Baars and Gage: Cognition, Brain, and Consciousness

Study Guide

Chapter 1: Mind and Brain

1. Name three small-scale spatial events in the brain, with their order of magnitude.
2. Name three small-scale temporal events in the brain, with their order of magnitude.
3. What is the role of ‘inference’ in cognitive neuroscience? How does it help shape our understanding of the mind and brain?
4. Provide an example of an ‘inferred concept’ and explain how it differs from raw observations.
5. Why are convergent measures important for understanding the mind and brain?
6. What is the name of the large ‘valley’ that separates the left and right hemispheres? Can you identify more major landmarks of the brain?
7. What is the relationship between the “mental” point of view and “physical” perspective? What is philosophical naturalism?
8. Who is considered to be a major historical source of mind/body philosophy?
9. What was the dominant viewpoint about consciousness and the human mind in the 19th century? In the early 20th?
10. What is a major difference between behavioral and cognitive psychology?
11. What influence did physiologists like Pavlov have on psychology?
12. Explain some ways in which psychology and brain science interact.
13. What are some difficulties in studying brain damage scientifically?
14. Provide examples of how conscious and unconscious brain events are studied today.
15. What are some ongoing debates in the field of cognitive neuroscience?
16. In everyday life, are you aware of using inner speech? Visual imagery? If so, in what situations? If not, what everyday situations might show that kind of process? (Note that there are considerable individual differences in visual imagery; not everybody reports having spontaneous images.).