

MODULE 19 VISUAL ORGANIZATION AND INTERPRETATION**VISUAL ORGANIZATION**

- **GESTALT** is a term meaning a “form” or a “whole”. Gestalt psychologists would emphasize our tendency to integrate pieces of information into meaningful wholes.
- **FIGURE AND GROUND** is our first perceptual task is to perceive any object (the figure) as distinct from its surroundings (the ground).
- **GROUPING** is the perceptual tendency to organize stimuli into coherent groups. There are three: proximity, continuity, and closure.
- **PROXIMITY** is the nearby figures (we see not six separate lines but three sets of two lines).
- **CONTINUITY** perception where smooth, continuous patterns rather than discontinuous ones.
- **CLOSURE** we fill in gaps to create a complete, whole object.

DEPTH PERCEPTION

- **DEPTH PERCEPTION** enables us to estimate an object’s distance from us. The ability to see objects in three dimensions although the images that strike the retina are two-dimensional.
- Eleanor Gibson inspired by depth perception was the visual cliff. The **VISUAL CLIFF** is a laboratory device for testing depth perception in infants and young animals. Gibson devised a miniature cliff with a glass-covered drop-off to determine whether crawling infants are reluctant to venture onto the glass over the cliff.

BINOCULAR CUES

- **BINOCULAR CUES** are depth cues, such as retinal disparity, that depend on the use of two eyes.
- **RETINAL DISPARITY** is a binocular cue for perceiving depth: by comparing images from the retinas in the two eyes, the brain computes distance – greater the disparity (difference) between the two images, the closer the object.
- **MONOCULAR CUES** are depth cues available to eye separately. Examples are RELATIVE MOTION, RELATIVE HEIGHT, RELATIVE SIZE, INTERPOSITION, AND LINEAR PERSPECTIVE.

MOTION PERCEPTION

- When two adjacent stationary lights blink on and off in quick succession, we perceive a single light moving back and forth between them. Lighted signs exploit this **PHI PHENOMENON** with a succession of lights that creates the impression of, say, a moving arrow.

PERCEPTUAL CONSTANCY

- To recognize objects without being deceived by changes in their color, brightness, shape, or size – a top-down process called **PERCEPTUAL CONSTANCY**.
- **COLOR CONSTANCY** is perceiving familiar objects as having consistent color, even if changing illumination alters the wavelengths reflected by the object. You and I see color thanks to our brain's computations of the light reflected by an object relative to the objects surroundings.
- Comparisons govern our perceptions.
- We develop **SIZE CONSTANCY** overtime using prior knowledge.
- Moon illusion predicament: the moon looks up to 50 percent larger when near the horizon than when high in the sky. Size and distance matters...the father away an object, the bigger it appears.

VISUAL INTERPRETATION

- The effect of sensory restriction suggests there is a critical period for normal sensory and perceptual development. **PERCEPTUAL ADAPTATION** is where in vision, the ability to adjust to an artificially displaced or even inverted visual field (goggles).

BE ABLE TO ANSWER: What do we mean when we say that, in perception, “the whole is greater than the sum of its parts”?

PRACTICE FRQ: Look at the relative size cartoon in figure 19.5. describe how the artist who drew this cartoon incorporated relative size, linear perspective, and interposition to create depth.