

OUTLINE OF TOPICS COVERED SINCE EXAM 1 (Ch. 4, Ch. 5, Ch. 6)

Chapter 4: ATTENTION

1. Before attention can be studied, it must first be defined. There are different views of/ways of defining attention. Your book lists several.
2. Three conceptions focused on in class were:
 - i. Attention as a selective filter:
 - The dichotic listening technique has been used to study attention from this perspective. (know the logic behind the different studies and how the various theories of selective attention evolved: e.g., Broadbent's filter theory, Treisman's attenuation theory, Norman's pertinence model & Johnston & Heinz's research in favor of a multimode approach.)
 - ii. Attention as a spotlight:
 - LaBerge study of visual selective attention (widening vs. narrowing the spotlight).
 - iii. Attention as a limited capacity resource:
 - The dual task/divided attention technique has been used to study attention from this perspective. Understand the logic underlying this approach.
 - Understand the distinction between automatic and controlled processing. What does it have to do with divided attention & the view of attention as a limited capacity resource? What is the role of practice?
 - Schneider and Shiffrin did a study of automatic vs. controlled processing using their VISUAL SEARCH PARADIGM. Understand this study (e.g., the difference between varied mapping and consistent mapping & how practice affects performance in these two conditions). Some variations of this study were discussed in class. What were they?

Chapter 5: SHORT-TERM, WORKING MEMORY

1. Description:
 - a. Conceptually, it is very closely related to awareness/attention—it has to do with the ability to hold

information in mind and/or perform operations on this information.

- b. It is often conceived of as a limited capacity mental resource (in much the same way as attention)
2. Memory Span (How much information can people typically hold in ST/WM)? What strategy(ies) can people use to hold more?
3. Rehearsal (rote repetition) as a means of maintaining info in ST/WM.
4. Forgetting from Short-Term/Working Memory (Why is information lost from ST/WM if it is not actively maintained, such as through rehearsal?):

2 Possibilities: Decay over time vs. Interference:

- a. Know the Brown-Peterson Task, the original findings using this task, what they were taken to mean, & any problems with this interpretation.
- b. Know Waugh & Norman's probe digit task—what did they demonstrate with this task?
- c. Know Proactive vs. Retroactive Interference:
 - i. What is the difference between these 2 types of interference?
 - ii. What is the release from proactive interference (PI)? How has this been demonstrated?

5. Rehearsal & ST/W Memory

--Know the 2 functions of rehearsal (maintenance vs. transfer to LTM).

--Know how these have been related to serial position curves:

--What is the primacy effect? How have researchers related it to rehearsal & ST/W memory? What empirical evidence has supported this idea?

--What is the recency effect? How have researchers related it to rehearsal & ST/W memory? What empirical evidence has supported this idea? What empirical evidence has gone against this idea? (This was discussed in class).

6. Scanning information in ST/W Memory

--Sternberg's study:

--What big question did Sternberg have about how people scan the contents of ST/WM for specific pieces of

information? What did he do to examine it? What was the outcome & what did he interpret it to mean?

7. Representation of information in ST/W Memory:
 - In what form(s) do we represent information in ST/W memory?
 - Verbal/Voice-like/Sound-based information? What is the evidence?
 - Visual/image-like information? What is the evidence?
 - Meaning? What is the evidence? (hint: interference in STM, see book also)

8. Baddeley's Working Memory Model:
 - What are the components? What are their roles?
 - Is there any evidence to support this model? What?

Chapters 6, 7, & 8 deal with LONG-TERM MEMORY (storing information over the long term, for access or use at a later time).

I. **Chapter 6: EPISODIC LONG-TERM MEMORY**

Definition:

Episodic Memory = Memory for specific episodes and events

- How is this type of memory studied?
- History (e.g., Ebbinghaus)

1. Encoding (Getting the information INTO memory):
 - i. Effects of Rehearsal (Rote Repetition)
 - ii. Levels-of-Processing Effects
 - iii. Effects of Generation
 - iv. Effects of Intention to Learn
 - v. Imagery
 - vi. Organization

2. Retrieval (Getting the information OUT OF memory):
 - i. Forgetting (proactive and retroactive interference relevant)
 - ii. Importance of Cues
 - iii. Encoding Specificity