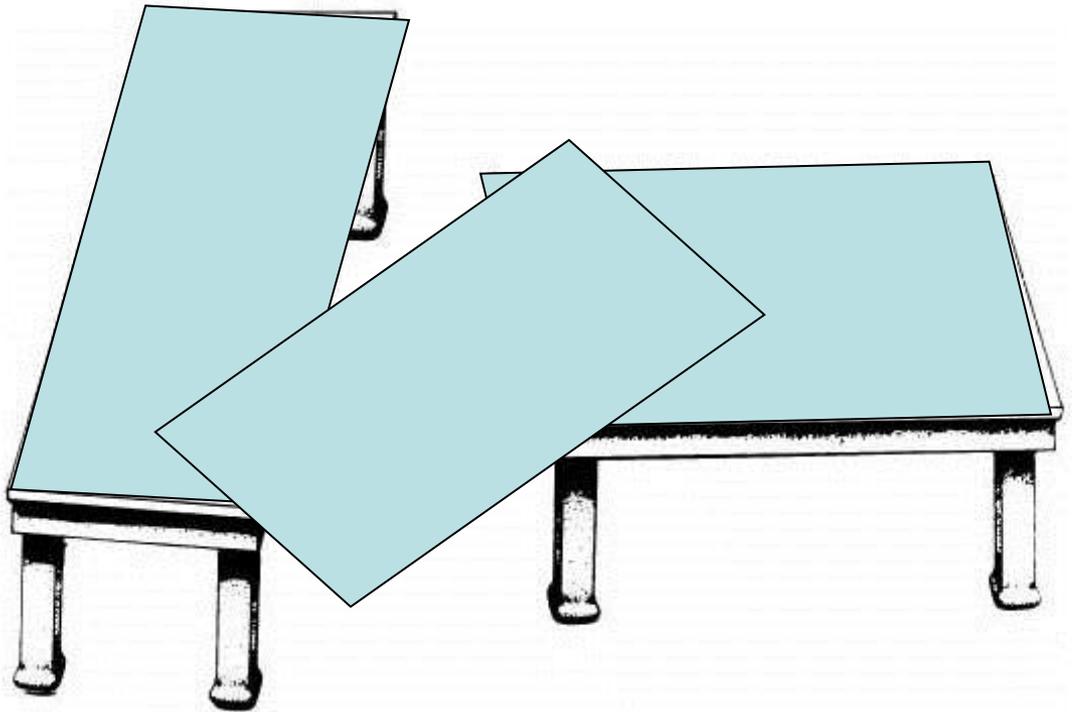


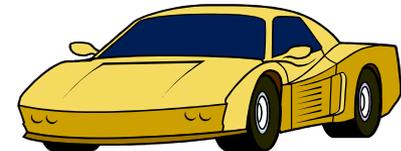
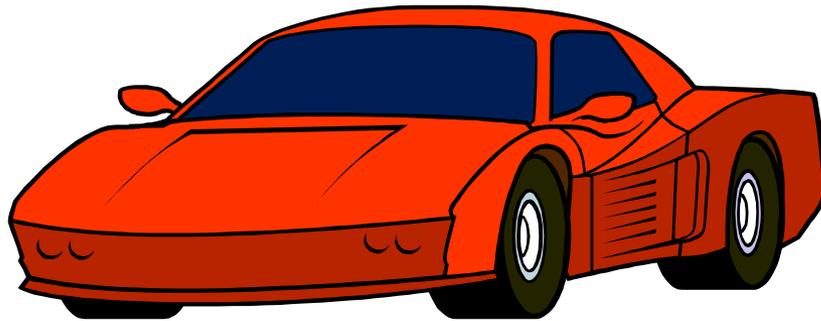
Shape Constancy



Source: MIND SIGHTS by Roger N. Shepard. Copyright © 1990 by Roger N. Shepard.

Size Constancy

Stable size perception amid changing size of the stimuli.



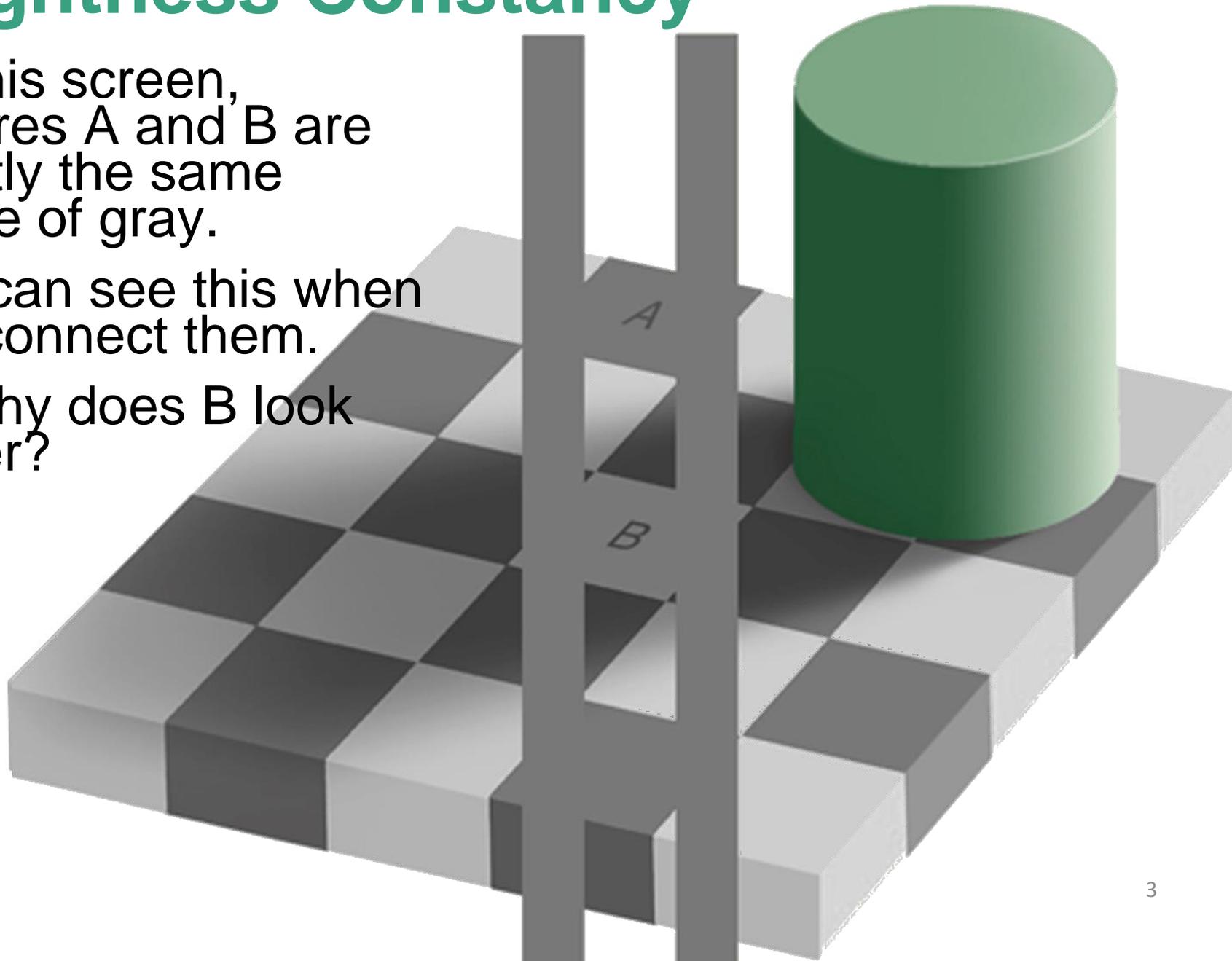
Size Constancy

Brightness Constancy

On this screen, squares A and B are exactly the same shade of gray.

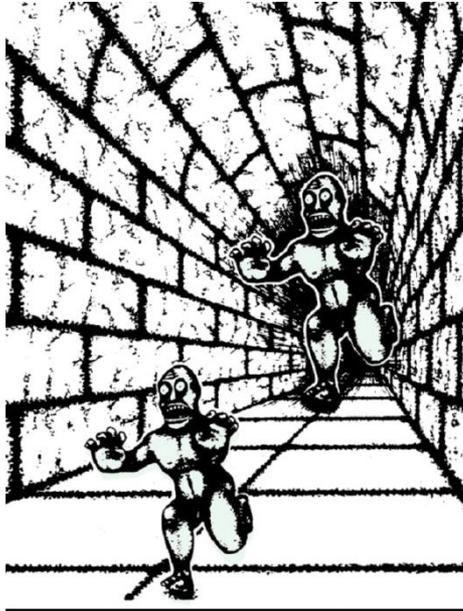
You can see this when you connect them.

So why does B look lighter?

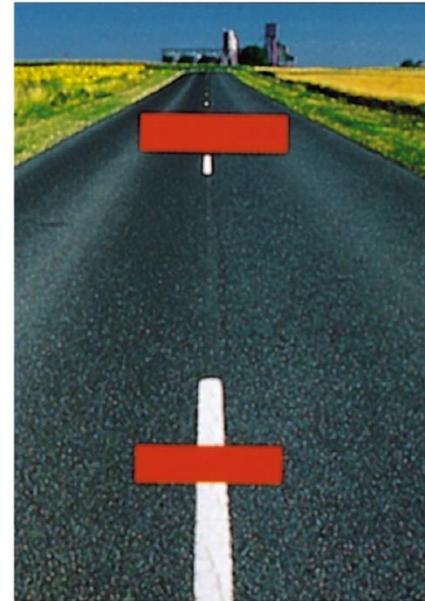


Size-Distance Relationship

The distant monster (below, left) and the top red bar (below, right) appear bigger because of distance cues.

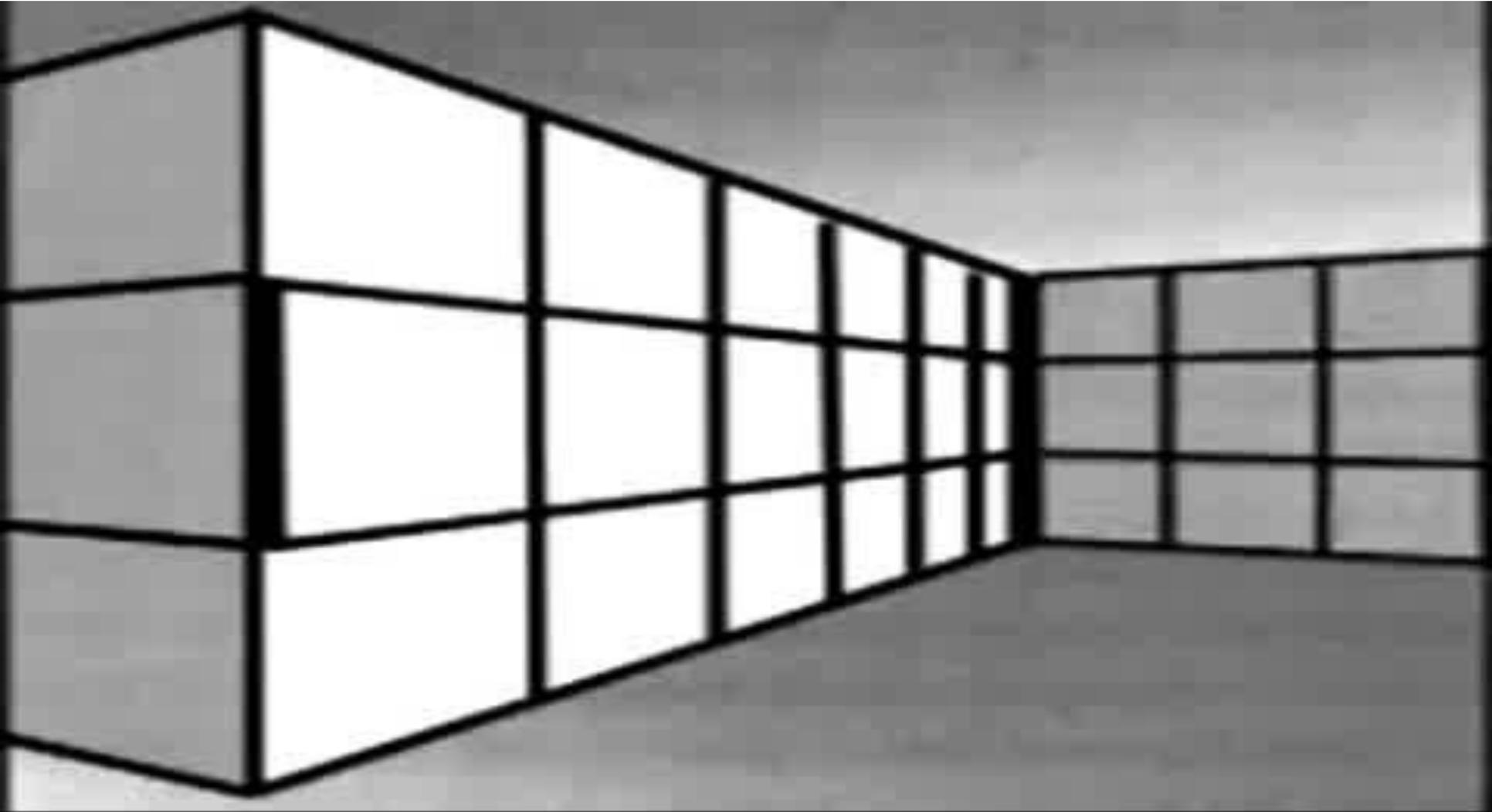


(a)

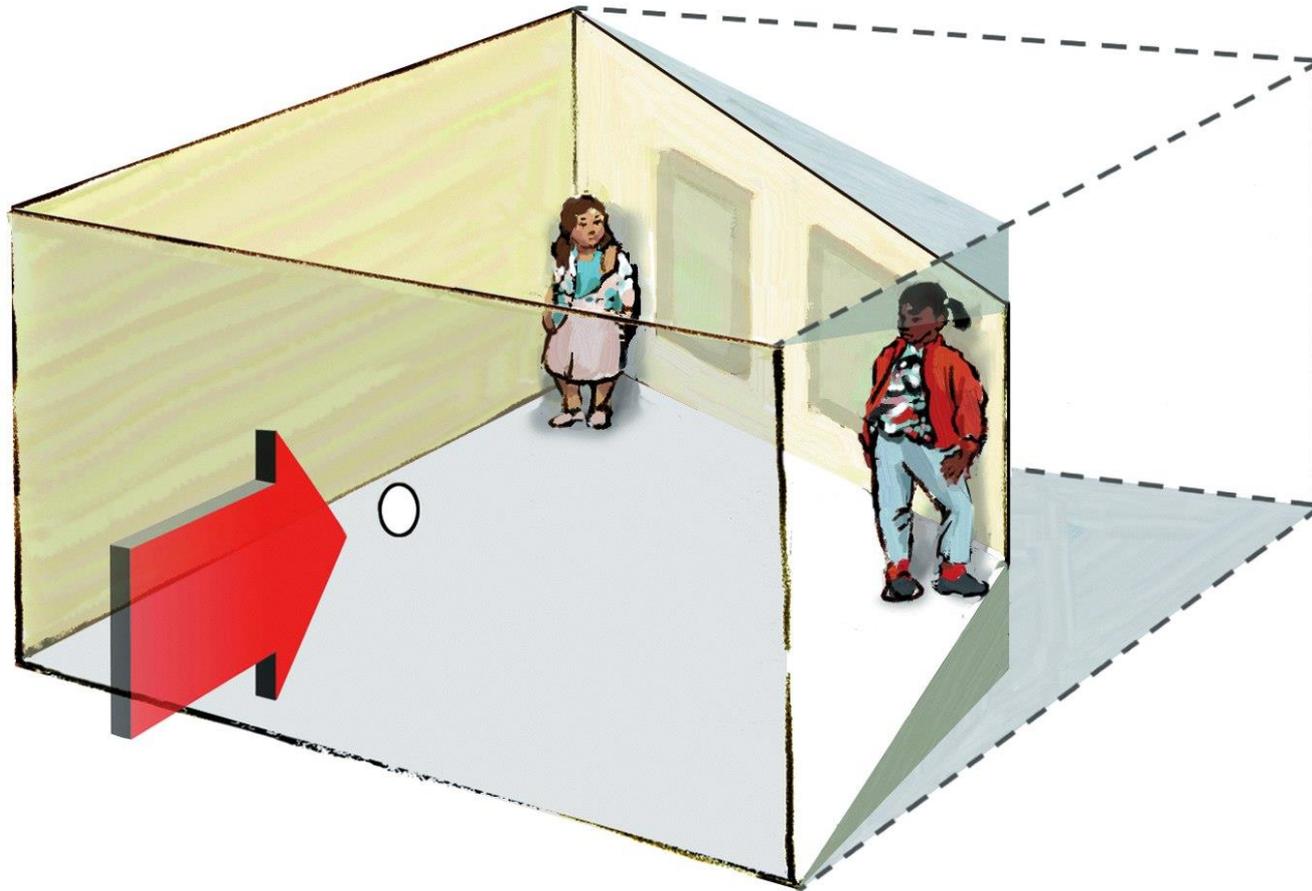


(b)

Ponzo Illusion



Ames Room



The Ames room is designed to demonstrate the size-distance illusion.

The Science of

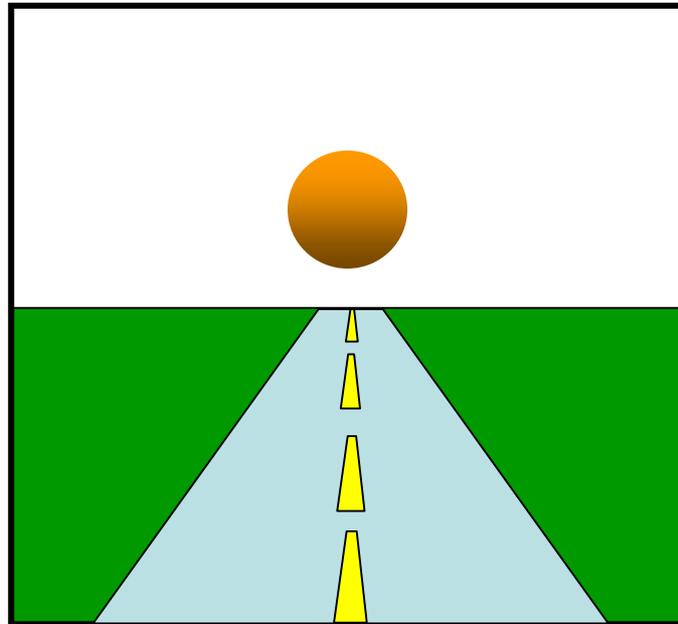
PSYCHOLOGY

with Behavioral Science

UNIVERSITY OF MICHIGAN

Motion Perception

Motion Perception: Objects traveling towards us grow in size and those moving away shrink in size. The same is true when the observer moves to or from an object.



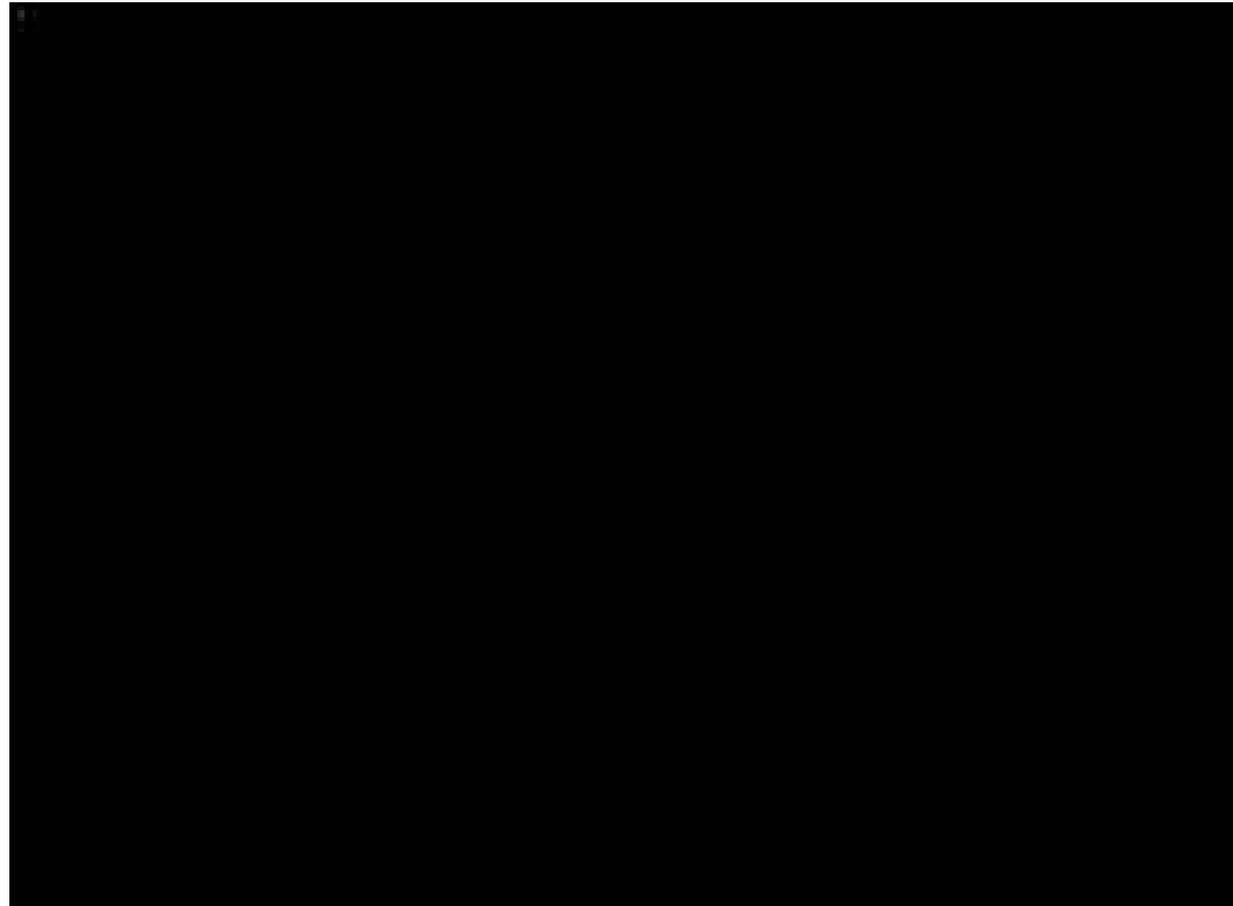
Perception of Motion

- **Looming:** Rapid expansion in the size of an image so that it fills the retina



Perception of Motion

Mario Flipbook



- **Stroboscopic Motion:**
Tendency to perceive movement when a series of still images appear, one at a time, in rapid succession (cartoons, films)

GAME OVER Project



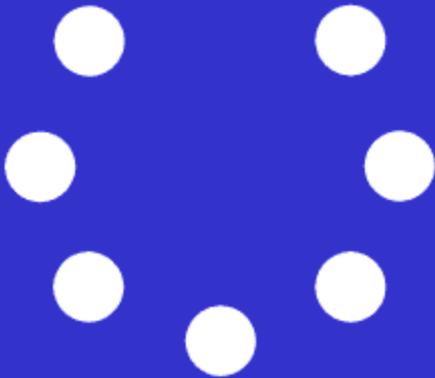
www.NOTsoNOISY.com

Phi

Phenomenon:

When lights flash at a certain speed they tend to present illusions of motion. Neon signs use this principle to create motion perception.

Apparent Motion



McGurk Effect

- 1/2 of students
 - Open eyes, watch video & listen
- 1/2 of students
 - Close eyes, just listen
- Write down: What sound did you hear?

McGurk Effect



McGurk Effect

The "McGurk Effect" illustrates that one sense can influence another. (Sensory Interaction)

It also demonstrates...



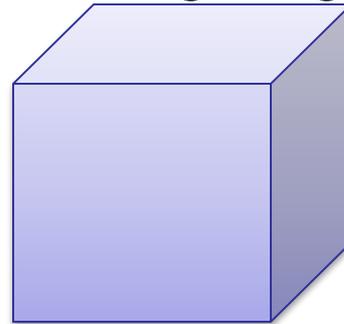
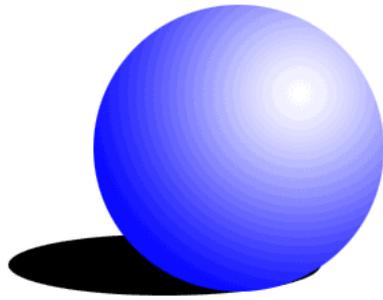
Visual Capture

- When vision competes with our other senses, vision usually wins - a phenomena called **visual capture**.



Sensory Deprivation and Restored Vision

If a person who was born blind and had only learned to distinguish between a sphere and a cube through touch gained their sight, would they be able to distinguish between the two items through sight alone?



Once vision was restored in adults who had been blind for their entire lives, they were able to distinguish figure from ground and recognize colors

They could not recognize by sight items they had formally recognized by touch

Restored Vision and Facial Recognition



Perceptual Adaptation

The ability to adapt to an artificially displaced or even inverted visual field



Inverted Vision



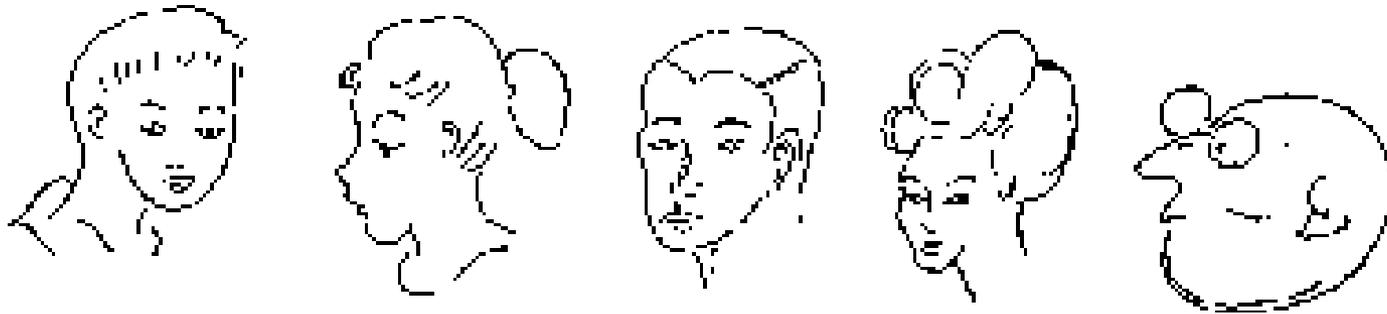
Perceptual Set

What we perceive a stimulus to be is influenced by what surrounds it.



- What you see in the center figures depends on the order in which you look at the figures:
 - If you scan from the left, see an old man
 - If you scan from the right, see a woman's figure

Perceptual Set



Perceptual Set



What is the middle figure?



This is an example of context effects.