## **Mountain linguistics**

Matthias Urban (University of Tübingen)

Keywords: Linguistic diversity, language geography, language dynamics, language ecologies, mountains

Language use in mountainous areas often exhibits special dynamics (Urban 2020).

For some mountain regions of the world, these are rather well described. For instance, linguistic diversity in the Caucasus exists on the basis of "asymmetrical vertical bilingualism:" there is a social and economic division between transhumant pastoralist highlanders and lowlanders, who are agriculturalists and traders. Since markets and winter pastures are in the lowlands, highlanders typically learn lowland languages, but lowlanders do not learn highland languages (Nichols 2004, 2013, cf. Dobrushina 2013). Similar socioeconomic opposition between highlanders and lowlanders, with linguistic dimensions, are also in evidence in other mountain regions of the world (Scott 2009 for mainland Southeast Asia, Urban forthcoming for the Central Andes). However, for other mountain areas of the world, detailed sociolinguistic and anthropological descriptions of the conditions on which language use is predicated are thin on the ground.

Accumulated over long time, such patterns of use yield particular –often discontinuous and dense– distributions of languages and language families in geographical space, with rich linguistic diversity in many (e.g. the Caucasus and the Himalayas, cf. Comrie 2008, Turin 2017), but not all mountain areas (e.g. the Altai). In addition, in some parts of the world, linguistic diversity tends to build up at the foots of mountain areas more than in the mountains themselves (e.g. MacEachern 2003). Perhaps for this reason, large-scale quantitative comparative studies (Axelsen and Manrubia 2014, Hua et al. 2019) reach contradictory results on the relationship between mountain environments and linguistic diversity.

Furthermore, it is conventional wisdom that languages spoken in peripheral, inaccessible areas such as mountains tend towards conservativism (e.g. Mańczak 1988) and the maintenance or even further accruement of complex structures (Baechler 2016, Nichols 2013, 2015, 2016, Bentz 2018). This is often attributed to sociolinguistic isolation and the resulting inward-looking "esoteric" orientation of speech communities. Since the precise characteristics of language geography and language typology in mountain areas therefore also depend on prevailing local sociolinguistic and socioeconomic conditions, rich sociolinguistic work is vital for modelling and understanding language distributions and structures.

Finally, more direct influences of the environment on language structures at high altitudes have been proposed as well (Everett 2013).

In sum, there is a rich set of factors that potentially interact in bringing about geographical and structural linguistic distributions in mountain areas. Understanding these dynamics systemically is as challenging as exciting.

Research communities who specialize on different mountain regions of the world are usually not in interaction with one another on these topics. The result is that broader commonalities as well as differences between different high-altitude areas of the world

remain poorly understood, to the detriment of higher-level theorizing. Also, researchers engaged in large-scale quantitative work on language geography and diversity are not usually in touch with any of these communities, but could benefit from the on-ground experience of descriptive and historical linguists in fine-tuning models and explanatory frameworks for their findings.

This workshop aims to provide a forum for exchange, interaction and knowledge exchange between these different communities, with the overarching aim to gain a better general understanding of the linguistics of mountain areas in all its interdependent aspects. Contributions addressing the following topics are welcome, but the list is not exhaustive:

- How does the mountain environment and socioeconomic organization in mountain areas influence patterns of bi- and multilingualism and language attitudes?
- How does the integration of mountain areas into national states and economies influence or disrupt traditional patterns of language use?
- How do such patterns of usage and attitude influence language geography in the long run in diachronic terms? What are the dynamics of language spread or spread of innovations within languages/dialects (e.g. uphill, downhill, or transversal), and how does this relate to language use?
- What broader patterns of language distribution in mountains are there, and how are they generated? E.g., is there a correlation between language boundaries and boundaries of ecozones? Are languages spoken in discontinuous enclaves, and how can we account for this diachronically?
- How can overall levels of linguistic diversity/language density and different mountain areas of the world be best explained? What drives high or low diversity in mountains, and what drives high or low diversity in the surrounding lowlands?
- How can such detailed sociolinguistic or anthropological descriptions of language ecologies in mountain areas most fruitfully inform or refine quantitative modelling of language diversity and language density?
- Can claims as to special structural-typological characteristics of languages spoken at high altitudes be corroborated on a worldwide comparative basis, and are there more such characteristics that have not yet been discussed widely? If so, are the characteristics best accounted for by social/sociolinguistic or directly environmental factors, and how do we decide between these explanatory options methodologically?
- How is the notion "mountain" or "mountain area", which is left deliberately vague here, best defined for linguistic purposes?
- In addition to papers addressing these questions, contributions that survey mountain areas on a general level with regard to language use, language geography, and language history, especially areas where these are not widely discussed in print (e.g. the Altai, the Hindukush), are highly welcome, too.

Financial support of the convener from the German Research Foundation (Deutsche Forschungsgemeinchaft, DFG, grant number UR 310-1/1) is gratefully acknowledged.

## References

- Axelsen, Jacob Bock, and Susanna Manrubia (2014), River density and landscape roughness are universal determinants of linguistic diversity, *Proceedings of the Royal Society B: Biological Sciences* 281, 20133029.
- Baechler, Raffaela (2016), Inflectional complexity of nouns, adjectives and articles in closely related (non-)isolated varieties, in R. Baechler and G. Seiler (eds.), (2016), *Complexity, isolation, and variation*, Berlin / Boston: Walter de Gruyter, 15–46.
- Bentz, Christian (2018), *Adaptive languages: An information-theoretic account of linguistic diversity*, Berlin / Boston: Walter de Gruyter.
- Comrie, Bernard (2008), Linguistic diversity in the Caucasus, *Annual Review of Anthropology* 37, 131–143.
- Dobrushina, Nina (2013), How to study multilingualism of the past: investigating traditional contact situations in Daghestan, *Journal of Sociolinguistics* 17(3), 376–393.
- Everett, Caleb (2013), Evidence for direct geographic influences on linguistic sounds: the case of ejectives, *PLOS ONE*, 8(6), e6527.
- 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.
- MacEachern, Scott (2003), Residuals and resistance: Languages and history in the Mandara mountains, in B. D. Joseph, J. Destefano, N. G. Jacobs, and I. Lehiste (eds.), (2003), When languages collide: Perspectives on language conflict, language competition, and language coexistence, Columbus: Ohio State University Press, 21–44.
- Mańczak, Witold (1988), Bartoli's second "norm", In J. Fisiak (ed.), (1988), *Historical dialectology: regional and social*, Berlin / New York / Amsterdam: Mouton de Gruyter, 349–355.
- Nichols, Johanna (2004), The origin of the Chechen and the Ingush: a study in alpine linguistic and ethnic geography, *Anthropological Linguistics*, 46(2), 129–155.
- Nichols, Johanna (2013), The vertical archipelago: adding the third dimension to linguistic geography, in P. Auer, M. Hilpert, A. Stukenbrock, and B. Szmrecsanyi (eds.), (2013), *Space in language and linguistics: geographical, interactional, and cognitive perspectives*, Berlin / Boston: Walter de Gruyter, 38–60.
- Nichols, Johanna (2015), Types of spread zones: Open and closed, horizontal and vertical, in R. de Busser and R. J. LaPolla (eds.), (2015), *Language structure and environment:*Social, cultural, and natural factors, Amsterdam / Philadelphia: John Benjamins, 261–286.
- Nichols, Johanna (2016), Complex edges, transparent frontiers: Grammatical complexity and language spreads, in R. Baechler & G. Seiler (eds.), (2016), *Complexity, isolation, and variation*, Berlin / Boston: Walter de Gruyter, 117–137.
- Scott, James C. (2009), *The art of not being governed: an anarchist history of Upland Southeast Asia*, New Haven / London: Yale University Press.
- Turin, Mark (2007), A multitude of mountain voices. *Sustainable Mountain Development*, 52, 11–13.
- Urban, Matthias (2020). Mountain linguistics, *Language and Linguistics Compass* 14 (9): e12393.
- Urban, Matthias (Forthcoming). Language ecologies and dynamics in the ancient Central Andes, in M. Urban (ed.), *The Oxford Guide to the Languages of the Central Andes*. Oxford: Oxford University Press.