Humans have long been engaged with nonhuman animals since the beginning of their journey on the Earth. Both human and nonhuman species have been co-existing and sharing the world forming multi-dimensional relationships. Although the non-humans are hunted, manipulated, domesticated, consumed or sometimes extincted by humans, they are also respected, worshiped, symbolized, conserved as well as adored in human societies. For a long time, different academic disciplines have considered the nonhuman animals in a utilitarian approach, considering them as objects for humanity. Therefore, the intangible aspects of emotional and relational bonds between humans and nonhumans have been commonly unrecognized. However, rapid growing interests are seen on the study of human and nonhuman animal relationships in contemporary academic discourses, resulted through various approaches of anthrozoology, an emerging field of anthropological science. Showing its origin, development, study fields, complexities and future perspectives, this paper is aimed to present the essence of anthrozoological studies in Bangladesh and other developing countries.

**Key Words:** Human-animal bonds, Bangladesh, Anthropology, Anthrozoology

**INTRODUCTION**

Humans and nonhuman animals have been living together sharing the world by forming multi-dimensional relationships since the origin. These relationships have long been ignored in sociology. Sociology is conventionally seen as the study of nonhuman animals in a linguacentric perception, because animals lack the ability to employ spoken language. Consequently nonhumans are treated as mindless and selfless. Rationalist views of Descartes is that nonhuman animals could not think, and therefore, they are not worthy of serious analytic attention. Influenced by this idea, sociology has had a long history of anthropocentrism and consequently an uneasy relationship with nonhuman animals. In attempting to create a science of society, the founders of the discipline strove to distinguish human behaviour from that of animals, and elevated human behaviour to the apex. They dismissed animal behaviour as based on instinct. In this view, nonhuman animal behaviour is simply responds to instinctual cues, but human behaviour is shaped by society and culture.

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Moreover, animal instinct left no need for interpretation. With no social basis for their behaviour, thus, animals were simply not of interest to sociology’s founders. However, different approaches in social sciences have been seen towards nonhumans in the last three decades. Moreover, in the last 100 years, people have markedly changed their perceptions, their relationships, and their uses of animals and animal products.

One hundred years ago, most of the families grew domesticated animals in their house and had considerable contact with livestock and wildlife. People knew that dairy cows were kept to provide milk and meat. Beef cattle and pigs were slaughtered to provide meat, and chickens provided eggs and meat. Wildlife was often hunted by farm families to provide meat and skins. Even though people understood that actual role of nonhumans in human lives, they were often in a close relationship which gave them a perspective of interdependence and the nature the ecosystem. Cats were often kept to hunt down and kill intruding mice or rats. By watching cats, children learned the example of the prey-predator relationship as well as the utilitarian reasons for life and death. Today, people are shocked and consider it cruel when a cat expresses its natural instinctive behaviour to kill a mouse or bird and bring it home. Nearly all cats were kept outdoors in the past. However, the majority of house cats sleep on the owner’s bed today. Nearly all dogs were kept for herding, pulling power, hunting, tracking, or protection and were seldom allowed in the house, almost never in the bedroom. Today most dogs in the developed countries are kept in the house for companionship and sleep with their owners in the bedroom.

It is socially acceptable today to grieve the loss of a pet, to carry pet pictures in wallet or purse, to celebrate pet’s birthday with a party, to have pet medical insurance, or to buy special food for pet. Even in 1900, human societies didn’t recognize or allow themselves discussing and enjoying the bond between people and nonhumans. However, this is now a common and inevitable part of our society. This does not mean that the bond did not exist hundred or a thousand years ago. In fact, it has been present and often spoken of in religion, mythology, folk tales, cave paintings, and architecture throughout human history and cultures. The disciplinary anthrozoology is, therefore, eager to understand our kinship with nonhuman animals.

2. ANTHROZOLOGY: CONCEPT AND DEFINITION

Anthrozoology is the study of animal-human interactions. This study is mainly expanded to examine, understand, and critically evaluate the complex and
multi-dimensional relationships between human and nonhuman animals. The relationship can be real or symbolic, factual or fictional as well as historical or contemporary. Anthrozoology shows the various ways in which nonhumans figure in our lives and we in theirs. Anthrozoology would cover much of conservation science, animal welfare and applied animal ecology by its etymological meaning; however, it is normally applied to studies of associations and especially relationships between individual humans and individual nonhuman animals, rather than to interactions that take place at the population level. This is a newly developed and fast growing research area which is gaining increasing popularity in contemporary years.

Although some may overlap anthrozoology with animal welfare, they are actually not the same. Animal welfare is aiming to create and maintain the standards of the ‘well-being’ for nonhumans and it is focused mostly from human side activities, while anthrozoology deals with the interactions from both humans and nonhuman sides.

The key term in this definition is ‘relationship’. Anthrozoology is the only field that directly investigates relationships between human and nonhuman animals and their environment. This subject, therefore, deals with various forms of bonds, attachments, interactions, and communications between human and other animal species. Other fields may investigate one or another aspect of human being or of nonhuman beings. However, they never emphasise the relationship between the nonhuman species and humans. For example, ethology\(^5\) and comparative psychology investigate the behaviour of nonhuman animals. These fields therefore can be foundational fields – as chemistry is to biology, however, they are not a part of anthrozoology as because there is no dealing with relationships between humans and nonhuman animals.

Scholars in anthrozoological research have been modifying existing research methods for other fields and developing unique methods to the study of human-animal relationships. The problem of existing research methods is that they all are views from human perceptions while anthrozoology is focusing from both humans and nonhumans perceptions. At present, anthrozoology has activated researchers from several academic disciplines such as animal behaviour, zoology, psychology, veterinary or medical science, philosophy, sociology, and anthropology. Many of anthrozoological works have also been influenced by philosophical thought about attitudes to other animals.
3. WHAT MAKE US HUMAN?

Animal consciousness has been debated for many years among philosophers, psychologists, and behavioural scientists. Although nonhuman animals were ignored in sociology, several recent scientific studies have shown our long ignorance about the status and abilities of nonhumans. Research shows that nonhumans also have the expression of self-concept. However, there are many stages of consciousness according to cognitive science. Access consciousness is information made available to the brain’s systems, such as systems of memory, reasoning, planning, evaluation of alternatives, decision-making, direction of attention, and rational control of action. Scientists believe that many animals possess access consciousness. However, two other senses of consciousness cause controversy when applied to nonhuman animals: phenomenal consciousness and self-consciousness. Phenomenal consciousness refers to sentence, i.e. the qualitative, subjective, experiential, or phenomenological aspects of the conscious experience. Self-consciousness is closely related to theory of mind, i.e. whether animals are capable of attributing mental states to others. Scientists claim that phenomenal consciousness is inseparable from an animal’s capacity to perceive and respond to its environment and is therefore it is very widespread in nonhuman animals. The consequence is that, at least now, human cannot claim that only they have scene of awareness or consciousness.

On the 7 July 2012, the Francis Crick Memorial Conference entitled as ‘Consciousness in Humans and Non-Human Animals’ showed that humans alone do not possess the neurological faculties for consciousness. A prominent international group of cognitive neuroscientists, neuropharmacologists, neurophysiologists, neuroanatomists, and computational neuroscientists participated in the conference and declared the famous Cambridge Declaration on Consciousness. The declaration says:

“The absence of a neo-cortex does not appear to preclude an organism from experiencing affective states. Convergent evidence indicates that non-human animals have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit internal behaviors. Consequently, the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Non-human animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.”

With the help of modern scientific development, different researches exposed that many nonhuman animals have cognitive ability as like human and human children. On the other hand, academic concern has been growing in scholars
and scientific communities regarding that nonhumans are still shaping humans society as they shaped in the past. Consequently, necessity has arisen for changing previously established sociological idea and definitions on animals. Similarly, it is now inevitable to change social approach and evaluate animals’ relationships with human society.

4. EMERGENCE AND DEVELOPMENT OF DISCIPLINARY ANTHROZOLOGY

Anthrozoology is a newly developed interdisciplinary field which was created by an overlap of several other disciplines, including anthropology, ethology, psychology, veterinary medicine, and zoology. The first issue of the prominent journal regarding this field ‘Anthrozoös’ was published in 1987. Since then the academic anthrozoology is being known and spread. However, the current tradition of the research on the relationships between human and nonhumans is usually considered to have begun with a paper by the psychiatrist Boris Levinson in 1962, in which he described the effects of interaction with a dog on one of his young patients.

With the publication of Australian philosopher Peter Singer’s Animal Liberation (1975) and American philosopher Tom Regan’s The Case for Animal Rights (1983), there has been a burgeoning interest in animals among academics, animal advocates, and the general public. Anthrozoologists recognize the lack of scholarly attention given to nonhumans and to the relationships between humans and nonhumans, especially in the light of the pervasiveness of animal representations, symbols, and stories, as well as the actual presence of nonhumans in human societies and cultures. During 70s, feminist scholars began to correct the male-centered research literature, while anthrozoologists have begun to insert non-humans issues into the full range of academic disciplines.

A significant turning point in anthrozoology occurred by Clifton Bryant by his publication and advocacy for the importance of sociologists attending to the ‘zoological connection’. Soon a few pioneering sociologists began to investigate settings in which human-nonhuman interaction was a central feature and call into question the Cartesian orthodoxy which hitherto influences sociology. Sociologists working within the perspective of animal symbolic interactionism include Leslie Irvine, Clinton D. Sanders and Janet M. Alger & Steven F. Alger have great contributes for anthrozoology. These researches have focused on the process by which people have constructed an understanding of the individuality, mindedness, emotionality, and identity of nonhumans; and, in turn, how association with animals has shaped the identities of humans.
Catherine Bertenshaw & Peter Rowlinson’s work has revealed that dairy cows in England produce more milk when they are given names rather than numbers. Irit Gazit & Joseph Terkel, G. J. Adams & K. G. Johnson and Vikki Fenton’s work have shown that scent detection of Canidae Sp. can identify explosives, drugs, cadavers and termites. The work of Erika Friedmann, et al. work has provided the result that therapy animals measurably reduce stress responses of patients. These kinds of other researches on nonhuman consciousness, empathy, benefits of the human-nonhuman bond, human-nonhuman communication also have enriched the disciplinary anthrozoology.

Until 2010, there were 23 college programs in anthrozoology only in the United States, Canada, Great Britain, Germany, and in the Netherlands. Moreover, there are eight veterinary school programs in North America, and over 30 organizations in the United States, Canada, Great Britain, Australia, France, Germany, New Zealand, Sweden, and Switzerland. There are over 300 courses in 29 disciplines at over 200 colleges and universities around the globe are found related to anthrozoology. Besides, there are nearly 100 law courses related to anthrozoology and policy issues of nonhumans. Currently over a dozen journals including ‘Anthrozoös’ and ‘Society & Animals’ are covering anthrozoological issues, many of them founded in the recent years. These journals are mainly aimed to signify the various ways where humans and nonhumans are connected. Another online journal is ‘Humanimalia’ which has been popular recent years.

Established sociological journals also have been publishing special issues in the field of human nonhuman interaction, Journal of Marriage and Family, Qualitative Sociology, Social Research, Journal of Social Issues, International Journal of Sociology and Social Policy etc. are most prominent among them. Besides, there are now over hundreds of academic books and papers published on anthrozoological research. In this regards, Margo DeMello’s book and Key Peggs’s book are found to be the most recognized among the textbooks of anthrozoological studies. Different universities are also publishing anthrozoological series publications.

Non-academic organization and activities are also promoting the idea and necessity of disciplinary anthrozoology. The first humane society was established 1866 in New York City as the American Society for Prevention of Cruelty to Animals. Today, there appear to be more than 5,000 humane and rescue groups for animals only in the US.

A book of human animal bond stories has been sold out more than one million copies in its first year. Several hundred other books about people and their pets have been published in the last ten years. Author Susan Chernak McElroy in her book illustrates our increasing connection to nonhumans.
Numerous conferences have also been organized all over the world in last 25 years in different aspects of anthrozoology. However, annual meetings of two leading organizations ‘Animals & Society Institute (ASI)’ and ‘International Society for Anthrozoology (ISAZ)’ are most notable among anthrozoological conferences.

5. STUDY AREAS IN ANTHROZOOLOGY

The relationships between humans and nonhumans are complex and sometimes change their phases according to environment, training as well as companion- ships. Therefore, these relationships could be identified as predatory to mutual physical survival, through economic dependence to psychological dependence as well as friends to social movers. Humans use nonhumans for a wide range of purposes and their relationship develop based on the significance of certain nonhu- mans to humans lives. Therefore, humans may have no interest or very limited interest in species, which are irrelevant to their lifestyle. In Indian countries, human worship dangerous species like snake. The interest with this nonhuman may be great, but the relationship here is of avoidance. Therefore, human-nonhuman bond is not appropriate in this case. Hunting societies are interested in prey animals and have significant cultural practices for the success of their hunt. Again, this is a one sided relationship and human-nonhuman bond is not appropriate here. However, the relationship between hunters and their hunting dogs, horses or birds may be close and a bond may exist between them. Pastoralists have to sell their herds for money, and they even sometimes have intimate relationship with some selective individual animals of their herds.

The level of influence of nonhumans to the survival of humans may influence their relationships. The more dependent humans are on individual species for their survival, the more effort they will put into the welfare of the species and perhaps the closer their relationship will be. Currently within the social sciences and humanities, many traditional academic fields have a core of scholars who study human-nonhuman bonds. However, other scholars in these same fields study humans and animals without reflecting on the relationships between them. For example, a study in anthropology that describes participations of nonhumans in human society for commerce or ritual use -is not part of anthrozoology as it presents the nonhumans as cultural artefacts. Therefore, it is seen that the study areas of anthrozoology is wide and various, as because nonhumans’ involvement in human society is wide and various. Following is the glimpse of some research areas where anthrozoology is mostly focused on:
5.1 Human Interactions with Companion Animals/Pets

There are a lot of anthrozoological researches\textsuperscript{30} that have been carried out on the relationships between humans and dogs, cats as some other pet. Most research shows that companionship is the major reason for ownership of pets. It is also found that most of pet owners treat their pets as a part of the family.\textsuperscript{31} However, anthrozoologists question that the amount of money people are willing to spend on their pets is less than they would spend on a human family member. On the other hand, most of the pets live as their single species in human households and therefore their major social contact is their human owners. The fact is that many people actually spend most of their time working, socialising or sleeping and they have little time to interact with their pets. Companionship suggests interaction but the lack of interaction dilutes this concept. The reasons why people keep cats and dogs are still poorly identified. Human relationships with dogs, cats and other companion animals are not new but now it is mostly urban based. Anthrozoological studies show that isolated people may depend on their companion animals for more emotional support than that previously seen in large households.

5.2 The Role of Animals in Human Beliefs and Religions

Animals have been playing critical role in human beliefs and religions since Palaeolithic period.\textsuperscript{32} Especially prehistoric hunting practices played significant role in development of early shamanic practice. Success in hunt was often considered to be a giving to the hunters by their target animal. This giving has to be ensured for the future by the correct pre and post hunting rituals. Individuals may focus their hunting activity on specific species and adopt that animal species as totemic. In contrast, they may be associated with animal species that they cannot hunt being of their clan. Therefore, the prehistoric hunters had great interest in and emotional relationships with their target species and also with totemic species which they were forbidden to hunt. However, alongside of early human beliefs and symbolic practices, anthrozoology also focuses on the crucial roles of different animal species in contemporary religions.

5.3 The Role of Animals in Cultural Identity, Power and Cultural Changes

A small but important subset of anthrozoological research is the role of animals in shaping the gender, ethnic, and cultural identities of people. Anthrozoology explores the place of animals in society and culture and how this varies cross-culturally and over time. It addresses the importance of animals to the organization and development of society. Anthrozoology considers different aspects of human-animal relations to change cultural identities as well as shows how taking animals into consideration might challenge our understandings of society.
5.4 The Symbolism of Animals in Human Literature and Art

The role of animals in human art and literatures is inevitable. In the earliest Palaeolithic cave arts, Mesopotamian cuneiform writings, Egyptian hieroglyphics or even the literary words of Hittite clay tablets, humans needed the examples from animals to express various critical human characters and to symbolize their moral expressions. Anthrozoology finds the role of an animal in a story or an art work is like a vehicle or symbol for understanding some aspect of a human being. It eventually encompasses some aspects of animal representations in literatures and art works, such as: disrespectful ways of presenting nonhuman animals; evaluating the degree to which the author or artist presents the animal; and analyzing the human-animal relationships in the work at hand.

5.5 Animals in the Past Human Society

Hunter-gathering-scavenging societies depended on a wide range of plants and animals for survival. The animals of importance include insects, fish, birds, reptiles, and mammals. Detail knowledge about their behaviour was required to successfully utilise this range of species. For example, for the harvesting of honey, the past hunter-gatherers must knew when honey will be available, whether the bees have fed on toxic plants and made toxic honey, how to access bee nests and how to take the honey while limiting stings and not destroying the resource. On the other hand, hunting large mammals is a dangerous, difficult and exciting exercise. It required knowledge, skills and cooperation because it was dangerous. It also required a relationship often with some religious significance to help guarantee, success and safety.

5.6 Origin and the Development of Domestic Species

Humans first started farming and domesticating animals around 11,000 years ago in the Levant and Central Anatolia (Turkey). This managing process of different animal as well as plant species was spread by Anatolian farmers from the Central Anatolia to northwards directions in around 10,000 years ago. Later this domestication process spread all over the world and fundamentally changed the humans’ social system and eventually their environment. In fact, the process of domestication involved changing animal species so that they could live and reproduce effectively while close to humans. Human abilities to successfully change a species’ behaviour as well as the ability to empathise with animals were needed to tamed animals living intimately with their human captors. This physical and emotional intimacy between human and animals was resulted the domestication of...
most livestock species. Since the beginning, humans have this intimacy and it is obvious today in many communities. In cattle people societies such as the Nuer in Africa, men wash their cattle and sing and recite poetry to them while women in some Papuan societies suckle piglets and Europeans share their beds with dogs and cats. Anthrozoology focuses these critical and widely distributed aspects of the interactions between human and their domestic animals.

5.7 Captive Zoo Animals and Their Bonds with Keepers

More than 1,000 animal collections or zoos are open to the public in the world today. It is not clearly known when the earliest zoos were established. However, it is thought that animal keeping for display were probably practiced following the animal domestication. Therefore, it is likely that the zoo has a long history with humans from prehistory to modern world. It is found that pigeons were kept in captivity as early as 6500 years ago in present-day Iraq. Another very old known zoological collection was revealed during excavations at Hierakonpolis, Egypt in 2009, of a ca. 5500 years old menagerie, where exotic animals included hippopotami, hartebeest, elephants, baboons and wildcats were kept. Whatever, the ancient or modern zoo, keepers have always seen having emotional bonds with zoo animals. The ramifications of zoo keepers role is now considered to be very significant for the behavior and welfare of zoo animals. It is likely that different relationships are formed dependent on the unique keeper-animal interaction. A major part of anthrozoological research thus focused on keeper-animal interactions.

5.8 The Social Construction of Animal

Anthrozoologists are eager to understand and find the answer what it means to be animal. One of the main reasons is that animals are excluded from discussions of language and power is that they themselves are not participants in their own social construction through language. Focusing on hegemony, it is visible that oppression of a group is carried out ideologically rather than coercively, and through the manufacture of consent. In most of the case of animals, the power is seen completely coercive which is controlled by a small number of people in the world. However, it is seen that this coercive power and this kind of social construction of animal status depends completely on the approval of the majority of the human population who explicitly or implicitly agree to the way animals are treated. Anthrozoology is keen to examine and evaluate this ‘animal’ status constructed by human societies.
5.9 Animals and the Intersections of Speciesism, Racism, and Sexism

Speciesism is a belief that different species of animals are significantly different from one another in their capacities to feel and therefore different species live in different autonomous existence. Racism is a belief that human races have distinctive characteristics that determine their respective cultures, and therefore, one race becomes superior and has the right to rule others. On the other hand, sexism or gender discrimination is a belief that different genders have their distinctive abilities and cannot equally capable for something, therefore all gender do not deserve the same status. It is clearly apparent that all of these notions have same functional structure, e.g. oppressive attitude and psychology of controlling others. Therefore, many anthrozoologists argue and find equality between speciesism, racism, and sexism. Some even go further, proposing that the oppression of non-human animals is connected to the oppression of women, racial and ethnic minorities, people of lower social classes and other members of disvalued and disempowered human groups, and that it is directly related to the political and economic structure of contemporary society. However, there are debates whether the animal rights advocates who promote veganism inherently racist by not taking into account different cultures’ perspectives on animals or whether the meat-eating people are speciesists who argue that meat is a part of their tradition.

5.10 Exploitation of Animals by Human Devourer

As food source, various nonhuman species have been used in human survival since the earliest evolutionary stage. Processes of food production and consumption involve a multitude of human interactions with other animals. These interactions culminate in perhaps the most significant of all –the death and the subsequent consumption of flesh of animals. Humans have been practicing, hunting, pastoralism and farming to obtain their protein source. Without this process since prehistoric time, humans would face strong challenges for their survival. For example, primitive type of pastoralism is practiced by the reindeer people in northern Scandinavia and Russia. These people depend on reindeer for their cultural identity and survival. They follow reindeer herds, tame them and protect them from other predators and finally kill them for meat, skins and everything else. Their identity depends on reindeer and their culture and survival depends on being able to husband and manage these animals. Although, this close relationship between people and reindeer is comparatively looser than that of cattle, goat, sheep and camel pastoralism, reindeer people are very aware about and live intimately with their animals. Pigs are important animals in the subsistence agricultural communities in Papua. While pigs are regularly eaten by them, piglets may be suckled by women in their society and are often reared with a targeted social end in mind. On
the other hand human have been commercially farming livestock to produce more meat. Surprisingly, it is found that although cattle ranchers keep emotional distancing in order to protect themselves from feelings of attachment toward animals that will shortly be slaughtered, this boundary does not always work successfully. Anthrozoology, showing such complex examples, indicates that humans may be predator or devourer to different nonhuman species, however, mutual dependence and bonds are certainly grown between people and the animals that human consume.

5.11 Nonhumans in Labour and Economy

Humans use animals for a wide range of labouring purposes. For example, horse, falcons and dogs are commonly used for hunting other species. The use of horses, donkeys, camels, yaks, cattle, buffalos and elephants for agriculture, transport, logging and various other laborious works can date back to earliest period of human civilization. Some animal such as elephants are used in tasks such as ploughing or logging for their physical strength. Others like horses, mules, donkeys, reindeer, cattle and llamas may be used for animal-powered transport, the movement of people and goods and also to carry loads. It is likely to be formed a very intimate relationships between these animals and their companion human for a long time of working and living side by side. Taking as a very significant aspect, anthrozoology has been exploring this complex and intimate relationships between those work animals and their owners or keepers.

5.12 Nonhumans in Entertainments and Sports

Animals today are still a huge part of the sport and entertainment industries. Cultural traditions such as fox hunting, bull fighting, dog racing, performing tricks at circuses, are all examples of how we take advantage of animals for our own entertainment. Many animals, at least in more commercial sports, are highly trained. Racing is the most popular form of animal-related sport, particularly horse racing. There are also some non-racing competitive events involving animals. In many countries animals fight such as cockfighting, dog fighting, cow fighting and camel wrestling are very popular. There are also some sports where humans fight animals, such as bullfighting which has a long history in Spanish and Portuguese tradition. In most cases, animals need long term training to be used in sport, and therefore, an intimate relationship between sport animals and their trainers is inevitable. Alongside these mutual interactions, anthrozoology also focus on the very complex issue of how nonhuman animals are used for human entertainments and amusements. Circus can be the most suitable example for this. In one hand, circus animals are often trained with very cruel process, on the other hand, circus workers usually have found forming quite close relationships with their animals.
5.13 Nonhumans in Cross-Cultural Practice

Culture is a defining interest area of social and cultural anthropologists. Humans have long been regarded as uniquely cultural beings while cultural practices differentiate one human group from another. Culture has also often been seen as one of the ways in which humans are different from other animals. However, anthrozoology shows that animals also shape human culture as well as define cultural identity. Some animals are abhorred in some societies while adored by others. Animals are therefore seen have both positive and negative impacts in cross-cultural interactions. Within some religions particular species may be taboo. For example, dogs and pigs are forbidden within Islam and Judaism. On the other hand, pigs supply major portion of meat source for most of European families as well as most of their dogs sleep in their bed. Pigs are found very essential medium of dowry for men's marital eligibility among Vanuatu society in northeast of Australia. Vanuatu also achieves leadership and social status through the accumulation of pigs. In Melanesia, the pig is considered to have a soul and they are regarded as family members, albeit nonhuman ones.

5.14 Animal Abuse and Experiments on Animals

One of the major focuses in anthrozoological research is the notion of animal use in "dirty work". Dirty work is a form of labour that is perceived to be morally offensive or undesirable. Animal human bonds exist but vary considerably depends on a wide range of factors. These include individual human needs of companion animal species, individual lifestyle, tradition, experience and culture. The development of human animal bonds with the exclusion of human need may become problematic and may in some cases become a form of abuse. Many towns in the developed world has an animal shelter and a pound to take in unwanted, stray and surplus animals usually companion animals such as dogs and cats. The existence of such facilities suggests that there are problems with the relationship between humans and companion animals and that the ‘bond’ between humans and animals may be a fragile thing. Research suggests that physical or sexual child abuse, paternal alcoholism and unavailability as well as domestic violence may be significant in development of childhood animal cruelty. It is also found that people convicted for animal cruelty to be more likely to be violent to humans. Therefore, anthrozoologists believe that decreasing animal abuse will, in turn, decrease domestic violence.
5.15 Communication between Human and Nonhumans

Anthrozoology attempts to emphasise the invalidity of previously established idea that animals do not have any capacity to communicate. Moreover, anthropologists show that many nonhuman species even capable to communicate with other species. Domestic dogs have an unusual ability to read human communicative gestures and body language. There are several examples in the nonhuman animal world of selected individuals possessing advanced skills to communicate verbally with humans. Alex the Grey parrot (Psittacus erithacus) exhibited cognitive capacities comparable to marine animals such as bottlenose dolphins (Tursiops truncatus), Bonobo apes (Pan paniscus), and sometimes 4 to 6 year old children. The bottle nosed dolphin (Tursiops truncates) is known for a high level of language competency. It is found that dolphin’s cognitive structures for the interpretation and manipulation of auditory information are highly developed. Koko is a 44 years old Western Lowland female gorilla who communicates with human in sign language. It is said that Koko understands approximately 2,000 words of spoken English in addition to more than 1000 signs of American Sign Language (ASL). These studies, along with many other cases, raised many questions on previously established paradigms in sociology and anthropology.

5.16 Interspecies Telepathic Communication

Telepathic human connection to animals is a fascinating field in anthrozoology. Thousands of human communicators have claimed that they are successfully engaged with telepathic communication to other species. Many have professional full-time practices with loyal clients worldwide. Research shows that many pet owners indicated that their pets responded to their thoughts or silent commands; their animal knew what their human was thinking. However, study of telepathic connection with nonhuman animals is actually newly approached field in anthrozoology while few people mentioned it before.

5.17 Mind, Self, and Personhood in Nonhuman Animals

Some of the sister fields of anthrozoology such as comparative psychology and ethology, explore the intellectual, emotional, consciousness, and socio-religious organizational capabilities of nonhuman animals. They investigate aspects of humanity or animality directly, without addressing the question of the relationships between them. However, the first problem in these studies is to understand other minds as other animals have lacking of ability to use human language and they cannot tell us about their experiences. The second major problem with the denial that an animal does not feel, its life has no value, and harming it is not morally
wrong; which was established by the 17th-century French philosopher René Descartes. Nonetheless, many studies with the help of mirror test over the past 30 years have found evidence that other animals such as chimpanzees, bonobos, orang-utans, gorillas, elephants, bottlenose dolphin, killer whales and even some neocortex-less bird species have self-awareness and even they recognise themselves in mirrors. On the other hand, the study of animal faith and allied behaviours in non-human animals also provides an opportunity to understand their nature and function in human. Consequently, some researchers attempt to show superficial similarities between the funeral rituals of African elephants and the burial rituals of Neanderthal humans. These kinds of deconstructions are therefore, become important in the scope of anthrozoology.

5.18 Issues and Activities for Laws and Rights of Animals

Another area of human-animal studies is based within the literatures, laws and organizations of animal rights as a social movement. This study field focuses on the policy involving the abuse of companion animals in home; culturally supported images of ‘animals’; the role of language in supporting or condemning animal abuse; the role of police and criminal justice in response to animal abuse and other animal issues; status of nonhuman animals in existing laws; the relation between animal abuse and other forms of violence; and the development and evaluation of programs dealing with animal problems and other perpetrator-victim violence. Over the last 40 years, many anthrozoological works have explored how the animal rights movement challenges the socially constructed definitions of animals and how they create a moral shift in beliefs and values relating to animals.

5.19 Conservation of nonhuman animal species

The Anthropocene as an epoch in the Earth’s history began some 200 years ago, marked by a widespread technological shift to industrialization and the associated impact of anthropogenic activity on the planet’s geological and environmental stability. Conservation of other animal species is a prominent issue for anthropologists because the anthropogenic activities which threaten other species also have negative impacts on human communities globally. However, there is no general consensus regarding sustainable human–animal–environmental relations. Anthrozoologists show that disparate attitudes towards the fate of the natural world and the importance attributed to wildlife conservation can result in conflicts between human groups. Many studies have attempted to signify this issue are already fairly common to us.
6. COMPLEXITIES IN ANTHROZOOLOGY

Both human and nonhuman animals have capabilities that limit the forms of their relationships within and across species. These capabilities and the inclination to exercise them vary greatly by species, individual, and environment. In turn, science is limited in what it can learn about both the capabilities and the relationships. These limitations of science reflect both our investigatory tools and the special problems of gaining access to the lives and experience. Although they communicate, it eventually limits the science when other species do not speak our language without extensive training. This situation creates the complexity of studying human-nonhuman animal relationships. In addition to the understanding that science gives us, our relations to animals are influenced by the complex ways of a social view on animals. These views derive from our philosophical, religious and political ideologies as well as the various ways we treat animals what we glean from scientific literature.

Anthropology, more than any other social sciences or humanities subjects, is premised on the primacy of the human. Therefore, we have constructed the ‘animal’ image in our own ways. Historically and currently, we have adopted many different attitudes and images toward animals that also limit and influence the forms of our relationships with them. We have various images of monkeys, donkeys and tigers - that monkeys always come as funny creature, donkeys come with a foolish brain, and tigers always create fearsome and strong images. This complex of constructions influences the form of our relationship to a particular animal species. For example, our relation to chickens is intensively confined for the production of meat. We view these animals as commodities, not as individual beings. Therefore, our relation to them is comparable to that of our relation to a pumpkin. Moreover, there are confrontations with animals that are naturally evolved and animals that are socially constructed, which includes artificial selection, genetic engineering, and systematic forms of socialization. More important fact is the usage of the term “animal” referring to all animals except humans despite the reality that humans are also animals.

Another problem in anthrozoological research is the biasness of some of the funders. Those who work for veterinary pharmaceutical companies do not want to hear negative consequences of use of their drugs on animals. Pet food companies do not want to get evidence that pets have some negative effects on humans. Farm food companies do not want to accept the evidence of the side-effects in animal health that eventually affects on human health. There also has been a splintering in the field between anthrozoology and critical animal studies because of the conflicting beliefs of the purpose of academic research. For example, while some anthrozoo-
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gists have supported some aspects of animal advocacy, others remain apolitical or even maintain speciesism. Critical animal studies, on the other hand, have taken a political and academic stance for the end of animal, human, and environmental exploitation.

7. PROSPECTS OF ANTHROZOOLOGY

Currently within the social sciences and humanities, many traditional academic fields have a core of scholars studying anthrozoology. Some other scholars study humans and animals without reflecting on the human-nonhuman animal relationships and the attitudes that shape and constrain those relationships. Overall, the study of human-animal interaction offers a wide variety of options for future research. Since most of the extant discussions have been focused on humans' everyday relationships with cats and dogs, in especially western world, the various aspects of socio-cultural relationships with other "exotic" animals such as ferrets, fish, reptiles, insects, and rabbits would be new and instructive. There are also numbers of unexplored animal-related occupations that are available for fruitful investigation, including pet sellers, wildlife rehabilitators, zookeepers, beekeepers, professional animal handlers, elephant keepers, animal behaviour consultants, circus personnel, and those involved in animal assisted therapy. Besides, socio-cultural-religious roles of various animal species in village, town and tribal communities offer wide ranges of research fields. Finally, anthrozoology encompasses, but is not restricted to, the study of human-nonhuman animal ‘bond’. And therefore, it should logically also include unsuccessful and dysfunctional interactions beside the positive cases. It is likely to be that there will be much more research on what are the abilities of animals including fish and invertebrates as well as birds and mammals, what are the real effects of animals on people and of people on animals as well as the complex roles and symbolic values of other animal species in human society.

8. SCOPE OF ANTHROZOOLOGICAL RESEARCH IN BANGLADESH

The disciplinary anthrozoology is almost a very new phenomenon in Bangladesh and almost no anthrozoological research has been carried out by sociologists and anthropologist in this field. However, a wide range of socio-cultural aspects of human-animal interactions are seen in both town and rural areas of Bangladesh. Nonhuman animals have been placed a major role in various aspects of socio-cultural and economical practices in the subcontinent since prehistoric time. Animals can be seen acting only in food in bare eyes. However, they are involved in agriculture, religious beliefs, rituals, festivals as well as being emotional parts of many societies. Even 30 years ago, before the arrival of tractors and other agricultural machineries, almost every farmer in Bangladesh was very much depended on
animals and inevitably had more than one cattle for ploughing the field, processing
the harvested crops and for the sources of family protein. Although the number of
animal farms is growing rapidly, many households in Bangladesh still keep cattle
and goats to earn daily basis by selling milk and also for a big financial support for
emergency. Mostly raised in village, these animals are seen as an important part of
their owner’s family and they remain unforgotten in children as well as adult
individuals’ memory for even they have been long gone. Keeping chicken and
ducks is likely to be a prehistoric household practice in subcontinent. People regu-
larly raise chicken and ducks in their household and alongside of regular source of
meat and eggs, most of case, they have been a part of daily household chores
providing women economical supports in rural Bangladesh.

Keeping cats, birds and fish (in the aquarium) as pet has been long practices
in cities and towns in Bangladesh. Moreover, there is an increasing trend of keeping
several dog species by wealthy families and it has been observed in the capital and
other metropolitans. Therefore, various research approaches can be taken on pet
markets, changing trend on human-nonhuman bonds, as well as the complex
relationships between town pets and their owners.

Using different animal species and their body parts as traditional medicine
is a commonly known facts in Bangladesh. On the other hand, alongside of many
tribal cultures, animals have seen playing significant roles in traditional beliefs and
religious practices in Bangladesh. Many nocturnal birds such as owl are feared by
local people all around the country because of their ability to kill or as evil sign
things in a family. These cultural practices are also demanded to be studied by
anthropologist in the country.

9. CONCLUDING REMARKS

It is now clear and well accepted that our views on nonhuman animals are
mostly prejudiced and anthropocentric, consisting of layers of ideological and
human linguistic biases that serve only human interests. By unravelling and re-ex-
amining the layers of these social constructions, anthrozoology has been attempting
to regulate our approaches to nonhuman animals in ways that enhance as well as
allow the very real facts of human-animal relationships (since our origin) on which
we are living in an all species world. Although some issues in anthrozoology can be
arguable, there are still many socio-cultural aspects of human-nonhuman animal
relationships that are significant to be understood for good of human society and a
better world too. Increased research around the globe indicates the disciplinary
anthrozoology as a robust emerging multidisciplinary field. Observing the scenar-
ies in western world, one might think it unnecessary; however, anthrozoological
research seems to be more significant in Bangladesh or other underdeveloped countries than that of developed countries because of its aptitude in help reducing violence and social discriminations.

Endnotes

1. It is usually associated with the introduction of mathematical methods into philosophy during this period by the major rationalist figures Descartes, Leibniz and Spinoza.
4. Ibid.
5. Ethology is a subfield of zoology where human behavior and social organization are studied from a biological point of view.
16. Ibid.


33. Such as honey bees, termites, and locusts etc.

34. Ibid.


References