Colors, features and power laws. Statistical typology and the notion of linguistic universals

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The talk starts with a quantitative evaluation of the the World Color Survey, a large scale questionnaire study about color naming systems across typologically diverse languages. Using statistical feature extraction, it can be shown that (a) the extension of color terms form, with a good approximation, convex regions in the psychological color space (thus lending support to Gärdenfors' 2000 central claim about universal constraints on possible adjective meanings), but (b) that Berlin & Kay's distinction between possible and impossible color naming systems cannot be maintained. Rather, there is a smooth transition between probable and improbable systems without a clear cutoff point. In the second part of the talk, it is shown that this characteristics also applies to other linguistic features that a covered in sufficiently large typological data bases (like the World Atlas of Language Structures or the Automated Similarity Judgment Project). Finally, the consequences of this finding for our understanding of typological universals will be discussed.