Orienting Questions
Chapter 4: Working Memory

Chapter Question

What are the relative merits of Baddeley’s working memory model, Cowan’s embedded process model, and Nairne’s feature model?

Specific Orienting Questions

1. Indicate some of the meanings of the term working memory.

2. Why did Baddeley reject the modal model in favor of his working memory model?

3. Identify the essential components of Baddeley’s working memory model.

4. What are the two components of the phonological loop, and what are their functions?

5. What four effects was the phonological loop designed to explain?

6. What is the phonological similarity effect, and what prediction does Baddeley’s working memory model make about this effect?

7. Describe the Peterson & Johnson study, and explain its results in terms of Baddeley’s working memory model. Describe and consider other aspects of the Peterson & Johnson data.

8. What is the irrelevant speech effect, and what predictions does Baddeley’s working memory model make about this effect?

9. What evidence is there for the word length effect?

10. What aspect of word length appears critical to recall performance? Summarize the evidence in support of this view.

11. How is the word length effect accounted for by Baddeley’s working memory model?

12. Explain what should happen, according to Baddeley’s working memory model, to the word length effect under conditions of articulatory suppression.
13. What, in fact, does happen to the word length effect under conditions of articulatory suppression, and how has Baddeley responded?

14. Consider the Longoni et al. (1993) data as shown in Table 4.3 with respect to Baddeley’s working memory model.

15. Why has Baddely added an episodic buffer to his working memory model?

16. What is the negative word-length effect? What are its implications?


18. Identify other problems with Baddeley’s working memory model.

19. What is the activation model of memory?

20. What are the two main similarities between Baddeley’s working memory model and activation models of memory?

21. What are the main differences between Baddeley’s working memory and Cowan’s activation model of memory?

22. What are the essential features of Cowan’s version of the activation view?

23. What findings can be accommodated by Cowan’s embedded-processes model but not by Baddeley’s working memory model?

24. What two problems does the text identify with Cowan’s version of the activation view?

25. The text promised to identify three problems with Cowan’s model but came through with only two. What do you suppose their third might have been?

26. What is meant by working memory capacity and why is it important?

27. How is working memory span measured?

28. How has working memory capacity been found to affect dichotic listening?

29. Nairne’s feature model was designed to account for what kind of findings?

30. Nairne’s feature model makes a key distinction between what two broad categories of information? How is this distinction implemented?
31. How is primary memory represented in Nairne’s feature model?

32. Describe the basis of Nairne’s feature model as given in Figure 4.7.

33. How does Nairne’s feature model account for output interference?

34. How does Nairne’s feature model account for the modality effect?

35. How does Nairne’s feature model account for the serial position function?

36. How does Nairne’s feature model account for the suffix effect?

37. How does Nairne’s feature model account for the effect of phonological similarity?

38. How does Nairne’s feature model account for the effect of articulatory suppression?

39. How does Nairne’s feature model account for the effect of word length?

40. Identify two shortcomings of Nairne’s feature model.

41. Identify two advantages that Nairne’s feature model enjoys over Baddeley’s working memory model and/or Cowan’s version of the activation model.