

Dandasian

Dandas, the language of the Mbvùga people

M.M.N.H.

A descriptive grammar

2019

Dedicated to miacometa

Class: speedlang
Version: 0.12 (beta)
Date: 4 March, 2019

©copyright 20 February, 2019 Marek

| Contents

Glossing abbreviations	5
0 Introduction	7
0.1 Overview	7
0.2 Conventions	7
0.3 External history	7
0.4 Internal history	8
1 Phonology	9
1.1 Consonants	9
1.1.1 Consonant taxophony	9
1.2 Vowels	10
1.2.1 Vowel taxophony	10
1.3 Phonotactics	11
1.3.1 Phonological profile	11
2 Prosody	12
2.1 Isochrony	12
2.2 Prosodic units	12
2.3 Tone	12
2.4 Stress	13
3 Orthography	14
4 Syntax	15
4.1 Empathy hierarchy	15
4.2 Alignment	15
4.3 Copular clauses	16
4.3.1 Comparative	16
4.4 Dependent clauses	17
4.5 Pivot	17
5 Lexical classes & general morphology	18
5.1 Auxiliary verbs	18
5.1.1 Hit	18
5.1.2 Sense	19
5.1.3 Say	20
5.1.4 Eat	21
5.1.5 Throw	22
5.1.6 Burn	22

5.1.7	Carry	23
5.1.8	Lack	23
5.2	Adpositional nouns	24
5.3	Serialization	25
6	Verbs	26
6.1	Agreement	26
6.1.1	Personal	26
6.1.2	Impersonal	26
6.2	Aspect	27
6.2.1	Perfective	27
6.2.2	Imperfective	27
6.3	Transitivity	27
6.3.1	Intransitive	27
6.3.2	Transitive	27
7	Nouns	28
7.1	Class	28
7.1.1	Natural	28
7.1.2	Human	28
7.1.3	Animate	28
7.1.4	Edible	28
7.1.5	Inanimate	28
7.2	Reduplication	28
8	Determiners	30
8.1	Speaker	30
8.2	Listener	31
8.3	Participant	31
8.4	Established	31
8.5	Introduced	31
8.6	Indefinite	31
8.7	Reflexive	31
8.8	Logophoric	31
9	Particles	32
9.1	Adjunct	32
9.1.1	Case	32
9.1.1.1	Ergative	32
9.1.1.2	Essive	33
9.1.1.3	Instrumental	33
9.1.1.4	Lative	34
9.1.1.5	Ablative	34
9.1.2	Modal	34
9.1.2.1	Antipassive	35
9.1.2.2	Experiential	35
9.1.2.3	Adversative	35
9.1.3	Relational	36
9.1.3.1	Conjunct	36
9.1.3.2	Disjunct	36

9.1.3.3	Subjunct	37
9.2	Discourse	38
9.2.1	Contrast	38
9.2.2	Dismissal	38
9.2.3	Attention	39
9.2.4	Continuation	39
9.2.5	Conclusion	39
10	Numerals	40
	Appendices	41
A	Verbs	42
B	Nouns	44
C	Example sentences	47
D	Long translations	48

| Figures

1.1	Consonant phonemes & taxophones	9
1.2	Vowel phonemes & taxophones	10
1.3	Vowel archiphonemes & taxophones	10
1.4	Phonological profile	11
2.1	Moraic structure	12
2.2	Tone expansion	12
3.1	Consonants (Latin)	14
3.2	Vowels (Latin)	14
4.1	Constituent profile (independent)	15
4.2	Constituent profile (dependent)	15
4.3	Empathy hierarchy (semantic)	15
4.4	Empathy hierarchy (syntactic)	15
6.1	Phonological profile	26

| Glossing abbreviations

<i>Gloss</i>	<i>Definition</i>
∅	null
.	metalanguage element
:	inherent/unimportant element
·	non-concatenative element
~	reduplication
RED	reduplication result
PRS	personal
NPR	impersonal
PRF	perfective
IMP	imperfective
NTR	intransitive
TR	transitive
NAT	natural
HUM	human
ANI	animate
EDI	edible
INA	inanimate
OBL	oblique
SPE	speaker
LIS	listener
PRT	participant
EST	established
INT	introduced
NDF	indefinite
RFL	reflexive
LOG	logophoric
ERG	ergative
ESS	essive
INS	instrumental
LAT	lative
ABL	ablative
ANT	antipassive

EXP	experiential
ADV	adversative
CNJ	conjunct
DSJ	disjunct
SBJ	subjunct

0 | Introduction

0.1 | Overview

In this book, I shall document and describe the [Dandas](#) language.

In Ch. 0, I shall introduce the conventions and content of this book, and also provide a look into the history of the language, both external (out-of-world) and internal (in-world). In Chs. 1 to 3, I shall describe the sounds and related phenomena, both segmental and suprasegmental, as well as the orthography. In Ch. 4, I will delve into various syntactic details. In Chs. 5 to 9 I will detail various categories and processes relating to words. In Ch. 10, I shall explain the numeral system. In Apps. A to D, I will give a set of lexicons and example sentences/translations.

0.2 | Conventions

In this book, I shall use [blue text](#) for [Dandas](#) words, whether they be in orthographic transcription or non-bracketed phonemic transcription (common).

Forward slashes (/example/) are used for phonemic transcription, square brackets ([example]) are used for phonetic transcription, blue-text pipes (|[example](#)|) are used for morphemic transcription (except in glosses), and blue-text angle brackets (<[example](#)>) are used for orthographic transcription.

Underlined text (which may sometimes be enclosed by ‘single quotes’) is used for translations, sans-serif text is used for important terms, *italicized* text is used for normal emphasis, and SMALL CAPS is used for glossed terms. “Scare quotes” are used for non-standard, ironic, or otherwise deviant usages of terms.

Glosses are structured as follows:

- (1) <[orthography](#)>
 [phonemic transcription](#)
 morphemic transcription (object language)
 morphemic transcription (metalanguage)
 translation
 LIT. ‘optional literal translation’

Ungrammatical, unfelicitous, or otherwise “bad” glosses are preceded by an asterisk (*) on each line.

0.3 | External history

[Dandas](#) is a speedlang (a conlang created within a time restraint) created within the timeframe of Wednesday, February 20, 2019, to Sunday, March 3, 2019. The challenge was proposed by *miacomet*, a.k.a. *u/roipoiboy*.

The following creative restraints have been made:

- a three-way phonation contrast
- three or less, or seven or more vowels
- at least one archiphoneme

- productive reduplication
- no concatenative morphology
- lack at least one part of speech that English has

As well as the following tasks:

- document and showcase the language
- translate five “syntax test” sentences, as provided by Leo or some other acceptable source
- write what the speakers first said to you when contacted
- (optional) write part of your conversation with the village’s matriarch after learning the language
- (optional) invent and write a recipe in your language for a dish from your conculture’s cuisine.

In-world, this language is an isolate spoken somewhere in New Guinea. It is, however, *a priori* in nature.

0.4 | Internal history

I discovered the [Dandas](#) language while trekking through the wilderness in the eastern highlands of New Guinea. The [Mbvùga](#) people seem to be almost completely secluded from other peoples, although they may have had contact in the past.

The [Dandas](#) language appears to be a language isolate, unrelated to any of the languages spoken nearby.

1 | Phonology

In this chapter and the following two chapters we explore the sounds and related phenomena of **Dandas**. This includes abstract (phonemic¹) and concrete (phonetic) forms, as well as suprasegmental units and orthographic conventions. We shall use (a modified) *offIPA* for phonemic transcription, and *canIPA*² for phonetic transcription.

1.1 | Consonants

There are nine phonemic consonants:

	Labial	Coronal	Dorsal
<i>Lenis plosive</i>	b [b̥]	d [d̥ d̥ʔ]	g [g̥ ɟ̥]
<i>Fortis plosive</i>		t [t̥ t̥ʔ]	k [k̥ ɕ̥]
<i>Voiced plosive</i>	^m b [ˌb ˌb̥ b̥ m]	ⁿ d [ˌd̥ ˌd̥ʔ n n̥ p̥ p̥ ɲ̥]	
<i>Constrictive</i>		s [s̥ s̥]	ʃ [ʃ̥ ʃ̥]
<i>Sonant</i>		r [r̥]	l [l̥ l̥]

Figure 1.1: Consonant phonemes & taxophones

Wherein:

- the lenis and fortis plosive groups both pattern as voiceless, as do the constrictives
- the lenis plosive group are slack-voiced; the fortis group is glottalized and slightly lengthened
- the voiceless coronal plosives are laminodental (and can palatalize), while the coronal voiced plosive and constrictive are apicoalveolar (and do not palatalize)

There are many (arguably) remarkable features of this consonant inventory. Most notably, there is a three-way phonation distinction in the coronal plosives, and two-way distinctions in the labial and velar groups.

Also interesting is the group of prenasalized plosives, which are accompanied by trilling when word-initial, as well as the lateral consonants, which are persistently dorsal in articulation.

1.1.1 | Consonant taxophony

- /^mb ⁿd/ surface as [ˌb̥ ˌd̥ʔ] word-initially
- /d̥ g̥ t̥ k̥ ʃ̥ l̥/ surface as [d̥ʔ ɟ̥ t̥ʔ ɕ̥ ʃ̥ l̥], respectively, before /i/³
- /^mb ⁿd/ surface as [m̥ n̥] between a vowel and a consonant or word boundary (in that order);
/mm̥ nn̥/ surface as [mm̥ nn̥]

¹wherein a phoneme is a strictly *contrastive unit* that is abstracted to succinctly represent various but related phonetic surface forms

²see *canipa.net*

³any taxophony associated with /i/ is also associated with the high taxophone of /i/ (i.e., when it is preceded by /i u/)

- /ⁿd s/ surface as [ɲ s] before /d t/; they surface as [ɲ ʃ] before /di ti/
/ⁿd/ surfaces as [ɲ] before /g k/; it surfaces as [ɲ] before /gi ki/
- otherwise, /b d g t k ^mb ⁿd s ɫ r l/ surface as [b̥ d̥ g̥ t̥ k̥: ~b̥ ~d̥ ʃ ɫ rɫ]

1.2 | Vowels

There are seven phonemic vowels, four of which are archiphonemic:

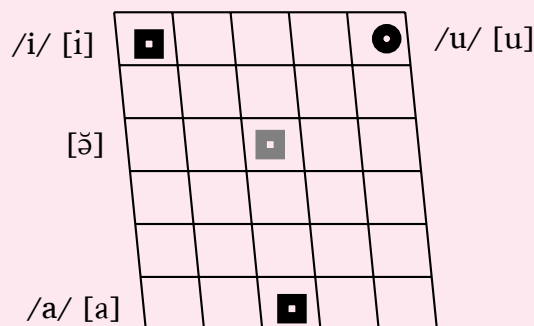


Figure 1.2: Vowel phonemes & taxophones

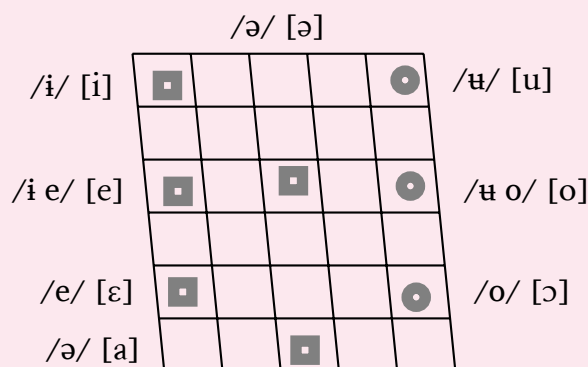


Figure 1.3: Vowel archiphonemes & taxophones

The realizations of the various archiphonemic vowels are dependent on the preceding vowel (one of /i u a/); this occurs between any amount of consonants or archiphonemic vowels.

The epenthetic vowel [ə] only occurs between heterorganic inversely-voiced consonant clusters (i.e., clusters of consonants *not* of the same place of articulation, *nor* of the same voicing), after a word-final consonant, and before word-initial geminate lenis and fortis plosive clusters (i.e., clusters of the same lenis/fortis plosive).

It is *not* inserted between the clusters /^mbb ⁿdd ⁿdg ⁿdt ⁿdk sb sd sg st sk rb rd rg rt rk/; it is only inserted before these clusters when they are word-initial.

It is always inserted word-finally after a consonant.

1.2.1 | Vowel taxophony

- /i ʉ ə e o/ surface as [i u ə e o], respectively, after /i u/
- /i ʉ ə e o/ surface as [e o ə ε ɔ], respectively, after /a/
- /i u a/ surface as [i u a]

1.3 | Phonotactics

1.3.1 | Phonological profile

The profile of the phonological word is as follows⁴:

$$\# \left[\underset{\omega}{C^?} \left[\underset{\varphi}{T^?} \left[\underset{\mu_1}{C^? V_1} \right] \left[\underset{\mu_2}{C V_2 | C | V_2} \right] \right]^+ C^? \right] \#$$

Figure 1.4: Phonological profile

Wherein:

- # a word boundary
- ω a phonological word
- φ a foot
- μ a mora
- [] a domain
- T tone (§ 2.3)
- $\circ^?$ zero or one
- \circ^+ zero or more
- C a consonant (in μ_1 , it may only be null word-initially)
- V_1 a vowel /i u a/
- V_2 an archiphonemic vowel /i ʊ ə e o/

Roots are minimally bimoraic; this constraint does *not* apply to particles, which may be monomoraic.

⁴we shall use a modified version of *Recursive Baerian Phonotactics Notation* (RBPN), a non-standard but infinitely more useful notation; see *Blumire & Baer (2017)*

2 | Prosody

Prosody is the patterns of tone, intonation, stress, and other suprasegmental units, as well as how these interact with each other.

2.1 | Isochrony

Isochrony is the rhythmic division of utterances. The isochrony of **Dandas** is moraicly-timed, i.e., the duration of every mora (μ) is approximately equal.

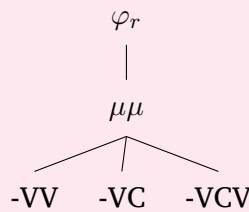


Figure 2.1: Moraic structure

The foot rime (φ_r) consists of everything within a given foot except the first consonant (if present).

2.2 | Prosodic units

All utterances are divided into many levels of prosodic units.

The smallest unit is the mora, explained in the previous section. Above the moraic unit, there is the prosodic foot (φ). Feet are obligatorily bimoraic; a bimoraic rime may consist of two vowels, or a vowel and /h/.

2.3 | Tone

There are two phonemic tones: high / $\acute{\circ}$ / and low / $\grave{\circ}$ /, as well as the unmarked / \circ /. The unmarked tone surfaces as mid [·], the high tone surfaces as high [ˈ], and the low tone surfaces as low [ˌ].

Verb roots may only take the high and unmarked tones; the low tone only occurs via inflection. Noun roots, on the other hand, may take all tones.

Tone spans the metrical foot; a vowel in μ_2 will take the tone of the vowel in μ_1 . This may be modelled autosegmentally:

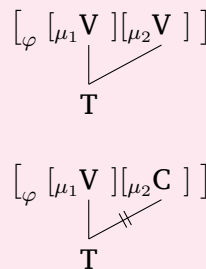


Figure 2.2: Tone expansion

2.4 | Stress

Stress is weak and relatively unimportant in [Dandas](#), largely being superseded by tone. Stress consistently occurs on the first mora within each foot. It tends to be stronger on the very first foot of a word, and weaker on non-initial feet.

3 | Orthography

Dandas is a completely spoken-only language; the **Mbvùga** have no formal way of writing. Because of this, I have devised an orthography largely for personal use. It is as follows:

	<i>Labial</i>	<i>Coronal</i>	<i>Dorsal</i>
<i>Lenis plosive</i>	b ⟨b⟩	d ⟨d j⟩	g ⟨g⟩
<i>Fortis plosive</i>		t ⟨t c⟩	k ⟨k⟩
<i>Voiced plosive</i>	^m b ⟨mb mbv m⟩	ⁿ d ⟨nd ndr n⟩	
<i>Constrictive</i>		s ⟨s⟩	ʃ ⟨ʃ⟩
<i>Sonant</i>		r ⟨r⟩	l ⟨l⟩

Figure 3.1: Consonants (Latin)

Wherein:

- [dʒ tʃ:] (j c)
- [ˌbʌ ˌdr] (mbv ndr)
- [m] (m); [n ɱ ɲ ɳ ŋ] (n)
- otherwise, /p t k h d g m n s ʃ r l/ (b d g t c mb nd s h r l)

i u a	i u a
i [i e]	i e
u [u o]	u o
ə	a
e [e ε]	e ɐ
o [o ɔ]	o ɔ
[ə̃]	’
o o ̃	o o ̃

Figure 3.2: Vowels (Latin)

Wherein:

- [ə̃] is only written as ⟨'⟩ when within a word (i.e., when not word-initial or word-final); otherwise, it is unwritten

4 | Syntax

The order and structure of constituents of an independent clause is as follows:



Figure 4.1: Constituent profile (independent)

Wherein DP stands for discourse particle (§ 9.2).

The topic of an independent clause is determined by semantics, not pragmatics; it consists of the highest-ranked (with regard to the empathy hierarchy) noun within the clause.

In dependent clauses, it changes as follows:

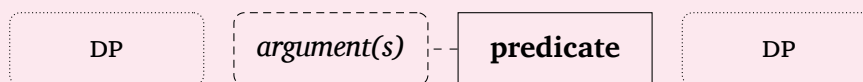


Figure 4.2: Constituent profile (dependent)

4.1 | Empathy hierarchy

The empathy hierarchy ranks arguments semantically and syntactically, which determines the order in which they go within a clause.

The order of arguments is primarily determined by a semantic hierarchy.

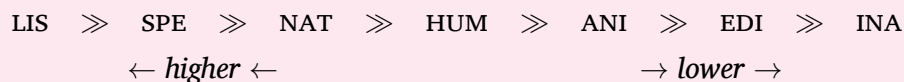


Figure 4.3: Empathy hierarchy (semantic)

Wherein LIS and SPE refer to the listener and speaker of a conversation (Ch. 8), while the rest refer to the various noun classes (§ 7.1).

If the arguments are of the same class, it follows an additional syntactic hierarchy:

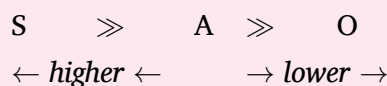


Figure 4.4: Empathy hierarchy (syntactic)

These roles are detailed in the next section. Oblique (X) arguments are always placed directly after the predicate; the order of multiple oblique arguments is determined by the empathy hierarchy.

4.2 | Alignment

Alignment describes how arguments are arranged within a clause with regard to marking and syntax.

S represents the sole argument of an intransitive predicate; A and O represent the most agent-like and most patient-like arguments of transitive clauses, respectively.

Determiners align accusatively; the S of intransitive clauses is associated with the A of transitive clauses.

Nouns align ergatively; the S of intransitive clauses is associated with the O of transitive clauses.

In accusative-aligned clauses, the subject argument is S and A; in ergative-aligned clauses, the subject argument is S and O. Likewise, the object argument is O and A in accusative- and ergative-aligned clauses, respectively.

Role preference (e.g., when a determiner and a noun occur in the same clause) is determined by the empathy hierarchy.

All predicates may take oblique arguments (X), which are usually marked by a case particle (§ 9.1.1).

These roles are relevant to dependent clauses, pivot, and agreement (§ 6.1).

4.3 | Copular clauses

Copular clauses are constructions in which two arguments are associated to indicate various relationships between the aforementioned.

They are most often used to describe a quality or state of being of an argument, and are formed by using the auxiliary verbs *tásu* ‘say’ and *dámbo* ‘eat’ (wherein they must be marked as transitive). The former is used for external/physical/temporary states, while the latter is used for internal/mental/permanent states (§ 5.1).

The entity being described is the A argument, while the quality or state is the O argument.

(2) ⟨*ndambẹ táso báke*⟩

ⁿdda^mbe tásu báke

ⁿdda^mbe tásu báke

betelnut say:TR nut

betelnuts are nuts

LIT. ‘betelnuts say nuts’

When an inanimate entity is being described, it must be the S argument, the auxiliary verb must be modified by a modal particle (usually the antipassive; see § 9.1.2), and the quality or state is demoted to X via the essive case (§ 9.1.1.2).

4.3.1 | Comparative

Comparative clauses are a subtype of copular clauses, and express comparison between the arguments in relation to a state.

The comparer is the S argument, the comparee the X argument, and the quality being compared is serialized (§ 5.3) into the predicate.

They always use a modal particle to reduce the valency of the auxiliary verb (again, usually the antipassive), and a case particle (§ 9.1.1) is used to modify the comparee (X) to indicate a neutral, positive, or negative comparison.

The essive case is used to indicate neutral comparison.

- (3) ⟨umbu ndra su atə tásu ui umbu tág⟩

u^mbɥ ⁿda su atə tásu ui u^mbɥ tág

u^mbɥ ⁿda su atə tásu ui u^mbɥ tág

pig SPE ANT red say:TR ESS pig LIS

my pig is as red as your pig

The lative case is used for positive comparisons (‘more...than’).

- (4) ⟨umbu ndra su atə tásu age umbu tág⟩

u^mbɥ ⁿda su atə tásu age u^mbɥ tág

u^mbɥ ⁿda su atə tásu age u^mbɥ tág

pig SPE ANT red say:TR LAT pig LIS

my pig is more red than your pig

While the ablative case is used for negative comparisons (‘less...than’).

- (5) ⟨umbu ndra su atə tásu iⁿd umbu tág⟩

u^mbɥ ⁿda su atə tásu iⁿd u^mbɥ tág

u^mbɥ ⁿda su atə tásu iⁿd u^mbɥ tág

pig SPE ANT red say:TR ABL pig LIS

my pig is less red than your pig

4.4 | Dependent clauses

Dependent clauses depend on an argument or predicate, whether implicit or explicit.

Dependent clauses follow a modified argument. The argument a dependent clause modifies must also be contained in the dependent clause itself, and is referenced by the logophoric determiner (§ 8.8). The modified argument and logophoric determiner must share role as subject/object of their respective clauses.

When used as arguments themselves, dependent clauses form deverbal nouns, or predicates which behave as arguments. These fall under the inanimate noun class (§ 7.1.5).

4.5 | Pivot

Pivot is the argument around which certain syntactic processes revolve. This affects argument-dropping, argument-modifying dependent clauses, and other phenomena. Pivot is centered on the subject argument.

5 | Lexical classes & general morphology

There are four lexical classes (“parts of speech”): verbs, nouns, determiners, and particles. Determiners and particles are closed classes; they do not readily accept new members. In contrast, verbs and nouns are open classes.

Within these classes, there are various subclasses. Certain verbs can be used to indicate details such as tense and mood (auxiliary verbs), and certain nouns may be used to indicate location and/or position (adpositional nouns).

5.1 | Auxiliary verbs

Auxiliary verbs are a special subset of verbs used to indicate various grammatical phenomena. They often take deverbal nouns as their O argument (although some may take nouns). There are eight auxiliary verbs:

táe	hit
^m bidu	sense
tasu	say
dá ^m bo	eat
utə	throw
ki ⁿ də	burn
suku	carry
dai	lack

Various uses may be dependent on the determiner (Ch. 8) used, the presence of a relational particle (§ 9.1.3), or the aspect (§ 6.2) of the auxiliary.

5.1.1 | Hit

The auxiliary verb **táe** ‘hit’ is the external general auxiliary. It is often used to derive verb-like meanings using a noun as the O argument.

(6) ⟨ndra tàe t’kúu⟩

ⁿda tàe tkúu

ⁿda tàe tkúu

SPE hit:TR canoe

I canoed; I went canoeing

It is used to emphasize the predicate, when using the logophoric determiner in the deverbal noun clause. This may also indicate that the agent of the predicate has explicit control over the event.

- (7) ⟨ndra dàmbọ uga⟩

ⁿda dà^mbo ugəⁿda dà^mbo ugə

SPE eat:TR potato

I ate a potato

- (8) ⟨ndra tàẹ mbváo uga dàmbọ⟩

ⁿda tàẹ ^mbáo ugə dà^mboⁿda tàẹ ^mbáo ugə dà^mbo

SPE hit:TR LOG potato eat:TR

I *did* eat a potato (on purpose)

s

It is used to form urgent commands, when using the listener determiner in the deverbal noun clause.

- (9) ⟨ndra tàẹ tág uga dàmbọ⟩

tág tàẹ tág ugə dà^mboⁿda tàẹ tág ugə dà^mbo

SPE hit:TR LIS potato eat:TR

you, eat a potato (now)!

Using the participant determiner creates a hortative-like meaning.

- (10) ⟨ndra tàẹ si uga dàmbọ⟩

tág tàẹ tág ugə dà^mboⁿda tàẹ si ugə dà^mbo

SPE hit:TR PRT potato eat:TR

let's eat potatoes (now)!

5.1.2 | Sense

The auxiliary verb ^mbídu ‘sense’ is the internal general auxiliary. It is used to derive sensory verb-like meanings using a noun as the O argument.

- (11) ⟨ndra mbvídu dao⟩

ⁿda ^mbídu daoⁿda ^mbídu dao

SPE sense:TR nose

I smelled (something)

It is used to indicate circumstantial obligation and ability, when using the logophoric determiner in the deverbal noun clause.

(12) ⟨ndra mbvídu mbváo uga dàmbọ⟩

ⁿda ^mbídu ^mbáo ugə dà^mbo

ⁿda ^mbídu ^mbáo ugə dà^mbo

SPE sense:TR LOG potato eat:TR

I want to/can (due to circumstance) eat a potato

It is used to indicate predictive (likely) possibility, when using the indefinite determiner in the main clause.

(13) ⟨kís mbvídu ndra uga dàmbọ⟩

kís ^mbídu ⁿda ugə dà^mbo

kís ^mbídu ⁿda ugə dà^mbo

NDF sense:TR SPE potato eat:TR

it is likely I eat a potato; I will eat a potato (probably)

It is used to indicate non-urgent commands (including requests and suggestions), when using the listener determiner in the deverbal noun clause.

(14) ⟨ndra mbvídu tág uga dàmbọ⟩

ⁿda ^mbídu tág ugə dà^mbo

ⁿda ^mbídu tág ugə dà^mbo

SPE sense:TR LIS potato eat:TR

you should eat a potato; may you eat a potato?

Again, a hortative-like meaning is formed using the participant determiner instead of the listener determiner.

It is also used to indicate that one obtained information via visual and/or auditory means (sensory evidence), when using the subjunct relational to modify the deverbal noun clause.

(15) ⟨ndra mbvídu bi ci uga dàmbọ⟩

ⁿda ^mbídu bi ti ugə dà^mbo

ⁿda ^mbídu bi ti ugə dà^mbo

SPE sense:TR SBJ EST potato eat:TR

they ate a potato (I have visual/auditory evidence for this)

5.1.3 | Say

The auxiliary verb *tasu* 'say' is the auxiliary of voluntary expulsion. It is used to form external/physical states using a noun as the O argument.

(16) ⟨uga táso ato⟩

ugə tásu ato

ugə tásu ato

potato say:TR red

the potato is red

It is used to focus the beginning of an event, when using the logophoric determiner in the deverbal noun clause, and the conjunct relational to modify the deverbal noun clause.

- (17) ⟨ndra táso út mbváø uga dàmbø⟩

ⁿda tásu út ^mbáo ugə dà^mboⁿda tásu út ^mbáo ugə dà^mbo

SPE say:TR CNJ LOG potato eat:TR

I began to eat a potato

It is used to indicate indirect speech or that one obtained information via someone else (reported evidence), when using the subjunct relational to modify the deverbal noun clause.

- (18) ⟨ndra táso bi ci uga dàmbø⟩

ⁿda tásu bi ti ugə dà^mboⁿda tásu bi ti ugə dà^mbo

SPE say:TR SBJ EST potato eat:TR

they ate a potato (someone told me)

5.1.4 | Eat

The auxiliary verb ^dámbo ‘eat’ is the auxiliary of voluntary consumption. It is used to form internal/mental states using a noun as the O argument.

- (19) ⟨sík dàmbø atø⟩

sík dà^mbo atosík dà^mbo ato

liver eat:TR red

I am angry

LIT. ‘(my) liver is red’

It is used to focus the end of an event, when using the logophoric determiner in the deverbal noun clause, and the conjunct relational to modify the deverbal noun clause.

- (20) ⟨ndra dàmbø út mbváø uga dàmbø⟩

ⁿda dà^mbo út ^mbáo ugə dà^mboⁿda dà^mbo út ^mbáo ugə dà^mbo

SPE eat:TR CNJ LOG potato eat:TR

I stopped/finished eating a potato

It is also used to indicate inherent obligation and ability, when using the logophoric determiner in the deverbal noun clause.

- (21) ⟨ndra dàmbø mbváø uga dàmbø⟩

ⁿda dà^mbo ^mbáo ugə dà^mboⁿda dà^mbo ^mbáo ugə dà^mbo

SPE eat:TR LOG potato eat:TR

I need to/can (inherently) eat a potato

5.1.5 | Throw

The auxiliary verb **utə** ‘throw’ is the auxiliary of involuntary expulsion. It is used to indicate counter-factual (unlikely) possibility, when using the indefinite determiner in the main clause.

(22) ⟨kís úta ndra uga dàmbə⟩

kís útə ⁿda ugə dà^mbo

kís útə ⁿda ugə dà^mbo

NDF throw:TR SPE potato eat:TR

it is unlikely I eat a potato; I might eat a potato (but probably not)

It is also used to indicate an attempted or delayed event, when using the conjunct relational to modify the deverbal noun clause.

(23) ⟨ndra úta út mbváo uga dàmbə⟩

ⁿda útə út ^mbáo ugə dà^mbo

ⁿda útə út ^mbáo ugə dà^mbo

SPE throw:TR CNJ LOG potato eat:TR

I almost ate/tried to eat a potato; I will eat a potato (later)

5.1.6 | Burn

The auxiliary verb **kíⁿdə** ‘burn’ is the auxiliary of involuntary consumption. It is most often used to indicate that the agent of the predicate has little to no control over the event, when using the logophoric determiner in the deverbal noun clause. This may indicate an accidental event, or an event caused by a natural, non-sentient, and/or supernatural force.

(24) ⟨ndra kínda mbváo uga sae ták dàmbə⟩

ⁿda kíⁿdə ^mbáo ugə sai ták dà^mbo

ⁿda kíⁿdə ^mbáo ugə sai ták dà^mbo

SPE burn:TR LOG potato ERG LIS eat:TR

I ate your potato (by accident, I did not intend to; a higher force compelled me to)

In the perfective aspect and when using the conjunct relational to modify the deverbal noun clause, it is used to emphasize that an event has occurred recently.

(25) ⟨ndra kínda út mbváo uga dàmbə⟩

ⁿda kíⁿdə út ^mbáo ugə dà^mbo

ⁿda kíⁿdə út ^mbáo ugə dà^mbo

SPE burn.PRF:TR CNJ LOG potato eat:TR

I have just eaten a potato

In the imperfective aspect and when using the conjunct relational to modify the deverbal noun clause, it indicates that the event is currently ongoing.

(26) ⟨ndra kíndanda út mbváo uga dàmbə⟩

ⁿda kíⁿdəⁿdə út ^mbáo ugə dà^mbo

ⁿda kíⁿdə ~ⁿdə út ^mbáo ugə dà^mbo

SPE burn:TR ~IMP CNJ LOG potato eat:TR

I am eating a potato (right now)

5.1.7 | Carry

The auxiliary verb **suku** ‘carry’ is the auxiliary of transfer. It is most often used to form ditransitive predicates, or predicates that take up to three core arguments.

- (27) ⟨ndra súku age ták uga⟩
 nda súku age ták ugə
 SPE carry:TR LAT LIS potato
 I gave you a potato
 LIT. ‘I carried a potato to you’

In the perfective aspect and when using the conjunct relational to modify the deverbal noun clause, it is used to focus the result of an event.

- (28) ⟨ndra súku út mbváq uga dàmbə⟩
 nda súku út mbáo ugə dàmbə
 nda súku út mbáo ugə dàmbə
 SPE carry.PRF:TR CNJ LOG potato eat:TR
 I have eaten a potato (and, thus, it is now gone)

In the imperfective aspect and when using the conjunct relational to modify the deverbal noun clause, it is used to indicate that the event has continued past its inception, or that it is repeated more times than expected.

- (29) ⟨ndra súkuku út mbváq uga dàmbə⟩
 nda súkuku út mbáo ugə dàmbə
 nda súku ~ku út mbáo ugə dàmbə
 SPE carry:TR ~IMP CNJ LOG potato eat:TR
 I keep/kept on eating potatoes

5.1.8 | Lack

The auxiliary verb **dai** ‘lack’ is the auxiliary of negation. It is most often used to negate predicates, when using the logophoric determiner in the deverbal noun clause.

- (30) ⟨ndra dáe mbváq uga dàmbə⟩
 nda dáe mbáo ugə dàmbə
 nda dáe mbáo ugə dàmbə
 SPE lack:TR LOG potato eat:TR
 I did not eat a potato

It is used to form questions, when using the indefinite determiner in the main clause.

- (31) ⟨kís dáe táq uga dàmbə⟩
 kís dáe nda ugə dàmbə
 kís dáe táq ugə dàmbə
 NDF lack:TR LIS potato eat:TR
 Did you eat a potato?

5.2 | Adpositional nouns

Adpositional nouns are a special subset of nouns that are used to indicate position, location, and direction. They are often used in tandem with another argument. The argument and adpositional noun are connected by the ergative case (§ 9.1.1.1).

They are usually used as oblique arguments, marked by the essive (§ 9.1.1.2), lative (§ 9.1.1.4), or ablative (§ 9.1.1.5) case.

There are seven adpositional nouns:

bíi	head	on top of, above
lue	mouth	near, close to, at the entrance of
bù ⁿ du	torso	in the center of
tibo	arm(s)	along, through (a horizontal path)
búto	hand(s)	touching, in physical contact with
ulo	leg(s)	along, through (a vertical path)
dúgi	foot/feet	at the bottom of, under

Using the essive case indicates static location.

(32) ⟨ui bíi sae umbu⟩

ui bíi sai u^mbu

ui bíi sai u^mbu

ESS head ERG pig

...on/at the top of the pig

Using the lative case indicates motion to or toward the referent.

(33) ⟨age bíi sae umbu⟩

ui bíi sai u^mbu

age bíi sai u^mbu

LAT head ERG pig

...to/toward the top of the pig

Using the ablative case indicates motion away from the referent.

(34) ⟨iⁿd bíi sae umbu⟩

ui bíi sai u^mbu

iⁿd bíi sai u^mbu

ABL head ERG pig

...off/away from the top of the pig

5.3 | Serialization

Serialization is the process of modifying a verb using a noun, forming a complex predicate. Syntactically, a complex predicate acts as a single unit (this is evidenced by the placement of predicate-modifying particles, such as modal particles).

Serialization is usually lexical in nature, deriving new words from previous ones.

(35) ⟨áso⟩

áso

áso

move

move (using one's body)

(36) ⟨dúgi áso⟩

dúgi áso

dúgi áso

foot move

walk, move on foot

However, it may also serve syntactic purpose. A prominent example is shown by comparative copular clauses (§ 4.3.1), wherein the quality being compared is serialized with a state-denoting verb.

6 | Verbs

Verbs may serve as the predicate of a clause. The phonological profile of verb roots is as follows:

$$\# \left[\begin{array}{c} \left[\begin{array}{c} T^? \\ \omega \end{array} \left[\begin{array}{c} C_1^? V_1 \\ \varphi_1 \end{array} \right] \left[\begin{array}{c} C_2 V_2 | C | V_2 \\ \mu_2 \end{array} \right] \right] \left[\begin{array}{c} T^? \\ \varphi_{1+n} \end{array} \left[\begin{array}{c} C_2^? V_1 \\ \mu_1 \end{array} \right] \left[\begin{array}{c} C_2 V_2 | C | V_2 \\ \mu_2 \end{array} \right] \right]^* C_2^? \end{array} \right] \#$$

Figure 6.1: Phonological profile

The same conventions are used as in fig. 1.4, with the following differences:

- \circ^* zero or more
- C_1 /b d g t k ^mb ⁿd s ʎ/
- C_2 any consonant

6.1 | Agreement

Agreement tracks the subject argument of a predicate. All verbs are inherently classed as personal, and are marked for the impersonal via mutation of the initial consonant:

b	∅
d	s
g	ʎ
t	d
k	g
^m b	b
ⁿ d	d
s	r
ʎ	l
∅	g

6.1.1 | Personal

The personal agreement (PRS) tracks the natural, human, and animate classes.

6.1.2 | Impersonal

The impersonal agreement (NPR) tracks the edible and inanimate classes.

6.2 | Aspect

Aspect describes the structure of time regarding an event. All verbs are inherently perfective; they are marked for the imperfective via reduplication:

$$\begin{array}{ccc} -C(V_1)V_2^\# & + & \sim CV_2 \\ -VC^\# & & \sim V \end{array}$$

6.2.1 | Perfective

The perfective aspect (PRF) describes an event as a complete temporal whole, with no internal structure.

6.2.2 | Imperfective

The imperfective aspect (IMP) describes an event as being temporally incomplete, and as having internal structure.

6.3 | Transitivity

Transitivity describes the number of arguments a predicate takes. All verbs are inherently intransitive, and are marked as transitive by applying the following tone changes:

$$\begin{array}{ccc} \circ & \rightarrow & \acute{\circ} \\ \acute{\circ} & & \grave{\circ} \end{array}$$

6.3.1 | Intransitive

Intransitive verbs (NTR) take one core argument, S. The S argument is prototypically patient-like in nature, often being the experiencer of a state or patient of an action.

The S argument may be given an agent-like meaning by using a modal particle (§ 9.1.2) to modify the predicate.

6.3.2 | Transitive

Transitive verbs (TR) take two core arguments, A and O. The A argument is prototypically agent-like, while the O argument is prototypically patient-like.

7 | Nouns

Nouns may serve as arguments of a clause.

7.1 | Class

All nouns are grouped into one of five classes, which determine the order in which arguments are arranged

7.1.1 | Natural

The natural class (NAT) includes natural forces (wind, weather, gravity), fundamental materials (water, fire, soil), and certain animals (birds, bats, insects).

7.1.2 | Human

The human class (HUM) includes native [Mbvùga](#) people, kinship terms, and body parts. It does not include foreigners.

7.1.3 | Animate

The animate class (ANI) includes all terrestrial animals, excluding scaly and/or shelled animals. It also includes foreigners, non-rigid tools, and shiny objects, such as polished metal or particularly reflective water.

The indefinite determiner (§ 8.6) also falls under this class.

7.1.4 | Edible

The edible class (EDI) includes food and drink (that are safe to ingest), and rigid tools. Numeral and color terms also fall under this class.

7.1.5 | Inanimate

The inanimate class (INA) includes all entities and concepts not covered by the previous classes, and mostly consists of scaly/shelled animals, plants, dead entities, and locations. All deverbal nouns fall under this class.

Inanimate nouns cannot be the A argument of a predicate; a modal particle (§ 9.1.2) must be used to force an A-like meaning in inanimate arguments (where they are syntactically an S argument).

7.2 | Reduplication

Reduplication is the process of repeating a word. It is most often used to form plurals, indicating more than one entity. This seems to be falling out of use with younger speakers, except when mandatory. Compare the following:

(37) ⟨**umbu**⟩

u^mbɛ

u^mbɛ

pig

a pig; pigs

(38) ⟨**umbu umbu**⟩

u^mbɛ u^mbɛ

u^mbɛ ~ u^mbɛ

pig ~ RED

pigs

Plural reduplication is only mandatory when a noun is modified by a determiner (Ch. 8) or relational particle (§ 9.1.3), and only when the relational particle is only modifying one noun (i.e., when *not* being used to coördinate nouns).

(39) ⟨**umbu ndra**⟩

u^mbɛ ⁿda

u^mbɛ ⁿda

pig SPE

my pig

(40) ⟨**umbu umbu ndra**⟩

u^mbɛ u^mbɛ ⁿda

u^mbɛ ~ u^mbɛ ⁿda

pig ~ RED SPE

my pigs

Plural reduplication never occurs when a noun is modified by a numeral (Ch. 10).

8 | Determiners

Determiners are used to refer to or modify an entity, whether implicit or explicit. There are eight determiners:

	core	oblique
<i>speaker</i>	ⁿ da	ⁿ dat
<i>listener</i>	tág	ták
<i>participant</i>	si	siə
<i>established</i>	ti	tiə
<i>introduced</i>	ká	kás
<i>indefinite</i>	kís	kít
<i>reflexive</i>	sa ⁿ do	sa ⁿ dɬ
<i>logphoric</i>	^m báo	^m báu

Determiners may be used on their own, but the core forms may also be used to modify a noun (wherein the determiner is usually placed after the noun). This is often used to indicate inalienable possession.

- (41) ⟨ak ndra⟩
ak ⁿda
eyes SPE
my eyes

- (42) ⟨dúgi ci umbu⟩
dúgi ti ^mbɬ
dúgi ti ^mbɬ
foot EST pig
the pig's foot

Inalienable possession describes a possessive relationship that is permanent or not easily separable.

The established and introduced determiners may be used like this to mark a noun as established or introduced information, respectively.

The core forms are used when a determiner is used as a core argument (S, A, or O; see § 4.2); the oblique forms (OBL) are used when it is used as an oblique argument (X).

The listener and speaker determiners have their own slots in the empathy hierarchy (§ 4.1); the established, introduced, reflexive, and logphoric determiners inherit the class of their referent; the indefinite determiner is classed as animate.

8.1 | Speaker

The speaker determiner (SPE) refers to the current speaker of the conversation.

8.2 | Listener

The listener determiner (LIS) refers to the current listener(s) of a conversation

8.3 | Participant

The participant determiner (PRT) refers to all participants within a conversation.

8.4 | Established

The established determiner (EST) refers to an entity that is established within the universe of discourse. This consists of old, given information, and information that is shared between the speaker and the listener.

8.5 | Introduced

The introduced determiner (INT) refers to a newly-introduced or reintroduced entity within the universe of discourse. This consists of new information, and information that is known only to the current speaker.

8.6 | Indefinite

The indefinite determiner (NDF) refers to an unknown and/or unspecified entity.

8.7 | Reflexive

The reflexive determiner (RFL) refers to a previously-stated entity within the given clause.

8.8 | Logophoric

The logophoric determiner (LOG) refers to a previously-stated entity outside of the given clause.

9 | Particles

Particles are used to modify clauses and phrases. There are two types: adjunct particles and discourse particles.

9.1 | Adjunct

Adjunct particles are used to modify nouns and verbs. There are two subtypes: case, modal, and relational particles.

9.1.1 | Case

Case particles describe the relationship between an argument and its predicate, or between arguments.

<i>ergative</i>	<i>sai</i>
<i>essive</i>	<i>ui</i>
<i>instrumental</i>	<i>ⁿdú</i>
<i>lative</i>	<i>age</i>
<i>ablative</i>	<i>iⁿd</i>

Case particles are usually placed before the argument they modify

9.1.1.1 | Ergative

The ergative case (ERG) is used to mark the A of transitive clauses (except for inanimate nouns; see § 7.1.5).

- (43) ⟨sae umbu ndràmbo uga⟩
sai uᵐbu ⁿdàᵐbo ugə
sai uᵐbu ⁿdàᵐbo ugə
ERG pig NPR:eat:TR potato
the pig ate a potato

It is also used to mark alienable possessors, wherein the possessor is always placed after the possessed.

- (44) ⟨umbu sae ndrət⟩
uᵐbu sai ⁿdat
uᵐbu sai ⁿdat
pig ERG SPE.OBL
my pig

Alienable possession describes a possessive relationship that is temporary or easily separable.

9.1.1.2 | Essive

The essive case (ESS) is the general oblique case. It is most often used to form oblique arguments that behave as the O argument of a predicate modified by a modal particle.

- (45) ⟨sidu su ndrasko ui sando⟩
 sidu su ndasko ui sandu
 potato plant ANT NPR:be tall:TR ESS RFL
the potato plant grew

It is also used to mark manner and purpose.

- (46) ⟨ndra dambō ui sbāgo uga⟩
 nda dambo ui sbago uga
 SPE eat:TR ESS foreigner potato
I ate a potato as/like a foreigner
- (47) ⟨ndra tindi ui mbvāo sandō ndrasko bāke⟩
 nda tindī ui mbāo sandō ndasko bāke
 SPE plant:TR ESS LOG RFL NPR:be tall:TR seed
I planted seeds so/for that they grow

9.1.1.3 | Instrumental

The instrumental case (INS) indicates that the modified noun is used as a tool or instrument.

- (48) ⟨ndra kùd ndrú ndrúk uga⟩
 nda kùd ndú ndrúk uga
 SPE wrap:TR INS woven fiber potato
I wrapped the potatoes in/with/using fabric

It is also used to mark the cause(r) or stimulus of an event.

- (49) ⟨kala guso ndrú ndrāt⟩
 kalə guso ndú ndat
 fish NPR:hang INS SPE.OBL
the fish were hung up by/because of me

9.1.1.4 | Lative

The lative case (LAT) is used to indicate efficiency to/toward a locus.

- (50) ⟨ndra dúgi áso age umbu⟩
 nda dúgi ásu age u^mb^u
 nda dúgi ásu age u^mb^u
 SPE foot move LAT pig
 I walked to/toward a pig

It is also used to mark recipients.

- (51) ⟨ndra súku age ták uga⟩
 nda súku age ták ugə
 nda súku age ták ugə
 SPE carry:TR LAT LIS potato
 I gave you a potato

9.1.1.5 | Ablative

The ablative case (ABL) is used to indicate efficiency away from a locus.

- (52) ⟨ndra dúgi áso ind umbu⟩
 nda dúgi ásu age u^mb^u
 nda dúgi ásu iⁿd u^mb^u
 SPE foot move ABL pig
 I walked away from a pig

It is also used to indicate static location.

- (53) ⟨ndra áe ind ilo⟩
 nda ái iⁿd ilo
 nda ái iⁿd ilo
 SPE stand ABL house
 I am standing at a house

9.1.2 | Modal

Modal particles reduce the valency of a predicate, and apply semantic nuance to the predicate.

<i>antipassive</i>	su
<i>experiential</i>	da
<i>adversative</i>	ta ⁿ d

Modal particles are usually placed before the predicate they modify.

All modal particles suppress the S/O argument of a given predicate. With intransitive predicates, the S argument is suppressed and there are no overt arguments. With transitive predicates, the O argument is suppressed, making the previous A argument syntactically S, but still semantically A.

Arguments are marked as their derived role (A→S, S→∅), but behave as their underived role.

The suppressed role may be reintroduced using a case particle, usually the essive.

Modal particles are usually used to conform to certain syntactic restraints, such as pivot (§ 4.5).

9.1.2.1 | Antipassive

The antipassive modal (ANT) simply suppresses the argument.

- (54) ⟨ndra dàmbɔ uga⟩
 nda dà^mbo ugə
 nda dà^mbo ugə
 SPE eat:TR potato
I ate a potato
- (55) ⟨ndra su dàmbɔ⟩
 nda su dà^mbo
 nda su dà^mbo
 SPE ANT eat:TR
I ate

With intransitive predicates, this has the unique property of making the predicate refer to the event itself.

- (56) ⟨su dámbɔ⟩
 su dá^mbo
 su dà^mbo
 ANT eat
(the act of) eating

9.1.2.2 | Experiential

The experiential modal (EXP) indicates that the suppressed argument is an entity that is strongly associated with the given predicate; the suppressed argument is expected, and the event may have a more habitual meaning.

- (57) ⟨ndra da úambib⟩
 nda da úa^mbib
 nda da úa^mbib
 SPE EXP smoke:TR
I smoked (fish meat, to preserve it)

9.1.2.3 | Adversative

The adversative modal (ADV) indicates that the event is undesirable and/or unfortunate, that it is somehow malicious (or at least non-beneficial).

- (58) ⟨ndra tand dàmbɔ⟩
 nda taⁿd dà^mbo
 nda taⁿd dà^mbo
 SPE ADV eat:TR
I ate (something bad)

9.1.3 | Relational

Relational particles coördinate and modify predicates and arguments.

<i>conjunct</i>	út
<i>disjunct</i>	asə
<i>subjunct</i>	bi

Relational particles are usually placed before the clause or argument they modify.

Coördinated clauses and arguments are placed adjacent to each other, usually in linear order of occurrence (for clauses) or by the empathy hierarchy (for arguments; see § 4.1). Coördinated clauses are always dependent (§ 4.4).

9.1.3.1 | Conjunct

The conjunct relational (CNJ) indicates that the associated clauses are similar in participants (usually the subject argument), timeframe, and/or situation.

- (59) ⟨ndra kùd kala út ndra úambib⟩
 nda kùd kalə út nda úəmbib
 nda kùd kalə út nda úəmbib
 SPE wrap:TR fish CNJ SPE smoke:TR
I wrapped up the fish and smoked them

For arguments, it simply coördinates the arguments with no additional implications (‘and’).

- (60) ⟨ak út gao⟩
 ak út gao
 ak út gao
 eyes CNJ ears
eyes and ears

When used to modify a single constituent, it indicates universal quantification ($\forall x$; ‘all, every, always’).

- (61) ⟨út umbu umbu⟩
 út u^mb_u u^mb_u
 út u^mb_u ~u^mb_u
 CNJ pig ~RED
all pigs

9.1.3.2 | Disjunct

The disjunct relational (DSJ) indicates that the associated clauses are dissimilar or in some way contrastive.

- (62) ⟨ndra kùd kala asa tág úambib⟩

ndra kùd kalə asə tág úambib

ndra kùd kalə asə ndra úambib

SPE wrap:TR fish DSJ LIS smoke:TR

I wrapped up the fish and/but you smoked them

It is used to coördinate arguments, and additionally indicates that there is some form of contrast between them ('but').

- (63) ⟨ak asa uda⟩

ak asə udə

ak asə udə

eyes DSJ fruit fly

eyes, but also fruit flies

When used to modify a single constituent, it indicates uniqueness quantification ($\exists!x$; 'only, alone').

- (64) ⟨asa umbu umbu⟩

asə umbu umbu

asə umbu ~umbu

DSJ pig ~red

only pigs

9.1.3.3 | Subjunct

The subjunct relational (SBJ) indicates that the following clause is irrealis, or only in at least one possible world ($\exists x$), or that they clauses are exclusive alternatives ('or, or else').

- (65) ⟨ndra kùd kala bi ndra úambib⟩

ndra kùd kalə bi ndra úambib

ndra kùd kalə bi ndra úambib

SPE wrap:TR fish SBJ SPE smoke:TR

I wrapped up the fish or else I smoked them

It is most often used to form conditionals and to indicate indirect speech.

It is also used to coördinate arguments as exclusive alternatives.

- (66) ⟨umbu bu uda⟩

umbu bi udə

umbu bi udə

pig SBJ fruit fly

pigs or else fruit flies

When used to modify a single constituent, it indicates existential quantification ($\exists x$; 'some, at least one, sometimes').

(67) ⟨bi umbu umbu⟩

bi u^mbɯ u^mbɯ

bi u^mbɯ ~u^mbɯ

SBJ pig ~red

some pigs

9.2 | Discourse

Discourse particles are used to modify the flow and state of discourse, or conversation.

<i>contrast</i>	láɪ
<i>dismissal</i>	ibɯ
<i>attention</i>	áə
<i>continuation</i>	agi
<i>conclusion</i>	giə

9.2.1 | Contrast

The contrast discourse particle (CONTRAST) indicates that there is some form of contrast between the listener's and speaker's statements. It is often used as a negative answer to polar questions. For example, a possible answer to the question "Is that pig yours?":

(68) ⟨lái ndra dái ci umbu⟩

láɪ ⁿda dái ti u^mbɯ

láɪ ⁿda dái ti u^mbɯ

CONTRAST SPE lack:TR EST pig

no, that pig is not mine

LIT. 'no, I lack the pig'

9.2.2 | Dismissal

The dismissal discourse particle (DISMISS) suppresses the listener's statement, indicating it is unimportant or irrelevant to the current situation. As a response to "I don't want to feed the pigs!":

(69) ⟨ibu sae umbu su dàmbɔ ndrú ták⟩

ibɯ sai u^mbɯ su dà^mbo ⁿdú ták

ibɯ sai u^mbɯ su dà^mbo ⁿdú ták

DISMISS ERG pig ANT eat:TR INS LIS

you will feed the pigs anyways

LIT. 'regardless, the pigs will eat because of you'

9.2.3 | Attention

The attention discourse particle (ATTENTION) demands attention from the listener (or another entity).

(70) ⟨áa sisa⟩

áə sisə

áə sisə
ATTENTION rain

look, rain!

9.2.4 | Continuation

The continuation discourse particle (CONTINUE) is used to provide additional information.

(71) ⟨ndra kùd kala út age ndra úambib⟩

ˈda kùd kalə út aɡi ˈda úəmbib

ˈda kùd kalə út aɡi ˈda úəmbib
SPE wrap:TR fish CNJ CONTINUE SPE smoke:TR

I wrapped up the fish, and even smoked them

9.2.5 | Conclusion

The conclusion discourse particle (CONCLUDE) is used to indicate the end of the speaker's statement(s), and that the listener may reply.

(72) ⟨ndra kùd kala gia⟩

ˈda kùd kalə ɡiə

ˈda kùd kalə ɡiə
SPE wrap:TR fish CONCLUDE

I wrapped up the fish, now what?

10 | Numerals

Numerals are a subset of nouns, and are used to express quantity. There are five numeral terms:

ukə	one
tíi	two
las	three
búto	five
kásə	(one) more

Wherein *kásə* ‘(one) more’ is used to describe any amount greater than a previously-given amount, and defaults to one. The amount more may be specified by placing another numeral after *kásə*.

- (73) ⟨(las) kása uka⟩
 (las) kásə ukə
 (las) kásə ukə
 (three) more one
 one more (than three; i.e., four)

Multiplication may be expressed using the ergative case marker for possession.

- (74) ⟨búto saí cíi⟩
 búto saí tíi
 búto saí tíi
 five ERG two
 two sets of five (i.e., ten)

When modifying nouns, numerals use possession via determiners.

- (75) ⟨umbu ká cíi⟩
 u^mb_u saí tíi
 u^mb_u ká tíi
 pig INT two
 two pigs

| Appendices

Appendices A and B are lexicons of verbs and nouns, respectively. Appendix C contains example sentences, while Appendix D contains longer translations.

Verb entries are structured as follows:

- `<orthography> lemma : (NTR) meaning (intransitive) ‡ (TR) meaning (transitive)`

Different meanings are separated by a double dagger `†`; Idiosyncratic meanings derived from phenomena such as reflexives and modal particles are separated by a double dagger, and preceded by the appropriate abbreviation in parentheses. Reflexive O arguments are noted as (O_{RFL}).

Oftentimes, parenthetical details are only noted in the first entry (preceded by NTR); these details apply to all meanings.

Complex predicates take the same entry structure, but the serialized noun is italicized (only in the ‘lemma’ field).

Noun entries are structured as follows:

- `<orthography> lemma (class) : meaning`

| Actions

- ⟨táe⟩ **táe** : (NTR) be hit ‡ (TR) hit
- ⟨mbvidu⟩ **mbidú** : (NTR) be sensed (visual or auditory) ‡ (TR) sense
- ⟨tasu⟩ **tasu** : (NTR) be said ‡ be emitted, expelled (voluntarily) ‡ (TR) say ‡ emit, expel
- ⟨dámbo⟩ **dámbo** : (NTR) be eaten, drunk ‡ be consumed ‡ (TR) eat, drink ‡ consume
- ⟨uta⟩ **utá** : (NTR) be thrown ‡ be emitted, expelled (involuntarily) ‡ (TR) throw ‡ emit, expel
- ⟨kinda⟩ **kindá** : (NTR) be burned, burnt ‡ be consumed (involuntarily) ‡ (TR) burn, cause to burn ‡ consume
- ⟨suku⟩ **suku** : (NTR) be carried ‡ held ‡ (TR) carry ‡ hold
- ⟨dae⟩ **dai** : (NTR) be lacked, have no owner ‡ (TR) lack (ownership)
- ⟨mbv'dúa⟩ **mbdúá** : (NTR) be wet ‡ be clean ‡ (TR) make wet ‡ clean
- ⟨dae⟩ **dae** : (NTR) be organized, neat ‡ be free of obstructions, unwanted entities ‡ (TR) organize, make neat ‡ make free of obstructions, unwanted entities
- ⟨kaekia⟩ **kaekia** : (NTR) be distracted, have one's attention be diverted ‡ (TR) distract ‡ (EXP) be a distraction ‡ be loud, obnoxious ‡ (O_{RFL}) ignore others ‡ be carefree, naïve ‡ (EXP, O_{RFL}) lack routine ‡ be random, spontaneous ‡ be insane

| Description

- ⟨ái⟩ **ái** : (NTR) stand ‡ (TR) cause to stand
- ⟨ube⟩ **ube** : (NTR) sit ‡ (TR) cause to sit
- ⟨gáe⟩ **gáe** : (NTR) lie (down) ‡ (TR) cause to lie (down)
- ⟨undand⟩ **undánd** : (NTR) be thick, heavy (especially of a mass or container) ‡ (TR) make thick, heavy ‡ (O_{RFL}) become thick, heavy
- ⟨das'ko⟩ **dasko** : (NTR) be tall, long ‡ (TR) make tall, long ‡ (O_{RFL}) become tall, long; grow
- ⟨sambo⟩ **sambo** : (NTR) leave (of a container) ‡ (TR) cause to leave ‡ (O_{RFL}) relax, rest ‡ sleep

| Cooking & food preparation

- ⟨uambib⟩ **uambib** : (NTR) be smoked, dried (over a fire) ‡ (TR) smoke, dry ‡ (EXP) smoke, dry (of fish or other meat)
- ⟨kúd⟩ **kúd** : (NTR) be wrapped (in leaves or sheets of woven fiber, of food, for storage) ‡ (TR) wrap

| Position

Position verbs lexicalize ground, or the location of an action.

- ⟨kuso⟩ **kuso** : (NTR) be hung (from a rigid entity) ‡ (TR) hang O ‡ (O_{RFL}) become hung
- ⟨ndrage⟩ **ndage** : (NTR) be hung (from a non-rigid entity) ‡ (TR) hang O ‡ (O_{RFL}) become hung
- ⟨cindi⟩ **ti'di** : (NTR) be planted; be put in a hole (in the ground) ‡ (TR) plant, put in a hole ‡ (EXP) plant seeds, plants; make/care for a garden ‡ (O_{RFL}) plant oneself; put oneself in a hole

- ⟨mbvuto⟩ ^mbuto : (NTR) be laid (on a flat surface) ‡ (TR) lay (down) ‡ (EXP) lay out to dry ‡ (O_{RFL}) lay oneself down ‡ (EXP, O_{RFL}) go to bed, sleep ‡ retire (from one's current activity)
- ⟨ungo⟩ uⁿdgo : (NTR) be put (in a fire) ‡ (TR) put ‡ (EXP) cook over/in a fire ‡ (O_{RFL}) get in(to) a fire
- ⟨sáta⟩ sáto : (NTR) be put (in flowing/potable water) ‡ (TR) put ‡ (EXP) bathe ‡ (O_{RFL}) get in(to) water
- ⟨kile⟩ kile : (NTR) be put (in still/im potable water) ‡ (TR) put ‡ (EXP) bathe ‡ (O_{RFL}) get in(to) water
- ⟨basa⟩ basə : (NTR) be put (in water in a container) ‡ (TR) put ‡ (EXP) bathe ‡ (O_{RFL}) get in(to) water

| Motion

Motion verbs lexicalize manner, or how an action is performed.

- ⟨áso⟩ ásu : (NTR) move (using one's body) ‡ (TR) cause to move
- ⟨dúgi áso⟩ dúgi ásu : (NTR) walk, move (using one's feet) ‡ (TR) cause to walk
- ⟨ulo áso⟩ ulo ásu : (NTR) run, move (quickly, using one's feet) ‡ (TR) cause to run

- ⟨búsi⟩ búsi : (NTR) be scattered (from an area); be moved haphazardly, in many directions ‡ (TR) scatter ‡ (O_{RFL}) dance

| Direction

Direction verbs lexicalize path, or the route of an action.

- ⟨úlib⟩ úlib : (NTR) be moved (across a surface) ‡ (TR) (cause to) move

| Division

- ⟨táko⟩ táku : (NTR) be cut (shallow, through a single layer) ‡ (TR) cut ‡ (EXP) cut up (a layer, sheet) ‡ (O_{RFL}) perform ritual scarification

| Sounds

- ⟨subu⟩ subu : (NTR) make sound by movement (of a liquid); slosh, splash ‡ (TR) cause to make sound by movement; agitate (a liquid)

| Weather

- ⟨sisə⟩ sisə : (NTR) rain, precipitate ‡ (TR) cause to rain

B | Nouns

| People

- ⟨mbvùga⟩ ^mbùgə (HUM) : Mbvùga native; the Mbvùga people
- ⟨sbágo⟩ sbágo (ANI) : foreigner; non-Mbvùga people
- ⟨rage⟩ ragi (ANI) : dead person ‡ person who has gone away and not returned

| Kinship

Kinship terms indicate that the referent is of the same or of a different gender compared to the speaker.

- ⟨mbvamba⟩ ^mba^mbə (HUM) : parent, ancestor (same)
- ⟨ugu⟩ ugu (HUM) : parent, ancestor (different)
- ⟨gáte⟩ gáte (HUM) : older sibling (same)
- ⟨sgud⟩ sgud (HUM) : older sibling (different)
- ⟨gáro⟩ gáro (HUM) : younger sibling (same)
- ⟨aro⟩ aru (HUM) : younger sibling (different)
- ⟨inde⟩ íⁿde (HUM) : child, descendant

| Body parts

- ⟨ak⟩ ak (HUM) : eye(s) ‡ sight
- ⟨gao⟩ gao (HUM) : ear(s) ‡ hearing
- ⟨dao⟩ dao (HUM) : nose ‡ smell, taste
- ⟨kúi⟩ kúi (HUM) : tongue ‡ speech, sound
- ⟨bíi⟩ bíi (HUM) : head
- ⟨lue⟩ lue (HUM) : mouth

- ⟨ánd⟩ áⁿd (HUM) : tooth/teeth
- ⟨bál⟩ bál (HUM) : hair (of the head, face)
- ⟨ágo⟩ águ (HUM) : hair (of the body)
- ⟨al⟩ al (HUM) : hair (of the nose, ears)
- ⟨bùndu⟩ bùⁿdu (HUM) : torso
- ⟨tibo⟩ tibo (HUM) : arm(s)
- ⟨búto⟩ búto (HUM) : hand(s) ‡ tactile sensation
- ⟨ulo⟩ ulo (HUM) : leg(s)
- ⟨dúgi⟩ dúgi (HUM) : foot/feet ‡ balance, direction
- ⟨sík⟩ sík (HUM) : liver ‡ seat of emotion, empathy
- ⟨ndrál⟩ ⁿdál (HUM) : bladder ‡ seat of intuition, knowledge
- ⟨kàl⟩ kàl (HUM) : heart ‡ seat of fear, excitement
- ⟨sùl⟩ sùl (HUM) : gallbladder ‡ seat of logic, reason
- ⟨bát⟩ bát (HUM) : brain ‡ seat of life, vitality
- ⟨láke⟩ láke (HUM) : spleen ‡ seat of anxiety, suspicion
- ⟨làa⟩ làa (HUM) : kidney(s) ‡ seat of vigor, willingness
- ⟨umb'la⟩ u^mblə (HUM) : pancreas ‡ seat of willpower, perseverance
- ⟨tàbu⟩ tàbu (HUM) : lung(s) ‡ seat of grief, emotional pain

| Concepts

- ⟨dandas⟩ *daⁿdəs* (HUM) : the *Dandas* language
- ⟨jimb⟩ *di^mb* (ANI) : any foreign language

| Numerals

- ⟨uka⟩ *ukə* (EDI) : one
- ⟨cīi⟩ *tīi* (EDI) : two
- ⟨las⟩ *las* (EDI) : three
- ⟨búto⟩ *búto* (EDI) : five
- ⟨kása⟩ *kásə* (EDI) : (one) more

| Colors

- ⟨atə⟩ *ato* (EDI) : red, orange, brown, purple
- ⟨táro⟩ *táro* (EDI) : light blue, green
- ⟨mbvise⟩ *^mbise* (EDI) : yellow, white, light gray
- ⟨gànd⟩ *gàⁿd* (EDI) : black, dark blue, dark gray

| Nature

- ⟨dund⟩ *duⁿd* (NAT) : flowing and/or potable water
- ⟨mbvidu⟩ *^mbidu* (NAT) : still and/or impotable water
- ⟨báę⟩ *báe* (NAT) : water (in a container)
- ⟨guka⟩ *gukə* (INA) : sand ‡ any particulate matter ‡ beach

| Places

- ⟨isu⟩ *isu* (INA) : flowing water feature; river
- ⟨gàa⟩ *gàə* (INA) : still water feature; lake
- ⟨g'sáe⟩ *gsái* (INA) : water feature with no visible boundary; ocean
- ⟨d'sumb⟩ *dsu^mb* (INA) : vertical water feature; waterfall
- ⟨jił⟩ *dīł* (INA) : hill, mountain ‡ large pile of rocks
- ⟨r'ndise⟩ *rⁿdise* (INA) : forest, collection of various different trees
- ⟨t'lás⟩ *tlás* (INA) : forest, collection of identical trees

| Animals

- ⟨uda⟩ *udə* (NAT) : fruit fly
- ⟨umbu⟩ *u^mbu* (ANI) : pig
- ⟨uind⟩ *uiⁿd* (ANI) : small cat; kitten
- ⟨lánde⟩ *láⁿde* (ANI) : lion; any large, wild cat
- ⟨badə⟩ *bado* (NAT) : duck
- ⟨balos⟩ *balus* (NAT) : pidgeon, dove ‡ airplane
- ⟨kala⟩ *kalə* (INA) : fish

| Animal products

- ⟨lind⟩ *líⁿd* (INA) : pig meat (raw)
- ⟨tála⟩ *tálə* (INA) : fish meat (raw)

| Plants

- ⟨sidu⟩ *sidu* (INA) : potato, yam plant
- ⟨ndr'suga⟩ *ⁿdsugə* (INA) : betel/areca tree
- ⟨báķę⟩ *báke* (INA) : seed ‡ nut (with shell) ‡ pit (of a fruit)
- ⟨bile⟩ *bile* (INA) : sago palm

| Plant products

- ⟨ámba⟩ á^mbə (INA) : sago pith
- ⟨tusu⟩ tusu (INA) : wood (from a newly-felled tree)
- ⟨b'dao⟩ bdao (INA) : wood (from an already-felled tree; a tree felled by the wind or some other natural force)

| Food & drink

- ⟨uga⟩ ugə (EDI) : potato, yam (in general)
- ⟨ndambə⟩ ⁿdda^mbe (INA) : betel/areca nut (in general)
- ⟨tám̄ba⟩ tá^mbə (EDI) : dried sago pith; sago flour
- ⟨mbvásse⟩ ^mbássi (EDI) : sago dough
- ⟨biku⟩ biku (EDI) : sago porridge (boiled sago flour)
- ⟨kút'l⟩ kútl (EDI) : sago flatbread
- ⟨mbvìr⟩ ^mbìr (EDI) : pig meat (cooked)
- ⟨aḽe⟩ aḽi (EDI) : fish meat (cooked)

| Products

- ⟨ndrúk⟩ ⁿdúk (ANI) : (sheet of) woven fiber
- ⟨b'sus⟩ bsus (EDI) : (piece of) clothing, apparel ‡ any non-rigid covering

| Tools

- ⟨sug⟩ sug (EDI) : axe ‡ the head/blade of an axe
- ⟨tál̄⟩ tá^l (EDI) : short knife
- ⟨ndrago⟩ ⁿdago (EDI) : long knife
- ⟨tui⟩ tui (INA) : blade (of a knife)

| Constructions

- ⟨iḽo⟩ iḽo (INA) : house
- ⟨kándo⟩ káⁿdo (INA) : firepit ‡ center of a house

| Vehicles

- ⟨subit⟩ subit (EDI) : boat, watercraft in general
- ⟨t'kúu⟩ tkúu (EDI) : long boat made of a single hollowed-out log, usually fitting between one and three people
- ⟨t'gumba⟩ tgu^mbə (EDI) : raft made of logs lashed together by rope

C | Example sentences

“The canoe got heavy from the water.”

- (76) <t'kúu gúndand ndrúu bée sando>
 tkúu gúndand ndrúu bée saⁿdo
 canoe NPR· TR· be heavy INS water RFL
the canoe became heavy because of water

“She throws sand everywhere while sweeping.”

- (77) <ci búsisi guka út mbáo su dáede>
 ti búsisi guka út mbáo su dáede
 ti ̀ búsí ~si guka út mbáo su ̀ dae ~de
 EST TR· scatter ~IMP sand CNJ LOG ANT TR· organize ~IMP
they scatter sand while cleaning

“All the seeds that have been sown have sprouted.”

- (78) <út báke báke mbáo jindi su gínda ui mbáo ui sando tás'kọ>
 út báke báke mbáo diⁿdi su gínda ui mbáo ui saⁿdu tásko
 út báke báke mbáo d· tiⁿdi su g· ̀ kiⁿda ui mbáo ui saⁿdu t· ̀ dasko
 CNJ seed ~RED LOG NPR· plant ANT NPR· TR· burn ESS LOG ESS RFL.OBL NPR· TR· be tall
all the planted seeds have grown

“They gave me two pairs of trousers.”

- (79) <ci súku age ndrat b'sus sae ulo ká cí>
 ti súku age dat bsus sai ulo ká tí
 ti ̀ súku age dat bsus sai ulo ká tí
 EST TR· carry LAT SPE.OBL clothing ERG legs int two
they gave me two pieces of clothing for legs

“I used to pour water out.”

- (80) <ndra da sámbo ui bée>
 nda da sámbo ui bée
 nda da sámbo ui bée
 SPE EXP leave:TR ESS water
I used to empty (a container) of water

D | Long translations

The following text is what the people said to me when they first saw me:

(81) (áa ká táso sbágo)

áə ká tásu sbágo

áə ká ́ tasu sbágo

ATTENTION INT TR say foreigner

look, there is a foreigner!

They then refused to talk to me for the next few days. I have since learned that this is because I attempted to speak to them in Tok Pisin, and that they don't like Tok Pisin nor the people that speak it.