Assignment 5, Part A

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1 The Bright Color Hypothesis

Hypothesis: Marking two elements to be compared with solid bright green against a grey background will promote more accurate perception than marking those same elements against a white background.

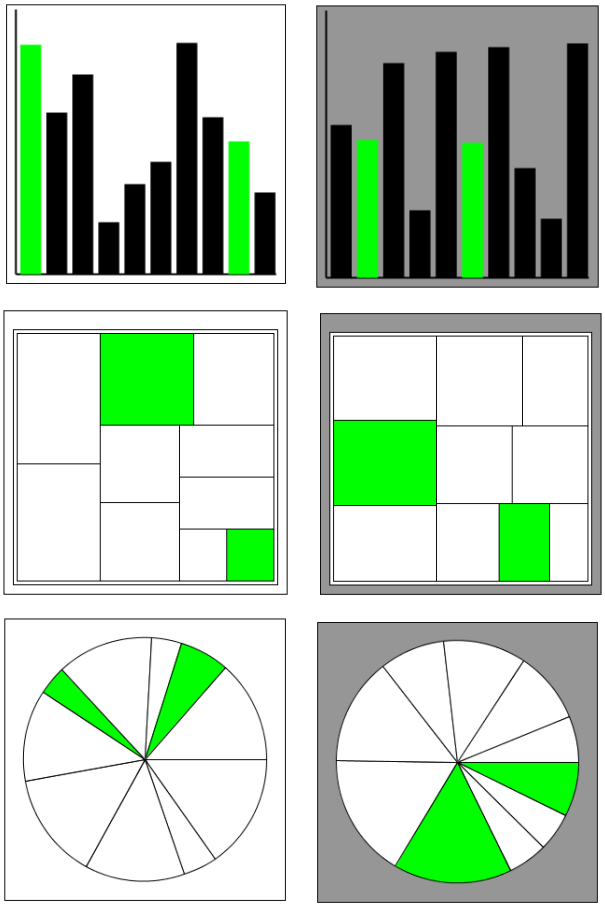

Figure 1: Bar charts, squarified treemaps, and pie charts on backgrounds of white (left) and grey (right).

We hypothesize that the effect will be roughly proportional to the amount of grey on the screen in any particular graph. Therefore, the effectiveness of changing the background to grey will be most potent on the bar chart, somewhat less on the pie chart, and least effective on the treemap.

2 The Flashing Color Hypothesis

Hypothesis: Flashing between bright green and white at 0.5 second intervals will make perception less accurate than displaying elements in solid green.

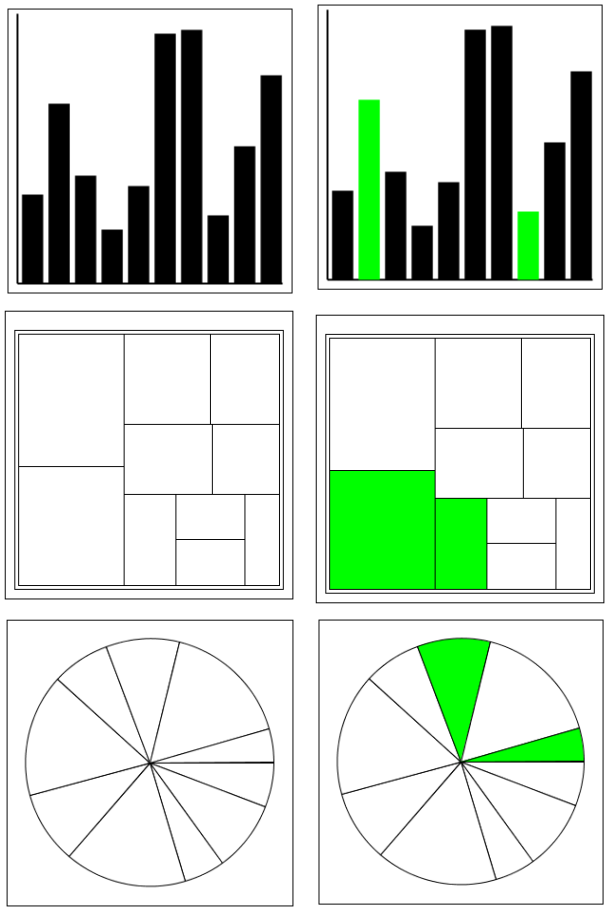

Figure 2: Bar charts, squarified treemaps, and pie charts with white (left) and green (right) selections.

Flashing between white and green is distracting, but also draws the viewer's attention. We believe the distracting nature of flashing will impair the comparison abilities of viewers.