

Memory



Objective's for Today's Class:
Why do we forget?
What is amnesia?

If you couldn't forget,
your mind would be filled
with meaningless data.



The ability to forget is essential to the
proper functioning of memory

Normal Forgetting



- ☞ Memory traces gradually decay
 - During any delay a memory is subject to the effects of time and interference from other experiences

☞ Decay: _____

☞ Memories seem to be forgotten because we no long have the _____

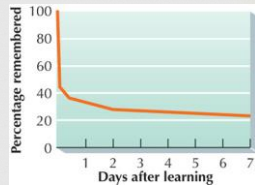
Normal Forgetting



Found that most forgetting

- Recall drops from 100% to 50% correct within 20 minutes of list learning

After the first several hours - forgetting levels off and slows at that point



4

If we forget so quickly, why put effort into learning something?



Researchers have demonstrated that forgetting is

- Studied only meaningless nonsense syllables.

5

Reasons for Forgetting



Encoding failure:

6

Reasons for Forgetting



- Through the lack of use and rehearsal information is gone

Retrieval failure

- _____

Interference

- Proactive interference
- Retroactive interference

7

Proactive Interference



- A decrease in accurate recall of information as a result of previously learned information.
- Old material increases forgetting of the new material

8



Proactive Interference

Aubrie recently ended a long-term relationship but has found a new love. They are out a third date... The lights are low, the champagne and strawberries are served. The music in the restaurant is soft and romantic - Aubrie reaches across the table to take her date's hand. She looks deeply into his eyes, about to tell him what a wonderful evening it is and how happy she is to be out with him and then out of her mouth, before she realizes it, comes - the name of her ex!!!

9

Retroactive Interference



↳ New information interferes with recall of old information

- New material increase forgetting of the older material

10



Retroactive Interference

↳ Pretend that you've been sneaking around on your long-term girlfriend/boyfriend for a couple of months. One day, while talking to your significant other in some casual context, you address them by the name of your secret lover.

↳ New information has interfered with your recall of older information.

11



Decay theory suggests that the passage of time always increases forgetting.

12



This theory suggests that when we learn something new, a neurochemical memory trace forms, but

Severe Forms of Memory Loss



Amnesia

☞ _____
☞ People with amnesia tend to have poor factual memories, but _____

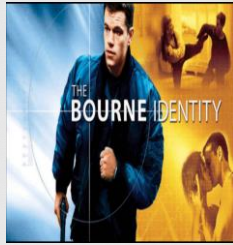
- Amnesiacs show preserved performance on tests of implicit memory (which do not require conscious recollection for successful performance)
- On tests of explicit memory, amnesiacs show much more severely impaired performance (requires that the individual recognize the correct answer and be aware that long-term memory is being tapped)

Two Types of Amnesia

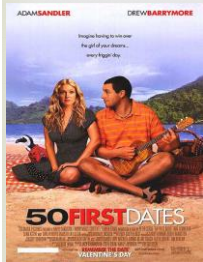
- involves memory loss for a segment of the past but not for

Retrograde amnesia is much more common than anterograde amnesia

- frequently occurs when the brain is assaulted by an electrical shock or a physical blow such as a head injury to a football player.



Two Types of Amnesia



- a memory disorder that affects the
- People who find it hard to remember ongoing events after suffering damage to the head
- They do not tend to forget their childhood or who they are, but have trouble remembering day-to-day events



Are Memories Accurate?

Memory is not a perfect reflection of reality. Memory is like the water in this glass. One drop of color, which represents experiences in the world, can change the memory completely.

Many people have memories for events that could not have happened



People have the ability to create false memories through simple suggestion

False Memories



Many of our memories are incorrect because memory is so susceptible to outside influence. This is not a flaw in our memory system...we all have false memories.
