

Ministry of Scientific Research and Innovation

# Naami Orthography Guide

by

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2011

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2016

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2023

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This paper concerns the Naami language spoken in Donga-Mantung division, Misaje subdivision, North West Region of Cameroon.

ISO 639-3 language code: bzv.

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This is a revised version of the Naami Orthography Guide. The first version was written by Grace Tabah in 2011. The first revision was done in 2016 by Bonny Li and Njinyi Tasiana Atenchong. The current version was done right at the time when the translation of Naami New Testament was getting to a crucial time of checking, testing, and later on the final read through. These important steps of Bible translation and other literacy works in the Naami community have contributed a lot to the improvement of the Naami writing system, namely in the area of word division, tone orthography and minimal tone pairs. The main changes in this 2021 version include disambiguating grammatical constructions such as hortative, habitual, progressive, the P0 perfective, the immediate future and the SVO imperatives. Also, though the translators did not apply this in the New Testament, we found it important to discuss the **-nə/-lə** verb suffixes and the **nə/lə** negation particles and add a rule apropos. These constructions in Naami are solely distinguished by tone in their positive and/or negative forms. The marking of P2 vs. P3 has been revised. Most of these issues came up when the present author worked on Naami verb paradigms (2019: unpublished manuscript). Therefore, some of the data used here will be taken from that 2019 paper. Some guidelines for special spelling have also been added. More importantly, the spelling of the Naami data has been revised according to the writing system used in the Naami New Testament which was typeset in April 2021.

Some of the data utilised in this version came mainly from the translators of the New Testament, namely, Jibbo Bernard Kande, Guda Lawrence, Mbante Solomon and Dodi Samuel.

## Abbreviations

1, 2, 3	first, second, third person
1c, c2, c3	Noun classes
AM	Associative marker
c	(Noun) class
CP	Completer particle
F0	Immediate future
F1	Near future tense
F2	Medial future tense
F3	Remote future tense
HAB	Habitual aspect
HORT	Hortative mood
n	Noun
NEG	Negative polarity
PFV	Perfective aspect
PROG	Progressive aspect
REAL	Realis mood
P1	Recent past tense
P2	Medial past tense
P3	Remote past tense
S	Singular
v	Verb

H	High tone
L	Low tone
M	Mid tone
HM	High-Mid tone
HL	High-Low tone
ML	Mid-Low tone
MH	Mid-High tone
LM	Low-Mid tone
LH	Low-High tone

### **Acknowledgments (for this version)**

I would like to thank Stephen Anderson and Bep Langhout for their considerable help with this work. Their expertise helped me to get more experience in the linguistic domain. I equally wish to express my gratitude to Dr. Richard Boutwell, for his invaluable comments.

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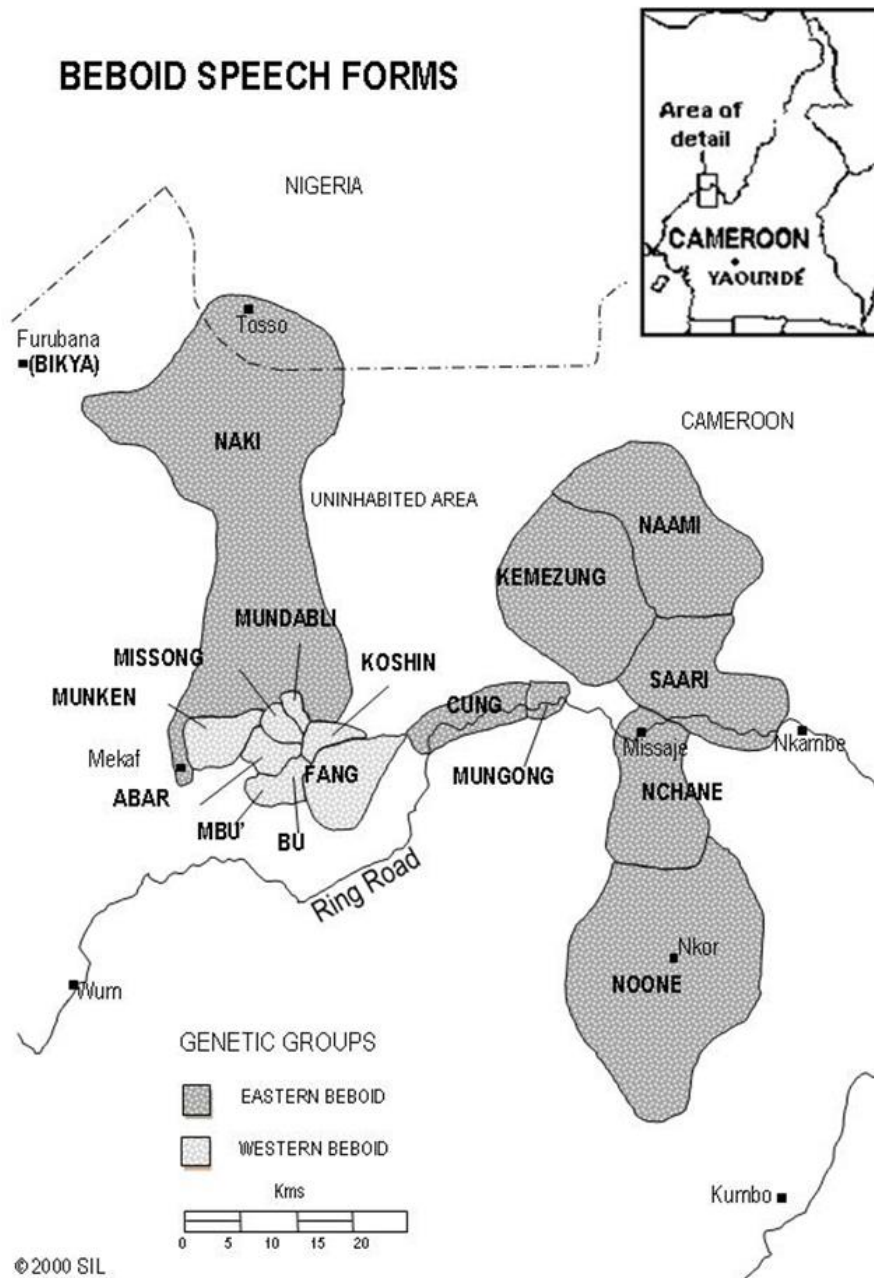
## 1 Introduction

This paper proposes an orthography for Naami, a Beboïd language spoken in the North West Region of Cameroon, Donga-Mantung division, Misaje subdivision. Like other Bantoid languages, Naami is a tonal language, spoken by about 4,400 people as stated in the *Ethnologue* (2021). The ethnic group called Bebe means “us us” or “we we” in Pidgin English. The Bèbè land is ruled by two fondoms: The fondom of Bebe Jatto which rules Sabongida, Bebe Jato and Mayonfon villages, and the fondom of Bebe Kette which rules Mayokila, Bebe Kette and Bebe Jama. The language has two dialects known as bebe-kette and bebe-jato. The Naami speaking area is bordered on the West by the Kemedzung language and in the South by the Sari language. The eastern part of the Bebe area is a vast land up to the border with Nigeria, inhabited almost entirely by Fulani cattle herders. The *Ethnologue* (Lewis, Simons, and Fennig 2021) lists the following as the language name variations: Bebe and Yi be Wu. The ISO-639-3 language code is [bzv].

Grace Tabah in April 2021 defended her PhD thesis on the topic “Tone description in Eastern Beboïd Languages: Implications for Orthography and Literacy”. The thesis examined Naami, Chungmboko and Kemedzung. Grace Tabah (2020) wrote a Sketch Grammar of Naami. Blaise Tala (2019 *unpublished manuscript*) wrote a paper on the Naami Verb Phrase. SIL (2016/2017) organized A Rapid Word Collection workshop in which 17,834 words and phrases were collected. This will probably result in around 7,000 words once these forms are organized into dictionary entries. Li Bonny (2016) wrote a Participant Reference Strategies in Naami Narrative Discourse. A phonology sketch of Naami was done by Tabah (2011) mainly from a wordlist collection of 1490 words. Much earlier than these recent works, Jean-Marie Hombert (1980) studied the noun classes of the Beboïd languages, including those of Naami. Apart from these above-mentioned papers, we are not aware of any other linguistic work done on Naami.

Since the objective of this paper is to help describe a good Naami orthography for the Naami language, I will continue to use the orthography symbols for the Naami segmental alphabet already in use by the community. The following bolded orthographic graphs and digraphs correspond to their International Phonetic Alphabet (IPA) sounds: **ch** = [tʃ], **sh** = [ʃ], **j** = [dʒ], **ny** = [ɲ], **y** = [j] and **hl** = [ɬ].

The following map, showing the location of the Beboid Speech forms, is adapted from Hamm 2002.



Map of the Beboid languages (Hamm 2002:2)



## 2 Alphabet

The Naami segmental alphabet is made up of 21 consonants and 9 vowels. They are represented below in upper and lower cases:

**A a, B b, Ch ch, D d, E e, Ɛ ɛ, Ɔ ɔ, F f, G g, Gb gb, H h, Hl hl<sup>1</sup>, I i, ɪ i, J j, K k, Kp kp, L l, M m, N n, Ny ny, ŋ ŋ, O o, ɔ ɔ, P p, Sh sh, T t, U u, W w, Y y.**

### 2.1 Consonants

The consonant phonemes, their allophones and graphemes are presented in the table below. We also show their use in various positions in a word.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/p/	[p]	<b>P p</b>	<b>pwaŋ</b> <i>honey</i>	<b>bəpampa</b> <i>tins</i>	—
/t/	[t]	<b>T t</b>	<b>tələ</b> <i>cane</i>	<b>fitu</b> <i>forehead</i>	—
/k/	[k]	<b>K k</b>	<b>kinaaŋ</b> <i>ringworm</i>	<b>fika</b> <i>bottle</i>	—
/b/	[b]	<b>B b</b>	<b>bufe</b> <i>wisdom</i>	<b>nlobi</b> <i>weaver</i>	—
/d/	[d]	<b>D d</b>	<b>dontə</b> <i>explain</i>	<b>fidu</b> <i>dove</i>	—

---

<sup>1</sup> The digraph **hl** stands for the voiceless dental alveolar palatal [ɬ]. However, the General Alphabet of Cameroon Languages (Tadadjeu & Sadembouo 1979, 1984) suggests that it should be represented as **sl**. We could not get good information about the choice of **hl** over **sl**. We presume that this was to avoid any confusion with the **sl** (*sleep, slow, slap...*) in English which Bebe people use as second language. However, the fact that Naami also use a silent **h** to disambiguate minimal pairs called the attention of linguists in 2020 to suggest the change from **hl** to **sl** or **xl**. The translators met with the community in Sabongida and made the suggestion, using words with **xl** and **sl** to read. The people were very confused and said they preferred the **hl**. (The proposal of **xl** and **sl** was to avoid confusion between the digraph **hl** and the perfective past suffix **-la**. For example, a minimal pair verb like *kee teach* and *kee look* where *teach* is written with the silent **h** as **keeh**, then the perfective past **keehla taught**. This **keehla** has nothing to do with the digraph **hl**, but **keeh-la**.) Since the community did not like **sl** or **xl**, the suggestion that worked was to keep **hl** and separate **keeh** from **la** with the diacritic ' so as to have **keeh'la**. The Bebe community thus still feels comfortable with the **hl** digraph here.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/g/	[g]	<b>G g</b>	<b>gahi</b> <i>subtract</i>	<b>kiga</b> <i>mat</i>	—
/kp/	[kp]	<b>Kp kp</b>	<b>kp̩i</b> <i>moon</i>	<b>kikpuŋ</b> <i>noise</i>	—
/gb/	[gb]	<b>Gb gb</b>	<b>gbo</b> <i>body</i>	<b>kigbɔɔ</b> <i>wooden bicycle</i>	—
/tʃ/	[tʃ]	<b>Ch ch</b>	<b>Chu</b> <i>God</i>	<b>fichuli</b> <i>mole</i>	—
/dʒ/	[dʒ]	<b>J j</b>	<b>joo</b> <i>grave</i>	<b>kijə</b> <i>mouth</i>	—
/f/	[f]	<b>F f</b>	<b>fəmi</b> <i>fat</i>	<b>njaafa</b> <i>wander</i>	—
/ʈ/	[ʈ]	<b>Hl hl</b>	<b>hle</b> <i>think</i>	<b>kəhlɔ</b> <i>limp</i>	—
/ʃ/	[ʃ]	<b>Sh sh</b>	<b>shaali</b> <i>sprinkle</i>	<b>bushɔ</b> <i>hunt (v)</i>	—
/h/	[h]	<b>H h</b>	<b>həmə</b> <i>point (n)</i>	<b>fwəhi</b> <i>ferment (v)</i>	—
/m/	[m]	<b>M m</b>	<b>məŋ</b> <i>try</i>	<b>bemi</b> <i>accept</i>	—
/n/	[n]	<b>N n</b>	<b>nuh<sup>2</sup></b> <i>knee</i>	<b>ŋɔɔni</b> <i>breathe</i>	—
/ɲ/	[ɲ]	<b>Ny ny</b>	<b>nyen</b> <i>slaughter</i>	<b>finyini</b> <i>bird</i>	—
/ŋ/	[ŋ]	<b>Ŋ ŋ</b>	<b>ŋɛkɛ</b> <i>praying mantis</i>	<b>dɛŋa</b> <i>okra</i>	<b>kwaŋ</b> <i>hand</i>
/w/	[w]	<b>W w</b>	<b>woomə</b> <i>squat</i>	<b>fiwɔ</b> <i>grinding stone</i>	—
/l/	[l]	<b>L l</b>	<b>libi</b> <i>lake</i>	<b>wələ</b> <i>listen</i>	—

<sup>2</sup> The final **h** on **nuh** is to differentiate it from **nu** which is a demonstrative pronoun *this* class 1.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/j/	[j]	Y y	yoo <i>hot weather</i>	kiyaa <i>buffalo</i>	—

### 2.1.1 Prenasalized consonants

One kind of consonant cluster found in Naami is the nasal consonant cluster. In this kind of consonant complex, the first consonant is a nasal (*m*, *n* or *ŋ*). Quite a few consonants may be preceded by such nasals (symbolized as “N”, known as a homorganic nasal) as in the following table:

Consonant cluster	Allophone	Grapheme	Initial position	Medial position	Final Position
/Nt/	[nt]	Nt nt	ntɪŋ <i>saliva</i>	kintaŋ <i>bed</i>	—
/Nk/	[ŋk]	ŋk ŋk	ŋkəənə <i>eyebrow</i>	kiŋkaa <i>chair</i>	—
/Nb/	[mb]	Mb mb	mbaŋ <i>fence</i>	fimbi <i>cola nut</i>	—
/Nd/	[nd]	Nd nd	ndəŋ <i>tears</i>	findəŋ <i>fig tree</i>	—
/Ng/	[ŋg]	ŋg ŋg	ŋgɔŋ <i>blood</i>	kiŋgɔ <i>womb</i>	—
/Nkp/	[ŋkp]	ŋkp ŋkp	ŋkpənə <i>quarrel</i>	kiŋkpee <i>conclusion</i>	—
/Ngb/	[ŋgb]	ŋgb ŋgb	ŋgbe <i>fail</i>	kiŋgbəŋ <i>pus</i>	—
/Ntʃ/	[ntʃ]	Nch nch	nchiŋ <i>(be) drunk</i>	finchiŋ <i>bead</i>	—
/Ndʒ/	[ndʒ]	Nj nj	nje <i>urine</i>	kinji <i>diarrhea</i>	—
/Nf/	[ɱf]	Nf nf	nfiinə <i>pretend</i>	bənfə <i>react</i>	—
/Nɬ/	[nɬ]	Nhl nhl	nhlinə <i>drip</i>	kinhlaŋ <i>back</i>	—

Consonant cluster	Allophone	Grapheme	Initial position	Medial position	Final Position
/Nʃ/	[nʃ]	Nsh nsh	nshɛŋkɛ <i>rag</i>	bunshɛkɔŋ <i>country</i> <i>Sunday</i>	—
/Nl/	[nl]	Nl nl	nlo <i>pain (n)</i>	mənlo <i>alcohol</i>	—
/Nw/	[ɲw]	Ŋ'w ɲ'w	ɲ'wɛɛ <i>weeding</i>	kiŋ'wa <i>shirt</i>	
/Nj/	[ɲj]	N'y n'y	n'yəə <i>pushing</i>	kin'yohi <i>honour</i>	

### 2.1.2 Palatalized Consonants

In this kind of consonant cluster, the second element is the palatal glide [j], which is always written in Naami as *ani* (as in other Misaje languages). Quite a few consonants may be followed by this glide, as in the following table:

Consonant complex	Allophone	Grapheme	Initial position	Medial position	Final position
/pj/	[pj]	Pi pi	pia <i>a way of wearing traditional dress (v)</i>	—	—
/tj/	[tj]	Ti ti	tiɛɛ <i>tree</i>	butiɛ <i>cave</i>	—
/kj/	[kj]	Ki ki	kiɛɛ <i>finger nail</i>	kikiaakia <i>dragonfly</i>	—
/bj/	[bj]	Bi bi	biaa <i>wound, sore</i>	bibiaa <i>leaves</i>	—
/dj/	[dj]	Di di	die <i>voice</i>	fidieɛ <i>now</i>	—
/gj/	[gj]	Gi gi	giaali <i>shame (n)</i>	—	—
/fj/	[fj]	Fi fi	fiɔŋ <i>cotton</i>	finfiɔŋ <i>ring (finger)</i>	—

Consonant complex	Allophone	Grapheme	Initial position	Medial position	Final position
/pj/	[pj]	Pi pi	<b>pia</b> <i>a way of wearing traditional dress (v)</i>	—	—
/tj/	[tj]	Ti ti	<b>tieɛ</b> <i>tree</i>	<b>butie</b> <i>cave</i>	—
/kj/	[kj]	Ki ki	<b>kieɛ</b> <i>fingernail</i>	<b>kikiaakia</b> <i>dragonfly</i>	—
/mj/	[mj]	Mi mi	<b>miaali</b> <i>blink</i>	—	—
/ɲj/	[ɲj]	ŋi ɲi	<b>ɲiaɲ</b> <i>child</i>	<b>fiɲiaa</b> <i>baby</i>	—

### 2.1.3 Labialized Consonants

The last kind of consonant complex is the labialized consonant where the second element is the labiovelar glide [w], which is written in Naami as **w**. The consonants that may be followed by this glide are illustrated in the following table.

Consonant complex	Allophone	Grapheme	Initial position	Medial position	Final Position
/pw/	[pw]	Pw pw	<b>pwaɲ</b> <i>liquid honey</i>	—	—
/kw/	[kw]	Kw kw	<b>kwaɲ</b> <i>hand</i>	<b>bəkwɛɛ</b> <i>women</i>	—
/bw/	[bw]	Bw bw	<b>bweenə</b> <i>arm</i>	<b>kibweɲ</b> <i>shoulder</i>	—
/gw/	[gw]	Gw gw	—	<b>ɲgwa</b> <i>aubergine</i>	—
/tʃw/	[tʃw]	Chw chw	<b>chwaɲ</b> <i>monkey</i>	<b>finchwaɲ</b> <i>support stone</i>	—

Consonant complex	Allophone	Grapheme	Initial position	Medial position	Final Position
/dʒw/	[dʒw]	<b>Jw jw</b>	<b>jwa</b> <i>cook</i>	<b>kinjwaŋ</b> <i>decorate</i>	—
/fw/	[fw]	<b>Fw fw</b>	<b>fwee</b> <i>hair</i>	<b>bəfwe</b> <i>two</i>	—
/ʃw/	[ʃw]	<b>Shw shw</b>	<b>shwaanə</b> <i>mark out</i>	<b>kishwa</b> <i>flood</i>	—
/mw/	[mw]	<b>Mw mw</b>	<b>mwaa</b> <i>millet</i>	<b>limwi</b> <i>razor</i>	—
/nw/	[nw]	<b>Nw nw</b>	<b>nwaŋ</b> <i>bamboo</i>	<b>binwa</b> <i>four</i>	—
/ŋw/	[ŋw]	<b>Ŋw ŋw</b>	<b>ŋwi</b> <i>drink</i>	<b>kiŋwaati</b> <i>book</i>	—

#### 2.1.4 Consonant Orthography Rules

Various rules about which consonants can occur in which positions or which can occur before and after other consonants are important to learn. Here is a partial list of consonant orthography rules.

##### Rule 1:

- The only consonant that can be word-final is **ŋ**. We can have other consonants in borrowed words or names, like, **Lut Ruth**, **kəsh course**.
- The **h** at word final position is not pronounced but only used to distinguish minimal pairs, see section 4.3 **Writing noun and verb minimal pairs**
- If you hear the lateral fricative [ɬ] like in the word **hlahi scatter**, write **hl**.
- If you hear a nasal consonant before **k, g, kp, gb**, always write **ŋ**.
- If you hear a nasal consonant before **t, d, sh, ch, j, l, hl** or **f**, always write **n**.
- If you hear a nasal consonant before **b**, always write **m**.

## 2.2 Vowels

The Naami language has nine vowel phonemes, presented with their allophones and proposed graphemes in the table below. The sounds are shown as they occur in different positions of the word.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/i/	[i]	I i	I <i>he/she</i>	biili <i>rib (n)</i>	bihi <i>spoil</i>
/e/	[e]	E e	eee <i>yes</i>	kweli <i>jaw (n)</i>	ngbete <i>birth pains</i>
/ɛ/	[ɛ]	Ɛ ɛ	—	buhleli <i>(be) thin</i>	kɛ <i>bowl</i>
/i/	[i]	ɪ ɪ	ihɪŋ <i>aha</i>	kifiŋ <i>brain</i>	ŋki <i>tune (v)</i>
/ə/	[ə]	Ə ə	ə <i>if</i>	chələ <i>eyelash</i>	chəə <i>heel</i>
/a/	[a]	A a	akpolo <i>seed from a tree (sp.)</i>	nyaŋ <i>urinate</i>	jafa <i>stand up</i>
/u/	[u]	U u	—	ŋunə <i>get well</i>	ŋgulu <i>vulture</i>
/o/	[o]	O o	ooo! <i>exclamation</i>	fobi <i>skin (of fruit)</i>	kwo <i>catch (v)</i>
/ɔ/	[ɔ]	Ɔ ɔ	—	ŋɔɔni <i>breathe</i>	chɔɔ <i>feast</i>

### 2.2.1 Vowel Length

Naami has both short and long vowels. The nine long vowels are written as a sequence of two identical vowels. Examples of these long vowels and their contrasting short vowels are given in the table below:

Phonemic	Phonetic	Orthographic	Gloss
/di:/	[dì:]	<b>dii</b>	<i>eye</i>
/di/	[dì]	<b>di</b>	<i>eat</i>
/ɖɛ:/	[ɖɛ̃:]	<b>jee</b>	<i>fly</i>
/ɖɛ/	[ɖɛ̃]	<b>je</b>	<i>path, road</i>
/bɛ:/	[bɛ̃:]	<b>bɛɛ</b>	<i>be weak</i>
/bɛ/	[bɛ̃]	<b>bɛ</b>	<i>calabash</i>
/kpa:/	[kpā:]	<b>kpaa</b>	<i>shoe,</i>
/kpa/	[kpá]	<b>kpa</b>	<i>drag on the floor</i>
/kɪ:nə/	[kɛ̃:nə]	<b>kɪinə</b>	<i>brick</i>
/kɪnə/	[kɛ̃nə]	<b>kinə</b>	<i>warn</i>
/jə:/	[jɛ̃:]	<b>yəəŋ</b>	<i>(be) correct</i>
/dzə/	[jɛ̃]	<b>yəŋ</b>	<i>certainly</i>
/tu:/	[tù:]	<b>tuu</b>	<i>touch</i>
/tu/	[tù]	<b>tu</b>	<i>carry</i>
/tʃo:/	[tʃó:]	<b>choo</b>	<i>be hot</i>
/tʃo/	[tʃò]	<b>cho</b>	<i>stone beef</i>
/ɬɔ:/	[ɬɔ̃:]	<b>hloo</b>	<i>wipping</i>
/ɬɔ/	[ɬɔ̃]	<b>hlo</b>	<i>cutlass</i>

### 2.2.1 Vowel Orthography Rule

Various rules about which vowel can occur in which positions are important to learn. Here is a partial list of vowel orthography rules.

#### Rule 2:

- Never write two vowels together unless they are the same vowels or the first one is **i**.
- Ideophones are written with three identical vowels together.

(cf section 4.5 **Ideophones**)

**yiii** *the sound of a moving vehicle*



### 3 Tone

Considerable work has been done in the area of Naami tone orthography in order to identify all instances where tone needs to be marked. This has been done in collaboration with the Naami language committee, followed by testing and evaluation in the language community. The community and the linguists finally decided to be marking tone only where it is absolutely necessary as in the case of gender 9/10 nouns discussed below. This is similar to what is done in Nooni, Nchane and Chung (and some other Beboid languages) where minimal tone markings are used in the early stages of orthography implementation. In the following subsections, we present basic phonological tone in Naami as well as certain diacritics used in marking distinctions in grammatical meaning.

#### 3.1 Basic Naami Tone

Grace Tabah (2011) identified nine contrastive tones in Naami: three level tones (high, mid and low) and six contour tones (low-high, high-low, mid-low, mid-high, low-mid, and high-mid). Below are examples of words with the three level tones and the six contour tones:

Tone	Phonetic	Gloss
High	[tjé]	<i>ear</i>
Mid	[kwō]	<i>bone</i>
Low	[kə]	<i>slap (v)</i>
Low-High	[jǒ]	<i>louse</i>
Low-Mid	[lě]	<i>throw</i>
High-Low	[tʃô]	<i>sand</i>
High-Mid	[lú]	<i>dust</i>
Mid-Low	[tā]	<i>ladder</i>
Mid-high	[tʃǎ]	<i>fill</i>

None of these nine contrastive lexical tones are consistently marked with diacritics (as in many Cameroonian languages outside of the Misaje area). Instead of

using consistent diacritic markings, the language committee and community have decided only to distinguish lexical tone contrast on certain words where confusion is most obvious to all. See section 4 Guidelines for special spellings below for details on how specific minimal tone pairs are given special spellings to clarify their meanings.

## 3.2 Grammatical functions and markings of tone

Tone in Naami also plays important grammatical roles. For instance, the difference between certain singular and plural nouns (section 3.2.1), the difference between certain tenses (sections 3.2.2 and 3.2.3) and the difference between certain moods (section 3.2.4).

### 3.2.1 Plural vs. Singular Forms of Classes 9/10 nouns

Like most Beboid languages, the only difference between class 9 and class 10 nouns in Naami is tone. Class 9 is the singular class and usually has its plural in class 10. Nouns in class 10 usually carry a relative high tone which distinguishes them from class 9 nouns, as shown in the examples below:

Tone for class 9 vs. class 10	Class 9 (singular)	Class 10 (plural)	Gloss
Low – High	[dʒà]	[dʒá]	<i>weaver-bird(s)</i>
Low – High	[tʃə̀]	[tʃé]	<i>room(s)</i>
Low – Falling HL	[hlù]	[hlû]	<i>giraffe(s)</i>
Mid – High	[kĩ̀]	[kí]	<i>python(s)</i>

In writing orthographic tone for these classes, mark a high tone diacritic ( ´ ) over the first vowel of nouns of plural class 10 and leave nouns of singular class 9 unmarked. For polysyllabic words in class 10, only the first syllable is marked with a high tone diacritic and the rest of the syllables are unmarked. For words with vowel clusters or long vowels, only the first vowel is marked with a high tone diacritic. This identical rule is being used by many Beboid languages where class 9 and class 10 nouns are distinguished solely by tone. Examples of how to write class 9 and 10 nouns in Naami are given below:

Class 9	Gloss	Class 10	Gloss
yaa	chin	yáa	chins
jɛŋ	hippopotamus	jéŋ	hippopotami
shɔŋ	sheep	shóŋ	sheep
juŋ	antelope	júŋ	antelopes
yɔ	snake	yó	snakes
jooli	mushroom	jóoli	mushrooms
dia	rubber	día	rubbers
shaani	flying ant	sháani	flying ants
fie	debt	fíe	debts

Based on this analysis, the following tone orthographic rule is presented:

**Rule 3:** Write gender 9/10 nouns in the plural form (class 10) by marking a diacritic ( ´ ) over the first vowel of the word. The singular (class 9) form of the noun is left unmarked.

### 3.2.2 P2 (medial past) versus P3 (remote past) tense markers

The P2 and P3 tense markers differ in tone only. The P2 marker is used to show events that occurred one to three days ago, while the P3 marker is employed to indicate events that occurred long ago. The P3 tense marker is marked with a low tone diacritic over the vowel **mà** while the P2 tense marker is written as the unmarked **ma**. We can see this in the examples below.

Wə    ma    kə    gəŋnə    fogbu    lə.  
 2s   P2   not   went   yesterday   CP  
*You did not go yesterday.*

I    ma    fɔŋna    fibɛ.  
 3s   P2   sharpen   knife.  
*He sharpened a knife (before today)*

I    mà    fɔŋna    fibɛ.  
 he   P3   sharpen   knife  
*He sharpened a knife long ago.*

Mbɛɛ      ju      nnu      bá      mà      chee      lə      ʒɔŋ.  
 Person    some    who    they P3    called that    John  
*Long ago there was a person called John.*

**Rule 4:** Mark a low tone diacritic ( ` ) on the verbal tense marker **mà** whenever it indicates remote past (P3) tense.

### 3.2.3 F2 (near future) versus F3 (remote future)tense markers

Similarly, the F2 and F3 tense markers also differ by tone only. The F2 marker [yā] is used to indicate an event that will occur in one to three days, while the F3 marker [yá] is employed to show an event that will occur in about four or more days. The F3 tense marker is marked with a high tone diacritic over the vowel **yá** while the F2 tense marker is left unmarked as in **ya**, as below.

Bá    yá    gəŋ    bwe.  
 they    F3    go    after two days  
*They shall go in two days.*

Bá    ya    bwo    mbwaa.  
 they F2    come    tomorrow  
*They will come tomorrow.*

**Rule 5:** Mark a high tone diacritic ( ´ ) on the verbal tense marker **yá** to show remote (F3) future tense.

### 3.2.4 Hortative mood marker

The immediate future and hortative constructions are written with the same segmental verb forms in both positive and negative variants. Let us consider the positive examples (written with their non-orthographic surface tones) below.

Ì    gəŋ    kɪŋwàatì.  
 3S go.F0    school  
*He will go to school.*

Ì gèŋ kɪŋwàatì.  
 3S go.HORT school  
*He should go to school.*

Looking at the examples above, we can see that immediate future (F0) tense and hortative constructions need to be distinguished with diacritics somehow since their written letters are identical. In order to solve this problem, we will write hortative constructions with a circumflex diacritic ( ^ ) over the first vowel of the verb in all hortative sentences, as follows.

I gəŋ kɪŋwaati.      *He will go to school. (immediate future)*  
 I gêŋ kɪŋwaati.      *He should go to school. (hortative)*

A close look at the negative form of hortative construction also shows that it is ambiguous but, this time, with the negative form of the P0 perfective. Therefore, the problem of confusion will not be totally solved if only the positive form of any of either hortative or F0 is marked, as we can see in the examples below.

	Positive form	Negative form
<b>P0</b> <b>PERF</b>	Ì gèŋná kɪŋwàatì. 3S go.P0-PFV school <i>He has gone to school.</i>	Ì kə gèŋnə kɪŋwāatī kə. 3S NEG go.PFV.NEG school NEG <i>He has not gone to school.</i>
<b>HORT</b>	Ì gèŋ kɪŋwàatì. 3S go.HORT school <i>He should go to school.</i>	Ì kə gèŋnə kɪŋwāatī kə. 3S NEG go.HORT.REAL school NEG <i>He should not go to school.</i>

**Rule 6:** Write negative and positive hortative constructions with a high low tone diacritic on top of the first vowel of the verb and leave the immediate future and P0 perfective constructions unmarked for tense and mood, as below.

I gêŋ kɪŋwaati.      I kə gêŋnə kɪŋwaati kə.  
*He should go to school.*      *He should not go to school.*

**I gəŋ kiŋwaati.**

*He will go to school.*

**I gəŋ nə kiŋwaati.**

*He will not go to school.*

### 3.2.5 Habitual aspect<sup>3</sup>

Another pair of constructions that are frequently orthographically ambiguous are the present habitual (which describes an action that someone does often) with the immediate future. Let us look at the relevant examples below (again written with their non-orthographic surface tones).

	Positive form	Negative form
<b>Immediate future F0</b>	Ì gəŋ kiŋwàatì. 3S go.F0 school <i>He will go to school.</i>	Ì gəŋ ná kiŋwāatī ká. 3S go.F0 NEG school NEG <i>He will not go to school.</i>
<b>Habitual</b>	Ì gəŋ kiŋwàatì. 3S go.HAB school <i>He goes to school.</i>	Ì gəŋ ná kiŋwāatī ká. 3S go.HAB NEG school NEG <i>He does not go to school.</i>

The above sentences are pronounced differently only in that their verbs are realized on different tones. Since the segmental written forms are identical for these present habitual and future constructions, it is again necessary to somehow distinguish them orthographically. We will therefore mark present habitual constructions (both positive and negative forms) in order to avoid confusion with F0 sentences, as follows:

**I gəŋ kiŋwaati.**

3S go.HAB school

*He goes to school.*

**I gəŋ nə kiŋwaati kə.**

3S go.HAB NEG school NEG

*He does not go to school.*

**I gəŋ kiŋwaati.**

3S go.F0 school

*He will go to school.*

**I gəŋ nə kiŋwaati kə.**

3S go.F0 NEG school NEG

*He will not go to school.*

<sup>3</sup> This section and the next one mainly describe the marking used in the New Testament, where the mid tone on top of the first vowel of the verb was used to mark negative progressive, low tone for negative habitual and negative future unmarked. Meanwhile, after the printing of the New Testament, we have realized that there is no tonal difference between NEG HAB and NEG PROG. Therefore, it would be good if while F0 is left unmarked, all imperatives (habitual and progressive positive and negative form) are marked with the same mark (mid tone), as shown in the next section: 4.

**Rule 7:** Mark habitual sentences with a low tone diacritic ( ` ) over the first vowel of the verb, both in their positive and negative forms.

### 3.2.6 Negative progressive VS negative habitual and F0

The negative forms of the sentences below are segmentally written the same (and are written here with their non-orthographic tones).

	Positive form	Negative form
<b>HAB</b>	Ì gǎŋ kɪŋwàatì. 3S go.HAB school <i>He goes to school.</i>	Ì gǎŋ ná kɪŋwāatī ká. 3S go.HAB NEG school NEG <i>He does not go to school.</i>
<b>PRES PROG</b>	Ì yú gǎŋ kɪŋwàatì. 3S PROG go school <i>He is going to school.</i>	Ì gǎŋ ná kɪŋwāatī ká. 3S go.PROG NEG school NEG <i>He is not going to school.</i>
<b>F0</b>	Ì gǎŋ kɪŋwàatì. 3S go.F0 school <i>He will go to school.</i>	Ì gǎŋ ná kɪŋwāatī ká. 3S go.F0 NEG school NEG <i>He will not go to school.</i>

From the above examples, we can see that there is no difference between negative present habitual and negative present progressive in spelling and tones despite a differentiation in the parallel positive constructions. Given that both the positive and negative habitual forms are marked and the future unmarked, it is also helpful to mark the present progressive which has **yu** as its aspectual marker though it disappears in the negative form.

In order to simplify teaching of these grammatical tone marks, it is good that the present progressive (both positive and negative forms) be marked with the mid tone diacritic ( ¨ ) though the positive form has the extra **yu** morpheme. As a result, we will have the following habitual, progressive and future sentences written orthographically as in the table below:

	Habitual	Progressive	Immediate future
Positive	I gəŋ kiŋwaati. 3S go.HAB school <i>He goes to school.</i>	I yu gəŋ kiŋwaati. 3S PROG go school <i>He is going to school.</i>	I gəŋ kiŋwaati. 3S go.F0 school <i>He will go to school.</i>
Negative	I gəŋ nə kiŋwaati kə. 3S go.HAB NEG school NEG <i>He does not go to school.</i>	I gəŋ nə kiŋwaati kə. 3S go.PROG NEG school NEG <i>He is not going to school.</i>	I gəŋ nə kiŋwaati kə. 3S go.F0 NEG school NE <i>He will not go to school.</i>

**Rule 8:** Write present progressive positive and negative forms with a mid tone diacritic ( ̃ ) on top of the first vowel of the verb.<sup>4</sup>

### 3.2.7 F0 vs. Imperative with topicalized subject

Imperative commands are clearly expressed in Naami. We can have the common VO (Verb Object) as well as occasional SVO (Subject Verb Object) patterns. Whenever the SVO is used, there is a potential pause after the imperative subject, followed by the typical VO command. The common VO pattern is obvious and clear to recognize, as is the case with English and other Beboid languages. However, whenever the SVO imperative is written, it is identical to the hortative. This is exemplified below (again written with non-orthographic tones):

4

	Habitual	Progressive	Immediate future
Positive	I gəŋ kiŋwaati. 3S go.HAB school <i>He goes to school.</i>	I yu gəŋ kiŋwaati. 3S PROG go school <i>He is going to school.</i>	I gəŋ kiŋwaati. 3S go.F0 school <i>He will go to school.</i>
Negative	I gəŋ nə kiŋwaati kə. 3S go.HAB NEG school NEG <i>He does not go to school.</i>	I gəŋ nə kiŋwaati kə. 3S go.PROG NEG school NEG <i>He is not going to school.</i>	I gəŋ nə kiŋwaati kə. 3S go.F0 NEG school NE <i>He will not go to school.</i>



	Positive form	Negative form
Hortative	Dódí gèṅ kɪŋwàatì. Dódí go.HORT school <i>Dodi should go to school.</i>	Dódí kē gèṅ-ná kɪŋwāatī ká. Dodi NEG go.HORT-REAL school NEG <i>Dodi should not go to school.</i>
Imperative	Dódí, gèṅ kɪŋwàatì! Dodi, go school <i>Dodi, go to school!</i>	Dódí, kē gèṅ-ná kɪŋwāatī ká! Dodi, NEG go-REAL school NEG <i>Dodi, don't go to school!</i>

When we look at the contrasting hortative and SVO imperative sentences, we see that there is no segmental morphological or even tonal change. Thus it is that the presence or absence of the pause after the subject in imperative constructions is the crucial difference between these two sentences. Therefore, if the hortative positive and negative forms are both marked with the circumflex ( ^ ) diacritic on the verb and a full stop at the end of the sentence, it is good to put a comma after the subject in both the positive and negative forms of SVO imperatives and an exclamation mark at the end of these sentences. This will help the reader to easily distinguish the difference between hortative and imperative. These orthographic conventions are exemplified below.

	Imperative with subject	Hortative
Positive form	Dódí, gəṅ kɪŋwaatì! <i>Dodi, go to school!</i>	Dodi gēṅ kɪŋwaatī. <i>Dodi should go to school</i>
Negative form	Dódí, kə gəṅnə kɪŋwaatī kə! <i>Dodi, don't go to school!</i>	Dodi kə gēṅnə kɪŋwaatī kə. <i>Dodi should not go to school</i>

**Rule 9:** Write both the positive and negative forms of an SVO (Subject Verb Object) imperative by putting a comma after the subject and an exclamation mark at the end of the sentence.

As for the normal V(O) imperative mood, the reader automatically knows the mood since it is not confusable with any other structure (no other constructions have a missing initial subject). The ordinary exclamation mark can therefore be used at the end of the sentence, as in the examples below.

Positive form:	<b>Gəŋ kiŋwaati!</b>	<i>Go to school!</i>
Negative form:	<b>Kə gəŋnə kiŋwaati kó!</b>	<i>Do not go to school!</i>

## 4 Guidelines for special spellings

Naami, like other Beboïd languages, has words that are easily confused with each other when their lexical tones are not written. Therefore, some of these ambiguous pairs of words need to somehow be disambiguated. The three disambiguating conventions for Naami are: the doubling of the initial consonant, the doubling of the final nasal **ŋ** and the adding of a silent **h** at the end of the root word. Ideophones are also written in a special way, according to their syllabic structure.

### 4.1 Writing relative pronouns, the possessive pronoun *my*, and the demonstrative pronoun *this*.

In Naami, with the writing rules that we have discussed so far, the possessive pronoun *my*, the relative pronoun *who/that/which* and the demonstrative pronoun *this* would be written the same, each one according to the noun class they belong to. Therefore, these three otherwise ambiguous items need to be differentiated from each other in some way. Our solution is to always write the possessive *my* with a double **ŋ** at the end of the word, write the relative pronoun *which* with double consonants at the beginning of the word and the demonstrative pronoun *this* with an **h** before the final **ŋ**. If the word is consonant plus vowel like **ni** for instance, add **h** at the end like **nih**. Except **nu** where **h** is used for the word *knee* instead, as we see in the table below.

Class	Example words	Possessive pronoun <i>my</i>	Relative pronoun	Demonstrative pronoun <i>this</i>
1	<b>ḡkələ</b> <i>box</i>	<b>ḡgwəḡ</b> <sup>5</sup>	<b>nnu</b>	<b>nu</b>
2	<b>bəḡkələ</b> <i>boxes</i>	<b>bəḡḡ</b>	<b>bbəḡ</b>	<b>bəhḡ</b>
3	<b>nwaḡ</b> <i>bamboo</i>	<b>waḡḡ</b>	<b>wwuḡ</b>	<b>wuhḡ</b>
5	<b>limwi</b> <i>razor</i>	<b>liḡḡ</b>	<b>lliḡ</b>	<b>lihḡ</b>
6	<b>ḡəmwi</b> <i>razors</i>	<b>ḡəḡḡ</b>	<b>ḡḡəḡ</b>	<b>ḡəhḡ</b>
7	<b>kimbaa</b> <i>snail</i>	<b>kiḡḡ</b>	<b>kkiḡ</b>	<b>kihḡ</b>
8	<b>bimbaa</b> <i>snails</i>	<b>biḡḡ</b>	<b>bbiḡ</b>	<b>bihḡ</b>
9	<b>jii</b> <i>hoe</i>	<b>njəḡ</b>	<b>nni</b>	<b>nih</b>
10	<b>jíi</b> <i>hoes</i>	<b>yíḡḡ</b>	<b>yyiḡ</b>	<b>yihḡ</b>
14	<b>butiɛ</b> <i>cave</i>	<b>buḡḡ</b>	<b>bbuḡ</b>	<b>buhḡ</b>
19	<b>fíḡka</b> <i>bottle</i>	<b>fíḡḡ</b>	<b>ffíḡ</b>	<b>fihḡ</b>
18a	<b>mwiḡka</b> <i>bottles</i>	<b>muḡḡ</b>	<b>mmuḡ</b>	<b>muh</b>
25	<b>mentiɛ</b> <i>caves</i>	<b>məḡḡ</b>	<b>mməḡ</b>	<b>məhḡ</b>

**Rule 10:** Write the possessive pronoun *my* by doubling the **ḡ** at the end of the word when it is ambiguous, the relative pronoun *who/that/which* by doubling the consonant

<sup>5</sup> The linguist and the consultant suggested to the Naami language team that for consistence, all possessive pronouns meaning *my* should have double final **ḡ** and all demonstrative pronoun *this* should have **h** without exception even if some do not confuse with any other word. However, the team insisted that they will mark only the ones that are sometimes confusing.

at the beginning of the word and the demonstrative pronouns *this* with the silent **h** before the final **ŋ**.

#### 4.2 Writing the possessive adjective *his* and other lexical words.

In Naami, the possessive adjective *his* has various forms according to the noun class of the word they determine. Each form except class 18a has other meaning(s) apart from being a possessive. These words should be disambiguated by adding the silent **h** at the end of the possessive *his* and leaving the other meanings unmarked, as we see in the table below.

Class	Example word	Possessive <i>his</i>	Other meanings
1	<b>ŋkələ</b> <i>box</i>	<b>wih</b>	<b>wi</b>  <i>over there</i>
2	<b>bəŋkələ</b> <i>boxes</i>	<b>biih</b>	<b>bii</b>  <i>ask</i>
3	<b>nwaŋ</b> <i>bamboo</i>	<b>wiih</b>	<b>wii</b>  <i>stop crying</i>
5	<b>limwi</b> <i>razor</i>	<b>liih</b>	<b>lii</b>  <i>remove a hoe from its handle</i>
6	<b>ŋəmwi</b> <i>razors</i>	<b>ŋiih</b>	<b>ŋii</b>  <i>shell of a porcupine</i>
7	<b>kimbaa</b> <i>snail</i>	<b>kiih</b>	<b>kii</b>  <i>type of weaving plan</i>
8	<b>bimbaa</b> <i>snails</i>	<b>biih</b>	<b>bii</b>  <i>ask</i>

Class	Example word	Possessive <i>his</i>	Other meanings
9	<b>jii</b> <i>hoe</i>	<b>yih</b>	<b>yi</b>  <i>cave/cliff</i>
10	<b>jii</b> <i>hoes</i>	<b>yiih/yíih</b>	<b>yii</b>  <i>name, type of pepper</i>
14	<b>butie</b> <i>cave</i>	<b>bwiih</b>	<b>bwii</b>  <i>fire, arrive</i>
19	<b>fiŋka</b> <i>bottle</i>	<b>fiih</b>	<b>fii</b>  <i>burn, turn</i>
18a	<b>mwiŋka</b> <i>bottles</i>	<b>mwiih</b>	---
25	<b>mentie</b> <i>caves</i>	<b>miih</b>	<b>mii</b>  <i>to press</i>

**Rule 11:** Write any possessive adjective *his* by adding an **h** at the end of the word and leave any parallel word without the additional letter.

### 4.3 Writing noun and verb minimal pairs

By the same token, if two words are spelt the same and therefore easily confused with each other, choose the one which occurs the least in common usage and add a silent **h** after the vowel. If the word has a final **ŋ**, write the **h** before the **ŋ**, as in the following examples.

Syllable type	Word	Gloss	Word	Gloss	Extension	Gloss
CV	<b>nu</b>	<i>this</i>	<b>nuh</b>	<i>knee</i>		
CVV	<b>kee</b>	<i>look</i>	<b>keeh</b>	<i>teach</i>	<b>keeh'la</b>	<i>taught</i>
CVC	<b>niŋ</b>	<i>work</i>	<b>ni<sup>h</sup>ŋ</b>	<i>refuse</i>	<b>ni<sup>h</sup>ŋna</b>	<i>refused</i>
CVCV(ŋ)	<b>finchiŋ</b>	<i>bead</i>	<b>finchi<sup>h</sup>ŋ</b>	<i>curse</i>		

**Rule 12:** If two words are easily confused with each other, choose the less common in daily usage and add a silent **h** after the last vowel of the root. If the word ends with **ŋ** like **niŋ** *refuse*, add the silent **h** before the **ŋ** giving **ni<sup>h</sup>ŋ** *refuse*. If the word is a verb, the past perfective will be written with the perfective suffix attached to the verb, for instance **ni<sup>h</sup>ŋna** *refused* and **ni<sup>h</sup>ŋnə** *not refuse*. If the word is a verb of CVV structure like **kee** *look*, the **h** will be at the end of the verb root. In these cases, the past perfective positive form will be written with an apostrophe in between the **h** and the suffix to visually separate the **h** from the **l**, giving for instance **keeh'la** *taught* and **keeh'lə** *did not teach*. This must be done to avoid any confusion between the special **h'l** forms that are formed between a root and a suffix and the letter of the basic alphabet written **hl**.

### 4.4 Writing second person plural **bə** and third person plural **bá**

In Naami, the second person plural **bə** and the third person singular **bə** differ solely by tone and therefore sometimes confused the reader. To avoid this confusion, write

*they* and *them* with a high tone diacritic over the first vowel of the verb, like in the following sentence.

**B́ə fwəla kpo.**

3Pl borrow money

*They have borrowed money.*

**Bə fwəla kpo.**

2Pl borrow money

*You have borrowed money.*

**Rule 13:** Write the third person plural *they* and *them* with a high tone diacritic over the vowel, giving **b́ə** and leave the parallel second person plurals unmarked, giving **bə**.

#### 4.5 Ideophones

Ideophones appear according to the effects of the action that is being described. If the action described is repetitive, the ideophone will be written with three time repeated syllables as one, like:

**kpaŋkpaŋkpaŋ**                      *sound of a bell*

**tututu**                              *sound of a grinding mill*

If the action described is not continuous and repetitive, the ideophone will be written with three vowels, as in:

**kpaaa**                      *sound of a gun*

**gbaaaŋ**                      *sound of the door closed with force*

**waaa**                      *sound of running water*

**ŋgɔɔɔŋ**                      *sound of a lion roaring*

**ŋaaaŋ**                      *sound of a baby crying*

**Rule 14:** Write ideophones for repetitive action as a combined word with three identical syllables. If the action is not repetitive or continuous, write the ideophone with three vowels.

## 5 Word Division

Naami words should be written in a way that preserves their word image, i.e. words should be written as they are spoken in isolation.

### 5.1 Noun class prefixes

**Rule 15:** Noun class prefixes will be written attached to their noun roots, as shown below.

Example	Gloss	Example	Gloss
<b>tah</b>	<i>father</i>	<b>bətah</b>	<i>fathers</i>
<b>nyaa</b>	<i>broom</i>	<b>binyaa</b>	<i>brooms</i>
<b>finchiŋ</b>	<i>bead</i>	<b>mwinchiŋ</b>	<i>beads</i>
<b>kinuu</b>	<i>buttock</i>	<b>binuu</b>	<i>buttocks</i>
<b>chəə</b>	<i>heel</i>	<b>bichəə</b>	<i>heels</i>
<b>buyili</b>	<i>bundle</i>	<b>mənyili</b>	<i>bundles</i>
<b>fitu</b>	<i>forehead</i>	<b>muntu</b>	<i>foreheads</i>

### 5.2 Noun Modifiers and Noun Class Agreement Markers

Noun modifiers in Naami include possessives, demonstratives, numerals, adjectives and quantifiers. In each of these categories, the noun modifiers agree with their modified noun through the use of agreement marker prefixes. These markers that show agreement in a noun class are written attached to the modifier root, instead of being written separate.

**Rule 16:** Write noun modifiers with their noun class agreement markers joined to their roots as prefixes.

Below are examples of each of the modifiers which demonstrate the above rule.

#### Possessive Pronouns

noun classes	example words	Gloss	Possessive	Gloss
noun class 1	ɲkɔɔ	<i>box</i>	bə	<i>their</i>
noun class 2	bəɲkɔɔ	<i>boxes</i>	bəbə	<i>their</i>
noun class 3	nwaɲ	<i>bamboo</i>	wibə	<i>their</i>
noun class 5	limwi	<i>razor</i>	libə	<i>their</i>
noun class 6	Náɲ	<i>bamboos</i>	ɲəbə	<i>their</i>
noun class 7	kimbaa	<i>snail</i>	kibə	<i>their</i>
noun class 8	bimbaa	<i>snails</i>	bibə	<i>their</i>
noun class 9	jii	<i>hoe</i>	bə	<i>their</i>
noun class 10	jíi	<i>hoes</i>	yibə	<i>their</i>
noun class 14	butie	<i>cave</i>	bubə	<i>their</i>
noun class 18a	munhlɔɲ	<i>antenna</i>	mubə	<i>their</i>
noun class 19	finhlɔɲ	<i>antennas</i>	fibə	<i>their</i>
noun class 25	məntie	<i>caves</i>	məbə	<i>their</i>

## Numerals

Classes	Example words	Gloss	two	three	four
2	bəɲkɔɔ	<i>boxes</i>	bəfwe	bətɔ	bənwa
6	náɲ	<i>bamboos</i>	fwe	tɔ	na
8	bimbaa	<i>snails</i>	bifwe	bitɔ	binwa
10	jíi	<i>hoes</i>	fie	shɔ	nya
19	munhlɔɲ	<i>antennas</i>	munfweɲ	muntɔɲ	munwaani
25	məntie	<i>caves</i>	məmfwe	məntɔɲ	mənwaani



## Demonstratives

Class	Example words	Gloss	Proximal	Distal	Far distal
1	ḡkɔ́ɔ	<i>box</i>	nu	yo	kwi
2	bəḡkɔ́ɔ	<i>boxes</i>	bəḡ	bie	bəli
3	nwaḡ	<i>bamboo</i>	wuḡ	we	wili
5	razor	<i>limwi</i>	liḡ	le	lili
6	náḡ	<i>bamboos</i>	ḡəḡ	ḡie	ḡili
7	kimbaa	<i>snail</i>	kiḡ	kie	kili
8	bimbaa	<i>snails</i>	biḡ	bie	bili
9	jii	<i>hoe</i>	ni	ye	ki
10	jíi	<i>hoes</i>	yíḡ	ye	yili
14	butie	<i>cave</i>	buḡ	bwe	bwili
19	finhluḡ	<i>antenna</i>	fíḡ	fie	fili
18a	mwinhluḡ	<i>antennas</i>	muḡ	mwe	mwili
25	məntie	<i>caves</i>	məḡ	mie	mili

## Quantifiers

Class	Example words	Gloss	<i>all</i>	<i>some</i>	<i>many</i>
2	bəḡkɔ́ɔ	<i>boxes</i>	bənhliḡ	bədi	bəkiḡaḡ
6	náḡ	<i>bamboos</i>	ḡənhliḡ	ḡəndi	ḡəkiḡaḡ
8	bimbaa	<i>snails</i>	binhliḡ	bidi	bikiḡaḡ
10	jíi	<i>hoes</i>	yinhliḡ	yidi	yikiḡaḡ
19	mwinhluḡ	<i>antennas</i>	munhliḡ	mundi	mukiḡaḡ
25	məntie	<i>caves</i>	mənhliḡ	məndi	məkiḡaḡ

## Adjectives

- a. kiḡwaati      kitənə  
       c7.book      c7.small  
       *small book*
- b. chəḡ      yiwu  
       c10.houses      c10.white  
       *white houses*

c.	<b>budieŋ</b>	<b>buŋkuntaŋ</b>
	c14.bridge	c14.big
	<i>big bridge</i>	

### 5.3 Associative noun phrase

The associative phrase is a type of grammatical construction that shows a relationship between two nouns. A number of different semantic relationships can be communicated through the association of two nouns. These two nouns are called noun 1 (N1) and noun 2 (N2). The two nouns are joined together using an associative marker which agrees with the class of the head noun (N1) in the construction.

**Rule 17:** Write the associative marker separate from N1 and N2.

<b>gbɛŋ</b>	<b>wi</b>	<b>tiɛɛ</b>
c3.root	c3.AM	c7.tree
<i>root of tree</i>		
<b>wɛɛ</b>	<b>ki</b>	<b>bəlɔkɔ</b>
c7.farm	c7.AM	c1.cassava
<i>cassava farm</i>		
<b>sháŋ</b>	<b>yi</b>	<b>bilika</b>
c10.seed	c10.AM	c1.pawpaw
<i>pawpaw seeds</i>		

### 5.4 Compound nouns

A compound noun is a type of construction that is formed when two or more words come together, resulting in a new word that functions as a noun and refers to a single concept. Compound nouns in Naami are formed by joining a noun with another word such as a verb, or one or more nouns. The resulting compound takes the same noun class as the initial noun of the compound. Examples are seen below.

<b>kpeɛ</b>	<b>ŋku</b>
c1.woman	ancestor
<i>widow</i>	

**mbɛɛ      kpuuni**

c1.person    visit

*visitor*

**ŋwa      nshɔŋ**

c1.child      sheep

*lamb*

**Rule 18:** Write compound noun words separately, except for the word **ŋwambɛɛ** *son of man*.

## 5.5 Verbal Aspects and Causative Markers

**Rule 19:** Write the perfective aspectual marker (**-la**, **-na**, **-a**) and the causative marker (**-hiŋ**) joined to the verb root as suffixes.

**dii              call              diila              called**

**gəŋ              go              gəŋna              went**

**lɔ              afraid              lɔhiŋ              frighten**

The form of the perfective suffix changes depending on the last vowel and consonant of the verb, which gives rise to the following rules.

**Rule 20:** For verb roots ending with **h**, where the **h** indicates a special addition to disambiguate a tonal minimal pair distinction, the **h** is kept with the root when the perfective suffix is added. In addition, an apostrophe ( ' ) is added in front of the perfective suffix when the form of that suffix is **-la/-lɔ**. This apostrophe is added to indicate that the **h'l** is not the normal **hl** digraph in the basic alphabet.

**keeh              teach              keeh'la              taught**

### 5.5.1 Negative **nə/lɔ** in imperfective vs. past perfective

In Naami, negation is marked by the discontinuous **kə...kə** in past perfective constructions and the discontinuous **nə/lɔ...kə** in imperative and future ones. The difference between these two discontinuous morphemes is the positioning of the

morphemes: in the first case, the first part is always pre-verbal and the second part is always sentence-final, while in the second case, the first part is always post-verbal but before the object while the second part is again sentence-final. None of the discontinuous negation markers can be written as one word because they are two separate words. We can see this in the following examples.

I gəŋna.

3S go.PFV

*He has gone.*

I diee.

3S eat.PFV

*He ate.*

I kə gəŋnə kə.

3S NEG go.PFV.NEG NEG

*He has not gone.*

I kə diee kə.

3S NEG eat.PFV.NEG NEG

*He did not eat.*

I yu gəŋ chə.

3S PROG go church

*He is going to church.*

I gəŋ chə.

3S go.IPFV church

*He goes to church.*

I gəŋ nə chə kə.

3S go.IPFV NEG church NEG

*He is not going to church.*

I gəŋ nə chə kə.

3S go.IPFV NEG church NEG

*He does not go to church.*

As we have seen above, the past perfective marker appears as a suffix on the verb root. It can be **-la** or **-na** or a simple vowel, depending on the type of the syllable of the verb root. The variants **-la** or **-na** occur only with positive constructions while the parallel variantes **-lə** or **-nə** appear in negative constructions. Thus, the variants **-na** and **-nə** are the opposing suffixes for CVC verbs while variantes **-la** and **-lə** are opposing suffixes of CVV verbs. Thus the vowel change from **a** to **ə** corresponds to the change from positive to negative meaning. We therefore have the parallel negative suffixes **-lə** or **-nə** instead of their positive counterparts. These latter are written the same as the negative particle words **lə** or **nə** in the negative progressive, negative habitual and negative immediate future. As rule 19 states above, suffixes are written together with the verb roots. However, when it comes to **nə** or **lə** in progressive, habitual and future constructions, the morphemes are not verb suffixes but negative markers and therefore should be written separated from the verb as follows:

### Present Habitual

I kàŋ fiɔŋ.

3S fry.HAB fish

*He fries fish.*

I dī de.

3S eat.HAB beans

*He eats beans. He does not eat beans.*

I kàŋ nə fiɔŋ kə.

3S fry.HAB NEG fish NEG

*He does not fry fish.*

I dī lə de kə.

3S eat.HAB NEG beans NEG

### Present Progressive

I yu kāŋ fiɔŋ.

3S PROG fry fish

*He is frying fish.*

I kāŋ nə fiɔŋ kə.

3S fry.PROG NEG fish NEG

*He is not frying fish.*

I yu nyāa chəŋ.

3S PROG sweep house

*He is sweeping the floor*<sup>6</sup>

I nyāa lə chəŋ kə.

3S sweep.PROG NEG house NEG

*He is not sweeping the floor.*

### Immediate future

I kaŋ fiɔŋ.

3S fry.F0 fish

*He will fry fish.*

I kaŋ nə fiɔŋ kə.

3S fry.F0 NEG fish NEG

*He will not fry fish.*

I yá wɛɛ chəŋ.

3S F3 build house

*He will build a house.*

I yá wɛɛ lə chəŋ kə.

3S F3 build NEG house NEG

*He will not build a house.*

**Rule 21<sup>6</sup>:** Write the normal negative particles **nə** and **lə** separated from the verb in progressive, habitual and future constructions (in this case, the **nə** or **lə** appears after the verb and there is no **kə** before the verb), but write the negative past perfective suffixes **-nə/-lə** attached to the verb like their counterparts of the positive form **-na/-la** (in this case, you have two **kə** negative morphemes, one before the verb and one at the end of the sentence).

<sup>6</sup> This rule was not consistently applied in the NT because the allotted time to read through the NT before printing was not enough to do all the work. We hope that it will be perfectly applied in future documents such as literacy and other scripture materials.

### 5.5.2 Nouns formed from verbs (i.e. “verbal nouns”)

It is possible to turn verbs into nouns by adding a nasal **n**, **m**, **ɲ** before the word. For instance:

If you hear a nasal before **d**, **t**, **sh**, **ch**, **hl**, **j**, **l**, **f**, write **n**.

<b>to</b>	<i>insult</i>	<b>nto</b>	<i>insult</i>
<b>jaa</b>	<i>move</i>	<b>njaa</b>	<i>moving</i>
<b>di</b>	<i>eat</i>	<b>ndi</b>	<i>eating</i>
<b>jii</b>	<i>kill</i>	<b>njii</b>	<i>killing</i>
<b>fwɔɔ</b>	<i>borrow</i>	<b>nfwɔɔ</b>	<i>borrowing</i>

Write **m** only before a noun that starts with **b**.

<b>bɲ</b>	<i>dance</i>	<b>mbɲ</b>	<i>dancing</i>
<b>bwo</b>	<i>come</i>	<b>mbwo</b>	<i>coming</i>

Verb roots starting with the consonants /n/, /m/, and /ɲ/ will double their initial consonants to become nouns.

<b>ɲwi</b>	<i>drink</i>	<b>ɲɲwi</b>	<i>drinking</i>
<b>mwaɲ</b>	<i>suck</i>	<b>mmwaɲ</b>	<i>sucking</i>
<b>nɔɲ</b>	<i>sleep</i>	<b>nnɔɲ</b>	<i>sleeping</i>

For verbs starting with the semivowels /y/ and /w/, an apostrophe ( ' ) will be put after the nasal prefix to form their respective nouns.

<b>yɔɔ</b>	<i>talk</i>	<b>n'yɔɔ</b>	<i>talking (n.)</i>
<b>wɛɛ</b>	<i>build</i>	<b>ɲ'wɛɛ</b>	<i>building (n.)</i>

**Rule 22:** Nouns formed of verbs will be written by attaching a nasal prefix (**m**, **n**, or **ɲ**) before the word. For verbs having initial consonants which are nasals, their initial consonants are doubled for the noun forms. For verbs starting with **w**, or **y**, an apostrophe ( ' ) is added between the nasal prefix and the verb root to form the noun.

### 5.5.3 1st person singular subject prefix on verbs<sup>7</sup>

In the Naami language, the 1st person singular subject morpheme meaning “I” is written joined to the verb as a prefix. It is also represented by a nasal **m**, **n** or **ɲ** (i.e. a nasal having the same place of articulation as the consonant that follows). Let us consider the following present habitual forms (in the right column below) which are always marked by a low tone mark (the first column just there to show their contrast with simpler forms). ([see section 3.2.5 above](#)) :

<b>lu</b>	<i>roof (v)</i>	<b>nlù</b>	<i>I roof</i>
<b>bien</b>	<i>write</i>	<b>mbièn</b>	<i>I write</i>

For verbs starting with a nasal consonant /n/, /m/ and /ɲ/, double the initial consonant.

<b>ɲaɲ</b>	<i>vomit</i>	<b>ɲɲàɲ</b>	<i>I vomit</i>
<b>nə</b>	<i>give</i>	<b>nnə</b>	<i>I give</i>
<b>manta</b>	<i>compare</i>	<b>mmànta</b>	<i>I compare</i>

For verbs starting with the /ɲ/ represented by the basic consonant digraph **ny**, add **n** in front of the verb.

<b>nyi</b>	<i>excrete</i>	<b>nnyi</b>	<i>I excrete</i>
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For verbs starting with /w/ or /y/, add **ɲ** for **w** and **n** for **y** and put an apostrophe ( ' ) in between the nasal and the verb.

<b>wii</b>	<i>wash</i>	<b>ɲ'wii</b>	<i>I wash</i>
<b>ya</b>	<i>cut</i>	<b>n'yà</b>	<i>I cut</i>

Therefore, the following orthographic rule resulted.

**Rule 23:** Write the first person singular of a verb by attaching a nasal **m**, **n** or **ɲ** before the verb. For verbs having an initial nasal, the nasal consonant should be doubled. For verbs that start with **w** or **y**, put an apostrophe in between the nasal and the verb.

<sup>7</sup> The distinction between the first person singular prefixed verbs and the verbal nouns is the low tone on the first person singular and verb, which is usually habitual aspect and thus marked in the language by a low tone on the verb root (as a result of a distinction between habitual and immediate future F0). ([See section 3.2.5](#) and [section 5.5.2](#) above). However, if in the future the marking of habitual is changed, something must be done to disambiguate verbal noun and the first person singular prefix on the verb. In Mungong, another language of the Misaje cluster, a high tone diacritic is used on the first nasal of verbal nouns.

#### 5.5.4 Infinitives formed from verbs

**Rule 24:** Write the infinitive form of a verb with the marker **bəN-** joined to the verb root as a prefix (where N refers to a nasal **n**, **m** or **ŋ** having the same place of articulation as the first consonant of the verb root). Examples:

<b>ga</b>	<i>divide</i>	<b>bəŋga</b>	<i>to divide</i>
<b>jaa</b>	<i>move</i>	<b>bənjaa</b>	<i>to move</i>
<b>buhun</b>	<i>gather</i>	<b>bəmbuhun</b>	<i>to gather</i>

**Rule 25:** If the verb starts with the nasal **m**, **n** or **ŋ**, do not double it, write only **bə** + verb instead.

<b>nə</b>	<i>give</i>	<b>bənə</b>	<i>to give</i>
<b>mən</b>	<i>taste/try</i>	<b>bəmən</b>	<i>to taste/try</i>
<b>ŋwaa</b>	<i>comb (v)</i>	<b>bəŋwaa</b>	<i>to comb</i>

**Rule 26:** For verbs beginning with **w** or **y**, put an apostrophe in between the nasal and the verb root.

<b>wɛɛ</b>	<i>build</i>	<b>bəŋ'wɛɛ</b>	<i>to build</i>
<b>yɔɔ</b>	<i>say</i>	<b>bən'yɔɔ</b>	<i>to say</i>

#### 5.6 Numerals

**Rule 27:** Numbers 1 to 10 and multiples of ten which are less than one hundred (i.e. 20, 30, ... 90) are written as one word; numerals 11-19, 21-29... are written as separate words; numeral one hundred, multiples of one hundred and one thousand (i.e. 200, 300, ... , 1000) are written as one word; numerals which are multiples of one thousand (i.e. 2000, 3000, ..., 9000) are written as two separate words.

7	<b>fumanyaən</b>
10	<b>yuufi</b>
11	<b>yuufi nchɔ mwi</b>
20	<b>mbwɛɛnfie</b>
30	<b>mbwɛɛnshɔ</b>
100	<b>gbi</b>



101	<b>gbi bi mwe</b>
200	<b>gifwe</b>
300	<b>gitə</b>
1000	<b>nchuku</b>
2000	<b>bəanchuku bəfwe</b>
3000	<b>bəanchuku bətə</b>

## 5.7 Completer

A completer is a linguistic term used to designate some functional words that usually complete the sense of another word that appeared earlier in the sentence. Most of the time it appears at the end of the sentence.

**Rule 24.** Completers are written as separate words.

**Ye bwee li Jisho mà jaa lə.**

As birth of Jesus P3 happen CP

*As the birth of Jesus took place.*

## 6 Punctuation and Capitalization

The punctuation marks and the rules that govern the Naami language are the same as those for English. The punctuation marks used for Naami are therefore as follows:

1. Full stop (.)
2. Question mark (?)
3. Exclamation mark (!)
4. Comma (,)
5. Colon (:)
6. Quotation marks (“ ”) and (‘ ’)

## 6.1 Full Stop

The full stop (.) marks the end of a declarative sentence.

**Nchu        yu        gəŋ    shi        bəŋ.**

Nchu        F2        go        market        on

*Nchu is going to the market.*

## 6.2 Question Mark

The question mark (?) marks the end of an interrogative sentence.

**Wə   diee   ge        mwehiŋ?**

you   eat        egg        how.many?

*How many eggs will you eat?*

## 6.3 Exclamation Mark

The exclamation mark is written at the end of a command with emphatic meaning, or it is placed following exclamatory words or phrases. It functions to express interjections, surprises, excitement, and forceful comments as well as simple commands.

**Bwo        fəŋ!**

Come        here

*Come here!*

## 6.4 Comma

Commas are used to separate clauses or parallel words within a clause, as below:

**Njaŋko    yo        bə        fibeka, shóŋ    fiɛ, bə        bi.**

Njaŋko        have   one        cat        sheep two   one        goat

*Njanko has a cat, two sheep and a goat.*

## 6.5 Colon

Colons are used to separate a clause which refers to a concept in general terms from a clause or phrase which makes the concept more specific. It represents a pause in speech that could be replaced by the words “that is” or “as follows” in English.

**Jə bieŋ biŋ: jii, hlo, fijili, bə fu.**  
take things these hoe cutlass planting.hoe and axe  
*Take these things: a hoe, a cutlass, a planting hoe, and an axe.*

A colon also is used to signal the beginning of a list or in Bible references to separate the chapter number from the verse number.

**Matio 1:3**  
Mathew chapter 1, verse 3

## 6.6 Quotation Marks

Quotation marks ( “ ” or ‘ ’ ) occur at the beginning and end of direct speech, as below:

**Nchu yɔɔlə, “Jaŋ lə bwo daŋ.”**  
Nchu say rain F2 come today  
*Nchu said, “It will rain today”.*

Note: In English and Naami, other punctuation marks always precede closing quotation marks when they occur next to each other.

## 6.7 Capitalization

Capital letters are used at the beginning of sentences and for proper nouns.

**Kkə ya gəŋ Doŋ.**  
We F2 go Sabongida.  
*We shall go to Sabongida.*

**ŋashi ma keeh’la Gabushi, ŋgona bə Nfali.**  
Nashi P1 teach-PERF Gabushi, Ngona and Nfali  
*Nashi taught Gabushi, Ngona and Fali.*

## **7    Need for further improving the orthography**

Any new orthography needs to be used for a time before problems can be identified. Though this version has already gone through a decade of testing and is therefore considered as much improved, future scholars or other linguists may still need to improve it further yet. In particular, the area of minimal pairs is likely to be revised and new distinguishing methods added as people come across new confusing pairs of written lexical words. We however hope that this proposal will contribute to enabling speakers of Naami to make a breakthrough in learning to more easily read and write their language.

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## 9 Appendix: Tone Lexical Minimal Pairs with Arbitrary Spelling Conventions

The following is a list of minimal pairs in Naami where the words are spelled the same except for the tone on the words. The words are listed first as minimal pairs, followed by their tone pattern and then in bold typing is the spelling in current use for each word and finally the English meaning.

Mininal pairs	Tone	Current Naami spelling	Gloss
ba	M	<b>bah</b>	<i>marriage</i>
ba	L	<b>ba</b>	<i>always/remain</i>
bia	H	<b>biah</b>	<i>married</i>
bia	L	<b>bia</b>	<i>slap</i>
bə	H	<b>bə́</b>	<i>they</i>
bə	H	<b>bə́</b>	<i>them</i>
bə	L	<b>bə</b>	<i>you (pl)</i>
bəche	M M	<b>bəche</b>	<i>forefathers</i>
bəche	M H	<b>bəcheh</b>	<i>gods</i>
bəŋ	L	<b>bəŋ</b>	<i>you (pl)</i>
bəŋ	M	<b>bəŋŋ</b>	<i>my</i>
bəŋ	H	<b>bəhŋ</b>	<i>this</i>
bəŋ	H	<b>bbəŋ</b>	<i>which</i>
kidaŋ	LH	<b>kidahŋ</b>	<i>local tattoo on the face</i>
kidaŋ	L L	<b>kidaŋ</b>	<i>table</i>
bii	M	<b>biih</b>	<i>his</i>
bii	MH	<b>bii</b>	<i>ask</i>

biŋ	M	<b>biŋ</b>	<i>dance (v)</i>
biŋ	L	<b>biŋŋ</b>	<i>my</i>
biŋ	H	<b>biŋŋ</b>	<i>this</i>
biŋ	H	<b>bbiŋ</b>	<i>which</i>
bo	H	<b>boh</b>	<i>ice</i>
bo	M	<b>bo</b>	<i>hammer</i>
bu	H	<b>buh</b>	<i>heaven</i>
bu	H	<b>bu</b>	<i>like/ash</i>
bwi	M	<b>bwih</b>	<i>famine</i>
bwi	H	<b>bwi</b>	<i>dog</i>
bwii	M	<b>bwiih</b>	<i>his</i>
bwii	H	<b>bwii</b>	<i>fire, arrive</i>
cha	HL	<b>chah</b>	<i>story</i>
cha	L	<b>cha</b>	<i>poison (n.)</i>
cha	H	<b>cha</b>	<i>old man</i>
chu	H	<b>chu</b>	<i>God</i>
chu	H	<b>chu</b>	<i>turn</i>
chu	H	<b>chuh</b>	<i>palm nut</i>
chu	H	<b>chu</b>	<i>excrement</i>
chi	M	<b>chih</b>	<i>cover of something</i>
chi	L	<b>chi</b>	<i>put</i>
chi	H	<b>chi</b>	<i>waist</i>
da	H	<b>dah</b>	<i>scrotum</i>
da	L	<b>da</b>	<i>commit</i>
dəŋ	L	<b>dəhŋ</b>	<i>decorate</i>

dəŋ	HM	<b>dəŋ</b>	<i>also</i>
du	H	<b>du</b>	<i>gossip</i>
du	H	<b>du</b>	<i>stomp</i>
du	H	<b>duh</b>	<i>make someone angry</i>
du	H	<b>du</b>	<i>harass</i>
duŋ	M	<b>duŋ</b>	<i>stay</i>
duŋ	L	<b>duhŋ</b>	<i>be</i>
duŋ	L	<b>duŋ</b>	<i>happen</i>
fa	L	<b>fa</b>	<i>calculate</i>
fa	L	<b>fa</b>	<i>check</i>
fa	L	<b>fah</b>	<i>carve</i>
fii	M	<b>fiih</b>	<i>his</i>
fii	H	<b>fii</b>	<i>burn, turn</i>
finchiŋ	L L	<b>finchiŋh</b>	<i>curse</i>
finchiŋ	L L	<b>finchiŋ</b>	<i>bead</i>
fiŋ	L	<b>fiŋŋ</b>	<i>my</i>
fiŋ	H	<b>fiŋh</b>	<i>this</i>
fiŋ	H	<b>ffiŋ</b>	<i>which</i>
ga	L	<b>ga</b>	<i>divise</i>
ga	L	<b>ga</b>	<i>distribution</i>
ga	H	<b>gah</b>	<i>transfer</i>
gaa	M	<b>gaah</b>	<i>ache</i>
gaa	M	<b>gaa</b>	<i>break</i>
gaa	M	<b>gaa</b>	<i>circle</i>



gbu	L	<b>gbuh</b>	<i>boat</i>
gbu	H	<b>gbu</b>	<i>foot</i>
gbu	HM	<b>gbu</b>	<i>yesterday</i>
hlaa	M	<b>hlaah</b>	<i>govern</i>
hlaa	L	<b>hlaa</b>	<i>first/before/clear</i>
			<i>cutting</i>
hlaanə		<b>hlaahnə</b>	<i>judge (n)</i>
ka	L	<b>kah</b>	<i>pass/complete</i>
ka	M	<b>ka</b>	<i>charcoal/wrap</i>
kə	M	<b>kkə</b>	<i>we</i>
kə	M	<b>kə</b>	<i>not</i>
kə	L	<b>kə</b>	<i>slap</i>
kə	M	<b>kəh</b>	<i>shift in time</i>
kee	L	<b>kee</b>	<i>look</i>
kee	MH	<b>keeh</b>	<i>teach</i>
kilaŋ	L H	<b>kilahŋ</b>	<i>small clear pot</i>
kilaŋ	L L	<b>kilaŋ</b>	<i>order/decreed</i>
kii	M	<b>kiih</b>	<i>his</i>
kii	H	<b>kii</b>	<i>month</i>
kinchaa	M HL	<b>kinchaah</b>	<i>a flame for</i>
			<i>weaving bag</i>
kinchaa	L HL	<b>kinchaa</b>	<i>light</i>
kinduŋ	L L	<b>kinduŋ</b>	<i>life</i>
kinduŋ	L L	<b>kinduhŋ</b>	<i>nature</i>

kiŋ	L	<b>kiŋ</b>	<i>win</i>
kiŋ	M	<b>kiŋ</b>	<i>serpent</i>
kiŋ	M	<b>kiŋŋ</b>	<i>my</i>
kiŋ	H	<b>kihŋ</b>	<i>this</i>
kiŋ	H	<b>kkiŋ</b>	<i>which</i>
kwaa	L	<b>kwaah</b>	<i>tie heart</i>
kwaa	H	<b>kwaa</b>	<i>only</i>
kwoo	H	<b>kwooh</b>	<i>cup</i>
kwoo	M	<b>kwoo</b>	<i>head</i>
kpa	H	<b>kpah</b>	<i>drag/drive</i>
kpa	ML	<b>kpa</b>	<i>field</i>
kpe	L	<b>kpeh</b>	<i>bachelor</i>
kpe	HM	<b>kpe</b>	<i>woman</i>
lo	HL	<b>loh</b>	<i>anger/hurt</i>
lo	L	<b>lo</b>	<i>weave</i>
lii	M	<b>liih</b>	<i>his</i>
lii	M	<b>liih</b>	<i>remove from its</i>
			<i>handle</i>
ma	L	<b>ma</b>	<i>compare</i>
ma	H	<b>mah</b>	<i>mother</i>
maa	M	<b>maa</b>	<i>gun</i>
maa	L	<b>maah</b>	<i>with/and</i>
məŋ	M	<b>məŋŋ</b>	<i>my</i>
məŋ	H	<b>məhŋ</b>	<i>this</i>
məŋ	H	<b>mməŋ</b>	<i>which</i>
mii	M	<b>miih</b>	<i>his</i>

mii	M	<b>mii</b>	<i>to press</i>
mun	M	<b>munɔ</b>	<i>my</i>
mun	H	<b>muhɔ</b>	<i>this</i>
mun	H	<b>mmun</b>	<i>which</i>
mwa	M	<b>mwah</b>	<i>white ants</i>
mwa	HM	<b>mwa</b>	<i>your mother</i>
niɔ	L	<b>niɔ</b>	<i>work (v)</i>
niɔ	L	<b>niɔ</b>	<i>fear (v)</i>
niɔ	H	<b>niɬɔ</b>	<i>refuse (v)</i>
niɔ	H	<b>niɔ</b>	<i>bite (v)</i>
nu	H	<b>nuh</b>	<i>knee</i>
nu	H	<b>nu</b>	<i>this</i>
ɲəɲ	L	<b>ɲəɲ</b>	<i>uproot</i>
ɲəɲ	M	<b>ɲəɲ</b>	<i>see</i>
ɲəɲ	M	<b>ɲəɲɲ</b>	<i>my</i>
ɲəɲ	H	<b>ɲəɬɲ</b>	<i>this</i>
ɲəɲ	H	<b>ɲɲəɲ</b>	<i>which</i>
ɲii	M	<b>ɲiih</b>	<i>his</i>
ɲii	ML	<b>ɲii</b>	<i>shell of porcupine</i>
ɲka			
ta	MH	<b>tah</b>	<i>father</i>
ta	H	<b>ta</b>	<i>sting</i>
tɔ	M	<b>tɔh</b>	<i>three</i>
tɔ	L	<b>tɔ</b>	<i>burst</i>

wɛɛ	H	wɛɛ	<i>weed (v.)</i>
wɛɛ	ML	wɛɛh	<i>farm (n.)</i>
wɛɛ	M	wɛɛ	<i>part (n)</i>
wɛɛ	M	wɛɛ	<i>build (v)</i>
wɛɛ	L	wɛɛ	<i>slow</i>
wii	M	wiih	<i>his</i>
wii	H	wii	<i>stop crying</i>
wu	M	wu	<i>him</i>
wu	H	wuh	<i>feet</i>
wuŋ	M	wuŋŋ	<i>my</i>
wuŋ	H	wuhŋ	<i>this</i>
wuŋ	H	wwuŋ	<i>which</i>
ya	M	yah	<i>redeem</i>
ya	H	ya	F3
yii		yiih/yíih	<i>his/class 10</i>
yii		yii	<i>name, type of pepper</i>