

### Supplemental Figure 1

Reach direction during adaptation aligned to Aftereffect trials (trial 0). (a) Top panel: Mean performance surrounding Aftereffect trial. Black circles represent Long-PT trials that occurred immediately after the Aftereffect trial. Blue circles represent mean performance in Long-PT trials at other positions relative to the Aftereffect trial. Red circles represent mean performance in the first Short-PT trial after each Aftereffect trial (which occurred either 2 or 3 trials later). Bottom Panel: As Top Panel, but for Cycle 7. (b) Mean difference across a cycle between Long-PT trials and Short-PT trials (red) and between Long-PT trials and Aftereffect trials (green) for cycles 1 and 7. All error bars represent  $\pm$  s.e.m.

### Supplemental Figure 2

Response Time behavior. (a) Experiment 1. The actual preparation times for each trial type, averaged across participants. (b) As in (a) but for Experiment 2. Color scheme as in main figures: Blue – Long PT trials, Red – Short PT trials, Green – Aftereffect trials.