# 9-1 CLASSICAL CONDITIONING

Chapter 9: Learning

#### Learning

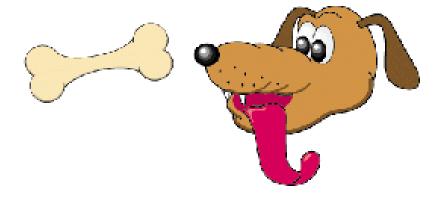
 Relatively permanent change in behaviour due to experience.

- □ Ivan Pavlov
- An old response becomes attached to a new stimulus.
- Can a neutral stimulus cause a desired response?

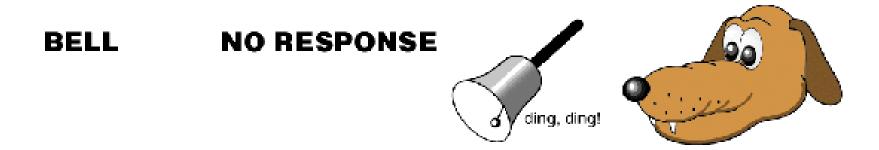
- Neutral stimulus = causes no particular response.
- Unconditioned stimulus = leads to a predictable behaviour
- Unconditioned response = natural reaction or reflex
- Conditioned stimulus = previously neutral event,
   after training leads to a response
- Conditioned response = learned reaction to a conditioned stimulus.

Before conditioning

FOOD (UCS) SALIVATION (UCR)



Before conditioning, the dog will salivate at the sight of a treat.



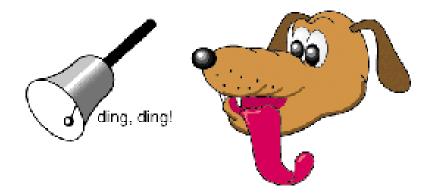
Before conditioning, the dog will not respond in any way to the bell.

During conditioning
BELL + SALIVATION
(UCS) (UCR)

During conditioning the bell is sounded and then the treat is presented.

After conditioning

BELL (CS) SALIVATION (CR)



After conditioning, the previously neutral stimulus causes the dog to salivate.

The bell is now the conditioned stimulus and the salivation the conditioned response.

- Generalization
  - Respond to a second stimulus similar to the original conditioned stimulus.
- Discrimination
  - The ability to respond differently to different stimuli
- Extinction
  - Loss of the conditioned response because the conditioned stimulus is not paired with the unconditioned stimulus anymore
- Spontaneous Recovery
  - Quick recovery of the conditioned response when the conditioned stimulus is again paired with the unconditioned stimulus

- Criticism
  - How is morality learned?
  - How is critical thinking learned?
  - Does not consider choice
  - Does not consider resiliency
  - For only basic behaviours

## **Examples of Classical Conditioning**

- Pavlov and his pups
  - http://www.youtube.com/watch?v=CpoLxEN54ho
- Classical Conditioning in the Real World
  - http://www.youtube.com/watch?feature=endscreen&N
    R=1&v=ypCSoVhAyhI
- Jim conditions Dwight
  - http://www.youtube.com/watch?v=WfZfMIHwSkU