

The diachrony of language geography: linking small-scale and large-scale perspectives

Keywords: language geography, language ecology, linguistic diversity, language ideologies, historical linguistics

Language geographies differ significantly across the world. Such differences can be observed on local, regional, continental, and global scales. Locally, in many parts of New Guinea it is possible to encounter a completely different language that not only is not mutually intelligible with a neighboring one, but belongs to an entirely different family, each time one walks from one village to the next (Foley 2020). In Europe, this is much less likely; before the development of standardized national languages, the continent was characterized by extensive dialect continua involving principally the Romance, Germanic, and Slavic branches of Indo-European. On the regional scale, Southeast Asia is characterized by a contrast between poverty of languages in the agriculturalist cities of the valleys and the fluid identities of people, which entails a lower allegiance to either one of many individual languages, in the highlands (Scott 2009). On the continental scale, there are striking skewings in language diversity e.g. in North America: California is hyperdiverse, but east of the Rockies there is a language geography that is notably less exuberant. Finally, globally, the thousands of languages of the world at large are not evenly distributed either: for instance, one pattern is that language diversity levels get less dense the further away one moves to the equator (Mace and Pagel 1995, Nettle 1998).

This workshop aims to explore what historical, sociolinguistic, and environmental factors shape language geographies on lower scales, and how large scale patterns might emerge from such lower-level language ecologies in different environments across the globe.

In doing so, it seeks to address two probably interrelated open questions at the current state of research:

First, since there seems to be a geographical component to global variation in linguistic diversity, quantitative global studies such as Nettle (1998), Gavin et al. (2017), Axelsen and Manrubia (2014), or Hua et al. (2019) use environmental variables like temperature, precipitation, terrain rugosity, or the proximity to geophysical barriers as predictors of linguistic diversity. However, results are inconsistent, so that it remains unclear if differences in language geography can be accounted for with reference to physical geography. If so, it is also unclear what factors are relevant, why they are relevant, and how they relate to human behavior, linguistic and nonlinguistic, that fosters or inhibits the emergence of particular language geographies. Furthermore, it has been suggested

that the search for universally valid geographical factors underlying different language geographies might be a wild goose chase, and that in reality different environmental factors conspire in regionally specific ways (Pacheco Coelho et al. 2019). Finally, the well-known distinction between spread and accretion zones (Nichols 1992, 1997) is linked to different diachronic language dynamics that are set in motion by different environments (like, prototypically, the steppe of Eurasia fostering language spread and the Caucasus mountains fostering language accretion). Such evidence has not been articulated with quantitative investigations such as the ones mentioned either.

Second, abstract theorizing as to how speakers of languages may behave to yield the observed distributions (e.g., Nettle's 1998 "management of ecological risk" or Gavin and Stepp 2014's "group boundary formation") is typical for global-scale quantitative studies. But it is not always clear how these ideas link up to actually observed patterns of human behavior and linguistic diversification. Sociolinguistic perspectives on regionally prevailing language ideologies that govern language use in a particular language ecology are likely to be important here, because these may influence emerging language geographies. A well-known case is the Vaupés basin of Amazonia, where linguistic exogamy sustains widespread and stable regional multilingualism that is not reduced by incoming languages. Rather, incoming languages like Tariana become integrated into the language ecology according to preexisting principles and hence increase net diversity (Aikhenvald 2002).

A third question of interest, also implicated in the large-scale work of Nichols (1992, 1997), is whether language ecologies in different types of language geographies influences the diachronic evolution of involved languages themselves. To stick with the example of the Vaupés, predicated upon a language ideology that bans conscious language mixing in the form of lexical borrowing, but that does not filter out less conscious processes of structural convergence, there is significant grammatical convergence effects while lexica are kept distinct. However, few studies (e.g. Huisman et al. 2019) model language geography and feature geography simultaneously and explicitly.

This workshop aims to serve as a platform that brings together scholars who work from quantitative and qualitative perspectives on the dynamics of language diversity to foster the kind of exchange that is required to tackle these questions. Such interaction is presently too limited.

In keeping with this aim, the workshop invites different types of presentations:

With the goal of obtaining a better comparative view on language ecologies and their diachronic dynamics at local and regional scales, presentations may sketch the characteristics of a specific regional language ecology and explore how it relates to the creation and maintenance of the region's language geography. Presentations dealing with ecologies that have not yet been made as prominent as e.g. the Vaupés, are

particularly welcome. Such presentations should have a comparative perspective and present case studies involving a set of distinct languages rather than a single one. They should provide an overview of the area concerned; the languages involved; their geographical distribution; describe what the social and economic relations between their speakers are; what language ideologies govern language use (if any); what effects the regional system in which language use is embedded has on the diachronic trajectory of languages. This may concern the lexicon (e.g. lexical borrowing or the absence thereof); convergence effects, including large-scale readjustments of morphosyntactic organization (e.g. Ross's 1996 „metatypy“), but possibly also divergence effects (Evans 2019) as speakers seek to maintain ideologically relevant linguistic differences. Of interest is also the question whether there is evidence that the observed characteristic language ecology is a long standing stable one that may be projected into the past, and if so what evidence there is in support.

Also welcome are presentations that treat particular language geographies on any scale of analysis, including large or even global scales, and that model, either quantitatively or qualitatively, the language dynamics underlying the generation or maintenance of distinct patterns in language geography.

Finally, particularly welcome are studies that link the quantitative analysis of environmental variables and diversity levels with empirically observable linguistic and nonlinguistic behavior and/or diachronic language dynamics of expansion and language shift, and that help to understand synchronically observed patterns of language geography through the exploration of the underlying diachronic language dynamics.

References

Aikhenvald, Alexandra Y. 2002. *Language contact in Amazonia*. Oxford: Oxford University Press.

Axelsen, Jacob Bock, and Susanna Manrubia. 2014. River density and landscape roughness are universal determinants of linguistic diversity. *Proceedings of the Royal Society of London. Series B: Biological Sciences* 281(1788): 20141179.

Evans, Nicholas. 2019. Linguistic divergence under contact. In: Michela Cennamo and Claudia Fabrizio (eds.): *Historical Linguistics 2015: Selected papers from the 22nd International Conference on Historical Linguistics, Naples, 27-31 July 2015*, 563-592. Amsterdam/Philadelphia: John Benjamins.

Foley, William A. 2020. In: *Language diversity, geomorphical change, and population movements in the Sepik-Ramu basin of PapuaNew Guinea*. In: Mily Crevels and Pieter Muysken (eds.): *Language dispersal, diversification, and contact: a global perspective*, 142-155. Oxford: Oxford University Press.

Gavin, Michael C., Thiago F. Rangel, Claire Bower, Robert K. Colwell, Kathryn R. Kirby, Carlos A. Botero, Michael Dunn, Robert R. Dunn, Joe McCarter, Marco Túlio Pacheco Coelho, and Russell D. Gray. 2017. Process-based modelling shows how climate and demography shape language diversity. *Global Ecology and Biogeography* 26 (5): 584-591.

Hua, Xia, Simon J. Greenhill, Marcel Cardillo, Hilde Schneemann, and Lindell Bromham. 2019. The ecological drivers of variation in global language diversity. *Nature Communications* 10: 2047.

Huisman, John L. A., Asifa Majid, and Roeland an Hout. 2019. The geographical configuration of a language area influences linguistic diversity. *PLoS One* 14(6): e0217363.

Mace, Ruth, and Mark Pagel. 1995. A latitudinal gradient in the density of human languages in North America. A latitudinal gradient in the density of human languages in North America. *Proceedings of the Royal Society of London. Series B: Biological Sciences* 261 (1360): 117-121.

Nettle, Daniel. 1998. *Linguistic diversity*. Oxford: Oxford University Press.

Ross, Malcolm. 1996. Contact-induced change and the comparative method: cases from Papua New Guinea. In: Mark Durie and Malcolm Ross (eds.): *The comparative method reviewed: regularity and irregularity in language change*, 180-217. New York: Oxford University Press.

Scott, James C. 2009. *The art of not being governed: an anarchist history of Upland Southeast Asia*. New Haven: Yale University Press.