Illusions that are not Illusions: Misleading cross-level comparisons

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Abstract

Visual illusions – as Oliver Braddick has provocatively argued – are too broad a category to be characterized by simple criteria such as non-veridicality or perceptual error. In the present analysis, we want to elaborate, in the context of Dejan Todorovic's augmented framework for illusions, on a class of classical visual illusions which we propose to call "misnamed illusions". The common characteristic of these is that the percept is veridical even though it is based on differing physical attributes. Within Todorovic's framework, the alleged perceptual error in many pictorial displays arises not within perceptual appearance but stems from a comparison between heterogeneous representational domains, like physical measurement and appearance. Examples include Adelson's checkerboard and the Lotto-Purves Colour Cube. There, the alleged mismatch between luminance and brightness or brown and orange colour arises as a consequence of the perceptual mechanism of colour constancy. In a simplified framework for a general audience, we can thus distinguish between misnamed illusions, which arise from misleading cross-level comparisons, and genuine illusions, in which the discrepancy is intrinsic to perceptual appearance itself, i.e., relations that are directly available for comparison within the same perceptual field. As an example for a genuine colour illusion, we would put forward the "Lilac chaser".
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