Impact of climatic and ecological contexts on sociolinguistic factors among Bantu populations

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In order to understand how today's social and linguistic situation in equatorial and southern Africa derives from past migrations, a preliminary step is to better relate present ecological contexts to the human groups inhabiting them. More specifically, we propose to investigate the interactions between, on the one hand, climate, elevation and vegetation and, on the other hand, 3 features of human populations: i) the density of population, ii) the number of speakers of a language, and iii) the linguistic density. If significant relationships can be established between such factors, it becomes then easier to derive past human configurations from paleo-ecological reconstructions.

At a methodological level, we rely on several high-resolution databases – the Ethnologue for languages, the 10' latitude/longitude climate dataset of the University of East Anglia, the ETOPO-1' dataset for elevation etc. – to build a dataset of the previous ecological and sociolinguistic variables for a large number of African languages. We then look for correlations between the variables of this dataset, and try to assess a general model of the evolution of populations.