

# Advanced Placement Psychology

## Chapter 6: Perception

( <http://www.ApPsychology.net> )

### Selective Attention

- **Selective attention:** focusing only on one thing at a time; focused awareness only on limited aspect of all that is capable of experiencing; *you aren't aware of nose in line of vision*
- **Cocktail Party Effect:** (example of selective attention) ability to focus only on one voice in a huge crowd
- Unnoticed stimuli has effect: women who had listened to tunes previously played to them while unnoticed *preferred it* later on

### Perceptual Illusions

- **Visual capture:** phenomenon when a conflict occurs between vision and another sense, vision dominates; *vision captures other senses (overrides)*
- in theaters, sound comes from behind (projector), yet perceive as from screen
- Perceiving voice coming from ventriloquist's dummy

### Perceptual Organization

- Humans organize clusters of sensation into **gestalt**: organized "whole"; human tendency to order pieces of info into a meaning picture
- First perceptual task: to perceive *figure* (object) as **distinct** from *ground* (background)
- **Figure-ground:** organization of visual field into the figure(s) that stand out from the ground
- Next, organize figure into meaningful form (color, movement, like-dark contrast)
- To process forms, use **grouping**: rules mind follows to organize stimuli into logical groups
- Grouped into *Proximity, Similarity, Continuity, Closure, Connectedness* (visuals on page 185, figure 6.5 and definition on page 186 of 5 edition)
- **Depth perception:** ability to see objects in 3D even though image sensed by retina are 2D; allows distance judgment; partly innate (born with)
- Gibson and Walker placed 6-14 months old infants on edge of a visual cliff (table half glass, half wood), making the appearance of a drop-off; Mothers then tries to convince infant to crawl pass the normal part of the table onto glass; most refused, indicating perception of depth
- **Visual cliff:** laboratory device for testing depth perception in infants/animals
  
- **Binocular cues:** depth cues that depend on both eyes
- Eyes apart, slightly different images, brain sees difference –**retinal disparity**: bi cue in which the greater the difference between images, the closer the object
- **Convergence:** bi cue in which the more the eyes turns inward, the closer the object
- **Monocular cues:** distance cue that are available to either eye
- Examples: *relative size, interposition, relative clarity, texture gradient, relative height, relative motion, linear perspective, relative brightness* (definitions on pages 188-189 of 5 edition)
  
- Brain computes motion base partly on assumption that objects moving away is shrinking & vise versa
- Brain reads rapid series of slightly different images as movement; phenomenon called *stroboscopic movement*
- Another illusion of movement is **phi phenomenon**: perception of movement when lights blink one after the other; *the lighted arrow signs on the back of parked construction trucks*
- **Perceptual constancy:** perception that objects are not changing even under different lighting; *allowing identification regardless of angle of view* [a door is a door even at 45 degree (shape constancy) angle or 20 feet away(size constancy)]
- Even at same size, linear perspective causes one to see one object bigger (page 191 figure 6.13a)

## Interpretation

- Formerly blind patients often can't recognize objects familiar by touch
- Sensory restriction like allowing only diffuse, unpatterned light does no damage is occurring later in life; affect only at infancy, suggesting *critical period* for development
- **Perceptual adaptation**: ability for our vision to adjust to artificial displacement (chicks do not possess this); *given goggles that shift vision 30 degrees to left, humans learn to adjust actions 30 degrees to left*
- Roger Sperry surgically turned eyes of animals; found out **Fish, Frogs, Salamanders** (Note: **reptiles**) **CAN'T ADJUST** while **Kittens, Monkeys, Humans** (Note: **mammals**) **ADAPTED**
- Experiences, assumptions, and expectations give us **Perceptual set**: mental set up to perceive one thing and not another; *ufo-looking objects that are really clouds*; because can't resist finding a pattern on unpatterned stimuli
- Much of our perception comes not just from world "out there", but also from behind the eyes and between the ears

## ESP

- 50% of americans believe in **extrasensory perception (ESP)**: claim perception occurring without sensory input
- **Parapsychology**: study of paranormal phenomena (profession called Parapsychologists)
- Three varieties of ESP: *Telepathy (sending or reading thoughts)*, *Clairvoyance (perceiving an event unfolding)*, *Precognition (seeing future)*
- Vague predictions can later be interpreted to match events; *Nostradamus claimed his prophecies could not be interpreted till after the event*
- After many experiments, never had a reproducible ESP phenomenon or individual who can convincingly demonstrate psychic ability

## **Bibliography**

Myers, David G., Psychology Fifth Edition. Worth Publishers, Inc. New York, NY ©1998