How universal are focal colours after all? A different approach and analysis for identifying focal colours

Regier, Kay and Cook (2005) argued that the prototypal, focal colours at the centres of colour categories are universal, although boundaries between categories can be swayed by cultural and linguistic influences. In contrast, some formulations of Linguistic Relativity predict that focal colours can also vary.

We located foci for Basic Colour Terms (BCTs) in diverse languages, using speakers' unconstrained nominations of best examples of each BCT. Data were obtained with an empirical-cognitive field method and standard stimuli, for a range of languages, weakly as well as closely related, with different numbers of BCTs: Italian, Spanish, Czech, Hungarian, Estonian, Finnish, Udmurt, Komi-Zyrian and Turkish. Analysis within an empirical colour space confirms the substantial cross-cultural similarity in colour-naming patterns: focal colours are not distributed arbitrarily in the space, instead forming clusters central to 11 universal colour categories. This convergence highlights the departures and exceptions to the overall trend, with secondary colour terms exhibiting relatively loose clustering of foci, while differences in the foci are sometimes significant – making it possible to argue for language- and culture-specific contributions to their locations. The focal points for primaries in nine languages are also shown in the model. To exemplify, the distribution of Turkish 'GREEN' choices is shifted towards 'blue' compared to the others (as shown in Figure 1). The distribution of Spanish GREEN is lighter than that of Lithuanian GREEN. There is also a lot of variation in the foci of secondary BCTs, especially pink. Some differences in foci placement can be accounted for the selection of stimuli: there are only two tiles that could possibly be named 'yellow', while there are lots of pinks, blues, greens, browns and purples in the standard 65-colour set. The rationale for the stimuli selection is given in numerous publications by Davies and his colleagues (see below).

The methodology for estimating focal colours from colour naming data can also be applied to published data, i.e. the results from Davies and his colleagues for Russian (1994a), English (1995), Xhosa (1994b) and Catalan (Davies, Corbett and Margalef, 1995).

References

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Figure 1. MDS solution from treating the colour-naming responses as sorting data.