Spatial Representation of Environmental and Geographical Space in Different Perspectives

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Abstract: This experiment investigates the impact of scale and perspective on spatial representations. Seventy summer school participants indicated the spatial relationship between the conference center and a nearby lake (map A) as well as their hometown (map B). They marked the target both on partial maps in birds-eye perspective or on a tilted plane (oblique perspective). After completing both maps, participants added an arrow pointing north to their drawings. Most type B maps were oriented north-up, but orientation varied widely in type A maps. Our findings suggest that most participants remembered a topographic map for depicting the large-scale space, no matter in which perspective the map was drawn. For depicting the relationship of a close location (i.e., the lake), most participants seem to rely on embodied strategies or a strategy based on route knowledge.