

Report  
Role of categorization in Visual Search for Orientation

Total number of trials per experiment: 60

Total number of subjects: 8

<u>Number of Trials Correct</u>	<u>Experiment 1</u>	<u>Experiment 2</u>	<u>Experiment 3</u>	<u>Experiment 4</u>
<u>Subject-1</u>	59	60	56	59
<u>Subject-2</u>	56	52	60	60
<u>Subject-3</u>	58	50	58	60
<u>Subject-4</u>	54	51	57	60
<u>Subject-5</u>	40	54	48	59
<u>Subject-6</u>	59	58	59	59
<u>Subject-7</u>	57	60	60	60
<u>Subject-8</u>	57	54	48	58

Experiment-1:

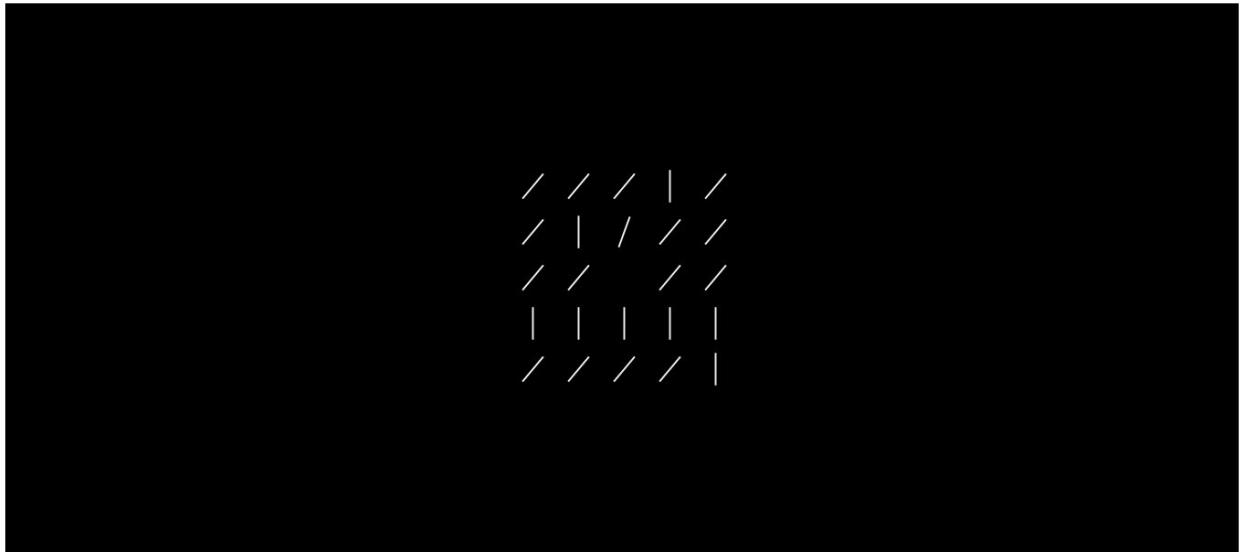
Target: White line at +20° from the vertical axis.



Distractors: White lines at +40° and 0° from the vertical axis.



Sample Image of a trial with item size 24.



Experiment-2:

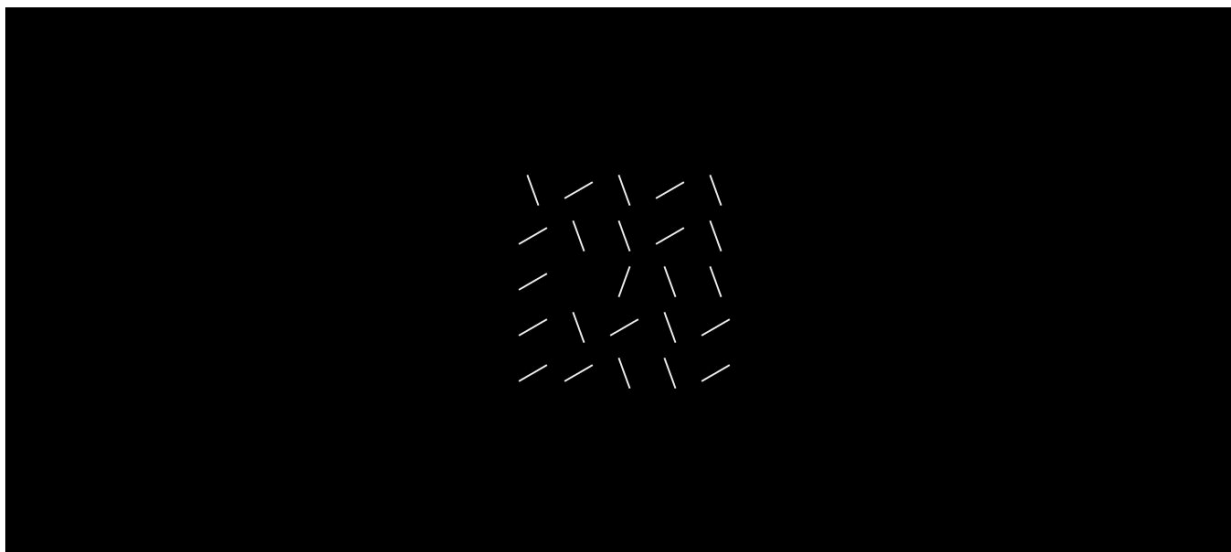
Target: White line at +20° from the vertical axis.



Distractors: White lines at -20° and +60° from the vertical axis.

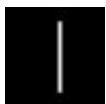


Sample image of a trial with item size 24



Experiment-3:

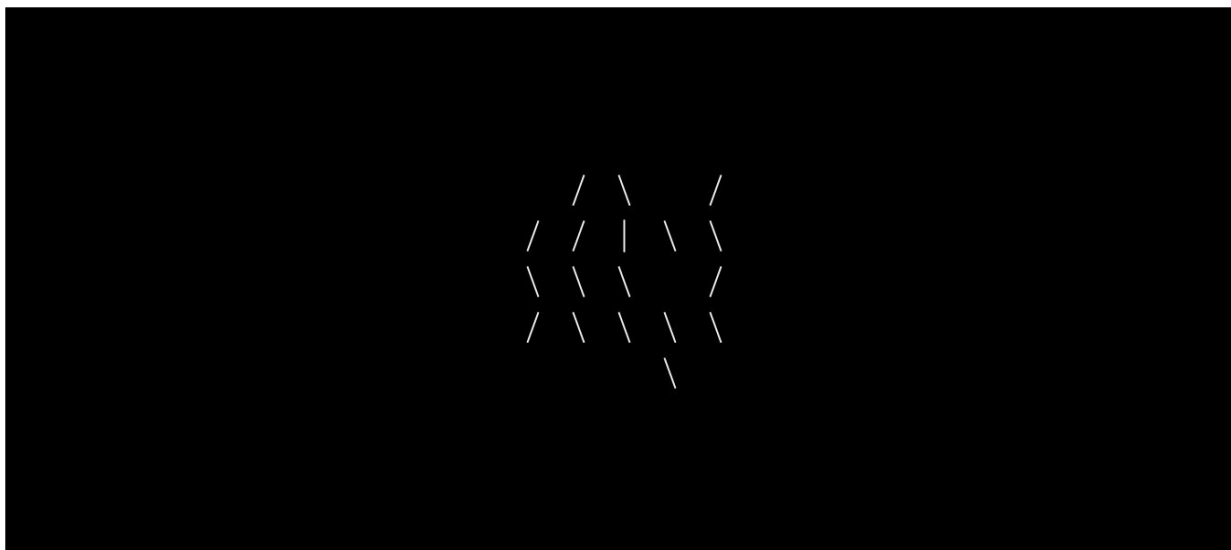
Target: White line at  $0^\circ$  from the vertical axis.



Distractors: White lines at  $-20^\circ$  and  $+20^\circ$  from the vertical axis.



Sample Image from a trial with item size 18.



#### Experiment-4:

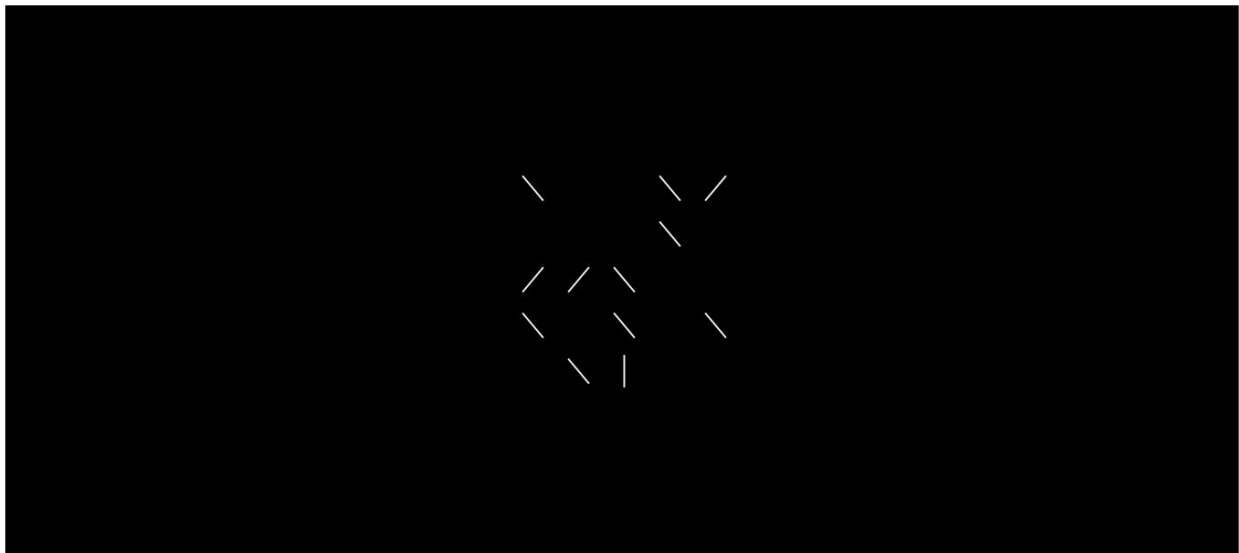
Target: White line at 0° from the vertical axis.



Distractors: White lines at -40° and +40° from the vertical axis.



Sample Image of a trial with item size 12.



#### Analysis

<u>Mean Reaction Time</u>	<u>Experiment-1</u>	<u>Experiment-2</u>	<u>Experiment-3</u>	<u>Experiment-4</u>
<u>Item_Size=6</u>	1114.95 ms	1320.3875 ms	953.85 ms	649.975 ms
<u>Item_Size=12</u>	1433.85 ms	1598.825 ms	1400.575 ms	826.625 ms
<u>Item_Size=18</u>	1467.7125 ms	1995.525 ms	1400.575 ms	728.825 ms
<u>Item_size=24</u>	1501.1625 ms	1835.55 ms	1694.925 ms	697.4 ms

<u>Variance</u>	<u>Experiment-1</u>	<u>Experiment-2</u>	<u>Experiment-3</u>	<u>Experiment-4</u>
<u>Item_Size=6</u>	484902.99	779673.16	489077.97	85074.22
<u>Item_Size=12</u>	757439.65	1043724.84	1040091.01	372929.70

<u>Item_Size=18</u>	812073.55	1766424.14	1317738.35	151251.19
<u>Item_size=24</u>	870291.08	1311800.49	1487796.64	113727.74

<u>Median</u>	<u>Experiment-1</u>	<u>Experiment-2</u>	<u>Experiment-3</u>	<u>Experiment-4</u>
<u>Item_Size=6</u>	854.5	950.5	675.0	573.0
<u>Item_Size=12</u>	1147.5	1274.5	1001.5	618.5
<u>Item_Size=18</u>	1134.0	1526.5	1062.5	598.5
<u>Item_size=24</u>	1237.0	1549.0	1121.0	605.0

<u>Mode</u>	<u>Experiment-1</u>	<u>Experiment-2</u>	<u>Experiment-3</u>	<u>Experiment-4</u>
<u>Item_Size=6</u>	513.28,585.92	601.6	614.4	535.9
<u>Item_Size=12</u>	1053.48	710.0	545.5,3929.5	525.76
<u>Item_Size=18</u>	751.0	3929.44	1016.32,3928.9 6	421.26
<u>Item_size=24</u>	738.8	3928.66	3928.89	469.26

