Linguistic geography or evidence for genetic affiliation? New proposals for the phonological inventory of proto-Bantu

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The phonology of proto-Bantu and the power of received wisdom

- Our common understanding of the phonology of proto-Bantu derives from the work of Malcolm Guthrie in his magisterial volumes on Comparative Bantu (1967-1971)
- The revisions of Meussen made some changes to forms but almost none to the phonology
- These are enshrined in Bantu Lexical Reconstructions III, online from the Musée Royal de L'Afrique Centrale
- And in 'The Bantu Languages' (Nurse & Philippson 2003)

The Bantu Languages

Edited by Derek Nurse and Gérard Philippson

Guthrie's claims

- On the face of it, however, Guthrie made some strange proposals and some of them have been quietly dropped; however, historical linguists continue to compare synchronic forms against his 'Common Bantu'
- Oddly enough, even Guthrie did not claim 'Common Bantu' was a reconstruction, and distinguished this from Proto-Bantu
- But the abundance of forms cited have gradually caused Common Bantu to take on this status

Comparative Bantu AND PREHISTORY OF THE BANTUL ANGUAGES by MALCOLM GUTHRIE rofessor of Bantu Languages in the University of Londo GREGG PRESS LTD

Features of Guthrie's proto-Bantu

 Seven vowels, including 'narrow vowels' i and u
No nasal or fricative vowels, no ATR vowel harmony (which wasn't really understood at that period

- No labial-velars, i.e. /kp/, /gb/ and /ŋm/
- Two tones, no glides, downstep etc.

Problems with Guthrie's proto-Bantu

- However, as we have learnt more about early Bantu, i.e. Zones A-D this is increasingly problematic because we do find;
 - Few, if any languages with a vowel-system such as posited by Guthrie
 - Bantu languages with nine vowels and ATR vowel harmony
 - Some languages with fricative or pharyngealised vowels
 - Many languages with labial-velars
 - Some languages with three tone-levels and complex glide tones

And the actual border between Bantoid and Bantu remains elusive

A recent proposal for Bantoid/Bantu



So does this mean Guthrie was wrong?

- Well, it would seem so, but no revisionist Bantu phonology has been proposed
- And in the meantime, a new model has begun to gain ground, the 'linguistic geography' paradigm
- Roughly, the presence of these features is part of a geolinguistic zone and therefore cannot be attributed to the genetic unit Bantu is intended to represent
- So how does the 'linguistic geography' paradigm work?

Linguistic geography versus genetic affiliation

African historical linguistics has chugged along fairly happily with the 'four-phylum' model (prop. Joseph Greenberg) and in particular with Niger-Congo, a version of which goes back to Bleek (1855) but which took on its main form with Westermann (1927)

 However, recent times have seen it challenged by linguistic geography models, especially by Tom Guldemann and others in the Heine/Nurse volume on African Linguistic Geography



Linguistic geography versus genetic affiliation

- The claim here is that we have mistaken *Sprachbund*-like phenomena for evidence of genetic affiliation and that the distribution of various phonological and morphosyntactic features of African languages argues for what Guldemann calls a 'Macro-Sudan' Belt
- There is little doubt that contact phenomena play an important role in the evolution of African phonological inventories
- And that some phenomena easily cross language phylum boundaries. One example of this is the labio-dental flap, first plotted by Greenberg in 1983 and in more detail by Olson & Hajek in 2004

Distribution of the labio-dental flap



Linguistic geography versus genetic affiliation

- The distribution leaves little doubt that the labio-dental flap is easily transmitted from one language to another and crosses phylogenetic boundaries freely
- Oddly enough, it seems to do this without direct lexical borrowing and may occur in various areas of the lexicon in different languages.
- It thus appears to be an iconic phoneme
- But other types of phonological phenomena are not and too confuse the two is to compound a methodological error
- This presentation will argue that the absence of various phonological features in much of Bantu is because of restructuring *not* linguistic geography

Labial-velars

- O The labial-velars, i.e. /kp/, /gb/ and /ŋm/ are characteristic of all branches of Niger-Congo except Dogon and most Kordofanian. /kp/ and /gb/ are also throughout Central Sudanic (Nilo-Saharan)
- They are not clearly found anywhere else in the world, so they look like a genetic feature
- O However, they are only found along the Northern edge of the Bantu area, principally in groups A, C, D with an outlier among the Mijikenda on the East African Coast
- But they are omnipresent in all the branches of Bantoid closest to Bantu (as defined by Guthrie)
- For them *not* to be present in proto-Bantu, and then to be borrowed back in makes for a contorted argument

Labial-velars in Africa



Labial-velars in Bantu



• Also in some Mijikenda languages on the Kenya coast (and in Kordofanian, despite previous map)

• From: Clements and Rialland (2008)

Nine-vowel systems and ATR vowel harmony

- Most Bantu languages have seven or even five vowels, although the 'extra' vowels are mid-vowels, as elsewhere in Niger-Congo
- O But along the northern border, in A60 Mbam languages and C and D group languages such as Bila, Lika, Budu, Vanuma etc. have nine-vowel systems arranged via strict ATR harmony systems.
- Nande has nine surface vowels: underlyingly seven with an ATR contrast in the high vowels
- Sotho etc. have nine vowels but these do seem to have developed recently
- The 'missing' vowel is the second central vowel, as is many Bantoid languages

 It has been suggested that these nine-vowel systems were rebuilt by contact with Central Sudanic although if so, the evidence for this has not been presented

Nine-vowel systems and ATR vowel harmony

- However, more recent analyses point to there being two distinct types of seven-vowel system in DRC Bantu
- One system has one high vowel, two mid vowels and mid-vowel harmony.
- The other system is two high vowels (+ATR] and [-ATR], and one mid vowel, underlyingly [-ATR], with a [+ATR] allophone when preceded or followed by [+ATR] /i/ or /u/.
- Harmony functions differently in these two systems and the boundary between the them is somewhere in Eastern DRC.
- Plus, there are also seven-vowel systems which have independent vowels.
- O Is this evidence for an archaic nine-vowel system eroding along differential pathways?

How many tones? I

- Most Bantu languages have two level tones, and few, if any glide tones
- O However, in a now familiar pattern, some have three, especially those in C and D (including Bila) and those in part of the A group, for example Mangisa and languages of the Mbam group
- O The origin of the three tones in C and D languages is analysed as depressor consonants, but this does not prevent the system from being reconstructed further back into Bantu
- And these languages also have more complex glide tones
- Three-tone languages may thus be archaic not modernising

How many tones? II

- The tone levels of many Grassfields languages are disputed
- It was decreed long ago that Grassfields had two tones, and of course any tonal system can be reduced with sufficient recourse to 'underlying' tone.
- Three tones can always be dismissed as 'phonetic'
- But it is more likely that a three tone analysis holds for most Grassfields as well as other Bantoid
- Three-tone languages may thus be archaic not modernising

Pharyngeal/fricative vowels I

- There have been scattered accounts of pharyngealised or fricative vowels in the Bantu/Bantoid area, particularly in Fang, but the first author to pull these together was Connell (2001) who observed that these occur in Len (Mambiloid) and other languages in this area
- Connell also noted that in some cases the special vowels appeared to be cognate across languages, which would usually be evidence for their presence in proto-Bantu (and indeed in Bantoid)
- He argues that they correspond the first-degree vowels in reconstructed proto-Bantu
- Fricative vowels have that property that once you are on the lookout for them, you hear them more clearly
- For example, in Bagyele (A80), where they are manifestly present, Renaud wrote a 2-volume thesis on its phonology without mentioning them

Pharyngeal/fricative vowels II

- Since the work of Bruce Connell, there is considerably more evidence for fricative vowels. The present 'map' of their occurrence is;
- O Len Mambila
- Mundabli (Yemne-Kimbi aka West Beboid)
- O Eastern Grassfields (e.g. Chufie') and Limbum (certainly)
- Jarawan Bantu (recently recorded; noticed by previous researchers)
- Bantu A80 languages (Kwasio, Gyele)
- Fang group (B group Bantu)

Pharyngeal/fricative vowels III

- With a couple of occurrences, this could be dismissed as independent evolution
- However, fricative vowels are fairly rare, globally, although they occur in Chinese
- With this chain of examples almost throughout Bantoid, it would be much more reasonable to assume *that fricative vowels were present in proto-Bantu* and have only survived sporadically
- It is reasonable to predict, on the basis of recent discoveries that more example will be uncovered

And so?

- It seems there is a priori evidence for a very different approach to the phonological inventory of proto-Bantu than that presented in the textbooks
- The basis for this is features which are present in Bantoid (or Niger-Congo more generally) and also in 'early' stages of Bantu
- There is no present way to reach definitive answer because the numbers of fieldwork-based phonologies of the relevant languages is still very small
- And indeed because we have no convincing genetic classification of Bantu A, marking it off from Bantoid

But we can say that

- There is more to this than linguistic geography. This approach confounds iconic phonology (labio-dental flaps) with genetic features (labial-velars)
- A more credible interpretation is that early Bantu looked much more like its immediate relatives in Grassfields, Beboid etc. and that these features survived sporadically in isolated languages near the homeland
- But were eliminated in a major wave of restructuring that occurred subsequent to the initial Bantu expansion ca. 4000 BP
- The co-occurrence of archaic features in C and D languages in NE DRC strongly points to an early wave of movement along the forest/savanna ecotone

Proto-Bantu might have had;

Pharyngealised/fricative vowels.
9/10 vowels with <u>+</u> ATR harmony

- Three tone levels
- Labial velars. kp/gb/ ?ŋm

We won't know the answers until we are more willing to try out new mental models and scrap the old approaches

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