How the “Rule of Thirds” is Wrong: Let Us Count the Ways

Stephen E. Palmer, Yurika S. Haras, & William S. Griscom
Department of Psychology, University of California, Berkeley

The “Rule of Thirds”
- Focal objects should be on the vertical and horizontal “thirds-lines” especially at the “thirds-points” (O).
- The center of the frame (O) and positions on the central symmetry axes are aesthetically poor choices.
- Content and other image structure does not matter.

ARE THESE CLAIMS TRUE?

TWO REASONS TO THINK THEY ARE NOT

The Center and Inward Biases
Palmer et al. (2006) studied positional preferences for the same object in the same facing directions. Their results showed strong effects of facing:
- Center biases for forward-facing objects, and
- Inward biases for right-facing & left-facing objects.

The Structure of Rectangular Frames
Palmer & Guidi (2012) studied goodness-of-fit ratings for circles at different positions in rectangular frames. The best-fitting position was at the center,
Next-best was along the symmetry axes,
Next-best along local symmetry axes at the corners.
Positest fit at asymmetric positions (e.g., third lines).

Experiment 1: Results

The Rule of Thirds predicts:
- Equal effects for horizontal & vertical positions,
- Highest preferences at the 4 thirds-points (O),
- Lowest preference at the frame’s center (O),
- Intermediate preferences at intersections of the thirds-lines with the central axes (O),
- No effects of facing direction.

The results show:
- Large effects for horizontal position, but not vertical.
- For forward-facing views, highest preference along the frame’s central axis.
- For left- and right-facing views, highest preference at the inward-facing thirds lines (only).
- For left- and right-facing views, lowest preference at the outward-facing thirds lines (only).

Experiment 1: Methods

Three Rendered Objects
Dog
Fish

Nine Positions
Left-facing vs. Right-facing

2AFC Task

Experiment 2: Background & Methods

The results showed that people:
- do not like objects to be too close together,
- prefer related objects close and unrelated ones far.

What about simply structuring the background?
Goodness-of-fit ratings for circles in different rectangular shapes shows that local (subframe) centers dominate global centers (Palmer & Guidi, 2012).

Will a divided background influence people’s composition preferences, contrary to the Rule of Thirds?
Frames were undivided or divided along the 33%, 50%, or 67% lines of the frame.
The objects (a person, fish, or dog) faced right, forward, or left.
Participants dragged the object to the most aesthetically pleasing position, and then clicked the mouse.

Experiment 2: Results

Very strong center bias for all views.
Object’s center categorized into one of 5 equally spaced bins.
Several robust, systematic effects were present:
- People do not like objects to overlap other elements, even background ones.
- If the background is divided, people strongly prefer the object to be in the larger subspace.
- Strong inward biases are evident in all divided frame conditions.
- All three findings are contrary to the Rule of Thirds (no effects of divides or facing directions).

Discussion & Conclusions

How is the Rule of Thirds wrong?
- People’s horizontal preferences are sensitive to objects’ facing directions.
- People strongly prefer forward-facing objects at the frame’s center, not on third-lines.
- People prefer side-facing objects among third-lines only when it faces into the frame.
- People dislike elements along third-lines when the object faces out of the frame.

People’s compositional preferences are sensitive to spatial context.
- When more than one focal object is present, people don’t like them to overlap.
- If the background is divided, people do not like the object to overlap the boundary.
- If the background is divided, people prefer the object to occupy the larger subspace.
- They also prefer the object to face into the subspace it occupies.

Why is the Rule of Thirds wrong?
- People’s compositional preferences seem driven by asymmetries in the affordance space around objects.
- The functional space within which they act and interact with others.
- The correlation between asymmetries in people’s judgments of Affordance Spaces for different objects and asymmetries in their compositional preferences is ~.80. Stay tuned!

References and Acknowledgments


This material is based upon work supported by the National Science Foundation under Grant Nos. 152-18005 and 152-076920.