Baars and Gage: Cognition, Brain, and Consciousness

Study Guides

Chapter 2: A Framework

1. Provide examples of the ‘outer senses’. Where are the outer senses processed in the brain?
2. Provide examples of ‘bottom-up’ and ‘top-down’ attention and briefly describe their roles in processing sensory information (what you see, hear, touch, etc.) in our environment.
3. What are the classical components of working memory?
4. Locate the classical components on the functional framework provided at the beginning of Chapter 2. How do they interact with other aspects of cognition?
5. What are the ‘inner senses’ and what are their roles in working memory function?
6. What is meant by the term ‘central executive’?
7. What brain areas are believed to be involved in working memory and long-term memory? In visual imagery and spatial planning?
8. What is inner speech and how does it relate to everyday cognition?
9. What have the cases of Clive Wearing and HM taught us about memory?
10. What is a useful definition for working memory? For selective attention? For the different types of long-term stores?
11. Can you provide an everyday example of a dual task situation? Describe some limited capacity tasks that have been used to investigate brain capacity.
12. Provide examples of some very large brain capacities.
13. Why are some human brain capacities so limited? Describe some current views on why some capacities are narrow.
14. In psychological experiments, what are ways that the capacity of working memory been measured?
15. Is there only one working memory? Or several? Describe evidence in support of your view.
16. Describe the difference between automatic and voluntary actions. What are the brain areas that are activated by these actions?
17. How is attention related to our conscious experience? Do we need to attend to an event for it to enter our consciousness?