



Classical Conditioning Theory

Theory and it's Educational implications

Conditioning

When behaviour changes systematically in relation to environmental stimuli, behaviourist refer to such learning in terms of conditioning

जब पर्यावरणीय उद्दीपन के परिणाम स्वरूप व्यवहार में क्रमबद्ध परिवर्तन होता है तो ऐसी घटना को मनोवैज्ञानिक अनुबंधन का नाम है

Theories of conditioning.

- **Two theories of conditioning**
- Classical conditioning theory शास्त्रीय अनुबंधन का सिद्धांत
- Operant conditioning theory. क्रिया प्रसूत अनुबंधन का सिद्धांत

Theory of classical conditioning

- Classical conditioning theory
- Developed by *Ivan Pavlov*
- It is also known as **Type S conditioning** theory.
- शास्त्रीय अनुबन्धन का सिद्धांत
- रूसी शरिरशास्त्री *इवान पैवलाव* द्वारा प्रतिपादित
- **टाइप एस अनुबन्धन** भी कहा जाता है

Pavlov theory of learning : *What Is Learning*

- Pavlovian theory conditioning is a learning procedure that involves pairing a stimulus with a conditioned response. In other terms, two stimuli are linked together to produce a new learned response in a person or animal.
- *Conditioning is the process of learning in which an un natural stimulus acquires the power of natural stimulus to elicit any particular response.*
- Through the process of conditioning the learner(human or animal) can be trained to react involuntarily to a stimulus that previously had no impact on them
- अनुबन्धन सीखने की ऐसी प्रक्रिया है जिसमें एक अप्राकृतिक उददीपक प्राकृतिक उददीपक के समान प्रतिक्रिया उददीप्त कर सकने की क्षमता अर्जित कर लेता है

Important terms

Unconditioned Stimulus

- **Natural Stimulus** :
- *The stimulus which unconditionally, naturally, and automatically triggers a response*
- प्राकृतिक उद्दीपक वह उद्दीपक है जो स्वाभाविक प्रतिक्रिया को उद्दीप्त कर सकता है
- *Is termed as **UnConditioned Stimulus (UCS)***

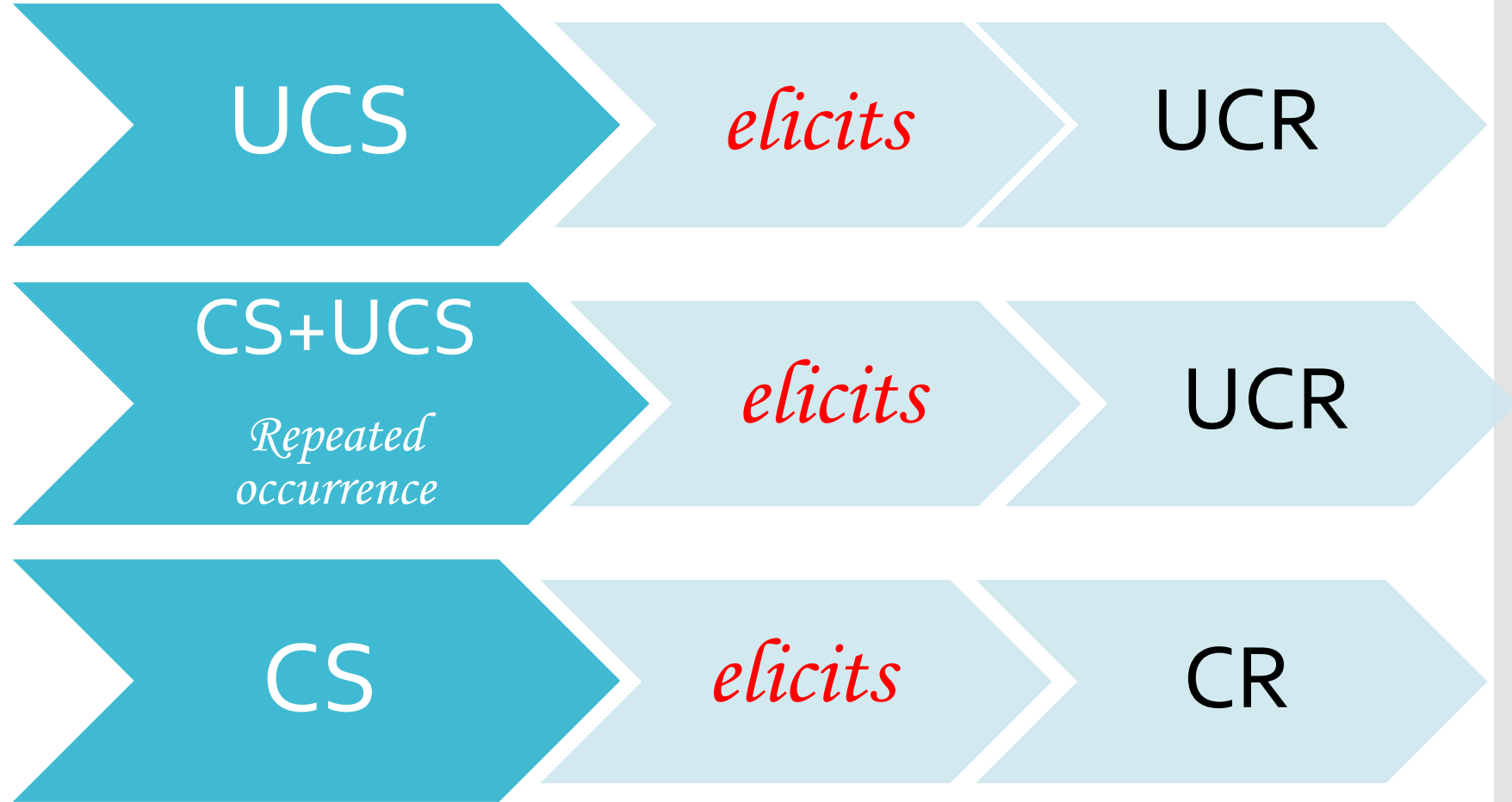
Conditioned stimulus

- **Unnatural Stimulus :**
- *The stimulus which is not capable of eliciting the very response is termed as artificial stimulus*
- अप्राकृतिक उद्दीपक जिसको सामान्य उद्दीपक की शक्ति का अर्जन करना है अथवा जिस उद्दीपक के प्रति प्रतिक्रिया करना सिखाना है
- ***Conditioned Stimulus (CS)***

Unconditioned Response And Conditioned Response

- **Response:**
- *The reaction of the organism towards occurrence of stimulus.*
- अनुक्रिया उद्दीपक के प्रति प्राणी के द्वारा किया जाने वाला व्यवहार
- Two types : *Unconditioned (UCR)* and *Conditioned (CR)*

The stages of conditioning



The process

UCS(light)



UCR(blinking of eye)



- अन अनुबंधित उद्दीपक परिणाम स्वरूप ऑन अनुबंधित प्रतिक्रिया

CS +UCS (clap+light)



UCR(blinking of eye)



- अना अनुबंधित उद्दीपक के साथ अनुबंधित किए जाने वाले उद्दीपक और उसके परिणाम स्वरूप प्रतिक्रिया

CS(Clap)



CR (blinking of eye)



- अनुबंधित उद्दीपक के प्रति अनुबंधित प्रतिक्रिया

THE EXPERIMENT

Before conditioning

**FOOD
(UCS)**

**SALIVATION
(UCR)**



BELL

NO RESPONSE



During conditioning

**BELL +
FOOD
(UCS)**

**SALIVATION
(UCR)**



After conditioning

**BELL
(CS)**

**SALIVATION
(CR)**



Conditions शर्तें

- Time (समय) .05 sec gap between cs and ucs .
More time interval will hinder the process
- Sequence
- अन अनुबंधित और अनुबंधित उद्दीपक का क्रम
- cs first then ucs (cs +ucs)
- Absence of interference
- व्यवधान की अनुपस्थिति

CONDITIONS

Stimulus Differentiation उद्दीपक सामान्य करण

It involves the ability to distinguish between one **stimulus** and similar stimuli.

One observes stimulus discrimination when one stimulus ("CS₁") elicits one CR and another stimulus ("CS₂") elicits either another CR or no CR at all.

if we do try the purple berries, and if they do not make us sick, we will be able to make the distinction in the future.

Stimulus Generalization उद्दीपक विभेदीकरण

Stimulus generalization is said to occur if, after a particular CS has come to elicit a CR, a similar test stimulus is found to elicit the same CR. Usually the more similar the test stimulus is to the CS the stronger the CR will be to the test

- If we eat some red berries and they make us sick, it would be a good idea to think twice before we eat some purple berries.*

Some other related concepts

- High order conditioning उच्च स्तरीय अनुबंधन
- Extinction विलोपन Extinction refers to the reduction in responding that occurs when the conditioned stimulus is presented repeatedly without the unconditioned stimulus.
- Spontaneous Recovery स्वतः पुनरावर्तन The increase in responding to the CS following a pause after extinction is known as spontaneous recovery.

Educational implication

- **Habit formation**(what to eat and not is conditioned hunger being the natural stimulus and eating natural response , the type of food get associated with eating and we eat even in the absence of hunger)
- **Deconditioning for bad habits.**
- **Learning Alphabets** and other concepts
- Clinical psychologists make use of classical conditioning to explain the learning of a **phobia** — *a strong and irrational fear of a specific object, activity, or situation.*
- Classical conditioning has also been used to help explain the experience of *post-traumatic stress disorder (PTSD)*
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References

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