

Reviews (Round 2): Motion-driven enhancement of a lower region cue in depth perception (#8028)

Edited by: Kohske Takahashi, Ritsumeikan University, Japan

Review by: Satoshi Shioiri, Tohoku University, Japan

For author and editor

The authors have addressed most of my concerns. I have no further comment.

Recommendation: Accept Submission

Completed: 2021-11-17

Review by: Yuki Kobayashi, Ritsumeikan University, Japan

For author and editor

The authors have almost sufficiently addressed the comments in the previous review. The collected data made the discussion more convincing. However, I would like the authors additionally address the points below.

1. Generalizability of the comparison of two depth cues

The revised manuscript seems to put more focus on the comparison of the lower region cue's strength with other depth cues (e.g., "the lower region was predominantly perceived as being in front..." [p.3 left, line 31-], "the velocity cue is more dominant in determining the depth order..." [p4 left, line 28-], "the occlusion cue is more dominant than the lower region cue" [p5 left, line 32-]). I agree that these comparisons suggest general tendency, but it should be clarified that they are not necessarily applicable in any cases. The relation of depth cue A and B might be different in stimuli with different velocity or those of different texture pattern, shape,

or visual angle. The authors may be aware of this point, so I recommend they mention the limitation of the generalizability in the manuscript.

2. Data for Movie 1b (Appendix)

I do not agree with the authors' interpretation about the right region preference for Movie 1b. The information in the manuscript (i.e., 23 responses were the same as the preceding ones) does not seem to be sufficient to claim that the hysteresis effect is the main cause of the right preference. At least, information directly indicating that many of the 34 preceding trials were responded with "right" is necessary to claim this (I interpreted the 23 responses include "left" responses. Am I right?). I also think it should be shown how many preceding trials were "left or right" trials (some of the 34 preceding trials should have been "upper or lower" trials).

If the authors do not persist in the hysteresis effect hypothesis, I do not think they have to go deeply into this discussion in this paper. It might possibly be related to the visual system's left-right asymmetry (e.g., Campbell, 1978; Sun & Perona, 1998) but how it is driven in the present stimulus is not clear. I recommend the authors just leave this issue for future studies and mention so in the text.

3. Minor point

p6 left, line 16 "We conducted informal observations": this sentence sounded a little unnatural to me. I think the sentence should be modified to clarify that the subject of "informal observations" is 18 participants, not the authors.

Recommendation: Revisions required

Completed: 2021-11-08
