

The Paradox of Number and Non-number in Kiswahili Classes

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Amidu, A. Assibi. 2002. *The Paradox of Number and Non-number in Kiswahili Classes*. *The Linguistic Association of Korea Journal*, 10(4), 149-178. Within the Bantu linguistic world, genetic class systems stand as central pillars of their communication systems. In this study, we argue that, in classes, social organization and natural kind systems, there are anomalies that do not confirm entirely the standard division of number as singular versus plural pairs of affixes in Bantu. We suggest that a principle of non-number is responsible for such a conclusion. To achieve our goal, the study will examine the relationship between Kiswahili grammatical number, the social organization of countability, and the Bantu view of natural kinds. We draw attention to contradictions involving non-number in the systems and suggest that class affixes are not inherent number affixes. The anomaly is partly resolved in Bantu classes only when non-number is described as a neutral or *central* category. We conclude that Bantu classes are primarily classifiers of natural kinds of object, and only secondarily determiners of number.

Key words: Kiswahili, Bantu, classes, number, gender

1. Introduction

Bantu is a class language family, but it is not alone in expressing its universe of reference through genetic class or classifier markers. Lakoff (1986) and Dixon (1968, 1982) have written about the Dyirbal class or classifier system and its semantic implications. Wilkins (2000) and Aikhenvald (2000) have recently come out with descriptions of classifier/class systems laying emphasis on their grammatical and semantic categories.¹⁾ Both class and classifier languages are generally

1) Allan (2001, p. 116) has rightly observed in reviewing Aikhenvald (2000)

referred to as either class or classifier systems. Some linguists, however, refer to Bantu languages as class systems as opposed to classifier systems (Craig, 1986; Amidu, 1997; Aikhenvald, 2000). In this study, I use the terms interchangeably. I shall restrict myself, however, to Kiswahili and Bantu evidence.

The study argues that there is a high countable or probability ratio in natural kind systems such that objects may be paired as one versus more than one, and their linguistic terms may also be paired as singular versus plural in a predictable manner. But there is no direct correspondence between class and number in Bantu. I begin, however, by claiming that the conceptual organization behind Bantu classes and their universe of reference, as seen through Kiswahili, emanates from two things: 1. The social organization of the family among Bantu people, 2. The Bantu universe of natural kinds of objects. I view the Bantu family simply in Durkheimian terms (see §§ 2.-3. below), and so I will not go into an anthropological description of what or how it looks like. Within these two parameters, we discover that there are limitations to a one to one mapping of social countability and natural kinds in a natural language like Kiswahili Bantu, particularly with regard to a) number and b) semantic assignment rules. This study will only look at problems of number descriptions in Bantu.

2. A theory of social thinking and organization

Social anthropologists have long drawn attention to the fact that human beings are organised into communities, not so much for the sake of the individual but for the survival of the group or family as a whole (Lienhardt 1964, 1966).²⁾ According to Lienhardt (1966), Durkheim was

that "Amazonian languages are given disproportionate prominence in the book."

2) I wish to thank Arne Kjell Foldvik of the Department of Linguistics, Norwegian University of Science and Technology, Trondheim, for giving away his book on social organization. The book has contributed immensely to the hypothesis in this study and in my recent studies of classes. I also thank warmly Ali H. Marouga of Trondheim and Abdulaziz Y. Lodhi of Uppsala

the first to point out that a study that proceeds from the individual to the majority is likely to miss out the fact that the individual is himself a product of the society. He or she is, as a result, incapable of representing the total goals and salience of that society. A study of human society should, therefore, be based not on the individual, but rather on the 'collective representations', that is, on the fact that "Different societies exhibit different *patterns* of thought, different 'collective representations'..." (Lienhardt, 1966, pp. 31). Lienhardt explains the doctrine of diversity in a lucid manner as follows: "In general, the French sociologists of Durkheim's school established convincingly that social tradition moulds the individual conscience more fully than even the most self-conscious members of a society usually recognize."

The concept of difference and diversity in patterns of thought and hence of 'collective representations' may appear to rule out a universalist explication of the emergence of today's Bantu classes. An interpreter may also assume that difference and diversity mean that there are no unifying threads that link language systems together. These conclusions are, however, not justifiable in Bantu or in linguistics generally as typological studies show (Greenberg, 1966, Heine and Reh, 1984, Croft, 1990). We stress, however, that Bantu classes can best be studied from a position of an understanding of what Krapf (1850) called the 'Nilotic Idiom' (NI). The NI is a collective idiom that represents the African's conceptualization of his or her universe of reference. An interpreter who does not understand the 'collective representations' in the NI cannot truly do justice to the way the African perceives the world and how this is reflected in and through his linguistic strings. The linguistic strings are themselves derived from his antecedent usage. It should be noted that the affirmation of difference and diversity of thought is a non-racial statement, though pedlars of racial doctrines could seize upon it for their own goals (Lucy, 1992, ch. 1, on relativity).

University for verifying some of my data.

3. Social organization in class organization: the concept of grammatical number

Following from the Durkheimian School, we might say that, essentially, human societies consist of individuals and a collective representation of individuals. The collective representation is the family, a very important and indispensable landmark of human social organization and existence. The Bantu family is, therefore, a collective representation of individuals. In Amidu (1997, ch. 9), the relationship between individuals and their families was reduced to a system of ontological opposition (I) for individual object versus (F) for family of individual objects.³⁾ The opposition reflects the fact that the family organization of Bantu man and woman as a collective is reflected also in the linguistic organization of their speech. This can be seen in the fact that the genetic classification of their grammar attempts, albeit often unsuccessfully, to correlate some linguistic terms with (I) and other linguistic terms with (F). We also discover that some items are neither (I) nor (F) objects. The grammatical representations of the family or collective representation, on the one hand, and the individual representation, on the other hand, are known linguistically as the opposition of singular versus plural. The opposition (I) versus (F), therefore, reveals a direct impact of social organization on language organization, in my view. This does not imply that one will always find a one to one opposition or correlation between language and family or collective representation in the society or the universe of reference.

3.1. Countability and class classification in Bantu

If we look at the data (1)-(16) below, we discover that the opposition

3) The term 'individual' should be interpreted broadly to include all objects and possible objects with independent existence as opposed to the collective existence of their families of object. In this sense, 'individual' is not restricted to human beings as objects.

(I) versus (F) in social organization underpins much, but not all, of Kiswahili class organization, too.

- (1) a. Class 1 MU1
 b. *m-sichana yu-le m-refu a-meolewa* m- yu- m- a-
 Cl. 1 she-girl Cl. 1 she-that Cl. 1 she-tall Cl. 1 SM
 she-RECENT PAST-marry-PASS.-MOD.
 'The tall girl is married.'
- (2) a. Class 2 WA
 b. *wa-levi wa-le wa-wili wa-naimba* wa- wa- wa- wa-
 Cl. 2 they-drunkard Cl. 2 they-that Cl. 2 they-two Cl. 2 SM
 they-PRESENT-sing-MOD.
 'Those two drunks are singing.'
- (3) a. Class 3 MU2
 b. *m-to w-etu m-kubwa u-mefurika* m- w- m- u-
 Cl. 3 it-river Cl. 3 it-our Cl. 3 it-big Cl. 3 SM it-RECENT
 PAST-overflow-STATIVE-MOD.
 'Our big river has overflowed (its banks).'
- (4) a. Class 4 MI and Class 1 MU1
 b. *mi-iba hi-i my-embamba i-li-m-choma m-pishi* mi- i- my- i- |
 -m- m-
 Cl. 4 they-torn Cl. 4 this-they Cl. 4 they-thin Cl. 4 SM
 they-PAST-Cl. 1 OM she-prick-MOD. Cl. 1 she-cook
 'These slender thorns pricked the cook.'
- (5) a. Class 5 JI
 b. *ji-cho l-ake moja li-nauma* ji- l- Ø- li-
 Cl. 5 it-eye Cl. 5 it-his Cl. 5 it-one Cl. 5 SM
 it-PRESENT-pain-MOD.
 'One of his eyes smarts with pain', Lit. his one eye smarts
 with pain.'
- (6) a. Class 6 MA1
 b. *ma-gombano y-ao y-a juzi ya-mekwisha* ma- y- ya- ya-
 Cl. 6 they-quarrel Cl. 6 they-their Cl. 6 they-of Cl. 0
 ø-day-before-yesterday Cl. 6 SM they-RECENT

PAST-STRESS

AFX.-finish-MOD.

'Their quarrel/s of the day before yesterday has/have been buried.'

(7) a. Class 7 KI

b. *ch-akula hi-ki ch-ote ki-mehabirika* ch- -ki ch- ki-
Cl. 7 it-food Cl. 7 this-it Cl. 7 it-all Cl. 7 SM it-RECENT
PAST-spoil-STATIVE-MOD.

'All this food has gone bad.'

(8) a. Class 8 VI

b. *vi-jiko vy-angu vy-ote vi-meibwa* vi- vy- vy- vi-
Cl. 8 they-spoon Cl. 8 they-my Cl. 8 they-all Cl. 8 SM
they-RECENT PAST-steal-PASS.-MOD.

'All my spoons have been stolen.'⁴⁾

(9) a. Class 9 NII

b. *kengele y-etu m-pya i-nalia* Ø- y- m- I-
Cl. 9 it-bell Cl. 9 it-our Cl. 9 it-new Cl. 9 SM
it-PRESENT-cry-MOD.

'Our new bell is ringing.'

(10) a. Class 10 NI2

b. *tende z-enu tamu zi-meuzwa* Ø- z- Ø- zi-
Cl. 10 they-date Cl. 10 they-your Cl. 10 they-sweet Cl. 10 SM
they-RECENT PAST-sell-PASS.-MOD.

'Your sweet dates have been sold.'

(11) a. Class 11 U1

b. *u-fa u-le m-kubwa u-tazibwa* u- u- m- u-
Cl. 11 it-crack Cl. 11 it-that Cl. 11 it-big Cl. 11 SM
it-FUTURE-stop up-PASS.-MOD.

4) Note that -ibwa 'be stolen' is a passive of the basic predicate verb -iba 'steal'. It is used in the Northern dialects of Kiswahili, such as Kimvita, but it is not used in a Southern dialect like Kiunguja, according to Ali H. Marouga of Trondheim, and Abdulaziz Y. Lodhi of Uppsala University, both native speakers of Kiswahili from Zanzibar. In the Kiunguja dialect of Zanzibar, the applicative passive form -ibiwa 'be stolen from' is rather used. As a result, the passive of the simple predicate verb -iba is, strictly speaking, often unused in Kiunguja.

'That large crack will be stopped up.'

(12) a. Class 12 KA (dormant and no longer used actively)

b. *ka-toto ka-le ka-dogo ka-nalia* ka- ka- ka- ka-
Cl. 12 it-child Cl. 12 it-that Cl. 12 it-small Cl. 12 SM
it-PRESENT-cry-MOD.

'That small child is crying.'

(13) a. Class 14 U2 and Class 2 WA

b. *u-shirika u-takatifu hu-u u-ta-wa-imarisha wa-kulima* u- u-
u- u- | -wa- wa-

Cl. 14 it-communion Cl. 14 it-holy Cl. 14 this-it Cl. 14 SM
it-FUTURE-Cl. 2 OM they-be firm-CAUS.-MOD. Cl. 2

they-farmer

'This Holy Communion will fortify the farmers.'

(14) a. Class 15 KU and Class 2 WA

b. *ku-iba kw-ake ku-le ku-li-wa-aibisha wa-geni* ku- kw- ku-
ku- | -wa- wa-

Cl. 15 it/they-thieving Cl. 15 it/they-his Cl. 15 it/they-that
it/they-PAST-Cl. 2 OM they-shame-CAUS.-MOD. Cl. 2

they-guest

'His thieving/s abashed the guests, Lit. that/those his
thieving/s

embarrassed the guests.'

(15) a. Class 16/25 MA2, also
traditional Cl. 16 PA-, and
Proclass 2/1 1st Pers.

b. *ma-hali pa-le pa-kubwa pa-na-tu-tisha sisi* ma- pa- pa-
pa- | -tu-

Cl. 16 it/they-place Cl. 16 it/they-that Cl. 16 it/they-big Cl.
16 SM
it/they-PRESENT-ProCl 2/1 OM we-fright-CAUS.-MOD.

ProCl. 2/1

we that/those large place/s frighten/s us.'

(16) a. Class 17/26 NI3, also

traditional Classes 16. PA- , 17. KU- ,
18. MU-

- b. *nyumba-ni ha-pa p-ote pa-mepakwa rangi*
-ni pa- p- pa-

Cl. 17/26 house-there Cl. 17/26 this-there Cl. 17/26 there-all

Cl.

17/26 SM there-RECENT PAST -paint-PASS.-MOD. Cl. 9

it-paint

'This entire house has been painted.' Lit. In and out of this

entire

house has been painted paint.

- c. *nyumba-ni hu-ku k-ote ku-mepakwa rangi-ni ku- k- ku-*

Cl. 17/26 house-there Cl. 17/26 this-there Cl. 17/26 there-all

Cl.

17/26 SM there-RECENT PAST -paint-PASS.-MOD. Cl. 9

it-paint

'This entire house has been painted.' Lit. In and out of this

entire

house has been painted paint.

- d. *nyumba-ni hu-mu m-ote m-mepakwa rangi-ni mu- m- m-*

Cl. 17/26 house-in there Cl. 17/26 this-in there Cl. 17/26 in
there- all Cl. 17/26 SM in there-RECENT

PAST -paint-PASS.-MOD.

Cl. 9 it-paint

'The interior of the entire house has been painted.' Lit. In this
entire house has been painted paint.

Each predication-sentence (Pn-S) represents a class system or part of a class system.⁵⁾ We discover, therefore, that there are basically 16

5) For each predication-sentence type, the classifier/s of the class, e.g. MU1 and/or MI, etc., underlying the string is/are the actual generator/s of the string construction, and hence of the predication-sentence. Immediately below every derived Pn-S in the data above, therefore, we find its class significant constituent syllabic units (SCSUs), e.g. wa- wa- wa- triggered by classifier WA of class 2, etc., which determine syntaxemic functions or string constituent

or more distinct predication-sentence types in Standard Kiswahili, exactly as illustrated by (1- 16) *supra*. In a dialect like Kisiu, we find 15 classes (Eastman and Topan, 1966). The data are arranged roughly on the basis of natural kinds, such as +human, +tree/river, +body part/action, +thing, +implement, +abstract entity, +location, etc., in such a way that, where possible, they show the opposition individual object (I) versus family of individual object (F). This corresponds roughly to singular versus plural oppositions in grammars. Note that the data are not paired classes of the same object x or y or z . Rather, they are paired as x versus y natural kinds. Alternatively, they are unpaired natural kind p , q , or n . Thus, *msichana* (girl) in (1b) is an individual natural kind of human object corresponding to a grammatical singular noun. It contrasts with *walevi* (drunkards) in (2b), which is a family of individual natural kinds of human object corresponding to a grammatical plural noun. Traditionally, most of the data are re-organized into sets of pairs of the same natural kind of object x , e.g. $x1/x2$, $y3/y4$, $z5/z6$, $q7/q8$, $g9/g10$, $n11/n10$, which are then viewed as singular versus plural pairs of Pn-Ss. In the traditional system, singular regularly correlates with (I) of object x and plural regularly correlates with (F) of object x in the real world. For example, datum (1) may be paired with (17) and datum (3) with (18) below.

(17) a. Class 2 WA

functions. The triggering effect which generates SCSUs is known as the class projection principle (CPP) (Amidu, 1997). The CPP also tells us how classes are organized and then mapped onto syntactic structures to derive Pn-Ss. The CPP has been discussed in Amidu (1997). The data above also consist of a and b , $\pm c$, $\pm d$ components. The a component states the class marker/s and class number/s 1, 2, 3, etc. under description, and the b , $\pm c$, $\pm d$ components give the output predication-sentence or -sentences derived under the CPP or CPPs of the class marker/s. The gloss follows the method used in Amidu (1997, 2001a, 2001b). We see in the above illustrations that class descriptions are more complex than the mere itemization of word structure morphology and the compilation of a taxonomy of word clusters called noun classes, something rather fashionable in Bantu grammatical studies since its foundation (Creider, 1975, Denny and Creider, 1986, Demuth, 2000).

- b. *wa-sichana wa-le wa-rfu wa-meolewawa- wa- wa- wa-*
 Cl. 2 they-girl Cl. 2 they-that Cl. 2 they-tall Cl. 2 SM
 they-RECENT PAST-marry-PASS.-MOD.
 'The tall girls are married.'

(18) a. Class 4 MI

- b. *mi-to y-etu mi-kubwa i-mefurika mi- y- mi- i-*
 Cl. 4 they-river Cl. 4 they-our Cl. 4 they-big Cl. 4 SM
 they-RECENT PAST-overflow-STATIVE-MOD.
 'Our big rivers have overflowed (their banks).'

The result is the paired strings of Pn-Ss found in traditional grammar books. But note that this information about natural pairs of the same object *x* or *y*, etc., e.g. girl/girls, or river/rivers, is not what class classification is about. The information is, therefore, not required in a table of classes, at least in my view. This is because classes in themselves are not obligatorily paired systems of the same object in Bantu, in my opinion, hence girl/drunkards is just as good an indication of so-called number as girl/girls.

The justification for our claim is as follows. In both the real world and in language, we find individual objects without corresponding 'collective representations' or family of object. For example, *magombano* 'quarrel/s' in (6) has no class 5 **gombano* 'quarrel' in Kiswahili. We also find 'collective representations' or family of object without its corresponding individual object. For example, *kuiba* 'thieving' in (14) contrasts with nothing. This fact is captured by our data (1)-(16) than by traditional descriptions and classifications. This seems to suggest that each class is independent morphologically and syntactically of every other class, and not all classes can be paired, as this study will further illustrate below (Amidu, 1997, for further discussions).

So far, we have seen that some Kiswahili classes may be paired into singular versus plural, corresponding to pairs of natural kind objects as (I) versus (F). We have also seen that this pattern does not imply that all classes are reducible to a binary number system. It follows that classes represent natural kinds of object, whether or not the natural

kinds correspond with grammatical number singular versus plural. In addition, a so-called singular noun may correspond with a family of objects in its function and a so-called plural noun may correspond with an individual object in its function (compare (15) with (6) on one reading). Lastly, the same so-called singular or plural class may correspond with individual and family object functions in the grammar thus defeating the classification of the class into pairs of singular versus plural number. See (6), (14), (15), (16) above. All these variations suggest that class is different from number in Kiswahili. My initial hypothesis, therefore, is that the pairing of classes in Bantu by linguists and Bantuists lies outside the framework of class classification and organization and belongs to number classification and organization. The two organizations, i.e. natural kind and number, belong to different systems of the grammar. We blur the levels in class systems when we fuse them into the same affixes. This problem is further discussed in § 3.2 below.

Consider also the following aspects of the data. For example, the predication-sentence type (16b)-(16d) above in the class 17/26 NI3 is known in traditional class classifications as locative classes 16-18 following general Bantu practice. The general practice does not reflect Kiswahili Bantu string constructions and patterns. Consequently, following discussions and recommendations in Amidu (1994, 1997), the traditional system of numbering is changed to reflect the evidence in Kiswahili. In view of this, instead of classes 16-18, I prefer 17/26 NI3, because $KU > NI$, $PA > NI$, and $MU > NI$ in Kiswahili noun to noun derivations. A similar modification applies to class 16 to give 16/25 MA2 or PA in our classification. The class 16/25 MA2 or PA is justified by the fact that place nouns in the class can be modified by adjectives, whereas locative nouns with affix {ni} cannot be so modified in Kiswahili. In addition, the prefix {ma} or {pa} of the class 16/25 implies, in contexts, number as either singular or plural, or both, something the locative affix {ni} does not imply in Kiswahili. The class 16 or 16/25 is a class formed by only one borrowed foreign word, *mahali* (place/s) and a couple of grammaticalized Bantu words, e.g.

peupe 'open space, clearing, square in a town' (Johnson, 1939, p. 87). *Mahali* is often bantuized as *pahali*. Amidu (1980, 1997), following Ashton (1947), and other scholars, claims there is just one noun word in the class 16 or 16/25. This conclusion is no longer defensible given words such as *peupe* 'open space' above. In short, there is more than one noun in class 16 PA or 16/25 MA2 or PA of Kiswahili Bantu. For simplicity, the student should select either {pa} or {ma} as the class marker (Amidu, 1997 for details of the 16/25 and 17/26 approaches).

3.2. A limitation of countability and number pairs

What about the claim that some items are neither (I) nor (F) objects? It seems universally accepted that classifier/class values have some primitive meanings. It is, therefore, believed that the meanings underlying the classifiers of a class language reflect the way the speakers of the community involved perceive and organize the world around them, including possible worlds, and worlds of auto-communication or thinking (Amidu, 1980, Davidson, 1975). My illustrations, however, predict that the Bantu man and woman did not achieve complete correlation between their family organization and their speech organization. This is due to the fact that the social organization of society depended and depends, crucially, on the prior recognition of natural kinds of objects in the universe of reference. Without such a recognition, there would be nothing to organize into (I) versus (F), nothing to count as one versus more than one, and no reason for class or language systems which recognize grammatical number as singular versus plural, the language correlates of (I) versus (F). An interesting aspect of Bantu social organizations is, therefore, the discovery that it seems relatively easy to pair sets of ontological kinds naturally as (I) versus (F), e.g. river/rivers, or thorn/thorns. But it is, in practice, not easy to pair all ontological kinds as (I) versus (F). For example, mass objects like mud, spittle, crowd, etc., are not easily paired as (I) of x versus F of x (Amidu, 1997). Let us call the failure of pairing of natural kinds as (I) versus (F) in the organizational system the problem

of neutral or *central* monads. Namely, there are objects that are, strictly speaking, neither (I) nor (F) objects. These are often our uncountable objects of grammars. Do these objects have grammatical number, too?

If we turn to Kiswahili Bantu, we discover that the problems of social organization just described above carries over into class organization. For example, all the predication-sentences (1)-(18) above of the Kiswahili Bantu grammar are not singular versus plural pairs of constructions reflecting paired classes of natural objects like $x1/x2$, e.g. data (1)/(17), or random objects like x/y , e.g. data (1)/(2). Indeed, data (13)-(16), for example, are not paired into classes of singular versus plural inflections. For these data, the issue of number affix is meaningless. Why is this so? Data such as (13)-(16) reveal that the Bantu people recognized the central category of objects mentioned above. They also recognized that, within the dichotomy singular versus plural, there are class words without number affixes. Such affixes represent a non-number category. To resolve this anomaly of non-number within a number system, the absence of number as either singular or plural has been called central number (Amidu, 1997). It is abbreviated as (Ce.).

Following from our analysis, we discover that the Bantu classes, especially what Mutaka and Tamanji (2000) call 'Narrow Bantu', consist of i) singular classes, ii) plural classes, and iii) central classes. In this respect, Ce. means a class with a non-countable and non-number or number neutral class affix. But how can this be, if classes are paired singular versus plural affixes in Bantu? And yet, this is exactly what we find in data (1)-(18). That is, some classes easily pair for natural or random number, e.g. (1)/(17), (3)/(18), (1)/(2), while others never do, e.g. (13)-(16). This means that there is a negation of grammatical number in the class systems of Bantu, especially when number is made coterminous with natural kinds. In this respect, the evidence contradicts, in a fundamental way, grammatical assertions to the effect that the Bantu classes are exclusively a paired system of singular versus plural affixes. I return to the issue again in § 4. below.

4. Classes as reflections of natural kinds and social organization in Bantu and Kiswahili

What is the nature of the natural kinds in Bantu? The data (1)-(18) reflect the Bantu conceptual view of the universe, especially the core ontological kinds of object that make up the world. I wish to illustrate here, using two descriptions, how Bantuists, as interpreters, have ordered and arranged the semantic categorizations of natural kinds found among Bantu speakers. Here is the first description. Demuth, Faraclas and Marchese (1986, p. 455) select Sesotho as "an example of a full noun class/concordial agreement system ... — a typical Bantu language." They then present 15 classes of this language, and explain that "In such a system each noun is prefixed with one of a pair of CV-noun class markers, one used for the singular form, the other for the plural." They go on to state that:

The more conservative Bantu languages typically have 5 or 6 productive singular/plural noun class or gender pairs, plus a few classes with no alternation. While productive semantic correspondences have been lost for most of these gender distinctions, classes 1/2 (mo / ba above) and 2a (bo- the kinship class') are generally known as the human classes. Classes 9/10, in the larger Niger-Congo context, have been called the 'larger animal' classes. Most Bantu languages and many other languages in Niger-Congo also have a 'mass noun' or 'liquid' (14 bo) class which generally exhibits no singular/plural pairing (Demuth et al., 1986, pp. 455-456).

In her recent work, Demuth (2000, p. 272) lists 23 "*Various Niger-Kordofanian noun class systems*" (Maho 1999, p. 247-248, for similar classifications). The semantic and number classifications of the Bantu classes given by the scholars above are said to reflect the Bantu universe of reference and the Bantu mode of ordering the universe of natural kinds and properties of these. The scholars also assert that the

organization of the classes reflects grammatical number, i.e. singular versus plural.

The second description comes from Ashton. It is specifically about Kiswahili. Ashton (1936, 1937) developed what she termed the 'Idea Approach to Swahili,' which she then applied to the writing of her grammar book of 1944/1947. The underlying ideas behind Kiswahili classes provided by Ashton are given on various pages of her grammar book. The reader may refer to the data (1-18) above to confirm some of her claims. We summarize Ashton's claims below. We give the page numbers after each extract.

- M- WA- classes: "...Living Classes...contain the names of human beings." (Ashton, 1947, p. 29). E.g. *mpishi* 'cook'.
- M- MI- classes: "...names of living things but not human,....", e.g. all trees, plants etc. "something that spreads or extends" (Ashton, 1947, p. 23). E.g. *mji* 'town', *mti* 'tree', *mlima* 'mountain', etc.
- JI- MA- classes: "names of things which occur in quantities, but which may be thought of singly as well,...." (Ashton, 1947, p. 65). E.g. *jino* 'tooth'.
- KI- VI- classes: "...often spoken of as the *thing* classes, for many of the nouns are the names of inanimate things as opposed to animate or sentient beings." (Ashton, 1947, p. 14). E.g. *kiti* 'chair', *kiko* 'pipe'.
- N- N- classes: "...words which are the names of common objects and of animals." (Ashton, 1947, p. 82). E.g. *fimbo* 'whip', *simba* 'lion'.
- U- classes: "There are two U- Classes...".
 - a. U- (< BU-) Class. This contains "Words which admit of no singular or plural concept, such as abstract nouns denoting qualities or states." (Ashton, 1947, p. 104). E.g. *uzuri* 'beauty', *utu* 'manhood'.
 - b. U- (< LU-) Class. "All words, however, refer to concrete objects, with a further implication of length or mass."

(Ashton, 1947, p. 105). E.g. *ukuta* 'wall', *ifagio* 'broom, brush', *uji* 'gruel'.

KU- class: "That of a verbal noun, as such it forms a class of nouns known as the KU- class....These verbal nouns cannot be thought of in terms of singular and plural. They express the act of doing, of becoming or the state of being...." (Ashton, 1947, p. 123). E.g. *kusoma* 'reading/s', *kuondoka* 'departure/s'.

MAHALI class:"Reference to a definite place." (Ashton, 1947, p. 125). E.g. *mahali* 'place/s'.

ADVERBIAL classes (Ashton, 1947, p. 126)

KU- class: "ku- Indefinite place, direction". E.g. *huku* 'there'.

PA- class: "pa- Definite place, position". E.g. *hapa* 'here'

MU- class: "mu- Area, "alongness", "withinness"". E.g. *humu* 'in here/there'

Note that Ashton's "adverbial place classes" are also called locative classes (Amidu, 1980, 1997, see also §§ 3.-3.1. supra). We refer the reader also to discussions by Sacleux (1909), Haddon (1955), and Corbett (1991) on the topic of the meanings of class affixes. Our data (1)-(18) almost exactly match Ashton's classification. The 'ideas' underlying Ashton's classes reflect the core Kiswahili categorizations of the world and hence the Kiswahili and Bantu view of natural kinds of object in the world, and, consequently, the collective versus individual representations of the natural kinds of object in the world, including possible worlds.

We mentioned earlier on that in their social organization of the family or collective units of objects, the Bantu man and woman soon realized that there was a middle ontological category of central monad or entity in respect of countability. We have attempted to show that the grammatical organization of classes also reflects this central category. In the class system, the central category may be said to involve number neutralization in some affixes. We have suggested that number neutralization in affixes may partly be resolved linguistically by

recognizing a central number. Essentially, therefore, the central number and its affixes in class systems display what is known as syncretism in languages. Within central number, the distinction singular versus plural is neutralized. This leaves the distinction singular versus plural to be made semantically according to the contextual functions of lexical words or phrases or Pn-Ss themselves. Or else, no number distinctions are made at all, and we get classes without number morphemes and markers. Let us look at Ashton's list for confirmation of our analysis.

If we look at the above list of core conceptual categorizations presented by Ashton (1947), what strikes us is that the classes are paired initially as reflecting an opposition singular versus plural affixes, namely M-WA, M-MI, JI-MA, KI-VI, N-N. Then the opposition ceases. All the classes U-, KU-, MAHALI, PA-, KU-, MU, are not paired. Recall also that the locative classes of Kiswahili actually display the following morphemic patterns of conversion: PA- > NI3, KU-> NI3, MU-> NI3, i.e. they are represented by exactly the same affix NI3 and the same noun *nyumbani* 'in the house' in (16a)-(16d). Consequently, the Bantu noun markers PA-, KU-, MU-, are neutralized and replaced by a common affix -NI3 in Kiswahili Bantu and display no opposition singular versus plural, even semantically. We cannot call this class (or classes) a grammatical number class when its affixes lack inflectional and semantic number morphemes. The prefixes PA-, KU-, MU- only surface in modifying words, e.g. *kule* 'far over there', *pale* 'just over there', *mle* 'in there', of the nouns, as the data in (16b), (16c), (16d) demonstrate (Amidu, 1980, 1997). The unpaired classes are evidence of number neutralization or non-number.

5. A criticism of natural kinds and number descriptions in Bantu

What are the pairing anomalies in the traditional descriptions of Bantu and linguistic grammarians? Traditional classifications give the impression that number and natural kinds are the same kinds of morphemes. That is, class affixes describe number as singular or plural

and have gender meanings. In practice, grammarians are unable to defend this approach, and appeal to a principle of fusion (Dixon, 1986, p. 106, Amidu 1997, p. 130). For example, Ashton's (1936, 1937, 1947) 'idea approach' states that "Each class is associated with one or more underlying ideas". In spite of this, she classifies her classes along a number-gender scale, thus fusing number and gender together. Ashton's classification seems to make the lexical conceptual features of natural kinds, such as +human, +tree/river, +body part/action, +thing, +implement, +abstract entity, +location, etc., subordinate to the number features, singular/plural, of her classes. In our view, it seems better to use a two-level scale: 1) a lexical conceptual scale of natural kinds and b) a number property or feature scale. The motivation for this is that number is like an adjectival predicate in Bantu, while underlying ideas are mostly tied in with nouns (Amidu, 1997). In principle, therefore, number and underlying ideas (genders) are not concepts of the same category in the class systems, even though both can fuse together (Amidu, 1997). A two-level system prevents number, a 'long series' feature, from underlying all the classes. This in turn prevents affixes of words that refer to underlying ideas or natural kinds, and which are really 'short series' elements often restricted to one or two classes only, from necessarily expressing number as either singular or plural. If my assertion is motivated, then we should also be able to find in Bantu and Kiswahili classes words which express number by means of noun modifiers and not by means of class prefixes. Such examples would illustrate further that number is not an inherent feature of class affixes.

We further justify the separation of number from natural kinds below. For example, observe that Ashton's class 15 KU, exemplified by a word such as *kusoma* 'to read, reading', is paired with nothing in her Kiswahili data above (see below for her table containing *kucheza* 'play'). In addition, on page 123 of her work, Ashton (1947) explicitly states that the verbal noun words in class 15 KU "cannot be thought of in terms of singular and plural". Furthermore, on page 104 of her book, Ashton also claims that the class U- (< BU), also given as class 14 bo by Demuth et al (1986), does not often show singular/plural pairing in

Kiswahili. This claim about class 14 is repeated by Demuth et al. (1986, p. 456) as affecting "most Bantu languages and many other languages in Niger-Congo". Let us assume that Demuth et al. (1986) are correct. If so, their initial general claim to the effect that "In such a system each noun is prefixed with one of a pair of CV- noun class markers, one used for the singular form, the other for the plural." is simply untenable and self-evidently false (Demuth et al.).

It is clear from the above analysis that there is a drawback in the works of Bantuists. Namely, they excuse some classes from the principle of pairing classes into gender classes defined also as singular versus plural pairs of affixes, even as they insist that class affixes are number prefixes used to distinguish singular from plural in Bantu. We see in the above descriptions, therefore, quite clearly the paradox of number in Kiswahili and Bantu class descriptions. The evidence, in my view, shows that, in principle, the two classes U- and KU- are, in most Bantu languages and in many Niger-Congo languages, incapable of being subject to the principle of arranging classes into paired singular/plural affixes. We discover from the above descriptions, therefore, that gender or natural kind must be defined for the two classes U- (< BU) and KU- as something which is independent of the system number. The evidence also means that not all classes stand for singular or plural inflection. This leads to one conclusion only. Namely, some classes are central classes. Unfortunately, Bantu grammarians do not handle the evidence about central classes well in writing their grammars. For example, in order to resolve the anomaly which has surfaced above, some linguists, *inter alia*, Heine (1982), Corbett (1991) claim directly or indirectly that the class KU- has no plural. In short, they resolve the problem of either neutral number or non-number simply by imposing number on the class KU- (Amidu, 1997 for discussions). There is no cross-linguistic evidence for adopting such a solution, at least, for Kiswahili (Amidu, 1997, on Heine, 1982). We illustrate the lack of inflectional number in the class 15 KU affix of Kiswahili with the following datum from George Orwell (1967).

(19) *Kuja na kuondoka kwake kuliwahfisha mno wanyama.*

Cl. 15 it/they-coming Cl. 0 \emptyset -COP-be with Cl. 15 it/they-leave Cl.
 15 it/they-his Cl. 15 SM it/they-PAST-Cl. 2 OM
 they-fear-CAUS-MOD. Cl. 0 \emptyset -very much Cl. 2 they-animal
 'His coming/s and going/s frightened the animals very much.'

The datum (19) has a coordinate NP *kuja na kuondoka*. The agreement in the demonstrative *kwake* 'his' for both coordinate nouns is {ku} and the predicate verb *kuliwahfisha* 'it/they frightened them' also has the same affix {ku}. The construction is perfectly good Kiswahili. But what is interesting is that the conjoined elements *kuja* 'coming' and *kuondoka* 'leaving' are translationally ambiguous. *Kuja* may mean one instance of coming or many instances of coming. Likewise, *kuondoka* may mean one instance of leaving or departure or several instances of this. In Kiswahili, we can also have the following construction types.

(20) *Kuja kwake kuliwahfisha mno wanyama.*

Cl. 15 it/they-coming Cl. 15 it/they-his Cl. 15 SM
 it/they-PAST-Cl. 2
 OM they-fear-CAUS-MOD. Cl. 0 \emptyset -very much Cl. 2
 they-animal
 'His coming/s frightened the animals very much.'

(21) *Kuondoka kwake kuliwahfisha mno wanyama.*

Cl. 15 it/they-leave Cl. 15 it/they-his Cl. 15 SM
 it/they-PAST-Cl. 2
 OM they-fear-CAUS-MOD. Cl. 0 \emptyset -very much Cl. 2
 they-animal
 'His going/s (or departure/s) frightened the animals very much.'

The subject of (20) is *kuja* and the subject of (21) is *kuondoka*. The NPs *kuja* and *kuondoka* are the very elements that form the coordinate NP subject of (19). In (20), the possessive and the predicate verb of *kuja* are the very same *kwake* and *kuliwahfisha* we saw in (19). The

concord affixes are {ku} for each modifier. If we turn to (21), we discover again that the possessive and the predicate verb of *kuondoka* are the very same *kwake* and *kuliwahfisha* we saw in (19), and the concord affix is {ku} for each modifier. In addition, note how the fact that *kuja* or *kuondoka* is used on its own as a subject argument NP does not make it automatically a singular noun. In fact, the data (20)-(21) are, in this case, translationally just as ambiguous as (19). Our study of Kiswahili patterns shows that the patterning in class 15 KU effectively reveals that there is nothing inherently singular or plural about its affixes and its class. Disambiguation depends on the modifiers of the head noun, i.e. according to how they restrict the meaning of the head noun in a construction to a singular interpretation or plural interpretation. The distinction singular versus plural is not a property of the class 15 KU itself or its affixes, at least in Kiswahili. The class 15 KU is a clear example of non-number, i.e. the absence of number defined as singular versus plural in Kiswahili. To save the number theory in Kiswahili and Bantu we need to recognize a middle category of number, hence central number.

Table 1: Ashton's arrangement of Kiswahili classes (1947)

singular pronouns		Plural pronouns	
m-tu	a person	wa-tu	persons, people
m-ti	a tree	mi-ti	trees
ki-ti	a thing	vi-ti	things
ji-cho	an eye	ma-cho	eyes
njia	a path	n-jia	paths
ulimi	a tongue	n-dimi	tongues
ku-cheza	to play, playing	-	-
Mahali	a place	Mahali	places

*With two exceptions, the prefix in the plural Class differs from that of the singular Class. Each class is associated with one or more underlying ideas.

Ashton's table and claim above suggest that prefixes need not differ at all to form singular/plural classes. And so, she classifies class 15 KU as singular in number, a method repeated directly by Heine (1982). And

yet, on page 123 of her book, as seen above, she claims emphatically that the class 15 KU "cannot be thought of in terms of singular and plural". The table reinforces the contradictions noted above. Note, however, that Ashton (1947) does not include the class 15 KU among the two exceptions mentioned in her table. In contrast to Ashton (1947) and Heine (1982), we have noted that Corbett (1991) and others assert that class 15 KU has no plural, an assumption that indirectly implies that it has a singular prefix. The evidence provided above shows that Corbett's (1991) description lacks grammatical motivation for Bantu. Furthermore, in Bantu languages, where classes such as class 15 KU are said to have plural prefixes, one discovers, unhappily, that the so-called plural prefixes do not form inherent or natural inflectional pairs with the so-called singular prefixes.⁶⁾

The traditional approach to number does not also account for the fact that morphemic meanings of number as singular or plural may be context dependent on modifiers of noun phrases, or on the usage of a word or a phrase or predication containing the same affix. For example, in *ku-piga kw-ingi* 'too much beating' or 'too many beatings', number is a property of the root *-ingi* 'many, much' in the modifying word *kwingi*. Number is not in the class affix {ku} that defines the class (Amidu, 1997, pp. 361-370).

Ashton (1947) also states that in Kimvita or Mombasa Kiswahili, one may hear *mahali* as "*pahali pl. mwahali*". This would seem to be the additional justification for her classification of *Mahali* class as involving number singular/plural. Her justification is however weak in Standard Kiswahili (cf. data (22)-(23) *infra*). Even if we take into account Kimvita or Mombasa Kiswahili, we discover that, as far as the Standard Grammar goes, Ashton's table of classes above imposes number semantically, but not morphologically, on her *Mahali* class. The

6) The method of pairing unnatural classes as number classes confirms the advantage of the pairings in (1)-(16) over the traditional ones (Maho, 1999; Haddon, 1955). These so-called number pairs are random or pseudo-pairs because, in Kiswahili, one can borrow affixes from other classes either as allomorphs of existing affixes or for use as inflectional markers in other classes. This principle is called *allonominal concord marking* (Amidu, 1997).

data (22)- (23) below illustrate our claim clearly.

(22) *Ma-hali ha-pa pa-mekuwa p-embemba tena pa-baya* ma- pa- |
pa- p- pa-

Cl. 16/25 it-place Cl. 16/25 SM it-RECENT PAST-STRESS
AFX-be-MOD. Cl. 16/25 it-narrow Cl. 0 \emptyset -and also Cl. 16/25
it-bad

'This place/space has become narrow and also bad.'

(23) *Ma-hali ha-pa pa-mekuwa p-embemba tena pa-baya* ma- pa- |
pa- p-pa-

Cl. 16/25 they-place Cl. 16/25 SM they-RECENT
PAST-STRESS
AFX-be-MOD Cl. 16/25 they-narrow Cl. 0 \emptyset -and also Cl. 16/25
they-bad

'These places/spaces have become narrow and also bad.'

Observe, immediately below the Pn-Ss, that the following SCSUs are generated, namely ma- pa- | pa- p- pa- separated by a group boundary marker (|) in the form of a horizontal bar which separates the subject *mahali hapa* 'this/these place/s' from the predicate phrase *pamekuwa pememba tena pabaya* 'has/have become narrow and bad'. Observe further that the data (22)-(23) are repetitions or reduplications of exactly one and the same string construction that would normally be described as an ambiguous predication. Consequently, it seems that Ashton (1947) interprets the same string with exactly the same prefix markers as a singular denoting Pn-S, hence the translation of (22), or a plural denoting Pn-S, hence the translation of (23). The meaning singular versus plural is, therefore, not an inflectional property of ma- pa- | pa- p- pa-. Number is rather a contextual function of the use of one Pn-S and the lexical conceptual meanings contained in it. By repeating the same string twice, Ashton (1947) claims to have established singular versus plural pairs of affixes for her *Mahali* class. It is clear, however, that there is just one noun affix marker and one

type of affix concord for both constructions. If we follow her example, the datum (6) may also be repeated twice to stand for singular versus plural number without changing class. Ashton's approach and those of Corbett (1991), Maho (1999) and others are, therefore, non-linguistic methods of generating number in Bantu classes. The methods are, nevertheless, widely used in Bantu grammatical descriptions and are applauded. Compare the data (6), (22)-(23) with the data (24)-(25) which form the second of the two exceptions referred to by Ashton (1947) in her table.

- (24) *N-jia hi-ii-mekuwa ny-embemba tena m-baya* n- i- | i- ny- m-
 Cl. 9 it-road Cl. 9 SM it-RECENT PAST-STRESS
 AFX-be-MOD. Cl.
 9 it-narrow Cl. 0 \emptyset -and also Cl. 9 it-bad
 'This road has become narrow and also bad.'
- (25) *N-jia hi-zi zi-mekuwa ny-embemba tena m-baya* n- zi- | zi- ny- m-
 Cl. 10 they-road Cl. 10 SM they-RECENT PAST-STRESS
 AFX-be-MOD. Cl. 10 they-narrow Cl. 0 \emptyset -and also Cl. 10
 they-bad
 'These roads have become narrow and also bad.'

In the data (24)-(25), we notice that the nouns and adjectives, namely *n-jia* 'road/s', *ny-embemba* 'narrow', *m-baya* 'bad' do not show differentiation in affixal form. However, their demonstratives *hi-ii/hi-zi* 'this/these' and predicate verbs *i-mekuwa/zi-mekuwa* 'it/they has/have become' show differentiation between {i} for singular and {zi} for plural. Thus, to say that *n-jia* 'road/s' inflects for number can be demonstrated by associating it, for example, with demonstrative or predicate verb concords. On the other hand, the claim that *mahali* inflects for number cannot be demonstrated in any way in string constructions in the Standard Grammar using the affixes *ma- pa- | pa- p- pa-*.

Finally, Ashton (1947) leaves out of her table the classes PA-, KU-, MU- (classes 17/26 NI3, in this study) generally known as locative

noun classes in the literature. We have seen that these classes do not pair for number as singular versus plural versus central in Kiswahili. The classes highlight the weakness of the Kiswahili class number systems.

5.1. The anomaly of central number within a paired number system

The class 6 MA1 is said to be a plural class, but Kiswahili evidence does not fully confirm this claim. The weakness of the traditional approach is revealed by the datum (6) above. The datum is both singular denoting and plural denoting even though its singular inflectional class is said to be class 5 JI in Kiswahili Bantu. This means that we cannot say that *magombano* in (6) is plural in number. The simple reason is that it also interprets as singular in number. The affixes *ma-* *y-* *ya-* *ya-*, by themselves, do not tell us anything about these choices of number function. Since the construction (6) belongs to class 6 MA1 but is interpretable as either a singular or plural morphemic string, it is clear that it does not pair with a class 5 JI for singular/plural number. It rather pairs with itself, so to speak. The principle of pairing becomes, therefore, totally redundant for determining number in (6). Even central number does not apply strictly here. For, how can a plural class also be a singular class when it allegedly has a separate class for singular? See Amidu (1997), for further discussions. In short, in class 6 MA1, the concept of number as a system flies out of the window. Here again, Corbett (1991), Maho (1999) have attempted to get out of this set back to Bantu class theory by using terms like "*pluralia tantum*" and "grammatically plural uncountables". These terms are meaningless in Kiswahili and in morphology. We see this in the fact that 'plural form' is not equivalent to having a plural morpheme, whereas number is a matter of morphemes and morpheme functions. Number is, therefore, not merely a matter of phonological shapes and configurations. We see here an unhappy development in Bantu morphological theory in which form is taken as equivalent to number

morpheme and number function. Even if we accept the distinction *singularia tantum* versus *pluralia tantum*, it fails to resolve the problems of data (6), (13)-(16), (19)-(21). The datum (6) is singular and plural in morphemic meaning and function, i.e. ambiguous, while its class is said to be plural. Here, the terms, *singularia tantum* and *pluralia tantum*, avail us not.

6. Conclusion

Firstly, the evidence reveals that natural kinds, such as +human, +tree/river, +body part/action, +thing, +implement, +abstract entity, +location, etc., are necessary and obligatory features of the Kiswahili and Bantu linguistic universe of reference and class organizations. Secondly, the natural kinds form the basis of Bantu social organization and categorization of objects into (I), (F) and (Ce.). Thirdly, the Bantu social organization and categorization lead to the organization of the class or classifier system into number categories of the type central > singular > plural (Amidu, 1997, ch. 5). Generalizations about central number or non-number or number neutralization are also called number neutrality in other studies (Kanazawa, 2001). We refer the reader to Amidu (1997, chs. 5-6, 9), Kanazawa (2001), for some discussions on the subject. Class systems in Kiswahili Bantu are, therefore, not necessarily and obligatorily paired number systems. To save the day, we have recognized a central number. Quite often, due to the problem of non-number in the class system, even the central number fails to save the day completely for the Bantu class number system. We can see this in the fact that some Bantu classes, e.g. class 17/26 NI3, are not sensitive to the so-called number oppositions of traditional and modern Bantu grammars. In addition, we have seen that grammatical number, viewed in terms of inflectional affixes, is not a necessary and obligatory part of class organization. For example, the adjective root {ingi} generates plural strings, thus by-passing class affixes.

Lastly, language has propositions and sentences in linguistics and also has a theory of ambiguity precisely for handling cases like (6),

(19)- (21), (22)- (23). Propositions and ambiguity allow *magombano* in (6) to pair with nothing, and still express singular versus plural functions. Propositions and ambiguity also allow *mahali*, *kuja*, *kuondoka*, and other nouns to perform the same kinds of function that *magombano* performs. Bantu classes, historically and synchronically, are not primary number systems but systems for natural kind and social object classification. The class affixes have secondary functions as number markers only where the context of their words allows it.

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