# Memorization and the Brain

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Different types of memory:
- Long-term memory (explicit and implicit)
  - Declarative/explicit: semantic (facts)
  - Declarative/explicit: episodic (events that have happened to you)
  - Procedural/implicit (muscle memory)
- Short-term memory (i.e. phone number)
- Working memory (i.e. remembering and using accidentals when you sightread)
  - Visuospatial working memory
  - Verbal working memory
  - Musical working memory
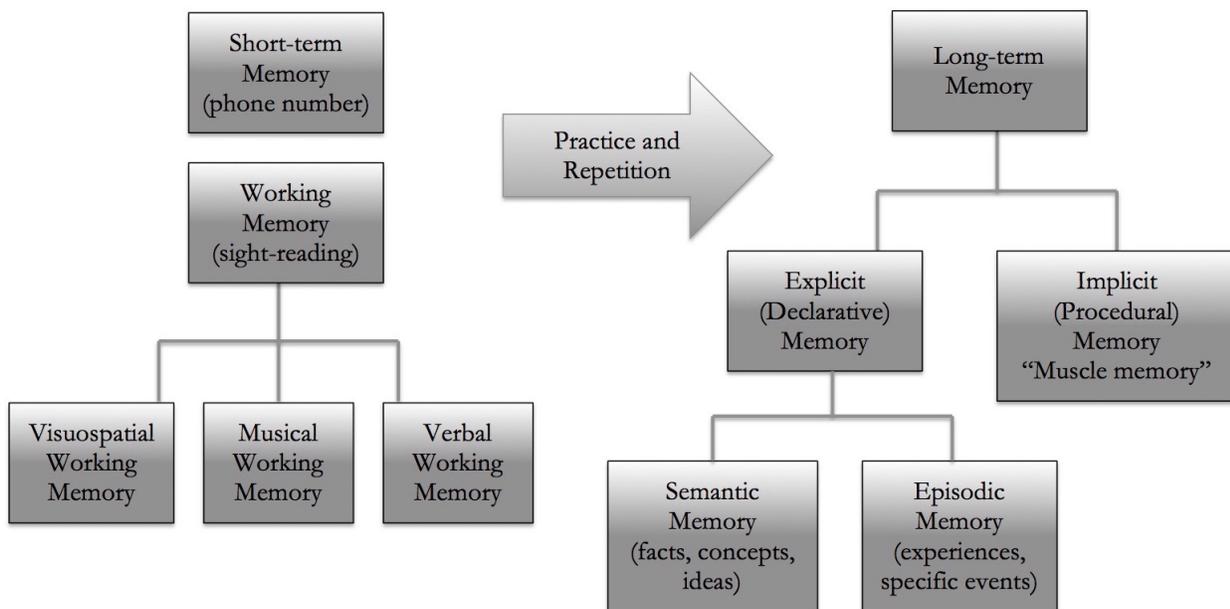
How are long-term memories made?
- Encoding: how do you get information into your brain?
- Consolidation: how memories move from short-term storage to long-term storage?
- Retrieval: how do you get memories back out again when you need them?

Better Encoding
- Chunking
- Performance cues

<u>Better Consolidation</u>
- Importance of sleep
- Practicing last in the day and first thing the next morning will result in a memory boost.

<u>Better Retrieval</u>
- Practice playing from memory
- Play from memory right away in the learning process.
- Interleaved practice
- Three streams of memory in performance: muscle memory, auditory memory, declarative memory

<u>Protect Against Memory Slips</u>
- Choking under pressure is due to thinking explicitly about things that should be automatic.
- Video record yourself playing from memory often
- Think about big picture things: phrasing, sound, expression, etc.
- Perform in front of people often before a concert/audition from memory.

Full list of memorization techniques to try:

- Study your score and practice using your performance cues.

- Use chunking to your advantage.

- Get enough sleep.

- Practice what you are trying to memorize last in the day and then first thing the next morning.

- Practice playing from memory early in the learning process.

- Use interleaved practice to test your memory.

- Strengthen muscle memory, aural memory, and declarative memory equally.

- Videotape yourself playing from memory.

- Practice playing from memory thinking about big picture things (sound, phrasing, expression, etc.).