

Perceptual organization, background knowledge as determinants of map and graph reading

(Hurts and Hommel)

Description

When people read maps or common statistical graphs their spatial representation of the depicted area is often biased by cognitive processes. For instance, people tend to underestimate the distance between two depicted cities if they are connected through a road, as if "connecting" two cities moved them closer together. Typically, such observations are attributed to knowledge effects (knowing about the connectedness leads to a "shorter" judgment. However, some of these phenomena may also be produced by perceptual Gestalt laws. This and related ideas will be investigated in this project.

Financing

Eerste en tweede geldstroom

Staff

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Student participation

Scriptie en oefenexperiment

Publications

Hurts, C.M.M. (1996). The Effect of Configural Graphs on Concurrent and Retrospective Performance. Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting. Santa Monica, CA: HFES, 1160-1164.

Hommel, B., Gehrke, J., & Knuf, L. (2000). Hierarchical coding in the perception and memory of spatial layouts. *Psychological Research*, 64, 1-10.