

Second the King Truck ad features several unique uses of text. Interestingly, the “Will Work” sign held by the man on the side of the road received the most attention ($m=1.51$) by the most participants ($n=56$). The next highest ranking text items were the stand-alone text appearing on the screen in white. The most attention-grabbing was the text reading, “Martinez vetoed minimum...” which participants spent an average of 1.32 seconds on, followed by the “Lowest Test Scores” and “49th in Child welfare” which participants spent .99 and .98 seconds on average respectively. For each of these items, the majority of participants did fixate on the item, and each item was on screen for approximately 2-3 seconds. At the conclusion of the ad, the name for the Governor received attention from almost every participant for more than .8 seconds on average, while the name for the Lieutenant Governor received a bit less ($m=.61$). This may be a result of order effects, or preference for text that occurs first. Interestingly, this text received the least average amount of attention by participants despite being on the screen for the longest amount of time. Of all the individuals in the ad, the Governor and Lieutenant Governor received roughly .8 seconds a piece by most participants. Otherwise, the kids and men featured in the ad received very little attention, despite conventional wisdom which suggests people are drawn to faces. This is likely in large part due to the fact that the eye-tracking metrics suggest participants were spending much of their time reading the text. The item that received the most attention turned out to be inanimate – the stereo ($m=2.75$).

Third Lady who Lunches features only a few elements which, not surprisingly, receive almost universal attention from participants. Of all of these, the lady received the most attention ($m=16.05$). Focusing on text, “Rock the Vote” received a significant amount of attention by all participants ($m=1.43$), while “Care like Crazy” was a close second ($m=1.02$). The text “She Votes” followed by, “Do you?” received .56 and .78 seconds of attention on average. Given the

amount of time each item was on the screen – a brief 1 second for “She Votes” and “Do you?” a little more than a second for “Care like Crazy” and more than 2 seconds for “Rock the Vote” – these fixation amounts make sense.

Finally, the ad titled Halter has several text elements that received a lot of attention. The quote on investing Social Security received the most attention ($m=2.01$) by most participants ($n=51$) and was on screen for more than 3 seconds. Interestingly the, “Supported a plan...” received 1.57 seconds of participant attention on average, despite being on the screen for a longer duration of time. In contrast the text, “Do you really know Bill Halter?” was given on average 1.23 seconds of attention, despite a short duration of time on screen. The first text to appear on screen for about 1 second, “You should know,” only received .53 seconds of participant attention on average, and did not capture the attention of all participants ($n=35$). Bill Halter’s name which appears for almost 4 seconds, only received .55 seconds of attention on average by only 34 participants. In context, this text appeared on screen along with several other elements including additional text. Aside from text, out of all the images the social security card received the most amount of attention ($m=.88$), followed by a disappointing amount of attention for Bill Halter’s likeness ($m=.55$, $n=34$) – which may be a good thing given the negative tone of the ad.

Finally, we can visualize these metrics as a heat map (see videos in Appendix A) where the darker red the element, the longer the gaze. Note that this visualization uses all data rather than data captured by areas of interest so that gaze falling outside of the image’s perimeter is also included. Though this visualization should not be used alone to assess attention, it is helpful when used in tandem with the duration data discussed above.

Anger

In the case of the Rock the Vote ad, “Lady who Lunches,” we are primarily interested in whether or not the anger appeal was successful. Anger is considered an antecedent to political action, and as such is both a potentially potent appeal and also notoriously difficult to effectively elicit and measure. For this reason, I use several approaches to discern the effectiveness of the anger appeal in this ad. First, I utilize the standard emotional batteries which simply ask participants how they feel after watching the ad where 1 indicates not at all, 2 is slightly, 3 is moderately, 4 is very, 5 is extremely. On average, participants were slightly more than moderately angry after viewing the ad ($m=3.06$).

I also asked participants 24-hours and 7-days after exposure to the Rock-the-Vote ad how angry they felt on 5-point scale where 5 indicates the participant extremely angry and a 1 indicates a participant did not at all feel angry. Interestingly, participants expressed more anger 7-days after exposure to the ad ($m=2.78$) than they did 24-hours following exposure ($m=2.58$). Perhaps as the effects of ads decay, the experienced emotions linger and intensify.

Second, following the viewing of the ad participants were exposed to two visual emotional primes displayed on the screen at the same time: a carousel meant to capture enthusiasm and a dead cat meant to capture anger.² Researchers have previously documented that participants in an emotional state will automatically, without conscious effort, look to a word or image that matches the way they feel. For example, when a group of words flashes on a screen, fearful participants will look at the image of spider before they look at the image of a lollipop. For this experiment, if participants look at the dead cat image first we can be reasonably certain it is because they are in an angry state as a result of exposure to the ad

² Both images are drawn from IAPS database, a collection of images that have been tested and confirmed by repeated psychological trials to elicit certain discrete emotions. Both images scored highest on the emotions of interest, while also scoring very low on other co-occurring emotions such as anxiety which is to say simply, we can be sure that the emotions elicited by these images are primary and intense.

previously. In this way, we can check the participants' self-reported anger against their expression of anger outside of their awareness. The results offer compelling evidence that the ad successful elicited anger: 33% of participants looked at the anger prime first (n=20).

Third, outside of participants' awareness I measured the amount of pupil dilation. The measurement of pupils, or pupillometry, is an oft used psychological technique for assessing emotional arousal. To do so, I measure participants' baseline pupil size and again after watching the ad. If participants' pupils are significantly larger after watching the ad than they are at their baseline, then we can reasonably ascertain that the emotional appeal successful elicited the emotion of interest. Since we are comparing change within participants rather than between participants we can be more confident that any differences are not due to idiosyncrasies with a given individual. Thus, I test whether or not the difference between pupil size at the start of the ad and at the end of the ad are significantly different and the results are impressive ($F(1, 46,153)=91.19, p<.000$). On average participants pupils were more dilated after viewing the ad by .078 millimeters, which suggests the attempt at arousing an emotional state was successful.

Taken together, a moderate amount of average self-reported anger and attention to the visual prime, along with a significant dilation of pupils allows us to triangulate evidence that the anger appeal in the Rock the Vote ad was successful.

Memorability

24 hours Follow-up

Of the 64 participants who participate in the original experiment in the lab, 36 opted to fill out a follow-up online survey 24-hours later. Recall that participants were offered a flash of a screenshot of the ad to trigger their memory, but were provided no additional details.³ I measure favorability towards the candidate in question on a five-point scale where 5 is very

³ Note these screenshots did not include any text so as not to tip off participants.