

HISTORICAL PERCEPTION OF ANIMAL BEHAVIOUR

The history of ethology is as old as mankind because human beings were hunter gathers. It was thus mandate for them to be careful students of animal behavior and in fact revealed in the paintings on the walls of excavated caves of pre-historic times.

The great Greek philosopher, Aristotle (372BC) who for the first time wrote excellent description of animal behavior in his book “*Historia Animalium*” meaning the History of Animals. He keenly recorded the various behaviours of animals; however the conclusions he drew from his observations were incorrect. He stated that Redstart changed into robins in winter because of the close similarities between the two species. In fact Redstart birds migrated during winter.

Another keen observer of animal behaviour was William Harvey, a 17th century scientist who studied the breeding, nesting and incubation behavior of many birds.

Gilbert White (1720-1793), a vicar in England made meticulous observations of behavioural aspects of man and animals especially the swallows. Like Aristotle, he was unable to interpret his finding by using a scientific approach. He believed that swallows buried themselves in the muddy bottom during winter. He arrived at this conclusion as the swallows aggregates in the reef beds before they migrate during the night.

It was Charles Darwin (1809-1889) who is regarded as the first one to make scientific study of animal behavior in his book, ‘*The expression of emotions in man and animals*’. This book gave

details of animal behavior and it is till date considered as a classic book. He stated that the phylogenies of behavioural development were subjected to the same laws of natural selection which governs the morphological developments of organisms.

After Darwin’s theory of Natural selection was stated, it gave a new impetus and a new direction to the study of an animal behaviour .The application of laws of natural selection to ethology gave a new perspective to the better understanding of animal behavior.

After Darwin's death, his student, John Romanes wrote an excellent book on "Animal intelligence". Early work on Ethology was based on the observations of pets, domestic and farm animals. Fundamental change in the approach of studying behavior in the wild came with works of a German Zoologist, Oskar Heinroth (1871-1945) who devoted his life studying water fowls. He enumerated his observations in the book, "Ethology of Anatidae".

Ethology reached its peak of popularity in the works of three great ethologists, Karl Von Frisch from Germany, Konrad Lorenz, an animal Psychologist in Vienna, Austria and Niko Tinbergen, a Zoologist in Holland. These three shared a Nobel prize in 1972-73 for their remarkable contributions in the field of animal behaviour. They are also credited for introducing an absolutely new branch of science to Zoology and making it popular among common people. Prior to Fischer, Konrad and Tinbergen, I. P Pavlov (1849-1936) a Russian physiologist received worldwide acclamation for his work on condition reflex observations in psychological studies on learning.

Karl Von Frisch (1886-1982), a German scientist disclosed his famous studies on communication in honeybees. He described the bee dance used by foraging bees to communicate the distance, location and nature of food resources.

Konrad Z Lorenz (1903-), founding father of ethology developed a theory on animal behavior which stressed its inherited aspects and relative fixity. He formulated imprinting behavior in goselings. His books, 'King Solomon's ring' and 'Man meets dog' demonstrates his deep understanding on animal behavior.

Niko Tinbergen (1904-), a Dutch ethologist, a co founder of modern ethology along with Lorenz is famous for his work on instinctive behavior. He worked on the courtship behavior in stickle back fish, food begging in chicks of sea gulls, nesting behavior of digger wasps.

B. F. Skinner (1904-), an American psychologist did extensive work on learning by reward or reinforced learning in caged rats. This led to formation of Skinnerian Psychology.

Today we have dedicated men and women like Jane Goodall, Joy Adamson etc , who have studied the behavior of apes in the African jungles and the behavior of lion