

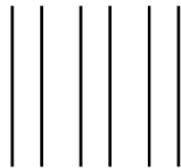


Figure and Ground

- Gestalt Psychologists thought that an important part of our perception was the organization of a scene in to its:
- Figure - the object of interest
- Ground - the background

Perceptual Organization-Gestalt

- Grouping Principles
 - **proximity**- group nearby figures together
 - **similarity**- group figures that are similar
 - **continuity**- perceive continuous patterns
 - **closure**- fill in gaps
 - **connectedness**- spots, lines and areas are seen as unit when connected



Proximity



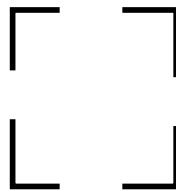
Similarity



Continuity

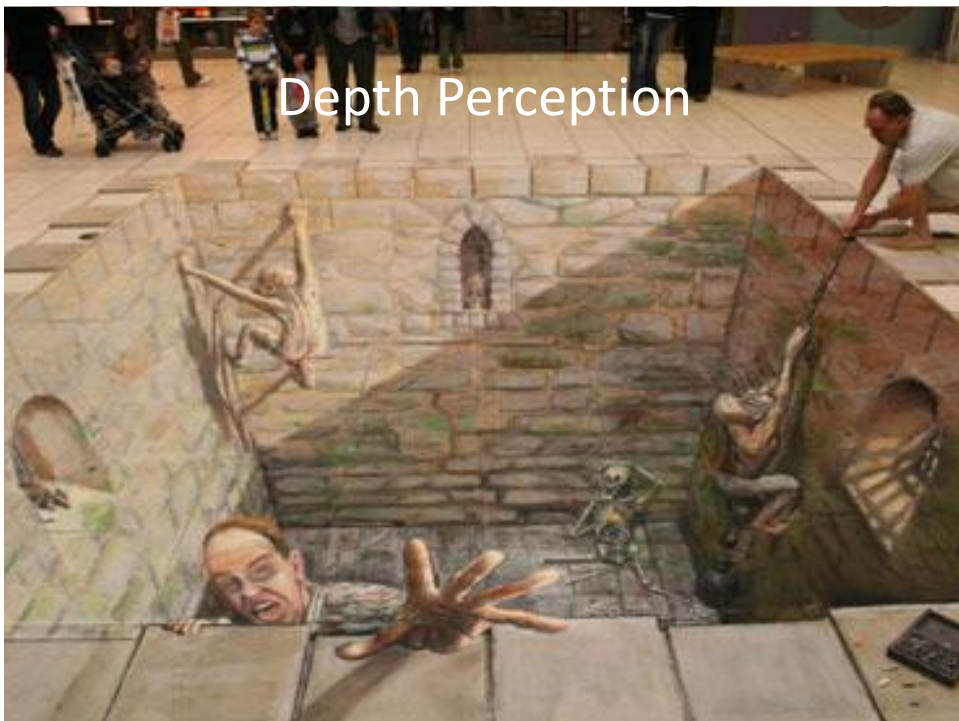
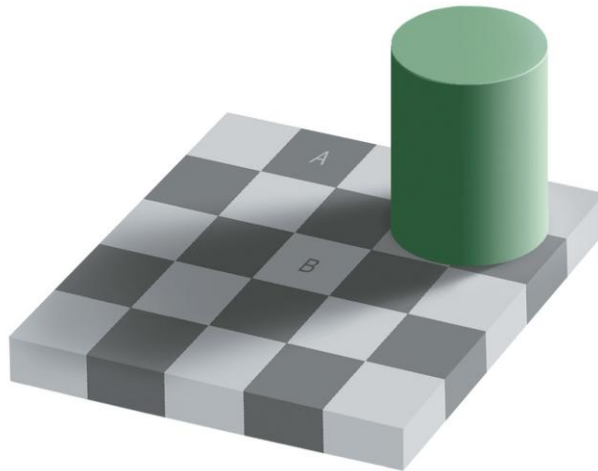


Connectedness



Closure

Perceptual Organization-Brightness Contrast



How do we see a 3-D world using only the 2-D retinal images?

- Cue - stimulus characteristics that influence our perceptions
- We are able to see in 3-D because the visual system can utilize depth cues that appear in the retinal images.

Types of Depth Cues

- Monocular - depth cues that appear in the image in either the left or right eye
- Binocular - depth cues that involve comparing the left and right eye images

Perceptual Organization-Depth Perception

- Monocular Cues
 - relative size
 - smaller image is more distant
 - interposition
 - closer object blocks distant object
 - relative clarity
 - hazy object seen as more distant
 - texture
 - coarse --> close
 - fine --> distant

Perceptual Organization-Depth Perception



Interposition

Perceptual Organization-Depth Perception

- Monocular Cues (cont.)
 - relative height
 - higher objects seen as more distant
 - relative motion
 - closer objects seem to move faster
 - linear perspective
 - parallel lines converge with distance
 - relative brightness
 - closer objects appear brighter

Forced Perspective

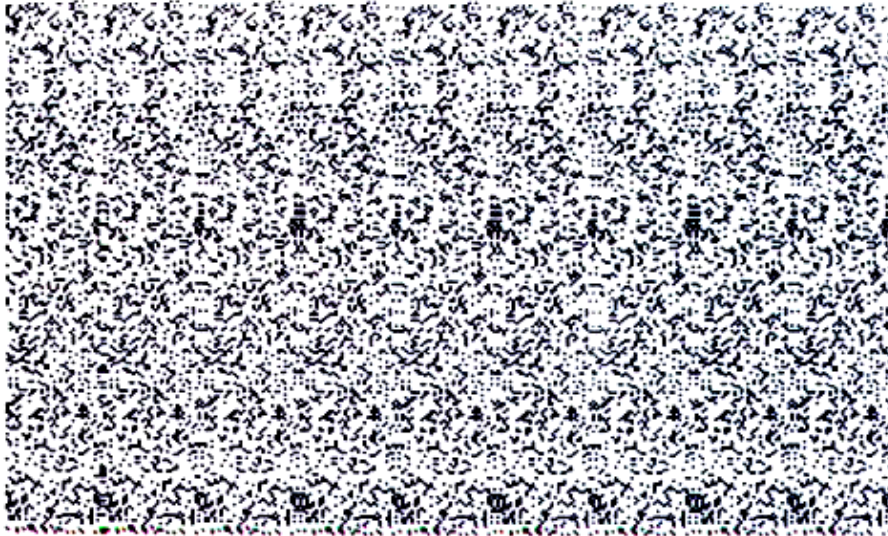
- Ames Room (in text)
- [Lord of The Rings](#)
- Julian Beever's anamorphic illusions
 - drawn in a special distortion in order to create an impression of 3 dimensions when seen from one particular viewpoint.

Binocular Depth Cues

- Best depth perception occurs if we look through both eyes.
- This is because our right and left eyes see a slightly different view of the world.
- This difference between the image in the two eyes is known as:
 - Binocular Retinal Disparity.

Binocular Stereopsis

- Binocular Stereopsis - the perception of depth based on retinal disparity
- Psychologists typically study binocular stereopsis with the use of stereograms.
- Stereogram - stimulus consisting of a left eye and a right eye image. When these two images are fused, the illusion of depth is created.
- An autostereogram is formed by superimposing two repeating patterns
- The two patterns are slightly offset, and when viewed properly, this offset is seen as a binocular disparity.



Perception without Sensation?

- **Extrasensory Perception (ESP)**
 - controversial claim that perception can occur apart from sensory input
 - telepathy
 - clairvoyance
 - precognition
- **Parapsychology**
 - the study of paranormal phenomena
 - ESP
 - Psychokinesis

Is There Extrasensory Perception?

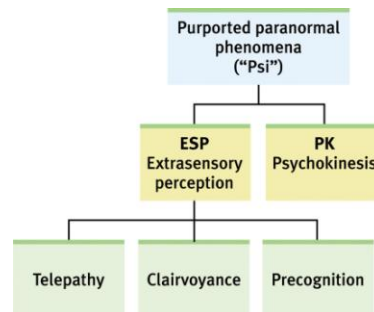
From Module 17

Perception without sensory input is called extrasensory perception (ESP). A large percentage of scientists do not believe in ESP.

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Claims of ESP

Paranormal phenomena include claims of astrological predictions, psychic healing, communication with the dead and out-of-body experience, but the most relevant are telepathy, clairvoyance and precognition.



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Claims of ESP

1. **Telepathy:** Mind-to mind communication. One person sending thoughts and the other receiving it.
2. **Clairvoyance:** Perception of remote events. Like sensing a friend's house on fire.
3. **Precognition:** Perceiving future events. Such as a political leader's death.

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Premonitions or Pretensions?

Can psychics see the future? Can psychics aid police in identifying locations of dead bodies? What about psychic predictions of the famous Nostradamus?

The answers to these questions are NO!
Nostradamus' predictions are "retrofitted" to events that took place afterwards.

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Putting ESP to Experimental Test

In an experiment with 28,000 individuals, Wiseman tested psychically influencing or predicting a coin toss. People were able to correctly influence or predict a coin toss 49.8% of the time.



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