

A Comparative Analysis of the Nominal Class Marking Systems of Cisukwa, Cindali and Cilambya

Atikonda Akuzike Mtenje-Mkochi

Malawi University of Science and Technology

Email: amkochi@must.ac.mw

Abstract

This paper compares the nominal class marking systems of Cisukwa (M202), Cindali (M301) and Cilambya (M201B) - Bantu languages spoken in Malawi, Tanzania and Zambia which have been collectively labelled SuNdaLa in this paper. The paper focused on the Malawi varieties and aimed to analyse the similarities and micro-variation exhibited in these closely related languages. The paper couched its focus on the following questions: i) What are the similarities of the nominal class marking systems of SuNdaLa? ii) How is variation exhibited in their noun classes? iii) What factors account for the variations in SuNdaLa? The paper used Guérois, Gibson, Everdium and Marten (2017) parameters to answer the questions raised by the paper but also to test their validity on closely related varieties. The paper demonstrates that the SuNdaLa varieties share similarities on a lot of values, particularly that they have V shaped augments, use the class 5 prefix *-li-* which alternates with zero. They also have 19 noun classes, express diminutive and augmentative meaning through noun classes and nouns take locative and infinitive prefixes. However, these parameters fail to capture micro-variation of minute details exhibited within the varieties. The paper argues that there is need to refine the parameters by adding sub-parameters that address these issues. It shows how closely related languages exhibit variation and how the variation provides indications of the direction and nature of language change in the nominal class marking systems. The paper concludes that although there are minute variations in the nominal class marking systems of SuNdaLa, their similarities are indeed indications that the varieties are on a dialect continuum.

Keywords: noun, noun class, variation, prefix, augment, pairing

1. Introduction

Comparative studies of the morpho-syntax of Bantu languages have benefitted from works of scholars such as Toporova (1997), Kiso (2012), Bresnan and Moshi (1990), Demuth and Mmusi (1997), Nsuka Nkutsi (1982), Henderson (2006), Marten, Kula

and Thwala (2007) and Petzel and Hammarström (2013). The focus of recent studies has been to examine how closely related languages in particular geographic spaces exhibit variation. Marten, Kula and Thwala (2007) take a parametric approach in their analysis of morpho-syntactic micro-variation of Bantu languages. Guérois, Gibson, Everdium and Marten (2017) have developed parameters for the analysis of further morpho-syntactic variation in Bantu languages. It is against this background that the paper compares the noun classes of Cisukwa (M202), Cindali (M301) and Cilambya (M201B) (Bantu languages, spoken in Malawi, Tanzania and Zambia) which have been collectively labelled as SuNdaLa. The analysis in this paper is for the varieties that are predominantly spoken in Chitipa, northern Malawi. In their language mapping survey, conducted in 2006, The Centre for Language Studies (CLS) of the University of Malawi – on the basis of a presumed mutual intelligibility as well as selected shared linguistic features of the lexicon and phonology – lumped the three varieties into one language.¹ It should, however, be noted that the speakers insist that the languages are different. Although the CLS report points out some few phonological similarities and differences among the SuNdaLa varieties, the phonological analysis is not comprehensive. Furthermore, the report does not provide a morpho-syntactic analysis of these three varieties.

This paper compares the nominal class marking systems of SuNdaLa using parameters developed by Guérois et al (2017) with the aim of testing the validity on closely related varieties and answering the following research questions i) What are the similarities in the nominal class marking systems of SuNdaLa? ii) How is variation exhibited in the nominal class marking systems of SuNdaLa? iii) What factors account for the variations in SuNdaLa? The paper contributes to studies on comparative linguistics of Bantu languages through the analysis of closely related varieties whose comparative analysis has not been presented before in the literature. It also contributes to the literature on language change by showing the nature and direction of change of noun classes of genetically related varieties.

Data were collected from elicitation sessions from 5 native speakers of each of the SuNdaLa varieties, using word lists by Swadesh (1954) and Snider and Roberts (2006). The rest of the paper is structured as follows: Section 2.0 compares the nominal class marking system of the SuNdaLa varieties using Guérois et al's (2017) parameters on morpho-syntactic variation of Bantu languages. Section 3.0 examines the variation in the nominal class marking systems of SuNdaLa and 4.0 provides concluding remarks.

2.0 Comparative analysis of the nominal class marking systems of Cisukwa, Cindali and Cilambya

This section analyses the nominal class marking systems of the SuNdaLa varieties², using the parameters developed by Guérois et al (2017) for nouns and pronouns. However, the parameters derive from a larger set of parameters of Bantu morpho-syntactic variation which deal with nouns and pronouns, noun modifiers, nominal derivation, the lexicon, verbal derivation, verbal inflection, relative clauses, clefts and questions, verbless clauses, simple clauses, constituent, complex sentences and the

expression of focus. This paper focuses on the following 8 parameters which deal with nouns and pronouns:

- What is the shape of the augment?
- Does the augment fulfil a specific grammatical function?
- What is the shape of the class 5 nominal prefix?
- How many noun classes are there, (including locative noun classes)?
- Does the infinitive take a noun class prefix?
- Is the diminutive meaning expressed through the use of noun classes?
- Is the augmentative meaning expressed through the use of noun classes?
- Can a noun take a locative class prefix?

The following subsections analyse aspects of the SuNdaLa nominal class marking systems basing on these parameters.

2.1 What is the shape of the augment?

Some Bantu languages, for example Otjiherero (see Kavari and Marten 2009), Bukusu, isiXhosa and Cibemba (see Kula 2002), have an augment also known as the pre-prefix or initial vowel. Other Bantu languages such as Chichewa (see Mchombo 2004), Kiswahili (see Maho 1999), Ciyawo (see Ngunga 1997) and Citumbuka (see Vail 1971) do not have augments. For those that have augments, there is variation in the shape of the augment. According to Guérois et al (2017), there are some languages that have augments that only have the V shape, there are other languages whose augments have V and CV shapes and then there are languages whose augment is expressed tonally. All SuNdaLa varieties have optional augments which always occur as a V shape. In some Bantu languages, the shape of these augments can be variable depending on vowel harmony. For instance, in Zulu, the augment - reliant on the vowel properties of the prefix - can be *u-*, *a-*, or *i-*. (see Katamba 2003). Similarly, in SuNdaLa, the augment can be manifested as /i/, /u/ and /a/ based on vowel harmony properties. As demonstrated by the examples below in (1), the augment becomes *u*, *a-*, or *i-* when the prefix vowels are also *u*, *a*, or *i*, respectively. It should be noted that in all SuNdaLa varieties, there are no prefixes that have the vowels /e/ and /o/.

(1)

SuNdaLa	English gloss
a) <i>i-mí-tu</i> AUG-4-head	'heads'
b) <i>i-cí-fuwa</i> AUG-7-chest	'chest'
c) <i>a-má-fupa</i> AUG-6-bone	'bones'
d) <i>a-má-fumbi</i> AUG-6-egg	'eggs'

- | | | |
|----|-----------------------------------|----------|
| e) | <i>u-lú-limi</i>
AUG-11-tongue | ‘tongue’ |
| f) | <i>u-mú-lindu</i>
AUG-1-girl | ‘girl’ |

The augments in SuNdaLa occur with all classes except with the three locative classes. They are followed by the CV type prefixes such as, *-li-* (class 5), *-mi-* (class 4). Classes 9 and 10 may take a nasal (N) as the prefix and classes 1a, 2a, 5, 9 and 10 may also have zero prefixes. However, the augment is still prefixed to the nouns in these noun classes. The most common phonological shape of the augment plus prefix in nouns is the V-CV type. Other noun classes in SuNdaLa, for example class 1a, 14, and for Cisukwa and Cindali sometimes class 5, 9, 10 show the V- type. In classes 16, 17 and 18 the CV type is prefixed, while N is found in classes 9 and 10.

2.2 Does the augment fulfil a specific grammatical function?

Some literature has attempted to assess whether the augment has a function in the various Bantu languages that have them (cf. Maho 1999, Batibo 1985, Katamba 2003, De blois 1970). Maho (1999) notes that the augment does not have any apparent meaning or else it lost a previously well-defined meaning in some Bantu languages. He quotes Sommer and Vossen (1954) who argue that the grammatical function of the augment in the Ngamiland dialect of Siyeyi is no longer clear. Nevertheless, there are some languages whose augments seem to have grammatical functions. Hyman and Katamba (1991, 1993), as cited in Katamba (2003), demonstrate that the augment in Ganda has some functions. It has the pragmatic function of displaying definiteness, specificity and focus and it may also have a syntactic function. The occurrence of the augment may depend on whether the noun occurs in a main or dependent clause or whether it appears after an affirmative or negative construction. They also show that the augment is normally present on the noun and on the adjectives and the numerals in affirmative constructions, in the main clause and subject nominal prefixes. Nevertheless, it is absent in certain syntactic constructions after a negative verb.

Botne (2008:21) lists environments where the augment does not appear in Cindali. They include the following:

- i. When a locative prefix is attached to the noun,
- ii. When the noun follows the connective linker *-aa*,
- iii. When the noun follows any form of the verb ‘be’, i.e. *-ba* or *-li*,
- iv. When the noun follows the conjunction *ngáti* ‘like’,
- v. When the noun follows the complementizer *ukúti* ‘that’,
- vi. When the noun follows the defective verb *-ti* ‘say’.

The paper agrees with Botne’s observations (2008). The augment in Cisukwa, Cindali and Cilambya is used in everyday speech of the people. It occurs in contexts such as natural conversations, narration of stories and other speech discourses. However, there is need for more discourse and pragmatic data and/or texts to provide information on what the function of the augment in the SuNdaLa varieties may be. These occurrences

noted by Botne (2008) could only begin to show some direction of the functions of the augment in the language.

2.3 What is the shape of the class 5 nominal prefix?

According to Guérois et al (2017), there is variation on issues concerning class 5. For some languages, it is always zero marked. For instance, Mchombo (2004) and Bentley and Kulemeka (2001) claim that in Chichewa, the class is zero marked. However, in Mtenje-Mkochi (forthcoming), it is argued that there are remnants of CV shape of the prefix in Chichewa. There are some languages which have a V shaped prefix that possibly alternates with zero marking. There are some languages with CV shape, possibly alternating with zero marking, for example Citumbuka (cf. Vail (1971) and then there are other languages that have prefixes with both V and CV shape. All SuNdaLa varieties show that they have *-li-* as the prefix for class 5. The prefix can also be realised as *-l̥-* or *-li-* and can alternate with the zero prefix. This is illustrated in the following examples:

(2)

SuNdaLa	English gloss
<i>i-(li)fupa</i>	'bone'
<i>i-(li)-βele</i>	'flower'
<i>i-(li)fumbi</i>	'egg'

2.4 How many noun classes are there (including locative classes)?

The number of noun classes varies across Bantu languages. Maho (1999) suggests that Ganda seems to have the highest number, 21 noun classes. There are some Bantu languages that have a small number of noun classes, for example Kako which only has 3 classes. Kamo no longer has noun classes (cf. Guthrie 1971:42). Maho (1999) terms those languages that have three or fewer classes as reduced systems and those with seven classes or more as canonical. Katamba (2003) refers to canonical systems as those languages with six classes paired for singular and plural nouns, while at the same time having about the same number of classes that are not paired. All the SuNdaLa varieties have canonical noun class systems because including the locative noun classes, each of the varieties has a total of 19 noun classes. Table 1 presents the noun class system for the SuNdaLa.

Table 1: The Noun classes of SuNdaLa

Class	Augment	Noun prefix	Semantics	Example
1	<i>u-</i>	<i>-mu-, -m^w-</i>	human beings	<i>umulindu</i> ‘girl’
1a	<i>u-</i>	∅	kinship terms, some proper names, some living beings, loan words	<i>ukálulu</i> ‘hare’ <i>u-táta</i> ‘father’
2	<i>a-</i>	<i>βa-</i>	regular plural class of class 1 in Cisukwa, Cindali and Cilambya and also plural class for class 1a in Cisukwa and Cilambya	<i>a-βa-lindu</i> ‘girls’ <i>a-βá-na</i> ‘children’
2a	<i>a-</i>	<i>βo-</i>	plural class for 2a for Cindali	<i>a-βó-maji</i> ‘mothers’ <i>a-βó-tata</i> ‘fathers’
3	<i>u-</i>	<i>-mu-</i>	trees, plants, inanimates, some body parts, implements, natural phenomena, augmentative and pejoratives	<i>u-mú-lomo</i> ‘lip’ <i>u-mú-tu</i> ‘head’
4	<i>i-</i>	<i>-mi</i>	Plural of class 3 but may also be a plural class for class 9 for Cindali	<i>i-mí-tu</i> ‘heads’ <i>i-mí-lomo</i> ‘heads’
5	<i>i-</i>	<i>-li-</i>	paired body parts, natural phenomena, plants and fruits, animals and miscellaneous nouns, loan words	<i>i-lí-βele</i> ‘breast’ <i>i-lúwa</i> ‘flower’
6	<i>a-</i>	<i>-ma-</i>	plural class of 5, mass terms and liquids	<i>a-má-fupa</i> ‘bones’ <i>a-má-fumbi</i> ‘eggs’

7	<i>i-</i>	<i>ci-</i>	inanimates, instruments, tools, utensils, augmentation, derogatives, miscellaneous	<i>i-c-éeni</i> ‘forehead’ <i>i-ci-fuwa</i> ‘chest’
8	<i>i-</i>	<i>fi-</i> (Cisukwa and Cindali) <i>vi-</i> (Cilambya)	plural of class 7	<i>i-ʃ-éeni</i> ‘forehead’ (Cisukwa and Cindali) <i>i-vj-éeni</i> ‘foreheads’ (Cilambya)
9	<i>i-</i>	<i>-N-</i> (Cilambya) <i>-N- or ø</i> (Cisukwa and Cindali)	animals, inanimates, miscellaneous properties and loan words	<i>i-m-bóombo</i> ‘work’ <i>ií-sofu</i> ‘elephant’ (Cisukwa and Cindali)
10	<i>i-</i>	<i>-N-</i> (Cilambya) <i>-N- or ø</i> (Cisukwa and Cindali)	plural of class 10 and 11	<i>i-m-bóombo</i> ‘work’ <i>ií-n-dimi</i> ‘tongues’ <i>ií-fula</i> ‘rain’
11	<i>u-</i>	<i>-lu-</i>	long, thin entities; some abstracts single instances of collectives	<i>u-lú-limi</i> ‘tongue’ <i>u-lú-soko</i> ‘river’
12	<i>a-</i>	<i>-ka-</i>	large quantities; some miscellaneous diminutives	<i>a-ká-na</i> ‘small child’ <i>a-ká-yuluʃe</i> ‘small pig’

13	<i>u-</i>	<i>-tu-</i>	plural of class 12	<i>u-tw-áana</i> 'small children' <i>u-tu-yulúþe</i> 'small pig'
14	<i>u-</i>	<i>-þu-</i>	qualities, characteristics, materials abstracts, some concretes	<i>u-þu-lími</i> 'agriculture' <i>u-þú-kata</i> 'laziness'
15	<i>u-</i>	<i>-ku-</i>	Infinitives	<i>u-kú-l'a</i> 'to eat' <i>u-kú-seka</i> 'to laugh'
16		<i>pa-</i>	Locative 'at' 'on' 'proximity', general place or direction	<i>pa-mu-hanya</i> 'at, on the top'
17		<i>ku-</i>	Locative general area 'far away'	<i>kú kaya</i> 'at the village'
18		<i>mu-</i>	Locative 'in'	<i>mu-lú-soko</i> 'in the river'
21	<i>i-</i>	<i>-li-</i>	pejoratives, augmentatives	<i>ililosi</i> 'horrific witch' (Cindali)

2.5 Does the infinitive take a noun class prefix?

Guérois et al (2007) mention different instances in which the infinitive may be expressed. A language may have no infinitive, the infinitive may be marked in another way for example through tonal marking or it may be marked through the noun classes. All SuNdaLa varieties express the infinitive through class 15 which has *u-* as the augment and *-ku-* as the infinitive class prefix. Examples can be observed below.

(2)

SuNdaLa	English gloss
<i>u-kú-í'a</i>	'to eat'
<i>u-kú-lima</i>	'to cultivate'
<i>u-kú-maɲa</i>	'to know'
<i>u-kú-í'a</i>	'to die'
<i>u-k^w-éenda</i>	'to walk'
<i>u-kú-lila</i>	'to cry'
<i>u-kú-seka</i>	'to laugh'
<i>u-kú-βuka</i>	'to go'

All the examples above have the class 15 prefix *-ku-* indicating the infinitive.

2.6 Is diminutive meaning expressed through the use of noun classes?

Guérois et al (2017)'s parameters address whether diminution is addressed through noun classes or another strategy. All the SuNdaLa classes use classes 12 and 13 to express diminution. Class 12, as seen in Table 2, has the prefix *-ka-*. It is highly productive in that any noun from other classes can take the prefix *-ka-* in what is known as secondary affixation. This prefix replaces the noun class prefix of the original noun class. Examples of class 12 nouns demonstrating diminution are presented in Table 2.

Table 2: Class 12 nouns

SuNdaLa	English gloss	SuNdaLa	English gloss
<i>ka</i>		Common class	
<i>a-ká-na</i> AUG-12-child	'small child'	<i>u-mw-áana</i> AUG-1-child	'child'
<i>a-ká-suluβe</i> AUG-12-pig	'small pig'	<i>i-η-gulúβe</i> AUG-12-pig	'pig'
<i>a-ká-kuku</i> AUG-12-chicken	'small chicken'	<i>ii-η-guku</i> AUG-9-chicken	'chicken'(sg)
<i>a-ká-liindu</i> AUG-12-chicken	'small girl'	<i>u-mú-liindu</i> AUG-1-girl	'girl'
<i>a-ká-juumba</i> AUG-12-house	'small house'	<i>ii-ɲ-úumba</i> AUG-9-house	'house'

<i>a-ká-soko</i> AUG-12-river	‘small river’	<i>u-lú-soko</i> AUG-11-river	‘river’
<i>a-ka-mu-tu</i> AUG-12-1- head	‘small head’	<i>u-mu-tu</i> AUG-3-head	‘head’
<i>a-ka-mu-ndu</i> AUG-12-1- person (Cisukwa, Cindali) <i>a-ka-mu-nthu</i> AUG-12-1- person (Cilambya)	‘small person’	<i>u-mu-undu</i> AUG-1-person (Cisukwa and Cindali) <i>u-mu-nthu</i> (Cilambya) AUG-1-person	‘person’

In the examples above, when a noun goes into class 12, it loses its original prefix. For instance, in the word *a-ká-liindu* ‘small girl’ derived from class 1 where it was *u-mú-liindu* ‘girl’, the prefix *-mu-* of the original class is lost and replaced by *-ka-* of class 12. This is unlike languages such as Chichewa and Citumbuka which allow multiple prefixation and hence forms occur with two prefixes. For example, in Chichewa the words *ka-mu-nthu* ‘small person’, *ka-chi-ngwe* ‘small rope’, which are in class 12 appear with the class 12 prefix *ka-* and the original noun prefixes *mu-* and *ci-*. The original prefix in SuNdaLa is maintained. However, in monosyllabic noun stems as in the examples *akamutu* ‘small head’, *kamuundu* ‘small person’ (Cisukwa, Cindali) and *kamuunt^hu* ‘small person’ (Cilambya) which have the monosyllabic noun stems *tu* and *ndu/nt^hu*, both the original prefix and the retained prefix are maintained.

It should be noted though that in the SuNdaLa varieties, there is an option of not dropping the inherent prefix hence forms such as *akamwána* ‘small child’ and *akanguku* ‘small chicken’ with prefixes *mu-* of class 1 and *N-* of class 9, respectively, are possible. In this option, it is the retained prefix that controls agreement, hence the phrase ‘my child’ is *akámwana kaangu* with the agreement *-ka-* of the class 12 prefix (the retained prefix) and not *akámwana waangu* with *-u-* of the inherent prefix. Class 13 has the prefix *-tu-* and presents diminution in plural (it is a plural class for class 12). Examples are presented in the Table 3.

Table 3: Class 13 nouns

SuNdaLa	English gloss	SuNdaLa	English gloss
<i>tu</i>		Common class	
<i>u-t^w-ána</i> AUG-13-child	‘small children’	<i>a-βá-na</i> AUG-2-child	‘children’
<i>u-tu-xulúβe</i> AUG-13-pig	‘small pigs’	<i>i-η-gulúβe</i> AUG-10-pig	‘pigs’

<i>u-tú-kuku</i> AUG-13-chicken	‘small chickens’	<i>ii-ŋ-guku</i> AUG-10-chicken	‘chicken’(pl)
<i>u-tú-liindu</i> AUG-13-girl	‘small girls’	<i>a-βá-liindu</i> AUG-2-girl	‘girls’
<i>u-tú-soko</i> AUG-13-river	‘small rivers’	<i>a-ma-soko</i> AUG-6-river	‘rivers’

2.7 Is augmentative meaning expressed through noun classes?

Apart from diminution, the Guérois et al (2017) parameters also question whether a language expresses augmentative meaning through the noun classes. All SuNdaLa varieties express augmentation through noun classes and use classes 12 and 13 for this endeavour. Just like in diminution, augmentative nouns originate from other classes and get assigned to classes 7 and 8 through secondary affixation and the original prefix is dropped. Examples of class 7 words showing augmentative meaning are presented in Table 4. The class has *i-* as the augment and *-ci-* as the prefix.

Table 4: Class 7 nouns

SuNdaLa	English gloss	Common class	English gloss
<i>ci</i>			
<i>i-c-ána</i> AUG-7-child	‘big child’	<i>u-mw-ána</i> AUG-1-child	‘child’
<i>i-ci-vuluβe</i> AUG-7-pig	‘big pig’	<i>i-ŋ-guluβe</i> AUG-9-pig	‘pig’
<i>i-ci-kuku</i> AUG-7-chicken	‘big chicken’	<i>ii-ŋ-guku</i> AUG-9-chicken	‘chicken’ (sg)
<i>i-ci-liindu</i> AUG-7-girl	‘big girl’	<i>u-mú-liindu</i> AUG-1-girl	‘girl’
<i>i-ci-úumba</i> AUG-7-house	‘big house’	<i>ii-ŋ-úumba</i> AUG-9-house	‘house’
<i>i-ci-soko</i> AUG-7-river	‘big river’	<i>u-lú-soko</i> AUG-11-river	‘river’

Class 8 is the plural class to the singular class 7 and hence also serves the purpose of expressing diminution in the language. It should be noted that Cisukwa and Cindali only have voiceless fricatives while Cilambya has both voiceless and voiced fricatives (cf. Mtenje 2016 for this analysis). This difference in the sound inventories renders divergence in the prefixes for this class among the SuNdaLa varieties. A voiceless fricative *-fi-* is the prefix for Cisukwa and Cindali and *-vi-* a voiced fricative occurs in Cilambya. All SuNdaLa varieties use the augment *i-* for this class. The prefixes can also appear as *-f-* or *-v-* in cases where the underlying prefixes *-fi-* and *-vi-* precede a vowel initial stem. These changes are due to secondary articulation as a vowel hiatus resolution strategy. Examples of class 8 nouns are presented in Table 5.

Table 5: Class 8 nouns

Cisukwa, Cindali	Cilambya	English gloss	Common class	English gloss
<i>ci</i>				
<i>i-fi-vuluβe</i> AUG-8-pig	<i>i-vi-vuluβe</i> AUG-8-pig	'big pigs'	<i>i-η-guluβe</i> AUG-10-pig	'pig'
<i>i-fi-kuku</i> AUG-8- chicken	<i>i-vi-kuku</i> AUG-8- chicken	'big chickens'	<i>ii-η-guku</i> AUG-10-chicken	'chicken' (sg)
<i>i-fi-liindu</i> AUG-8-girl	<i>i-vi-liindu</i> AUG-8-girl	'big girls'	<i>a-βá-liindu</i> AUG-2-girl	'girl'
<i>i-fi-júumba</i> AUG-8- house	<i>i-vi-júumba</i> AUG-8- house	'big houses'	<i>ii-η-úumba</i> AUG-10-house	'house'
<i>i-fi-soko</i> AUG-8-river	<i>i-vi-soko</i> AUG-8- river	'big rivers'	<i>u-lú-soko</i> AUG-11-river	'river'

2.8 Can a noun take a locative class prefix?

The last parameter the paper discusses concerns the locative noun classes. The Guérois et al (2017) parameters also deal with whether a language includes a locative class prefix. On the one hand, there are some languages where locative prefixes can appear on nouns while in other languages different strategies are used. Some languages use locative suffixation or they may use prepositional phrases. Maho (1999) notes that there are some languages where all locative classes 16, 17 and 18 are attested with their noun prefixes and some of these languages have all the concords associated with the classes. Maho quotes Van Sambeek (1995) and Poulos (1991) who provide examples from Icibemba and Tshivenda, respectively as languages with such characteristics. Maho (1999) however, argues that there are some languages like Kiswahili which have lost the locative prefixes and instead use a suffix to form locatives but the concords of classes 16, 17 and 18 are maintained. For example, Kiswahili uses the suffix *-ni* and maintains the concords for all the locative classes. However, Maho (1999) further notes that in this group of languages that use suffixation, there are some languages such as Kamba which have lost the locative prefixes and have no other special locative prefixes. Then there are some languages such as Kesukuma and Sestwana where the locative concords have merged into a single set. For instance, in Setswana, Cole (1955) as quoted in Maho (1999), observes that the locative concord *go* for class 17 is used for all classes. All SuNdaLa varieties behave like iciBemba and Tshivenda for they have all the locative classes 16, 17 and

18 and have all the concords associated with the noun classes. Examples of the locative classes in SuNdaLa are presented below.

SuNdaLa

(3)

(a) *pa-lw-ingilo*
16-11-courtyard
'on the courtyard'

(b) *mu-lú-soko*
18-11-river
'In the river'

(c) *kú-kaya*
17-village
'at the village'

Locative nouns are derived by combining a noun with its inherent noun class prefix with the locative prefix. For instance, in the word *mu-lú-soko* 'in the river', the locative prefix *mu-* is concatenated with the inherent class 11 prefix *lu-*. The locative nouns, therefore, make allowance for multiple prefixation. In the diminutive (classes 12 and 13) and augmentative (classes 7 and 8) multiple prefixation was an option together with dropping the inherent prefix. For the locative classes, the inherent class is never dropped hence one cannot have forms such as **paingilo* 'at/on the courtyard' or **musoko* 'in the river'.

In all the SuNdaLa varieties, once a noun has shifted from one class to a locative class and obtained a new prefix, both the retained prefix and the inherent prefix can trigger agreement. This is unlike in the augmentative and diminutive classes where in the optional case of multiple prefixation, it was the retained prefix that controlled agreement. For instance, in (4b), both class 15 and class 3 prefixes can control agreement. This phenomenon can also be observed in Chichewa, Citumbuka, Cisena and Cinyiha (see Mtenje-Mkochi forthcoming).

(4)

<i>kumuúnda kwithu</i>	
<i>ku-mu-unda</i>	<i>ku-ithu</i>
15-3-garden	SM15-POSS
<i>kumuúnda withu</i>	
<i>ku-mu-unda</i>	<i>u-ithu</i>
15-3-garden	SM3-POSS

2.9 Summary of analysis of parameters

All SuNdaLa varieties share values of the parameters set by Guérois et al (2017). All varieties have arguments that are V shaped and are dependent on vowel harmony. They also have *-li-* as the prefix which alternates with the zero prefix. Furthermore, all SuNdaLa varieties have a canonical noun class system with 19 noun classes and the diminutive and augmentative meanings are expressed through noun classes. Nouns also take locative and infinitive prefixes. The similarities within the noun class systems of SuNdaLa strengthen the argument that Cisukwa, Cindali and Cilambya are genetically related varieties on a dialect continuum.

3.0 Variation in the noun classes of SuNdaLa

Guérois et al's (2017) parameters do not capture some micro-variations exhibited by the SuNdaLa varieties. These variations are observed in the pairing systems and the use of some prefixes. This is an indication that the parameters need to be revised to highlight variations of closely related varieties. Furthermore, the variations show the areas in which related varieties begin to change and be different. The next section discusses these micro-variations.

3.1 Micro-variation in the use of prefixes

One micro-variation observed in the SuNdaLa varieties concerns the use of prefixes in classes 9 and 10. In Table 1, it was observed that in Cilambya, the class 9 and 10 prefixes are always N (except with loan words where it can be zero). In Cisukwa and Cindali, class 9 and 10 prefixes can either be N or zero. Consider the following examples from class 9 in Table 6:

Table 6: Class 9 nouns

Cisukwa, Cindali	Cilambya	English gloss
<i>ii-m-buno</i> AUG-9-nose	<i>ii-m-p^huno</i> AUG-9-nose	'nose'
<i>i-n-dálama</i> AUG-9-money	<i>i-n-daláma</i> AUG-9-money	'money'
<i>ii-ŋ-gata</i> AUG-9-headpad	<i>ii-ŋ-k^hata</i> AUG-9-headpad	'headpad'
<i>ii-sofu</i> AUG-ø-elephant	<i>ii-n-zovu</i> AUG-9-elephant	'elephant'
<i>ii-fula</i> AUG-ø-elephant	<i>iii-m-vula</i> AUG-9-elephant	'rain'
<i>ii-sato</i> AUG-ø-elephant	<i>ii-n-sato</i> AUG-9-elephant	'python'
<i>ii-fuu</i> AUG-ø-elephant	<i>ii-m-vuu</i> AUG-9-elephant	'hippo'

For class 9 and 10, the prefix for all varieties is an underlying nasal (N) which varies according to the place of articulation of the following consonant in a process called homorganic nasal assimilation (cf. Mtenje 2016). For Cisukwa and Cindali, the prefix can also be a null prefix as in the word *ii-fuu* ‘hippo’, while it is always overt in Cilambya as *ii-m-vuu*. ‘hippo’. Another example is the word for ‘elephant’ which is *ii-sofu* in Cisukwa and Cindali and *ii-n-zovu* in Cilambya with the nasal prefix.

The occurrence of the zero morpheme in classes 9 and 10 of Cisukwa and Cindali has to do with the phonotactic constraints of these two varieties. In Mtenje (2011, 2012, 2013), it is argued that Cisukwa does not allow sequences of a nasal and a fricative in its phonology and whenever there is an underlying nasal in such a context, it is deleted. The same argument is made in Mtenje (2016) where a similar analysis for Cisukwa and Cindali is presented. It is this process which accounts for the zero prefix morpheme in classes 9 and 10. The nasal prefix is the usual prefix for these two classes. When this prefix is followed by a fricative in Cisukwa and Cindali, the nasal is deleted. A case of a phonological process having an effect on the morphology of a language. In Cilambya, the combination of a nasal and a fricative is allowed and thus the nasal occurs as a prefix in classes 9 and 10 even in contexts where this sound combination is encountered.

Nurse (1999) notes that the instability of the nasal before the fricative varies from Bantu sub-group to sub-group. Its distribution in some languages in East Africa, he notes, is a result of shared inheritance or later geographical spread.

3.2 Variation in the class pairings

There are two tendencies observed in this paper concerning the pairing of particular noun classes that exhibit variation. The first one concerns the pairing of class 1a nouns with class 2 nouns (with *βa* as prefix) in Cisukwa and Cilambya while Cindali pairs class 1a nouns with class 2a (with *βo* as prefix). The other variation exists in the pairing of class 9 nouns. In Cisukwa and Cilambya, class 9 nouns pair with class 10 while in Cindali, they may pair with class 10 but also with class 4.

3.2.1 Pairing of class 1a with class 2 and class 2a

As seen in the examples below, in Cisukwa and Cilambya, class 1a pairs with class 2. This is a case of a phonological process having an effect on the morphology of a language. Cindali, however, uses class 2a to pair with class 1a singular nouns.

(5)

Class 1a	English gloss	Class 2	Class 2a	English gloss
<i>u-nasenje</i> AUG-ø-father's sister	father's sister	<i>a-βa-násenge</i> AUG-2-father's sister	<i>a-βo-nasenje</i> AUG-2a-father's sister	father's sisters
<i>u-máji</i> AUG-ø-mother	Mother	<i>a-βa-máji</i> AUG-2-mother	<i>a-βó-maji</i> AUG-2a-mother	mothers
<i>u-táta</i> AUG-ø-father	Father	<i>a-βa-táta</i> AUG-2-father	<i>a-βó-tata</i> AUG-2a-father	fathers

3.2.2 Class 9 pairings with class 4

As mentioned above, the other variation involves Cisukwa and Cindali's pairing of class 9 with class 10 while Cindali sometimes pairs this class with class 4. Examples of pairings of class 9 with class 10– where *i-* is the augment and a nasal is the prefix for classes 9 and 10 are presented in Table 7.

Table 7: Class 9 and class 10 pairing of Cisukwa and Cilambya

Class 9 : Cisukwa	English gloss	Class 10: Cisukwa	English gloss	Class 9: Cilambya	English gloss	Class 10: Cilambya	English gloss
<i>ii-m-buno</i>	'nose'	<i>ii-m-buno</i>	'noses'	<i>ii-m-p^huno</i>	'nose'	<i>ii-m-p^huno</i>	'noses'
<i>i-n-dálama</i>	'money'	<i>i-n-dálama</i>	'money'	<i>i-n-daláma</i>	'money'	<i>i-n-daláma</i>	'money'
<i>ii-η-gata</i>	'headpad'	<i>ii-η-gata</i>	'headpads'	<i>ii-η-k^hata</i>	'headpad'	<i>ii-η-k^hata</i>	'headpads'
<i>ii-η-gulúwe</i>	'pig'	<i>ii-η-gulúwe</i>	'pigs'	<i>ii-η-gúluwe</i>	'pig'	<i>ii-η-gúluwe</i>	'pigs'
<i>ii-η-galamo</i>	'lion'	<i>ii-η-galamo</i>	'lions'	<i>ii-η-k^halamo</i>	'lion'	<i>ii-η-k^halamo</i>	'lions'
<i>ii-m-batáta</i>	'potato'	<i>ii-m-batáta</i>	'potatoes'	<i>i-m-p^hatáta</i>	'potato'	<i>i-m-p^hatáta</i>	'potatoes'
<i>ii-η-gwapa</i>	'armpit'	<i>ii-η-gwapa</i>	'armpits'	<i>iiηk^hwapa</i>	'armpit'	<i>iiηk^hwapa</i>	'armpits'

Class 9 nouns normally pair with Class 10 and this pairing can be observed in Cisukwa and Cilambya. In Cindali, although there are some class 9 nouns that are paired with class 10, some speakers obtain their plurals from class 4. Class 4 is the plural class for class 3 in Cisukwa and Cilambya while it is a plural class for both class 3 and 9 in Cindali. Consider the examples below of class 9 and class 4 pairings where *i-* is the augment, a nasal is the prefix of class 9 and *-mi-* is the prefix for class 4.

Table 8: Cindali Class 9 and Class 4 pairing

Class 9	English gloss	Class 4	English gloss
<i>i-m-bwáakasa</i>	'testicle'	<i>i-mi-p^wáakasa</i>	'testicles'
<i>ii-ŋ-gwapa</i>	'armpit'	<i>i-mi-k^wápa</i>	'armpits'
<i>i-n-dálama</i>	'money'	<i>i-mi-tálama</i>	'money'
<i>ii-ŋ-góngole</i>	'debt'	<i>i-mi-kóngole</i>	'debt'
<i>ii-ŋ-gata</i>	'headpad'	<i>i-mi-kata</i>	'headpads'
<i>ii-ŋ-galamo</i>	'lion'	<i>i-mi-kalamo</i>	'lions'

It can be observed that the words *i-mi-p^wáakasa* 'testicles', *i-mi-kalamo* 'lions', *i-mi-tálama* 'money', *i-mi-kata* 'headpads' and *i-mi-kóngole* 'debt' have their singular counterparts *iimb^wáakasa* 'testicle', *iingalamo* 'lion', *iindálama* 'money' and *iingata* 'headpads' and *iingóngole* 'debt,' respectively in class 9. In Cisukwa and Cilambya, these class 9 nouns have their plurals in class 10 (see Table 7). Maho (2003) refers to class 4 as one of the polyplural classes (classes which pair with more than one singular class) in Bantu languages. Other polyplural classes include classes 2, 6, 8 and 10. Classes 6 and 10 are the most widely distributed polyplural classes among the Bantu languages and Maho notes that in fact the polyplural nature of these classes is reconstructed for Proto-Bantu. Classes 4 and 8 are less common polyplural classes. For instance, polyplural class 4 is found in north-west. However, it can also be found in such Bantu areas such as the south west and the extreme south. Maho (2003) follows Wolf's (1971) reconstruction of Proto-Benue-Congo where classes 4 and 10 are said to have originated from the same pre-Proto-Bantu class by way of a 'split'. Therefore, the supposed pairing of 9/4=10 (where 4 merged with 10) are believed to have existed in Proto-Benue-Congo. If this is accepted, then Maho believes a polyplural class of 4 in Proto-Bantu could be reconstructed. There must have been a split later on of polyplural class 4. Maho (2003:169) notes that

One rationale behind the use of polyplural classes would be a desire to 'streamline' the noun class systems, that is, by keeping down or even decreasing the number of plural choices. Thus, if we assume class 4 to have had a polyplural function in Proto-Bantu, its current decrease in modern languages may be accounted for by it having been ousted, so to speak, by its competitors, classes 6 and 10.

Indeed, as we can see, the use of class 4 as a polyplural class has decreased in the Bantu languages. Among the three varieties being studied in this paper, it is only Cindali that uses class 4 as a polyplural class while Cisukwa and Cilambya only use it

as a plural for class 3. Polyplurality in Cindali may therefore also diminish with time. It should be mentioned that the consultants for this study who used class 4 as a plural class for class 9 used this class interchangeably with class 10. These are indications that indeed the polyplural nature of class 4 in Cindali may be decreasing and undergoing analogical levelling.

This section has discussed variations exhibited in the noun class systems of Cisukwa, Cindali and Cilambya that could not be captured by Guérois et al (2017). There is need to refine the parameters further to capture these micro-variation factors that are observed in very closely related varieties. This point is also mentioned among other things in Mtenje-Mkochi (forthcoming) where nominal class marking systems of a broader scope i.e. various Malawian languages are observed. The Guérois et al (2017) parameters perhaps regarded micro-variation across languages and hence overlooked the micro-variation that could be exhibited among varieties of the same language. This paper examined varieties on a dialect continuum and observed minute micro-variations among them. The Guérois et al (2017) parameters need to fill this gap in order to comprehensively factor in all micro-variations. The micro-variations discussed in this paper also indicate that changes in closely related varieties can emerge from their use of prefixes and their pairing systems. The changes are mainly being exhibited in classes 2 and 9 prefixes and the diminishing nature of the polyplurality of class 4.

4.0 Conclusion

This paper has compared the nominal class marking systems of Cisukwa, Cindali and Cilambya (SuNdaLa) – three closely related varieties spoken in northern Malawi whose comparison was not discussed in detail in previous publications, for instance CLS (2006), Botne (2008), and Kershner (2002). Using parameters developed by Guérois et al (2017), the paper has demonstrated that the SuNdaLa varieties share most features in their noun class systems. They all have V shaped augments that can be dropped and depend on vowel harmony. They have the class 5 prefix as *-li-* which alternates with zero. All SuNdaLa varieties have a canonical noun class system of 19 noun classes. It has been further noted that diminutive and augmentative meaning in SuNdaLa is expressed through the use of noun classes. They also take infinitive and locative class prefixes. These similarities are indications that indeed the SuNdaLa are varieties of the same language. The paper, however, has observed micro-variations in the pairing system. For instance, Cindali has a pairing system that is different from the other two varieties. It pairs class 1a with 2a, while Cisukwa and Cilambya pair this class with 2. In some cases, Cindali also pairs class 9 nouns with class 4, while Cisukwa and Cilambya pair such nouns with class 10. Cilambya differs from Cindali and Cisukwa with regard to class 9 and 10 prefixes where this variety does not take a zero prefix while the other two can have null prefixes in addition to the N prefix. The paper has shown that not all micro-variations in the SuNdaLa noun class systems are captured by the parameters by Guérois et al (2017) and suggests that the parameters for micro-variation be refined further to capture differences among varieties of the same language.

Abbreviations used

AUG	Augment
SM	Subject marker
POSS	Possessive

Notes

1. A language name for these varieties was not provided by the Centre for Language Studies (2006) report.
2. The paper uses the word varieties basing on evidence from this paper and further morpho-syntactic and phonological evidence from Mtenje-Mkochi (forthcoming), which show that the SuNdaLa exhibit many similarities linguistically. However, the author still respects the speakers' insistence on referring to the varieties as distinct languages.

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