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Early Bantu Population Movements and Iron Metallurgy: The Linguistic Evidence

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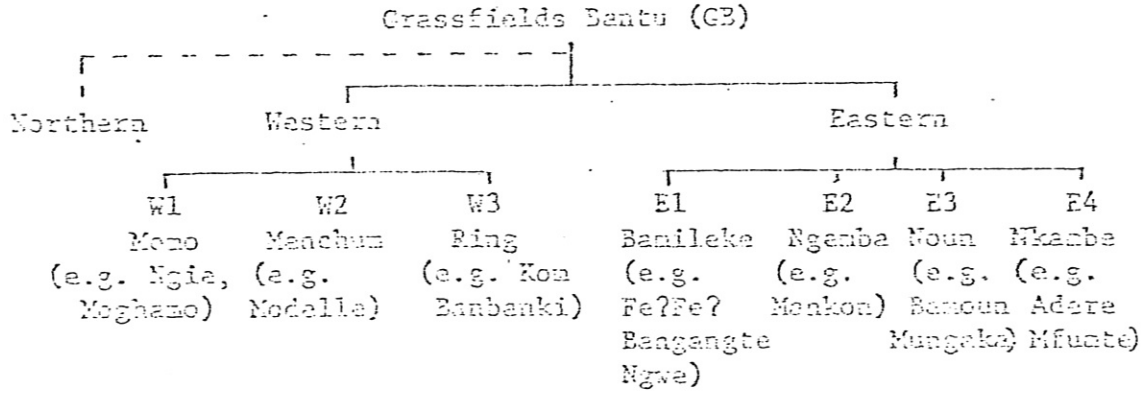
1. Introduction

Although Bantu languages are spoken over a vast geographical area covering most of subequatorial Africa, they are closely related to each other thus indicating a relatively recent spread. Archaeologists estimated that the spread of Bantu populations started some 2500 years ago.

Where was the homeland of Proto-Bantu speakers located? Why was their expansion so successful? Which migratory routes did they follow? The purpose of this paper is to present new data from a group of languages located in the area which has been suggested as the homeland area of Proto-Bantu speakers. These data will be used to evaluate answers which have been proposed for the last two questions.

2. The Proto-homeland

One of Greenberg's main achievements in his monumental work on classification of the languages of Africa was to realize that the group of Bantu languages was not a linguistic family by itself as was previously believed but rather that all these closely related languages were a sub-branch of the Benue-Congo branch of Niger-Congo. He suggested that the original homeland of Proto-Bantu speakers was located in the northwest of the Bantu area, approximately around the present-day Cameroon-Nigerian border, since it is there that the linguistic diversity is the greatest.[1] Languages located in this area used to be called Semi-Bantu because it was believed that the Bantu features found in these languages were due to borrowing; Greenberg[2] however, classified them as Bantu. Subsequent work in the area clearly established that he was correct and that all these languages which are now called the Grassfields Bantu languages are in fact genetically related to Bantu. A preliminary classification[3,4] of these languages is presented below and their geographical distribution is shown in Map 1.



3. Iron metallurgy

The success and the efficiency of the Bantu expansion has been attributed to or associated with the knowledge of iron metallurgy. It is assumed that such knowledge would have made the Bantu better farmers, better hunters and better warriors thus allowing a fast and successful spread. An impressive amount of archaeological research has been carried out in the eastern and southern parts of the Bantu area (especially in Kenya, Tanzania, Zimbabwe and Zambia). Radiocarbon dates obtained from these sites suggest a spread of the Bantu populations closely in agreement with the population movements derived from lexicostatistic studies.[5] Unfortunately archaeological data are not as common for the western zone in general and are quasi non-existent for the Proto-homeland area. It is then impossible to tell, on archaeological grounds, whether Proto-Bantu speakers knew about iron technology when they first left their homeland. However we have reasons to believe that the iron industry[6] which is still practiced today in the Grassfields area is in fact a very old one. First, the dimension of the slag heaps found at certain sites especially in Babungo give an approximate idea of how long the smelting furnaces have been used. Second, oral tradition indicates that the ancestors of some of the people who currently live in the Grassfields area learned iron working techniques from other tribes established in the area some twenty generations ago -- that is approximately 300 to 500 years ago (Jeffreys (1961)). More interestingly, Jeffreys found some pieces of iron slag too big to have been produced by the smelting furnaces currently found. This suggests that larger furnaces were used in the Grassfields in a more remote past. It should be pointed out that furnaces of this size were still used until very recently by various tribes located in the Eastern Bantu area such as the Haya (Schmidt (1978), Schmidt and Avery (1978)) and the Fipa (Greig (1937)). Obviously the arguments we just presented are not very conclusive and do not allow us to draw any conclusions for the period corresponding to the first Bantu population movements some 2500 years ago. Let us now turn to the linguistic evidence. Maps 2, 3 and 4 show the distribution of the various roots which have been reconstructed for axe, hoe and spear respectively in Proto-Grassfields. Let us now compare these reconstructions with corresponding Proto-Bantu forms (from Guthrie (1967 1971):

	Proto-Grassfields Bantu (PGB)	Proto-Bantu (PG)
'axe'	tím	témò
'axe'	jàm	jèmbè
'hoe'	sók	cúkà
'spear'	kòŋ	gòngá

Since Guthrie's reconstructions were arrived at without taking into account the Grassfields languages, these data suggest that Bantu speakers knew about axes, hoes and spears when they left the Grassfields area. If we now consider words more closely associated with iron technology[7] such as 'smith/smithy' PGB *làm, iron-slag[8] PGB *yite and iron-ore PGB *sa, we are faced with a different problem:

corresponding forms cannot be found in other Bantu languages. In summary it seems that correspondances between Proto-Grassfields Bantu reconstructions and Proto-Bantu as reconstructed by Guthrie can only be established for items which are not specifically related to iron technology. 'Axe', 'Hoe' and 'Spear' could have been made out of wood and stone at the time Proto-Bantu speakers left their original homeland. When items more specifically related to iron technology are considered, correspondances with Guthrie's Proto-Bantu forms cannot be established. This suggests that when Proto-Bantu speakers left the Grassfields area some 2500 years ago, they did not know about iron technology.

4. Migratory routes

Phillipson (1977a,b) suggests that Proto-Bantu speakers left their homeland in two directions: a southward route through the equatorial forest and an eastward route through the savannah, north of the equatorial forest (see Map 5). Maps 6, 7 and 8 show the distribution of the PB roots for 'axe', 'hoe' and 'spear' discussed in the previous paragraph. The fact that *jèmbè and *cʊ́kà have cognates in PGB but are otherwise restricted to the eastern part of the Bantu zone strongly supports the existence of the eastward route north of the forest as proposed by Phillipson. The distribution of the gòŋgá root can be interpreted as supporting the southward route although borrowing due to geographical proximity cannot be discarded here as easily as in the two previous cases.

5. Conclusion

Linguistic reconstructions of lexical items related to iron techonology in the languages of the Cameroonian Grassfields suggest that speakers of Proto-Bantu probably did not know about iron technology when they left their homeland. However the distribution of certain items associated with tools which were probably made out of stone and wood during these early migrations is consistent with the claim that two migratory routes were used: an eastward route north of the equatorial forest and a southward route through the forest.

Acknowledgements

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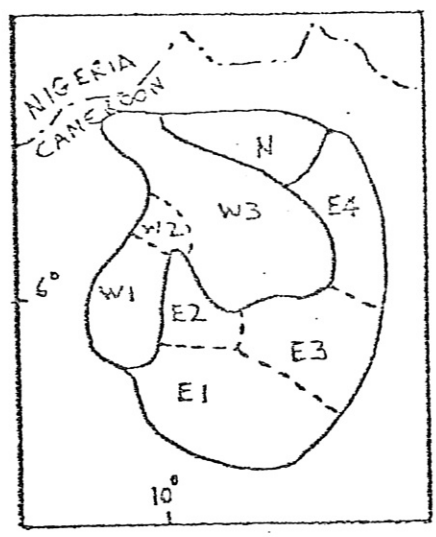
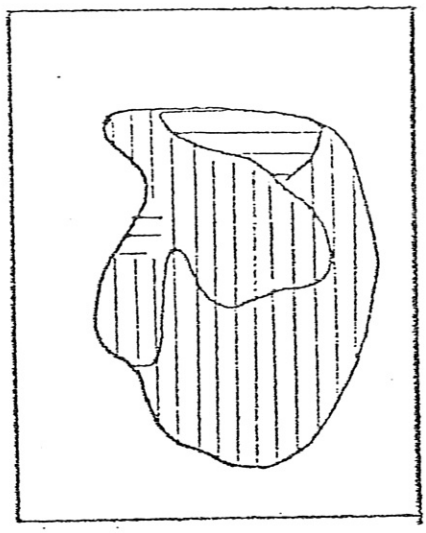
Footnotes

1. Guthrie (1962b) proposed that the Proto-Bantu homeland was located south of the equatorial forest, about halfway between the two coasts. Recent lexicostatistic studies however (Coupez, Evrard and Vansina (1975), Heine (1973), Henrici (1973) support Greenberg's position.
2. See for instance, Dunstan (1966), Hyman (1972) and Voorhoeve (1963).
3. A complete classification and Proto-Grassfields Bantu lexical reconstructions are currently being prepared by members of the Grassfields Bantu Working Group.
4. Since the exact relationship of the Northern languages with the Eastern and Western languages is not completely clear, this group



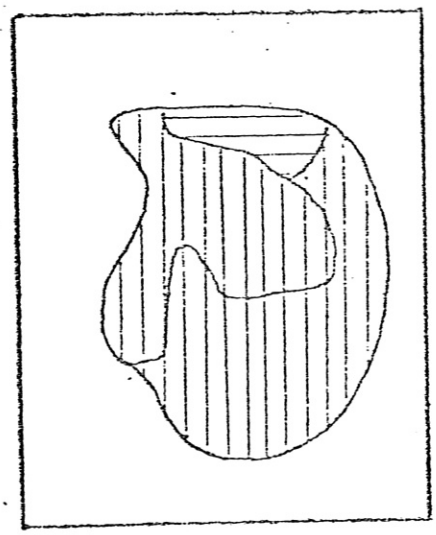
Map 1
Distribution of the
Grassfields Bantu Languages



Map 2
Distribution of 'axe'

tím

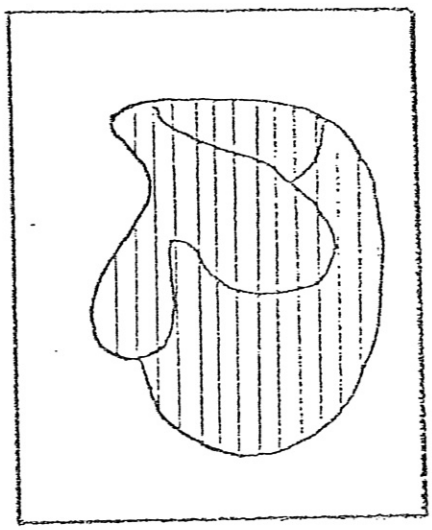
jàm



Map 3
Distribution of 'hoe'

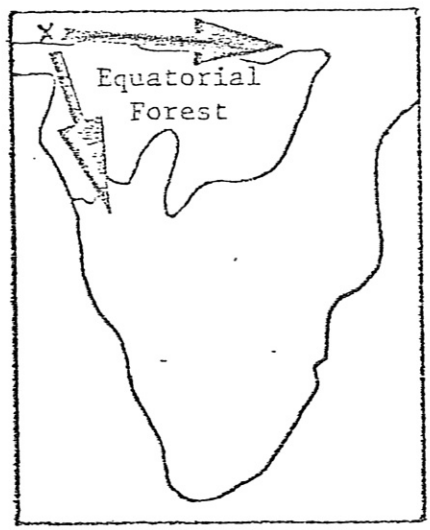
jì

sók

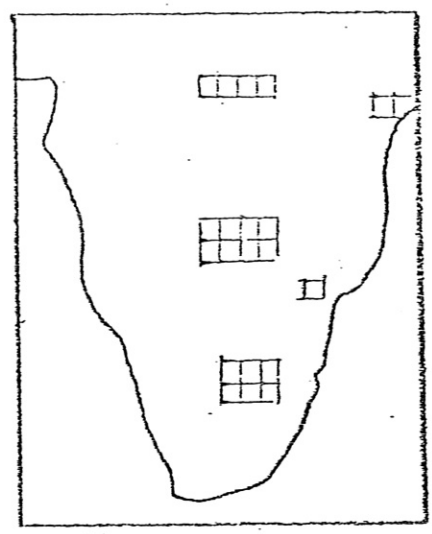


Map 4
Distribution of 'spear'

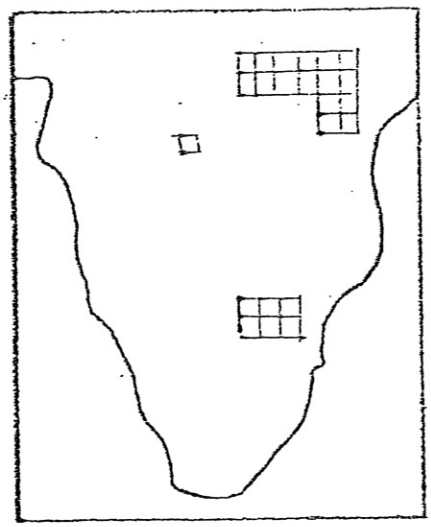
kòŋ



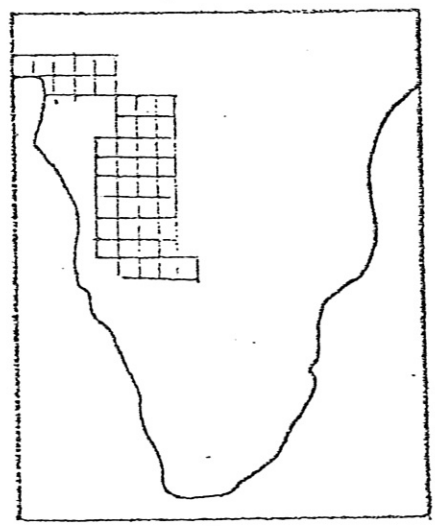
Map 5
Early Bantu Migratory Routes



Map 6
Distribution of 'axe'
*jèmbè



Map 7
Distribution of 'hoe'
*cụ́kà



Map 8
Distribution of 'spear'
*goŋ̀gá

has been connected with a dotted line to the other two groups.
5. See for instance, Phillipson's work.
6. Although smelting has been progressively abandoned in the last fifty years, smithing is still very common especially in the Ndop plain area.
7. The word 'iron' itself has two roots: *kás found in Ring languages and *tén found elsewhere in Grassfields Bantu. These two roots are probably cognates with PB *gèdà (although the tone correspondence is irregular) and PB *tádè. But as it was shown by de Maret and Nsuka (1977) it is not clear that the original meaning of these stems was 'iron'.
8. Because of insufficient data we were not able to reconstruct the tone of 'iron-slag' or 'iron-ore'.

Bibliography

Coupez, A., E. Evrard and J. Vansina (1975) "Classification d'un échantillon de langues bantoues d'après la lexicostatistique", Africana Linguistica, 6, 131-158.

De Maret, P. and F. Nsuka "History of Bantu metallurgy: some linguistic aspects", History in Africa, 4, 43-65.

Dunstan, E. (1966) "Tone on disyllabic nouns in Ngwe", Journal of West African Languages, 3, 1, 33-38.

Greenberg, J. H. (1963) "The languages of Africa", International Journal of American Linguistics, 29, 1, II.

_____. (1972) "Linguistic evidence regarding Bantu origins", Journal of African History, 13, 2, 189-216.

Greig, R. C. H. (1937) "Iron smelting in Fipa", Tanganyika Notes and Records, 4, 77-81.

Guthrie, M. (1962a) "Some developments in the prehistory of the Bantu languages", Journal of African History, III, 2, 273-282.

_____. (1962b) "Bantu origins: a tentative new hypothesis", Journal of African Languages, 1, 1, 9-21.

_____. (1967-1971) Comparative Bantu I-IV, Farnborough: Gregg International Publishers.

Heine, B. (1973) "Zur genetischen gliederung der Bantu sprachen", Afrika und Übersee, 56, 164-185.

Henrici, A. (1973) "Numerical classification of Bantu languages", African Language Studies, 14, 82-104.

Hyman, L. M. (1972) "A phonological study of Fe?Fe?- Bamileke", Studies in African Linguistics, Supp. 4.

Jeffreys, M. D. W. (1942) Report on the Local Iron Industry Bamenda Division. Buea Archives.

_____. (1948) "Stone-Age Smiths", Archiv für Völkerkunde, 3, 1-8.

_____. (1952) "Some Notes on the Bikom Blacksmiths", Man, 52, 75, 49-51.

_____. (1961) "Oku Blacksmiths", Nigerian Field, 26, 3, 137-144.

_____. (1962) "Some Notes on the Kwaja Smiths of Bamenda", Man, 62, 236, 152.

_____. (1971) "Some Notes on the Iron Workers of Bamenda", Nigerian Field, 36, 2, 71-74.

Phillipson, D. (1976) "Archaeology and Bantu Linguistics", World Archaeology, 8, 1, 65-82.

_____. (1977a) "The Spread of the Bantu Language", Scientific American, 236, 4, 106-115.

_____. (1977b) The later prehistory of Eastern and Southern Africa, Africana Publishing Company, New York.

Schmidt, P. R. (1978) Historical Archaeology: A Structural Approach in an African Culture, Greenwood, Westport, Connecticut.

_____ and D. H. Avery (1978) "Complex iron smelting and prehistoric culture in Tanzania", Science, 201, 1085-1089.

Voorhoeve, J. (1963). "La classification nominale dans le Bangangte", Journal of African Languages, 2, 3, 206-209.