- **Experiment 1 - Effect of colour**

Files *'Exp1_Colour_Accuracy'* and *'Exp1_Colour_ReactionTime'* contain average accuracy and average RT data across 10 repeats for each stimulus condition and each participant.

Each column in the file corresponds to a specific stimulus condition in which:

V – number of shape vertices or shape type: 3- triangle; 4 -square; 5- pentagon; 6 – hexagon;

L – location of elements: 1 - on-vertices (or *shape*; 2 – random;

E – number of elements (or Gaussian blobs): 3, 4, 5, 6 elements

C – colour condition: 1 – same colour; 2 – different colour.

OBS_ID – participant number

The combinations of V, L, E and C parameters describe the 40 stimulus conditions used, as follows:

V3.L1.E3.C1 – triangle shape sampled by 3 elements of the same colour located on the shape vertices (i.e. equilateral triangle).

V3.L1.E3.C2 – triangle shape sampled by 3 elements of the different colours located on the shape vertices.

V3.L1.E4.C1 – triangle shape sampled by 4 elements of the same colour with 3 elements placed on the shape vertices and 1 element placed randomly anywhere on the imaginary contour shape or inside the shape.

V3.L1.E4.C2 – triangle shape sampled by 4 elements of the different colours with 3 elements placed on the shape vertices and 1 element placed randomly anywhere on the imaginary contour shape or inside the shape.

V3.L1.E5.C1 – triangle shape sampled by 5 elements of the same colour with 3 elements placed on the shape vertices and 2 elements placed randomly anywhere on the imaginary contour shape or inside the shape.

V3.L1.E5.C2 – triangle shape sampled by 5 elements of the different colours with 3 elements placed on the shape vertices and 2 elements placed randomly anywhere on the imaginary contour shape or inside the shape.

V3.L1.E6.C1 – triangle shape sampled by 6 elements of the same colour with 3 elements placed on the shape vertices and 3 elements placed randomly anywhere on the imaginary contour shape or inside the shape.

V3.L1.E6.C2 – triangle shape sampled by 6 elements of the different colours with 3 elements placed on the shape vertices and 3 elements placed randomly anywhere on the imaginary contour shape or inside the shape.

V3.L2.E3.C1 – 3 elements of the same colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E3.C2 – 3 elements of different colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E4.C1 – 4 elements of the same colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E4.C2 – 4 elements of different colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E5.C1 – 5 elements of the same colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E5.C2 – 5 elements of different colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E6.C1 – 6 elements of the same colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V3.L2.E6.C2 – 6 elements of different colour placed randomly anywhere inside the triangle shape area and on the virtual contour path, except on its vertices.

V4.L1.E4.C1 – square shape sampled by 4 elements of the same colour located on the shape vertices.

V4.L1.E4.C2 – square shape sampled by 4 elements of different colour located on the shape vertices.

V4.L1.E5.C1 – square shape sampled by 5 elements of the same colour with 4 elements placed on the shape vertices and 1 element placed randomly anywhere on the imaginary contour shape or inside the shape.

V4.L1.E5.C2 – square shape sampled by 5 elements of different colours with 4 elements placed on the shape vertices and 1 element placed randomly anywhere on the imaginary contour shape or inside the shape.

V4.L1.E6.C1 – square shape sampled by 6 elements of the same colour with 4 elements placed on the shape vertices and 2 elements placed randomly anywhere on the imaginary contour shape or inside the shape.

V4.L1.E6.C2 – square shape sampled by 6 elements of different colours with 4 elements placed on the shape vertices and 2 elements placed randomly anywhere on the imaginary contour shape or inside the shape.

V4.L2.E4.C1 – 4 elements of the same colour placed randomly anywhere inside the square shape area and on the virtual contour path, except on its vertices.

V4.L2.E4.C2 – 4 elements of different colour placed randomly anywhere inside the square shape area and on the virtual contour path, except on its vertices.

V4.L2.E5.C1 – 5 elements of the same colour placed randomly anywhere inside the square shape area and on the virtual contour path, except on its vertices.
V4.L2.E5.C2 – 5 elements of different colour placed randomly anywhere inside the square shape area and on the virtual contour path, except on its vertices.
V4.L2.E6.C1 – 6 elements of the same colour placed randomly anywhere inside the square shape area and on the virtual contour path, except on its vertices.
V4.L2.E6.C2 – 6 elements of different colour placed randomly anywhere inside the square shape area and on the virtual contour path, except on its vertices.
V5.L1.E5.C1 – pentagon shape sampled by 5 elements of the same colour located on the shape vertices.
V5.L1.E5.C2 – pentagon shape sampled by 5 elements of different colour located on the shape vertices.
V5.L1.E6.C1 – pentagon shape sampled by 6 elements of the same colour with 5 elements placed on the shape vertices and 1 element placed randomly anywhere on the imaginary contour shape or inside the shape.
V5.L1.E6.C2 – square shape sampled by 6 elements of different colours with 5 elements placed on the shape vertices and 1 element placed randomly anywhere on the imaginary contour shape or inside the shape.
V5.L2.E5.C1 – 5 elements of the same colour placed randomly anywhere inside the pentagon shape area and on the virtual contour path, except on its vertices.
V5.L2.E5.C2 – 5 elements of different colour placed randomly anywhere inside the pentagon shape area and on the virtual contour path, except on its vertices.
V5.L2.E6.C1 – 6 elements of the same colour placed randomly anywhere inside the pentagon shape area and on the virtual contour path, except on its vertices.
V5.L2.E6.C2 – 6 elements of different colour placed randomly anywhere inside the pentagon shape area and on the virtual contour path, except on its vertices.
V6.L1.E6.C1 – hexagon shape sampled by 6 elements of the same colour located on the shape vertices.
V6.L1.E6.C2 – hexagon shape sampled by 6 elements of different colour located on the shape vertices.
V6.L2.E6.C1 – 6 elements of the same colour placed randomly anywhere inside the hexagon shape area and on the virtual contour path, except on its vertices.
V6.L2.E6.C2 – 6 elements of different colour placed randomly anywhere inside the hexagon shape area and on the virtual contour path, except on its vertices.

- **Experiment 2 - Effect of luminance polarity**

Files '*Exp2_Polarity_Accuracy*' and '*Exp2_Polarity_ReactionTime*' contain average accuracy and average RT data across 10 repeats for each stimulus condition and each participant. Similar stimulus conditions were used as in Experiment 1 but instead of colour (C) we varied luminance polarity (P). The elements had either the same (all black/all white - P1) or different (white and black – P2) polarity. For example:

V3.L1.E3.P1 – triangle shape sampled by 3 elements of the same polarity located on the shape vertices (i.e. equilateral triangle);
V4.L1.E4.P2 – square shape sampled by 4 elements of different polarity located on the shape vertices;
V5.L2.E5.P1 – 5 elements of the same polarity placed randomly anywhere inside the pentagon shape area and on the virtual contour path, except on its vertices;
V6.L2.E6.P2 – 6 elements of different polarity placed randomly anywhere inside the hexagon shape area and on the virtual contour path, except on its vertices;
and so on.

- **Experiment 3 - Effect of orientation**

Files '*Exp3_Orientation_Accuracy*' and '*Exp3_Orientation_ReactionTime*' contain average accuracy and average RT data across 10 repeats for each stimulus condition and each participant. Similar stimulus conditions were used as in Experiments 1 and 2 but instead of colour (C) or luminance polarity (P) we varied the orientation of the Gabor elements (O). The elements were oriented either collinearly (O1) or orthogonally (O2) to the imaginary path of the contour shape. For example:

V3.L1.E3.O1 – triangle shape sampled by 3 elements located on the shape vertices and oriented collinearly to the imaginary contour path;
V5.L1.E5.O2 – pentagon shape sampled by 5 elements placed on the shape vertices and arranged orthogonally to the imaginary contour-path;
and so on.

- **Experiment 4 - Effect of context**

Files *'Exp4_Context_Accuracy'* and '*Exp4_Context_ReactionTime'* contain average accuracy and average RT data across 8 repeats for each stimulus condition and each participant.
Each column in the file corresponds to a specific stimulus condition in which:

T – target type: 0 - random target; 1 - mirror symmetric target; 2 - shape target;
C – context type: 0 - random; 1 - mirror symmetric; 2 - translation symmetric; 3 - no context (or target only); 4 - grid;
E – number of target elements: 3, 4, 5, 6 elements
OBS_ID – participant number

The combinations of T, C and E parameters describe the 56 stimulus conditions used, as follows:

T0_C0_E3 – target made of 3 elements placed randomly and embedded in random context elements;
T0_C1_E5 – target made of 5 elements placed randomly and embedded in mirror symmetric context;
T0_C2_E4 – target made of 4 elements placed randomly and embedded in translation symmetric context;
T0_C3_E3 – target made of 3 elements placed randomly and presented in isolation (no context)
T0_C4_E6 – target made of 6 elements placed randomly and embedded in regular/grid context;
T1_C0_E4 – target made of 4 elements placed mirror symmetric and embedded in random context;
T1_C1_E5 – target made of 5 elements placed mirror symmetric and embedded in mirror symmetric context;
T1_C2_E4 – target made of 4 elements placed mirror symmetric and embedded in translation symmetric context;
T2_C4_E3 – target made of 3 elements placed on the vertices of shape (triangle) and embedded in regular/grid context;
T2_C4_E4 – target made of 6 elements placed on the vertices of shape (square) and embedded in regular/grid context;
and so on.