## Y 331

Lagá, a language of Dōki

## M.M.N.H.

A descriptive grammar

Dedicated to miacomet, again

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## Contents

Glossing abbreviations ..... 6
0 Introduction ..... 8
0.1 Overview ..... 8
0.2 Conventions ..... 8
0.3 External history ..... 8
0.4 Internal history ..... 9
1 Phonology ..... 10
1.1 Consonants ..... 10
1.1.1 Consonant taxophony ..... 10
1.2 Vowels ..... 12
1.3 Phonotactics ..... 12
1.3.1 Phonological profile ..... 12
2 Prosody ..... 14
2.1 Isochrony ..... 14
2.2 Prosodic units ..... 14
2.3 Upstep ..... 14
2.4 Stress ..... 15
3 Orthography ..... 16
3.1 Punctuation \& diacritics ..... 16
3.2 Latin ..... 17
4 Syntax ..... 18
4.1 Prefield ..... 18
4.2 Empathy hierarchy ..... 18
4.3 Core field ..... 18
4.4 Auxiliary slot ..... 19
4.5 Postfield ..... 19
4.6 Obliques ..... 19
4.7 Independent \& dependent clauses ..... 20
4.7.1 Independent ..... 20
4.7.2 Dependent ..... 20
4.7.2.1 Adverbial ..... 20
4.7.2.2 Adnominal ..... 20
4.7.3 Insubordination ..... 21
4.8 Transitivity ..... 21
4.8.1 Agent ..... 21
4.8.2 Patient ..... 21
4.8.3 Intransitive ..... 21
4.8.4 Transitive ..... 21
4.9 Alignment ..... 22
4.9.1 Accusative ..... 22
4.9.2 Ergative ..... 22
4.10 Imperatives ..... 22
4.11 Interrogatives ..... 22
4.12 Conditionals ..... 23
4.13 Third-person reference ..... 23
4.14 Pivot ..... 23
4.14.1 Relativization ..... 24
4.14.2 Argument-dropping ..... 24
4.14.3 Questioning ..... 24
5 Lexical classes ..... 25
5.1 Nouns ..... 25
5.2 Verbs ..... 25
5.2.1 Eat ..... 25
5.2.2 Say ..... 26
5.2.3 Move ..... 26
5.2.4 Sense ..... 27
5.2.5 Put ..... 27
6 General morphology ..... 29
6.1 Affixes ..... 29
6.2 Reduplication ..... 29
7 Nominal morphology ..... 30
7.1 Case ..... 30
7.1.1 Direct ..... 30
7.1.2 Indirect ..... 30
7.2 Number ..... 31
7.2.1 Inherent number ..... 31
7.2.1.1 Singular ..... 32
7.2.1.2 Dual ..... 32
7.2.1.3 Plural ..... 32
7.2.1.4 Extraplural ..... 32
7.2.2 Natural ..... 32
7.2.3 Inverse ..... 32
7.2.4 Augmented ..... 33
8 Verbal morphology ..... 34
8.1 State ..... 34
8.1.1 Finite ..... 34
8.1.2 Non-finite ..... 34
8.2 Agreement ..... 35
8.2.1 Intransitive agreement ..... 35
8.2.2 Transitive agreement ..... 35
8.3 Relationals ..... 36
8.3.1 Generic ..... 37
8.3.2 Posterior ..... 38
8.3.3 Resultative ..... 38
8.3.4 Conditional ..... 38
8.3.5 Negative ..... 39
9 Pronouns ..... 41
9.1 Person ..... 41
9.1.1 First singular ..... 41
9.1.2 First plural ..... 42
9.1.3 Second ..... 42
9.2 Mode ..... 42
9.2.1 Realis ..... 42
9.2.2 Irrealis ..... 43
9.3 Evidential usage ..... 43
9.3.1 Experiential ..... 43
9.3.2 Inferential ..... 44
9.3.3 Reportative ..... 44
10 Determiners ..... 45
10.1 Local ..... 45
10.2 Proximal ..... 46
10.3 Medial ..... 47
10.4 Distal ..... 47
10.5 Indefinite ..... 47
10.6 Temporal usage ..... 48
10.6.1 Simple ..... 49
10.6.2 Perfect ..... 49
10.6.3 Dynamic ..... 49
10.6.4 Preterite ..... 50
10.6.5 Future ..... 50
10.6.6 Imperfect ..... 50
11 Positionals ..... 51
11.1 Lative ..... 51
11.2 Ablative ..... 52
11.3 Instrumental ..... 54
11.4 Purposive ..... 55
11.5 Essive ..... 55
11.6 Applicative usage ..... 56
11.6.1 Lative applicative ..... 56
11.6.2 Ablative applicative ..... 56
11.6.3 Instrumental applicative ..... 56
11.6.4 Purposive applicative ..... 56
11.6.5 Essive applicative ..... 57
12 Semantics ..... 58
12.1 Numerals ..... 58
12.1.1 Larger numerals ..... 58
Appendices ..... 60
A Nouns ..... 61
B Semantic divisions ..... 64
C Example sentences ..... 65
Figures
1.1 Consonant phonemes \& taxophones ..... 10
1.2 Vowel phonemes \& taxophones ..... 12
1.3 Phonological profile ..... 12
2.1 Moraic structure ..... 14
2.2 Upstep ..... 15
2.3 Upstep deletion ..... 15
3.1 Script (native) ..... 16
3.2 Punctuation \& diacritics (native) ..... 16
3.3 Consonants (latin) ..... 17
3.4 Vowels (latin) ..... 17

| Gloss | Term |
| :---: | :---: |
| $\varnothing$ | null |
|  | morpheme separation |
| - | affix |
| : | inherent/non-concatenative |
| + | compounded |
| $\rangle$ | infix |
| $\sim$ | reduplication |
| AGT | agent |
| PAT | patient |
| NTR | intransitive |
| TRA | transitive |
| FIN | finite |
| NFN | non-finite |
| SIM | simultaneous |
| CNS | consecutive |
| INT | internal |
| IMM | immediate |
| NEG | negative |
| IND | indirect |
| DIR | direct |
| NAT | natural |
| INV | inverse |
| AUG | augmented |
| NNT | non-natural |
| SG | singular |
| DU | dual |
| PL | plural |
| EPL | extraplural |
| PRO | pronoun |
| 1SG | first singular |
| 1PL | first plural |
| 2 | second |


| Gloss | Term |
| ---: | :--- |
| 3PER | third personal |
| 3IMP | third impersonal |
| SAP | speech act participant |
| NNU | non-atomic |
| REA | realis |
| IRR | irrealis |
| LOC | local |
| DET | determiner |
| PRX | proximal |
| MED | medial |
| DST | distal |
| NDF | indefinite |
| POS | positional |
| LAT | lative |
| ABL | ablative |
| INS | instrumental |
| PUR | purposive |
| ESS | essive |

## 0 | Introduction

In this book we shall explore and describe the Lagá language of the Mōhtāi people.

## 0.1 | Overview

In Ch. 0, I shall introduce the language, the conventions used in this book, and the history/context of the language (both internal and external). In Chs. 1 to 3, I shall discuss the sounds and features of the sounds of the language, both segmental and suprasegmental; as well as how the language is written, both natively and transcribed. In Ch. 4, I shall discuss how individual words interact to form phrases and clauses, and related structures and phenomena. In Chs. 5 to 11, I shall discuss the different classes of words, how they are modified, and their usage. In Ch. 12, I shall discuss the meanings of certain groups of words. Finally, in Apps. A to C, I will provide a (technically) non-exhaustive lexicon. some specific semantic divisions, and miscellaneous example sentences.

## 0.2 | Conventions

In this book, I shall use blue text for Lagá 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; and «chevrons» are used for notations.

Glosses are structured as follows:
(0.1) phonemic transcription

〈native script)
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.

When used as examples to demonstrate a particular grammatical feature, the morphemic metalanguage transcription will usually only contain the relevant information.

## 0.3 | External history

Lagá is a speedlang (a conlang created within a time restraint) created by me, Mareck (M.M.N.H.). It was created within the timeframe of Sunday, October 11, 2020, to Sunday, October 25, 2020. The challenge was proposed by miacomet, a.k.a. u/roipoiboy.

The following creative restraints have been made:

- a pitch accent-type tonal system
- a vowel system with some other non-frontness, non-height, non-roundedness, non-orthogonal feature
- use differential object-marking
- at least two types of converb
- some sort of ablaut/apophony

As well as the following tasks:

- document and showcase the language
- translate five "syntax test" sentences, as provided by Zephyrus or some other acceptable source
- explain the number system

The pitch accent requirement is satisfied by the upstep phenomenon (§2.3). The vowel system requirement is satisfied by the non-orthogonal distribution of nasal vowels in the vowel inventory (§ 1.2). The differential object-marking requirement is satisfied by the phenomenon in which the indirect case is used on patients (strongly correlated to the traditional notion of "objects" in Lagá) only when they outrank the agent in animacy as determined by the empathy hierarchy. The converb requirement is satisfied by the five relationals (§ 8.3). The ablaut/apophony requirement is satisfied by the non-productive but still common nasal alternation that is found systematically in verbs (Ch. 8), and in various other places.

This document in of itself documents and showcases the language, satisfying the related task. Acceptably-sourced example sentences are found in App. C. The number system is detailed in §12.1. An unofficial theme of this language is 'five' (5).

## 0.4 | Internal history

The Lagá language is spoken by Mōhtāi people in the nation of Dōki, a large island north of the nation of Tseri, inhabited by the Náma people, who speak the gan Minhó language. Due to their proximity, there has been much contact between the two peoples.

While their island is physically larger than that of the Náma, the Mōhtāi have a significantly smaller population.

## 1 | Phonology

In this chapter and the following two chapters we explore the sounds and related phenomena of Lagá. This includes abstract (phonemic ${ }^{1}$ ) and concrete (phonetic) forms, as well as suprasegmental units and orthographic conventions. We shall use (a modified) off IPA for phonemic transcription, and ${ }^{c a n} I P A^{2}$ for phonetic transcription.

## 1.1 | Consonants

There are ten phonemic consonants in Lagá:

|  | labial | dental | alveolar | vela |  | glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| plosive | p [p p] | t [t d] | ts [ts] | k | [k g] | 3 [र] |
| constrictive |  |  | $s$ [ F z x] |  |  |  |
| sonant |  |  | r [ n ¢ h ] | w | w m y $\varphi$ ] |  |
| lateral |  | 1 [ ¢ ¢] |  |  | [gt kl] |  |

Figure 1.1: Consonant phonemes \& taxophones

- /p/ is bilabial
- /t l/ are laminodental
- /ts s r/ are primarily apicoälveolar; /s/ may be velar, /r/ may be apicopostalveolar ("retroflex") and glottal
- /k L/ are velar
- /w/ is primarily labiovelar, but may be labial and velar
- /R/ is glottal

Most notable in this inventory is the lack of labials, the only significant one being $/ \mathrm{p} /$, which primarily surfaces as a voiceless bilabial trill. Also interesting is the presence of the segment $/ \mathrm{L} /$, which surfaces as a voiced velar lateral stop-stricative, a relatively rare sound. Nasals are not phonemic, and the segment $/ \mathrm{s} /$ sometimes surfaces as a velar constrictive.

### 1.1.1 | Consonant taxophony

- /t k s/ surface as [d g z] after /r w/
- /p/ surfaces as [p] before /ũ/
- /s/ surfaces as [x] before /t p r w l/
- /r w/ surface as [n m] before /ũ ã/; /rr ww/ surface as [nn mm]

[^0]- /r/ surfaces as [n] before /t sl/; it surfaces as [ $\ddagger$ ] before /k L/
- /w/ surfaces as [ y ] before /t k s rlı/, and before a word boundary
- /r w/ surface as [h $\varphi$ ] before /ts $\mathrm{p} \mathrm{p} /$; /r/surfaces as [h] before a word boundary
- / $1 \mathrm{~L} /$ surface as [ f kt ] after $/ \mathrm{tk} \mathrm{s/}$
- otherwise, /t ts k ? p s rwll/surface as [t ts k P P s f w I gl]


## 1.2 | Vowels

There are five phonemic vowels in Lagá:


Figure 1.2: Vowel phonemes \& taxophones

- /ũ/ is protruded-rounded; /o/ is compressed-rounded
- /ũ ã/ are nasalized

This vowel inventory is notable for its uneven distribution of nasal vowels, as well as the three variants of rounding (protruded-rounded, compressed-rounded, and unrounded). Also notable is the relative sparseness of front vowels.

Vowels experience little significant taxophonic variation.

## 1.3 | Phonotactics

Phonotactics describes the way phonemes are organized in relation to each other and within words.

### 1.3.1 | Phonological profile

The profile of the phonological word is as follows ${ }^{3}$ :

$$
\#\left[\mathrm{~T}_{\omega}^{?}\left[{ }_{\varphi}\left[{ }_{\mu_{1}^{\prime}} \mathrm{C}_{1} \mathrm{~V}\right]\left[{ }_{\mu_{2}^{\prime}}\left(\mathrm{C}_{1}^{?} \mathrm{~V}\right) \mid \mathrm{C}_{2}\right]\right]\left(\varphi\left|\mu_{1}^{\prime}\right| \mathrm{C}_{2}\right)^{*}\right] \#
$$

Figure 1.3: Phonological profile
Wherein:

- \# a word boundary
- $\omega$ a phonological word
- $\varphi$ a foot
- $\mu^{\prime}$ a moraic complex

[^1]- [ ] a domain
- zero or one
- ${ }^{*}$ zero or more
- T upstep (§ 2.3)
- $\mathrm{C}_{1}$ a consonant
- $\mathrm{C}_{2} / \mathrm{t} \mathrm{k}$ s r w/
- V a vowel

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 Lagá is moraically-timed, i.e., the duration of every mora ( $\mu$ ) is approximately equal.

It is important to note the difference between the moraic complex $\mu^{\prime}$ and the mora $\mu$; the former is comprised of the latter. Within a moraic complex, each vowel counts as one mora, and a coda consonant counts as one mora as well. Onset consonants do not affect mora count. This may be modeled as such:

It is also important to note the vocalic mora, which is a mora consisting of a vowel /i u o a a $\tilde{\mathrm{a}}$ /, as opposed to the mora proper, which may be any moraic unit (vowel or otherwise).


Figure 2.1: Moraic structure
Wherein a foot $(\varphi)$ must be bimoraic; a bimoraic rime may consist of a vowel-vowel sequence, a vowel-consonant-vowel sequence, or a vowel-consonant sequence.

## 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 foot $(\varphi)$. The structure of a foot is shown in § 1.3.1. Foot weight is measured in the number of moras contained within a foot. Light feet ( $\varphi^{\prime}$ ) contain one mora (monomoraic), while heavy feet $(\varphi)$ contain two (bimoraic).

## 2.3 | Upstep

Upstep is a word-level tonal phenomenon in which a single vocalic mora within a word may take upstep /ó/ (H), or otherwise be unmarked / / ( $\varnothing$ ).

Upstep surfaces as a high tone on the affected mora as well as all vocalic moras rightward (i.e., postceding) the marked mora, continuing until the end of the phonological word. The phonological word is comprised of a root and all its affixes, if present ${ }^{1}$. This may be modeled as such:


Figure 2.2: Upstep
If more than one upstep occurs in a word (via affixation or compounding), the rightmost upstep takes precedence; all other upstep are deleted. This may be modeled as follows:


Figure 2.3: Upstep deletion

## 2.4 | Stress

Stress is characterized by an increase in volume and intensity of a mora. Stress in Lagá is rather weak, and always occurs on the heaviest leftmost (i.e., the first) moraic complex within the phonological word. Secondary stress follows trochaically, occurring on every other subsequent moraic complex.

[^2]
## 3 | Orthography

The native orthography of Lagá is an alphabet, wherein each glyph encodes only a single segment. The script was inherited from the Náma people ${ }^{1}$, who in turn inherited it (partially) from the Moógatí people.

| t | c |  |  |
| :---: | :---: | :---: | :---: |
| ts | e |  |  |
| k | 3 |  |  |
| ? | $\Gamma$ | i |  |
|  | $\bigcirc$ | u | cod |
| p |  | - | d |
| s | 2 | a | J |
| r |  | ã |  |
| w | < |  |  |
| 1 | Y |  |  |
| L | E |  |  |

Figure 3.1: Script (native)
Spaces (i.e., some sort of word separator or word boundary marker) are not commonly used, although may appear in texts intended for foreigners and/or children.

## 3.1 | Punctuation \& diacritics

| $\cdot$ | end of a sentence |
| :---: | :--- |
| $\div$ | beginning of a text |
| $\sim$ | end of a text |
| $\dot{-}$ | marks long segments |

Figure 3.2: Punctuation \& diacritics (native)
The length diacritic $\langle\dot{\circ}\rangle$ is only used word-internally (i.e., not across word boundaries).

[^3]3 ｜Orthography

## 3.2 ｜Latin

|  | labial | dental | alveolar | velar | glottal |
| :---: | :---: | :---: | :---: | :---: | :---: |
| plosive |  | $\begin{array}{ll}\mathrm{t} & \langle\mathrm{d}\rangle \\ \\ 1 & \langle 1\rangle\end{array}$ | ts $\langle\mathrm{t}\rangle$ | k 〈g〉 | ？〈k〉 |
| constrictive | p $\langle f\rangle$ |  | s 〈s s ${ }^{\text {s }}$ |  |  |
| sonant |  |  |  | w $\langle\mathrm{vm} \underline{\mathrm{n}} \mathrm{p}$ 〉 |  |
| lateral |  |  |  | L 〈1〕 |  |

Figure 3．3：Consonants（latin）
Wherein：

- ／s／［x］〈́s〉
- ／r／［n h］［n h〉
－／w／$[\mathrm{m} \mathrm{y} \Phi]\langle\mathrm{m} \underline{\mathrm{n}} \mathrm{p}\rangle$
－otherwise，／t tsk ？p s rwll／（d t g k f s rwll

| i ũ | 〈i ō〉 |
| :---: | :---: |
| o | （o） |
| a ã | 〈a $\overline{\mathrm{a}}$ 〉 |
| $\bigcirc$ | 〈ò／ó） |

Figure 3．4：Vowels（latin）
Wherein upstep is written as 〈ò〉 on／i o a／（i．e．，〈ì ò à〉），or as 〈ó〉 on／ũ ã／（i．e．，〈ó á〉）．

Syntax describes how words are ordered and how they relate to one another.
The order and structure of constituents of an independent clause (§ 4.7.1) is as follows:


In dependent clauses (§ 4.7.2), the structure differs as such:


## 4.1 | Prefield

The prefield contains the topic, which is the most-animate core argument ${ }^{1}$. Animacy is determined by the empathy hierarchy.

In dependent clauses, the prefield contains all arguments (still ordered by the empathy hierarchy).

## 4.2 | Empathy hierarchy

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

$$
\begin{gathered}
\text { nature } \gg 1 \mathrm{SG} \gg 1 \mathrm{PL} \gg 2>\text { human }>\text { fauna } \gg \text { flora } \gg \text { inanimate } \\
\\
\\
\rightarrow \text { higher } \leftarrow
\end{gathered}
$$

1sG, 1PL, and 2 refer to their respective persons, as detailed in Ch. 9. The class «nature refers to natural forces, deities, and other such phenomena traditionally considered outside the scope of human control. The classes «human», (fauna), and \&flora» are fairly self-explanatory, and are collectively considered animate entities. The class «humans also subsumes pronominal determiners (Ch. 10). The last class, inanimate), comprises all inanimate entities, and also includes abstract concepts and nonfinite verbs (§ 8.1.2).

Within the classes themselves, named/unique entities are placed higher than non-unique/generic entities. With equally-classed entities, the more "salient" or agentive entity is chosen as the topic.

## 4.3 | Core field

The core field contains a verb and an optional auxiliary.

[^4]
## 4.4 | Auxiliary slot

The auxiliary slot is the space directly postceding the verb, and may contain any one of the following:

- indirect-case noun (§ 5.1)
- non-finite verb (§5.2)
- pronoun (Ch. 9)
- determiner (Ch. 10)
- positional (Ch. 11)

These are collectively termed auxiliaries. Noun auxiliaries are primarily used for derivation of more specific verb and event meanings. Verb, pronoun, determiner, and positional auxiliaries are used for grammatical expression, such as modality and temporal designation.

Verbs may take any number of auxiliaries, but generally occur with between zero and two. Only one auxiliary may occupy the auxiliary slot (the true auxiliary), while other auxiliaries are demoted in various ways.

Auxiliary demotion follows a hierarchy:

$$
\begin{aligned}
& \text { noun } \gg \text { verb } \gg \text { PRO } \gg \text { DET } \gg \text { POS } \\
& \leftarrow \text { higher } \leftarrow \\
& \rightarrow \text { lower } \rightarrow
\end{aligned}
$$

Wherein the highest-ranked auxiliary stays the true auxiliary, while the others are demoted.
Noun and verb auxiliaries are demoted to obliques; nouns are marked with the essive positional (§ 11.5), while verb auxiliaries are simply moved to the postfield. With two verb auxiliaries, the less "salient", or otherwise less contextually-relevant verb auxiliary is demoted. Otherwise, two of the same type of auxiliary generally do not coöccur.

Determiner, pronoun, and positional auxiliaries are demoted to the postfield as well, postceding any obliques and ordered by the auxiliary hierarchy.

Postfield dependent clauses, such as predicates marked with a relational, postcede obliques, but precede postfield auxiliaries.

## 4.5 | Postfield

The postfield contains residue, which is usually a non-topic argument as well as obliques and demoted auxiliaries. If there is more than one oblique, they are ordered by the empathy hierarchy. As noted before, postfield auxiliaries (that are not already obliques, i.e., determiner, pronoun, and positional auxiliaries) are placed after any obliques, and are ordered by the auxiliary hierarchy.

In dependent clauses, the postfield only contains obliques and demoted auxiliaries.

## 4.6 | Obliques

Oblique arguments are those which are not core arguments. They are often adverbial in nature, describing goals, sources, locations, times, etc.

Obliques are marked with positionals (Ch. 11).

## 4.7 | Independent \& dependent clauses

Clauses are divided into two syntactic types: independent and dependent clauses. These differ mainly in how the predicate is inflected and how it behaves.

### 4.7.1 | Independent

Independent clauses are those which may stand alone (disregarding insubordinate clauses, detailed in the next section). They are formed with finite verbs (§ 8.1.1).

### 4.7.2 | Dependent

Dependent clauses are those which modify a predicate or an argument. They are formed with nonfinite verbs (§ 8.1.2).

Within dependent clauses, all pronouns take the irrealis mode.
In dependent clauses, temporal phenomena are arranged in relation to the superordinate independent (matrix) clause.

### 4.7.2.1 | Adverbial

Adverbial dependent clauses are those which modify a predicate, or a verb.
Adverbial clauses are often used to embed predicates within other predicates, as content clauses to attitude predicates (using a bare non-finite verb), or as a true adverbial (using a relational; see § 8.3).
(4.1) rũ rấkito lao kũwũ sóri tsũú

rũ rấkito lao kũwũ sóri tsũứ
PRO sense DET bunny grass eat.NFN
I saw that the bunny was eating the grass

### 4.7.2.2 | Adnominal

Adnominal dependent clauses are those which modify an argument, or a noun ${ }^{2}$.
Adnominal clauses are used to further describe or identify a noun. Only core arguments may take adnominal dependent clauses. The shared argument is aligned along a loose pivot (§ 4.14.1); it does not have to match its roles in both clauses. However, it must be a core argument of both clauses.

Restrictiveness of relative clauses is modulated by the presence of the indefinite determiner wãs in the adnominal clause. The determiner takes the place of the shared argument within the adnominal clause. Otherwise, the shared argument does not occur (or is "gapped") in the adnominal clause.

[^5](4.2) rũ rãkỉós lao kũwũ sóri tsũứ

rũ rãkiłós lao kũwũ sóri tsũứ
PRO sense DET bunny grass eat.NFN
I saw the bunny that was eating the grass

```
rũ rãki}ós lao kũwũ wãs sóri tsũứ
```



```
rũ rãki}ós lao kũwũ wãs sóri
PRO sense DET bunny NDF grass
    tsũứ
    eat.NFN
```

I saw the bunny, which was eating the grass

Headless relatives always take the indefinite determiner.
(4.4) wãs sóri tsũứ

wãs sóri tsũṹ
NDF grass eat.NFN
that which is eating the grass

### 4.7.3 |nsubordination

Insubordination is the process of using a dependent clause as an independent clause (i.e., using the non-finite state on an otherwise syntactically-independent predicate).

Insubordination is primarily used to emphasize an entire clause, and is most often used for imperatives (§ 4.10).

## 4.8 | Transitivity

Transitivity describes the number of arguments a predicate may take, and how they relate to each other.

### 4.8.1 | Agent

The agent argument (AGT) is the argument that performs or induces the event.

### 4.8.2 | Patient

The patient argument (РАт) is the argument that undergoes or is effected by the event.

### 4.8.3 | Intransitive

Intransitive predicates (NTR) take a single core argument, the $S$ argument.
The $S$ argument may be the agent or patient, as differentiated by intransitive agreement (§ 8.2.1) or case-marking (§7.1).

### 4.8.4 | Transitive

Transitive predicates (TRA) take two core arguments, the A and O arguments.
Generally, the A argument is the agent, and the O argument is the patient.

## 4.9 | Alignment

Alignment (which may be better specified as morphological alignment) describes how arguments are marked and how they relate to their predicate.

### 4.9.1 | Accusative

The accusative alignment arranges the S and A arguments as the agent, and the O argument as the patient.

The accusative alignment is used in clauses in which the agent is more animate than the patient, as determined by the empathy hierarchy (§ 4.2). It is also used in intransitive clauses in which there is only an agent.

### 4.9.2 | Ergative

The ergative alignment arranges the $S$ and $O$ arguments as the patient; and the $A$ argument as the agent.

The ergative alignment is used in clauses in which the patient is more animate than the agent. It is also used in intransitive clauses in which there is only an patient.

### 4.10 | Imperatives

Imperative clauses are those in which the speaker asserts that the listener perform an action.
As stated before, imperatives are formed simply via insubordination.
(4.5) tsũứ

〈ecd•)
tsũứ
eat.NFN
eat!
Soft imperatives, or requests, are formed by insubordinating an interrogative.
(4.6) ki kis kisrosó kũwũ tsir wo

## 

ki kis kisrosó kũwũ tsir wo
PRO move.NFN move.NFN:NEG bunny POS PRO
may you give me the bunny?

### 4.11 | Interrogatives

Interrogative clauses are those in which the speaker requests information from the listener.
Interrogatives are formed by using the negative relational on a reduplicated auxiliary verb.
(4.7) kũwũ tsiiká tsũũrosó sóri

kũwũ tsiiká tsũũ -rosó sóri
bunny eat eat.NFN-NEG grass
is the bunny eating the grass?
They may also use the indefinite determiner wãs as a wh-word.
(4.8) wãs tsiiká tsũũrosó sóri

wãs tsiiká tsũũ -rosó sóri
NDF eat eat.NFN -NEG grass
what is eating the grass?

### 4.12 | Conditionals

Conditional statements are those which denote 'if $x$, then $y$ '; event $y$ occurs because of as a result of $x$. Conditional statements are composed of two (or more) clauses, the protasis (the condition) and the apodosis (the consequence).

Conditionals are formed using the conditional relational (§ 8.3.4). The apodasis is marked as irrealis, either with the distal determiner auxiliary or a modal verb auxiliary.
(4.9) wo tsíito koi kứ kiswiti ?óli rũ

〈2dened3dn3cd3n22nenrdYnscd••
wo tsíto koi kû́ kis -witi ?óli rũ
PRO eat DST PRO move.NFN -CON POS PRO
I will eat, if you come with me

### 4.13 | Third-person reference

Third-person reference denotes the act of referring to third-party entities, or entities that are neither the speaker nor listener. The pronominal usage of determiner often takes this role (especially for anaphoric and cataphoric uses), but nouns are also used.

Nouns used for third-person reference are usually in some way "generic" in nature, such as one of the various 'person' nouns kíli, lũ̉i, satã, taó, tsáwo for human referents, or the general noun tsoo thing, something. Sometimes, the numerals hãsa, ?ũlo one (animate and inanimate) are used for a general animate/inanimate reference distinction (other numerals may also be used, but this is not as common).

### 4.14 | Pivot

Pivot (or syntactic alignment) describes how arguments relate between and across clauses. Pivot in Lagá is relatively loose, without major restraints on which roles arguments must take.

### 4.14.1 | Relativization

Relativization is concerned with which arguments may take an adnominal (or 'relative') clause (§ 4.7.2.2). Arguments that take such clauses must be a core argument in both the matrix clause and the dependent clause.

### 4.14.2 | Argument-dropping

Argument-dropping is concerned with the process of removing, or "dropping", arguments, and replacing them with pronominal determiners, or dropping the argument entirely.

This is done after an argument is established within the universe of discourse. The distal and indefinite determiners koi, wãs ( $\S 10.4$ and 10.5) are often used for this purpose, with their anaphoric usages that are divorced from the discourse participants. Generally, any established core argument may be replaced with a pronominal determiner. This may create "ambiguities", but context usually supplants such information.

### 4.14.3 | Questioning

Questioning is concerned with which syntactic constituents are open to being questioned (§4.11). Only core arguments may be questioned.

## 5 | Lexical classes

There are five lexical classes, or "parts of speech": verbs, nouns, pronouns, determiners, and positionals.

Nouns are the only open class (i.e., group that readily accepts new members); all other classes are closed.

## 5.1 | Nouns

Nouns are content words, and (as stated before) are the only open class of roots.
Each nominal root has an inherent number, singular, dual, or plural; this is detailed in the relevant section (§ 7.2).

Nouns in the indirect case may be used in the auxiliary slot of a verb in order to derive more narrow meanings.

## 5.2 | Verbs

There are five basic verbs in Lagá. Each one has a general verbal usage as well as a modal usage. They may be used alone, or in conjunction with a noun in the auxiliary slot or postfield in order to express more specific events.

Each verb has two stems, a finite and a non-finite form (§ 8.1). The non-finite forms are transparently derived from the finite via a non-productive nasal alternation in the vowels, as well as some upstep shift and fabrication.

Intransitive verbs undergo alternations depending on the role of their sole argument, agent or patient, such as 'eat' vs 'be eaten', and also have a transitive alternation, 'eat $r$ ' ${ }^{1}$. Such alternations are noted in lexicon entries.

Generally, the sole argument of an action is the agent, while the sole argument of a state is the patient.

### 5.2.1 | Eat

Eat (tsíi, tsũứ) is the verb of consumption and internal physical states.
(5.1) kũwũ tsiiká sóri
(3cl/<cdéṅ3z2dsn•)
kũwũ tsiiká sóri
bunnyeat grass
the bunny is eating the grass
(5.2) kũwũw tsiisí Lósaw

kũwũw tsiisí Lósaw bunny eat hunger
the bunny is hungry

When used as an auxiliary, it indicates desire and/or necessity.

[^6]（5．3）kũwũ tsiiká tsũŭ́ sóri

## 

kũwũ tsiiká tsũũ sóri
bunny eat eat．NFN grass
the bunny wants／needs to eat the grass

## 5．2．2｜Say

Say（poa，pû́ã）is the verb of expulsion，communication，and external physical states．
（5．4）rũ poata kũwũ
（5．5）kũwũw poa rosũloswã
〈scdodses3cd／cel•）
rũ poata kũwũ
PRO say bunny
I spoke to the bunny

## 

kũwũw poa rosũloswã
bunny say brown
the bunny is brown

When used as an auxiliary，it indicates possibility and／or inherent capability．
（5．6）kũwũ tsiiká pứã sóri
（3col《cdenं3Jocdyzalsn．）
kũwũ tsiiká pû̃ã sóri
bunny eat say．NFN grass
the bunny can（inherently）eat the grass

5．2．3｜Move
Move（kũs，kis）is the verb of transfer and motion．
（5．7）rũ kũs？ós kũwũ
〈 $\mathrm{scd} 3 \mathrm{~cd} 2 \mathrm{rd} 23 \mathrm{~cd} / 2 \mathrm{~cd} \cdot$ •
rũ kũs？ós kũwũ
PRO move bunny
I am moving the bunny
（5．8）rũ kũsto tsir sáw？ow

rũ kũsto tsir sáw？ow
PRO move POS market
I am going to the market

When used as an auxiliary，it indicates obligation and／or situational capability．
（5．9）kũwũ tsiiká kis sóri
（3col《cdenj3ラ3n22dSn．）
kũwũ tsiiká kis sóri
bunny eat move．NFN grass
the bunny should／can（situationally）eat the grass
It is also used for wishes and hopes．
(5.10) ki rãkilá kiwósoliw kis

## 

ki rãkilá kiwósoliw kis
PRO sense satisfaction move.NFN
may you be happy!

### 5.2.4 | Sense

Sense (rắki, rakí) is the verb of sensation, reception, and mental states.
(5.11)
rũ rãkiRós kũwũ

rũ rãkiหós kũwũ
PRO sense bunny
I see/hear/sense the bunny
(5.12) rũ rãkỉós rãksi

rũ rãki?ós rãksi
PRO sense book
I am reading a book
(5.13) rũ rắkitũ tikroowã

rũ rắkitũ tikroowã
PRO sense sleep
I am asleep
Even though sensory functions may be specified via a body part noun auxiliary, this is often eschewed in colloquial speech, as it is usually inferrable by context or otherwise irrelevant.

When used as an auxiliary, it indicates a potential/hypothetical situation.
(5.14) kũwũ tsiiká rakí sóri

## 

kũwũ tsiiká rakí sóri
bunny eat sense.NFN grass
the bunny might/could (possibly) eat the grass

### 5.2.5 | Put

Put (taro, tãrũ) is the verb of position. It is most often used to form action events (as well as events of position) in tandem with a noun auxiliary.

| (5.15) | rũ taro?ós kũwũ | (5.16) | kũwũ tarosí tíri kotwã |
| :---: | :---: | :---: | :---: |
|  | (Scderscird23cd/ $\mathrm{cd} \cdot$ - |  |  |
|  | rũ taro?ós kũwũ |  | kũwũ tarosítíri kotwã |
|  | Pro put bunny |  | bunny put pos burrow |
|  | I am positioning the bunny |  | the bunny is in the burrow |

（5．17）kũwũ tarosí siawã

kũwũ tarosí siawã
bunny put snug space
the bunny got into a snug space
（5．18）rũ taroto tsoowã

## 〈scderscledéd々ンフ・〉

rũ taroto tsoowã
PRO put thing
I am doing something
（5．19）kũwũ tarosí tsir kotwã

kũwũ tarosí tsir kotwã
bunny put POS burrow
the bunny got into the burrow
It is also used as an existential copula，when a verb is syntactically required．
（5．20）to？a taroká kũwũ

```
<edryeJsc3y3cd/\cd·\
```

to？a taroká kũwũ
DET put bunny
this（one）is the bunny
This is often used to confer verb－exclusive morphology onto nouns via circumlocution．
（5．21）kũwũ tũrãtílo tsiiká sóri

## 〈3cdRcdecdsyenYceri3y2dsn•）

kũwũ tũrãtílo tsiiká sóri
bunny put．NFN：RES eat grass
even the bunny is eating the grass
（5．22）kũwũ tãrũ táLi tãrũwiti
〈3cdRcdeyscdeyשneyscal＿nen〉
kũwũ tãrũ táLi tãrũwiti
bunny put．NFN duck put．NFN：CON
（it is）the bunny or（it is）the duck

When used as an auxiliary，it indicates causation and／or permission．
（5．23）kũwũ tsiiká tãrũ sóri

## 〈3cdRcolén3

kũwũ tsiiká tãrũ sóri
bunny eat put．NFN grass
the bunny is caused／allowed to eat the grass

A causer may be introduced with the instrumental positional Róli．
（5．24）kũwũ tsiiká tãrũ sóri Róli Losáw

## 

kũwũ tsiiká tãrũ sóri ？óli Losáw
bunny eat put．NFN grass INS hunger
the bunny is caused to eat the grass by hunger
hunger made the bunny eat the grass

## 6 | General morphology

General morphology describes the general form and function of morphemes.

## 6.1 | Affixes

Affixes (denoted as $|-\infty, \circ-|$ ) are segments or groups of segments simply concatenated before (|-o|) or after $(|-|)$ the point to which they are attached.

Most root morphology comes in the form of affixes.

## 6.2 | Reduplication

Reduplication (denoted as $|\sim 0, \circ \sim|$ ) indicates that (a part of) the root word is copied and affixed at the designated area. Reduplication may consist of a segment ( $|\mathrm{C}, \mathrm{V}|$ ), a mora ( $|\mu|$ ), a foot $(|\varphi|)$, or the entire root word $(|\omega|)$.

Reduplication occurs primarily as the indirect inverse/augmented affix. However, full reduplication is also used colloquially to indicate universal quantification.

## (6.1) kũwũkũwũ

〈 3 cd 亿cel3cd/ col )
kũwũ $\sim \omega$
bunny ~bunny
all bunnies
Reduplication is also observed in numerals, specifically in the numeral wũtiwũti ten, which is transparently constructed via reduplication of wũti?i five; however, this is not productive.

## 7 | Nominal morphology

Nouns inflect for case and number.

|  | NAT | INV | AUG |
| :--- | :--- | :--- | :--- |
| DIR | $\varnothing$ | -ró | $-(s)$ ow |
| IND | $-w(a ̃)$ |  | $\sim \mu_{1}$ |

The indirect natural affix surfaces as $\mid$-w $\mid$ after a single vowel, and as $\mid$-wã| after a consonant or vowel cluster. The indirect augmented affix surfaces as $\mid$-sow $\mid$ after a vowel, and as $\mid$-ow $\mid$ after a consonant.

The indirect inverse/augmented affix $\left|\sim \mu_{1}\right|$ surfaces as reduplication of the first mora complex of the root; upstep is also reduplicated, and upstep deletion occurs as expected. It is glossed as DIR.NNT (non-natural).

## 7.1 | Case

Case designates an argument's role in relation to the predicate.

### 7.1.1 | Direct

The direct case (DIR) marks the agent and/or patient of accusative-aligned clauses (both intransitive and transitive), and the agent of transitive ergative-aligned clauses.
(7.1) kũwũ tsiiká sóri

## 

kũwũ tsiiká sóri
bunny.DIR eat grass.DIR
the bunny is eating the grass
(7.2) kũwũ tsiisí

## 

kũwũ tsiisí
bunny.DIR eat
the bunny is eating

### 7.1.2 | Indirect

The indirect case (IND) marks the patient of ergative-aligned clauses (both intransitive and transitive).
(7.3) satãw tsiiká kũwũ

satã -w tsiiká kwmw
child -IND eat bunny
the child is being eaten by the bunny
(7.4) kũwũw tsíi
(3col)col/en.•)
kũwũ -w tsíi
bunny -IND eat
the bunny is being eaten

It also marks noun auxiliaries (§4.4).
（7．5）kũwũw rãkisí tikroowã

kũwũw rãkisí tikroo－wã
bunny sense sleep－IND
the bunny is asleep
It is also used to mark possessors，in conjunction with a determiner（Ch．10）．
（7．6）sóri toª kũwũw
〈2dsnedry3cd $\langle\mathrm{cd}$ 人）
sóri tola kũwũ－w
grass DET bunny－IND
the bunny＇s grass
It is also used to mark obliques，in conjunction with a positional（Ch．11）．
（7．7）rũ kũsto tsir sáw？ow
（Scd3c्d2edéns2J2／rd••）
rũ kũsto tsir sáw？o－w
PRO move POS market－IND
I am going to the market
It is also used to form predicate nominals，or copular clauses，as well as appositives denoting identity，permanent states，and numeric quantity．
（7．8）koi tsáwo satãsa

koi tsáwo satã $\sim \mu_{1}$
DET people child－IND
those people are children
（7．9）topó rosũloswã
（edodsezca）cr2〈ע）
topó rosũlos－wã
eyes brown－IND
the brown eyes
（7．10）kũwũró wãsaw

kũwũró wãsa－w
bunnies two－IND
the two bunnies

## 7.2 ｜Number

Number designates the amount of an entity．

## 7．2．1｜Inherent number

Number is arranged in an inverse paradigm，in which all nouns are inherently singular，dual，or plural．

## 7．2．1．1｜Singular

The singular inherent number（SG）designates one entity．When used with the indefinite determiner （§ 10．5），it designates a part of an entity．

## 7．2．1．2｜Dual

The dual inherent number（DU）designates two entities．It is significantly less common than the other two inherent numbers，and is primarily restricted to natural and expected pairs（eyes，a couple，etc．）．

## 7．2．1．3｜Plural

The plural inherent number（PL）designates two or more entities．It is also used as the inherent number for mass nouns，such as materials．

## 7．2．1．4｜Extraplural

The extraplural（EPL）is not an inherent number，but a number resulting from the augmentation of an inherently－plural noun．It designates a greater－than－expected amount，or groups of groups of entities．

## 7．2．2｜Natural

The natural number（NAT）is the default，inherent number．
（7．11）kũwũ

kũwũ
bunny．NAT
bunny
a bunny
（7．12）topó
（edod）
topó
eyes．NAT
eyes
a pair of eyes
（7．13）tsáwo
〈लっ〈d〉
tsáwo
people．NAT
people
a group of people

## 7．2．3｜Inverse

The inverse number（INV）＂inverts＂the default number，turning inherent singular to dual，and in－ herent dual and plural to singular．

| （7．14） | kũwũró | （7．15） | toporó | （7．16） | tsaworó |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 〈3cd2calsd） |  | （edodsd） |  | 〈CyRdscl |
|  | kũwũ－ró |  | topó－ró |  | tsáwo－ró |
|  | bunny－INV |  | eyes－INV |  | people－INV |
|  | two bunnies |  | eye |  | person |
|  | a pair of bunnies |  | an eye |  | a person |

### 7.2.4 | Augmented

The augmented number (AUG) "augments" the default number, turning inherent singular and dual to plural, and plural to extraplural.
(7.17) kũwũsow
kũwũ -sow bunny -AUG
bunnies
(7.18) topósow

〈edOd2dス)
topó -sow
eyes -AUG
eyes
(7.19) tsáwosow
 tsáwo -sow people -AUG many people peoples

## 8 | Verbal morphology

The five verbs each have two stems, each of which can take further morphology.

|  | FIN | NFN |
| :--- | :--- | :--- |
| eat | tsíi | tsũữ |
| say | poa | pữã |
| move | kũs | kis |
| sense | rắki | rakí |
| put | taró | tãrũ |

## 8.1 | State

State decribes the function of a verb.

### 8.1.1 | Finite

The finite state $\left(\right.$ FIN $\left.^{1}\right)$ is used for independent predicates. Finite verbs always take agreement (§ 8.2).
(8.1) kũwũ tsiiká sóri

```
(3cl/<cleṅ372dsn.)
```

kũwũ tsíi -ká sóri
bunny eat.FIN -3)3 grass
the bunny is eating the grass

### 8.1.2 | Non-finite

The non-finite state (NFN) is used for dependent predicates. Non-finite verbs may take a relational ( $\S 8.3$ ) or be used bare. Their bare form is generally reserved for modal auxiliary uses (§5.2) and adnominal dependent clauses (§ 4.7.2.2). When used alone, their bare forms may be used for imperatives (§ 4.10) or emphatic/expletive statements.
(8.2) kũwũ tsíto wãs kispái

kũwũ tsíito wãs kis -pái
bunny eat DET move.NFN-GEN
the bunny is eating and hopping
(8.3) kũwũ tsiiká tsũứ sóri

kũwũ tsiiká tsũứ sóri
bunny eat eat.NFN grass
the bunny wants/needs to eat the grass

[^7](8.4) kũwũ tsũũ sóri

〈3cl/ecdèd2dSn•)
kũwũ tsũứ sóri
bunny eat.NFN grass
the bunny that eats grass
(8.5) tsũứ

〈ėcel)
tsũứ
eat.NFN
eat!

## 8.2 | Agreement

Agreement tracks the core argument(s) of a predicate, and always occurs on finite verbs. There are two paradigms: intransitive and transitive agreement.

### 8.2.1 | Intransitive agreement

Intransitive agreement occurs on intransitive predicates, or predicates in which there is only one core argument.

|  | AGT | PAT |
| :--- | :--- | :--- |
| 1SG | -to | -tũ |
| 1PL | -wi | -wũ |
| 2 | -lá | -lắ |
| 3PER | $\varnothing$ |  |
| 3IMP | -sí |  |

Wherein 1sG, 1PL, and 2 are their respective persons as detailed in $\S 9.1 ; 3 \mathrm{HUM}$ and 3 NHU are third-person referents, and make a distinction between personal (PER) and impersonal (IMP). This distinction maps fairly well to a human/non-human dichotomy, but humanoids and humanoid figures (such as statues) also fall under the personal class ${ }^{2}$.

Additionally, the SAP agreement morphemes make a distinction between agent (§ 4.8.1) and patient (§ 4.8.2), which the independent pronouns do not do.
(8.6) rũ tsíito
(sculened•)
rũ tsíi -to
PRO eat-1SG.AGT
I am eating
(8.7) rũ tsíitũ
(Scderieccl.)
rũ tsíi -tũ
PRO eat-1SG.PAT
I am being eaten

### 8.2.2 | Transitive agreement

Transitive agreement occurs on transitive predicates, or predicates in which there are two core arguments.

Transitive agreement is polypersonal, in that it tracks both A and O core arguments of the predicate, wherein $\mathrm{A} \rightarrow \mathrm{O}$.

[^8]| $\rightarrow$ | SAP | 3SG | 3PL |
| :--- | :--- | :--- | :--- |
| 1SG | -ta | -?ós | -tsi |
| 1PL | -wứ | -rã | -tiw |
| 2 | -ki | -sat |  |
| 3 | -lo | -ká |  |

Wherein SAP is speech act participant (Ch. 9), which subsumes both first and second persons. Additionally, the tracked O argument agreement distinguishes singular and plural in the third person.

The singular and plural numbers on the third person agreement references the derived semantic number of the referent (i.e., the number resulting from the natural-inverse-augmented paradigm). Here, the «plural» also encompasses dual and extraplural semantics, as well as coördinated nouns (§ 11.3).

Transitive agreement affixes are generally glossed as $x y y$, wherein $\langle x\rangle$ denotes the tracked A argument, and $\langle y\rangle$ denotes the tracked $O$ argument. The affixes $\mid$-tiw, -ká|, which exhibit some merging, are glossed as SAP.NNU3PL (speech act participant, non-atomic ${ }^{3}$ ) and $3 / 3$.
(8.8) rũ tsii?ós kũwũ

〈Scclenird23cd/cel•)
rũ tsíi -Rós kũwũ
PRO eat -1 SG 3 3SG bunny
I am eating the bunny

## 8.3 | Relationals

Relationals ${ }^{4}$ designate the relationship between a non-finite verb and another predicate, temporal or otherwise. They only occur on non-finite verbs (but are not mandatory).

| GEN | -pái |
| :--- | :--- |
| PST | -lãw |
| RES | -tílo |
| CON | -witi |
| NEG | -rosó |

When used to generally link two predicates, the relational-taking verb is placed in the postfield, much like an oblique argument (§ 4.6). Unlike an oblique argument, it does not take a positional (Ch. 11).
(8.9) rũ kũsto lao tsir sáwRow wãs topitó rakipái

rũ kũsto lao tsir sáw?ow wãs topitó raki -pái
PRO move DET POS market DET flatbreads sense.NFN -GEN
I went to the market and got some flatbreads

[^9]Relationals may be used on a reduplicated verb in the auxiliary slot for special uses.
(8.10) kũwũ tsiiká tsũũpái sóri

kũwũ tsiiká tsũṹ -pái sóri
bunny eat eat.NFN-GEN grass
the bunny is eating up the grass
When used on reduplicated verb auxiliaries that are in dependent adnominal clauses, the reduplicant verb may be dropped.
kũwũ (tsũũ) sóri tsũũuái

kũwũ (tsũũ) sóri tsũú -pái
bunny (eat) grass eat.NFN -GEN
the bunny that is eating up the grass
Inclusion of the parenthetical verb is reserved primarily for formal speech and writing.
When referring to predicates affected by relationals, the main predicate is the superordinate independent predicate, and the marked predicate is the associated dependent predicate that takes a relational

### 8.3.1 | Generic

The generic relational (GEN) expresses a general relationship between predicate. It may indicate that the predicates are simultaneously-occurring, or that main predicate occurs within the marked predicate.
(8.12) kũwũ tsiisí wãs kispái

kũwũ tsiisí wãs kis -pái
bunny eat DET move.NFN -GEN
the bunny is eating and hopping
the bunny is eating while hopping
It is used on a reduplicated auxiliary verb to emphasize or intensify the meaning.
(8.13) ki tsíisat tsũũpái tópi

ki tsíisat tsũũ -pái tópi
PRO eat eat.NFN -GEN flatbread
you are really eating the flatbread
you are eating up the flatbread

### 8.3.2 | Posterior

The posterior relational (PST) expresses a consecutive relationship, in which the marked predicate occurs after the main predicate. This relationship is purely temporal, and does not imply causation.
(8.14) kũwũ tsiisí lao wãs rakílãw tikroowã


```
kũwũ tsiisí lao wãs rakí -lãw tikroowã
bunny eat DET DET sense -PST sleep
the bunny ate, then slept
```

It is used on a reduplicated auxiliary verb to form reflexive and reciprocal meanings.

## (8.15) kũwũ rãkisí rakílãw <br> 

kũwũ rãkisí rakí -lãw
bunny sense sense.NFN -PST
the bunny sees itself
(8.16) kũwũ rãkiká rakílãw tási

kũwũ rãkiká rakí -lãw táLi
bunny sense sense.NFN-PST duck
the bunny and the duck see each other

### 8.3.3 | Resultative

The resultative relational (RES) expresses a causative relationship, in which the marked predicate occurs as a result of the main predicate. It may also denote a more immediate temporal relationship than the posterior relational.
(8.17) kũwũw tsiisí Lósaw wãs tsũũtílo lao


```
kũwũw tsiisí Lósaw wãs tsũũ -tílo lao
bunny eat hunger DET eat.NFN-RES DET
because/when the bunny was hungry, it ate
```

It is used on a reduplicated auxiliary verb to give an additive-scalar meaning.
(8.18) kũwũ tsiiká tsũũtílo sóri

## 

kũwũ tsiiká tsũứ -tílo sóri
bunny eat eat.NFN-RES grass
the bunny even ate the grass

### 8.3.4 | Conditional

The conditional relational (CON) expresses a conditional relationship, in which the main event is (semantically) dependent on marked event. Generally, the main event is in some way marked as irrealis; this is most commonly done using the distal determiner auxiliary, although a modal verb auxiliary may also be used.
(8.19) Wo tsíito koi kṹ kiswiti Róli rũ

wo tsíito koi kứ kis -witi Róli rũ
PRO eat DET PRO move.NFN -CON POS PRO
I will eat, if you come with me

It may also be used to arrange the predicates as exclusive alternatives, in which either one or the other (but not both) are in some way "true". This usage is not restricted to realis or irrealis modes, and thus may overlap with the conditional proper usage.
(8.20) rũ tsíito lao wãs kiswiti

rũ tsíito lao wãs kiswiti
PRO eat DET DET move
I ate, or I went
It is used on a reduplicated auxiliary verb to form frustrative statements.
(8.21) kũwũ tsiiká tsũứwiti sóri

kũwũ tsiiká tsũũ -witi sóri
bunny eat eat.NFN-CON grass
the bunny is trying to eat the grass
the bunny is eating the grass in vain

### 8.3.5 | Negative

The negative relational (NEG) expresses a negated relationship, in which the marked predicate does not occur. If the main predicate is irrealis, it has a causative relationship to the negated marked predicate. Otherwise, the relationship may be causative, in which the marked predicate's non-occurrence is because of the main predicate in some way, or more general.
(8.22) wo tsíto koi kứ kisrosó Póli rũ

wo tsíito koi kứ kis -rosó ?óli
PRO eat DET PRO move.NFN -NEG POS
rũ
PRO
I will eat, if you do not come with me
(8.23) kũwũ tsiisí lao wãs tsũũrosó Lósaw

kũwũ tsiisílao wãs tsũũ -rosó
bunny eat DET DET eat.NFN-NEG
Lósaw
hunger
because/when the bunny ate, it was not hungry
the bunny ate, and/then was not hungry

It is used on a reduplicated auxiliary verb to form negated independent clauses and interrogatives (§ 4.11).
(8.24) kũwũ tsiiká tsũũrosó sóri

## 

kũwũ tsiiká tsũũ -rosó sóri
bunny eat eat.NFN-NEG grass
the bunny is not eating the grass
is the bunny eating the grass?

## 9 | Pronouns

Pronouns (PRO) are used to reference speech act participants (SAPs), or the speaker(s) and listener(s) of a conversation.

|  | REA | IRR |
| :--- | :--- | :--- |
| 1SG | rũ |  |
| 1PL | tí |  |
| 2 | ki | kú |

They are primarily used to simply refer to SAPs.
(9.1) rũ tsiiłós kũwũ

rũ tsii ós kũwũ
1sG.REA eat bunny
I am eating a bunny
They may also be used possessively.
(9.2) rũ kũwũ

## (Scel3cd/cd•)

rũ kũwũ
1sG.REA bunny
my bunny
Possessive pronouns are placed directly before their modified noun, and do not coöccur with deictic/possessive determiners.

## 9.1 | Person

Person describes the speech act participant.

### 9.1.1 | First singular

The first singular person (1sG) describes the speaker and only the speaker.
(9.3) rũ tsíito kũwũ
(scadened•)
rũ tsíito
1sG eat
I am eating

## 9．1．2｜First plural

The first plural person（1PL）describes the speaker and any number of non－listener participants（i．e．， exclusive＂we＂）．
（9．4）tí tsíiwi kũwũ
（enersed•）
tí tsíito
1PL eat
we（not you）are eating

## 9．1．3｜Second

The second person（2）describes any number of listeners，or any number of speakers and listeners （i．e．，inclusive＂we＂）．
（9．5）ki tsiilá kũwũ

## （3ヵéņy．）

ki tsiilá
2 eat
you are eating
we（including you）are eating

## 9.2 ｜Mode

Mode describes the quantification of the predicate．

## 9．2．1｜Realis

The realis mode（REA）is used in realis independent clauses．Realis clauses are those which are not considered irrealis（see next section）．
（9．6）ki tsíisat kũwũ

ki tsíisat kũwũ
2．REA eat bunny
you are eating a bunny
Clauses that contain an evidential auxiliary are not considered irrealis，and thus take realis－mode pronouns．
（9．7）ki tsíisat kứ kũwũ

## （3ヵén2フe3cd3cd／2cd•）

ki tsíisat kû́ kũwũ
2．REA eat 2．IRR bunny
you are eating a bunny，I heard

Realis pronouns are also always used when a pronoun is modified by a positional.
(9.8) wo tsíito koi 3óli ki

〈2désed3dnrdYn3n••
wo tsíito koi ?óli ki
PRO eat DET POS 2.REA
I will eat with you

### 9.2.2 | Irrealis

The irrealis mode (IRR) is used in irrealis independent clauses, in all dependent clauses, and as evidential auxiliaries (detailed in the next section). Irrealis clauses are those which take a modal (verb) auxiliary ( $\S 5.2$ ), as well as imperatives ( $\S 4.10$ ), interrogatives ( $\S 4.11$ ), conditional apodosis (§ 4.12), and future statements ( $\S 10.6 .5$ ). Additive-scalar, frustrative, and negated clauses ( $\S \S 8.3 .3$ to 8.3.5) also take irrealis pronouns.
(9.9) kứ tsíisat rakí kũwũ


```
kứ tsíisat rakí kũwũ
2.IRR eat sense bunny
you might be eating a bunny
```


## 9.3 | Evidential usage

When used as auxiliaries, pronouns confer an evidential meaning to the verb. Only irrealis pronouns have this function, and there are three grades of evidentiality.

### 9.3.1 | Experiential

In the absence of an evidential auxiliary proper, the implicit "evidential" category is taken to be the experiential. This is associated with direct personal experience, such as witnessing the event oneself, as well as with general factual information and a priori knowledge.
(9.10) kũwũ tsiiká sóri

kũwũ tsiiká sóri
bunnyeat grass
the bunny eats the grass
(I saw it)
(I know because bunnies generally eat grass)

### 9.3.2 | Inferential

The inferential evidential is expressed via the first-person pronoun wo, and is associated with information inferred by direct evidence (e.g., phenomena adjacent to the event), and other a posteriori knowledge.
(9.11) kũwũ tsiiká wo sóri

## 

kũwũ tsiiká wo sóri
bunny eat PRO grass
the bunny eats the grass
(I inferred, e.g., from leftover grass)

### 9.3.3 | Reportative

The reportative evidential is expressed via the second-person pronoun kứ, and is associated with information acquired from another source, such as hearsay or quotation. It also subsumes assumption without evidence.
(9.12) kũwũ tsiiká kứ sóri

## 

kũwũ tsiiká kứ sóri
bunny eat 2.IRR grass
the bunny eats the grass
(I was told)
(I assume, but I have no evidence for this)

## 10 | Determiners

Determiners (DET) are used to designate nouns spatially and semantically.

| LOC | siw |
| :--- | :--- |
| PRX | toRa |
| MED | lao |
| DST | koi |
| NDF | wãs |

They are primarily used as deictic designators, arranging nouns spatially in relation to the speaker and/or listener.
(10.1) to?a kũwũ
(edry3cd\{cd)
to?a kũwũ
PRX bunny
this bunny
They are also used pronominally for third-person referents (§ 4.13), with anaphoric and (to a lesser extent) cataphoric uses.
(10.2) tola tsiiká sóri
(edryén $3 y 2 d$ sn•)
toPa tsiiká sóri
PRX eat grass
this (e.g., bunny) is eating the grass
They are also used possessively, in conjunction with the indirect case.
(10.3) sóri to?a kũwũw

```
<2dSnedry3cd<cod<)
    sóri to?a kũwũ -w
    grass PRX bunny -IND
    the bunny's grass
    the grass of the bunny
```

Like possessive pronouns, determiners are placed directly before their modified noun.

## 10.1 | Local

The local determiner (LOC) is associated with entities very close to the speaker, usually touching/in contact with the speaker(s). Its domain is analogous to the first singular pronoun.
（10．4） $\operatorname{siw}$ kũwũ
（2n＜3cel＜cd）
siw kũwũ
loc bunny
this bunny（that I am holding）
（10．5）siw tsiiká sóri

siw tsiiká sóri
LoC eat grass
this（that I am holding）is eating the grass

When used possessively，it denotes an inalienable relationship，or one that cannot easily be sepa－ rated．This is most often used for body parts，family members，and indivisible part－whole relationships．
（10．6）topó siw kũwũw
（edod2n23cel／cd）
topó siw kũwũw
eyes Loc bunny
the bunny＇s eyes
It is also obligatorily used to mark personal and place names．
（10．7）siw Rasiró
〈2n〈－J2nsd）
siw Rasiró
Loc name
Asirò

## 10．2｜Proximal

The proximal determiner（PRX）is associated with entities near the speaker（s），but not necessarily in contact with them．They are usually within reaching distance．Its domain is analogous to the first plural pronoun．
（10．8）to？a kũwũ
（edry3cd／ced）
to？a kũwũ
PRX bunny
this bunny（that is near me）
（10．9）toPa tsiiká sóri

to？a tsiiká sóri
PRX eat grass
this（near me）is eating the grass

When used possessively，it denotes a subset alienable relationship；one that can be separated，and in which the possessee is in some way subordinate to the possessor．
（10．10）sóri to？a kũwũw
〈2dSnedry3cd $\langle\mathrm{col}\langle$ 〉
sóri to？a kũwũw
grass PRX bunny
the bunny＇s grass

## 10.3 ｜Medial

The medial determiner（MED）is associated with entities near the listener（s）and／or far from the speaker（s）．Its domain is analogous to the second pronoun．

```
(10.11) lao kũwũ
    〈YJd3cel{cd\
    lao kũwũ
    MED bunny
    that bunny (that is near you)
```

（10．12）lao tsiiká sóri

lao tsiiká sóri
MED eat grass
that（near you）is eating the grass

When used possessively，it denotes a reciprocal alienable relationship；one in which the possessor and possessee are equal．
（10．13）likó lao kũwũw

likó lao kũwũw
partner MED bunny
the bunny＇s mate

## 10．4｜Distal

The distal determiner（DST）is associated with entities far from both the speaker（s）and listener（s）．Its domain is analogous to the third－person referents．It is the determiner most commonly used pronom－ inally to refer to non－participant referents．
（10．14）koi kũwũ
〈3dn3cel／ced）
koi kũwũ
DST bunny
that bunny（that far from both of us）
（10．15）koi tsiiká sóri

koi tsiiká sóri
DST eat grass
that（far from us）is eating the grass

When used possessively，it denotes a superset alienable relationship；one in which the possessee is in some way superordinate to the possessor．
（10．16）kot koi kũwũw
〈3ce3dn3cd／2cll）
kot koi kũwũw
burrow DST bunny
the bunny＇s burrow

## 10．5｜Indefinite

The indefinite determiner（NDF）is associated with indefinite entities，or outside the universe of discourse．
（10．17）wãs kũwũ
〈〈य23cd／＜cel）
wãs kũwũ
ndF bunny
a bunny
some／any bunny
（10．18）wãs tsiiká sóri

wãs tsiiká sóri
NDF eat grass
something／anything is eating the grass

It may also be used partitively，denoting some portion of a whole．With a semantic singular，it refers to a part of an entity；with a semantic dual，it refers to one of the two entities；with a semantic plural，it refers to some amount less than the total．
（10．19）wãs kũwũ
〈2บ23cel〈cd〉
wãs kũwũ
ndF bunny
part of a bunny
（10．20）wãs kũwũró
〈〈223cd／2cdsd〉
wãs kũwũ－ró
NDF bunny－INV
one bunny（of a pair）
（10．21）wãs kũwũsow
〈〈य23cd＜ccl2d々〉
wãs kũwũ－sow
ndF bunny－AUG
some bunnies（of a group）

In questions，it functions as a general wh－word（who，what，when，etc．）．
（10．22）wãs tsiiká tsũũrosó sóri

wãs tsiiká tsũũurosó sóri
NDF eat eat．NFN：NEG grass
what is eating the grass
It is used logophorically in dependent clauses，referring to an argument outside of the dependent clause，a core argument of its host independent clause．
（10．23）rũ poatũ lao wãs tópi tsũứ
〈sclodsealẏd＜
rũ poatũ lao wãs tópi tsũứ
PRO say DET NDF flatbread eat
I said I ate flatbread
（10．24）rũ tsíto to Pa wãs kispái
〈scuenéededry〈य23n20コロ〉
rũ kũsto to 3 wãs tsíiwiti
PRO eat DET NDF move
I am eating while walking

When used possessively，it denotes a short－lived or happenstance relationship；one that occurs unexpectedly or coincidently，in which the relationship is accidental or non－prototypical．
（10．25）látsã wãs kũwũw

látsã wãs kũwũw
digging stick NDF bunny
the bunny＇s digging stick

## 10.6 ｜Temporal usage

When used as auxiliaries，determiners confer a temporal meaning to the verb，both in when the event is situated in relation to the time under discussion（tense），as well as the structure of the flow of
time regarding the event (aspect). Temporal auxiliaries are generally not used when the timeframe is explicitly stated, or implied by a previous clause. There are six grades of temporal description.

### 10.6.1 | Simple

In the absence of a temporal auxiliary proper, the implicit "temporal" category is taken to be the simple. This is largely associated with present events, or events that take place at the time of speaking. There is no reference to the exact structure of the flow of time.

It is most often translated as a simple present or present progressive.
(10.26) kũwũ tsiiká sóri

kũwũ tsiiká sóri
bunnyeat grass
the bunny eats the grass
the bunny is eating the grass

### 10.6.2 | Perfect

The perfect temporal is expressed via the local determiner siw, and is associated with a past event that has some sort of present relevance. Present relevance may be of result, a state resulting from a past event, or of continuation, an event that started in the past but extends into the present.
(10.27) kũwũ tsiiká siw sóri

kũwũ tsiiká siw sóri
bunny eat LOC grass
the bunny has eaten the grass
the bunny is still eating the grass

### 10.6.3 | Dynamic

The dynamic temporal is expressed via the proximal determiner to ?a, and is associated with events with some sort of internal structure, most often incomplete or unbounded events.

It differs from the present progressive meaning of the simple temporal in that it has a broader range, and is not limited to the exact time of speaking ${ }^{1}$. It is also associated with the inception of an event, focusing on its beginning point.

## (10.28) kũwũ tsiiká toła sóri

(3cdRcdenj3yedryzdsn•)
kũwũ tsiiká to?a sóri
bunny eat PRX grass
the bunny is eating the grass
the bunny is starting to eat the grass

[^10]
### 10.6.4 | Preterite

The preterite temporal is expressed via the medial determiner lao, and is associated with past completed events, events contained entirely in the past, and past events without internal structure. It may be seen as a past analogue to the simple temporal.
(10.29) kũwũ tsiiká lao sóri

kũwũ tsiiká lao sóri
bunny eat MED grass
the bunny ate the grass

### 10.6.5 | Future

The future temporal is expressed via the distal determiner koi, and is associated with future events and conditional apodosis. The future temporal is also considered irrealis.
(10.30) kũwũ tsiiká koi sóri

kũwũ tsiiká koi sóri
bunny eat DST grass
the bunny will eat the grass

### 10.6.6 | Imperfect

The imperfect temporal is expressed via the indefinite determiner wãs, and is associated with past habitual events, events that occurred regularly or was repeated in the past, and past progressive events, events that were ongoing in the past. Similar to the preterite, it may be seen as a past analogue to the dynamic temporal.

It is also used for general, "tenseless" statements, such as statements of perceived fact or general truth.
(10.31) kũwũ tsiiká wãs sóri

## 

kũwũ tsiiká wãs sóri
bunny eat NDF grass
the bunny used to eat grass
the bunny was eating grass
the bunny eats grass

## 11 | Positionals

Positionals (POS) are used to designate oblique arguments (§ 4.6).

| LAT | tsir |
| :--- | :--- |
| ABL | kosó |
| INS | ?óli |
| PUR | lok |
| ESS | tíri |

They are primarily used to mark additional, non-core arguments. They express a non-agent, nonpatient relationship to the predicate, and often involve some form of motion or otherwise efficiency. Nouns modified by a positional take the indirect case (§ 7.1.2).
(11.1) rũ kũsto tsir sáwRow

rũ kũsto tsir sáw?o -w
PRO move LAT market -IND
I am going to the market
They are also used to express adnominal relationships, relationships between nouns. Unlike true adnominal clauses, adnominal positional phrases are not restricted to core arguments.
(11.2) kũwũ Róli tátiw

kũwũ oóli táLi -w
bunny ins duck -IND
the bunny and the duck
Adnominal positionals are placed before their modified noun and any pronoun or determiner that also modifies it.

## 11.1 | Lative

The lative positional (LAT) is associated with motion to/toward/in/into a goal.
(11.3) kũwũ kũs tsir kotwã

kũwũ kũs tsir kotwã
bunny move lat burrow
the bunny is going into the burrow
It is also used to mark the recipient of a verb of transfer.
(11.4) rũ kũs?ós kũwũ tsir ki

rũ kũs?ós kũwũ tsir ki
PRO move bunny lat PRO
I am giving the bunny to you
It is also used to mark the demoted core argument of a verb with an applicative.
(11.5) kũwũ tsiiká tíri kot tsir sóriw

## 

kũwũ tsiiká tíri kot tsir sóriw
bunny eat ESS burrow LAT grass
the bunny is eating grass at/in the burrow
It may also be used irresultatively, marking the patient of an atelic, goal-incomplete, or nonculminating event.
(11.6) kũwũ tsiisí lao tsir sóriw

kũwũ tsiisí lao tsir sóriw
bunny eat DET LAT grass
the bunny ate the grass (but did not finish)
Lit. the bunny ate to the grass
When used adnominally, it indicates an approximate relationship, in regard to or concerned with the marked noun. It may also be spatial, indicating location nearby or in the general vicinity of the marked noun.
(11.7) rãksi tsir kũwũkũ

〈Sच32nens $33 \mathrm{~cd} /\langle\mathrm{cd} 3 \mathrm{~cd}$ )
rãksi tsir kũwũkũ book LAT bunnies the book about bunnies
(11.8) kũwũ tsir kotwã

〈3cal<c्dens3ce<2ע)
kũwũ tsir kotwã
bunny lat burrow
the bunny near the burrow

## 11.2 | Ablative

The ablative positional (ABL) is associated with motion away from/out of a source.
(11.9) kũwũ kũs kosó kotwã

kũwũ kũs kosó kotwã
bunny move lat burrow
the bunny is coming out of the burrow
It is also used to mark the donor of a verb of transfer.
(11.10) rũ kũs?ós kũwũ kosó ki (Scd3cd2rd23c2cd3n•)
rũ kũs?ós kũwũ kosó ki
PRO move bunny abl PRO
I am taking the bunny from you
(11.11) rũ rãkiłós kũwũ kosó ki (Scdsच33
rũ rãkiłós kũwũ kosó ki PRO sense bunny ABL PRO
I am receiving the bunny from you

It is also used for temporal description，or location in time．
（11．12）kũwũ tsiisí kosó rairiswã

kũwũ tsiisí kosó rairiswã
bunny eat ABL yesterday
the bunny ate yesterday
When used adnominally，it indicates origin／source．
（11．13）kũwũ kosó to？a kotwã

kũwũ kosó to？a kotwã
bunny ABL DET burrow
the bunny from this burrow

## 11.3 ｜Instrumental

The instrumental positional（INs）is associated with accompaniment and means by which an event occurs（e．g．，a tool）．
（11．14）kũwũ tsiisí ̉óli táLiw

kũwũ tsiisí Róli táLiw
bunny eat ins duck
the bunny is eating with the duck
It is also used to introduce causees．
（11．16）ki kũssat lao kũwũ Róli wo

ki kũssat lao kũwũ ？óli wo
PRO move DET bunny INS PRO
you took the bunny because of me
I made you take the bunny
When used adnominally，it coördinates nouns equally．
（11．17）kũwũ Yóli tátiw
〈3cd／adrdYneJun々〉
kũwũ Róli tátiw
bunny ins duck
the bunny and the duck

## 11.4 | Purposive

The purposive positional (PUR) is associated with purpose, benefit, causation, and/or intention regarding a goal.
(11.18) rũ kũsto lok kũwũw

rũ kũsto lok kũwũw
PRO move PUR bunny
I am coming for the bunny
When used adnominally, it designates the marked noun as the goal of purpose, benefit, or intention.
(11.19) sóri lok kũwũw

sóri lok kũwũw
grass PUR bunny
grass (meant, intended) for the bunny

## 11.5 | Essive

The essive positional (ESS) is associated with state of being, likeness/similarity, static location, and the manner in which an event occurs.
(11.20) kũwũ tsiisí tíri kotwã

kũwũ tsiisí tíri kotwã bunny eat ESS burrow
the bunny is eating at/in the burrow
(11.21) rũ tsíto tíri Lósaw
(scalénedensnud2J2.)
rũ tsíito tíri Lósaw
PRO eat ESS hunger
I am eating hungrily

It is also used for noun auxiliaries used in tandem with another auxiliary, in which the noun auxiliary is demoted as an oblique argument and marked with the essive positional.
(11.22) ki rãkilắ lao tíri tikroowã

ki rãkilắ lao tíri tikroowã
PRO sense DET ESS sleep
you slept
When used adnominally, it is used to indicate composition and temporary states.
(11.23) kot tíri rosũw
(3cleensnscracd)
kot tíri rosũw
burrow ESS dirt
the burrow (made) of dirt
(11.24) kũwũ tíri tikroowã

kũwũ tíri tikroowã
bunny ess sleep
the sleeping/sleepy bunny

## 11．6｜Applicative usage

When used as auxiliaries，positionals have an applicative usage，functioning to promote an oblique argument to a core argument．There are five applicatives．

Oblique－promotion is used to instantiate an oblique argument as a core argument，which allows it to undergo certain processes such as relativization（§4．14．1）．Otherwise，they behave similarly to their non－applicative counterparts．

## 11．6．1｜Lative applicative

The lative applicative promotes lative obliques．
（11．25）kũwũ kũská tsir kot

kũwũ kũská tsir kot
bunny move LAT burrow
the bunny is going into the burrow

## 11．6．2｜Ablative applicative

The ablative applicative promotes ablative obliques．
（11．26）kũwũ kũská kosó kot
〈3cd／2cel3cd23フ3c2d3cle•）
kũwũ kũská kosó kot
bunny move lat burrow
the bunny is coming out of the burrow

## 11．6．3｜Instrumental applicative

The instrumental applicative promotes instrumental obliques．
（11．27）kũwũ tsiiká Yóli táLi

kũwũ tsiiká ？óli táLi
bunny eat INS duck
the bunny is eating with the duck

## 11．6．4｜Purposive applicative

The purposive applicative promotes purposive obliques．
（11．28）rũ kũská lok kũwũ
11.6.5 | Essive applicative

The essive applicative promotes essive obliques.
(11.29) kũwũ tsiiká tíri kot

kũwũ tsiiká tíri kot
bunny eat ESS burrow
the bunny is eating at/in the burrow

## 12 ｜Semantics

Semantics are concerned with the meaning of words．

## 12.1 ｜Numerals

Numerals are words that express numeric value and quantity．There are ten basic numeral terms in Lagá：

| Pãsa，？ũlo | one | SG |
| :--- | :--- | :--- |
| wãsa，wũlo | two | DU |
| sor，sás | three | PL |
| lor，lás | four | PL |
| wũtỉi | five | SG |
| wũtiParũ | six | PL |
| LiíLi | seven | PL |
| Liírãw | eight | PL |
| Liíso | nine | PL |
| wũtiwũti | ten | SG |

Numerals one through four have two forms，wherein the forms 1ãsa，wãsa，sor，lor are used for animate referents，and the forms ？ũlo，wũlo，sás，lás are used for inanimate referents．These classes correspond to those described in § 4．2．

Numerals five through nine are loaned from gan Minhó，and the number ten is transparently derived from reduplication of the numeral five ${ }^{1}$ ．

Modifying numerals take the indirect case．Referents of numerals take their semantic number from the morphological number of the numeral．

| （12．1） | kũwũ ఇãsaw | （12．2） | kũwũró wãsaw | （12．3） | kũwũsow sorwã |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 〈3cl／celry2Jス〉 |  | 〈3cd＜col＜च2J人） |  | （3cdRcercl2zds〈ข） |
|  | kũwũ アãsa－w |  | kũwũ－ró wãsa－w |  | kũwũ－sow sor－wã |
|  | bunny．NAT one－IND |  | bunny－INV two－IND |  | bunny－AUG three－IND |
|  | one bunny |  | two bunnies |  | three bunnies |

## 12．1．1｜Larger numerals

Larger numerals are built from basic numerals via a base－ten positional system．


[^11]Wherein each slot $n$ consists of a numeric term $x$, and indicates $x 10^{n}$ (i.e., $x$ times 10 to the power of $n$ ); consecutive slots are then added together. The nonexistence of a value in a slot ${ }^{2}$ is indicated by placing the root tsoo thing in the null slot. Numerals that modify other numerals in the formation of larger numerals take the indirect case as well.
(12.4) Rãsa wũtiłiw

```
<ry2g<cclen<<>
Rãsa wũtiłi -w
one five -IND
```


## fifteen

Larger numerals inherit the morphological number from the last numeral in the numeric complex (i.e., $x_{0}$ ).

| (12.5) | kũwũ 1ãsaw Rãsaw <br>  | (12.6) | kũwũró Rãsaw wãsaw <br>  | (12.7) | kũwũsow Rãsaw sorwã <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | kũwũ Rãsaw Rãsaw |  | kũwũ -ró Rãsaw |  | kũwũ -sow Rãsaw |
|  | bunny.nat one one |  | bunny -INV one |  | bunny -AUG one |
|  | eleven bunnies |  | wãsaw |  | sorwã |
|  |  |  | two |  | three |
|  |  |  | twelve bunnies |  | thirteen bunnies |

[^12]
## Appendices

Appendices A is a lexicon of nouns; appendix B details the semantic divisions of certain concepts, and appendix C gives various example sentences.

Compounds, idioms, etc., are considered distinct lemmas.
Lemma entries are structured as follows:

- 〈native orthography) root (morphosyntactic categories) : definition(s)

The «morphosyntactic categories» portion contains a noun's inherent number.
Definitions are separated by a double dagger $\uparrow \ddagger$. Definitions which rely on certain morphological or semantic phenomena are noted by preceding the entry with the specific category in parentheses. Double-dagger-delimited entries that follow a morphologically-dependent meaning inherit the morphological dependence of the previous entry if not noted otherwise.

Auxiliary uses are noted as follows:

- verb :: definition(s)

Idioms may have variable inflection slots, which are noted with italicized letters (e.g., $<-x,-y$-, $z-$ ) in both transcription and native orthography.

Colloquial and metaphorical meanings are prepended by «colloq.» and «metaph.), respectively.

## A｜Nouns

## People

Gendered words are divided into same／different／irrelevant gender，which is to be compared to the gender of the speaker．

－〈Ycelrn＞lũRi（SG）：person，adult（different gender）
－〈2Jey $\rangle$ satã（SG）：child，teenager（gender irrelevant）
－〈eJd〉 taó（SG）：baby，infant，newborn （gender irrelevant）
－$\langle ल \jmath\langle\mathbb{d}\rangle$ tsáwo（PL）：persons，people（gender irrelevant；this is often used for groups of people）

## ｜Family

－$\langle$ YD3d likó（SG）：partner，spouse（gender irrelevant）

- 〈〈चַ〈cd〉 wãwũ（SG）：parent（same gender）
- 〈eJed）tato（SG）：parent（different gender）
- 〈Ry＜＜cdeyed〉 wãwũtato（SG）：parent，family member of older generation（gender irrelevant）
－$\langle 3$ PYp $\rangle$ kilí（SG）：older sibling（same gender）
－〈eフOJ）tapa（SG）：older sibling（different gender）
－〈eフロラ3Yか〉 tapaklí（SG）：older sibling，older family member of same generation（gender irrelevant）
－$\langle\langle n 2 d\rangle$ wíso（SG）：younger sibling（same gender）
－$\langle$ JYC $\rangle$ wálo（SG）：younger sibling（different gender）
－$\langle\langle n 2\langle$ yYd $\rangle$ wiswálo（SG）：younger sibling， younger family member of same generation （gender irrelevant）
－$\langle\langle n 2 C y\rangle$ tísta（SG）：twin sibling，same－age family member of same generation（gender irrelevant）

－$\langle 2 \mathrm{R} 22 \mathrm{~d}\rangle$ siswo（SG）：child（different gender）
－〈enS்n2 2 d tsirriswo（SG）：child，family member of younger generation（gender irrelevant）


## Body

 $\ddagger$ seat of desire and personal wants，needs， goals，etc．
－eat ：：（AGT，TRA）want（to obtain，have， get），long（for），desire $\div$ love，lust（after）
－〈eclOd）topó（DU）：eyes，pair of eyes
－sense ：：（AGT，TRA）see，look（at）$\ddagger$（PAT）be seen
－$\langle\mathrm{Od}\langle\rangle\rangle$ powí（PL）：hair，body hair $\div$ fur（of animals）
－say ：：（PAT）be hairy，have hair／fur $\ddagger$
（AGT）become hairy，grow hair／fur
－move ：：（AGT）bald，shed hair／fur + （TRA） shave，cause to be bald

## Food

－〈edOp）tópi（SG）：flatbread，unleavened bread $\div$ food，a meal
－eat ：：（AGT）eat（a meal）$\ddagger$（TRA）have as a meal
－put ：：（AGT）make／prepare food $\div$（PAT）be prepared（of food）$\div$（TRA）prepare as food，as a meal

## ｜Animals

－〈3cd／ced〉kũwũ（SG）：bunny，rabbit，hare； woolly hare $\ddagger$ leporidae in general
－〈éd＜d〉 tsowo（sG）：pika；plateau pika $\ddagger$ ochotonidae in general
－〈＠Jロ〉 táli（SG）：duck；ruddy shelduck $\ddagger$ waterfowl
－$\langle 3 \mathrm{C} 3$ か $\rangle$ kokí（SG）：yak + cow，dzo，bovine

## Animal products

－〈eJd $\langle\boldsymbol{y}\rangle$ taowã（SG）：egg $\ddagger$（colloq．）child， baby

## Plants

－〈2dS円）sóri（PL）：grass，hay grass；grass used as animal feed

## Concepts

－〈लंब〉 tsoo（SG）：thing，something －put ：：（AGT）perform an action，do something $\ddagger$（РАТ）have an performed on oneself，be affected by something
－〈2d2ป〉 sosấ（PL）：innate knowledge，a priori information
－sense ：：（AGT／TRA）know（innately， personally）$\ddagger$（PAT）be known（innately）
－〈OnSd ${ }^{\text {píro（PL）：experiential knowledge，} a}$ posteriori information
－sense ：：（AGT／TRA）know（circumstantially， of information）$\ddagger$（РАТ）be known （circumstantially）
－〈3d3 $>$ 〉 kóki（SG）：situation，event，state of affairs $\ddagger$ location（in time or space）$\ddagger$ truth，fact
－$\langle\mathrm{Sej}\rangle$ roo（SG）：affirmation，confirmation －say ：：（AGT）affirm，confirm，agree $\ddagger$（PAT） be affirmed，agreed（with）
－〈ecdर〉 tũs（SG）：negation，denial
－say ：：（AGT）negate，deny，disagree $\div$（PAT） be negated，disagreed（with）

## States

－〈en3sé〉 tikroo（SG）：sleep，rest $\ddagger$ unconsciousness
－sense ：：（РАт）be asleep，sleep $\ddagger$（AGT）fall asleep，become asleep／unconscious $\div$（TRA）
cause to be asleep／unconscious
－〈Ud2J）Lósa（SG）：hunger，appetite $\ddagger$ desire， greed
－eat ：：（РАт）be hungry，hunger + （AGT） become hungry，start to hunger $\ddagger$（TRA）cause to be hungry，hunger
－$\langle 3 ヵ\langle<2 d$ Yn $\rangle$ kiwósoli（SG）：satisfaction， contentness，happiness
－sense ：：BE SATISFIED，CONTENT，HAPPY $\geqslant$ （AGT）BECOME SATISFIED $\ddagger$（TRA）CAUSE TO BE SATISFIED

## ｜Emotion

 tsũứwiti ：（AGT，TRA）envy，desire of that which one cannot or does not have（Lit．try to desire， desire in vain）$\ddagger$（РАт）be envied

## Colors

－〈Sč2cdYč〉 rosũlos（PL）：brown， reddish－brown；dirt－colored
－say ：：（рАт）be brown，reddish－brown ： （AGT）become brown $\geqslant$（TRA）cause to be brown

## Numerals

- 〈「J2J）Rãsa（SG）：one，animate
- 〈rcdYd）Rũlo（sG）：one，inanime
- 〈〈चป2J〉 wãsa（DU）：two，animate
- 〈〈c्dYç $\rangle$ wũlo（DU）：two，inanimate
－$\langle 2 \mathrm{Cl}\rangle$ sor（PL）：three，animate
－$\langle 2$ フ2 $\rangle$ sás（PL）：three，inanimate
－（YdS）lor（PL）：four，animate
－$\langle Y \gg\rangle$ lás（PL）：four，inanimate
- 〈2cdenrn〉 wũtiłi（sg）：five
- 〈〈cdenryscd〉 wũtiłarũ（PL）：six


－（Eñ2d）Liíso（PL）：nine
－$\langle$ Rcden＜cden〉 wũtiwũti（sG）：ten


## ｜Locations

- 〈3de）kot（SG）：bunny burrow，bunny nest
- 〈2J＜rd＞sáw？o（sG）：market，place where trade of goods and services occurs，often open－air


## ｜Time

－〈〈コロロコロ｜wailai（sG）：day $\ddagger$ today
－$\left\langle\right.$ SJInSn2 ${ }^{2}$ rairis（SG）：yesterday

 the near past（further than yesterday）
 in the near future（further than tomorrow）

## Position

－（2ヵコ）sia（SG）：snug／comfortable space
－say ：：（РАT）be cute $\ddagger$（AGT）become cute $\ddagger$ （TRA）cause to be cute
－put ：：（PAT）be in a snug space $\ddagger$（AGT）get into a snug space $\ddagger$（TRA）put into a snug space
－（enYcd）tílũ（sG）：lower position／location， ground position $\ddagger$ direction down，downward
－put ：：（РАТ）be in a lower position $\div$（AGT） get into a lower position $\ddagger$（TRA）put into a lower position

## Terrain

－〈乌У〉〉 rãw（SG）：mountain，rock formation

## Nature

－$\langle\mathrm{Sc} 2 \mathrm{Cd}$ ）rosũ（PL）：dirt，soil，ground

## ｜Technology

 implement in general
－（edS）tor（SG）：small knife，used for cutting food
－〈Sच32n）rãksi（SG）：paper $\ddagger$ book
－sense ：：（AGT）read（a book）$\ddagger$（TRA）read

## B | Semantic divisions

TODO more lexicon so this appendix can be used

## C | Example sentences

(3.1) "I made him prepare (some) food."
(5moyd \#1339)
koi taro tópiw Róli wo rakí lao

koi taro tópi -w Róli wo rakí lao
DST put flatbread -IND INS 1.IRR sense.NFN MED
that (person) prepared food because of me
I made that (person) prepare food
This sentence displays pronominal determiner usage, as well as the fairly common phenomenon of stacking auxiliaries.
(3.2) "João knows the girl to whom Manel gave what?"
(5MOYD \#1342)
satãw siw soãwo rakí sosắw kũská kisrosó wãs ?óli siw wãrãla lao tsir

satã -w siw soãwo rakí sosấ -w kũs -ká kis -rosó wãs Róli siw wãrãla
child -IND LOC João sense knowledge -IND move -3>3 move.NFN -NEG NDF INS LOC Manel
lao tsir
MED LAT
to the girl that Soāvo knows, what was given by Mānāla?
This sentence demonstrates how names function in the language, and how they are loaned. It is also rather syntactically difficult, especially in English, and some shifting around of clauses had to be done.
(3.3) "This (story) is impossible."
(5moyd \#1344.1)
lao taroká tãrũrosó kóki
(YJdeysd3yeyscard2d3d3n.)
lao taro -ká tãrũ -rosó kóki
MED put -3/3 put.NFN -NEG situation
that's not so
LIT. that is not the situation, state of affairs, truth
(3.4) "There are yaks in Tibet now."
(5moyd \#1344.2)
kokísow tarosí to ?a tíri siw tiwitwã

kokí -sow taro -sí to 1 a tíri siw tiwit -wã
yak -AUG put -3IMP PRX ESS LOC Tibet -IND
yaks are in Divid (Tibet)

C | Example sentences
(3.5) "I saw three just last week."

rũ rãki -?ós koi sor -wã kosó rairissai -wã
1sG.REA sense -1/3SG DST three -IND ABL near past -IND
I saw three (of them) last week
Due to its length, this example had to be split up. It is relatively simple in construction, however.
(3.6) "Other people began to envy him."
(5мочD \#1345) wãs tsáwo tsíi kiorokow lũ?i tsũứwiti to?a

wãs tsáwo tsíi kioroko -w lũ?i tsũú -witi to ${ }^{\text {a }}$
NDF people eat stomach -IND person eat.NFN -CON PRX
some people (began to) envy the person
This sentence demonstrates the emotional idiom tsí- $x$ kiorokow $r$ tsũúwiti envy, desire that which one cannot have, literally 'have in one's stomach in vain'.
(3.7) "I will go whether he agrees or not."
(5moyd \#1350)
wo kũsto koi lũ?i pû́ãwiti roowã pû̃ãwiti tũswã

wo kũs -to koi lũ?i pứã-witi roo -wã pũã -witi tũs -wã
1.IRR move -1sG.AGT DST person say -CON affirmation -IND say -CON negation -IND

I will go if the person agrees or disagrees
This sentence demonstrates both the conditional and exclusive alternative uses of the conditional relational.
(3.8) "Why did you push your brother?"
kứ tarosat tílũw wãs tsir tapaw lao lok

kứ taro -sat tílũ -w wãs tsir tapa -w lao lok 2.IRR put -2 33SG lower -IND NDF LAT older sibling -IND MED PUR why did you push your brother?


[^0]:    ${ }^{1}$ Wherein a phoneme is a strictly contrastive unit that is abstracted to succinctly represent various but related phonetic surface forms.
    ${ }^{2}$ See canipa.net.

[^1]:    ${ }^{3}$ We shall use a modified (i.e., in conjunction with regex-like conventions) version of Recursive Baerian Phonotactics Notation (RBPN), a non-standard but infinitely more useful notation; see Blumire \& Baer (2017).

[^2]:    ${ }^{1}$ There is no separate section detailing differing domains as the phonological word is the only significant domain.

[^3]:    ${ }^{1}$ Although telepathically disseminated by the Moógatí people to the Náma people (yes, that is canon), the Mōhtāi people are a later addition to the known world, and as such have inherited it more directly via cultural and social contact.

[^4]:    ${ }^{1}$ Note that this "topic" is not motivated by information structure, but purely by semantics.

[^5]:    ${ }^{2}$ Positionals (Ch. 11) are also used to form adnominal phrases, but these are not full clauses.

[^6]:    ${ }^{1}$ The letter $r$ stands for 'argument'.

[^7]:    ${ }^{1}$ The finite state is generally left implicit in glosses.

[^8]:    ${ }^{2}$ In contrast, such humanoid entities do not fall under the class «humans in the empathy hierarchy (§ 4.2).

[^9]:    ${ }^{3}$ i.e., nuclear; the expected nat for 'non-atomic' might have been confusing.
    ${ }^{4}$ I don't like the term 'converb'.

[^10]:    ${ }^{1}$ The simple progressive sentence might be used as a response to "what is the bunny doing at this very moment", while the given dynamic sentence might be used as a response to "what is the bunny doing nowadays".

[^11]:    ${ }^{1}$ I feel it is important to note that wũtiPi is in no way related to the Toki Pona term＇mute＇，which also means＇five＇（or ＇hand＇）；it is derived from gan Minhó＇ mt tèe＇．I do not find Toki Pona particularly interesting，and find this coincidence to be rather unfortunate；while I could change it，I like the relationship to the gan Minhó numerals，and do not want to radically change its numerals in order to satisfy a relatively small annoyance．

[^12]:    ${ }^{2}$ That is, zero, although this is not considered a numeral proper in Lagá.

