

CALL FOR PAPERS

Spatial Cognition and Computation



Special issue on "Spatial and visual components in mental reasoning about large-scale space"

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The investigation of cognitive representation and the processing of visuo-spatial information is pursued from multi-disciplinary perspectives:

- Cognitive psychologists empirically investigate spatial and visual information processing in human memory, i.e. the characteristics of different types of information processing and their interaction.
- Cognitive neuroscientists are interested in how visual and spatial information is processed in the brain, and which neural processes underlie visual and spatial thinking.
- Computer scientists in artificial intelligence aim at modeling spatial and visual information processing in qualitative spatial reasoning and in diagrammatic reasoning, both theoretically and application-driven.

This special issue of *Spatial Cognition and Computation* follows an international workshop held at the International Spatial Cognition Summer Institute (ISCSI), 01-02 Sept 2003 in Bad Zwischenahn, Germany. Details on this workshop can be found at <http://www.cosy.informatik.uni-bremen.de/events/spavis03>. In the workshop, researchers from the diverse disciplines investigating visuo-spatial information processing discussed results to identify open issues and to work out research perspectives for visuo-spatial mental reasoning.

The editors solicit contributions that elaborate on the issues discussed in the workshop. These issues include, but are not limited to:

- the definition of spatial mental models and visual mental images;
- the differentiation between and integration of spatial and visual mental reasoning;
- the interaction between visual-spatial mental imagery and visual perception;
- computational modeling of mental reasoning with spatial and visual mental representations;
- the role of different spatial scales in mental reasoning;
- egocentric and allocentric influences in visuo-spatial mental reasoning.

The papers will be refereed according to the usual standards and procedures for the journal. Manuscripts should conform to the guidelines presented in the Publication Manual of the American Psychological Association (5th ed.) Help on preparing APA style manuscripts is available at the website of *Spatial Cognition and Computation* (<http://www2.sis.pitt.edu/~scc>). Any readable manuscript format is acceptable for initial submission and reviewing, although PDF is the preferred format.

Please submit your manuscript of 12-18 pages to Thomas Barkowsky (barkowsky@sfbtr8.uni-bremen.de) by 29 February 2004.