

| Paradigm | Decade ¹⁾ | Theory | Key concepts |
|-------------------------------|----------------------|---|--|
| (Connectionism) ²⁾ | 1880 - 1900 | Connectionism (Thorndike) | - learning is incremental strengthening of the S-R ³⁾ association |
| | | | - S-R associations are strengthened through repetition |
| | | | - outcome of a S-R event can strengthen or weaken the connection |
| | | | - potential to learn leads to frustration if not satisfied |
| Behaviorism | 1900 - 1910 | Classical conditioning (Pavlov) | - learning is a visible change in one's behavior |
| | | | - learning is manifested in a natural reflex reaction on an associated environmental stimulus |
| | | | - emotional response can also be learned or conditioned |
| | 1910 - 1920 | | |
| | 1920 - 1930 | Contiguity theory (Guthrie) | - behavior is formed by a series of movements which are learned through S-R associations |
| | | | - a close temporal relationship between S and R is necessary for learning to occur |
| | | | - learning occurs on first experienced instance of the stimulus |
| | | | - reinforcements (reward or punishment) do not influence the strength of this connection |

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

1)

Decade in which the theory was introduced

2)

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

3)

Stimulus-Response

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Last update: 2023/06/19 15:49

