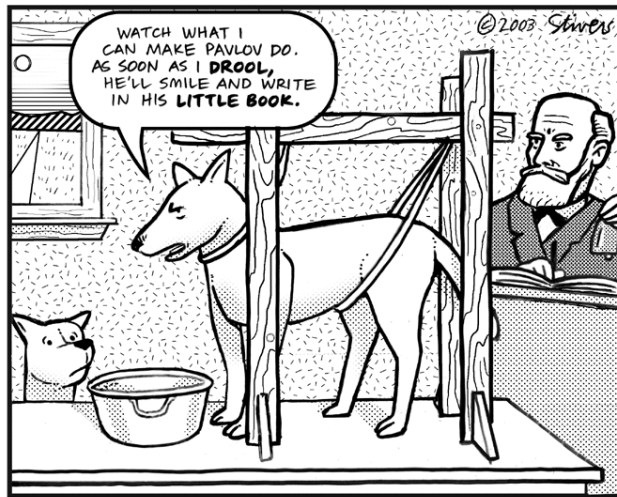


AP Psychology



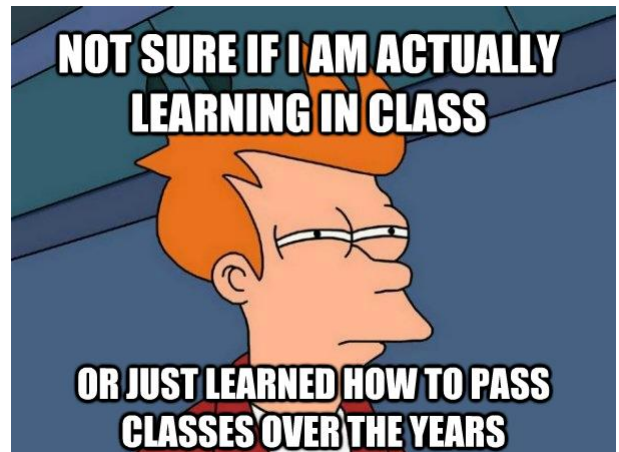
5.1 - Classical Conditioning

1

Learning

• Learning

- A lasting change in behavior or mental processes as the result of an experience
 - Behavior is much easier to observe than mental processes
- Instincts vs. Learning?
 - Instincts are unlearned behaviors due to evolutionary programming
 - Learning represents a significant evolutionary advance over instinctive behavior
 - Enables humans to acquire new knowledge that can be transferred from one generation to the next



2

Learning

• Types of Learning

• Classical Conditioning

- Learning to link two stimuli in a way that helps us anticipate an event to which we have a reaction

• Operant Conditioning

- Changing behavior choices in response to consequences

• Observational Learning

- Acquiring new behaviors and information through observation, rather than by direct experience

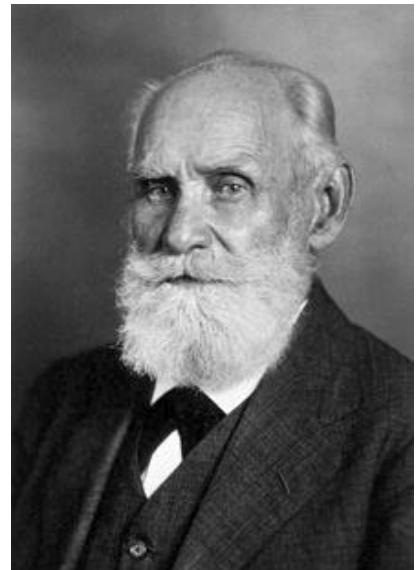


3

Classical Conditioning

• Ivan Pavlov

- Russian physiologist who was awarded a Nobel Prize in 1904 for his research on the digestive system of dogs
- During his research, he noticed that dogs tended to salivate before food was actually delivered to their mouths
 - Devoted over 30 years and 500 experiments to studying Classical Conditioning
- Labeled "Classical Conditioning" because it was the first to be studied extensively in psychology



4

Classical Conditioning

• Components of Classical Conditioning:

• Unconditioned Stimulus (UCS)

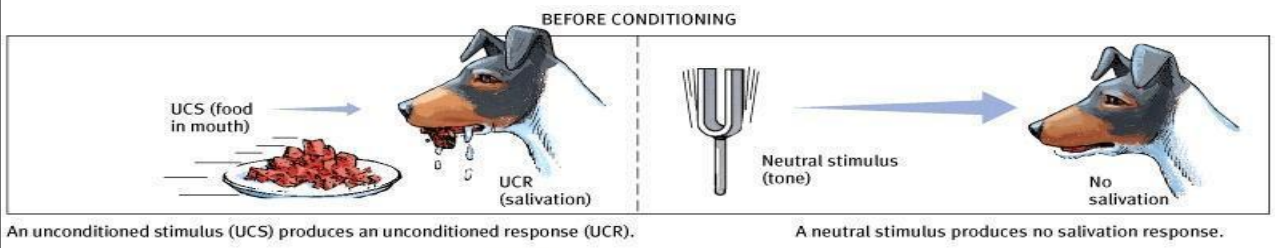
- A natural stimulus that reflexively elicits a response without the need for prior learning

• Unconditioned Response (UCR)

- An unlearned response that is elicited by an unconditioned stimulus

• Neutral Stimulus (NS)

- Any stimulus that produces no conditioned response prior to learning



5

Classical Conditioning

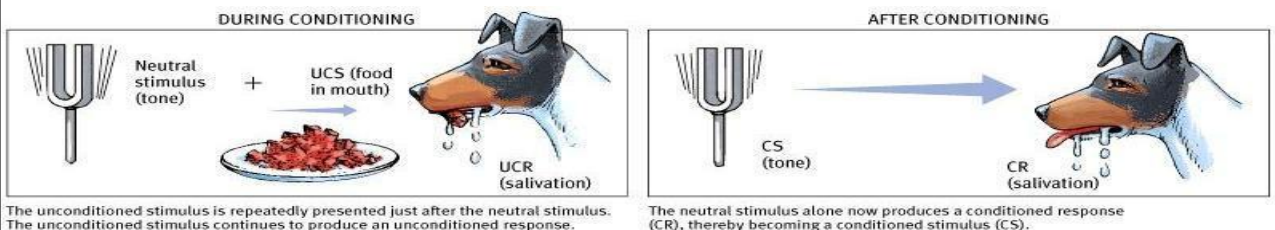
• Components of Classical Conditioning

• Conditioned Stimulus

- The conditioned stimulus that was originally the NS
- When systematically paired with the UCS, the NS becomes a learned stimulus that gains the power to cause a response

• Conditioned Response

- A learned response elicited by the Conditioned Stimulus
- **Acquisition:** The process by which a conditioned stimulus elicits a conditioned response



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Classical Conditioning

• Practice Scenarios

1. Jamie was talked into riding on the roller coaster when she was 12. The ride absolutely terrified her. Now whenever she goes to the amusement park, she breaks into a cold sweat if she even looks at the roller coaster.
2. Kim was sick all night after eating a bad fried oyster. Now, she says, the smell of ANYTHING frying makes her feel nauseated.
3. Sam was frightened when a barking dog lunged at the fence as Sam walked by. The next day, when Sam's mother started to lead him by the house where the dog lives, Sam began to tremble.
4. John's dog drools whenever she hears the can opener.
5. Mike was stung by a bee in the garden. Now, whenever he hears a buzzing sound, he starts tremble.

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Classical Conditioning

• Practice Scenarios

6. Tom gives his girlfriend Mary Beth a gift, which makes her happy. While he gave her the gift, a song was playing on the radio. Now, whenever she hears the song she gets very happy.
7. Jason was a curious and adventurous five year old. When Christmas came around, he helped his dad put up the outside lights. Accidentally, he was electrocuted. Ever since that day, Jason has been afraid of blinking lights.
8. Suzanne's favorite food is pizza with pepperoni. Now, whenever she sees a pizza commercial on TV she begins to salivate.
9. Every time Tim's roommate flushes a toilet in their apartment, the shower becomes very hot, causing Tim to jump back. Over time, Tim jumps back automatically after hearing the flush.

8

Classical Conditioning



9

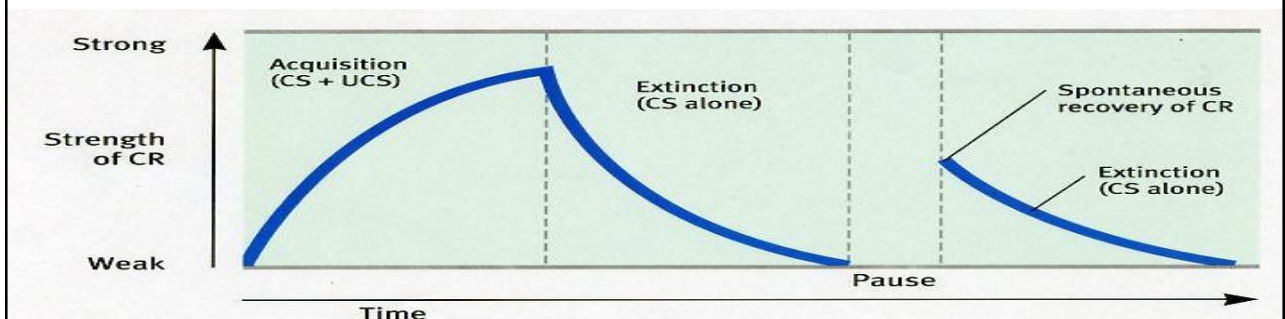
Classical Conditioning

• Extinction

- The gradual weakening of a conditioned behavior when the CS is not followed by the UCS

• Spontaneous Recovery

- The reappearance of an extinguished stimulus after a time delay
 - Often reappears at a lower intensity



10

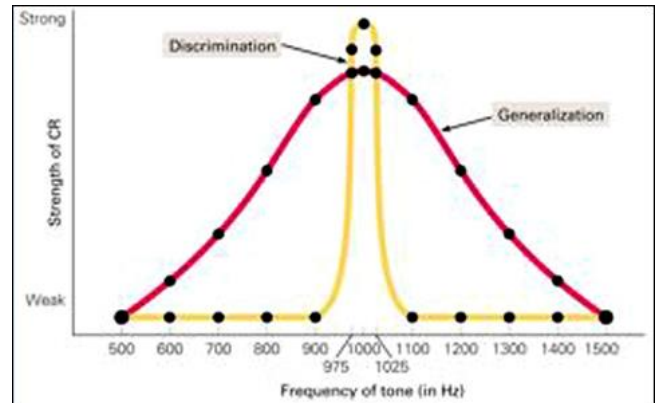
Classical Conditioning

• Stimulus Generalization

- Occurs when stimuli that are similar to the original stimulus also elicit the CR

• Stimulus Discrimination

- The ability to distinguish between two similar stimuli



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Classical Conditioning

• Taste Aversions

- A classically conditioned dislike for and avoidance of a particular food that develops when an organism becomes ill after eating the food



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