

CHAPTER 6: SENSATION AND PERCEPTION • LECTURE NOTES

- Chapter 6: Sensation and Perception
- Thresholds and Signal Detection
 - Absolute Sensory Threshold
 - Intensity at which a given individual can detect a stimulus 50% of the time
 - Response Ways
 - 2 ways to be correct: Hit, Correct Rejection
 - 2 ways wrong: False alarm
 - misses
 - Signal-Detection Theory
 - The study of people's tendencies to make hits, correct rejections, misses, and false alarms
 - In signal detection experiments, people's responses depend on their willingness to risk a miss or a false positive
- Experiment
 - Scenario 1: Light bulb dollar and penny
 - Scenario 2: Light bulb: dollar, penny and shock
- Subliminal Perception
 - The idea that a stimulus can influence our behavior even when it is presented so faintly or briefly or along with such distracters that we do not perceive it consciously
 - Myths
 - Make you buy things
 - Disney Movies
 - The Little Mermaid
 - The Rescuers
 - Who Framed Roger Rabbit
 - Aladdin
 - The Lion King
 - Myths
 - Make you join a cult
 - Rock Songs
 - Barney
 - Myths

- Subliminal audiotapes can help you improve your memory, quit smoking, and lose weight...
 - Truths
 - Emotions and facial expressions
 - Word Identification
 - Recognition of Patterns
- Perceived Brightness
 - Depends on comparison to objects around it
 - Brightness Contrast
 - The increase or decrease in an in an objects' apparent brightness because of the effects of objects around it
- Feature Detection
 - Feature Detection Theory we begin recognition by breaking a complex stimulus into its component parts
 - Feature Detectors
 - Neurons in the visual cortex that respond to the presence of certain simple features, like lines and angles
- Gestalt Psychology
 - A field that focuses on our ability to perceive overall patterns
 - German word that means "Overall pattern or configuration"
 - Slogan was "a whole is different from the sum of its parts"
 - Visual perception is an active creation, not just the adding of lines or dots
- Figure and Ground:
 - In order to perceive things, we must be able to separate figure and ground
 - We must be able to distinguish the _____ from the _____
 - We usually take this process for granted, except in situations when the task is difficult
- Reversible Figures
 - Stimuli that can be perceived in more than one way.
 - In these cases, we have to test hypotheses to make sense of what we see
- Gestalt Psychology
 - Proximity-**distance**
 - The tendency to perceive objects close to each other as forming a group
 - Similarity-**shapes**
 - Tendency to perceive objects that resemble ach other as forming a group
 - Continuation
 - Occurs when the eye is compelled to move through one object an continue to other object
 - Closure
 - Imagine the rest of the figure that is missing

- Closer and continuation can work best together when something has blocked the presumed object in the background.
- Perception of Movement and Depth
 - Visual Constancy
 - Tendency to perceive objects as keeping their shape, size, and color, even though what actually strikes our retina changes from one moment to the next.
- Perception of Movement
 - How do we distinguish between our own movements and that of other objects?
 - We know the object remains stationary for 2 reasons
 - We perceive motion through the object's background.
 - The vestibular system
- Perception of Motion
 - Induced, or apparent movement
 - When a background is moving and we incorrectly perceive as the object being in motion rather than the background.
- Stroboscopic movement
 - An illusion of movement created by rapid succession of stationary objects.
- Phi Effect
 - Illusion of movement created when when two or more stationary light speared by a short distance blink on and off at regular intervals.
- Perception of Depth
 - Depth Perception
 - Our perception of distances
 - Retinal Disparity
 - The discrepancy between the slightly different views the two eyes see becomes greater as the object comes closer. We use the amount of discrepancy to gauge distance.
 - Convergence
 - The degree to which the eyes turn in to focus on a close object.
 - The closer the object, the more your eyes turn in
- **Binocular cues**
 - Depend on both eyes
- **Monocular cues**
 - Enable a person to judge depth and distance with just one eye or when both eyes see the same image, like a drawing
 - Depends on experience