

The mean amplitude of the first saccade in each trial differed significantly between combinations of the factor starting position and image type. The mean first saccade amplitudes for left and right starters were  $\bar{s}_{\text{left}} = 7.80^\circ$  and  $\bar{s}_{\text{right}} = 9.26^\circ$ , resp. We computed a linear mixed-effects model using the lme4 package (Bates, Maechler, Bolker, & Walker, 2013) in the R Language of Statistical Computing (R Core Team, 2014) as

$$model = \text{saccadelength} \sim \text{imagetype} \times \text{startingposition} + (1|\text{Subject}) + (1|\text{Image}) \quad (4)$$

with the first saccade amplitude as the dependent variable, the starting position, image type and their interaction as fixed effects and the intercept of the subjects and images as random effects. By using the lmerTest package (Kuznetsova, Brockhoff, & Christensen, 2013) and computing the satterthwaite estimation (Satterthwaite, 1946) we obtained  $p$ -values. The starting position was significant ( $p = 1.72 \times 10^{-8}$ ) as well as image type ( $p = 9.87 \times 10^{-4}$ ). Mean values were  $\bar{s}_{\text{balanced}} = 8.43^\circ$ ,  $\bar{s}_{\text{pattern}} = 7.81^\circ$ ,  $\bar{s}_{\text{leftfocus}} = 9.34^\circ$  and  $\bar{s}_{\text{rightfocus}} = 8.83^\circ$ . The interaction between image type and starting position was also significant ( $p = 4.97 \times 10^{-3}$ ). Figure 4c visualizes this interaction and the main effects of image type and starting position. Computing an ANOVA for the influence of saccade number on saccade amplitude for the first and the second saccade indicated significant effects ( $F(1, 1790) = 54.4, p = 2.5 \times 10^{-13}$ ), where the amplitude of the first saccade was larger than the amplitude of the second (Fig. 4b).

In summary, forcing the observers to start exploration from an experimentally controlled initial position close to the border of the monitor resulted in a long first saccade. This was particularly true if the interesting image part was on the opposite side of the initial position. The longer initial saccade from right to left than vice versa is congruent to the left direction bias that has been found in various experiments (Dickinson & Intraub, 2009;