

SYNTACTIC CHANGE IN THE LAKE LANGUAGES OF NORTHEAST BANTU¹

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1. The Problem of Syntactic Change

A syntactic change is said to have occurred in a language when speakers of the language no longer use the same syntactic construction or device to express some semantic content that their predecessors did. For example, predecessors of contemporary English speakers used to say "I know not", but nowadays inheritors of the English-speaking tradition say "I don't know". Thus, formerly the semantic content of negation (used for purposes of denial, refusal, etc.) was expressed by a syntactic construction in which the negative marker was postposed to the main verb involved in the proposition to be negated, while currently the negative marker is preposed to the main verb but postposed to a pro-verb do. We can formalize this change as a change in the rules of negative placement for English, but we don't know why this change occurred. In this way, this particular change in English is similar to a large number of known changes in a great variety of natural languages. For example, we don't know why the preposition a in Spanish has extended to a position preceding virtually all human NP's used as grammatical objects. In fact, the point of the discussion so far is that we know very little about why syntactic change occurs.

One of the most enduring and widely accepted explanations for some syntactic changes is that the changes are a response to phonological changes in the language. A well-known example of this is the explanation for the change from the use of case markings suffixed to NP's to the use of the syntactic devices of word order and/or prepositions to express

¹Part of this research was carried out while I was supported by NSF-GS-2887. I thank my friends Russell G. Schuh and Larry M. Hyman for discussions which have led to improvements in this paper.

grammatical relations between NP's and the verb of a sentence, in the history of the Romance languages and English. Phonologically caused reduction of vowel distinctions upon which case distinctions depended in these languages led to the replacement of this system by syntactic devices mentioned above. An important point to recognize in such arguments is that the motivation for the syntactic change is not the sound change that intervenes between the syntactic devices used in the former and latter stages of the language to express the same semantic content, but rather the preservation of a surface expression of the semantic content. Why else should a phonological change provoke a syntactic response?

When the motivation for syntactic change is viewed in this way it is possible to go beyond the limitations of syntactic changes linked to phonological changes, and include among the causes of syntactic change other syntactic changes. This leads us to explore the relation in syntax between various grammatical systems. It raises such questions as: why was it that word order took over the function of cases rather than some other syntactic device? What was word order doing in the language before? What happened to whatever word order was doing in the language before? Did some other syntactic device replace the former function of word order, or are some syntactic distinctions in language expendable? If so, which ones? Why?

One line of investigation opened up by such questions leads to the identification of chain-shifting of grammatical devices through the history of a language. If certain semantic relationships require surface syntactic expression in a language, then if one grammatical device, call it X, shifts its grammatical function, then some other grammatical device, call it Y, may shift its grammatical function to express what was formerly expressed by X. This, in turn, may necessitate the shift of a third grammatical device, say Z, to replace the former function of Y. It should be noted that syntactic shifting, like any kind of linguistic change, takes time, and if a certain grammatical distinction must be preserved a second syntactic shift must start before the first

syntactic shift is complete. For example, if the semantic relations expressed by case had to be preserved syntactically in English, then word order and prepositions must have begun to move to preserve those functions before the demise of the case system. In such an event, we must have a period of syntactic variation in which two syntactic devices are used to express the same semantic content. We note, for example, that the use of both prepositions and word order allowed for a redistribution of semantic relationships left by the exiting case system. The use of the preposition to replacing some functions of the dative case possibly allowed some of the original functions of word order to remain, so that English has been left so far with variations such as "he gave the dog a bone" and "he gave a bone to the dog", where the difference between the two sentences does not involve case relations. Similarly, in Spanish we see that the extension of the preposition a to all animate objects allows word order to function in other ways, for example, by allowing postposing of the subject to the verb without loss of distinction:

- (1) mira a la gente "he/she is looking at the people"
 mira la gente "the people are looking"

A most interesting question is: are there some semantic distinctions that are required of all natural languages? And, furthermore, are there some semantic distinctions that are required of all natural languages which have certain other semantic distinctions expressed on the surface of their grammars?

With these questions in mind, the case of a syntactic change in the Lake languages of Northeast Bantu takes on interest for linguistic theory in general.

2. A Syntactic Change in the Lake Languages

The underlying theme of the following discussion will be that the particular change which I will describe for the Northeast Bantu Lake languages is that the change was motivated to preserve the distinction between predicate and attributive position. Examination of the

distinction between predicate and attributive position in three of the languages in (2) below reveals a difference between the syntactic devices used to maintain this distinction.

(2)	PREDICATE	ATTRIBUTIVE
	'the person is pretty'	'the pretty person'
<u>Luganda</u>	omuntu murungi	omuntu <u>o</u> - murungi
	NP ADJ	NP PP ADJ
<u>Nyankore</u>	omuntu <u>ni</u> - murungi	omuntu <u>o</u> - murungi
	NP PM ADJ	NP PP ADJ
<u>Luhia</u>	omundu <u>ni</u> - <u>o</u> -mulayi	omundu <u>o</u> - mulayi
	NP PM PP ADJ	NP PP ADJ

Glancing first at the Attributive construction, it is noticed that the ADJ is prefixed with a marker which I will call the PP (Pre-prefix, also called an Initial Vowel, e.g. Ashton [1954], Augment, e.g. de Blois [1970] or Double Prefix, e.g. Guthrie [1948]). It can be safely assumed that the marking of the attributive ADJ by a PP is an inherited feature of the Proto-language from which the three languages under consideration are derived.

When we look now at the predicate constructions in the three languages we see that each language differs, and yet within each language the distinction between the attributive and predicate ADJ is maintained. In Luganda the Pred ADJ is not marked in any way and thus it is distinct from the Attrib ADJ which is PP-marked. In Nyankore the Pred ADJ is marked by a particle *ni* which I will call the PM (Predicate Marker, more commonly known as the copula -- I am avoiding the latter term for reasons which I will make clear in the following section). Compared with Luganda, the Nyankore Pred ADJ is distinguished from the Attrib ADJ on two counts: one, it is marked with a PM; two, it is not marked with a PP. In Luhia the Pred ADJ is marked with both a PM and a PP. It is distinct from the Attrib ADJ on only one count, the marking

by the PM.

Given that the three languages represented above are genetically related and in close geographical proximity to each other², we may assume that the languages share a common origin which will be called PLB (Proto-Lake Bantu), and that PLB must have had one surface syntactic construction for the Pred ADJ corresponding to the three different constructions found in the present-day daughter languages.

I will argue in this paper that the distinction between Pred and Attrib as expressed in Luganda is the original distinction in PLB, and that the PM found in Nyankore and Luhia is an innovation which resulted as a response to a change in function of the PP in earlier stages of those languages so that the distinction between Pred and Attrib constructions could be maintained.

Essentially, this change is of the same type as the change from the use of a case system to word order and prepositions in English and Romance, but it is somewhat neater and phonological change is not involved. The relationship between these changes is as follows:

At stage one in the history of a language a surface syntactic device X (e.g. case inflections, the PP, etc.) is used to express a semantic relationship between two or more syntactic categories (e.g. NP's and the main V, Attrib and Pred ADJ's, NP's, V's, etc.) At a later stage in the development of the same language, X is no longer used productively and its earlier function has been taken over by one (or more) other syntactic devices Y (and Z; e.g. word order, prepositions, the PM, etc.). The "receiving" device Y existed at an earlier stage in the same language, when X was still productive. But at a later stage, Y has taken over the function of X, and thus the syntactic change has occurred.

²A good map of the relative locations of the various Lake Bantu languages is found in Tucker and Bryan [1957].

3. The Lake Languages of Northeast Bantu

One disadvantage in work on the Northeast Bantu languages is common to investigating syntactic change in most natural languages. That is, earlier stages of the languages are not attested and therefore must be reconstructed. Since the principles of syntactic change are not well developed, it is difficult to reconstruct an earlier syntactic construction in a language with as great a degree of certainty as for phonological systems. However, the basic tools and concepts of syntactic reconstruction are the same as those for phonological reconstruction, viz. comparison of the languages involved and of other related languages if available, and investigation of the geographical distribution of the constructions in question in order to see if, in fact, we are dealing with a conservative feature or an innovation.

The languages which will concern us are Luganda, Nyankore, and Luhia. They are relatively closely related, although there are some disagreements about their relative classification.³ It will be useful to also consider Haya along with Nyankore for purposes of the grammatical constructions discussed here. My personal experience indicates that the Haya and Nyankore recognize special affinities of their languages as opposed to Luganda.

The most notable feature of all the Lake languages, which distinguishes them from adjacent non-Lake languages, is the morphological complexity of the PP. In the Lake languages, the PP consists of

³Guthrie [1948] assigns Nyankore to a group E10 along with Luganda as distinct from another closely related language Haya which is put in a group E20. This grouping is based on geopolitical considerations, all E10 languages being in Uganda, while all E20 languages are in adjacent Tanzania to the south. A more satisfactory classification, in my opinion, is that of Doke [1961] in which Nyankore and Haya are grouped together as North 20-3 while Luganda is assigned to North 20-4. Nyankore and Haya are clearly opposed to Luganda on phonological grounds, the most striking example of their close affinity being the sharing of a palatal reflex of Proto-Bantu *b before *u, not found in Luganda e.g. Proto-Bantu *mbuda 'rain' has Nyankore and Haya reflexes -njura.

a + Vowel (where the Vowel is an anticipation of the vowel of the class prefix determined by the lexical class of the noun). The PP coalesces into a single vowel unit by a reduction noted in a great variety of Bantu languages:

(3) a + a > a a + i > e a + u > o

Thus, using Luganda as an example, the PP has the following form:

(4)	<u>a</u> -bantu	'people'	(a + a - ba - ntu)
	<u>o</u> -muntu	'person'	(a + u - mu - ntu)
	<u>e</u> -kintu	'thing'	(a + i - ki - ntu)

Although the PP has survived in all the Lake languages, it has undergone various changes in its use as a syntactic device according to the language. In the following two subsections, I will discuss the evidence that the Luganda construction in (2) above represents the original PLB form of the Pred ADJ. The discussion involves the geographical distribution of the PP and the PM in the Bantu area as a whole.

3.1. The PP in Bantu. Traces of some form of the PP are found throughout the Bantu speaking area, with the exception of the extreme Northwest area of Gabon and Cameroun (Guthrie's zones A and B, c.f. Guthrie [1948]). It may be that the PP never developed in that area, but considering that the area is well-known for the disintegration of the class-prefixing system (Hyman [1970]), it is more likely that the PP was a property of Proto-Bantu. The PP has suffered various fates in different Bantu areas. For example, in the Southwest Bantu area (particularly Angola and Namibia) its various phonological forms have fallen together and it has become inseparably a part of the class prefix which follows it (e.g. Umbundu, most forms of the PP have been reduced to o). In the Northeast Bantu area, it has disappeared in Kenya and appears to be much reduced in function in Coastal Tanzania.

Morphologically, it appears in various forms depending on the language area. In a few Northeast Bantu languages it appears as an anticipation of the class prefix (CP), which obligatorily marks nouns in all Bantu languages (excepting some nouns of some classes in the Northwest area), e.g. ga (PP)- ma (CP) - futa (N stem) 'oil' in Gisu. This anticipation of the CP is apparently the oldest form of the PP, and it is found in two separated areas in Northeast Bantu (Gisu in the Northern Lake Victoria region, and on the Northern Tanzania coast).

For the distribution of the forms and functions of the PP in the entire Bantu speaking area, I am relying heavily on de Blois [1970], who has conducted an extensive survey of the PP reviewing available descriptions of Bantu languages throughout the area. However, the conclusions I reach here are not discussed in his study.

The most widespread form of the PP is an anticipation of only the Vowel of the CP. This is an understandable line of development if it is assumed that it is the result of the loss of the initial consonant still preserved in Gisu (as mentioned above) and Northern Coastal Tanzanian languages such as Zaramo and Luguru. This is the form found, for example, to the South and West of the Lake languages (e.g. Rwanda i (PP) - ki (CP) - nhu 'thing', u - mu - nhu 'person', a - ma - futa 'oil'). The Lake languages are virtually unique in having the PP form: a + Vowel of CP.⁴

⁴There is, however, a large area including parts of the Congo and Southwest Bantu in which it appears that the formation typical of the Lake Bantu PP was formerly present. Various patterns of syncretism indicative of the loss of function of the PP, however, have obscured this original pattern. I suspect that the Lake Bantu PP formation is an innovation involving another morpheme prefixed to the original PP after the loss of the original consonant, and that the formation is not uniquely a property of PLB, but this will not be further discussed in this paper. At any rate, at present the Lake languages are isolated from other languages which show formerly the formation was more widespread (see de Blois [1970, p. 100] for present patterns of the PP).

In most of the area where the PP has survived, it is not found prefixed to Nouns and Adj's used predicatively. Exceptions are found in Southwest Bantu (e.g. Kwanyama, Herero, Umbundu) where the PP has been fossilized and has no function, and in the Lake languages which will be the focus of attention here.⁵

Typically, among those languages which retain the PP in productive use, the PP is found marking attributive constructions, but not predicative ones.

The absence of a PP marking Pred N's and ADJ's extends over Guthrie's zones F, G, H, J, K and M; that is, most of the area in which the PP is productively used (cf. de Blois [1970, pp. 121-122]). Typical examples outside the Lake area are:

(5)		ATTRIB		PRED
	<u>Zulu</u> (Southeast Africa)	umuntu <u>o</u> mkhulu		umuntu mkhulu
		N <u>PP</u> ADJ		N ADJ
		'the big person'		'the person is big'
	<u>Nyiha</u> (Southwest Tanzania)	umuntu <u>u</u> - mumsi		umuntu mumsi
		N <u>PP</u> ADJ		N ADJ
		'the small person'		'the person is small'

The widespread distribution of this distinction indicates that it is a conservative feature of Bantu, when coupled with the observation that there are no other special affinities among the languages which share it which can be attributed to innovation.

The distinction survives in Luganda in this form as shown in (6) below. Since the use of the PP to distinguish Attrib from Pred constructions predates the development of PLB, it is concluded a fortiori that

⁵A more serious set of exceptions is found in Southern Bantu and its Northern border area e.g. Subiya, Ila, Tonga (de Blois [1970, p. 95]).

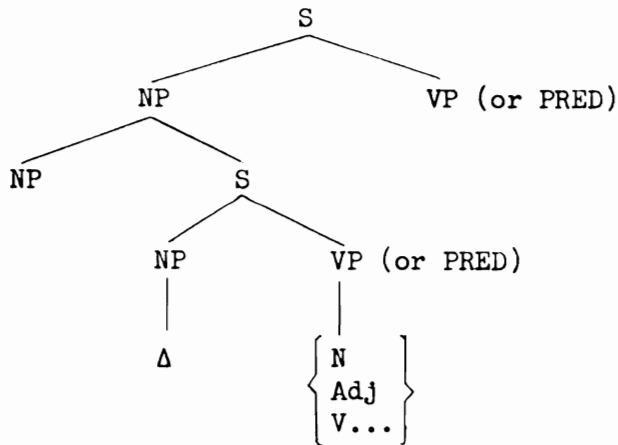
it was also a feature of PLB, which has indeed survived in Luganda.

In (6) below we see that the distinction exists for ADJ, N, and V. (The term "Attrib(utive)(Verb-phrase)" is synonymous with Subject Relative clause (Subj Rel), meaning the V is the main V of a relative clause whose subject is coreferential with the head noun modified by the clause).

(6)	<u>Luganda</u>	ATTRIB	PRED
	ADJ:	omuntu <u>o</u> -mulwadde	omuntu mulwadde
		N <u>PP</u> ADJ	N ADJ
		'the sick person'	'the person is sick'
	N:	omuntu <u>o</u> -musomesa	omuntu musomesa
		N <u>PP</u> N	N N
		'the person (who is) a teacher'	'the person is a teacher'
	V:	ekikopo <u>e</u> -kigudde	ekikopo kigudde
		N <u>PP</u> V	N V
		'the cup that fell' (<u>or</u> 'the fallen cup')	'the cup fell'

The use of the PP marking Attrib, as opposed to Pred, constructions can be expressed by a rule applying to structures of the form:

(7)



(where Δ is a dummy symbol for a NP coreferential with the NP commanding its S.)

Thus, the rule is a Subj Rel rule of the form:⁶

(8) SUBJ-REL (or PP-Marking)

$$\text{NP} - [\Delta - \text{VP}]_S \rightarrow 1 \text{ PP } 3$$

1 2 3

(where 1 and Δ are coreferential)

This rule is the basic Luganda Subj-Rel or PP-Marking rule, which has been inherited from PLB. From now on I will refer to rule (8) as the PP rule. It distinguishes Attrib from Pred constructions in as much as the Attrib position satisfies the conditions for application of the rule while the Pred position does not.

⁶Other rules for relativization, involving coreference between an antecedent and a NP other than the subject of the relative clause, do not involve the PP. They vary within the Lake area. The most widespread construction outside the Lake area involves the use of a demonstrative as a relative pronoun introducing the relative clause.

There are contexts other than attributive position in which a PP, or at least a reflex of a historical PP, appears marking an N in Luganda. For example, the PP is normally prefixed to N's which are subjects or objects of V's. These occurrences of the PP will not concern us at this point, but will be mentioned when I go into further discussion of the evolution of the PP from Proto-Bantu in section 4.

Before considering the "deterioration" of the PP rule in the Lake languages of Northeast Bantu, let us consider the historical status of the PM *ni*.

3.2. The PM in Bantu. The PM *ni* is much more restricted in its geographical distribution than the PP in Bantu. As a PM, *ni* is confined to parts of the Eastern Bantu area, including most of Northeast Bantu (particularly the area in which the PP has been lost, importantly), the adjacent Northeast Congo, and to the south of the Northeast Bantu area it occurs in Southern Coastal Bantu (Mozambique) and Northern Zambia. Its restriction to Eastern Bantu exclusively indicates that its use as a PM is not a feature of Proto-Bantu.⁷

The most commonly used predicate marker (or copula) in Bantu is *li*, which is reconstructible as Proto-Bantu **de*. As opposed to *ni*, *li* functions as a tense carrier. It is not possible in this paper to distinguish the original uses of *li* and *ni*, but it is worth mentioning that *li* is traceable back to Proto-Bantu while *ni* appears to originate in Eastern Bantu, and that in the Northeast Coastal area *ni* appears to be expanding at the expense of *li*.⁸ While I will treat this problem more

⁷This is one of the reasons that it is evident that the usage of the PP in the Pred in Southern Bantu and its Northern border area is an innovation as suggested in footnote 5.

⁸More detailed discussion of the difference between the use and origin of *ni* and *li* involves discussion of the tense systems of Bantu languages and is beyond the scope of this paper. Swahili shows the greatest expansion of *ni* with near complete loss of *li* as a PM.

fully in a separate paper, it is worth mentioning here that the fact that the *li* predicate marker is inflected for tense indicates that predicates introduced by *li* are ones which must be temporally specified. The PM *ni* is never inflected for tense and therefore is neutral as to whether the predicates it introduces are temporally specified.

To both the west and east of the Lake languages *ni* is found functioning as a predicate marker. Luganda, which is the most conservative of the Lake Bantu languages with respect to PP-marking (as discussed in 3.1 above), does not have the PM *ni*. In this respect, Luganda appears to be conservative as well. The PM *ni* appears to be moving into the Lake languages from both a southeasterly and northeasterly direction where its usage is well established.

The Northeast Bantu Lake area and its vicinity is the only area in which both the PM *ni* and the PP co-occur marking predicate N's and ADJ's (cf. de Blois [1970, p. 123]). This strongly suggests a relationship between the two markers as devices for distinguishing Pred and Attrib constructions.

In the following section it will be seen that the appearance of the PM *ni* in the Lake area is related to the loss of the PP as a device for maintaining the Pred:Attrib distinction.

4. The Demise of the PP Rule in the Lake Languages

Starting with the PP rule (See (8)) as the original PLB rule for surface expression of the Pred:Attrib distinction (henceforth P:A), the use of the PP in various Lake languages show stages and directions in the demise of the PP rule. With the extension of the PP to Pred N's and ADJ's in Nyankore and Luhia, the PP no longer functions to maintain P:A. At the same time the PM *ni* is found performing the previous function of the PP in this respect. However, whereas formerly it was the Attrib construction which was overtly marked on the surface by the prefixation of the PP, after the syntactic change occurs, it is the Pred construction which is overtly marked by the prefixation of the PM. Examining the individual languages involved in this change gives us insight into how

this syntactic change was effected. Consider first the Nyankore P:A constructions for N, ADJ and V.

(9)	<u>Nyankore</u>	ATTRIB	PRED
N	omuntu <u>o</u> -mwami	omuntu <u>n(i)</u> - <u>o</u> -mwami	
	N <u>PP</u> N	N PM PP N	
	'the man (who is) a chief'	'the man is a chief'	
ADJ	omuntu <u>o</u> -muhango	omuntu <u>ni</u> -muhango	
	N PP ADJ	N PM ADJ	
	'the big man'	'the man is big'	
V	abantu <u>a</u> -bamureebire	abantu bamureebire	
	N PP V	N V	
	'the people who saw her'	'the people saw her'	

The P:A distinction remains in Nyankore, but it is unchanged in surface expression only for V. The PM is found marking both the Pred N and ADJ. The PP has spread to the Pred N, and therefore the PM can be seen as the instrument for maintaining P:A there, but the PP is not found marking the Pred ADJ so that the PM appears redundantly.

In attempting to understand the transition from PLB to Nyankore, two causal possibilities can be set up on the basis of (9):

(a) The PM *ni* was introduced before the Pred N and ADJ. Because the absence of the PP on these Pred's was no longer instrumental in maintaining the P:A distinction, the PP was able to spread to the Pred N. Under this interpretation the Pred ADJ represents an earlier stage for the Pred N construction as well, and the redundancy shifts from the PM to the absence of the PP. This possible line of development can be represented as follows

(10)	PRED CONSTRUCTION	EXAMPLES	STAGE
	N { N } { ADJ }	omuntu { mwami } { muhango }	PLB

N <u>PM</u>	{ N ADJ }	omuntu ni- { mwami muhango }	1
N <u>PM-PP-N</u>		omuntu n(i)- <u>o</u> -mwami	2

This possibility will be called 1-PM since the PM appears at stage 1. Questions unanswered by 1-PM are: why did stage 1 occur? why did the PP spread to N but not ADJ?

(b) A second possibility is that the PP first spread to the Pred N endangering the P:A distinction for N. Then the PM appeared preserving the distinction, but it also spread to the Pred ADJ. The line of evolution represented by this possibility is:

(11)	PRED CONSTRUCTION	EXAMPLES	STAGE
	N [N ADJ]	omuntu [mwami muhango]	PLB
	N <u>PP-N</u>	omuntu <u>o</u> -mwami	1
	N <u>PM</u> [PP-N ADJ]	omuntu ni- [o-mwami muhango]	2

This possibility will be called 1-PP since the PP appears on the Pred N in stage 1. Questions unanswered by 1-PP are: why did stage 1 occur? why did the PM spread to both Pred N and Pred ADJ?

We have, then, the familiar chicken-and-egg problem. What happened first? Did the PP spread to the Pred N because its absence was redundant because of the presence of the PM, or did the PM appear before the Pred N to maintain the P:A distinction threatened by the spread of the PP?

Unfortunately, we lack languages which exemplify stage 1 of either 1-PP or 1-PM in the Lake area or vicinity. However, in support of hypothesis 1-PM we have the present state of Luhia, which can be interpreted as an added stage in the line of development seen in Nyankore.

(12)	<u>Luhia</u>	ATTRIB	PRED
	N	omundu <u>o</u> -musoomi N <u>PP</u> N	omundu <u>n(i)</u> - <u>o</u> -musoomi N <u>PM</u> <u>PP</u> N
		'the person (who is) a teacher'	'the person is a teacher'
	ADJ	omundu o-mulayi N PP ADJ	omundu <u>n(i)</u> - <u>o</u> -mulayi N <u>PM</u> <u>PP</u> ADJ
		'the nice person'	'the person is nice'
		abandu <u>a</u> -bamulaba N <u>PP</u> V	abandu bamulaba N V
		'the people who saw her'	'the people saw her'

The difference between Nyankore set (9) and Luhia set (12) is simply that the PP also occurs on the Luhia Pred ADJ as well as the Pred N. It appears then that whether we adopt 1-PP or 1-PM, we still must recognize a third stage in Luhia, in which the PP spreads to the Pred ADJ:

(13)	<u>Luhia</u>	PRED CONSTRUCTION	EXAMPLES	STAGE
		N PM $\left[\begin{array}{c} \text{PP-N} \\ \text{ADJ} \end{array} \right]$	omundu n(i) $\left[\begin{array}{c} \text{-o-mwami} \\ \text{-mulayi} \end{array} \right]$	2
		N PM <u>PP</u> $\left[\begin{array}{c} \text{N} \\ \text{ADJ} \end{array} \right]$	omundu n(i) $\left[\begin{array}{c} \text{-o-mwami} \\ \text{o-mulayi} \end{array} \right]$	3

Thus, we see the spread of the PP to the Pred ADJ after the PM has already been made available for the function of maintaining the P:A function. This may be interpreted as evidence to support 1-PM since we then see the recurrence of the same mechanism in Luhia at Stage 3.

Consideration of Nyankore's sister, Haya, gives us some further indications of the relationship between the PP and the P:A distinction before the introduction of the PM ni.

4.1. The Demise of the PP rule in Haya. Haya and Nyankore are closely related, geographically adjacent and mutually intelligible. A Nyankore speaker has relatively little to learn to become an acceptable Haya speaker. However, he must learn a different use of the PP. In most

respects the use of the PP in Haya is more conservative than in Nyankore, but it still shows some significant changes from the PLB situation. The Haya paradigm is as follows:

(14)	<u>Haya</u>	ATTRIB	PRED
	N	omuntu o-mwami	omuntu mwami
		N <u>PP</u> N	N N
		'the person (who is)	'the person is a chief'
		a chief'	
	ADJ	omuntu (o)-murungi	omuntu murungi
		N (<u>PP</u>) ADJ	N ADJ
		'the good-looking person'	'the person is good-looking'
	V	abantu (a)-bamboine	abantu bamboine
		N (<u>PP</u>) V	N V
		'the people who see her'	'the people see her'

The Haya PP is only optionally present in the Attrib construction. If it is not present, P:A is morphologically unmarked in Haya. The optionality of the PP has not been encountered in the discussion of Nyankore and Luhia above.⁹

According to Rascher's description of Haya, the use of the PP to mark the Attrib construction is emphatic. Thus, for ADJ for example, the PP serves the function that stress in English serves:

- (15) a. omuntu murungi 'the gòod-lòoking pérson' (as ATTRIB)
 b. omuntu o-murungi 'the góod-lòoking pèrson'

It would be possible to represent the innovation in the PP-rule indicated by Rascher's observation by using a free-floating feature E(mphasis) which must appear in the Haya PP-rule in order to satisfy the conditions of its operation. However, to do this would be to misrepresent the process of change which appears to be taking place in Haya. Furthermore, the feature itself is ad hoc and circular. The only way we know

⁹In the constructions that concern us here, Luhia and Nyankore do not admit optionality of the PP.

the construction is emphatic is by the use of the PP. If we stop to consider what emphasis is, we see that it is undesirable to represent the change from PLB to Haya in this way.

The success with which emphasis is recognized in speech depends on its unexpectedness. This means that if the PP is actually used to emphasize the information contained in the Attrib construction in Haya, it must be used relatively rarely as opposed to its absence in the same constructions. This should be empirically measurable in terms of the frequency of occurrence of PP marking the Attrib in Haya speech. There have been no empirical studies of this nature in Haya. However, my own investigations of Haya indicate that in at least some Haya speech communities the PP is very rarely used to mark Attrib ADJ and V. In responding to a long translation task from Swahili to Haya, a twenty year old native speaker of Haya from Rubafu seeking employment in Dar es Salaam (recently arrived from his home area) never used the PP to mark an Attrib construction, this in spite of the formality of the situation which should favor emphatic speech. When questioned afterwards about the possibility of using the PP to mark the Attrib construction, the speaker admitted to it but was at a loss to distinguish its use from its non-use, e.g. Swahili: *tulimwona mtu mzuri* 'we saw a pretty person' was translated *tinabona omuntu murungi* (no PP marking the Attrib ADJ *murungi*). The speaker accepted *tinabona omuntu o-murungi* on questioning.

We note no more than that the PP rule is variable for ADJ and V in Haya, and furthermore that its operation is disfavored. In observing the process of change in progress in a language, we find that a conservative and an innovative feature vary before the innovation completely takes over (cf. Labov [1972], Wald [1973]). It is most likely that this is what is happening in Haya. It is clear that the use of the PP represents the conservative PLB feature. To the east of the Lake area the PP has already been completely lost. Thus, Haya represents a westward movement of this change (cf. Section 2, above). The major difference between the Haya development of the PP and the Luhia-Nyankore development

is that in Haya the loss of function of the PP is reflected in its loss as a morphological entity, while in Nyankore and Luhia the loss of function is reflected in its expansion to Pred position, so that it is no longer involved in maintaining the P:A distinction for N (Nyankore and Luhia) and ADJ (Luhia). The same Haya speaker rejected attempts to mark any Pred with a PP.

What is most important in understanding the differential development of the PP in Haya and the other Lake languages, is that the PP remains virtually invariant on the *Attrib N*, which thus remains distinct from *Pred N*. Haya, then, offers evidence that the P:A distinction can be suspended for ADJ and V, but not for N. This suggests that the line of development which distinguishes Haya from Nyankore and Luhia depended on whether the loss of function of the P:A distinction began with N or not. The P:A distinction has remained for nouns marked by the PP in Haya, and the PM *ni* has not been introduced. When I tried to introduce it, the Haya speaker rejected it. Haya, thus, points to the line of development 1-PP rather than 1-PM in explaining the situation of Nyankore and Luhia. The line of development proposed upon consideration of Haya involves a leap-frogging effect which hastens the demise of the PP rule:

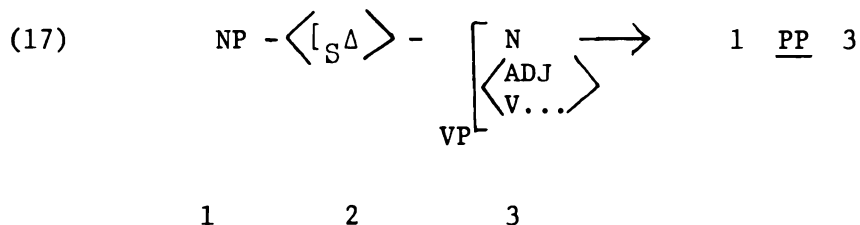
(16)	PRED CONSTRUCTION	STAGE	REPRESENTED BY
	N { N ADJ }	PLB	Luganda (Haya)
	N <u>PP</u> N	1	(loss of P:A for N)
	N <u>PM</u> PP N	2	(restoration of P:A for N)
	N <u>PM</u> ADJ	3	Nyankore
	N PM <u>PP</u> ADJ	4	Luhia

The initial spread of the PP appears unexplained so far. This will be attended to in Section 5 below, where I will argue that this development is the continuation of a process which began before the formation of a distinct PLB.

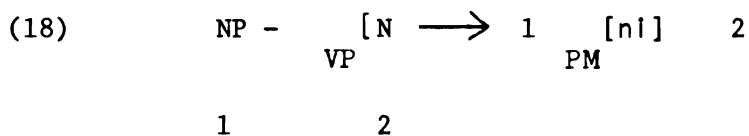
The other stages in (16) can be seen as an increase in the generality of rules precipitated by stage 1. In formal terms the changes can be

represented as follows:

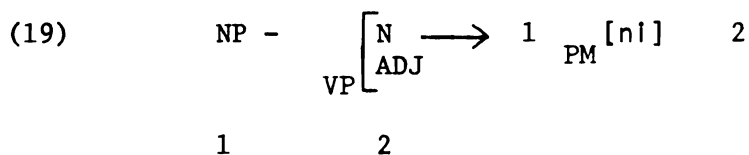
Stage 1: The PP spreads to the Pred N. This change has not been motivated in the preceding discussion:



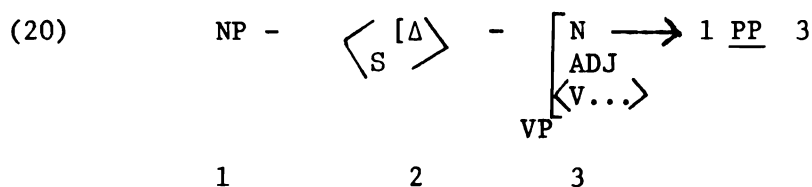
Stage 2: The spread of the PP to the Pred N threatened the loss of P:A in that environment. This was maintained by the addition of a rule marking the Pred N with the PM ni:



Stage 3: The PM marking rule expands to the Pred ADJ increasing its own generality:



Stage 4: The PP expands to the Pred ADJ increasing the generality of the rule begun in stage 1 without endangering the maintenance of P:A:



Stage 4 represents the situation in Luhia.¹⁰

5. Generalization and Loss of Function of the PP

So far the PP has been presented as a linguistic element which served in PLB to mark the P:A distinction. This is reflected in rule (8) above, repeated here for convenience:

(8) PP-Marking: NP - [Δ - VP] \longrightarrow 1 PP 3

1 2 3

(where 1 and Δ are coreferential).

Rule (8) is accurate in reflecting this function of the PP in Luganda which has been taken to be representative of PLB in this respect. But it does not account for all occurrences of the PP in Luganda, nor in the other Lake Bantu languages, even setting aside the innovative rules proposed for Nyankore and Luhia. In particular, in all the Lake languages it is "normal" for non-Pred nouns to be marked with a PP, (cf. Ashton 403-13 for Luganda). Thus, for example, the head noun of segment 1 (NP) in (8) above is virtually invariably marked with a PP in Luganda. Rule (8) does not account for this. It will not be the main purpose of this section to wrestle with the question of whether (8) should be amended to account for the PP in non-Pred nouns which are also non-Attrib nouns (e.g. subject and object NP's) or whether another rule which marks PP's should be introduced into the grammar of Luganda, but rather to trace the spread of the PP from its earliest Bantu stage in order to show that there has been a continual expansion of the PP from the earliest stage culminating in its near

¹⁰There is no evidence from any part of the Bantu area of a further generalization on stage 4. In point of fact, stage 4 leaves the PP functioning simply as a marker of a subject relative clause. What appears to happen next is that the rule is done away with altogether as the device for oblique relativization extends to subject relativization as well. At this point the PP is certainly no more than a functionless fossil, and not to be accounted for by any rule other than the one which gives shape to the CP. This stage is typical of Kuria among the Lake languages, and Southwest Bantu.

uselessness in function in Luhia.

To begin with, it is evident that non-Pred nouns were normally PP-marked in PLB since all Lake languages agree in this feature. As a point of departure for tracing the development of the PP from its inception I will begin with de Blois' [1970] speculation based on his study of the distribution and function of the PP throughout the Bantu area:

"...in Proto-Bantu the augment (i.e. the PP: BW) was placed before every determinate nominal group. Starting from this hypothesis it will be clear that originally only independent adjectives, connectives, possessives and relatives were accompanied by the augment (first element of the nominal group). The occurrence of the augment with attributive adjectives, connectives, possessives and relatives must be of later origin..." (de Blois [1970, p. 151])¹¹

Replacing de Blois' use of the word 'determinate' with 'definite', he is positing the original Proto Bantu rule for the use of the PP as:

$$(21) \emptyset \rightarrow \underline{PP} / \text{--- NP} \left[\begin{array}{l} [-\text{Pred}^{12}] \\ [+def] \end{array} \right]$$

Two strong pieces of evidences in support of this position are found in Nyankore and Luganda: Non-use of the PP with NP's modified by certain indefinite quantifiers and non-use of the PP to mark a NP which is the object of a negative sentence:

(22) No PP with indefinite quantifiers:

(both Luganda and Nyankore)

buli muntu 'everybody ~ anybody'¹³
 Qu N

muntu ki 'which person?'
 N QU

¹¹ Underlining is my own, BW.

¹² -Pred is not implied by de Blois' paragraph, but is evident from the preceding discussion in this paper and in de Blois' data.

¹³ Generally in Bantu languages the same morpheme is involved in expressions equivalent to the quantifiers 'all' and 'any' in English. In contradistinction to English, Bantu languages are Neg-V, so that the equivalent of all the people didn't go is interpretable as nobody went.

(23) No PP with object of negative sentences:

Luganda: †(a)-ogula nte 'don't buy a/the/any cow'
 NEG V N

Nyankore: †i-ndikwenda nte 'I don't want a/the/any cow'
 NEG V N

Non-use of the PP with objects of negative sentences is understandable in that negation of an indeterminate implies negation of the same proposition with any definite NP. Thus, for example, if to the offer 'do you want this beautiful cow' one responds 'I don't want any cow', this response is interpretable as a refusal of the offer, whatever else may be implied.

There is much evidence that the morphological origin of the PP is as a preposed demonstrative. First, by its original function as a marker of definiteness it functions like a demonstrative which has been stripped of locative or temporal significance. Secondly, in Nyankore a noun is not PP-marked when it is modified by a preposed demonstrative, although the demonstrative shows that the modified noun is definite:

(24) ogu muntu 'this man'.
 DEM N

The PP-marking of the modified noun when a demonstrative follows it appears to be a later development in Nyankore:

(25) o-muntu ogu 'this man'.
 PP N DEM

In fact, it appears that the original Pre-Proto Bantu order was DEM-N. This order is still possible in most Bantu languages, while the order N-DEM, although more frequently used in many Bantu languages, is not found in a few languages (e.g. Rwanda, which is a PP language that does not exhibit the PP when the noun is modified by a demonstrative). Accepting Pre-Proto Bantu order as a DEM-N, it is evident that the PP had already lost its status as a demonstrative before the N-DEM order became prevalent in the ancestral forms of Lake Bantu. The PP is redundant as a definitizer when a demonstrative is also present.

Luganda has gone further than Nyankore in extending the PP, in that the modified noun is PP-marked in either a DEM-N or N-DEM order:

- (26) guno o-muntu, 'this man'.
 DEM PP N

The demonstrative which gave rise to the PP in Bantu will be referred to as DEM-P. The shape of the PP in the most conservative Bantu languages also supports the notion that this morpheme originated as a demonstrative and also suggest some of the detail of the original shape of the DEM-P.

In the most conservative Bantu languages the PP has the phonological shape CV (consonant + vowel) and is identical with the 'secondary concord' form used with demonstratives (and also verbs and most noun modifiers) as opposed to the noun prefix (noun-class prefix) found on noun and adjectives. The distinction of form only shows in the nasal-initial prefixes, as in Nyankore:

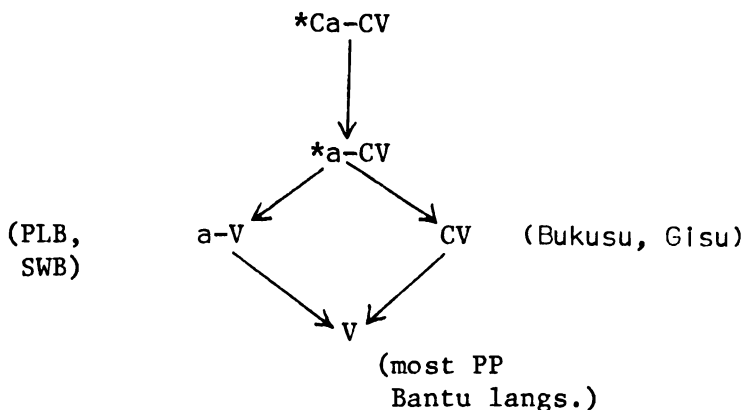
- | | | | |
|------|-----|------|--------------|
| (27) | DEM | N | |
| | GU | MU | (class 1, 3) |
| | GI | MI | (class 4) |
| | GA | MA | (class 6) |
| | GI | N(I) | (class 9) |

This CV reflex of the PP is preserved in several languages, as for example in Bukusu:

- (28) xu-mu-liro 'fire' (Nyankore o-mu-liro)
xa-ma-bele 'breasts' (Nyankore a-ma-bele)

I shall therefore propose here that the original shape of the DEM-P was Ca-CV, where the second CV morpheme is the concordial marker a demonstrative 'carrier' morpheme consisting of some consonant plus the vowel a. This a is, further, assumed to have survived in PLB and South-West Bantu, while various pathways of phonological attrition have led to the present shapes of the PP in other Bantu sub-groups:

(29)



Thus, the original (Pre) Bantu PP rule may be expressed as:

(30) $\emptyset \rightarrow \text{DEM-P} / \text{--- NP} \left[\begin{array}{l} -\text{Pred} \\ +\text{Def} \end{array} \right]$

Of course, it is not necessary to take a segmentation position here. Rule (30) may have simply arisen from the loss of the feature [+Loc] in the ancestor DEM-P. This process is common in language and has recurred with other demonstratives in Bantu languages.¹⁴

The spread of the PP into the Attributive position may have been a pleonastic development which is foreshadowed in (30), as was suggested by de Blois [1970]. When the definite head noun is not realized on the surface (i.e. it is deleted through anaphora), the PP (or DEM-P) is then absorbed on the attributive modifier. This putative original situation may be expressed in the rule:

(31) $\text{DEM-P} \left[\begin{array}{l} \text{NP} \\ +\text{def} \end{array} \right] \left[\begin{array}{l} \text{NP} \\ \text{S} \\ \text{ATTRIB} \end{array} \right] \rightarrow 1,3$

1 2 3

¹⁴For example, in Swahili, where the normal N-DEM order prevails, the remote demonstrative may be used as a mere definitizer in a DEM-N order, so that: mtu yule 'that man', yule mtu 'the man'.

titative change in the number of nouns marked with a PP, but had a decisive qualitative effect in erasing the requirement that a noun be definite in order to be PP-marked. The same expansion of the distribution of the PP is also found with object NP's in affirmative sentences in the Lake languages as evidenced in Nyankore in (33b). This is typical of the Lake languages.

The result of these innovations is an increase in the generality of the PP rule in marking nouns. Given the almost universal spread of this innovation in the Bantu area, it appears that the following rule may be written for Late Common Bantu:

(34) $\emptyset \rightarrow \text{DEM-P} / \text{_____} \left[\begin{array}{l} \text{NP} \\ [-\text{Pred}] \end{array} \right]$

Rule (34) is no more than a generalization of rule (30), by loss of the condition [+def]. More accurately, (34) should be restricted so as not to apply to objects of negative sentences. However, in point of fact, Luganda and Nyankore obscure this issue by generalizing the absence of the PP to nouns serving as objects of negative sentences whether they are definite or not. The following Nyankore sentence illustrates this development (Morris and Kirwan [1958, p. 3]).

(35) ti-ndikukozesa nyondo e-mpango 'I didn't use the big hammer'

The PP is conspicuously absent from the object N, but we know that the NP is definite because the PP appears marking the attributive adjective. Historically, the marking of the attributive adjective should follow the marking of the modified noun as rule (32) indicates. Thus, it appears that the Nyankore development illustrated in (35) is best described as the result of a deletion rule which deletes the PP of the object noun in a negative sentence. This being the case, rule (34) is accurate as it stands for Nyankore and Luganda,¹⁵ providing the deletion rule follows it.

¹⁵The Nyankore situation is also typical of Luganda according to Martin Mould (personal communication).

It is most probable that the phonological attrition of the DEM-P to a PP began as rule (34) became established in Bantu. At this point the PP has lost a good part of its original informational content, i.e. that of marking definite nouns, and functions now solely to distinguish predicate from non-predicate nouns. Even the absence of the PP on objects of negative sentences has become redundant, and thus signals nothing in that context. Assuming that phonological attrition began with the PP before a noun, where its function was weakest, in most cases this attrition took place immediately before a class prefix of the form CV- of which the V is identical to the last vowel of the DEM-P.¹⁶ This attrition continues into the fractionalization of Bantu as evidenced by its various results in attested Bantu languages.

However, prior to the fractionalization, the attrition had already spread to the attributive position with one exception, viz. where the subject of the relative S was not coreferential with that of the head noun, as in oblique relativization.¹⁷

The spread of the attrition to the attributive position can be seen as a generalization of the attrition of the DEM-P to a position before a concordial marker with which it is coreferential. Where an underlying subject of an embedded S is coreferential with the head noun, the subject NP of the embedding will be represented on the surface by a concordial marker which refers to its noun class. The outcome of this extension of phonological attrition is the PP, and may be represented as follows:

¹⁶ There are a number of "class"-less N's in Bantu languages which exhibit a PP but not a CP. These are discussed by me in another paper.

¹⁷ An innovation in Southern Bantu leads to the use of the PP in oblique relativization, but the PP is in concord with the subject of the relative S and is therefore not a direct descendant of DEM-P which would have been in concord with the commanding noun.

$$(36) \quad \underset{\text{DEM-P}}{[\text{CaCV}_i]} \quad \text{-->} \quad \underset{\text{PP}}{[\text{(a) (c) v}_i]} \quad / \quad \text{---} \quad \text{CM}^{[\text{CV}_i]}$$

(where CM and DEM-P are coreferential)

The surviving DEM-P has been replaced in various ways in various Bantu languages, the most usual way being by another demonstrative (which may have already been functioning as an alternant for introducing a relative clause).¹⁸

These changes lead us to the PLB stage from which the further fate of the PP has been discussed in section 4.0. In Nyankore and Luhia we have seen that a further generalization of the PP rule of (34) leads to a loss of the condition [-Pred], leaving the rule:

$$(37) \quad \emptyset \quad \text{-->} \quad \text{PP} \quad / \quad \text{---} \quad \text{NP}^{[}$$

At this point the PP is clearly functionless for nouns, and the PM *ni* is seen to take over maintaining the P:A distinction.

There remain a number of interesting questions to be answered in this account of the evolution of the PP from Proto-Bantu to PLB. For example, why did DEM-P generalize into a marker of a definite noun in the first place? I suspect that the DEM-P was in competition with other demonstratives at the time for marking a definite noun. I lack enough information to make this a confident proposal at this time.

5. The Predicate Marker

In Section 4.1 it was proposed that the PM *ni* came to the rescue of the threatened P:A distinction following the spread of the PP to predicate nouns:

$$(38) \quad \underset{1}{\text{NP}} - \underset{2}{\text{VP}}^{[\text{N}]} \quad \text{-->} \quad \underset{1}{\text{PM}}^{[\text{ni}]} \quad \underset{2}{\quad}$$

¹⁸In Nyankore and Haya the DEM-P syncretizes with a demonstrative. Nyankore: aV₁CV₁ e.g. ogu (class 1) eki (class 7); Haya aV₁CV₁o e.g. owo (class 1) ečō (class 7). Appleby's [1961] Luhia (Butere) shows a quasi-demonstrative CVa, e.g. kya (class 7). Luganda shows a most interesting development involving CV-ee.

Naturally we would like to know why *ni*? Where did it come from? Its immediate origin is apparent from Haya, a language which does not use *ni* to distinguish P:A for nouns or any of the other categories we have been concerned with. Nevertheless, *ni* is found in Haya marking a predicate Pronoun with an impersonal subject as in:

- (39) *ni*-*inywe* 'it's you'
 ni-*inye* 'it's I'

Thus, there is a proto-type for the PM rule already evident in Haya:

- (40) \emptyset --> *ni* / NP $[\Delta]$ — VP $[\text{PRO}]$

(where Δ is empty¹⁹)

This same construction is found in Nyankore and Luhia, although not in Luganda and is assumed to go back at least to PLB.²⁰ It is easy to see PM-marking as a generalization of (40).

6. Conclusions

In this paper I have attempted to show the case of one syntactic change being motivated by another syntactic change. To be more precise one syntactic change is motivated by the 'need' to preserve a distinction which is threatened by another syntactic change. On the basis of the example of the Lake languages of Northeast Bantu, I would like to propose two principles dealing with this phenomenon.

¹⁹ It is empty in terms of lexical filling. In discourse, constructions of this type have subjects which refer to prior sentences with unknown subjects, the subject turning out to be the pronoun. The prior sentence may be manifest in a relative clause commanded by PRO, e.g. *ni-iwe otunobire* 'it is you who have hated us' where the subject of the higher sentence is 'the one who has hated us', by coreference.

²⁰ Luganda is innovative with respect to the copula although it is conservative with respect to the PP. It appears that the copula *-ee* is related to the *-ee* of the oblique relative. This cannot be pursued here. Earlier history of *ni* is also interesting, as suggested by an analysis of Haya in which *ni* is interpreted as a marker of the dummy subject NP rather than of the predicate, but this need not be discussed further here.

(1) In any language there are certain semantic distinctions which require overt syntactic expression.

(2) No distinction is immune to the pressures of syntactic change, but in the event that one syntactic change threatens to eradicate a required distinction another syntactic change must occur to maintain that distinction.

With regard to principle (1), it is clear that in any given language there must be some distinctions which must be preserved, since the result of the loss of all such distinctions would be the loss of any surface manifestation of a grammar, i.e. simply the total loss of language. However, it is not likely to be the case that the only distinctions that need to be preserved are universal distinctions (e.g. Noun: Verb, etc.). That is, the maintenance of certain distinctions in a language depend on the existence of other distinctions in a language. This is certainly so in the case I have been discussing, since there are languages which do not require overt P:A distinctiveness, although they are apparently rare (Malay appears to be an example). This calls to mind universal implicational models of language, such as those being researched by the Stanford group of linguists. To my knowledge there have been no studies of the relationship between predicate and attributive constructions among these research efforts.

This paper will have served its purpose if it has called attention to the problem of syntactic change and the preservation of semantic distinctions as a motivation for syntactic changes, and it is hoped that it will stimulate further research into the evolution of languages to discover other examples of the process and eventually an explanation of what type of distinctions can be expected to be preserved in a given language, and what syntactic devices can be expected to preserve them if a particular syntactic change, whatever its motivation (generalization, phonological change, etc.), threatens them.

REFERENCES

- Appleby, L. L. 1961. A First Luyia Grammar. Nairobi: East African Literature Bureau.
- Ashton, E. O., E. M. K. Mulire, E. G. Ndawala, A. N. Tucker. 1954. A Luganda Grammar. London: Longmans.
- de Blois, K. F. 1970. "The augment in the Bantu languages." Africana Linguistica IV, Tervuren: Musee Royal de l'Afrique Centrale.
- Doke, C. M., D. T. Cole. 1961. Contributions to the History of Bantu Linguistics. Johannesburg.
- Guthrie, M. 1948. Classification of Bantu Languages. London: International African Institute.
- Halliday, M. A. K. 1970. "Language structure and language function" in New Horizons in Linguistics. J. Lyons, ed. London: Penguin.
- Hockett, C. F. 1958. A Course in Modern Linguistics. New York: Macmillan.
- Hyman, L., E. F. K. Voeltz, G. Tchokokam. 1970. "Noun class levelling in Bamileke". Studies in African Linguistics 1.2:185-210.
- Labov, W. 1972. "The internal evolution of linguistic rules," in Linguistic Change and Generative Grammar, R. P. Stockwell and R. K. S. Macaulay (eds.), Bloomington: Indiana University Press.
- Morris, H. F., B. E. R. Kirwan. 1957. A RuNyankore Grammar. Nairobi: Eagle Press.
- Rascher, A. 1958. Guide for Learning the RuHaya Language. Bethel Mission.
- Tucker, A. N., M. Bryan. 1957. Linguistic Survey of the Northern Bantu Borderland, London: International African Institute.
- Wald, B. 1973. Variation in the Tense-Markers of Mombasa Swahili, Ph.D. Columbia University (unpublished).