

FAKE VOWEL LENGTHENING IN KABIYÈ

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Abstract : We have noticed, in the Kabiye language use, some long realisations of initially short vowels at word final position in some constructions whose status is questionable. Are they lengthened vowels really or what phenomenon accounts for their occurrence and what is the linguistic value of this phenomenon? The main objective of this paper is finding answers to these questions. Based on analyzing data through the theoretical model of “fake or apparent geminates” (D Crystal, 2008) and transformational generative grammar, the work shows that the said vowel sequences are “fake lengthened vowels”, resulting from the phenomenon of ‘fake vowel lengthening’, and are accounted for by morphophonological processes. Fake vowel lengthening is frequently used in the Kabiye language to express focalisation in contracted form, instead of the full focalisation form.

Key words: Kabiye, vowels, fake vowel lengthening, focalisation

Résumé : Nous avons remarqué, dans l’usage de la langue kabiye, quelques longues réalisations de voyelles initialement courtes en finale de mots dans certaines constructions dont le statut suscite des interrogations. S'agit-il vraiment de voyelles allongées ou quel phénomène explique leur occurrence et quelle est la valeur linguistique ou expressive de ce phénomène? Le présent article vise à trouver des réponses à ces questions. Fondé sur l'analyse de données sous l’inspiration du modèle théorique de «fake or apparent geminates» “fausses géminées ” (D. Crystal, 2008) et sur la grammaire générative et transformationnelle, le travail montre que lesdites séquences vocaliques sont de «fausses voyelles allongées». Leur occurrence s’explique par des processus morphophonologiques. Il s’agit donc d’un phénomène de « faux allongement vocalique» fréquemment utilisé dans la langue kabiye pour exprimer la focalisation sous une forme contractée, au lieu de la forme complète de la focalisation.

Mots clés : kabiye, voyelles, faux allongement vocalique, focalisation

Introduction

Kabiye is a gur language of the eastern gurunsi subgroup. We have observed in this language, the long realisation of short vowels at word final position in some constructions and these vowel sequences raise a number of questions about their status: Are they lengthened vowels in deed or what phenomenon accounts for their occurrence? What is the linguistic value of this phenomenon?

Finding answers to those questions is the main concern of this paper. Our investigation on the issue is based on analyzing data collected. The leading assumption is that the observed vowel sequences result from 'fake vowel lengthening'.

To account for this phenomenon, we draw inspiration from the theory of "fake or apparent geminates" by D. Crystal (2008, p. 206). The author defines gemination as "A term used in phonetics and phonology for a sequence of identical adjacent segments of a sound in a single morpheme". The terms *gemination* and *geminates* generally involve consonants (See also J. Dubois and al. (2012, p. 213; P. L. Bolouvi (2011, p. 170)). D. Crystal further distinguishes between "true" geminates, which cannot be separated, and "fake" or "apparent" geminates "where identical segments have been made adjacent through morphological concatenation". Basing on this model, we define fake lengthened vowels as vowels which have been made adjacent and identical through morphological processes and which are pronounced as though they were long or lengthened vowels. We refer to the process generating this type of vowels as "fake vowel lengthening". For explaining and illustrating this process, transformational generative grammar is also used.

Many works have been carried out on the Kabiye language, including sound description. Whereas the researchers unanimously agreed upon nine short vowels as phonemes of this language, they diverge over the phonological status of their long counterparts.

Therefore, before looking at the main issue, we first present the state of affairs of vowel typology in Kabiye in order to contribute to the debate on the

phonological status of long vowels by finding minimal pairs to oppose them to their short counterparts.

1. Vowel typology in Kabɩyɛ

With regard to the duration of their production, three classes of vowels are found in the Kabɩyɛ language, namely, short vowels, long vowels and extra-long vowels.

1.1. Short vowels

Nine short vowels have been identified by J. Delord (1976) CLNK & SIL-Togo (1998) and K. K. Lébikaza (1999) as vocalic phonemes in Kabɩyɛ. These vowels are presented in the chart below:

Chart 1: The Kabɩyɛ short vocalic phonemes

	Front	Back
High	i	u
	ɪ	ʊ
Mid	e	o
	ɛ	ɔ
Low	a	

More recent works such as, D. Roberts (2003) and C. M. Padayodi (2010) have also confirmed the phonological status of those vowels.

1.2. Long vowels

Researchers such as J. Delord (1976), CLNK & SIL-Togo (1998), K. K. Lébikaza (1999), D. Roberts (2002) and C. M. Padayodi (2010) recognise the existence of long vowels in the Kabɩyɛ language, yet they are not unanimous about the phonological status of these vowels. Only CLNK & SIL Togo (1998), D. Roberts (2002) and C. M. Padayodi (2010) have established them as phonemes.

They have identified nine (09) long vowels as phonemes corresponding to the nine (09) short vowel phonemes discussed above. These are presented in chart 2 below:

Chart 2: The Kabiye long vocalic phonemes

	Front		Central	Back	
	+ATR	-ATR		+ATR	-ATR
High	ii	u		uu	oo
Mid	ee	εε		oo	ɔɔ
Low			aa		

Source: C. M. Padayodi (2010, p. 53)

We found it necessary to test the phonological status of these vowels by finding minimal pairs to illustrate their distinctive opposition to short vowels. In the minimal pairs (1), the distinctive vowels in contrast are in bold type and the exclamation mark indicates imperative verb forms.

- (1) a. cεsúú “dig” vs cεsúú “strengthen”
 b. mɔzúú “suck” vs mɔzúú “make disappear”
 c. kitúú “return” vs kiitúú “turn around”
 d. ketúú “lead animals” vs keetúú “bark”
 e. kozúú “weed” vs koozúú “scrape”
 f. tɔzúú “select” vs tɔzúú “feed”
 g. luzúú “lower” vs luuzúú “turn a stick in a hole”
 h. pɛsúú “go back” vs pɛsúú “scourge”
 i. ta “attach !” vs taa “anoint !”

The minimal pairs above testify the distinctiveness of long vowels in Kabiye and support their phonemic status.

1.3. Extra-long vowels

Extra-long vowels are attested in idiophones (Idio) in Kabiyɛ as exemplified below:

- (2) a. kpeluú tibá **fiii** “The sparrowhawk descended speedily”
 /sparrowhawk/descend+PERF/Idio/
 b. ño **cuu** “red head”
 /head/Idio/
 c. lum télémééé “lukewarm water”
 /water/Idio/
 d. ε-ñó lim **maaamaaa** “He drank water in great mouthfuls”
 /Pro-drink+PERF/water/Idio/
 e. pɔ-ɖɔza-ɪ **kpuuu** “S/he totally went bankrupt”
 /Pro-dip in+PERF-Pro/Idio/
 f. nóó **lɔɔɔ** “long mouth”
 /mouth/Idio/
 g. nim **ɔɔɔ** “very rich/fatty”
 /oil/Idio/
 h. su **ɖááá** “put dow slowly”
 /put down !/Idio/
 i. e-wiláa **wooo** “S/he wept out at the top of her/his voice”
 /Pro-weep+PERF/Idio/

The extra-long vowels are summed up in chart 3 below:

Chart 3: Kabiyɛ extra-long vowels

	Front		Central	Back	
	+ATR	-ATR		+ATR	-ATR
High	iii	uu		uuu	ɔɔɔ
Mid	eee	εεε		ooo	ɔɔɔ
Low			aaa		

The length of these vowels may be extended at will in idiophones so as to intensify their signified, the quality denoted by the idiophone.

Exemple : cuuu “dark red”, suuuu “very dirty/very dark”.

What about the phonological status of extra-long vowels? It should be noted that some of these vowels, notably, **uu** and **uuu**, contrast with their short (u, uu) and long (uu, uuu) counterparts in words such as **ci/cíu/cuu** “pinch! /tear/dark red” and **su/suu/suuu** “shut up/wear!/very dirty or very dark”, respectively. However, extra-long vowels are not phonemes in Kabiye (C. M. Padayodi, 2010: pp. 200-208), since they appear only in idiophones within the language and may be lengthened at will. They are therefore considered to be allophones of short or long vowels.

2. Fake lengthened vowels?

We have shown precedingly that short vowels and long vowels are attested as phonemes in the Kabiye language and that these vowels may be lengthened at will in idiophones, thus producing extra-long vowels. Still, the question arises about the length of some vowel sequences at word final position in certain utterances in this language, since the vowels concerned are short vowels in the same words taken in isolation, as in the sample data provided below:

(3) Words	Sentences	Gloss
a. tóko “shirt”	Tókoo é-yábá /shirt/Pro-buy+PERF/	“it is a shirt that s/he bought”
b. Cɔzɔ (name)	Cɔzɔ́ é-yábá tóko /name/Pro-buy+PERF/shirt/	“It is for Cɔzɔ that s/he bought the shirt”
c. cótu “mustard”	cótuu é-bédiy /mustard/Pro-sell+IMPERF/	“It is mustard that s/he sells”
d. kaakoo “market”	kaakoo Samá wóbá /market/name/go+PERF/	“It is to market that Sama went”
e. tɛɛ “yesterday”	tɛɛé é-bísáa /yesterday/Pro-retrun+PERF/	“S/he came back yesterday”

- f. wáló “husband” é-yábá é-walóó hulaý “She bought her husband a hat”
 /Pro-buy+PERF/Pro-husband/hat/
 g. haló “wife” ε-halóó é-má dáy “He built the house for his wife”
 /Pro-wife/Pro-build+PERF/house/

Having examined carefully the data, especially the sentences and their gloss, we came to realise that the vocalic realisations (in bold type) in those utterances are neither long vowels nor lengthened vowels. They rather occur in constructions expressing focalisation. This prompted us to consider how focalisation works in the language concerned.

2.1. Focalisation in Kabɿye

The term *focalisation* proceeds from *focus*, meaning the part of an utterance that should retain the attention of the hearer (Z. Tchagbalé (2006, p. 128)). For other authors, it consists in focusing new information on a constituent in a sentence (R. W. Langacker (1972, p. 295); K. K. Lévikaza (1999, p. 504)). Focalisation may involve any of the actants or circonstants in a sentence (Z. Tchagbalé (2006, p. 128)). In Kabɿye, focalising a subject is marked by adding the suffix -ná to the verb in the sentence (4 a); but a focalised direct object (4 b, c), indirect object (4 d, g, h) or circonstant (4 e, f) is followed directly by the focalising morpheme or focaliser (FOC) *ke`* (or *kené*) (K. K. Lévikaza (1999, 504)), as exemplified below:

- (4) a. Samá wóbí-na kaaku “It is Samá who went to market”
 /Sama/go+PERF-FOC/market/
 b. tóko ke é-yábá “It is a shirt that s/he bought”
 /shirt/FOC/Pro-buy+PERF/
 c. cótu ke é-bédíy “It is mustard that s/he sells”
 /mustard/FOC/Pro-sell+IMPERF/
 d. Cɔzó ke é-yábá tóko “It is for Cɔzó that s/he bought the shirt”

- /Cɔzɔ/FOC/Pro-buy+PERF/shirt/
 e. kaaku ke Samá wóbá “It is to market that Sama went”
 /market/FOC/Sama/go+PERF/
 f. ʔeʔe ke é-bísáa “S/he returned yesterday”
 /yesterday/FOC/Pro-return+PERF/
 g. ε-waló ké é-yábá hulaý “It is for her husband that she bought a hat”
 /POSS-husband/FOC/Pro-buy+PERF/hat/
 h. ε-haló ké é-má dáy “It is for his wife that he built a house”
 /POSS-wife/FOC/Pro-build+PERF/house/

The focalising sentences in example (4) above are derived from their corresponding underlying simple declarative sentences in example (5) below:

- (5) a. Samá wóbá kaaku “Samá has gone to market”
 /Sama/go+PERF/market/
 b. é-yábá tóko “S/he has bought a shirt”
 /Pro-buy+PERF/shirt/
 c. é-bédíy cótú “S/he sells mustard”
 /Pro-sell+IMPERF/mustard/
 d. é-yábá tóko ke Cɔzɔ “S/he bought a shirt for Cɔzɔ”
 /Pro-buy+PERF/shirt/for/Cɔzɔ/
 e. Samá wóbá kaaku “Samá has gone to market”
 /Sama/go+PERF/market/
 f. ε-buí ʔeʔe “S/he came back yesterday”
 /Pro-come back+PERF/yesterday/
 g. é-yábá hulaý ké ε-waló “She has bought a hat for her husband”
 /Pro-buy+PERF/hat/for/POSS-husband/
 h. é-má dáy ké ε-haló “He has built a house for his wife”
 /Pro-build+PERF/house/for/POSS-wife/

The focalising constructions in example (4) are derived from these underlying forms (5). As mentioned precedingly, the focalisation of a subject in a sentence requires adding the suffix *-ná* to the verb in the sentence. But focalising the other elements (direct and indirect objects, circonstants) requires two sequential transformational operations: (1) movement of the focalised word to the initial position and (2) inserting the focaliser *ke* just after it. See examples (4) above.

These focalisation constructions -that we refer to as ‘full form of focalisation’- have the same semantic value as the constructions discussed in example (3) above, with the questionable vowel sequences concerned with our investigation. So, we refer to them as ‘contracted form of focalisation’. In other words, two forms of focalisation may be derived from a simple declarative sentence in Kabiye, namely, the full form and the contracted form. The construction process of the contracted form of focalisation accounts for the occurrence of the phenomenon we refer to as “fake or apparent” vowel lengthening. How does this phenomenon work?

2.2. *Contacted focalisation as context of fake vowel lengthening in Kabiye*

We have just shown that two possible focalisation forms may be derived from a simple declarative sentence in Kabiye -the full form and the contracted form- and that the contracted form accounts for the phenomenon of fake vowel lengthening. Thus, the underlying form (UF) or simple declarative sentence and both surface forms (SF) or focalisation forms constitute three paraphrases, as illustrates example (6) below:

- (6) a. ϵ -béđiy cótu (UF/Simple declarative sentence)
 /Pro-sell+IMPERF/mustard/
 “S/he sells mustard”
- b. cótu ke é-béđiy (SF 1: Full focalisation form)
 /mustard/FOC/Pro-sell+IMPERF/

“It is mustard that s/he sells”

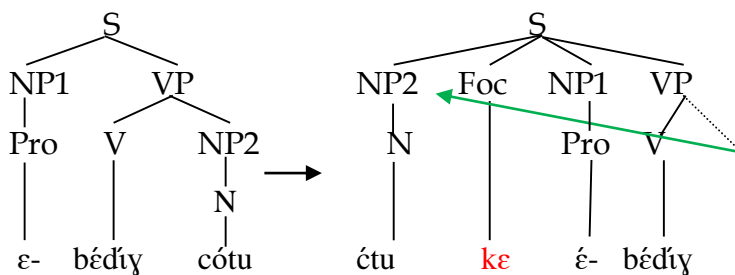
c. *cótuu é-bédíy* (SF 2 : Contracted focalisation form)

/mustard/Pro-sell+IMPERF/

“It is mustard that s/he sells”

The full form of focalisation (6 b) is derived from a simple declarative sentence (6 a). The derivational process of the two forms of focalisation can be illustrated as in chart (4) and (5) below:

Chart 4: Deriving full focalisation form from the underlying form



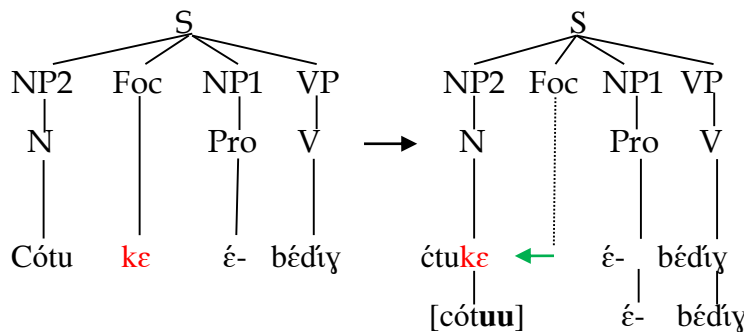
(6a) Underlying form (6b) Full focalisation form

The structural representation in chart (4) above shows that the simple declarative sentence (6a) is respectful of the canonical syntactic structure SVO (NP1 V NP2) characterising the Kabɩyɛ language. In deriving the full focalisation form, this structure undergoes two transformational operations:

- movement of the target of the focalisation -the objet (NP2)- from the final position to the initial position (movement indicated by the green arrow) ;
- insertion of the focaliser (Foc) *kɛ* between the element focalised (O/SN2) and the subject (NP1) of the verb.

The contracted focalisation form (6 c) is derived from the full focalisation form (6 b), as shows chart (5) below:

Chart 5: Deriving the contracted focalisation form from the full focalisation form



(6b) Full focalisation form

(6c) Contracted focalisation form

The contracted focalisation form (6c) is derived from the full focalisation (6b) by applying transformation to the structure of the latter too: the focaliser *ke* is moved and suffixed to the word focalised (O/SN2). This process generates the phenomenon of fake vowel lengthening.

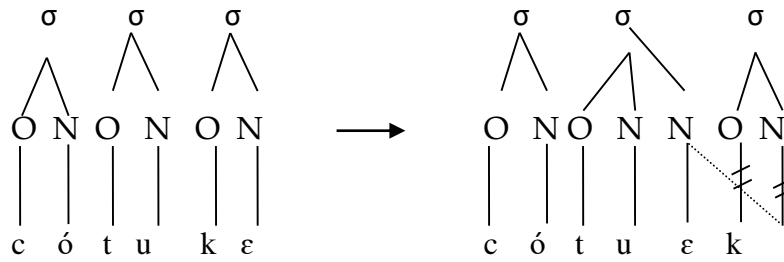
2.3. Fake lengthened vowels as a result of the fake vowel lengthening phenomenon

The concatenation of the focaliser (*ke*) with the focalized word produces three sequential morphophonological processes: (a) consonant deletion, (b) vowel assimilation, and (c) tone assimilation.

a) Consonant deletion

Regarding consonant deletion, the monosyllabic focaliser *ke* -whose syllable (o) structure is CV -that is an onset (O) and a nucleus (N)- drops the onset; this results in the focalised word ending with a sequence of two vowels, as schematised the syllable structure representation in chart (5) below.

Chart 6: Consonant deletion in contracted focalisation



b) Vowel assimilation

After the consonant deletion, the attached vowel /ε/ (representing the focalizer) is totally assimilated by the preceding vowel, that is, the final vowel of the word focalized (O/SN2: *cótu*), in case both differ in vowel timbre. Consequently, a focalised word with CVCV syllable structure (as in *cótu*) becomes CVCV: (as in *cótuu*). This assimilation process can be written into the following segmental rule:

$$/\varepsilon/ \longrightarrow [\infty V] / [\infty V] \text{ —\#}$$

The vowel /ε/ (marking contracted focalisation) is totally assimilated by any vowel (∞) at word final position.

c) Tone assimilation

In the morphological concatenation process, the vowel /ε/ marking focalisation is also assimilated by the final vowel of the focalised word in terms of tone (high/low). This is noticeable in the following examples:

- (7) a. *tózi-ε* [tózii] → tózii é-hiliy
 /sauce-FOC/ /sauce+FOC/Pro-cook+IMPERF/
 “It is sauce that s/he is cooking”
- b. *kelimiyé-ε* [kélimiyéé] → kélimiyéé é-ñúny
 /chicken-FOC/ /chicken+FOC/Pro-look for+IMPERF/
 “It is chicken that s/he is looking for”

- c. $nó-\varepsilon$ [nóó] \longrightarrow nóó é-yábá
 /ox-FOC/ /ox+FOC/Pro-buy-PERF/
 “It is an ox that s/he has bought”
- d. $só-\varepsilon$ [só] $sóó \longrightarrow$ zóóláa
 /drumbeat-FOC/ /drumbeat+FOC/Pro-like-PERF/
 “It drums that s/he likes”
- e. $mlá-\varepsilon$ [mláá] \longrightarrow mláá é-bédíy
 /sorghum-FOC/ /sorghum+FOC/Pro-sell-IMPERF/
 “It is sorghum that s/he is selling”

The contracted focalisation marker / ε /, which is initially low toned, copies the tone of the preceding (or assimilating) vowel, according to the following rule:

$$/L/ \longrightarrow \left\{ \begin{array}{l} [H] \ / \ [H] \ -\# \\ [L] \ / \ [L] \ -\# \end{array} \right\}$$

As a result of the morphological concatenation followed by morphonological processes described above, the vowel sequences below occur at the end of the focalised words in contracted focalisation constructions in Kabɿye:

- $i + \varepsilon \longrightarrow [ii]$
 $u + \varepsilon \longrightarrow [u]$
 $e + \varepsilon \longrightarrow [ee]$
 $\varepsilon + \varepsilon \longrightarrow [e\varepsilon]$
 $u + \varepsilon \longrightarrow [uu]$
 $o + \varepsilon \longrightarrow [oo]$
 $\acute{o} + \varepsilon \longrightarrow [oo]$
 $o + \varepsilon \longrightarrow [oo]$
 $a + \varepsilon \longrightarrow [aa]$

At first sight, these vowels (on the right side of the arrows) look like long or lengthened vowels but, actually, they result from “apparent” or “fake” vowel lengthening. Therefore, they are apparent or fake lengthened vowels.

Conclusion

Basing on vocalic quantity, two types of vowels are attested in the Kabiye language as phonemes: short vowels and long vowels. Long vowels can be lengthened at will in idiophones, thus producing extra-long vowels which do not enjoy phonemic status. Apart from these, recurring apparent lengthening of initially short vowels at the end of words is observed in the use of this language. Our investigation has led to the conclusion that this apparent lengthening of initially short vowels results from expressing focalisation in contracted form and is accounted for by morphological concatenation and morphonological processes, namely, consonant deletion, vowel assimilation and tone assimilation. Therefore, we consider this phenomenon to be ‘fake vowel lengthening’ producing ‘apparent or fake lengthened vowels’, in comparison with fake geminates produced by morphological concatenation. Fake vowel lengthening is very recurring in the use of the Kabiye language as the contracted focalisation form is much more frequently used than the full focalization form by the Kabiye speakers, except for some variants of the language.

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