The semantics of color terms. 
A quantitative cross-linguistic investigation

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Abstract

The talk will present results of a statistical evaluation of the data from the World Color Survey, a large scale typological questionnaire study on the lexical semantics of basic color terms. Unlike most previous studies on the topic, I mainly use data from individual speakers, rather than generalizations over individual languages, as basis for statistical inference.

I will present two main findings:

With a good approximation, the extension of color terms are convex sets in the CIELab space of color perception. This is a confirmation of a conjecture by Peter Gärdenfors on the structure of properties in conceptual spaces.

The attempt to identify a small set of "possible color naming systems" along the lines of Berlin and Kay was only partially successful. Against my expectations, there are not a small number of frequently attested systems and a large number of rarely attested systems. Instead, I found that language types are distributed according to a power law, without a clear cut-off point between "possible" and "impossible" systems.

The talk will end with some speculations on the consequences of this finding for the notion of linguistic universals.