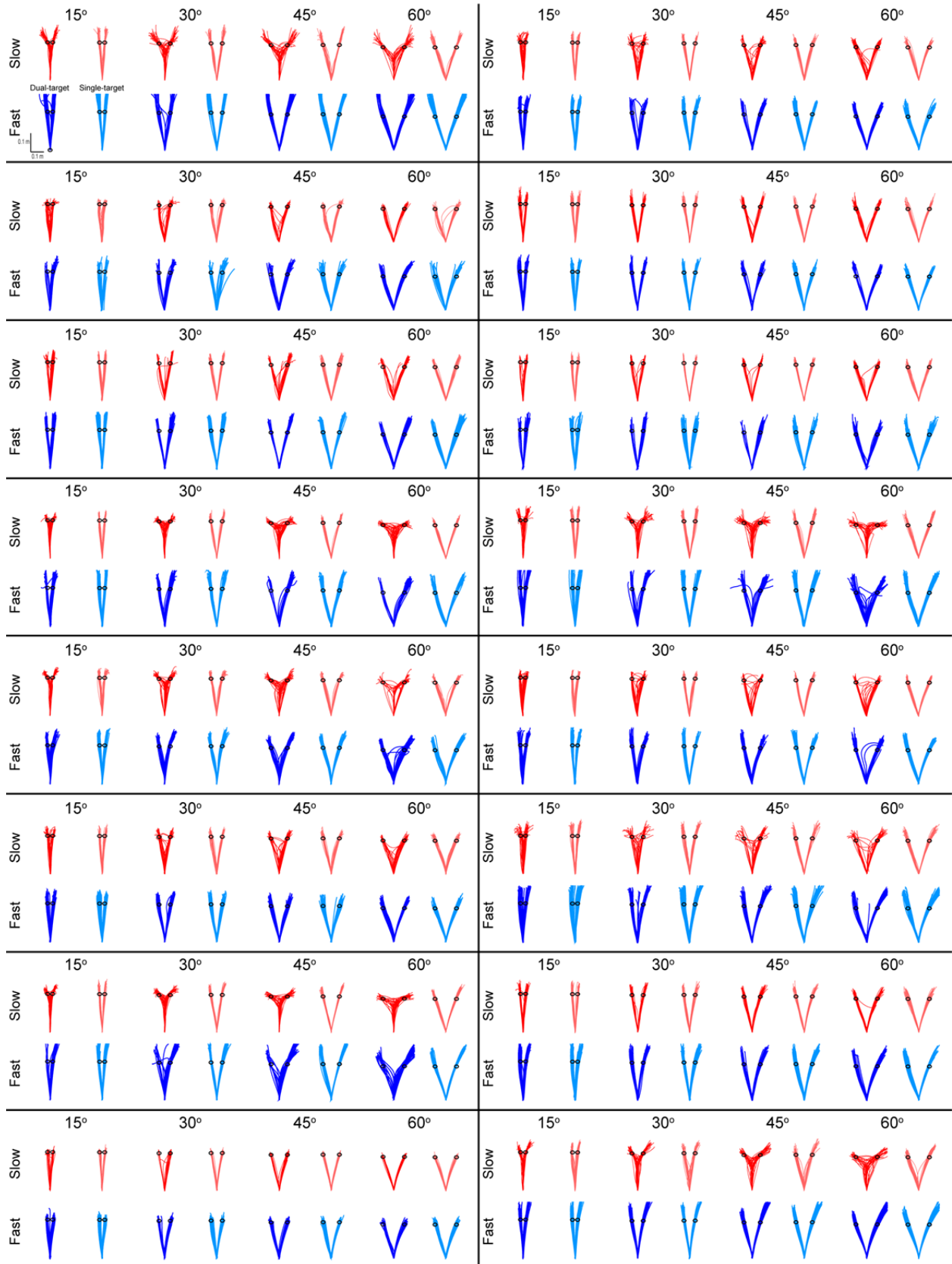


1 **Supplementary Figure 1.** Reaching trajectories from all participants in Experiment 1.



3 Reaches are presented from the 16 participants included in Experiment 1. Reaches are grouped
4 by target-separation angle (horizontal) and required movement speed (vertical; Slow reaches in
5 red, Fast reaches in blue). Both dual-target trials (darker colors) and single-target trials (lighter
6 colors) are shown. These data highlight both the general group-wide tendency to produce
7 intermediate movements mainly for Slow trials. Additionally, it is possible to observe the
8 participants who generated no intermediate movements throughout the entire session.
9
10

11
 12 **Supplementary Table 1.** Group-wide model parameters.
 13

Target Separation	Fast				Slow			
	μ_d	σ_d	σ_i	θ	μ_d	σ_d	σ_i	θ
15°	7.562	3.046	8.238	0.078	5.052	4.242	5.810	0.500
30°	15.359	3.210	4.816	0.071	13.149	4.672	3.031	0.329
45°	22.205	3.353	4.884	0.045	19.964	4.964	3.836	0.397
60°	29.058	3.382	18.960	0.098	26.074	5.193	4.934	0.352

14
 15 Parameters shown above reflect the model fits to the pooled data (stage-1 fits), fitted to the data
 16 from Experiment 1. The particularly large estimate of σ_i for in the Fast 60° condition reflects the
 17 fact that it was very rare to observe intermediate movements in this condition.
 18
 19