

Chapter 9 Test Slides

The practice questions in the Study Guide are also helpful.

The type notes may be needed for review as well.

Sins of forgetting

- *According to memory researcher Daniel Schacter:*
- *a. Absent mindedness* inattention to details
- *b. Transience* storage decay over time
- *c. Blocking (tip of the tongue phenomenon);* unable to access stored information

Forgetting- Interference, 380

- **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 Construction, 382

- 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, 386

- People fill in memory gaps with plausible guesses and assumptions and their biases
- Imagining events can create false memories
- Children's eyewitness recall
 - Child sexual abuse does occur
 - Some innocent people suffer false accusations
 - Some guilty cast doubt on true testimony

Memory Construction, 388

- Most people can agree on the following:
 - Injustice happens
 - Incest 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

Professional groups agree:

- a. Injustice happens
- b. Incest happens
- c. Forgetting happens
- d. Recovered memories are common place
- e. Memories recovered under hypnosis or drugs are unreliable
- f. Memories of things before age 3 are unreliable due to infantile amnesia

More on false memories

- g. Memories can be emotionally unsettling even if unreal
- *Most traumatic experiences are remembered; unlikely to be repressed and then retrieved through therapy*

Memory researcher Elizabeth Loftus

- Loftus experienced false memory when she was told she discovered a dead relative at age 14 and began to believe it. She was molested at 6, and has not forgotten that.
- For her, this was an example of the *misinformation effect*.

Discerning true and false memories

- The most confident witnesses are often not the most accurate
- Hypnotically recovered memories have errors to suggestions from the hypnotist
- Imagined memories contain more gist or feeling but less actual detail
- Imagined memories can be more durable than real memories
- False and true memories can appear to be just as convincing

Improve Your Memory, 391

- Study repeatedly to boost recall
- Spend more time rehearsing or actively thinking about the material
- Make material personally meaningful
- Use mnemonic devices
 - associate with peg words- something already stored
 - make up story
 - chunk-acronyms

Improve Your Memory, 391

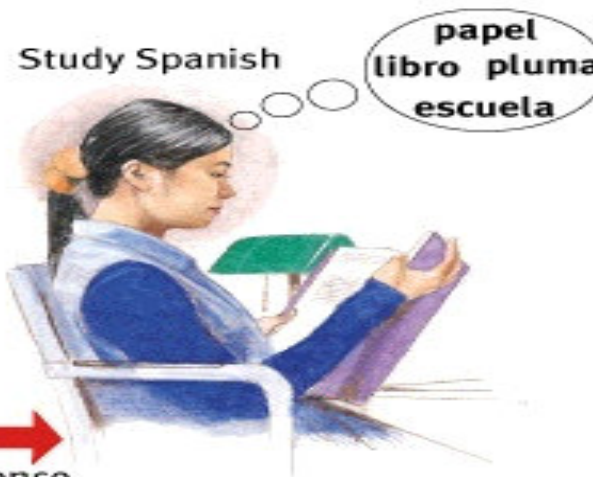
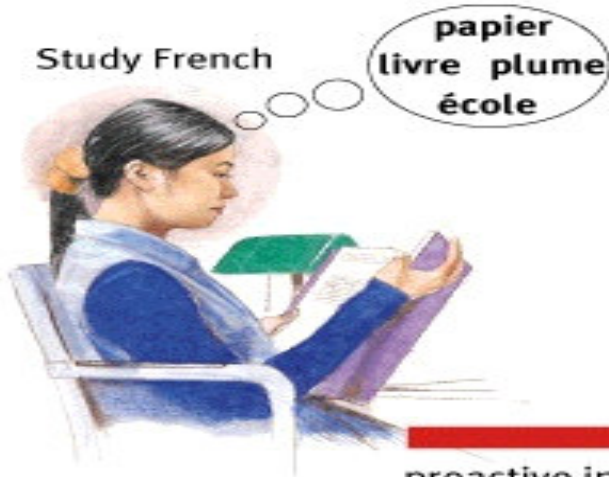
- Activate retrieval cues- mentally recreate situation and mood
- Recall events while they are fresh- write down before interference
- Minimize interference
- Test your own knowledge
 - rehearse
 - determine what you do not yet know

Forgetting as Interference, 379

- Learning some items may disrupt retrieval of other information
 - Proactive(forward acting) Interference
 - disruptive effect of prior learning on recall of new information
 - Retroactive (backwards acting) Interference
 - disruptive effect of new learning on recall of old information

Forgetting as Interference

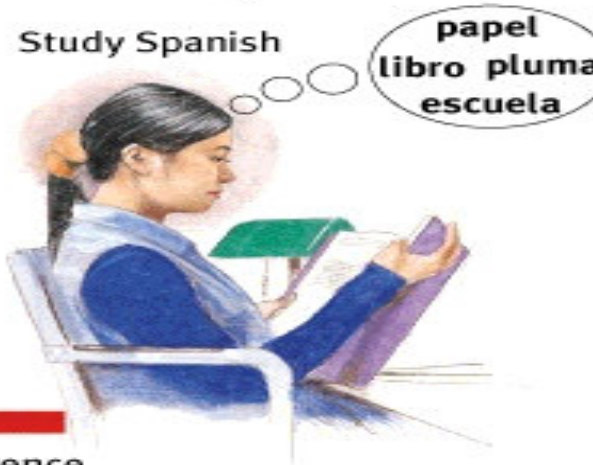
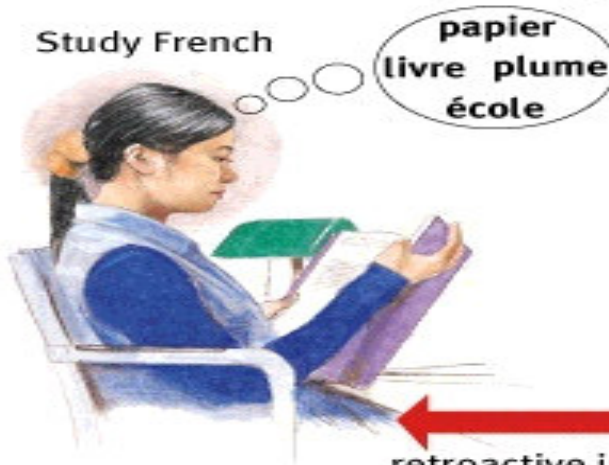
French, learned beforehand, interferes proactively



proactive interference



Spanish, learned afterward, interferes retroactively

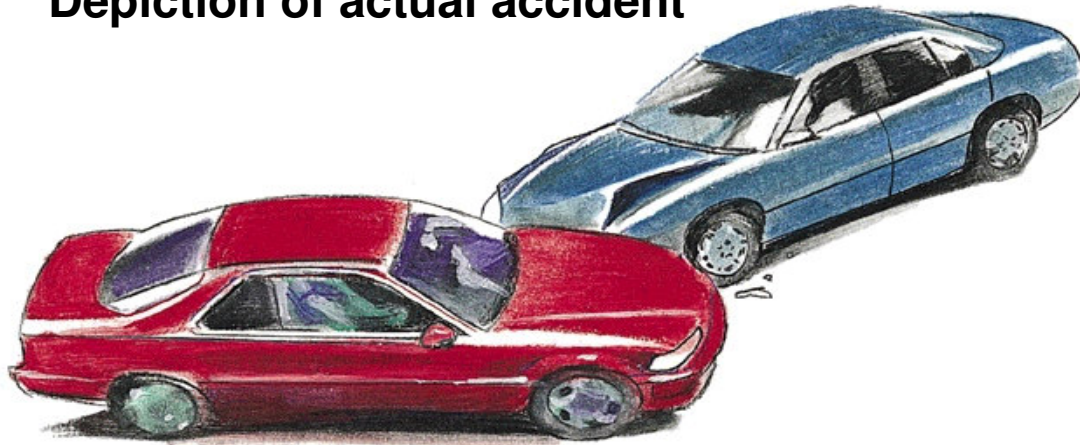


retroactive interference



Memory Construction and the misinformation effect, 382

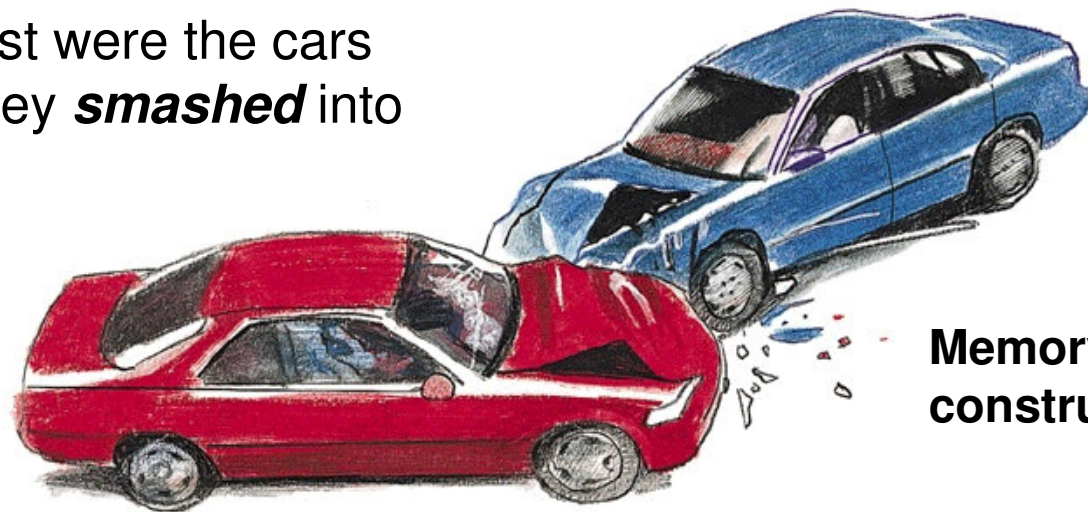
Depiction of actual accident



- Eyewitnesses incorrectly reconstruct memories when questioned. If asked a leading question they assume more damage was done.

Leading question:

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



Memory construction

Source Amnesia, 382

- We filter information and fill in missing pieces
 - attributing to the wrong source an event that we experienced, heard about, read about, or imagined (misattribution)

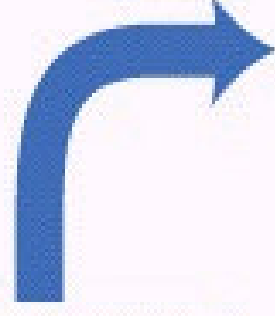
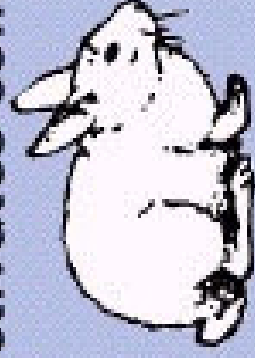
Priming, 371-372

- activation, often unconsciously,
of particular associations in
memory
- See next slide

Seeing or hearing
the word *rabbit*



Activates concept



Primes spelling
the spoken
word *hair/hare*
as *h-a-r-e*

What Do We Encode? 356

- Semantic Encoding
 - encoding of meaning
 - including meaning of words
- Acoustic Encoding
 - encoding of sound
 - especially sound of words
- Visual Encoding
 - encoding of picture images

Method of Loci

List of Items

Charcoal
Pens
Bed Sheets
Hammer
.
.
.
Rug

Imagined Locations

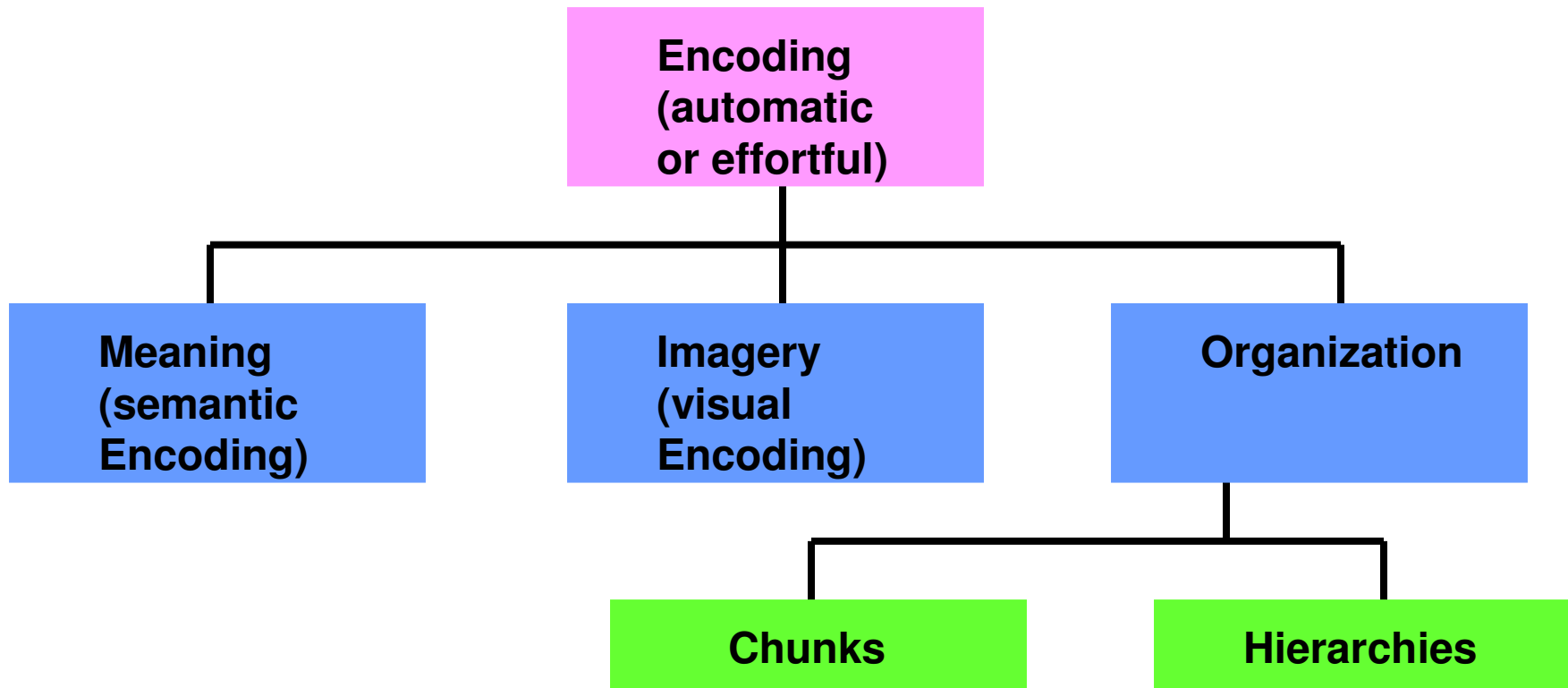
Backyard
Study
Bedroom
Garage
.
.
.
Living Room

Encoding, 359

- **Chunking**
 - organizing items into familiar, manageable units
 - like horizontal organization- 1776149218121941
 - often occurs automatically
 - use of acronyms
 - HOMES- **H**uron, **O**ntario, **M**ichigan, **E**rie, **S**uperior
 - ARITHMETIC- **A** **R**at **I**n **T**om's **H**ouse **M**ight **E**at
Tom's **I**ce **C**ream

Encoding, 361

- Hierarchies
 - complex information broken down into broad concepts and further subdivided into categories and subcategories



Storage-

Retaining Information, 362

- **Sensory Memory**
 - the immediate, initial recording of sensory information in the memory system
- **Iconic Memory**
 - a momentary sensory memory of visual stimuli
 - a photographic or picture image memory lasting no more than a few tenths of a second
 - Registration of exact representation of a scene
- **Echoic Memory**
 - momentary sensory memory of auditory stimuli

Long term potentiation

- Gary Lynch term:
- The prolonged strengthening of potential neural firing which provides the neural basis for memory and learning
- Synaptic changes that promote memory formation

The location of Long Term Memory, 367

- Explicit Memory

- memory of facts and experiences that one can consciously know and declare

- hippocampus**- neural center in limbic system that helps process explicit memories for storage

- Verbal in the left

- Visual in the right

Retrieval- Getting Information Out, 370

- Recall

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

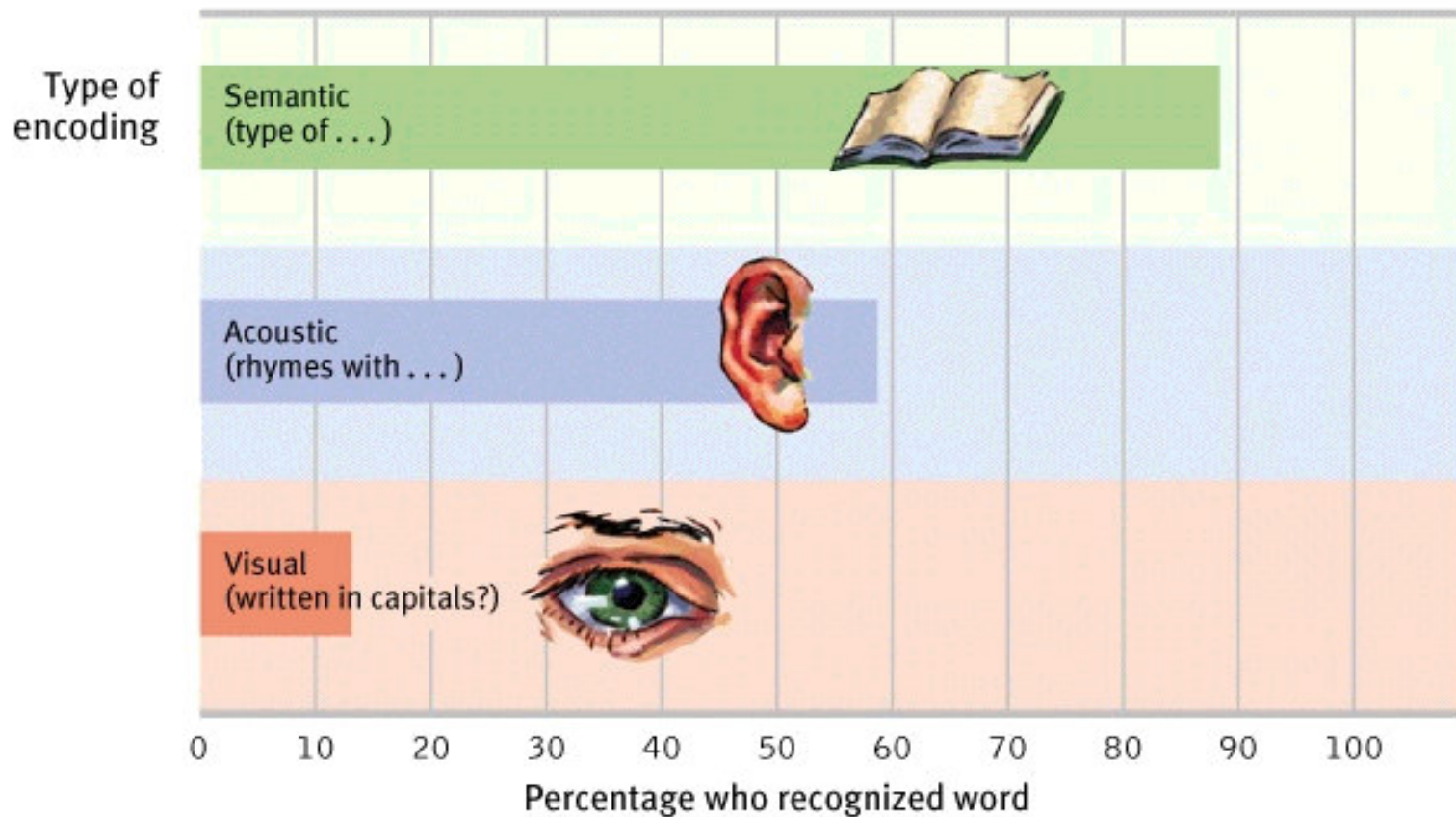
- Recognition

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

Bower's memory experiment

- When words were presented by category v. in random order the recall was better.
- Indicates the importance of organization
- See page 360

Craig and Tulvig experiment on processing words: results, 357



Serotonin and memory, 365

- Kandel and Schwartz's research on snails indicated the neurotransmitter serotonin is released into the synapses between neurons when learning occurs.

Essay

- Bring your book to class.
- The question will have you looking up the definitions of:
 - Afterimage effect
 - Group think
 - Optimistic explanatory style
 - Proactive interference
- And then describing how the concept could lead one to have an inaccurate perception, cognition or conclusion.