NASAL RETENTION OF NOUN PREFIXES OF CLASSES 9/10 IN BANTU LANGUAGES: A CASE STUDY FROM SETSWANA, KISWAHILI AND SHISUKUMA

H.M. Batibo and N. Kgolo
University of Botswana
Private Bag 00703, Gaborone, Botswana
batibohm@mopipi.ub.bw
kgolon@mopipi.ub.bw

Abstract

The proto-forms of the prefixes of classes 9/10 in Bantu languages have invariably been represented as *\(n-/\)*n- (Meeussen 1967: 97) and *\(ny-/\)*ny- (Guthrie 1971). Some scholars have proposed other forms, especially for Cl.10. Katamba (2003) has however noted that many of the contemporary Bantu languages have reduced these forms to N-/N- or \(\emptyset-/\ \emptyset-\). Thus, one finds many different manifestations of these class prefixes in the contemporary Bantu languages. This paper uses the basic descriptive theory to examine the nature and function of the prefixes of noun classes 9/10 in a selected number of Bantu languages. The main assumption of the study is that these noun class prefixes have made far-reaching evolution in their form and function due to several related phonetic and historical reasons, resulting in their reduction in some cases. The study, which is based on both primary and secondary data, reveals several types of evolutionary trends which have been followed by these prefixes.

Keywords: Bantu languages, noun prefix, noun classes 9/10, nasal retention, nasal segment deletion

1. Introduction

The proto-forms of the prefixes of classes 9/10 in Bantu languages have invariably been represented as *\(n-/\)*n- (Meeussen 1967: 97) and *\(ny-/\)*ny- (Guthrie 1971: 9). Some scholars, however, have reconstructed the prefix of class 10, as *\(thin-\) (cf Bleek 1869: 282), li-*ni- (cf Meinhof and Van Warmero 1932: 39) and li-*ne- (cf Welmers 1973). What is common in all these studies is that the two noun class prefixes have a nasal element in the final or next to final position, which interacts or forms a homorganic relationship with the first consonant of the noun stem. In a recent study of the noun class system in Bantu languages by Katamba (2003), he posits N-/N-, as the canonical forms for classes 9/10.
However, Katamba (2003) also notes that many of the contemporary Bantu languages have reduced forms, including zero morphemes (represented as $\emptyset$). The two prefixes, namely N-/N-, occur in a variety of forms depending on the manner of articulation of the first consonant of the stem. Such occurrence usually causes many complex morpho-phonological processes with the stem consonant. Furthermore, the reduced prefix forms of classes 9/10, which are represented by $\emptyset$/Ø-, appear in most Bantu languages in varying situations and frequency.

This paper examines the nature and function of the noun prefixes for classes 9/10 in Bantu languages, namely N-/N-, and looks at the rules which have given rise to their retention, or otherwise, in Bantu languages. Four types of Bantu languages are identified. Each of this type is discussed with relevant sample languages.

2. Research Methodology

Although there are all together more than 500 Bantu languages (Heine and Nurse, 2000), this study is based on sample languages, taken from all the Bantu zones, namely, eastern, central, north-western and southern. The data for this research were collected by using a questionnaire that elicited a corpus of nouns from selected speakers of the respective languages. At least 100 nouns were used as a sample for each of the languages. In each case, the prefixes of the class 9/10 nouns were identified and used for the analysis. The study was supplemented by documentary work, in which the authors studied the noun class systems in grammatical and lexical treaties carried out by other scholars. Some general patterns were identified.

3. The occurrence of the prefixes of classes 9/10 Nouns

According to our sample languages, the prefixes of classes 9/10 nouns could be categorized as follows:

a) Languages in which the nasal N- co-occurs with $\emptyset$-

A number of Bantu languages have two types of prefixes for classes 9/10 nouns, namely the common form N- (or n(i)-) and the reduced forms $\emptyset$-. The two types may appear in similar phonetic environments as shown in (1), Shisukuma example:

(1) The co-occurrence of N- and $\emptyset$- in Shisukuma (Batibo, 1985)

i) Nouns with N- prefix  
   N- twiga $[\text{n}^h\text{wiga}]$\(^1\) “giraffe”  (nhwiga)  
   N- tingo $[\text{n}^h\text{ingo}]$ “neck”  (nhingo)

\(^1\) For practical reasons, tone will not be marked in this study. Also, the orthography in the respective languages will be given in parentheses after the gloss.
N- basa [mbasa] “axe” (mbasa)
N- gobo [ngobo] “dried animal skin” (ngobo)
N-dimù [ndimu] “wild animal” (ndimu)
N-komba [ŋomba] “soft porridge” (ngh’omba)

ii) Nouns with the Ø- prefix
Ø-tolo [tolo] “sleep” (tulo)
Ø-gaagi [gaagi] “sweet corn” (gaagi)
Ø-dongo [dongo] “frog” (dongo)
Ø-figo [figo] “kidney” (figo)
Ø-sonda [sonda] “star” (sonda)
Ø-kooli [kooli] “lizard” (kooli)

In the above examples, one notes that Shisukuma aspirates and even loses the occlusive segment of the voiceless plosives when they come into contact with the N- prefix. Thus the two types of prefixes co-occur and their occurrence is not conditioned by any phonetic environment.

(b) Languages in which the N- prefix only occurs with voiced consonants

In some Bantu languages, the N- prefix occurs only with voiced consonants; while the Ø- prefix appears before the voiceless consonants. This is the case of Kiswahili, as shown in (2) and (3) below:

(2) Examples in Kiswahili showing the occurrence of the N- prefix before voiced consonants only (TUKI, 1980)

<table>
<thead>
<tr>
<th>N-</th>
<th>[ndama]</th>
<th>“calf”</th>
<th>(ndama)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-goma</td>
<td>[ngoma]</td>
<td>“drum”</td>
<td>(ngoma)</td>
</tr>
<tr>
<td>N-dui</td>
<td>[ndui]</td>
<td>“small pox”</td>
<td>(ndui)</td>
</tr>
<tr>
<td>N-dizi</td>
<td>[ndizi]</td>
<td>“banana”</td>
<td>(ndizi)</td>
</tr>
<tr>
<td>N-buzi</td>
<td>[mbuzi]</td>
<td>“goat”</td>
<td>(mbuzi)</td>
</tr>
<tr>
<td>N-vua</td>
<td>[mvua]</td>
<td>“rain”</td>
<td>(mvua)</td>
</tr>
<tr>
<td>N-vijo</td>
<td>[mvijo]</td>
<td>“wine”</td>
<td>(mvinyo)</td>
</tr>
<tr>
<td>N-gumi</td>
<td>[ŋgumi]</td>
<td>“fist”</td>
<td>(ŋgumi)</td>
</tr>
</tbody>
</table>

(3) Examples in Kiswahili showing the occurrence of the Ø- prefix before voiceless consonants only (TUKI 1980).

<table>
<thead>
<tr>
<th>Ø-kamba</th>
<th>[kamba]</th>
<th>“rope”</th>
<th>(kamba)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø-pamba</td>
<td>[pamba]</td>
<td>“cotton”</td>
<td>(pamba)</td>
</tr>
<tr>
<td>Ø-tausi</td>
<td>[tausi]</td>
<td>“peacock”</td>
<td>(tausi)</td>
</tr>
<tr>
<td>Ø-tende</td>
<td>[tende]</td>
<td>“date-fruit”</td>
<td>(tende)</td>
</tr>
<tr>
<td>Ø-fumbo</td>
<td>[fimbo]</td>
<td>“cane”</td>
<td>(fimbo)</td>
</tr>
</tbody>
</table>
In this case, it is logical to state that at the underlying level, all nouns in classes 9/10 are characterized by a nasal segment which functions as a noun prefix. This is represented as N-prefix and that this segment is replaced by a Ø-morpheme, when it is followed by a voiceless consonant in the noun stem. In this case, the noun class is represented by Ø-prefix.

One should note that, in Kiswahili, this prefix replacement only takes place when the stem contains two or more syllables. Where a noun stem contains one syllable, the N-prefix is retained and is realized as a syllabic nasal. This happens presumably in order to maintain the syllabic weight of the word. Examples of these cases are shown in (4) below:

(4) Words with monosyllabic stems in Kiswahili (TUKI 1980)

<table>
<thead>
<tr>
<th>N-prefix</th>
<th>Stem</th>
<th>Meaning</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø-</td>
<td>tʃwa</td>
<td>“termite”</td>
<td>(nchwa)</td>
</tr>
<tr>
<td>N-</td>
<td>tʃwa</td>
<td>“wax”</td>
<td>(nta)</td>
</tr>
<tr>
<td>N-</td>
<td>tjí</td>
<td>“country”</td>
<td>(nchi)</td>
</tr>
<tr>
<td>N-</td>
<td>tjá</td>
<td>“edge”</td>
<td>(ncha)</td>
</tr>
</tbody>
</table>

Moreover, in some languages, words of foreign origin in classes 9/10 do not have the N-/Ø-prefixes. They are associated with the Ø-prefix. The only way to know that they belong to classes 9/10 is by their concordial agreement system. Example (5) below shows cases of borrowed words in Kiswahili which have no nasal prefixes for Classes 9/10, even where their stem consonants are voiced (TUKI, 1980).

(5) Kiswahili words of foreign origin

<table>
<thead>
<tr>
<th>Ø-prefix</th>
<th>Stem</th>
<th>Meaning</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø-</td>
<td>boji</td>
<td>“houseboy”</td>
<td>(boy)</td>
</tr>
<tr>
<td>Ø-</td>
<td>dau</td>
<td>“canoe”</td>
<td>(dau)</td>
</tr>
<tr>
<td>Ø-</td>
<td>baa</td>
<td>“bar”</td>
<td>(bar)</td>
</tr>
<tr>
<td>Ø-</td>
<td>gundi</td>
<td>“gum-paste”</td>
<td>(gundi)</td>
</tr>
<tr>
<td>Ø-</td>
<td>dira</td>
<td>“compass”</td>
<td>(dira)</td>
</tr>
<tr>
<td>Ø-</td>
<td>biriani</td>
<td>“special type of curry”</td>
<td>(biryani)</td>
</tr>
<tr>
<td>Ø-</td>
<td>baraka</td>
<td>“blessing”</td>
<td>(Baraka)</td>
</tr>
</tbody>
</table>

(c) Languages in which the N-prefix has been totally replaced by Ø-prefix

Some languages no longer have the N-prefix for CIs 9/10. The N-prefix, in all phonological contexts, that is whether followed by voiced or voiceless consonants, is represented by Ø-prefix. This has happened as part of the diachronic process of strengthening in which the N-prefix has
caused the following voiced consonants to be voiceless and the voiceless consonants to be aspirated, as shown in (6) below.

(6) The diachronic process in which the stem consonant has been strengthened by the N- prefix in Setswana

\[
\begin{align*}
\text{*N-piti}^3 & \rightarrow \Omega-p^b\text{iri} \quad [p^b\text{iri}] \quad \text{“hyena” (phiri)} \\
\text{*N-pala} & \rightarrow \Omega-p^b\text{ala} \quad [p^b\text{ala}] \quad \text{“gazelle” (phala)} \\
\text{*N-kudu} & \rightarrow \Omega-k^\text{udu} \quad [k^\text{udu}] \quad \text{“tortoise” (khudu)} \\
\text{*N-tatu} & \rightarrow \Omega-t^\text{aro} \quad [t^\text{aro}] \quad \text{“three” (tharo)} \\
\text{*N-bula} & \rightarrow \Omega-p^h\text{ula} \quad [p^h\text{ula}] \quad \text{“rain” (pula)} \\
\text{*N-gubu} & \rightarrow \Omega-k^b\text{u} \quad [k^b\text{u}] \quad \text{“hippo” (kubu)} \\
\text{*N-jogu} & \rightarrow \Omega-t^h\text{ou} \quad [t^h\text{ou}] \quad \text{“elephant” (tlou)} \\
\end{align*}
\]

In some languages, especially in North-West Bantu, like Zone A, many of the languages have replaced the N- with Ø- as a general trend in the process of form reduction. Basaa (A43) is fast replacing its N- prefix with the Ø- prefix (Hyman, 2003); while Makaa (A85) has replaced the prefix of class 9 with Ø- but has retained the N- prefix for class 10 (Heath, 2003).

In the case of words with monosyllabic stems, Setswana has retained the nasal, as in the case of Kiswahili (5) above. This is shown in (8) below:

(7) The retention of N- in Setswana

\[
\begin{align*}
\text{N-pho} & \rightarrow m-p^b\text{o} \quad [mp^b\text{o}] \quad \text{“gift” (mpho)} \\
\text{N-ta} & \rightarrow n-t\text{a} \quad [nt\text{a}] \quad \text{“louse” (nta)} \\
\text{N-tlo} & \rightarrow n-t^h\text{u} \quad [nt^h\text{u}] \quad \text{“house” (ntlo)} \\
\text{N-\text{fa}} & \rightarrow n-t^\text{fa} \quad [nt^\text{fa}] \quad \text{“dog” (ntfa)} \\
\text{N-\text{tha}} & \rightarrow n-t^h\text{a} \quad [nt^h\text{a}] \quad \text{“edge” (ntlha)} \\
\text{N-\text{ku}} & \rightarrow n-k^\text{u} \quad [nk^\text{u}] \quad \text{“sheep” (nkku)} \\
\end{align*}
\]

It should be noted that all monosyllabic words in classes 9/10 have voiceless consonants due to strengthening process. Moreover, one can tell that the nasal prefix did exist in the earlier form of Setswana by the presence of the nasal in proper names, such as the ones in (8) below:

(8) Proper names in Setswana with nasal prefixes

Mpule
Ntau
Ntlou
Mphiri

---

2 It is for this reason that Setswana and the other Sotho languages do not have voiced consonants as first elements in words of classes 9/10, except for words of foreign origin.
3 In the examples that will be given in the paper, the asterisk (*) indicates that the forms represent the ancestral or proto-language from which the current forms have evolved.
Also the nasal segment of Cls 9/10 prefix N- has been retained in words with stems beginning with vowels as in (9) below:

(9) Words in Setswana in which the stems begin with a vowel

*\(N(i)-\)atl > ny-\(\text{atl}\) > n-ar\(\text{i}\) [nar\(\text{i}\)] “buffalo” (nare)
*\(N(i)-\)oka > ny-\(\text{oka}\) > n-o\(\text{\(\chi\)}\) [no\(\text{\(\chi\)}\)] “snake” (noga)
*\(N(i)-\)ok\(\text{\(\iota\)}\) > ny-\(\text{ok\(\text{\(\iota\)}\)}\) > n-\(\text{\(\upsilon\)}\) [n\(\text{\(\upsilon\)}\)] “honey” (noge)
*\(N(i)-\)oni > ny-\(\text{oni}\) > n-o\(\text{\(\varphi\)}\)\(\alpha\) [no\(\text{\(\varphi\)}\)\(\alpha\)] “bird” (nonyane)
*\(N(i)-\)ama > ny-ama > n-ama [nama] “meat” (nama)

4. Discussion of the evolution of the Cl. 9/10 N prefix in Bantu languages based on the case studies

From the above, one may remark that there is a trend in Bantu languages to lose the nasal segment of Cls 9/10 prefix (N- Prefix) and to be replaced by the Ø-Prefix. This is not only because of the influx of words of foreign origin, which often have no N- prefixes, but also due to the new phonological processes such as strengthening and nasal segment deletion in words whose stems are more than one syllable. The retention of the N- prefix in words with monosyllabic stems is due to the syllable weight rule in most Bantu languages, in which the strong syllable (s) is in the penultimate syllable, while the final syllable is extra-syllabic (Batibo and Rottland, 1992; Katamba 1991). This is shown in (10) below for the word mosadi [mosadi] “woman”.

(10) The syllable structure of the word mosadi in Setswana

\[
\begin{array}{c}
\text{Word} \\
\text{Foot} \\
W \quad s \\
[ \text{mo} - \text{sa ...(di)}] \text{“woman”}
\end{array}
\]

Hence, for a word to have a complete syllabic weight, it has to be disyllabic. This is the reason for the retention of the N- prefix in monosyllabic stemmed words. In this case, the nasal is realized as a syllabic unit. Usually words of foreign origin are not prefixed with the N-element. For these, the prefix will be Ø in most cases. This is a demonstration that the use of N- as Cl.9/10 prefixes is no longer productive in many Bantu languages.

However, prefixes, in general, have retained some semantic content (See Batibo, 1987, 1988; Burton and Kirk, 1976; Creider, 1975 and Kadima, 1969). Hence they can be used as noun derivative morphemes as in the case of Setswana bo-tho [bo-t\(\text{\(\upsilon\)}\)] “humanity”, in which Noun
Class prefix 14 replaces the inherent Noun Class prefixes 1 and 2, namely \textit{mo-tho/ba-tho} ([mu-t'\o]u/[ba-t'\o]u). Moreover, the formal characteristics and semantic attributes of Classes 9/10 have allowed them to harbor many lexical items of foreign origin, most of which have no formal prefixes. According to Polomé (1967), the Noun prefixes 9/10 have a wide range of semantic fields, which includes: animals, insects, reptiles, natural phenomena, etc. The wide range of items in these classes has attracted many words of foreign origin to be part of the class, particularly as the two classes allow zero prefixes in many Bantu languages. The reduction trend can be summarized as in (11) below:

(11) The N-reduction trend

<table>
<thead>
<tr>
<th>A</th>
<th>Proto-Bantu</th>
<th>B</th>
<th>(Shisukuma-type)</th>
<th>C</th>
<th>(Kiswahili-type)</th>
<th>D</th>
<th>(Earlier Setswana-type)</th>
<th>E</th>
<th>Current Setswana-type</th>
</tr>
</thead>
<tbody>
<tr>
<td>*N(i)-C[+/-vce]</td>
<td>N-C[+/-voice]</td>
<td>N-C[+voice]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\emptyset)-C[+/-voice]</td>
<td>(\emptyset)-C[-voice]</td>
<td>N-C[-voice]</td>
<td></td>
<td></td>
<td>(\emptyset)-C[-voice]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Furthermore, the number of lexical items in this class has increased as a result of loanword influx. This expansion is demonstrated in (12) below, with examples from Setswana.

(12). The semantic attributes of Noun Class 9/10

<table>
<thead>
<tr>
<th></th>
<th>Proto-Bantu semantic attributes</th>
<th>Additional semantic attributes (majority, not visibly marked),</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Natural phenomena (e.g (t^b)aba “hill”, (p^b)efo “wind”)</td>
<td>Changed class prefixes (e.g. (q^b)wedi “moon”, from cls 3/4; (\eta)aka “traditional doctor”, from cls 1/2)</td>
</tr>
<tr>
<td>2.</td>
<td>Animals, reptiles, insects, etc. (e.g. (p^b)iri “hyena”, (n\o\chi)a “snake”)</td>
<td>Borrowings (e.g. koloi “car”, kompyutara “computer”)</td>
</tr>
</tbody>
</table>

5. Conclusion

This study has investigated the current state of the N- prefix markers of class 9/10 nouns. Certainly, more research needs to be done to confirm whether the trend could be applied to a good spectrum of the Bantu languages. However, if we assume that the sample languages discussed above represent the general trend, we could state that the N- prefixes of class 9/10
nouns in Bantu languages are going through rapid change in which they are being replaced by $\phi$-prefixes, for the reasons and circumstances given above. Moreover, as observed by Batibo (1987), the class 9/10 prefixes tend to accept a good range of lexical items, particular those of foreign origin, most of which have no initial segment which could be regarded as noun prefixes. As a result, these prefixes have lost much of their original semantic and morphological characteristics.

References


