

**Markus Reichert:  
Spatio-temporal patterns in linguistic diversity and  
biodiversity**

**Abstract:**

The diversities of human languages (linguistic diversity) and biological species (biodiversity) exhibit astonishingly similar patterns on a global scale. A higher diversity of languages and species is found towards the equator, on islands and in certain hotspot regions of the world.

In my dissertation project, I presume that these similarities can be understood within a theoretical framework of common evolutionary preconditions (heredity, variation, selection), allowing for an integrated research approach. A closer look at spatio-temporal diversity patterns also reveals characteristic differences. They are to be understood in the context of varying evolutionary factors (e.g. social factors in linguistics) and time scales. Furthermore, linguistics and ecology are complementary in describing the inventory of present diversity (better in linguistics) and past phylogenetic histories (better in ecology), thereby bridging gaps in research across disciplines. Using methods from ecological modelling, I broaden the focus to answer questions relevant to both language typology and biodiversity research, advancing from a synchronous towards a diachronous perspective: How are today's diversities influenced by (socio-)environmental conditions? How do they differ between the linguistic and biological systems? What changes occurred over time? My presentation will give a first overview about my research project, discussing the general idea, introducing the state-of-the-art, and pointing out conceptual pitfalls. I will also provide reasoning for the relevance of my research to both language typology and biodiversity research.