

CZ2004 Human-Computer Interaction

Tutorial 4: Humans

1. Consider the TV/AV remote control shown on the right.

- a. List the 6 Gestalt perceptual grouping principles.
- b. Discuss which Gestalt principles are being used to help the user more quickly perceive related functions of buttons.
- c. Suggest which of the buttons are designed to catch the user's attention pre-attentively, and why.
- d. Explain what iconic communication means, and give examples of the labels in the remote control that represent this form of communication.



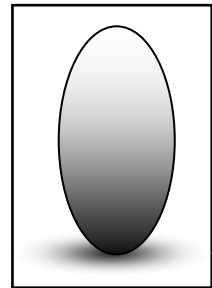
2. A blindfolded passenger in a car driven along a highway hears an oncoming ambulance with sirens on. Discuss the auditory cues that help the passenger roughly determine the relative location of the ambulance to the car.

- 3.
- a. What are the different forms of long-term memory? Classify the following recollections into these forms of memory:
 - i. The names of your friends.
 - ii. The ability to juggle balls.
 - iii. Events of the first day you started studying in NTU.
 - b. Describe what a mnemonic is, and give examples.

4.

- a. Define the various types of reasoning. Classify the following into the different types of reasoning:
 - i. I see this number: 100111010011. I conclude it is in binary.
 - ii. Based on my past experience, I conclude that the sun will rise in the east tomorrow morning.
 - iii. I learn that part of the resistor color code includes red=2, orange=3, yellow=4, green=5, blue=6. I conclude that violet=7.
 - iv. The rule says CZ2004 lectures can only be attended by CS students.. I conclude that everyone I see in a CZ2004 lecture must be a CS student.

5. The figure on the right is drawn using standard Word / PowerPoint drawing tools. Try and figure out how this is created and give your answer in the form of an operator sequence with intermediate states. Afterwards, think through the process by which you came to the solution (Did you explore different possibilities mentally? How did you eliminate the wrong candidates? etc.).



6. How does an observer recognize different affects in a person? List two positive and two negative affects from Ekman's list.