

Unit 6 : Learning

Intro and Classical Conditioning

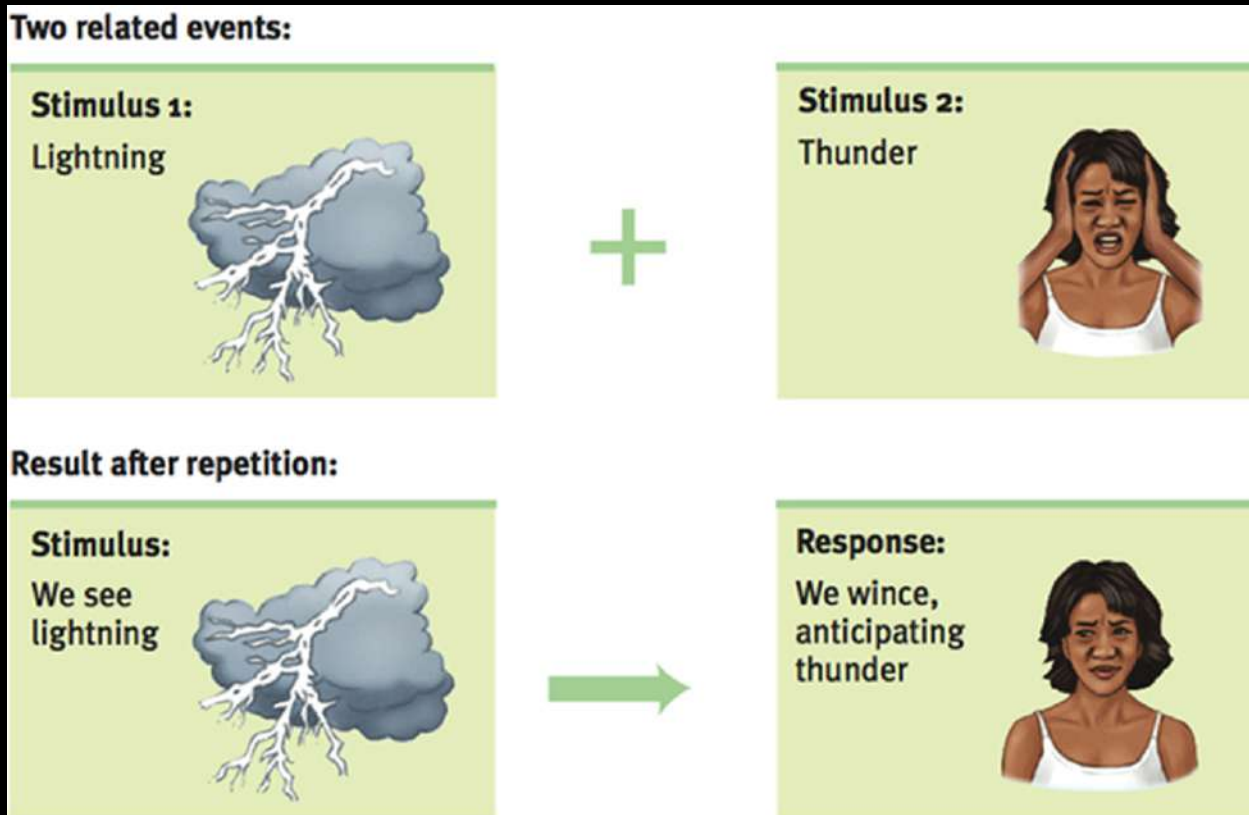
How do we learn?

- Learning
 - A permanent change in behavior because of experience
 - EX: I won't open my eyes under water anymore because it makes them sting
- Habituation
 - Becoming less responsive to something because you are always around it
 - EX: less excited about a movie because you've seen it 10 times
- Associative Learning
 - Learning that things occur together
 - Classical
 - Operant
 - Observational



Brief Intro to Classical

- Linking two or more stimuli and anticipate response



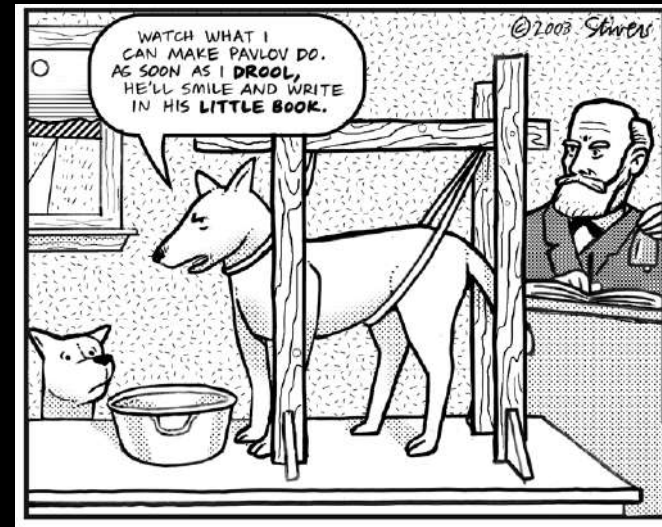
Brief intro to Operant

- Type of learning where behavior is strengthened or diminished with a reinforce or punishment



Classical Conditioning

- **Classical Conditioning**
 - EX: salivating at a food commercial
- **Ivan Pavlov**
 - Pavlov's dog = salivating dog experiment
- **John B. Watson**
 - Little Albert case study
- **Behaviorism**
 - Both Pavlov & Watson are considered behaviorists
 - Looks at psychology strictly from a behavior perspective, no reference to mental process



Parts of Classical Conditioning

- **Unconditioned Stimulus (US)**
 - Something that provokes you naturally, triggers something
 - EX: food, loud noise, kiss
- **Unconditioned Response (UR)**
 - Natural/automatic response to a stimulus; the reaction
 - EX: salivating, jumping, arousal
- **Conditioned Stimulus (CS)**
 - Learned/trained stimulus that provokes a response
 - Usually happens are repeated pairing
 - EX: bell, specific smell
- **Conditional Response (CR)**
 - Learned/trained response to something that was once neutral but now provokes a reaction
 - EX: salivating, jumping, arousal, a feeling
- **Neutral Stimulus (N usually becomes to the CS)**
 - A thing that would otherwise provoke no response

Pavlov's Experiment



An unconditioned stimulus (US) produces an unconditioned response (UR).

BEFORE CONDITIONING

US (food
in mouth)



UR
(salivation)



Neutral stimulus
(tone)

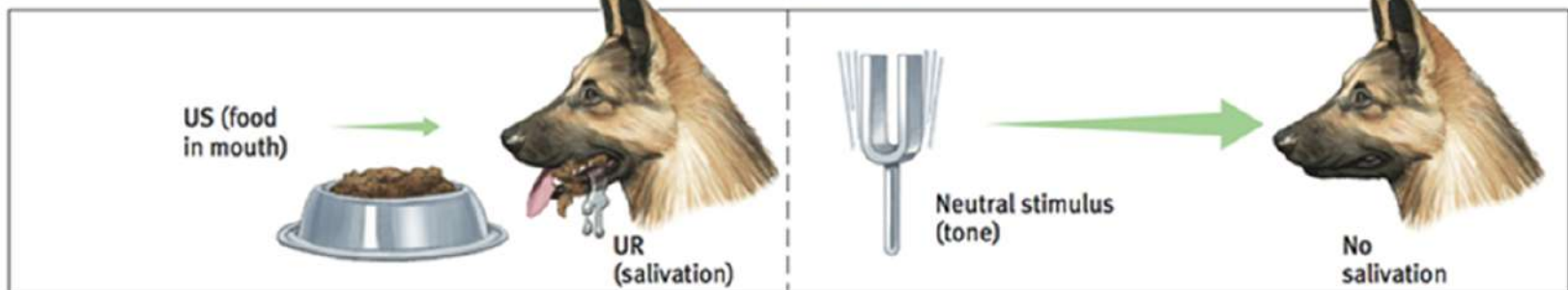


No
salivation

An unconditioned stimulus (US) produces an unconditioned response (UR).

A neutral stimulus produces no salivation response.

BEFORE CONDITIONING



An unconditioned stimulus (US) produces an unconditioned response (UR).

A neutral stimulus produces no salivation response.

DURING CONDITIONING



The unconditioned stimulus is repeatedly presented just after the neutral stimulus.
The unconditioned stimulus continues to produce an unconditioned response.

BEFORE CONDITIONING

US (food
in mouth)



UR
(salivation)



Neutral stimulus
(tone)



No
salivation

An unconditioned stimulus (US) produces an unconditioned response (UR).

A neutral stimulus produces no salivation response.

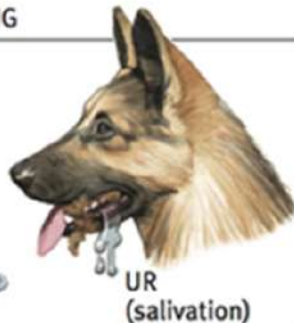
DURING CONDITIONING



Neutral
stimulus
(tone)

+

US (food
in mouth)



UR
(salivation)

The unconditioned stimulus is repeatedly presented just after the neutral stimulus.
The unconditioned stimulus continues to produce an unconditioned response.

AFTER CONDITIONING



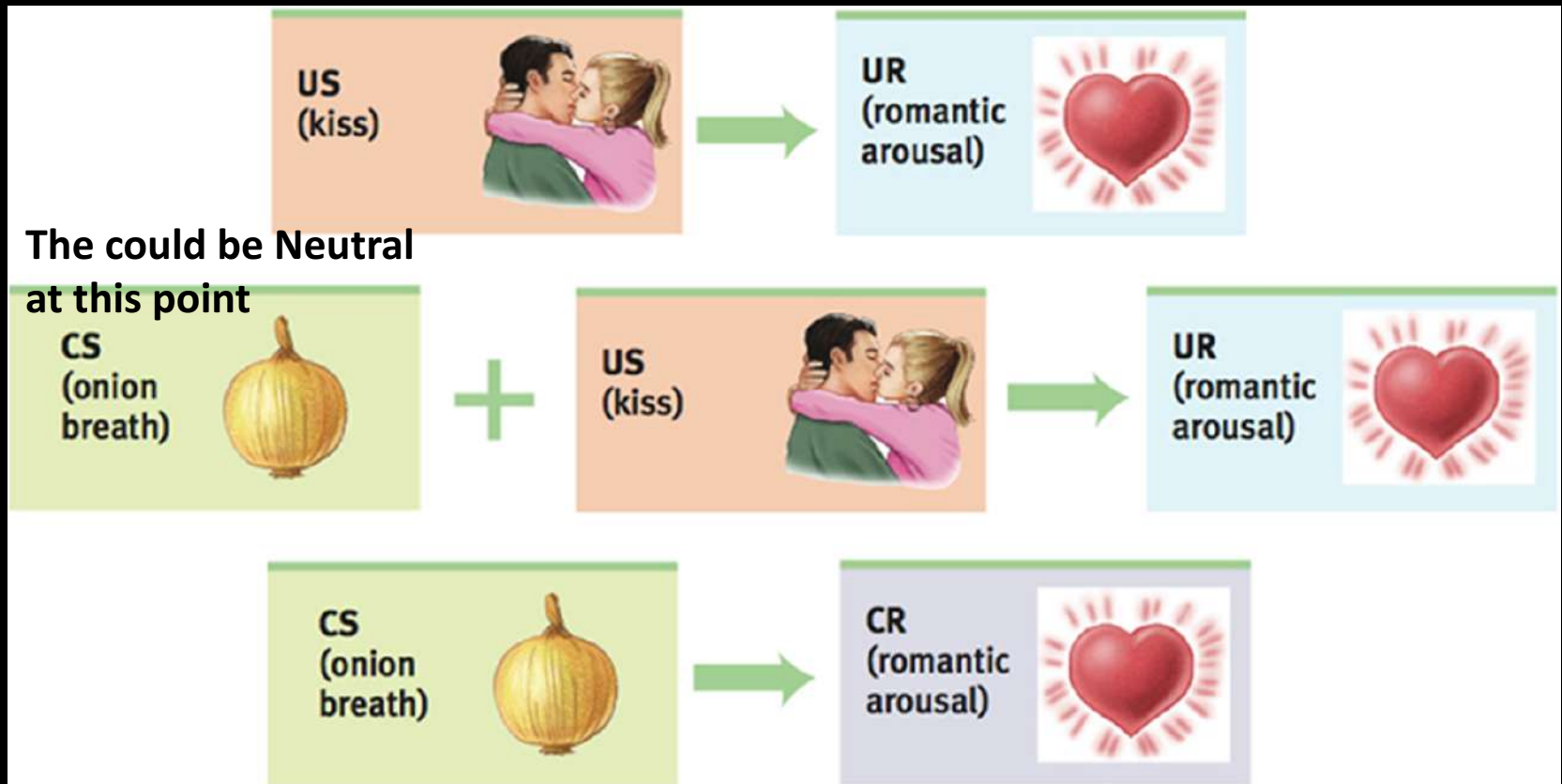
CS
(tone)



CR
(salivation)

The neutral stimulus alone now produces a conditioned response (CR), thereby becoming a conditioned stimulus (CS).

Example



- **Extinction**

- Pairing stops and CR fades away

- **Spontaneous Recovery**

- Out of nowhere the CR returns

- **Generalization**

- To generalize a stimulus so now similar stimulus trigger CR

- **Discrimination**

- CR only triggered by something very specific rather than something similar

