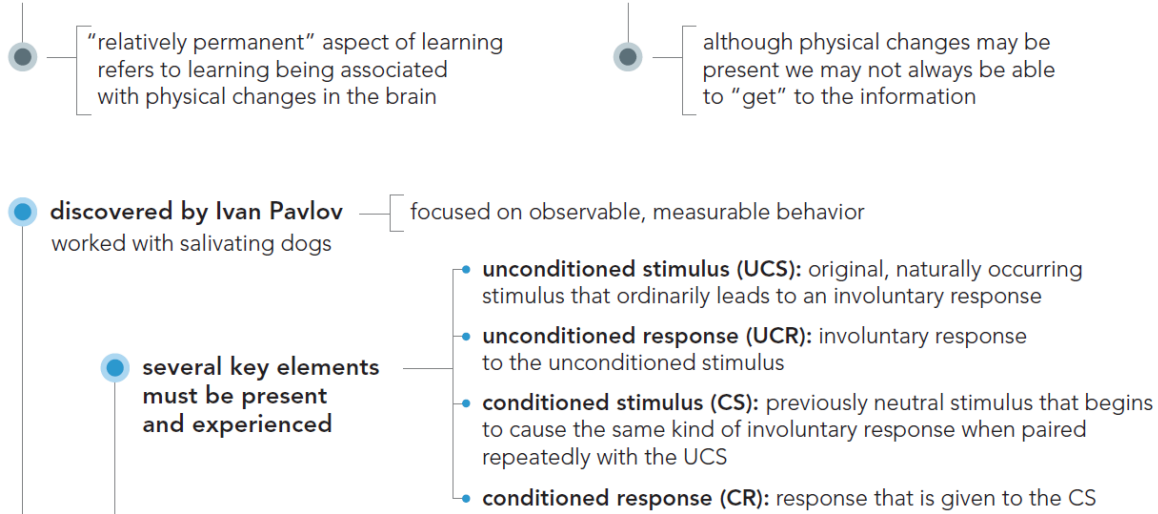


# Learning

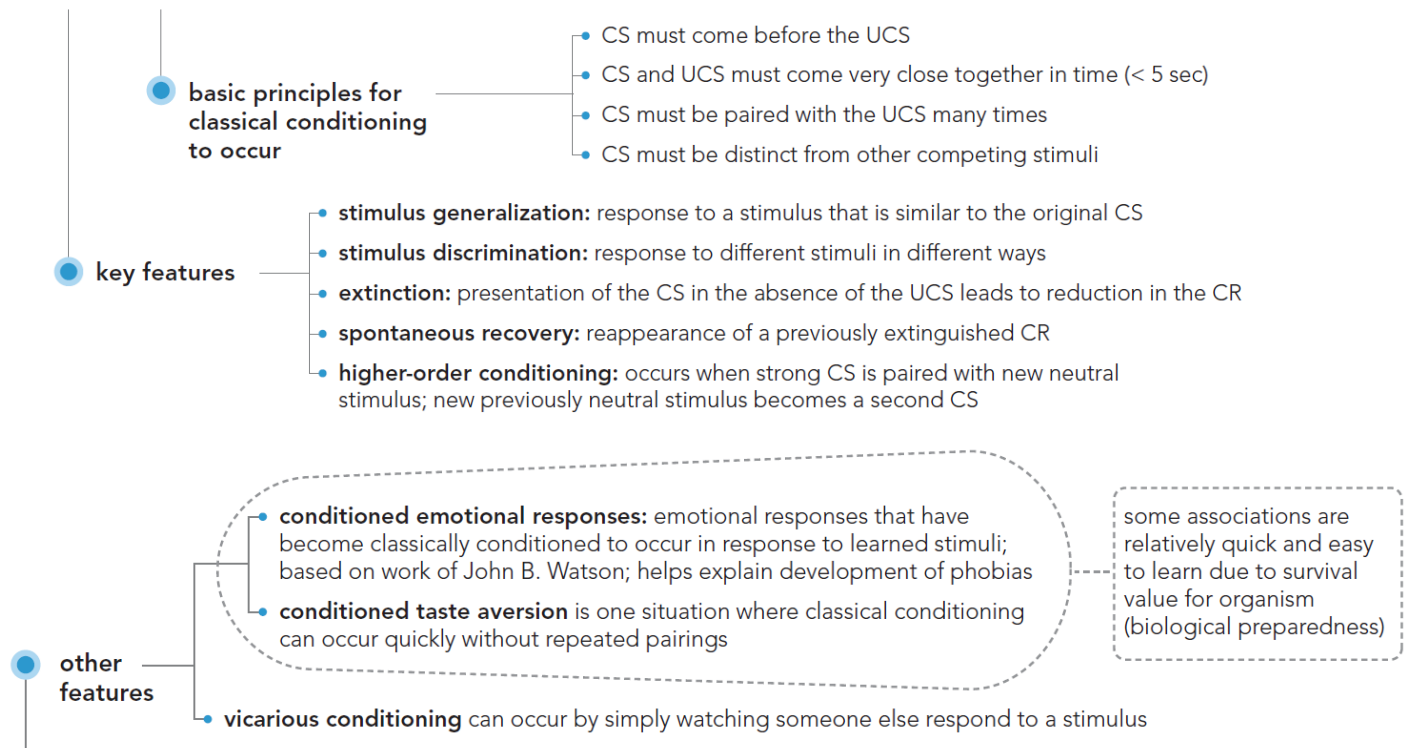
## Definition of Learning

(any relatively permanent change in behavior brought about by experience or practice)



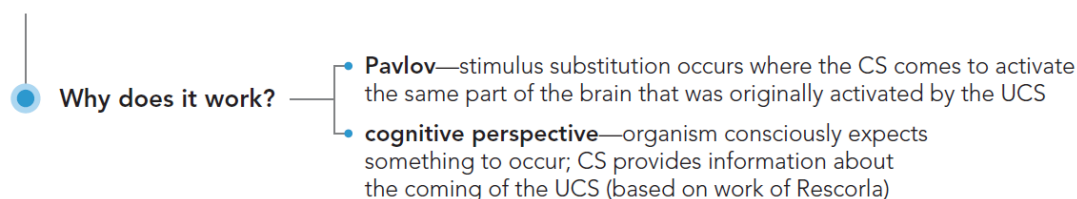
## Classical Conditioning

(learning to make an involuntary response to a stimulus other than the original, natural stimulus that normally produces it)

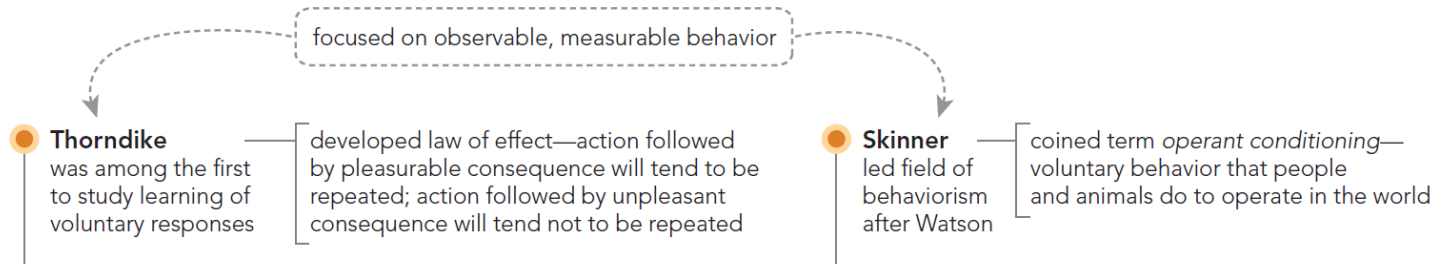


## Classical Conditioning (continued)

(learning to make an involuntary response to a stimulus other than the original, natural stimulus that normally produces it)

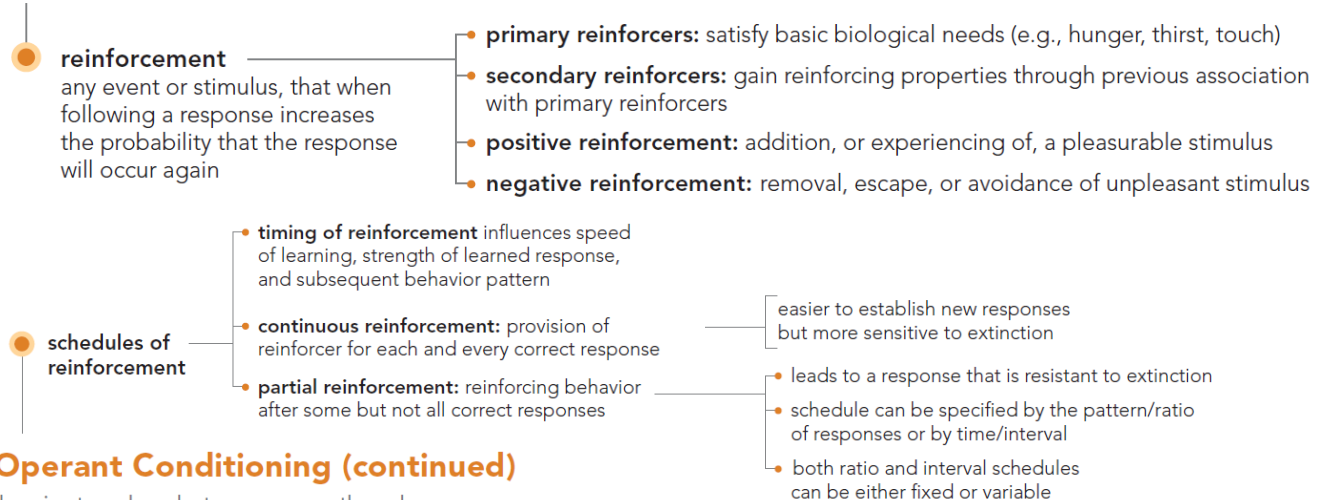


# Learning



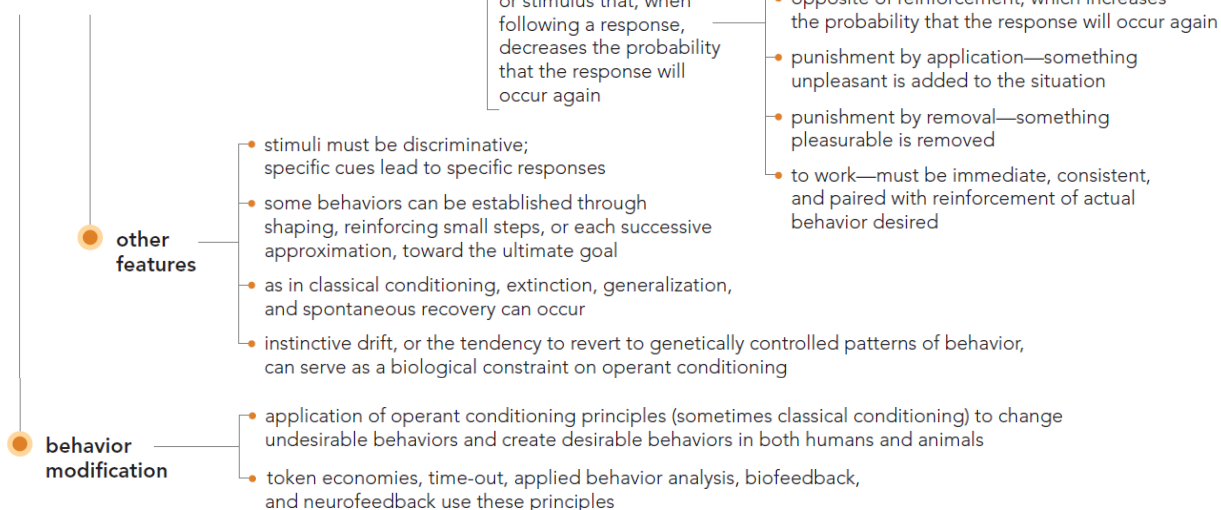
## Operant Conditioning

(learning to make voluntary responses through the effects of positive or negative consequences)



## Operant Conditioning (continued)

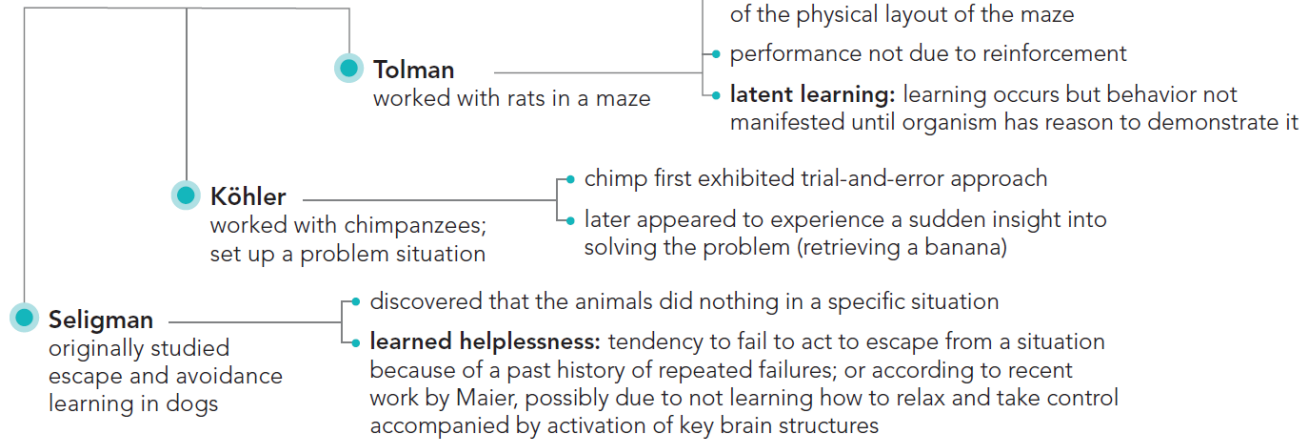
(learning to make voluntary responses through the effects of positive or negative consequences)



# Learning

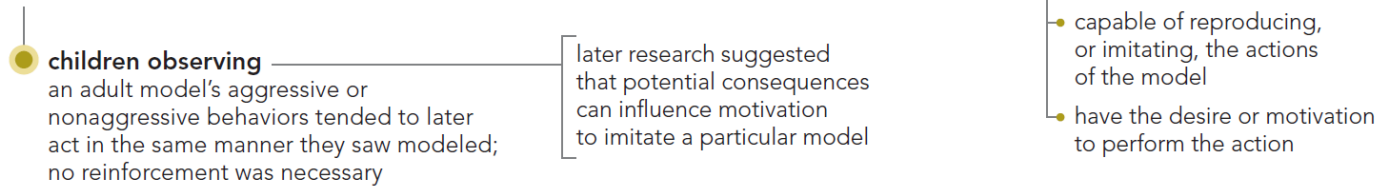
## Cognitive Learning Theory

(focuses on role of cognition, or thought processes, on learning)



## Observational Learning

(the learning of a new behavior through the observation of a model; typically associated with classic work of Bandura and "Bobo doll" study)





# 5 learning

5.1

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## Definition of Learning

(any relatively permanent change in behavior brought about by experience or practice)

“relatively permanent” aspect of learning refers to learning being associated with physical changes in the brain

although physical changes may be present we may not always be able to “get” to the information

5.3

p. 179

conditioned emotional responses

conditioned taste aversion

vicarious conditioning

other features



## Classical Conditioning (continued)

(learning to make an involuntary response to a stimulus other than the original, natural stimulus that normally produces it)

Why does it work?

- Pavlov
- cognitive perspective

5.2

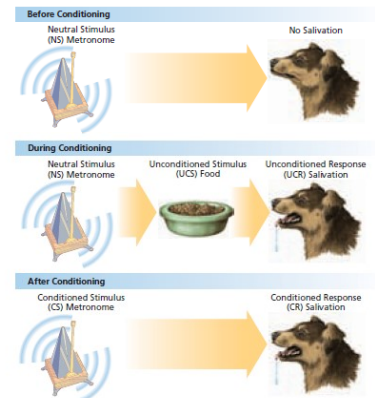
p. 176

discovered by Ivan Pavlov  
worked with salivating dogs

focused on observable, measurable behavior

several key elements must be present and experienced

- unconditioned stimulus (UCS)
- unconditioned response (UCR)
- conditioned stimulus (CS)
- conditioned response (CR)



## Classical Conditioning

(learning to make an involuntary response to a stimulus other than the original, natural stimulus that normally produces it)

basic principles for classical conditioning to occur

- CS must come before the UCS
- CS and UCS must come very close together in time (< 5 sec)
- CS must be paired with the UCS many times
- CS must be distinct from other competing stimuli

key features

- stimulus generalization
- stimulus discrimination
- extinction
- spontaneous recovery
- higher-order conditioning

5.4

5.5

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Thorndike

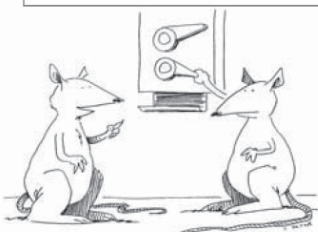
was among the first to study learning of voluntary responses

developed law of effect

Skinner

led field of behaviorism after Watson

coined term operant conditioning



## Operant Conditioning

(learning to make voluntary responses through the effects of positive or negative consequences)

reinforcement

any event or stimulus, that when following a response increases the probability that the response will occur again

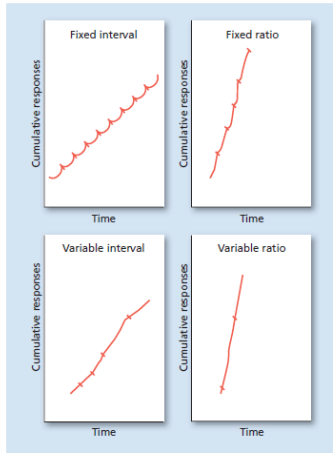
- primary reinforcers
- secondary reinforcers
- positive reinforcement
- negative reinforcement



## Operant Conditioning (continued)

(learning to make voluntary responses through the effects of positive or negative consequences)

**punishment** is any event or stimulus that, when following a response, decreases the probability that the response will occur again



**schedules of reinforcement**

- timing of reinforcement
- continuous reinforcement
- partial reinforcement

Table 5.2

Four Ways to Modify Behavior

	REINFORCEMENT	PUNISHMENT
Positive (Adding)	Something valued or desirable	Something unpleasant
	Positive Reinforcement Example: getting a gold star for good behavior in school	Punishment by Application Example: getting a spanking for disobeying
Negative (Removing/Avoiding)	Something unpleasant	Something valued or desirable
	Negative Reinforcement Example: avoiding a ticket by stopping at a red light	Punishment by Removal Example: losing a privilege such as going out with friends

**other features**

**behavior modification**

## Cognitive Learning Theory

(focuses on role of cognition, or thought processes, on learning)

**Tolman**

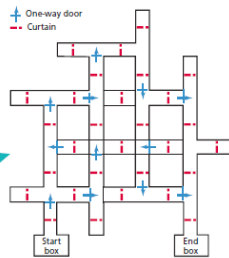
worked with rats in a maze

**Köhler**

worked with chimpanzees; set up a problem situation

**Seligman**

originally studied escape and avoidance learning in dogs



"Bathroom? Sure, it's just down the hall to the left, jog right, left, another left, straight past two more lefts, then right, and it's at the end of the third corridor on your right."



## Observational Learning

(the learning of a new behavior through the observation of a model; typically associated with classic work of Bandura and "Bobo doll" study)

**key elements for learner**

- pay attention to the model
- able to remember what was done
- capable of reproducing, or imitating, the actions of the model
- have the desire or motivation to perform the action

**children observing**

an adult model's aggressive or nonaggressive behaviors tended to later act in the same manner they saw modeled; no reinforcement was necessary

later research suggested that potential consequences can influence motivation to imitate a particular model

