

## Chapter 11: Behaviourism

### Glossary

**Connectionism:** E. L. Thorndike's stimulus-response (S-R) psychology.

**Law of Effect:** A law proposed by E. L. Thorndike that stated reward would strengthen connection between stimuli and responses, while punishment would weaken connection between stimuli and responses (the punishment component of this definition was later dropped by Thorndike).

**Law of Exercise:** A law proposed by E. L. Thorndike that stated the strength of any response to stimuli is proportional to the number of times they have been connected.

**Principle of Belongingness:** A law proposed by E. L. Thorndike that stated only relevant responses that "belong" to the learning situation are learned; that ideas must *belong* together to be associated with one another.

**Classical Conditioning:** A form of learning established when associations occur between events and stimuli. A neutral stimulus is paired with an unconditioned stimulus which produces an involuntary bodily response; the neutral stimulus eventually begins to elicit a similar response to that produced by the unconditioned stimulus.

**Comparative psychology:** The study of animal behaviour.

**Criteria of the psychic:** According to Yerkes, the criteria that an organism must meet if they are to have a mind.

**Discriminative consciousness:** The first level of Robert Yerkes' conception of consciousness; the ability to discriminate stimuli.

**Intelligent consciousness:** The second level of Robert Yerkes' conception of consciousness; the ability to learn.

**Rational consciousness:** The third level of Robert Yerkes' conception of consciousness; the ability to perform behaviours more complex than simply responding to the environment.

**Methodological Behaviorism (Lashley):** consciousness exists but is unsuited for any form of scientific treatment

**Strict/Radical Behaviorism (Lashley):** Consciousness does not exist

**Logical Positivism:** A combination of positivist's empiricism and modern formal logic.

**Operational Definition:** An observation term (directly observable property) combined with a theoretical term (explanation).

**Operationism:** Promised to settle disputes about psychological terminology; stated that terms that could not be operationally defined were scientifically meaningless.

**Purposive behaviourism:** Tolman's study of behaviour, which featured both objective methods and the consideration of the purpose of behaviour.

**Molar behaviourism:** Tolman's study of behaviourism, which looked at whole acts of behaviour, as he viewed behaviour as purposive, not just a set of reactions to stimuli.

**Molecular behaviourism:** Watson's study of behaviour, which looked at behaviour in terms of small, muscular reactions, and the physiology that explained them.

**Independent variable:** The variable that is manipulated by the experimenter in a scientific experiment. Tolman viewed this as internal/external states that influenced behaviour.

**Dependent variable:** The variable that is measured, as it is influenced by the independent variable. Tolman viewed this as behaviour.

**Intervening variable:** Variables that bridge the gap between the dependent and independent variable, and can be used to explain their relationship. For molar behaviourism, these were purpose and cognitions. For molecular behaviourism, these were physiological variables.

**Operational behaviourism:** Tolman's revised behaviourism. Operational in two ways: (i.) operationalizing of intervening variables (ii.) a central tenet was that behaviour is when an organism operates on its surroundings.

**Mechanistic behaviourism:** Hull's view of behaviour, in which cognitive phenomena is a mechanistic process that can be explained by mechanics, geometry, and mathematics.

**Radical Behaviourism:** school of thought developed by B.F. Skinner based on operant conditioning. Argued that the goal of psychology is to analyse behaviour by identifying specific determinants (antecedents) of behaviour and to establish the exact nature of the relationship between antecedent and behaviour. All behaviour is based on the consequences of past behaviour.

**The Experimental Analysis of Behaviour:** Skinner's experimental research program involving the systematic control of all factors affecting behaviour; the systematic description of contingencies of reinforcement.

**Independent variables (Skinner):** Antecedent influences on behaviour

**Dependent variables:** Behaviour that is a function of antecedents/independent variable

**Locus of variables (Skinner):** An organism; thought of as a place where independent variables act together to produce a behaviour

**Respondent behaviour or learning (Skinner):** reflex behaviour, such as salivation, that is elicited by a definite stimulus (can be either conditioned or unconditioned); "Involuntary" behaviour

**Operant behaviour or learning (Skinner):** behaviour that is not elicited by a stimulus in the environment but may be strengthened if it is followed by a reinforce; "voluntary" behaviour; a class of responses controlled by the same contingencies of reinforcement, not a single response

**Experimental situation (also known as operant conditioning chamber or Skinner box):** experimental device that allows for control/manipulation of independent variables that influence an animal's behaviour

**Discriminative stimulus:** enables an animal to discriminate a reinforcing from a nonreinforcing situation

**Tact:** a verbal operant response under the stimulus control of the physical environment and the reinforcement by the verbal community

**Fractional Anticipatory Goal Response:** proposed to handle a type of error (covert response produces covert stimuli which prod the rats to make the correct response too soon) made by rats that had learned a maze

**Pure Stimulus Act:** behaviors which occur internally to provide stimulus support for another behavior

**Mediation theory:** human symbolic processes conceived as internal continuations of S-R chains

**Logical/Philosophical Behaviorism:** A semantic theory about what mental terms mean

**Category mistake:** because something has a name, it must apply to something separate from its parts