# Sari Orthography Guide 

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

ISO 639-3 language code: asj
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This is a revised version of the Sari Orthography Proposal written by AKU Julius EYOH and Robert Hedinger in 2006. This orthography proposed the writing of tone as Nooni did at that time. Nooni, a related language, abandoned writing lexical tone before the New Testament was printed. They moved to marking certain grammatical constructions instead. In 2011, when the six Misaje languages started translating the New Testament, the choice was made to start without marking lexical tone. Sari, like most of the languages, marked the plural for gender 9/10. Boutwell (2011) revised the Orthography Proposal to reflect this change.

As with any new orthography, problem areas with the orthography were identified once it began to be used by the community. The main changes in this revision are an expansion of the chapter on word forming rules, word division in the case of locatives, special rules for nasal prefixes, and the use of the hyphen for the lengthening of vowels in certain constructions. The section on capitalization has also been expanded. There is now an added section on special spelling rules, and an appendix with words that have a special spelling because of ambiguity. The section on Grammatical tone contrasts deals with the possible confusion between perfective and imperfective aspect. Since at this moment the grammar of the Sari language has not been described in a separate paper, this paper has many footnotes for linguists and in the appendices certain future spelling issues have been described at greater length.

There is personal speech variation, especially for tone and length of vowels. In this guide, I tried to use examples that are known and pronounced with the same vowel length by all Sari speakers, and I point out certain differences that influence reading and writing.

## Abbreviations

1s first person singular
2s second person singular
3s third person singular
$1 \mathrm{p} \quad$ first person plural
$2 \mathrm{p} \quad$ second person plural
$3 p \quad$ third person plural
c noun class
CP completer ${ }^{1}$
IMP imperative mood
IPFV imperfective aspect
$\mathrm{N} \quad$ nasal consonant (m, n, ny and g )
NMLZ nominalization
P3 remote past tense
PFV perfective aspect
pl plural
PREP preposition
QM question marker
REAL realis mood
REL relative pronoun
SUB subject

Symbols used, other than the tone diacritics (shown further below):
/ / phonemic representation
[] phonetic representation
$<>$ orthographic proposal, not current orthography
~ alternative form (usually indicating free variation)

[^0]Tone diacritics:
, high tone
mid tone
low tone
high-mid tone
^ high-low tone
mid-high
mid-low tone
low-high tone
low-mid tone
n low-high-low
low-mid-low
Since the diacritics for low-mid-low do not fit on one vowel, the second part will be written on the second part of the coda (a second vowel or a syllable final nasal).

## TABLE OF CONTENTS

1 Introduction .....  1
1.1 Language and people ..... 1
1.1.1 Multilingualism .....  1
1.2 Language research .....  2
2 Alphabet ..... 4
2.1 Consonants ..... 4
2.1.1 Nasal-Consonant clusters ..... 6
2.1.2 Palatalized Consonants ..... 8
2.1.3 Labialized Consonants ..... 8
2.1.4 Consonant Orthography Rules ..... 10
2.2 Vowels ..... 11
2.2.1 Long vowels ..... 11
2.2.2 Nasalized vowels ..... 13
2.2.3 Vowel orthography rules ..... 14
3 Tone ..... 15
3.1 Historical Perspective ..... 15
3.2 Basic Sari Tone ..... 16
3.3 Lexical Tone Contrasts ..... 17
3.4 Grammatical Tone Contrasts ..... 18
3.4.1 Plural vs. Singular forms of Gender 9/10 ..... 18
3.4.2 Perfective versus imperfective aspect ..... 19
4 Special writing rules ..... 20
4.1 Ideophones ..... 20
4.2 Exclamations ..... 20
4.3 Biblical names and loanwords ..... 20
4.4 Special writing rules to distinguish words with different tones ..... 21
4.4.1 Special spellings using the $h$ ..... 21
4.4.2 Special spellings without the $h$ ..... 23
4.4.3 Summary of special spelling guidelines ..... 24
5 Word Forming ..... 26
5.1 Noun class prefixes ..... 26
5.2 Demonstratives ..... 27
5.3 Possessive pronouns ..... 28
5.4 Numbers ..... 29
5.4.1 Numbers from 1-5 ..... 29
5.4.2 Numbers above 10 ..... 30
5.5 Quantifier chu 'all' ..... 30
5.6 Indefinite pronoun mu 'a certain one, some' ..... 31
5.7 Compound words ..... 31
5.7.1 Proper nouns ..... 32
5.8 Associative noun phrases ..... 32
5.9 Relative clauses and Adjectives ..... 33
5.9.1 Adjectival kinds of uses of relative clauses ..... 33
5.9.2 True Adjectives ..... 34
5.10 Adverbs ..... 35
5.11 Reduplication ..... 35
5.12 The use of the hyphen - for lengthened vowels ..... 36
5.12.1 Prepositional phrase completer ..... 37
5.12.2 Associative phrase completer ..... 37
5.12.3 Méy ki 'not yet' ..... 38
5.12.4 The possessor of a locative noun ..... 38
5.13 Forms fe, li or lu , and $\mathrm{l} \varepsilon$ ..... 39
5.13.1 The locative prepositions $f \varepsilon$, $l \varepsilon$ and $l i$ ..... 39
5.13.2 The locative noun prefixes $f \varepsilon$-, $l \varepsilon$ - and $l i$ - ..... 40
5.13.3 Specification of location ..... 41
5.14 Short version of the first person singular prefix ..... 42
5.15 Verbal nouns ..... 42
5.16 Ambiguous ny and ŋw sequences ..... 43
5.17 Writing the realis marker with verbs ..... 44
5.18 A summary of word forming rules ..... 44
5.18.1 Numbers ..... 44
5.18.2 Compound words ..... 44
5.18.3 Adjectives and attributive verbs ..... 44
5.18.4 Reduplication. ..... 45
5.18.5 Hyphens and completers. ..... 45
5.18.6 Fe , li or lu , and $\mathrm{l} \varepsilon$ ..... 45
5.18.7 First person singular pronouns ..... 46
5.18.8 Verbal nouns ..... 46
5.18.9 Nasal consonant prefixes followed by y or w ..... 46
5.18.10 Writing the realis marker with verbs ..... 46
6 Punctuation and Capitalisation ..... 47
6.1 Full Stop ..... 47
6.2 Question mark ..... 47
6.3 Exclamation mark ..... 48
6.4 Comma ..... 48
6.5 Colon ..... 48
6.6 Quotation marks ..... 49
6.7 Capitalisation and names ..... 49
7 Further testing and recommendations ..... 51
8 References ..... 53
1 Appendix 1: Words with special spellings ..... 55
2 Appendix 2: Marking progressive aspect ..... 58
3 Appendix 3: Hortative mood ..... 61
3.1 Perfective hortatives ..... 62
3.2 Imperfective hortatives ..... 62
3.3 Negative hortatives ..... 63
4 Appendix 4: Orthographic function of the hyphen ..... 64
5 Appendix 5: Relative pronouns ..... 68

## 1 Introduction

### 1.1 Language and people

This paper proposes an orthography for the Sari language, spoken by the Besaa people in Misaje subdivision and classified in Ethnologue as follows: Sari [asj]: Niger Congo, Atlantic Congo, Volta Congo, Benue Congo, Bantoid, Southern, Beboid. Sari, as indicated in Ethnologue, is spoken by about 7,000 people in Misaje Subdivision, Donga-Mantung Division in the Northwest Region of Cameroon. Sari is located on both sides of the ring road between Misaje and Nkambe. The main Sari villages include Mbisa, Kamine and Akweto. Dieu and Renaud (1983) in the Atlas Linguistique du Cameroun (ALCAM) list the language as: Nsari [874]. The Ethnologue (Eberhard, Simons \& Fennig, 2020) has Sari as the language name, and lists the following as alternate language names: Akweto, Nsari, Pesaa, Saari, Sali (ISO 639-3 language code: asj). There are no major dialects in Sari, but there are personal speech variants. This concerns mainly some variation in vowel length and tone, and sometimes the use of a different vowel, or the contraction of two words.

### 1.1.1 Multilingualism

English is the language of instruction in schools. Although Sari has a high vitality of usage, Pidgin English is widely used in the Misaje area. In fact, Pidgin English is the language of wider communication in all Anglophone regions of Cameroon. The youth and also some older people tend to mix Sari with Pidgin English. Most people from Kamine and Mbissa have learned to understand Nchane, spoken in Misaje.
The neighbouring languages are Nchane, Naami, and Kemezung within the Beboid linguistic sub-family, and Limbum of the Nkambe linguistic sub-family (see language map below, map by Colin Davis. SIL 2015.) Thick lines show language boundaries, and the Ring Road. Large names in bold print are other Beboid languages, large names in regular print are languages from different language families.


### 1.2 Language research

Other research into the Sari language has been done by Jean-Marie Hombert (1980), who studied the noun classes of the Beboid languages (including Saari, as he spelled it). A phonological analysis of three languages, of which Sari was one, was done by Russell Richards (1991), mainly from a wordlist collection. Eyoh Julius wrote a Phonology sketch of Sari (2007). Bep Langhout wrote on tone in the noun phrase (2012) and on the noun class system (2015).

A Rapid Word Collection workshop was held in 2015, in which 16,000 words and phrases were collected, counting multiple senses. This will account for an estimated 5,000 words once the database is cleaned up. Nkenda Boniface Afuh, Tatoh Wilson Nformi and Bep Langhout are working on this huge task. These last two also collected topological data with a space stimuli kit (Bowerman, 1992).

This particular document was prepared with the assistance of several language informants: notably Tatoh Wilson Nformi, Nkimi Innocent, Nkenda Boniface Afuh, Mboro Victor Killey and Ndubi Divine Ayaba. Example sentences come from texts collected by the Bible Translators in 2011, and from data collected between 2011 and 2021 by Bep Langhout, and from the Sari New Testament (2022).

The Sari orthography was developed together with other Beboid language orthographies (formerly called Eastern Beboid), and an effort was made to have similar writing rules where the languages need to make the same distinction.

## 2 Alphabet

The Sari segmental alphabet is made up of 31 letters with 24 consonants and 7 vowels. They are represented below in upper and lower cases:
 kp, L 1, M m, N n, Ny ny, Ø y, O o, D o, P p, R r, S s, Sh sh, T t, Ts ts, 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 the word.

| Phoneme | Allophone | Grapheme | Initial <br> position | Medial <br> position | Final <br> position |
| :--- | :--- | :--- | :--- | :--- | :--- |
| /p/ | $[\mathrm{p}]$ | P p | puru <br> powerful person | kapinta <br> carpenter | - |
| /b/ | $[\mathrm{b}]$ | B b | bige <br> teeth | kiboo <br> sky | - |
| /t/ | $[\mathrm{t}]$ | T t | ta <br> stones | butuu <br> night | - |
| /d/ | $[\mathrm{d}]$ | D d | du <br> mortar | kidoo <br> caterpillar | - |
| /g/ | $[\mathrm{k}]$ | G g | ke <br> bowl | leke <br> beg <br> okra | bugoo <br> marriage |
| /kp/ | $[\mathrm{kp}]$ | Kp kp | kpe <br> trouble | fokpon <br> harmattan | - |
| /gb/ | $[\mathrm{gb}]$ | Gb gb | gbofi <br> bark (dog) | - |  |
| /ts/ | $[\mathrm{ts}]$ | Ts ts | tse <br> kernel | dzatse <br> leave | - |
| /dz/ | $[\mathrm{dz]}$ | Dz dz | dze <br> path | kidzo <br> grasshopper | - |


| /t $\mathrm{f} /$ | [tS] | Ch ch | chikuu squirrel | biche <br> look | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /d3/ | [d3] | J j | jobe <br> sun | bujoy good | - |
| /f/ | [f] | F f | finiiy <br> bird | tafi <br> ladle | - |
| /s/ | [s] | S s | $\begin{aligned} & \hline \text { seri } \\ & \text { deep } \end{aligned}$ | tasa <br> dish | - |
| / $/$ | [J] | Sh sh | shey <br> liver | tooshe <br> spread out to dry | - |
| /h/ | [h] | H h | hebee! exclamation | wohoo no | - |
| /1/ | $[1]{ }^{2}$ | L 1 | la compound | filoy <br> story | - |
|  | $[r] \sim[1]^{3}$ | R r | - | nduru corn | - |
| /w/ | [w] | W w | wi <br> person | kiwa <br> mouth | - |
| /j/ | [j] [ [3] | Y y | yo <br> snake | kiyo <br> elephant | - |
| /m/ | [m] | M m | mexy oil | fimu cat | - |
| /n/ | [n] | N $n$ | nime <br> work | tene <br> clay pot | - |
| /n/ | [n] | Ny ny | $\begin{array}{\|l\|} \hline \text { nyo } \\ \text { god } \end{array}$ | binyi <br> buttocks | - |
| /y/ | [y] | 7 7 | ŋכre <br> take greedily | geye <br> razor | chigon disease |
|  | [ $\mathrm{V}:]^{4}$ |  | -- | - | kitsээy <br> peace |

[^1]There are loanwords (mainly Biblical names) that are written with unusual wordfinal consonants. In Sari these word-final consonants are normally not pronounced, only people who know English will pronounce them. The words are transliterations of English words.
Examples: isob hyssop, meعr myrrh, Anas Annas.

### 2.1.1 Nasal-Consonant clusters

One kind of consonant cluster found in Sari are clusters where the first consonant is a nasal consonant that is pronounced at the same place of articulation as the following consonant. When these clusters are in word medial position, there is speaker variation concerning voicing of non labial plosives. ${ }^{5}$ For instance doonche or doonje demonstrate. At this moment there has not been a decision how to write these words, both forms are fine.

The consonants which are preceded by a homorganic nasal consonant (symbolized by " N ") are presented in the following chart:

| Consonant <br> Cluster | Allophone | Grapheme | Initial <br> position | Medial <br> position | Final <br> position |
| :--- | :--- | :--- | :--- | :--- | :---: |
| $/ \mathrm{Np} /$ | $[\mathrm{mp}]$ | Mp mp | mpiaru <br> to praise | pampa <br> oil tin | - |
| $/ \mathrm{Nb} /$ | $[\mathrm{mb}]$ | $\mathbf{M b} \mathbf{~ m b}$ | mbasi <br> broth | lembe <br> orange | - |
| /Nt/ | $[\mathrm{nt}]$ | Nt nt | nton <br> salt | fintu <br> nail | - |
| /Nd/ | $[\mathrm{nd}]$ | Nd nd | ndu <br> cloth | kindu <br> duck | - |
| /Nk/ | $[\mathrm{nk}]$ | nk yk | nkoma <br> chameleon | tayki <br> exorcise | - |

[^2]| Consonant <br> Cluster | Allophone | Grapheme | Initial position | Medial position | Final position |
| :---: | :---: | :---: | :---: | :---: | :---: |
| / Ng / | [ g g ] | 7g 9g | ngombe <br> plantain | buyga strength | - |
| /Nkp/ | [1mkp] | Mkp mkp | mkpay one | fimkpo wild wasp | - |
| /Ngb/ | [\mgb] | Mgb mgb | mgbanye <br> sour | - | - |
| /Nts/ | [nts] | Nts nts | ntson quarrel | kintsii place | - |
| /Ndz/ | [ndz] | Ndz ndz | ndzos <br> blight | kindzandzo <br> baboon | - |
| /Nt $5 /$ | [nt5] | Nch nch | nchuki <br> thousand | benchuki thousands | - |
| /Nd3/ | [nd3] | $\mathrm{Nj} \mathbf{~ n j}$ | njin <br> smoke | kinjiinjii shadow | - |
| /Nf/ | [mf] | Mf mf | mfoka <br> soldier ant | kimfime lip | - |
| /Ns/ | [ns] | Ns ns | nsey <br> nose | mensey corn silk | - |
| /NS/ | [ nf ] | Nsh nsh | nshe <br> ground | kinshiingi ${ }^{6}$ last | - |
| /Nl/ | [nl] | N1 nl | nloche <br> bitter | finla <br> flea | - |
| /Nw/ | [ ${ }^{\text {w }}$ ] | \'w y'w ${ }^{7}$ | y'wofu <br> neatness | kiy'wa bag | - |
| /Ny/ | [ỹ] | N'y n'y ${ }^{8}$ | n'yike audience | kin'yiygise scale | - |

[^3]
### 2.1.2 Palatalized Consonants

Another type of consonant cluster is where the second consonant is the palatal glide [j]. In Sari this is written as $\mathbf{i}$ when preceded by a consonant and followed by a vowel. Some of the consonants that precede this glide may be pre-nasalised. The consonants that may be modified by this palatal glide are all labial, and are shown in the following chart, including those that may be prenasalized.

| Phoneme | Allophone | Grapheme | Initial position | Medial position | Final position |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /pj/ | [pj] | Pi pi | pia <br> pear | bepia pears | - |
| /bj/ | [bj] | Bi bi | bio <br> raffia palm | kpabie <br> iguana | - |
| /fj/ | [fj] | Fi fi | fivy <br> thread | befioy <br> threads | - |
| /mj/ | [mj] | Mi mi | mǐy! <br> spark, shine | bimis muddy | - |
| Prenasalized palatalized consonants: |  |  |  |  |  |
| /mpj/ | [mpj] | Mpi mpi | mpiaru <br> to praise | fimpiey <br> drunkard |  |
| /mbj/ | [mbj] | Mbi mbi | mbiamfu soft | fimbiey arrow | - |
| /mfj/ | [mfj] | Mfi mfi | mfiee <br> fever | kimfie gossip | - |

### 2.1.3 Labialized Consonants

A third consonant cluster is where the second consonant is the labiovelar glide [w], which is always written in Sari as $\mathbf{w}$. The chart below shows instances of consonants followed by this glide, including those that can be prenasalised. ${ }^{9}$

[^4]| Consonant Cluster | Allophone | Grapheme | Initial position | Medial position | Final position |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /pw/ | [pw] | Pw pw | pwe <br> pancreas | pwapwa ${ }^{10}$ <br> always <br> available <br> (ideophone) | --- |
| /bw/ | [bw] | Bw bw | $\begin{aligned} & \text { bwi } \\ & \operatorname{dog} \end{aligned}$ | bebweey sacrifice | - |
| /dw/ | [dw] | Dw dw | dwaabaaa weak and soft (ideophone) | kidweebii ${ }^{11}$ <br> moss |  |
| /kw/ | [kw] | Kw kw | kwa money | kakwe owl | - |
| /gw/ | [gw] | Gw gw | gwent <br> in-law | bugwe <br> fight | - |
| /fw/ | [fw] | Fw fw | fware <br> rub | f\&fwa tip | - |
| /mw/ | [mw] | Mw mw | mwenye <br> drizzle | bemweso <br> in-laws | - |
| /lw/ | [lw] | Lw lw | lwetilweti ${ }^{12}$ <br> very slippery <br> (ideophone) | lwetilweti <br> very slippery <br> (ideophone) |  |
| / yw / | [yw] | Øw yw | yway <br> child | kiywaati <br> book | - |
| Prenasalized labialized consonants: |  |  |  |  |  |
| /mpw/ | [mpw] | Mpw mpw | mpwosy <br> very white <br> (ideophone) | - | - |
| /mbw/ | [mbw] | Mbw mbw | mbwaa <br> shield | bembwaa shields | - |

[^5]| Consonant Cluster | Allophone | Grapheme | Initial position | Medial position | Final position |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /ntw/ | [ntw] | Ntw ntw | ntweentwe <br> indian <br> bamboo (sg.) | ntwerntw $\varepsilon^{13}$ <br> indian bamboo (sg.) | - |
| / Jkw / | [ ykw ] | Пkw ykw | ykweye <br> sound | kiykweとy gossip | - |
| /ggw/ | [ngw] | Jgw ygw | ygwe <br> dew | leygwiy <br> shin | - |
| /mfw/ | [mfw] | Mfw mfw | mfwa <br> slave | lumfwe front | - |

### 2.1.4 Consonant Orthography Rules

There are various rules on which consonant to write where. Here is a partial list of consonant orthography rules:

1. Never write any consonant at the end of a word except $\mathbf{y}$. Exceptions are borrowed words (for instance Pכدl, Kamalon), ideophones (for instance mpoom sound of explosion), and special spelling words that are written with a silent h. ${ }^{14}$
2. If you hear a nasal consonant before $\mathbf{b}, \mathbf{p}, \mathbf{f}, \mathbf{k p}$, or $\mathbf{g b}$ always write $\mathbf{m}$ : $\mathrm{mb}, \mathrm{mp}, \mathrm{mf}, \mathrm{mkp}, \mathrm{mgb}$.
3. If you hear a nasal consonant before $\mathbf{t}, \mathbf{d}, \mathbf{s}, \mathbf{t s}, \mathbf{s h}, \mathbf{1}$ or $\mathbf{j}$, always write $\mathbf{n}$ : nt, nd, ns, nts, nsh, nl, nj.
4. If you hear a nasal consonant before $\mathbf{k}, \mathbf{g}$, or $\mathbf{w}$ always write $\mathbf{y}$ : ŋk, yg, ŋw.
5. Do not write u before another vowel, write w. Example:

Not kua but kwa money.
The exception is when a verb receives the ending $\boldsymbol{\rho}$ or $\boldsymbol{\rho}$, like tuu return, tuus return.realis.
6. Do not write $\mathbf{y}$ after a consonant and before a vowel, except when writing ny as a single consonant sound. In all other instances write $\mathbf{i}$ instead of $\mathbf{y}$. Example: Not fyon but fion thread.

[^6]
### 2.2 Vowels

Sari has 7 vowel phonemes. The Sari short vowels are presented with their graphemes in the chart below. The chart also shows their occurrence in various positions in the word. Vowels in word initial position are very rare.

| Phoneme | Allophone | Grapheme | Initial <br> Position | Medial <br> Position | Final <br> Position |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /a/ | [a] | A a | asee <br> juju type | ygafu <br> insult | fika cup |
| /e/ | [e] | E ${ }^{\text {e }}$ | e ee exclamation, negative | mbeen breasts | yge <br> much |
| /ع/ | [ $\varepsilon$ ] | $\mathcal{E} \varepsilon$ | $\boldsymbol{\varepsilon}$ | y घy <br> venom | kene proverb |
| /i/ | [i] | I i | ihiiy confirming exclamation | bine <br> dance | jumi <br> song |
| /o/ | [o] | 0 o | oprets <br> operator (loan <br> word) | mbose <br> colour | ygo canoe |
| /3/ | [〕] | 50 | $\boldsymbol{0}$ you | gэуย <br> spear | buks ladder |
| /u/ | [u] | U u | u wé that over there | muntey <br> small | kiku <br> beehive |

### 2.2.1 Long vowels

Sari has contrastive vowel length. All seven vowels have short and long counterparts. Examples of contrast between short and long vowels in nouns are given below.

| Phonemic | Phonetic | Orthographic | Gloss |
| :---: | :---: | :---: | :---: |
| /dzà:/ <br> /dzǎ/ | [dzà:] ${ }^{15}$ <br> [dzà] ${ }^{16}$ | $\begin{aligned} & \text { dzaa } \\ & \text { dza } \end{aligned}$ | back (n) <br> guinea corn |
| $\begin{array}{\|l} \hline \text { /Sé:/ } \\ \text { / Sé/ } \\ \hline \end{array}$ | [Jé:] <br> [Jé] | shée <br> shé | fowls <br> horns |
| $\begin{aligned} & \text { /t } \bar{\varepsilon}: / \\ & / \mathrm{t} \bar{\varepsilon} / \end{aligned}$ | [t $\bar{\varepsilon}:]$ <br> [ $\mathrm{t} \bar{\varepsilon}$ ] | tec <br> t $\varepsilon$ | trap! <br> hang up! |
| $\begin{array}{\|l} \hline \text { /d3ì:/ } \\ \text { /d3í/ } \end{array}$ | $\begin{aligned} & {\left[\mathrm{d}_{3} \mathrm{ì}\right]} \\ & {\left[\mathrm{d}_{3} \mathrm{i}\right]} \end{aligned}$ | jii <br> ji | put on, dress! eat! |
| $\begin{aligned} & \text { /kō:// } \\ & \text { /kō/ } \end{aligned}$ | [kō:] <br> [kō] | $\begin{aligned} & \text { koo } \\ & \text { ko } \end{aligned}$ | incubate! grow! |
| $\begin{aligned} & \text { /kȳ:/ } \\ & \text { /k̄̄/ } \end{aligned}$ | $\begin{aligned} & {[k \overline{\mathrm{y}}]} \\ & {[\mathrm{k} \bar{\jmath}]} \end{aligned}$ | $\begin{aligned} & \text { kכ } \\ & \text { ko } \end{aligned}$ | be sharp! pick! |
| /tfìkù:/ <br> /kìkù/ | [tjîkù:] <br> [kìkù] | chikuu kiku | squirrel <br> beehive |

In Sari, there are several words that some people pronounce with a short vowel, and others with a long vowel, for instance bunin and buniin men, beye and becye crack, peel. Both ways of pronounciation are correct here, and both ways of writing are correct.

The chart below also shows the occurrence of vowels in various positions in the word. Long vowels in word initial position are very rare, and occur only in exclamations or contractions.

| Phoneme | Allophone | Grapheme | Initial <br> Position | Medial <br> Position | Final <br> Position |
| :--- | :--- | :--- | :--- | :--- | :--- |
| /a:/ | [a:] | AA aa | aay <br> no | waay <br> gecko | gaa <br> red |
| /e:/ | [e:] | EE ee | Eeshia <br> Asia | sheey <br> splinter | shee <br> fowl |

[^7]| Phoneme | Allophone | Grapheme | Initial <br> Position | Medial <br> Position | Final <br> Position |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /ع:/ | [ $¢$ :] | $\varepsilon \varepsilon \varepsilon \varepsilon$ | - | yeen <br> same | tع $\varepsilon$ <br> three |
| /i:/ | [i:] | II ii | iiy <br> yes | dziin pig | bii <br> ask |
| /o:/ | [0:] | 0000 | oo Oh | doonki <br> date palm | kikoo head |
| /3:/ | [ 3 ] | วЗ эง | 30 <br> if you | lכoko cassava | koد <br> anus |
| /u:/ | [u:] | UU uu | - | nshuushe <br> spill | tuu <br> reply |

### 2.2.2 Nasalized vowels

There is contrast between oral and nasal long vowels in word-final position as illustrated below. All seven vowels have nasal counterparts:

| Phonemic | Phonetic | Orthographic | Gloss |
| :---: | :---: | :---: | :---: |
| /dza:/ <br> /dza:1/ | [dzà:] <br> [dzằ:] | dzaa <br> dzaay | $\begin{aligned} & \text { back (n) } \\ & \text { rain (n) } \end{aligned}$ |
| /Se:/ <br> / $\mathrm{e}: \mathrm{y} / \mathrm{y}$ | [ऽè:] <br> [ऽề:] | shee <br> sheen | fowl <br> splinter, tapper's knife |
| /fje:/ <br> /fje:1)/ | [fjē:] <br> [fjẽ̃:] | fie <br> fieq! | look, watch! predict, cast lots! |
| $\begin{aligned} & \text { /d3i:/ } \\ & \text { /d3i:y/ } \end{aligned}$ | $\begin{aligned} & {\left[\mathrm{d}_{3} \mathrm{ì}\right]} \\ & {\left[\mathrm{d}_{3} \mathrm{i}:\right]} \end{aligned}$ | jii <br> jiiy | put on, dress! jump! |
| /ko:/ /ko:1/ | [kō:] <br> [kõ̃:] | koo <br> koon | return! <br> drive away! |
| /wo:/ /wo:y/ | $\begin{aligned} & \text { [wゝ̄:] } \\ & \text { [woั̀:] } \end{aligned}$ | wวง <br> wวэŋ | clean the anus! roast! |
| /ju:/ <br> /ju:n/ | [jú:] <br> [jứ:] | yúu <br> yuuy | termites tails |

### 2.2.3 Vowel orthography rules

Various rules on which vowels can occur in which positions or which vowels can occur before and after which consonants are important to learn. Here is a partial list of vowel orthography rules:

1. Do not write $\mathbf{u}$ before another vowel, write w. Example:

Not kua but kwa money.
The exception is when a verb receives the ending $\boldsymbol{\supset}$ or $\boldsymbol{\supset}$, like tuu change, return, tuus change (specific).
2. Do not write $\mathbf{y}$ after a consonant and before a vowel, except when writing ny as a single consonant sound. In all other instances write $\mathbf{i}$ instead of $\mathbf{y}$.
Example:
Not fyon but fion thread.
3. Never write $\mathbf{i}$ between $\mathbf{s h}, \mathbf{c h}, \mathbf{j}$ and another vowel in the same syllable.

Example:
Not shiay but shay pit, kernel.
Not chieen but cheey true.
Not njiu but nju I pound.
But jio is eating is okay, these are two syllables.

## 3 Tone

### 3.1 Historical Perspective

There is much discussion these days regarding the best way to write orthographic tone. In writing tone in Cameroonian national languages, there was initially a tendency toward either surface tone marking or deep tone marking. Over the years, linguists have begun to recognise the importance of a balance between these two approaches (see for example, Lux \& Lux 1996).
So, among the Beboid languages, related language Nooni in 1996, initially wrote tone markings on every syllable (with mid-tone represented as unmarked). In recent years, Nooni orthographic tone has undergone extensive research to determine the best way to represent tone such that people can read and write most easily (Lux \& Lux 1996; Andrus \& Lux 2006). The goal in revising the Nooni 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 [` ,', ^, "] no longer carry the sense of spoken tone, but instead perform grammatical and lexical disambiguating functions" (Andrus \& Lux 2006:18). The revised Nooni tone orthography underwent field testing and is now being utilised quite successfully by the Nooni Literacy Committee.

The initial Sari orthography guide (2007) suggested marking tone like the initial Nooni orthography. However, when literacy and translation started in 2011, a tone orthography with minimal marking of tone was used. The implementation of this approach was closely monitored and additional research on the function of Sari tone was carried out, resulting in further refinements to the tone orthography. Because there are many minimal tone pairs for Sari words in isolation, which may be hard in literacy, some testing was done in 2018 on writing certain tone distinctions ${ }^{17}$. The outcome was that for now consistent marking of lexical tone would not be written.

[^8]The remainder of this section presents a discussion of basic phonological tone in Sari as well as certain diacritics used in marking distinctions in grammatical meaning.

### 3.2 Basic Sari Tone

We have identified three underlying tones in Sari: high (H), mid (M) and low (L). Combinations of these three tones produce another eight surface melodies on basic Sari words. One vowel can have two tone levels connected with it, and when a syllable has a long vowel or a vowel followed by y then the syllable can have three tone levels connected to it.

There are three level melodies: high (H), mid (M) and low (L); three falling melodies: high-low (HL), high-mid (HM), mid-low (ML); three rising melodies: lowmid (LM), low-high (LH), mid-high (MH); and two rising and falling melodies: low-high-low (LHL) and low-mid-low (LML).
(Contour melodies that end in a low tone will drop the final low tone when they are followed by another word.)

|  |  | Tone | Notation | IPA Diacritic |
| :---: | :---: | :---: | :---: | :---: |
| Level |  | High | H | , |
|  |  | Mid | M ${ }^{18}$ | - |
|  |  | Low | L ${ }^{19}$ | - |
| Contour | Falling | High-Low | HL | ^ |
|  |  | High-Mid | HM | - |
|  |  | Mid-Low | ML | $\checkmark$ |
|  | Rising | Low-Mid | LM | - |
|  |  | Low-High | LH, L ${ }^{\text {H } 20}$ | $\checkmark$ |
|  |  | Mid-High | MH ${ }^{21}$ | $\checkmark$ |
|  | Rising + falling | Low-High-Low | LHL ${ }^{22}$ | n |
|  |  | Low-Mid-Low | LML ${ }^{23}$ | - |

[^9]The contour tones LHL and LML are rare. LHL only occurs in one speech variant, and is not included in the table.
LML (LHL in the other speech variant) occurs in noun class 23, for instance kwiin (LHL) floor.
HM or MH on one syllable is rare as well. ${ }^{24}$
Examples of all these tone melodies are shown in the chart below. ${ }^{25}$

| Phonemic Tone | Phonemic | Orthographic | Gloss |
| :--- | :--- | :--- | :--- |
| High | /wáy/ | way | market |
| Low | /này/ | nay | cow |
| Mid | /bwīy/ | bwiy | mosquito |
| High-low | /wî/ | wi | gun |
| High-mid | /ná:/ | naaŋ | my mother |
| Mid-low | /mè:/ | męy | oil |
| Low-high ${ }^{26}$ | /tsǎy/ | tsay | headpad |
| Low-mid | /bjăy/ | biaŋ | palm needle |
| Low-mid-low | /kwìì̀̀/ ${ }^{27}$ | kwiiŋ | floor |

### 3.3 Lexical Tone Contrasts

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

```
nyo /n\grave{/ god}
nyo /j\grave{/ cutlass}
```

kare /kàrě/ overtake, pass
kare /kār̄̄/ fold a headpad

[^10]Lexical tone is usually not written in Sari, 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 Sari 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 chapter 4 below and the present list of all such special spellings is included in Appendix 1: Words with special spellings.

### 3.4 Grammatical Tone Contrasts

Sari tone also performs grammatical functions. Section 3.4.1 describes singular versus plural forms of gender $9 / 10$ nouns, and the way to mark those plurals. Section 3.4.2 describes in which cases imperfective and perfective may be confusing. This distinction is not marked orthographically. ${ }^{28}$ Though surrounding languages need to mark the hortative, it seems that Sari doesn't need to do so. In Appendix 3: Hortative mood, there is some information in case it does need marking after all.

### 3.4.1 Plural vs. Singular forms of Gender 9/10

The singular-plural distinction for gender $9 / 10$ is based only on tone. Class 9 is the singular form of the noun and Class 10 is the plural. The pronunciation distinction between the two classes is a relatively higher tone for Class 10 . The plural is marked by writing the acute accent / / over the first vowel. If there is a long vowel or the semivowel i before another vowel, the tone is marked only on the first vowel. Examples are shown below:

| Class 9 | Gloss |
| :--- | :--- |
| ndu | piece of clothing |
| dze | road |
| dziin | pig |
| biaay | palm nut |
| biooy | word |


| Class 10 | Gloss |
| :--- | :--- |
| ndú | clothes |
| dzé | roads |
| dzíiy | pigs |
| bíaay | palm nuts |
| bíooy | words |

[^11]
## 3．4．2 Perfective versus imperfective aspect

When there is no tense marker，the perfective and imperfective can be confused in very specific cases．Because this hardly ever occurs in a narrative text ${ }^{29}$ ，the translators did not see the need for grammatical marking in the Sari Bible．The author thinks there may be that need，and proposes a grammatical marker in Appendix 2：Marking progressive aspect．

Examples where there is ambiguity，and thus confusion of which meaning is intended：
Joy yoonchゝゝ Nyo．John（has）praised God．（pfv）
Jэy yoonchəァ Nyo．John is praising God．（ipfv）
Wuni beyวง．This person（has）closed．（pfv）
Wuni beyos．This person is closing．（ipfv）
O gach＞＞．You（have）divided．（pfv）
O gachəs．You are dividing．（ipfv）．

Examples where there is no confusion：
Be yoonchi baa Nyo．They are praising God．
Be younche baa Nyo．They praised God．
Yoonchəo Nyo．He is praising God．
Wu yoonchวง Nyo．He has praised God．
Joy chemos．John is sneezing．
Joy chey．John has sneezed．

[^12]
## 4 Special writing rules

There are certain words that do not follow the normal spelling rules: ideophones, exclamations, (Biblical) names, and words that need to be distinguished from another word that otherwise would be written in the same way.

### 4.1 Ideophones

Ideophones are words that you can choose to pronounce longer or shorter. Often they say something about the way things are or behave, and can be preceded by ni as, like. For example shuuyy good smell and guuu overflow of water:
seendi ni shuuyy smelling like a good smell
chiiy ni guuu push like strong overflow of water

In Sari, as in most neighbouring Beboid languages, the final sound of these words will be written extra long, resulting in either a double $\mathbf{y}$ or a triple vowel.
Words will only be written with the extra final vowel or consonant when they are used as an ideophone, for instance tii black as in:
liki ni tiii blackening like black (ideophone)
blacken.IPFV like black
kikuy ki tii black horse (horse that is black)
7.horse 7.REL black

### 4.2 Exclamations

Exclamations can be written with a triple vowel or even more, for instance:

```
eee yes
```

eeeee (hesitation filler), er
hooo sound of sadness

### 4.3 Biblical names and loanwords

In order to make these kinds of words easier to recognise for people who know English, these words often do not follow the normal Sari spelling rules, for instance: Anas Annas, Luk Luke, meer myrrh.

### 4.4 Special writing rules to distinguish words with different tones

Some 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, jii [dzì:] hoe and jii [d3ī:] put on, dress 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, bufii [būfí] spear grass and bufii [bùfi:'] wisdom 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 be given a special spelling. This section describes the guidelines for such special spellings and a few examples to illustrate.

### 4.4.1 Special spellings using the $h$

In Sari the most common way to differentiate one word from another one that would otherwise be written the same is to add a silent $\mathbf{h}$ to one of them:

| sheeh | /Sè:/ <br> /Sè:/30 | white ant | shéeh | /Sé:/ /Sé, | white ants |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { /Je:/ } \\ & \text { / } \text { ěe: } \end{aligned}$ |  |  | / | fowls |

Normally, when one form of a word has a silent $\mathbf{h}$, that $\mathbf{h}$ is kept in other derived forms of the word. This helps in recognizing the meaning of the word as the 'word image' of the root stays the same.

Sometimes three words can all be confused with each other, and then the one word that is the most confusing will be written in a different way:

| wih | thief |
| :--- | :--- |
| wi | person |
| wi | fire |
| wi | gun |

[^13]In this case, the plural forms are very different, and the $\mathbf{h}$ is not kept. So not beyih but beyi thieves, since the root image would not be the same anyway:

| singular |  | plural |  |
| :--- | :--- | :--- | :--- |
| wih | thief | beyi | thieves |
| $\mathbf{w i}$ | person | beniin | people |
| $\mathbf{w i}$ | fire | $\mathbf{y i}$ | fires |
| $\mathbf{w i}$ | gun | $\mathbf{y i}$ | guns |

In the case of verbs, there are always several forms. The translators chose to only mark those forms that are confusing. The author would propose to mark in the same way all the forms of each individual verb.
For verbs, there are six main forms that are important to know how to write:

- IMP (Imperative, command), for instance lee! sleep
- PFV + c2.REAL (Perfective + noun class 2 realis) (Perfective), for instance lee baa (they) slept
- PFV + c1.REAL (Perfective + noun class 1 realis), for instance lees he/she (has) slept
- IPFV + c2.REAL (Progressive), for instance liiti baa are sleeping
- IPFV + c1.REAL (Progressive), for instance liitos is sleeping
- NMLZ (Nominalized, the noun form), for instance nlewu sleeping

This means that for the verb beh to seek someone's opinion, the following forms occur:

| Words with special spelling |  |  |  | Similar words |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| beh |  | to seek someone's opinion |  | be be |  | they, them be ripe, b | ready |
| The six forms of beh are: |  |  |  | The six forms of be are: |  |  |  |
| IMP | PFV <br> c2.REAL <br> c1.REAL | IPFV <br> c2.REAL <br> c1.REAL | NMLZ | IMP | PFV <br> c2.REAL <br> c1.REAL | IPFV <br> c2.REAL <br> c1.REAL | NMLZ |
| beh! | beh baa beoh | behti baa behtos | mbehru | be! | be baa bes | bii baa biio | mberu |

See Appendix 1: Words with special spellings, for other examples.

### 4.4.2 Special spellings without the $h$

There are a few words that have a special spelling without an $\mathbf{h}$.

When the letter $\mathbf{r}$ would normally be written in two otherwise identical words, one of those words can be written with an 1 (even though it is also pronounced like the [r], just with a different tone pattern).

| kibele <br> bibele | loaf of bread <br> loaves of bread | kibere <br> bibere | fool <br> fools |
| :--- | :--- | :--- | :--- |

When only infinitives of a verb are orthographically confusing, and both are pronounced with free variation between -wu or -fu endings but pronounced with different tone patterns, it is possible to assign one of the endings to each of the verbs, as follows:

| y'wowu <br> n'wowu | to hear <br> obedience | y'wofu <br> kiy'wofu | to be light <br> light |
| :--- | :--- | :--- | :--- |

The verb nuuy be, can is sometimes pronounced with a short vowel. Always write it with a long vowel, to distinguish it from nuy bite which is always pronounced with a short vowel (though with a different tone pattern).

The noun núy knees would normally not have the plural accent mark because it is not a class 10 noun, but this accent is used here to distinguish it from nuy bite.

| núy <br> nunu |  | knees ${ }^{32}$ <br> knee |  | nuy |  | bite |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| nuuy |  | be, can (all | forms) | nup |  | bite |  |
| The six forms of nuuy are: |  |  |  | The six forms of nuy are: |  |  |  |
| IMP | PFV <br> c1.REAL | IPFV <br> c1.REAL | NMLZ |  | PFV <br> c1.REAL | IPFV <br> c1.REAL | NMLZ |
|  | nuuy <br> nuuy we | nuuy nuuy we | numu | nunc! | nuy <br> nuns | nundi <br> nundos | nunu |

[^14]The plural of teeh stomach, belly is written téeh ${ }^{33}$, even though the vowel is said as a short vowel. This is so that the plural is not confused with teh flutes.

| teeh [té:] | stomach, belly | tee | tell, say |
| :--- | :--- | :--- | :--- |
| téeh [té] | stomachs, bellies | te | father of... |
|  |  | teh | flutes |

As in other Beboid languages, the far past tense is marked with a low tone mark to distinguish it from other similar words:

| fì $\quad$ far past tense (P3) | $\mathbf{t \varepsilon}$ | we, us |
| :--- | :--- | :--- |
|  | $\mathbf{t \varepsilon}$ | too |
|  | tadpoles |  |

### 4.4.3 Summary of special spelling guidelines

Whenever two or more 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 not too similar, then no special spelling is called for. If yes, continue to step 2.
2. If there are two easily confused words, then ask which one of the words is used the least in speaking and or writing. This is the word that should normally be spelled in a special way. If there are several confusing words, then ask which one creates the most confusion. Then that is the word that should be spelled in a special way, detailed in the following steps.
3. If there is an $\mathbf{r}$ in the word, write one word with an 1 (like kibere, kibele).
4. If the confusion is between two infinitives ending in -wu/-fu (and not the other verb forms), write one with -wu and the other with -fu.
5. If the word is a verb, then add a silent $\mathbf{h}$, and decide for all six forms how to write them.

[^15]6. If the word is not a verb, then the normal way is to add an $\mathbf{h}$ after the last vowel, but before any final consonant (e.g., kikooh or kweとhy ${ }^{34}$ ). Decide how to write any other forms (for instance, the plural).

In Appendix 1: Words with special spellings, a list of all current words with special spellings is given.

[^16]
## 5 Word Forming

Sari word breaks are written as follows. Below are specific examples and rules to follow.

### 5.1 Noun 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.)

| Genders | singular forms | plural forms |
| :---: | :---: | :---: |
| 1/2 | (without a prefix) nduru corn | bebenduru corn |
| 3/4 | CW sequence kwiy firewood | C sequence kiy firewood |
| 5/6 | (without a prefix) <br> doki bean | (without a prefix, final vowel deletion ${ }^{35}$ ) do beans |
| 7/8 | ki- <br> kiti tree | bi- <br> biti trees |
| 9/10 | (low tone, not marked) dziiy pig | high tone diacritic dzíiy pigs |
| 14/25 | bubukooy name | meN - <br> meykooy names |
| 19/26 | fifiniin bird | mumuniin birds |
| 6a | meN- <br> meykay peace plant | - |
| 16 | f $\varepsilon$ -fe-ken wrist | - ${ }^{36}$ |

[^17]| Genders | singular forms | plural forms |
| :--- | :--- | :--- |
| 17 | li- $\sim \mathbf{l u}-$ <br> li-tiy $\sim \mathbf{l u - t i n ~ a t ~ t h e ~ w a i s t ~}$ | - |
| 18 | $\mathbf{l \varepsilon}$ - <br> $\mathbf{l \varepsilon}$-ykayka armpit |  |
| 23 | (without a prefix) <br> kwiin floor |  |

See 5.13 for more guidance on when a locative construction is a noun with a prefix (as in noun classes 16, 17 and 18), and when it is a prepositional phrase in which the preposition is a separate word.

### 5.2 Demonstratives

Sari has five different demonstratives, the spatial demonstratives wuni (close), wé (distant) and wuuye (far distant), and the anaphoric demonstratives $\boldsymbol{w \varepsilon}$ (already mentioned) and wuru (known). Sari demonstratives have a noun class prefix which agrees with the head noun and a root that carries the 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

| yway wuni | this child |
| :---: | :---: |
| Øway weع | that child |
| ŋway wuuye | that child (over there) |
| yway we | the child (of whom we |
|  | have already spoken) |

Đway wuru that (particular) child
c2

## booy bani these children

bэoy baa those children
booy biiye those children (over there)
boэy baa the children (of whom we have already spoken)
boэy baru those (particular) children
c9 c10

| bi yini | this goat | bí yini | these goats |
| :--- | :--- | :--- | :--- |
| bi yec | that goat | bí yec | those goats |
| bi yiiye | that goat (over there) | bí yiiye | those goats (over there) |
| bi ye | the goat (of whom we <br> have already spoken) | bí yec | the goats (of whom we <br> have already spoken) |
| bi yiru | that (particular) goat | bí yiru | 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 root are written as one word for all possessive pronouns. Below are some examples of possessive pronouns in noun classes 9,8 and in the last column several classes, for different persons.
c9 class

1s
bi yey my goat biti bien my sticks

| 2s bi ya | your goat | biti bio | your sticks | c3 | we wa | your <br> bitterleaf |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3s bi ye | his/her <br> goat | biti biee | his/her sticks | c4 | tsay yee | his/her <br> fingers |


| 1p | bi yisey | our goat | biti bisey | our sticks | c19 | filaay fisey | our clay <br> pot |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2p | bi yine | your (pl.) <br> goat | biti bine | your (pl.) <br> sticks | c18a |  | muloy mune | | your (pl.) |
| :--- |
| stories |

3p bi yibe their goat biti bibee their sticks c2 benay bebee their cows

Many kinship terms (noun class 1) have special, irregular forms for possessives. For example:

|  | nyuy | husband | yway | child, baby |
| :--- | :--- | :--- | :--- | :--- |
|  | nyume | someone's husband | ywane | someone's child |
| 1s | nyumey | my husband | ywaney | my child |
| 2s | nyuma | your husband | ywana | your child |
| 3s | nyumi | her husband | ywani | his/her child |
| 1p | nyune sey | our husband | ywane sey | our child |
| 2p | nyune ne | your (pl.) husband | ywane ne | your (pl.) child |
| 3p | nyune be | their husband | ywane be | their child |

In this case sey our, ne your (pl.) and be their do not have a prefix.

### 5.4 Numbers

### 5.4.1 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, as below.

## Examples:

| nay mumkpay | one cow | fimbi fimumkpay | one colanut |
| :--- | :--- | :--- | :--- |
| benay befec | two cows | yíh fié | two houses |
| benay betectu | three cows | gii taa | three eggs |
| benay bence | four cows | naay neє | four bamboos |
| benay betiinu | five cows | mumbi muntiinu | five colanuts |

### 5.4.2 Numbers above 10

Write the words for $20,30,40,50$ and 60 as a single word, the final consonant of mbaay follows the writing rules, $\mathbf{m}$ before $\mathbf{f}, \mathbf{n}$ before $\mathbf{s h}$, and $\mathbf{m}$ before $\mathbf{b}$.
Mbaanyé fourty does not have an extra $\mathbf{n}$ before ny.
20 mbaamfice : mbaay fiec twenty tens (10s) two mbaanshé, mbaanyex,
50 mbaanshiy,
60 mbaambusso
Write all other numbers as separate words:

12 |  | yoofi ntso | kifec |
| :--- | :--- | :--- |
| ten | + | two |

70 gwi mfomenyaay
hundred seven
seventy
203 gii fec be kitecte
hundreds two with three
two hundred and three
3000 benchuki betectu
thousands three
three thousands

### 5.5 Quantifier chu 'all'

The only quantifier in Sari that is changing its form according to the noun it modifies is chu all or chuchu all (emphasized). It is written together with a prefix as one word. For some noun classes, the prefix is merged with chu (see examples for nay and boy below). Chu can be used with singular nouns to give the meaning all of the or the whole.

## Examples:

| fimbi fichu | the whole colanut | mumbi munchu | all colanuts |
| :--- | :--- | :--- | :--- |
| giki chichuchu | the whole egg | gii chichi | all eggs |
| nay kwi | the whole cow | benay bechu | all cows |

### 5.6 Indefinite pronoun mu 'a certain one, some'

Sari also has an indefinite pronoun mu a certain one, some. It can be used with singular or plural nouns. It takes a noun class prefix that agrees with the noun that it is modifying. With the prefix yi-, the vowel of mu always changes, giving yimi.

## Examples:

| kiti kimu ${ }^{37}$ | a certain tree | biti bimu | some trees |
| :--- | :--- | :--- | :--- |
| giki chimu | a certain egg | gii yimi | some eggs |
| wi wumu | somebody | beniiy bamu | some/certain people |

### 5.7 Compound words

A compound word is a type of construction formed when two or more words come together, resulting in a new word that refers to single concept.
In Sari, compound nouns are formed by joining a noun with modifiers or with one or more nouns. As a result, the noun formed takes the noun class of the initial noun of the compound. Below are some examples.

| tela | : | te | la |
| :--- | :--- | :--- | :--- |
| c1.compound.head | c1.father.of | c1.compound |  |
| compound head |  |  |  |
| kwectso | : kweєy | tso |  |
| c1.bride | c1.wife | new |  |
| bride |  |  |  |

[^18]| mfikwi | mfi | kwi |
| :--- | :--- | :--- |
| always |  |  |
| always | c1.time | all |


| ywaakweey | $:$ | yway |
| :--- | :--- | :--- |
| c1.girl | c1.child | kweey |
| girl, virgin |  |  |

### 5.7.1 Proper nouns

In the case of proper nouns, words that otherwise would be written separately may be connected.
nlisu lidzss baptism, to put into water

Joэy Nlisulidzos John the Baptist
Mfaanyay Vegetarian, refusing to eat meat

### 5.8 Associative noun phrases

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

Examples:
yih yi Nyo church (house of God)
wi wu bugomu hunter (person of hunting)

When the associative marker is not $\mathbf{y i}$ or $\mathbf{w u}$, there will be a completer ( $\boldsymbol{l} \boldsymbol{\varepsilon}$ or a vowel) at the end of the associative noun phrase. See 5.12.2 about the use of hyphens to mark the lengthened vowel.

Examples:

| kiteetee ki dzaay le | drop of rain |
| :---: | :---: |
| kintutu ki beniiy $1 \varepsilon$ | group of people |
| mexy me bikpo-o | shoe polish |
| fingaa fi bara-a | tomato (foreign garden egg) |
| bome chi kiso-эŋ | flower of palmtree |

### 5.9 Relative clauses and Adjectives

Relative clauses begin with a relative pronoun, which agrees with the noun it follows. In the next examples the relative pronouns are underlined.

## Examples:

wi wu deeki cook (n.), person who cooks.
c1.person c1.REL cook.IPFV
beniin $\underline{\mathbf{b e}} \mathbf{t} \mathbf{\varepsilon} \quad$ biki $\quad \mathbf{w u}$ baa those people who were following
c2.people c2.REL PAST follow.IPFV 3s c2.those him
nsuuy yi $\quad$ saa $\boldsymbol{y}$ kos, the first fish that you catch
c9.fish c9.REL you first you catch

Just like the associative marker, the relative pronoun is written as a separate word. The relative pronoun has the same form as the corresponding associative marker, but a different tone. The tone on the relative pronoun depends on the grammatical function of the noun that it is modifying. Despite these tone changes in pronunciation, Sari is not adding any special tone diacritics to relative pronouns. ${ }^{38}$ See Appendix 5: Relative pronouns, for a proposal to mark the relative pronoun.

### 5.9.1 Adjectival kinds of uses of relative clauses

Sari often uses attributive verbs in relative clauses where English uses adjectives. Examples:
doy, from ndonu be old, grow old deev, from ndeyu grow tall

| bebabi be doy | wi wu doy | ndu yi doy |
| :--- | :--- | :--- |
| old bags | old person | old cloth |

[^19]There are more words that can be used to describe things or people, for instance words like gaa red, ripe, tii black, fichi old. In all these cases, the agreement marker is written as a separate word.

## Examples:

| doki chi gaa | red bean |
| :--- | :--- |
| kiykoy ki fichi | old robe |
| kiboo ki tii | black sky |
| kikoo ki tecme | hard head |
| biee bi mwesimwesi | small things |

### 5.9.2 True Adjectives

Sari has very few true adjectives. The ones we could find are key female, niy male, fey new, ndeey long, tall, ntey small, thin and noya big. An adjective follows the noun it modifies, and takes an agreement marker that has the same form and melody as the relative pronoun. The agreement marker is written separately.

Adjectives have different forms when they modify a noun of a wu-class ${ }^{39}$ or yiclass ${ }^{40}$.

Examples:

| kikuy ki keen | nay wu kwecy | dziij yi checy |
| :---: | :---: | :---: |
| mare | cow (female) | sow |
| kikuy ki niiy | nay wu nyuy | dziin yi nyiiy |
| stallion | bull | boar |
| kiboo ki fey | nts¢ wu fwey | ndu yi fiey |
| new heaven | new earth | new cloth |

[^20]| beniin be ndeen | wi wu ygweey | yo yi njeey |
| :---: | :---: | :---: |
| tall people | tall person | long snake |
| chigon chi noya | wi wu nyoya | nyiiy yi nyoya |
| leprosy (big illness) | big (important) person | big toe |
| beniin be ntey be ntey | wi wu $\mathfrak{y} \mathbf{k w e y}$ | dzos yi nchey |
| each of the little people | small person | brook, small water |

True adjectives canbe doubled (reduplication), when one wants to indicate each and every member of a group. The words are then written separately:
bete muntoofi be nэŋa be noŋa each of the chief priests
beniin be ntey be ntey
each of the little people

### 5.10 Adverbs

Sari also has adverbs. They modify verbs, adjectives or other adverbs. They are written as separate words.

## Examples:

$$
\begin{array}{ll}
\text { fiee nsin } & \text { nothing, no thing } \\
\text { mi kwaa } & \text { I alone }
\end{array}
$$

### 5.11 Reduplication

In Sari, certain words or phrases can be doubled, resulting in reduplication.

If the reason for doubling is to strengthen the meaning, or to make it count for each instance, then write the words separately.
cheey cheey truly truly (cheen true)
butuu butuu very early
(butuu night)
bete muntoofi be nэya $\mathbf{b} \boldsymbol{\varepsilon}$ nэya each of the chief priests

If the reduplication is making a new word, then write the words together.


### 5.12 The use of the hyphen - for lengthened vowels

In some phrases, the length of the final vowel of a word is lengthened. For instance, the Sari phrase for employer is kikoo ki nime- $\boldsymbol{\varepsilon}$ head of work, where the last vowel of nime work is lengthened. The melody of the extra vowel is going up and down. To avoid confusion with similar words with a long vowel, Sari uses the hyphen to mark this phrase final kind of lengthening. ${ }^{41}$ There are four different grammatical constructions where this hyphen is used:

1. At the end of a prepositional phrase, instead of the completer ${ }^{42}$ li (see 5.12.1)
2. At the end of an associative phrase, instead of the completer $\boldsymbol{l} \boldsymbol{\varepsilon}$ (see 5.12.2)
3. After méy ki or méyo ki meaning not yet, instead of the first negator ke following the verb (see 5.12.3)

In some cases, the full completer or negator is pronounced and written. In other cases, there is only a tone difference and vowel lengthening. In that case of simplification, the hyphen is used before the extra vowel.

[^21]4. The possessor of a locative noun, when this one is put between the prefix and the noun root (see section 5.13.4).

These four constructions are explained in the next four sections.

### 5.12.1 Prepositional phrase completer

There are three prepositions in Sari: $\mathbf{f} \mathbf{\varepsilon}$ at, on, to, from, $\mathbf{l i}$ (or lu) to, from, on, at, for, and $1 \varepsilon$ in, into, out, out of, at. Sari uses the particle li or an additional vowel to mark the end of a prepositional phrase. For instance:

| $\mathrm{f} \varepsilon$ kintsii li | at the place |
| :--- | :--- |
| li kikaa li | on the leg |

When the last word of the prepositional phrase has a short vowel, the completer will not have its full form li, but will lengthen that final short vowel. It keeps its melody as if the full form were present. The hyphen is written before the extra vowel:

| $\mathbf{f} \varepsilon$ kintsii kimu-u | at another place |
| :--- | :--- |
| $\mathbf{f} \varepsilon$ kida-ay | on the bench |

### 5.12.2 Associative phrase completer

Sari uses the particle $\mathbf{l} \boldsymbol{\varepsilon}$ or an additional vowel to complete an associative phrase. The completer $\mathbf{l} \boldsymbol{\varepsilon}$ is always written separately.

Examples:

| fika fi dzos $1 \varepsilon$ | cup of water |
| :---: | :---: |
| kintsii ki dziin 1 ع | place of pig |

In the above examples, the syllable preceding $\boldsymbol{\varepsilon} \boldsymbol{\varepsilon}$ has a long vowel. If that syllable has a short vowel, the completer will not be $\mathbf{l} \boldsymbol{\varepsilon}$. Instead, the short vowel will be lengthened. This will be written with an extra vowel, and there will be a hyphen before the extra vowel.

Examples:
lisi chi kwa-a coin (eye of money)
kintsii ki dzi-iy place of war

### 5.12.3 Méy ki 'not yet'

In the New Testament, the first negator $\mathbf{k} \boldsymbol{\varepsilon}$ is sometimes not written. There is free variation after meey ki not yet, when the verb ends in a short vowel, to drop the ke and lengthen the vowel. When the $\mathbf{k} \boldsymbol{\varepsilon}$ is dropped, the preceding vowel is lengthened, and a hyphen is written. ${ }^{43}$ When writing, it is good to write ki, even though in speaking, you can leave that word out while lengthening the vowel.

Examples:
Boวy belu meєy baa ki kwi-i (ke).
children the still.be SPEC not died.not not The children didn't die yet.
$\mathcal{E}$ la fi ge, se binjiinjii bilu méy (ki) be- $\varepsilon$ ?
is what thing happen then pictures the still.be not come.not What happened, that the pictures have not come yet?

### 5.12.4 The possessor of a locative noun

In some cases, a hyphen will be written with locative nouns when the possessor comes in between the prefix and the root of the noun. Currently, whether the hyphen is written depends on the melody. If the melody on the extra vowel goes up, the hyphen is written. ${ }^{44}$
Some examples without vowel lengthening ${ }^{45}$ :

- Examples where the vowel is not lengthened:

| lebo | in hand | $l \boldsymbol{k w e}$ bo |
| :--- | :--- | :--- |
| $l \boldsymbol{l}$ be bo | in death's hand |  |
|  |  | in their hand |

- Example with a hyphen:
libwiy on skin, on body li mi-i bwiy around me

For more explanation on locative nouns, see section 5.13 .2 below.

[^22]
### 5.13 Forms $f \varepsilon$, li or $l u$, and $l \varepsilon$

The forms $\mathbf{f}, \mathbf{l} \mathbf{i}$ or $\mathbf{l u}$, and $\mathbf{l} \boldsymbol{\varepsilon}$, can be prepositions and can be prefixes. They also can be other words, like verbs or pronouns. When they are prefixes, they should be written together with the noun. However, it is not always easy to tell whether these forms are prefixes or whether they are prepositions. The next sections will describe when these forms should be written together with the noun. Though lis in free variation with $\mathbf{l u}$, in the next section we will only write $\mathbf{l i}$.

### 5.13.1 The locative prepositions $f \varepsilon, l \varepsilon$ and $l i$

$\boldsymbol{F \varepsilon}, \boldsymbol{l} \boldsymbol{\varepsilon}$ and $\boldsymbol{l i}$ can be locative prepositions. In this case, it will not replace the noun's own prefix, and it is written separately from the noun. The completer li or the vowel lengthening with the hyphen comes at the end of the noun phrase.

## Examples:

| fe beniin li | at/to people |
| :---: | :---: |
| fe tssno-> | at the feast |
| 18 kitoo li | in the pit |
| 18 ygo-o | in the boat |
| 18 femfo-o | into evening |
| 1 l Nyo-o | to God |
| li dziin li | to pigs |

If the noun is modified, the locative modifier normally will follow the noun and take the prefix that agrees with the noun's regular class.

## Examples:

f $\varepsilon$ yi yee li at his body
$\mathrm{f} \varepsilon$ kintsii kimu-u at another place

| $1 \varepsilon$ beniiy bo-o | to your peope |
| :--- | :--- |
| $1 \varepsilon$ yih yi Nyo-o | in the house of God |
| li beniiy bamu-u | to some people |
| li yih yilu-u | to that house |

### 5.13.2 The locative noun prefixes $f \varepsilon$-, $l \varepsilon$ - and $l i$ -

Fe-, $\mathbf{l \varepsilon}$ - and li- are also locative prefixes for class 16,18 and 17 . In this case, they are written together with the noun. The prefix replaces the noun's normal noun class prefix, if the noun has one. In the case of a place name, the whole word is written together and with a capital.

## Examples:

| fetaay | fireplace | $\mathbf{f} \boldsymbol{\varepsilon}+$ taay |  |
| :---: | :---: | :---: | :---: |
| felii | forehead | $\mathbf{f} \boldsymbol{\varepsilon}+\mathbf{l i i}$ |  |
| femfo | at evening | $\mathbf{f} \boldsymbol{\varepsilon}+\mathrm{mfo}$ |  |
| fetoo | hole, pit | $\mathrm{f} \varepsilon+$ kitoo |  |
| Feboondzos | Douala | $\begin{aligned} & \text { fe }+ \text { bээy }+ \\ & \text { dzэァ } \end{aligned}$ | at children's water, where many children live |
| leygwiy | shin | $1 \varepsilon+$ ygwiy |  |
| lebo | in hand | $1 \varepsilon+\mathrm{kib} \boldsymbol{\sim}$ |  |
| 1enti | inside | $1 \varepsilon+$ kinti |  |
| Lete | Nigeria | $1 \varepsilon+t \varepsilon$ |  |
| libuka | desert, open land | li + buka |  |
| 1 liboo | in the sky | $\mathbf{l i}+$ kiboo |  |


| lifa | on head | $\mathbf{l i}+\mathbf{f a}$ |
| :--- | :--- | :--- |
| Ludziiy | Bakinchine | $\mathbf{l u}+\mathbf{d z i i y}$ |

If the noun is modified, the modifier normally will follow the noun and take the prefix that agrees with the noun's locative class.

## Examples:

lenti lelu the room
lefufu lee his side
feygoon femu at other edge
liwiy lumu los the other side

With some nouns belonging to these locative classes, 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. The possessor word is sometimes written with a hyphen, see section 5.12 .4 above.

## Examples:

| fekuuy | at home | fe wuu kuuy, f $\varepsilon$ wu-u kuup | at her home |
| :---: | :---: | :---: | :---: |
| $18 b>$ | in hand | 18 kwe bo | in death's hand |
| 1ewa | in mouth | 18 kwe wa | in death's mouth |
| libwiy | on skin, on body | li mi-i bwiy | around me |

### 5.13.3 Specification of location

Locative nouns like liwe on top, lewe over, lekwiy under, libwiy attached, fechiy near, lenti inside, lekuuy outside, lejin behind, limfwe in front of, that are used to specify a location, are written together.
le ygo-o lenti inside the ship
PREP ship-CP in.middle
Jiso dende li dzo li liwe. Jesus walked upon the water.
Jesus walked PREP water CP on.up
Jiso kemi buyga le kwe-e lewe Jesus has power over death.
Jesus has power PREP death-CP in.up

### 5.14 Short version of the first person singular prefix

The first person singular marking of the verb is made with a nasal prefix $\mathrm{N}-(\mathbf{n}, \mathbf{m}$ or y).

For example:

| jiì | he is eating | njiio | I am eating |
| :--- | :--- | :--- | :--- |
| tè ji | he ate | ntè nji | I ate |

For verbs and auxiliaries that already start with a nasal the initial consonant is doubled.

| nachss | he is arranging | nnach>s | I am arranging |
| :--- | :--- | :--- | :--- |
| mendss | he is limping | mmendss | I am limping |
| nyes | he is giving | nnyes | I am giving |
| nuuy | he is, he can | nnuuy | I am, I can |

If the verb begins with the $\mathbf{y}$ or $\mathbf{w}$, a raised bar ${ }^{\prime 46}$ is put after the nasal, which is explained in section 5.16 below.
yeti he is saying n'yeti I am saying
wukכs he is hearing y'wukכs I am hearing

### 5.15 Verbal nouns

Verbs can be made into a noun by adding a nasal prefix (m-, n- or y -).
If the verb begins with a nasal, that initial orthographic nasal consonant will not be doubled, in order that these verbal nouns will not be confused with verbs with a first person singular prefix (see 5.14 above).

[^23]For example:
nache arrange nache arranging, organisation kinache he who arranges mone taste monu tasting

If the verb begins with the $\mathbf{y}$ or $\mathbf{w}$, a raised bar ${ }^{\prime 47}$ is put after the nasal, which is explained in section 5.16 below.

For example:

| beeche <br> yع $\varepsilon$ | think rise | mbeech $\varepsilon$ <br> n'yé | thinking, thought rising | bembeech $\varepsilon$ kin'yع | thoughts envy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| wวэye | wipe | n'wวэyย | wiping | kiŋ'wวэyย | towel |

Nominalized verbs ending in -wu/-fu: can be written with -wu or $\mathbf{- f u}$ as one is pleased, except when there is a special spelling rule (see section 4.4.2). nchewu, nchefu pulling

### 5.16 Ambiguous ny and yw sequences

When a nasal prefix comes together with a $\mathbf{y}$ or $\mathbf{w}$, the sound is not the same as the ny or $\mathbf{y} \mathbf{w}^{48}$. To avoid confusion, a raised bar (or an apostrophe) is written between the two letters.

Compare the first sound of the next words:
nyex he is giving with n'yex I rise
yweenye slicing with y'weとye sieving

In order to keep the same word image, any nominalized verb that has an extra prefix will also be written with the raised bar. This could be a plural or another noun form, as below.

## Examples:

| yecshe | greet | n'yecshe | greeting | ben'yecshe | greetings |
| :---: | :---: | :---: | :---: | :---: | :---: |
| wכวye | wipe | y'woدye | wiping | kiy'woэye | towel |

[^24]
### 5.17 Writing the realis marker with verbs

When you know for certain something is happening or happened just now, you add a realis marker after the verb in the Sari language. The form depends on the noun class of the subject. For people (plural) it is baa. For all noun classes these words are written separately from the verb, except for noun class 1 . For one person it is connected with the verb, changing the final vowel from the verb from $\boldsymbol{\varepsilon}$ or $\mathbf{i}$ to $\boldsymbol{\jmath}$ or ว. ${ }^{49}$

Giingoد. He is going.
Be giingi baa. They are going.
Kikune giingi keє. The rat is going.

### 5.18 A summary of word forming rules

### 5.18.1 Numbers

- Remember to attach the noun class marker to the numbers 1-5.
- Write numbers as separate words.

Gii fec be mbaamfié ntso kiné 224

- Always attach the noun class marker to chu all and mu some.


### 5.18.2 Compound words

- Write compound words as one word.


### 5.18.3 Adjectives and attributive verbs

- Adjectives and attributive verbs should be written with the noun class marker separately.
wi wu nyэŋa big (important) person

[^25]
### 5.18.4 Reduplication

- Reduplicated words are normally written together. Only adjectives and adverbs that are reduplicated are written separately.


### 5.18.5 Hyphens and completers

- The hyphen between two identical vowels is used to show that a vowel is lengthened and the melody is going up and down. This can happen after short vowels in the case of:
* Prepositional phrase
* Associative phrase
* Verb after meey ki
* Possessor of a locative noun
- If a completer has the full form (lior $\mathbf{l} \boldsymbol{\varepsilon}$ ), it is written separately


### 5.18.6 $\mathrm{F} \varepsilon$, li or lu , and $\mathrm{l} \varepsilon$

- When it is a prefix ( $\mathbf{f} \mathbf{\varepsilon}$-, $\mathbf{l} \mathbf{i}-, \mathbf{l u}$ - and $\mathbf{l \varepsilon}$-), write it connected to the noun.
- If there is a locative completer (li or vowel lengthening), then the $\mathbf{f \varepsilon}, \mathbf{l i}, \mathbf{l u}$ or $\boldsymbol{l} \boldsymbol{\varepsilon}$ is a preposition, and should be written separately. Also if the word following $\mathbf{f} \mathbf{\varepsilon}, \mathbf{l} \mathbf{l}, \mathbf{l u}$ or $\mathbf{l} \boldsymbol{\varepsilon}$ keeps its own noun class, this shows that it is a prefix with a noun. Example: $1 \varepsilon$ yih yi Nyo-o in the house of God.
- If there is no completer, $\mathbf{f} \boldsymbol{\varepsilon}, \mathbf{l}, \mathbf{l} \mathbf{u}$ or $\mathbf{l} \boldsymbol{\varepsilon}$ is usually a prefix which is written together with the noun. Also if the word following $\mathbf{f} \varepsilon, \mathbf{l}, \mathbf{l u}$ or $\mathbf{l} \boldsymbol{\varepsilon}$ has a locative noun class, it should be written as one word. Examples: liyih home, lewa in mouth femfo evening, and lenti lelu the room.
- If there is a possessor in between the prefix and the word itself, three or more separate words will be written. Examples: li wu-u yih at his home, le kwe wa in death's mouth, and $\mathbf{f \varepsilon}$ wuu lii at his forehead.
- Words that are used to specify a location are written together. Examples: lekwiy under and fechiy near.


### 5.18.7 First person singular pronouns

- Always write the short first-person singular pronoun together with the following verb or verb particle as a single word. If the verb starts with a nasal ( $\mathbf{m}, \mathbf{n}, \mathbf{n y}$ or $\mathbf{y}$ ) then double the first letter of the nasal.

Example: nnye I give.

### 5.18.8 Verbal nouns

- Always write the nominalizing prefix together with the following verb root as a single word. If the verb starts with a nasal, do not double the nasal. monu tasting and bembeeche thoughts.


### 5.18.9 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. Examples: n'yeti I am saying and y'wukכs I am hearing.
- If the nominalizing prefix is added to a verb that begins with $\mathbf{y}$ or $\mathbf{w}$, then add a raised bar after the nasal consonant. Examples: kin'yec envy and り'wosye wiping.


### 5.18.10 Writing the realis marker with verbs

Write the realis marker separately from the verb, except for noun class 1. Examples: lev he entered, giingos he is going and be giingi baa they are going.

## 6 Punctuation and Capitalisation

The punctuation marks and the rules that govern the Sari language are the same as those for English. The punctuation marks used for Sari 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 (.) in Sari marks the end of a declarative sentence.

Nshife leto $\quad$ fewe.
Nshife go.IPFV.SPEC at.farm
Nshife is going to the farm.
Nyanji gingos fe suku-u.

Nyanji go.IPFV.SPEC PREP school-CP
Nyanji is going to school.

### 6.2 Question mark

The question mark (?) marks the end of an interrogative sentence.
Daaki jiis biee ni?
Daaki eat.PFV.SPEC something QM
Has Daaki eaten something?

| Bukooy | bwo | nuuy | le | noo? |
| :--- | :--- | :--- | :--- | :--- |
| name | your | is | that | who |

What is your name?

### 6.3 Exclamation mark

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

Gene!
go.IMP
Go!

Hebe! Hebe! Fibee fice!
helas! helas! bad it
Oh! oh! It is bad.

### 6.4 Comma

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

Keshi nuuy ye yway wu bwi ke, $\varepsilon$ wi wu kaay.
Keshi is not child who small not, is person who old Keshi is not a small child, he is an elder.

| Ndoygo | keygos | shée | shé, | bí | nyec, | fimu, | be |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ndongo | has | fowls | three | goats | four | cat | and |

bwí fiectu li wu-u yih.
dogs two in his house
Ndongo has three fowls, four goats, a cat and two dogs in his house.

### 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.

Fiee fimumkpay fiec cheey: Wu liyih ke.
Thing one is true she home not
One thing is true: She is not at home.

### 6.6 Quotation marks

Quotation marks ("... ") occur at the beginning and end of direct speech, as below:
\(\left.\begin{array}{llllllll}Ni \& tè \& de \& wu \& bii, "Tè \& kwi \& le \& la?" <br>

her.mother \& PAST \& cried \& she ask \& PAST \& died \& that \& what\end{array}\right]\)| Her mother cried and asked, "Why did she die?" |
| :--- | :--- |


| Tè | bii, | "We | tuu | fey?" |
| :--- | :--- | :--- | :--- | :--- |
| PAST | asked | you | go | where |

She asked, "Where are you going?"

Before the quote there is a comma, as can be seen in the examples above, and the quotation itself starts with a capital letter.

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

### 6.7 Capitalisation and names

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).

Proper nouns:

| Bemi | tè | geєy | feway | bee | Nchute, | Songwa, | Findo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bemi | PAST | went | at.market | with | Nchute | Songwa | Findo |

be Shekwec.
and Shekwer
Bemi went to the market with Nchute, Songwa, Findo and Shekwee.

For various languages it may vary what names to capitalize. In Sari the following words are written with a capital, for each at least one example is given:

- names of days
- names of months
- personal names
- family names
- names of clans
- names of villages
- names of people (groups)
- names of languages ${ }^{50}$
- names of Regions
- names of rivers, waters Kintsiy, Kimbey
- names of mountains, hills Kigure, Kigoto

Biblical names or names from another language can end in a consonant, even if it is not pronounced in Sari. This is to make clearer what the original name was. For instance Anas Annas, Balak Barak.

[^26]
## 7 Further testing and recommendations

Any new orthography needs people to use it for a time before potential problems reveal themselves. Probably there will be more words (minimal tone pairs) that will need distinction by writing one in a special way. It is good to follow the guidelines, making sure there are not too many words spelled in a special way: people will need to be able to remember those words. In order to help people recognize words, it is good to keep the special spelling even if inflection makes it unnecessary for those forms to be distinguished. But seeing the word with for instance an $\mathbf{h}$ when it is not ambiguous makes it easier to remember that it needs the $\mathbf{h}$ when it is ambiguous.

The writing of locative phrases, with prefixes and prepositions, needs to be well taught. And it needs to be tested whether people can write them consistently.

The author proposes to mark the first vowel of every progressive - $\boldsymbol{-}$ and - $\boldsymbol{\jmath}$, also in places where there is no confusion. Possible markers are the grave accent marker ${ }^{\text {` }}$ and the macron ${ }^{-}$. It is best not to use the circumflex ${ }^{\wedge}$, which in surrounding Beboid languages is used for the hortative aspect.

| nyoonchos | (has) praised. |
| :---: | :---: |
| < nyoonchว̀s> | is praising. |
| cheys | (has) sneezed. |
| <chemò? > | is sneezing. |

See Appendix 2: Marking progressive aspect for more detail.

If hortative mood needs marking for certain verbs, the suggestion is to mark those with a circumflex ^ on the first vowel of the verb. See Appendix 3: Hortative mood for more detail.

If the use of a hyphen proves to be problematic in the future, the completers can be written with an accent instead. Prefered accents are ${ }^{\wedge}$ and ${ }^{-}$(see also footnote in section 5.12 ). Another option is to still use a hyphen with the extra vowel, but only at the end of the word. See Appendix 4: Orthographic function of the hyphen for more detail.

If at some point it is decided that relative pronouns are confused with other class agreement markers, they could be marked with a grave accent `. The same accent
should be used with adjectives. The choice of diacritic is in order to follow other Beboid languages that mark the relative pronoun that way.
< bi yì tè ji benduru bey> goat which ate my corn
< bi yì taa nye> goat which my father gave
<bi yi taa> goat of my father
See Appendix 5: Relative pronouns for more detail.

It is my hope that this proposal will help in developing and changing teaching material, and that if the orthography needs to be changed at some point, that the information in the guide will prove to be helpful.

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## 1 Appendix 1: Words with special spellings

In the table below, the words with special spellings are listed (in order to differentiate them from other words). ${ }^{51}$
In the left column is the word with a special spelling. This can be:

- with a silent h (like lah compound)
- with an extra accent (like núy knees, which normally would be nuy)
- with an 1 instead of an $\mathbf{r}$ (kibele bread)
- having a fixed choice with the infinitive ending in wu or fu (y'wowu hearing, y'wofu being light)
- keeping a long vowel (nuuy be, can), even when sometimes the word is said with a short vowel in certain forms.

For nouns, the singular and plural of the special word are given.
For verbs, there are six main forms that are given:

- IMP (Imperative, command), for instance lee! sleep
- PFV + c2.REAL (Perfective + noun class 2 realis), for instance lee baa (they) slept
- PFV + c1.REAL (Perfective + noun class 1 realis), for instance lees he/she slept
- IPFV + c2.REAL (Progressive), for instance liiti baa are sleeping ${ }^{52}$
- IPFV + c1.REAL (Progressive), for instance liitos is sleeping
- NMLZ (Nominalized, the noun form), for instance nlewu sleeping

| Words with a special spelling |  |  |  | Similar words |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| beh |  | seek someone's opinion |  | be be ${ }^{53}$ |  | they, the be ripe, | $d y$ |
| The six forms of beh are: |  |  |  | The six forms of be be ripe are: |  |  |  |
| IMP | $\begin{aligned} & \text { PFV } \\ & \text { c2.REAL } \end{aligned}$ c1.REAL | IPFV <br> c2.REAL <br> c1.REAL | NMLZ | IMP | PFV c2. REAL <br> c1.REAL | IPFV <br> c2.REAL <br> c1.REAL | NMLZ |
| beh! | beh baa beoh | behti baa behtos | mbehru | be! | be baa bes | bii baa biio | mberu, mbe ${ }^{54}$ |

[^27]| Words with a special spelling |  |  |  | Similar words |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kibele bibele |  | loaf of bread loaves of b |  | kibere bibere |  | fool <br> fools |  |
| lah belah |  | compound compounds |  | la <br> la |  | go out of sig purpose daybreaking | for a <br> star |
| leh beleh |  | oath <br> oaths |  | $\begin{array}{\|l} \text { le } \\ \text { le } \end{array}$ le |  | that (like: when there | that) |
| leeh |  | take a decis | n, swear | lee |  | sleep |  |
| The six IMP <br> leeh! | forms of lee PFV <br> c2.REAL <br> c1.REAL <br> leeh baa <br> leesh | are: <br> IPFV <br> c2.REAL <br> c1.REAL <br> _ 55 | NMLZ <br> nlehwu | The six <br> IMP <br> lee! | forms of 1 PFV <br> c2.REAL <br> c1.REAL <br> lee baa lees | are: <br> IPFV <br> c2.REAL <br> c1.REAL <br> liiti baa <br> liitos | NMLZ <br> nlewu |
| nteh <br> ntè |  | Holy Comm 1sg.P3 |  | nte |  | load |  |
| núy nunu |  | knees <br> knee |  | nuy |  | bite |  |
| nuuy |  | be, can (all | forms) | nuy |  | bite |  |
| The six IMP <br> nume! | orms of nu PFV c2.REAL c1.REAL nuuy baa nuuy we | are: <br> IPFV <br> c2.REAL <br> c1.REAL <br> numi baa <br> numi we | NMLZ <br> numu | $\begin{aligned} & \text { The six } \\ & \text { IMP } \\ & \text { nune } \\ & ! \end{aligned}$ | forms of PFV c2.REAL c1.REAL nuy baa nuys | y are: <br> IPFV <br> c2.REAL <br> c1.REAL <br> nundi baa <br> nundos | NMLZ <br> nunu |
| y'wowu |  | obedience, | aring | y'wofu |  | being light |  |
| seh |  | whip (n) |  | se |  | then |  |
| sheeh <br> shéeh |  | white ant white ants |  | shee shee shée |  | sit fowl fowls |  |
| teh |  | flutes |  | te |  | father of ... |  |

[^28]| Words with a special spelling |  |  |  | Similar words |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tebi ${ }^{56}$ |  | flute |  |  |  |  |  |
| teeh <br> téeh |  | stomach, belly stomachs, bellies |  | tee te teh |  | tell, say <br> father of . <br> flutes |  |
| tè |  | far past tense (P3) |  | $\begin{aligned} & t \varepsilon \\ & t \varepsilon \\ & t \varepsilon \end{aligned}$ |  | we, us too tadpoles |  |
| wih beyi |  | thief thieves |  | wi <br> wi <br> wi |  | fire gun person |  |
| yah |  | to redeem, encroach |  | ya <br> ya |  | take anoth (branch) your own | way |
| The six forms of yah are: |  |  |  | The six forms of ya are: |  |  |  |
| IMP <br> yah! | PFV <br> c2.REAL <br> c1.REAL <br> yah baa <br> yash | IPFV <br> c2.REAL <br> c1.REAL <br> yehti baa <br> yehtos | NMLZ <br> n'yahru | IMP <br> ya! | PFV <br> c2.REAL <br> c1.REAL <br> ya baa <br> yas | IPFV <br> c2.REAL <br> c1.REAL <br> yeti baa <br> yetos | NMLZ <br> n'yaru |
| $\begin{aligned} & \text { yéh } \\ & \text { yéh } \end{aligned}$ |  | buffalo buffaloes |  | $\begin{aligned} & y \varepsilon{ }^{57} \\ & y \varepsilon, y \varepsilon \\ & y \varepsilon \\ & y \varepsilon \\ & y \varepsilon \\ & y \varepsilon \end{aligned}$ |  | farms <br> grandchild <br> not anymo <br> that (ANA <br> is (class 9) <br> of (class 2 | children <br> lass 9) |
| $\begin{aligned} & \text { yih } \\ & \text { yíh } \end{aligned}$ |  | house houses |  | $\begin{aligned} & \text { yi } \\ & \text { yi } \end{aligned}$ yi |  | it (class 4, fires, guns hair | $(9,10)$ |

[^29]
## 2 Appendix 2: Marking progressive aspect

Progressive aspect is marked in various ways in Sari. One of those ways is to grammatically mark a sentence with both imperfective aspect forms and realis mood forms. This can result in orthographic ambiguity, and the author proposes to mark the progressive aspect for noun class 1. This has not been applied in the Sari NT.

Sari verbs can be in either the perfective (PFV) form or the imperfective (IPFV) form. ${ }^{58}$
buye notice (PFV)
buygini noticing (IPFV)
dende move, walk (PFV)
deygi moving, walking (IPFV)

In the present tense, a realis marker can be used to state that the proposition is true. This marker has the same form and melody as the copula $\boldsymbol{\varepsilon}$ is. Just like the copula, it has a prefix that agrees with the noun class of the subject. For instance if the subject is beniiy people, the realis marker is baa. If the subject is wi person, the realis marker is - $\boldsymbol{-}$ or $\mathbf{- \boldsymbol { \omega }}$ (from $\mathbf{w} \varepsilon^{59}$ ). If it is bi goat, the realis marker is $\mathbf{y} \boldsymbol{\varepsilon}$.

## Examples:

dendos (has) moved, (has) walked
dende baa (have) moved, (have) walked
dejgos is moving, is walking
dengi baa are moving, are walking
In the present tense, adding both the imperfective suffix and the realis marker results in a meaning that is similar to the progressive meaning in English.

For some verbs this will result in a sentence that is orthographically ambiguous, the reader does not know which form it is, and how he should pronounce the sentence.

[^30]Examples:
Joэy nyэonchəァ Nyo. John (has) praised God. (PFV + REAL)
Jээy nyəonchэァ Nyo. John is praising God. (IPFV + REAL)
Wuni beŋวว. This person (has) closed. (PFV + REAL)
Wuni beŋว. This person is closing. (IPFV + REAL)
O gachəo.
O gachəэ.
You (have) divided. (IPFV + REAL)
You are dividing. (IPFV + REAL).

The orthographic ambiguity is because the -כ/-כ elided forms with the realis suffix have eliminated the final perfective vs. imperfective vowel difference one would find with most verbs:

| nyoonche + we | gives | nyosnchos | praise (PFV) |
| :---: | :---: | :---: | :---: |
| nyosnchi + we | gives | nyosnchos | praising (IPFV) |

There are verbs and constructions where there is no confusion, for instance:
Be nyounchi baa Nyo. They are praising God.
Be nyoonche baa Nyo. They praised God.
Nyounch>> Nyo. He is praising God.
Wu nyoonchวo Nyo. He has praised God.
Joэy chemoo. John is sneezing.
Joэy cheyo. John has sneezed.

The proposal is to mark every progressive - $\boldsymbol{0}$ and ->0, also in places where there is no confusion. Possible markers are the grave accent ${ }^{\text {` }}$ and the macron ${ }^{-}$. It is best not to use the circumflex ${ }^{\wedge}$, which in surrounding Beboid languages is used for the hortative aspect.

Example (with brackets showing that this is not current orthography):
< Wuni nyoonchəэ Nyo.> Wuni nyoonchээ Nyo. This one has praised God.
< Wuni nyoэnchว̀ว Nyo.> Wuni nyoonchээ Nyo. This one is praising God.

Since nyoonche (pfv) is the basic form, and the imperfective is often longer (is marked by adding to the basic form), the proposal is to put a mark on the imperfective form with -כ / -כэ. This mark indicates combinations of imperfective aspect and realis mood, that together indicate progressive meaning.

Since we suggest marking the - $\boldsymbol{-}$ / $-\boldsymbol{0}$, and not the first vowel of the verb, this means that forms with separate realis markers, for example baa or ké, can stay unmarked:
nyoonchi baa are praising

Some examples, with the proposed marking between brackets:

| < Dengòo.> | Dejgos. | He is moving. |
| :---: | :---: | :---: |
| $<$ Wu dendos.> | Wu dendos. | He just moved. |
| <Naay becò.> | Naay beco. | My mother is coming. |
| <Elaja beo.> | Elaja beo. | Elijah has come. |
| < Tsiiyò. $>$ | Tsiiyo. | He is staying. |
| $<$ Wu tsio. $>$ | Wu tsio. | He has stayed. |

## 3 Appendix 3: Hortative mood

Hortative means encouraging, giving advice or urging. The first sentence below is in indicative mood, it just indicates the way things are. The second sentence below is in hortative mood.

| Wu | jio | buncey. | He ate fufu (just now), he has eaten fufu. |
| :--- | :--- | :--- | :--- |
| 3 s | eat.c1.REAL | fufu |  |
|  | Ji | buncey. | He should eat fufu. |
|  | eat.HORT | fufu |  |

As of the writing of this paper, it appears that hortative sentences in Sari are always clearly marked in contrast to their parallel indicative sentences by some kind of additional marker, whether that marker is an additional word, or just a suffix, or just the absence of the indicative realis suffix or marker.

Therefore, because hortative sentences always differ from their indicative counterparts by the addition of some kind of written word or affix, it was not deemed necessary to also mark these hortative sentences by the addition of some kind of diacritic, as it is done in neighbouring languages. If, at some point, it is discovered that there exist parallel indicative and hortative sentences that have no written differences between them, then the community should seriously consider
 as is done in neighbouring Beboid languages.

Below is a theoretical example of what a hortative sentence would then look like if such a decision were made some day (brackets showing that this is not the current orthography):
< Jî buncey.> He should eat fufu.

In case further investigation is needed, the following paragraphs could serve as a beginning reference point.

## 3．1 Perfective hortatives

In the present tense，the verb in the hortative form will not get a realis suffix or marker．

Be ji baa buneey．They ate fufu（just now）．
3p eat．REAL c2SUB．REAL fufu
Be ji buncey．They should eat fufu．
3p eat．HORT
fufu

In the past tense the hortative uses the verb nuuy be，can，should，followed by a pronoun．${ }^{60}$

For example：
⿹waney bee ji buneey．My child has eaten fufu．
my．child P1 eat fufu
Øwaney bee nuun wu ji buneとy．My child should have eaten fufu．
my．child P1 be．HORT 3s eat．HORT fufu

## 3．2 Imperfective hortatives

In a present tense hortative progressive sentence，the hortative progressive marker ni should must be used．In the examples below the differences between the indicative and hortative sentence are underlined．

| Øwaney | jiio | buneモy． | My child is eating fufu． |
| :--- | :--- | :--- | :--- |
| my．child | eat．IPFV．c1．REAL fufu |  |  |
| Øwaney | $\underline{\text { ni }}$ | jii | buneモy． | My child should be eating fufu．

[^31]In the past tense there is an extra pronoun after the tense particle, and the verb nuuy be, should, could is used.

| Øwaney | bee |  | jii | buncey. |
| :---: | :---: | :---: | :---: | :---: |
| my.child | P1 |  | eat.IPFV | fufu |
| My child was eating fufu. |  |  |  |  |
| Øwayey | bee nuun | $\underline{\text { wu }}$ | jii | buncey. |
| my.child | P1 be.HORT ${ }^{61}$ | 3s | eat.HORT.IPFV | fufu |
| My child should have been eating fufu. |  |  |  |  |

### 3.3 Negative hortatives

There is a clear distinction between negated hortative and negated indicative clauses. The hortative clause always uses the bipartite negator kiin ... ni.

For example:
Kiin be ni be jii nyay ke.
NEG.HORT they HORT.IPFV they eat.HORT.IPFV meat NEG
They should not be eating meat.

Be
they
They are not eating meat.

[^32]
## 4 Appendix 4: Orthographic function of the hyphen

In section 5.12 the use of the hyphen is described. Using a hyphen for a grammatical reason can cause problems when typing. Your computer editor may think that this symbol is suggesting a place to break the word when needed. Or the hyphen is thought to be the end of the word when selecting words on your phone or computer. There may also be a problem when searching for words when the word ends in $\mathbf{y}$. For instance: searching for references to nyuy man will not find the variant nyu-uy. In the future there may be other problems in computer programs, when you use the hyphen within the word. For these reasons, this appendix offers possible solutions that do not involve a hyphen.

As mentioned in section 5.12, there are four places where the hyphen is used:

1. At the end of a prepositional phrase, instead of the completer ${ }^{62} \mathbf{l i}$ (see 5.12.1) li nyu-uy to a man
2. At the end of an associative phrase, instead of the completer $\boldsymbol{l} \boldsymbol{\varepsilon}$ (see 5.12.2) kintsii ki dzi-iy place of war
3. After méy ki or méyo ki meaning not yet, instead of the first negator ke following the verb (see 5.12.3)
Ntè nuuy kilo, ne tè méy ki fi-i mike. I was a stranger, and you did not help me.
Be méy ki fi ke wu ke. They did not help him.

In some cases, the full completer or negator is pronounced and written. In other cases, there is only a tone difference and vowel lengthening. In that case of simplification, the hyphen is used before the extra vowel.
4. The possessor of a locative noun, when this one is put between the prefix and the noun root (see section 5.13.4).
li mi-i bwiy around me

[^33]If the use of a hyphen proves to be problematic in the future, then the proposal is for case 3 above to always write the negator $\mathbf{k}$. When reading out loud one could elide the $\mathbf{k} \boldsymbol{\varepsilon}$ and lengthen the vowel as one wishes. In the remaining part of this appendix, the author describes an alternative way to write completers.

There are two different ways that could be used to write completers (with brackets showing that this is not the current orthography):

1. Add the extra vowel always at the end of the word after the hyphen, this will facilitate searching for the word. For instance $<$ li nyuy-u $>$ to man. ${ }^{63}$
2. Add a specific accent on all or specific completer morphemes and words. For instance <linyuūy> to man. ${ }^{64}$

Even though the above alternatives were rejected in favour of the current orthography, the author wishes to describe these two options in more detail below. Possibly, when people are more used to reading and writing Sari, the need for a better solution will become more evident.

Before some future language committee proposes any of this to the community, they should write consistently a piece of text with the different methods, to see and show what each option would look like.

Before expanding on the two options, the author wishes to emphasize why she feels some special way of writing is needed. Just removing the hyphen is not a good option. Recognizing the underlying words would become hard, and certain phrases would become ambiguous. For example removing the hyphen in the next phrases leaves us with two identically written phrases:

| bikaa bi nya-ay | legs of animal |
| :--- | :--- |
| bikaa bi nyaay | eight legs |

[^34]Not writing the lengthening of the vowel is not a good option either. In that case it is not clear when the phrase is finished, for example in the next phrase. Without marking the completer the phrase could finish after yíh, yibe, or bintaashe:
li yíh yibe yi bintaashe- $\varepsilon \quad$ in their houses of gathering in houses their of gathering-CPL

Option 1:
In this option the lengthening of the vowel is always written after the word.

## Examples:

| Current orthography | Gloss | Option 1 |
| :--- | :--- | :--- |
| méy me bikpo-כ | shoe polish | remains the same |
| kintsii ki dzi-iy | place of war | $<$ kintsii ki dziy-i> |
| kintutu ki beniiy le | group of people | remains the same |
| fe kimu-u | at another one | remains the same |
| li nyu-uy | to man | $<$ li nyuy-u $>$ |
| li kikaa li | on leg | remains the same |

Option 2: Write all completers with an accent
In case option 2 seems the best, the community should choose which accent to use. The choice of which mark to use is less important than the choice to use a mark or not to use one.
This would give, for instance (using the macron ${ }^{-}$):

| Current orthography | Gloss | Option 3 |
| :---: | :---: | :---: |
| méy me bikpo-o | shoe polish | <meとy me bikpos > |
| kintsii ki dzi-iy | place of war | < kintsii ki dziīy> |
| kintutu ki beniiy $1 \varepsilon$ | group of people | $<$ kintutu ki beniiy lē> |
| fe kimu-u | at another one | $<\mathbf{f} \boldsymbol{\varepsilon}$ kimū̄$>$ |
| li nyu-uy | to man | <li nyuūy $>$ |
| li kikaa li | on leg | $<$ li kikaa lī> |
| li kikaa li libwiy | on leg, at skin | $<$ li kikaa lī libwiy $>$ |

Using the same method for the vowel lengthening after meey ki would result in the rule: write an accent where the $\mathbf{k} \boldsymbol{\varepsilon}$ was elided and resulted in an extra vowel.

Be meqy ki fi-i wu ke. They did not help him. <Be méy ki fiī wu ke.>
The author believes however that it is even better to write the full words:
Be meey ki fi ke wu ke. They did not help him.
Using an accent for the vowel lengthening with a possessed locative noun would give:
li mi-i bwiy around me <li miī bwiy>

## 5 Appendix 5: Relative pronouns

Relative clauses begin with a relative pronoun, which agrees with the noun it follows. In the examples below, the relative pronoun is underlined.

## Examples:

| wi wu deeki c1.person c1.REL cook.IPFV | cook (n.), <br> person who cooks. | high <br> toned <br> wu |
| :---: | :---: | :---: |
| wi wu biee <br> c1.person c1.REL follow.IPFV | follower, person who follows | high <br> toned <br> wu |
| beniiy be tè biki wu baa c2.people c2.REL PAST follow.IPFV 3s c2.those | those people who were following him | high toned be |
| $\begin{array}{llllll}\text { nsuuy } & \text { yi } & \boldsymbol{o} & \text { saa } & \boldsymbol{\jmath} & \text { kכ } \\ \text { c9.fish } & \text { c9.REL } & \text { you } & \text { first } & \text { you } & \text { catch }\end{array}$ | the first fish that you catch | mid toned yi |
| $\begin{array}{llllll}\text { bi } \quad \text { yi } & \text { nyumi } & \text { be } & \text { be } & \text { yi } \\ \text { goat } & \text { c9.REL } & \text { her.husband } & \text { came } & \text { with } & \text { c9 }\end{array}$ | the goat that her husband (just) came with | mid <br> toned <br> yi |
| $\begin{array}{llllll}\text { bí } & \text { yi } & \text { nyumi } & \text { be } & \text { be } & \text { yi } \\ \text { goats } & \text { c10.REL } & \text { her.husband } & \text { came } & \text { with } & \text { c10 }\end{array}$ | the goats that her husband (just) came with | mid <br> toned <br> yi |

Relative pronouns carry a high tone when they are the subject of the following verb phrase, like in the first three examples above. The relative pronoun is followed by a verb phrase when it is the subject.
Relative pronouns carry a mid tone when they are the object, like in the third and fourth example. In this case they are followed by a subject, which could be a noun.

Associative markers can occur at the same place as relative pronouns: immediately after the noun. They carry a low tone for the wu noun class 1 (person) and yi noun class 9 (singular), and a mid tone for the other noun classes. Associative markers are followed by a noun.
Examples:
wi wu biee beniiy be biee le
bi yi nyumi
bí yi nyumi
person of things, rich person low toned wu rich people mid toned be
goat of her husband low toned yi
goats of her husband mid toned yi

The author suggests to make a distinction between the relative pronoun and the associative marker. For instance adding an accent on the relative pronoun (with brackets showing that this is not current orthography):
$<$ wi wu biee $>$ person of things, rich person
<wi wù biee> person who follows, follower
$<$ bi yi nyumi be> goat of her husband came
$<$ bi yì nyumi be be yi> goat that her husband came with

If this is decided upon in the future, then the community needs to discuss whether to mark the class marker for attributive verbs in the same way as the other relative clauses:

| Current orthography | Gloss | Marking the class marker |
| :--- | :--- | :--- |
| wi wu doy | old person | <wi wù doy> |
| doki chi gaa | red bean | <doki chì gaa> |

And maybe even write the marker for adjectives with the same accent:
Current orthography Gloss Marking the class marker
yway wu nyuy male child < yway wù nyuy >
wi wu ggweey tall person <wi wù ggweey >


[^0]:    ${ }^{1}$ Particle at the end of an associative phrase or prepositional phrase.

[^1]:    ${ }^{2}$ The /l/ at the start of a root is pronounced [1], and will be written I: filon story, biloy stories.
    ${ }^{3}$ The /l/ between vowels at other places is pronounced [r] or [l], and will be written as $\mathbf{r}$. Especially older women will say [1].
    ${ }^{4}$ The choice of $\boldsymbol{y}$ at the end of a word for signifying a nasalised vowel stems from speakers' intuition, and the fact that lengthening a short vowel followed by a $/ \mathrm{y} /$ will result in a nasalized long vowel, without the $/ \mathrm{y} /$ being pronounced. Surrounding related languages are using the same method to write nasalization.

[^2]:    ${ }^{5}$ In Sari, there is variation in how people pronounce longer words with $\mathbf{n t}, \mathbf{n d}, \mathbf{\eta} \mathbf{k}, \mathbf{\eta g}$, nch, and $\mathbf{n j}$. When this sound is not in the first syllable of the root, some people will say $\mathrm{nt}, \mathfrak{\eta k}$, and nch, and others will say nd, gg , and nj. For example ndenche to trample. The first nd is always nd, but the nch can also be nj. Fintanju insect, fi- is prefix, nt is always nt, and $\mathbf{n j}$ can also be nch.

[^3]:    ${ }^{6}$ kinshiingi ~ kinshiigki, personal variation
    ${ }^{7} \boldsymbol{\eta} \mathbf{w} \boldsymbol{\varepsilon} \boldsymbol{n} \mathbf{n} \boldsymbol{\varepsilon}$ slicing, $\boldsymbol{\eta} \mathbf{\prime} \mathbf{w \varepsilon \varepsilon} \boldsymbol{y} \boldsymbol{\varepsilon}$ sieving. In section 5.16 the difference between $\boldsymbol{\eta} \mathbf{w}$ and $\boldsymbol{\eta} \mathbf{\prime} \mathbf{w}$ will be explained
    ${ }^{8}$ nyءع he is giving, n'y $\mathbf{y}$ I rise. In section 5.16 the difference between ny and n'y will be explained.

[^4]:    ${ }^{9}$ While the vast majority of these consonant clusters occur before unrouded vowels, they also occur in bwo c14.your (sg), mwo cl8a.your (sg), and kwo backpack.

[^5]:    ${ }^{10}$ The only words with $\mathbf{p w}$ word medially are reduplications.
    ${ }^{11}$ Only two words found with dw in it.
    ${ }^{12}$ The only word found with Iw.

[^6]:    ${ }^{13}$ The only word found with ntw.
    ${ }^{14}$ See section 4.4.1 for special spelling rules with an $\mathbf{h}$.

[^7]:    ${ }^{15}$ In isolation, the low tone surfaces as a low falling tone.
    ${ }^{16}$ In isolation, the LH surfaces as a non-falling low tone.

[^8]:    ${ }^{17}$ Tone was written on words in isolation, on the first vowel of each syllable. V́ for high tone, V̀ for low tone, both falling at the end of a word $(\mathrm{L})$ and level within a word $(\mathrm{L})$ or at the end of a word $\left(\mathrm{L}^{\mathrm{H}}\right)$. No marking for other melodies on syllables: LM, ML, M, LML, LH, HL, LHL, MH, HM. All participants knew how to write the Sari letters. Two people out of 19, both speaking the same variant of Sari, did reasonably well. The rest was struggling. It was decided not to write tone at this time. The author noticed that between variants of the language, difference in tone and in vowel length are most common.

[^9]:    ${ }^{18} \mathrm{M}$ after a low tone, with no High tone following it, will be lowered. This is not downstep.
    ${ }^{19} \mathrm{~L}$ at the end of an utterance will surface as a low falling pitch.
    ${ }^{20} \mathrm{LH}$ at the end of a word will in isolation surface as a level low pitch.
    ${ }^{21} \mathrm{MH}$ within one morpheme may present itself as free variation between MH and (M)HL surface pitches.
    ${ }^{22}$ The High will only surface as a normal mid pitch level.

[^10]:    ${ }^{23}$ The Mid will have lower mid level.
    ${ }^{24}$ This may be limited to long syllables, a larger corpus would be needed to know for sure.
    ${ }^{25}$ The examples all have a long vowel or a vowel with a nasal, but there are words with short vowel and no final nasal as well, except for the last two lines.
    ${ }^{26}$ This surfaces as a non-falling low tone in isolation. The high tone will prevent the low tone from falling in isolation. When followed by a low toned prefix, that prefix is changed to high (tsǎy yìnî this headpad, yi will be realised on a high tone), and when followed by a word starting with a low tone, the high tone will show up on the word itself (tsăy yì tàa' headpad of my father, tsay will be realised on a low-high rising tone).
    ${ }^{27}$ The tone mark on the final nasal here does not indicate that it is a syllabic nasal. It is just a place to write the low tone mark of the melody.

[^11]:    ${ }^{28}$ This choice has been made by the translators, since they did not see the need to mark anything here. The author would propose marking the imperfective, since this is the verb form that is not basic. Proposal: mark the imperfective form that ends in $-\supset 0$ or -o . See Appendix 2: Marking progressive aspect.

[^12]:    ${ }^{29}$ It only occurs when the subject is a single person（noun class 1 ），and is not wu $3 s g$ ，but a noun phrase or a name，or $\boldsymbol{y}$ you．Also the verb needs to belong to the High toned verbs，and have the same form for the perfective and imperfective．

[^13]:    ${ }^{30}$ Surfaces as low falling in isolation.
    ${ }^{31}$ Surfaces as level low in isolation.

[^14]:    ${ }^{32}$ See the table in 5.1 for the different noun class affixes. In this case the final vowel of the singular is dropped, creating the plural.

[^15]:    ${ }^{33}$ In the NT the plural téeh bellies, stomachs is used, but téh is prefered by at least one of the translators.

[^16]:    ${ }^{34}$ These are at the moment not existing words, just examples of where to place the $\mathbf{h}$ if it needs to be placed.

[^17]:    ${ }^{35}$ Since in Sari the only possible consonant syllable finally is $\mathbf{y}$, any other consonant is either removed (like the $\mathbf{k}$ from doki) or changed into an $\mathbf{\eta}$ (for nasals $\mathbf{m}, \mathbf{n}$ and $\mathbf{n y}$ ). Other examples are: tsons feast, tsson feasts; name herb, nay herbs. There seems to be no clear rule for when the vowel needs to be lengthened like for tsson feasts.
    ${ }^{36}$ Noun classes $16,17,18$ and 23 are locative noun classes, containing non-count words. See Langhout 2015 for more information.

[^18]:    ${ }^{37}$ Or kiti kumu, the $\mathbf{u}$ from mu may change the vowel of prefix ki- to $\mathbf{u}$.

[^19]:    ${ }^{38}$ Both the class 9 and 10 relative pronouns yi have a high tone if the noun it modifies is a subject and a mid tone if the modified noun is an object. In contrast, tone on the associative marker agrees with the noun class of the noun it modifies. For example, the class 9 associative marker yi always has a low tone, while that for class 10 , the plural yi, always has a high tone.

[^20]:    ${ }^{39}$ Noun classes 1 and 3
    ${ }^{40}$ Noun classes 4, 6, 9 and 10.

[^21]:    ${ }^{41}$ It probably should be reviewed at some point, whether the hyphen is a problem. A recent proposal was to mark the vowel of the completer with a grammatical mark instead of using the hyphen. For instance nim $\varepsilon \hat{\varepsilon}$ instead of nime- $\varepsilon$, lî instead of $\mathbf{l i}, 1 \hat{\varepsilon}$ instead of $\mathbf{l} \varepsilon$. With lî and $l \hat{\varepsilon}$ possibly connected to the preceding word. All of this was not accepted during a meeting in Kamine on 3 Dec. 2020, with translators, the review committee and some literacy workers. See Appendix 4: Orthographic function of the hyphen, for recommendations.
    ${ }^{42}$ Sari has two completers. They signify the end of a phrase, and make it complete. Therefore the term we use is completer (CP). Completers are phrase final clitics.

[^22]:    ${ }^{43}$ The community could make a choice to always write the full form of the $\mathbf{k \varepsilon}$. The author thinks this would be a better choice. The reader can still choose to pronounce the form without $\mathbf{k \varepsilon}$, with a lengthened vowel.
    ${ }^{44}$ The community could choose to always write a hyphen when the vowel is lengthened.
    ${ }^{45}$ In all examples the first word has a mid tone, and the last a high tone. The tone of the possessor is different.

[^23]:    ${ }^{46}$ Instead of this raised bar, it is also possible to use an apostrophe ', depending on what the text editor gives.

[^24]:    ${ }^{47}$ Instead of this raised bar, it is also possible to use an apostrophe ', depending on what the text editor gives.
    ${ }^{48}$ A nasal prefix will nasalize the approximant: $\mathbf{n}^{\prime} \mathbf{y}[\hat{\jmath}]$ is not $\mathbf{n y}[\mathrm{n}] ; \mathbf{y} \mathbf{\prime} \mathbf{w}[\tilde{w}]$ is not $\mathfrak{y w}\left[\mathrm{g}^{\mathrm{w}}\right]$.

[^25]:    ${ }^{49}$ The length of the vowel depends on the final tone of the verb.

[^26]:    ${ }^{50}$ English: je yi bara. Since this is not a name, no capitalization is used.

[^27]:    ${ }^{51}$ There are some places where the list is different from the words in the New Testament. The translators have only used a special spelling with $\mathbf{h}$ for the confusing forms of a word. The author of this paper uses the $\mathbf{h}$ in all the forms, for consistency. This makes it easier to remember which of the two words uses the $\mathbf{h}$.
    ${ }^{52}$ The form liiti is the basic imperfective, and can have either habitual or progressive meaning, according to the context.
    ${ }^{53}$ Perfective: has become ripe, be ripe. Imperfective: becoming ripe.

[^28]:    ${ }_{54}^{54}$ mberu to become ripe, mbs be ripe
    ${ }^{55}$ No imperfective form was found. If it is happening now, one is eating oath, jiio leh.

[^29]:    ${ }^{56}$ Translators wrote tebi flute, the author of this paper would propose < tehbi > flute.
    ${ }^{57}$ The word $\mathbf{y} \boldsymbol{\varepsilon}$ farms gave the most confusion with $\mathbf{y} \boldsymbol{\varepsilon}$ buffalo. Most of the other words in this list occur in a diffferent place in the sentence and did not receive a special spelling.

[^30]:    ${ }^{58}$ Verbs fall into several classes, this is still under investigation. Imperfectives from various classes take suffixes -i, -isi, -ini, -ti (-di after nasal), or -ki (-gi after nasal), and there can also be a change of vowel quality and vowel length.
    ${ }^{59}$ Realis marker or Copula for all noun classes: wecl (->/-ov, vowel length depending on final tone of verb),
     mwé $c 18 a$, fiєع $c 19$, yaa $c 23$, maa $c 25$.

[^31]:    ${ }^{60}$ The complete use and tonal inflection of this verb has not been analyzed yet．In different constructions it has different meanings，maybe with a different melody because of TAM．The glosses should and could are interchangeable．

[^32]:    ${ }^{61}$ See previous footnote.

[^33]:    ${ }^{62}$ Sari has two completers. They signify the end of a phrase, and make it complete. Therefore the term we use is completer (CP). Completers are phrase final clitics.

[^34]:    ${ }^{63}$ This option was proposed early in the project, and rejected by the translators. It is a bit further away from the way you say it, but should be easy to learn.
    ${ }^{64}$ This was rejected near the end of the translation project, during a meeting with translators, reviewers, and literacy people.

