SYNTACTIC CHANGE IN LAKE-BANTU: A REJOINER

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1. Introduction

In the last issue of SAL Wald discussed a case of two converging syntactic changes in the lake area of North-East Bantu (Ganda, Nyankore, Luhya, Nya). The changes involve the complementary functional distribution of two morphemes in the grammar, the copula ni and the Pre-Prefix vowel (henceforth PP). Briefly stated, Wald suggests that in the Lake-Bantu area the copula ni as a predicate marker represents a more recent innovation, while the use of the PP as an attributive (contrasting with predicative) marker is an older stage in the grammar of Lake-Bantu languages. In other words, Wald suggests that the contrast ATTRIBUTIVE/PREDICATIVE for adjectives, verbs, possessives or nouns, was initially marked by the prefix-morphology contrast VCV/CV, but was later replaced by the contrast CV/ni-CV, respectively. In the course of his argument Wald makes a number of assumptions that, I believe, are open to questions. Some of those are not essential to the argument, and will not be discussed here in much detail. Others, more germane to the argument, are:

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1 I am indebted to Benji Wald, A.E. Meeussen, Erhard Voeltz and Martin Mould for helpful comments on an earlier version of the manuscript.

2 Wald also assumes that the o- and e- vowels in the PP in Luganda arise as a result of vowel-fusion with a preceding morpheme a-. This assumption has no shred of evidence to support it. The lowering of the initial vowels u-/l- to o/-e- is currently in the middle of happening in KinyaRwanda. There are several ways one could view this process. First one may view it as a partially grammar-influenced dissimilation. One may also view it as a natural lowering rule in word-initial position. Finally, a suggestion for which I am indebted to Martin Mould, one may concede that the spirit of Wald's interpretation of this phenomenon was indeed correct in the following way: Many words in the discourse preceding both object and subject nouns are verbs. And in Bantu in general many of those are likely to end with the neutral vowel -a. And as Wald [1973] points out, the fusion: a + u > o and a + l > e is a widespread rule in Bantu. Thus many PP's in Bantu tend to be pronounced, in rapid speech, as o- , e- due to this process. This may very well influence their form in isolation as well, or at the very least accelerate other natural processes.
(a) That the copula ni is an innovation in the Eastern Bantu zones;
(b) That the PP was a pre-noun demonstrative in Proto-Bantu and later, (following de Blois [1970]), a definitizer.

In this paper I would like to show that there exist both factual and theoretical grounds for believing that the replacement process described by Wald went on in exactly the opposite directionality. That is, the copula ni is not an innovation in the Eastern Bantu zones but is rather reconstructable to Proto-Bantu and most likely, in some form or other, also to Proto-Niger-Congo. And further, there exists an alternative—and perhaps more plausible—scenario for explaining the introduction of the PP into the morphology of noun modifiers, one which depicts this process as a natural outgrowth of the function of the PP in Proto-Bantu as a referentiality marker on nominals.

2. The Copula ni in Bantu

At the crux of Wald's argument lies the assumption that the copula ni is an Eastern-Bantu innovation. This argument is supported by the fact that in languages west and north-west of the east Congo dividing line, i.e. languages chiefly of the Western and North-Western Bantu zones, the copula ni is not attested. Even disregarding the fact that Meeussen [1967] has reconstructed both ni and its negative counterpart * for Proto-Bantu (as well as the inflected copulas -lI and -ba, to be discussed later on), I would like to suggest that the assumption of the loss of ni in the Western and North-Western zones is much more plausible than the assumption of its innovation in the Eastern zones. The argument for the loss hypothesis rests first on a number of patterns observed in Bantu languages outside the North-East corner. It is further augmented by a more careful re-examination of at least one North-West Bantu language (Lomongo), and is further strengthened by considering related languages in Niger-Congo. I will begin the discussion by citing the distributional pattern of ni in a number of languages from Central, Eastern, Southern and North-Eastern Bantu.
2.1. Hemba (Central Bantu). In this language in most predicate environments ni was deleted and replaced by a high-tone, long vowel CVV prefix. Further (with names, pronouns and demonstratives standing as an exception), ni is used only before non-referential predicates, while -li (or -ba) are used for referential predicates. Thus:

(1) umu-ana ali umu-puupu 'The child is the thief' (ref.)
(2) umu-ana nú puupu 'The child is a thief' (non-ref.)
(3) umu-ana ali umu-suma 'The child is the good one' (ref.)
(4) umu-ana nú suma 'The child is good' (non-ref.)

For morphologically defective noun classes, i.e. 1a/2a and 9/10 in which the morphology makes it difficult to accommodate a VCV/ČVVC contrast, ni appears in non-referential predicates:

(5) umu-ana ali im-fumu 'The child is the chief' (ref.)
(6) umu-ana núi m-fumu 'The child is a chief' (non-ref.)
(7) umu-ana ali kaleemba 'The child is the writer' (ref.)
(8) umu-ana nú kaleemba 'The child is a writer' (non-ref.)

For pronouns, demonstratives and names, which naturally appear only as referential predicates, ni is obligatory, but so is -li. This suggests to me that ni here is a purely morphological-support device and had no significance in meaning. Thus:

(9) umu-ana ali ni-uyu 'The child is this one'
(10) umu-ana ali ni Mubanga 'The child is Mubanga'
(11) umu-ana ali ni iwe 'The child is you'

What is also of interest, for the eventual reconstruction of the semantics of ni as against -li and -ba, is that in past tenses (or future) -li/-ba rather than ni are used—and the prefix of non-referential predicates is CV without the extra-high tone:
(12) umu-ana á-d-ž̄f̄ umu-puupu 'The child was the thief' (ref.)
(13) umu-ana á-d-ž̄f̄ mu-puupu 'The child was a thief' (non-ref.)
(14) umu-ana á-d-ž̄f̄ umu-suma 'The child was the good one' (ref.)
(15) umu-ana á-d-ž̄f̄ mu-suma 'The child was good' (non-ref.)

The use of ni as 'morphological-support' for defective noun classes, pronouns, names and demonstratives has been extended to non-present tenses too— but there again it appears together with -l/-ba:

(16) umu-ana á-d-ž̄f̄ kaleemba 'The child was the writer (ref.)
(17) umu-ana á-d-ž̄f̄ ni-kaleemba 'The child was a writer' (non-ref.)
(18) umu-ana á-d-ž̄f̄ ni-uyu 'The child was this one'
(19) umu-ana á-d-ž̄f̄ ni-iwe 'The child was you'
(20) umu-ana á-d-ž̄f̄ ni-Mubanga 'The child was Mubanga'

Given the data above, one may reconstruct the semantics/syntax of ni in bemba as such:

(a) Third person (noun class) subjects
(b) Present-habitual tense
(c) Non-referential (i.e. attributive) predicates

Of these three, (a) and (b) are attested in Swahili (Eastern Bantu), Siluyana (Lunda-type Central Bantu) and KinyaRwanda (North-Eastern Bantu), where the use of ni is not reduced as in Bemba. In all three languages, further, there is a tendency to dispense with ni optionally. In two of them, Siluyana and KinyaRwanda, locative predicates require -l in the present tense, as is also the case in Bemba:

(21) umu-ana a-l ku-no 'The child is here'
(22) *umu-ana ku-no

Finally, while these three languages do not have the referential/non-referential contrast in predicates as does Bemba, in all three ni may not appear when the subject is first or second person. It thus seems that at the very least conditions (a) and (b) above governed the use of
n in Proto-Bantu, with the possible addition of (c). The copulas -ni and -ba functioned in the predicate-copulative paradigm in other environments, and where ni is lost they may invade its end of the paradigm and replace it.

What is also of interest in van Spanndonck's [1971] suggestion that in Luba and perhaps in other Bantu languages, the loss of ni resulted in the absorption of its high-tone on the CV prefix of the predicate noun.

Another area of great interest, in Bemba as well as in other languages where ni has largely disappeared from simple copular-predicate sentences, is its survival in two special environments which are semantically and diachronically related to predicate-copular structures: cleft sentences and WH-questions. In cleft sentences in Bemba one gets exactly the same distribution of ni as in copular-predicate sentences:

(23) ni-uyu-mupuupu nàâ-mweene 'It's this thief that I saw' (ref.)
(24) múu-puupu nàâ-mweene 'It's a thief that I saw' (non-ref.)

And ni survives in non-referential nouns of the defective noun classes, as in:

(25) ni-uyu-kalulu nàâ-mweene 'It's this hare that I saw' (ref.)
(26) ni-kalulu nàâ-mweene 'It's a hare that I saw' (non-ref.)

The semantic-syntactic relation between cleft sentences and WH-questions has been discussed extensively in the literature, and for recent Bantu references see Takizala [1972] and Heny [1971]. In Bemba there are three WH-question patterns: cleft, pseudo-cleft and 'unmarked order'. In the cleft pattern (as well as in the pseudo-cleft, which represents the 'regular copular-predicate' construction here), one finds obligatory reflexes of ni. Thus:

Subject:

(27) n-ani dàâ-boombele 'Who (is it who) worked?'
(28) ni-banl dàâ-boombele 'Who (are they who) worked?'
Accusative:
(29) \(n\)-ani \(w\-d\-m\-weene\) 'Who (was it that) you saw?'
(30) \(n\)-ban\(i\) \(w\-d\-m\-weene\) 'Who (were they that) you saw?'

Dative/prepositional:
(31) \(n\)-ku\(l\)-ani \(w\-d\-seende\-le \(i\)\(li\)\(abo\) 'It's from whom that you received the book?'

Locative:
(32) \(n\)-ki\(w\) \(d\-\-i\)\(le\) 'It's where-to that he went?'

Temporal:
(33) \(n\)-li\(l\)-ali \(d\-\-\-i\)\(sh\)\(ile\) 'It's when that he came?'

This pattern of survival of \(n\) in Bemba is important for the following reason: Further below I will show that in other languages of the Eastern zones the copula \(n\) is lost in the simple copular-predicate construction, but its reflexes are still attested in two grammatical environments: Cleft sentences and WH-question words. One may thus consider these two environments as relic environments for the copula \(n\).

2.2. Nyanja (Eastern Bantu). My data from Nyanja are derived from Price [1966]. In this language one finds a number of areas where \(n\) has survived (provided one accepts the survival hypothesis). To begin with, the reflex \(n\)- rather than \(*n\) is attested before consonants, conforming to the universal reduction of \(n\) morphemes in most Bantu languages (e.g. in class 9/10 and for the 1st person singular pronoun). Further, one still finds \(n\)- in Nyanja in a small number of predicate-adjectives, as in:

(34) \(k\)-\(u\)-\(n\)-\(a\m\) \(n\)-\(k\)-\(o\)'\(i\)\(pa\) 'Lying is bad', 'Lying is of badness'

(35) \(c\)-\(i\)-\(m\)\(a\)\(g\)\(a\) \(c\)-\(a\)-\(n\)\(a\) 'This maize is mine'

(36) \(m\)-\(a\)-\(l\)\(a\)\(ya\) \(w\)-\(a\) \(n\)-\(ga\)-\(c\)\(a\)\(be\) 'This garment is no good'

One further finds the survival of \(n\)/\(n\)- in non-cleft (or pseudo-cleft) WH-questions, as in:
(37) n-kuni zo'uma n-zl-ti 'Which is the dry firewood?'
   wood dry nI-AG-what

(38) mu-dzl wo n-zl-ti 'Which is that village?'
   village that nI-AG-what

(39) mi-nda ya-bwiro n-ji-ti 'Which are the good gardens?'
   gardens of-goodness nI-AG-what

The more common copula in Nyanja is a fusion of ni > n with -li, yielding the expected ndi, as in:

(40) ny-alugwe ndi ci-lombo c'a-ukali
    leopard is animal of-fierceness
    'The leopard is a fierce animal'

(41) eenl ma-sitolo ndi Amwenye
    owners stores are Bahais
    'The store-keepers are Bahais'

(42) Dr. Livingstone ndi m-zungu wo'yamba kudza kuno
    Dr. Livingstone is white-man of-first to-come here
    'Dr. Livingstone is the first white man to come here'

Much like in Bemba, Swahili and Siluyana, ni is not used in Nyanja in the past tense, but is replaced by -li, as in:

(43) Cidyaonga a-na-lli mfumu ya-ki-kulu ya-Angoni
    Cidyaonga AG-PAST-be chief of-bigness of-Ngoni
    'Cidyaonga was the great chief of the Ngoni'

Next one sees ni > n surviving in the use of the fused ndi in cleft sentences, as in:

(44) n-di-ne.... 'It's I (who)....'

(45) n-di-ye w-a-ti-Itana 'It's he who called them'
    be-he PRO-PAST-them-call

One finds a similar use of ndi in pseudo-clefts, as in:

(46) w-a-ku-cita ici si-n-di-ne 'Whoever did this is not I'
    PRO-PAST-do this NEG-be-I

Finally, one finds reflexes of ni > n in WH-question pronouns, whether or not in cleft constructions:
(47) n-d(1)-ani mzun gu yo 'Who is that European?' (cleft)
(48) n-na-ili-po n-d(1)-ani 'Who was here?' (pseudo-cleft)
(49) ant u a-na-bl s a la bwa-n-ji 'How did the people hide?' (pseudo-cleft)
(50) ci-lo mbo cy-a-n-ji cy-a-pha nkuku 'What animal killed the chicken?'
(51) kod l mu-funa n-d(1)-ani 'Whom are you looking for?' (pseudo-cleft)

To sum up the situation in Nyanja, I think one could see how -li has invaded the paradigm and fused with ni in simple copular constructions, cleft and pseudo-cleft. But a reflex of ni survives in some adjectives and, in particular, in WH-interrogative pronouns.

2.3. Seswati (Southern Hantu). My data on this language are derived from Ziervogel [1952]. One doesn’t find ni here at all in simple predicate-copular constructions. However, one finds its reflex n- in cleft constructions, where it is augmented by (and thus preserves!) old reflexes of the PP as well as, perhaps, old reflexes of the secondary-concord of nasal-prefix noun classes. Thus:

(52) um-fat i 'woman' n-gu-m-fat i 'it's a woman'
(53) ema-kuba 'hoes' n-ge-na-kuba 'it's hoes'
(54) aba-fat i 'women' n-ge-ba-fat i 'it's women'

In most cleft constructions, the morpheme n-gu has been generalized, as in:

(55) ngu-phans i 'It’s below'
(56) ngu-kuphi 'Where is it?'
(57) ngu-loy i 'it’s this one'(cl. 1)
(58) ngu-laba 'it’s those ones'(cl. 2)
(59) ngu-lo l i 'it’s this one'(cl. 5)
(60) ngu lo-wani 'it’s the broad one'(cl. 1)
(61) ngu la-bang ekho 'it’s the absent ones'(cl. 2)
(62) ngu la-li-ngakhall 'it’s the one which doesn’t cry'(cl. 5)
One also finds ngV in cleft-forms of pronouns, as in:

(63) ngi-mi 'it's I'
(64) ngu-we 'it's you'
(65) ngi-lo 'it's it'(cl. 5)
(66) ngu-lo 'it's it'(cl. 11)
(67) nga-bo 'it's them'(cl. 2)
(68) nga-wo 'it's them'(cl. 6)

One finds similar reflexes of n! > n in various WH-interrogatives, as in:

(69) ngu-muphi umtfana 'Which boy?'
(70) ngu-mtfana muphi 'Which boy?'
(71) ngu-bani lonyi 'Who is this one?'
(72) u-khuluma nga-bani 'Who are you talking about?'
(73) lu-swane lu-nje nga-bani 'The child looks like who?'
(74) ngu-kuph! lapha a-khona 'Where is it that he is?'
(75) u-sebenta n-jani 'How does he work?'
(76) u-ta-ku-ya ni-ni 'When will you go'?3
(77) u-sebenta nga-ni 'Why does he work?'

Thus, if one accepts the identity of n with *n!, then the survival of n! in cleft and WH-interrogative patterns conforms well to what has been shown in Bemba and Nyanja.

2.4. The copula n! outside the East-Bantu zones.

2.4.1. Lomongo (North-Western). My data for this language are derived from Hulstaert [1966]. Lomongo is presumably one of the languages in the

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3This is perhaps a case of non-reduction of n! > n due to a prohibition, in most Bantu languages, on identical CC or NN clusters.
zones where the copula ni is not attested. However, here one finds the
the reflex n- of ni in precisely the same environments as is to be
expected from the discussion above. Thus in WH-interrogatives, one finds:

(78) n-á 'What?', 'Which?'
(79) n-kó 'Where?'
(80) élé-n-kó 'which ones?'
(81) bá-n-gá 'how many?'
(82) škóké élé-n-kó 'what time?'

Similarly, in cleft constructions one finds:

(83) n-k-oníngá 'it's only the friend'
(84) ški-m-osángáká n-k-endé 'who I said is already here' (pseudo-cleft)
(85) olo wáká nd-ónko 'the one who accused him is this one' (ps.-cleft)

One also finds a reflex of ni > n in the comparative preposition 'be
like', as in:

(86) bomóng'ésé n-gá bofaya 'The locals are like the foreigners'
(87) alongi škóké n-gá saányi 'His face is like a basin'

To sum up, then, while the data here represent only one North-Western language, it nevertheless shows that ni could not have been an
Eastern-Bantu innovation.

2.4.2. Kihung'an (Western). For the data on this language I am indebted
to Alexis Takizala (in private communication). While this language re-
placed *ni with an inflected copula on the paradigm of CV-e (with the
CV- standing for the noun-class agreement morpheme), two potential survi-
valls of *ni are found in WH-question pronouns. Thus the morpheme for
'who' is na . The morpheme for 'what', which also figures in many other
WH-questions, is k'hi synchronically. But one could argue that the as-
piration is directly related to a lost n . To support this consider the follow-


The form of PB mu-ntu 'person' in Kihung'an is muu-t, with the long vowel presumably arising from the original presence of the now-lost n. The loss of /n/ before voiceless stops in Bantu is a rather widespread process, and it is often coupled with the aspiration of those stops. The data in (87a) above strongly suggest that the aspiration in khj 'what' in Kihung'an is a result of the loss of an underlying /n/.

2.4.3. Others. Meeussen (in private communication) has suggested to me that there exist tonological evidence, in the form of a 'ghost' high tone (or 'tonal raising') in predicate environments in a number of Western Bantu languages, such as Tsio, Kongo-Itandu, Yaka, Suku and Mhala. This certainly corresponds to the tonal raising observed in Bemba (see section 2.1. above) in identical environments, as well as to what van Speandonck [1971] has suggested for CI-Luba. Alexandre [1966] also notes the presence of n(i) in Bulu.

To sum up, then, the contention that the copula ni was restricted to the Eastern zones of Bantu cannot be supported. Further below I will also show that comparative Bantoid and Niger-Congo evidence suggests that ni goes back much further than Proto-Bantu.

2.5. Luganda and the Lake-Bantu area. It is certainly true that in Luganda one finds no use of ni in simple copular-predicate constructions. The more baffling fact about Luganda, however, is that it shows no traces of ni or n- in either cleft, pseudo-cleft or WH-interrogatives. This by itself certainly requires an eventual explanation. However, the copula ni is attested marginally in Naya and more than marginally in Ru-Nyankore. It is fully productive (i.e. used in simple copular-predicate constructions) in Luhya (Martin Mould, in private communication). It is fully productive in much the same way in Kinya-Rwanda, where it appears in
Clefts, pseudo-clefts and WH-interrogatives, as in:

(88) ni-nde wà-giye 'It's who who came?' (cleft)
(89) inzu ni n-nini 'The house is big'
(90) uwà-giye ni-nde 'The one who came is who?' (pseudo-cleft)
(91) ni-i ki kyà-manetsìse 'What got spilled?' (cleft)
(92) ni-mu-gitondo yà-giye 'It's in the morning that he left' (cleft)
(93) ni-ku-ìšùli yà-giye 'It's to school that he went' (cleft)
(94) ni-he yà-giye 'Where did he go?' (cleft)
(95) ni gute yà-giye 'How did he go?' (cleft)
(96) umwaka uṣìze ni wo yà-je-mo 'Last year is when he came'

It seems that in the lake area only in Luganda, Lusoga and Lunyoro, which represent a close dialect cluster, the copula ni is not attested (for this observation I am indebted to Martin Mould, in private communication).

2.5. **Summary.** I have shown that in many languages where ni does not function in simple predicate constructions, its reflexes may nevertheless be found in cleft and WH constructions. One may argue that perhaps those constructions represent the **locus of innovation**, rather than the **locus of survival** as I have been claiming all along. It seems to me that there are strong reasons for suspecting that the pattern is indeed a **relic/survival**—rather than an innovative pattern:

(a) Both cleft and WH-interrogative environments, which are diachronically as well as semantically related, are highly-marked special constructions. It is highly unlikely for a language to introduce a copula there, rather than in the unmarked predicate constructions. In particular, cleft constructions are likely to be of lower frequency than simple predicate constructions, and thus an unlikely environment for innovation, but a typical relic environment.

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For the Kinyarwanda data in this paper I am much indebted to Charles Uwimana and Alexandre Kimenyi.
(b) WH-interrogative pronouns usually fuse into single words. And this is precisely a situation where one finds relics of older syntax.

(c) In Bemba in simple predicates one finds ni only in morphologically-irregular noun classes, pronouns, demonstratives and names. This is again a typical relic environment rather than an innovation pattern.

(d) When one considers languages in which ni is at all attested, one comes up with an implicational pattern: All the languages that have ni in simple predicates, also have it in cleft and cleft-WH constructions, but not vice versa. That is:

\[ \text{[simple]} \supseteq \text{[cleft, WH]} \]

This is a strong suggestion of a dependency. That is, while the existence of ni in cleft and WH can be predicted from its existence in simple predicates, the existence of ni in simple predicates cannot be predicted from its existence in cleft and WH constructions.

It seems to me that the weight of the evidence, as well as the theoretical considerations presented above, militate much more strongly against the innovation hypothesis and for the survival hypothesis.

3. The Pre-prefix Vowel in Bantu

3.1. Reference and definiteness. While de Blois [1970] suggests that the PP was a definitizer in Proto-Bantu, I think there are grounds for believing that it was either a referentiality marker or both a referentiality marker and definitizer. These two semantic functions form a natural class, where [+ definite] is a discourse feature relevant mostly to nominals which have been marked already as [+ referential]. A situation of the VCV/CV contrast functioning only for referentiality (but not for definiteness) may be seen in Bemba (for a detailed discussion see Givón [1972]), where in non-opaque environments, i.e. in environments where nouns are obligatorily referential, one finds only VCV prefixes:

(97) \text{umuana aa-some}n\text{e }cI\text{-tabo} \quad \text{The child read a/the book' (ref.)}

(98) \text{*umuana aa-some}n\text{e }cI\text{-tabo}
In non-negative environments one finds a VCV/CV contrast:

(99) umuana aa-fwaaylle uku-soma lci-tabo (ref.)
   (a) 'The child wanted to read the book' (def.)
   (b) 'The child wanted to read a book' (indef.)

(100) umuana aa-fwaaylle uku-soma ci-tabo (non-ref.)
   'The child wanted to read some book'

Finally, in negative opaque environments the [+ ref.,- def.] interpretation is ruled out, so that the referential (VCV) noun is automatically interpreted as definite. This particular 'change' is apparently a semantic universal (see the discussion of Dzamba, Kinyarwanda and Luganda below; see also Givón [1974 (forthcoming)]). Thus:

(101) umuana taə-somene lci-tabo (ref.)
   (a) 'The child didn't read the book'
   (b) *=The child didn't read an indefinite book' (*indef.)

(102) umuana taə-somene ci-tabo (non-ref.)
   'The child didn't read a/any book'

It is thus not unreasonable to assume that the identification of [+ referential] with [+ definite] in the scope of negation is perhaps responsible for the extension of the VCV/CV contrast in Bantu from referentiality to definiteness. A situation of this extended type may be observed in Dzamba (see Bokamba [1971]), where in non-opaque environments --i.e. where a nominal is obligatorily referential--the VCV/CV contrast functions for definiteness, as in:

(103) oSalomi aenəkĩ omu-ana  'Salome saw the child' (def.)

(104) oSalomi aenəkĩ mu-ana    'Salome saw a child' (indef.)

In a negative opaque environment, where referential nouns universally must be definite, the VCV/CV contrast functions for referentiality, as in:

(105) oSalomi teenəkĩ omu-ana emba (ref., def.)
   'Salome didn't see the child'
In non-negative opaque environments in Dzamba, the VCV/CV contrast still signals referentiality. However, while in Bemba it is the VCV (referential) prefix which is ambiguous between (referential) definite and indefinite, in Dzamba it is the CV prefix which is ambiguous between non-referential and referential-indefinite. Thus:

(107) oSalomi a-zingaki na-one omu-ana (ref., def.)
'Salome wanted to see the child'

(108) oSalomi a-zingaki na-ene mu-ana
(a) 'Salome wanted to see a child' (ref., indef.)
(b) 'Salome wanted to see some child' (non-ref.)

The extension of the REF/NON-REF distinction to DEF/INDEF thus seems to be a natural process.

In the Lake-Bantu area, specifically in Luganda and Kinyarwanda, one finds traces of the REF/NON-REF VCV/CV contrast at least in two environments. One of those is in objects of negated verbs, a situation comparable to the one discussed above for Bemba and Dzamba. For example, in Kinyarwanda the morphological VCV/CV contrast is lost here, but the semantic contrast REF/NON-REF is intact. Thus, the VCV prefix is obligatorily interpreted as non-referential:

(109) nhi-ya-bonye umu-nhu 'He didn't see any man'

In order to obtain a referential (and thus automatically definite) interpretation, the object NP must be pre-posed, i.e. it must undergo a topic-fronting movement (and the obligatory pronominalization associated with it):

(110) umu-nhu nhi-ya-mu-bonye \[ \{ 'He didn't see the man' \}
\[ \{ 'As to the man, he didn't see him' \}

The semantic connection between definite, pronominal and topic need not be belabored here. It seems reasonable to assume that when the language lost the VCV/CV contrast in this environment, it capitalized on the
universal redundancy rule:

\[(+ \text{ referential}) \rightarrow (+ \text{ definite}) / \text{NEG-verb} \rightarrow \text{object}\]

and then also on the existing topic-movement rule (which obviously applies only to definite objects), and thus maintained the contrast intact.

In Luganda (see Nould [1972]) the situation is virtually the same, except that the non-referential object noun, which remains behind the negated verb, receives a CV prefix, while the pre-posed referential/definite noun receives the expected VCV prefix:

112) ya-gula eki-tabo 'You bought a/the book'
113) ta-ya-gula ki-tabo 'He didn't buy any book' (non-ref.)
114) eki-tabo, ta-ya-ki-gula \{'He didn't buy the book'
                             \{As to the book, he didn't buy it'}

3.2. Reference and non-restrictive modifiers. There is another area of natural extension of the VCV/CV referentiality contrast in Bantu, and this area is particularly relevant for understanding how the VCV prefix, i.e. the FP, invaded the noun-modifiers paradigm and in due course became a marker for attributives, as in Luganda.

In Bemba (for details see Givón [1972]), the VCV/CV contrast also functions to differentiate non-restrictive from restrictive embedded modifiers (relative clauses, adjectives, nouns, possessives). Thus, for example:

115) abantu abá-á-ishile 'The people, who (all) came,...' (NR)
116) abantu bâ-á-ishîlo 'The people who came...'(not those who didn't)(R)
117) abantu aba-suma \{'The people, who were (all) good...' (NR)\}
           \{The people, the good ones,...' (NR)\}
118) abantu ba-suma 'The good people...' (R)

5 For these data I am indebted to various manuscripts of L. Walusimbi [1971].
(119) abaana aba-a-ndi 'The children, those that are mine,...' (NR)
(120) abaana ba-a-ndi 'My children...' (R)

In Givón [1972] I argued that this is a natural semantic extension of the REF/NON-REF contrast. Briefly, one notes that only referential nouns, quite universally, may be modified by non-restrictive modifiers. Thus:

(121) nshla-mweene aba-ana bâ-d-lishile (R)
'I didn't see the children who came'

(122) nshia-mweene aba-ana abâ-d-lishile (NR)
'I didn't see the children, who (all) came'

(123) nshia-mweene ba-ana bâ-d-lishile (R)
'I didn't see any children who came'

(124) *nshia-mweene ba-ana abâ-d-lishile (*NR)
*I didn't see any children, who (all) came'

Thus, since the deleted equi-noun within the non-restrictive ('parenthetical') relative clause must have been referential, it is predictable in Bemba—where an anaphoric pronoun must show the same VCV/CV type prefix as its co-referent deleted noun—that a VCV prefix will mark the NR modifier. This is provided that one accepts the assumption that anaphora is indeed involved in NR relative clauses. That is, that the underlying structure of a sentence such as (122) above is something like:

(125) 'I didn't see the children, (I mean) those children who came'
'I didn't see the children, those who came'
'I didn't see the children, who came'

For the regular assumption of the deleted noun's prefix by an anaphoric pronoun in Bemba, consider the following:

(126) nshla-mweene aba-ana ba-suma
'I didn't see the good children'

⇒

nshia-mweene aba-suma
'I didn't see the good ones'
In the Lake-Bantu area it is of interest to note that at least in a number of languages the VCV/CV contrast functions here much the same way as it does in Bemba, i.e. to differentiate between NR/R modifiers, respectively. Thus, in a number of Kinyarwanda dialects, one finds this contrast to be quite regular (tho the optionality with some morphemes may suggest that it is still spreading):

(130) abaana bâ-ryamyye ubu 'The children who're now asleep' (R)
(131) abaana abâ-ryamyye ubu 'The children, who are (all) now asleep' (NR)

The pattern has been partially extended to object relatives (where it does not exist in Bemba):

(132) umusozl wo du-tuye-ho 'The village where we live' (R)
(133) umusozl uwo du-tuye-ho 'The village, where we live' (NR)

Similarly, with adjectives:

(134) abagabo bâ-nini 'The big men' (R)
(135) abagabo abâ-nini 'The men, who are (all) big' (NR)

According to Martin Mould (in private communication), a situation similar
to KinyaRwanda and Bemba is observed in a number of other Lake-Bantu languages.

In Luganda itself, where as Wald [1973] has shown the VCV/CV contrast distinguishes attributives (modifiers) from predicatives, non-restrictive modifiers are not embedded, but are rather post-posed to the end of the sentence. Thus, in object relative clauses one finds:

(136) omu-wala gwe njaga la ye atali l-wo (R)
     'The girl that I like is not here'

(137) omu-gala ye atali l-wo gwe njaga la (NH)
     'The girl is not here, the one I like'

Then, for adjectives, similarly:

(138) omusajja omu-rungi a-genze 'The good man left' (R)

(139) omosajja a-genze omu-rungi 'The man left, the good one' (NH)

Finally, for subject relative clauses, one finds:

(140) abasajja aba-a-genda ba-rungi (R)
     'The men who left are good'

(141) abasajja ba-rungi aba-a-genda (NH)
     'The men are good, the ones who left'

To sum up, then, it seems that in the Lake-Bantu area the same natural extension of the VCV/CV morphology from signalling the REF/NOW-REF distinction to signalling the NR/R distinction, as seen in Bemba, is well attested. One may further suggest that Luganda (and its close cluster of LuSoga, LuToro, Lulyoro) probably had that extension at some earlier date, and this can explain how the VCV prefix invaded the noun-modification paradigm. Finally, when Luganda stopped embedding NR modifiers and started post-posing them, there was no more need for a VCV/CV contrast in the attributive position, and the VCV prefix became generalized--especially that these languages had also lost the copula n1. The CV form of the prefix thus remained the form for the predicative.
4. Discussion

Following the data presented in the preceding sections, one could now propose an alternative scenario to the syntactic development in the Lake-Bantu area and re-interpret the Luganda situation as such:

(a) Luganda has the VCV/CV contrast for referentiality, a contrast which probably goes back to Proto-Bantu;
(b) Like Bemba, Rwanda and Luhyia, Luganda also extended that contrast to mark the NR/R contrast for embedded modifiers;
(c) At a certain point, for reasons yet to be clarified, Luganda lost the copula ni;
(d) The loss of ni created a situation whereby CV prefixes marked both predicative and attributive (modifiers);
(e) Since the embedding of NR modifiers is much less universal, being that they are parenthetic statements and are semantically conjoined rather than subordinated, it was relatively easy for Luganda to move NR modifiers out of the noun phrase altogether and post-pose them—-together with their original VCV prefix;
(f) As a result of this movement, the VCV prefix was not needed any more to mark NR modifiers, which were now marked by their post-posed syntactic position;
(g) The VCV prefix was freed to be used for all attributive (embedded noun modifiers), contrasting them with the CV prefix or predicative.

Two other points should be also mentioned here. The first concerns reasons for the loss of ni in many Bantu languages. In general all over the Bantu area, ni segments (i.e. class 9/10 prefix, first person singular pronoun and the copula ni) tend to get assimilated and reduced before consonants—first to n and then, in many languages (this is particularly

6 See comments below concerning the phonetic naturalness of the loss of ni segments in Bantu.

7 That is, NR relative clauses contain part of the new information, rather than old (presupposed) information.
true for class 9/10 prefixes), on to complete zero. The reflex n- tends to lose its articulatory position, tends to get devoiced before voiceless consonants, tends to fuse with the following voiced consonant (Meinhoff's law) or with the following voiceless consonant (cf. SiLuyana). In other words, the loss of n—once it became a bound morpheme—is a highly predictable outcome of natural assimilation rules in Bantu.

The second point involves the following considerations: There are strong grounds for believing that cognates of n翎 exist in other Benue-Kwa and Niger-Congo languages. Thus, for example, in Yoruba the morpheme n翎 is used both as a locative copula and as a focus-cleft morpheme, as the following data from Stahlke [1974] attest:

(142) qmb n翎 ibi 'The child is here'
aja kpa alqe "The dog killed the chicken"
adi n翎 ajal kpa 'It's the chicken that the dog killed'
aja n翎 ḋ kpa adlqe 'It's the dog that killed the chicken'

As Lord [1973] has recently shown, there is a natural development in Benue-Kwa by which a copulative verb meaning 'be at' or 'be with' becomes either a locative preposition/post-position or a comitative/associative/instrumental one. With this in mind, one finds an instrumental n翎 preposition in Yatye [Stahlke 1970]; n翎 'be at' or 'at' in Yoruba [Lord 1973]; n翎 'be at' in Igbo [Lord 1973]; na 'at', 'in', 'on' in Igbo [Lord 1973]. One finds n翎 'with' in Bambara (Mande); 8 ne 'with' in Mooré [Peterson 1971](Gur); n翎 'with' in Sup'ide [Welmers 1950](Gur); n翎 'be at' in Wara [Prost 1968](Gur); ne as an instrumental post-position in Kru [Givón 1974b](Kwa); one also finds a copulative/predicative morpheme n翎 in Tiv [Abraham 1940](Bantoid). Now, the universal relationship between locative and existential (be-pred) expressions has also been noted by Clark [1970] and Lyons [1967]. It is thus reasonably safe to assume that the Bantu existential copula n翎 is a natural semantic extension of the locative copula/verb n翎 'be at', 'be with' in Niger-Congo. This makes Wald's contention that n翎 is an innovation of Eastern-Bantu all the less plausible.

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8For the data I am indebted to Karen Courtenay and Ibrahima Coulibaly.
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