

# Learning and Memory

Unit Introduction



# Opening Brainstorm

In partners, brainstorm the following and write them in your notes.

- What are all the different ways that you learn? List at least 5 different ways that you learn things.
- What do you think are the most permanent/lasting types of learning? Why?

# Three Types of Learning

- Classical Conditioning
- Operant Conditioning
- Learning by Observation

# Learning by Association

How do you know something bad is about to happen in a horror movie?

Example

Comedy Clip



# Learning by Association

What is your reaction to the smell of freshly baked cinnamon rolls?

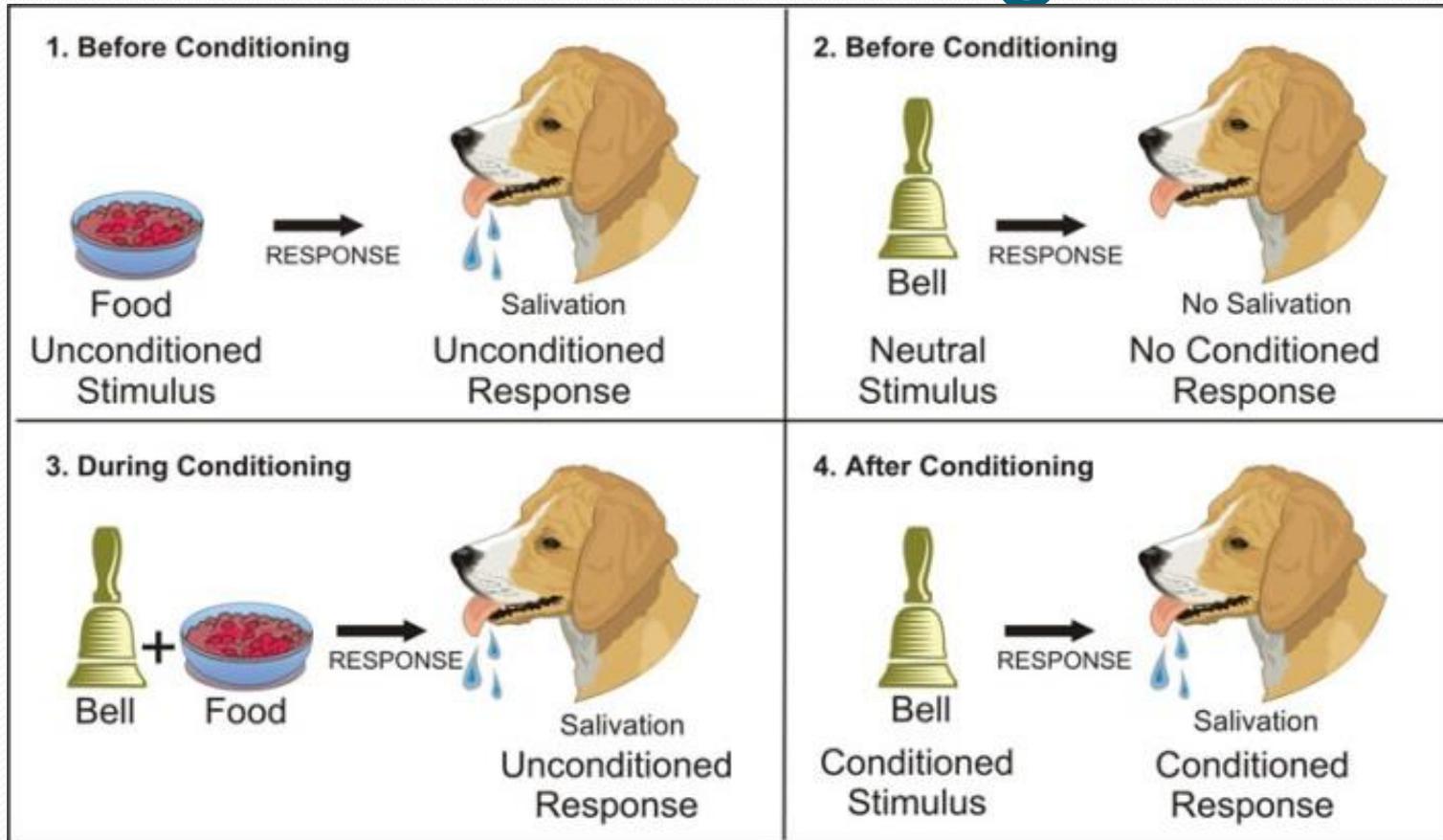


# Learning by Association

What does this picture make you feel?



# Classical Conditioning: Pavlov



**Classical Conditioning**

# Classical Conditioning: Apply



By throwing binder clips at his head when she says the word, Lori conditions Will to duck and shriek every time she says “focus!”

What is the...

1. Unconditioned stimulus
2. Unconditioned response
3. Conditioned stimulus
4. Conditioned response

# Classical Conditioning: Little Albert

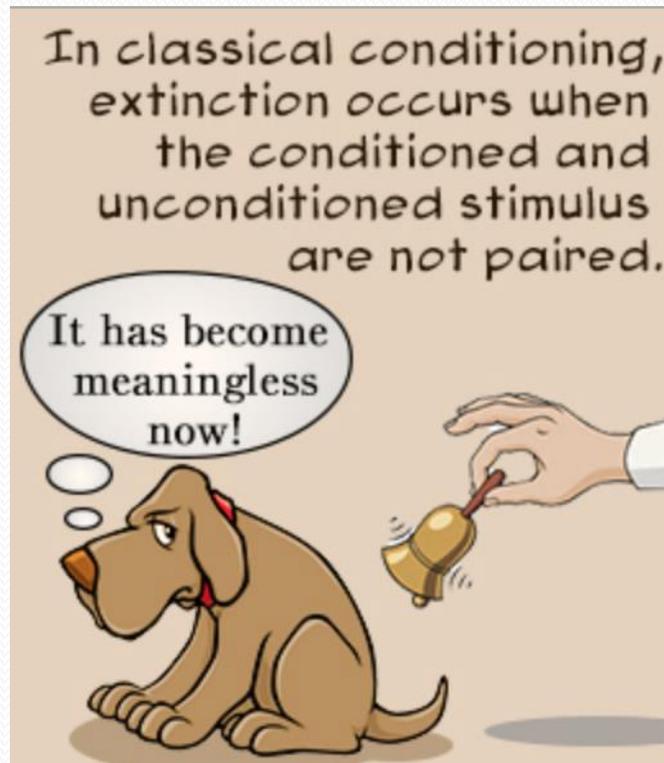
## Little Albert Experiment

As you watch this, take notes on the following:

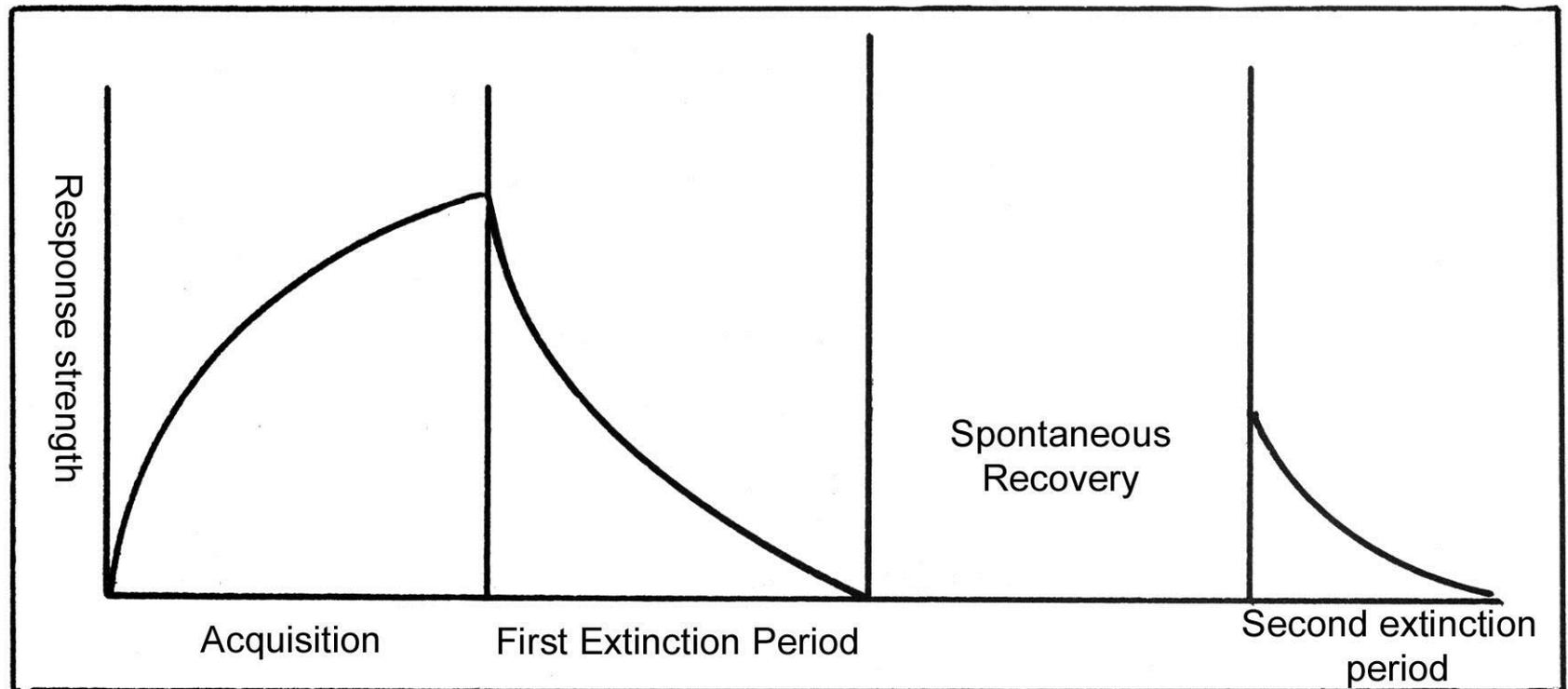
- What is the Unconditioned Stimulus? (US)
- What is the Unconditioned Response? (UR)
- What is the Conditioned Stimulus? (CS)
- What is the Conditioned Response? (CR)
- What ethical issues are there with this experiment?

# Classical Conditioning: Extinction

What happens if the tone rings, but there's no food? Do the dogs unlearn the conditioning?



# Classical Conditioning: Extinction



# Classical Conditioning: Biology

- Biologically prepared to learn some associations rather than others. (Garcia)
- EX: Get violently ill after eating mussels. Would you then have an aversion to:
  - The music playing in the restaurant?
  - The person you were dining with?
  - Eating mussels?
  - The sight of the restaurant?

# Classical Conditioning: Biology

Which woman is more attractive? (Elliot and Niesta, 2008)



# Ultimate Lesson

- Natural selection favors traits that aid survival
- We learn from three things:

