Limits of Color Perception in Map Legibility

Summary / Zusammenfassung
Primarily a PhD project for Ms. Alzbeta Brychtova, in this project we study how to best utilize color in cartographic maps. While color perception has been studied in cartography for many decades, we revisit the subject with modern tools (e.g., we use eye tracking to understand participants' visual strategies when the colors are too similar) and conduct systematic empirical studies to establish the lower thresholds of color discriminability under various conditions. For example, while the number of classes in some map types can be controlled, in some others there are naturally imposed categories (thus, the number of categories cannot be changed). Assuming the categories are represented with color as a visual variable; the two cases require different design solutions. In this project we try to bridge the theories of color perception and map design through user experience studies.

Publications / Publikationen
Weitere Informationen unter http://www.geo.unizh.ch/~arzu/publications/

Keywords / Suchbegriffe
Color perception, eye tracking, choropleth maps

Project Leadership and Contacts / Projektleitung und Kontakte
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