Supplementary Material to:

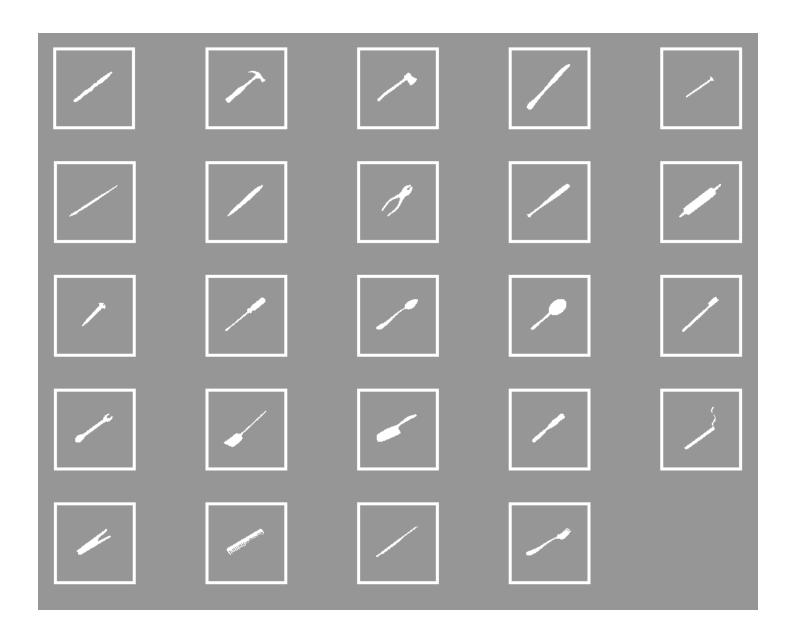
#### Stop and Think: Looking into an artificial peripheral scotoma Janssen & Verghese Journal of Vision

This supplementary material contains the following files:

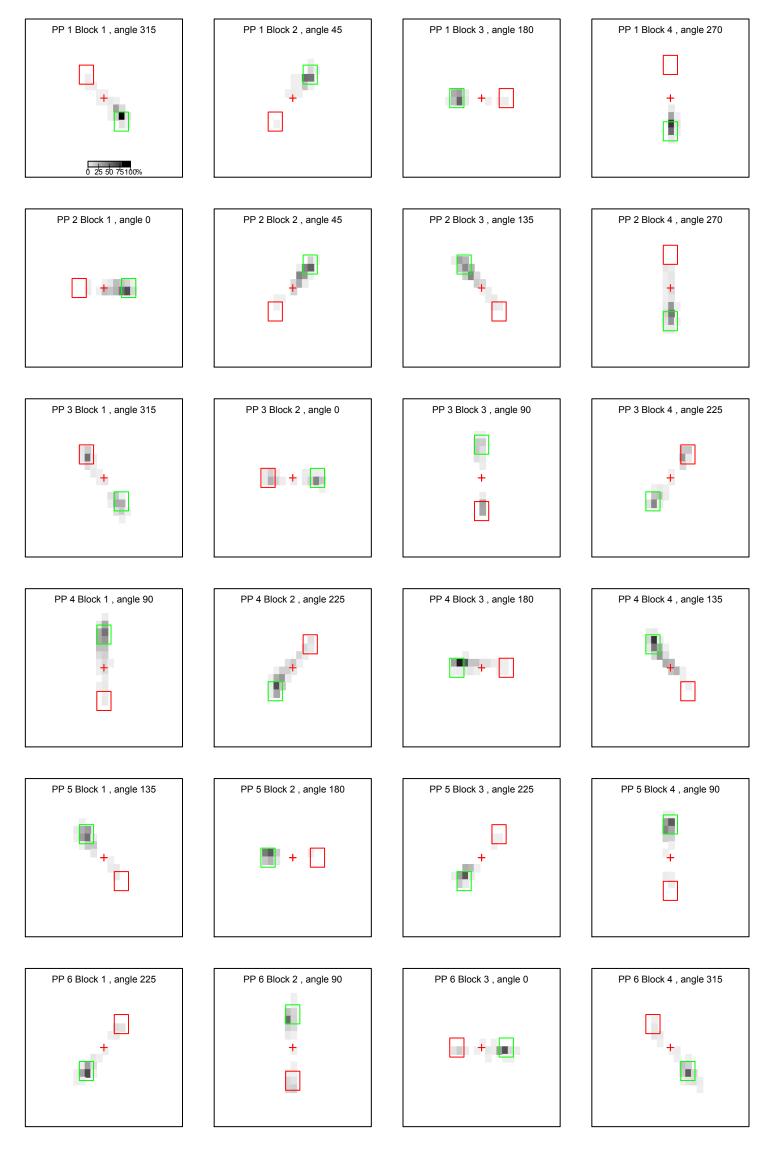
- S1. Overview of the 24 silhouettes that were used in this study
- S2. Experiment 1A: Density plots for all participants (rows) and all blocks (columns), in the same format as Figure 3B in the main manuscript. Text inside each Figure specifies the participant, the block number, and the angle at which the target was presented.
- S3. Experiment 1B: Density plots for all participants and all blocks, similar to Supplement Figure 3. Note that not all participants in this experiment completed all 4 blocks.
- S4. Experiment 2: Density plots for all participants (rows) and all angle configurations (columns), in the same format as Supplement Figure 3.
- S5. Experiment 3: Density plots for all participants (rows) and all blocks (columns), in the same format as Figure 7B in the main manuscript Text inside each Figure specifies the participant, the block number, and the angle at which the target was presented.
- S6. Simulated final screenshot of example trial for participant 3 in experiment 3

#### S1. Overview of the 24 silhouettes that were used in this study

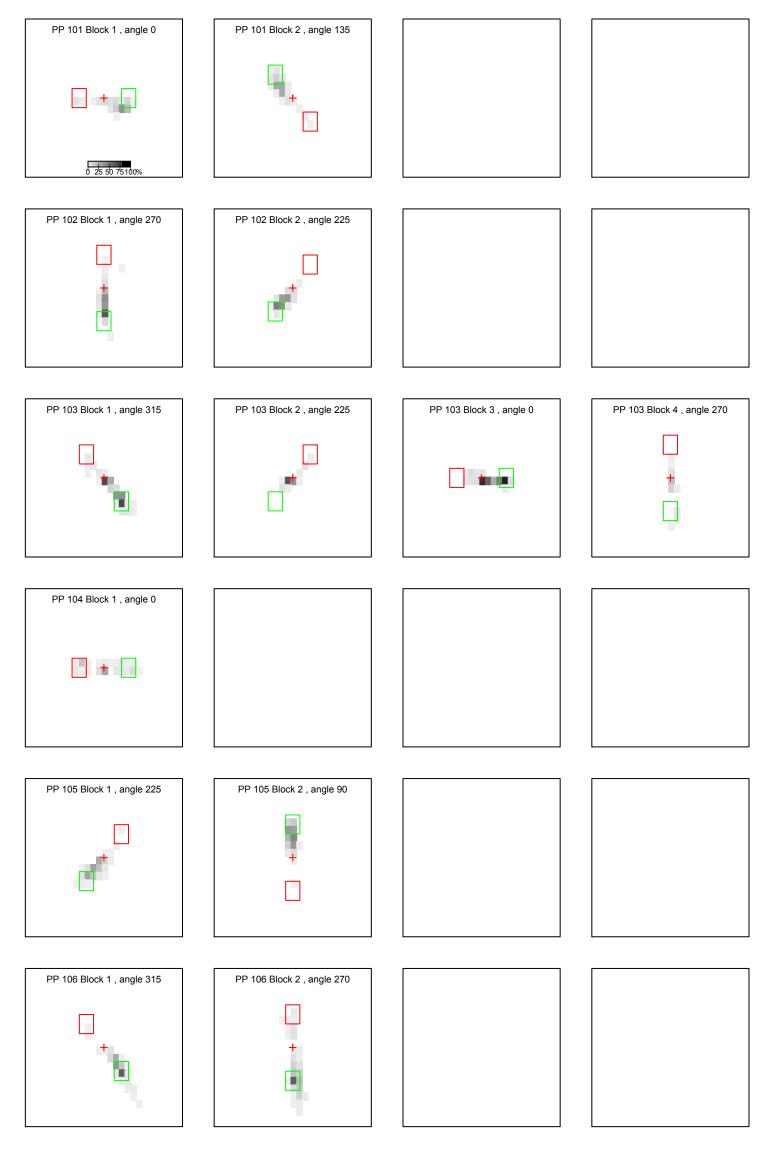
The following shapes were used in the study. See paper for details.



### **S2. Experiment 1A: Density plots**



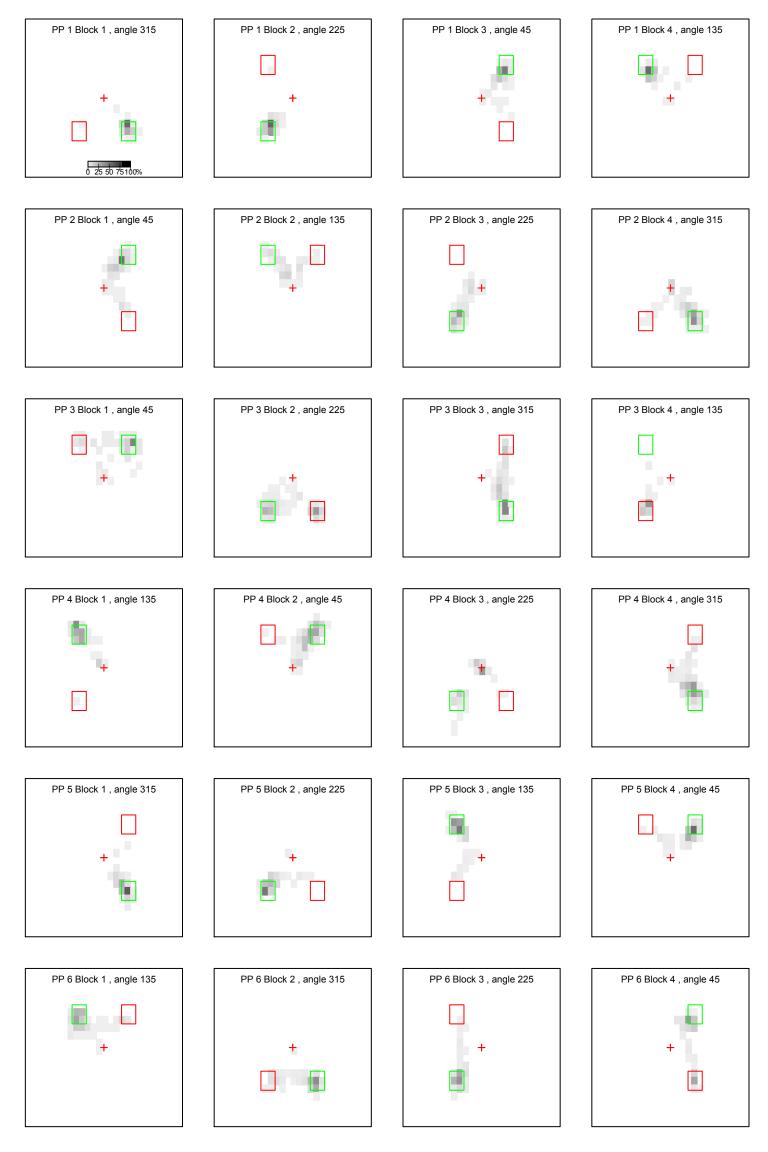
### S3. Experiment 1B: Density plots



# **S4.** Experiment 2: Density plots



# **S5. Experiment 3: Density plots**

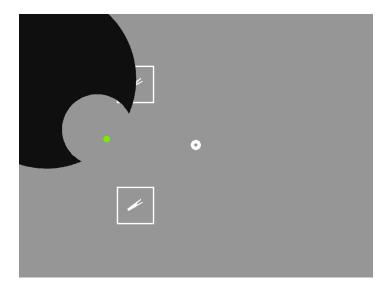


# S6. Simulated final screenshot of example trial for participant 3 in experiment 3

In experiment 3, when the hidden target was presented in the top-right of the screen and the distractor in the bottom-left, participant 3 applied a specific strategy on 57 trials. The participant first gazed towards the distractor and then looked up. At the end of the trial, eye-gaze formed an angle between 33.75 and 56.25 relative to the angle at which the hidden target was presented.

Below is a simulated screenshot of what parts of the screen were visible at the end for a specific trial (trial 22 in this block).

In the first picture, the scotoma is marked in black and the gaze position in green. Notice how a critical part of the hidden stimulus is uncovered using this strategy.



The scotoma was invisible to the participant. Hence, to the participant the screen looked like this:

