

## Language and the Anthropocene

Martine Robbeets

Technology, a Leitmotif of the 21<sup>st</sup> ICL conference, has catapulted us from the age of hunting prey and gathering berries to the age of industrialized agriculture and online conferencing. But along with progress, technology has also generated an explosion of our world's population, loss of biological diversity and global climate change. The term "Anthropocene" refers to the period when human technology started to have an irreversible impact on our planet's climate and ecosystems. The question of when the Anthropocene began is still debated (Renn 2020) but anthropologists tend to date its onset back to the beginnings of agriculture (Smith and Zeder 2013; Boivin *et al.* 2016; Ellis 2018).

With a cut-off point of around 10 000 years ago (Comrie 2000; Campbell 2000), historical comparative linguistics is set in the Anthropocene. This is probably no coincidence, since it is around this time that relatively few dominant farmers languages started to spread at the expense of a large variety of pre-existing hunter-gatherer languages and since the cultural imprints of farmers are easier to reconstruct than those of hunter-gatherers, who tread only lightly on the earth. Nevertheless, notwithstanding various calls to integrate the humanities into Anthropocene research (Palsson *et al.* 2013; Ellis *et al.* 2016), linguistics has been slow to engage with the topic.

In this talk, I will examine how environmental change, climate change in particular, may have impacted language dynamics over the last 10 000 years. After exploring the interface between Historical Comparative Linguistics and Anthropocene studies, I will discuss how climate affects language diversity, how it may impact language structure and how it drives language mobility. Finally, I will suggest that certain global climate trends may have led to local linguistic responses, simultaneously in different parts of the world.

Examples will be drawn from various languages and language families worldwide but my research focus is on North and East Asia, particularly the "Transeurasian" language family (Robbeets *et al.* 2021)—i.e., Japanese, Korean, Tungusic, Mongolic and Turkic languages—and neighbouring families. This region serves as an interesting test-case, not only because it is home to a variety of language families, but also because it is known for its versatile climate and changing landscapes since Neolithic times.

## References

Boivin, Nicole L., Melinda A. Zeder, Dorian Q. Fuller, *et al.* (2016). Ecological Consequences of Human Niche Construction: Examining long-term anthropogenic Shaping of Global Species Distributions. *Proceedings of the National Academy of Sciences* 113:6388-6396.

Campbell, Lyle (2000). 'Time Perspective in Linguistics', in Colin Renfrew, April McMahon, and Larry Trask (eds.), *Time Depth in Historical Linguistics*. Cambridge: McDonald Institute for Archaeological Research, 3-31.

Comrie, Bernard (2000). 'Is there a single Time-depth Cut-off Point in Historical Linguistics?', in Colin Renfrew, April McMahon, and Larry Trask (eds.), *Time Depth in Historical Linguistics*. Cambridge: McDonald Institute for Archaeological Research.

Ellis, Erle, Mark Maslin, Nicole Boivin, and Andrew A. Bauer (2016). ‘Involve social scientists in defining the Anthropocene’, *Nature* 540:192–193.

Ellis, Erle C. (2018). *Anthropocene: A Very Short Introduction*. Oxford: Oxford University Press.

Palsson, Gisli, Bronislaw Szerszynski, Sverker Sörlin, *et al.* (2013). ‘Reconceptualizing the “Anthropos” in the Anthropocene: integrating the Social Sciences and Humanities in Global Environmental Change Research’, *Environmental Science and Policy* 28:3-13.

Robbeets, Martine, Remco Bouckaert, Matthew Conte, *et al.* (2021). ‘Triangulation Supports Agricultural Spread of the Transeurasian Languages’, *Nature* 599:616-621.

Renn, Jürgen (2020). *The Evolution of Knowledge: Rethinking Science for the Anthropocene*. Princeton: Princeton University Press.

Smith, Bruce D. and Melinda A. Zeder (2013). ‘The onset of the Anthropocene’, *Anthropocene* 4:8–13.