

ENG122A Group Assignment

BEHAVIOURIST THEORY OF LANGUAGE ACQUISITION

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OVERVIEW

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2. Basic Tenets of Behaviourist Theory of Language Acquisition
3. History of Behaviourism
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A PEEK INTO BEHAVIOURISM

- ❖ Behavioural psychology, popularly called **behaviourism** is basically a theory of learning.
- ❖ A basic assumption of this theory is that behaviour is solely learned via interaction with the environment.
 - This has been proposed to happen in two ways-
 - 1) Classical conditioning
 - 2) Operant conditioning
- ❖ It takes into account observable behaviour rather than internal events like emotion and thinking. This is because only observable behaviour can be measured.
- ❖ There is no fundamental difference between learning that takes place in humans and animals.
- ❖ Any behaviour can be reduced to a stimulus-response association.

BASIC TENETS OF THE BEHAVIOURIST THEORY OF LANGUAGE ACQUISITION

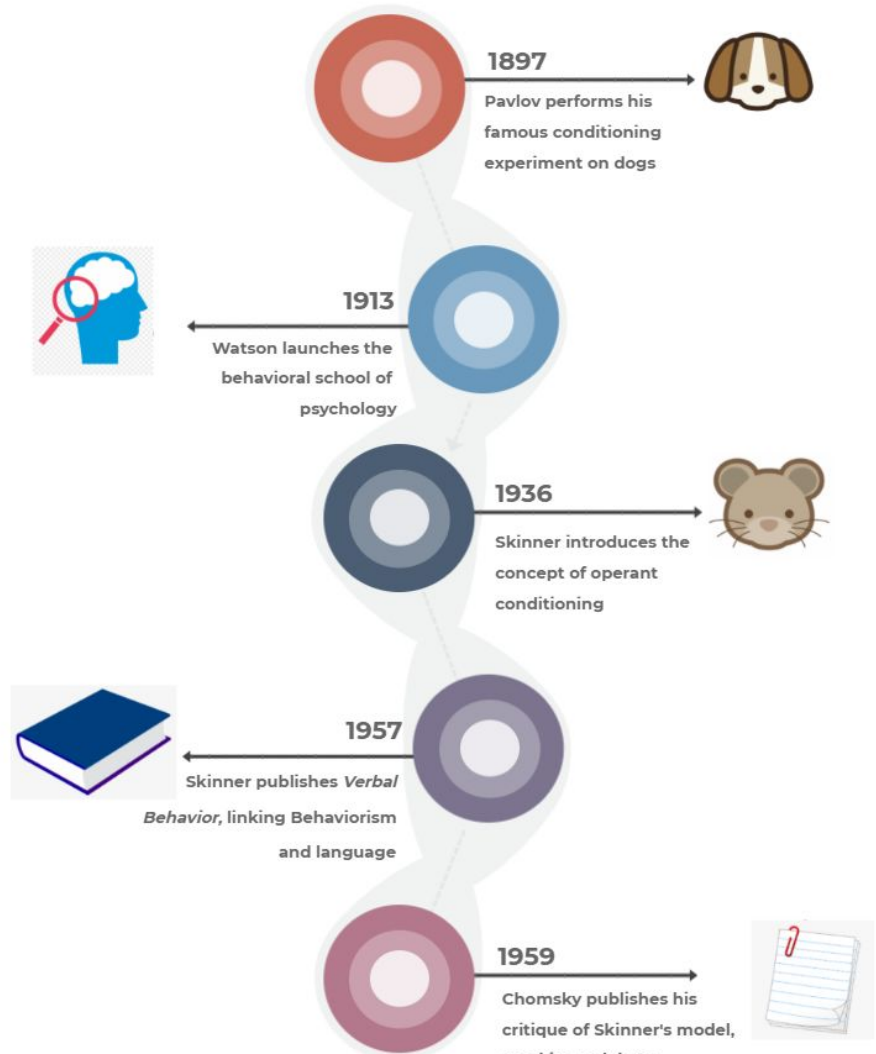
- Mainly applicable to native language acquisition
- 1. Language is primarily what is spoken and secondarily, what is written.
- 2. Language learning is a mechanical process leading learners to habit formation.
- 3. Conditioning and building from the simplest conditioned responses to more complex behaviours
- 4. All learning is the establishment of habits as the result of reinforcement and reward

A BRIEF HISTORY OF BEHAVIORISM

Behaviorism as a psychological theory emerged during the early 20th century. The experiments carried out by Ivan Pavlov (in 1897), and Edward Thorndike's formulation of the Law of Effect (in 1898) pioneered early research work in the field.

John B. Watson laid out the basics of Behaviorism as a scientific field, while B. F. Skinner carried the work forward by introducing his philosophy of Radical Behaviorism.

BEHAVIORISM: A HISTORICAL TIMELINE



PIONEERS OF BEHAVIOURISM

John Broadus Watson

John B. Watson is best known for codifying and publicizing Behaviorism as a scientific theory and field during the 1910s and 1920s. His contributions made Behaviorism the dominant psychological area of study during the first half of the 20th century and invited considerable scientific research into the field.



PIONEERS OF BEHAVIOURISM

Burrhus Frederic Skinner

B. F. Skinner helped develop behavior analysis further by introducing a new branch known as Radical Behaviorism.

Skinner was also responsible for applying the psychological theory of Behaviorism to language acquisition. In his book *Verbal Behavior* (1957), Skinner argued that “infants learn language through operant conditioning.”

Skinner's theory of language acquisition invited heavy criticism from Noam Chomsky, who published his influential paper *Review of Verbal Behavior* (1959), sparking a never-ending debate in the field of linguistics.



EXPERIMENTS IN BEHAVIOURIST ACQUISITION

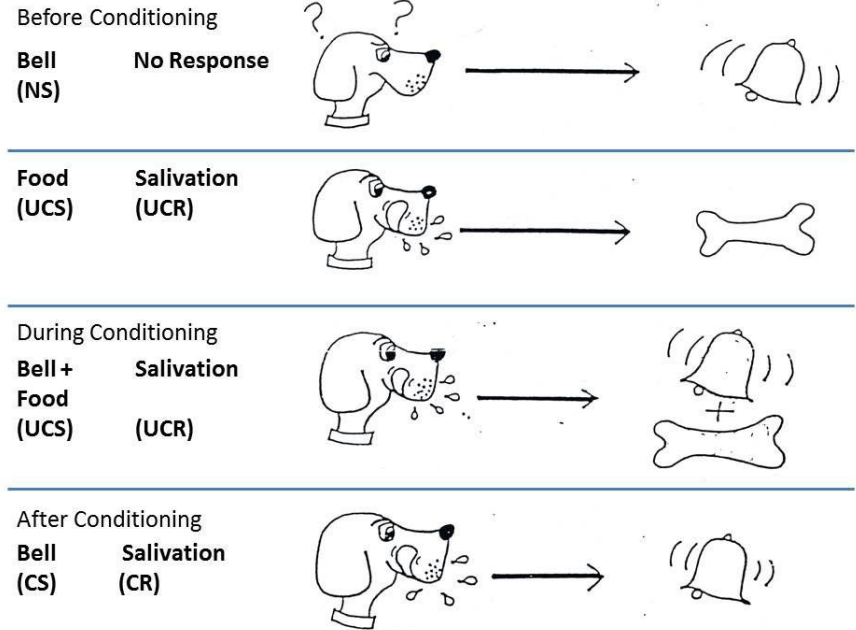
Behaviorists have tried to explain learning without referring to mental processes by focusing on observable behaviour and how an organism adapts to its environment.

The famous experiment by Ivan Petrovich Pavlov with dogs and later experiments by BF Skinner are examples of behavioristic learning experiments. Despite these very "low-level" learning experiments focusing largely on reflexes, the behaviouristic theories have been generalized to many higher level functions as well.

PAVLOV'S EXPERIMENT

Classical Conditioning

The process of *reflex learning* through which an unconditioned stimulus which produces an unconditioned response is presented together with a conditioned stimulus such that the response is eventually produced with the presentation of the conditioned stimulus alone.



SKINNER'S OPERANT CONDITIONING

Operant Conditioning is a type of associative learning which acts as a feedback system wherein responses to stimuli are reinforced and there is a contingency between the response and the presentation of the reinforcement/reinforcer.

Behaviour is guided through -

- Positive Reinforcement
- Negative Reinforcement
- Positive Punishment
- Negative Punishment



BROWN'S EXPERIMENT ON SYNTAX REINFORCEMENT

Roger Brown studied 3 processes -

CONCLUSIONS

1. Imitation with reduction
Children tend to imitate adults' immediate utterances.
2. Imitation with expansion
Adults offer an appropriate model of the child's utterance
3. Induction of the latent structure
Errors in children's utterances such as 'I digged a hole' point to a latent structure of language.

- Reinforcement seldom occurs, and when it does, it is to correct factual or pronunciation errors.
- Hence, it is the *truth value* rather than the syntactic well-formedness that governs reinforcement.
- Even if syntactic corrections were more frequent, they would not explain how or what children learn from adult responses, or how children construct the correct rules.

COUNTER ARGUMENTS ON BEHAVIOURIST THEORY

- ❖ The theory cannot explain acquisition of very complex Learning Processes.
- ❖ This theory is only applicable to humans in their early childhood periods.
- ❖ Different individuals show different learning abilities under the same environment.
- ❖ Not physically possible for every piece of language spoken by a child to be reinforced by an adult.
- ❖ It does not seem to matter what is being said, just how it is being said.

SUMMARY/CONCLUSION

- ❖ The behaviourist theory is extensively supported by experiments.
- ❖ This theory has identified comparisons between humans and animals
- ❖ In language acquisition each word acts as a stimulus for the next, which ultimately leads to formation of meaningful sentences.
- ❖ Environment has active role in language acquisition, learner is secondary to the process.

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