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Nchane Orthography Guide

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This paper concerns the Nchane language spoken in Misaje Subdivision, Donga-Mantung Division, in the North West Region of Cameroon.

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This is a revised version of the Nchane Orthography Guide written by Boutwell and Boutwell in 2008. As with any new orthography, problem areas with the orthography were identified once it began to be used by the community. Many of these problems were addressed when the orthography guide was revised by Esther Zubot in 2017. The main change made in the 2017 version was the elimination of the vowel *ɔ* from the Nchane alphabet, resulting in Nchane writing six rather than seven vowels. Other revisions made in 2017 were adjustments to the sections on long vowels and nasal vowels, considerable expansion to the guidance given for word division, as well as the addition of sections dealing with hortative constructions and future constructions.

This current revision seeks to deal with further problems observed in the preparations for typesetting of the New Testament. These changes include: updated guidance on hortative constructions and adjectives, and the addition of sections on imperative constructions, relative pronouns and special spellings.

It should be noted that the current orthography guide is not in complete harmony with the observations provided in the latest Nchane grammar description (Boutwell 2020). However, these inconsistencies should not result in any complications in the implementation of the current orthography, as presented in this guide.

Abbreviations

1s	first-person singular
2s	second person singular
3s	third person singular
1p	first person plural
2p	second person plural
3p	third person plural
AM	associative marker
CO	completer
COP	copula
IMP	imperative
IPFV	imperfective
LOC	locative
n	noun
NMLZ	nominalization
P3	remote past
PAST	past
PFV	perfective
pl	plural
REL	relative pronoun
QM	question marker
v	verb
σ	syllable
Ø-	zero affix

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1 Introduction

This paper proposes an orthography for Nchane, an Eastern Beboïd Language spoken by about 22,000 people in the Misaje Subdivision, Donga-Mantung Division, North-West Province, Republic of Cameroon. Dieu and Renaud (1983) in the *Atlas Linguistique du Cameroun* (ALCAM) list the language as: Ncane [873]. The *Ethnologue* (Eberhard, Simons & Fennig 2020) lists the following language names as variations: Cane, Ncane, Nchaney, Nchanti, Ntshanti. The ISO 639-3 code is [ncr]. The language area comprises five principal villages: Nkanchi, Chunge, Nfume, Kibbo and Bem, each of which have their own **fon** ("chief"). It is reported that Kibbo and Bem have slight dialectal variations from the other villages.

A phonological analysis of three languages, of which Nchane was one, was done by Russell Richards (1991), mainly from a wordlist collection. Jean-Marie Hombert (1980) studied the noun classes of the Beboïd languages, of which Nchane was included. Nathan Kimbi (2010) completed a dissertation in which he proposed a pan-Misaje language, with Nchane being the central language. Other than that, SIL linguists have written a number of papers on Nchane. Boutwell and Boutwell have written a phonology sketch (2014). Richard Boutwell has written a grammar sketch (2010), a paper on anaphoric demonstratives (2018), a paper on tone in the noun phrase (2015), and a dissertation description grammar (2020). Esther Zubot has written a paper on Nchane vowels (2016). Outside of this research, the authors are not aware of any other linguistic research that has been performed on Nchane.

This particular document was prepared with the assistance of several language informants, notably Shey Tamfu Ephriam from Nfume and Emmanuel Chambang from Bem. Special thanks go to Foncha Sasha for his help with the 2017 revision, and the Nchane Bible translation team (named below).

The data utilised in this document comes mainly from a 1700 wordlist collected by Richard Boutwell in 2007. The wordlist provides most of the example words. Chila Frederick, Kilese Samuel, Ngong Raphael, Soka Sylverius and Kinlo Ancela helped with revising and editing the wordlist and provided additional examples. Example sentences come from data collected between 2005 to 2008 and 2018 to 2020 by Richard Boutwell, and data collected by Esther Zubot between 2015 to 2017.

2 Alphabet

The Nchane segmental alphabet is made up of 21 consonants and 6 vowels. They are represented below in upper and lower cases:

A a, B b, Ch ch, D d, E e, Ɛ ɛ, F f, G g, Gb gb, Gh gh, I i, J j, K k, Kp kp, L l, M m, N n, Ny ny, Ŋ ŋ, O o, S s, Sh sh, T t, U u, W w, V v, Y y.

2.1 Consonants

The consonant phonemes, their allophones and graphemes are presented in the table below. The chart also shows their occurrence in various positions in the word.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/b/	[b]	B b	beede <i>crying</i>	jebe <i>mushroom</i>	—
/t/	[t ^h]	T t	tɛde <i>stone</i>	kite <i>wood</i>	—
/d/	[d]	D d	dunye <i>show!</i>	bvudɛɛ <i>bridge</i>	—
	[d] ~ [ɾ] ¹		—	fɛde <i>winnow!</i>	—
/k/	[k ^h]	K k	kanɛ <i>squeeze!</i>	bikɛɛ <i>pockets</i>	—
/kp/ ²	[kp]	Kp kp	kpa <i>flying snake</i>	kinɪkpweŋ <i>lazy person</i>	—
/g/	[g]	G g	gaa <i>divide!</i>	chuge <i>wash!</i>	—
/gb/ ²	[gb]	Gb gb	ŋgbame <i>be sour</i>	fɛgbwe <i>shoulder</i>	—
/ɣ/	[ɣ] ~ [j] ³	Gh gh	ghaa <i>enthroned!</i>	kighaŋ <i>young person</i>	—

¹ The allophones [d] and [ɾ] are in free variation word medially between identical vowels, [d] elsewhere.

² The phonemes /kp/ and /gb/ are rare and are considered minor phonemes.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/tʃ/	[tʃ]	Ch ch	cho <i>carved</i>	bachii <i>fathers</i>	—
/dʒ/	[dʒ]	J j	jí <i>hoes</i>	kijine <i>mat</i>	—
/f/	[f]	F f	fi <i>helped</i>	kife <i>time</i>	—
/s/	[s]	S s	sa <i>judged</i>	yese <i>greeted</i>	—
/ʃ/	[ʃ]	Sh sh	shii <i>chicken</i>	bvushi <i>face</i>	—
/m/	[m]	M m	mee <i>oil</i>	kome <i>harp</i>	—
/n/	[n]	N n	naa <i>cow</i>	gine <i>egg</i>	—
/ɲ/	[ɲ]	Ny ny	nya <i>gave</i>	chunye <i>packed</i>	—
/ŋ/	[ŋ]	Ŋ ŋ	ŋaane <i>crawled</i>	nyanje <i>fed</i>	faŋ <i>to deny</i>
	[Ṽ] ⁴		—	—	beeŋ <i>climbed</i>
/l/	[l]	L l	lege <i>ran</i>	bvule <i>lion</i>	—
/w/	[w]	W w	waan <i>market</i>	chiwon <i>villages</i>	—
	[v] ⁵	V v	—	kibvule <i>sky</i>	—

³ Whereas /y/ seems to be a phoneme of Nchane, it is only pronounced as such in some (especially upper Nchane) dialects. Lower Nchane speakers generally use the sound [j]. Upper Nchane is spoken in the villages of Kibbo and Bem, lower Nchane in Nkanchi, Chunge and Nfume.

⁴ The choice of **ŋ** at the end of a word for signifying a nasalised vowel stems from speakers' intuition and work that has been done in the surrounding languages. There is no contrast between words ending in nasalized vowels and words ending in [ŋ]. In general, only long vowels at morpheme boundaries can be nasalised. /ŋ/ is the only consonant that appears in the word-final position.

⁵ The allophone [v] is a special case which is addressed in Section 2.1.4.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/j/	[j]~[ɟ] ⁶	Y y	ye <i>house</i>	tɛye <i>hang! (sth.)</i>	—

2.1.1 Prenasalised Consonants⁷

One kind of consonant cluster found in Nchane consists of a non-nasal consonant preceded by a nasal consonant. With the exception of the consonant **l**, both consonants of the cluster are produced at the same place of articulation.⁸ Most consonants may be preceded by such homorganic nasal consonants (symbolised by “N” below), as shown in the following chart.

Consonant Cluster	Allophones	Grapheme	Initial position	Medial position	Final position
/Nb/	[mb]	Mb mb	mbaa <i>sauce</i>	fimbi <i>kola nut</i>	—
/Nt/	[nt]	Nt nt	nto <i>palace</i>	kinta <i>bed, chair</i>	—
/Nd/	[nd]	Nd nd	nduŋ <i>hawk</i>	kindoŋ <i>neck</i>	—
/Nk/	[ŋk]	ŋk ŋk	ŋka <i>salt</i>	fiŋkoo <i>cup</i>	—
/Ng/	[ŋg]	ŋg ŋg	ŋgu <i>fire</i>	bvuŋga <i>strength</i>	—
/Ngb/	[ŋgb]	ŋgb ŋgb	ŋgbame <i>be sour</i>	—	—

⁶ The [j] and [ɟ] are in free variation in all environments, although there appears to be some personal/dialectal preference as to when it is [j] and when it is [ɟ]. The speakers themselves tend to perceive the phoneme as /j/.

⁷ Word initially, the nasal of prenasalised consonants is syllabic (tone-bearing) but not contrastive (always low tone), whereas word medially the tone shifts to the preceding vowel of the homorganic NC sequence.

⁸ The velar nasal /ŋ/ seems to be the underlying form of the nasal found in Nchane. The authors theorise that the liquid consonant /l/ may represent a weaker consonant thus precluding the normal nasal assimilation. Furthermore, nasal assimilation does not apply at the stem-suffix boundary, as evidenced by the causative verb **daŋse** ‘to spread’.

Consonant Cluster	Allophones	Grapheme	Initial position	Medial position	Final position
/Ntʃ/	[ɲtʃ]	Nch nch	nche <i>medicine</i>	kinche <i>residence</i>	—
/Ndʒ/	[ɲdʒ]	Nj nj	njiese <i>blessing</i>	munjege <i>smoke</i>	—
/Nf/	[ɲf] ~ [mf] ~ [nf] ⁹	Nf nf	nfa <i>eagle</i>	kinfune <i>maize</i>	—
/Ns/	[ns]	Ns ns	nsaŋ <i>friend</i>	kinsuŋ <i>yam</i>	—
/Nʃ/	[ɲʃ]	Nsh nsh	nshɛŋ <i>ground, land</i>	finsho <i>mud wasp</i>	—
/Nl/	[ɲl]	ŋl ɲl	ɲlo ¹⁰ <i>poison (n)</i>	kinlaa <i>kingfisher</i>	—

2.1.2 Palatalised Consonants

Another type of consonant cluster is where the second consonant is the palatal glide [j], which is written in Nchane as **i** when preceded by a consonant and followed by a vowel. There is a relatively small number of words containing these palatalized consonants, as seen in the following three instances.

Phoneme	Allophone	Grapheme	Initial position	Medial position	Final position
/bj/	[bj]	Bi bi	bia <i>young banana plant</i>	fimbieŋ <i>arrow</i>	—
/fj/	[fj]	Fi fi	fiɛ <i>bush rat</i>	—	—
/mj/	[mj]	Mi mi	miage <i>blinked</i>	fimimia <i>one (c19)</i>	—

⁹ The [ɲ], [m] and [n] occur in free variation before [f].

¹⁰ This word is pronounced [nlo] by some speakers.

2.1.3 Labialised Consonants

A third consonant cluster is where the second consonant is the labiovelar glide [w], which is always written in Nchane as **w**. The glide follows the majority of the consonants, as seen in the table below.

Phoneme	Allophones	Grapheme	Initial position	Medial position	Final position
/bw/	[bw]	Bw bw	bwee <i>his mother</i>	—	—
/kw/	[kw]	Kw kw	kwii <i>moon</i>	kikwεε <i>head</i>	—
/kpw/	[kpw]	Kpw kpw	kpwele <i>bachelor</i>	kilakpwa <i>grasshopper</i>	—
/gw/	[gw]	Gw gw	gwe <i>fell</i>	kigwεεŋ <i>owl</i>	—
/tʃw/	[tʃw]	Chw chw	chwε <i>witch</i>	—	—
/dʒw/	[dʒw]	Jw jw	jwεŋse <i>man</i>	kijwii <i>boundary</i>	—
/fw/	[fw]	Fw fw	fwe <i>pregnancy</i>	banfwa <i>slaves</i>	—
/ʃw/	[ʃw]	Shw shw	shwayε <i>husk! (corn)</i>	—	—
/mw/	[mw]	Mw mw	mwe <i>garden</i>	bamwanga <i>rabbits</i>	—
/ŋw/	[ŋw]	Ŋw ŋw	ŋwa <i>book</i>	baŋwan <i>granaries</i>	—

2.1.4 Labio-dental Fricative Offglides

Nchane exhibits a small number of consonants followed by a labio-dental fricative offglide.¹¹ This modification occurs at least with the consonants **b**, **ch**, **g**, **k**, **j**, and **y**. When these consonants are labialised before the vowel **u**, the labialisation is realised as a [v] in the case of voiced consonants, and as an [f] in the case of voiceless consonants. The labio-dental off-glide is written **f** after **k**, and **v** after all other consonants.¹² Note that the consonant **v** only occurs in the context of the labio-dental offglide and therefore does not represent a full phoneme in the language (being just a phonetic variant of /w/). The chart below shows the occurrence of the labio-dental offglides in various positions in the word.

Phoneme	Allophones	Grapheme	Initial position	Medial position	Final position
/bw/	[bv]	Bv bv	bvu <i>dog</i>	fibvuŋ <i>spoon</i>	—
/kw/	[kf]	Kf kf	kfu <i>rope</i>	kikfune <i>rat</i>	—
/gw/	[gv]	Gv gv	gvune <i>feather</i>	kingvu <i>duck</i>	—
/tʃw/	[tʃf]	Chv chv	chvu <i>excreta</i>	munchvu <i>weevils</i>	—
/dʒw/	[dʒv]	Jv jv	jvu <i>cobra</i>	—	—
/jw/	[jv]	Yv yv	yvu <i>hair</i>	—	—

¹¹ This labio-dental offglide is also seen in Nooni, but occurs with a greater variety of consonants (Andrus & Lux 2009). The Nchane offglide varieties may be considered as allophones of the labialised consonants /**bw**/, /**chw**/, /**gw**/, /**kw**/, /**dʒw**/ and /**jw**/ (where, before the back high vowel [u], the [w] becomes a [v] or an [f] depending on the voicing of the preceding consonant). Note that Boutwell analyses this phenomenon as involving a fricative vowel rather than as an allophone of labialization (2020: 37–39). Both of the alternative analyses call for the same kind of representation in the orthography. Therefore, the original analysis has been maintained in this current revision of the orthography guide.

¹² Even though the labio-dental fricative offglide is realized as [f] after a voiceless [tʃ], the language committee perceives it as [v] and therefore, has decided that it will be written as **v**.

2.1.5 Consonant Orthography Rules

Various rules regarding 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:

1. Never write **h** without a **c** or **s** in front of it, except in the case of certain borrowed words, and in special spellings.
2. The only consonant that can be word-final is **ŋ**.
3. If you hear a nasal before **b**, always write **m**.
4. If you hear a nasal before **t**, **d** and **f**, always write **n**.
5. If you hear a nasal before **k**, **g**, **kp** or **gb** always write **ŋ**. The only exception is in writing the village name of **Nkanchi** due to the historical precedent established.
6. If you hear a different prenasal consonant, write what you hear.
7. Never write a **v** without another consonant in front of it.

2.2 Vowels

The Nchane language has six vowel phonemes, presented with their allophones and proposed graphemes in the table below. The chart also shows their occurrence in various positions in the word.¹³

¹³ The original orthography guide recognized seven vowel phonemes, with /o/ in addition to the six vowels given here. As the orthography began to be used, writers had difficulty distinguishing the three back vowels. A follow up study of the vowel system by Zubot (2016) recognized only two back vowels, thus reducing the vowel inventory to six. Boutwell (2020) studied the vowel system again and found that the vowel system does in fact have three back vowels, although the back vowel inventory includes the fricative vowel /^Fu/, which follows a relatively small number of consonants and is always realized with friction. This vowel is therefore always written with a preceding letter sequence of a consonant followed by a fricative. This means that the same vowel letter, namely **u**, can be used to represent the two phonemes /^Fu/ and /o/ (the latter of which is analysed as /u/ in this guide) without any confusion. See Boutwell 2020:37-39 for more details.

Phoneme	Allophones	Grapheme	Initial position	Medial position	Final position
/i/	[i]	I i	—	bine <i>dance</i>	bvubi <i>bundle</i>
	[ɪ] ¹⁴		—	kite <i>tree</i>	luji <i>becoming</i> <i>bitter</i>
/u/	[ʊ]	U u	—	chuge <i>wash!</i>	ngu <i>crop</i>
	[ɯ] ~ [u] ¹⁵		—	gvune <i>feather</i>	bvu <i>dog</i>
/e/	[e] ¹⁶	E e	—	lege <i>ran</i>	je <i>road</i>
	[ɪ]		—	chefe <i>sneeze!</i>	—
	[ə]		—	—	jone <i>being good</i>
/ɔ/	[ɔ]	O o	—	gone <i>search!</i>	finsho <i>mud wasp</i>
/ɛ/	[ɛ] ¹⁷	ɛ ɛ	ɛɛŋ ¹⁸ <i>yes</i>	lege <i>begging</i>	je <i>word</i>
	[ə]		—	kwɛŋ <i>firewood (sg.)</i>	fune <i>fly!</i>
/a/	[a]	A a	abɛŋ <i>today</i>	kane <i>squeeze!</i>	bvuya <i>shame</i>

¹⁴ [ɪ] occurs mostly in prefixes, and after palatal sounds. There is also a certain amount of free variation and speaker preference concerning the use of [i] versus [ɪ].

¹⁵ These allophones occur after labio-dental fricative off-glides (see section 2.1.4 below).

¹⁶ There is a lot of variation between the different possible pronunciations of /e/. Which sound is used seems to depend partly on speaker preference, and partly on the prominence and tone of the syllable. More research needs to be done.

¹⁷ Most often /ɛ/ becomes [ə] before or after a velar consonant; however, it is noted that [ɛ] occurs word final after a velar and exceptions are evident. It is suspected that these phones are to some extent in free variation and/or there are speaker variations.

¹⁸ This is the only instance of /ɛ/ at the beginning of a word. Moreover, it has to be noted that this /ɛ/ is both nasalised and long.

2.2.1 Long Vowels

Nchane exhibits contrastive vowel length. All vowels have short and long counterparts. Examples of contrast between short and long vowels in nouns are given below:

Phonemic	Phonetic	Orthographic	Gloss
/ŋka:/	[ŋkà:]	ŋkaa	<i>basket</i>
/ŋka/	[ŋká]	ŋka	<i>salt</i>
/tʃe:/	[tʃē:]	chee	<i>ratmole</i>
/tʃe/	[tʃé]	che	<i>palm kernel</i>
/tʃwɛ:/	[tʃwē:]	chwɛɛ	<i>latrine</i>
/mwɛ/	[m ^w ɛ]	mweɛ	<i>farm</i>
/fi:/	[fī:]	fii	<i>wind</i>
/fi/	[fí]	fi	<i>kidney</i>
/ŋgɔ:/	[ŋgō:]	ŋgoo	<i>line of people walking</i>
/ŋgɔ/	[ŋgó]	ŋgo	<i>termite</i>
/nsu:/	[n ^s ū:]	nsuu	<i>pepper (gen.)</i>
/nsu/	[n ^s ú]	nsu	<i>shin</i>

2.2.2 Nasalised Vowels

Nchane is in the process of developing a contrast between nasal and oral vowels. At this point in the history of the language, there is contrast between oral and nasal long vowels in word-final position as illustrated below. There are five vowels that have nasal counterparts: /a:/, /ɛ:/, /i:/, /ɔ:/ and /u:/.

Phonemic	Phonetic	Orthographic	Gloss
/ʃi:/	[ʃī:]	shii	<i>to (be) deep</i>
/nʃi:ŋ/	[n ⁿ ʃī:]	nshiin	<i>to (be) silent</i>
/tʃwɛ:/	[tʃwē:]	chwɛɛ	<i>latrine</i>
/nshwɛ:ŋ/	[n ⁿ ʃwē:]	nshween	<i>pounding stick</i>
/kika:/	[kíká:]	kikaa	<i>foot</i>
/fika:ŋ/	[fikâ:]	fikaan	<i>calabash for oil</i>
/su:/	[sū:]	suu	<i>put on a string!</i>
/su:ŋ/	[sū:]	suun	<i>beat!</i>
/kɔ:/	[kó:]	koo	<i>catch!</i>
/kɔ:ŋ/	[kō:]	koon	<i>love!</i>

3 Tone

3.1 *Historical Perspective*

There is much discussion regarding the best way to write orthographic tone. In writing tone in Cameroonian national languages, after a brief period of marking (phonetic) surface tone, most languages began the practice of marking (phonemic) lexical tone. Over the years, linguists have begun to recognise the importance of other options (see for example, Lux & Lux 1996).

Among the Beoid languages, Noonni began writing tone markings on every syllable (with mid-tone represented as unmarked). A few years later, Noonni orthographic tone underwent extensive research to determine the best way to represent tone such that people can read and write most easily (Lux & Lux 1996; Andrus & Lux 2009). The goal in revising the Noonni tone orthography was “to reduce the number of diacritic marks on a printed page to the largest extent possible, while still adequately representing [the tone’s] functions in the language. What resulted was a system in which the former tone diacritics [` , ´ , ^ , ˇ] no longer carry the sense of spoken tone, but instead perform grammatical and lexical disambiguating functions” (Andrus & Lux 2009: 18). The revised Noonni tone orthography underwent field testing and is now being utilised quite successfully by the Noonni Literacy Committee.

The initial Nchane tone orthography guide proposed a system similar to that found in Noonni, using minimal marking of tone. The implementation of this approach was closely monitored and additional research on the function of Nchane tone was carried out, resulting in further refinements to the tone orthography, appearing in the 2017 and 2020 orthography guide revisions. The remainder of this section presents a discussion of basic phonological tone in Nchane as well as certain diacritics used in marking distinctions in grammatical meaning.

3.2 *Basic Nchane Tone*

Seven tone melodies have been identified in Nchane. There are three level tones: high (H), mid (M) and low (L); and four contour tones: high-mid (HM), high-low (HL), mid-low (ML) and mid-high (MH).

		Tone	Notation	Phonetic Representation
Level		High	H	ˈ
		Mid	M	-
		Low	L	ˋ
Contour	Falling	High-Mid	HM	ˊ
		High-Low	HL	ˆ
		Mid-Low	ML	ˋ
	Rising	Mid-High	MH	ˊ

In the 2008 corpus of 1215 words, approximately 250 belong to minimal tone pairs. All tones are well represented in the minimal pairs with the exception of rising tones, which are comparatively rare. Some examples are given in the chart below.

Tone	Phonetic	Orthographic	Gloss
H	[tʃóŋ]	choŋ	<i>thief</i>
M	[tʃē]	che	<i>tree branch</i>
L	[lè]	le	<i>oath</i>
HM	[gɔ́ŋ]	goŋ	<i>bamboo (pl)</i>
HL	[mfû]	nfu	<i>stirring stick</i>
ML	[nâ]	na	<i>cow</i>
MH	[tʃwé]	chwe	<i>witch</i>

3.3 Lexical Tone Contrasts

Tone in Nchane is contrastive and performs a lexical function by differentiating between two or more words that are otherwise identical. The following tone minimal triplet illustrates the presence of lexical tone:

Phonetic	Gloss
[ŋgò]	<i>canoe</i>
[ŋgō]	<i>food (that has not yet been harvested)</i>
[ŋgú]	<i>fire</i>

Lexical tone is usually not written, since there are relatively few tone minimal pairs or triplets which can be confused with each other. Literacy efforts have shown that not marking lexical tone in Nchane results in very little difficulty. For the few words that can be confused with each other, special spellings are used to eliminate the confusion. The rules for special spellings are given in section 4 below and the present list of all such special spellings is included in the Appendix.

3.4 Grammatical Tone Contrasts

Nchane tone also performs grammatical functions. Three of these functions are explained below along with how they are represented orthographically.

3.4.1 Singular and plural

There are eight genders in Nchane. While most gender pairings are clearly marked for singular and plural by the presence of different prefixes, that distinction for gender 9/10 nouns is indicated only by a difference of pitch on the noun root. Class 9 is the singular form of the noun and Class 10 is the plural. The distinction between the two classes is a relatively higher tone for Class 10.¹⁹ Examples of different phonetic tone for gender 9/10 nouns in Nchane are shown below.

Tone for 9 vs. Tone for 10	Class 9 (singular)	Class 10 (plural)	Gloss
Low – High	[bjèŋ]	[bjéŋ]	<i>fish</i>
Mid – High	[bī]	[bí]	<i>goat</i>
Low – Falling ML	[dʒì]	[dʒĩ]	<i>hoe</i>
Falling ML – H	[gwī]	[gwí]	<i>guinea fowl</i>
Rising MH-H	[bvú]	[bvú]	<i>dog</i>

The orthographic convention in Nchane is to only mark Class 10 with a high tone diacritic on the vowel and to leave Class 9 vowels unmarked, as is done in Noon. In polysyllabic words, the high tone is marked only on the first syllable of class 10 words, and on long vowels, the tone is marked only on the first vowel. Here are some examples written orthographically:

¹⁹ This general distinction of relative difference in tone has also been observed by Hombert (1980: 91). He states that “tone differences are found on the stem with relatively lower tones associated with the singular form [Class 9].”

<u>Class 9</u>	<u>Gloss</u>	<u>Class 10</u>	<u>Gloss</u>
shii	chicken	shíi	chickens
bi	goat	bí	goats
mbee	a grasshopper	mbée	grasshoppers
joo	tear	jóo	tears
ji	hoe	jí	hoes
jε	voice	jé	voices
chane	headpad	cháne	headpads
chuma	locust	chúma	locusts

3.4.2 Hortative

Hortative constructions differ from their respective indicative constructions solely in terms of tone. There are perfective and progressive hortative forms. In both cases, hortative clauses should be marked with a circumflex ^ on the first vowel of the main verb²⁰. Below, examples of hortative and indicative constructions are contrasted.

Bo jεme. *They spoke.*

Bo jême. *They should speak.*

Bo jeme. *They are speaking.*

Bo jême. *They should be speaking.*

Often, the verb with the hortative marking will be near the beginning of the sentence as in the examples above. But it can also appear later. Here is an example to illustrate.

Nto bæ yi, wɔ nyâ wu le. *I will bring it and you should (then) give it to him.*

²⁰ The author suggested that the marking for hortative should be placed near the beginning of the clause, since the high tone associated with hortative constructions is usually pronounced on the subject of the clause. But this suggestion has not been accepted by the community, who seem to prefer the marking on the verb.

3.4.3 Imperative after a subject

Commands (also known as Imperatives) are verb-initial clauses pronounced with a high tone on the verb and are written with an exclamation mark at the end of the sentence. Sometimes, when clarifying who the imperative is meant for when various possibilities are present, the verb-initial imperative clause will be preceded by a noun phrase that functions as an interjection, apposition or theme but may look like a subject. When this happens, the overall sentence can be confused with other kinds of sentences. Therefore, these imperative sentences that appear to have a subject need to be written with a comma following the noun phrase so that you recognize the verb-initial clause to be a true imperative, as the examples below show.

Wu, guu fimbi!

You, buy a kola nut!

Jwaan, shile feku!

My husband, sit down!

3.4.4 Future versus Present Perfect

The particle *le* is present in future constructions as well as present perfect constructions. These two sentence types differ in that future constructions are pronounced with a high tone on the subject coming before the main verb instead of the normal lexical tones on the subject. To ensure that future and present perfect sentences are not confused with each other, the *le* that appears in the future sentence is always written with an upwards slanted accent above the vowel, as shown in the examples below.

Wo le wo yu yo.

You have killed a snake.

Wo lé wo yu yo.

You will kill a snake.

Wu le wu ji nyan.

He has eaten meat.

Wu lé wu ji nyan.

He will eat meat.

3.4.5 Relative pronouns

Relative pronouns and personal pronouns (as well as associative markers) generally are spelled with the same letters and can sometimes be confused with

each other. To eliminate this confusion, relative pronouns are always written with a low tone diacritic, as shown below.

Bo chee kinche kì jone wese.	<i>They were living a life that was very good.</i>
Mε le bε nche yì yu bikfunε.	<i>I have medicine that kills rats.</i>
Wu yeŋ le le ŋlo wù boon baa ji.	<i>He saw that it was poison that those children ate.</i>
Chi be Nji wù chi nya mbvuun Tada le.	<i>It was Nji who gave Tada wine.</i>

The one exception to this rule is the 3p relative pronoun **ba**, which cannot be confused with the 3p personal pronoun **bo**. Therefore, the 3p relative pronoun is written without the low tone diacritic, as shown in the example below.

Boon ba gè to fwe gè be boon ba kwεse wεε.	<i>The children who came first were the children of that woman.</i>
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4 Special writing rules

As mentioned in section 3.3 above, a relatively small number of words differ from each other only in their tone. In many cases, which word is intended can be understood because they belong to different word classes. For example, **kome** [kómè] ‘harp’ and **kome** [kómé] ‘scratch’ are not likely to be confused with each other because one is a noun and the other is a verb. In other cases, there is no confusion because of the context, either what has been written earlier in a text or what verb or noun appears with the word. For example, **kfuu** [kfū:] ‘rope’ and **kfuu** [kfú:] ‘family’ have such different meanings and appear with very different verbs, such that they are not likely to be confused with each other.

When context is not enough to make it clear which word is intended, or if the two words often appear in the same sentence making it harder to read, then one of the similar words will have a special spelling. This section describes the guidelines for such special spellings and a few examples to illustrate.

4.1 Guidelines for special spellings

When two words are identified which can be confused with each other because they are spelled the same way, the word which occurs the least in common usage should be spelled with a silent *h* so that the two words are distinct from each other. When there are more than two words that can be confused with each other, special spelling should be applied to the word which will get rid of the confusion the best. The placement of the silent *h* depends on what word class the word belongs to. If the word is something other than a verb (e.g., nouns, demonstratives, numbers, etc.), then the *h* will be written after the final vowel of the word.²¹

Examples:

Orthographic	Phonetic	Gloss	Orthographic	Phonetic	Gloss
mu	[mū]	<i>some</i>	bane	[bānē]	<i>these (c2)</i>
muh	[mũ]	<i>person</i>	baneh	[bānê]	<i>four (c2)</i>

This strategy is further illustrated in the following set of examples using imaginary words of different shapes.

na	bii	beŋ	kikama	fitindun
nah	biih	behŋ	kikamah	fitinduhŋ

When the word needing special spelling is a verb, then the silent *h* should be written after the first vowel of the verb (or the second vowel when the vowel is doubled, as in **biih**). This strategy is simple to teach and does well at maintaining the word image, even with the different forms of progressive marking. The imagined

²¹ In the unlikely event that a noun from gender 5/6 requires special spelling and is of the type where the singular form has a longer stem than its plural counterpart, the recommendation is to maintain the rule of placing the *h* after the final vowel of the words. For example, **gvuneh/agvuhŋ** (c5/c6). This strategy results in the *h* appearing in a different position relative to the letters of the noun root and therefore, the word image is not maintained well. However, an alternative strategy would likely be more difficult to teach. Careful testing of the special spelling in this case is called for, and adjustments made if problems are encountered.

example sets below illustrate this strategy applied to the four different verb groups, which vary in respect to how the progressive form is realised.

Syllable shape	Verb 1	Verb 2	Verb 1	Verb 2
	Perfective		Progressive	
CV	bɛ	bɛh	bɛɛ	bɛɛh
CV(C) ²²	bɛ	bɛh	bɛge	bɛhge
CVŋ	bɛŋ	bɛhŋ	bɛne	bɛhne
CVCV	bɛge	bɛhge	bɛge	bɛhge

4.1.1 Summary of special spelling guidelines

Whenever words are identified which have the same letters and differ only by tone (or otherwise are found to be confused when reading), the following steps should be taken in order to devise a special spelling for one of the words.

1. Ask if the words are similar enough in category and/or meaning to be confused with each other. If no, then no special spelling is called for. If yes, continue to step 2.
2. Ask which one of the words is used the least in speaking and or writing, or causes the most confusion. This is the word that should be spelled in a special way, which is explained in steps 3 and 4.
3. If the word is a verb, then add an *h* after the first vowel (e.g., **mɛhŋ** or **mɛhne**).
4. If the word is not a verb, then add an *h* after the last vowel, but before any final consonant (e.g., **kibah** or **kibahŋ**).

4.2 Remote past tense marker (P3)

The remote past tense marker **ge** [gɛ̃] appears at first to not need any special spelling, since it usually is not confused with any other word. However, when it appears in the same sentence with the negative marker [gɛ̃] and/or the word for

²² The parentheses around this second C indicates that the perfective form has a CV shape, while the progressive form has a CVCV shape. This second consonant is believed to belong to the verb root rather than the progressive suffix, since several different consonants are seen in different verbs, including **d**, **g** and **l** (e.g., **bide** ‘asking’, **yuge** ‘hearing’ and **koole** ‘catching’ respectively).

‘only’ [gɛ́], the sentence can be difficult to read. To alleviate this problem, the P3 marker is written with the low tone diacritic as gɛ̀, which follows the pattern of several other Misaje languages.²³ Meanwhile, the word for ‘only’ follows the special spelling rule and is written with the silent *h*. These spelling conventions are illustrated in the example below.

Gɛ gɛ̀ ge gɛh wu fɛ wu gwe gɛ. *He was not the only one that caused her to fall.*

4.3 Ideophones

Ideophones are words that represent some physical quality of the entity referred to, such as sound or movement. These words are special in that they are often pronounced with lengthened vowels and consonants, depending on the intensity or dramatic effect desired by the speaker. Writers may choose to write three or more vowels or consonants for greater impact. But the simplest spellings should usually include a doubling of the final consonant or vowel. This is illustrated in the examples below.

shiinj	<i>silence</i>	wuuu	<i>loud noise</i>
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5 Word Forming

5.1 Nouns class prefixes

In writing nouns, all noun class prefixes will be written as part of the nouns as shown below. (Note that gender 9/10 is discussed in section 3.4.1 above.)

Class	Singular Marking	Example	Gloss	Class	Plural Marking	Example	Gloss
1	Ø-	naa	<i>cow</i>	2	ba-	banaa	<i>cows</i>
3	Cw	bweŋ	<i>mosquito</i>	4	C	bɛŋ	<i>mosquitoes</i>
5	Ø-	gine	<i>egg</i>	6	a-	agiŋ	<i>eggs</i>
7	ki-	kige	<i>tooth</i>	8	bi-	bige	<i>teeth</i>
9	σ	ji	<i>hoe</i>	10	ó	jí	<i>hoes</i>
14	bvu-	bvudɛɛ	<i>bridge</i>	6a	maN-	mandɛɛ	<i>bridges</i>

²³ For example, Naami writes **ma** and **mà** for P2 and P3 respectively, and Kemedzung writes **nə** and **nə̀** for P2 and P3 respectively.

Class	Singular Marking	Example	Gloss	Class	Plural Marking	Example	Gloss
19	fi-	finyii	<i>bird</i>	18a	mu-	munyii	<i>birds</i>
5	Ø-	kome	<i>harp</i>	27	chi-	chikome	<i>harps</i>

5.2 Demonstratives

Nchane has four different demonstratives, the spatial demonstratives **wune** (close) and **wuge** (distant), and the anaphoric demonstratives **wεε** (non-focused) and **wuyu** (focused). Nchane demonstratives have a noun class prefix which agrees with the head noun and a root that carries the main demonstrative meaning. Just like nouns, demonstratives are also written together with their prefix as one word. Examples of some demonstratives in different noun classes are given below.

c1

c2

mwa wune

this child

boon bane

these children

mwa wuge

that child

boon бага

those children

mwa wεε

the child (of whom we have already spoken)

boon baa

the children (of whom we have already spoken)

mwa wuyu

that (particular) child

boon bayu

those (particular) children

c9

c10

bi yine

this goat

bí chine

these goats

bi yege

that goat

bí chege

those goats

bi yεε

the goat (of whom we have already spoken)

bí chieε

the goats (of whom we have already spoken)

bi yiyu

that (particular) goat

bí yiyu

those (particular) goats

5.3 Possessive pronouns

Possessive pronouns also consist of a noun class prefix, and a root that carries the meaning. In many cases, the prefix and the root have merged; in some forms the prefix vowel gets deleted if the root starts with a vowel. Prefix and ending are written as one word for all possessive pronouns. Below are some examples of possessive pronouns in different noun classes and different persons.

1s	c9	bi yaŋ	<i>my goat</i>	c8	bite biaŋ	<i>my sticks</i>
2s	c9	bi yo	<i>your goat</i>	c1	mwa yo	<i>your child</i>
3s	c9	bi ye	<i>his/her goat</i>	c14	bvuŋga bwe	<i>his/her strength</i>
1p	c9	bi yese	<i>our goat</i>	c7	kikoo kisa	<i>our forest</i>
2p	c9	bi yene	<i>your (pl.) goat</i>	c6	ason awene	<i>your palm trees (pl.)</i>
3p	c9	bi yiboo	<i>their goat</i>	c2	banaa baboo	<i>their cows</i>

5.4 Numbers from 1-5

The numbers from 1 to 5 also have a noun class prefix that agrees with the noun that they are modifying. The numbers are written together with the noun class prefix.

Examples:

bi yimimia	<i>one goat</i>	mwa wumumwa	<i>one child</i>
bí yifiɛ	<i>two goats</i>	banaa bafɛ	<i>two cows</i>
bí yishɛdɛ	<i>three goats</i>	atutu atadɛ	<i>three potatoes</i>
bí yiniɛ	<i>four goats</i>	banto banɛ	<i>four palaces</i>
bí yishɛŋ	<i>five goats</i>	maŋko matɛŋ	<i>five ladders</i>

5.5 Quantifier *chii*

The only true quantifier in Nchane is ***chii*** ‘all’. It takes a noun class prefix that agrees with the noun that it is modifying. It is written together with the prefix as one word. ***Chii*** can even be used with singular nouns to give the meaning ‘all of’ or ‘the whole’.

Examples:

kite kichii	<i>the whole tree</i>	bamii bachii	<i>all people</i>
ye yichii	<i>the whole house</i>	bí yichii	<i>all goats</i>
kfuu chichii	<i>the whole family</i>	munyii munchii	<i>all birds</i>

5.6 Indefinite pronoun *mu/mi*

Nchane also has an indefinite pronoun ***mu/mi*** ‘some, a certain one’²⁴. It can be used with singular and plural nouns. It takes a noun class prefix that agrees with the noun that it is modifying. As always, the root is written together with the prefix as one word. At this point it is not clear whether the root varies according to phonological criteria, free variation or semantic considerations.

Examples:

kite kimu	<i>some/a certain tree</i>	bite bimi	<i>some trees</i>
kijuse kimi/kimu	<i>a certain place</i>	manjuse mamu	<i>some places</i>
mu mu	<i>somebody</i>	bamii bamu/bami	<i>some/certain people</i>

5.7 Compound nouns

Compound nouns consist of two nouns that are joined without the presence of an associative marker, but often the final vowel of the first noun is lengthened. This construction is not very productive in Nchane. It seems that only class 1, 9 and

²⁴ Often ***mu*** and ***mi*** are interchangeable with no meaning difference, with speakers of upper Nchane tending to use ***mu***. But there are also certain words where everybody agrees that only one of the two roots can be used, for example only ***ye yimi*** ‘a certain house’ is possible, but not ****ye yimu***.

10 nouns may serve as the first noun of these compounds. The two nouns of the compound are pronounced quickly with no pause between them and are written together as a single word.

Examples:

mwabwee *brother or sister*

child.his.mother

nyishii *cock*

??..fowl

ŋgoonkwɛɲɛ *elbow*

??..arm.length

cheen̄kfu *widower*

his.father.deceased

5.8 Associative noun phrase

An associative noun phrase is a construction in which two nouns are linked by an associative marker. In Nchane, the associative marker agrees with the preceding noun (N1). It is written as a separate word.

Examples:

bansa ba kinfi *unjust judgments* **mwɛɛ mu kinfi** *unjust things, injustice*

naa wu
mwabwoo *your brother's cow* **banaa ba**
mwabwoo *your brother's cows*

kite ki afe *plum tree* **waan̄ wu afe** *market for plums*

Even when the associative maker is not clearly pronounced in normal speech, if it is there in careful speech, it will be written. Especially the associative markers for class 1 (**wu**), and classes 9 and 10 (**yi**) are often not clearly pronounced in rapid speech, but still written.

Examples:

muh wu nche *medicine man*

ye yi kincheŋ *hospital*

5.9 Relative clauses

Relative clauses begin with a relative pronoun, which agrees with the noun it follows in noun class. The relative pronoun has the same form as the corresponding associative marker, although tone on the relative pronoun depends on the position of the noun that it is replacing. In contrast, tone on the associative marker depends on which class it agrees with. For example, the class 1 associative marker always has a low tone, while that for class 3 always has a high tone. Meanwhile, the class 3 relative pronoun has a high tone if the noun it replaces is a subject and a mid tone if the replaced noun is an object. See Boutwell (2020: 113 and 271–282) for more details. Just like the associative marker, the relative pronoun is written as a separate word.

Examples:

ki-ncheŋ kɪ njiŋse bɛ muh *a debilitating illness*

c7-sickness c7.REL torment with c1.person

muh wù sage bansa *judge*

c1.person c1.REL judge c2.judgment

5.10 Adjectives and attributive verbs

Nchane has very few true adjectives. So far *fɛŋ* ‘new’ is the only true adjective in the database, although there certainly could be others. When it modifies a noun, it has an agreement word which depends on the modified noun. In addition, it is pronounced with a “w” after the first consonant of the root when modifying nouns from certain classes. Adjectives are usually written with the agreement word separately.

Examples:

kinta ki fɛŋ *new chair* **kwii wu fwɛŋ** *new moon*

Note that in some cases, the agreement element can be written together with the adjective. The specific context for when it is written together versus separately is not clear, but speakers appear to know intuitively when to write it together.

In most cases, Nchane uses attributive verbs where English uses adjectives. One indication of their verbal nature is that they can be followed either by the verbal completer **lo** or by the adverb **wa** ‘already’ just like other verbs. In contrast, the true adjective presented above can never be followed by **lo** or **wa** in any sentence.

Examples:

Bi-ge duude lo. *There is a lot of money.*
c8-money be.much CO

Nju kuge lo. *The dress is big.*
c9.dress be.big CO

Kwɛse wune juŋ wa. *This woman is already old.*
c3.woman c3.this be.old already

Even though many people attach the **lo** or **wa** directly to the verb when they speak, in written Nchane, especially in the Nchane Bible, these are written as separate words.

Examples:

chɛnɛ lo *to be sick* do not write **chɛnoo**

juŋ wa *to be old* do not write **juŋa**

Attributive verbs are separated from the nouns which they describe by an agreement marker which is always written as a separate word.

Examples:

ngone wu yeele ripe banana

je yi kuge big road

finyo fi nyoonyi small knife

kfuu wu kfufe short rope

kite ki teeme hard stick

5.11 Adverbs

Nchane also has adverbs. Adverbs are words that modify or qualify an adjective, verb or other adverb or word group. Even when they follow a noun, they do not take an associative marker. They are written as separate words.

Examples:

fiee seŋ nothing

fiee le chuule the thing is fine

5.12 Completers

Nchane has two completers: **le** comes at the end of certain noun phrases and prepositional phrases, and **lo** comes after verbs in certain sentences to make the sentence complete. Both of these completers are always written as separate words.

Examples:

fe kidan le at the slab a kikoo kisa le in our forest

Mwa chene lo. The child is sick. Mwa lege lo. The child is running.

5.13 The forms “a” and “fɛ”

A and fɛ can be prefixes, written together with a root to form a word, or words that are written separately. This section discusses how to know if they should be written attached to a word or separately.

5.13.1 The form “a”

The plural prefix a-

A- is the class 6 noun prefix. Class six is a plural class. Like all noun class prefixes, a- is attached to the noun whenever it is a class 6 prefix.

Examples:

afe	plums	plural of fele	plum
agin	eggs	plural of gine	egg

The locative preposition a

A is also a locative preposition, and as such is written as a separate word. It does not replace the noun’s own prefix if it has one, and the noun phrase is followed by the completer le.

Examples:

a kikoo kɛ le	in that forest	kikoo keeps its own ki-, it is not ako
a banto bisa le	in our palaces	banto keeps its own ba-

If the noun is modified by a possessive or a demonstrative, those will follow the noun and take the prefix that agrees with the noun’s regular class.

Examples:

a kite kine le	inside this tree
a kikɛ kan le	in my bag

The locative noun prefix *a-*

A- is also a locative prefix for class 18 nouns. In the English translation, there will often but not always be a preposition such as ‘in’, ‘on’, or ‘to’. The general meaning of the locative **a-** is ‘in’.

Examples:

aje *on the road*

ajiŋ *behind*

akuu *under*

akfuŋ *outside*

antene *in the middle*

The c18 prefix replaces the normal noun class prefix of some nouns. In this case, the ending of the word will often but not always change as well.

Examples:

kikoo *forest* **ako** *in the forest*

kintuŋ *ear* **antunu** *inside of the ear*

njeŋ *nose* **anjenyi** *inside of nose*

kintaŋ *night* **antaŋ** *in the night*

With nouns belonging to class 18, a possessor will come in between the prefix and the noun, the result being that the prefix will be written as a separate word at the beginning of the phrase.

Examples:

a mɛ jii *in my eye*

a wo je *on your road*

a boo ntene *in their midst*

5.13.2 The form “fɛ”

The locative preposition *fɛ*

Fɛ can be a locative **preposition**. In this case, it will not replace the noun’s own prefix, and it is written separately from the noun. The completers **le** or **fo** come at the end of the noun phrase.

Examples:

fɛ ye le *at the compound*

fɛ kijuse kimi le *somewhere*

If the noun is modified by a possessive or a demonstrative, those will follow the noun and take the prefix that agrees with the noun’s regular class.

Examples:

fɛ ye yo le *at your compound*

fɛ kidan kɛɛ le *at that slab*

The locative noun prefix *fɛ-*

Fɛ- is also a locative prefix for class 16. In this case, ***fɛ-*** is written together with the noun. It replaces the noun’s normal noun class prefix, if the noun has one. Even though some Nchane speakers pronounce the locative prefix or preposition ***fɛ-*** as ***fo-***, it is always written ***fɛ-***.

Examples:

fenta *on the bed* **fɛ + kinta**

fɛkuu *on the ground* **fɛ + kuu**

fɛkfunj *at home* **fɛ + kfunj**

With nouns belonging to class 16, a possessor may come in between the prefix and the noun, the result being that the prefix will be written as a separate word at the beginning of the phrase.

Examples:

fɛka	<i>palm of hand</i>	fɛ mɛ ka	<i>the palm of my hand</i>
fɛnta	<i>bed</i>	fɛ wo nta	<i>on your bed</i>
fɛmwɛɛne fɛɛ	<i>at that farm</i>	fɛ wo mwɛɛne	<i>at your farm</i>

The conjunction *fɛ* “before”

Fɛ can also be a **conjunction** which means ‘when’ or ‘as’. It has the same form and pitch as the locative preposition. As with the locative preposition, the conjunction *fɛ* is written separately from the word which follows it.

Examples:

Mbe mboge Misaje, fɛ ntasɛ bɛ mu. *I was going down to Misaje, when I met somebody.*

Bo bvun̄ jébe fɛ bo lee ako. *They discovered mushrooms as they entered the forest.*

5.14 Short version of the first-person singular pronoun

The short version of the first-person singular pronoun should always be written together with the verb or verb particle, forming a single word.²⁵ Remember that whichever nasal consonant is to be written depends on the consonant that follows it.

²⁵ The author suggested in late 2020 to write the 1SG pronoun as a separate word, apart from the following verb or verb particle. This would have been consistent with the practice used with other agreement pronouns (e.g., 2SG, 1PL, etc.). It would also have made a clear distinction between the written form of a subject and verb sequence on the one hand, and a nominalized verb on the other (e.g., N sa nsa ‘I gave a judgement’). However, this suggestion was not accepted by the community, as it was thought to be difficult to read.

Examples:

nto	<i>I came</i>	mbii	<i>I followed</i>
nnya	<i>I gave</i>	ŋŋku	<i>I clapped</i>
n'yɛɛse	<i>I am greeting</i>	ŋ'waade	<i>I am quarrelling</i>

Notice from the examples above that when the verb begins with a nasal consonant, that nasal consonant will be written two times. Even though you cannot hear the first-person singular pronoun, it is still there in the grammar of the language and should be written. First person pronouns before verbs starting with **y** or **w** are followed by a raised bar. This is explained in section 5.16 below.

5.15 Nominalization

Many verbs can be made into nouns by adding a nasal consonant to the beginning of the word. The nominalizing prefix should always be written together with the verb root. Remember that whichever nasal consonant is to be written depends on the consonant that follows it.

Examples:

mbiile	<i>question</i>	bambiile	<i>questions</i>
mmbian	<i>lie</i>	chimmbian	<i>lies</i>
n'yɛye	<i>teaching</i>	ban'yɛye	<i>teachings</i>
ŋ'wan	<i>shout</i>	baŋ'wan	<i>shouts</i>

Just as in the case of first-person singular pronouns, the nominalizing prefix should be written, even when the prefix is not heard, which is the case when the verb begins with a nasal consonant. Also as with first-person singular pronouns, when the verb begins with a **y** or **w**, the nominalizing prefix should be written with a raised bar between it and the verb, as explained in section 5.16 below.

5.16 Ambiguous *ny* and *ɲw* sequences

Sometimes, a nasal consonant followed by a **y** or a **w** can be confusing to readers because it could be interpreted as representing a single phoneme (i.e., the letter **ny**) or the single morpheme sequence **ɲw** (i.e., the **ɲ** is a part of the root rather than a prefix coming before a word that begins with **w**). This is the case whenever the nasal consonant is the short first-person singular pronoun or the nominalizing prefix. To eliminate possible confusion, the following rule should be followed.

Whenever the short first-person singular pronoun occurs before a verb that begins with **y** or **w**, a raised bar should be written between the two letters.

Examples:

n̄yɛɛsɛ	<i>I am greeting</i>	ɲ̄waade	<i>I am quarrelling</i>
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In the same way, when the nominalizing prefix is added to a verb that begins with **y** or **w**, a raised bar should be written between the two letters. In order to maintain the word image, the raised bar should be used in both the singular and plural forms.²⁶

Examples:

n̄yeyɛ	<i>teaching</i>	ban̄yeyɛ	<i>teachings</i>
ɲ̄wan̄	<i>shout</i>	ban̄wan̄	<i>shouts</i>

²⁶ The author first suggested to use a hyphen for this purpose. This would have been easily recognized as indicating a prefix, since this is the symbol used in linguistic analysis and in many elementary school grammar textbooks. It also would have avoided the likely substitution of an apostrophe for the raised bar, since the apostrophe is present on all standard keyboards, while the raised bar is not. The Cameroonian Alphabet calls for the apostrophe to represent the glottal stop /ʔ/, which is present in some nearby languages, and is therefore discouraged from being used for any other purpose. However, Nchane writers began using the raised bar before the hyphen was suggested, and the proposal to change was not accepted by the community.

5.17 A summary of word division rules

5.17.1 Numbers and quantifiers

- Remember to attach the noun class marker to the numbers 1-5.
- Always attach the noun class marker to *chii* and *mu/mi*.

5.17.2 Compound nouns and associative noun phrases

- If there is a noun class marker in between the first noun and what follows, write everything apart. If there is nothing in between two nouns, write them as a single word.
- Pay special attention when the noun class marker is *wu* or *yi* because it is often not pronounced in rapid speech. If you know that it really is there in careful speech, then write it, even if you do not pronounce it clearly.

5.17.3 Adjectives and attributive verbs

- If you want to know if a word is an adjective, try if it can also be followed by *lo* or *wa* in another sentence. This means that it comes from a verb, and the noun class marker should be written separately.
- Adjectives should also normally be written with the noun class marker separately. But in some cases, the writer will know that it should be written together with the adjective.
- Even though many people add the *lo* or *wa* directly to the attributive verb when they speak, this is not what we write. When writing attributive verbs, do not write words that end in *-oo* or *-a*. Instead write *lo* or *wa* as separate words.

5.17.4 “a” and “fe”

- If *a* is a plural prefix, attach it to the noun. Example: *afu* ‘Bambara groundnuts’
- If there is a completer at the end of the phrase, or if the word following *a* or *fe* has its own noun class prefix, write them separate. In this case, *a* or *fe* is a preposition. Example: *a kite kinε le* ‘in this tree’

- If there is no completer, **a** or **fɛ** is usually a prefix which is written together with the noun. If there is a possessor in between the prefix and the word itself, three separate words will be written. Examples: **ajiŋ** ‘behind’, **fɛkuu** ‘on the ground’, **a mɛ ntunu** ‘in my ear’, **fɛ joo ntɛnɛ** ‘in the middle of the water’

5.17.5 First-person singular pronouns

- Always write the short first-person singular pronoun together with the following verb or verb particle as a single word. Examples: **mbii** ‘I am following’ and **mɛ ntu ŋgɛŋ nji** ‘I then went and ate’.

5.17.6 Nominalization

- Always write the nominalizing prefix together with the following verb root as a single word. Examples: **mbilɛ** ‘question’ and **nnya** ‘gift’.

5.17.7 Nasal consonant prefixes followed by y or w

- If the first-person singular pronoun occurs before a verb that begins with a **y** or **w**, then write a raised bar between the letters. Example: **n[̣]yu** ‘I heard’ and **ŋ[̣]waade** ‘I am quarreling’.
- If the nominalizing prefix is added to a verb that begins with **y**, then add a raised bar after the nasal consonant. Example: **ban[̣]yɛyɛ** ‘teachings’.

6 Punctuation and Capitalisation

The punctuation marks and rules that govern the Nchane language are similar to those for English. The punctuation marks used for Nchane are as follows:

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

6.1 Full Stop

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

Boon gime fenta.
children sleep.IPFV on.bed.
'The children are sleeping on the bed.'

John gude nyán fe kidaŋ le.
John buy.IPFV meat(pl) LOC slab CO
'John is buying meat at the slab.'

6.2 Question Mark

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

Mwabwoo le faane?
sibling.your COP QM(when)
'Where is your brother/sister?'

Kfuu le ne?
family COP QM(how)
'How is the family?'

Note that yes-no questions differ from their declarative counterparts only by the presence of a falling tone on the final syllable. Although there is no question marker (QM) in these sentences, the presence of the question mark is sufficient to inform the reader regarding proper pronunciation.

Wo jii belekaŋ?
2s eat.IPFV papaya
'Are you eating papaya?'

Wo jii belekaŋ.
2s eat.IPFV papaya
'You are eating papaya.'

6.3 Exclamation Mark

The exclamation mark (!) is written at the end of a command or following exclamatory words and phrases. It functions to express forceful comments and commands, interjections, surprise, and excitement.

Lege!

run.IMP

'Run!'

To chige!

come.IMP quickly

'Come quickly!'

6.4 Comma

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

Taŋe me nchi ŋkole bieŋ, nchi nlanje.
when 1s 1s.PAST 1s.catch.IPFV fish 1s.PAST 1s.happy
'When I caught a fish, I was happy.'

Jo ji, nyo, ŋkaa be fintan.
take hoe cutlass basket and seed
'Take a hoe, a cutlass, a basket and some seeds!'

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.

Mwεε mune le bε lεne mu mwεene: ji, nyo bε
things these COP with work AM farm hoe cutlass with

ngoba.

clearing stick

‘These things are for working in the farm: hoe, cutlass and clearing stick.’

6.6 Quotation Marks

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

Mu wu yeyi le wu du le, “Beŋ chi bε jwe.”
person who teach COP 3s say that 2p stop with noise

‘The teacher said, “You all be quiet.”’

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

6.7 Capitalisation

Capital letters are used at the beginning of sentences (see sections 6.1 to 6.6 above), following a colon (see section 6.5 above), at the beginning of direct speech in quotation marks (see section 6.6 above), and for proper nouns (illustrated below).

Ŋgoŋ bε Che le boon ba aman.

Ŋgoŋ and Che COP children AM twins

‘Ngong and Che are twins.’

7 Need for Further Testing of the Orthography

As an orthography is being used, people will become aware of areas that can be improved. One area that should be kept in mind as testing of the Nchane orthography goes on is the spelling of minimal pairs. As people become aware of more and more lexical minimal pairs, the guidelines for special spellings should be followed and the effectiveness of the strategy being used should be monitored closely.

The suggestions for how to best write hortative and imperative sentences are untested and somewhat novel in their approach (at least in the Misaje area). Therefore, these conventions should be followed up on later to ensure that people are able to easily learn them and can easily read and write the correct forms.

Another area that should be tested is word division, especially the difference between compound nouns and associative noun phrases, and the rules for **a** and **fe**. Are the rules for deciding what is a compound and what is an associative noun phrase clear enough so that people can consistently apply them? And concerning **a** and **fe**: Are the differences between prefix and preposition taught in such a way that people follow the rules and write consistently?

The author's hope is that the present orthography guide will be useful in the continual development of the Nchane language, and that necessary revisions and additions will happen in the future as their need becomes apparent.

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9 Appendix (Words with special spellings)

<u>Words with special spelling</u>				<u>Similar words</u>			
boh		go down (PFV)		bo		they	
baahŋ		much, large		baaŋ		white, shining	
				baaŋ		still	
muh		person		mu		they(c18a)	
c2 (banaa)	baneh			c2 (banaa)	bane		
c6 (agiŋ)	anah			c6 (agiŋ)	kane		
c8 (bite)	bineh			c8 (bite)	bine		
c10 (bí)	yinyeh	four		c10 (bí)	chine	these	
c25 (maŋko)	maneh			c25 (maŋko)	mane		
c26 (munyii)	muneh			c26 (munyii)	mune		
c27 (chifluŋ)	chineh			c27 (chifluŋ)	chine		
biih		ask		bii		follow	
The four forms of biih are:				The four forms of bii are:			
IMP	PFV	IPFV	NMLZ	IMP	PFV	IPFV	NMLZ
biih	biih	biihde	mbiih	bii	bi	bii	mbii
bohne		get well		bone		pierce, plant	
The four forms of bohne are:				The four forms of bone are:			
IMP	PFV	IPFV	NMLZ	IMP	PFV	IPFV	NMLZ
bohne	bohne	bohne	mbohne	bone	boon	bone	mbone
geh		only		ge		negative	
leh		make oath		le		to be	