative stem: voiced consonants lower tones while voiceless consonants raise tones. The

underlying tones of the verb root are found on the citation stem, with the root melody being

spread from the root to the final vowel suffix.

(34)   Mid, [–ATR] vowel roots

	Root	Imperative Stem	Citation Stem	Gloss
a.	dɛb	dɛ̀b–ɛ́	dɛ̀b–ɛ́	cover
b.	kɛɛr	kɛ́ɛ́r–ɛ́	kɛ́ɛ́r–ɛ́	bite
c.	dɛg	dɛ̀g–ɛ́	dɛ́g–ɛ́	lick
d.	nɛɲ	nɛ̀ɲ–ɛ́	nɛ̀ɲ–ɛ́	lean
e.	pɛg	pɛ́g–ɛ̀	pɛ́g–ɛ̀	nail
f.	nɛ̃r	nɛ̀r̃–ɛ	nɛ́r̃–ɛ	file
g.	sɛm	sɛ́m–ɛ́	sɛ́m–ɛ̀	sweep

h.	gɔŋ	gɔ̀ŋ–ó	==gɔ̀ŋ–ó==	surround
i.	jɔŋ	ʤɔ̀ŋ==–ó==	==ʤóŋ–ò==	heal
j.	pɔr	pɔ́r–ɔ́	pɔ́r–ɔ̀	strangle
k.	sɔb	sɔ́b–ɔ́	sɔ̀b–ɔ́	shot
l.	sɔg	sɔ́ɣ–ɔ́	sɔ́g–ɔ̀	lock
m.	tɔg	tɔ̀g–ɔ́	tɔ́g–ɔ̀	knock
n.	tɔŋ	tɔ̀ŋ–ɔ́	tɔ́ŋ–ɔ̀	write
a.	sob	==sób–ɔ́==	==sób–ò==	brush out braids
b.	jeb	jɛ́b–ɛ́	jɛ̀b–ɛ́	roll up (pants)
c.	peer	pɛ́ɛ́r–ɛ́	pɛ́ɛ́r	bone (break)

Verb roots which are underlyingly [+MID], [+ATR] take a copy of the root tone in the imperative stem and [–u] in the citation stem as the final vowel.

(35)   Mid, [+ATR] vowel roots

	Root	Imperative Stem	Citation Stem	Gloss
a.	boʤ	bòʤ–ó	bóʤ–ú	bury
b.	ob	ób–ó	ób–ù	give

We see in the imperative stem that the front, mid vowel roots (35a - b) emerge with front vowel suffixes while the back, mid vowel roots (35c - e) surface with back vowel suffixes. The citation suffixes for [+ATR] root vowels are all high, back vowels [–u] (although as highlighted above, there are some exceptions surrounding nasals, proposed to be a phonetic occurrence).

Now that we have determined that [–ATR] vowel roots surface with a copy of the root vowel in both citation and imperative stems, and [+ATR] vowel roots take [–u] as the final

vowel in the citation form and a copy in the imperative stem, we may examine the surface

opaque low and high vowel roots.

(36)   Low vowel roots

	Root	IMP	Citation	Gloss
a.	lab	láb–á	láb–à	cut/chop
b.	bar	bár–á	bár–ù	help/increase
c.	ʤaŋ	ʤáŋ–á	ʤáŋ–ù	read
d.	lág	lág–á	lág–ú	hit
e.	pâg	pág–á	pág–ù	tie
f.	dág	dág–á	dàg–ú	leave (alone)
g.	táb	tàb–á	táb–ù	touch

The verb root in (35a) is proposed to have underlying [–ATR] root vowels as its surfaces

with a copy of the root vowel in both citation and imperative form in the same manner as the mid

vowels above. By the same reasoning, (36b - g) take a final [–u] and are hypothesized to be

underlying [+ATR] although they surface with the default [–ATR] value for low vowels.

It is proposed that [–ATR] high vowel roots (37a - e) surface with a mid-vowel suffix.

(37)   High vowel roots

	Root	Citation Stem	IMP	Gloss
a.	biɲ	bíɲ–ɛ̀	bíɲ–ɛ́	pull
b.	bɪr	bír–ɛ́	bír–ɛ́ ˈbír–ɛ́	work
c.	jig	jìg–é	jíg–è	sift
d.	dʊb	dùb–ɔ́	dúb–ɔ́ dùb–ɔ̀	forge
e.	gur	gúr–ó	gùr–ó	dig

While underlyingly [+ATR] high vowel roots (37f - i) surface with the high, front vowel suffix.

Among roots with high vowels, there are no final [–u] suffixes. The reason why high vowel roots may not surface with high vowel suffixes is not known, although it is hypothesized that it may be due to an OCP violation banning successive high, back vowels.

Stative verb stems act slightly differently than active verbs in that they end in a high, front vowel in citation form and with a mid, front vowel in the imperative mood despite the root vowel's quality or height. The tone on the citation form of stative roots is the lexical tone of the verb root; it is unpredictable.

(38)   Stative roots

	Root	Citation	IMP	Gloss
a.	teb	téb–ì	téb–ɛ́	bend
b.	ger	gèr–í	gɛ́r–ɛ́	hold
c.	tɔdʒ	tɔ́dʒ–ì	tɔ̀dʒ–ɛ́	squat
d.	ɪŋ	íŋ–ì	íŋ–ɛ́	stand, stop
e.	dʒɪb	dʒíb–ì	dʒib–ɛ́	wrap (panya)
f.	tuŋ	túŋ–ì	tùŋ–ɛ́	kneel
g.	pub	púb–ì	púb–ɛ́	blow on a fire
h.	kum	kùm–í	kúm–è	make a fist
i.	dʊ	dùw–í	duw–ɛ́	carry on head
j.	baŋ	bàŋ–í	bàŋ–ɛ́	hide
k.	wag	wagi–jɛ	wàjíg–ɛ́	yawn
l.	tab	táb–í	táb–ɛ́	start

Some <u>nasal-final/nasalized vowel</u> roots do not take a final vowel.

(39)   Nasal-final roots without epenthesis

a.   dáá^n hunt
b.   dèé^n sit, sit down
c.   dìń   lie down
d.   sɔ́ǹ   unbraid

(40)   Other (exceptions)

a.   dʒɔ́ŋ–ò   heal
b.   màj–í   make
c.   nɛ̀ɲ–ú   lean
d.   ní–í ní–í   sing
e.   nímíɲú bɛ̀ɛ̀   remember

(41)   Vowel final roots

a.   guw̃–ɛ́   gúw̃–ɛ́ ꞌgúw̃–<mark>ɛ́?</mark>   steal

<u>Tonally</u>, each verb root is associated with a melody. The melody spreads from the root vowel to the epenthesized final vowel in the chaining form. Each stem must surface with at least one high toned vowel. Since each verb root melody must contain at least one high tone, there is a possibility that the language could be considered pitch-accent instead of tone, with one accent per word. Throughout the manuscript, verb roots are shown, where available, in abstract form with their underlying tone and [ATR] specifications.

The following inflectional positive categories are presented in this grammatical overview.

(42)   Inflectional Positive Categories

Perfective   (compl)   -jɛ- ~ -dʒɛ-   ex. lág-dʒɛ́-m̀   'I ate'

perf for statives   -aa- ~ -jaaj-   ex. dog-aa- /sug-aa-   '(the work) it is finished'

perf for mp   -tɛ-   ex. bar-i-tɛ-mɛ-m   '(sugar) was increased'

                                         ex. wo baŋ-a ʋɛg-ɛ-tɛ-mɛ-m   'when I came, he was hidden'

		ex. wo n daa-j-ti-n	'he was killed'
		ex. laɡ-i ɲii-tɛ-mɛ-m	'when I came, he had been hit'
past	-bi- ~ -bɛ-	ex. lágá-bí-m̀	'I hit'
past focus	-bo-	ex. lágá-bó-m̀	'it was me who hit'
habitual		ex. lágáwn jɛ̀ tábàm	'I am always hitting'
		ex. laɡ-ɛ-m	'(every day) I hit'
progressive	-ŋgɛ-	ex. làɡ-á-w̃ɡɛ́-m̀	'I am hitting'
future,	-do-	ex. lágá-dó-m̀	'I will hit'
imperfective			

4.3   Inflectional Stems

As noted above, the verb root in Ibi-so is an abstract extrapolation based on the behavior of various verb stem forms. The verb root is helpful in determing the tonal and vocalic affects of the various inflectional suffixes found in the language. In addition to each verb stem listed, the verb root is shown with its underlying vocalism and tone.

The imperative mood is formed by suffixing a short vowel to front vowel, CVC verb roots (a - c) in the singular and a long vowel to the plural. Roots which are CVV and contain mid, front vowels underlyingly are altered tonally (c), and those with low vowels (43e - f) take the suffix [–j] in the plural. A mid, [–ATR] CVC root also takes the [–j] suffix in the plural. The imperative singular stem takes high tone melody unless the initial consonant is voiced in which the initial vowel's tone is lowered. The plural imperative stem takes the same tonal pattern but with a phrase-final lowering on the final vowel.

(43)   Imperative mood

	Gloss	Root	Imperative (SG)	Imperative (PL)
a.	look	ɲèń	ɲèn–ɛ́	ɲèn–ɛ́ɛ̀
b.	take	dʒèɲ́	dʒèɲ–é	dʒèɲ–éè
d.	sit	déé^n	dèé^n	déè^n
g.	run	dʒɔ́b	dʒɔ́b–ɔ́	dʒɔ́b–ɔ̀–j
c.	work	bír	bìr–ɛ́	bír–ɛ́ɛ̀
e.	go	éè	jáá	jáà–j
f.	eat	káà	káà	káà–j

The imperative mood stem shows evidence of the underlying [±ATR] value of the root.

(44)   Imperative mood : Mid vowels

	Root	Imperative	Gloss
a.	déé^n	dèé^n	sit
b.	dʒèɲ́	dʒèɲ–é	take
c.	dĕb	dèb–ɛ́	cover
d.	dɛ́g	dèg–ɛ́	lick
e.	ɛ́b	ɛ̀b–ɛ́	buy
f.	ɲèń	ɲèn–ɛ́	look
g.	kɛ́r	kɛ́r–ɛ́	bite
h.	ôb	òb–ó	give
i.	gómm	gòmm–ó	chop
j.	sôg	sóg–ɔ́	lock
k.	dʒôŋ	dʒòŋ–ɔ́	healer

l.   tɔ̂ŋ   tɔ́ŋ–ɔ́   write

m.   nɔ́ɔ́   nɔ̀ɔ́   drink (sth)

From the imperative mood stems, we can see that (44a - b) have underlying mid, front [+ATR] vowels as the suffix vowel is a copy of the underlying root vowel. Roots (44c - g) are mid, front [–ATR], (44h - i) are mid, back [+ATR] and (44j - m) are mid, back [–ATR].

(45)   Imperative mood : High vowels

	Root	Imperative	Gloss
a.	dʒîb	dʒìb–é	wrap (panya)
b.	jĭg	jíg–ɛ́	sift
c.	bír	bìrɛ́ bìr–ɛ́	work
d.	dín̄g	dìŋg–ɛ́	attach
e.	în̄	ìŋ–ɛ́	stop
f.	pín̄	pínn–ɛ́	close
g.	dìí^n	dìí^n	lie down
h.	gŭr	gùr–ó	dig (sth)
i.	dŏb	dùb–ɔ́	forge
j.	dŏ	dùw–ɛ́	carry on head

Among high vowels, we see that high vowels may not surface as [–ATR] although the imperative forms of front, high vowels (45b - f), and back, high vowels (45i - j) indicate that the underlying [–ATR] value of the verb root is spread to the imperative suffix. The remaining forms spread the [+ATR] value of the verb root onto the imperative suffix. The example (45j) is an exception to the generalization that the imperative suffix also adopts the frontness/backness feature of the verb root.

(46)   Imperative mood : low vowels

	Root	Imperative	Gloss
a.	dáà	dáá	kill
b.	dáá^n	dáǹ dànn–á	hunt
c.	éè	jàá	leave
d.	ʤáǹ	ʤáŋ–á	read
e.	káà	káá	cut, shave
f.	lâb	láb–á	cut
g.	lág	lág–á	hit
h.	pâg	páɣ–á	tie

Among low vowel roots, we see that the imperative suffix adopts the low height value of the root, although no difference in [ATR] value is witnessed.

In summary, the imperative mood induces vowel height and [ATR] harmony, spreading from the root to the suffix, with the exception among high vowels which surface as mid in the imperative suffix. The tone of the imperative mood is high, with depressor consonants lowering the initial vowel of the stem.

4.4   Prohibitive mood

The prohibitive mood is formed with the verb root, the final vowel in accordance with the height, [ATR], and backness features described above, and a clitic [no] for the singular. The prohibitive morpheme is considered a clitic because it alters neither the tone of the root nor is its [ATR] value altered by the root. The plural prohibitive in the second column is formed by the suffixation of a palatal glide [j]. The plural morpheme is considered a suffix because it receives

nasalization spreading from a root with a nasal or nasalization on a vowel (47a - d) but not from the prohibitive clitic's nasal if the root does not contain a [+NAS] feature (47e - f).

(47)   Roots with nasals/roots without nasals

	Root	Sg Prohib	Pl Prohib	Gloss
a.	ɲèń	ɲɛ́n=nò	ɲɛ́n=nò–j̃	look
b.	ʤèɲ́	ʤèɲ–é=nò	ʤèɲ–é=nò–j̃	take
d.	déénⁿ	déènⁿ=nò	déènⁿ=nò–j̃	sit
c.	bír	bír–ɛ́=nò	bír–ɛ́=nò–j	work
g.	ʤɔ́b	ʤɔ̀b–ɔ́=nò	ʤɔ̀b–ɔ́=nò–j	run
e.	éè	jàá=nò	jàá=nò–j	go
f.	káà	káà=nò	káà=nò–j	eat

The tone on the prohibitive is not predictable from these stems thus further evidence needs to be gathered to determine the tonal pattern of the prohibitive stem.

4.5   Past tense

The past positive stem consists of the verb root, the <u>final vowel</u> of the verb stem, the past tense marker [bV], and a singular or plural person marker. Certain verbs such as 'hit' also take the <u>unknown suffix</u> [–w̃].

(48)   Past positive stem - lág 'hit'

mǔ íʤú láɣ–à–w̃ bì–m	I hit a dog	ɛ́mɛ́ íʤú láɣ–à bè–ŋ	we hit dogs
ú íʤú láɣ–à(–w) bò	you hit a dog	ɛ̀ɛ́ íʤú láɣ–à bè	you (pl) hit dogs
wó íʤú láɣà–w bì	he hit a dog	bɛ̀ɛ́ íʤú láɣà–w̃ bè–ŋ	they hit dogs

Each verb stem in the past paradigm carries a high-low melody. The final vowel of the verb has a low tone as does the past tense morpheme indicating that the phrase boundary is the verb due to the fact that phrase-final falling is an active tonal process in the language.

The past negative stem consists of the verb root plus the final vowel and the negative marker [r ~ nV], plus the person suffix where applicable.

(49)   Past negative stem - lág 'hit'

mǔ ídʒú làɣ–à rú–m̀	I did not hit a dog	ɛ́mɛ́ ídʒú làɣ–à ní	we did not hit dogs
ú ídʒú làɣ–à rú	you did not hit a dog	ɛ̀ɛ́ ídʒú làɣ–à rí	you (pl) did not hit dogs
wó ídʒú làɣ–à rú	he did not hit a dog	bɛ̀ɛ́ ídʒú làɣ–à ní	they did hit dogs

Note here that the verb stems are all low toned, whereas the negative markers are all high toned; this could be considered an example of tone polarity although this needs further investigation.

Further examples of past positive and negative phrases are shown here.

(50)   Verb Phrases: Positive and Negative

a.	ɛ́mɛ́ églís/ámmá gínnì bè–ŋ	we went to church
b.	ɛ́mè églís/ámmá gínnì jàà ní	we did not go to church
c.	ɛ́mɛ́ dʒáà ɛ́bɛ̀w bè–ŋ	we bought a meal
d.	ɛ́mè dʒáà ɛ́bɛ̀ ní	we did not buy a meal
e.	ɛ́mɛ́ bìrɛ́ bè–ŋ	we finished the work
f.	ɛ́mè bìrɛ́ dòr̃úŋ bè–ní	we were not able to finish the work
g.	ɛ́mɛ́ pɛ́dʒù kɛ́ɛ̀–w̃ bè–ŋ	we slaughtered the sheep
h.	ɛ́mɛ́ pɛ́dʒù kɛ́ɛ̀ⁿ ní	we did not slaughtered the sheep

Another past tense marker which closely resembles the [bV] past tense marker above is the focus past tense marker shown here. The difference is that, whereas the first and third singular persons were represented with [bi] above, for the focus, they are represented as [bo]. The negative of the focus past is the same as the above stated for the non-focus past.

(51)   Focus past –bo– : H Melody

	Root	Singular Stem	Gloss
a.	pîn	pínn–έ bó–	close
b.	sôg	sɔ́ɣ–ɔ́ bo–	lock
c.	tôŋ	tɔ́ŋ–ɔ́ bó–	write
d.	kέr	kέr–έ bó–	bite
e.	dʒîb	dʒíb–é bó–	wrap
f.	pâg	páɣ–á bó–	tie

In general, CVC verb roots with an initial voiceless consonant, (51e) is an exception, and

an underlying high-low tone, (51d) is an exception, emerge as high on the past tense verb stem.

(52)   Focus past –bo– : LH Melody

	Root	Singular Stem	Gloss
a.	dɛ̌b	dɛ̀b–έ bò–	cover
b.	jĭg	jìg–é bó–	sift
c.	dég	dèg–é bó–	lick
d.	gɛ̌r	gɛ̀r–é bó–	hold
e.	gǔr	gùr–ó bó–	dig
f.	lâb	làb–á bó–	cut
g.	dʒâŋ	dʒàŋ–á bó–	read
h.	ɲɛ̀ń	ɲɛ̀n–é bó–	look
i.	dʒɛ̌ɲ	dʒɛ̀ɲ–é bó–	take
j.	dʒɔ̂ŋ	dʒɔ̀ŋ–ɔ́ bó–	healer
k.	díǹg	dìŋg–í bó–	tie

l.   góm   gòmm–ú bó–   chop

m.   gón   gònn–ó bó–   take out

CVC verb roots with an initial voiced consonant of any underlying tonal pattern adopt a
low-high tonal melody on the past tense verb stem. These CVC stems are further examples of
depressor consonants interacting with the tonal pattern of the TAM category. Therefore, it is
stated that the past tense verb stem has a high-tone which is lowered by voiced consonants.

(53)   Focus past –bo– : Reduplicated Stems

	Root	Singular Stem	Gloss
a.	dŏb	dúb–ɔ́ ˈdúb–ɔ́ bó–	forge
b.	bír	bír–ɛ́ ˈbírɛ́ bó–	work

Reduplicated verbs are downstepped on the second verb and seem to be unaffected by the
above depressor-consonant tone-lowering.

(54)   Focus past –bo– : Vowel-Initial Roots

	Root	Singular Stem	Gloss
a.	ɛ́b	ɛ̀b–ɛ́ bó–	buy
b.	ɛ̂r	ɛ́r–ɛ̀ bó–	braid
c.	îŋ	íŋ–ɛ̀ bó–	stop
d.	éè	jàá bó–	leave

Verb roots which begin with vowels seem to keep their tonal melody, with the exception of
(54a).

(55)   Focus past –bo– : Vowel-Final Roots

	Root	Singular Stem	Gloss
a.	dǒ	dùʋ–ɛ́ bó–	carry on head
b.	dáà	dàá bó–	kill
c.	dìíⁿ	dìíⁿ bó–	lie down
d.	dééⁿ	dèéⁿ bó	sit
e.	dááⁿ	dááⁿ dànà bó–	hunt
f.	káà	káà bó–	shave
g.	náá	nàà bó–	give birth
h.	nɔ́ɔ́	nɔ̀ɔ̀ bó–	drink

Vowel-final roots seem to be less predictable, although generally speaking, depressor consonants are still active (55a - c). The examples in (55f - h) are unclear, although the initial nasal may have a lowering affect as well.

4.6   Perfective aspect

The Perfective aspect is formed by the cliticization of the Perfective morpheme [tu] for first and second singular persons, and [ti] for all other forms. The addition of the first person singular suffix [m], and the first person plural and third person plural suffixes [n] are added after the TAM marker. Pronominals distinguish the remaining persons. The Perfective aspect may only be used with action verbs, there are no possible Perfective paradigms with stative verbs such as those which end in [–i] or [–ijɛ].

(56)   PERF for action transitive verbs

a. gŏn   'fence in'   b.   pêg   'nail'   c.   pɛ́ɛ̀r   'break'

gǒnn=tù–m   gǒnno=tì–n   pé?gɛ́=tù–m   pɛ́gɛ́=tì–n   pɛ́ɛ́r=tù–m   pɛ́ɛ́r=tì–n

gǒnno=tù   gǒnno=tì   pɛ́ˈgɛ́=tù   pɛ́gɛ́=tì   pɛ́ɛ́r=tù   pɛ́ɛ́r=tì

gǒnno=tì   gǒnno=tì–n   pɛ́gɛ́=tì   pɛ́gɛ́=tì–n   pɛ́ɛ́r=ti   pɛ́ɛ́r=tì–n

Roots with [+ATR] back vowels and [–ATR] mid vowels retain their [ATR] values in the
Perfective aspect.

Among verb stems in the Perfective aspect, all back vowels become [+ATR] (57).

(57)   PERF for action transitive verbs: Roots with Back Vowels

a.   ò‍ʤɔ́   'build'   b.   sôg   'lock'

úʤó=tù–m   úʤó=tì–n   sɔ́?gó=tù–m   sógó=tì–n

úʤó=tù   úʤó=tìsógó=tù   sógó=tì

úʤó tì   úʤó tì–n   sógó=tì   sógó=tì–n

Additionally, coda consonants are allowed before the Perfective suffix (58) if the verb
root contains a low, back vowel [a].

(58)   PERF for action transitive verbs: Roots with Low Vowels

a.   lág   'hit'   b.   lâb   'chop'

lág=tù–m   lág=tì–n   láb=tù–m   láb=tì–n

lág=tù   lág=tì   láb=tù   láb=tì

lág=tì   lág=tì–n   láb=tì   láb=tì–n

Certain intransitive verbs (59) may take the Perfective suffix as a marker of focus,
although these verbs would otherwise employ the past tense morpheme [bV].

(59)   PERF for action transitive verbs

a.   ʤɔ́b   'run'   b.   jú   'walk'

ʤɔ̀b–ó=tù–m ʤɔ̀b–ó=tì–n   jújì–jé=tù–m jújì–jé=tì–n

ʤɔ̀b–ó=tù   ʤɔ̀b–ó=tì   jújì–jé=tù   jújì–jé=tì

ʤɔ̀b–ó=tì   ʤɔ̀b–ó=tì–n   jújì–jé=tì   jújì–jé=tì–n

4.6.1 PERF-NEG for action transitive verbs

The Perfective negative for action transitive verbs is formed by the suffixation of the <u>negative</u> morpheme [rV].

Intransitive or stative verbs form the Perfective aspect in a manner which differs from the above described formation of action verbs.

(60)   Intransitive Perfective

category	'go' a. jaa	'die' b. ɲii	'rob' c. gʊ	'take' d. ʤɛn	'buy' e. ɛb
1Sg	mŭ já–à–m	mŭ n ɲá–à–m	mŭ gú gú–w̃–ɛ̀–m	mŭ ʤɛ́n ʤ–ɛ̀–m	mŭ ɛ́ɛb–ɛ̀–m
2Sg	ŭ já–à–w	ŭ n ɲá–à–w	ŭ gú gú–w̃–ɛ̀	ŭ ʤɛ́n ʤ–ɛ̀–w	ŭ ɛ́b–ɛ̀–w
3Sg/InanSg	wó já–à	wó n ɲá–à	wò gú gú–ṽ–ɛ̀	wò ʤɛ́ n ʤ–ɛ̀	wò ɛ́b–ɛ̀
1Pl	ɛ́mɛ́ já–à–j	ɛ́mɛ́ n ɲá–à–j	ɛ́mɛ́ gú gú–w̃–ɛ̀	ɛ́mɛ́ ʤɛ́n ʤ–ɛ̀–j	ɛ́mɛ́ <mark>ɛ́</mark> ɛ́b–ɛ̀–j
2Pl	ɛ̀ já–à–j	ɛ̀ n ɲá–à–j	ɛ̀ gú gú–j–ɛ̀	ɛ̀ ʤɛ́n ʤ–ɛ̀–j	ɛ̀ ɛ́b–ɛ̀–j
3Pl/InanPl	bɛ́ já–à–j	bɛ́ n ɲá–à–j	bɛ́ gú gú–j–ɛ̀	bɛ́ ʤɛ́ n ʤ–ɛ̀–j	bɛ́ ɛ́b–ɛ̀–j

Among verbs in the Perfective aspect, we see that CV and CVC roots pattern alike in that they both receive a glide as the plural suffix. Additionally, unlike the <u>Prohibitive mood</u>, the Perfective plural suffix does not undergo nasalization spreading from a nasal in the root (60b, d).

Stative verbs form the Perfective aspect through the reduplication of the verb stem. The reduplicated Perfective, like the Reduplicated Nouns is formed with a copy of the root-initial onset plus the vowel [i]. There are three aspectual suffix allomorphs: [–i], [–e], [–ɛ].

(61)   Reduplicated Perfective aspect (statives): Roots with Front Vowels

	Root	Stem	Gloss
a.	nɛ̆ɲ	nì–nɛ́ɲ–ì–	lean
b.	láɡ	lì–láɡ–ì–	hit
c.	tɛ́gr	tí–tɛ́gr–ì–	burn
d.	téɲ	tí–téɲ–ì–	grind
e.	péɡú̱r	pí–péɡr–ì–	'un-tie an animal, hitch'
f.	kɛ́ʤ	kí–kɛ́ʤ–ì–	cut
g.	pín̄	pì–pínn–ì–	closed
h.	ʤɛ̀ń	ʤì–ʤéɲ–ì–	take

Verb roots which are underlyingly [–ATR] receive the allomorph [–i].   Examples illustrate that verb roots with surface mid, front, [–ATR] vowels become [+ATR] in the reduplicated Perfective, suggesting that the vowel of the reduplicated Perfective suffix is [+ATR] and spreads to the root.

(62)   Reduplicated Perfective aspect (statives): Roots with Back Vowels

	Root	Stem	Gloss
a.	pûb	pú–púb–ì–	blow on (fire)
b.	nɔ́ŋ	nù–nóŋ–ì–	grind (millet)
c.	jɔ̌j	jú–újì–n	enter(2nd PL)

Verb roots with back vowels take [Cu] as the copy and [–ì] as the suffix.

47

(63)   Reduplicated Perfective aspect (statives): Root-Final Vowels

	Root	Stem	Gloss
a.	tén	tí–té–è–	chew
b.	wɛ́l	ʋì–ʋé–	come
c.	pɛ́ɛ̀	pí–péɛ̀–	strike (match, flint)
d.	gʊ́w̃	gʊ́–gʊ́w̃–è–	rob, steal

CVV roots take the suffix [–è].

(64)   Reduplicated Perfective aspect (statives): Root-Final Vowels

	Root	Stem	Gloss
a.	kɛⁿ	kí–kɛ́–ɛ̀–	slaughter
b.	sɪ́ṁ	sì–sɪ́nn–ɛ̀–	carrying baby on back
c.	lî	lì–líj–ɛ̀–	afraid
d.	gɛ̌r	gì–g–ɛ́–ɛ̀–	hold

However, other verb stems take [–ɛ] as the aspectual suffix.

4.6.2   Negative reduplicated Perfectives (statives)

Stative verbs in the Perfective negative aspect are not reduplicated in the singular persons and take the negative suffix [ru].

4.7   Perfective negative aspect

The Perfective negative resembles the Reversive derived stem. The Perfective negative with singular subjects is shown in the examples below, using the same roots as the Reversive below to compare the two stems.

(65)   Negative Singular Stems without pronounced pronominal

	Root	Negative Singular	Gloss
a.	ɛ̀r	ɛ́r–ɛ́–rú–	braid
b.	pín̄	pínn–ɛ́–rú–	close
c.	dín̄g	díŋg–ɛ́–rú–	tie (knot)
d.	têb	tɛ́b–ɛ́–rú–	bend
e.	dĕb	dɛ̀b–ɛ̀–rú–	cover (object)
f.	pêg	pɛ̀g–ɛ̀–rú–	nail
g.	kún̄	kún–ɔ́–rú–	insert
h.	sôg	sɔ́g–ɔ́–rú–	lock
i.	gŏŋ	gɔ̀ŋ–ɔ̀–rú–	surround
j.	sɔ́n̄	sɔ́nn–ó–rú–	unbraid
k.	kùm̄	kúmíj–ó–rú–	crumple
l.	bóʤ	bòʤò–rú–	bury
m.	gòn̄	gònn–ò–rú–	fence in
n.	pójìn	dòmmò pòj̃–rú–	roll turban
o.	nàm̄	nàm–à–rú–	step on

In the reversive stem, the verb root takes a mid-vowel suffix, which harmonizes in backness and [ATR] values with the root-vowel. The negative imPerfective suffix for singular persons is [–rú], therefore, all reversive stems end in a high tone. If the root has its own high tone, it is deleted by the OCP, even if the high of the root is not adjacent to the suffix.

A preceding nasal in the root does not spread nasalization, except when the optional prefix pronominal or a pronounced subject is present.

(66) Perfective negative: pronounced pronominals

	Negative Verb	Gloss
a.	àdámà làg–à–rú	Adama did not hit
b.	àdámá pìnn–ɛ̀–r̃ú	Adama did not open
c.	àdámá jàŋà–r̃ú	Adama did not read
d.	mǔ pínn–ɛ̀–r̃ú–m̀	I did not open
e.	ú pínn–ɛ̀–r̃ú	you did not open
f.	ǒ pínn–ɛ́–r̃ú	he did not open
g.	ɛ́mɛ́ pínn–ɛ̀–r̃ú	we did not open
h.	ɛ́ pínn–ɛ̀–ní	you (PL) did not open
i.	bɛ́ pínn–ɛ̀–ní	they did not open

Among the plural person stems, first and third person plural, when there is a nasal consonant in the verb root, the [r] of the suffix becomes [n], with or without pronounced pronominals. However, the second person plural [r] becomes nasalized by a preceding nasal in the root, but does not change to a nasal stop.

(67) Perfective negative: plural person subjects

	1st/3rd PL	2nd PL	
a.	ɛ́r–ɛ́–ri–	–r̃i	braid
b.	tɛ́b–ɛ́–ri–		bend
c.	sɔ́g–ɔ́–ri–		lock
d.	pínn–ɛ́–ni–		close
e.	nàm–à–ri–		step on
f.	pɛ̀g–ɛ̀–ri–		nail

g.	sɔ́nn–ó–ni–	unbraid
h.	kún–ɔ́–ni–	insert
i.	díŋg–ɛ́–ni–	tie (knot)
j.	kúmíj–ó–ni–	crumple
k.	bòdʒò–ni–	bury
l.	dɛ̀b–ɛ̀–rú–	cover (object)
m.	gònn–ò–rú–	fence in
n.	dòmmò pòj̃–rú–	roll turban
o.	gɔ̀ŋ–ɔ̀–rú–	surround

The Perfective negative, like the <u>Reversive</u>, is –rV. However, unlike the Reversive, the [ATR] vowel harmony does not spread to the vowel of the negative suffix; the final vowel of the Perfective negative stem is [u] in the singular and [i] in the plural. Further, the nasalization-spreading in the Perfective negative is blocked unless the stem contains the person-marking prefixes. The levels of nasalization also differ, not only from the reversive , but also by person and number. The details of these matters are left to further research.

4.8   Experiential (I am used to doing…)

The experiential positive is formed by the verb root, plus the final vowel, and the morphemes [tɛ sɛ]. To the final morpheme, pronominal suffixes are attached. Verb stems do not necessarily end in a low tone, although the phrase carries a high-low tone.

(68)   Experiential Positive

I am used to going /jéè/   see   do   /kâr̃/

| jàá tɛ́ sɛ̀–m | jàá tɛ́ sɛ̀ | íj–è tɛ́ sɛ̀–m | íj–é tɛ́ sɛ̀ⁿ | kár̃–á tɛ́ sɛ̀–m | kár̃–á tɛ́ sɛ̀ⁿ |

jàá tɛ́ sɛ̀–m   jàá tɛ́ sɛ̀   íj–è tɛ́ sɛ̀–m   íj–é tɛ́ sɛ̀ⁿ   kár̃–á tɛ́ sɛ̀–m kár̃–á tɛ́ sɛ̀ⁿ

jàá tɛ́ sɛ̀–w   jàá tɛ́ sɛ̀ⁿ   íj–è tɛ́ sɛ̀–w   íj–é tɛ́ sɛ̀ⁿ   kár̃–á tɛ́ sɛ̀–w kár̃–á tɛ́ sɛ̀ⁿ

jàá tɛ́ sɛ̀   jàá tɛ́ sɛ̀ⁿ   íj–è tɛ́ sɛ̀   íj–é tɛ́ sɛ̀ⁿ   kár̃–á tɛ́ sɛ̀   kár̃–á tɛ́ sɛ̀ⁿ

The habitual negative is formed by negating the [tɛ] morpheme.

(69)   Experiential Negative

I am not used to going   see   do

jèè–ʥɛ̀–rú–m̀ jèè–ʥɛ̀–ní   ìjè tè–rú–m̀   ìjè tè–ní   kàr̃à tè rú–m̀   kàr̃à tɛ̀ ní

jèè ʥɛ̀–rú   jèè–ʥɛ̀–rí   ìjè tè–rú   ìjè tè–rí   kàr̃à tè rú   kàr̃à tɛ̀ rí

jèè ʥɛ́–rú   jèè–ʥɛ̀–ní   ìjè té–rú   ìjè tè–ní   kàr̃à tɛ́ rú   kàr̃à tɛ̀ ní

Further examples of the usage of this construction are shown here:

I am *used to* entering/I am *not used to* entering

jòjí ʋɛ́ *ʥíí-jè-m*/jòjí ʋɛ́ *ʥɛ́-rú-m̀*

I am *used to* drinking/I am *not used to* drinking

nɔji ʋɛ ʥii-jɛ-m/nɔji ʋɛ ʥɛ-ru-m

4.9   Habitual

The habitual tense, 'I perform an action every day', is formed by the verb root, the habitual

suffix [ɛ] ~ [Vj], and person markers where applicable. As with Perfective stems above, the

habitual is divided between transitives and instransitives. Transitives do not receive a root-intial

reduplicant whereas intransitives do.

(70)   Transitive habitual stem

/lag/   'hit'
lág–ɛ́–m̀   lág–á–ɉ   (*li–lag–ɛ–m)
lág–ɛ́–ẁ   lág–ɛ̀
lág–ɛ̀   lág–á–ɉ

Note that the singular and second plural persons all take the suffix [ɛ] whereas the plural persons other than second take the final vowel which is associated with the verb root plus the plural glide marker. Transitive habitual stems have a high-low tonal contour on the stem.

Intransitive habitual stems take the stem-initial reduplicant in the same manner as the Perfectives above.

(71)   Intransitive habitual stem

/num/   fall, lose
nù–núm–ɛ́–m̀   ɛmɛ nù–núm–ò–ɉ̃
nù–núm–ɛ́–ẁ   ɛ nù–núm–ɛ̀
nù–núm–ɛ̀   bɛ nù–núm–ò–ɉ̃

/taa/   kick
tì–táá–ɉ–ɛ́–m̀   tì–táá–ɉ
tì–táá–ɉ–ɛ́–ẁ   tì–táá–ɉ–ɛ̀
tì–táá–ɉ–ɛ̀   tì–táá–ɉ

/ʤaŋ/   study, read

ʤáŋ ʤì–ʤáŋ–ɛ́–m̀   ʤáŋ ʤì–ʤáŋ–à–ɉ̃
ʤáŋ ʤì–ʤáŋ–ɛ́–ẁ   ʤáŋ ʤì–ʤáŋ–ɛ̀
ʤáŋ ʤì–ʤáŋ–ɛ̀   ʤáŋ ʤì–ʤáŋ–à–ɉ̃

Unlike the Possessive paradigm, nasalization, (it could be argued that there is a nasal stop rather than nasalization in these forms), from a verb stem spreads to the final vowel or glide of the verb stem among third person plural subjects.

(72)   Nasalization on 1st and 3rd person plural subjects

kí kédʒ–è	slaughter	ɲí–ɲén–ɛ̀ⁿ	look
tí tέgér–è	burn	pì pínn–ɛ̀ⁿ	close
bì bír–ɛ̀	work	dì–déɾ̃–ɛ̀ⁿ	take a break
pí–pégér–è	tie	nì–nínín–è̱ⁿ	breathe
kí–ká–jì	eat	dʒí–dʒáŋ–à–ɟ̃	teach
tí–táá–jì	kick	dʒáŋ dʒì–dʒáŋ–à–ɟ̃	study
		nì–náà–ɟ̃	give birth
dʒòbú dʒù–dʒób–ò–j	run	tɔ́ŋ–tù tɔ́n–ò–ɟ̃	write
ób–ó–òj	give	nù–núm–ò–ɟ̃	lose
		nù–nɔ̀–ɟ̃	drink
		mù–mà–ɟ̃	make
		mù–mɔ̀–ɟ̃	laugh

4.9.1   Negative Habitual

The negative habitual is formed by the deletion of the reduplicant for intransitive verbs and a

long final vowel for transitive verbs in a manner similar to the Negative Future.

Further examples of the habitual are shown here :

/bir/
bàáj púú bìrέ bíì–bírὲm   every day I work
baa pu woj birɛ bi birɛm   every day, all the time, I work
baa pu birɛ bi birɛ   every day he works

/tɛgɛr/
tɛgɛrɛ   'burn'
bàáj púú tí tέgérὲm

/kaa/
ká–j   káá–bé– (perf)   'eat'
bàáj púú (jáà) kí kájim   every day I eat (a meal)

kέέⁿ   kέὲⁿ–bé– (perf)   'slaughter'
kí kὲὲⁿ–bé– (progressive)
bàáj púú kí kὲὲ–m

pégúr–ú   'tie an animal, hitch'
bàáj púú pi pégerεm

bàáj púú ʤóbù ʤúù–ʤóbèm   every day I run
baa pu ʤobu ʤu ʤobε   every day he runs

ób–   'give'
bàáj púú o–obεm
óbó–bé–

ílέ   'ripen'
ílε–ìlè–bé– (perf)
bàáj púú iilε

bàáj púú n nɔ–ε–m   'drink'

wɔ̀gúrú   'scoop out (grain)'
wɔ̀–wɔ̀gɔ̀rɔ̀–bé– (perf)
bàáj púú wɔ̀gèrém

lág–ú   lágá–bé– (perf –passive?)   'hit'

pag–u   'tie'
bàáj púú pagε–m

bàáj púú (íbέ) jè–m   every day I go (to the market)
bàáj púú ɲέn–è–m   every day I look

baa pu tɔŋi tɔŋ–ε–m   every day I write
baa pu livri tɔŋi tɔŋ–ε–m   every day I write a book

Reduplicant + truncated form of nominalized verb?

4.10 Progressive Aspect

The progressive aspect is formed by the verb stem, the progressive suffix [Vw̃g], an epenthesized

vowel [ε], plus the pronominal suffix where applicable.

(73)   Progressive aspect pronouns

a.   kεʤ   cut   báɣá   wood (for houses)

mǔ báɣá kέʤ–έw̃g=è–m   έmέ báɣá kέʤ–έw̃g=è–ŋ

ú báɣá kέʤ–έw̃g=è–w   έ báɣá kέʤ–έw̃g–è

wó báɣá kɛ́dʒ–ɛ̃̃wg–ɛ̀   bɛ́ báɣá kɛ́dʒ–ɛ̃̃wgɛ̀–ŋ

b.   duu   carry on head   dɔ̀ɔ́   luggage

mŭ dú dúw–ɛ̃̃wg=ɛ̀–m

ú dú dúw–ɛ̃̃wg=ɛ̀–w

wó dú dúw–ɛ̃̃wg–ɛ̀

The progressive stem has a high-low tonal contour.

The progressive negative stem is formed by adding the clitic [la] to the progressive stem, to which the pronominal suffixes are added.

(74)   Progressive Negative

kɛdʒɛ̃̃wg-ɛ la-m

duwɛŋgɛ-la-m

The progressive aspect final vowel is determined by the height and harmony specifications of the verb root.

(75)   Progressive aspect final vowel

	Root	PROG	Gloss
a.	ɛ́b	ɛ́b–ɛ̀–w̃g=ɛ̀–	buy
b.	dʒěn	dʒì dʒɛ́n–ɛ́–w̃g=ɛ̀–	take
c.	tɛgɛr	tɛ́gɛ́r–w̃g=ɛ̀–	burn
d.	kɛ́ɛ̀ⁿ	kɛ́ɛ́–w̃g=ɛ̀–	slaughter
e.	pegur	pi–peger–w̃g=ɛ̀–	tie an animal, hitch
f.	kédʒ	kédʒ–ɔ̀–ŋg=ɛ̀–	cut
g.	ɔ́b	ób–ò–ŋg=ɛ̀–	give
h.	dʒɔ́b	dʒób–ɔ̀–ŋg=ɛ̀–	run

i.	bír	(birɛ) bír–ɛ̀=w̃gɛ̀–	work
j.	îl	íl–ɛ́–w̃g=ɛ̀	ripen
k.	dǔ	dùw–ɛ́–ŋg=ɛ̀–	carry on head
l.	lág	láɣ–á–w̃g=ɛ̀–	hit
m.	jéè	jà–ẃŋg=ɛ̀–	go
n.	káà	ká–á–w̃g=ɛ̀–	eat
o.	ǎnt	àntɔ́ tɔ́ŋg=ɛ̀–	insult

4.11 Imperfective

The imperfective stem is formed by the reduplication of the verb root, suffixation of the root's final vowel, and the suffixation of the pronominal morpheme. Additionally, the morpheme [bo] follows the imperfective stem and is also suffixed with the pronominal marker.

(76)   Imperfective first person stem

	Root	Future Stem	
a.	dʒɔ́b	dʒú–dʒób–ó–m bò–m	run
b.	jěn	ɲí–jén–ú–m bò–m	look
c.	bǐr	bìrɛ́ bìr–à–m bò–m	work
d.	jàá	ʒí–jáá–m bò–m	go
e.	káà	kí–káá–m bò–m	eat

4.12 Future Tense

The future tense is formed by the verb stem, then the reduplicated form of the verb stem, plus the future morpheme [dV] which is suffixed with pronominal morphemes.

(77)   Future tense: First person singular

'run'

dʒɔ̀b–ù dʒú dʒɔ́b–ˈɔ́–dò–m   dʒɔ̀b–ù dʒú dʒɔ́b–ˈɔ́–dè–n

dʒɔ̀b–ù dʒú dʒɔ́b–ˈɔ́–dò   dʒɔ̀b–ù dʒú dʒɔ́b–ˈɔ́–dè

dʒɔ̀b–ù dʒú dʒɔ́b–ˈɔ́–dò   dʒɔ̀b–ù dʒú dʒɔ́b–ˈɔ́–dè–n

The negative future tense is formed by lengthening the final vowel of the verb stem.

(78)   Negative Future Tense

Positive Future	Negative Future	Gloss
ɛ́b–ɛ̀–dó–m̀	ɛ́b–ɛ́ɛ́–dó–m̀	buy
ɲèn–é–dó–m̀	ɲèn–éé–dó–m̀	look (ɲɛnɛ–r̃u–m)
dʒéɲ–é–dó–m̀	dʒéɲ–éé–dó–m̀	take
tègú tí–tég–è dó–m̀	tègú tégéé–dó–m̀	speak
ó–ób–ó dó–m̀	ób–óò dó–m̀	give
dʒù–dʒɔ́ŋ–ò dó–m̀	dʒɔ̀ŋ–óò dó–m̀	heal
tú–tɔ́ŋ–ɔ̀ dó–m̀	tɔ́ŋɔ́ɔ́ dó–m̀	write

Futher examples of the future tense are listed as follows:

ɲi ɲɛɲɛ dom – look   ɲi ɲɛnɛ de

ɛ́ŋ – milk

îr – breast milk

mŭ íì–n ír ób–òŋg–ɛ̀–m   I am breasting feed a child

(1S child–N breast feed–1S)

ɛ̃r̃ɛ ir–i̱ ób–ɛ̀–m   I breast fed a goat

mŭ ír–ì̱ ób–òŋg–ɛ̀–m   I am breast feeding (no obj)

58

ɛ́r̃ɛ́ ír–ò ób–ód–ò–m   I will breast feed a goat

íì–n ír–ò ób–ód–ò–m   I will breast feed a child

mǔ ír ób–ód–ò–m   I will breast feed

ír–ú nɔ́ĵ   (a dog) drinks breast milk

ír–ù n–ɔ́ŋg–ɛ̀   (a dog) is drinking milk

ír–ù n–ɔ́nd–ò–m   "" will drink milk

mǔ ír–ù n–ɔ́nd–ò–m   I will drink milk

ír–ú ɛ̀ẁŋ   take out breast milk

mǔ ír–í ɛ̀ẁ–ŋg–ɛ̀–m   I am ""

mǔ ír–ù ɛ̃ẃ–dɔ̀m   I will ""

4.13 Unknown TAM marker

The morpheme [w] appears throughout inflectional paradigms and is thought to be a form of the progressive.

(79)   Unknown morpheme [–w–]   progressive ?

a.   laga–bi–m   I hit (past)
b.   laga–w̃–bi–m   I hit (Perfective)

c.   laga–b–o–m   I hit
d.   laga–wn–b–o–m   I was hitting

e.   *laga–m
f.   laga–w–wo–m   I hit (present)

g.   *laga–ŋg–ɛ–m   I am hitting
h.   laga–w–ŋg–ɛ–m   (progressive)

i.	laga–d–o–m	I will hit (future)
j.	laga–w–d–o–m	CAUS.FUT
k.	laga	hit
l.	laga–w̃	let's hit (subjunctive)

5 Derivational Verb Stem

The following derivational verb stems have been found in Ibi-so:

5.1   Transitive Suffix

The transitive suffix appears to be homophonous with the <u>Reversive</u> suffix [–ru], although the behavior differs in the stem. The verb root surfaces in the transitive with either the stative suffix [–i] (80a - b), or the isolation default [–u] (80c - e). A root-final nasal spreads nasalization to the [r] of the transitive suffix. Roots with high vowels are unaffected by vowel harmony.

(80)   Stative ~ Transitive: Height and [ATR] harmony in derived roots

	Stative	Gloss	Transitive	Gloss
a.	sínn–í	carry on back	sínn–í–r̃ú	put on (sbs) back
b.	íŋí–í	stand up, stop(person)	íŋí–í–r̃ú	stop (sth)
c.	ìní–í	bathe	ín–ú–r̃ú	bathe (sb)
d.	tùŋ–í	kneel	tùŋ–ù–r̃ú	make kneel
e.	dùw–í	carry on head	dú–ú–rú	put on (sbs) head
f.	díìⁿ	lie down	(íì) dù–nú	have lie down, put to sleep
g.	dèéⁿ	sit down	dàà–nú	have sit, seat

The transitive suffix undergoes back harmony with verb roots with back, mid (81a - d) and back, low (81e - g) vowels. Interestingly, the transitive suffix appears to be [–ATR], although the [–ATR] value only spreads to the final vowel of the citation stem when the root is consonant-final (80a - c).

(81)   Stative ~ Transitive: Height and [ATR] harmony in derived roots

	Stative	Gloss	Transitive	Gloss
a.	gób–í	cling to	góbɔ́–rɔ́	cause to cling
b.	tòg–í	be spilled	tóg–ɔ́ˈɔ́	spill (sth)
c.	gór–í	put ones hat on	gór–ó–ró/góóró	put hat on (sb)
d.	dòmm–ò pó–jín	roll on turban	dómmó pɔ́ɔ́–r̃ɔ́	put turban on (sb)
e.	tág–í	put ones shoes on	tág–á–ˈrá	put shoes on (sb)
f.	pág–í	tie ones belt on	pág–á–rá	tie belt on (sb)
g.	bàŋ–í	hide (oneself)	bàŋ–á–r̃á	hide (sb, sth)

5.2   Reversive Suffix

The reversive suffix [–ru] attaches to the verb root, and is followed by a person marking suffix.

(82)   Reversive: Nasal spreading in derived stems

	Root	Gloss	Reversive	Gloss
a.	ɛ́r	braid	ɛ́r–ɛ́–rù–	not braided
b.	têb	bend	têb–ù–rù–	unbend
c.	sôg	lock	sòg–ù–rù–	unlock
d.	pɛ́g	nail	pɛ̀g–ù–rù–	remove nail
e.	dêb	cover (object)	dêb–ú–rú–	uncover (object)
f.	jɛ̀b	roll up pants	jɛ̀b–ù–rú–	un-roll pants
g.	gàd	hobble	gàd–ù–rú–	unhobble
h.	tɔ́ʤ	sag	tɔ́ʤ–ú–rú–	un-sag
i.	ʤìb	put on a panya	ʤìb–ú–rú–	take off a panya
j.	nímíɲú bɛ̀ɛ̀	remember	nímíɲúbɛ̀ɛ̀–rù–	unable to know

62

Examples (82a - f) below show that after the final vowel is epenthesized, the nasalization of a root-final nasal consonant spreads to the [r] of the reversive suffix. Note from example (82j) above, only root-final nasals spread nasalization, the three word-internal nasals above do not spread nasalization to the suffix. Since only root-final nasals spread nasalization, a question arises as to whether the root-final vowel epenthesizes before the spreading of the nasalization. In either case, it is clear from these examples that nasal-spreading only occurs at morpheme boundaries. The root tones are delinked and a low tone spreads iteratively to all vowels in the stem.

(83)   Reversive: Nasal spreading in derived stems

Root	Gloss	Reversive	Gloss
a. màn–ú	lost	màn–<u>à</u>–r̃ú	not lost
b. náàŋ–ú	forget	náàŋ–<u>à</u>–r̃ú	remind
c. nɔ̀ŋ–í	caught (in tree)	nɔ̀ŋ–ù–r̃ú	un-caught from tree
d. dìŋg–ú	tie (knot)	dìŋg–ú–r̃ú	untie (knot)
e. tìm–ú	put top/lid on	tím–ú–r̃ù	take off
f. sɔ̀nn–ú	unbraid	sɔ̀nn–ú–r̃ú	not unbraided

(84)   Reversive negatives

naaŋ-a-r̃a-r̃u-m	not reminded
teb-ɛ-rɛ-ru-m	neg.caus of bend
sog-o-ro-ru-m	not unlocked
sɔn-nɔ-nɔ-ru-m	not unbraided
nɔŋ-nɔ-r̃ɔ-ru-m	not uncaught from a tree

(85)   Reversive negatives

tagerum (not put on shoes)   tagararum (not put shoes on sme)

Root	Perf1	Perf2	Reversive–PERF	Gloss
gonn	gónn–ì	gònn tín	gònn–ò–rú gònn tìn	fence in
pɛg	pɛ́g–íjɛ̀	pɛ̀g–ɛ́ tìn	pɛ̀g–rú gònn tìn	nail
pɪnn	pínn–íjɛ̀	pínn–ɛ̀ tìn	pín–ú–r̃ú gónn tìn	close
sɔg	sóg–íjɛ̀	sóg–ó tìn	sòg–ù–rù gónn tìn	lock
sɔn	sɔ́n–ɔ́dʒɛ̀	sɔ́n–ɔ́ tìn	sònn–ú–r̃ú gónn tìn	unbraid
dʒb	dʒíb–íjɛ̀	dʒìb–ì–rú tìn	dʒìb–ú–rú gónn tìn	wrap
dɛb	dɛ̀b–í	dɛ̀b–ɛ́ tìn	dɛ̀b–ú–rú gónn tìn	cover
teb	téb–íjɛ̀	téb–úr–ú tìn	téb–ù–rù gúwà	bend
tɔdʒ	tɔ́dʒ–íjɛ̀	tɔ́dʒ–úr–ú tìn	tɔ́dʒ–ú–rú gùwà	squat

	Stem	Gloss
a.	sòg–ò–rò lá	lock
b.	pɛ̀g–rù lá	nail
c.	nìmìɲù bè lá	remember
d.	dʒìb–ì–rì lá	wrap panya
e.	dʒɛ̀b–ɛ̀–rɛ̀ lá	roll up pants
f.	gàd–ù–rù lá	hobble

The causative is formed by attaching the suffix /Vw-n/ to verb roots. The quality of the vowel, discussed further in the section describing the Verb Root, is determined through vowel harmony.

(87)   Causative: Nasal deletion

	Root	Gloss	Causative	Gloss
a.	kaaj	eat	kà–àẃ–ǹ	feed
			kaa–r̃u–m	neg
b.	baar	help	bààr–àẃ–ǹ	cause to help

c.	teg	speak	tég–ɛ́ẃ–ǹ	cause to speak	
d.	dɛb	cover	dɛ̀b–ɛ̀ẃ–ǹ	cause to cover	
e.	ʤug	know	ʤùg–ɔ̀ẃ–ǹ	inform	
f.	joj	enter	jɔ̀–ɔ̀ẃ–ǹ	make enter	

The final nasal of the causative suffix is deleted when there is a nasal in the verb root. The nasal may occur root-finally (88b - e), or word-initially (88a).

(88)   Casuative: Nasal deletion

a.	nɔɔj	drink	nɔ̀–ɔ̀ẃ	give a drink (to animals)
b.	ʤaŋ	read	ʤàŋ–ɔ̀ẃ ʤaŋ–a– r̃u–m	teach neg
c.	kunn	put (on shoes, clothes)	kùnn–ɔ̀ẃ	make put (on shoes, clothes)
d.	pinn	close (by itself)	pìnn–ɛ̀ẃ	make close
e.	sinn	dress (v.)	sìnn–ɛ̀ẃ	cause to dress

(89)   <mark>Mediopassives</mark> Completive? (not recent past) 'X is done'

mediopassives or statives? lie down paradigm vs. kneel?

	Root	CAUS	3rd PERF	Gloss
a.	tab	tab–i	táb–í–jè	start
b.	nɔɔ	nɔɔ–w	nɔ̀j–ínjɛ̀	drink
c.	ini	ini–r̃u	ín–íʤè	bathe
d.	iŋi	iŋi–r̃u	íŋ–íjɛ̀	stop
e.	déé^n	daa–nu	dèé^n–jè	sit
f.	<mark>dii^n</mark>	<mark>duu–nɔ</mark>	<mark>dìì^n–já-</mark>	<mark>lie down</mark>

g.	túŋ–ì	tuŋ–ɔ–nɔ	túŋ–íjɛ̀	kneel
h.	tag–i	tag–a–ra	tág–íjɛ̀	put on shoes
i.	gor–i	go(r–o)–ro	gòr–íjɛ̀	put on hat
j.	duw–i	du–u–ro	dùw–íjɛ̀	carry on head
k.	tog–u	tog–o	tóg–íjɛ̀	spill
l.	ger–i	ger–ɛw–n	gèr–íjɛ̀	keep
m.	kum–i	kum–ɛw–n	kúm–íjɛ̀	make a fist
n.	teb–i	teb–er–e	téb–íjɛ̀	bend

==get differences in Perfective negatives between statives and passives:==

táb–ɛ–rú - start-PERF.NEG.3S

tab-a-ni - they have not started

*tab-a-la

bàr-á-bè - he helped/was helped (bar-ijɛ-be - defend sme)

bàŋ-í-jɛ̀ - he is hidden

bàŋ-í-jɛ̀-bè - he was hidden

bàŋ-è-r̃ú - he was not hidden (==check==): he is not hidden =fut/pres negative formation for statives

dèè-r̃ú - (note spreading of nasalized vowel to suffix) - I am not sitting (as in response to 'sit!'),

or I was not sitting, but -

dì-dáá-m - I am sitting

dì-dáá-lá-m̀/dáá-lá-m̀ - I am not sitting (but see here that mediopassive and stative are different)

birɛ birɛ jɛ-ŋ - the work is finished
birɛ birɛ jɛ-m
birɛ jɛ-m - I worked

PERF paradigm for go = jɛɛ
jàá-m̀   jááj
jáá-ẁ   ɛ́ jááj
jáà   bɛ́ jááj

PERF paradigm for come = ʋɛ
ʋì jáá-m̀   ɛmɛ ʋì jáàj
ʋì jáá-ẁ   ɛ ʋì jáàj
ʋì jáà   bɛ ʋì jáàj

(sit = stative form)

carry on head
dùwí-jɛ́-m̀
dùwí-jɛ́

PERF paradigm for arrive = dɔ́ɔ̀
dù wáá-m̀   ɛmɛ dù-wáá-j̀
dù wáá-ẁ   ɛ dù-wáá-j̀
dù wáà   bɛ dù-wáá-j̀

PERF paradigm for walk = jɔ́ɔ̀j
jɔ́ɔ́j jɛ́-m̀   ɛmɛ jɔ́ɔ́j jáàj
jɔ́ɔ́j jɛ́-ẁ   ɛ jɔ́ɔ́j jɛ̀
jɔ́ɔ́j jɛ̀   bɛ jɔ́ɔ́j jáàj

PERF paradigm for run = dʒɔ́b-ɔ́
dʒɔ́b dʒɔ́bó dʒɛ́-m̀   ɛmɛ dʒɔ́b dʒɔ́bó dʒɛ́-ŋ̀
dʒɔ́b dʒɔ́bó dʒɛ́-ẁ   ɛ dʒɔ́b dʒɔ́bò dʒɛ̀
dʒɔ́b dʒɔ́bó dʒɛ̀   bɛ dʒɔ́b dʒɔ́bó dʒɛ́-ŋ̀

PERF paradigm for fly = kír-ɛ̀
kír-ì jɛ́-m̀   ɛmɛ kír-í jɛ́-ŋ̀
kír-ì jɛ́-ẁ   ɛ kír-í jɛ̀
kír-í jɛ̀   bɛ kír-í jɛ́-ŋ̀

PERF paradigm for forget = náŋ-á (stative?)
naŋ-aa-m   ɛmɛ naŋ-aa-j
naŋ-aa-w   ɛ naŋ-aa-j
naŋ-aa   bɛ naŋ-aa-j

PERF paradigm for climb = sug-o (stative?)
sug-aa-m   ɛmɛ sug-aa-j
sug-aa-w   ɛ sug-aa-j
sug-aa   bɛ sug-aa-j

<mark>birɛ sugɔw = the work has descended</mark>

PERF paradigm for climb = ul-o (stative?)
ul-aa-m   ɛmɛ ul-aa-j
ul-aa-w   ɛ ul-aa-j
ul-aa   bɛ ul-aa-j

fall = num-ɔ (*numɔjɛ = Yorno so imperf)
num-aa-m

-----
wo-n laga bɛ-ŋ (he was hit)
wo ii laga <mark>bɛ</mark> (he hit (the child))
mu ii laga bi-m   I hit the child
mu ii laga bo-m   I hit the child

<mark>Past ImPerfective (check ATR of final vowel)</mark> - *ɛ*

shave

mǔ jáá kújì káá-ẁn-bí-m   ɛ́mɛ́ jáá kújì káá-wn-bɛ̀-ŋ

jáà ú kújì kááẁn-bò   ɛ́ jáá kúji káá-wn-bɛ̀

màlìk jáá kú káá-ẁn-bɛ̀   bɛ́ jáá kújì káá-wn-bɛ̀-ŋ

fall

mǔ jáá nù númɔ̀-n-bì-m   ɛ́mɛ́ jáá nù númɔ̀-n-bɛ̀ -ŋ

ú jáá nù númɔ̀-n-bì-w   ɛ́ jáá nù númɔ̀-n-bɛ̀

wó jáá nù númɔ̀-n- bɛ̀   bɛ́ jáá nù númɔ̀-n-bɛ̀ -ŋ

give

óbó-n bì-m   óbó-n bὲ -ŋ

óbó-n bì -w   óbó-n bὲ

óbó-n bὲ   óbó-n bὲ -ŋ

hit (inanimates)

lògì láɣà-wn-bì-m   lògì láɣà-wn-bὲ -ŋ

lògì láɣà-wn-bì-w   lògì láɣà-wn-bὲ

lògì láɣà-wn-bὲ   lògì láɣà-wn-bὲ –ŋ

5.3   Stative

(90)   1SG Statives : <mark>mid</mark> vowels (are these redup Perfectives ?)

	Root	Stem		Gloss
a.	gɛr	gí–g–έ–m̀ gi-ʒɛɲɛ-do-m	ʒɛɲɛ-r̃u-m ʒɛɲ-ɛ-do-m	hold
b.	nɛɲ	ní–nέɲ–έ–m̀		lean
c.	sinn	sí sín–έ–m̀		carrying baby on back
d.	pinn	pí pín–ɛ́	pinɛ-ru-m	close
e.	li	lí líj–έ–m̀	lij-ɛ-ru-m	afraid
f.	tuŋ	tù túŋ–έ–m̀		kneel
g.	tɔdʒ	tú–tɔ́dʒ–ó–m		squat
h.	di	dí–d–í–m̀		lie down
i.	iŋ	í–íŋì–m		stand

j.	am g	ám gi gɛ́–g–ɛ́–m̀	arms crossed over
k.	gí mìr̃ù	gí mir̃u gɛ́–gɛ́–m	head hanging down

Statives are formed in a similar manner to the Reduplicated Perfective aspect. They differ, however, in the <mark>Perfective aspect of the stative stem</mark>.

	Stem	Gloss
	<u>Stem</u>	<u>Gloss</u>
a.	mǔ j–áà–m	I left
b.	ú j–á–òw	you left
c.	wó j–à	he left
d.	ɛ́mɛ̀ j–á–jì–n	we left
e.	ɛ́ j–áà–j	you (pl) left
f.	bɛ́ j–áà–j	they left

jaa-ru-m

g.	nùmú	fall
h.	nùm–áàm	I fell down

num-o-r̃u-m

i.	dééⁿ	sit
j.	dì d–ám̀	I sat down
k.	dì dáà–bì–m	I was sitting
l.	jòjí	I am full

m.	dǐn	
n.	dìj–áà–m	I laid down

o.   dí dîn dòm   I want to lie down

p.   m bom   I want

q.   ííŋìȓɛ̀

r.   iiŋiȓ–aa–m   I got up

s.   sùgú   descend

t.   sùg–áà–m   I got down/descended

Unlike action verbs, a stative stem is made Perfective by the suffixation of the morpheme [áà] plus the person marker (get others).

Devinette

1 tanre
   devinette
Devinette

2 yagau   lee jòn   lee oru   moone   unɔ be yu wa   jaa wɔ   .
   paindatte et lapain,lièvre et champ rassemblé nous eux mil cultiver aller où, y
Le paindatte et le lapin ils sont dit de rassemblons nos champs allons-y à cultiver.

3 oru   jɛ jɛɛ   gɛ   bɛ   lèi   morin   gɛ   yu wain   .
   champ ils arriver répéter, dire ils, les deux rassembler répéter, dire mil cultivé
Ils sont parties au champ ils sont cultivé ensemble.

4 yu wain   gɛ   jòn   kubò lee goo jè   gɛ   jɛɛ   yagau
   mil cultivé répéter, dire lapin pied et sorti prendre répéter, dire arriver, partir paindatte
kiresɛ   lee jɛɛ   .
en volant, vol d'oiseau et   arriver, partir
Ils sont cultivés le mil, le lapin en venant à pied et le paindatte en volant ils se sont arrivés.

5 yu gò   wain   gɛ   ilɛ wo jɛ gɛ   .
   mil danser cultivé répéter, dire mir il, lui ils répéter, dire
Ils sont cultivés le mil prêt à récoltés.

6 bɛ   lèi   moonrin gɛ   gèɲin
   ils, les deux ensemble répéter, dire récolté
Les deux ils sont dit récoltons ensemble.

7 gègɛ   yu gò   gamarawn be gigɛ .
   récolte mil pas, danser partageons eux
Ils sont récolté ensemble et partageons aussi ensemble.

8 ɛ   jòn gamuru gò   wɔ unɔne   .
   vous lapin partager danser où c'est-a-moi
Et le lapin a dit qu'on ne partage pas ensemble c'est-à-moi.

9 yagau   unɔ bɛ   lèi   gamuru gò   wɔ .
   paindatte nous ils, les deux partager danser où
Il a dit qu'il ne partage pas avec le paindatte.

10 yagau   yabaru   jòn yabaru   saarɛ goo jè   gɛ   jɛɛ   .
   paindatte ne pas d'accord lapin ne pas d'accord justice sorti prendre répéter, dire arriver, partir

Le paindatte il ne pas accepter et le lapin aussi il ne pas accepter ils sont parti à la justice.

11 jεε   gε   yagau   won oju   wo   jεε   dèi   wɔ
    arriver, partir répéter, dire paindatte leur route il, lui arriver, partir pour, à propos de où
maa   yagau   gèm   .
sec,dur,construire paindatte calme

Ils sont arrivé là-bas ils sont demandé à paindatte la routé que elle est partit qu'elle ne pas fut répondu.

12 jòn   oju   wo   jεε   be   gigε oju   unɔ   jεε   bula   ko   din
    lapin route il, lui arriver, partir eux dire route nous arriver, partir tout droit cela coucher
gε   tagu   .
répéter, dire montré

Ils sont demandé a lapin la routé que elle est partit qu'il a montré à eux.

13 ε   kɔ yagau   wɔ yu gònne tòon   wɔ won korii wɔ won koru obu   gε   daa
    vous ça paindatte où mil dedans ne pas où leur tord où leur tord donne répéter, dire laisse
gin   .
comme

Ils sont dit si c'est comme ça il n'appartient pas le mil il est tort, ils sont dit le paindatte qu'il est tort.

14 yagau   òo   gε   wo   won   .
    paindatte oui répéter, dire il, lui leur

Le paindatte aussi a dit oui je suis d'accord.

15 jòn   yu kɔ dongon   gε   tumbutu   jεε   gε   dononron
    lapin mil ça pile, enlever paille répéter, dire Tombouctou arriver, partir répéter, dire vendre
gε   nèun baii   jè   gε   vεε   .
répéter, dire sel   ramasser prendre répéter, dire venir

Après le lapin il a pris le mil d'enlever le paille il est partit à Tombouctou a vendue il a ramassé le sel il venait.

16 nèun baii   gε   vεε wo   won yagau   wa   jè   jεε
    sel   ramasser répéter, dire venir il, lui leur paindatte cultiver prendre, épouse arriver, partir
gε   gueje   gε   nèun kɔ unɔ obò   wɔ   .
répéter, dire accueillera répéter, dire sel   ça nous donné où

Quand il ramasse le sel il venait le paindatte aussi il est partit attaque en cour de route il a dit le sel c'est-à moi donne.

17 jòn   obòdom   wɔ unɔne   tumbutu   jεε   gε   εbε   gε
    lapin je ne donne pas où c'est-a-moi Tombouctou arriver, partir répéter, dire acheter répéter, dire
vεεm wo   kɔ nèun kɔ obòdom   wɔ   .
venir il, lui ça sel   ça je ne donne pas où

Le lapin a dit c'est pour moi je le donne pas le sel, je suis partis acheter à Tombouctou, je viens d'arriver comme ça je ne donne pas le sel à qui que je sois.

18 yagau   wa   yabarum   wɔ .

   paindatte cultiver ne pas d'accord, accepter où

Donc le paindatte il n'est pas d'accord.

19 bɛ   lèi   iya   goo   jè   gɛ   saarɛ   jɛɛ   .

   ils, les deux encore sorti prendre répéter, dire justice arriver, partir

Les deux sont sorti encore ils sont partis à la justice ils sont arrivé là-bas.

20 saarɛ   jɛɛ   be   kanran   dèi   maa   be   gigɛ .

   justice arriver, partir eux aussi, fait pour, à propos de sec,dur,construire eux dire

Ils sont partis à la justice ils sont posé la question, que y'a t-il passé ?

21 yagau   unɔ tumbutu   jɛɛ   gɛ   nèun kɔ duii   gɛ   unɔ

   paindatte nous Tombouctou arriver, partir répéter, dire sel   ça porte, chargé répéter, dire nous

vɛɛ   gɛ   danran   unɔ wo   kɔin   taguru   gɛ   kɔ wo kukurin kɔ

venir répéter, dire au milieu de la tète nous il, lui c'est ça garante répéter, dire ça où cheveux ça

gò   wo   kɔ dèi .

danser il, lui ça cela

Le paindatte il les répondu : je suis partis à Tombouctou j'ai supporté le sel, je suis venue comme ça pour cela ma tête il n'y a pas de cheveux.

22 jòn   dèi   maa   be   gigɛ jòn   gèm .

   lapin pour, à propos de où, sec, dur, construire eux dire lapin calme

Ils sont demandé a lapin que y'a t-il passé lapin il est calmé il n'a pas fut à répondu à leur question.

23 ɛ   kɔn bi   wɔ .

   vous sa   fait où

Et son été passé comme ça.

24 jònɲi yagaun   moni maa   yagauin jònu moni maa   gin   wɔ

   lapin paindatte eux   sec,dur,construire paindatte lapin eux   sec,dur,construire comme où

yagaui   jònu moni gin   wɔ .

paindatte lapin eux   comme où

Ils sont demandés comme qui a perdu dans cette devinette ? Le lapin qui à eux le paindatte où bien le paindatte qui à eux le lapin ? Ils sont dit c'est le paindatte qui à eux le lapin. Le perdant c'est le lapin. Ce que c'est passé entrée lapin et le paindatte.

Le Conte Légende

1 inrin   ni
   conte chant
Conte chant

2 danane   oru   dane   dana   jɛɛ   gɛ   .
   chasseur champ chasseur chasser arriver, partie répéter, dire
Le chasseur il est partit au champ pour le chasse.

3 gòngònron ònyon gɛ   nɔgɔ   bɛɛru   kanrun gɛ   komin   naa   gɛun wo
   promener fatigué répéter la viande ne trouver fait   répéter trou d'arbre la vache noir il, lui
to   wɔ tayi   .
dedans où tiré sur!
Il a promène à fatigué, il ne pas eu la viande y'avait une vache noir dans un trou il a chassé ça.

4 naa   gɛun kɔ tayi   gɛ   paanu   gɛ   nɔgɔ   kɔ laaru jɛ gɛ   ginni
   la vache noir ça tiré sur! répéter ŏte,enlevé répéter la viande ça coupe ils répéter la maison
vɛɛ   .
venir
Il a chassé la vache noir il a opté la peau il a coupé la viande par morceau il est venue à la maison.

5 ginni   vɛɛ gɛ   jaana wɔ .
   la maison venir répéter prépare où
Il est venue à la maison il a dit de préparer.

6 nɔgɔ   kɔ jaanu   be kanran gɛ   .
   la viande ça préparer, cuire eux aussi, fait répéter
Ils sont fait prépare la viande.

7 anran   danane jɛrɛ mi tan   laa   .
   homme chasseur venue me chassé, tiré moi, d'abord
Il a dit un homme chasseur il est venue me chassé.

8 anran   danane jɛrɛ mi tan   laa .
   homme chasseur venue me chassé, tiré
Un homme chasseur il est venue me chassé.

9 komin naa gɛum toonu komu toonu naa gɛum
  trou d'arbre la vache noir dedans, profond (eur) trou dedans, profond (eur) la vache noir
toonu .

dedans, profond (eur)

La vache qui est dedans dans un trou profond, dans un trou profondeur la vache qui est dedans.

10 nɔgɔ belu naa gɛum tan laa .
  la viande ne pas eux, trouver la vache noir chassé, tiré moi, d'abord

Tu n'es pas eux la viande tu as chassé la vache noir.

11 e jaala òru u be sa .
  vous tu as eux problème tu, toi eux sœur, transparent, claire

Hé! Tu as eu un problème sérieux.

12 e jaala òru u be sa kɔ wo gigɛ .
  vous tu as eux problème tu, toi eux sœur, transparent, claire ça il, lui dire

Hé! Tu as eu un problème il a dit comme ça.

13 iya vɛɛ gɛ nɔgɔ kɔ to gin .
  encore venir répéter la viande ça verse comme

Encore il est venu enlever la viande.

14 to goo gɛ nɔgɔ titin deen be gigɛ .
  verse sorti répéter la viande croque veulent, s'asseoir eux dire

Il est d'enlever la viande pour croquer.

15 anran danane jɛrɛ mi ko laa .
  homme chasseur venue me cela moi, d'abord

Il a dit un homme chasseur il est venue me croqué.

16 anran danane jɛrɛ mi ko laa .
  homme chasseur venue me cela moi, d'abord

Un homme chasseur il est venue me croqué.

17 komin naa gɛum toonu .
  trou d'arbre la vache noir dedans, profond (eur)

La vache noire qui est dedans dans un trou profondeur.

18 komu toonu naa gɛum toonu .
  trou dedans, profond (eur) la vache noir dedans, profond (eur)

La vache noire qui est dedans dans un trou profond.

19 nɔgɔ   belu   naa   gɛum tan   laa   .
   la viande ne pas eux, trouver la vache noir   chassé, tiré moi, d'abord

Tu n'es pas eux la viande tu as chassé la vache noir.

20 e   jaala   òru   u   be sa   .
   vous tu as eux problème tu, toi eux sœur, transparent, claire

Tu as eu un problème sérieux.

21 kɔn wo   gigɛ vɛɛ nɔgɔ   kɔ tin   .
   sa   il, lui dire venir la viande ça boupée, croqué

Il a dit comme ça il est venue croquer la viande.

22 nɔgɔ   kɔ tin   wo   kanran gɛ   bɛɛrɛ kɔ pidee gɛ   vɛɛ gɛ
   la viande ça boupée,croqué il, lui aussi, fait répéter ventre ça gonfler répéter venir répéter
jegu   jegu   .
degré degré

Il a croqué la viande le ventre il est devenue gonfler degré à degré.

23 loo   puu   obò   ònyon baa   jaaru loo   puu
   médicament tout, tous, totalité donné fatigué ça n'a pas guérie médicament tout, tous, totalité
obò   ònyòn baa   jaaru wɔ .
donné fatigué ça n'a pas guérie où

Ils sont donne tous le médicament il ne pas guérie et ils sont donne toutes les façons de médicament il ne pas guérie.

24 ɛ   wonu jèn jè   gɛ   dèin   wo   tayi   gòone wonu jeen
   vous lui   pris prendre répéter, dire en droit il, lui tiré sur! là-bas lui   prendre, sous levé
jɛɛ   wɔ .
arriver, partir où

Ils sont pris à lui ils sont partit l'endroit où il la chassé.

25 jèn be jɛɛ   gɛ   vɛɛ komu gòne vɛɛ gɛ   naa   gɛun giranga .
   pris eux arriver, partir répéter venir trou   là-bas venir répéter la vache noir   gros

Ils sont partit là-bas, ils sont arrivés tout juste dans le trou la vache noir qui est venue gros grand.

26 wonu kɔ baa   ju   gɛ   ginni   dimirun jè   gɛ   vɛɛ wɔ .
   lui   ça sa été guérie répéter la maison ramène   prendre répéter venir où

Il était guérie comme ça ils sont ramènent à la maison. Ce que c'est passé entrée d'un homme chasseur et la vache noir.

Légende

1 inrin   ni
  conte chant
Conte chant

2 ajerikoro   ɛri   gɛ   wo   goo   .
  grand place du village doux, agréable, sucre répéter, dire il, lui sorti
Au grand place du village y'avait une lutte c'était très chaud.

3 gangan lee bipin   lee unɔ bɛ   tai   jaa   wɔ .
  copeau et petit oiseau et nous ils, les place public aller, repas où
Le copeau et le petit oiseau ils sont dits de partons à la grande place publique.

4 bɛ   lèi goo gɛ   tai   jɛ jɛɛ   gɛ   .
  ils, les deux sorti répéter, dire place public ils arriver, partir répéter, dire
Les deux sont sorti ils sont partis à la place public.

5 gangan pregɛ joyi   bipin   pregɛ joyi   .
  copeau sauté entrée petit oiseau sauté entrée
Le copeau il a saute entrée et petit oiseau aussi il a sauté entrée.

6 bipin   lee gangan lee agɛ .
  petit oiseau et copeau et lutté
Le petit oiseau et le copeau ils sont luttes.

7 bipin   ganganne jaragɛ   paru   .
  petit oiseau copeau   faire tomber faire descendu
Le petit oiseau il à faire tombe le copeau.

8 paru   wo   kanrankɛ gangan jobò   gɛ   ginni   jɛɛ   .
  faire descendu il, lui fait   copeau fuit, courir répéter, dire la maison arriver, partir
Il a fait tombe le copeau à fuit il est partit à la maison.

9 ginni   jɛɛ   gɛ   inna waru   waru   gun
  la maison arriver, partir répéter, dire la mère rapidité, vite rapidité, vite enlever
laa   .
moi, d'abord, premier
Il est partit à la maison il dit à sa mère enlevé rapidement repas.

10 emɛ egu   dugu   jara   yesogèn emɛ egu   taa   jara
    nous brousse, champ éléphant faire tomber on arrivé nous brouse,champ liyenne faire tomber
yesogèn inna   waru   waru   gun   laa   .
on arrivé la mère rapidité, vite rapidité, vite enlever moi,d'abord,premier

Il dit on n'a fait tombe le plus grand l'homme de brousse nous arrivions et nous sommes faire tombe un libyenne de brousse nous arrivions ma mère enlevé vide-vite.

11 jè   gun   waru   waru   .
    prendre enlever rapidité, vite rapidité, vite

Il a dit comme ça sa mère a dit je entrain de l'enlever vide-vite.

12 kɔn wo   gigɛ wo   na   won jaa   jeen   gɛ   wo   obu
    sa   il, lui dire il, lui la mère leur aller, repas prendre, sous levé répéter, dire il, lui donne
jaa   unɔ kaa   .
aller, repas nous manger

Il a dit comme ça sa mère elle a pris le repas il a donné à son fils il a mangé le repas.

13 iya   akaba   ya gɔ   goo jè   gɛ   bɛ   lèi   tayi   jɛɛ
    encore le lendemain hier danser, de sorti prendre répéter, dire ils, les deux tiré sur! arriver, partir
jɛ be jɛ gɛ   .
ils eux ils répéter, dire

Encore le deuxième jour ils sont sorti, ils sont partis à la place public eux ils sont partit comme ça.

14 è   bipin   na   gɔ   ignw tai   enne   jaa   wo .
    potasse petit oiseau la mère danser, de façu place public regarder aller, repas où

Après eux la mère de petit oiseau cette façu allons-y regarder à la place public la lutte des enfants.

15 tai   enne   jaa   wo   gigɛ gangan na   gɔ   ii   won kɔ lee
    place public regarder aller, repas il, lui dire copeau la mère danser, de enfant leur ça et
tain   iyew   jɛ kɔ .
place public voir, invisible ils ça

Elle a dit allons-y voir à la place public. La mère de copeau elle a répondu à la mère de petit oiseau son enfant on se voit à la place.

16 tai   enne   jaa   lee jaa   won .
    place public regarder aller, repas et aller, repas leur

Si tu dis que allons-y regarder allons-y.

17 kɔ gigɛ jaa   unɔ sirɛ   daan ti   gɛ   goo jè   gɛ   tayi
    ça dire aller, repas nous prépare dépose envoyer répéter, dire sorti prendre répéter, dire tiré sur!
jɛɛ   jɛ be kanran   gɛ   .
arriver, partir ils eux aussi, fait répéter, dire

Si elle a dit comme ça, après mon repas allons-y voir elles sont sorti ensemble les deux ils sont partis à la place public en arrivé là-bas.

18 iya   gangan pregɛ joyi   bipin   pregɛ joyi
   encore copeau sauter entrée petit oiseau sauter entrée

Encore le copeau il a sauté entrée et le petit oiseau aussi il est entré.

19 bipin   be lèi taari   bipin   ganne jargɛ   paru   .
   petit oiseau eux deux attraper petit oiseau copeau faire tomber faire descendu

Les deux sont luttes le petit oiseau il à faire tombe le copeau.

20 paru   wo kanrankɛ bipin   na   gɔnnɔ   wo   enne   dene
   faire descendu il, lui fait   petit oiseau la mère regarde, retourne il, lui regarder chercher
gangan na   joba .
copeau la mère fuit

Il a fait tombe la mère de petit oiseau avant qu'elle regarder derrière la mère de copeau elle à fuit.

21 jobo   èjɛ   gɛ   parikire   unɔ jɛguru
   courrier parti répéter, dire spatule pour tourner la nourriture cuiller en bois nous prête position
gɛ   wo   denwɔn .
répéter, dire il, lui assis

Elle a couriez elle est partit préparer son spatule elle était assis.

22 gangan iya   jɛ goo gɛ   vɛɛ .
   copeau encore ils sorti répéter, dire venir

Le copeau encore il est venu.

23 vɛɛ   gɛ   inna   waru   waru   gun   laa   emɛ egu
   venir répéter la mère rapidité, vite rapidité, vite enlever moi, d'abord nous brousse, champ
dugu   jara   yesogè emɛ egu   taa   jara   yesogè .
éléphant faire tomber on arrivée nous brousse, champ libenne faire tomber on arrivée

Il est venue ma mère d'enlever vide-vite nous on n'à faire tombe le chef des animaux de la brousse et le libenne.

24 inna   waru   waru   gun   laa   jè   gun   waru
   la mère rapidité, vite rapidité, vite enlever moi, d'abord prendre enlever rapidité, vite
waru   .
rapidité, vite

Ma mère enlevé vide-vite je entrain de l'enlever vide-vite.

25 kɔ wo   gigɛ wo   na   kine banri gɛ
   ça il, lui dire il, lui la mère cœur fâche répéter, dire

parikire   jeen   gɛ   kukɔ gòn daa
spatule pour tourner la nourriture cuiller en bois prendre, sous levé répéter, dire cou sur frappé

wo   gigɛ pire   kɔ wo   gò   wɔ .
il, lui dire blanque ça il, lui danser où

Il a dit comme ça sa mère elle fâche elle a pris son spatule il a frappé sur le cou pour cela le blanc sur le cou. Ce que c'est passé entrée les mères et ces enfants le copeau et le petit oiseau.

A a

ádúr̃ò *n* life

ágá pànnà [áɣá pànnà] *n* lunch

ágá wèdɛ́ [áɣá vèdɛ́] *n* breakfast

ájárà *n* sew (with needle)

am g ám g-í [am̄ !gí] *v* cross arms over

antɔ t àntɔ́ tɔ̀ [àntɔ́ tɔ̀] *v* reprimand

áŋà *n* mouth

> àŋà pág-ù (comp.) [àŋà págù] *v* act of fasting

áŋá kɛ̂ *n* jaw (lower)

áŋá kùú kúrú wòjì *n* mustache

àŋà pág-ù [àŋà págù] (comp. of **áŋà**, **pág-ù** 'tie the mouth', see under **áŋà**)

áŋù gòrò bárⁿù *n* roselle plant

árá *n* rice

ár̃á *adj* male comp. kúbò íí àr̃à 'toe's male child' **(see under kúbà)** comp. nɔ́ɔ̀ ár̃á 'male hand'

> **(see under nɔ̀ɔ́)**
>
> péjí àr̃à (comp.) [pédʒí àr̃à] *n* male sheep

àr̃á *n* rain

árá ŋómmì *n* rice cake (pancake form)

àr̃ŋɛ́ *n* friend

ásárà mɔ̀r̃ɔ̀ *n* dates (from date palm)

àsárá nɛ̀ẁ *n* sugar

àsɛ̀gɛ́ gìrè nú *n* herder

ásɛ̀gɛ̀ sí *n* liquid animal fat (added to sauce)

áynà péɣ̀ [ájnà péj] (comp. of **àýnɛ̀**, **péɣ̀**, see under **àýnɛ̀**)

àýnɛ̀ [àjnɛ̀] *n* 1) man 2) boy comp. ɛ́ɲɛ́ àr̃á 'male chicken' **(see under ènɛ́)**

áynà péỳ (comp.) [ájnà péỳ] *n* old man

B b

bágà *n* stick

baŋ bàŋ-í [bàŋí] *v* hide

báŋà *n* owner

bar bar-a [bara] *v* help

bar bar-a [bara] *v* increase

bélétù *n* soul

bèrú (dɔ̀gɔ́) *n* grass, herbs

béẁ kùú kúrú wòjì *n* beard

bɛ̀ɛ́ *n* chin

bénnè *n* rib

bérè 1) *n* belly 2) *adj* inside

biɲ bíɲ-ɛ̀ [bíɲɛ̀] 1) *v* pull 2) *v* draw (water, at well) by pulling

bɪr bír-ɛ́ bír-ɛ́ [bírɛ́ !bí!rɛ́] 1) *v* work 2) *AGENT* worker *bìr-ɛ̀ bír-ɛ́-ǹ* worker

-bó *v : TAM* pst

boj bódʒ-ú [ɲù bódʒú] *v* bury

bórù *n* paternal uncle

bɔ́gí *n* navel

bɔ́rɔ́ dɛ̀ *n* banana

bùjɔ̀gù *n* guava

bùrèmà dʒùwá *adj* I am full (satisfied after eating)

bùrù *n* bread

bùyì bùjì [bùjì] *n* drum

C c

càpé *n* coffee

D d

daa dááj-ì [dáájì] *v* 1) kill 2) extinguish, put out a fire

daan dan dan [dáán] 1) *v* hunt 2) *AGENT* hunter *dà ná-áǹ* hunter

dag dag–u [dagu] *v* 1) leave (alone) 2) lock (door)

dáɣà *adv* a little

deeⁿ dééⁿ [dééⁿ] *v* sit, sit down

dègè *n* statue

démé *adj* heavy

der̃ dèr̃-έ *v* take a break from working

dɛb dὲb-έ [dὲbέ] *v* cover

dɛg dέg-έ [dέgέ] *v* lick

dèmír̃έ *adj* black

dénnè *adj* round

déré *n* older brother

dèr̃έ *n* restfulness, ease, comfort

dí dímù *n* forehead

dí nór̃ì *adj* thirst

dígà pànnà *n* dinner

dìí *n* water

dii yuy díì yùy-í [díì jùjí] *v* go into the water

diin dìín [dìín] *v* lie down

dɪng díŋg-ὲ [díŋgὲ] *v* tie

-dó *v : TAM* fut

dògò kíné *n* back

domm dòmm–ò pójín [dòmmò pójín] *v* roll turban

dòmò *n* turban

dɔ́ɔ̀ *n* testicles

dɔ̀ɔ́ *cf:* **dùw-í**. *n* luggage

dùgó *n* poison

dùgójí *n* necklace

dʊ dùw-í [dùʊí] *cf:* **dɔ̀ɔ́**. *v* carry on head

dʊb dùb-ɔ́ [dùbɔ́] 1) *v* forge 2) *AGENT* blacksmith *dùb-ɔ̀ dúb-ɔ́ǹ* blacksmith

dʒá *n* meat (cooked)

dʒǎ sírù dʒǎ sír-ù [dʒǎ sírù] *v* cook (a meal)

dʒɔ̂ *n* fishhook

Y y

ee yéè [jéè] *v* 1) leave 2) go

Ɛ ɛ

ɛb ɛ́b-ɛ́ [ɛ́bɛ́] *v* buy

ɛ̀dʒí *adv* a lot

ɛ̀jú [ɛ̀dʒú] *adj* 1) good 2) pretty 3) good looking

ɛ́mmɛ́ *n* sorghum

ɛ̀ɲɛ́ *n* chicken

     ɛ́ɲɛ́ àɾ̃á (comp.) *n* rooster

ɛ́ɲɛ́ àɾ̃á (comp. of **ɛ̀ɲɛ́**, **àýnɛ̀** 'male chicken', see under **ɛ̀ɲɛ́**)

έ↑̀ŋ *n* milk

ɛr ɛ́r-ɛ̀ [ɛ́rɛ̀] *v* braid

ɛ́rɛ́ *n* peanut

ɛ̀r̃ɛ́ *n* goat

ɛ́rɛ́ árà ɛ́rɛ́ *adj* unsteady

ɛ́skíyɛ̀ *n* sneeze

      ɛ́skíyɛ̀ sááy-ì [ɛ́skíyɛ̀ sáájì] *v* sneeze

ɛ́skíyɛ̀ sááy-ì [ɛ́skíyɛ̀ sáájì] (**<u>ɛ́skíyɛ̀</u>**, **<u>sááyì</u>**, see under **<u>ɛ́skíyɛ̀</u>**)

g

gàà *n* indigo

gábú dʒɔ́gɔ̀ *n* watermelon, melon

gad gàd-ú kúún [gàdú kúún] *v* hobble

gám̀ ɲú *n* wing (of a bird)

gámmá *n* cat

gàrɛ́ŋ *n* spleen

gáẃ *n* onion

ger gèr-í gèr-í [nám̀ gèrí], [gèrí] *v* 1) keep 2) hold 3) step on

géw̃ù *adj* big

gɛ̂ *n* hunger (noun)

gɛ̂ mù ɛ́sɛ́ gɛ̂ mù ɛ́sɛ́ *v* I am hungry

gèrù ùsí *n* trap

gi gaɲà *n* okra

gí gáɲà nìŋɛ́ *n* okra sauce

gí gèrⁿú *n* charcoal

gi mir gì mír [gì mír] *v* hang down head

gíⁿ *adj* like

gìnní *n* house

gìnní kùù báŋà *n* head of household

gìnní yésèy [gìnní jésèj] *n* house owner

gir gìrì íí [gìrì íí] *v* sleep (verb only)

gìrì kúmí [gìrì kúmí] (comp. of **gìrì í** 'shut eyes')

gìrì gùjú [gìrì gùdʒú] *n* eyelid

gìrì í *n* eye

       gìrì kúmí (comp.) [gìrì kúmí] *v* blink

gìrì kùú *n* eyebrow

gìrì kùú kúrú wòjì *n* eye lash

gírú pàá *n* face

gob gób–í [góbí] *v* cling to

gomm gómm-ó [gómmó] *v* chop, cut (firewood)

gonn gónn-ú [gónnú] *v* take off, take out

       séyì gʷɔ̀nɔ̀ (comp.) [séjì gʷɔ̀nɔ̀] *v* undress

gor gór–í [górí] *v* put on hat

góró *n* hat

gɔ gɔ́ gɔ́ [gɔ́ !gɔ́] 1) *v* dance 2) *AGENT* dancer *gɔ̀-gɔ́-ɔ́-ǹ* dancer

gɔnn gònn-ó [gònnó] *v* fence in

gɔŋ gòŋ-ó [gòŋó] *v* surround

gɔ́rɔ̀ *n* cola nut

gùdʒí *n* body

gújù [gúdʒù] *n* skin

gùnón *n* slave

gùnú *n* pebble

gur gùr-ó [gùró] *v* dig (sth)

gúròy *adj* young

gʊ gúw̃-ɛ́ gúw̃-ɛ́ [gúw̃-ɛ́ !gúw̃-ɛ́] 1) *v* steal 2) *AGENT* thief *gù-gùw̃-ɛ́ǹ* thief

gwù gwɔ́ⁿ *n* chest (body)

I i

-ì *v > ??? stative*

ídʒí dì *n* fish sauce

ìdʒú *n* dog

íì 1) *n* child 2) *n* diminutive comp. kúbò íí à̃r̃à 'toe's male child' **(see under <u>kúbà</u>)** comp. nɔ́ɔ̀ íí 'hand child' **(see under <u>nɔ̀ɔ́</u>)**

íì yàà gúròy *n* young woman, girl

in ìní–í [ìníí] *v* bathe

ìnɛ́ *n* person

ínsár pìnnì *n* kidney

îr *n* breast milk

ìrí *n* blood

írù *n* milk

írù dîì breast milk

írúwál [í!rúwál] *n* parasol

ɪl íl-ɛ̀ [ílɛ̀] *v* ripe

ɪŋ íŋ-ì [íŋì] *v* 1) stand 2) stop

J j

jàgú [dʒàgú] *n* hump

jàgú yésèy [dʒàgú jésèj] *n* hunchback

jàndúrú [dʒàndúrú] *n* donkey

jaŋ jáŋ-ù [dʒáŋù] *v* read

jáŋgínì *n* body

jeɲ jὲɲ-ú [dʒὲɲ-ú] *v* take

jɪb jíb-ì [dʒíbì] *v* wrap (panya)

joj jòjí 1) *v* enter 2) *adj* full

jòjó *adj* bouncy

jɔ́ɣɔ́ góró gàrá *n* 1) oesophagus 2) throat (interior)

jɔ́ɣɔ́ òdʒú *n* windpipe

jɔŋ jɔ́ŋ-ò [dʒɔ́ŋò] 1) *v* heal 2) *AGENT* healer *dʒù-dʒɔ́ŋ-ɔ́-ǹ* healer

júbà [dʒúbà] *n* pocket

jug [dʒug] *v* know

júpùnò *n* millet flour

K k

kaa kááy-ì [kááj-ì] *v* cut, shave

kaa kááy-ì *v* eat

káár káár [káár] *v* rip, tear

kágá *adj* hard

kánnà *adj* new

kaȓ káȓ-ù *v* do

kέbέ *n* flint for lighter

kέbέlù *n* hot chili pepper

kɛr kέr-ɛ́ [kέrɛ́] *v* bite

kέrɛ́ *n* African eggplant (similar to tomato)

kèrí *n* stem, stalk

kέẁⁿ *n* root

kídʒɛ́ *n* thing

kínɛ̀ *n* liver

kíné lɔ̀mbɔ̀ *n* heart

kínɛ̀ púdʒù pádʒù *n* lung

kíŋù *n* nose

kíŋú bɔ̀r̃ɔ́ *n* nostril

kízà péỳ [kíʒà péj̀] (comp. of **péỳ**)

kò *cop* is

kóbùrì *cf:* **nɔ́ɔ̀ kóbùrì**. *n* toe nail, finger nail

kógò *n* thorn

koj kódʒ-ò [kódʒò] 1) *v* scrape out (calabash, after sawing it in half) 2) *v* peel (fruit, gingerroot) with knife

kòkò mɔ́ *n* smoke

kóníyò [kóníjò] *n* millet beer

kɔ̀dʒá *n* entrails, guts

kú kɔ̌ *n* neck

kúbà *n* foot

> kúbà dɔ́rɔ́ (comp.) *n* heel of foot
> kúbà gírí *n* ankle
> kúbò íí à̃r̃à (comp.) *n* big toe

kúbà dɔ́rɔ́ (comp. of **kúbà**)

kúbà gírí (**kúbà**)

kúbá ídʒù *n* barefoot

kúbò *n* toe

kúbò íí à̃r̃à (comp. of **kúbà**, **íi**, **á̃r̃á** 'toe's male child', see under **kúbà**)

kúbó mèní *n* ring (on toe)

kùbò námmá̃r̃á *n* footprint

kúnnà *n* pounding mortar (any kind)

kùrɔ́ *n* tree leaf

kùú *n* head

kùú kúrú wòjì₁ (comp.) *n* head hair

kùú kúrú wòjì₁ (comp. of **kùú**)

kùú kúrú wòjì *n* hair

kʋm kùm-í kùmìj-ó [kùmí], [kùmìjó] *cf: . v* 1) make a fist *wh:* **kùm-í kùmìj-ó 2)** . 2) crumple *pt:* **kùm-í kùmìj-ó 1)** .

kʋnn kúnn-ú [kúnnú] 1) *v* insert 2) *v* put 3) *AGENT* dyer *gàà kún-ó-ǹ* indigo dyer 4) *v* dye

L l

lab láb-à [lábà] 1) *v* chop 2) *AGENT* sculptor *dègè láb-á-ǹ* statue sculptor 3) *v* sculpt

lag lág-ú [lágú] 1) *v* hit (inanimates) 2) *v* slap

lálέ *subordconn* but

lémùrù *n* orange

lέwlēw *adj* squishy

li líy-ὲ líy-ὲ [líjὲ] *v* fear

lí *n* bed

ló lò *adj* squishy

log lòg-í [lògí (laga-)] *v* hit (animates)

M m

ma mày-í [màjí] 1) *v* make 2) *v* construct 3) *AGENT* brick maker *tém-é má-á-w-ǹ* brick maker 4) *AGENT* potter *tòròj má-áǹ* potter (of pots)

màngórò [màŋgórò] *n* mango (tree)

mángóró îi *n* mango (fruit)

mànná *n* cheek

máŋgòrò ná *n* mango

mínínnì *n* shea butter (for cooking)

mìřú *n* cut (small wound)

mɔ [mójì mɔ̀] *v* laugh

mú

mú mànnà *n* side burns

mùsóró *n* woman's head shawl

músɔ̀ɔ̀rɔ̀ *n* shawl

N n

-ǹ *n* Accusative

S s

naa súnn nàjì [nàjì] *v* braid (rope)

N n

naa nááj-í [náájí] *v* give birth

náà *n* cow

nàà gùrá *n* heifer, young cow (not yet a mother)

nàm *n* cotton

naŋ náŋ *v* forget

nàřú *n* hip

     nářú pó págì (comp.) *n* belt

nářú pó págì (comp. of **nàřú**)

nèẃ *n* salt

néw̋ dìì *n* ocean

nɛ́m̀ sɔ́rɔ́ *n* granulated salt (not in bars)

nɛɲ nɛ̀ɲ-ɛ́ [nɛ̀ɲɛ́] *v* lean

neɾ̃ nɛ́ɾ̃-ɛ́ [nɛ́ɾ̃ɛ́] *v* file (sth, with a metal file)

ni ní-í ní-í [níí níí] 1) *v* sing 2) *AGENT* singer *nìì ní-í-ǹ* singer of songs

ní 1) *n* oil (peanut, for cooking) 2) *pro* it

niin níîⁿ nínn-ɛ̀ [níîⁿ] *v* breathe

níínù *n* breath, breathing

nimiɲ nímíɲú bɛ̀ɛ̀ [nímíɲú bɛ̀ɛ̀] *v* remember

nínnɛ̀ *n* tongue

nìŋɛ́ *n* sauce (any)

nìŋú *n* maternal uncle

nô ménnù *n* bracelet (simple, metal)

nô sátù *n* silver bracelet

nóŋó kɔ̀ *n* raw, uncooked (meat)

nóŋò wám̀ ɛ́dʒú *adj* cooked, done (meat)

-nɔ *v : TAM* imp.neg

nɔ̀ íí *n* branch (of a tree)

nɔ̀ méní *n* ring (on finger)

nɔ́ŋɔ́ dì *n* meat sauce

nɔɔ nɔ́ɔ́ [nɔ́ɔ́] *v* drink

nɔ̀ɔ́ *n* arm

    nɔ́ɔ̀ áɾ̃á (comp.) *n* thumb

    nɔ́ɔ̀ íí (comp.) *n* finger

    nɔ̀ɔ̀ tàgá (comp.) [nɔ̀ɔ̀ tàɣá] *n* palm of hand

    nɔ̀ɔ̀ úɾ̃ú (comp.) *n* hand

nɔ́ɔ̀ áɾ̃á (comp. of **nɔ̀ɔ́**, **áɾ̃á** 'male hand', see under **nɔ̀ɔ́**)

nɔ́ɔ̀ íí (comp. of **nɔ̀ɔ́**, **îi** 'hand child', see under **nɔ̀ɔ́**)nɔ́ɔ̀ únú

nɔ́ɔ̀ íí dúm nɔ̀ *n* 1) pinky finger 2) pinky toe

nɔ́ɔ̀ kóbùrì *cf:* **kóbùrì**. *n* 1) toe nail 2) finger nail

nɔ̀ɔ̀ tàgá [nɔ̀ɔ̀ tàɣá] (comp. of **nɔ̀ɔ́**)

nɔ̀ɔ̀ úr̃ú (comp. of **nɔ̀ɔ́**)nɔ̀ɔ́ⁿ

nŭŋ *n* cow pea

nŭŋ bár̃ù *n* red cow pea

nŭŋ pírú *n* white cow pea (fast growing)

nʊm *v* fall

Ɲ ɲ

ɲáár̃à *n* woman

ɲámá kùⁿ *n* ginger

ɲáŋù *n* fire

ɲɛn ɲèń [ɲèń] *v* look

ɲɛŋ ɲɛ́ŋ-ɛ̀ [ɲɛ́ŋɛ̀] *n* fly

ɲii ɲíî [ɲíî] *v* die

ɲòw̃ú *n* death

ɲóyì [ɲójì] *n* honey

ɲɔ̀ŋɔ́ *n* knee

ɲɔ̀ɔ́ kúkʷɔ̀ *n* wrist

ɲɔ́ɔ́ ɲɔ̀ŋɔ́ *n* elbow

ɲɔ́ɔ́ tútɔ̀ŋ *n* sharp part of elbow (funny bone)

Ŋ ŋ

-ŋgɛ́ *v : TAM* prog

ŋɔ̀nɔ́ *n* meat

O o

ob ób-ù [óbù] *v* give

òrò núŋó *n* game, hunted animals

Ɔ ɔ

-ɔ̀ *v : TAM* Final mid vowel

ɔ́gɔ́ɲɔ̀ *n* camel

ɔ̀gɔ́rɔ̀ *n* well

ɔ́gɔ́rɔ́ dìì *n* well water

ɔ̀rí *adj* humid

ɔ́rɔ́ *n* Boabab

ɔ́r̃ɔ̀ *adj* slick

ɔ̀rɔ̀ íí *n* Boabab fruit

ɔ̀rù nɔ̀wá *n* wild animal

P p

pag pág-ù [págù] *v* tie comp. àŋà pág-ù 'tie the mouth' **(see under áŋà)**

págá [páɣá] *n* leg

pànnà bìrú éjú [pànnà bìrú ɛ́dʒú] *v* cook (food) well

párání *n* flour, powder

péjí àr̃à [pédʒí àr̃à] (comp. of **péjù**, **ár̃á** 'sheep man', see under **ár̃á**)

péjí îì [pédʒí îì] *n* lamb

péjí jàŋú [pédʒí dʒàŋú] *n* ram

péjí yàá [pédʒí jàá] (comp. of **péjù**, **yáà**, see under **yáà**)

péjù [pédʒù] *n* sheep

péỳ *adj* old comp. áynà péỳ **(see under àýnè)**

      kízà péỳ (comp.) [kíʒà péj] *n* old (thing, animal)

pɛ pɛ́ɛ̀ [pɛ́ɛ̀] *v* strike (match, flint lighter)

pɛɛr pɛ́ɛ́r–ù [pɛ́ɛ́rù] *v* break

pɛg pɛ́g-ɛ̀ [pɛ́gɛ̀] *v* nail

pɛr pɛ́r-ù [pɛ́rù] *v* bone (break)

pírú *adj* white

pɩnn pínn-ɛ̀ [pínnɛ̀] *v* close

pòrì níŋé *n* sesame sauce

pɔ́^{n} *n* fonio (cultivated grain, Digitaria exilis)

pɔ́nɔ́ *n* cream of millet

pɔ́nú páà *n* pants

pɔr pɔ́r-ɔ̀ [pɔ́rɔ̀] *v* strangle

pub púb-ì [púʋì] *v* blow on a fire

púnɔ̀ *n* ashes

púpɔ́ɔ̀ *n* papaya

púr̃ɔ́ seed

R r

-r̃á *v > ???* transitive

ròbíné dìì *n* tap water

-r̃ú *v > ???* reversive

S s

sá *n* seed

saa sááyì [sáájì] *v* respond ɛ́skíyɛ̀ sááy-ì **(see under ɛ́skíyɛ̀)**

sáà *n* sister

ságà tàrà [sáɣà tàrà] *adj* young

ságú dʒà *n* millet cakes (usually served with baobab-leaf sauce)

sáɍ̃á *n* broom

sármɛ̀ *n* corn

sé *n* clothing

séyì gʷɔ̀nɔ̀ [séjì gʷɔ̀nɔ̀] (comp. of **gónn-ú** 'take off clothes')

séyí kúnnù [séjí kúnnù] *n* get dressed

sɛm sɛ́m-ɛ̀ [sɛ́mɛ̀] *v* sweep

sì sɛ́mɛ́ *n* rag

sí sì *adj* small

sìí *n* fat around stomach

sinn sínn-ì [sínnì] *v* carry baby on back

sínnú *n* shin, lower leg

sìsàá *n* bird (any)

sísɛ́mɛ̀ *adj* worn out

sob sob-u *v* brush out braids

soŋ sóŋ [sóŋ] *v* rest, relax

sɔ́ *n* speech

sɔb sɔ̀b-ɔ́ [sɔ̀bɔ́] *v* medical injection, shot

sɔg sɔ́g-ɔ̀ [sɔ́gɔ̀] *v* lock

sɔn sɔ́ǹ [sɔ́ǹ] *v* unbraid

sɔ́ŋù *n* horse

sug sug-o *v* descend

súgúrù *n* 1) ear 2) earlobe

súgúrù bɔ̀r̃ɔ́ *n* earhole

súgúrù dʒélù *n* earring

sùkùrò kɛ́rù *n* sugar cane

súŋì *n* rope

sùŋúr̃o *n* younger brother

T t

taa tàà-yí [tààjí] *v* shoot

tááŋ *n* door

tab táb-í *v* start

tab tab–u [tabu] *v* touch

tag tág–í [tágí] *v* put on shoes

tàgá [tàɣá] *n* pond

tágá dìì [táɣá dìì] *n* pond water

tagar tagar-a *v* show

tágù *n* shoes

tăjù [tădʒù] *n* basket

tamm támm-ù [támmù] *v* kick

Ɲ ɲ

taŋan ɲâŋ táŋán-ù [ɲâŋ táŋánù] *v* light, ignite

T t

tárù *n* egg

té *n* tea

teb téb-ì [tébì] *v* bend

teg teg teg-e 1) *v* speak 2) *n* language

tèmè *n* brick

ten [tén] *v* chew

ti tíy-ɛ̀ [tíjɛ̀] 1) *v* weave 2) *AGENT* weaver *tădʒù tíj-ɛ́ǹ* basket weaver

tì tábà *n* upper shoulder (traps)

tìbí *n* rock

tìí nà *n* trunk (of a tree)

tìíⁿ *n* tree

tííⁿ îì *n* fruit

tog tòg–í [tògí] *v* spill

tor tòr-ó [tòró] *v* pounding (in a mortar)

tòròy [tòròj] *n* pottery

tórù *n* pig

tɔ tɔji tɔ *v* plant (seeds)

tɔ́dʒú *n* calf (of leg)

tɔg tɔ́g-ɔ̀ [tɔ́gɔ̀] *v* knock (on door)

tɔj tɔ́j-ì [tɔ́dʒì] *v* squat

tɔŋ tɔ́ŋ-ɔ̀ [tɔ́ŋ] *v* write

-tù *v* pfv

tuŋ túŋ-ì [túɲì] *v* kneel

túr̃á *n* tooth

U u

ul ul-o *v* climb

ʊj ùjɔ́ [ùdʒ-ɔ́] *v* build

Ʊ ʊ

ʊ**è** *adj* light

W w

-w *n : Plural* pl

Y y

wa yù wàyí [jù wàjí] 1) *v* farm 2) *AGENT* farmer *jù wá-án*

W w

wayig wajig-e *v* yawn

waying wàyíng-ɛ́ káář̃-ù [wàyíŋgɛ́ káář̃ù] 1) *v* chop 2) *AGENT* butcher *wàjíŋg-ɛ́-ǹ*

Ʊ ʊ

wɛɛr ʊɛ́ɛ̀r [ʊɛ́ɛ̀r] *v* winnow

W w

wòó gùnón yésèy [wòó gùnón jésèj] *n* slave owner

Y y

yáà [jáà] *n* 1) female 2) girl

      péjí yàá (comp.) [pédʒí jàá] *n* sheep (female)

yàà èjú [jàà èdʒú] *n* pretty woman

yè pérú [jè pérú] *n* month

yè pérú lè *n* traditonal Dogon month which indicates the rainy season is almost complete

J j

yɛb jɛ̀b-ú [jɛ̀bú] *v* roll up (pants)

Y y

yènánú péỳ [jɛ̀nánú péj] *n* old woman

yésèy *adj* owner of

yig yìg-é [jìgé] *v* sift

yu yuy-i *v* walk

yŭ *n* millet