The Problem of Lexical Cohesion and Lexical Structure in Bantu Classes (Part 1)

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INTRODUCTION[1]

This work takes us into a very important debate in Bantu grammar and linguistics: the question of the cohesiveness of lexical words in Bantu. Amidu (1980) has discussed aspects of this question with regard to locative and non-locative word structure, an example of which will be presented below (10a, b). In this study, therefore, I wish to draw attention to some anomalies regarding lexical structure descriptions found in traditional Bantu grammars and linguistics, with special reference to the 'lexical atomicity' (my coinage) and 'lexical integrity' theories of Bantu. The data used are drawn almost exclusively from Kiswahili. The work examines the following topics: 1. the problem of lexicality in Kiswahili and Bantu, 2. types of nominal words in Kiswahili and their structures, 3. the limits of lexicality in Kiswahili and Bantu, 4. constituent binding, and 5. the place of noun modifiers in Kiswahili lexical structure. I shall not make use of word-for-word glosses in this work, except when illustrating an anomaly, and, therefore, assume, in this respect, some familiarity with Bantu (esp. Kiswahili) grammar. The following common symbols are also used: | | = group, or argument, predicate, etc. boundaries; || || = predication-sentence and clause boundaries, P-v1, P-v2, etc., = V1, V2; P = predicate; A1, A2 = argument position.

1.0 THE PROBLEM OF LEXICALITY IN KISWAHILI AND BANTU

In my view, when discussing word structure in Bantu, especially in relation to questions of 'lexical atomicity', i.e. lexical words in Bantu can be described by syntactic phrase structure trees and rules (cf. Myers 1987; Carstens 1991, 1993; Kinyalolo 1991), or 'lexical integrity', i.e. lexical words are morphological derivations, are synthetic, and cannot be described by syntactic phrase structure trees and rules (cf. Bresnan and Mchombo 1995), we need to bear in mind the

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[1] This work is part of my larger work on classes and seems sufficiently clear as to deserve separate publication, besides its topicality. I hope it will generate a healthy debate about lexicality in Bantu. I wish to thank Sh. Abdulaziz Yusuf Lodhi for finding time to verify some of the data used in this work. All shortcomings are, however, my own.

morphological and syntactical typologies and distinctions between the l.u.d and the l.o.d, and between lexids and classifiers in the l.u.d.

Firstly, it seems to me that the lexical atomicists and integritists, and other traditional Bantu linguists, often overlook the fact that an item in Bantu may be at one moment a lexical word or phrase or predication-sentence (or clause), as in (1-4) and, in the next instant, may be a mere lexid constituent of a lexical word, iff it undergoes a nominization process, as in (5-8). A lexid is any constituent formative F defined as a root or stem or theme, or minimal sign, or a combination of these (cf. Amidu 1994c; Polomé 1967; Hellan 1993). Consider data (1-4).

1. Jitu
    (giant)
*2.   Mwana mume
    (a male child)
3. Fundi | anashona | viatu
    A1   +   P   + A2
    (The craftsman is cobbling shoes)
4a. Tuki<u>mw</u>ongezea | pato | mkulima au mfanyakazi || i-naweza i-siondoe | matatizo kwake...
    (If we increase the income of the farmer or the worker, it may not remove his difficulties...)

The predicational structure of (4a) is (4b).

4b.   Pn-S1[Tuki<u>mw</u>ongezea | pato | mkulima au mfanyakazi || Pn-S2
          P   +   A2 [NP1 [NP2   ]]
        [i-naweza i-siondoe | matatizo | kwake.....
        P [P-v1   [P-v2   ]]   A2 [NP1 [NP2]]

The datum (4a) is a rewrite of a predication-sentence taken from *Ujamaa* by Nyerere (1968: 48). The datum (1) is an adhesive lexical word, (2) is a nominal phrase no longer in use, (3) is a single predication-sentence (Pn-S) with two argument constituents, and (4) is a complex predication containing two predication-sentences labelled Pn-S1 and Pn-S2 in (4b). The part or the whole of the same words, or phrases and predication-sentences may be converted into lexids of a lexical word under nominalisation as follows:

5.   ##ma{jitu}## as in majitu (giants),   Class 6
6.   ##mw{ana-mume}## as in mwanamume (man),   Class 1
7.   ##m{shona-viatu}## as in mshona-viatu (shoemaker),   Class 1
8.   ##ku{<u>mw</u>ongezea-pato-mkulima-au-mfanyakazi}##,   Class 15, as in (9)
     (increasing-the-income-of-the-farmer-or-worker)
9.   Kumwongezea pato mkulima au mfanyakazi | <u>ku</u>-naweza <u>ku</u>-siondoe |
     A1   + P [P-v1   [P-v2   ]] +
     matatizo | kwake...
     A2 [NP1 [NP2]]

(Increasing-the-income-of-the-farmer-or-worker | may not remove | his difficulties...)

Culled from Nyerere (1968: 48), and referred to in Amidu (1982a, 1982b).

There appears to be some confusion among Bantuists regarding what a lexical word is and what a lexid (root, stem, theme, minimal sign, etc.) is. I find this in works on integrity, as in Bresnan and Mchombo (1995) and others, as well as in works on atomicity, as in Myers (1987), Carstens (1991; 1993), Kinyalolo (1991), and also in the traditional preprefixes of Haddon (1955), Givón (1971; 1972 (1969)) and others. Bantu writers appear to confuse a lexical word ##jitu## with {jitu}, which is a lexid, and *mw-ana m-ume (male child), a phrase with two words, with mw{anamume} (man), which is one word containing one lexid (traditionally called a compound noun). The same confusion appears when anashona viatu (he is cobbling shoes), a simple finite predication-sentence is mixed with ##m{shona-viatu}## (a shoemaker, one who makes shoes) which is one lexical word containing one lexid. Finally, there is a tendency to confuse the predication-sentence 'tukimwongezea pato mkulima au mfanyakazi' (if we increase the income of the farmer or worker), which is a conditional predication-sentence, with ##ku{mwongezea pato mkulima au mfanyakazi}## (increasing-the-income-of-the-farmer-or-worker), which is one word containing one single lexid with several inbound constituents. Amidu (1980: 19-40, 231-260, 368-395, 568-581) has argued using constructions like (10a, 11a),

10a. Juma amekwenda nyumba-ya-pili
     (Juma has gone to the other house)
11a. Mjusi amegusa kifa-urongo
     (The lizard has touched the grass 'mimosa pudica')

that it is not helpful to describe (5-8) with reference to (1-4) using mere perceptual observation and theories of word structures derived from euro-centric grammatical models. It is argued by Amidu (1980) that we need first to look closely at the patternings and implications of word structure in Bantu before deciding the applicability of linguistic theories of the word in models to Bantu lexicals. For example, Amidu (1980) argues that nyumba-ya-pili, kifa-urongo, etc., are hybrid lexicals. These types are now termed adhesive lexicals in this work. This is because what appears as modifiers in the words are in fact obligatory inbound constituents of the words. This obligatoriness can be tested as in (10b, 11b).

*10b. Juma amekwenda nyumba
      (Juma has gone to the house)
*11b. Mjusi amegusa kifa
      (The lizard has touched the grass 'mimosa pudica')

The ungrammaticality of (10b, 11b) is due to the fact that *nyumba and *kifa are not themselves nouns in these constructions. They are lexid constituents which must be inbound constituents obligatorily as in (10a, 11a) before they can form lexical words of the hybrid type. Since the hybrid cannot be broken up, I call it adhesive. If we look at (7-8), we realize that these data are cohesive lexicals by contrast to (10a, 11a). This means that, even though they are also words in Kiswahili, one could qualify an inbound constituent with a modifier for example without destroying the lexicality of the construction, as in (7b).

7b)   Mshona-viatu-hivi | hajui | kazi yake
       A1   +   P   +   A2
       (The shoemaker of these/the maker of these shoes does not know his work)

The occurrence of a modifier, as in (7b), is not possible in an adhesive lexical noun. A failure to address these structural types leads to an incomplete description of the Bantu lexical word structure, and to 'toyretical' conclusions about Bantu lexicality.

   Secondly, both the lexical atomicity and integrity theories, as well as traditional theories (criticised in Amidu 1980), appear to have misunderstood the actual process of word-formation in Bantu. This may be due in part to the rush to apply to Kiswahili and Bantu constructs linguistic findings *universalized* from other languages. Consider, for example, (12-13).

12.   Mwanasiasa or mwana siasa
       (a politician)
13.   Mwananchi but *mwana nchi
       (a compatriot)

We observe that there is a choice in (12) but not in (13). The convention of writing single lexical words with two or more inbound constituents together or with space between components or constituents has been partially rectified in the *Kamusi ya Kiswahili Sanifu* (1981). Even so, the dictionary does not use a uniform convention in its entries. We find, therefore, entries such as mwananchi (compatriot), but not *mwana nchi, and find donda ndugu (a type of ulcer) but not *dondandugu. Whichever convention is adopted could affect the theoretical status of the items as lexical words. The data (14-16) have the same structural problems as (12-13), with one difference.

14.   <u>Mw</u>-ana-**m**-ke, but not *mwana **m**-ke
       (a woman).
15.   Mw-ana-**mw**-ali, or ?mw-ana **mw**-ali
       (maiden).
16a.   Mw-ana-**ch**-uoni, or mw-ana **ch**-uoni
       (a scholar)

16b. Mw-ana-chuo-**ni**, or mw-ana chuo-**ni**
(a scholar)

Compare (14) to (17) found in Johnson (1939: 311)

17a. M̲tu m̲ke
(female person, woman)
17b. W̲atu w̲ake
(female persons, women)

The problem which the *Kamusi ya Kiswahili Sanifu* (1981) probably attempted to rectify lies in our writing conventions. These conventions are not sufficiently clear as to when we are dealing with a single lexical item, as in (12-16), and when we are dealing with a phrase, as in (2, 17), which are not single lexical items but sequences of lexical items. The problem or question which naturally arises for a linguistic empiricist is this: If mwanamke (a woman) is distinct from mtu mke (a female person), in that the first is a lexical word and the second a phrase, then, in that case, how and why do (14-15), which are words, allow for what looks like overt internal inflection, (underlined in bold), in the same way as for the phrases, e. g. (17)? Do (12-13) allow for this type of overt internal inflection also? In reality, the nouns siasa (politics) and nchi (country or countries) have covert inflection. They are nouns of class 9 or class 10 whose class inflections are always distinctively zero. The inflection of siasa or nchi cannot, therefore, be verified except by reference to some of its modifiers. Verification of inflection is impossible when the nouns are converted into lexids as in (12-13). It is, nevertheless, tempting to argue, for example, that, given (17a, b), mke and mwali in (14-15) agree in concord with mwana. This temptation is strong if we consider cases like (18-19).

18. W̲-ana-**w**-ake
(women)

19. W̲ana-**w**-ali or ?w̲-ana **w**-ali
(maidens)

There are other compelling reasons, however, for dismissing the inflections in (14-15, 18-19) as internal concords or inflections. These types of internal inflections have been called "alternative concord" in Bresnan and Mchombo (1995), Myers (1987), Carstens (1991), and others. Compare (16) with (20) below.

20. **W**-ana-**vy**-uoni or **w**-ana **vy**-uoni
(scholars)

On the basis of surface observations, (16, 18-19) and (20) may be said to display internal constituent morphological inflection apart from external inflection for class

of the lexical word. They appear, therefore, to confirm the alternative concord or inflection theory. But what kind of inflection are we dealing with: a) concordial inflection, or 2) noun number inflection? If the answer to the first (a) is in the affirmative, the datum (20) would violate the integrity theory of Bresnan and Mchombo (1995) as it stands. The answer to the second (b), if positive, would appear to defeat entirely the claim that class affixes are not number class affixes (cf. Amidu 1994a). Let us proceed cautiously here. In traditional Bantu description, (14-16), (18-19) and (20) would often be taken as proof of an inflection which also includes the number contrast 'one' versus 'more than one', alternatively called singular versus plural. Thus (18-19) would have class 2 WA- inflection initially and medially. But (16, 20) are tricky. In (20), for example, we are forced to claim that the adhesive word has two inflections: the first is a class 2 WA inflection in initial position, followed by a class 7 VI- medial inflection. But the problem is that we know from Kiswahili and Bantu grammar that vy- in [vyuoni] cannot be the class marker of the word vyuoni *because the lexical word vyuoni is a locative noun*. As a locative noun it is marked by affix **-ni** for class 17 NI.3, according to Amidu's table of classes (cf. Amidu 1994a:76) or for classes 16-18 according to general Bantu classification. I draw attention to the fact that all concords of a lexical word vyuoni, or a lexid constituent [vyuoni] (if internal concord is possible) will normally be one of the concordial locative affixes pa-, ku,- mu-, and nothing else, and these must be triggered by the locative affix -**ni**. If, on the other hand, the noun chuoni or lexid constituent {chuoni} inflects, then it will do so on the locative affix -ni itself. For this reason it is not the source of vy- in [vyoni]. Observe that the inflection vy- in [vyuoni] is not class generated or triggered by the class 2 affix WA-. There is also no lexical semantic link between the two words to warrant a semantically generated trigger of the inflection vy- by wa-. This conclusion is consistent with Bantu systems of government. Since the vy- is not the class affix of vyuoni, it is not either in a governable position and so cannot inflect in the word. In order to justify an alternative inflection or concord theory word internally one may appeal either to a Steady-State theory of linguistics, similar to that of physics, the *Ex nihilo nihil fit* , described by Quine and Ullian (1970, 1978: 46-48) or to analogical inflection, i.e. if x inflects then y inflects irrespective of morphophonological rules. That is, if we assume that there is an inflectional relation between mwanachuoni and wanavyuoni, then if vy- is not generated by WA- then it must be self-generating. If this hypothesis is motivated, I would expect to find in the grammar affixes which inflect purely on phonetical grounds, without any grammatical motivation. In my view, the so-called internal inflections in (18-19) are purely phonological alliterative harmonizations devoid of any morphological determination. If I am right, then, for example, ch- does not inflect for vy- since it is not the criterial affix of the word chuoni. In addition, it is known that the locative affix -ni does not inflect in Bantu nouns whatever the semantical motivation. My prediction, therefore, means that data like (21-22) are also grammatical, but not (23).

21. **Mw**-ana **vy**-uoni
     (scholar)
22. **W**-ana **vy**-uoni
     (scholars)
*23. **W**-ana **ch**-uoni
     (scholars)

The datum (21) is indeed recorded by Johnson (1939: 150). In (21), the first constituent of the lexical word has the affix {mw-} of class 1 which is said to be singular, but the second constituent has the affix {vi-} of class 8 which is said to be a plural affix in traditional grammars. These two types of inflections (mw- singular versus vi- plural in the same word) cannot motivate each other since they belong to distinct and unrelated classes and are, semantically, mutually exclusive. This example confirms that the apparent alternative inflections inside the word are phonetically motivated by sound harmony of some kind and not by morphological rules of inflection. In view of this evidence, I wish to conclude that the internal inflections in (18-19) are also phonological alliterations rather than grammatical inflections or concords. (22) is an inflection of (21). But the so-called plural inflection, which shows both external and internal parallelism, is purely a phonetic accident. That is, while mw- may be said to inflect as wa-, the vy- (i.e. vi /- +Voc) does not change from (21) to (22). This explains why there is no word of the type (23) in the grammar. There is, therefore, in my view, something wrong with a theory of alternative concords (the so-called phrasal recursivity principle), and the so-called noun inflections which are used in testing lexicality in Kiswahili and Bantu. The expectation by Bresnan and Mchombo (1995: 191) that the inbound constituent {siasa} of the lexid in (12) should behave like a noun in controlling the demonstrative modifier hii (this) is without justification. If {siasa} has no grammatical inflection, it cannot have a demonstrative that can occur in lieu of itself. The lack of internal inflection in adhesive compounds shows that when a form class is converted into a lexid, it may lose all ability to generate the morphological rules which it had prior to its conversion (cf. Bauer 1983). A lexid is, therefore, not a lexical word. Bresnan and Mchombo (1995) have, it seems, been unable to come to grip with this important transformational process in noun to noun lexical derivation in Bantu.

It has often been argued that alternative concords are natural in those Bantu languages whose locative affixes are prefixal rather than suffixal, and that this justifies the claims of both the atomicity (cf. Myers 1987) and integrity (cf. Bresnan and Mchombo 1995: 195ff) treatments of locative nouns and phrases in Chishona and Chichewa, as in (24a) based on Amidu (1980: 349-350). The glosses are meant to reflect those used in current literature.

24a. Pamudzi uyo
     Cl. 16 Cl. 3-village Cl. 3 that
     (at/to that village)

In (24a), the demonstrative uyo refers to a noun such as mudzi (village) of the class 3 {mu} rather than to a noun of the class 16 {pa}, such as pamudzi (at the town) (see Amidu 1980: 340-350, 372-373, 399). In my view, however, the analysis of (20/22, 24a) as involving internal inflections or alternative concord is toyretical. Firstly, words like pamudzi uyo are cohesive lexical words, as suggested earlier, while those like wanavyuoni behave like adhesive lexical words. Secondly, in almost all Bantu grammars, (20/22) is formed by conversion rules from complete lexical items or phrases: mwana + vyuoni   mwanavyuoni   wanavyuoni, with the first constituent governing the second and the second may be adjoined to the first. On the other hand, (24a) is formed by the nominization of a phrase by means of the locative affix {pa}. The locative class projection makes {pa} the first constituent of the lexical and it governs a lexid converted from a phrase {mudzi uyo}, and this yields {{pa}+mudzi uyo}. In Kiswahili, the derivation is natural since, if it were not, the inflection of mwanachuoni would be wanachuoni, as in (23) since it is -ni which is the class affix not ch- (< ki /- +Voc). We have seen, however, that (23) is ungrammatical.

In both the Chichewa and Kiswahili cases also, only the affixes {wa} and {pa} generate concord with predicate verbs. If ch- or vy- in (16, 20/22) and {mu} in (24a) are inflectional, then they would also show this alternative marking on the predicate of their predication-sentences indicating a choice of systems available in the grammar. This is precisely what never happens in Bantu: that is, no choice of systems is available on predicates. (24b, c to 27) show the concords on predicates which are obligatory and those which are not grammatical in Bantu:

24b.   Pamudzi uyo | padapita | munthu
      Cl. 16 Cl. 3-village Cl. 3 that Cl. 16-PAST-go-MOD. Cl. 1 person
      (To this village there has gone a man)
*24c.   Pamudzi uyo | udapita | munthu
      Cl. 16 Cl. 3-village Cl. 3 that Cl. 3-PAST-go-MOD. Cl. 1 person
25a.   Mwanachuoni huyu anasoma
      (This scholar is reading)
*25b.   Mwanachuoni hiki kinasoma
*25c.   Mwanavyuoni hivi vinasoma
26a.   Wanavyuoni hawa wanasoma
      (These scholars are reading)
*26b.   Wanavyuoni hivi vinasoma
27a.   Pamudzi uyo pali munthu
      (At this town there is a person)
*27b.   Pamudzi uyo uli munthu

The failure of (24c, 25b, c, 26b, 27b) is a necessary and sufficient demonstration of the toyretism of the claims about alternative concords in Bantu, and the syntactic head analysis of locatives and so-called infinitive/gerund constructions in these

languages. For the same reason, there are no *mwanawake hawa (these women) or *wanamke huyu (this woman) in the grammar. An alternative concord must be allomorphic obligatorily since it implies a choice of systems. In (24-27), there are no choices of this type in the Bantu predication-sentences and this accounts for the failure of the alternative concord hypothesis, and the syntactic head theory of Bantu grammarians. In my view, linguists should cite phrases and lexical words which have been tested in contexts of predication-sentences where they function as arguments of predicates and are subject to case marking. As Amidu (1980) has argued, predicates are the only part of the grammar which, in about 90% of the cases, preserve only the concords of their matrix frames. If a string constituent is not a true lexical, it will not also function as an argument of a predication sentence where agreement is a critical index of class government. One feature of Kiswahili and Bantu is that qualifying nominal items always take the concords of their head nouns, unless the noun itself is fossilized (cf. Amidu 1980). Since neither vy- nor {mu}, etc. is fossilized, they ought to be able to head modifying predicates like any other noun, that is function as syntactic heads also. If we look at (8 and 9), for example, we see that because it is a lexical noun, it heads its predicates V1 and V2 with its concord affix ku-. This is just the kind of function [chuoni] and [vyuoni] cannot perform, as (25b, c, 26b, 27b) show, and [mudzi uyo] also fails to have concord with its predicate as (24c) indicates. Carstens (1993: 177) claims that:

> "Myers (1987) and B&M argue convincingly that locative Class prefixes are syntactic heads, and independent words."

This very statement about syntactic heads and independent words is directly contradictory iff the same words have alternative concords in the strictest sense. The evidence above shows that alternative concords generated by inbound constituents are negations of 'independent word'-hood or syntactic headedness, since we would, by implication, have two syntactic heads and two independent words in one and the same lexical. The contradictory nature of the claims of atomicists and integritists is one more evidence of my argument that their descriptions lack explanatory relevance and empirical motivation.

An appeal to semantics does not clarify the problem, being largely speculative and futile. Consider the following transliterations of (14-16), (18-19), (20/22), numbered with (b) for this purpose:

14b. Mw-ana-**m**-ke or mw-ana **m**-ke
      (a female-person).
15b. **Mw**-ana-**mw**-ali or mwana **mw**-ali
      (maiden-person).
16b. **Mw**-ana-**ch**-uoni or mwana **ch**-uoni
      (person-at-college)
18b. **W**-ana-**w**-ake or w-ana **w**-ake
      (females-persons)
19b. **W**-ana-**w**-ali or w-ana **w**-ali
      (maidens-persons)

23b. **W**-ana-**vy**-uoni or **w**-ana **vy**-uoni
      (persons-at-colleges)

While 'female-persons' and 'maidens-persons' are, semantically, individuals in their own right, and may justify (18b-19b), there is no reason why several persons cannot go to one college, i.e. *wanachuoni (indeed that is the normal feature of colleges), just as several people can go to several colleges, i.e. wanavyuoni. Mwana vyuoni (person at colleges/in books) also sounds strange. So, in the end, the so-called internal-like inflection is not morpho-semantically motivated. The internal-like inflection, self-evidently, occurs PRIOR to 'lexidation' and nominization.[2] This is confirmed by cases like (21). We shall go into this argument again further on.

1.1 TYPES OF NOMINAL WORDS IN KISWAHILI

So far I have used terms like adhesive and cohesive without much explanation. The evidence above shows that there are two basic systems of nominization in word formation in Bantu (including Kiswahili). A Nominal word is either, a) an *Adhesive Nominal Word* or, b) a *Cohesive Nominal Word*. An adhesive nominal word is a unitary word whose internal constituents do not inflect separately from the class affix of the word, and where internal inflectional changes are not triggered by the affix of the lexical word, but occur prior to lexidation (see mwana vyuoni vrs. wanavyuoni). A cohesive lexical word is one whose structure is phrase-like and whose inbound lexid constituents may inflect independently of the class affix of the noun word itself (see mshona-viatu vrs. mshona-viatu hivi). There is yet be a third type, the 'dishesive' nominal. I shall discuss it further on.

1.1.1 The General Structure of Nominal Words

According to Amidu (1980), a nominal word structure is one which is defined as having a class phonological genetic marker and a lexid (stem). The lexid is composed of a morphemic root or sets of root-like constituents plus or minus determiner specifier affixes and plus or minus nominalising suffixes (cf. Amidu

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[2]   Lexidation is a process by which new formative lexids are formed or derived in a grammar. Nominization is a process of reification by which I mean the process which converts any lexid, however complex, into a lexical word for predication-sentence syntactic and speech functions. If the reified word is a noun or nominal, I say that it is nominized. Nominization is not nominalisation. Nominalisation, for me, is one Bantu process by which an item from another form class is converted into a nominal lexid, but is not itself, as a lexid, of the status of a lexical word since no nominization has yet operated on it. For example, -soma (read) , which is a modalized predicate F may be nominalized by a suffix such as {ʃi} to give -somaji (reader). But -somaji is not nominized. In Bantu and Kiswahili, it is not a lexical word until it is reified by a nominizer as m-somaji (a reader), u-somaji (readership), etc.

1980: 19-27, 31-40, 368-377; 1983, 1994d). Nominalising suffixes are assumed to be part of the term lexid and are not specified separately below. I specify nominizing affixes which occur with lexids since only these two features determine wordhood in the grammar. The structure of the nominal lexical word taken from Amidu (1980: 34-35) is as follows:

28a. affix + root   datum (32) in Amidu (1980)
29a. affix + {stem [affix + root]}   datum (33) in Amidu (1980)

The word mtu (person) illustrates the type in (28a), i.e. [affix [m] + root [tu]], and majitu (giants) illustrates the type in (29a), i.e. [affix [ma] + *stem{[affix [i] + [tu]]}]. In an adhesive nominal, the internal labels in the stem have no syntactic function even if they were converted into lexids from another noun class. In such a case, my convention has always been to circumscribe the converted lexid or its purported affix with an asterisk (cf. Amidu 1980: 20-21). In reality, I often forget to do so! Bantu grammarians have failed to adopt this practice and this accounts for the misleading glosses we find in the literature, i.e. sub-lexical items are glossed as complete lexical words, with class annotations, when in fact this need not be the case in the micro-syntax. An example of this glossing is given in (24a-c). The lexid is never itself a word (even when it behaves like one). For this reason, the gloss of [mudzi uyo] as 'Cl. 3 village Cl. 3 that' (that village) is false and misleading. If we gloss [mudzi] as a word rather than as an inbound lexid constituent, we blur the distinction between word ##mudzi## (village) and lexid {mudzi} in Bantu.

    Amidu (1980) has drawn attention to the fact that following from the Mirror-Image Convention, there is a mirror-image structure which applies to locative nouns, as well as demonstrative proximates, and other similar words. These have, as a result, the structures (28b-29b) below.

28b. root + affix   see Amidu (1980: 318)
29b. {stem [affix + root]} + affix   datum (33b) in Amidu (1980)

Examples are huyu (this), i.e. [root [hu] + affix [yu]], and ndooni (in the bucket), i.e. [*stem {[affix [n] + root [doo]]} + affix [ni]]. In a caveat, Amidu (1980) states, in reference to (28a, 29a) above, that:
    "The first affixes in 32/33 are the significant affixes, the other affix in 33 is hypothetical, not criterial to concord or grammatical relations" (p. 34).

The "other affix" refers to the hypothetical affix shown on some nominal stems by an intuitive correlation of nominals with lexids derived by conversion. On the mirror-image cases given in (28b, 29b), Amidu (p. 34) writes that:
    "This involves a shift of the significant affix from the initial position as in 33(a) to final position in surface structure as in (33(b))."

The shift means that instead of the class marker appearing prefixally, it appears suffixally. The two broad types of nominals were originally called 'simple nouns' versus 'complex nouns', but these terms now appear rather vague. In order to avoid the kind of problems and confusion that now bedevil the atomicists, integritists, and traditionalists with regard to Bantu word structure morphology and class membership and class classification, a revision is proposed to the above structures in Amidu (1983; 1994d). The revision states that since the stem or lexid affix in the statement above is, in any case, purely hypothetical and not a class affix (given its sub-lexical status), it should be replaced by the term 'determiner' (DET) of a root. This means that {ndoo} may be analysed as consisting of {det [n] + [doo] root} /- Loc NI   ndooni (in the bucket). This approach eliminates the term affix word internally in adhesive lexicals and avoids the pitfall of thinking that every affix-like item is also a class classifier as found in the glosses of most Bantuists (see (24) for example, and Bresnan and Mchombo 1995, Carstens 1991; 1993). In addition, Amidu proposes, in the same works, that concord-like affixes, such as gu- found in the Gisu or Lumassaba, e. g. **gu**-mubano (the knife), and other types of affixes, such as ma- in Kiswahili, e. g. **ma**-rafiki (our acquaintances) should be analysed as specifiers of lexical words and labelled SPEC. Other grammarians prefer the term augment (cf. Hyman and Katamba 1993) instead of specifier. I shall not go into these descriptions here. It suffices that I have drawn attention to them. It should be noted that both noun specifiers and determiners in my usage have one common impact on lexicality: they cannot control concord and therefore their lexicals are adhesive and not cohesive. The above claim implies that if an inbound constituent shows some feature of inflection as in (7b), this should be treated as the result of a conversion of a phrase into a lexical word, especially if, notwithstanding its ability to be optionally inserted in the structure of the inbound constituent, the inbound constituent cannot determine the concord that can occur on predicates of the lexical word itself, as (7b, 24c) again illustrate. The implications of the above analyses of lexicality in Kiswahili and Bantu seem, therefore, self-evidently strong enough to warrant some attention by Bantuists.

1.2 SUMMARY

Part 1 of my study concludes as follows: Within the framework of the illustrations given, one can adequately analyse the different types of lexical nominals that occur in Kiswahili and Bantu. It will be seen then that both the atomicist who believe that lexical items should be analysed via syntactic trees as for phrase structures and the integritists who believe that the unitary structure of words cannot be subject to phrase structure descriptions but only to morphological derivations have failed to address the question of lexicality in Bantu. This is because adhesive lexicals cannot be analysed by phrase structure rules as Myers (1987) and Carstens (1991; 1993) advocate. At the same time, many cohesive lexicals cannot be described in terms of

synthetic integrity as Bresnan and Mchombo (1995) argue. The theories of word structure derived from Eurocentric models are, by themselves, inadequate for analysing and describing Kiswahili lexical words and, by implication, Bantu lexical words. In the part 2 of this work, I shall present data which show that lexical cohesion is a tricky issue and that contrary to the claims of Bresnan and Mchombo (1995), and Carstens (1993), lexical integrity and the independent word, per se, are myths in Bantu. What we have is a two way scale going from relatively more independent to relatively less independent words. The so-called syntactic heads of certain words, namely locatives and infinitive/gerunds are also myths when narrowly framed as has been done by both atomicists and integritists. The so-called exceptions of lexicality cut across most classes and are not confined to just locatives and so-called infinitive/gerunds as the writers maintain. The appendix supports this view. Note how inbound constituents marked by lexid boundary { } are headed by the class 1 affix MU-. The (a) predication-sentences have arguments at A1 which are adhesive words, while the rest have arguments at A1 are or are head by cohesive words.

A.
(i)
*a.   M{taka} | sharti | ainame
      (The wanter/one who wants must bend down)
 b.   M{taka-kitu cha mvunguni} | sharti | ainame
      (The wanter/one who wants (of) a thing under a bed must bend down)
 c.   M{taka-chamvunguni} | sharti | ainame [a proverb]
      (The wanter/one who wants (of) a thing under a bed must bend down)

(ii)
*a.   M{taka} | huenda | kwa sonara
      (The wanter/one who wants goes to the jeweller)
 b.   M{taka-dhahabu} | huenda | kwa sonara
      (One who wants gold goes to a jeweller)
 c.   M{taka-dhahabu yo yote nzuri} | huenda | kwa sonara
      (One who wants any good gold whatsoever goes to a jeweller)
 d.   M{taka-dhahabu yo yote iliyo nzuri} | huenda | kwa sonara
      (One who wants any good gold whatsoever goes to a jeweller)

B.
a.   M{tamani} | hufa | maskini
     (One who covets (a relation's wealth) dies a poor man)
According to Sh. Lodhi, it is understood that what is coveted is "cha ndugu" (a relation's wealth or property)

b.   Mtamani-kitu-cha-ndugu | hufa | maskini
(One who covets a relation's wealth dies a poor man), i.e. if he hopes to inherit it.

c.   Mtamani-cha-ndugu | hufa | maskini [a proverb]
(One who covets a relation's (wealth) dies a poor man), i.e. if he hopes to inherit it.

C.

*a.   M{shona} | hajui | kazi yake
(The sewer does not know his work)

b   M{shona-viatu hivi} | hajui | kazi yake
(The maker of these shoes does not know his work)

c.   M{shona-viatu} huyu | hajui | kazi yake
(This maker of shoes/shoemaker does not know his work)

d.   M{shona-viatu hivi vya kubana} | hajui | kazi yake
(The maker of these tight shoes does not know his work)

e.   M{shona-viatu hivi} wa kwetu | hajui | kazi yake
(The maker of these shoes from our hometown does not know his work)

f.   M{shona-viatu vinavyokubana} | hajui | kazi yake
(The maker of the shoes which pinch you does not know his work)

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