

On the Nature of the Accent of Kamba Nouns

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On the Nature of the Accent of Kamba Nouns

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In this paper, several fundamental points of view necessary for the study of accent in general are proposed first. Then, following these viewpoints, the accent of nouns of Kamba, a Bantu language spoken in Kenya, is tentatively described with a considerable number of examples relevant for the description.

INTRODUCTION

This paper presents a tentative analysis of the nature of the accent of Kamba nouns. Kamba people reside in the vast area east of Nairobi, the capital of Kenya, and their population is estimated to be about 120 million, according to the 1969 Census. Kamba is a Bantu language, which is genealogically close to the Kikuyu, Embu and Meru languages. It is assumed to be largely divided into Machakos and Kitui dialects, and this paper deals with a dialect belonging to the former, i.e., Machakos dialect. Mr. Paul Ndivo, the informant, comes from a village north of Sultan Hamud, and his parents are both Kamba people.

The data used in this paper were gathered during the writer's research in Nairobi in the first several months of 1980, which was conducted when he was sent there by the Japan Society for the Promotion of Science, as a visiting researcher at the Regional Studies Center in Africa. His sincere thanks go to the Department of Linguistics and African Languages, University of Nairobi, which accepted him as Research Associate, as well as to the Office of the President of Kenya, which granted him a research permit.

It should be noted that "accent" in this paper refers to all suprasegmental sound features except intonation. Namely, it is used as a concept which includes all of stress accent, pitch accent and tone.

1. PROBLEMS IN ACCENT RESEARCH

First, I would like to state briefly my views regarding questions such as how accent should be studied when describing each language, and what kinds of problems are involved in accent research from a general linguistic viewpoint.

1)

It goes without saying that the first question to be asked should be, what is the phonetic substance of the accent of the language under examination. It is said that

English has stress accent, and Japanese pitch accent, and this is fundamentally true. However, as one can easily infer from frequent discussions on the meaning of stress in the Japanese language, the question of phonetic substance is not so simple as to enable an immediate conclusion upon hearing the language.

In general linguistics there has been no agreement on the question of what phonetic features can constitute accent substance. This point has been examined to some degree by the writer [Yukawa 1971: Chapter 16, section 3].

2)

I follow the view that, at least in some languages, the accent cannot be grasped unless accent features of a unit larger than a syllable (mainly a word) are taken as a whole. This viewpoint holds that the "accent pattern" "covers" a word, or something like that, as a whole. Then, the second question arises as to what the "accent pattern" "covers" actually; does it cover a word, or something either smaller or larger than a word?

Let us refer to a phonological shape (a string of phonemes) covered with one "accent pattern" as the "length" of the accent pattern. This leads to an interesting question in terms of general linguistics: What, in effect, can correspond to "accent length"?

3)

In the case of a language with pitch accent, for example, it might be that every "accent pattern" has phonetic substance such that the whole "length" is either high or low (or middle, in addition), and that, accordingly, these "accent patterns" cannot be analyzed any further (the accent of this nature may, if there is any, be called "non-segmental accent"). In most languages with pitch accent, however, there must be an "accent pattern" in which some part of the "accent length" is pronounced higher or lower than the rest of it. One may call such an accent a "segmental accent". Then the study of "segmental accent" faces a question as to in what way each "accent length" should be analyzed. Assuming the necessary analysis is made, each smallest portion acquired as a result may be called "accent segment". Here, a question is raised as to whether or not such "accent segments" correspond with "syllables" induced by over-all examination of sounds of the language. This question is of great importance not only in a descriptive study of each language but also in general linguistics, because it is closely related to the problem of the nature of a "syllable".

4)

Next, we have another question of how many different kinds the "accent segment" thus defined should be classified into from the viewpoint of accent. Should it be classified into two, high and low, or into three, high, middle and low? Or, should there be other kinds such as rising and/or falling in addition to these? Let us call such a "kind" of "accent segment" "accent unit" (although the term may not be very appropriate).

In studying each individual language, one sometimes encounters a very difficult question such as whether such "accent unit" is only a part of the "accent pattern" without any unique existence of its own, and therefore the term "unit" is quite inappropriate. Or can it claim its own existence in some way while constituting part of the "accent pattern" at the same time. Such a question is also of great significance to general linguistics.

5)

The next question receives the greatest attention in describing accent of each language: How many "accent patterns" can be recognized in words of each part of speech in the language? In order to make the discussion simpler, it is supposed here that no word in the part of speech in question should show accent variation.

The factors related to the number of "accent patterns" include the number of "accent units", presence or absence of limitations concerning their combination in one "accent length" and the nature of such limitations, the maximum number of "accent segments" possible to be contained in one "accent length", and so on. Among these, the limitations regarding "accent unit" combination have two types. The first type is such that a certain "accent unit" can appear only in a certain particular position in the "accent length". For example, there is a language such that it has an "accent unit" with rising feature but that this "accent unit" can only appear at the end of the "accent length". The second type includes those limitations that, within one "accent length", a certain "accent unit" never appears after another particular "accent unit", or the same "accent unit" cannot repeat more than three times in succession, and so on. Generally speaking, the stricter the limitation, the fewer the "accent patterns".

Next, if we study accent contrast among words (or those which correspond to one "accent length") with the same number of "accent segments", we will find, in some languages, that the number of accent contrast increases, as the number of "accent segments" shows an increase. In other languages, the number of accent contrast is the same regardless of the number of "accent segments". Or in still others, if the number of "accent segments" exceeds a certain figure, the number of accent contrast is set at a certain figure. In any case, we will meet with the following problem: Can one and the same "accent pattern" "cover" those with different numbers of "accent segments"? In other words, for an "accent pattern", can the number of "accent segments" composing its "accent length" vary, or should it take a certain fixed figure? As to languages in which the number of accent contrast among those with the same number of "accent segments" is fixed irrespective of its figure, we will find many facts indicating that the same "accent pattern" can "cover" those with different numbers of "accent segments". On the other hand, some facts might be discovered which show that the same "accent pattern" does "cover", at least partially, those with different numbers of "accent segments" even in languages in which accent contrast among those with the same number of "accent segments" increases in number as the number of "accent segments" increases. In other such languages, however,

nothing might be found to determine which "accent pattern" is the same as which "accent pattern" between those with different numbers of "accent segments". Generally speaking, can one and the same "accent pattern" exist only among those with the same number of "accent segments", or can it also "cover", by its nature, those with different numbers of "accent segments"? Or, is such a question itself meaningless? These are very difficult, but quite interesting problems.

6)

There are languages where words show accent variation depending on their contextual environment. A good example is Kikuyu [YUKAWA 1981]. In such languages, it would naturally be important to ask how many kinds of contextual environment should be necessary to include every possible accent variation of each word.

The next question is what is the relationship among accent variations of each word. It would be customary to consider a certain form of a word as its underlying form and others as accent variations which derive from it according to some rules. However, this needs further consideration. For example, it has been difficult, in some cases, to say with confidence which the underlying form should be. Even where we can determine an underlying form, there still will be an important theoretical question left as to whether such an underlying form really exists in its true sense in the language.

7)

When we have shown every "accent pattern" that can be considered to exist in a language or among words of a part of speech of the language, the next question is how to describe the nature of each "accent pattern". It is my opinion at this stage that every characteristic each "accent pattern" has constitutes its essence, and that it is erroneous to create a theoretical distinction between some characteristics and others, referring to them as "distinctive features" and "non-distinctive features", although there may be cases when we have to list only some characteristics for the sake of conveniency. From this standpoint, it should be necessary to re-examine the concept of "kaku" (kernel) which has been one of the most important concepts in the accent research on the Japanese language.

8)

Finally, it should be pointed out that, when parts of speech differ, "accent patterns" related to those words might also be different in nature. Therefore, in order to avoid confusion, it would be wise to conduct a separate study on each part of speech, and usually most studies are carried out in such a way.

2. ON KAMBA NOUNS

Brief comments should be made here on Kamba nouns within the scope necessary for examining their accent.

1)

Structurally, a Kamba noun consists of the prefix and the stem. In many cases, the shape of the prefix corresponds to the "class" to which the noun belongs. Every prefix is listed below by each class.¹⁾

singula	r	plural	
I.	mũ–	Χ.	<i>a</i> –
II.	mũ–	XI.	mī-
III.	ĩ-	XII.	та-
IV.	kĩ-	XIII.	i- or si-
V.	n-	XIV.	n-
VI.	ũ–	XIV.	n
VII.	ka-	XV.	t ũ-
VI.	ũ–	XII.	ma-
VIII.	kū–	XII.	та-
IX.	va-		

The same prefix sometimes appears twice or more in this table. The reason for this is as follows: Singular nouns belonging to the same class may have their plurals belonging to different ones, or *vice versa*, and in the table above the prefix of a singular noun and that of its plural form are listed in the same row. Further, it should be noted that we sometimes find contraction between some prefixes and the initial sound of the stem. Also, some nouns belonging to classes I, II, and III have no prefix.

2)

In the Kamba language, just as in many other Bantu languages, Adjectives, Possessive Adjectives, Numerals and others which modify a noun change their initial parts, depending on which class the noun belongs to. The subject prefix of the predicate verb which has a noun as its subject also changes according to the class of the noun. The shapes of the phrases "my ..." are listed below for each class of noun as examples.²⁾

I.	müwáú	waakwá	'my patien	ť
II.	mütí	wáakwa	'my tree'	

¹⁾ The notation in this paper basically follows Kamba orthography. Consonant letters used and their phonetic values are as follows: b ([b]), d ([d]), g ([g]), k ([k]), l ([l]), m ([m]), n ([n]), ng' ([n]), ny ([n]), s ([s]), t ([t]), th ([0]-[0]), v ([v]), w ([w]), w' (rounded [w]), y ([j]), z ([dz]). Though pre-consonant nasals are considered to belong to one phoneme, I nevertheless follow the orthography which writes m in front of b, and n in front of the others. The following letters are used for vowels; i ([i]), i ([e]), e ([e]), a ([a]), o ([o]), ü ([o]), u ([u]). For accent notation, ' is added to high vowels and high pre-consonant nasals to distinguish them from low ones. Notation without any accent notation is done in italics to distinguish it from those pronounced low as a whole.

²⁾ Readers are requested to note the differences in accent among the words for "my". Their accent is determined by the class of nouns.

III.	ītü	yáakwa	'my leaf'
IV.	kïví	kyáakwa	'my palm (of hand)'
V.	mbáká	yaakwá	'my cat'
VI.	ũthyấ	wáakwa	'my face'
VII.	katúlú	káakwa	'my squirrel'
VIII.	kütű	kấakwa	'my ear'
IX.	vandü	váakwa	'my place'
X.	awáú	máakwa	'my patients'
XI.	mītí	yaakwá	'my trees'
XII.	matü	máakwa	'my leaves'
XIII.	iví	síakwa	'my palms'
XIV.	mbáká	síakwa	'my cats'
XV.	tütúlú	tấakwa	'my squirrels'

3. AN OUTLINE OF THE NATURE OF THE ACCENT OF KAMBA NOUNS

In this section, the nature of the accent of Kamba nouns is outlined in the light of the viewpoints set forth in Section one.

- a) The accent of the Kamba language is basically pitch accent, and this applies to its nouns also.
- b) The "accent length" corresponds to a word, at least in the case of nouns. However, the prefix is always pronounced low, with the exception of some foreseeable cases.³⁾ Therefore, it is only the stem that is concerned with accent contrast.
- c) The accent of Kamba nouns is "segmental accent" and the structure of "accent segment" has three types, Consonant + Vowel (written as CV⁴⁾), wordinitial or post-vowel Vowel (V), and pre-consonant homorganic Nasal (N). From the following examples, we can assume V and N as well as CV are qualified as "accent segments".

```
īvúúti 'gun'īlóńdu 'sheep'īsaáni 'dish'ndeńgu 'a kind of bean(s)'mūsúūsi 'broth'kanóngo 'a kind of monkey'
```

However, judgement should be reserved as to whether V or N can be called a "syllable".

d) As far as nouns are concerned, "accent units" are two, "high" and "low". That is, sufficient information on the accent of a noun can be provided by describing whether each "accent segment" composing the phonological shape of the noun is high or low. It is extremely doubtful in the case of the Kamba language whether the "accent unit" not only constitutes part of the "accent pattern", but can also claim an existence of its own. Further discussion on this point will be given in f).

³⁾ These are the cases of "Pattern L-I" and "Pattern L-Ia" mentioned below.

⁴⁾ The notation CV includes those which, to be more exact, should be expressed as CwV, Cw'V, CyV.

e) No limitations about the combination of "accent units" are found in a clearcut way, with the exception of what has been stated in b).⁵⁾ Therefore, the number of accent contrasts increases as the phonological shape of a word gets longer. However, there are very few nouns which have a long phonological shape in this language.

f) Some nouns show variation in accent between those used independently as Subject or Object (as well as those pronounced independently), and those appearing with modifiers such as adjectives or possessive adjectives.

kílómo 'lip. vs. kilomo kyáakwa 'my lip'.

However, many nouns do not show such variation.

műkéka 'mat' vs. műkéka wáakwa 'my mat'.

Speaking in relation to the point made in 1. 5), one can recognize the type of variation as seen in the word $k\bar{\imath}lomo$ such that alternation occurs between high pronunciation as a whole except the final "accent segment" and low pronunciation as a whole, regardless of the length of phonological shape of the noun. This suggests that at least some "accent patterns" seem to be able to "cover" words with different numbers of "accent segments".

It can also be said there is no substantial meaning in the fact itself that, for example, "lo" in $k\bar{\imath}lomo$ is pronounced high under a certain environment. Rather, it should be understood as the result, as it were, of the fact that the word is pronounced high as a whole except the word-final segment under such environment. In short, as far as this example is concerned, "accent unit" is merely a part of a certain "accent pattern", or to be exact, of one variation of it.

- g) The description hereafter will be restricted to outlining the general characteristics of the "accent patterns", and will not include any interpretation possible from the standpoint which distinguishes between "distinctive features" and "non-distinctive features", nor its critical examination.
- h) This paper deals only with the accent of nouns. For the accent of verbs, see [Yukawa 1980]. Comparison between these two will also be omitted here.

4. THE "ACCENT PATTERNS" OF NOUNS

The "accent patterns" of nouns are outlined below by each number of the "accent segments" constituting the stem.

1)

There are two "accent patterns" recognized in the nouns whose respective stem is composed of just one "accent segment". In the first type, the stem, and that alone, is pronounced high under every environment. Let us call this type "Pattern H".

⁵⁾ But, see 5.

⁶⁾ Only typical examples are given in this paper owing to limitations of space. My data on the accent of Kamba nouns is presented in Yukawa 1982.

Second, some words have two alternative ways of pronunciation, i.e., a) their prefixes are pronounced high and their stems low, and b) low pronunciation as a whole. As mentioned earlier in 3. f), the former case occurs when those words are pronounced separately or used as Subject or Object independently, whereas the latter occurs when they are modified by something. In dealing with such an "accent pattern", the phrase "my ..." is used hereafter as a typical example of the latter case.

This may be called "Pattern L-I".

2)

There are much more "accent patterns" in the nouns whose respective stem is composed of two "accent segments". First, in some nouns, the entire stem, and that alone, is pronounced high under every environment. This may be referred to as "Pattern HH'.

Next, there is an "accent pattern" such that only the stem-final is high under every environment. Let us call this "Pattern LH".

Next, in the case of some words, their pattern corresponds to "Pattern LH" when they are pronounced separately or are Subject or Onject independently, whereas it corresponds to "Pattern HH" when they are modified by something (Slight uncertainty remains). This pattern is to be called "Pattern M (ixed)".

In some other nouns, only the stem-initial is pronounced high. This is referred to as "Pattern HL".

Further, in some words, alternation occurs between high pronunciation as a whole with the exception of the stem-final, and low as a whole.

```
kílómo 'lip' vs. kilomo kyáakwa 'my lip',

ńgúa 'clothes' vs. ngüa yaakwá 'my clothes',

kííma 'mountain' vs. kiïma kyáakwa 'my mountain',

ííű 'banana' vs. ïiű yáakwa 'my banana' (2.5)
```

This pattern is similar to (1.2), and let us call this also "Pattern L-I".

Another pattern very similar to this can be found in the nouns whose stem-initial

"accent segment" is V or N. In some such nouns, alternation occurs between high pronunciation only at the prefix alone, and low as a whole.

This is called "Pattern L-Ia".

Finally, there are some nouns pronounced low as a whole in every environment. This may be called "Pattern L-II". This pattern has very few examples.

3)

There are even more "accent patterns" in the nouns whose respective stem contains three "accent segments".

To begin with, in the case of some nouns, the entire stem and that alone is pronounced high under every environment. This is referred to as "Pattern HHH".

Second, there seems to be words in which the second and third "accent segments" of the stem and these alone, are pronounced high. However, only one example, a pair of singular and plural nouns, is found, which suggests lack of certainty. Let us cell this "Pattern LHH".

The next type is such that only the word-final is high in every environment. It is called "Pattern LLH".

It seems that, in some nouns, the accent like "Pattern LLH" is found when they are pronounced separately or used independently as Subject or Object and the accent like "Pattern LHH" when they are modified by something. Since this pattern can be considered to be the same as (2.3), it may be called "Pattern M".

Further, in other nouns, the prefix and the stem-final only are pronounced low under every environment. Let us call this "Pattern HHL".

```
műsééle 'rice', īlóńdu 'sheep', īsắngwa 'orange',
műátíne 'baobab', műáműa 'brother-in-law'
yűmba 'clay' (3.5)
```

In the case of still other nouns, only the "accent segment" in the middle of the stem is pronounced high. This is called "Pattern LHL".

```
masalúvu 'moutache', mūtokáa 'car',

īsaáni 'dish', ndeńgu 'a kind of bean(s)'

aláma 'mark', aívū 'shame' (3.6)
```

Though the number is extremely small, there are nouns whose respective steminitial and last "accent segment" only are pronounced high. This is referred to as "Pattern HLH".

There is a great number of nouns in which only the stem-initials are pronounced high. This may be called "Pattern HLL".

```
kītúlumo 'wave', kīsánūi 'comb', mūsúūsi 'broth' kanóngo 'a kind of monkey', mbíïa 'grave', mwíkiva 'vein', méthoi 'tears' (3.8)
```

Next, alternation occurs in some nouns between low pronunciation only at the stem-final with the rest pronounced high and low as a whole. Considered to be the same pattern as (1.2) and (2.5), this pattern is called "Pattern L-I".

```
mbálási 'horse' vs. mbalasi yaakwá 'my horse',

nthóóko 'a kind of bean(s)' vs. nthooko síakwa 'my beans',

nyáái 'foot' vs. nyaai yaakwá 'my foot'

műíti 'nurse' vs. műiti waakwá 'my nurse' (3.9)
```

In other words where the mid-stem "accent segments" are V or N, alternation sometimes appears between high pronunciation at the prefix and at the stem-initial only, and low as a whole. Regarding this as the same pattern as (2.6), let us call it "Pattern L-Ia".

```
ńgáasi 'ladder' vs. ngaasi yaakwá 'my ladder'
kísúngi 'sift' vs. kisungi kyáakwa 'my sift'
fémbe 'mango' vs. iembe yáakwa 'my mango' (3.10)
```

Finally, some nouns have low pronunciation as a whole under every environment. Considered to be the same as (2.7), this pattern may be called "Pattern L-II", although evidence remains to be discovered which would definitely confirm that these words have the same pattern as (2.7).

4)

When the stem consists of four "accent segments", the "accent patterns" of such nouns should amount to a far greater number in theory. However, only 13 patterns have been recognized in my data, because of the remarkable decrease of examples of such nouns. Given below is each pattern named tentatively by the writer together with its examples.

"Pattern HHHH"	
űvángílí 'bracelet', ngéngélé 'bell'	(4.1)
"Pattern LLHH"	` ,
kavaalúkú 'rabbit'	(4.2)
"Pattern HHLH"	
ngấngũấ 'crow', nthíngií 'a kind of ant(s)'	(4.3)
"Pattern HLLH"	
síküükű 'holiday'	(4.4)
"Pattern LLLH"	
kumbatú 'tobacco leaf', itangūá 'tsetse fly'	4.4 =
maasangyá 'dawn'	(4.5)
"Pattern LHHL" ituvááli 'brick', vilíngi 'flute'	44.0
"Pattern HLHL"	(4.6)
kīsónoóno 'gonorrhea', mūváaváo 'crust'	
mwékeéko 'echo'	(4.7)
"Pattern LLHL"	
mbilikímű 'dwarf', műsungúla 'backbone',	
kītambáa 'cloth'	(4.8)
"Pattern LHLL"	
műsuméeno 'saw', kikwalúuso 'comb'	(4.9)
"Pattern HLLL"	
üsúngio 'answer', mütóngoi 'leader', yúutia 'sweat'	(4.10)
"Pattern L-I"	
kívéévélo 'flag' vs. kīveevelo kyáakwa 'my flag',	
kyáálíílyo 'anvil' vs. kyaalīīlyo kyáakwa 'my anvil'	(4.11)
"Pattern L-Ia"	
káúkénge 'baby' vs. kaükenge káakwa 'my baby'	(4.12)
"Pattern L-II" valavala 'road', üvambüi 'cobweb'	(4.12)
valavala road, uvalitodi cooweo	(4.13)

Among these listed above, the "Pattern L-Ia" can occur only when the "accent segment" second from the final is V or N (the actual example of a noun with V there, however, has not been found yet).

5)

Concerning the nouns whose respective stem consists of five "accent segments", only 11 "accent patterns" have been confirmed by my data. This is because such nouns themselves are extremely small in number.

"Pattern HHHHH" katámbángá 'noon'	(5.1)
"Pattern LLHLH" kïmbalúutw'á 'butterfly'	(5.2)
·	(3.2)
"Pattern HLHHL" kiláalínda 'blind person'	(5.3)
"Pattern LLHHL" ndakītáálī 'doctor'	(5.4)
"Pattern HLLHL" ngúülamée 'dragonfly'	(5.5)
"Pattern LLLHL" mükosakavíla 'half-breed'	(5.6)
"Pattern LLHLL" ikalatáasi 'paper', ikanzéeti 'newspaper'	(5.7)
"Pattern HHLLL" mwilingilo 'circumference'	(5.8)
"Pattern L-I" kíűngűio kyáakwa 'my hearburn'	(5.9)
"Pattern L-Ia" máúlílímbo 'birdlime' (pl.) vs.	
maülilimbo máakwa 'my birdlime' (pl.)	(5.10)
"Pattern L-II" nzūnzūŭla 'ear-ring'	(5.11)
I have found three nouns whose respective stem is composed of six	"accent
gments". These nouns show different "accent patterns" from each other.	
"Pattern LLLLHH"	((1)

6)

months. These neutro site is united by	
"Pattern LLLLHH" malunjandúú 'sandals'	(6.1)
"Pattern LLLHLH" syïmbalúutw'á 'butterflies'	(6.2)
"Pattern LLLHHL" nzükukaláńga 'groundnut'	(6.3)

5. SOME DISCUSSION

A few more comments should be added here. The first is in regard to "Pattern L-I" and "Pattern L-Ia". The reason why these patterns are considered to exist irrespective of the number of "accent segments" constituting the stem, lies in the

common nature of its regular alternation between low pronunciation at the stem-final (or V, N, which is the "accent segment" second from the final, as well as the stem-final) with the rest pronounced high, and low pronunciation as a whole. Faced with its quite striking nature, one is led to conclude that those nouns in question with different numbers of "accent segments" are "covered" with the same "accent pattern". Although slight anxiety is felt over the reliability of the data itself, the same thing can be said with regard to "Pattern M", granted that the data is correct. I am under the impression that in the Kamba language two kinds of "accent patterns" co-exist, i.e., many different "accent patterns" existing for each different number of "accent segments", and a few "accent patterns" remaining the same irrespective of the number of "accent segments". (Patterns named "Pattern L-II" might better be regarded as "Pattern LL", "Pattern LLL", and the like.)

Second, the following limitations may need to be assumed for the nouns with their stem composed of four or more "accent segments".

- a) If the term "peak" is applied to the part pronounced high in every environment (when high "accent units" are repeated successively, they are counted as one "peak" as a whole), the number of "peaks" are two at maximum in one noun.
- b) Unless the entire stem is a "peak", the length of a "peak" is up to two "accent segments" at maximum.

It may be due to a) and b) above that there seem to be no "accent patterns" such as HLHLH, and LHHH, etc.

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