

# ***Training and Behavioral Terms Glossary***

## ***International Marine Animal Trainers Association (IMATA)***

***“Dedicated to those who serve marine animal science through  
training, public display, research, husbandry, conservation, and  
education”***

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## A

**absolute threshold** ♦ The lowest level of stimulus that can still be perceived and to which a subject responds at least 50% of the time.

**abulia** ♦ The inability of an animal to act on a stimulus to perform a behavior because the number of performances required for reinforcement is too high.

**accidental reinforcement** ♦ Reinforcement of unintended behavior, causing an increase in an undesired response.

**acclimation** ♦ Adaptation or adjustment to a single environmental condition such as temperature, turbidity, and humidity.

**acclimatization** ♦ Adaptation or adjustment to several environmental conditions at the same time.

**acquired** ♦ Learned

**activation syndrome** ♦ A large group of responses that are elicited by the environment, usually paired with emotions such as fear or anger, and characterized by flight or fight. A singular or series of behaviors performed in response to a perceived threat.

**active avoidance** ♦ See Avoidance learning.

**adaptation** ♦ In experimental psychology, a change in the responsiveness of a sensory receptor or a sense organ which is temporary in nature. ♦ In evolution, any structural or behavioral change that has survival value.

**adjustable stimulus** ♦ A stimulus that an animal may change as a result of its own behavior.

**adventitious reinforcement** ♦ Reinforcement delivered independently of any response on the part of the subject that causes an increase in an undesired response.

**adverse** ♦ Tending to discourage, retard or make more difficult. Moving or working in an opposite or contrary direction.

**affiliation** ♦ To connect or associate oneself.

**aggression** ♦ An extremely general term used for a wide variety of acts that involve attack, hostility, etc. Typically, it is used for such acts as can be assumed to be motivated by any of the following: (a) fear or frustration, (b) a desire to produce fear or frustration in others, or (c) a tendency to push forward one's own ideas or interests.

- There are many different types of aggression, each one it independent on the others. Some of these types of aggression include:
  - Maternal aggression. When a mother attacks or threatens any perceived threat to her offspring. Good examples include walking between a female bear and her offspring or attempting to handle a baby dolphin with the mother in proximity. This type of aggression occurs only during the rearing period of the young.
  - Frustration-induced aggression. In almost all species studied, aggression is a natural response to frustration.
  - Defensive aggression. This type of aggression occurs when an animal is threatened or attacked. As soon as the threat or attack ceases, so does the aggression.
  - Pain-induced aggression. This type of aggression is caused by physical pain.
  - Predatory aggression. This should not really be called aggression. It is usually part of foraging behavior of carnivores or omnivores. It is probably the cause of most great white shark attacks on humans; the swimmer is confused with a normal prey item, the sea lion.
  - Territorial aggression. This type of aggression is found in animals that hold and defend a territory. It is usually only directed towards members of the same species that enter that animal's territory. This aggression is more often found in males. This aggression stops when the intruder leaves the territory.
  - Dominance aggression. This is almost always between males. It is aggression aimed at maintaining or advancing in status.
  - Learned aggression. It is aggression which occurs because it is reinforced. Learned aggression is characterized by an increase in the probability of aggression over time. There are two major types of learned aggression, aggression learned because it results in rewards (approach induced aggression) and aggression learned because it results in avoidance or escape from aversive stimuli. Each will be described.
    - Approach induced aggression. This type of aggression occurs when an animal learns that aggression results in positive reinforcement.
    - Avoidance induced aggression. This aggression occurs when an animal learns that an aggressive response will enable it to escape or avoid aversive stimuli. If the aggression serves to remove the frustration then it will be reinforced and the probability of the same situation causing aggression will increase.
  - Re-directed aggression. This is a type of aggression first analyzed by ethologists. When an animal is attacked or threatened by another animal of higher status, that animal may attack or threaten another

animal of lower status presumably because it is not a good idea to aggress against an animal of higher status. The animal that is ultimately attacked is simply a scapegoat and usually did nothing to provoke aggression.

**alternate response training** ♦ A behavior modification strategy whereby an individual is trained to engage in one specific response or any one of several responses that interferes with or replaces another less desirable response.

**amplitude** ♦ The degree of displacement of a sound wave. The psychological term for amplitude is loudness.

**anti-social behavior** ♦ An undesirable response that is beyond the usual parameters of a specific culture.

**anxiety** ♦ A state of apprehension caused by a real or perceived aversive and/or pre-aversive stimuli.

**approach-approach conflict** ♦ A conflict resulting from being drawn toward two equally desirable but mutually incompatible goals.

**approach-avoidance conflict** ♦ A situation in which an organism wants something but is afraid of obtaining it. There is conflict between two incompatible response tendencies of desire and fear.

**approximation** ♦ One of many progressive steps from simple to more complex behavior, all leading to a finished desired behavior by gradually raising the requirement for reinforcement.

**assimilation** ♦ The tendency to apply old ideas and responses to new objects or problems.

**association** ♦ An aspect of learning in which two or more stimuli events or ideas become connected through being presented at the same time.

**attitude** ♦ The evaluative and affective aspect of an organism's responses and perceptions toward a given object or situation.

**attitude shaping** ♦ An anthropomorphic term that refers to reinforcing specific behaviors which the trainer believes represents a frame of mind.

**autonomic conditioning** ♦ A theory of the 1960s, now mostly disproved, that instrumental conditioning works directly on autonomic responses such as heart rate and blood pressure. It is now accepted that these changes occur because of classical conditioning. This field is now known as bio-feedback.

**aversion** ♦ A dislike or avoidance of something.

**aversive conditioning** ♦ A technique in which a painful or discomforting stimulus is paired with another stimulus in order to extinguish the undesirable response to that stimulus.

**aversive stimulus** ♦ A stimulus whose termination increases the frequency of a performance, or whose addition decreases the frequency of a performance it follows.

**avoidance-avoidance conflict** ♦ A conflict resulting from being repelled by two undesirable goals when there are strong pressures to choose one or the other.

**avoidance** ♦ Performance of a behavior which postpones or averts the presentation of an aversive event or stimulus.

**avoidance conditioning** ♦ A type of conditioning in which the subject must learn to make some response to avoid a noxious or aversive stimulus.

**avoidance learning** ♦ Learning that occurs when the subject responds in order to avoid an unpleasant stimulus. The process of learning to emit a behavior in order to prevent an aversive event.

## B

**baiting** ♦ A training technique in which the deliberate movement or placement of food is used to maneuver an animal to a desired location.

**baseline** ♦ The frequency that behavior is performed prior to initiating or changing behavior modification program ♦ The rate of performance used to evaluate the effect of the program.

**behavior** ♦ A generic term covering acts, activities, responses, reactions, movements, processes, operations, etc., in short, any measurable response of an organism.

**behavior modification** ♦ The differential reinforcement of successive approximations leading to a target behavior pattern.

**behavioral chain** ♦ A group of behaviors in a specific order, defined as a unit to the animal.

**behavioral control** ♦ Exerting influence by altering the environmental contingencies to achieve a definite end.

**behavioral drift** ♦ A change or stray from a normal standard of response. The result of drift over a period of time is deviation.

**behavioral enrichment** ♦ Stimuli and methods used as tools to increase interest and enhance the environment.

**behaviorism** ♦ A school of thought that psychologists should concentrate on the study of overt behavior rather than of mental life or consciousness.

**bond** ♦ A relationship that one animal maintains with another towards which certain behavior is exclusively of preferentially directed.

**bridge** ♦ A signal that is conditioned to be reinforcing because it is paired with an established reinforcer ♦ The bridge is used to indicate the instant at which an animal successfully completes a desired approximation or behavior, or at anytime in which the desired topography is being emitted.

## C

**chain** ♦ Two or more behaviors that occur in a fixed order. The stimuli linking the behaviors together serve as both conditioned reinforcers and discriminative stimuli.

**chain of behaviors** ♦ Two or more behaviors that occur in a fixed order. The termination of the first behavior is the signal to start the second behavior.

**chaining** ♦ The process of learning a sequence of behaviors that proceeds semi-automatically in a determinate order.

**classical conditioning** ♦ A type of learning in which a conditioned stimulus is paired with an unconditioned stimulus to elicit a reflex response or respondent behavior ♦ Also referred to as *Pavlovian Conditioning*.

**conditioned aversive stimulus** ♦ An event that is initially neutral which acquires aversive properties by virtue of being paired with other aversive events or a signal that no reinforcement will be forthcoming. ♦ This is exactly like the bridge, but it happens with aversive events. If a bell is paired with shock, then that bell will become aversive. Because of classical conditioning, an event that is initially neutral will acquire aversive properties because it is paired with other aversive events.

**conditioned reinforcer** ♦ A stimulus that becomes a reinforcer because it is paired with another reinforcer, usually a primary reinforcer ♦ Also referred to as a *secondary reinforcer*.

**conditioned response (CR)** ♦ A new or modified response that is elicited only by a given stimulus after conditioning has occurred.

**conditioned stimulus (CS)** ♦ A stimulus that has the property of producing a response through pairing or association.

**conditioning** ♦ A change in the frequency and form of a behavior due to the influences of the environment. It can be brought about by the application of reinforcers or punishers.

**continuous reinforcement** ♦ A schedule of reinforcement in which every occurrence of the selected behavior is reinforced.

**control group** ♦ An experimental group which is not exposed to the independent variable under investigation. The behavior of the control group is used as a baseline against which to evaluate the effects of experimental conditions.

**counter conditioning** ♦ Process where normal defense reactions elicited by an aversive stimulus are modified by association with a positive reinforcer.

**cue** ♦ A stimulus perceptible to the animal that signals the availability of reinforcement if the subject performs a specific behavior. Cues do not elicit behaviors; they inform the animal that if the behavior is immediately emitted, reinforcement is available ♦ Also referred to as a *discriminative stimulus* ( $S^D$ ) or *signal*.

## D

**delay of reinforcement** ♦ The interval between the performance of a behavior and the delivery of reinforcement.

**delta** ♦ See Stimulus Delta

**deprivation** ♦ Reducing the availability of, or access to, a primary reinforcer or a strongly conditioned secondary reinforcer.

**desensitization** ♦ The process of using time or experience to change an animal's perception of a stimulus from a value, either reinforcing or punishing, to neutral or no value. If reinforcement is not used, this is referred to as passive desensitization (or *habituation*) while active desensitization utilizes primary reinforcement and is also referred to as *counter conditioning*.

**differential reinforcement** ♦ The selective reinforcement of one aspect of a behavior pattern to the exclusion of other aspects.

**differential reinforcement of incompatible behavior (DRI)** ♦ The delivery of a reinforcer after a response that is incompatible or competes with the target response that is to be suppressed. The effect is to increase the frequency of the incompatible response and to decrease the frequency of the undesired target response.

**differential reinforcement of other behavior (DRO)** ♦ A procedure in which a reinforcer follows any performance an organism emits except a particular one. The DRO schedule specifies the performance that is to be non-reinforced rather than the one that is increased in frequency. The result is a decrease in the frequency of the particular performance that is specified.

**differentiation** ♦ A type of social interaction in which individuals by virtue of forming affective bonds with certain individuals necessarily and simultaneously separate and segregate themselves from some others.

**discipline** ♦ Strict control to enforce obedience as the result of such training; treatment that corrects or punishes.

**discrimination** ♦ The ability to perceive differences between two or more stimuli ♦ In training it refers to a procedure of differential reinforcement which results when the subject is reinforced for responding only when a specific stimulus is presented.

**discriminative stimulus ( $S^D$ )** ♦ A conditioned signal or cue that is initially paired with, then has the property of eliciting, a specific behavior through a reinforcement schedule.

**displaced aggression (displacement)** ♦ Aggression that is redirected towards someone or something other than the original target seemingly because it is an easier or more available target.

**dominance** ♦ Refers to a relationship in which any *thing* is in a position of *control* over another ♦ A tendency to exert control over the behavior of other members of a group of conspecifics.

**dominance hierarchy** ♦ The ranking of members of a group according to relative importance or dominance ♦ Also referred to as *pecking order*.

**dominant behavior** ♦ A response that exercises controlling power, authority, or influence.

**drive** ♦ An incitement to action that has its origin in an internal physiological state (e.g., hunger) or that has been learned (e.g., the drive to obtain approval).

## E

**elicit** ♦ To automatically bring about a response. Respondent or reflexive behaviors are elicited by unconditioned stimuli.

**emit** ♦ The act of causing an operant behavior by the presentation of a conditioned stimulus.



**emotion** ♦ Refers to a number of mental states that are often accompanied by physiological changes.

**escape or escape behavior** ♦ The actual behavior which terminates an aversive stimulus.

**escape learning** ♦ A conditioning technique in which the subject learns to escape or terminate an unpleasant stimulus.

**experimental psychology** ♦ The study of different components of the behavior of animals under laboratory conditions in which variables can be manipulated to determine their effect on other variables.

**extinction** ♦ A procedure where the reinforcement of a previously reinforced behavior is discontinued. The result is a gradual disappearance of the learned behavior.

**extinction burst** ♦ An increase in responses or performances that is brought about by the withdrawal of reinforcement. Extinction bursts occur just prior to the extinction of the behavior.

## F

**fading** ♦ A procedure for gradually changing a stimulus controlling an organism's performance to another stimulus. ♦ The gradual removal of reinforcement, as in the progressive thinning of a reinforcement schedule.

**fear** ♦ An emotional reaction to perceived or real threat from a specific stimulus.

**fine-grain repertoire** ♦ An operant performance which changes under the control of small variations in the stimulus.

**fixed-interval schedule** ♦ A reinforcement schedule that rewards an animal when it makes a correct response after a predetermined constant time interval since the previous reinforced response.

**fixed-ratio Schedule** ♦ A schedule of reinforcement in which the organism is reinforced after a predetermined constant number of non-reinforced correct responses. In a fixed-ratio schedule of reinforcement, a fixed number of performances (counted from the preceding reinforcement) are required for reinforcement. Thus on a FR50 schedule, the 50th performance after the preceding reinforcement produces the next reinforcement. The term ratio refers to the ration of performances required for each reinforcement.

**free contact** ♦ A training situation in which the animal and the trainer have equal access to the work area. The animal is not restrained, muzzled, or confined in any way.

**frustration** ♦ Emotional behavior prompted by an environmental or personal obstacle that prevents an organism from obtaining a desired goal.

## G

**generalization** ♦ The tendency to respond to similar stimuli as if it were the original stimulus.

**generalized reinforcer** ♦ A type of conditioned reinforcer whose influence does not depend upon a single kind of deprivation.

**goal gradient** ♦ The term used to describe the fact that as one approaches a goal, the drive to reach it becomes stronger.

**group contingencies** ♦ A team-based contingency in which the members earn reinforcers on the basis of the performance of the group as a whole.

## H

**habit** ♦ A recurrent pattern of behavior acquired through experience and made more or less permanent by various reinforcing events.

**habituation** ♦ The lessening or disappearance of a response with repeated presentations of the stimulus. ♦ Also referred to as *passive desensitization*.

**hands-off Training** ♦ See Protected Contact

**high probability behavior** ♦ A response which is performed with a relatively high frequency when the individual is given the opportunity to select among alternate behaviors.

**husbandry** ♦ Long-term physiological and psychological management ensuring the viability of a species.

## I

**immediacy of reinforcement** ♦ To reinforce directly following a desired response in order to avoid the inadvertent reinforcement of some other behavior, pairing the reinforcing event as closely as possible with the target behavior.

**imprinting** ♦ The process by which a young animal forms a lasting attachment to, and preference for, some object, usually a parent.

**incentive** ♦ An external inducement which motivates an animal to act or respond in a certain way.

**incompatible behavior** ♦ A behavior that interferes with, or cannot be performed at the same time as another behavior.

**incremental learning** ♦ See Method of Approximations

**innovative training** ♦ Learning by which an animal is selectively reinforced for performing behaviors as a result of an experimental or self-inventive process.

**instinct** ♦ Unconditioned, automatic behaviors and responses which are the result of an innate predisposition for a species to respond to a stimulus in a specific way.

**instrumental conditioning** ♦ See Operant Conditioning.

**intelligence** ♦ The ability to adapt to new circumstances, learn new pieces of information, deal with complex or abstract materials, or solve intellectual problems.

**intermediate bridge** ♦ A secondary reinforcer that signals to an animal that its current topography is correct and to continue the behavior.

**intermittent reinforcement** ♦ A schedule of reinforcement in which a response is not reinforced every time it is performed. Only some occurrences of this response are reinforced.

**interval schedule of reinforcement** ♦ A schedule in which reinforcement is delivered on the basis of the amount of time before a response can be reinforced.

**inter-stimulus interval (ISI)** ♦ In classical conditioning, the time elapsed between the conditioned stimulus and the unconditioned stimulus. In habituation, the time between exposures to a stimulus.

## L

**latency** ♦ The delay between the presentation of a stimulus and the response of the organism.

**latent learning** ♦ Learning that takes place casually and does not manifest in overt behavior at that time, but may become evident at a later stage.

**law of effect** ♦ The concept that an organism will tend to repeat and learn behavior that has a satisfying or reinforcing outcome while behaviors that cause pain or discomfort will tend to be decreased in their probability of occurrence.

**learned helplessness** ♦ A condition created by exposure to inescapable aversive events which can retard or prevent learning in subsequent situations in which escape or avoidance is possible.

**learning** ♦ A change in behavior due to experience that allows the organism to adapt to situations for which its innate behavior is inadequate.

**learning plateau** ♦ A period in which progress in learning appears to have stopped and improvement is at a standstill. The plateau may be followed by a new period of progress.

**least reinforcing scenario (LRS)** ♦ A specific extinction technique based on differential reinforcement of other behavior (DRO). The trainer pauses 2 to 3 seconds following an incorrect response at the same point where reinforcement would have been applied following a correct response. The trainer's response also functions as a stimulus for the animal to behave calmly and attentively.

## M

**magnitude of reinforcement** ♦ The size, strength, or duration of a reward following a behavior.

**matching-to-sample (MTS)** ♦ A procedure in which the choice of a stimulus that matches a sample stimulus is followed by the delivery of a reinforcer.

**method of approximations** ♦ A method used to shape an organism's behavior whereby successive steps toward a desired behavior are selectively reinforced.

**mimicry** ♦ The act, practice, or art of copying the manner, expression, or behavior patterns of another.

**modeling** ♦ See Observational Learning.

**motivation** ♦ The internal variables influencing behavior ♦ A general description of the fact that an organism's acts may be partly determined in direction and strength by its own internal state.

**motive** ♦ A drive, force or tension state within the organism that compels it to act.

**multiple schedule** ♦ A response that is under the control of two or more simple schedules of reinforcement, each associated with a particular stimulus.

## N

**negative** ♦ Removal of, or decrease in, the intensity of a stimulus.

**negative discriminative stimulus** ♦ In operant conditioning, the stimulus to which responses are non-reinforced or negatively reinforced. (See stimulus delta.)

**negative punishment** ♦ A punishment procedure in which a response is followed by the removal of, or a decrease in the intensity of, a previously given positive reinforcer resulting in the decrease in frequency of that response.

**negative reinforcer** ♦ A stimulus which, when removed following a response, increases or maintains the frequency of that response.

**neutral stimulus or cue** ♦ Any stimulus that has no effect on the target behavior before conditioning.

**novelty effect** ♦ Innate fear-provoking response associated with exposure to a novel stimulus.

## O

**observational learning** ♦ A type of learning in which the behavior of another organism is observed and imitated.

**ontogenetic history** ♦ Types of behavior an organism produces caused by its experience and interaction with the existing environment.

**operant** ♦ A behavior which affects something. Operating or producing an effect or effects on the environment.

**operant behavior** ♦ Emitted behavior that is controlled by its consequences.

**operant conditioning** ♦ A science of behavior in which the frequency of occurrence of behavior is modified by the consequences of the behavior. Operant conditioning concerns the relationship between the behavior of organisms and their environment.

**orienting response** ♦ The initial phase of an organism's response to a novel stimulus. The organism responds to the source of the stimulus by turning toward the source.

## P

**paradigm** ♦ A pattern, example, or model.

**partial reinforcement maintenance** ♦ See Intermittent Reinforcement.

**passive desensitization** ♦ See Habituation.

**perception modification** ♦ The process of changing an organism's perception of an event or stimulus as evidenced by its changed response to the event or stimulus when compared to a previous baseline. This is most effectively accomplished through a conditioning process where the event/stimulus is paired with a conditioned reinforcer or punisher in order to transfer the value of the reinforcer or punisher to the event/stimulus.

**performance** ♦ Measures of observed behavior ♦ Behavior can be measured in terms of frequency, intensity, duration and topography.

**phylogenetic history** ♦ Refers to the evolutionary history of the species in which the survival of the individuals with the particular gene features produces a selection of genetic patterns. Thus, the inheritance of given species is determined by the evolutionary history in which other kinds of animals did not survive, rather than in the ontogenetic experience of the organism.

**positive** ♦ To add to the environment.

**positive punishment** ♦ A punishment procedure in which a response is followed by the presentation of, or an increase in the intensity of, an aversive stimulus resulting in the decrease of frequency of that response.

**positive reinforcement** ♦ A reinforcement procedure in which a reinforcer is presented following the performance of a correct response, which increases the probability that the response will reoccur in the future.

**positive transfer** ♦ The facilitation of the learning of responses in new situations as a result of past learning ♦ A process in which learning is made easier by something learned previously.

**pre-aversive stimulus** ♦ A stimulus which has been conditioned through generalization as a predecessor to an aversive stimulus.

**precursor stimulus** ♦ A stimulus (sometimes presented unintentionally), which indicated that the presentation of another stimulus is imminent.

**Premack Principle** ♦ The principle that high-probability behavior reinforces low-probability behavior.

**primary drive** ♦ An organic drive, such as thirst; also called an unlearned drive.

**primary reinforcer** ♦ An unconditioned reinforcer. Anything of intrinsic value to an organism.

**primary reinforcement** ♦ A reinforcing event that does not depend on learning to achieve its reinforcing properties.

**proactive inhibition** ♦ The process whereby previously learned material interferes with the retention of new or future learning.

**prompt** ♦ An antecedent event that helps initiate a response. Instructions, gestures, physical guidance, and modeling cues serve as prompts.

**property of a stimulus** ♦ A single dimension of the stimulus which may control a performance differentially from other dimensions of the stimulus ♦ A stimulus attribute.

**protected contact** ♦ A training situation in which the trainer is protected from the possibility of injury by the animal. In this type of training, contact is made with only portions of the animal's body at a time.

**punisher** ♦ Any consequence of a response that decreases the frequency of that response.

**punishment** ♦ The procedure of providing consequence for a response that reduces the frequency of that response.

## **R**

**recall** ♦ The process of sending or retrieving an animal from one point of station to another through the use of a conditioned stimulus (recall training) ♦ A measure of retention whereby the individual is able to extract from memory a specific piece of information (memory recall).

**recognition** ♦ The perception, realization or knowledge of something based upon previous exposure or experience with it.

**redirected activity** ♦ An activity that is guided or regulated toward an alternative stimulus other than the stimulus that originally initiated the activity ♦ Also referred to as *redirection*.

**reflex** ♦ An automatic involuntary response or reaction to a stimulus based upon inherited characteristics of the nervous system.

**refusal** ♦ A lack of response, or a declination to accept instruction or direction.

**regression** ♦ A return to an earlier mental or behavioral level or to an earlier stage of learning.

**reinforcement** ♦ The procedure of providing consequence for a response that increases the frequency of that response.

**reinforcement contingency** ♦ The relationship between the reinforcement and the exact properties of the performance which it follows.

**reinforcement schedules** ♦ The rule denoting how many or which responses will be reinforced.

**reinforcer** ♦ Any consequence of a response that increases the frequency of that response.

**reintroduction** ♦ A technique used in conservation biology that establishes or replenishes wild populations of endangered species in natural habitats, from which the species has been extirpated by nature or man, with wild born and/or captive animals.

**remote training** ♦ A training situation in which an attempt is made to remove the human element from the picture. No relationship or trust between the animal and the trainer should be developed during this type of training.

**repertoire** ♦ All the possibilities for responses that an organism possesses in a given class.

**repression** ♦ The failure of an operant behavior caused by previous aversive consequences. ♦ A defense mechanism in which an individual suffering anxiety over his/her motives seems to banish the thoughts, pushing them into the unconscious.

**respondent behavior** ♦ A type of behavior that is elicited by involuntary or automatic reflexes that are not under the control of the organism.

**response** ♦ An identifiable unit of behavior (can be muscular or glandular).

**retroactive inhibition** ♦ The process whereby the retention of previously learned material is interfered with by new learning.

**reward** ♦ A satisfaction-yielding stimulus or stimulus object that is obtained upon the successful performance of a task.

## S

**satiation** ♦ When a reinforcer loses its effectiveness as a result of being overused.

**schedule of reinforcement** ♦ The planned type, amount and frequency of the reinforcement that will be given when a task is completed. There are generally considered to be three basic schedules: continuous, fixed, and variable.

**S<sup>D</sup>** ♦ See Discriminative Stimulus.

**secondary reinforcer** ♦ A reinforcer that has acquired reinforcing value through learning by being paired with events that are already reinforcing. (See conditioned reinforcer.)



**selective reinforcement** ♦ See differential reinforcement.

**semi-protected contact** ♦ A training situation in which the trainer is partially protected or isolated from the animal. This partial isolation does not provide total protection to the animal or trainer.

**sensitization** ♦ The intensifying of an organism's response to stimuli that did not originally produce such strong reactions.

**shaping** ♦ The entire process of selectively reinforcing responses that approximate the desired response to an increasingly greater degree. A method of modifying behavior.

**socialization** ♦ The process whereby an organism acquires and conducts itself in patterns of behavior accepted by its society.

**spontaneous recovery** ♦ The tendency of a conditioned response that has undergone extinction to occur again after a rest period.

**station** (noun) ♦ An assigned position for an animal, designated by a trainer.

**station** (verb) ♦ An animal's action to remain at an assigned position, usually in a fixed posture, for a period of time designated by a trainer.

**stereotypic behavior** ♦ An undesirable repetitive behavior that is enacted by an organism, generally as a result of anxiety and/or lack of stimulation.

**stimulus** ♦ An external or internal object or event which elicits a behavioral response from an organism.

**stimulus control** ♦ The probability of a behavior being performed in the presence of one stimulus which is not evident in the presence of another.

**stimulus delta** ♦ Signal that indicates an incorrect behavior or response was performed and that the animal should return to the trainer for further instructions ♦ Signals that a previous behavior response will not be reinforced.

**stimulus generalization** ♦ Transfer of a trained response to situations or conditions other than those on which training has taken place in response to a stimulus that resembles the training stimulus.

**strain** ♦ A term used to describe the decreased frequency of a performance because the number of performances required for reinforcement is too high ♦ Also referred to as *ratio strain*.

**successive approximation** ♦ One of many progressive training steps from simple to more complex behavior, all leading to a finished desired behavior.

**superstitious behavior** ♦ Behavior that is unintentionally and unknowingly reinforced by a trainer.

**systematic desensitization** ♦ A procedure by which an animal is allowed to gradually become comfortable with an unusual or frightening stimulus.

## T

**tactile reinforcement** ♦ Any reward perceptible by touch.

**target** (noun) ♦ A prop that pinpoints a specific location for an animal to orient to or touch.

**target** (verb) ♦ The process of stimulating an animal to touch a particular object.

**team-based contingency** ♦ Group contingency in which members earn reinforcers on the basis of the performance of the group.

**terminal response** ♦ The final pattern of behavior that an organism is expected to demonstrate after the completion of the shaping procedures.

**threshold** ♦ The least amount of stimulus required to elicit a response ♦ Also known as *stimulus threshold*.

**time out** ♦ A non-reinforcement training strategy whereby a training session is temporarily paused and attention is removed from the animal for a period of time.

**topography** ♦ The form of a response.

**transfer of training** ♦ The application of past learning to new learning situations.

**trial and error** ♦ A form of learning in which one response after another is tried and rejected as unsuitable, until at last a successful response is made.

## U

**unconditioned reflex** ♦ A response that is emitted on exposure to a stimulus without previous conditioning.

**unconditioned reinforcer** ♦ See primary reinforcer

**unconditioned response (UR)** ♦ An involuntary, unlearned reaction to a stimulus.

**unconditioned stimulus (US)** ♦ A stimulus that elicits an involuntary, unlearned behavior (UR).

## V

**variable-interval schedule** ♦ A reinforcement schedule where an animal is reinforced for the first emission of the target behavior after the end of a randomly determined time interval. It results in a very steady rate of behavior.

**variable-ratio schedule** ♦ A reinforcement schedule in which reinforcement is presented after a random number of correct responses.

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