

Spatial Probability, Learning, and Gaze Supplementary Notes

I

Refer to Section 4.2 of <http://hdl.handle.net/10012/14562>

II

The spatial continuity between the Illusion Task and the PL Task is shown by the outline of the Illusion---one for each condition. The coloured dot in the center of each outline depicts the average location of anticipatory eye movements made by participants in that condition. Semi-transparent black dots depict the density of target locations across all trials for each condition. The spatial relationship between anticipatory eye movements and target locations over time underscores the link between gaze planning and spatial PL. The pie charts reveals that the tendency to make anticipatory eye movements is positively correlated with the degree of spatial bias in a sequence of target locations.

III

Only in the Biased condition were participant responses issued more rapidly for targets appearing in the Lower region---which was a high probability location for targets in that condition, but an equiprobable location for targets in the Uniform condition. Refer to Section 4.3 of <http://hdl.handle.net/10012/14562>

IV

Our analyses revealed that the differences in RT we call spatial PL are largely driven by differences in how rapidly participants localized targets, as opposed to how rapidly they classified targets. Refer to Section 4.3 of <http://hdl.handle.net/10012/14562>

V

The pie charts show that the PL Task did not alter the relative proportion of distinct allocations of voluntary attention to the three different regions of the display, in either condition. In terms of vertical gaze position over time, we also failed to find evidence that spatial biases accumulated during the PL Task transferred to the Illusion Task.