


General Psychology
Psy 100


Perception



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What We Will Cover in This Section

- Overview
- Perception
 - Visual perception.
 - Organizing principles.



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Perception

How we interpret the information our senses receive.

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Gestalt Psychology

We integrate the individual sensations into something meaningful.

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How We Acquire This Interpretation

- **Some characteristics are inborn.**
- **Some characteristics are acquired through experience.**
 - **Critical period.**

*The time during development when an organism **MUST BE EXPOSED** to certain influences or experiences it proper development is to occur.*

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Characteristics of Perception

- **Categories**
 - We group sensations into categories based on their features.
- **Relational**
 - The pattern of the stimulus has to be related in some way for it to make sense.

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Selective Attention

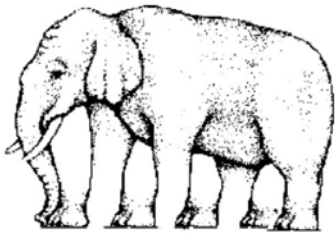
- **Focusing awareness on a subset of available stimuli.**
 - We are not aware of everything that is going on in the environment.
 - Adaptation causes constant stimuli to 'disappear' from awareness.
- **Goal directed attention.**
- **Stimulus-driven attention.**

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How many legs does this elephant have?

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Characteristics of Perception

- **Adaptive**
 - Helps us survive.
- **Automatic.**

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Visual Perception



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Characteristics of Visual Perception

- **Physical Structure**
 - Light and dark
 - Figure and ground
 - Depth
- **Inferences**
 - Since we see only parts of an object we must infer the whole from the parts.

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Form Perception: Figure Ground

- **Figure**
 - The object that is distinguished from the background.
- **Ground**
 - Backdrop or background areas against which figures stand out.



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Form Perception: Grouping

- **Proximity**
 - Objects closer together are perceived as being one unit.
- **Similarity**
 - Similar objects are perceived as being one unit.

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Proximity

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Similarity

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Form Perception: Grouping

- **Closure**
 - We perceive incomplete figures as being complete.
- **Common Fate**
 - Elements moving in the same direction at the same rate are grouped together.

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Common Fate

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Motion Perception

- **Induced Motion**
 - Illusion where a stationary object appears to move and the 'moving' frame of reference appears to be stationary.
- **Apparent Motion**
 - Illusion in which one or more stationary lights flickering in succession are perceived as a single moving light.

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Depth Perception



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Monocular Cues to Distance

- **When we use only one eye, these are the cues we use to tell us approximately how far away something is.**

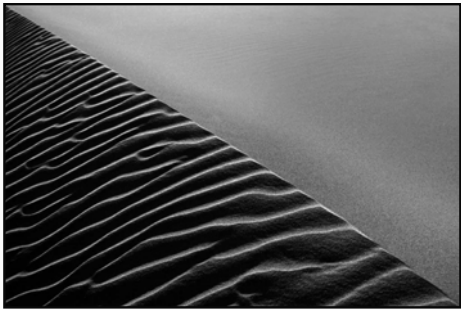
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Texture Gradient



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Pictorial Cues: Interposition



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Pictorial Cues: Linear Perspective



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Pictorial Cues: Relative Size



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Binocular Distance Cues

- **Retinal disparity.**
The horizontal differences of the image in the two eyes.
- **Convergence.**
The degree to which the eyes turn inward to fixate on an object.

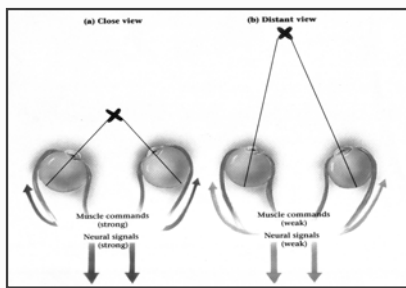
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Convergence



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Visual Constancies

- **Size Constancy**
 - The ability to perceive the true size of an object despite variations in the size of its retinal image.
- **Shape constancy**
 - The ability to perceive the true shape of an object despite variations in the orientation in the retinal image.

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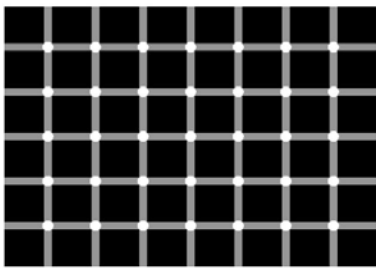
Identification and Recognition

- **Top-down processing.**
 - Analysis that emphasizes the perceiver's expectations, memories, and other cognitive factors.
- **Bottom-up processing.**
 - Analyzing details of the specific sensory details to determine nature of the object.

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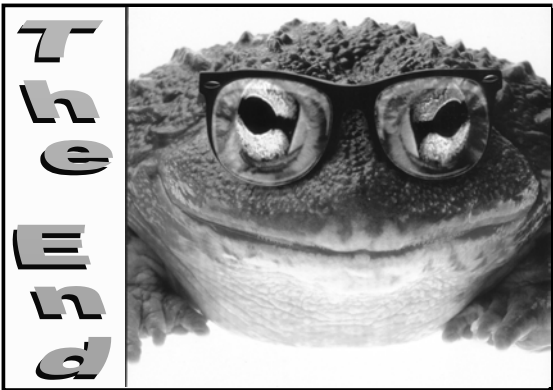


Count the black dots in this picture.

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