



WHAT IS LEARNING?



WHAT IS LEARNING?







CONCEPT OF LEARNING

THE BEHAVIOUR OF AN INDIVIDUAL CHANGES THROUGH DIRECT AND INDIRECT EXPERIENCES THIS CHANGE IN BEHAVIOUR BROUGHT OUT BY EXPERIENCE IS

LEARNING

GARDNER MURPHEY

"THE TERM LEARNING COVERS EVERY MODIFICATION IN BEHAVIOUR TO MEET ENVIRONMENT REQUIREMENTS"

HENRY P. SMITH

"LEARNING IS THE ACQUISITION OF NEW BEHAVIOUR OR THE STRENGTHENING OR WEAKENING OF OLD BEHAVIOUR"

WOODWORTH

"ANY ACTIVITY CAN BE CALLED LEARNING SO FAR AS IT DEVELOPS THE INDIVIDUAL(IN ANY RESPECT, GOOD OR BAD) AND MAKES HIM ALTER BEHAVIOUR AND EXPERIENCE DIFFERENT FROM WHAT THAT WOULD OTHERWISE HAVE BEEN"

KINGSLEY & GARRY

"LEARNING IS THE PROCESS BY WHICH BEHAVIOUR (IN BROADER SENSE) IS ORGANISED OR CHANGED THROUGH PRACTICE OR TRAINING."

CROW & CROW

"LEARNING IS AN ACQUISITION OF HABITS, KNOWLEDGE AND ATTITUDE. IT INVOLVES WAYS OF DOING THINGS AND OPERATES IN AN INDIVIDUAL'S ATTEMPTS TO OVERCOME OBSTACLES OR TO ADJUST REPRESENTS SITUATIONS. IT PROGRESSIVE CHANGE IN BEHAVIOUR. ENABLES HIM TO SATISFY INTERESTS **ATTAIN GOALS**"

CHARACTERISTICS OF LEARNING

- CHANGE IN BEHAVIOUR
- CHANGE IN BEHAVIOUR IS RELATIVELY PERMANENT
- CONTINUOUS LIFE LONG PROCESS
- > UNIVERSAL PROCESS
- PURPOSIVE & GOAL ORIENTED
- > INVOLVES RECONSTRUCTION OF EXPERIENCE

CHARACTERISTICS OF LEARNING

- IT A PRODUCT OF ACTIVITY
- ► IT IS TRANSFERABLE FROM ONE SITUATION TO OTHER
- NOT NECESSARY IMPLY IMPROVEMENT
- NOT NECESSARILY DEVELOPMENT IN RIGHT DIRECTION
- > BRINGS DESIRABLE CHANGE IN BEHAVIOUR
- HELPS IN TEACHING-LEARNING PROCESS

ELEMENTS INVOLVED IN LEARNING

- LEARNER
- LEARNING EXPERIENCE
- LEARNING PROCESS
- LEARNING SITUATION/ENVIRONMENT
- TEACHER

DOMAINS OF LEARNING













DOMAINS OF LEARNING

- CONATIVE DOMAIN OF LEARNING
 - (DOING ASPECT)
- COGNITIVE DOMAIN OF LEARNING
 (THINKING ASPECT)
- AFFECTIVE DOMAIN OF LEARNING
 - (FEELING ASPECT)

TYPES OF LEARNING

- FORMAL
- > IN-FORMAL
- NON-FORMAL

TYPES OF LEARNING

- > SKILL LEARNING
- PERCEPTUAL LEARNING
- CONCEPTUAL LEARNING
- ASSOCIATIVE LEARNING
- APPRECIATIONAL LEARNING
- ATTITUDINAL LEARNING

ANOTHER CLASSIFICATION OF LEARNING

- MOTOR LEARNING USE OF MUSCLES (TO WALK, TO OPERATE A TYPEWRITER
- DISCRIMINATION LEARNING LEARN TO
- > VERBAL LEARNING LEARN TO USE WORDS
- **CONCEPT LEARNING FORMATION OF CONCEPT**
- **SENSORY LEARNING PERCEPTION AND SENSE**

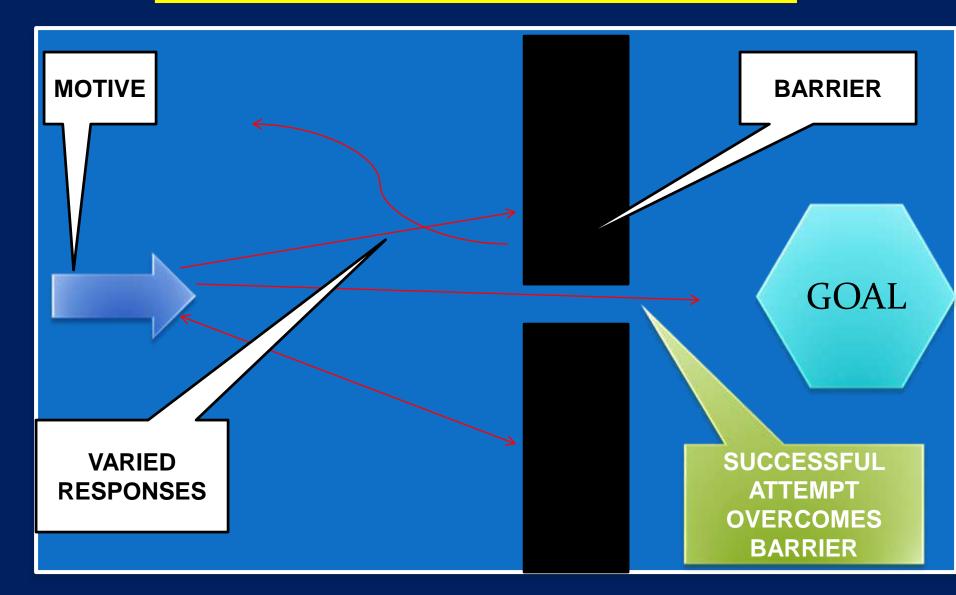
PROCESS OF LEARNING

LEARNING IS PROCESS NOT A PRODUCT AND A PROCESS IS CARRIED OUT IN VARIOUS STEPS.

> 1ST STEP: MOTIVE OF DRIVE

- 2ND STEP: GOAL / AIM
- > 3RD STEM: PROCESS OF LEARNING

PROCESS OF LEARNING



WHAT GOES IN THE PROCESS OF LEARNING?

HOW DO WE LEARN?

LEARNING IS A PROCESS AND LEARNING EXPLAINS THE PROCESS.

► IT IS AN ATTEMPT TO DESCRIBE HOW PEOPLE AND ANIMALS LEARN, THEREBY HELPING US UNDERSTANDS THE INHERENTLY COMPLEX PROCESS OF LEARNING.

- LEARNING THEORIES HAVE TWO CHIEF VALUES ACCORDING TO HILL (2002).
 - TO PROVIDE VOCABULARY AND A CONCEPT.
 - TO SUGGEST WHERE TO LOOK FOR SOLUTIONS

THEY DO NOT GIVE US SOLUTIONS, BUT DIRECT OUR ATTENTION TO THOSE VARIABLES THAT ARE CRUCIAL IN FINDING SOLUTIONS.

- MODERN LEARNING THEORIES MAY BE CLASSIFIED INTO TWO TYPES :-
 - STIMULUS-RESPONSE ASSOCIATIONIST TYPE
 LEARNING AS CHANGE IN BEHAVIOUR OF THE
 LEARNER BROUGHT OUT BY THE ASSOCIATION
 OF THE RESPONSE TO A SERIES OF STIMULI
 - -GESTALT FIELD OF FIELD COGNITION TYPE CHANGE IN THE FIELD CONSISTING OF LEARNER AND HIS ENVIRONMENT AND THE LEARNER'S PERCEPTION OF THE FIELD

STIMULUS-RESPONSE - ASSOCIATIONIST TYPE

EDWARD L. THORNDIKE

CONNECTIONISM OR TRIAL AND ERROR THEORY

JOHN B WATSON & EVAN PATROVICH PAVLOV
CLASSICAL CONDITIONING

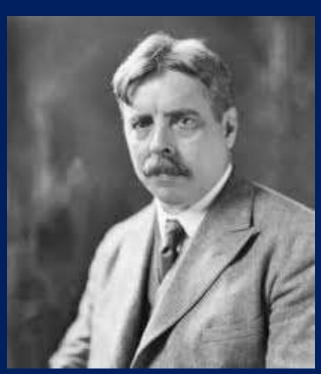
BURRHUS FREDERIC SKINNER
OPERANT CONDITIONING

GESTALT FIELD OF FIELD COGNITION TYPE

WOLFGANG KOHLER
INSIGHT THEORY

KURT LEWIN
FIELD THEORY

THORNDIKE'S CONNECTIONISM OR TRIAL & ERROR THEORY OF LEARNING



EDWARD LEE THORNDIKE (1874 –1949)
WAS AN AMERICAN PSYCHOLOGIST WHO
SPENT NEARLY HIS ENTIRE CAREER
AT TEACHERS COLLEGE, COLUMBIA
UNIVERSITY. HIS WORK
ON COMPARATIVE PSYCHOLOGY AND
THE LEARNING PROCESS LED TO THE
THEORY OF CONNECTIONISM AND LAID
THE SCIENTIFIC FOUNDATION FOR
MODERN EDUCATIONAL PSYCHOLOGY.

KNOWN AS FATHER OF MODERN EDUCATIONAL PSYCHOLOGY

THORNDIKE'S EXPERIMENT

CAT IN PUZZLE BOX



THORNDIKE'S EXPERIMENT CONCLUSIONS

- > THORNDIKE NAMED THE LEARNING AS TRIAL & ERROR LEARNING
- LEARNING IS NOTHING INCLUDING CORRECT RESPONSE AND REMOVING INCORRECT RESPONSE
- ➤ THORNDIKE CALLED IT "LEARNING IS SELECTING AND CONNECTING. MIND IS MAN'S CONNECTION SYSTEM."
- ➤ LEARNING IS FORMATION OF CONNECTION IN NERVOUS SYSTEM BETWEEN THE STIMULI & RESPONSE

THORNDIKE'S LAWS OF LEARNING

- LAW OF READINESS : PREPARATION FOR ACTION
- > LAW OF EFFECT : ROLE OF REWARD & PUNISHMENT
- > LAW OF EXERCISE
 - LAW OF USE USE STRENGTHEN CONNECTION
 - > LAW OF DISUSE DISUSE WEAKENS CONNECTION

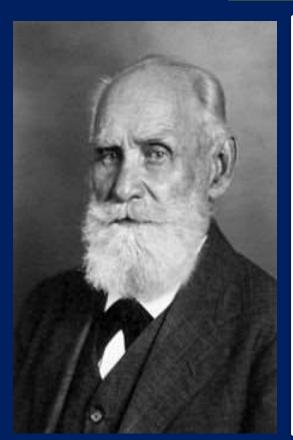
THORNDIKE'S SECONDARY LAWS OF LEARNING

- >LAW OF PRIMACY
- >LAW OF RECENCY
- >LAWS OF INTENSITY OF STIMULUS
- >LAW OF MULTIPLE RESPONSE
- >LAW OF SET ATTITUDE
- >LAW OF ANALOGY AND ASSIMILATION
- >LAW OF ASSOCIATIVE LEARNING
- >LAW OF PARTIAL ACTIVITY

EDUCATIONAL IMPLICATIONS OF THORNDIKE'S TRIAL & ERROR THEORY

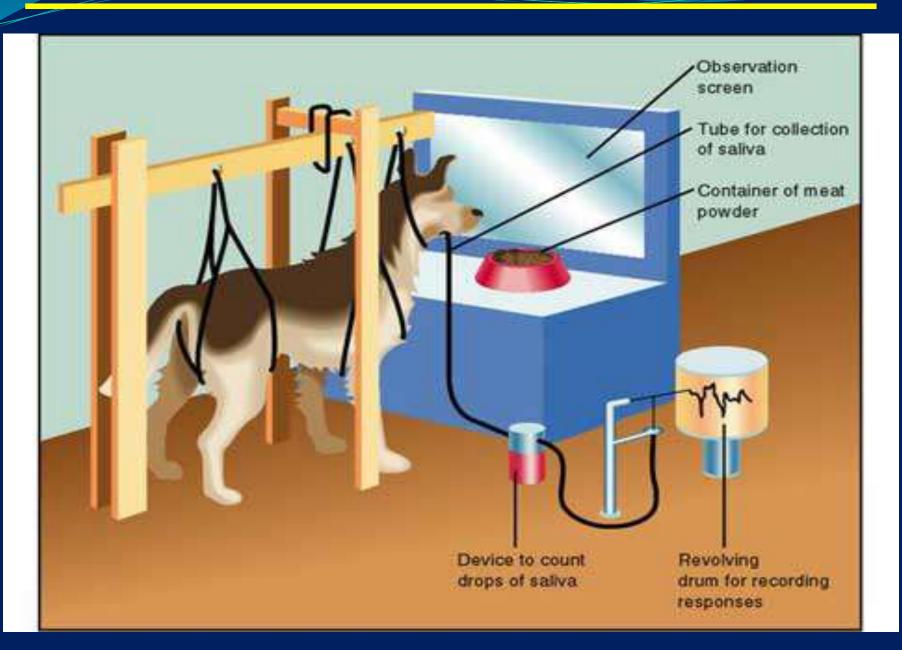
- > RESULTED IN MANY DISCOVERIES / INVENTIONS
- > TEACHER TRIES TO STRENGTHEN THE BONDS THROUGH REPETITION AND DRILL
- LEARNERS MUST BE MADE READY TO LEARN
- > TEACHER CONNECTS THE PAST EXPERIENCE WITH THE NEW CONCEPT
- LEARNERS SHOULD BE ENCOURAGED TO WORK INDEPENDENTLY

PAVLOV'S CLASSICAL CONDITIONING (CONDITIONED RESPONSE) THEORY OF LEARNING



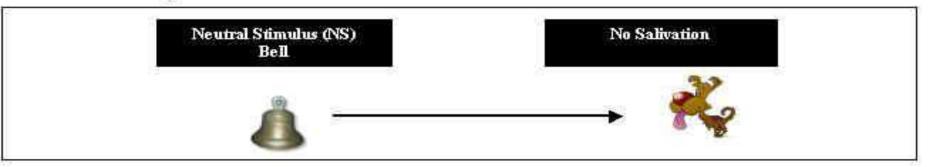
IVAN PETROVICH PAVLOV WAS A RUSSIAN PHYSIOLOGIST KNOW N PRIMARILY FOR HIS WORK IN CLASSICAL CONDITIONING. PAVLOV WON THE NOBEL PRIZE FOR PHYSIOLOGY OR MEDICINE IN 1904, BECOMING THE FIRST RUSSIAN NOBEL LAUREATE.

PAVLOV'S EXPERIMENT ON DOG

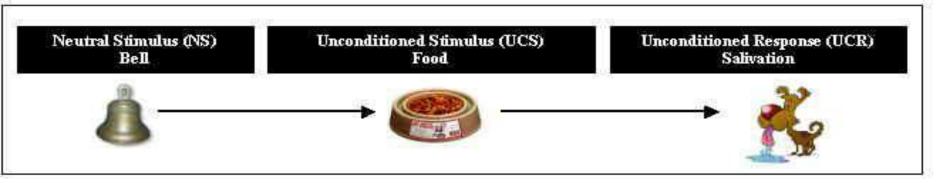


PAVLOV'S EXPERIMENT ON DOG

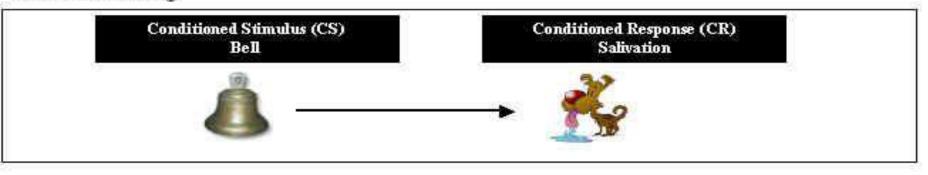
Before Conditioning



During Conditioning



After Conditioning



PAVLOV'S EXPERIMENT ON DOG

SITUATION	NATURAL STIMULUS	CONDITIONED STIMULUS	NATURAL RESPONSE
I: BEFORE CONDITIONING	FOOD S(A)		SALIVA R
II: DURING CONDITIONING	FOOD S(A)	RINGING OF BELL S(B)	SALIVA R
III : AFTER CONDITIONING		RINGING OF BELL S(B)	SALIVA R

S(A): NATURAL STIMULUS

S(B): ARTIFICIAL STIMULUS

R: NATURAL RESPONSE

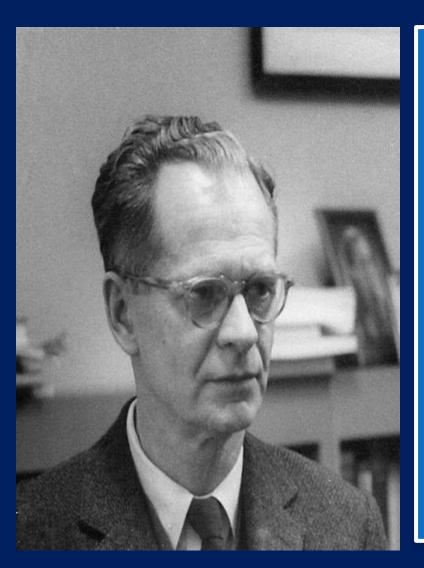
ACCORDING TO CLASSICAL CONDITIONING (CONDITIONED RESPONSE) THEORY

- > THE ORGANISM DOES NOT TAKE INITIATIVE TO BRING OUT ANY CHANGE IN THE BEHAVIOUR
- > IT WAITS SOMETHING TO HAPPEN TO RESPONSE
- THE PRESENCE OF STIMULI IS ESSENTIAL FOR EVOKING RESPONSE
- THE ORGANISM HAS NO CONTROL OVER THE HAPPENINGS
- THUS THE BEHAVIOUR IS SAID TO BE INITIATED BY THE ENVIRONMENT, THE ORGANISM SIMPLY RESPOND TO IT..

EDUCATIONAL IMPLICATIONS OF CLASSICAL CONDITIONING THEORY

- > FEAR, LOVE AND HATRED TOWARDS DIFFERENT SUBJECTS ARE CREATED THROUGH CONDITIONING
- >USE OF AUDIO-VISUAL AIDS IN TEACHING-LEARNING PROCESS INVOLVES THE CONDITIONING THEORY
- ➤IN DEVELOPING DESIRABLE HABITS, INTERESTS, ATTITUDE, SENSE OF APPRECIATION IN THE CHILDREN, CONDITIONING THEORY HELPS
- >UNHEALTHY ATTITUDES, SUPERSTITION, FEAR PHOBIAS CAN BE REMOVED THROUGH DE-CONDITIONING

SKINNER'S OPERANT CONDITIONING THEORY OF LEARNING



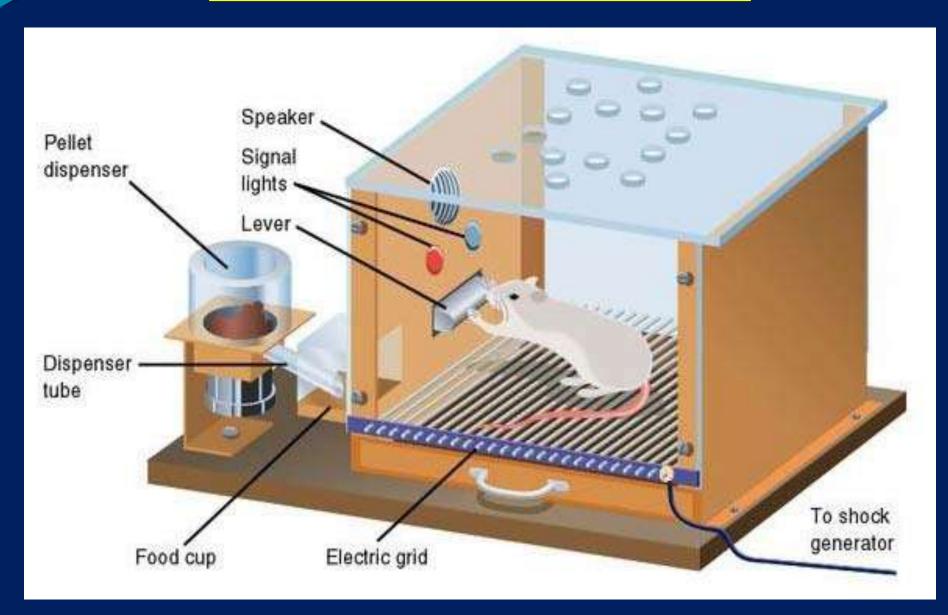
BF SKINNER WAS AN AMERICAN PSYCHOLOGIST, BEHAVIOURIST, AUTHOR, INVENTOR, AND SOCIAL PHILOSOPHER. HE WAS PROFESSOR OF PSYCHOLOGY AT HARVARD UNIVERSITY FROM 1958 TO 1974.

A JUNE 2002 SURVEY LISTED SKINNER AS THE MOST INFLUENTIAL PSYCHOLOGIST OF THE 20TH CENTURY

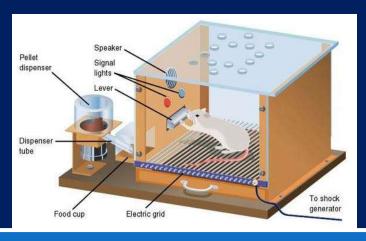
SKINNER'S ARGUMENT

- > IN PRACTICAL SITUATIONS WE CANNOT ALWAYS WAIT FOR THINGS TO HAPPEN IN ENVIRONMENT
- WE OFTEN MANIPULATES THE THINGS IN ENVIRONMENT WITH OWN INITIATIVE
- SOME KNOWN STIMULI IS NOT ESSENTIAL
- THE ORGANISM OPERATES ON THE ENVIRONMENT AND IN TURN THE ENVIRONMENT RESPONDS TO THE ACTIVITY
- DEPENDING ON THE RESPONSE OF THE ENVIRONMENT THE BEHAVIOUR WILL BE MAINTAINED, REPEATED OR AVOIDED

THE SKINNER'S BOX

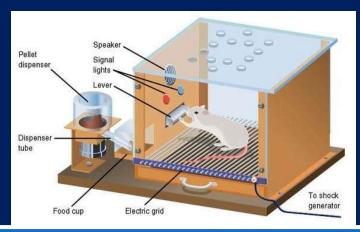


THE SKINNER'S BOX



- THE SKINNER BOX INVOLVED PLACING AN ANIMAL (SUCH AS A RAT OR PIGEON) INTO A SEALED BOX WITH A LEVER THAT WOULD RELEASE FOOD WHEN PRESSED
- PRESSED THE LEVER, IT WOULD PRESS IT MORE AND MORE BECAUSE IT LEARNT THAT DOING SO GIVES IT FOOD

THE SKINNER'S BOX



- ELEVER PRESSING IS DESCRIBED AS AN OPERANT BEHAVIOUR, BECAUSE IT IS AN ACTION THAT RESULTS IN A CONSEQUENCE. IN OTHER WORDS, IT OPERATES ON THE ENVIRONMENT AND CHANGES IT IN SOME WAY
- ▶THE FOOD THAT IS RELEASED AS A RESULT OF PRESSING THE LEVER IS KNOWN AS A REINFORCER, BECAUSE IT CAUSES THE OPERANT BEHAVIOUR (LEVER PRESSING) TO INCREASE

REWARD & REINFORCEMENT

- A REWARD IS SOMETHING, WHICH HAS VALUE TO THE PERSON GIVING THE REWARD, BUT MAY NOT NECESSARILY BE OF VALUE TO THE PERSON RECEIVING THE REWARD
- A REINFORCER IS SOMETHING, WHICH BENEFITS THE PERSON RECEIVING IT, AND SO RESULTS IN AN INCREASE OF A CERTAIN TYPE OF BEHAVIOUR

EDUCATIONAL IMPLICATIONS OF OPARANT CONDITIONING THEORY

- >CONDITIONING STUDY BEHAVIOUR
- >CONDITIONING AND CLASSROOM BEHAVIOUR
- >MANAGING PROBLEM BEHAVIOUR
- > DEALING WITH ANXIETIES THROUGH CONDITIONING
- > CONDITIONING GROUP BEHAVIOUR
- > CONDITIONING AND COGNITIVE PROCESSES

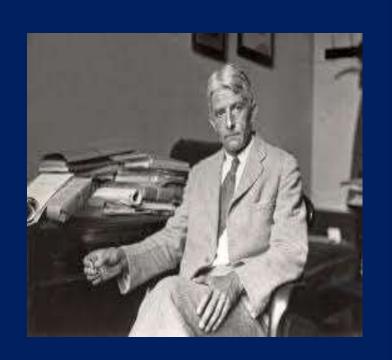
THE INSIGHT THEORY OF LEARNING



INSIGHT: MEANING

THE ABILITY TO HAVE
A CLEAR, DEEP, AND
SOMETIMES SUDDEN
UNDERSTANDING OF
A COMPLICATED PROBLEM
OR SITUATION

KOHLER'S INSIGHT THEORY



WOLFGANG KÖHLER
WAS GERMAN PSYCHOLOGIST
WHO, LIKE
MAX WERTHEIMER, AND
KURT KOFFKA,
CONTRIBUTED TO THE
CREATION OF
GESTALT PSYCHOLOGY

KOHLER'S INSIGHT THEORY

- ➤ IN THE 1920S, GERMAN PSYCHOLOGIST WOLFGANG KOHLER WAS STUDYING THE BEHAVIOUR OF APES
- HE DESIGNED SOME SIMPLE EXPERIMENTS THAT LED TO THE DEVELOPMENT OF ONE OF THE FIRST COGNITIVE **THEORIES OF LEARNING**, WHICH HE CALLED **INSIGHT LEARNING**. ... KOHLER CALLED THIS NEWLY OBSERVED TYPE OF LEARNING AS **INSIGHT LEARNING**

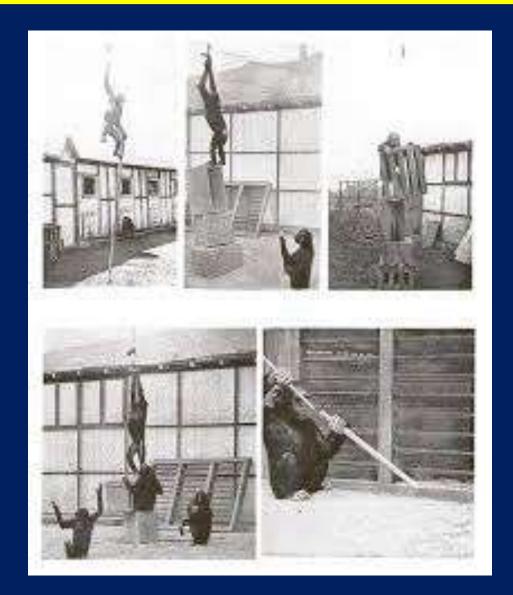












WHAT IS GESTALT?

- FOR WHICH THERE IS NO ENGLISH WORD EQUIVALENT SO THE WORD WAS CARRIED OVER IN ENGLISH PSYCHOLOGICAL LITERATURE
- THE NEAREST ENGLISH TRANSLATION OF GESTALT IS 'CONFIGURATION' OR MORE SIMPLY 'AN ORGANISED WHOLE' IN CONTRAST TO COLLECTION OF PARTS

GESTALT PSYCHOLOGY

- ➤ GESTALT PSYCHOLOGISTS BELIEVE THAT "THE WHOLE IS MORE IMPORTANT THAN ITS PARTS"
- BEHAVIOURISTS OR S-R PSYCHOLOGISTS BELIEVED THAT SENSATION COMES PRIOR TO ITS MEANING AND THESE ACTS ARE SEPARATE
- ➤ GESTALT PSYCHOLOGISTS DO NOT SEPARATE SENSATION OF AN OBJECT FROM ITS MEANING

GESTALT PSYCHOLOGY

- ➤ GESTALT PSYCHOLOGISTS TRIED TO INTERPRET LEARNING AS A PURPOSIVE, EXPLORATORY & CREATIVE EXERCISE INSTEAD OF TRIAL AND ERROR OR SIMPLE STIMULUS-RESPONSE MECHANISM
- PERCEIVES THE SITUATION AS A WHOLE AND AFTER SEEING AND EVALUATING THE DIFFERENT RELATIONSHIPS INTELLIGENTLY TAKES A PROPER DECISION

GESTALT PSYCHOLOGY

FINE TERM 'INSIGHT' TO DESCRIBE THE PERCEPTION OF THE WHOLE SITUATION BY THE LEARNER AND HIS INTELLIGENCE IN RESPONDING TO THE PROPER RELATIONSHIPS.

►INSIGHT REFERS THE SUDDEN FLASH IN THE MIND ABOUT THE SOLUTION OF THE PROBLEM

STEPS IN INSIGHT LEARNING

- >IDENTIFYING THE PROBLEM
- >UNDERSTANDING THE PROBLEM
- >INCUBATION OF IDEAS
- >TRAIL OF MODE OF RESPONSE
- > SUSTAINED ATTENTION
- > INSIGHT DEVELOPMENT
- >STEADY REPETITION OF ADAPTIVE BEHAVIOUR
- >COMPREHENSION OF ABILITY

EDUCATIONAL IMPLICATIONS OF INSIGHT LEARNING

- > FROM WHOLE TO PARTS
- >INTEGRATED APPROACH
- >IMPORTANCE OF MOTIVATION
- **EMPHASIS ON UNDERSTANDING**
- > PROBLEM SOLVING APPROACH
- > CHECKING OF PREVIOUS EXPERIENCES
- GOAL ORIENTATION

OTHER THEORIES OF LEARNING

- >LEWIN'S FIELD THEORY
- >INFORMATION PROCESSING THEORIES
- ROGER'S EXPERIMENTAL LEARNING THEORY
- MALOW'S HUMANISTIC THEORY OF LEARNING

CONCLUSION



