

TEACHING KISWAHILI PRONUNCIATION IN SECONDARY SCHOOLS IN KENYA: THE NECESSITY TO USE THE RIGHT INFORMATION AND DESCRIPTIVE TOOLS

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This paper focuses on inaccuracies in the way the teaching of Kiswahili pronunciation is provided for in textbooks recommended for secondary schools in Kenya. The major inaccuracies consist in the following: some of the charts are not labelled properly, a proper distinction is not made between voiced and voiceless consonants in some of the charts, the prenasalised consonants are not given adequate treatment, and some speech organs are not drawn or labelled correctly. The paper offers the correct information and descriptive tools to use so as to improve the teaching of Kiswahili pronunciation in Kenya.

1. INTRODUCTION

Kiswahili has the status, in the new constitution of Kenya (promulgated on 27th August 2010), of a national language and, alongside English, of an official language, which makes it a very important language in the daily activities and functioning of the state. It is taught as a compulsory subject in Kenyan secondary schools. The objectives of teaching Kiswahili are stated in the syllabus developed by the Ministry of Education, Science and Technology (2002, pp. 31-36). The interest of this paper is in the objectives specifically related to teaching Kiswahili pronunciation. They are stated as follows: *Mwanafunzi aweze* ['the learner should be able']:

- (a) *Kuzingatia matamshi bora ya lugha ya Kiswahili* ['to articulate correctly in the Kiswahili language'].
- (b) *Kutambua na kurekebisha athari zitokanazo na lugha za mama na lugha nyinginezo* ['to identify and correct negative mother tongue influence and that from other languages'].
- (c) *Kuimarisha na kuendeleza umilisi na uzoefu wa matamshi bora katika lugha ya Kiswahili* ['to improve and develop competence and performance in the articulation of Kiswahili'].

Objectives (a) and (b) are covered in Form 1, and objective (b) is also repeated in Form 2, while objective (c) is covered in Form 2.

In Kenyan secondary schools, pronunciation is taught as part of listening and speaking skills. If these are developed properly in a learner, it is believed that they will contribute considerably to the 'development of reading and writing skills' (Ministry of Education, Science and Technology, 2002, p. 5). Various texts have been written in an attempt to provide students with the necessary information to enable them to achieve the set objectives. But the focus in this paper will be on six textbooks recommended and used for the teaching of Kiswahili in Form 1 and Form 2, as it is only in these two years that the teaching of pronunciation is provided for. The six were written by Maneno et al. (2003), Mumbo et al. (2003), Waihiga and Wamitila (2003a), Waihiga and Wamitila (2003b), Wizara ya Elimu (2003)¹ and Wizara ya Elimu (2008b).

Generally, the teaching of pronunciation covers vowels, consonants, phonemes, syllables, stress and intonation. The weaknesses discussed in Section 2 refer to the incorrect presentation of descriptive tools, while those discussed in section 3 refer to the inaccurate or inadequate presentation of information. Both types of weaknesses will be given considerable attention because they should be eliminated altogether. The main weaknesses identified are the following: using letters instead of sound symbols, using incomplete or the wrong terminology to refer to place and manner of articulation, placing the "sounds" in the wrong boxes, placing voiceless or voiced "sounds" in the wrong positions within the boxes, using the wrong sound symbols and placing them in the wrong place in the chart, using incomplete or the wrong terminology to refer to speech organs, using inaccurate drawings of the speech organs, giving inaccurate and inadequate information about prenasalised consonants and glides, giving inaccurate information about the syllable structure, placing the stress on the wrong syllable in some words and giving inadequate information about intonation.

¹ There are five editions of the book by Wizara ya Elimu used for teaching Form 1 students. The ones used in this study are the 1995, 2003 and 2008 editions.

The sections that follow describe and illustrate each one of these weaknesses in detail.

2. INACCURATE TABLES AND FIGURES USED IN THE TEACHING OF KISWAHILI PRONUNCIATION

In the textbooks mentioned above, tables and figures are used to teach learners the articulation of Kiswahili sounds. Consonants are presented in Tables 1, 2, 3 and 4. Figures 1 and 2 contain Kiswahili vowels, while Figures 3, 4, 5, 6, 7 and 8 contain speech organs. Figure 8 has arrows to show the source of the air used in speech and the direction of the airstream. All the tables and figures have been copied from the selected recommended textbooks for teaching Form 1 students.

2.1 Tables of Kiswahili consonants as presented in the recommended textbooks

2.1.1 *The tables themselves*

Table 1: Kiswahili consonants as they appear in Maneno et al. (2003, p. 13)

Aina	Mahali								
	Midomo	Midomo na meno	Meno na ulimi	Ufizi	Kati ya kaakaa na ufizi	Kaakaa gumu	Kaakaa laini	Glota	
Vipasuo	P b			t d		j	k g		Si guna Ni guna
Ving'ong'o/ nazali	m			n		ny	ng		Ni guna
Kitambaza				l					Ni guna
Kimadende				r					Ni guna
Vikwamizo		f v	th dh	s z		sh	gh	h	Si guna Ni guna
Kituo- kwamizo					ch				Si guna
Viyeyusho						y	w		Ni guna

Table 2: Kiswahili consonants as they appear in Wizara ya Elimu (2003, p. 15)

AINA	MAHALI							
	vya mdomo	vya mdomo wa chini na meno ya juu.	vya meno	vya ufizi	vya nyuma ya ufizi	vya kaa-kaa ngumu	vya kaa-kaa laini	vya koo
VIPASUO	pb			td		j ch	k g	
VIKWAMIZO		fv	th dh	sz		sh	kh gh	h
VING'ONG'O	m			n		ny	ng'	
KITAMBAZA				l				
KIMADENDE				r				
VIYEYUSHO (NUSU IRABU)	w					y		

Mahali pa kutamkia konsonanti

Table 3: Kiswahili consonants as they appear in Wizara ya Elimu (2010, p. 15)

Aina na Mahali pa Kutamkia Konsonanti							
AINA	MAHALI						
	Midomo	Meno	Ufizi	Mdomo na meno	Kaakaa gumu	Kaakaa laini	Koo/ koromeo
Vipasuo	p b		t d			k g	
Vizuio kwamiza					j ch		
Vikwamizo		th dh	s z	f v	sh	gh	h
Ving'ong'o/ vipua/ nazali	m		n		ny	ng'	
Kitambaza			l				
Kimadende			r				
Kiyeyusho/ nusu irabu	w				y		

Table 4: Kiswahili consonants as they appear in Waihiga and Wamitila (2003a, p. 7)²

Konsonanti za Kiswahili

AINA \ MAHALI	MIDOMO MENO	MDOMO	MENO	UFIZI	KAA GUMU	KAA LAINI	KOROMEEO
VIPASUO (H) (GH)	p b			t d	j	k g	
KIPASUO - (H) KWAMIZO					ch		
NAZALI	m			n	ny	ng ³	
VIKWAMIZO (H) (GH)		f v	th dh	s z	sh	gh	h
KITAMBAZA				l			
KIMADENDE				r			
NUSU IRABU/VIYEUUSHO	w				y		

2.1.2 The Kiswahili-English gloss of the terms used in the tables above

The first cluster of translated words appears in Table 1. For the subsequent translations, what is already present in the translations for the words appearing in Table 1 will not be repeated.

Words appearing in Table 1

Aina 'type'³

Mahali 'place'

Vipasuo 'plosives'

Ving'ongo / *nazali* 'nasals'

Kitambaza 'lateral'

Kimadende 'trill'

Vikwamizo 'fricatives'

Kituo-kwamizo 'affricate'

Viyeyusho 'glides'

² (H) refers to voiceless sounds, while (GH) refers to voiced ones.

³ *Aina* means 'type'. The right word for manner is *namna* not *aina*.

Si guna (ghuna) 'it is voiceless' (literally, 'it is not voiced')

Ni guna (ghuna) 'it is voiced'

Midomo 'bilabial' (literally, 'lips')

Midomo na meno 'bilabio-dental'⁴ (literally, 'lips and teeth')

Meno na ulimi 'dental and tongue' (literally 'teeth and tongue')

Ufizi 'alveolar ridge'

Kati ya kaakaa na ufizi 'palato-alveolar/post-alveolar' (literally, 'between palate and alveolar ridge')

Kaakaa gumu 'palatal' (literally, 'hard palate')

Kaakaa laini 'velar' (literally, 'soft palate or velum')

Glota 'Glottal'

Words appearing in Table 2

Mahali pa kutamkia konsonanti 'place of articulation of consonants'

Viyeyuso (nusu irabu) 'glides (semi-vowel)'

Vya midomo 'of the lips', i.e. 'bilabial'

Vya mdomo wa chini na meno ya juu 'of lower lip and upper teeth', i.e. 'labio-dental'

Vya meno 'of the teeth', i.e. 'dental'

Vya ufizi 'of the alveolar ridge'

Vya nyuma ya ufizi 'of behind the alveolar ridge', i.e. 'post-alveolar'

Vya kaakaa gumu 'of the hard palate', i.e. 'palatal'

Vya kaakaa laini 'of the soft palate/ velum', i.e. 'velar'

Vya koo 'of the throat', i.e. 'glottal'

Words appearing in Table 3

Vizuo kwamiza 'affricates'

Ving'ong'o/ vipua/ nazali 'nasals'

⁴ *Midomo* is the plural form of *mdomo* 'lip'. Therefore, *midomo na meno* literally means 'lips and teeth'. If we borrow the related adjectives, we will have 'bilabio-dental'. The table should use *mdomo-meno*, i.e. labio-dental', because only one lip is involved.

Kiyeyusho/ nusu irabu 'glide/semi-vowel'

Meno 'teeth', i.e. 'dental'

Mdomo na Meno 'lip and teeth', i.e. 'labio-dental'

Koo/ koromeo 'throat/ Adam's apple', i.e. 'glottal'

Words appearing in Table 4

Konsonanti za Kiswahili 'consonants of Kiswahili'

Mdomo meno 'lip teeth', i.e. 'labio-dental'

Mdomo 'lip', i.e. 'labial'

Kaa gumu 'hard palate/palatal'

Kipasuo-Kwamizo 'affricate'

2.2 The types of inaccuracies that characterize those tables

There are four types of such inaccuracies: one, using letters instead of sound symbols; two, using incomplete or wrong terminology to refer to place and manner of articulation; three, placing the "sounds" in the wrong boxes; and four, placing voiceless or voiced "sounds" in the wrong positions within the boxes.

2.2.1 Using letters instead of sound symbols

In Tables 1, 2, 3, and 4, Kiswahili consonant sounds are represented using graphemes (letters of the Roman alphabet), not IPA symbols, though some sounds like /t/, /d/, /k/, have a one-to-one correspondence between the graphemes and IPA symbols representing them. Using graphemes is quite misleading because the standard IPA chart uses phonetic symbols, not orthography ones. In Maneno et al. (2003, p. 12), consonants are enclosed within slanted slashes, as follows: /b/, /ch/, /d/, /dh/, /f/, /g/, /gh/, /h/, /j/, /k/, /l/, /m/, /n/, /ng'/, /ny/, /p/, /r/, /s/, /sh/, /t/, /th/,

*/v/, /w/, /y/, /z/*⁵. Conventionally, sounds of a language are enclosed either within square brackets - if they are looked at as phones and allophones, or between slanted slashes - if they are considered as phonemes. However, these symbols used in Maneno et al. (2003) are neither phonemes nor allophones, but letters of the alphabet. So, they should not be enclosed within slanted slashes or square brackets. Therefore, despite correctly defining the phoneme as ‘... *Kipashio kidogo cha sauti ambacho hubadili maana ya neno*’, [‘the smallest element of (speech) sound which changes the meaning of a word’], Maneno et al. (2003, p. 6) misleadingly represented the Kiswahili phonemes in Table 1 using letters of the Roman alphabet, instead of IPA symbols. To give one example, */ny/* corresponds to a sound sequence which is found in French, for example, but not in Kiswahili (or English).⁶ To avoid confusion later on when students are exposed to the IPA chart and symbols at university or college level, proper IPA charts with the appropriate symbols should be used.

2.2.2 Using incomplete or the wrong terminology to refer to place and manner of articulation

This is evidenced in Tables 1, 3, and 4. In Table 1, from Maneno et al. (2003, p. 15), dental sounds are described as *meno na ulimi*, literally, ‘teeth and tongue’. Since the tongue is a main player in the articulation of almost all the sounds, it does not need to be mentioned. Otherwise, it would appear not to be involved where it is not mentioned.

The title given to Table 2, from Wizara ya Elimu (2003, p. 15), is *mahali pa kutamkia konsonanti* ‘place of articulation of consonants’. (See under the table in question). The word for ‘manner of articulation’ is not mentioned, yet the specific manner of articulation for each class of sounds

⁵ It is also noted that in Maneno (2003, p. 3), the vowels are enclosed within square brackets, as follows: *[i], [e], [o], [a], and [u]*. Since, these symbols are neither phonemes nor allophones, but letters of the alphabet, they should not be enclosed within square brackets.

⁶ If you have access to a French dictionary, you will find */ny/* to be the phonetic symbols for the word *nu* (which is an adjective meaning ‘naked’).

is mentioned in the extreme left of each row in the table. The specific Kiswahili word for manner is *namna*. It should appear in the extreme top left corner of the table. In addition, a more general title like *Konsonanti za Kiswahili* which means 'Consonants of Kiswahili' would be more appropriate for the table. Otherwise, if the current title is retained, then it should read as *mahali pa kutamkia na namna ya kutamka konsonanti* which means 'place and manner of articulation of consonants.'

The second column of Table 4 (showing place of articulation) is labelled *Midomo meno*, which literally means 'lips teeth', to refer to 'bilabio-dental'. This is a wrong description and place of articulation for bilabials. The term *midomo* is in its plural form, so the most appropriate translation of it would be 'bilabial'. The next place of articulation is labelled *mdomo*, (literally 'lip', for 'labial'), where the sounds /f/ and /v/ are encountered. If pluralised to *midomo*, this should be the right name for the place of articulation for bilabials and not for /f/ and /v/, which are labio-dentals. It is indeed for the latter two sounds that the phrase *mdomo meno* should be used. *Midomo* should be used for the real bilabial sounds, namely /p/, /b/, /m/, and /w/.

2.2.3 Placing the "sounds" in the wrong boxes

This has occurred in Tables 1, 2, 3, and 4 and specifically concerns the sounds /tʃ/ and /dʒ/, which, to start with, are wrongly represented in the various tables by the graphemes 'ch' and 'j', respectively. Waihiga and Wamitila (2003a) describe 'ch' as *kipasuo-kwamizo*, that is 'an affricate', which is correct. But they put 'j' under *vipasuo*, that is 'plosives', which is wrong. Moreover, 'ch' and 'j' are presented as voiceless palatal sounds in the same text, which is wrong as well, since 'j' (for /dʒ/ actually) is voiced. The sound typically heard in the speech of speakers of Kiswahili in Kenya, including the teachers of Kiswahili, is /dʒ/ (the voiced palato-alveolar affricate), and not /j/ (the voiced palatal stop) as the description in Table 4 (i.e. *kaa gumu* 'hard palate' plus *vipasuo* 'plosives') implies.

To view the inconsistencies in the tables in the textbooks more clearly, see my summary of them in Table 5 below. The asterisk '*' before the description of a sound in Table 5 shows that at least one element of the description is wrong.

Table 5: A summary of the descriptions of 'ch' and 'j' in Tables 1, 2, 3 & 4

	ch /tʃ/	j /dʒ/
Table 1	Voiceless palato-alveolar affricate	*Voiceless palatal stop
Table 2	*Voiced palatal stop	*Voiceless palatal stop
Table 3	*Voiced palatal affricate	*Voiceless palatal affricate
Table 4	Voiceless palatal affricate	*Voiceless palatal stop

The summary in Table 5 suggests that each description of the sound /dʒ/ in all the four tables is inaccurate, while /tʃ/ is correctly described in only two of the four tables. But even though I accept "voiceless palatal affricate" as used in Table 4, as a correct description of the sound /tʃ/, this acceptance should be qualified: In the updated IPA chart (see e.g. Ladefoged, 2001 and Roach, 2009), affricates are not present, probably because their articulation is complex, i.e. involving both stop and fricative phases, which are already catered for. In some books, the sounds /tʃ/ and /dʒ/ are called something else than 'palatal affricates'. Roach (2009, p. 52) calls them post-alveolar affricates. Gimson (1989, p. 175) and Sethi and

Dhamija (2004, p. 101) call them palato-alveolar affricates. For his part, O'Connor (1980) describes them as stops of a special kind because in their production '[t]he air is trapped as for all the stop consonants, but [they are] released with definite friction of the /ʃ, ʒ/ kind' (p. 47). He then implies that they are post-alveolar or palato-alveolar sounds by saying that the tongue tip touches the back part of the alveolar ridge in the initial part of their production, then it [the tongue tip] moves slightly away from the alveolar ridge so that the whole tongue takes the position it assumes in the production of /ʃ, ʒ/ (p. 47). It is noted that O'Connor's description was before the revision of the IPA chart. Fromkin et al. (2003) describe them as the voiceless palatal affricate /tʃ/ and voiced palatal affricate /dʒ/. They state that affricates

... are produced by a stop closure followed immediately by a gradual release of the closure that produces an effect characteristic of a fricative ... Phonetically, an affricate is a sequence of a stop plus a fricative ... In the American tradition, [tʃ], [dʒ] are the more common symbols for these sounds (p. 248).

They note that IPA uses the symbols [tʃ] and [dʒ], for the two sounds. In Ngala (1994), Okombo (1982), and Oduor (2002) palato-alveolar affricates /tʃ/ and /dʒ/, in Dholuo, occur in free variation with palatal stops /c/ and /j/, respectively. Therefore, they draw a clear distinction between palato-alveolar affricates and palatal stops.

What emerges from the previous paragraph is that in consonant tables without provisions for post-alveolar or palato-alveolar sounds, as distinct sounds from the palatal sounds, the term palatal is generally used for all of them (post alveolar, palato-alveolar and palatal sounds). This is seen in the consonant table in Fromkin et al. (2003, p. 243). In this regard, the descriptions of /tʃ/ and /dʒ/ in Tables 3 and that of /tʃ/ in Table 4 above are similar to the ones in Fromkin et al. (2003). The inconsistencies seen in the descriptions of these two sounds in the tables should be avoided to avoid confusing students. I therefore recommend the use of the terms

“voiceless” and “voiced palato-alveolar affricate” for the description of the two Kiswahili sounds in question, terms which I consider to be more precise, in terms of showing the place of articulation, than the use of the term “palatal” to cover the terms “post-alveolar”, “palato-alveolar”, or “palatal sounds”. The term “palato-alveolar” is already in use in Table 1, but only for the voiceless palato-alveolar affricate *c* /tʃ/.

Turning now to the “sound” ‘*kh*’⁷, it can be seen that Table 2 (from *Wizara ya Elimu* 2003, p. 15) shows that it is articulated at the soft palate. But a subsequent explanation, in the same textbook (on page 17), shows that it is articulated in the same area as the “sound” ‘*h*’: “*Kh na h hutamkwa kooni*” (‘*kh*’ and ‘*h*’ are usually articulated in the glottal region), which means that the place of articulation of ‘*kh*’ is the glottal region. This sound is absent in Maneno et al. (2003) and Waihiga and Wamitila (2003). The existence in one book and the absence in another raises the question of whether the sound is present or absent in Kiswahili and of whether it is a glottal or velar sound. In my view, and also according to Iribemwangi (2008, p. 67), the sound /x/ represented by the letters ‘*kh*’, is the voiceless velar fricative and is therefore not a glottal fricative.

2.2.4 Placing voiceless or voiced “sounds” in the wrong positions within the boxes

In Table 1 the sound in the upper part of each cell is voiceless, while the one in the lower part is voiced in most cases. Though ‘*ch*’ appears in the lower part, it is correctly labelled as being voiceless. Both ‘*ch*’ and ‘*j*’ are

⁷ The voiceless counterpart of the voiced velar fricative /ɣ/, i.e. /x/, does not occur in any other table except Table 2. It can be found in *Kamusi ya Kiswahili Sanifu* published by Taasisi ya Uchunguzi wa Kiswahili (TUKI) (2004). Only a few words, e.g. *khaa* /xaa/ ‘... neno la kuonyesha kukasirika’ [‘a word which expresses anger’] (p. 153), *akhera*, *akhi*, *akhiyari*, *masalkheri*/ *msalkheri*, *sabalkheri*, and *ikhlasia* have this sound (see *Kamusi ya Kiswahili Sanifu* for the meaning of each). Like Iribemwangi (2008, p. 67), I also identify /x/ as a phoneme.

identified as being voiceless. This is a mistake because 'j' is in reality voiced, while 'ch' is voiceless. In the explanations given by Maneno et al. (2003), 'j' is represented twice as a voiceless sound and once as a voiced sound. Regarding Table 2 (from Wizara ya Elimu, 2003), assuming that in each cell the "sounds" on the left hand side in each pair are voiceless, while the ones on the right hand side are voiced (just as presented in the International Phonetic Alphabet chart, then 'j' is voiceless, while 'ch' is voiced. In reality, the reverse is correct. (More examples of the wrong labelling of the two "sounds" can be found in Table 5.)

For all the sounds that are known to be voiced, but do not have voiceless counterparts in Kiswahili, Tables 2 and 3 do not show clearly whether they are voiced or voiceless. Most of them (namely *m, n, ny, ng* (which should be written as *ng'* in the Kiswahili spelling system), *l, r, w* and *y*) are in the left side of the cell, while others seem to be in the middle. The voiceless "sound" *sh* seems to be in the middle of its cell. So, one cannot tell whether it is voiceless or voiced.

In Table 4, it is not clear whether the "sounds" *m, n, ny, ng', l, r, w* and *y* are voiced or voiceless because their cells are narrower than others and, in addition, the labels "H" and "GH", which distinguish voiceless from voiced sounds, respectively, are not included in the cells specifying the manner of articulation of each class of sounds. It should be made clear that they are all voiced by inserting the label "GH" next to the manner of articulation of each class of these sounds or by enlarging the cells and placing them in the lower part of each, as can be seen in Table 4, where the trend is to place the voiceless sounds in the upper part of each cell and the voiced ones in the lower part.

2.3 The recommended table

The sounds of Kiswahili should have been represented as shown in the following table.

Table 6: Kiswahili Consonants⁸

<i>Mahali</i> 'place'	Mdomo 'bilabial'	Mdomo na meno 'labio-dental'	Meno 'dental'	Ufizi 'alveolar'	Ufizi na kaa-kaa gumu 'palato-alveolar'	Kaa-kaa gumu 'palatal'	Kaa-kaa laini 'velar'	Koo/glota 'glottal'
<i>Vipasuo</i> 'plosives'	p b			t d			k g	
<i>Vipasuo-kwamizwa</i> 'affricates'					tʃ dʒ			
<i>Vikwamizwa</i> 'fricatives'		f v	θ ð	s z	ʃ		x ɣ	h
<i>Ving'ong'o</i> 'nasals'	m			n		ɲ	ŋ	
<i>Kitambaza</i> 'lateral'				l				
<i>Kimadende</i> 'trill'				r				
<i>Viyeyusho</i> (<i>nusu irabu</i>) 'glide'	w					j		
<i>konsonanti zilizo nazalishwa</i> 'prenasalized consonants'	mb			nd	ɲdʒ		ŋg	

⁸While the sound /j/, which is a voiced palatal plosive/ stop, is typically encountered in Tanzanian Standard Kiswahili, most speakers of Kiswahili in Kenya (e.g. those I interact with at the University of Nairobi and elsewhere, apart from a negligible number) use /dʒ/ instead.

Examples of words illustrating the various Kiswahili phonemes, both consonants and vowels, are given in Table 7 below.

Table 7: Examples of words illustrating Kiswahili sounds

IPA Symbol	Grapheme	Example in phonemic transcription	Example in spelling	English gloss
i	<i>i</i>	mimi	<i>mimi</i>	me, I
ε	<i>e</i>	meza	<i>meza</i>	table
ɔ	<i>o</i>	mtɔ	<i>mtɔ</i>	river
a	<i>a</i>	hewa	<i>hewa</i>	air
u	<i>u</i>	uzi	<i>uzi</i>	thread
b	<i>b</i>	baba	<i>baba</i>	father
tʃ	<i>ch</i>	tʃai	<i>chai</i>	tea
d	<i>d</i>	dada	<i>dada</i>	sister
ð	<i>dh</i>	ðambi	<i>dhambi</i>	sin
f	<i>f</i>	fɛða	<i>fedha</i>	money
g	<i>g</i>	gari	<i>gari</i>	car
x	<i>kh</i>	xaa	<i>khaa</i>	a word used to express anger
ɣ	<i>gh</i>	ɣafla	<i>ghafla</i>	suddenly
h	<i>h</i>	harusi	<i>harusi</i>	wedding
dʒ	<i>j</i>	dʒua	<i>jua</i>	sun
k	<i>k</i>	kazi	<i>kazi</i>	work
l	<i>l</i>	la	<i>la</i>	no
m	<i>m</i>	mama	<i>mama</i>	mother
n	<i>n</i>	nazi	<i>nazi</i>	coconut
ŋ	<i>ng'</i>	ŋɔmbɛ	<i>ng'ombe</i>	cow

n	<i>ny</i>	nɔnɔ	<i>nyanya</i>	grandmother
p	<i>p</i>	papa	<i>papa</i>	shark
r	<i>r</i>	rais	<i>rais</i>	president
s	<i>s</i>	sasa	<i>sasa</i>	now
ʃ	<i>sh</i>	ʃamba	<i>shamba</i>	farm
t	<i>t</i>	tamu	<i>tamu</i>	sweet
θ	<i>th</i>	θɛlaθini	<i>thelathini</i>	thirty
v	<i>v</i>	vazi	<i>vazi</i>	clothing
w	<i>w</i>	wɛwɛ	<i>wewe</i>	you
j	<i>y</i>	jai	<i>yai</i>	egg
z	<i>z</i>	mzazi	<i>mzazi</i>	parent
mb	<i>mb</i>	ɛmbɛ	<i>embe</i>	mango
nd	<i>nd</i>	ndovu	<i>ndovu</i>	elephant
ŋg	<i>ng</i>	ŋgamia	<i>ngamia</i>	carmel
ɲɔɲ	<i>nj</i>	kiwɔɲɔɲ	<i>kiwanja</i>	playing ground, plot or airport

2.4 Figures showing the Kiswahili vowels as presented in the recommended textbooks

2.4.1 The figures themselves

Figure 1: Kiswahili vowels as they appear in Maneno et al. (2003, p. 3)

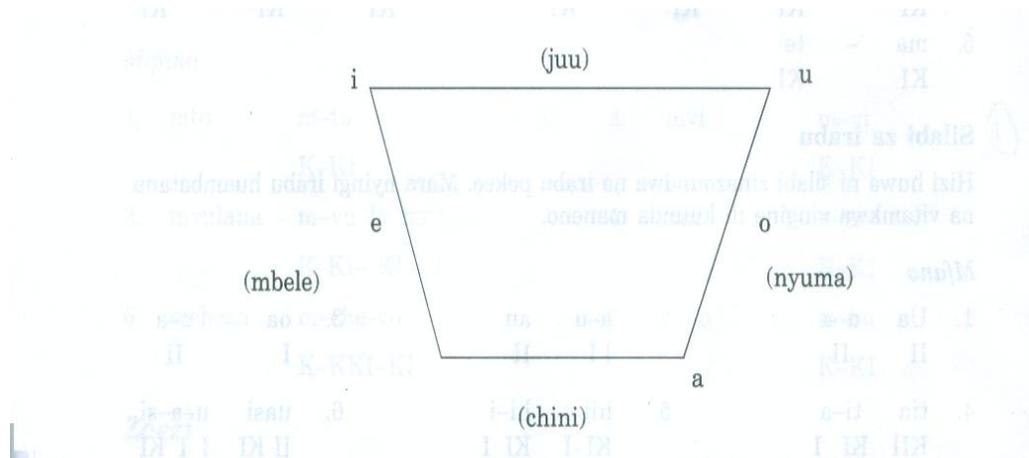
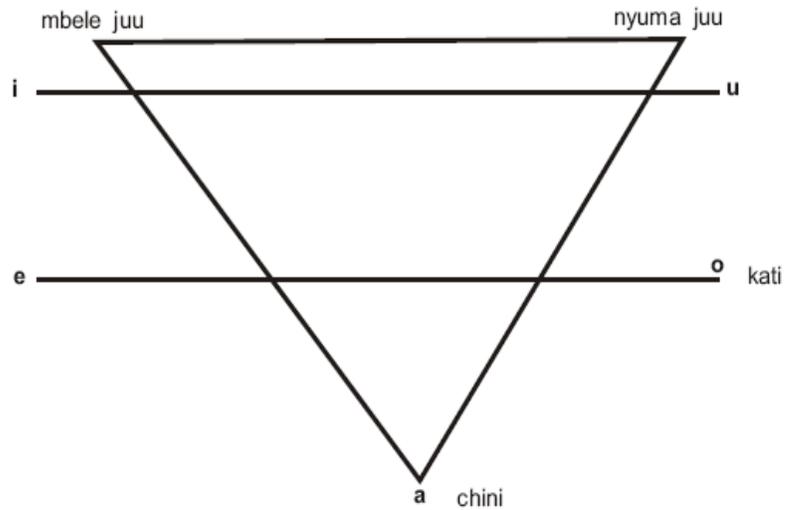


Figure 2: Kiswahili vowels as they appear in Wizara ya Elimu (2003, p. 14)



2.4.2 The Kiswahili-English gloss

Mbele juu 'front high'

Nyuma juu 'back high'

Kati 'central/ mid'

Chini 'low'

2.5 Inaccuracies in the figures above: Using the wrong sound symbols and placing them in the wrong places on the chart

In Figures 1 and 2, the Kiswahili vowels are represented using graphemes instead of IPA symbols, though some of them, /i/, /u/, and /a/, have a one-to-one correspondence with the graphemes representing them. For all the five vowel sounds, IPA symbols should have been used.

The sound /a/ is not placed in the same position in Figures 1 and 2: it is considered as a back vowel in Figure 1, while it is a central one in Figure 2. Since it is the same variety of Kiswahili in the two figures, the same sound should be placed at almost the same position in both diagrams. The sound /a/ is described by Wizara ya Elimu (2003, p. 15) as “... *irabu ya chini na kati*”, meaning ‘a low and central vowel’. The description does not state whether it is rounded or unrounded. Waihiga and Wamitila (2003a) state that *a, e* and *i* “*hutamkwa midomo ikiwa imetandazwa*” (p. 5), meaning that ‘they are articulated with spread lips’. As for Maneno et al. (2003, p. 3), the sound /a/ is described as follows: “... *hutamkiwa kwenye sehemu ya nyuma ya ulimi. Inapotamkwa, ulimi hulala kwenye upande wa chini wa kinywa na mdomo kuviringika*”, which means that ‘it is articulated at the back of the tongue, with the tongue lying low on the floor of the mouth and the lips being also rounded’. It therefore means that it is a low back rounded vowel. Iribemwangi (2008, p. 50) states that ‘/a/ is a centre (near back) low rounded vowel’ and quotes Mberia (1993) as saying that /a/ is in the rounded-unrounded border zone. According to Mberia (1993), then, this vowel seems to be neither rounded nor unrounded. I agree with Mberia’s assertion because when articulating Kiswahili words containing this sound, the lips are usually neutral, i.e. neither spread nor rounded. The vowel is also neither front nor back; so, it is central, as in Figure 2.

In Figure 2, the vowels *e*, and *i*, as well as *o* and *u* are placed or drawn beyond the extreme positions of the chart, labelled as *mbele juu* and *nyuma juu*, respectively. In short, it is wrong to leave them outside the

vowel diagram. For each vowel in the two figures, a dot '•' could be used to show its location of articulation, rather than leaving each of them outside the chart as seen in Figures 1 and 2.

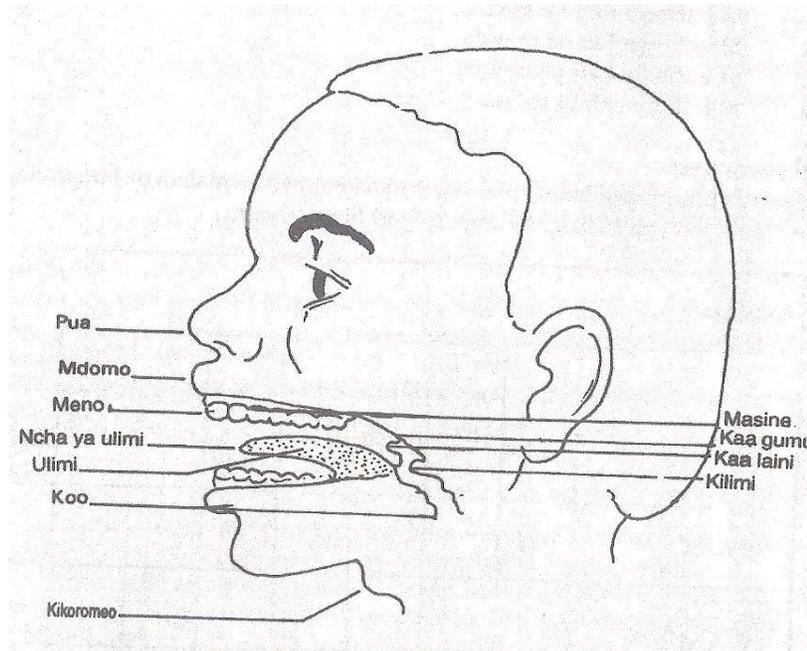
2.6 The need for an authoritative chart of Kiswahili vowels

To get the exact position of the articulation of Kiswahili vowels, a phonetic study using software such as Speech Analyser should be carried out. This would assist in preparing a standard vowel diagram for Kiswahili vowels. A minimum of six speakers of the Kiswahili used in schools in Kenya should be recorded while articulating words containing Kiswahili vowels. Ladefoged (1999, p. 140) recommends the recording of at least six speakers (three men and three women) and later recommends up to twelve or twenty members of each sex in a phonetic research (Ladefoged 2003, p. 14). There should be three recordings of each word per speaker from a reading list. The vowels in the words would then be plotted in a chart using Speech Analyser, which would help to locate the approximate position of each of the vowels of Kiswahili. After all, to the best of my knowledge, an authoritative chart of Kiswahili vowels established from a phonetic data analysis does not exist.

2.7 Figures showing the speech organs as presented in the recommended textbooks

2.7.1 *The figures themselves*

Figure 3: Speech organs in the mouth and the throat as they appear in Wizara ya Elimu (1995, p. 12)⁹



⁹ Figures 3, 4 and 5 are diagrams from different editions of the same book. Interestingly, the new editions were produced without correcting the mistakes in earlier editions.

Figure 4: Speech organs in the mouth and the throat as they appear in Wizara ya Elimu (2003, p. 16)

Sehemu za kutamkia sauti

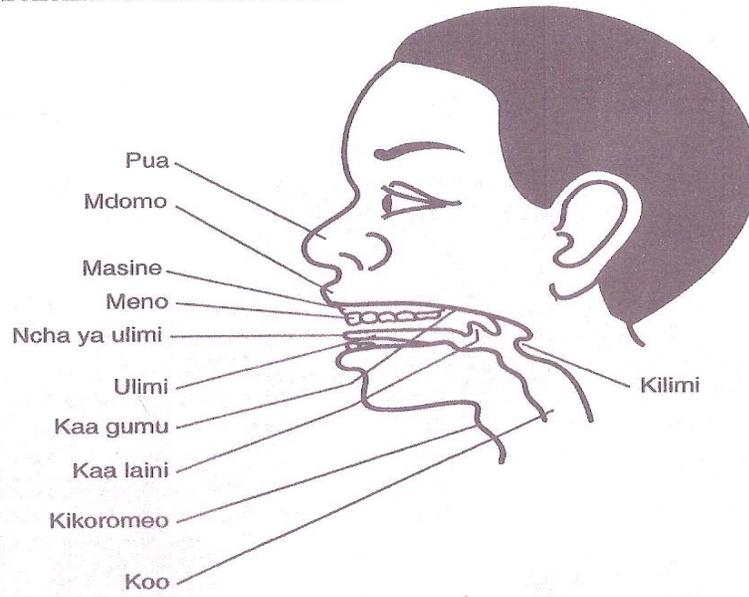


Figure 5: Speech organs in the mouth and throat as they appear in Wizara ya Elimu (2008a, p. 2 and 2010, p. 2)

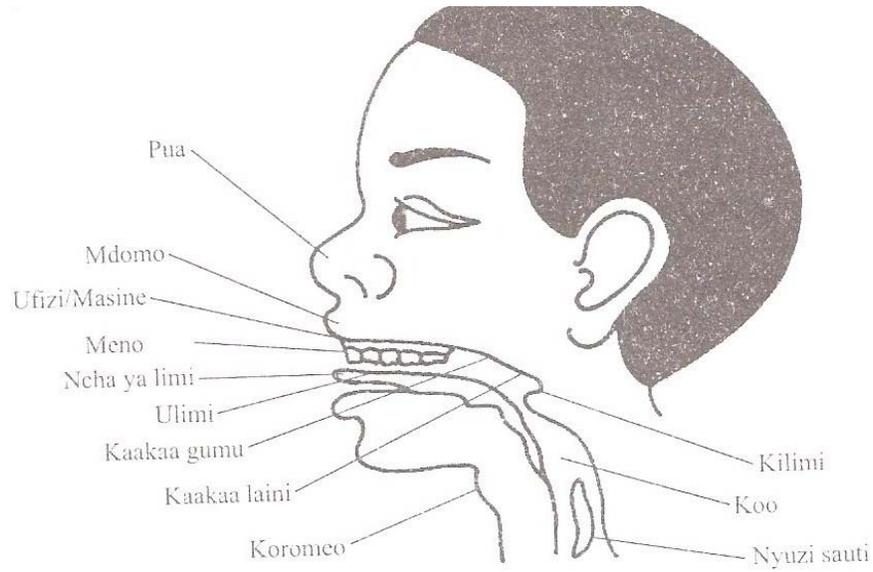


Figure 6: Speech organs in the mouth and the throat as they appear in Maneno et al. (2003, p. 12)

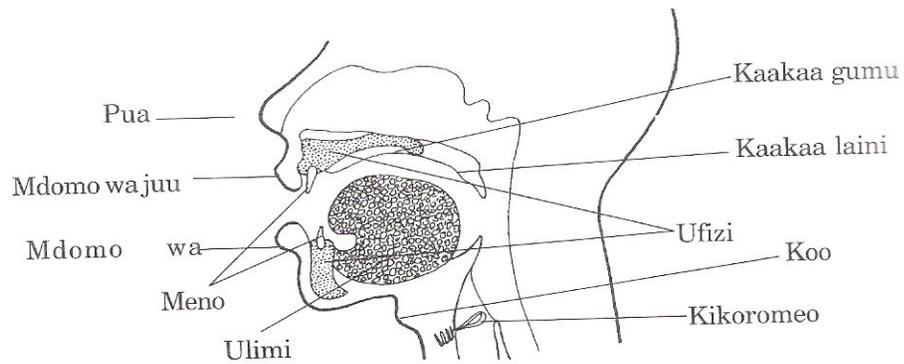
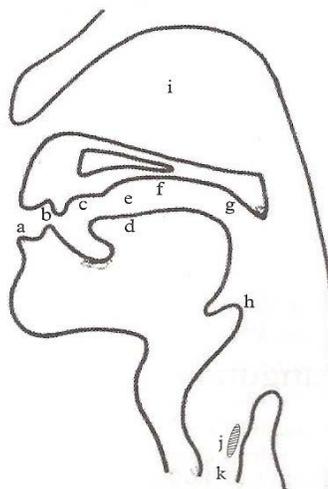
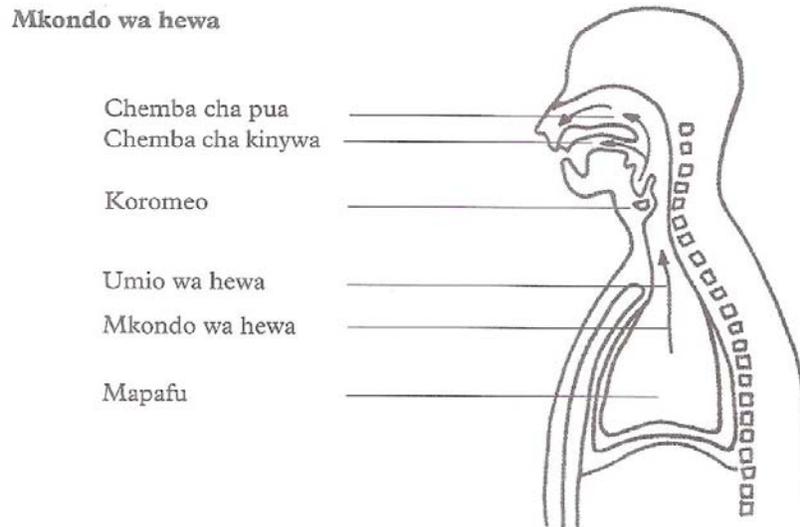


Figure 7: "Ala za Kutamkia" 'Speech Organs', as they appear in Waihiga and Wamitila (2003a, p. 4)



- | | |
|-----------------------|----------------------|
| (a) midomo | (g) kaaka laini |
| (b) meno | (h) kidakatonge |
| (c) ufizi | (i) chemba cha pua |
| (d) ulimi | (j) nyuzi za sauti |
| (e) chemba cha kinywa | (k) umio wa hewa/koo |
| (f) kaaka gumu | |

Figure 8: The air passage as it appears in Waihiga and Wamitila (2003a, p. 4)



2.7.2 *The Kiswahili-English gloss of terms referring to various speech organs in the figures above*

The first cluster of translated words is from Figure 3. For the subsequent translations, what is already present in the translations of words appearing in Figure 3 will not be repeated.

Words appearing in Figure 3

Sehemu za kutamukia sauti 'places of articulation of sounds'

Pua 'nose'

Mdomo 'lip'

Masine 'gum/ alveolar ridge'

Meno 'teeth/ dentals'

Ncha ya ulimi 'tip of the tongue'

Ulimi 'tongue'

Kaa gumu 'hard palate'

Kaa laini 'soft palate'

Kikoromeo 'Adam's apple' or 'larynx'

Koo 'throat'

Kilimi 'epiglottis'

Words appearing in Figures 4 and 5

Ufizi/masine 'alveolar ridge'

Kaaka gumu 'hard palate'

Kaaka laini 'soft palate'

koromeo 'Adam's apple'

Nyuzi sauti 'vocal cords'

Words appearing in Figure 6

Mdomo wa juu 'upper lip'

Mdomo wa (incomplete labelling, though it should be *mdomo wa chini* 'lower lip')

Words appearing in Figure 7

midomo 'lips'

kidakatonge 'epiglottis'

chembe cha pua 'nasal cavity'

chembe cha kinywa 'oral cavity'

umio wa hewa/ koo 'trachea/ throat'

Words appearing in Figure 8

Mkondo wa hewa 'air passage'

Mapafu 'lungs'

2.8 The inaccuracies in Figures 3 to 8 above

2.8.1 Using incomplete or wrong terminology to refer to speech organs

This is a problem specifically found in Figure 6 (from Maneno et al., 2003, p. 12). In Figure 6, the upper lip, *mdomo wa juu*, is clearly labelled. However, the lower lip, *mdomo wa chini* is labelled as *mdomo wa* only. The

term *chini*, which should differentiate the lower lip from the upper, is missing. In addition, the part labelled *koo* 'throat' should be *kidakatonge* 'Adam's apple'. *Koo* 'throat' is actually the area which also accommodates the vocal cords. The arrow pointing at the region labelled *koo*, 'throat', should be at the opening into the trachea.

Regarding the term *kaakaa*, the dictionary *Kamusi ya Kiswahili Sanifu (2004)* defines it as '*Sehemu ya juu ya Kinywa*' (p. 136), meaning 'the upper part of the mouth', while *ufizi* is defined as '*Nyama inayoshikilia meno kwenye kinywa cha mtu au mnyama; sine*' (p. 425), meaning 'the flesh that holds or supports teeth in a person's or animal's mouth'. Note that *sine* and *ufizi* are synonyms. So, for the same dictionary, *kaakaa* is the general term covering the following regions: the alveolar or teeth ridge, the soft palate and the hard palate. *Ufizi* (that is 'gum') is the same term used for the alveolar ridge. The term is thus used for the gum supporting the lower teeth as well. There is no specific name for the alveolar ridge to show its distinctive function in the production of certain sounds. Just like *Kamusi ya Kiswahili sanifu (2004)*, the tables and figures of speech organs do not provide a specific name for the alveolar ridge. There is need, therefore, for a more specific Kiswahili term for it in order to adequately describe the place of articulation of alveolar sounds and distinguish its linguistic function from that of the gum. I would suggest that whatever the Kiswahili term for 'ridge' would be, it should be used alongside the term *ufizi* so as to make this region distinct from the rest of the gum.

Following the definitions and explanation in the preceding paragraph, the problem in Figures 3, 4, 5, and 6 is that the lines attached to the labels *masine* or *ufizi* do not touch the alveolar ridge. The lines touch the gum in Figures 4 and 6, and the upper front teeth in Figure 3. In fact, in Figure 5, the line labelled *ufizi/masine* wrongly touches the upper lip. It is only in Figure 7 that *ufizi* corresponds clearly to the alveolar ridge. The identification of *ufizi* as the alveolar ridge in this chart comes close to Massamba's (2004) definition of the term, though it is incomplete when one considers the explanation that he gives in Kiswahili. He defines *ufizi* in linguistic terms as "(alveolar ridge) ... *sehemu ya kinywa ambayo iko nyuma*

ya meno ya mbele" (p. 23), which means 'the part of the mouth that is behind the front teeth'. However, I would argue that the definition he gives in Kiswahili needs to be more specific or improved further by indicating that it is the region behind the upper front teeth. The word *juu* ('upper') is missing from Massamba's definition.

In Figures 3 and 4, the terms *kaa gumu* and *kaa laini* are used for the hard palate and soft palate, respectively, while in Figures 5, 6 and 7, the terms *kaaka gumu* and *kaaka laini* refer to the same speech organs referred to in Figures 3 and 4. The main problem here is that in some texts, *kaa* is used, while in others, *kaaka* is used. (*Kamusi ya Kiswahili Sanifu* (2004) shows that the correct term is *kaaka* and not *kaa*.)

2.8.2 Inaccurate drawings of the speech organs

The inaccuracies to be presented concern (1) the upper lip, (2) the nasal cavity, (3) the soft palate, (4) the epiglottis, (5) the pharynx, (6) the vocal cords, and (7) the passage of air from the lungs and direction of the airstream.

First, concerning the upper lip, Figure 8, just like Figure 6, does not clearly show the distinction between the flesh on the upper lip and the nasal cavity.

Second, the nasal cavity is not shown to have a crucial function in speech production: it is completely absent from Figures 3, 4 and 5. Only the nose is labelled. Figure 6 is slightly better than the other three because it shows that there is a nasal cavity, though this is not labelled. However, as already mentioned, the figure does not clearly show the distinction between the flesh on the upper lip and the entry into the nasal cavity through the nostrils. So, while the opening of the nasal cavity into the pharynx was drawn properly, the opening into the nose was not. The passage of air out through the nose is not clear in Figure 6 as the upper lip appears to be part of the nasal cavity.

Third, in Figures 3 and 4, the position of the soft palate (referred to as '*kaa laini*' there) in relation to the tongue cannot be identified easily, as

the soft palate is shown to be part of the tongue. The tongue should not have been attached to the roof of the mouth at the hard palate. In Figures 7 and 8, the soft palate is quite far from the back wall of the pharynx and would have to stretch considerably to shut off the passage of air through the nasal cavity.

Fourth, the back part of the throat is shown to contain the organ known as the epiglottis '*kilimi*', in Figures 3, 4 and 5. This is not its normal position. The correct position should be below the root of the tongue. In Figure 6, it is present but not labelled.

Fifth, the region between the back of the tongue and the larynx, i.e. the pharynx, is not drawn properly. It will be remembered that in most of the inaccurate figures above (i.e. Figures 3-8), the organs beyond the back of the tongue and the epiglottis are not drawn properly. This means that the figures do not cater well for pharyngeal and glottal sounds. (This region is also crucial in the production of vowels.)

Sixth, though the vocal cords are present in Figure 5, they are not drawn well: they look like an object that is falling into the throat or that has been swallowed. A similar inaccurate representation appears in Figure 7: here, the part labelled '*j*', which is the vocal cords, is not well drawn as it appears to be also an object that is falling into the throat, thus choking the individual. The same part should be attached to the walls of the trachea at the glottis or larynx, as can be seen in Figure 6. In Figure 6, the passage of air into the lungs is separated from the one that leads into the stomach. This is the correct representation. However, even in this figure, just before getting to the vocal cords (*kikoromeo*), there is a line blocking this passage. This line should not be there because it seems to imply that another organ than the vocal cords or epiglottis blocks or closes the trachea. The passage leading to the vocal cords should be as open as the passage through the oral cavity into the oesophagus in the same diagram.

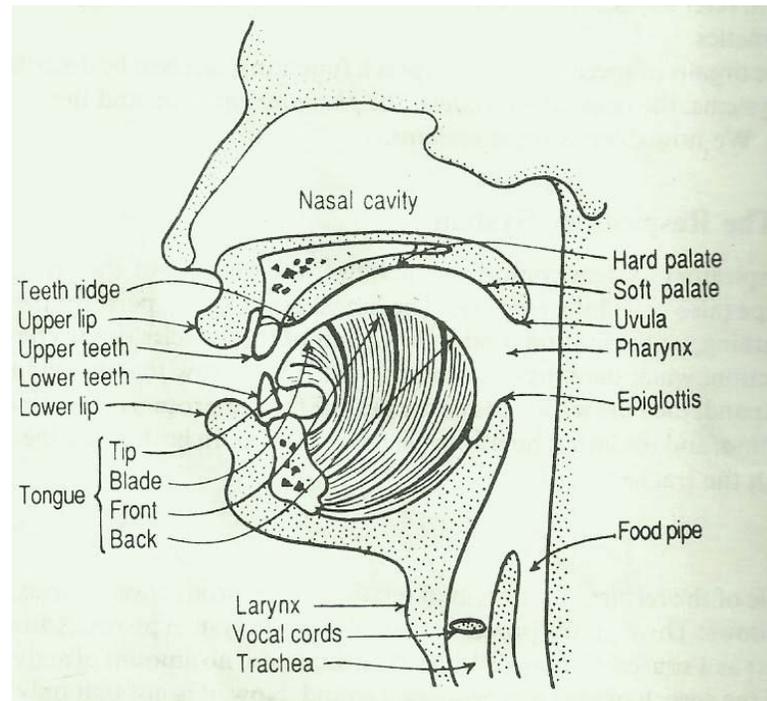
Seventh, in Figure 8, the direction of the airstream from the lungs can be seen clearly because there are arrows showing that direction. However, the lungs do not seem to be the only source of the airstream since another

arrow emerges from the region behind the epiglottis (see Figure 8), yet for all the sounds of Kiswahili, the lungs directly provide the airstream.

2.9 What the correct figures of speech organs should look like

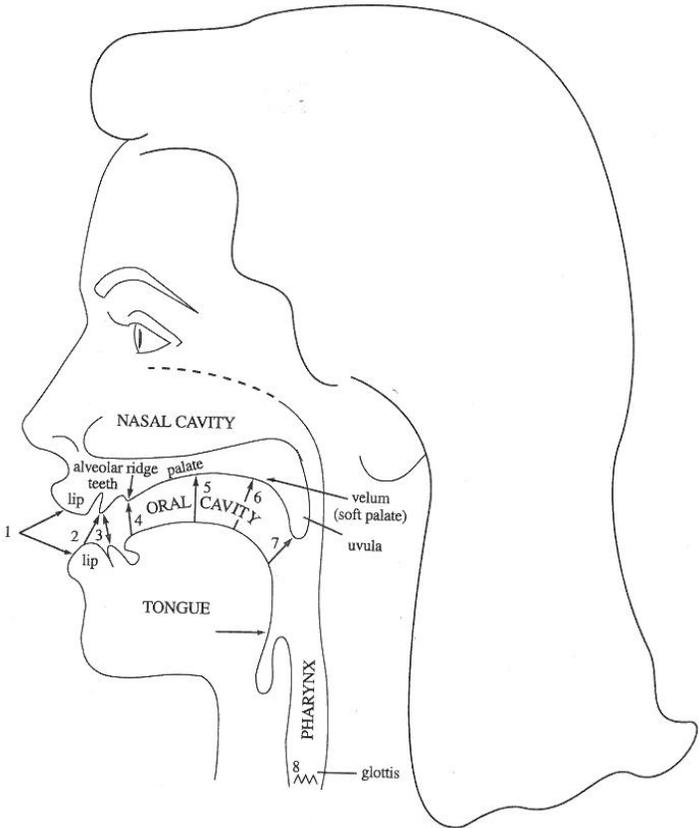
A more appropriate diagram of the organs of speech is given in Figure 9 below.

Figure 9: Organs of speech as they appear in Sethi and Dhamija (2004, p. 2)



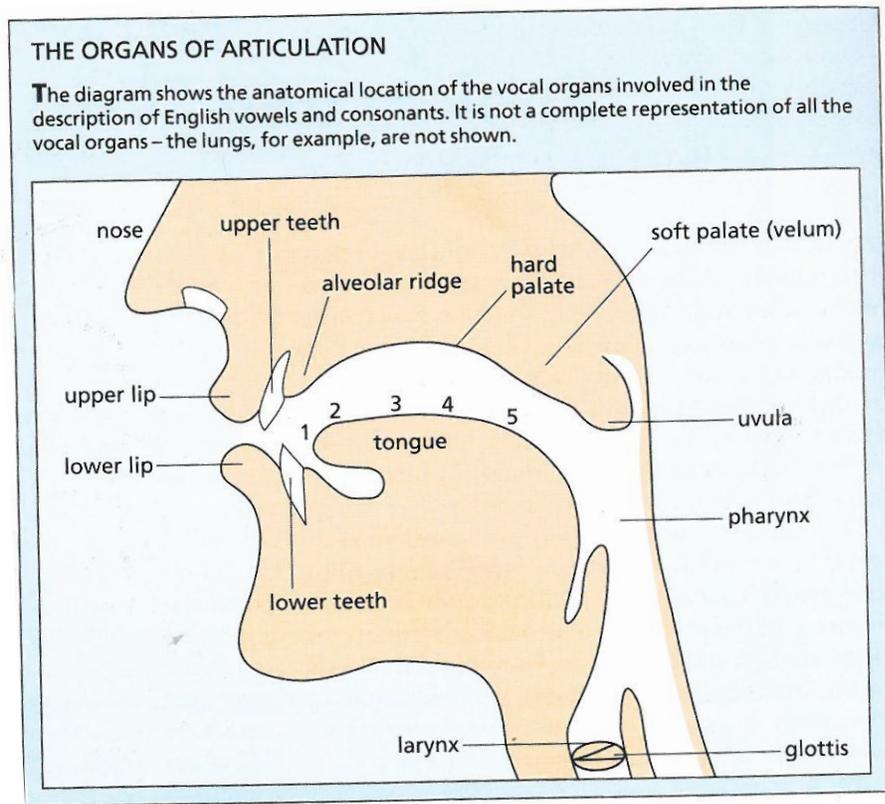
Other appropriate diagrams of the speech organs are given in Figures 10 and 11. As can be seen from Figures 9, 10 and 11, the length and shape of the vocal tract in the three diagrams is almost the same.

Figure 10: The vocal tract as it appears in Fromkin et al. (2003, p. 241)



Places of articulation: 1. bilabial; 2. labiodental; 3. interdental; 4. alveolar; 5. (alveo)palatal; 6. velar; 7. uvular; 8. glottal.

Figure 11: The organs of articulation as they appear in Crystal (2003, p. 236)



For the parts labelled 1, 2, 3, 4, and 5 in Figure 11, Crystal (2003, p. 237) provides the following key:

- 1 tongue *tip*
- 2 *blade* of the tongue (the tapering part, opposite the alveolar ridge)
- 3 *front* of the tongue (opposite the hard palate)
- 4 *centre* of the tongue (opposite where the hard and soft palate meet)
- 5 *back* of the tongue (opposite the soft palate)

It should be noted that Crystal's diagram is accompanied by an indication that not all speech organs are included. He mentions the lungs as one of them. It should be also noted that the nasal cavity is not shown, but the two openings, one behind the uvula and the other at the nose, can be seen clearly. He states that the '... diagram shows an anatomical location of the vocal organs ...' (p. 236).

3. OTHER GENERAL WEAKNESSES IN THE SIX KISWAHILI TEXTBOOKS

The weaknesses discussed in this section relate to the inaccurate, or insufficient, information about the prenasalized consonants and glides, the syllable structure, the stress pattern and the intonation pattern of Kiswahili.

3.1 Inaccurate and inadequate information about prenasalised consonants and glides

I note that there are prenasalised consonants in Kiswahili. The problem is that the prenasalised consonants are not given adequate treatment, compared to the other consonants. They are not included in the consonant tables and in the classification of sounds offered in the textbooks in question. However, examples of them, but without any explanations, are given in one of the textbooks, namely *Wizara ya Elimu* (2003, p. 17). The examples given, once again in the form of letters rather than sounds, are the following:

nd - enda 'go'

nj - njiwa 'a big domesticated bird'

ng - ngao 'shield'

nd - ndara 'slippers'

In the examples, the specific prenasalized consonant is identified, followed by a word showing its occurrence in Kiswahili. Since explanations were

given for all the consonants described earlier in the tables, it would be appropriate to do the same with the prenasalised consonants.

Prenasalized consonants are treated as CCV sequences in the analysis of the syllable structure of Kiswahili by Iribemwangi (2008, p. 71). It should be noted that the symbol '\$' here represents a syllable boundary. The following examples are given:

jya: hunger (CCV)¹⁰

ndege bird/aeroplane (CCV\$CV)

ygamia camel (CCV\$CV\$V)

mboga vegetable (CCV\$CV)

Though they are treated as CCV sequences as seen in the above examples, in my opinion, prenasalised consonants in Kiswahili are single (or unit) phonemes that are internally complex and therefore each of them should be represented with a single C, not a double CC.

Next to the examples of “prenasalised consonants” in Wizara ya Elimu (2003, p. 17) are other examples identified as consonants:

kw - *kwale* 'name of a place'

mw - *mwalimu* 'teacher'

I here note that *kw* and *mw* are CC clusters and not individual consonants as stated in Wizara ya Elimu (2003, p. 17). Therefore, it is wrong to represent them as single consonants.

In a recent edition, i.e. Wizara ya Elimu (2010, p. 5), both prenasalized consonants and consonant-glide sequences are called *sauti mwambatano*, which means 'a cluster of consonants.' Some of the combinations given are: *nj*, *nd*, *nyw*, *mw*, *ng*, *mb* and *kw*. They are also identified as *sauti mwambatano* 'consonant clusters' in Waihiga and Wamitila (2003a). It is

¹⁰ The word transcribed as /jya:/ in Iribemwangi (2008) is treated as /jɲɔ:/ in this paper.

wrong to classify all of them as consonant clusters because not all of them are. Some are consonant clusters, while others are single sounds. Some of the clusters or consonant sequences are *nyw*, *mw*, *kw*, *bw*, *pw*, *vy* and *sw*, while some of those that, in my opinion, are single sounds are *ng*, *mb*, *nd* and *nj*. The prenasalised consonants should be discussed on their own as unit phonemes, while the consonant-glide sequences should also be given separate treatment as CC clusters rather than to lump them together in the textbooks. In fact some of the prenasalised consonants combine with glides to form clusters such as *mbw*, *ndw*, *njw*, and *ngw*.

3.2 Inaccurate information about the syllable structure of Kiswahili

The syllable is discussed in *Wizara ya Elimu* (2010, pp. 4-5), where it is correctly defined as "*Silabi ni pigo moja la tamko*" (p. 4). A close translation of this is 'a syllable is one beat in pronunciation'. This definition could be related to the chest-pulse described by Abercrombie (1967), who acknowledges that:

The essential basis of a syllable, therefore, is a chest-pulse.... The pulse may - and usually will, in normal speech - have associated with it movements of the vocal cords and of the velum, and also *articulatory movements* - movements, principally, of the tongue and lips ... All these movements, combined together, are superimposed on the fundamental syllable- and stress-producing processes of the pulmonic mechanism, and they are felt by both speaker and hearer to constitute one single speech-producing act. (p. 37)

The two definitions are almost similar in the sense that the syllable is seen as a pronounceable unit. Furthermore, the one provided in *Wizara ya Elimu* (2010) can be understood easily by learners if illustrated well by the teacher.

It is correctly stated in *Wizara ya Elimu* (2010) that all Kiswahili vowels form syllables on their own and a consonant followed by a vowel also forms

a syllable. Some of the syllables identified using letters are: *ba, da, sa, ze*, etc. *Ba*, for example, is a combination of a letter representing a consonant followed by another one representing a vowel. To this extent, the identified syllables are correct because each letter corresponds to a single sound.

For their part, Maneno et al. (2003, p. 4) state that the syllable in Kiswahili consists of (a) a vowel (V), (b) a consonant and a vowel (CV), (c) two consonants and a vowel (CCV), and (d) three consonants and a vowel (CCCv). The examples given for (a) and (b) are correct. For (a), they are *u-a, a-u*, and *o-a*, while for (b), they are *ka-la-mu, ki-ta-bu, ma-te*, etc. The sign '-' represents syllable boundary in Maneno et al. (2003). For (c), some examples are correct while others are not. The following are some of the correct ones (where 'K' represents Consonant (C) and 'I' represents Vowel (V)):

<i>Mwezi</i>	<i>mwe - zi</i>	'moon/ month'
	<i>KKI - KI</i>	
<i>Kwetu</i>	<i>kwe - tu</i>	'our place'
	<i>KKI - KI</i>	
<i>Funza</i>	<i>fu - nza</i>	'teach'
	<i>KI - KKI</i>	

Each one of the three words has two syllables. Some of the incorrect examples are:

<i>Ghali</i>	<i>gha - li</i>	'expensive'
	<i>KKI - KI</i>	
<i>Kucha</i>	<i>ku - cha</i>	'nail/day break'
	<i>KI - KKI</i>	

What is incorrect in these examples is that the sequence KKI suggests that the letter sequence *gh* and *ch* are composed of two consonant sounds each. They are not; they represent single consonant sounds /ɣ/ and /tʃ/, respectively.

All the examples given to illustrate the syllable structure described in (d), where a syllable consists of three consonants (KKK) followed by a vowel (I), in Maneno (2003, p. 5), are wrong. The examples in question are:

Jengwa *je - ngwa* 'to be built'
 KI - KKKI

Jangwa *ja - ngwa* 'desert'
 KI - KKKI

Mbweha *mbwe - ha* 'fox'
 KKKI - KI

Chanjwa *cha - njwa* 'vaccinate'
 KKI - KKKI

Chimbwa *chi - mbwa* 'to be dug'
 KKI - KKKI

Kunywa *ku - nywa* 'to drink'
 KI - KKKI

They are wrong because the sequences *ngwa* /*ŋgwa*/, *mbwe* /*mbwe*/, *njwa* /*ndʒwa*/, *mbwa* /*mbwa*/ and *nywa* /*nwa*/ should be analysed as having the structure CCV and not CCCV. This is because /*ŋg*/ and /*mb*/ should be analysed as single internally complex segments. (Iribemwangi, 2008, p. 58, holds the same view.)

A further piece of inaccurate information in Maneno et al. (2003) is that the authors suggest that any consonant can be syllabic, and yet it is known that only nasals and liquids can be. They suggest this when they state that a syllabic consonant is a sound that forms a syllable when a consonant is followed by another consonant. They then give correct examples of words where the first consonant is syllabic, as seen in:

Mto *m - to* 'river'
 K - KI

Nne *n - ne* 'four'
 K - KI

Mbu *m - bu* 'mosquito'
 K - KI

The first consonant in each of the three words is syllabic and would be transcribed as [ṁtɔ], [ṁnɛ] and [ṁbu]¹¹.

3.3 Inaccurate placement of the stress in some words

In the books by Maneno et al. (2003), Wizara ya Elimu (2010) and Waihiga and Wamitila (2003a), it is correctly stated that the word stress falls on the penultimate syllable in Kiswahili. In some words, a difference in the position of the stress causes a difference in word meaning. Consequently, for some of these words, stress should not be on the penultimate syllable. Some of the examples given, where the stress has been placed on the syllables in bold type, are:

- Ala* (*Kifaa/ kitumizi*) 'instrument'
- Ala!* (*mshanga*) 'an exclamation of surprise'
- Barabara* (*njia kuu*) 'main road'
- Barabara* (*sawasawa*) 'okay/ all right/ fine' (p. 6)

It should be noted that the stress has not been marked correctly in the last two examples: in *barabara*, 'main road', the stress has been put on the letter 'b' at the beginning of the word and on the penultimate syllable. The stress marking in this word wrongly shows that the stress is on two syllables. It should be noted that 'b' is a consonant and, in fact, a non-syllabic consonant, therefore it cannot bear stress. Therefore, it is wrong to place stress on 'b' only, both in the antepenultimate and penultimate syllables. The correct position for stress in this word is the penultimate syllable only. The penultimate syllable is 'ba' and not 'b'. In the last word, (*barabara* (*sawasawa*) 'okay/ all right/ fine'), the stress has been placed on two syllables, namely the antepenultimate syllable 'ra' and the penultimate syllable 'ba'. But the main word stress cannot be on two syllables. The

¹¹ Some speakers of Kiswahili in Kenya pronounce [ṁbu] as [ṁmbu].

correct position for stress in this word is the antepenultimate syllable 'ra', but not, at the same time, the penultimate syllable.

3.4 Inadequate representation of intonation

Intonation is described in almost the same way by Wizara ya Elimu (2010, p. 5), Maneno et al. (2003, p. 24) and Waihiga and Wamitila (2003a, p. 19), as the rise and fall of voice in speech. This description is adequate. Consider some of the examples given by Wizara ya Elimu (2010):

Kazi imekwisha. (kauli) 'The work is completed. (statement)'

Kazi imekwisha! (mshangao) 'The work is completed! (surprise)'

Kazi imekwisha? (swali) 'Is the work completed? (question)'

These examples from Wizara ya Elimu (2010, p. 6), like those in Maneno et al. (2003, p. 24) and Waihiga and Wamitila (2003a, p. 19), are inadequate because they do not have symbols to show the rise and the fall of the voice. So, the question here concerns how the teacher is supposed to represent the different intonation patterns while presenting them to the students. For example, if the teacher is not sure of the intonation pattern used in a statement, a textbook with sentences containing the appropriate symbols of intonation would be useful. Without the symbols, such a teacher may not convey the correct intonation pattern, orally and/or in writing, to the students.

4. CONCLUSION

This paper has focused on inaccuracies in the way the teaching of Kiswahili pronunciation is provided for in six textbooks recommended for secondary schools in Kenya. The weaknesses discussed have been classified into two: (1) the incorrect use of descriptive tools and (2) the inaccurate presentation of information. Both types of weaknesses have been given considerable attention because they should be eliminated altogether. As far

as (1) is concerned, a number of inaccuracies have been identified. These are: using letters instead of sound symbols (e.g. using the letters 'ny' to represent the sound /n/), using incomplete or wrong terminology to refer to place and manner of articulation (e.g. the lower lip is labelled 'mdomo wa' in one of the figures), placing the "sounds" in the wrong boxes, placing voiceless or voiced "sounds" in the wrong positions within the boxes, using incomplete or wrong terminology to refer to speech organs, and using inaccurate drawings of the speech organs (e.g. in one of the figures, the tongue is attached to the roof of the mouth). Regarding (2), the paper has shown that there is inaccurate and inadequate information about prenasalised consonants and glides, inaccurate information about the syllable structure, inaccurate placement of stress in some words, and also inadequate information about intonation. The paper has proposed the correct information and descriptive tools to use so as to improve the teaching of Kiswahili pronunciation in Kenya. It has also stressed the need for a phonetic study to come up with an authoritative chart of Kiswahili vowels.

However, despite what I have proposed to improve the teaching of Kiswahili in Kenyan secondary schools, I would argue that at secondary school level, it would be more important to help the learners to learn Kiswahili and enjoy speaking it, rather than teach them its phonology. This should be left for later levels. In fact, the three objectives for teaching Kiswahili pronunciation, which are stated in the introduction above, can be achieved without having to teach its phonology. It has been noted that "... language starts with the ear. When a baby starts to talk he does it by hearing the sounds his mother makes and imitating them" (O'Connor, 1980, p. 1). Since speech depends on hearing, learners can listen to good role models, (i.e. their teachers, assuming that they are good role models) and the appropriate radio and film programmes.

Nevertheless, if Kenya Institute of Education (K.I.E.) (under the Ministry of Education, Science and Technology) insists that the teaching of Kiswahili pronunciation must include teaching its phonology, then phonetic symbols

drawn from the IPA chart must be used, instead of graphemes. One may argue that if learners are able to grasp and internalise more complicated symbols in other disciplines (like mathematics or chemistry), then the IPA symbols may not be a challenge to them. After all, some IPA symbols are already in use in the English secondary school texts, anyway. And if it is absolutely necessary (though in my view it is not at secondary school level) to use diagrams of the organs of speech, appropriate drawings must be used. Generally speaking, if the teaching of Kiswahili pronunciation in secondary schools must include the teaching of some basic aspects of phonology, these must be presented using internationally recommended conventions (and tools).

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