



WE RELY ON OUR SENSES to supply us with information about the world. But sometimes our eyes, ears and brains play tricks on us.

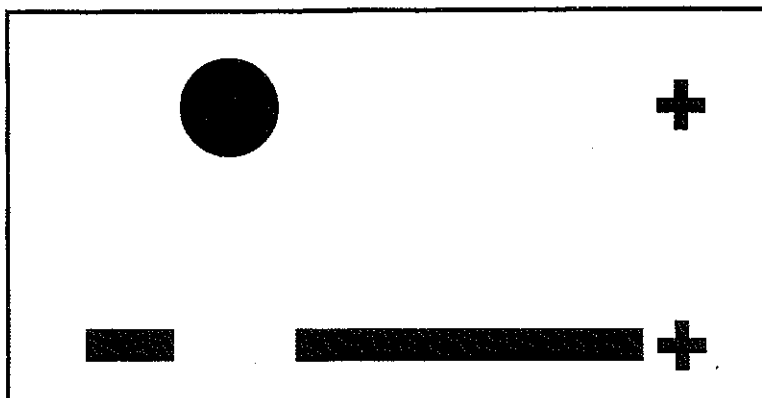
# At "Seeing Is Deceiving," **Why You Can't Trust Your Eyes**

a new permanent exhibit at Boston's Museum of Science, dozens of visual and auditory illusions invite visitors to explore the conflict between perception and reality. Here are two samples. BY DOUGLAS B. SMITH

## The Blind Spot: Seeing What You Cannot See

### WHAT TO DO:

*Cover your right eye. From a distance of about 12 inches, look at the top cross with your left eye. Slowly move your head closer to the cross. The disk on the left will vanish. If you move even closer, the disk will reappear.*



- Is your blind spot white?
- Follow this procedure for the diagram on the bottom. At a certain point, the black bar will appear continuous.
- Is your blind spot black?
- Does lack of vision have a color?

## Why Seeing Is Deceiving

At the back of the eye lies the retina, a vast field of light-sensitive nerve cells with long, signal-carrying fibers that join together and connect to the brain in a great bundle called the optic nerve. The point where this nerve leaves the eye forms a blind spot in the visual field. Because it is off-axis from the fovea—the area of the eye with the highest concentration of light-sensitive cells—we normally do not notice the blind spot.

*King Louis XIV of France amused himself during long, boring court ceremonies by finding his blind spot and then staring at members of his court so they appeared to have no heads.*



exhibits/seeing/seeing.html  
More illusions from the exhibit.

• *Now You See It, Now You Don't: The Amazing World of Optical Illusions*, by Seymour Simon (Morrow). A National Science Teachers Association choice.

• *Mind Sights: Original Visual Illusions, Ambiguities, and Other Anomalies*, by Roger N. Shepard (Freeman). Lots of fun.

DOUGLAS B. SMITH, exhibits planner at the Museum of Science, Boston, developed the "Seeing Is Deceiving" exhibit.

[www.mos.org/mos/exhibits/seeing/seeing.html](http://www.mos.org/mos/exhibits/seeing/seeing.html)