Secondary nominal prefixes in Bantu

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1. Overview

In most Bantu languages, there are nominal prefixes that are either added on top of a regular class prefix or substituted for one to express a certain meaning. These include locative prefixes, augmentatives, diminutives and pluralizing prefixes. These are generally referred to as secondary prefixes in the descriptive literature. Except for the locative prefixes, a secondary prefix is almost always identical in form to some regular class prefix (primary prefix) and triggers agreement in the same class as that prefix. The existing Noun Class Prefix Questionnaire elicits some information relevant to this in sections 1.3.-1.4., but we now want to enrich the questionnaire to chart the distributions and other properties of secondary prefixes in Bantu in a more detailed way,

2. The theoretical issues

Since secondary prefixes control concord and agreement, and concord and agreement reflects class-features, secondary prefixes must be associated with class-features. The first question that comes to mind, is where a secondary prefix gets its class-features from. It is generally assumed that a nominal prefix inherits its class-features from the nominal root they attach to, but this doesn't seem to be the case for secondary prefixes. A related question concerns the formal relation between a secondary prefix and a primary prefix with the same class-features.

We also believe that the properties of certain secondary prefixes bear on the relationship between the singular and the plural classes. To illustrate, we will outline preliminary conclusions from a pilot study of a secondary pluralizing prefix.

3. The double plural in Shona

As described by Fortune (1955), Shona allows the prefix *ma* to attach on top of plural class prefix to form a "plural of plurals":

(1) ma-mi-sha = 6 - 4 - village = "groups of villages"

and give the reasons why we want to do this, in what follows.

Since such forms trigger class 6 agreement on modifers and verbs, the *ma* in (1) must really itself be a class 6 form rather than just a variant of *mi* used to avoid adjacent identical syllables.

But on the assumption that a class-prefix is selected on the basis of a combination of gender-features and number-features, (1) raises two questions. First, it seems that the number feature pl must occur twice in (1), but in general it seems that a single noun only supports a single number feature across languages, a fact attributable to the fairly uncontroversial assumption that a given feature occurs only once in the sequence of functional heads, and that the sequence of functional heads is merged just once on top of a single lexical head. Second, where do the gender-features associated with *ma* come from?

An analysis of plural formation in Bayso (Cushitic) (see Corbett & Hayward 1987) suggests an answer to both questions. In Bayso, the plural form of a noun is formed with the suffix *-jool*. A striking feature of Bayso is that a plural subject continues to trigger singular agreement, but a pluralized feminine noun all of sudden triggers masculine agreement. The obvious account is to say that *jool* is itself a feminine singular noun with a meaning akin to "group" and is the head of the plural form. Caha (2012) extends this analysis to Czech to account for syncretism between the nominative plural form of a feminine or neuter noun and the genititive singular, but since Czech has no overt counterpart to *jool*, he posits a covert counterpart GROUP, adapting recent proposals by Kayne. We now propose to extend this to Bantu. On a first pass this gives (2):

(2) $ma-mi-sha = [pl_5 [_N GROUP_5 [pl_3 [_N sha_3]]]]$

This accounts for the double occurrence of the number feature (once per noun) and also provides a source for the gender-features associated with higher pl. It also directly accounts for the fact that the secondary *ma* has the features of the primary class 6 *ma*. But (2), which incorporates the traditional idea that the class-features of a plural prefix is the sum of pl and the gender-features of the corresponding singular class, also incorrectly predicts that there might be a corresponding singular form with the class 5 prefix meaning "a group of villages":

(3) $*RI-mi-sha = [sg_5 [N GROUP_5 [pl_3 [N sha_3]]]]$

This suggests bringing the analysis even closer to Bayso by taking GROUP in (2) to be a singular noun with plural semantics whose gender-features are distinct from those of class 5, breaking with tradition:

(4) $ma-mi-sha = [sg_6 [N GROUP_6 [pl_3 [N sha_3]]]]$

On this analysis, the plural meaning "groups of villages" reflects the lexical meaning of GROUP rather than the presence of a functional head bearing the feature pl. The denotation of GROUP is the set of all aggregates that can be formed from things in the denotation of the noun phrase it combines with, hence aggregates of pluralities in the case of (4).

As for the syntax of (4), we assume that the embedded nominal projection is too small to host modifiers in a way akin to Hyman et al.'s (2001) proposal for the structures with prenominal adjectives in Basaá. Hence, all modifiers are expected to exhibit class 6 concord only.

4. The primary plural prefixes

The identity between secondary *ma* and primary *ma* must now be captured in one of the following two ways. We could say that the regular plural prefix *ma* with class 5 nouns also reflects the presence of GROUP₆ now applying to individuals rather than pluralities:

(5) $ma-panka = [sg_6 [N GROUP_6 [N panka_5]]] = "knives"$

Alternatively, we can take class 5 nouns to be class 6 nouns like GROUP with the lexical property that they denote aggregates rather than singularities. Then, the fact that *RI-panka* (= [banka]) denotes singularities must be attributed to the class 5 prefix *RI* or more precisely to a covert class 5 noun embedding the class 6 noun. This might fit with the fact that *RI* too occurs as a secondary prefix in Shona and other languages, albeit with an augmentative/pejorative meaning.

The second alternative has the advantage that it might more easily lead to an understanding of the fact that *ma* as a primary prefix also combines with mass nouns, a fact that in itself already discredits the view that *ma* is a plural form.

The second alternative also avoids a question that arises on the first approach: Why is it that GROUP only embeds class 5 nouns as a primary prefix?

On the other hand, this line of analysis faces some problems which we now turn to.

5. ma co-occurring with ri/li

It is independently plausible that *ma* is not in general the plural counterpart of the singular class 5 prefix. In Tsonga languages the two co-occur. For example, in Changana and Rhonga, we see the sequence *ma-ri/li*- on monosyllabic nominal roots (the only roots that allow *ri/li* to surface in class 5), which is at least unexpected if plural vs. singular is taken to correspond to opposite values of a single binary number feature. On the other hand, the existence in Tsonga languages of forms like *ma-rhi-tu* "words" seems inconsistent with the second of the two proposals about primary *ma* in section 4, since this proposal would connect primary *ma* to class 5 nouns by saying that class 5 nouns are actually class 6 nouns which are brought into class 5 by being embedded under a covert class 5 noun. Tsonga *ma-rhi-tu* etc. rather suggests that the analysis in (5) is correct, leaving open the question what the privileged relationship between GROUP₆ and class 5 nouns might be:

(6) $ma-rhi-tu = [sg_6 [GROUP_6 [sg_5 [tu_5]]]]$

However, the plural prefix can co-occur with the corresponding singular prefix in other classes too, e.g. in class 4 *mi-mu*-, which leads to the further conjecture that more plurals than just the class 6 forms are formed via GROUP-like silent nouns of different genders. In Rhonga, class 2 *va* and class 8 *swi* may be the only plural prefixes that don't stack on top of the corresponding singular prefix.

However, a number of factors complicate the picture. In class 3, for instance, the singular prefix is an assimilating N on polysyllabic roots and mu on monosyllabic roots, but although both allomorphs may show up when class 4 mi is added, mu can also fail to appear next to mi, e.g. we find both mi-mu-nti and mi-nti "houses" and mi-mu-kwa and mi-kwa in Changana, and more disturbingly some monosyllabic roots allow mi-mi in addition, e.g. mi-mi-si and mi-mi-kwa (without a double plural reading).

Since the inexistence of singular *mu-mu speaks against a general process reduplicating prefixes, we will not take *mi-mi-si* etc. to be reduplicated forms of *mi-si* etc. either. Rather, we suggest that *mi-mi* is derived from *mi-mu*- by vowel assimilation, which must then be constrained to apply only when the two vowels are sufficiently similar to begin to keep it from having an effect on *ma-ri*-. Conceivably, *mi-si* etc. might be the result of haplology applying to the output of vowel assimilation, extending proposals in Langa (2012). This would be consistent with the observation that the allomorph N on polysyllabic class 3 roots is generally maintained when mi is added.

However, there are cases where the singular prefix fails to appear together with the plural prefix which require a different account. In Changana, the class 5 prefix ri also appears on some polysyllabic nouns in the singular form, but not when ma is added, e.g. ri-gaga "a green fruit" vs. ma-gaga, contrasting with ma-ri-to "words", ma-ri-fu "clouds" and other forms with monosyllabic roots. This is reminiscent of the way class 5 nouns behave in Xhosa, where the class 10 prefix zi on polysyllabic roots drops, when the augment i is present, but is retained on monosyllabic roots. Although we know of no formal account of this fact either, it seems plausible that zi (or the morphosyntactic piece of structure that would be lexicalized by zi) is always present at an underlying level. By extension, we may therefore take it that ri is underlyingly present in ma-gaga etc. too.

A separate question, which we will touch on briefly, is why stacking plural prefixes on top of their singular counterparts is not seen more widely in Bantu languages, e.g. not in Shona.

6. Conclusion

If the proposals presented above are correct, new items need to be added to our research agenda.

To the extent that the gender-features associated with plural class prefixes originate from a silent noun like $GROUP_6$, we need to rethink the relationship between plural classes and the singular classes they are paired with.

If plural classes other than class 6 also involve a silent noun akin to GROUP, there must be different GROUPs with different gender-features and different semantics, and we need to find out if the relevant plural classes really exhibit different semantic properties, and, if so, whether the difference can plausibly be traced back to different GROUP-like silent nouns.

Finally, we must also determine not only how these nouns get to be silent, but also why they cannot be overt.

We also think that similar issues will arise from the study of singular prefixes with a secondary use as augmentatives or diminutives.

References:

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