Review: Hybrid motion illusions as examples of perceptual conflict (#7084)

Edited by

Stuart Anstis, University of California, USA

Round 2, Review by:

George Mather, University of Lincoln, UK

For author and editor

The author has revised the paper extensively to accommodate the comments of reviewers. I only have two or three remaining comments.

Page 12 contains the line:

"However, Anstis and Rogers (2019) have noted that motion energy accounts of these phenomena are more descriptive than explanatory since all of these motion because they incorporate spatial smoothing, and any realistic motion model will signal reversed phi motion."

First, there is a typo in this sentence. Second, it begs the question as to what is meant by a "realistic" model. I would argue that motion energy accounts are more than just descriptive; they have a computational implementation that can predict motion illusions. The onus is on other "realistic" models to move beyond being descriptive by becoming computational (ie. implemented), and to demonstrate that they can actually predict psychophysical data. If other models can also demonstrate consistency with the data, then different models can be compared in terms of other criteria such as generality and complexity. The question of implementation is particularly relevant here, because finding features and edges in patterns containing multiple spatial frequencies is not an easy computational problem to solve, as some of the cited papers testify.

Finally, I could not find a reference to the cited work by Shapley et al. (2019).

Recommendation: Accept Submission

Completed: 2021-06-22 07:08 AM

Round 2, Review by:

Marvin Maechler, Dartmouth College, USA

For author and editor

The author has addressed all of my comments adequately. I recommend publication without additional changes.

Recommendation: Accept Submission Completed: 2021-06-19 12:06 PM

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