

Behavior, Learning and Natural Selection

I. Behavior

- A. **Animal Behavior** = the ways animals interact with other living organisms, and with the environment
- B. **Two types** exist in animal species (including humans)
- Innate behavior** is genetically determined and does not change
 - Learned behavior** must be directly or indirectly acquired from experience.

II. Types of Behavior

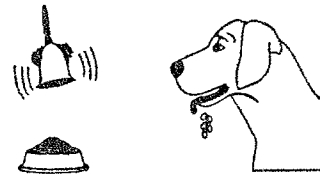
- Foraging** – searching for food
- Courtship** – selecting a mate
- Reproductive** – behaviors that lead to reproduction
- Parental Care** – ensures survival of young; includes feeding and protection
- Offensive/Defensive** – behaviors used to defend territory, hide, or fight.
- Territorial** – protecting a specific area; includes scenting and fighting.
- Migratory** – moving from one place to another with seasons
- Communication**
 - barking, growls, snorts, hoots, howls, etc.
 - body, ear, head, tail position; showing teeth etc.

III. Types of Learning

- Imprinting** = an organism learns to recognize another organism as a parent or object of trust
 - Occurs when organisms and are together during a critical period and
 - be unlearned
 - Can be instinctual or learned
- Habituation** – organism learns to ignore a frequent, harmless stimulus after repeated presentations
- Conditioning** = a response becomes more frequent as a result of repeated association with a stimulus

D. Two Types

- Classical Conditioning** = organism learns to associate a stimulus with a response
Ex: Pavlov's Dogs: Ringing bell stimulates salivating even without food



- Operant Conditioning** – learning to behave a certain way through consequences
EX: Skinner Box (B.F. Skinner): Rat learns that pressing a lever results in getting a treat.



IV. Individual vs. Group Behavior

- Asocial Behavior (Asocial)** – without the help of others; Less common EX: Bears
- Social Behavior (Social)** = interactions among individuals within the same species that are usually beneficial to other individual
 - Altruistic Behavior** = putting oneself at risk to save others
 - Cooperative Behavior** - increases the individual or groups ability to survive & reproduce
 - Reciprocal Behavior** - sharing resources in order to have the favor returned