

Lecture Preview

- Classical conditioning
- **Operant conditioning**
- Cognitive models
- Biological influences
- Learning fads

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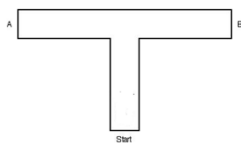
Why these are not examples of class conditioning

- Using fish a treat, a trainer teaches a dolphin to jump out of water, spin three times, splash in the water, and propel itself through a hoop.
- In his initial attempt to play tennis, a frustrated 12-year-old hits his opponent's serve into the net first 15 times. After two hours of practice, he returns his opponent's serve successfully more than half the time.

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Why this is not an example of classical conditioning

- A worm is placed in a T-maze. The left arm of the maze is brightly lit and dry; the right arm is dim and moist. On the first 10 trials, the worm turns right 7 times. On the next 10 trials, the worm turns right all 10 times.



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Operant Conditioning

- Learning controlled by the consequences of the organism's behavior
- The organism gets something because of its response
- The organism's behavior is shaped by what comes after it, that is reward.

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Operant / Instrumental Conditioning

- Operant conditioning
 - Organism operates on its environment
 - Behaviors are operants
- Instrumental conditioning
 - Response has an instrumental function
 - Organism gets reward out of response

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	CLASSICAL CONDITIONING	OPERANT CONDITIONING
Target behavior is...	Elicited automatically	Emitted voluntarily
Reward is...	Provided unconditionally	Contingent on behavior
Behavior depends primarily on...	Autonomic nervous system	Skeletal muscles

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The Law of Effect

- *“If a response, in the presence of a stimulus, is followed by a satisfying state of affairs, the bond between stimulus and response will be strengthened.”*
- If we’re rewarded for a response to a stimulus, we’re more like to repeat that response to the stimulus in the future
- Learning involves an association between a stimulus and response (S-R), with the reward stamping in this connection

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The Law of Effect

- S-R Theorists (behaviorists) claim that everything we do voluntarily results from the gradual buildup of S-R bounds due to the law of effect
 - Eating a sandwich
 - Driving a car
 - You give examples

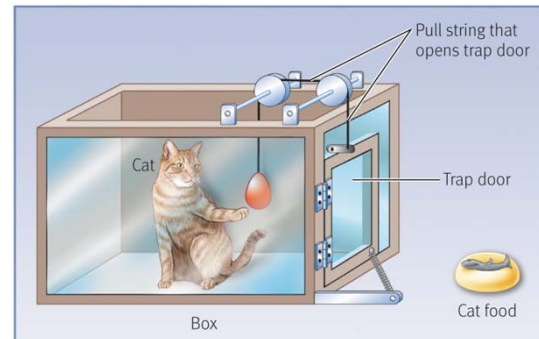
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E.L. Thorndike

- Discovered principles of the law of effect after experimenting with cats in puzzle boxes
- Found no **insight** in cats



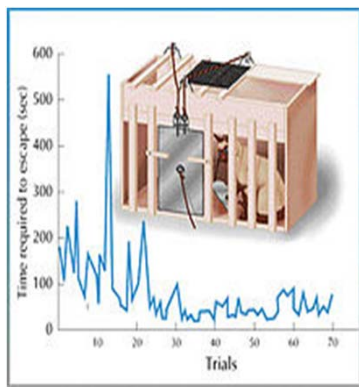
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Found no insight in cats

If cats has insight how this function would be?



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B.F. Skinner

- Followed up on Watson and Thorndike’s work on behavior
- Designed the **Skinner box** to more effectively record activity
 - Why it is difficult to study with escape box?



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