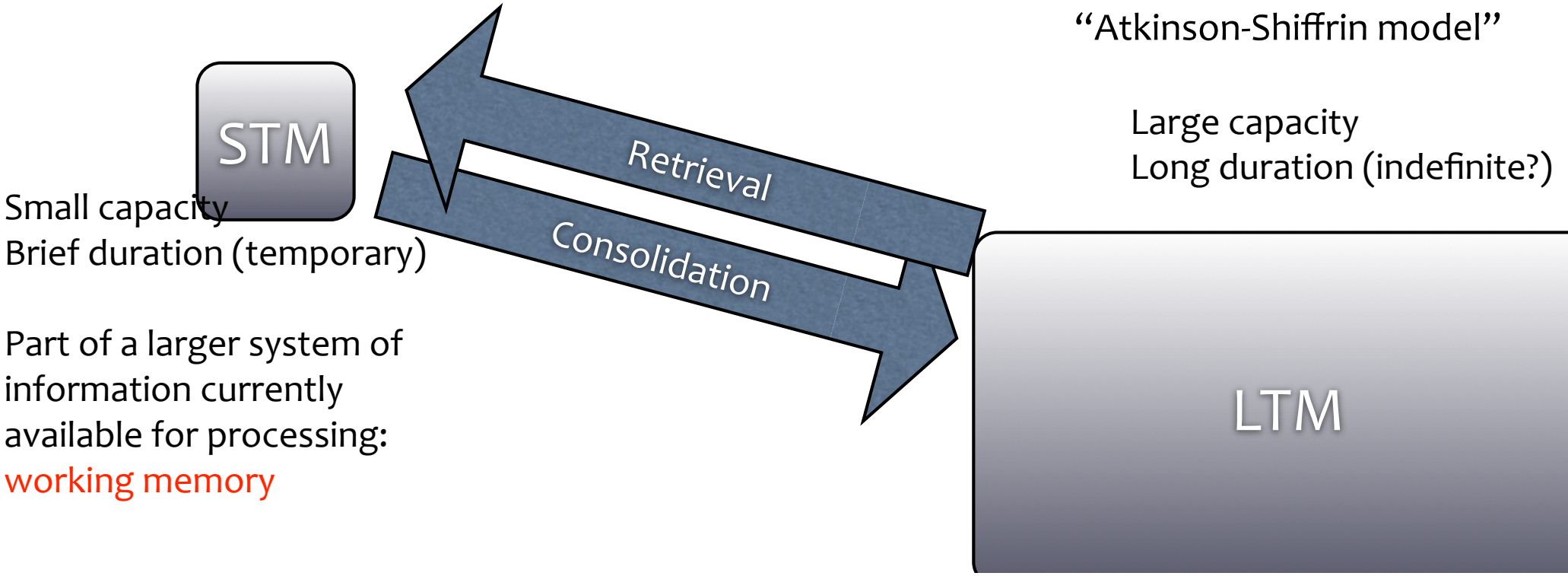
Memory systems

- Recency effect suggests that items are temporarily held in a small, short-term buffer (STM)

- Primacy effect suggests that rehearsal is required to consolidate items to long-term memory (LTM)



Key ideas from free recall experiment:

Interference -- competition between items, decreasing the likelihood of consolidation

Rehearsal -- repetition of an item to facilitate consolidation

Consolidation -- movement of information from short-term memory to long-term memory

- Also: reconsolidation; massed vs. spaced training

Encoding -- representation of information to be consolidated

Primacy effect -- early items are recalled better (because of less interference)

Recency effect -- last few items are recalled better (because they are still in working memory)

What is forgetting?

- Library metaphor

  -> Access cues are like indexes in the card catalog

- Failure to consolidate vs. failure to retrieve

- Interference among access cues

  - generally not “decay”

H. M.

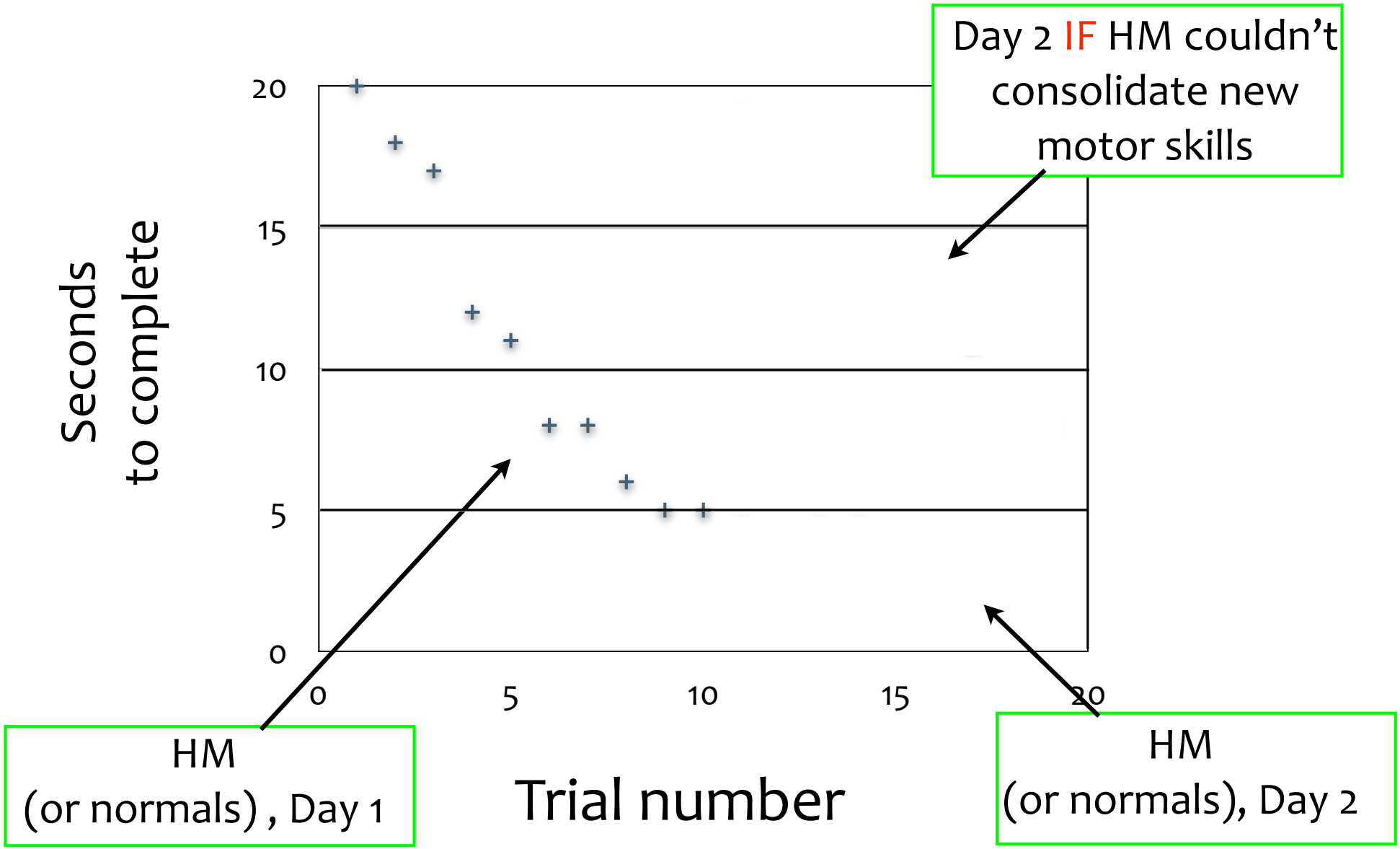
Hippocampus removed due to epilepsy

Result: unable to form new memories*

Retrograde vs. Anterograde (HM) amnesia

Conclusions: hippocampus performs consolidation

Mirror drawing



Conclusion: Procedural memory is encoded separately

Memory systems by manner of encoding

- Declarative (explicit)

  - Episodic - first-person memory of experiences

  - Semantic/propositional/conceptual -

    knowledge of facts

- Procedural (implicit)- how to do things, including motor procedures
- Mental imagery - knowledge of the appearance of things
- etc.