

SENSATION AND PERCEPTION

(side 1)

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- * absolute threshold
- * difference threshold/Jnd
- * Weber's Law
- * signal detection theory:
(hits, misses, false alarms, correct rejections)
- * subliminals

INTRODUCTION TO 'SENSATION'

- * "Psychophysics"
- * transduction
- * selective attention
 - * divided attention
 - * cocktail party effect
- * inattentional blindness; change blindness

VISION

- * Basic eye anatomy
- * rods and cones
- * the fovea
- * the blind spot
- * the visual cortex
- * light/dark adaptation

* perceptual adaptation demo

- * Basic ear anatomy
- * cochlea
- * hair cells
- * ossicles & tympanic membrane
- * sound localization
- * the sense of touch
- * the somatosensory cortex
- * phantom pain
- * gate control theory
- * the auditory cortex

HEARING

- * place theory
- * frequency theory
- the volley principle
- * sensorineural/nerve deafness
- * conduction deafness

THE "OTHER" SENSES

- * vestibular sense
- semi-circular canals
- * kinesthetic sense
- * synesthesia

- * motion detector cells
- * feature detector cells
 - opponent-process
 - trichromatic
- * color "blindness"
- * color vision theories

SENSATION AND PERCEPTION

- * Sensation vs. Perception
- * bottom-up processing vs. top-down processing
- * sensory adaptation vs. habituation

INTRODUCTION TO PERCEPTION

- * context
- * perceptual set
- * schemas

* figure-ground images

- * Gestalt principles
- closure
- continuation
- similarity and proximity

* impossible figures

ORGANIZING OUR PERCEPTIONS

- * feature analysis
- * prototype matching

- * reversible figures

- * size & shape constancy
- * color afterimages
- * illusions of apparent motion:
 - autokinetic effect
 - phi phenomenon
 - stroboscopic movement

ILLUSIONS AND OTHER PHENOMENA

- * depth/distance cues:
 - binocular or retinal disparity
 - convergence
- accommodation
- linear perspective
- relative size
- interposition
- elevation
- texture gradient
- motion parallax

*The Muller-Lyer Illusion

*The Ponzo Illusion