3/31 Week 11

General Psychology

Chapter 6: Part 1 (cont'd)

- **Short-term Memory**: limited capacity memory system which stores information for approximately 30 seconds without effort
    - also called *working memory*
    - Capacity of Short-term Memory:
    - **Digit span test** = we retain 7±2 items of information
        - repeat 9 numbers & you eventually can't repeat them all
        - more than 7 things or maybe more but you can't remember them
        - ex. phone # but not credit card #
    - **effects of chunking** = can trick short-term memory into thinking you have fewer items
        - ex. 8 numbers = chunk into double digit numbers so you can remember
    - **Duration of Short-term Memory:** without effort: around 12 - 30 seconds
        - depending on what kind of information
    - **effects of Rehearsal** – can keep it longer as long as you keep thinking about it
    - **effects of distraction** – if you're trying to rehearse things in your head & someone distracts you – your attention shifts & you can't remember what you were thinking about before

~~**Working Memory**~~

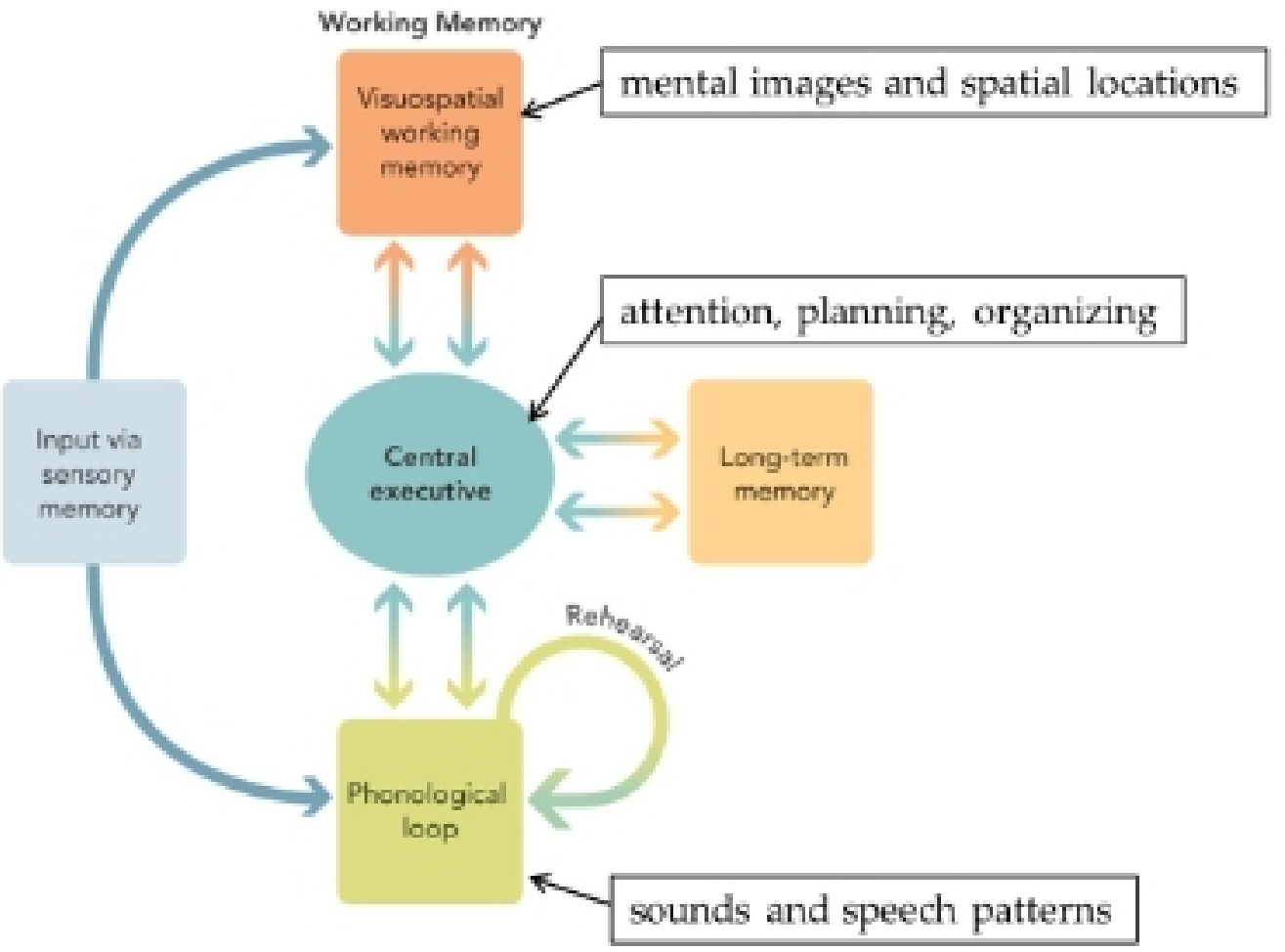
~~– alternative way of explaining short-term memory~~

~~- Three Parts of Working Memory~~

~~- Central Executive~~

~~- Phonological Loop~~

~~- Visuospatial Working Memory~~



Storage

- **Long-Term Memory**: last step in the memory storage process, in which we can store *unlimited* amounts of information for a *long time*
- it's never full!
    - **Two Types of Long-Term Memory** =
        - depending on what you're trying to remember – it uses different parts of your brain
        - **Declarative or Explicit Memory**
            - conscious memories for people, places, events, facts, dates, feelings & explanations.
            - Memory for who, what, where, when & why
        - **Nondeclarative or Implicit Memory**
            - nonconscious memories for skills, procedures subliminal information, and classically conditioned responses.
            - Memory for "how"
            - hidden & more subtle
            - ex. when you wake up in the morning & have sudden urge for coffee... because

              your body remembers that it gets coffee every morning
            - ex. remembering to ride a bike
            = once you do it you'll never forget (muscle memory)

            Episodic: memory for events in your life & autobiographical memory

            Semantic: memory about the world & general common knowledge

Q. How do we know that there are two types of LTM?

A. Henry M & Clive Wearing

Clive Wearing: destroyed part of his brain that controls learning & memory (Hippocampus)

- declarative memories but you do not need hippocampus to create nondeclarative memory
- can't create new long term memory: will go somewhere & have no clue about anything
- he had to live in a home to be taken care of – he constantly wonders why/where he is
- his body remembers how to do short-term things

Henry M.

- most studied man
- Hippocampus damaged in surgery – removed it because of seizures
- they didn't realize he couldn't ever get new information into long-term memory again

Chapter 6: Part 2

Retrieval – process of getting memories out of long-term storage & into conscious awareness
- "bringing it back"

- **Retrieval Cues:** means by which people retrieve information from long-term memory
    - the more cues that are associated with the memory, the easier it will be to retrieve
    - coming up with strategies/stories/word associations to study for a test
    - outlines with subtopics for organization

- on exams there is bold writing to help direct to particular place so that you don't have to search for the answer

- **Context Specific Memory**
  - people will recall information better if the context in which the information is learned is the same as when it was being recalled
  - ex. if you sit in the same place in class all the time, you're more likely to remember it all at the same location for the exam
  - why they take witnesses back to crime scenes to trigger memories about what happened
- **Serial Position Effects**
  - Order in which you learn something is much easy to remember

  Primacy Effect: - items that come in first into your long-term memory because it was once the only thing you were trying to remember
  - ex. when you play games where each person keeps adding on a word – everyone always remembers the first word & maybe 20 years later you'll associate that game with the word you first played with

  Recency Effect: hurry and look at a question right before the exam & you'll get the answer right

  *** spend more time studying middle stuff!**

  Q. Why do people remember the words at the beginning & end, but not the middle?

  A. Beginning items are in long-term memory & last items are stil in short-term memory

  Q. What would happen if you were distracted for about 30 seconds just after I finished reading a list & then you tried to recall the list items?

  A. **The Recency Effect**: you'd still remember the items at the beginning but then you got distracted and the stuff in the middle was in short term so it got lost

- **Flashbulb memories:** vivid memories for highly significant, traumatic or emotional experiences & events
  - can't remember what you had breakfast 3 weeks ago (unless you have the same one everyday)
  - CAN remember exactly what/where you were doing during 9/11 & if you were eating breakfast but can exactly remember that breakfast

Forgetting

- Assumption: as time passes, we forget
  - how much do we forget?
  - Do flashcards until you know every single one... how many will fade the next day?
  - if you made the terms meaningful to you, you will remember but most 50% will fade
- **Ebbinghaus & Forgetting**
  - Ebbinghaus Forgetting Curve:
  - made a ton of flashcards with no meaning & nonsense
  - 100 one syllable words & he memorized them all
  - once he realized that he could do them all he kept quizzing & timing himself