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SOME ASPECTS OF NOUN CLASS 9/10 PREFIX NASALISATION IN SHONA AND BARWE

Esau Mangoya 

University of Zimbabwe, Zimbabwe

ABSTRACT: Generally, most Bantu Languages have nouns that are constructed by way of a combination of a noun prefix and a noun stem. Taking a Shona example of the noun class 1 noun “mukomana” (boy) it is composed of a noun prefix mu- plus the noun stem –komana. Equally, the plural class 2 noun for the same noun is “vakomana” (boys) is constructed by way of noun prefix va- that is added to the noun stem –komana. In the same manner we can also have a Barwe class 1 noun “muthu” (person) as being composed of the noun prefix mu- plus a noun stem -thu. The plural for the same noun falling into noun class 2 is wanhu (people) also composed of noun prefix wa- plus a noun stem –nhu. However, a different phenomenon occurs with some class 9 and 10 Shona and Barwe nouns where in place of a stand-alone prefix there is some phonemic process that occurs at the noun initial consonant onsets. This is different from other noun classes where a noun prefix is placed before a noun stem. In the present paper it is observed that there are instances where some class 9 and 10 nouns go through the phonological processes that play substitute to the noun prefix. In the class 9 and 10 nouns the process targets the word initial consonants where some morphophonological processes take place in the Shona and Barwe languages. The research is corpus based as the researcher used Shona and Barwe corpora to retrieve the class 9/10 nouns. The analysis is based on “Lexical Phonology Theory”

Keywords: Barwe, corpus, Lexical Phonology Theory, Shona.

ALGUNS ASPECTOS DA NASALIZAÇÃO DOS PREFIXOS NOMINAIS DA CLASSE 9/10 EM SHONA E BARWE

RESUMO: Geralmente, a maioria das línguas bantu tem substantivos que são construídos por meio de uma combinação de um prefixo nominal e um radical nominal. Tomando um exemplo Shona do substantivo da classe 1, “mukomana” (menino), ele é composto de um prefixo substantivo mu- mais o radical nominal –komana. Da mesma forma, o substantivo plural da classe 2 para o mesmo substantivo é “vakomana” (meninos) é construído por meio do prefixo nominal va- que é adicionado ao radical nominal –komana. No entanto, um fenómeno diferente ocorre com alguns substantivos Bantu das classes 9 e 10, onde no lugar de um prefixo independente há algum processo fonêmico que ocorre na inicial do substantivo, onde, ao contrário de outras classes de substantivos, um prefixo é colocado antes de um radical nominal. Portanto, nesses casos, alguns substantivos das classes 9 e 10 passam pelos processos fonológicos que substituem o prefixo do substantivo. Nos substantivos das classes 9 e 10 o processo tem como alvo as consoantes iniciais da palavra onde ocorrem alguns processos morfofonológicos.

Palavras-chave: Barwe, corpo, Teoria de fonologia lexical, Shona.

Correspondência para: (correspondence to:) esaumangoya@yahoo.com

INTRODUCTION

The main aim of this study is to do a comparative study of some aspects of noun class 9 and 10 morphophonemic process in the two Bantu languages, Shona and Barwe. We argue that the general constructional pattern of nouns in both languages and many Bantu languages is noun prefix + noun stem. We are saying the Shona and Barwe class 9/10 nouns deviate from the general constructional pattern of 'noun prefix + noun stem' a pattern majority of nouns in Shona and Barwe and the generality of Bantu languages follow. The question here to be looked at is why the deviation and how the deviation takes place. Shona is one of the major languages spoken in Zimbabwe and Barwe is a cross-border language spoken in both Zimbabwe and Mozambique but the majority of speakers of Barwe are on the Mozambican side mainly in the Sofala province. There is some limited mutual intelligibility between Shona and Barwe but there are aspects some morphophonemic aspects that they share in the construction of some class 9/10 nouns. There are also some variations which the paper seeks to explore and compare.

As indicated above, the noun is in the Bantu languages realm, where the general constructional pattern is noun prefix + noun stem. On the one hand particular morphemes can be identified through the co-occurrences of given phonemic elements. According to Mkanganwi (1997, p.71), "We can easily show that the Shona morpheme are the smallest phonological sequences that have constant semantic values as segments that can be said to have meaning." Thus we can identify the morphemes that are of interest to the current paper from both Shona and Barwe languages which are here analysed and compared.

"Lexical Phonology Theory" is used in the analysis of data for this paper. Lexical phonology attempts to account for the interactions that take place between morphology and phonology. As given by Oosterndorp (2008, p.8), "The assumption is that lexical phonology is lexical and sensitive to the morphological structure." The word is composed of phonemes stringed in a peculiar fashion which is the reason why speakers of a given language are able to identify a given spoken word. "Lexical Phonology" recons that any new morphological configurations of a word also morphs it to new phonological configurations. What it means is that after every morphological process applied to a word or suffixation phonological rules are applied. Suffixation can be done a multiple times and equally the phonological assessment can also be applied in a cyclic fashion to assess the new phonological configuration. As given by Mangoya (2013, p.20) "Both Shona and Barwe are agglutinative as their cognates are receptive to multiple morphemes." In a similar mode the current paper seeks to assess the morphological and phonological reaction of the nouns as the agglutination of the morphemes are conjoined by way of prefixes added to the noun stems in Shona and Barwe languages.

As the morphological units are conjoined the phonemes that constitute them also get rearranged following the phonological rules that are abound in the languages. The sound reorganisation results from new morphological configurations. This phonetic ordering brings us to the term "syllable" Crystal (1991, p.338) describes the syllable as, "A unit of pronunciation typically larger than a single sound and smaller than a word." Commenting on the typological nature of the syllable in Bantu languages Ngunga (2000, p.11) says the basic syllable in Bantu is CV where C can be a single consonant, a glide or a nasal plus an oral consonant." The V stands for a vowel. In the Shona word "murume" (man) we have three

syllables mu + ru + me which are CV shaped. Equally in Barwe we can have the word “tawala” (run away from someone) which also has the syllables ta + wa + la. We can represent the syllables of the Shona word “murume” and Barwe word “tawala” as given in Figure 1.

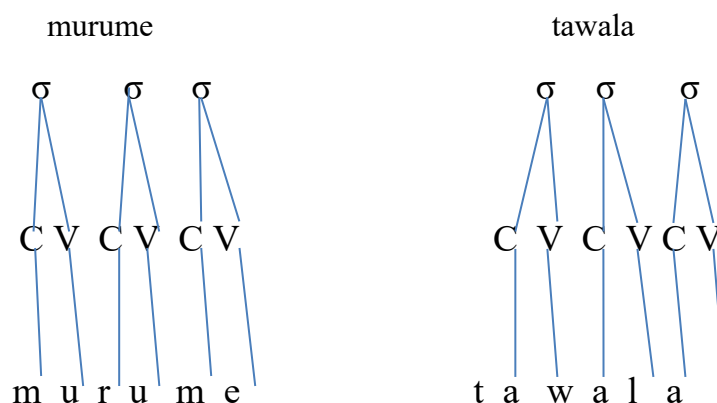


FIGURE 1: The syllables for the Shona word [murume] and Barwe word [tawala]

As demonstrated in Figure 1 the syllable symbolised by the sign (σ) in both Shona and Barwe is CV shaped. Describing the composition of the syllables in Bantu Hudson (2000, p. 225) says, “Bantu syllable is [+syllabic] with [zero] or more [-syllabic] phones on the left. In simpler terms it can be seen that the vowel is the compulsory component of the syllable while the consonants are the [-syllabic] sounds. So going by the example in figure 1 the C components are [-syllabic] and the V components are [+syllabic].

METHODOLOGY

The research is corpora based. An inputted data of the two languages was analysed. The Shona corpus is based on the interviews that were carried out on various topics in the Shona speaking areas and from a variety of texts that included novels and poetry texts. The Barwe language does not have written texts as yet and the corpus is mainly from the general interviews that were carried out in both Mozambique and Zimbabwe. The researcher was able to identify the class 9/10 nouns from the corpora. The Shona and Barwe corpus has been inputted into computers for easy retrieval and analysis. The researcher was able to read and listen to the words as the texts are linked to the voice through the Transcriber programme. Both corpora are language marked and they use a transcribe programme that links the text to the voice which the researcher was able to listen to and analyse. The class nouns were discerned in the context of sentences constructions. It has to be noted that the corpora that were used were written in the general spelling orthographies used for Shona in Zimbabwe and Barwe in Mozambique. The researcher then read and listened to the corresponding audios and made the phonetic transcription for phonetic analysis.

RESULTS AND DISCUSSION

General construction of nouns in Shona and Barwe

We take a look at how the Shona and Barwe nouns are constructed. We also take a look at how the syllables are structured in both languages showing how the prefix is structured.

1.

(a) Shona nouns

va-sikana	(girl)	class 2
mu-suwo	(door way)	class 3
ru-oko	(hand)	class 6

(b) Barwe nouns

wa-sikana	(girls)	class 2
ma-thika	(hyenas)	class 6
ku-nyumba	(to home)	class 17

Taking the Shona examples in 1(a) noun *va-sikana* consists of a noun prefix *va-* + noun stem *-sikana* while *mu-suwo* is made up of a noun prefix *mu-* + noun stem *-suwo*, while the third one consists of noun prefix *ru-* + noun stem *-oko*. In a similar way, taking the Barwe examples in (b) the noun *wa-sikana* is made up of the noun prefix *wa-* and a noun stem *-sikana*, while *mathika* consists of noun prefix *ma-* and noun stem *-thika*. The last noun *kunyumba* is constructed by way of noun prefix *ku-* and noun stem *-nyumba*. These are morphemes that are put together to construct nouns. Thus in the above examples we have noun prefix morphemes and noun stem morphemes. The majority of nouns are structured as earlier on described as consisting of a noun prefix and a noun stem.

As given by Mkanganwi (1997, p.75) “Shona also has examples of what are commonly called process morphemes or replacive morphemes. These are morphemes which have no segmental representations of their own.” To demonstrate this Mukanganwi gives Shona examples of class 5 nouns “*banga*” (knife), “*gomo*” (mountain) and “*dafi*” (frog). In the same way Barwe also has class 5 nouns are nouns like *dima* (garden), *dziso* (eye) and *thika* (hyena). In both cases these are nouns that do not follow the constructional patterns demonstrated in 1 (a) and (b) where the nouns are constructed by a noun prefix and a noun stem. Having seen that there are nouns that do not follow the general rule of noun prefix and noun stem construction the current paper seeks to look at some class 9 and 10 nouns that also do not follow the general construction pattern of noun prefix plus noun stem.

Class 9 and 10 prefixes

It can be generally noticed that singular nouns are placed in one noun class while the plurals are placed in their own. For example Shona singular noun ‘*mudiki*’ (young one) is class 1 while ‘*vadiki*’ (young ones) goes into class noun 2. In the same fashion the Barwe noun ‘*chidima*’ (small garden) is a class 7 noun and the plural ‘*zvidima*’ (small gardens) goes into class noun 8. In the same way we also have class 9 singular nouns with the plurals falling into class 10 in both Shona and Barwe languages as demonstrated in the 2 (a) and (b).

2.

(a) Shona

Class 9 nouns	Class 10 nouns
mvere (fur)	mvere (furs)
pfuti (gun)	pfuti (guns)
tsenza (type of edible tuber)	tsenza (type of edible tubers)

sero (winnowing basket)	Sero (Winnowing baskets)
huku (chicken)	huku (chickens)

(b) Barwe

Class 9 nouns	Class 10 nouns
ngoma (type of game meat)	ngoma (types of game meat)
tembo (tattoo mark)	tembo (tattoo marks)
malepale (skin of dead animal)	malepale (skins of dead animals)
terevhuzau (television)	terevhizau (television)
nyatwa (problem)	nyatwa (problems)

2 (a) and (b) show some class 9 and 10 nouns of Shona and Barwe. For both Shona and Barwe we see that there is no noun prefix through which these nouns are identified. However in both languages there are some nouns of these two classes that are seen to be going through some phonological process for them to be classified under class 9 and 10 nouns. These are nouns that have a nasal onset on the initial syllable.

In the examples that follow in 3 (a) and (b) are nouns that occur in both Shona and Barwe and in case where the noun occurs in only one of the two it is also indicated. In (a) we indicate the phonological transformation of the word initial voiceless consonant /p/ to a depressor nasal [m]. In 3 (b) we also demonstrate the transformation of the voiceless word initial consonant /t/ to a depressor nasal [n].

3.

a) /p/ → [m]

/piripiri/	[<u>m</u> iripiri]	(chilly pepper)	
/parapara/	[<u>m</u> arapara]	(sable)	
/palepale/	[<u>m</u> alepale]	(continuous body scratching)	Barwe
/palame/	[<u>m</u> alame]	(skin of dead animal)	Barwe
/putsamuɸa/	[<u>m</u> unzamuɸa]	(home destroyer)	Shona
/pandu/	[<u>m</u> andu]	(rebel)	Shona

b) /t/ → [n]

/tambe tambe/	[<u>n</u> ambe tambe]	(child play)	
/teme teme/	[<u>n</u> emeteme]	(rundo cutting)	
/tembo/	[<u>n</u> embo]	(tattoo marks)	Barwe
/tunga/	[<u>n</u> unga]	(mosquito)	

The 3 (a) demonstrates that the bilabial voiceless alveolar stop /p/ becomes a voiced depressor bilabial nasal [m] in both Shona and Barwe. In 3 (b) the voiceless alveolar stop /t/ becomes a voiced depressor alveolar nasal [n]. It is mainly the voicing that changes from being voiceless stops. The voiceless bilabial alveolar stop /p/ becomes a bilabial voiced depressor nasal [m]. The voiceless alveolar stop /t/ becomes a voiced depressor nasal [n].

The class 9 and 10 nouns have no morphemic and syllabic prefixes. No prefix is placed before the stem as is the case with nouns that fall into other classes as shown in examples 1 above. Some nouns of the class 9 and 10 have a nasal commencing consonant for them to fit into the class 9 and 10 groups in both Shona and Barwe as demonstrated in 2 (a) and (b).

We also have another phonological phenomenon that occurs with Barwe class 9 and 10 nouns. Barwe has an aspirated /t^h/ which Shona does not have as shown in example 4.

4

/t ^h /	→	[<u>n</u>]	
/t ^h ambe/	[<u>n</u> ambe]	(pool of water on rock)	
/t ^h enga/	[<u>n</u> enga]	(feather)	
/t ^h epwe/	[<u>n</u> epwe]	(type of fresh water prons)	
/t ^h ukutira/	[<u>n</u> ukutira]	(black jack leaves vegetables)	
/t ^h ungulu/	[<u>n</u> ungulu]	(ululation)	
/t ^h utu/	[<u>n</u> utu]	(disease of body shivering)	

As demonstrated in examples 4 it can be noted that the aspirated /t^h/ becomes a voiced depressor [n] as is also the case with the non-aspirated /t/ in examples 3(b). Both the voiceless /t/ and the aspirated /t^h/ become voiced depressor [n]. So the aspiration is of no consequence in shaping the noun class 9/10 onsets. The nasal depressor remains similar for the non-aspirated /t/ and the aspirated /t^h/. In the examples 2 and 3 we see that the word initial consonants are nasalised for the nouns to qualify as class 9/10 nouns. So the voiceless initial consonant becomes a voiced depressor nasal. We also note that there is no morphemic prefix to the class 9/10 nouns. We also note that during the process of nasalisation of the word initial consonant there is also place assimilation. It is the nasalisation process that qualifies the word to become class 9/10 noun. In examples 3 (a) we see that the voiceless bilabial /p/ becomes a depressor [m]. In examples 3 (b) the voiceless /t/ becomes a depressor [n]. in the same manner the voiceless but aspirated /t^h/ becomes a depressor [n]. For both the /t/ and /t^h/ we have a depressor [n] when it comes to formation of class 9/10 nouns. We can in summary represent the process of nasalisation using /parapara/ 3 (a) list.

input 1		input 2		input 3
/parapara/	→	[m-arapara]	→	[<u>m</u> arapara]

In the word /parapara/ that occurs in both Shona and Barwe we can see that we have input 1 where the word initial consonant is /p/. The word initial consonant becomes [m] in input 2. There then comes transformation of the voiceless /p/ to a depressor [m] in the input 3. The depressor takes the /a/ vowel that was preceded by the /p/ and the CV configuration becomes [ma-].

We have noted that the nasalisation targets the voiceless /p, t, t^h/ and the rest of the consonants in the word remain unchanged. However different trends are observed in the initial consonants /p/ and /t/ are followed by fricatives forming affricates. As given by Goldsmith (1990:68), “.....it has been pointed out, the affricate is inherently composed of sequential and even contradictory specifications: it begins as a stop and ends in a fricative.” Thus we can say an affricate has a stop onset and a fricative release. In Barwe there is a different form of nasalisation that takes place with the /pf/ and /ts/ affricates as demonstrated in example 5.

On the other hand there is also another form of nasal activity as the nouns conform to the class 9/10 nouns. This phonological process takes place mainly in Barwe. In this case there is no change of stem initial consonant to a nasal for nouns to become class 9/10 nouns. The Barwe pre-nasalisation process are demonstrated in 5 (a) and (b).

5.

- a) /N-pf/ \longrightarrow [ᵐpf],
 /N-pfuti/ [ᵐpfuti] (gun)
 /N-pfaji/ [ᵐpfaji] (epilepsy)
 /N-pfambi/ [ᵐpfambi] (prostitute)
- b) /N-ts/ \longrightarrow [ⁿts]
 /N- tsomba/ [ⁿtsomba] (fish)
 /N-tsotso/ [ⁿtsotso] (thin pieces of fire hood)
 /N-tseketsa/ [ⁿtseketsa] (young female chicken)
 /N-tsara/ [ⁿtsara] (line)

In the Barwe examples 5 (a) and (b) we see that the affricates /pf/ and /ts/ get pre-nasalised to /ᵐpf/ and /ⁿts/ respectively.

We again see a trend of place assimilation similar to examples 3 and 4. In examples 5 (a) and (b) there is also place assimilation of the pre-nasal and the preceding affricated sound. The pre-nasal /ᵐ/ comes before the affricate /pf/ while the pre-nasal /ⁿ/ comes before the affricate /ts/. We see that there is place assimilation of the /p/ and /m/ which are both bilabial. We also notice that the fricative is labiodental. In this particular case we see that the immediate onset /p/ is influential in the place assimilation as the fricative /f/ is labiodental. In the case of /ts/ both /t/ and /s/ are homorganic alveolar sounds. Taking the /ᵐpf/ case we can assume that the immediate onset has influence in determining place of articulation of the pre-nasal. In the case of /ⁿts/ we can assume it is only coincidental that the consonant onset and the fricative are homorganic but as the /ᵐpf/ case shows we assume the fricative is of non-influence to the place of articulation of the pre-nasal. The word initial affricate remains but only pre-nasalised in contrast to the process that takes place in examples 3 (a,b) and 4 where the word initial becomes a depressor nasal.

In contrast to the Barwe process given in examples (5a and b) Shona maintains the word initial affricate and still allocates the nouns into class 9/10 as shown in the examples 6.

6

- a) /pf/ onset nouns
 /pfuti/ (gun)
 /pfocho/ (irrelevant talk)
 /pfambi/ (prostitute)
 /pfumvu/ (danger/
 /pfuma/ (riches)
- b) /ts/ onset nouns
 /tsotso/ (thin pieces of fire hood)
 /tsoko/ (monkey)
 /tsoka/ (foot)
 /tsambwa/ (dirt)
 /tseketsa/ (young female chicken)

The Shona nouns in 6 show that no pre-nasalisation takes place to the affricate onset of the class 9/10 nouns. This is in contrast to the Barwe class 9/10 nouns in 5 where the word initial affricates are pre-nasalised. The Shona nouns retain the affricate.

CONCLUSION

We have only looked at some aspect of nasalisation of class 9/10 nouns. Going by what we have observed above we see that there are occasions where both the languages follow similar word initial nasalisation trends with the class 9/10 nouns. As demonstrated there are cases where Shona has its own trends that do not occur in Barwe. All the same we see that the trend in both Shona and Barwe is that the class 9/10 prefix is not syllabic as occurs with other noun classes.

Competing interests

The author declared no potential conflicts of interest with respect to the research, authorship, publication of this article, or this work.

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