

Linguistic Support for an Early Dogon Diffusion



Abbie Hantgan
CNRS-LLACAN



Abstract

By using the date estimated by Mayor et al. (2014) of 4000 years of continual inhabitation of the Bandiagara Escarpment as a point of departure, and a constant mutation rate for language change, we provide additional evidence to attest the accuracy of statement, “Historically, the first Dogon settlement of the [Bandiagara] Cliff zone can be placed within a range of two centuries, between 1230 and 1430 AD” (Mayor et al., 2005, 31). We expand upon previous work by Moran and Prokić (2013) and Prokhorov et al. (2012) who used lexico-statistics on a 100-item basic terminology word-list and comparison of nominal morphology systems for the 20-estimated Dogon languages. Yet, while Prokhorov et al. (2012) suggested, and Moran and Prokić (2013) follow, an East-West split along geographic lines for the Dogon languages, we propose that a division along north-south lines may be more genetically and geographically intuitive in terms of a historical expansion from different locations.

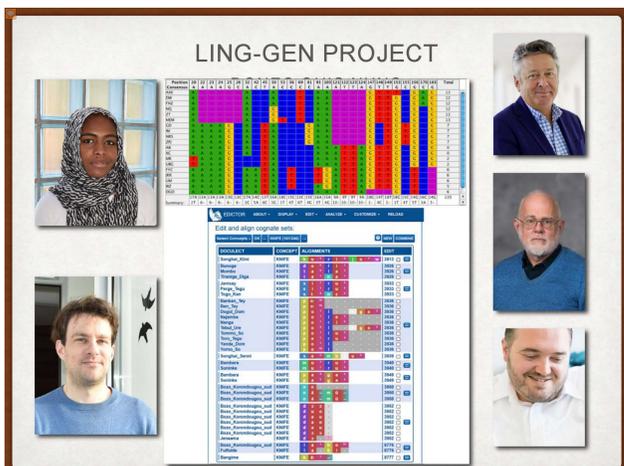
Our phylogenetic analysis uses archaeological and climatic priors for the Dogon settlement provided by Mayor et al., enabling us to view a time-depth for the Dogon-speaking populations. Studies prior to those of Mayor et al. depicted Dogon people migrating as a unit, settling near Bandiagara around 500 years ago, and then spreading out along the cliffs to where they are today. While we see that at around 500 years ago there was (at least linguistically) a split-off between the Toro-Tegu and related languages, those spoken among the Ibi and Sangha villages for which the 500 year date has been associated, with the others, incrementally increasing until the projected 1500 year mark for Najamba, itself an outlier in the Dogon group due to its differentiated vocabulary and robust nominal classification system not witnessed among the other Dogon languages.

Keywords: comparative method, historical linguistics, language isolates, sound correspondences, anthropological linguistics

Methods

Following Hantgan and List (forthcoming), where we focused on cognates detected by the automated output of Lingpy (List et al. 2017), we manually extracted borrowings. Whereas in Hantgan and List (forthcoming) we relied on Lingpy’s LexStat method (List 2012a) to differentiate true cognates from those selected by the SCA method (List 2012b), here, we expanded and manually adjusted the wordlist while noting items that the LexStat method rejected and the SCA method detected; these items we investigated for an external source as loan words.

Further, we source archaeological evidence in order to estimate dates of introduction for domestic animals and crops, thus providing us with an integrated picture of not only from which language but also when and potentially where a borrowing was introduced, effectively drawing a migration map to the source of pre-history. Eventually, we will confirm our findings with genetic affiliations among the ethno-linguistic groups and propose time depths from which each group split.

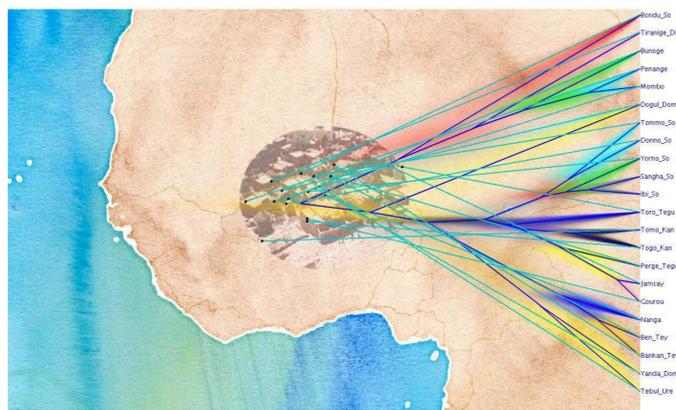


Background

It is believed that the Dogon arrived at Sangha around 500 years ago. This date is based on oral histories (Izard 1970; Marchal 1978) and Griaule (1938, pp. 28, 245) who claims to have uncovered nine Sigi masks at a site in the village Ibi in 1933. Ibi is located adjacent to Sangha. As the Sigi ritual is performed every 60 years, with one mask being made for the purpose of the festival, Griaule estimated a date of the first Sigi mask dated at 1430 AD or 1250 AD.

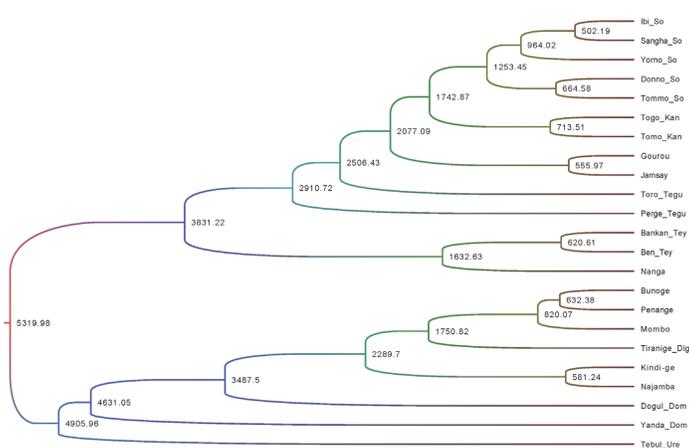


Mayor et al. (2005, p. 31) also propose that the Dogon populations began settling the Bandiagara Escarpment after their separation from the Mali empire, historically between 1230 and 1430 AD.



Results

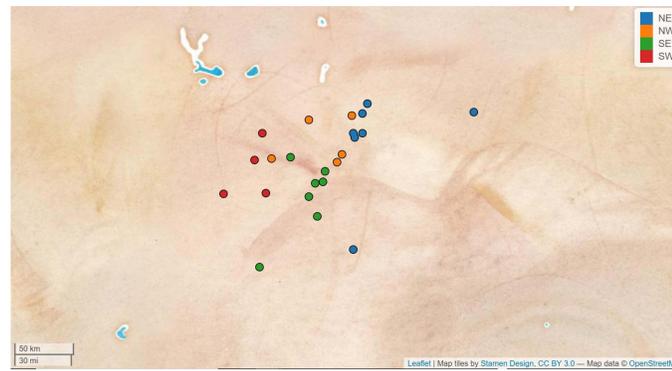
Further, Mayor et al. (2005) provide evidence to support the fact that an abrupt increase in aridity of the Sahara took place around 3500 BC, and that this climatic change probably precipitated population dispersal. If we take Mayor and Huysecom’s (2016) stipulation of a continuous occupation of the Bandiagara Escarpment and the change in cultural practices from Pre-Dogon to Dogon, then we can use these dates as indications of the commencement of habitation of the Dogon groups that now occupy the area.



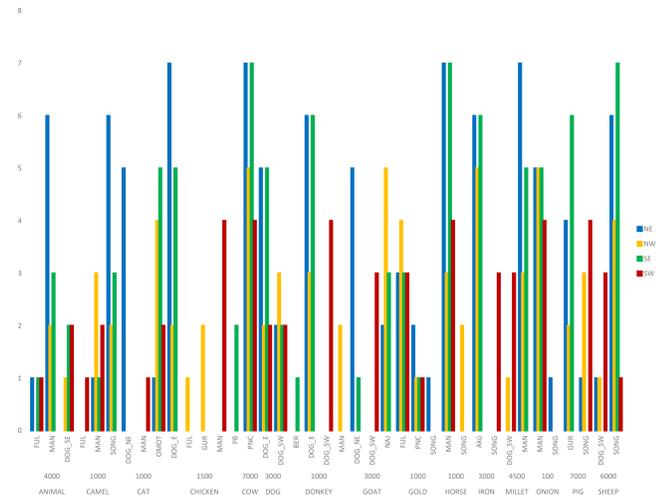
The Dogon language group shows evidence of a common ancestor yet is within itself disparate enough to constitute 20 or more mutually unintelligible languages. We propose that a division along north-south as well as east-west lines may be more genetically and geographically intuitive in terms of a historical expansion from different locations. This analysis challenges the commonly accepted notion that the current Dogon population migrated as a unit, settled near Bandiagara, and then spread out along the cliffs to where they are today.

Discussion

Evidence of millet cultivation adjacent to the Bandiagara Escarpment has also been discovered dating back to the 4th millennium BC (Burgarella et al. 2018; Manning et al. 2011). The form that is attributed to the Eastern Dogon languages [ju-] or [ju-], is also found along disparate language families along a definitive North-South line reaching all the way to Ivory Coast, but neither north nor west or east, with the exception of a common form in Mandinka spoken in Southwestern Senegal.



Sources of Borrowings



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