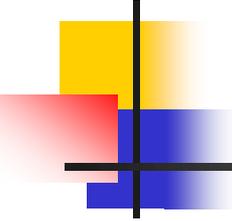


# Learning

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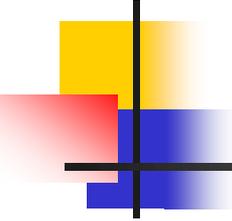
## Definition and Nature of Learning



# Learning

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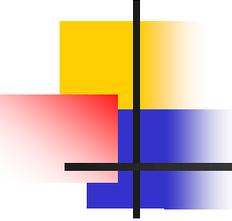
- Learning can be defined as any relatively permanent change in behaviour that occurs as a result of practice or experience.



# Learning

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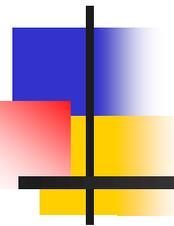
- Some behavioural changes occur due the use of drugs or fatigue. Such changes are temporary. They are not considered learning.



# Learning

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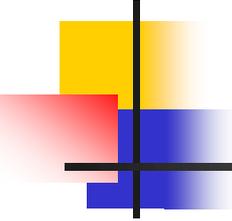
- Thus, there are 3 important elements of learning:
  - Learning is a *change in behaviour*, for better or worse.
  - It is a change that takes place through *practice or experience*.
  - Before it can be called learning, the change must be *relatively permanent*; it must last a fairly long time.



# Learning

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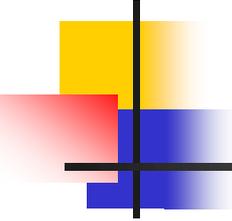
## Theories of Learning



# Theories of Learning

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- Different psychologists have given different theories to explain the process of learning. This proves that we don't learn in a single way.
- In other words, there is no one universal or best way of learning. Learning can occur through different mechanisms.

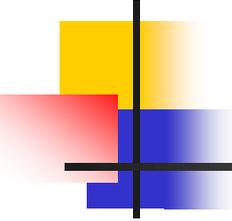


# Theories of Learning

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## ■ **Classical Conditioning**

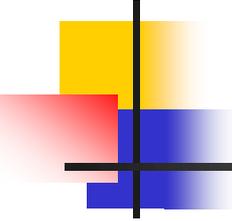
- The classical conditioning theory of learning was given by **Ivan Pavlov**, a Russian physiologist.
- The theory states that learning is an acquired behaviour and **association** is the important mechanism by which we learn.



# Theories of Learning

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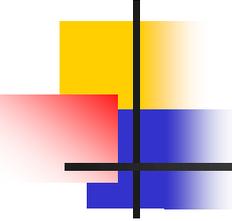
- In classical conditioning, a neutral stimulus (**CS**) regularly precedes an unconditioned stimulus (**US**) that evokes an unconditioned response (**UR**).
- As a result of this pairing, the previously neutral conditioned stimulus now begins to evoke a response.



# Theories of Learning

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- This is what is learned in classical conditioning.
- The response evoked by the conditioned stimulus (CS) after learning is known as conditioned response (CR)



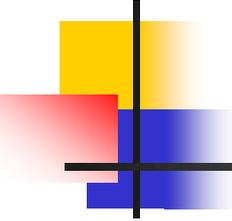
# Theories of Learning

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- CS (Bell) + UCS (Food)  $\longrightarrow$  UR  
(Salivation)

After repeated pairings

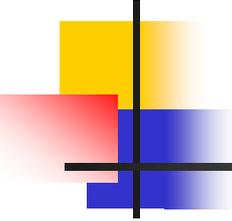
CS  $\longrightarrow$  CR  
(Bell) (Salivation)



# Theories of Learning

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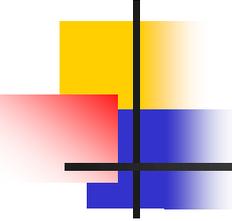
- In classical conditioning, **extinction** occurs when the CS is presented alone without the US for a number of trials.
- When this is done, the strength or magnitude of the CR gradually decreases.



# Theories of Learning

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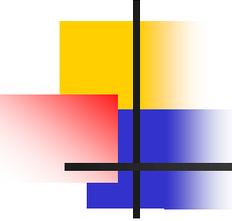
- However, the decrease in the magnitude of conditioned response is not permanent.
- When CS is presented again along with the US, the earlier learnt response emerges again.



# Theories of Learning

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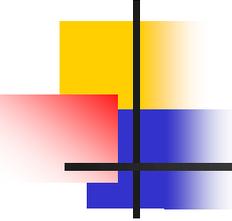
- Such an increase in the magnitude of a conditioned response after a period of time with no explicit training is known as **spontaneous recovery**.



# Theories of Learning

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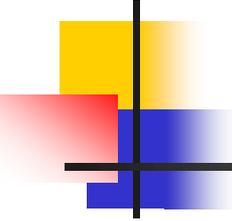
- Thus, extinction does not completely erase conditioning. Extinction is not forgetting.
- This is shown by the fact that *reconditioning* is usually more rapid than was the original conditioning.



# Theories of Learning

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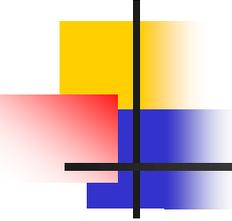
- In classical conditioning, Pavlov also mentioned two important phenomena, namely, stimulus generalization and discrimination.



# Theories of Learning

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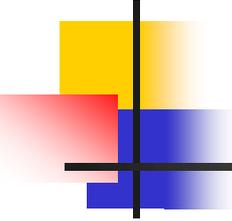
- **Stimulus generalization** is the tendency to give conditioned responses to stimuli that are similar in some way to the conditioned stimulus but have never been paired with the unconditioned stimulus.



# Theories of Learning

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- Studies in this regard brought out the fact that the greater the similarity of these stimuli to the original conditioned stimulus, the greater the amount of generalization.



# Theories of Learning

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- **Discrimination** is the process of learning to make one response to one stimulus and another response – or no response – to another stimulus.