

Paradigm	Decade	Theory	Key concepts
(Connectionism) <sup>1)</sup>	1880 - 1900	<b>Connectionism</b> (Thorndike)	- learning is incremental strengthening of the S-R <sup>2)</sup> association
			- <b>S-R associations</b> are strengthened through <b>repetition</b>
			- outcome of a S-R event can strengthen or weaken the connection
			- potential to learn leads to frustration if not satisfied
Behaviorism	1900 - 1910	<b>Classical conditioning</b> (Pavlov)	- learning is a <b>visible change</b> in one's behavior
			- learning is manifested in a <b>natural reflex</b> reaction on an associated environmental stimulus
	1910 - 1920		- emotional response can also be learned or conditioned
	1920 - 1930	<b>Contiguity theory</b> (Guthrie)	- behavior is formed by a <b>series of movements</b> which are learned through S-R associations
			- a close <b>temporal relationship</b> between S and R is necessary for learning to occur
			- learning occurs on <b>first experienced instance</b> of the stimulus
			- reinforcements (reward or punishment) do not influence the strength of this connection

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Neo-behaviorism	1930 - 1940	<b>Sign learning</b> (Tolman)	- suggests studying behavior on the molar level (whole, purposeful, goal-directed behaviors)	
			- learning is acquisition of knowledge through <b>meaningful behavior</b> , not mechanical moves	
			- rewards or punishments can only be used as motivators for performance, not learning	
			- animals are not simple mechanisms, but intelligent organisms capable of <b>cognitive processes</b>	
	1940 - 1950	<b>Drive reduction theory</b> (Hull)	- <b>mathematical formulas</b> attempting to explain behavior and the likelihood of its appearance	
			- <b>drive</b> (a stimulus in form of a biological need) results in behavior in order to <b>satisfy</b> it	
			- reinforced S-R learning through the reduction of a biological drive	
			- <b>cognitive factors</b> need to be taken into account when explaining human learning	
	1940 - 1950			
	1950 - 1960	<b>Operant conditioning</b> (Skinner)	- <b>reinforced learning of new behaviors</b> , not just shaping reflexes	
- different reinforcement intervals have different effect				
- complex behaviors are learned through more simple ones				
<b>Stimulus sampling theory</b> (Estes)		- a <b>statistical learning theory</b> ; set of formulas and axioms		
		- S-R association is learned in a <b>single trial</b> ; learning results in accumulated S-R associations		
		- reinforcement has to do with the performance, not with learning		
		- later included <b>memory</b> as a factor in his theory		

1)  
Connectionism is not considered a learning paradigm, but is mentioned due to its influence on behaviorist ideas

2)  
stimulus-response

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Last update: 2023/06/19 15:49

