Morphonological Description of Relative Morphemes in Kiswahili Language

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Abstract

This paper intended to provide morphonological descriptive analysis of relative morpheme forms in Kiswahili language. Many books have just shown its forms and use without showing how these forms came to be realized as they are realized on the surface form. This paper shows some phonological processes that underlie these forms while citing some relating examples from other Bantu language, Kinyamwezi, to prove the description since Kiswahili is also one of the Bantu languages. The theoretical framework that has been used in this analysis is Generative Phonology as stipulated by Chomsky and Halle in their book called Sound Pattern of English (SPE) of 1968. I have considered that relative morpheme forms are the result of two different formatives, which are O- of reference (O-ref.) and the Subject Concord (Subj. C) of respective noun class. They are formed by phonological processes through some phonological rules from the underlying form to the surface form as they appear in Kiswahili language today. These forms have been discussed according to their specific noun classes. Data have been collected from various books and from the experience of the author since he is the Kiswahili speaker.

1.0 Introduction

Relative morphemes are the formatives which represent the referent in the verb (Kihore *et al*, 1999). According to Dammann (1983) analysis, relative morphemes have other different functions in Kiswahili language in addition to that of representing the subject in the verb. This paper does not delve into that functional description but rather into explicitly describing their phonological structure while showing their possible underlying structures. Some linguists have said something concerning this phenomenon but they have not specifically analyzed these forms on the phonological ground showing explicit rules that govern relative morpheme forms formation. These are, (Ashton, 1944; Polome, 1967; Dammann, 1983; Schadeberg 1989; Zwart, 1997; Kihore *et al*, *wtj:*65; Mgullu, 1999; Ngonyani, 2001; Habwe and Karanja, 2004;), to mention but a few. Most of these linguists have only analyzed relative constructions, types of relative constructions and their functions without touching their phonological aspects.

There are few works that have tried to just mention the possible underlying structures of these formatives but not so much or as a targeted analysis. This can be seen in the work of Mgullu (1999:195-196) whereby he just tries to show the origin of relative morphemes saying, for instance, {li+o}—> {lo}, without analyzing them phonologically. No rules that have been shown for explicit learning. The same applies to Habwe and Karanja (2004) and Kihore, et al (wtj) who showed examples of the contraction of the subject concord with the o- of reference with no clear phonological description and analysis. Polome (1967:123) says that relative morpheme consists of the pronominal class-concord plus the referential particle {o} but he also does not give a detailed phonological analysis underlying such a formation. Probably, it was not their focus to deeply analyze these relative forms on a phonological perspective. Therefore, it is my main concern to deeply delve into analyzing the relative morphemes' structures while showing their underlying form and origin before they are realized in their surface form. Phonological rules that apply to every relative form will be shown on the basis of the Standard Model of Generative phonology as stipulated by Chomsky and Halle (refer to Chomsky and Halle, 1968; Hyman, 1975; Massamba, 2011). Relative forms have been discussed according to their respective noun classes so as to easily grasp their formations and phonological underlying structure with their changes into the surface form.

- **2.0** A Glance on the Types of Relative Constructions in Kiswahili Language Kiswahili language has three types of relative constructions (Ashton 1944; Polome, 1967; Schadeberg, 1989, Mgullu 1999, Kihore *et al*, 1999, Ngonyani, 2001) to mention but a few. These constructions are as shown here below:
- 1. When the relative morpheme comes at the end of the verb as a clitic which Schadeberg (1989:34-35) suggests it to be the origin form of relative construction in Kiswahili
- Eg. a) Watoto waongeao Kiswahili sanifu wanatoka Tanzania "Children who speak standard Swahili are from Tanzania"
 - b) Watu walao mboga za majani wana afya nzuri "People who eat vegetables are healthier"
- 2. When the relative morpheme is used as infix before to the verb root.
- Eg. a) Watoto wanaoongea Kiswahili sanifu wanatoka Tanzania "Children who speak standard Swahili are from Tanzania"

- b) Watu wanaokula mboga za majani wana afya nzuri "People who eat vegetables are healthier"
- 3. When relative morpheme is used with the root 'amba-'. The relative morpheme is attached at the end of the root amba-.
- Eg. Watoto **ambao** wana**o**ngea Kiswahili sanifu wanatoka Tanzania a) "Children who speak standard Swahili are from Tanzania"
 - b) Watu **ambao** wanakula mboga za majani wana afya nzuri "People who eat vegetables are healthier"

For more information I refer my reader to the reference cited above since the main purpose of this paper is not to deal so much on these types of relative constructions, their difference or functions but their morphonological derivation from their underlying forms. We will use one structure, which uses the relative morpheme as the infix to the verb throughout this work. The analysis is similar to all relative constructions, so I have decided to choose the second type.

3.0 Morphonological Analysis of Relative Morpheme Forms

Relative morphemes in Kiswahili are formed by the subject concord plus the o-ref. The o-reference refers to the noun mentioned which must have its identity into that construction by using its subject concord morpheme which is concatenated to the o of reference through some phonological processes. With regards to its exceptional, N.cl.1 (m/wa) will not be discussed as its relative morpheme structure does not follow the regular formation as others' do. Its relative morpheme form in singular is {-ye-} and in plural is {-o}.

2. M-mi

a) mti unaokatwa <= mti unauokata u - na - u - o - kata 2P_{sg} -Pre. -SubjC- -O-ref - stem (a tree that/which you are cutting) $una - \{u+o\}-kata => una-\{wo\}-kata$

In Kiswahili the combination of {u+o} becomes {wo} by the phonological rule of gliding which says that wherever vowel /u/ precedes another vowel which is not equal to /u/ it glides to [w] on the surface representation.

Rule is: $/u/ \longrightarrow [w]/ \longrightarrow V \le /u/$. (i)

For easy articulation, the glide /w/ is forced to drop (get deleted in pronunciation) as it is very rare in Kiswahili to find a word with the glide /w/ followed by the round vowels. If any, there is very big simplification whereby the glide /w/ is darkened to the extent of not being heard in the pronunciation except when word initially like in "uoga" [wpga]. Due to this reason, then the glide /w/ is dropped and make the relative morpheme of N.cl.2sg to be realized on the surface form as – {o}- (unaoukata).

(ii) Rule:
$$/w/ \longrightarrow [\nearrow] / V$$
 (O-ref)

b) Miti
$$unayokata \le miti unaiokata$$

 $u - na - i - o - kata$
 $2P_{sg}$.Pre. -SubjC- -O-ref - stem (trees that/which you are cutting)
 $una-\{i+o\}-kata => una-\{yo\}-kata$

Once again, $\{i+o\}$ becomes $\{yo\}$ by the same phonological rule (gliding) since when /i/ is followed by another vowel apart from /i/ it changes into the glide [j] on the surface representation in quick pronunciation. Thus, from our analysis, the surface representation of m/mi noun class relative morpheme structure is $-\{yo\}$ -.

(iii) The rule is:
$$/i/ \longrightarrow [j]/ _ V \odot /i/$$

Since the sound patterns /j [a]/ in Kiswahili has got no problems in articulation and there is no need of simplification or any other rule that apply to such a pattern, the morpheme structure is realized on the phonetic form as {-yo-} (unayokata).

Concatenation of $-\{li+o\}$ - yields to $-\{lyo\}$ - by the rule in 1b above. Since Standard Kiswahili does not allow such sound patterns, then simplification follows by dropping the glide /j in the pronunciation and remain with the surface form $-\{lo\}$ -, thus "linalopendeza" is realized.

(iv) Rule:
$$/i/ \longrightarrow [\nearrow] / /! \longrightarrow V$$

The -{lyo}- is realized in some Bantu languages which allow such a pattern like the Kinyamwezi language whereby relative structure of the cl.5 is $-\{lyo\}$ -. For instance,

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Iya&ó ilyowaálya i&ií
                      <= Iya⊗ó i -
                                          li - o-
                                                     waálya i∜ií
                              SubjM- SubjC- O-ref - stem
                               (the fruit that you ate is bad)
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What changes the referential subject concord $-\{1i\}$ - to $-\{1y-\}$ - is the gliding rule (iii) as stipulated above, that is when /i/ is followed by another vowel other than /i/ it changes to /j/.

Matunda yanayopendeza <= Matunda (ia)yanaiopendeza (Fruits which b) are good)

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na-i-o-pendeza
SubM<sub>pl</sub> - Pre. – SubjC - O-ref - stem
yana-\{i+o\}-pendeza => yana-\{yo\}-pendeza
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The phonological rule that applies to 3b) above is gliding rule (iii) which makes the surface realization of relative morpheme form of N.cl 3pl to be -{yo}-; (yanayopendeza)

4. Ki-vi

Kiti kinachotakiwa ni hiki <= Kiti kinakiotakiwa ni hiki (A chair a) which is needed is this)

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na - ki - o - takiwa
       SubjM<sub>sg</sub> - Pre SubjC- O-ref - stem
       kina-\{ki+o\}-takiwa => kina-\{kyo\}-takiwa
                                                           kina-
{cho}-takiwa
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In Kiswahili, as it is to other Bantu languages when the sound patterns /k+i/ is followed by a vowel which is not /i/ at the morpheme boundary, the sound /k/ is palatalized to /C/. Before /k/ changes to /C/ there is a process of changing /i/ to /j/ by the gliding rule (iii) whereby the sound pattern /kj / changes to /C / since /kjp/ pattern is not common in Standard Kiswahili. These phonological processes make the surface realization of relative morpheme structure of this noun class in singular as $-\{cho\}$ -.

(v) Rule:
$$/k/\longrightarrow [C]/\longrightarrow /i/+ V \boxtimes /i/$$

b) Viti *vinavyotakiwa* ni hivi <= Viti *vinaviotakiwa* ni hivi (chairs which are needed are these)

$$vi - na - vi - o - takiwa$$

 $SubjM_{pl} - Pre - SubjC - O - ref - stem$
 $vina - \{vi + o\} - takiwa = > vina - \{vyo\} - takiwa\}$

The rule that applies to 4 (b) is the gliding rule (ii) whereby the vowel /i/ changes to /j/ when followed by another vowel different from /i/ at the morpheme boundary. Since the pattern $[vj \bowtie]$ is acceptable in Kiswahili, then the surface form of the relative morpheme in this noun class (plural) is $-\{vyo\}$ - (vinavyotakiwa)

5. N-N

a) Nguo *inayotakiwa* <= Nguo *inaiotakiwa* (The clothes which is needed)

i- na- i - o - takiwa
$$SubjM_{sg} - Pre. - RSubjC- O-ref$$
 - $stem$ $ina-\{i+o\}-takiwa => ina-\{yo\}-takiwa$

This relative morpheme form for N.cl.5sg, $-\{yo\}$ - is derived by the same gliding rule (iii) which changes the subject referential concord $-\{i\}$ - to /j/ before the o-ref. morpheme which is different from /i/.

b) Nguo zinazotakiwa <= Nguo zinaziotakiwa (clothes which are needed)

$$zi$$
 - na - zi - o - $takiwa$
 $SubjM_{pl} - Pre.$ - $RSubjC$ - O -ref - $stem$
 $Zina-\{zi+o\}$ - $takiwa$ => $zina-\{zo\}$ - $takiwa$ => $zina-\{zo\}$ - $takiwa$

In 5b above we see that the vowel /i/ of the referential subject concord, $-\{zi\}$ - is changed to /j/ by the gliding rule (iii) that gives form $-\{zyo\}$ -. The sound pattern /zj \not -l/ is not common in Standard Kiswahili pronunciation, then the other phonological rule applies to $-\{zyo\}$ - which drops the sound /j/ for easy articulation of the pattern. Thus, the relative morpheme is realized on the surface form as $-\{zo\}$ - (zinazotakiwa)

(vi) Rule:
$$/j/$$
 \longrightarrow V

6. U-N

a) Ukuta *uliojengwa* vizuri <= ukuta *uliuojengwa* vizuri (a wall which was well built)

u - li - u - o - jengwa

$$SubjC_{sg}$$
 -Past. - SubjC - O-ref - stem
 $uli-\{u+o\}$ -jengwa => $uli-\{o\}$ -jengwa

The analysis in 6a) above shows that the concatenation of the subject concord – {u}- of this N.cl.6sg and the o-of reference feeds the phonological rule (i) which results to the sound pattern /w/\(\frac{1}{2}\)/ which is difficult to pronounce when word medially in Standard Kiswahili and less common in Kiswahili pronunciation. As a results of that difficultness in pronunciation, then the phonological rule (ii) applies to the pattern by dropping the glide /w/; thus the relative morpheme of N.cl.6sg is realized on the surface form as $-\{o\}$ - (uliojengwa).

Kuta zilizojengwa vizuri <= Kuta ziliziojengwa vizuri (walls which were well built)

$$zi$$
 - li - zi - o - $jengwa$
 $SubjC_{pl}$ - $Past.$ - $SubjC_{pl}$ - O -ref - $stem$

 $Zili-\{zi+o\}-jengwa => zili-\{zyo\}-jengwa => zili-\{zo\}-jengwa$

The analysis of relative morpheme form of this noun class (plural) is as that in 5b whereby phonological rule (iii) and (vi) apply to underlying form to yield the surface form –{zo}-; (zilizojengwa).

7. Ku

Kuimba kunakovutia <= Kuimba kunakuovutia (Singing that is impressing)

ku- na - ku - o - vutia
$$SubjC-Pre.-SubjC$$
 - O -ref - $stem$ $Kuna-\{ku+o\}$ - $vutia$ => $kuna-\{kwo\}$ - $vutia$ => $kuna-\{ko\}$ - $vutia$

From 7a) above we see that the subject concord of N.cl.7 is -{ku}- which when combines with the o-of reference feeds the phonological rule (i) that glides /u/ to [w] at the morpheme boundary leading to -{kwo}- surface form. This form again becomes the input of another rule that delete /w/ for easy articulation during pronunciation following the same reasons given in 2a) above; thus, the relative morpheme of this noun class is realized as -{ko}-.

(vii) Rule:
$$/w/\longrightarrow [>]/ /k \longrightarrow V$$
 (O-ref)

8. a) Pa

Mahali panapovutia <= mahali panapaovutia (the specific place which is attracting)

Pa - na - pa - o - vutia
$$SubjC-Pre.-SubjC$$
 - $O-ref$ - $stem$ $Pana-\{pa+o\}-vutia => pana-\{pao\}-vutia => pana-\{po\}-vutia$

The place subject concord –{pa}- when combined with the O- of reference yields the structure –{pao}- whereby the vowel /a/ is dropped for easy articulation. The O-of reference cannot be dropped since it is the main structure that is intended to be realized under such position in the verb derivation. Therefore, the surface form of relative morpheme in this noun class is realized as –{po}-; (panapovutia)

It says: the vowel /a/ drops when preceded by consonant /p/ and followed by the vowel which is, specifically, O- of reference.

8. b) Mu

Muhali mnamotakiwa <= muhali munamuotakiwa (the place (inside) which is needed)

The 8b) analysis can be described that, when the subject concord $-\{mu\}$ -combines with the O-ref. feeds the gliding rule (i) which changes /u/ to /w/ when meets with another vowel not similar to it at the morpheme boundary whereby /mw sound pattern of relative morpheme is realized on the surface form. With the same reasons of simplification in pronunciation, the glide /w/ is dropped by rule (ix) given below. Thus, the surface realization of relative morpheme form of Mu N.cl is $-\{mo\}$ -; (mnamovutia).

(ix) Rule:
$$/w/ \longrightarrow [\nearrow] /m/ V$$
 (O-ref.)

8. c) Ku

Kuhali kunakovutia <= kuhali kunakuovutia (the (general) place that is attracting)

The 8.c) analysis of relative morpheme form is similar to that in 8.b) above as we can see the vowel /u/ combines with O-ref. whereby rule (i) is fed to yield /w/ and then the glide /w/ is dropped by phonological rule (vii) for simplification to yield the surface realization of the relative morpheme form –{ko}-; (kunakovutia).

4.0 Conclusion

The above mophonological analysis of relative morpheme structure shows that the subject concord is the very important element in Kiswahili and other Bantu languages for grammatical conjugation. And it seems that the relative morpheme form cannot be realized in the verb without being combined with the subject concord. The concatenation of these two formatives feeds some phonological rule which leads to alternations of the underlying form of the subject concord realization to another form as shown above. This mophonological description is apparent and can be proven by the similar analysis in other Bantu languages.

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