Motion Capture

In this experiment you should see a white square constructed from illusory contours covering four black circles. Selecting Go from the Controls menu will start a two-frame movie in which the square seems to jump from one set of circles to the other. Most people see the animation as such; they never report seeing pacmen opening and closing their mouths or two squares flashing on and off.

You can stop the movie with the Stop menu command, and you can step through the movie one frame at a time with the Step command.

If the movie is projected on a background of regularly spaced horizontal and vertical lines, the lines appear to move with the illusory square even though they do not move at all. This is one of a class of illusions called motion capture. You can add or remove the lines with the Add Lines and Remove Lines menu commands.

The strength of the illusion depends on the frame rate. You can increase and decrease the frame rate of the movie with the Faster and Slower commands.

References

Ramachandran, V.S. (1987). Visual Perception of Surfaces: A Biological Theory. In S. Petry & G.E. Meyer (Ed.), The Perception of Illusory Contours (pp. 93-108). New York: Springer-Verlag.