

**PSG105** 

# PENGANTAR PSIKOLOGI

Runi Rulanggi -Prodi Psikologi FHB UPJ



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# Jumpa Lagi di Kelas Pengantar Psikologi.

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Kembali lagi bersama saya, Anggi.

# Pertemuan Ketiga Pengantar Psikologi.

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Sensasi dan Persepsi

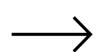
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# Outline

- Sensory Processes
- Signal Detection Theory
- Sensory Systems
- Perception: Creation of Experience





• Sensation is the conversion of energy from the environment into a pattern of response by the nervous system. It is the registration of information.

• Sensation is the detection of stimuli—energies from the world around us that affect us in some way. our eyes, ears, and other sensory organs are packed with receptors—specialized cells that convert environmental energies into signals for the nervous system.

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# Sensasi dan Persepsi

- Perception is the interpretation of that information.
- For example, light rays striking your eyes produce sensation. Your experience of recognizing your roommate is a perception. In practice, the distinction between sensation and perception is often difficult to make.

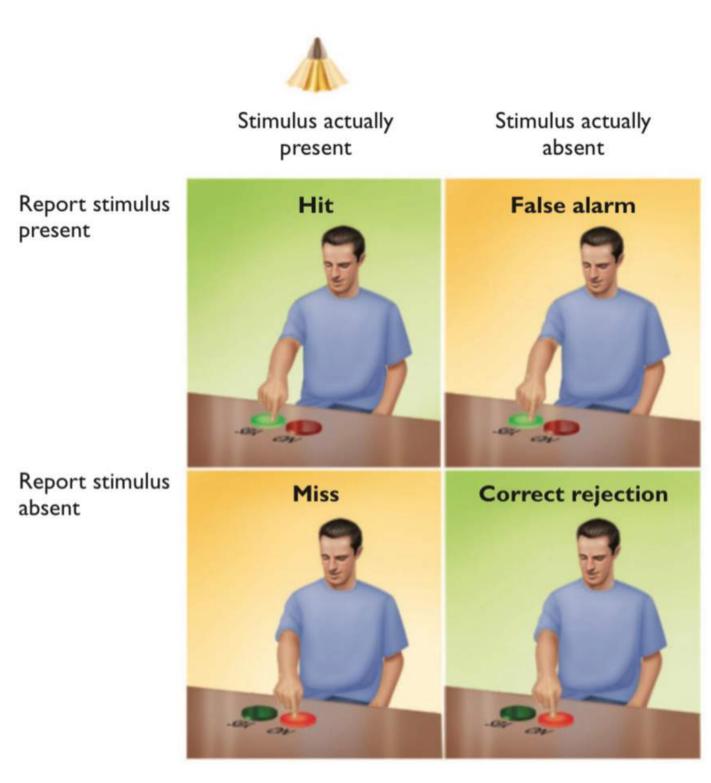
# Sensasi dan Persepsi



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- Hit
  - Stimulus Present & Response Present
- False Alarm
  - Stimulus Absent & Response Present
- Miss
  - Stimulus Present & Response Absent
- Correct Rejection
  - Stimulus Absent & Response Absent

#### **Signal Detection Theory**



▲ Figure 4.33 People make two kinds of correct judgments (green backgrounds) and two kinds of errors (yellow backgrounds). If you tend to say the stimulus is present when you are in doubt, you will get many hits but also many false alarms.

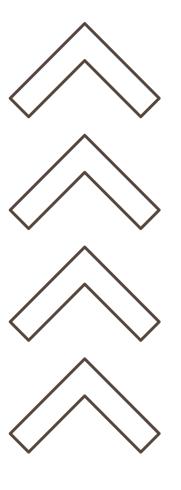
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- Sensation
- Detection
- Responding & translating stimuli into nerve impulses to brain.



#### Information

- Perception
- Making sense what the senses tell.
- Active process of organizing & giving meaning.



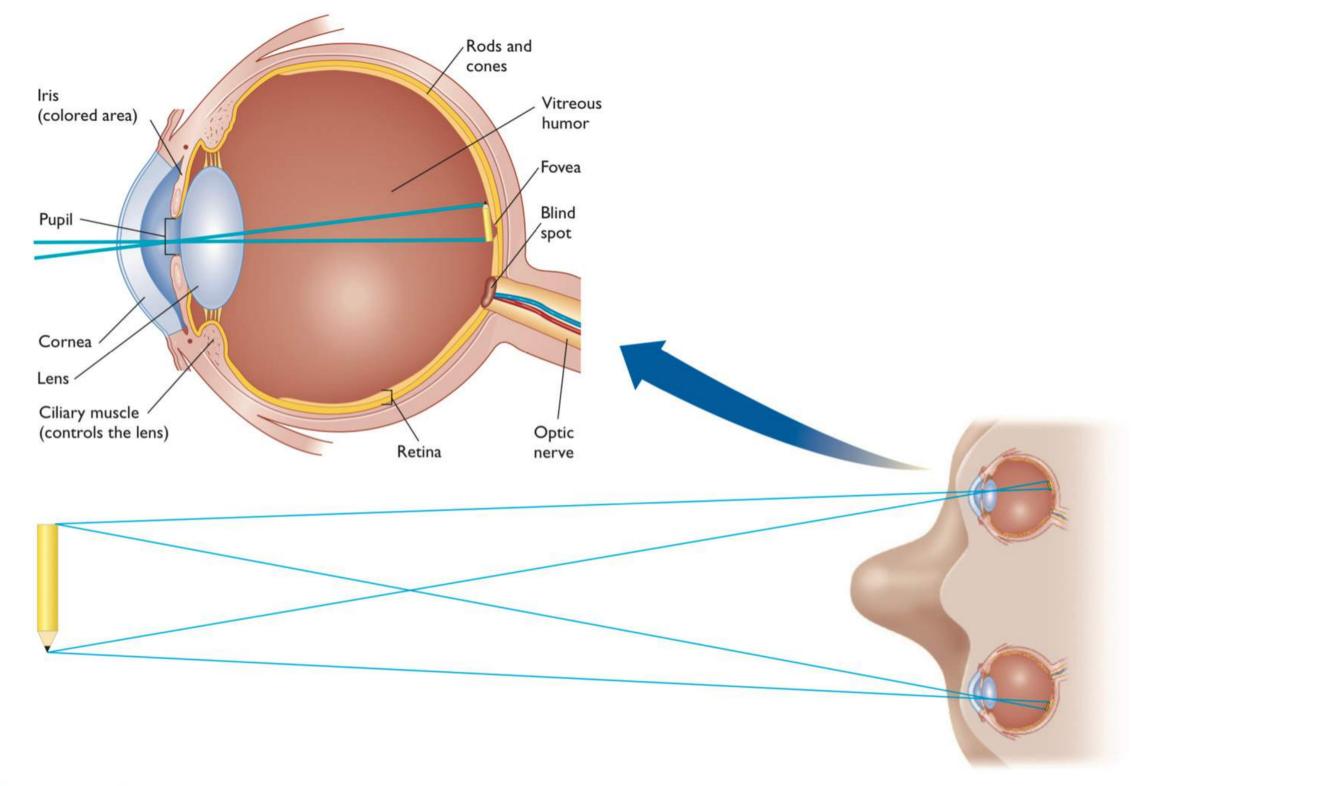
# Sensory Systems

- O Vision -> Electromagnetic energy
- Audition -> Sound waves
- O Gustation -> Taste
- Olfaction -> Smell
- Tactile (Touch) -> Skin
- O Kinesthetic & Equilibrium -> Body

13

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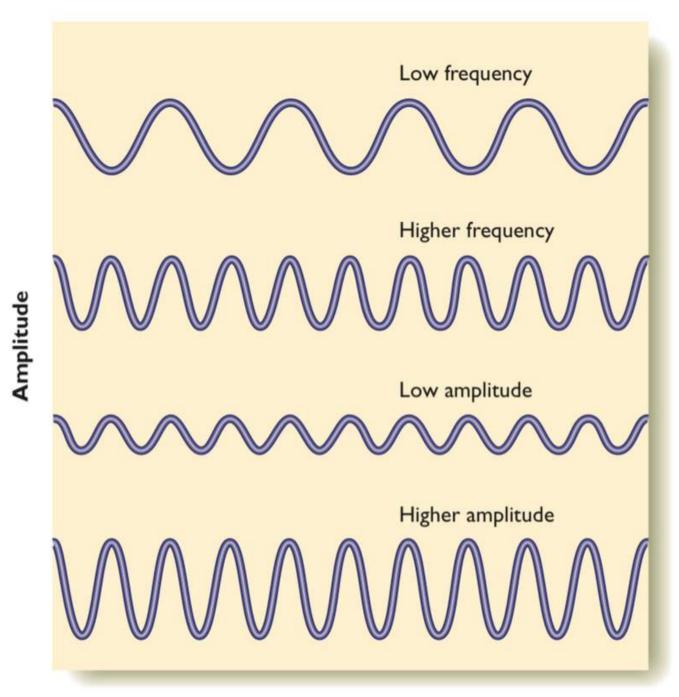




▲ Figure 4.2 The lens gets its name from the Latin word *lens*, meaning "lentil." This reference to its shape is an appropriate choice, as this cross-section of the eye shows. The names of other parts of the eye also refer to their appearance.

# Proses melihat

## Non Visual Senses

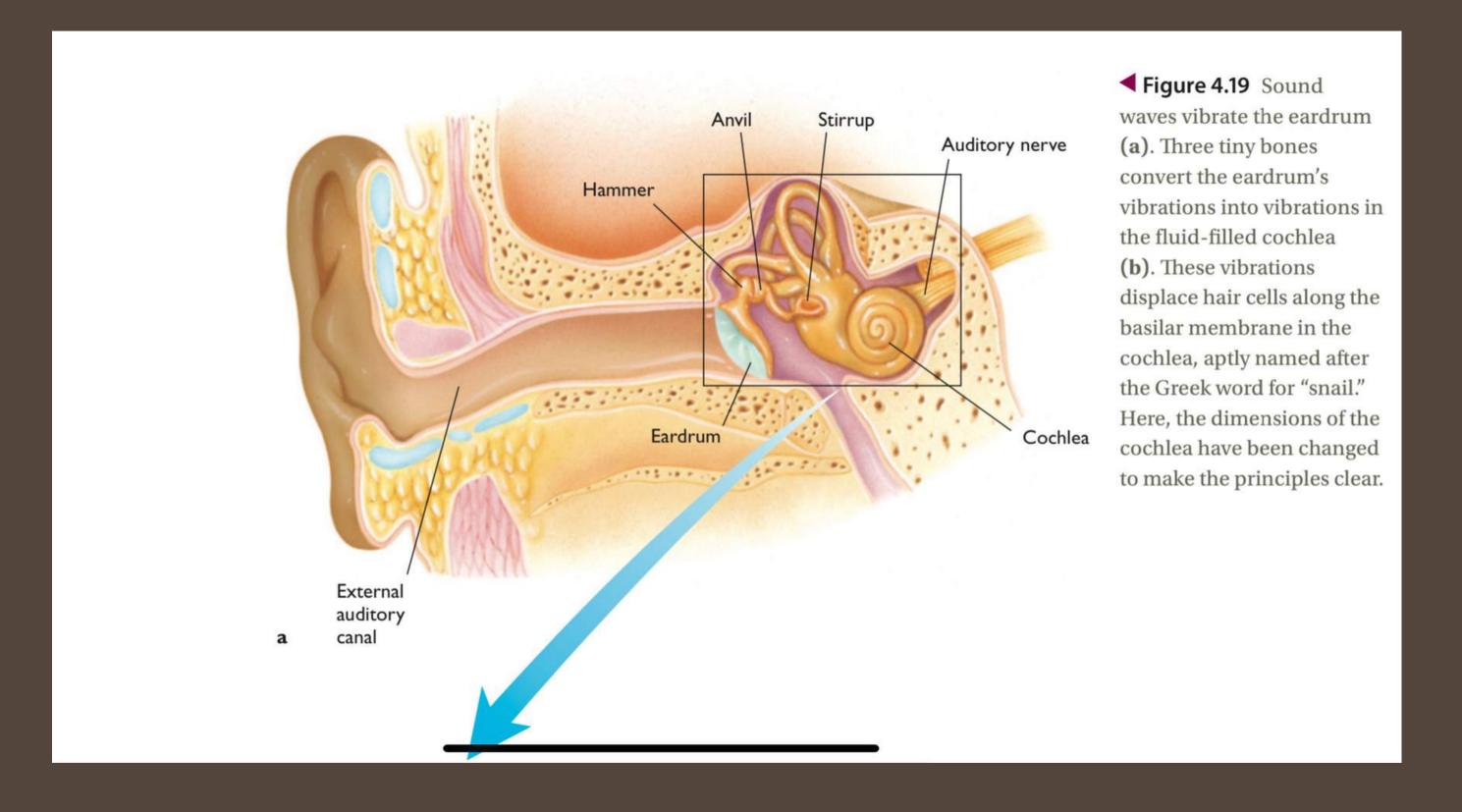


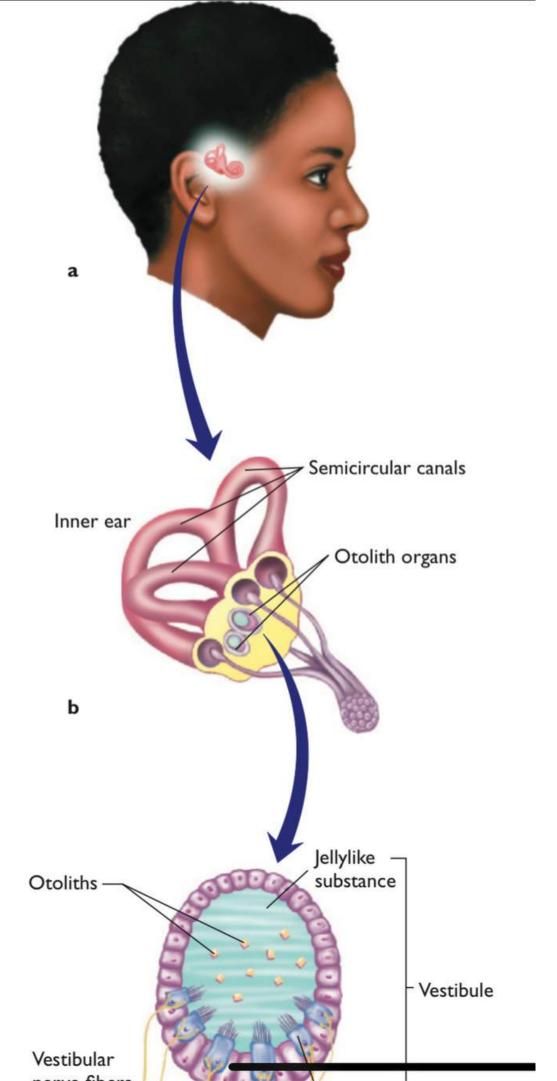
0.1 second

▲ Figure 4.18 The time between the peaks of a sound wave determines the frequency of a sound. We experience frequencies as different pitches. The vertical range, or amplitude, of a wave determines the sound's intensity.

#### Proses Mendengar

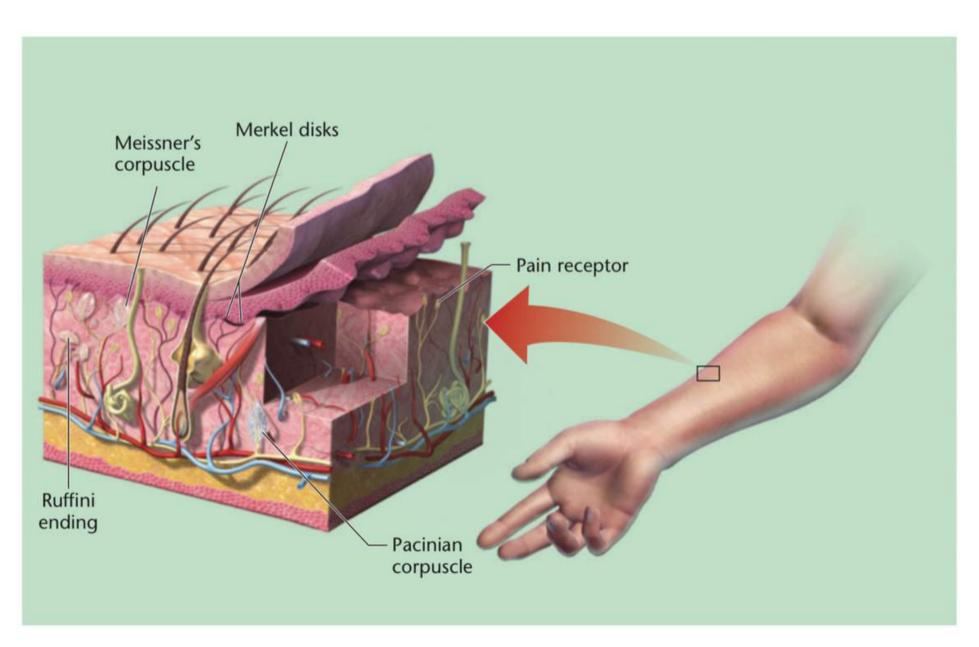






### **Vestibular Senses**

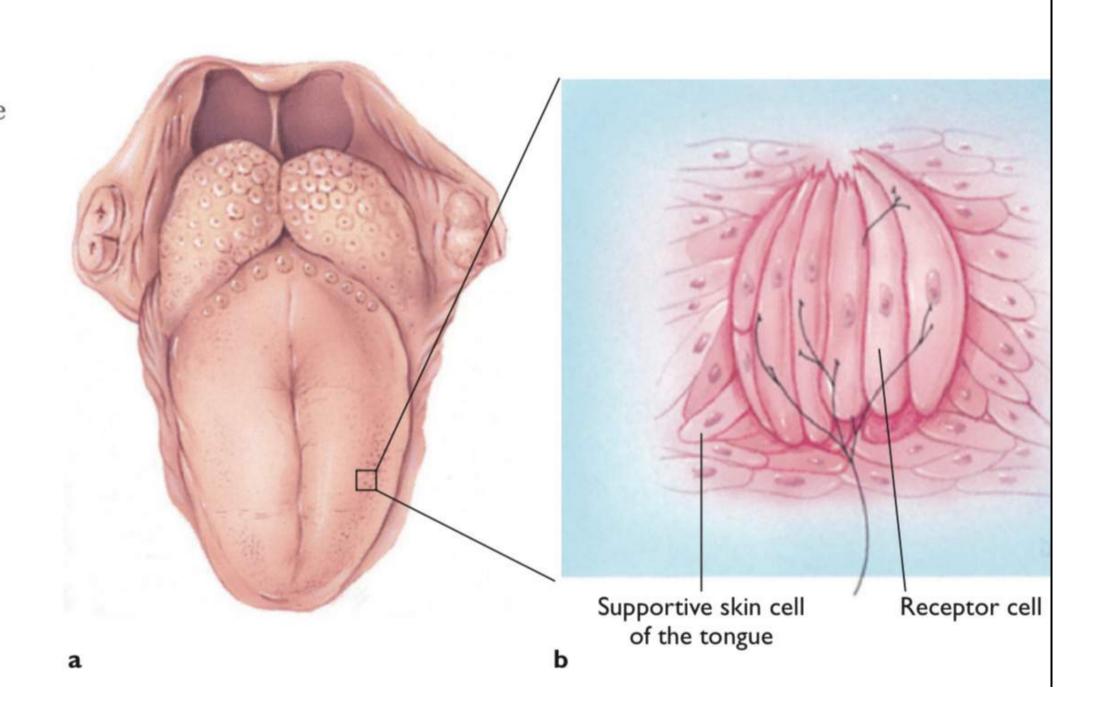
#### **The Cutaneous Senses**

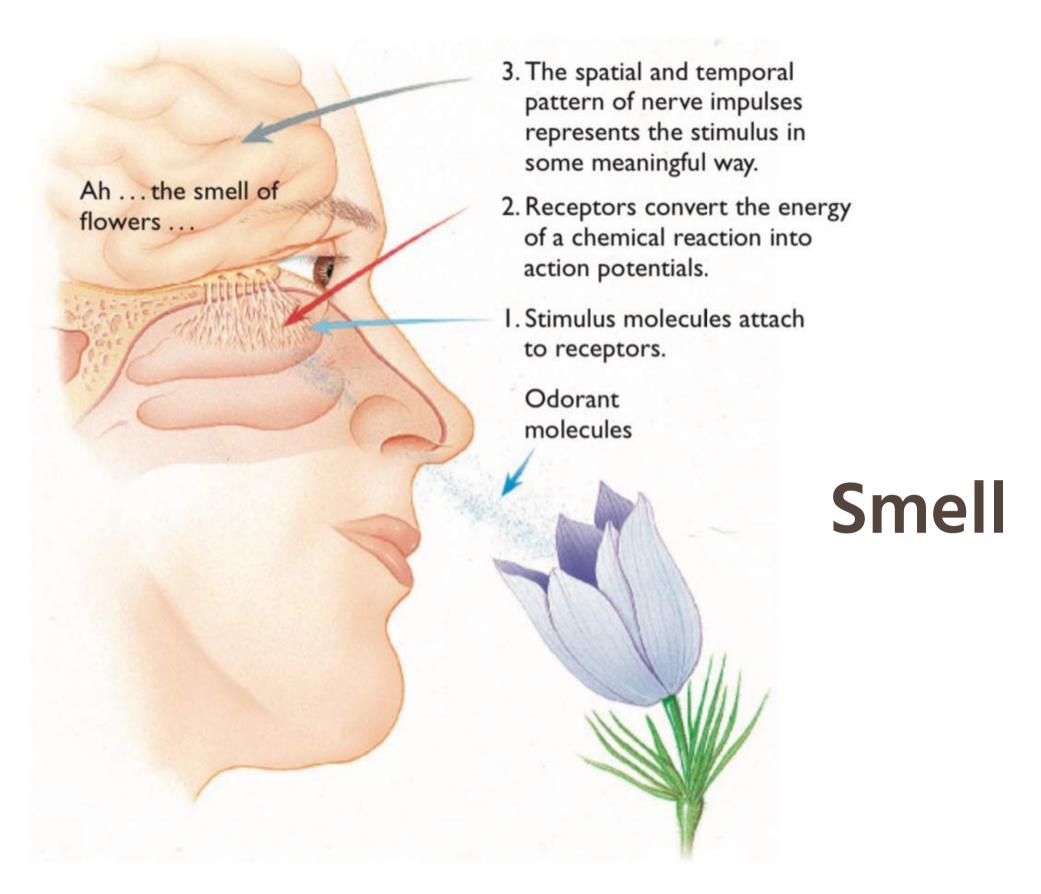


▼ Figure 4.24 Cutaneous sensati is the product of many kinds of receptors, each sensitive to a particular kind of information.

#### **Tastes**

(a) Taste buds, which react to olved in saliva, are located along the gue in adult humans. (b) A cross h part of the surface of the tongue buds.





▲ Figure 4.30 Olfaction, like any other sensory system, converts physical energy into a complex pattern of brain activity.

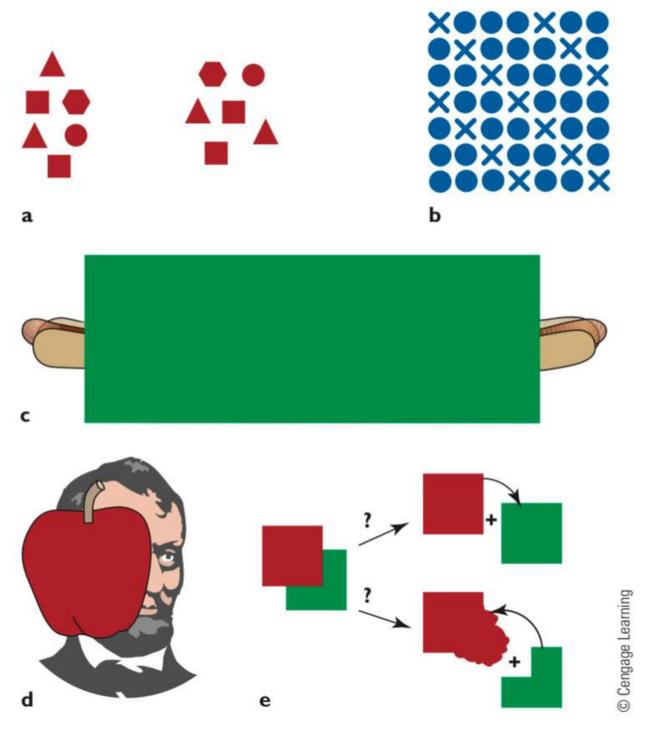
## Synesthesia

- a condition in which a stimulus of one type, such as sound, also elicits another experience, such as color.
- E.g. perceiving each letter or number as a color, such as seeing e as green or red

# **Gestalt Psychology**

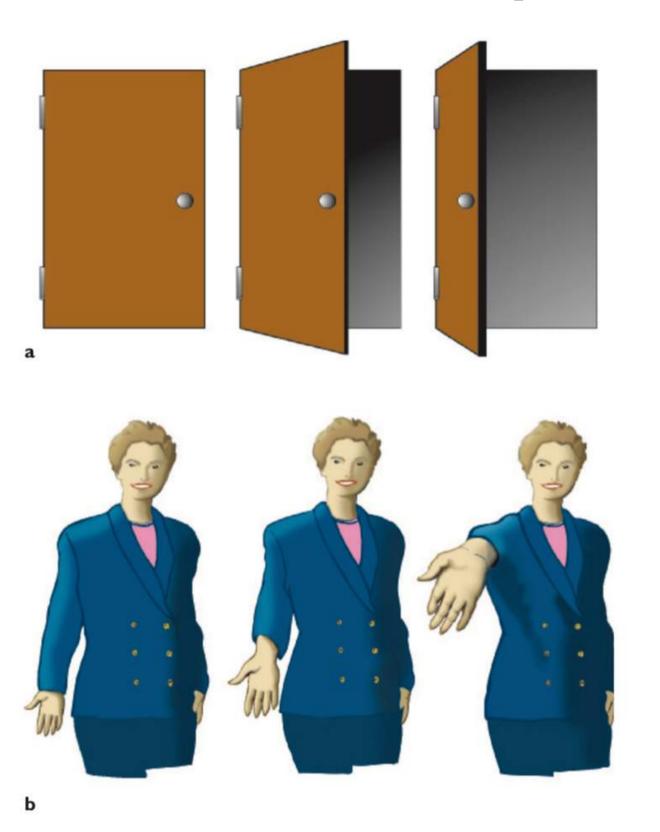
- A field that emphasizes perception of overall patterns
- The whole is different from the sum of its parts

# **Gestalt Psychology**



▲ Figure 4.42 Gestalt principles of (a) proximity, (b) similarity, (c) continuation, (d) closure, and (e) good figure.

## **Movement and Depth**



▲ Figure 4.47 (a) Shape constancy: We perceive all three doors as rectangles.

(b) Size constancy: We perceive all three hands as equal in size.

#### Movement and Depth

forth (Tombaugh, 1980). He identified that dot as Pluto, which astronomers now list as a dwarf planet (see Figure 4.49).



▲ Figure 4.48 A movie consists of a series of still photographs flickering at 86,400 per hour. Here you see a series of stills spread out in space instead of time.



▲ Figure 4.50 We judge depth and distance in a photograph using monocular cues (those that would work even with just one eye). Closer objects occupy more space on the retina (or in the photograph) than do distant objects of the same type. Nearer objects show more detail. Closer objects overlap distant objects. Objects in the foreground look sharper than objects do on the horizon.

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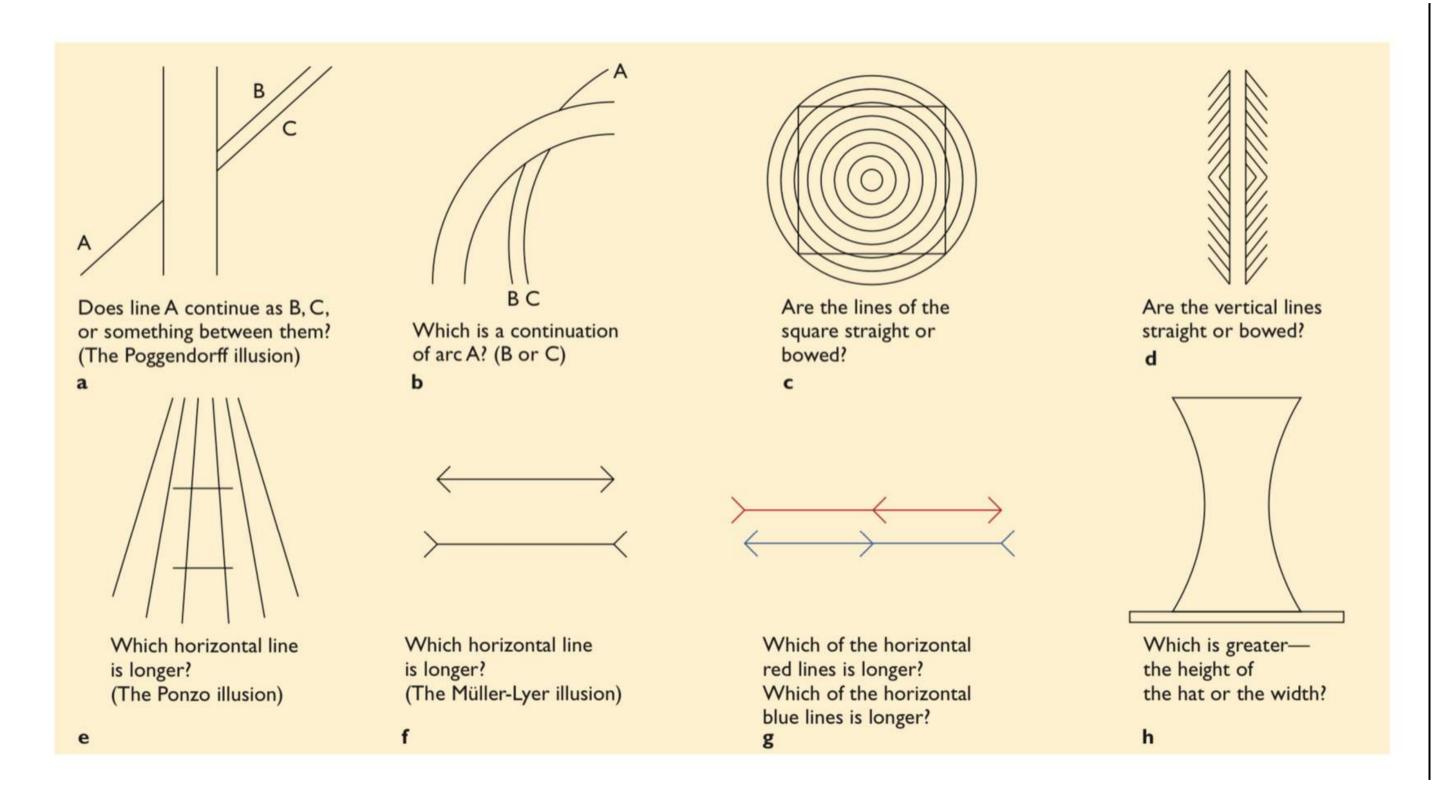


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# Ilusi Optik





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Do you have any questions?

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