

Review: A line-doubling illusion (#7540)

Edited by

Thomas V. Papathomas

Reviewed by:

Xiaohua Zhuang

For author and editor

This manuscript reports an illusion of perceiving a single bar as double when viewed in near periphery under certain conditions. The authors have also looked at the effect of bar width, contrast and phase shift on this illusion.

The illusion is novel and clear. I have only two minor comments, as below:

For the wider bars in Figure 2, is it possible to provide a movie for at least the widest bar, to demonstrate the effect of the appearance of two edges rather than three edges? And/or maybe in Figure 2, separate the four different width bars into separate figures, so that readers can test out the four different bars themselves using the stationary figures. The four bars are currently placed too close to each other in one single figure, which makes it harder to examine the effect for each of these different bar widths.

For the effect of bar width in Figure 2, it is mentioned that "The appearance of two bars (and three edges) is limited to a range of bar widths similar to the width of one bar of the background." Is this an observation from the authors, or the authors have actually collected experimental data from a group of subjects to support this? It might be helpful to clarify this in the paper.

Reviewed by:

Chia-Huei Tseng

This submission reports a "line-doubling illusion" which occurs when participants view moving vertical bars with periphery vision. The variations provided by the authors were helpful to identify the boundary conditions. The contents and the movies were appropriate for the publication in Journal of Illusion.