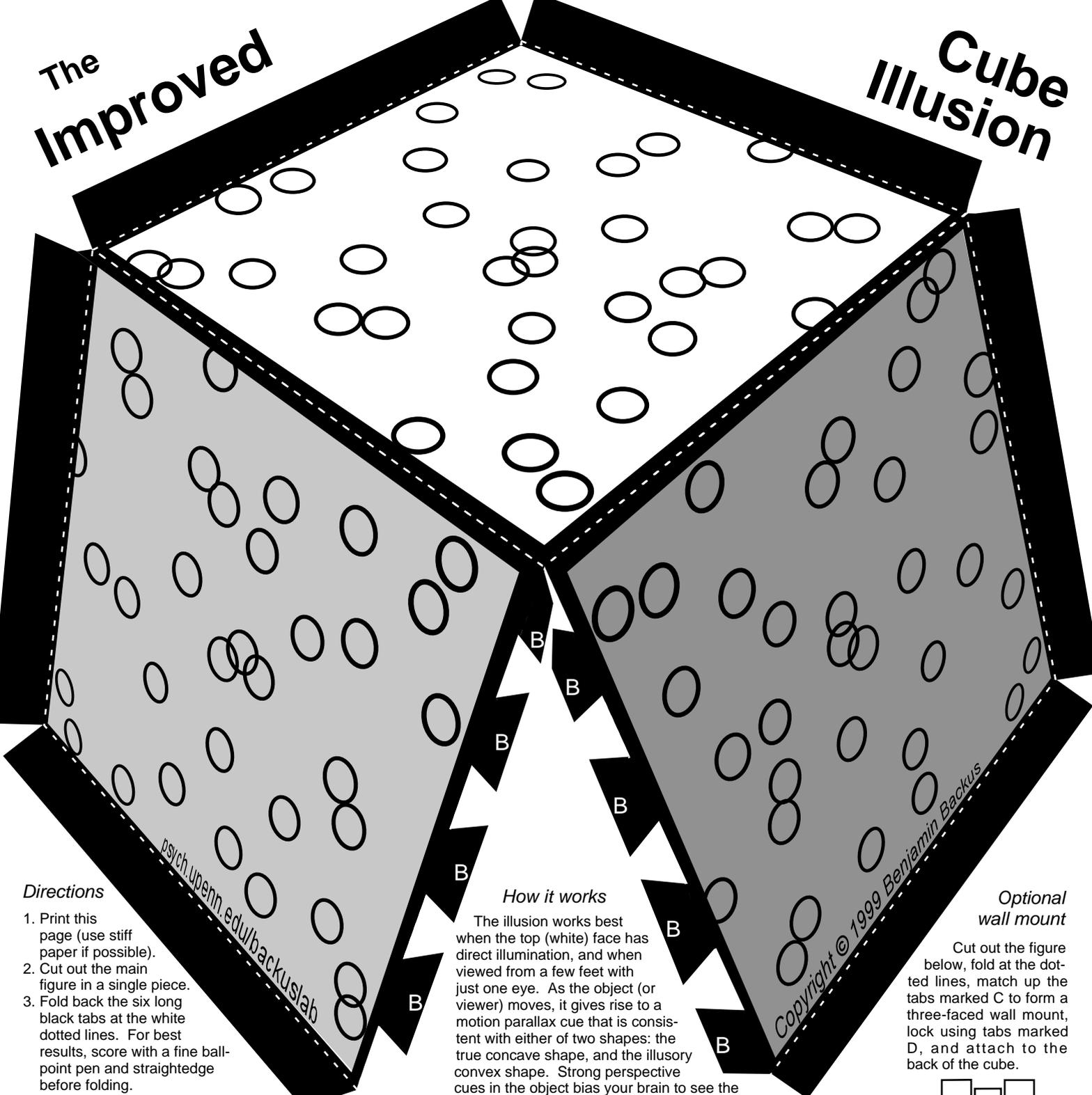


The Improved

Cube Illusion



Directions

1. Print this page (use stiff paper if possible).
2. Cut out the main figure in a single piece.
3. Fold back the six long black tabs at the white dotted lines. For best results, score with a fine ball-point pen and straightedge before folding.
4. Score and fold forward at the two remaining dotted lines (between the faces of the cube).
5. Hide all 8 dotted lines by tracing over them with a black marker.
6. Interlock the small tabs (B) to create a hollow (concave) cube.

How it works

The illusion works best when the top (white) face has direct illumination, and when viewed from a few feet with just one eye. As the object (or viewer) moves, it gives rise to a motion parallax cue that is consistent with either of two shapes: the true concave shape, and the illusory convex shape. Strong perspective cues in the object bias your brain to see the illusory convex shape. The Improved Cube Illusion combines features of the Necker Cube, Ames Window, and Mach Folded Card illusions. Its ancestors are Jerry Andrus's "Parabox" (19xx) and the perspective art of Patrick Hughes and Ron Davis. For more information visit <http://psych.upenn.edu/backuslab>.

Optional wall mount

Cut out the figure below, fold at the dotted lines, match up the tabs marked C to form a three-faced wall mount, lock using tabs marked D, and attach to the back of the cube.

Punch out

This part goes against the wall

Place tips of arrows to vertex of cube

Tape or glue this part to back of cube (the back of the white face)