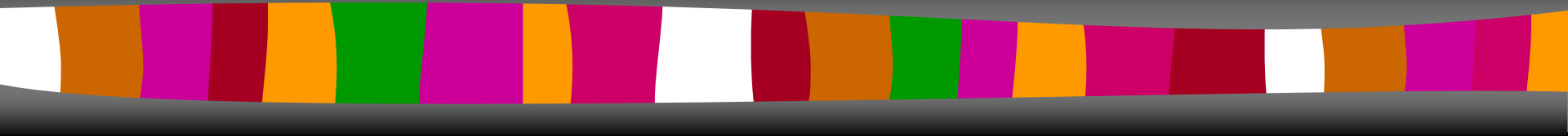


Sensation and



Perception

# What is it?

- Sensation: what information you gather through senses
- Perception: how you interpret that information



When do you use it?



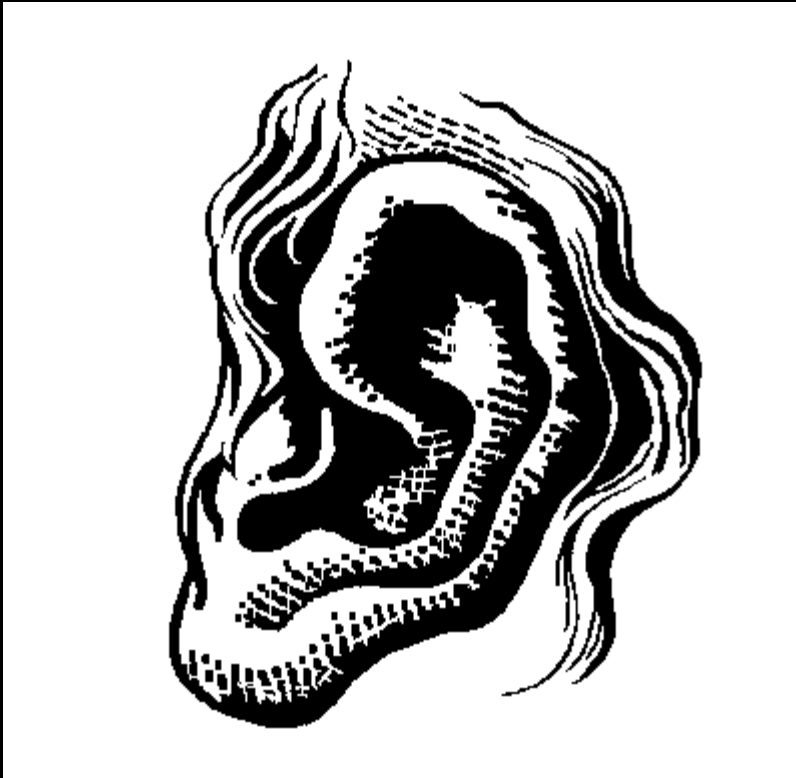
- Every day, all of the time.
- Seeing, hearing, smelling, feeling, and tasting

# Sensation

- Stimulus: a change in the environment to which an organism responds



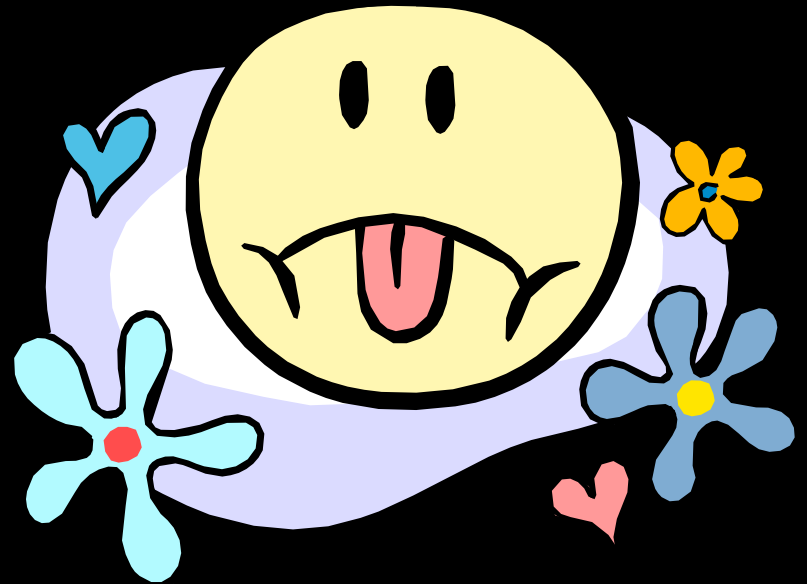
# Sensation



- Occurs anytime a stimulus activates a receptor: eyes, ears, skin, nose, tongue

# Sensation

- Perception: the organization of sensory information
- Psychophysics: studies how stimuli affect sensory experiences



# Threshold



- Figuring out how much stimuli is needed to activate a sensation half the time

# Human Thresholds

- Vision: candle 30 miles
- Hearing: watch tick-20 feet
- Taste: 1tsp. Sugar in 2 gal. H<sub>2</sub>O
- Smell: 1 drop of perfume in 3 room house
- Touch: feeling a bee's wing @ 1cm





# How do we compare to other animals?



- List on the board – who has better sight, hearing, feeling, tasting, and smelling skills?

# Sensory Adaptation

- Senses are most responsive to increases or decreases.
- Vision in a movie



# Without Sensory Adaptation



- Stimuli would bombard your senses.
- Pools never warm, clothes hang, etc.
- Notice only changes

# Small Detection Theory

- Threshold can depend on other factors
  - Preattentive process - automatic
  - Attentive process -



# Signal-Detection Theory



- All things require attention, some require more than others.
- Stroop Effect

# Perception

- Unconscious organization of stimuli into meaningful experiences



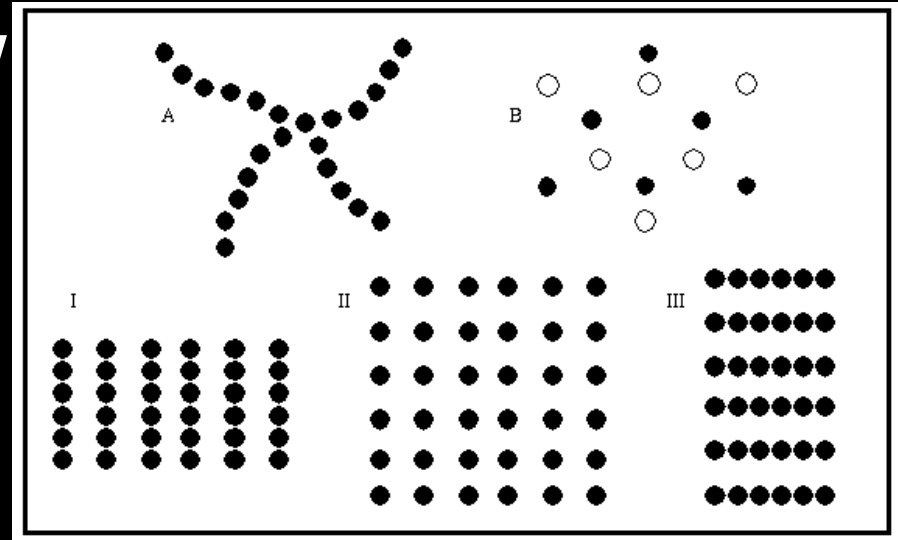
# Perception



- Gestalt: the experience that comes from organizing bits and pieces into a meaningful whole

# Perception

- Gestalt principles allow you to group items and recognize patterns



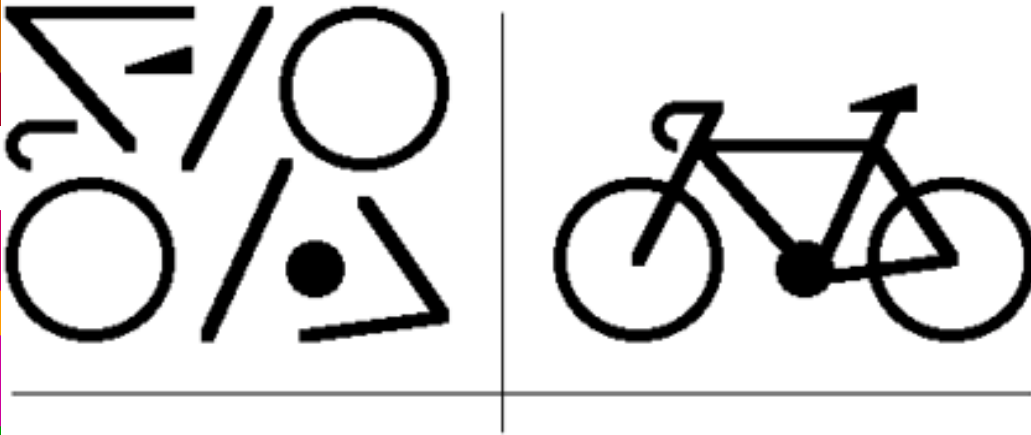


# Perception

- Principles people use to organize include

- Proximity
- Continuity
- Similarity
- Simplicity
- closure

The unified whole is different from the sum of the parts.



Similarity



Proximity



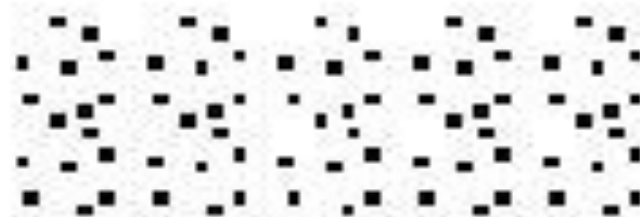
Good continuation



Symmetry

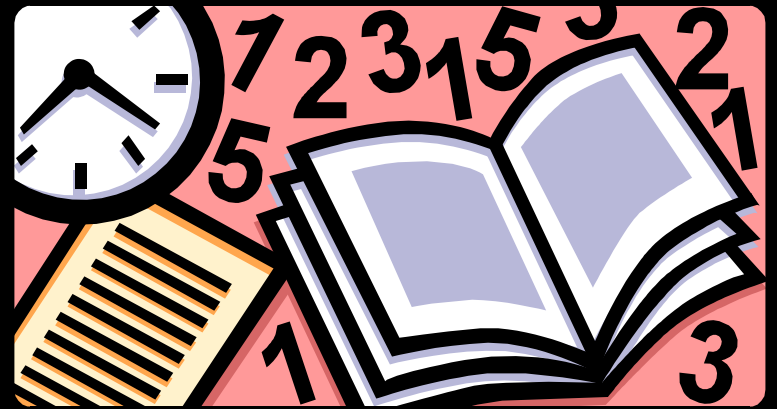


Periodicity

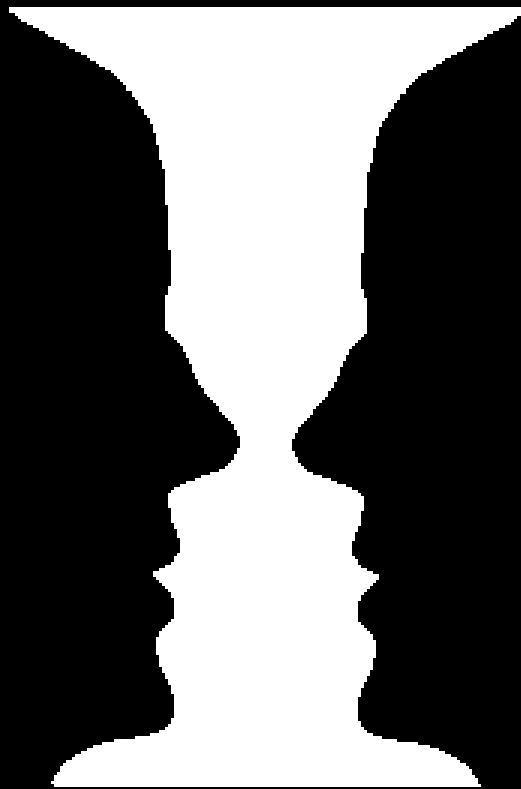


# Perception

- These principles help explain how we organize and group our sensations to make sense of the world.



# Figure-ground Perception



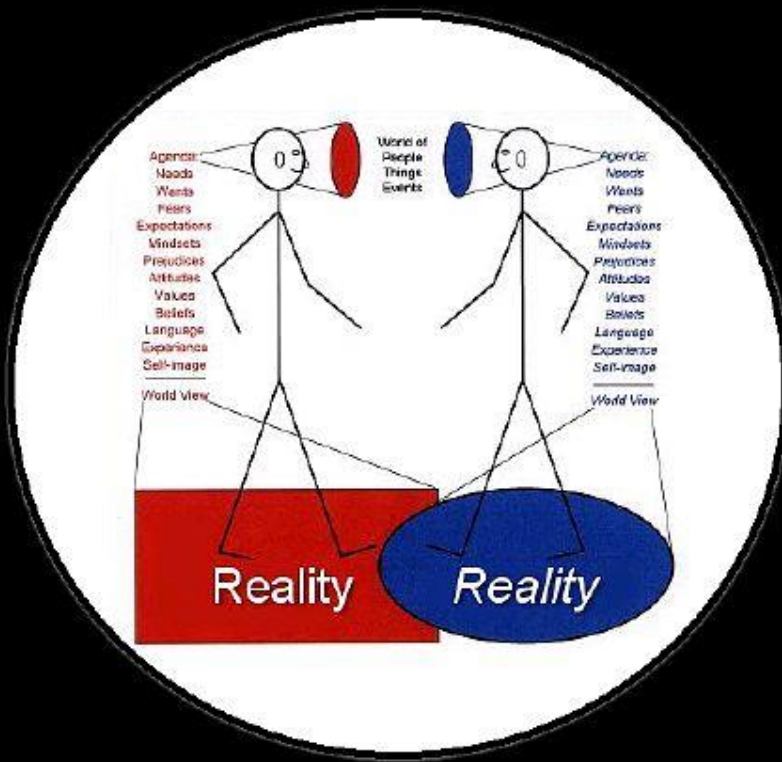
- The ability to distinguish between a figure and its background
- Applies to 2D as well as sound

# Perceptual Inference

- The ability to fill in the gaps for our senses.
- Sitting in a dark theater, road continues over a steep hill, etc.



# Learning to perceive



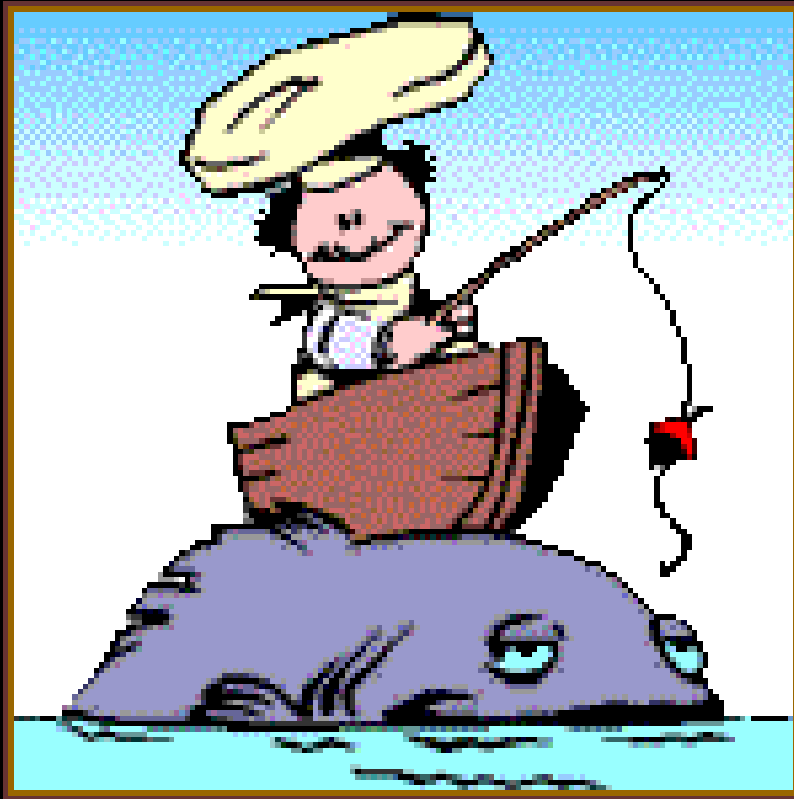
- Begin to learn as baby
- Active involvement with environment
- Perceptual set

# Subliminal Perception

- Subliminal messages – using techniques below human thresholds
- Unconscious messages



# Depth Perception

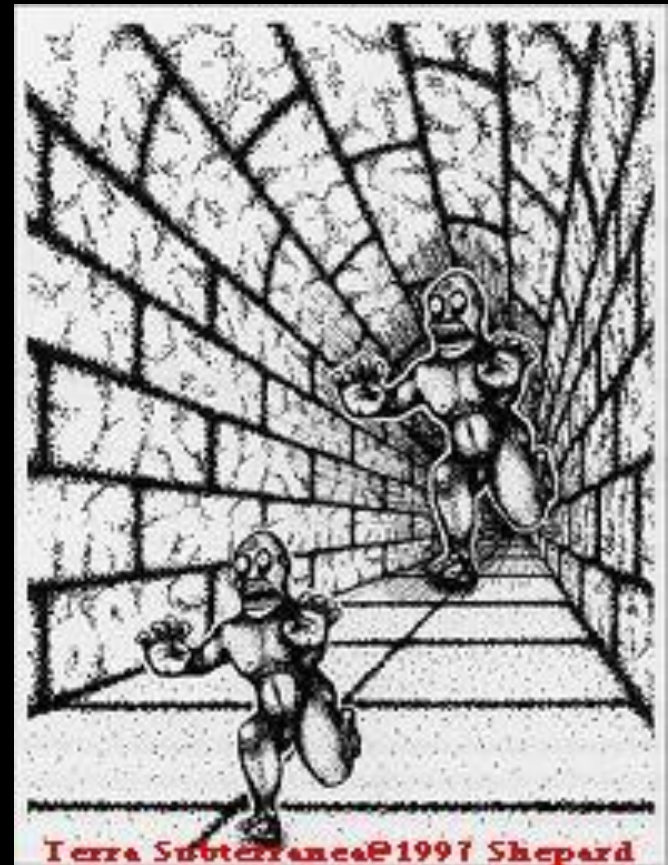


- Ability to recognize distance and 3D
- Develops in infancy



# Constancy

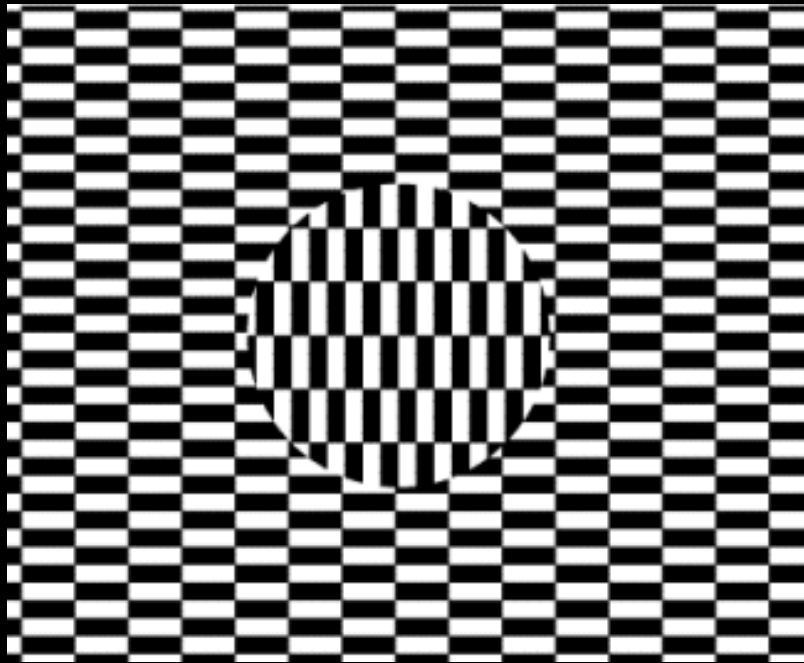
- Perceiving objects in the same way, regardless of position.
- Size constancy





Illusions

# Illusions



- Incorrect Perceptions
- Perceptual clues are distorted, so we cannot interpret correctly

# Illusions

- Often with illusion, the tendency is to “see” in 3D an object that is 2D



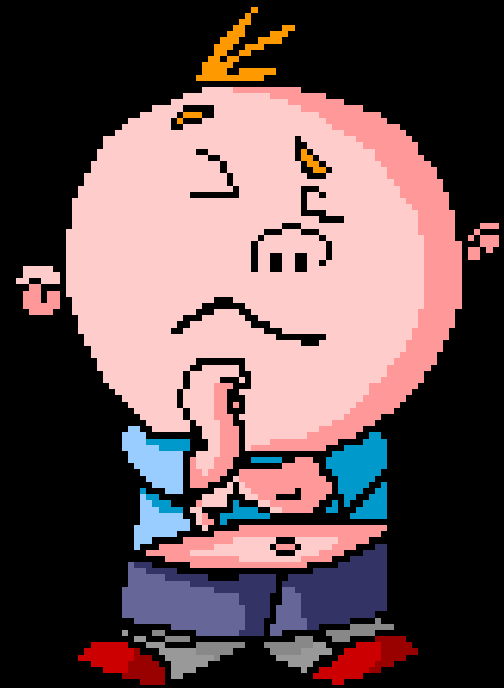
# Extrasensory Perception



- Receiving information through channels other than our normal senses

# ESP

- Four types
  - Clairvoyant
  - Telepathy
  - Psychokinesis
  - Precognition



# Clairvoyant



- Perceiving objects or information without sensory input
- Not fortune-telling

# Telepathy

- Reading someone's mind, or transferring one's thoughts





# Psychokinesis



- Moving objects with only mental effort
- Carrie

# Precognition

- The ability to foretell events
- Nostradamus
- Sylvia Brown
- Theresa Caputo

