Memory

Objective's for Today's Class:

What are some types of memories? How can we retrieving memories?

Let's Share Some Memories!

What kinds of things do you remember?

2

What do you remember?

Two types of long-term memories

Declarative Memories (Explicit)

- Memories with conscious recall
- Memories for facts

Procedural Memories (Implicit)

- Memories without conscious recall
- Memories for actions, skills, and operations

Declarative Memory

- The ability to state a fact
 - These memories are learned quickly but compared to procedural memories they are more likely to be forgotten over the long term
 - Examples:
 - Being able to tell someone your phone number
 - The meaning of the word "consciousness"

4

Two Types of Declarative Memories

Semantic Memory

- Contains general knowledge that is not tied to the time when the information was learned
- Memories of general principles, facts, rules and ideas.

Episodic Memory

Made up of chronologically, or temporally dated, recollections of personal experiences

5



Episodic Memory

- Who was the first person you kissed?
- What was your favorite toy in childhood?
- Memories for specific events
 - Includes details of when and where the events happened
 - Help us construct a sense of self



Procedural Memory

- It is the repository of motor skills and habits such as handwriting or driving.
 - These skills are essential part of our memory store, but it is difficult to describe the "know-how" in words.
 - In this sense the memory is said to be implicit or non-declarative ...you just cannot explain how to ride a bicycle.

7

The skills may be difficult to acquire, but once learned they are never forgotten, even without occasional practice

Retrieval

How do we get information back out?

What Influences Retrieval? What's the difference between Jeopardy and Who wants to be a millionaire? Which game would you prefer to play? Why? Both games are examples of <u>retention</u> How Do We Test Memory? <u>Recognition</u> is a method of testing memory by asking someone to choose the correct item from a set of alternatives. Example- True-false, multiple choice and matching tests Recognition Task The next time you see someone at a party who is having trouble walking properly, you might say, "He has had too much to drink, and it went right to his Reticular formation b) Cerebellum c) Frontal lobe

12

d) Parietal lobe

How is Information Retrieved?

- Free Recall is a method of testing memory by asking someone to produce certain items without substantial hints (Lefton & Brannon, 323).
 - Example- fill-in-the-blank, short-answer or essays exams

13

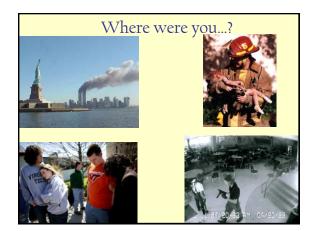
- Words positioned at the beginning and the end of a list are most likely to be remembered, a phenomenon called the serial position effect.
- Also, any unusual stimuli have a greater chance of being recalled, a phenomenon called the <u>von</u>

 <u>Restorff effect (Hunt & Lamb, 2001).</u>

14

Here's a HINT...

<u>Cued Recall</u> is a method of testing memory by asking someone to produce a certain item after being given a <u>hint</u>



Flashbulb Memories

- Unusually vivid and detailed memory for circumstances at the time of dramatic event.
 - These are emotionally significant memories



- Highly detailed and long-lasting
 - Memory of Princess Diana's death
 - Memory of the 9-11 attack
 - Memory of the Challenger explosion
 - Memory of JFK's assassination





Encoding Specificity Principle

- The associations you form at the time of learning will be the most effective retrieval cues
- Mood congruence

If you experience something while you're in a particular mood – you are more likely to think of it again when you are in the same mood

State-dependent retrieval

The tendency to remember something better if your body is in the same condition during recall as it was during the original learning

Mnemonic Devices

- Any memory aid that is based on encoding each item in a special way
 - Use silly images

The sillier the image the more effectively you will remember it

- Use pleasant images
 - Your brain often blocks out unpleasant images
- Use vivid colorful images

 They are easier to remember than boring ones
- Use all your senses to code information

Mnemonics can contain sounds, smells, tastes, touch, movements, feelings, and pictures

Verbal Mnemonics

- Word associations (i.e., acronyms or acrostics)
- Example:
 - ROY G BIV (acronym for colors of the spectrum)
 - King Philip Came Over For Good Sex (acrostic for order of taxonomy in biology)

Verbal Mnemonics

- Narrative stories and rhymes
 - Examples of rhymes:
 - Thirty days has September, April, June and November. When short February's done. All the rest have 31.
 - Red sun at night sailors delight, red sun in the morning sailors take warning
 - Righty tighty lefty loosey
 - Learning the ABCs to the tune of twinkle, twinkle little star

http://www.youtube.com/watch?v-mkO87mkgcNo

22

How Should You Study?

- Distributed practice is better than massed practice
 - Ten 1-hour blocks is better than one 10-hour block
- You should continue to rehearse the material after you first appear to have mastered it
 - Skimming or speed-reading will not promote longterm retention

23

How Should You Study?

- Active is better than passive (allows you to engage in deeper processing)
 - Writing out a detailed outline is better than passively reading over notes
 - Try to relate material to your own life and experience rather than just memorizing material
 - The better organized you are the better you learn and remember

