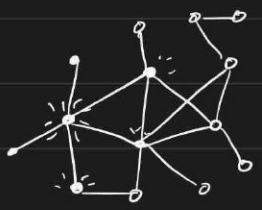
Lecture 8 Memory

→ In-class remember words experiment.
- First & last more likely remembered
- Implant memory because of semantic meaning.

* Neural network – similar concept activate related concepts



* Memory – ambiguous reconstruction of what happened using limited info
→ memory illusions

* Atkinson - Shiffrin memory model

Environment —(sensation)→ Sensory registers —(consciousness)→ short term memory ⇄ long term memory
(encoding, partially fades; retrieval, partially corrupted)

#1 Encoding and LTM (i.e. STM → LTM)

- We don't know how much we can store
* Cues – things that help retrieve i.e. connection
  - Environment
    → Learn on land → retrieve better on land,
    - - - - sea → . . . . . sea
    → Prof's zero gravity memory experiment.
  - Mnemonics
    → imagery → spacial cues
    → rhymes & rhythms → pre-set list

* Level of Processing – More cues, more connections ⇔ deeper processing
  - words: structual, semantic, personal, generation, phonetic ...
  - desirable difficulty: force deeper processing!
    → Reading waving text lead to better comprehension.

#2 Retrieval & LTM

* Retrieval changes memory!

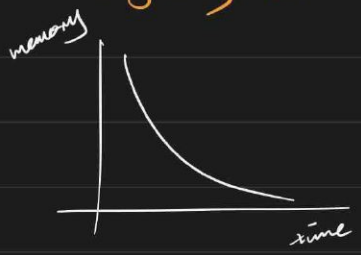
  Retrieve → process incomplete info → re-encode (stronger, but less accurate)

  - Tests reinforce memory
  - Harder the retrieval, stronger the retrieval pathway after re-encode.

* Interleaving effect
  → Make ppl learn identify painter
    1. show mixed ← ppl learn better
    2. show separately
  - So alternate between subjects when studying!

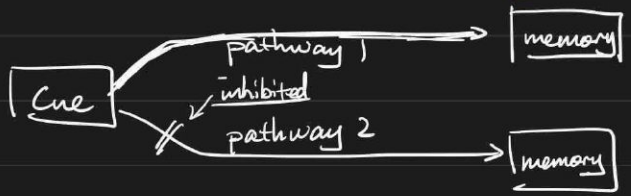
#3 Forgetting

* Forgetting Curve



* Why Forget?
  - Decay theory – something washes it away?
  - Interference theory (probably due to lost cue)
    - Retroactive: new memory replaces old
    - Proactive: old ... new

* Retrieval Induced Forgetting



→ remember words, practise half, then the other half gets less remembered

#4 False Memory and Bias

→ Guessing what's in Prof's office (without having been there)

↳ Same process as encoding in memory!

* Memory is malleable & suggestible!

* Asking ppl to recall differently → make ppl fill in different gap → they reencode differently.

→ Witness false info

"how many ppl on the side with stop sign"

(stop sign: not actually there)

↳ but now they remember there's a stop sign

* Memory bias: things remembered differently based on attitude

* Flashbulb memory: ppl think they remember that moment exactly (traumatic moment, 911, etc.)

→ After challenger explosion

- Psychologists ask the day after
- Ppl say they'll never forget
- 2 years later ask again
- same person says absolutely confident remember
- but some say ~~different~~ things.