Lexical and geographical distances as a tool to address the demographic history underlying the Bantu migrations

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During the last few decades, the evolution of Bantu languages and the spread of Bantu-speaking peoples across sub-Saharan Africa from their presumed homeland in the Benue Valley have been under debate in various disciplines. Bantu language trees constructed using the Swadesh word lists of Bastin et al. have produced conflicting results, not only in resolving the phylogeny of the Bantu family but also in suggesting putative models – given a certain tree – for the migrations of Bantu-speaking groups.

In order to test different models of migrations, in this study we generated a matrix of lexical distances among 95 Bantu languages based on the 92-word lists of Bastin et al.¹, as well as matrices of hypothetical geographic distances according to different models of migrations. A correlation approach (Mantel's test) among these matrices of distances was then applied. The results indicate that the best correlation of lexical distances is with the actual geographic distances among groups, rather than the hypothetical distances predicted by any of the models. Therefore, the models of migration tested here are rejected as the major causes of the linguistic patterns observed.

This highlights the complex history of sub-Saharan Africa and the intricate demographic scenario of the Bantu migrations. This would also point out the importance that further multidisciplinary approaches (e.g. by means of genetic data) would have to elucidate the migrations of Bantuspeaking populations.

Reference

Bastin, Y., Coupez, A. & Mann, M. (1999). *Continuity and divergence in the Bantu languages : perspectives from a lexicostatistic study*. Tervuren, Belgium: Muse\0301e royal de l'Afrique centrale