

# PERCEPTION

Chapter 6

Street Art and Optical Illusions

# I. SELECTIVE ATTENTION

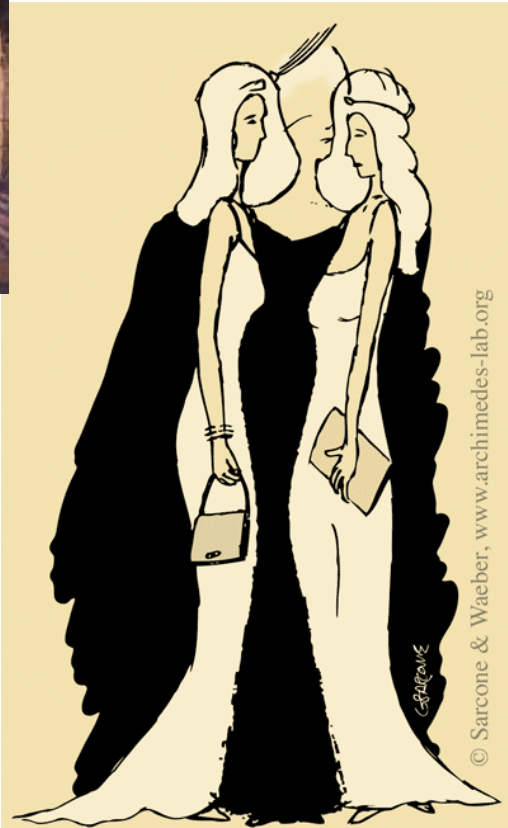
- Selective attention - The focusing of conscious awareness on a particular stimulus.
  - Count the passes video
  - Cocktail party effect - Ability to attend selectively to only one voice among many.
  - We can attend to stimuli we don't notice.
  - Who Cheated video

## II. PERCEPTUAL ILLUSIONS

- Visual capture - Vision usually dominates when there is a conflict among senses.
  - Franz Muller-Lyer Illusions
  - Ames Room Illusion
  - Gateway Arch in St. Louis
  
- Ex: Bracing ourselves when watching a roller coaster movie

# III. PERCEPTUAL ORGANIZATION

- Gestalt - Our tendency to integrate pieces of information into meaningful wholes.
- “The whole is greater than the sum of its parts.”
- Form Perception
  - Figure-Ground - Organization of the visual field into objects (figures) that stand out from their surroundings (ground)



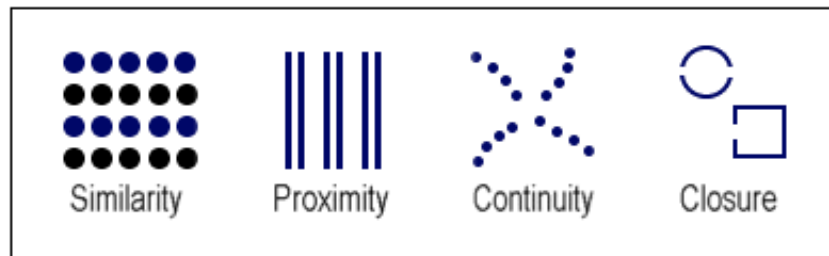
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# III. PERCEPTUAL ORGANIZATION

## ○ Form Perception

- Grouping - Tendency to organize things into coherent groups
  - Proximity - Group close objects together
  - Similarity - Group similar objects
  - Continuity - Perceive smooth continuous patterns
  - Connectedness - When uniform and linked we perceive dots, lines or area as a single unit
  - Closure - Fill in gaps to create a whole object



# III. PERCEPTUAL ORGANIZATION

○ Depth perception - Ability to judge the distance of objects.



■ Visual cliff - Lab device for testing depth perception in infants and young animals.

■ Visual cliff experiment

■ Binocular cues - Clues about distance requiring two eyes.

○ Retinal disparity - The slightly different view the two eyes have of the same object.

○ Convergence - Extent to which the eyes turn inward when looking at an object.

# III. PERCEPTUAL ORGANIZATION

- Monocular Cues - Clues about distance based on the image of one eye.
  - Interposition
  - Relative size
  - Relative clarity
  - Texture gradient
  - Relative height
  - Motion parallax
  - Linear perspective
  - Light and shadow

# III. PERCEPTUAL ORGANIZATION

## ◎ Motion perception

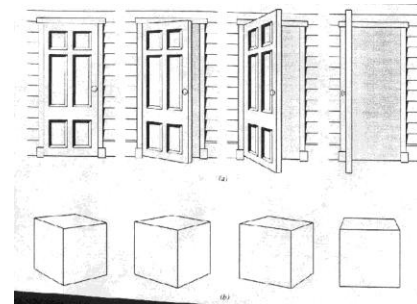
- Stroboscopic movement - Brain interprets a rapid series of slightly varying images as movement. (Think flip books...) Intermission
- Phi phenomenon - Illusion of movement created when two or more adjacent lights blink off and on in succession. (Think chasing lights...) Sandstorm



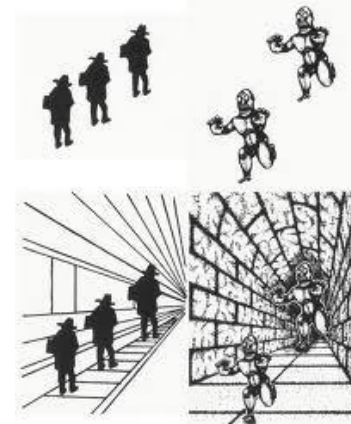
# III. PERCEPTUAL ORGANIZATION

○ Perceptual Constancy - Perceiving an object as unchanging even when the immediate sensation of the object changes.

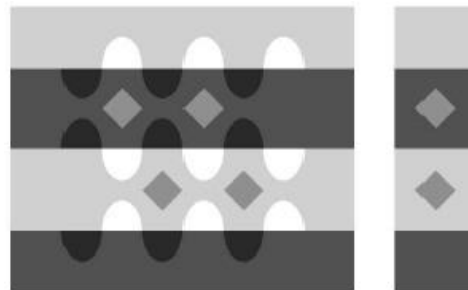
■ Shape constancy



■ Size constancy



■ Lightness Constancy



## IV. PERCEPTUAL INTERPRETATION

- Perceptual adaptation - In vision, the ability to adjust to an artificially displaced or even inverted visual field. [Experiment](#)
- Perceptual set - A mental predisposition to perceive one thing and not another.  
[Give it a try...](#)
- What we see is effected by our experiences, assumptions and expectations.

# V. EXTRASENSORY PERCEPTION

- ESP - Controversial claim that perception can occur apart from sensory input.
- Parapsychology - Study of paranormal events that investigates claims of ESP.
- Varieties of ESP
  - Telepathy - Mind to mind communication
  - Clairvoyance - Perceiving remote events
  - Precognition - Perceiving future events
  - Psycho kinesis - Mind over matter
- ESP has never been experimentally proven ([ESP and probability](#))