

Addendum

Effects of projection geometry in drawing of 3D objects and scenes on reality and preference judgments

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The visual perception of 2D drawings of 3D objects is still under debate in psychology and arts. One of the central issues is that whether it is governed by polar projective geometry or by others, because people often accept parallel projections and multiple perspective compositions. In the present study, we examined whether projection in drawings would influence the judgments of reality and preference of the drawings and whether the two judgments would interact. Eighty-four Japanese participants viewed pairs of 2D drawings of 3D objects and those of 3D schematic scenes. One of the pair was depicted in polar projection while the other was in parallel projection (for cubes) or in multiple perspective composition (for scenes). In separate sessions, participants were asked to choose one that looked more realistic and one that they preferred more. The results showed that our participants tended to judge the drawings of the objects with polar projection significantly more realistic (62%) and more preferable (58%). However, such a bias toward polar projection was not found for the scene drawings (53% for reality and 45% for preference). Further analysis revealed that individuals who found the objects in polar projection more realistic would tend to prefer objects in polar projection. But there was little correlation between reality and preference judgments for the scene drawings. The results suggest that the perception and preference of 2D drawings of 3D objects (and their interaction) depends on what is depicted in the drawings.

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A Case of Exploding Vehicles

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Suppose my experience represents a mango on a table. Call that which is represented by my experience the contents of experience. Call that which is doing the representing the vehicle of experience. Because evidence suggests that all bodily states causally impacting experience are nevertheless mediated by proximate effects in the brain itself, orthodoxy holds that all vehicles of experience are realized in the brain. Now consider's Shoemaker's distinction (1981) between the "core" and "total" realizer, as applied to vehicles of experience: the "core" realizer makes a salient but insufficient contribution to the realization of the vehicle; the "total" realizer suffices for realizing the vehicle. So for example, perhaps recurrent activation of MT/V5 + V1 is the "core" realizer for the experience of motion. Question: what is the "total" realizer of the vehicle? Is it limited to the brain, as orthodoxy holds? Block (2005) writes "what is--and is not--a *metaphysically necessary part of a metaphysically sufficient condition* of... experience (i.e., the minimal supervenience base)... the view, which I hold... is that nothing outside the brain is part of it." In contrast, I argue that the vehicle 'explodes' to include conditions outside the brain. Drawing on work by Johnston (2007) and Lewis (1986), I argue that while the "core" realizer is sensitive to the context of inquiry, the "total" realizer isn't. It is but a few steps to vehicle explosion. I consider whether this conclusion provides succor to extended-mind and embodied-cognition approaches to experience. I close with a dilemma: either reject the current forms of the "core/total" distinction or accept exploding vehicles.

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