

ON THE VERBAL ORIGIN OF THE BANTU VERB SUFFIXES¹

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1. Preamble

What follows below is a hypothesis. It is by no means fully proven. I will attempt to bring a certain amount of data to show that it has definite empirical contents, then argue from several more universal considerations. The more general view which underlies the hypothesis presented here may be found in Givón [1971a]. Briefly, it is there suggested that in order to understand the current morphology and morphotactics of a language, one must construct highly specific hypotheses concerning the syntax of that language at some earlier historical stage of its development. Conversely, it is also suggested there that synchronic morphologies and morphotactics are a most powerful tool for reconstructing earlier diachronic stages in the syntax of a language.

2. Bantu verb morphology

The normal syntactic order in the verb phrases of most Bantu languages nowadays (a few exceptions will be mentioned below) is verb:comp. The relevant morphotactics of the verbal word itself may be summarized as:

(1) A-M-OP-verb stem-VDS*-a

where A stands for subject agreement morpheme, M for tense-aspect-modal morpheme, OP for anaphoric object pronoun, VDS* for verb derivational suffix (with the asterisk indicating possible recursion), and -a for the 'neutral' verb suffix, which may be supplanted by either a negative, subjunctive or Modified Base suffix.²

¹I am much indebted to Edgar Polomé, Benji Wald, A. E. Meeussen and Larry Hyman for many valuable comments, suggestions and criticism of an earlier version of this material. The opinions expressed below remain strictly my own.

²Like all modality and other inflectional morphemes, these suffixes receive their phonological shape in the second (post-transformational) lexicon. For further discussion of second-lexical morphemes, see Givón [1971b].

Further, it can be shown, although the full details have not yet been put forth as a coherent and definite hypothesis, that the overwhelming majority of underived (unextended) verb stems in Bantu have the deep canonical shape -CVC- or -CVVC-. The relatively few -V-, -C- or -CV- verb stems can be reconstructed, on either internal or comparative grounds, to fuller forms, though not always back to the prevalent -CVC- (for some discussion, see Givón [1970a]). Another seeming exception to the -CVC- cardinal shape, the one involving NC clusters, will be discussed below.

3. The Bantu modality morphemes

The verbal origin of the Bantu modality prefixes has been noted for a long time. For detailed discussion of some of the evidence supporting this view, see Givón [1969:3.4.2.1.]. Briefly, it may be claimed that:

- (a) The Bantu modality morphemes arose from main verbs dominating sentential complements;
- (b) They arose primarily from modal-aspectual verbs such as 'begin', 'end', 'succeed', 'fail', 'continue', 'repeat', 'want', 'intend', 'try', 'plan', 'be about to', 'do intensively' etc.;
- (c) Most of them arose independently in each Bantu language, at a relatively late date and following the dispersal of the Proto-Bantu speech community.³

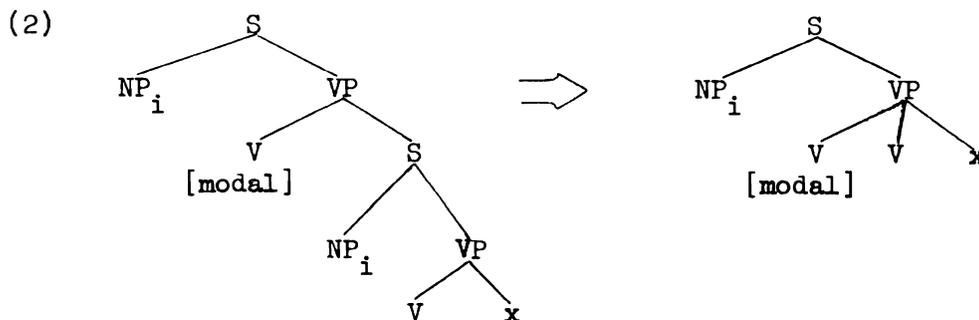
The details of the evidence will not be repeated here, but only summarized:

- (a) Semantics: The semantic features underlying the Bantu modality morphemes are the very same modal-aspectual verb features mentioned in (b) above;
- (b) Etymology: Many Bantu modality morphemes can still be tracked back to specific verbs;
- (c) Observable diachronic change: In many Bantu languages one can currently observe the continuation of the process of converting more verb stems into modality morphemes;

³By Proto-Bantu I will refer here only to the reconstructions which exclude the 'semi-Bantu' languages of Western-Equatorial Africa. That is, to those reconstructions such as undertaken by Meinhof [1932] or Guthrie [1967].

- (d) Morphotactics: The morphology of monosyllabic and vowel-commencing verb stems in Swahili and other languages furnishes more evidence to the modal-verb origin of the modality prefixes and to the earlier complement status of the current main verb stem;
- (e) Morphophonemics: Most Bantu modality prefixes show the canonic shape -CV(V)-, but in many instances there exists internal evidence to suggest the earlier presence of a consonant at the end of the prefix, thus leading to its reconstruction as -*CV(V)C- -- which is the 'deeper' (or older) canonic shape for verb stems. (For some discussion of the boundary phenomenon involved here, see Givón [1970a; 1969:2]).

Elsewhere I have argued that modality morphemes in Bantu and also in general receive their spelling (phonological shape) in the second (post-transformational) lexicon. (For details, see Givón [1969:2.4.1.; 1971b]). The seeming historical change is thus from erstwhile first-lexical verbs to the current second-lexical 'grammatical morphemes'. This change may have little semantic import, though I have shown elsewhere [Givón 1970b:4] that this change in morphemic status may often be accompanied by considerable semantic re-analysis, in terms of the hierarchy and markedness of the features involved. In many instances, however, one may still describe the syntactic-semantic relation between the modality prefix and the verb stem as a main verb:comp. verb relation. The diachronic change at the morphemic level may thus be interpreted as a complementation operation, with the characteristic equi-NP deletion T-rule:



Bantu languages show considerable variation with respect to the presence of agreement morphemes in the complex verbal word. Where the diachronic re-analysis verb>modal has been completed, only one subject

agreement prefix may appear per verbal word, but not two:

- (3) A-M-verb stem-
*A-M-A-verb stem-

In other instances, when the re-analysis verb>modal has not been fully accomplished, two agreement prefixes may still be found. For example, the present-continuous modality in Siluyana is formed by the use of the copula -|i as an 'auxiliary':

- (4) ba-nu ba-|i ba-tenda
people A-be A-work
'The people are working'

Similar intermediate situations are observed in Luganda, Kirundi, Chiluba and others.

The change from the older pattern (4) to the re-analyzed pattern (3) may be also described as a change in the ordering of some specific T-rules in the grammar. Thus in (3) one may assume that equi-NP-deletion preceded the rule of agreement-copying and thus double agreement was prevented. In (4), on the other hand, one may argue that the cyclic rule of agreement-copying applied once before equi-NP-deletion and once after, thus counting two cycles, rather than the single copying cycle in (3). An alternative formulation will require special provisions for double-copying, with very little motivation from elsewhere in the grammar.

Another change associated with the diachronic re-analysis verb>modal involves the infinitival morpheme ku-. One finds this second-lexical morpheme in normal complementation of aspectual-modal verbs, as in the Swahili:

- (5) ni-na-taka ku-cheza
I-pres.-want to-play
'I want to play'

Swahili still shows the following intermediate form (for this I'm indebted to Benji Wald), with the variant meaning:

- (6) ni-na-taka cheza
 I-pres-want play
 'I am about to play'

Finally, when the modal -ta- 'future' is used (historically a derivative of -taka 'want'), one finds the normal situation:

- (7) ni-ta-cheza
 I-fut.-play
 'I will play'

but never:⁴

- (8) *ni-ta-ku-cheza
 I-fut.-to-play
 *'I will to play'

To conclude this part of the discussion, notice that the current morphemic order in most Bantu languages, modal:verb, is consistent with the current syntactic order verb:comp. The significance of this will be discussed below.

4. The Bantu verb-deriving suffixes

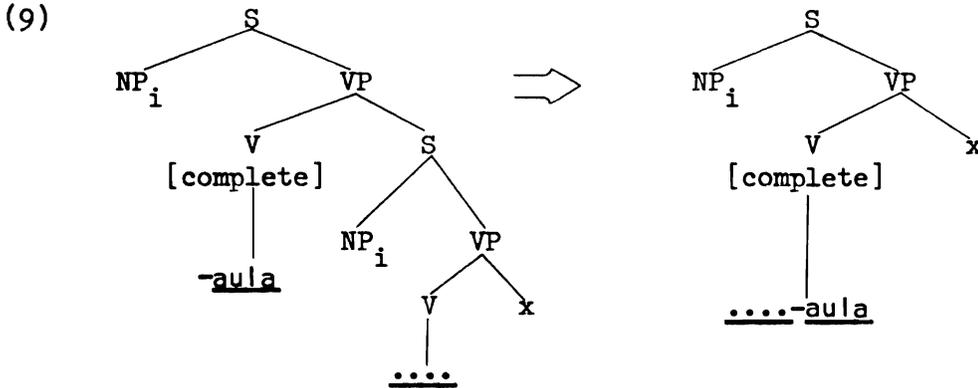
There is some evidence to suggest that many if not all the Bantu verb-deriving suffixes have also arisen, historically, from verbs. The evidence will be briefly sketched below. It is by no means complete, but nevertheless it strongly suggests a direction which I find fruitful to pursue. For more detailed syntactic and semantic analysis of some of the derivational processes involved see Givón [1971c, in preparation].

a. Semantic arguments. The semantic material added to the verb by many of the derivational suffixes⁵ is very much within the same modal-

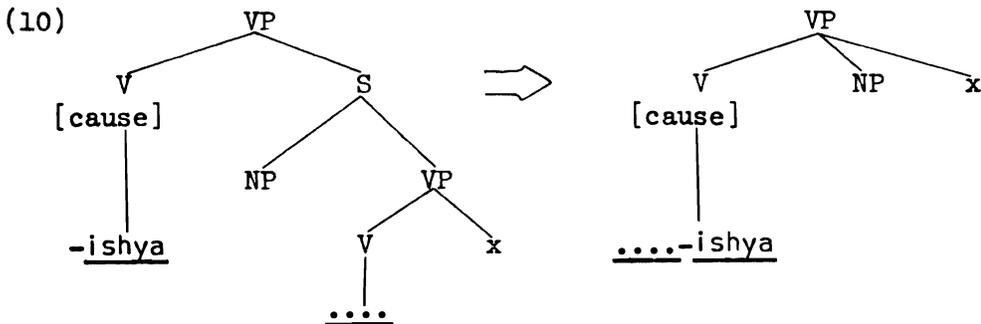
⁴The infinitival ku- still precedes monosyllabic and vowel-commencing verb stems in Swahili, as in ni-ta-ku-la 'I will eat', ni-ta-kw-enda 'I will go'.

⁵The most conspicuous exception here is the reciprocal derivation with the suffix -ana, which probably involves a variant of conjunction reduction within the pred-raising operation. For further details, see Givón [1971c, forthcoming].

aspectual verb features observed earlier for the modality prefixes: 'continue', 'complete', 'repeat', 'do intensively', 'do extensively', 'terminate' are some of the features which can be observed. Their relation to the verb is that of a higher verb to complement verb and may still be termed as complementation T-rule, including equi-NP-deletion. Thus, for the completive *-aula* suffix of ChiBemba:

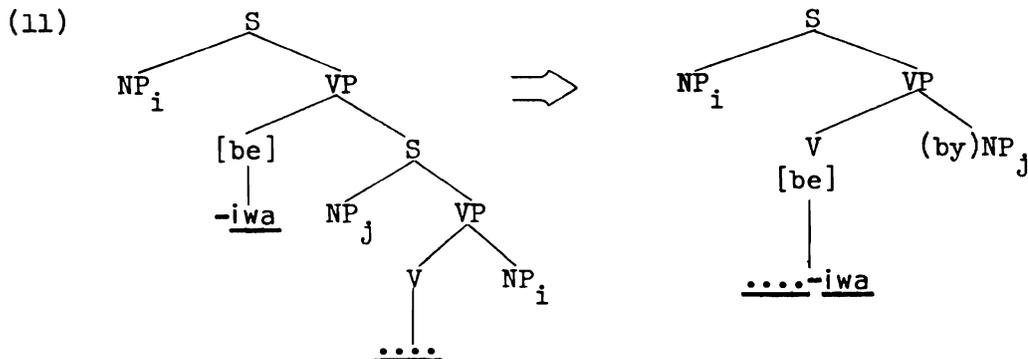


In the case of the causative suffix, it is clear that the underived verb behaves as a complement of the higher complementizer [cause], so that:⁶

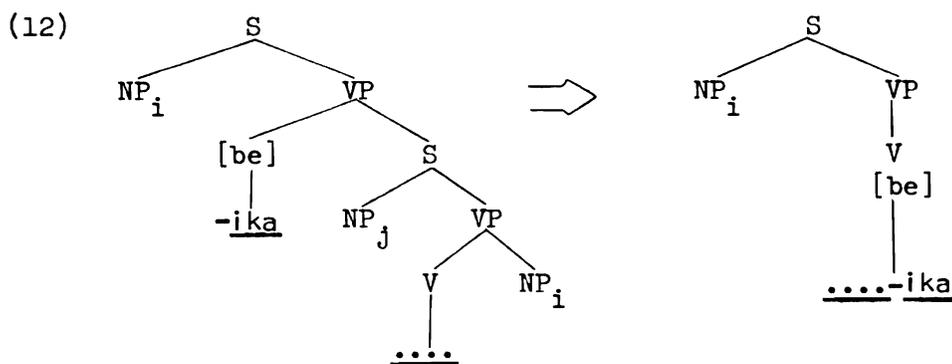


With respect to both the passive and stative derivations, I argue elsewhere [Givón 1971c, in preparation] that a complementizer [be] must be involved as the higher verb in the derivation, plus a special case of equi-NP-deletion (and in the case of stative derivations also agent deletion). The passive derivation may thus be characterized as:

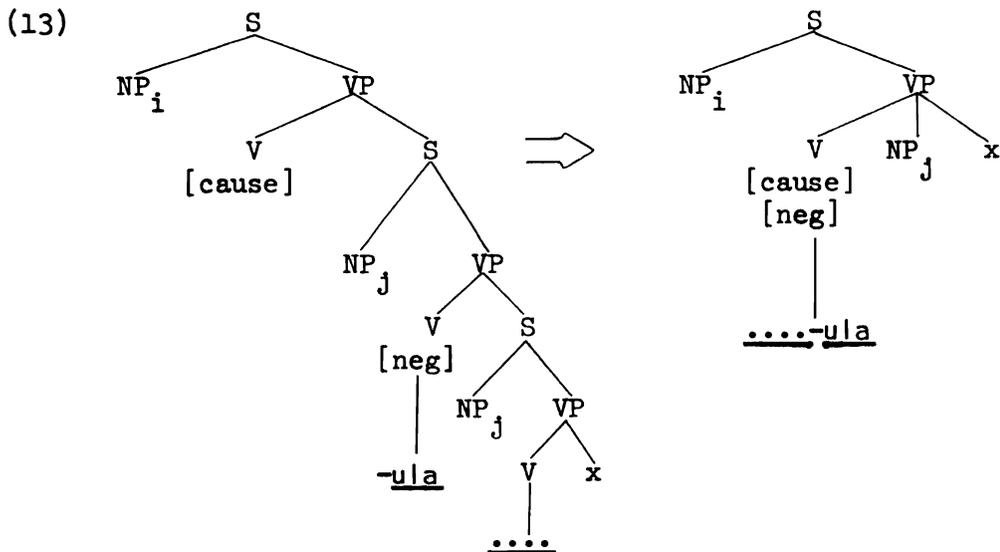
⁶Equi-NP-deletion is not involved in the causative derivation.



while the stative as:



Finally, one may also argue that the reversive suffix may have arisen from an underlying negative verb or a neg. particle in the embedded sentence in the derivation, so that the operation of neg-raising is here involved -- just as it seems to be involved in the counterparts of the very same verbs in English, cf. lock/unlock, tie/untie, bind/unbind, cover/uncover etc. It is perhaps not altogether an accident that the range of Bantu verbs to which this derivation seems to apply quite consistently very much coincides with the same semantic group in English, to which the un- derivation applies. Thus, I would suggest that the underlying derivation of the reversive in Bantu must originally have been:



The format described above is that of predicate raising. That is, a verb from an embedded sentence is raised and adjoined to the one from the higher sentence -- which then becomes, in Bantu, a suffix. This format is at present controversial, but regardless of one's position with regard to it, I would like to claim that the semantic facts seem to suggest a verbal origin for the Bantu verb suffixes.

b. Cardinal shape redundancy rules. At the word-level, that is after the insertion of second-lexical morphemes and before the application of the rules of Phonology, most Bantu languages seem to obey, with rather few exceptions, the universal morpheme structure condition:

(14) CV*

This condition may need relaxing in many cases by the occurrence of syllables of the form V. The most glaring seeming exception involves NC sequences which have historically arisen from NVC sequences and the loss of a vowel. Other 'deep' NV sequences have given rise to V sequences through the loss of the nasal. I have claimed elsewhere [Givón 1969:2] that in most Bantu languages there is sufficient internal justification for wanting to posit NV as the deep underlying form in either case. Most of these underlying NV sequences in Bantu can be shown to have arisen from *ni, though some, mostly in languages such as Swahili, may also be traced back to *mu (for some further

discussion of this, see Hoffman [1969] and Voeltz [1971, forthcoming]).

Another seeming exception to constraint (14) is found in Luganda, where identical CC sequences appear. On purely internal grounds, in most cases, one could reconstruct those at least back to *zjC sequences, and perhaps also, ultimately, back to two underlying contributors: *ljC and *gjC. (For some discussion of this, see Mould [1971, forthcoming].)

At the storage (first-lexical) level, most unextended Bantu verbs show the canonical stem shape -CVC-. Now, notice that most erstwhile verbs which turned into modality prefixes seem to show the canonical shape -CV-. (This is at the word-level. Many may still retain -CVC- at a deeper level.) On the other hand, most of the verb-deriving suffixes in Bantu exhibit the canonical shape -VC-. That is, if one assumes that both prefixes and suffixes have arisen from -CVC- verb stems, then those which became prefixes lost their final consonant, while those which became suffixes lost their initial consonant.⁷ Now, given the universal Bantu CV* canonical shape constraint at the word level, this differential loss of consonants is not only natural but also predictable, taken as a rule of simplification. Thus, once the language has re-interpreted on the morphemic level (i.e. word-level) two erstwhile distinct verbs as one word (stem plus affix), the CV* constraint is then violated, and the following simplification occurs:

$$\begin{array}{llll}
 (15) & \text{suffix:} & -\text{CVC}_{\text{v}}-\text{CVC}_{\text{s}} & \rightarrow & -\text{CVC}_{\text{v}}-\text{VC}_{\text{s}}- \\
 & \text{prefix:} & -\text{CVC}_{\text{p}}-\text{CVC}_{\text{v}} & \rightarrow & -\text{CV}_{\text{p}}-\text{CVC}_{\text{v}}-
 \end{array}$$

A. E. Meeussen and Benji Wald [both in private communication] have pointed out to me that the hypothesis expressed in (15) above does not yet explain how the neutral suffix -a got lost between the modality prefix and the stem, or, for that matter, between the stem and the suffix. This objection may be answered the following way: the suffix -a is a typical second-lexical morpheme added at word final. But the

⁷The most common suffixes are: -il-, -ik-, -ul-, -i-, -am-, -an-, -al-, -at-, -ip-, -iu-, -il-e.

morphemic re-analysis of the erstwhile -CVC- verbs into affixes would prevent just its appearance -- since the -CVC-CVC- sequence has now become a single word, so that the -a suffix is added only at its end.⁸

Alternative simplification patterns can also be observed. Thus, for example, in ChiBemba both the negative verb -kaan- 'avoid' and -bu| - 'lack, miss' have been fairly recently converted, under special circumstances, into neg-modality prefixes. In both cases the -a vowel was retained -- and even lengthened:

- (16) a-à-kaana uku-boomba 'he avoided working'
 a-à-kaanaa-boomba 'he did not work'
 á-a-bulaa-boomba, ... 'had he not worked ...'

It is very likely that this pattern is only an early intermediate one, since both instances are fairly recent. Perhaps an intermediate case may also be observed with respect to the normal neg. prefix †a- in ChiBemba, where in the infinitive it appears as -taa- :

- (17) †a-†u-bomba 'we do not work'
 ku-†áá-bomba 'not to work'

c. Internal reconstruction. Since, as I will argue below, the re-interpretation of main verbs as derivational suffixes predates by many centuries the re-interpretation of main-modal verbs as modality prefixes, it is much harder to obtain convincing etymological evidence, either internal or comparative, for reconstructing the presumed lost consonant of the verb suffixes, or identifying them with specific cognate -CVC- verb stems in Bantu or Niger-Congo. (Two recent works by Welmers [1970] and Hyman [1971] may suggest at least the possibility of the existence of such cognates.) This is of course to be expected, since most morpho-phonemic alternations level off in time, as affixes get more closely 'welded' to their stems. In spite of all this, some evidence from morpho-phonemic alternations has survived in some Bantu

⁸An obvious question here: Why do bound affixes rather than stems lose phonological material in the process of fusion into each other? For a discussion of some universal principle that may underlie this, see Givón [1971a:5.3].

languages, allowing one to reconstruct at least some -VC- suffixes as -*CVC- morphemes. Two possible examples of this are:

(a) The Modified Base suffix: Most Bantu languages furnish evidence for reconstructing this suffix as -j|-e, a form to which relatively few phonological rules may apply to yield the more common surface variants (for an illustration of this, see Givón [1970a]). In a few languages, such as Luganda, Kirundi and Runyankole, seemingly crazy alternations are observed, many times involving CC clusters (in Luganda) and specific changes on the verb-final consonant ordinarily associated with the PB /*j|. A detailed analysis of these alternations has been done by Mould [1971, forthcoming], where he has shown that many of the more crazy alternations may be explained away if one posits the deeper form -Cj|-e or even -gj|-e for the Modified Base. Or, in other words, one must reconstruct a -CVC-e sequence for this verb suffix. Polomé [in private communication] has informed me that in Chaga the MB form -gile is still attested on the surface.

(b) A boundary phenomenon in ChiBemba: There exists a strange disparity in the palatalization of Proto-Bantu */k/ in ChiBemba. The PB sequence *ki in the prefixes of class 7 has palatalized to ci (or, preceding vowels, to cy). Other *ki sequences in stem-initial position have also palatalized the same way (uku-cya 'dawn', PB -*ki- or -*ke-; uku-cila 'surpass', PB? -*kil-). Only in one position, of verb-stem final,⁹ does one find an unpalatalized /k/, before /i/ of the verb-deriving suffix. This disparity may of course be ascribed to grammatical conditions, citing environments such as 'not before verb-deriving suffixes' in the structural description of the palatalization rule. A solution of this kind, even if synchronically possible, has a

⁹This statement requires some amplification. Many former verb-deriving suffixes in Bantu have historically become fused into stem-final position, to the point where the derivation has lost much or all of its regularity. Thus, 'semantically unextended' stems nowadays may often exhibit underlying canonic shapes such as -CVCVC- or -CVCVCVC-. In my view one can simply assume that any non-initial consonant in the Bantu verb stem must have been, at some prior time, a stem-final consonant.

number of drawbacks. To begin with, it explains nothing about a highly natural assimilatory process such as palatalization. Further, grammatical conditioning of highly natural assimilation rules ordinarily arises as a result of the historical loss of an erstwhile purely phonological conditioning environment. Further, another and more restricted rule of palatalization in ChiBemba, that of /s/ > /š/, does apply in the very same pre-suffixal environment, i.e. before -ika, -ila and -ile. Finally, palatalization of many consonants in pre-suffix position does occur if the verb suffix is the causative -j-. These changes are:

- (18) k > š b > f
 t > š p > f
 s > š
 l > š
 d > š

The conditioning environment, if 'grammatical', will have to be adjusted accordingly.

An alternative solution would be to use these data for the reconstruction of a consonant-like 'boundary' at the initial position of -il-, -ik- and -ile, thus rendering them -*Cil-, -*Cik-, -*Cile, respectively. Or, in other words, one reconstructs for them the lost consonant of an erstwhile -CVC- verb stem. (As a corollary, one must assume that the historical consonant loss described in (15) must have followed the palatalization rule ki > ci in ChiBemba.)

d. The time-lag factor and some Niger-Congo comparative data. At this point one must consider the following question: How did Bantu languages develop two types of verb affixes, both arising from main verbs -- but one as prefixes and the other as suffixes? The following facts also bear on the answer to this:

(a) The verb suffixes of Bantu are attested as cognates in all Bantu languages, and can thus be reconstructed back to Proto-Bantu. That is, they must have arisen at some time before the putative Bantu dispersal. On the other hand, most of the modality prefixes cannot be reconstructed back to Proto-Bantu, they have arisen in each language

from specific verbs and must have developed independently in each Bantu language following the Bantu dispersal. There has obviously occurred a considerable time lag between the conversion of main verbs into verb suffixes and that of other main verbs into verb prefixes.

(b) Welmers [1970] has shown the rudiments of a verb-deriving system roughly corresponding to the Bantu one in Igbo, a Kwa language, where some existing lexical verbs have become suffixed to other verb stems, deriving meanings some of which are quite similar to the Bantu derivations.

(c) Stahlke [1970] has shown that in many Kwa languages, which are related to Bantu within the Niger-Congo family, complex verbs (i.e. verbs which take more than one argument) equivalent to those of Bantu, Indo-European or Semitic languages, rarely occur as single lexical items. Rather, one finds in Kwa the phenomenon of serial verbs, where the number of verbs in a verb phrase roughly corresponds to the number of nominal arguments in the sentence -- with only equi-NP-deletion applying but no predicate raising during lexicalization. As an example consider the following (taken from Stahlke [1970], from Yatye):

- (19) iywi aba otsi aba iku utsi
 child act stick act shut door
 { 'The boy caused the stick to cause the door to shut' }
 { 'The boy shut the door with the stick' }

Or the following, from Yoruba [Stahlke 1970]:

- (20) mo mu iwe wa fun e
 I took book came gave you
 'I brought the book for you'

In (19) above three serial verbs correspond to the English causative verb 'shut'. In (20) three serial verbs correspond to the English causative verb 'bring'. In my opinion the existence of Serialization in Niger-Congo is extremely significant for the hypothesis concerning the rise of the Bantu derivational suffixes from verbs. The Bantu derived verb involves, in its meaning, the chunking of several more primitive verbs into a single verbal word, through the operation termed

above predicate raising. The main difference between Bantu and the serializing Kwa languages seems to be that while both perform equi-NP-deletion in the complex verb phrase, only Bantu performs predicate raising, chunking the verbs-in-series into one word, while Kwa languages leave them as separate lexical items, often interspersed among the nominal arguments in the verb phrase.

(d) Voeltz and Hyman [1970, unpublished] and Hyman [1971, to appear] have shown that the phenomenon of serial verbs, in a form substantially identical to that of Kwa, appears in the Bamileke group, a 'semi-Bantu' dialect cluster of the Cameroun -- and one of the closest relatives of 'Bantu proper' in West Africa. The significance of these findings is enormous, since there is no single instance known in which a language first developed big, 'chunky', 'multi-argument' verbs, then decomposed them into component serialized verbs.¹⁰ If this is indeed true, then one must assume that at the point before the split of Bantu-Proper from the 'semi-Bantu' group, they all had verb serialization in their verb phrase. And this considerably strengthens my hypothesis about the verbal origin of the Bantu derivational suffixes.

(e) Larry Hyman [in private communication] has pointed out to me that there exist numerous examples in Niger-Congo serializing languages in which the complementizer (main) verb in the series follows rather than precedes the complement (lower) verb. He thus cites the following example from Gwari:

(21) wo lo tnu-tnú zo lo
 he work working finish go
 'He is finishing working'

where lo 'go' is used as the modal 'present continuous', zo 'finish' and tnu-tnú 'work' (preceded by the semantic cognate-object lo

¹⁰A seeming exception to this is Krio from Sierra Leone, which has taken 'chunky' English verbs and serialized them. However, Krio is a contact language, and one may argue that it has simply borrowed the surface shapes of 'big' English verbs to lexicalize already-serialized Kwa-type constructions, a process that is in no way similar to a historical change from a non-serializing to a serializing verb phrase.

'work'). The significance of this type of data is considerable, since it represents a situation in Niger-Congo where, in addition to verb serialization, the main verb is the last element in the verb phrase, the next-highest verb is next-to-last and the lowest verb is the first. Or, in other words, it represents the syntactic order COMP:VERB in the verb phrase. The relevance of this to the present discussion will be made apparent shortly.

(f) Finally, A. E. Meeussen [in private communication] has informed me that there exist several North-West Bantu languages, such as Ewondo, Bulu, Fang, Mboon and others (of zones A,B of Guthrie's [1948] classification, the closest to Niger-Congo) in which verb serialization still exists. Further, in some of those (Mboon) the syntactic order in the verb phrase is COMP:VERB.

5. A hypothesis

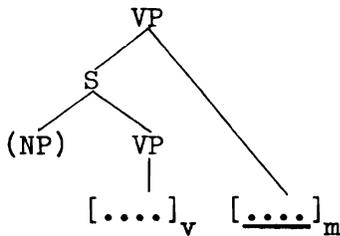
The question posed earlier -- why first verb suffixes and later verb prefixes -- will be now answered by the following hypothesis:

- (a) At some very early stage of Proto-Proto-Proto-Bantu, in all likelihood before the separation from the Benue-Congo sub-family, the precursor language must have had the syntax COMP:VERB in its verb phrase.
- (b) At that early stage the precursor language must have also had a wide measure of verb serialization in its verb phrase.
- (c) Subsequently the first morphemic re-interpretation (or diachronic predicate raising) occurred, through which main verbs became verb suffixes -- since at that time they followed the complement verb.
- (d) This morphemic shift represented the end of verb serialization in Bantu-proper. The fact that the 'semi-Bantu' languages still serialize verbs strongly suggests that the first morphemic shift occurred after the separation of Bantu-proper from its closest relatives in West-Africa, and perhaps also after the separation of many Zone A,B languages from the main Bantu-proper core.
- (e) At some later date the core Bantu-proper group changed its verb phrase syntax from COMP:VERB to VERB:COMP, which is the current order.

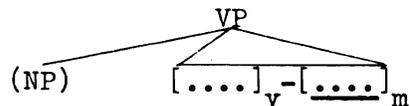
- (f) Main verbs that have become verb affixes after this diachronic change in syntax naturally became verb prefixes.
- (g) This second morphemic shift has occurred, for the most part,¹¹ after the putative Bantu-proper dispersal. This explains the relatively low number of overall cognates among the Bantu modality prefixes.

The differential rise of prefixes (later) vs. suffixes (earlier) is thus explained by the syntactic difference at the time these morphemic shifts occurred:

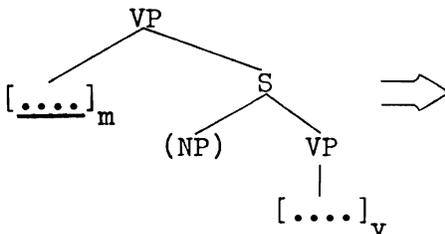
(22) comp:verb (syntax)



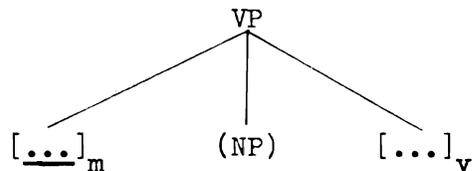
suffixation (morphology)



(23) verb:comp (syntax)



prefixation (morphology)



6. Discussion

The hypothesis presented above is admittedly strong. It would be nice if data from other areas of Bantu grammar could support it. One such support involves the anaphoric object ('infix') pronoun. Given the current verb:comp syntax of Bantu, it is very hard to account for an anaphoric object pronoun occurring as verb prefix, as in the

¹¹A few Bantu modality prefixes may be reconstructed back to Proto-Bantu. The most conspicuous among those are the á and à past-tense markers. What this implies is that the second morphemic shift, that of main verbs to modality prefixes, has already begun before the putative Bantu dispersal.

Swahili:

(24)	ni-li-ona <u>kitabu</u>	⇒	ni-li- <u>ki</u> -ona
	I-past-see <u>book</u>		I-past- <u>it</u> -see
	'I saw the book'		'I saw it'

This position of the object pronoun, which is reconstructible to Proto-Bantu, finds a most natural explanation in my hypothesis concerning a diachronic change in Bantu syntax -- namely, the Bantu object prefix arose at the time when the precursor language must have still had the verb phrase syntax COMP:VERB. The subsequent syntactic change has merely left the bound pronoun 'stranded' or 'petrified' in its earlier syntactic position, a rather typical state of affairs with bound morphology (for similar developments in Amharic, Arabic and Indo-European languages, see Givón [1971a]).

One would eventually like to know why the erstwhile verbs condensed into verb suffixes became derivational (first-lexical) morphemes, while many semantically similar main verbs later condensed into prefixes became modality (second-lexical) morphemes. The explanation to this may derive from diverse quarters. First, notice that the presence of the 'infix' object pronoun has prohibited the modality suffixes from fusing into the verb stem, as has indeed happened in the case of many of the older derivational suffixes. Next, one might also suspect that the difference between first vs. second lexicon spelling is not purely morphemic, but is grounded in some deeper syntactic-semantic facts. It is, for example, almost universal to find the following categories appearing as inflectional -- i.e. second-lexical: pronouns, subject-agreement morphemes, some case marking morphemes, and tense-aspect-modals. All these categories are sensitive to T-rules: pronominalization and agreement are T-rules of feature copying; genitive case often arises out of relative embedding; some accusative cases ('I want him to go', 'I wish her good luck', 'I knew them to be fools') arise from complementation; finally, modality morphemes depend heavily on many T-rules involved in various verb complementations, conjunctions and subordinations (for further discussion of dependent modals, see Givón [1971b]). Finally, a detailed semantic analysis of the tense-

aspect-modal system of at least one Bantu language [Givón 1970b] has shown that a considerable amount of semantic re-analysis has gone on between the main-verb stage and the subsequent modal-prefix stage. Thus, even when the etymological connection between a certain modality prefix and a certain verb is rather clear, the semantic re-interpretation seems to have been considerable. For example, the Bantu copula -li has become the [past] marker in Swahili, a [future] marker in Luganda, a [present-progressive] auxiliary in Siluyana and sometimes a marker for the feature [action focus] in ChiBemba. As I have shown elsewhere [Givón 1970b], much of the semantic reanalysis also involves the hierarchy and markedness properties of the erstwhile verbs.

The value of a farfetched hypothesis is often due to its usefulness in explaining a wide range of phenomena which until then seemed unrelated. I believe the hypothesis concerning the verbal origin of the Bantu verb-deriving suffixes goes some way in attempting to do just that.

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