Language Diversity: Space, Time, and Influences on Design

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The study of linguistic diversity has evolved rapidly in recent years into a multi-faceted, empirically sophisticated field. In an era characterized by data sharing, computational power, and interdisciplinary idea exchange, we are able to investigate not just the temporal and spatial dimensions of linguistic diversity, but also how external forces (e.g. culture, ecology) and functional considerations (e.g. cognition, use) impact linguistic systems and their diversity.

I present two studies that demonstrate how methodological innovation and interdisciplinary influences can improve our answers to longstanding questions about linguistic diversity. The first focuses on the basic distribution of languages on the North American continent, revisiting the question of what drives spatial patterns in language diversity. A geographically weighted path analysis approach overcomes multiple obstacles that have impeded prior work on the topic, casting new light on where and how several hypothesized environmental drivers of diversity impact language distributions. The second study I present implements Bayesian trait analysis to investigate the histories of color term systems in the Pama-Nyungan language family of Australia, explicitly testing the theory that interaction between color cognition and lexical systems constrains the evolution of basic color terms and, consequently, the diversity of color term systems we find in the world's languages.

I conclude by discussing how innovative but rigorous empirical research, in concert with new data tools like the Grambank database of morphosyntactic features, can be used not only to answer old questions about basic patterns and phenomena, but also to expand the scale and scope of questions we are able to ask about the diversity of the world's languages. Along the way I highlight specific opportunities to probe deeper into the many influences that impact grammatical diversity, phylogenetic diversity, and spatial patterns in language distribution.