

Memory

Chapter 7

Chapter 7 Outline




- Basic _____ Processing
 - Encoding
 - _____
 - Retrieval
- _____
- Systems of Memory
 - _____
 - _____
- Physiology of Memory
- _____ Your Memory

Human Memory: Basic Questions




- How does _____ get into memory?
- How is information _____ in memory?
- How is _____ pulled back out (_____) from memory?

_____ Memory Processes

- _____
- putting _____ into a form that our memory _____ can use
- _____
- maintaining _____ over time
- _____
- getting information out of memory


- Process of putting _____ into a form that the memory system can accept and use
 - _____ codes
 - _____ codes
 - _____ codes

Dictionary

_____ and Retrieval

- _____
- Process of _____ information in memory _____ over time
- Retrieval
- Process of _____ information stored in memory



_____ : Getting Information Into Memory

- The role of _____.
- Focusing on different _____ of stimuli leads to different kinds of codes
- Different types of _____ influence how well you _____.

_____ : Getting _____ into Memory

- Levels of _____.
- Incoming _____ processed at different levels
- Deeper _____ = longer lasting memory codes.
- **Encoding levels:**
 - _____ (case) = shallow
 - _____ (rhyme) = intermediate
 - _____ (thinking about the _____) = deep

	Level of processing	Type of encoding	Example of questions used to elicit appropriate encoding
Depth of processing	Shallow processing	Structural encoding: emphasizes the physical structure of the stimulus	Is the word written in capital letters?
	Intermediate processing	Phonemic encoding: emphasizes what a word sounds like	Does the word rhyme with weight?
	Deep processing	Semantic encoding: emphasizes the meaning of verbal input	Would the word fit in the sentence: "He met a _____ on the street"?

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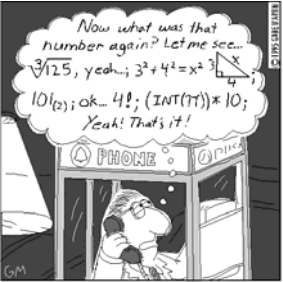
Learning Objective 1 & 2

Enriching _____.

- _____ = linking a _____ to other information at the time of _____.
- Thinking of examples
- _____ processing
- _____ **Imagery** = creation of _____ images that represent words to be remembered
- _____ = techniques to make abstract information easier to remember
- _____.
- _____.

Learning Objective 1, 2, 3

_____ Encoding



- _____.
- _____ for organizing information in order to remember it

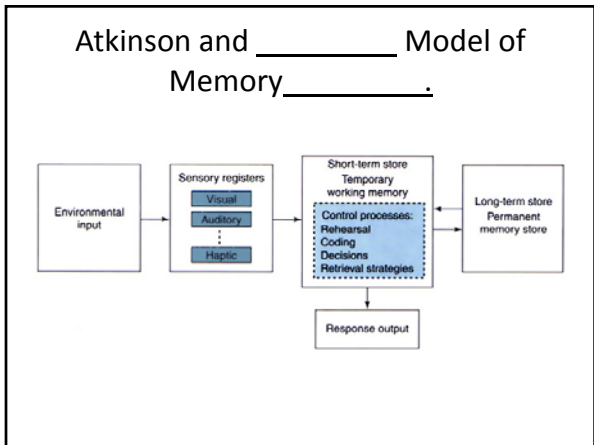
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Encoding: _____ Processing

- _____ Imagery
 - Easier for _____ objects
 - _____ versus giraffe
- Dual-_____ theory
 - Form _____ and _____ codes
 - Two codes _____ memory
 - _____ word uses _____ codes

_____ : Information Processing

- _____ : information storage in computers ~ information storage in human memory
- **Information-processing _____.**
 - Subdivide memory into _____ different stores
 - _____, _____, _____:



_____ Memory

- Brief _____ of information in original sensory _____.
- Allows for _____ recognition
- Large _____.
- _____ – persists approximately _____ second
- _____ - slightly longer

_____ Term Memory (___TM)

- **Limited** _____ – about **20 seconds** without _____
 - _____ – the process of repetitively verbalizing or thinking about the information
- **Limited capacity** – magical number ___ **plus or minus** ____
 - _____ – grouping familiar stimuli for storage as a _____ unit

_____ -Term Memory as “_____ Memory”

- STM not limited to _____ encoding
 - _____ and visual codes
- Loss of information not only due to _____
 - _____
- _____ (1986) – 3 components of working memory
 - _____ rehearsal loop
 - _____ sketchpad
 - **Executive** _____ system

Storage: Long-Term Memory

- _____ Capacity
- Permanent storage?
 - _____ memories
- How is _____ represented and organized in _____?
 - _____ and Scripts
 - _____ Networks
 - Connectionist Networks and _____ Models

Knowledge _____.

- _____.
- Understanding what _____ is like or how it works
 - Remember information consistent with _____.
- Semantic _____.
- Organization of _____ information
 - _____.
- _____ Networks
- Patterns of activation of interconnected units

The Fading _____.

- Some unusual, shocking or tragic events hold a special _____ in memory.
- Called _____ memories because the term captures the surprise, illumination & photographic detail that characterize them.
- Why are these memories so easy to recall?
 - _____.
 - _____.
 - _____ and _____ both involved in encoding
- Even _____ memories have errors.

_____ : Getting Information Out of Memory

- The _____ phenomenon
 - Failure of _____.
 - _____ cues are missing
- Reinstating the _____
 - Context cues
- _____ memories
 - _____ effect
- _____ monitoring

_____ Cues

- Provide a _____.
- But may also lead to _____ memory
- Did you _____ the word “ _____ ” from the earlier list?
- Why? _____.
- The context of the word list implied ___ should be part of the list
- Memory is _____/reconstructive

The _____ of Memory

- Memory for an event may include specific information, context, _____, emotions, and information that we saw or heard before or after the event
- _____ effect
 - _____ post-event information
- Source _____
 - Inability to determine where you got the information
- _____ Bias
 - Remember information that fits cultural beliefs or makes sense

The _____ of Memory

- _____ likely when:
 - You have thought or heard about the _____ event many times.
 - The image of the event contains many details.
 - The event is easy to imagine
 - You focus on _____ reactions to the event rather than what actually happened.
 - Increases _____, although inaccurate

Importance of Memory on Eyewitness Testimony

- Eyewitnesses are asked to recall events just as they happened
 - a long _____ after the actual event
 - not always _____.
- Factors which influence _____
 - Cross _____ identification.
 - _____ effect
 - Misleading _____ information

_____ Postevent Information (Loftus & Palmer, 1974)

- Subjects saw the same film of a car accident
- Later, different subjects were asked: How fast were the cars going when they:
 - _____?
 - _____?
 - _____?
 - _____?
 - _____?

Loftus and Palmer, Results

- Subjects _____ of speed varied with the verb they got in the question phase of the experiment.
- Subjects who got the _____ verb “remembered” the cars were going _____.
 - Smashed: _____ mph
 - Collided: _____ mph
 - Bumped: _____ mph
 - Hit: _____ mph
 - Contact: _____ mph

Loftus and Palmer, Results

- Two weeks after the film: Did you see the broken _____?
 – note: No _____ was present in the original film
 – 34% of “_____” reported “yes”

_____’s Testimony

- Under what conditions are _____ more suggestible?
 – Being very _____
 – When asked suggestive, leading questions
 – _____ questioning
- Not limited to children– adults are susceptible too

_____’s Testimony

- Research by Leichtman and Ceci (1995)
- If asked if a visitor committed acts that had not occurred, few _____ year olds said yes
 – _____% of 3-year olds said “yes”
- When investigators used techniques taken from real child-abuse investigations, most children said yes.
 – _____ leading questions
 - “When Sam tore the book, did he do it on purpose?”
- _____ questioning

Why We Forget

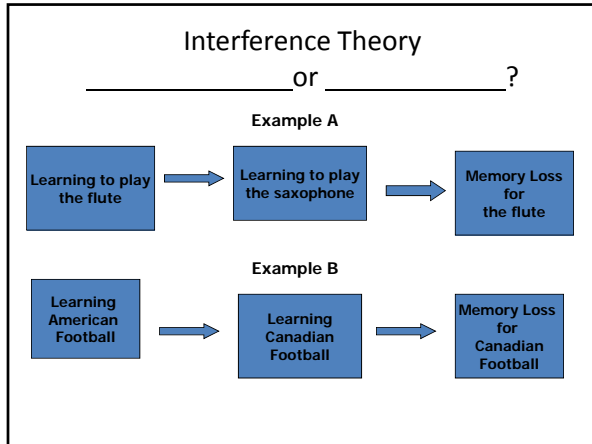
- _____ **Encoding**
- _____ **failure**
- _____
 - Memory trace fades over time
- **Interference**
 - Pro _____.
 - Retro _____.
- _____
 - Authenticity of repressed memories?
 - Controversy

When should we question recovered memories?

- If person says he or she has memories of first _____.
- If over time the memories become more and more _____.
- If therapist used _____ techniques such as _____, dream analysis, age regression, guided imagery and leading questions.

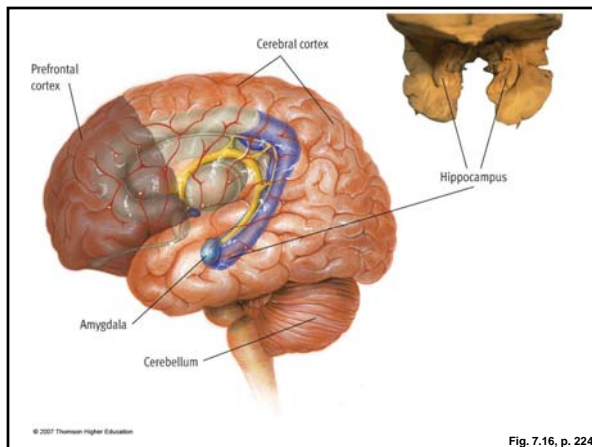
Forgetting: _____.

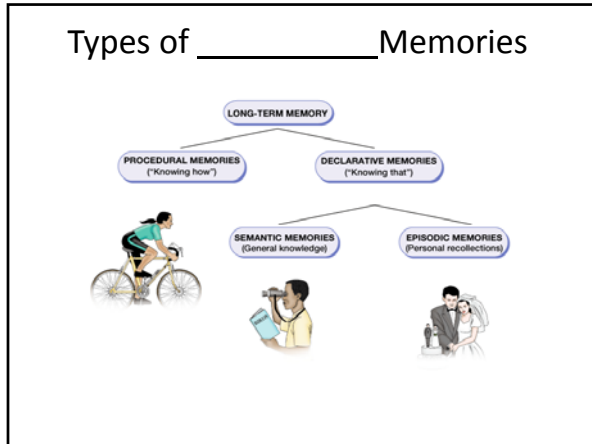
- Similar items _____ with one another
- _____ interference
 - Learning _____ info interferes with recall of old info
 - What is your old phone number?
- _____ interference
 - _____ info interferes with new info
 - Confusing recently learned soc terms with previously learned psych terms
 - Where did you park your car today? (not yesterday)



_____ of Memory

- _____
 - Medial _____ lobe memory system
 - Includes the _____.
 - Important in the _____ of memories
 - Formation of new long term memories
 - _____.
 - Important in memory for emotions
 - _____ cortex
 - Memories are distributed across the _____.





Improving Your Memory

- _____ information
 - Be aware of the _____ position effect
- _____ practice
- Organize information and use _____ processing
- Use _____ and visual imagery

_____ Effect

- The tendency for recall of first and _____ items on a list to surpass recall of items in the _____ of the list

_____ Practice

- _____ practice
 - “Cram” studying into one chunk of time
- Distributed practice
 - Distribute study over _____ of time with breaks
 - Leads to better _____.

