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# Between Perception and Conceptualization: Graded Constraints on Spatial Representation

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## Abstract

Semantic attributes such as *contact*, *inclusion*, and *support* are often assumed to reflect universally available properties of spatial scenes. This study introduces a preliminary method for empirically evaluating whether such attributes are directly available in spatial scenes or shaped through conceptualization. Speakers of Moroccan Arabic and English rated the applicability of geometric, functional, and qualitative physical attributes for a set of simple spatial scenes. In this pilot test, we examine which attributes show cross-linguistic convergence, indicating conceptual properties of the scenes, and which show cross-linguistic (or individual) variation, suggesting other influences on their interpretation. Cross-linguistic correlations provide preliminary evidence of graded convergence, with attributes differing in their degrees of alignment across languages. These patterns suggest that universality in spatial semantics is graded rather than categorical. These findings illustrate the potential of this approach to provide an objective and fine-grained empirical assessment of how spatial attributes are accessed and interpreted.