

A study in preference in photo composition

Weng Khuan Hoh, Fang-Lue Zhang, Neil A. Dodgson

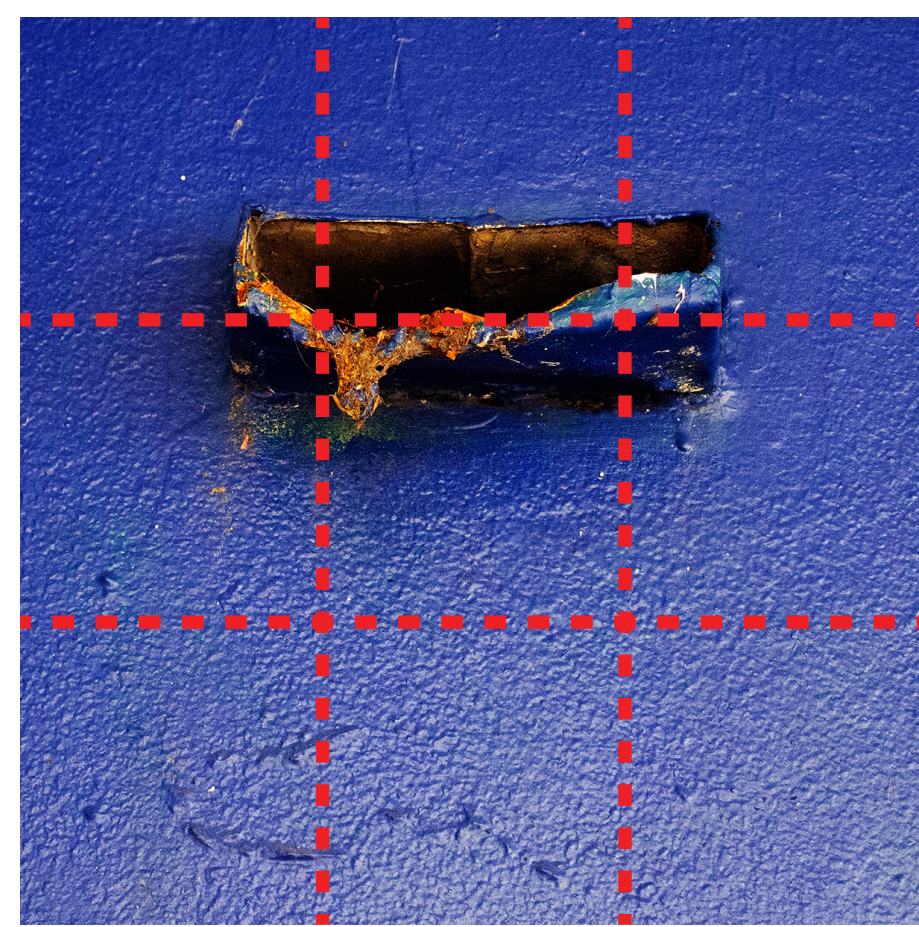
Victoria University of Wellington

Rule of Thirds?

The Rule of Thirds guideline is often used in computational aesthetics research but has never been verified or validated.



Rule of Thirds points

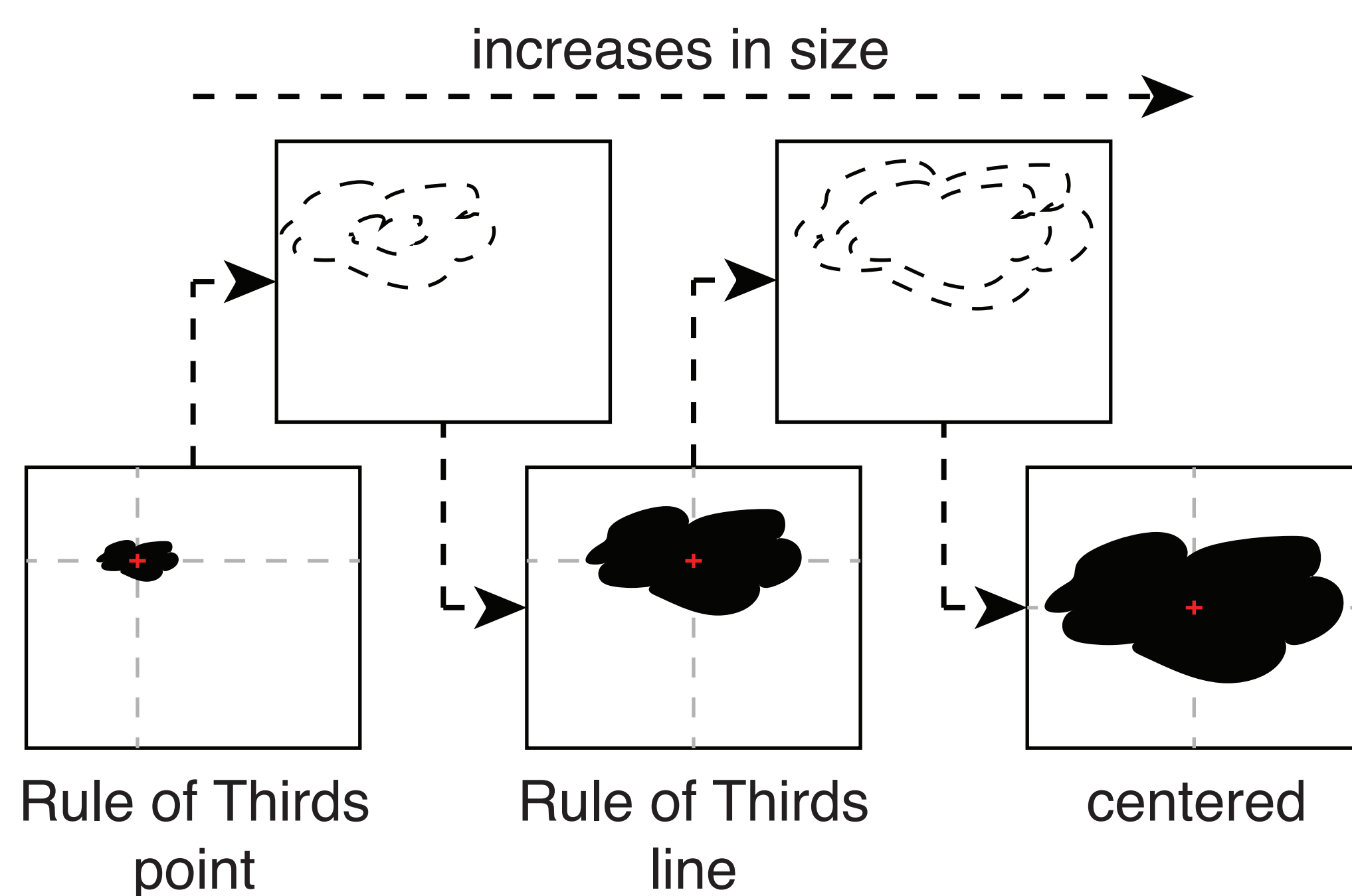


Rule of Thirds lines

?

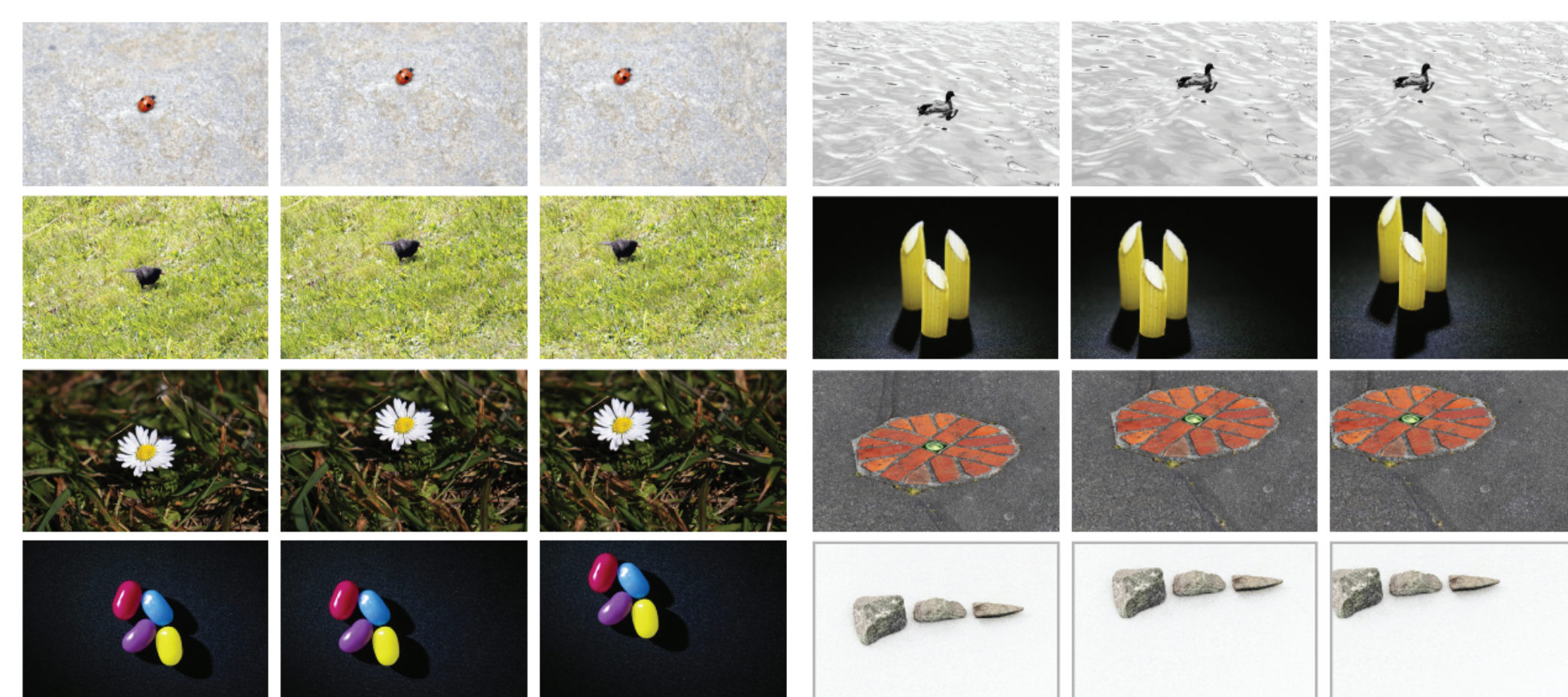
Hypothesis

As a single key object increases in size, its ideal position will shift.



Approach

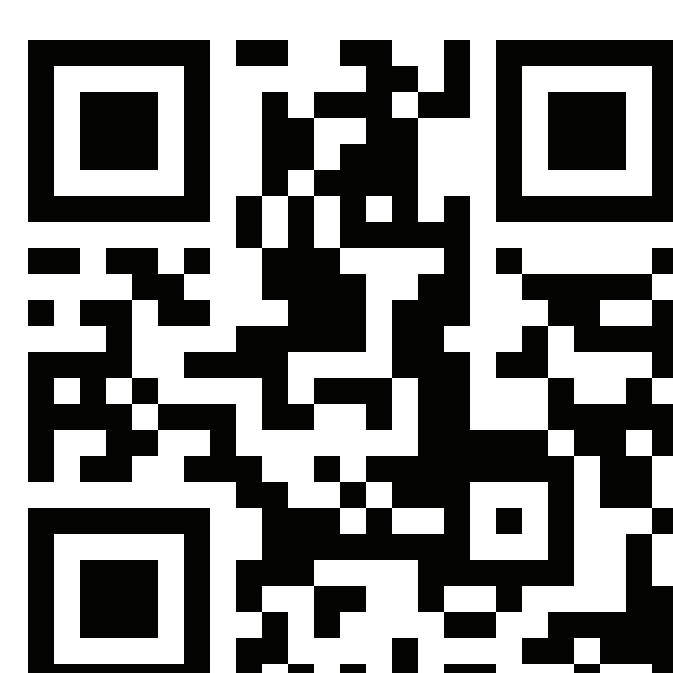
We tasked participants to assess 24 image sets of three images each (centered, Rule of Thirds line, Rule of Thirds point) to select the “most” and “least aesthetically pleasing” images in every set.



Eight of the stimuli sets

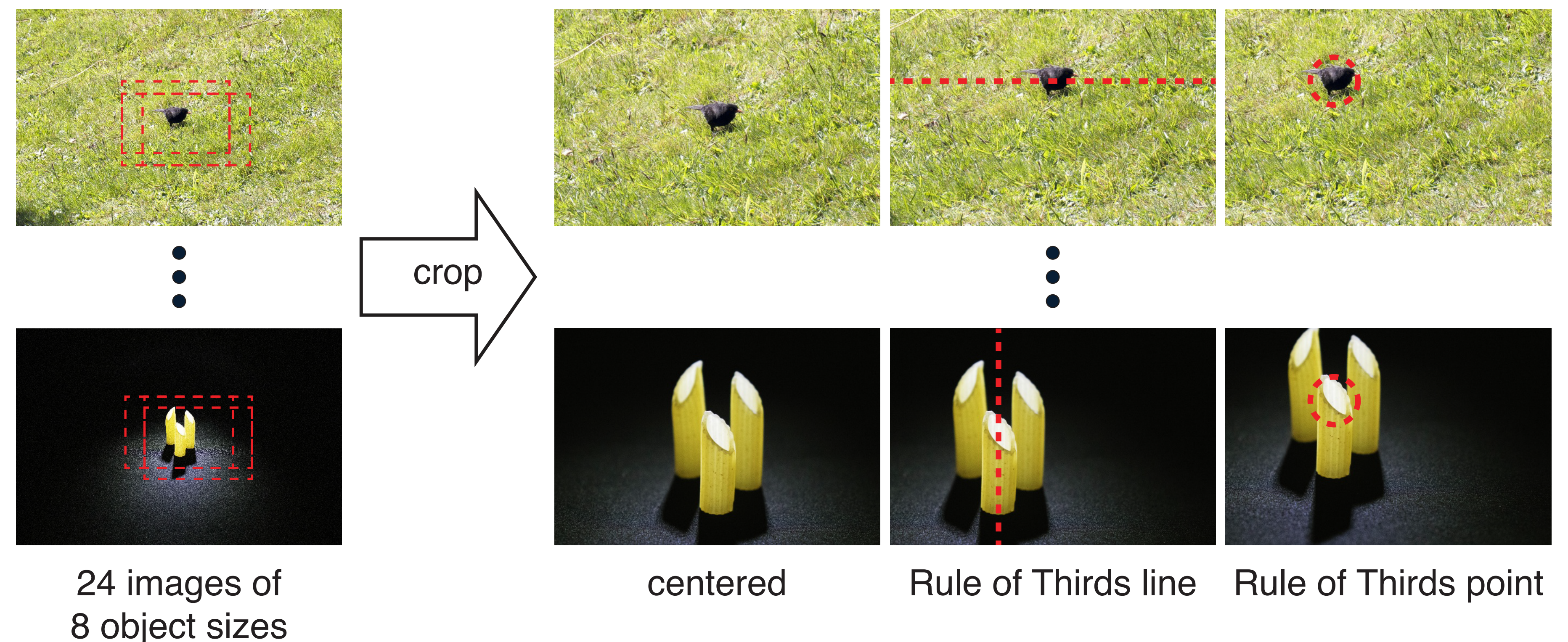
References

Weng Khuan Hoh. 2022. Effect of Encoded Theories of Visual Perception in Computational Aesthetics. Ph. D. Dissertation. Victoria University of Wellington.
Weng Khuan Hoh, Fang-Lue Zhang, and Neil A. Dodgson. 2023. Salient-Centeredness and Saliency Size in Computational Aesthetics. ACM Trans. Appl. Percept. 20, 2, Article 8 (apr 2023), 23 pages.
<https://doi.org/10.1145/3588317>



Experiment Design

Preparation of experimental stimuli



Survey

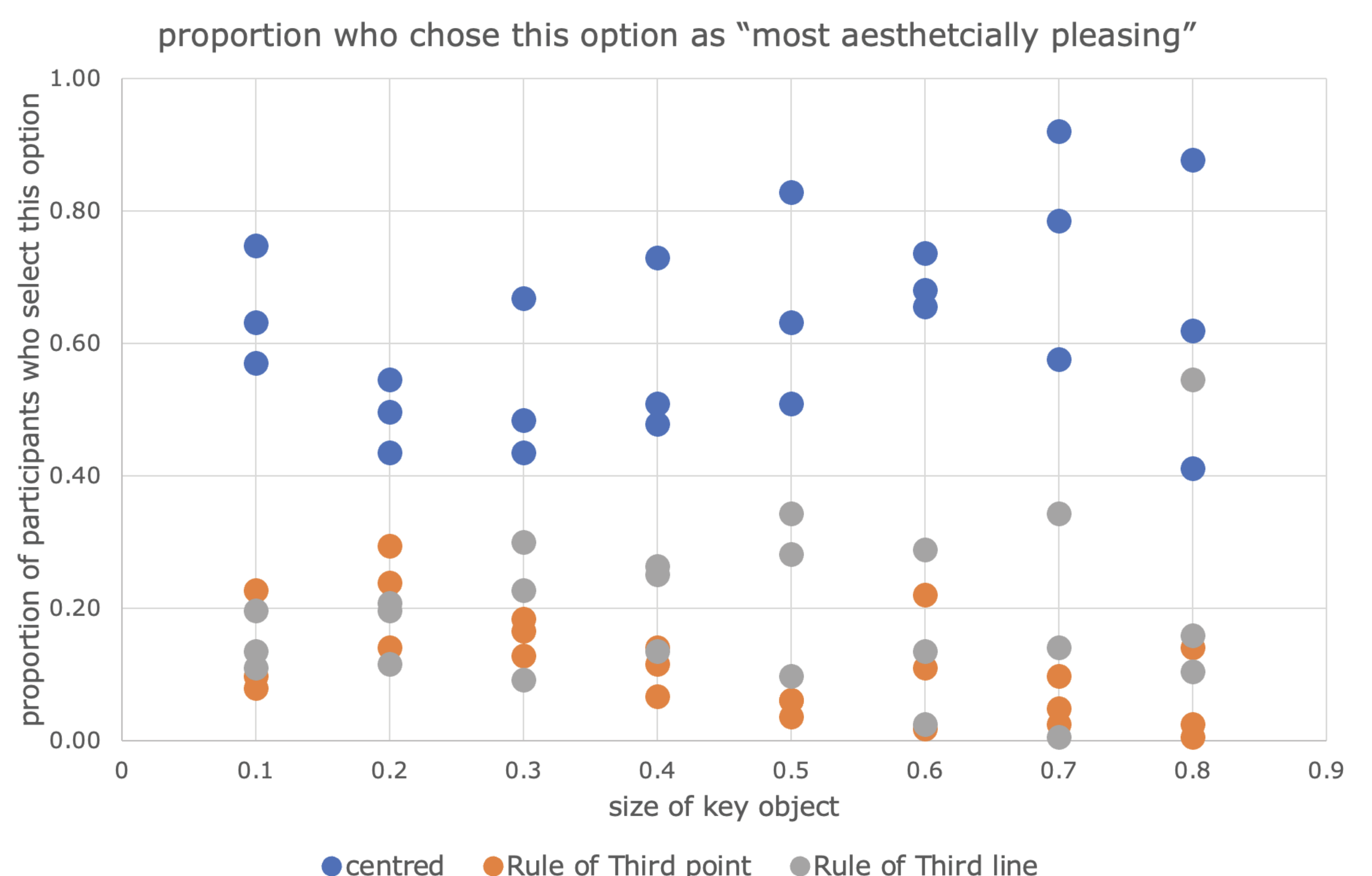


117 participants

24 sets, 24 different key objects, ranging in size from 0.1 to 0.8 of image width/height. Select from each set:

- “most aesthetically pleasing”
- “least aesthetically pleasing”

Results



Of 2,808 assessments, 64.1% selected the image with the key object at the center as “most aesthetically pleasing” across all sizes. For composing images with a single key object (regardless of size) against a simple background, **centeredness is preferred over the Rule of Thirds** guideline.

Why do people prefer centeredness? Does this nullify the Rule of Thirds guideline? We hypothesise that the Rule of Thirds guideline derives from two simpler guidelines: a preference for centeredness and a preference for the size of the key object to be about 71% of the image [Hoh, 2022, Hoh et al., 2023].