

Einladung  
zu einem Vortrag  
über  
Age, language, and context as determinants of spatial orientation

von  
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Stephen Levinson distinguishes between three different frameworks of spatial orientation on the horizontal plane: Absolute, Intrinsic, and Relative. In Absolute coordinate systems, the Figure and the Ground are related based on coordinates of fixed bearings or cardinal directions (e.g. *Norway is to the North of Germany*). Intrinsic frames of reference make use of an inherent “facet” of the Ground (e.g. *The cat is in front of the TV*), while in Relative frames of reference the relation is established using speaker-centered coordinates based on body axes projected onto relationship between the Figure and the Ground (e.g. *The cat is to the left of the TV*). These frames are used variably in different languages, and Levinson proposes a causal relationship between linguistic coding and conceptual representations. This is tested in different rotation tasks. In the case of Hungarian, a primarily Relative/Intrinsic language, this would predict that language development results in an increasing number of egocentric answers in rotation tasks. We examined developmental changes in five age groups (4-10 years) of typically developing native Hungarian children and a sixth adult group (18-30 years). The results do not support the expected relationship. The developmental trend was exactly the opposite of the hypothesis posed by Levinson: speakers of an inherently intrinsic/relative language seemed to prefer absolute choices ever increasingly with age. At the same time, hand preference and special ecaion (language versus sportd) had an effect. There is a threefold causality in the choice of reference frame in children: 1. Biological effects (such as sex and handedness) and 2. individual differences (such as intelligence and spatial memory) have a large impact on spatial reference choices 3. Both immediate (visible allocentric and egocentric cues) and general environment (education, culture) are important, yet language alone does seem to play a role.

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