Anchor Contraction Effect in Interface Design: The Impact of Color Cues on Online Review Rating

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ABSTRACT

Online review systems (ORS) adopt different UIs for collecting reviews. However, prior research suggests that these inconsistencies are non trivial. Design cues of the interval scale can influence individual's interpretation of the scale and thus numeric evaluations. In fact, the design of anchor cues on interval scales varies widely among ORS by number of intervals, color-design, shape and labels.

Figure 1. Scales from TripAdvisor, Yelp, Zomato.

This research-in-progress investigates the cognitive impact of color cues in interpreting interval scales. Our preliminary results suggest that color cues – because of their emotional value – might in fact influence numeric evaluations. Distorted numeric evaluations are problematic for assessing the true quality of the business, whether from perspective customers or for self-assessment.

THEORETICAL FRAMEWORK

Numeric evaluations depend on user's interpretation of the scale, which relies on anchoring cues. Anchoring cues guide user's perception of the lower and upper scale's bound, and even elements as simple as color cues (e.g., color brightness) can serve as anchors (De Langhe et al. 2011). Color red triggers negative emotions, while color green positive ones. When evaluating negative experiences, users tend to avoid extreme ratings; thus labelling the bounds of the scale with more extreme cues should lead users to select more neutral ratings (anchor contraction effect).

HYPOTHESES

H1a. Negative (red) color cues tied to extremely negative ratings (1) increase the average rating of extremely negative experiences.
H1b. Positive (green) color cues tied to extremely positive ratings (5) decrease the average rating of extremely positive experiences.

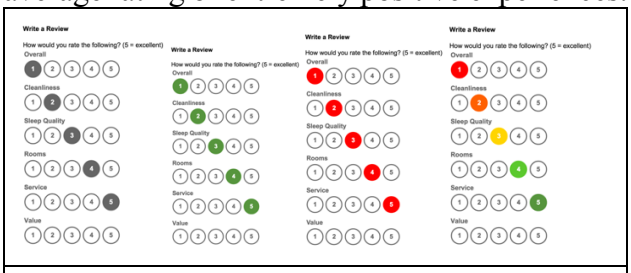

Figure 2 The 4 treatments: *gray*, *green*, *red* and *color*

EXPERIMENTAL DESIGN

After reading a review of a lodging experience, users evaluate it on 6 attributes using a 5-points scale from one of the UIs in Fig.2.

PRELIMINARY RESULTS

Preliminary results suggest that anchor contraction effect kicks in in presence of extreme negative experiences on a given attribute. *Sleep quality* and *value* showed significant increase in mean score when comparing *green* versus *color* treatment.

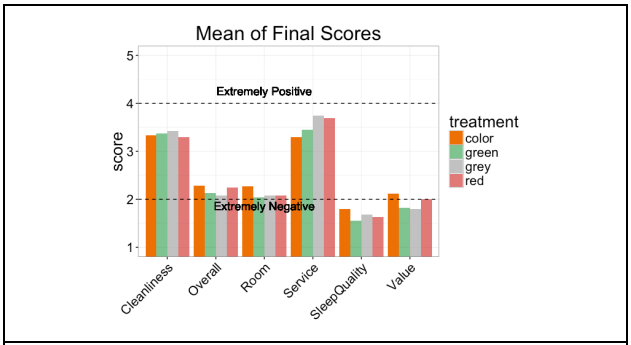

Figure 3 Average scores by attribute.