

# Classical conditioning

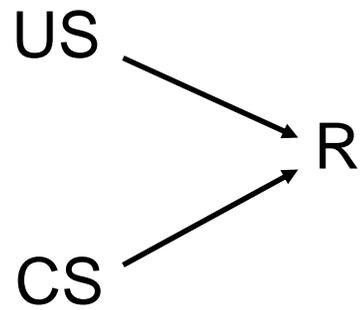
# Pavlov's experiment

- Measure salivation of dog.
- Meat triggers salivation.
- Training: Repeated presentations
  - Sound of bell
  - Meat
- Testing: Bell alone triggers salivation.

# Terminology

- Unconditioned stimulus (US)
  - Meat
- Unconditioned response (UR)
  - Salivation in response to meat
- Conditioned stimulus (CS)
  - Bell
- Conditioned response (CR)
  - Salivation in response to bell

# Hebb model



# Multiple stimuli

- repeat: CS1+CS2, US
- test with CS1
- test with CS2

# Blocking

- repeat: CS1, US
- test with CS1
- repeat: CS1 + CS2, US
- test with CS2

# Rescorla-Wagner

- Error-driven learning
- Conditioned stimuli are inputs to a linear perceptron
- Classical conditioning proceeds through training the weights.