

# Retrieval- Getting Information Out

- Recall

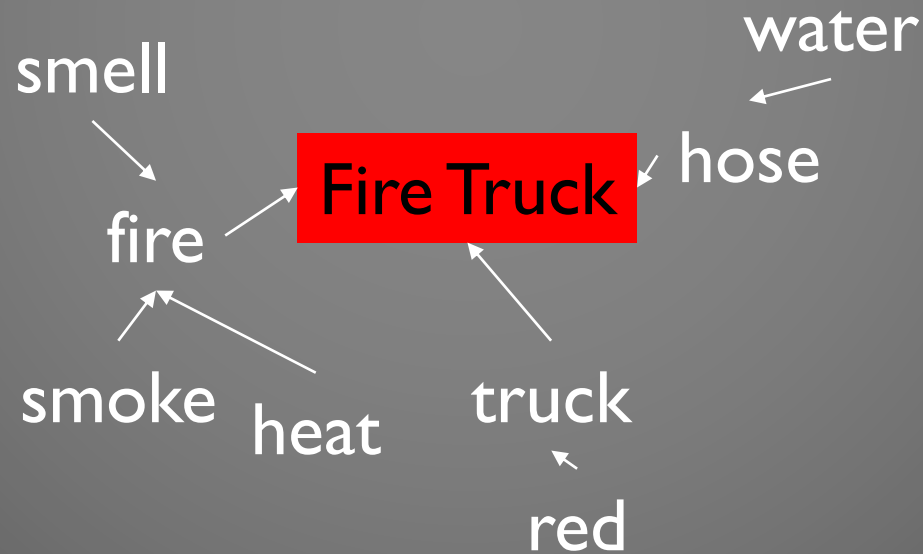
- the ability to retrieve info learned earlier and not in conscious awareness-like fill in the blank test

- Recognition

- the ability to identify previously learned items-like on a multiple choice test

# RETRIEVAL CUES

Memories are held in storage by a web of associations. These associations are like anchors that help retrieve memory.



# PRIMING

To retrieve a specific memory from the web of associations, you must first activate one of the strands that leads to it. This process is called priming.



# Retrieval

- Relearning
  - amount of time saved when relearning previously learned information

# Retrieval Cues

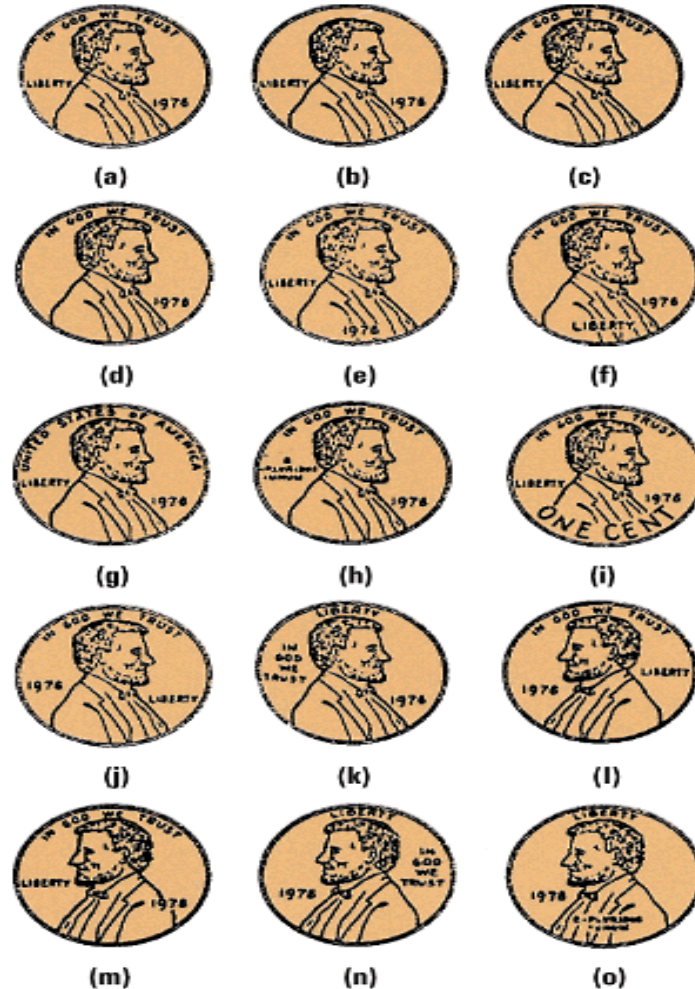
- **Deja Vu-** (French) already seen
  - cues from the current situation may subconsciously trigger retrieval of an earlier similar experience
  - "I've experienced this before"
- **Mood Congruent Memory**
  - tendency to recall experiences that are consistent with one's current mood
  - memory, emotions or moods serve as retrieval cues
- **State Dependent Memory**
  - what is learned in one state (while one is high, drunk or depressed) can more easily be remembered when in same state

# Forgetting

- Forgetting as encoding failure
- Information never enters the memory system
- Attention is selective
  - **we cannot attend to everything in our environment**
- William James said that we would be as bad off if we remembered everything as we would be if we remembered nothing

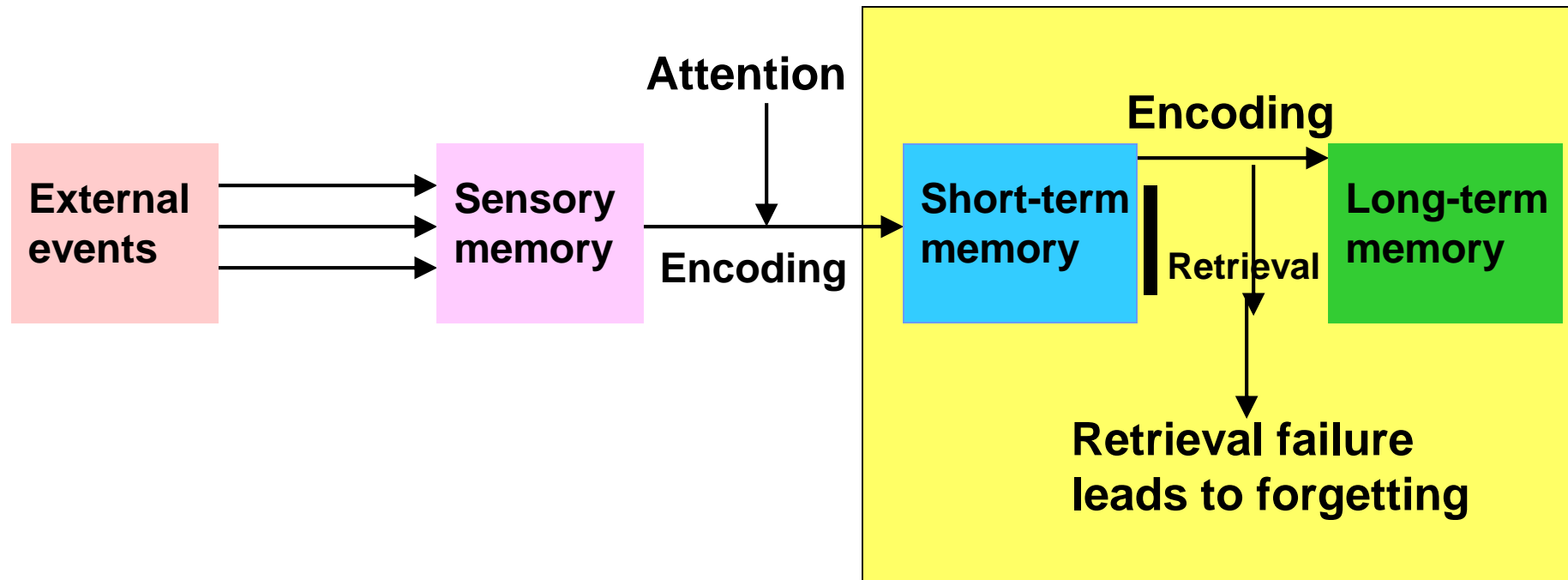
# Forgetting

- Forgetting as encoding failure
- Which penny is the real thing?



# Retrieval

- Forgetting can result from failure to retrieve information from long-term memory





# Forgetting as Interference

- Learning some items may disrupt retrieval of other information
  - Proactive(forward acting) Interference
    - disruptive effect of prior learning on recall of new information
    - You move into a new house and at first you have trouble remembering your new address because you remember your old one.
  - Retroactive (backwards acting) Interference
    - disruptive effect of new learning on recall of old information
    - Eventually you will remember the new address and have trouble remembering the old one.

# ODD AP TERMS! .... SAY WHAAAA?

## Prospective Memory

- ▶ Involves remembering to perform a planned action or intention at the appropriate time
  - ▶ Remembering to put the toothpaste cap back on
  - ▶ remembering to reply to an email
  - ▶ remembering to return a red-box movie
  - ▶ remembering to take medication



## Retrospective Memory

- ▶ Involves memory of people, events and words that have been encountered in the past.
- ▶ Events that have PREVIOUSLY OCCURRED (RETRO BABY!)



# Forgetting

- Forgetting can occur at any memory stage
- As we process information, we filter, alter, or lose much of it

# Forgetting-Interference

- Motivated Forgetting
  - people unknowingly revise history
- Repression
  - defense mechanism that banishes anxiety-arousing thoughts, feelings, and memories
- Positive Transfer
  - sometimes old information facilitates our learning of new information
  - knowledge of Latin may help us to learn French

# MEMORY EFFECTS

1. Next-in-line-Effect: You cannot remember what the person in line before you said because you were thinking about your own answer.
2. Spacing Effect: We retain information better when we rehearse over time.
3. Serial Position Effect: When your recall is better for first and last items on a list, but poor for middle items.
  - ▶ Primacy effect—better recall of items at the beginning of a list
  - ▶ Recency effect—better recall of items at the end of a list



# Memory Construction

- We filter information and fill in missing pieces
- Misinformation Effect
  - incorporating misleading information into one's memory of an event
- Source Amnesia
  - attributing to the wrong source an event that we experienced, heard about, read about, or imagined (misattribution)

# Memory Construction

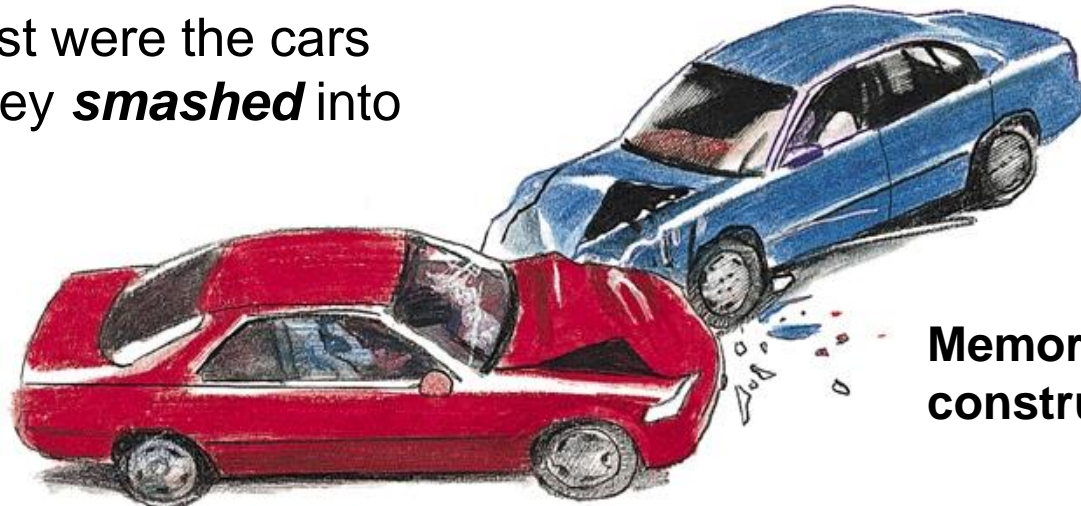
Depiction of actual accident



- Eyewitnesses reconstruct memories when questioned

Leading question:

“About how fast were the cars going when they **smashed** into each other?”



Memory  
construction

# Memory Construction

- People fill in memory gaps with plausible guesses and assumptions
- Imagining events can create false memories



# Memory Construction

- Memories of Abuse
  - Repressed or Constructed?
    - **Some adults do actually forget such episodes**
- False Memory Syndrome
  - condition in which a person's identity and relationships center around a false but strongly believed memory of traumatic experience
  - sometimes induced by well-meaning therapists

# Memory Construction

- Most people can agree on the following:
  - Injustice happens
  - Forgetting happens
  - Recovered memories are commonplace
  - Memories recovered under hypnosis or drugs are unreliable
  - Memories of things happening before age 3 are unreliable
  - Memories, whether false or real, are upsetting