

Spatial working memory in different senses

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Abstract This symposium is aiming for an integrative model of spatial working memory that not only considers spatial information in the visual domain but also spatial information provided by other modalities. For that purpose we bring together researchers with similar but nevertheless different perspectives. All of them share interests in spatial information processing, but at the same time these scientists investigated spatial processing in different sensory modalities and/or in different tasks. Visual 2D, visual 3D, auditory, and haptic modalities were investigated. Words from oral language, words from sign language, real sounds, abstract pictures, non-nameable sounds, and 'sounding space' were assigned as

to-be-processed information. Additionally, the full range of neuro-cognitive methods was applied. The authors will present fMRI, ERP, and behavioural data. From this multiple methods approach we hope to get converging evidence for a better understanding of spatial working memory and its neural realization. By this attempt we hope to contribute to shaping of a neurocognitive model of spatial working memory that is more general and that covers a broader scope than the actually discussed models.

Keywords Working memory • Spatial memory

