

# Perspectives in Externalizations of Mental Spatial Representations

H. Löwen, A. Schwering, J. Krukar, S. Winter

**Abstract** Place is a core component of human spatial knowledge and therefore a central topic in GI Science. People use externalizations of mental spatial representations to communicate about space. Textual descriptions and graphical descriptions are the two main modes of communication. In this paper a distinction of three scales of spatial descriptions is assumed and textual and graphical descriptions are collected and analyzed in order to investigate the differences between the spatial descriptions. Thereby the focus lies on the properties and perspectives of the descriptions. It is found that within the textual descriptions people tend to not consistently use one perspective, but switch perspectives and predominantly apply the route perspective. For the graphical descriptions there has been no clear categorization of description perspectives. However, there are differences in the properties of these descriptions that indicate different perspectives.

**Keywords** Spatial information extraction, Communication modes, Spatial description perspectives

