



Anthrozoological Study on the Agro-Pastoral Societies of Kızıltepe, Southeast Anatolia

SÜLEYMAN ŞANLI*
suleymansanli@artuklu.edu.tr
ORCID ID: 0000-0002-3826-201X

ABU BAKAR SIDDIQ**
abubakarsiddiq@artuklu.edu.tr
ORCID ID: 0000-0001-5838-2695

Abstract: *Since the origin, humans have been depended and formed mixtures of complex relationships with nonhuman animals. These mutualistic relationships eventually intensified following the animal domestication. Southeast Anatolia is one of the important regions where the first domestication of sheep, goat, cattle, and pig occurred as well as domestic herds have been fundamental in every socio-cultural aspect in the region until today. Therefore, Southeast Anatolia has been an ideal place for pastoral and anthrozoological study. Through fieldworks and exploratory case studies in agro-pastoral societies in Kızıltepe, we found certain sheep, goats, and cattle are capable of distinguishing and recognizing human and other cross-species individuals as like they do in their own species. Alongside of providing protein, wealth and social status, herd animals in Kızıltepe also possess deep affection and emotional bonds with human individuals as like as pets in urban societies. On the other hand, we do not observe any gender or sibling effect in children-animal bond which was focused in some contemporary studies. Our overall observations and findings also demonstrate some intangible culture cores in Southeast Anatolia which is promoted mainly by the complex relationships between human and their domestic herds.*

Keywords: *Anthrozoology, Human-animal bond, Pastoralism, Southeast Anatolia, Kızıltepe.*

Introduction

Humans and nonhumans have been sharing the world since the early evolutionary process forming multi-scale and complex relationships. The mutual understanding between humans and their fellow nonhumans intensely increased following the first domestication of dogs around 15,000 years ago¹. These interactions and emotional relationships further become more complex and deepen when the earliest settled

* Asst. Prof., Mardin Artuklu University, Faculty of Letters, Department of Anthropology.

** Lecturer, Mardin Artuklu University, Faculty of Letters, Department of Anthropology.

1 Peter Savolainen, et al., "Genetic evidence for an East Asian origin of domestic dogs", *Science*, 298/5598 (2002): 1610-1613.

Neolithic people in the Near East² and Central Anatolia³ gradually succeeded the domestication process of particularly four ungulate herd species - sheep, goats, pigs and cattle around 11000 years ago⁴. Following this, humans domesticated donkeys about 6000 years⁵, horses about 5500 years⁶, and camels about 3500 years ago⁷, mainly as draft animals and caravan packs. These domestication processes of over the past 11,500 years have had a significant effect not just on the nonhuman animals but also on human population as well as the biosphere as a whole⁸. The domestication actually involved a two-way mutual relationship between humans and the target animal populations. Some consider humans as the dominant partner in this relationship⁹ while others see it as a form of biological mutualism in which both humans and nonhumans adopted the new way of life for their mutual benefits¹⁰. Some even further challenge¹¹ that domesticated nonhumans actually manipulated the unaware humans into the relationships that gave them a great evolutionary and survival advantage. Therefore, it is an academic priority to understand the aspects and crucial factors in the relationships between humans and their different fellow domesticated nonhuman species that have been living in human court for over 11,000 years.

However, these relationships have long been ignored in sociology as it is conventionally seen the study of nonhuman animals in a linguacentric perception, because animals lack the ability to employ spoken language¹² and therefore they were as mindless and selfless. Influenced by Cartesian idea, sociology has had a long history of anthropocentrism and consequently an uneasy relationship with nonhuman animals viewing human behaviour to the apex. Therefore, the intangible aspects of emotional (affection & trust) and relational bonds between humans and nonhumans have been commonly unrecognised. However, different provident approaches in social sciences are seen towards nonhuman animals in the last three decades. Anthrozoology, a newly developed research area is mainly expanded to examining, understanding, and critically evaluating the complex and multi-dimensional relationships between

2 Melinda A. Zeder, "Domestication and early agriculture in the Mediterranean basin: origins, diffusion, and impact", *PNAS*, 105 (2008): 11597-11604.

3 Mihriban Özbaşaran, "The Neolithic on the Plateau", in *The Oxford Handbook of Ancient Anatolia: (10.000-323 B.C.E.)*. S. Steadmann & G. McMahon (ed.). Oxford: Oxford University Press, 2011, p.99-124.

4 Melinda A. Zeder, "Pathways to Animal Domestication", in *Biodiversity in Agriculture: Domestication, Evolution, and Sustainability*, Gept, P. et al., (eds.). Cambridge: Cambridge University Press, 2012, p.228-259.

5 Birgitta Kimura et al., "Ancient DNA from Nubian and Somali wild ass provides insights into donkey ancestry and domestication", *Proceedings of Biological Society*, 278/1702 (2011): 50-57.

6 Alan K. Outram et al., "The earliest horse harnessing and milking", *Science*, 323/5919 (2009): 1332-1335.

7 Joris Peters and Angela von den Driesch, "The two-humped camel (*Camelus bactrianus*): new light on its distribution, management and medical treatment in the past", *Journal of Zoology*, 242/4 (1997): 651-679.

8 Abu Bakar Siddiq, "Anatolian farmers in Europe: migrations and cultural transformation in Early Neolithic period", in *Proceeding book of 1st International Symposium on Migration and Culture (Vol. 2)*. Kahraman et al., (eds.). Amasya: Amasya University, 2016, p.519-532.

9 Juliet Clutton-Brock, "The unnatural world: Behavioural aspects of humans and animals in the process of domestication", in *Animals and Human Society: Changing Perspective*. Manning, A. & Serpell, J. A. (eds.). London: Routledge, 1994, p.23-35.

10 Zeder, "Pathways to Animal Domestication", p.228-31.

11 e.g. Darcy F. Morey, "The early evolution of the domestic dog", *American Scientist*, 82 (1994):336-47.

12 Abu Bakar Siddiq and Ahsan Habib, "Antropolojide ortaya çıkan çok-disiplinli güçlü bir alt bilim: Antrozooloji", *Artuklu İnsan ve Toplum Bilim Dergisi*, 2/1 (2017): 22-35.

human and nonhuman animals¹³. The disciplinary anthrozoology is further eager to understand our kinship with nonhuman animals.

Several researches have been done on the relationships between individual humans and individual nonhuman animals such as dogs and cats¹⁴ or even birds¹⁵. Some research even focused on various types of animal based cultural practices as well as the inevitable mutual relationships in those socio-cultural features¹⁶. However, very few research have come in light so far on the affection and close relationships between herd animals and their fellow humans albeit these domesticated herds have been living with humans contributing socio-economic-culturally since the earliest settled life in the humanity. Alongside of being the supply of delicacy and survivals, non-human herd animals have been providing our wealth, social status and being very important subjects for religious and symbolic identity. Therefore, anthrozoological study on the relationships between domestic herds and their fellow humans is very significant as they are the most diversely involved in humanity.

Southeast Anatolia is one of places where these ungulate species were first domesticated in early Neolithic period. Since then herd animals have had very broad roles in socio-culture in the region. People in the region have been practicing pastoralism since the Neolithic and following this tradition generation after generation¹⁷. The Kızıltepe plain has been used as a very rich area for animal herding since the earliest phase of pastoralism in Southeast Anatolia. Until the arrival of heavy agricultural machineries in recent years, almost all families in the region lived mainly on pastoralism. Following the prehistoric pastoralism, the Kızıltepe plain subsequently passed on to Akkadian, Roman-Byzantine, Seljuk, Ilkhanate, Mamluk, Qara Qoyunlu, Artuqid, Timurid and Ottoman rule, and as like other parts of Southeast Anatolia, become the major meat supplier to prominent cities in every rules. Cattle, sheep and goats are still considered as the most important socio-cultural elements in the region. Hence, this research has been conducted several anthrozoological field studies on the traditional pastoral (currently living agro-pastoral life) societies in Kızıltepe plain to understand the emotional relationships and bonds (trust & affection) between human and nonhuman herd animals in Southeast Anatolia.

Materials and Methods

Kızıltepe lies to the south-west of present day Mardin city in Southeast Turkey (Anatolia). It is surrounded by Mardin and Nusaybin district to the east, Derik and Ceylanpınar districts to the west, Mazıdağı district to the north and Syria to the south

13 Abu Bakar Siddiq and Ahsan Habib, "Anthrozoology –an emerging robust multidisciplinary subfield of anthropological science", *Green University Review of Social Sci.*, 3/1 (2016): 45-67.

14 e.g. Clinton R. Sanders, 1999 & 2000; Erika Friedmann et al., 2007; Peter B. Gray et al., 2015; Veronika Konok et al., 2015; Christina M. Brown et al., 2016; Kenneth D. Royal et al., 2016.

15 e.g. Irene M. Pepperberg, "Cognitive and communicative abilities of Grey parrots", *Applied Animal Behaviour Science*, 100/1 (2006): 77-86.

16 e.g. Devrim Ertürk and Süleyman Şanlı (eds), *Türkiye'de Devencilik Kültürü ve Deve Güreşleri*, Ankara, Gece Kitaplığı, 2017.

17 Abu Bakar Siddiq, "Pastoral societies of Mardin province in southeastern Turkey -some anthrozoological aspects", *Mukaddime*, 8/2 (2017): 253-265.

(Fig: 01). Because of its location on the northern part the fertile Mesopotamia and over the crossroads of the Silk Road -the prominent trade route between Asia, Africa and Europe - Kızıltepe remained a region that never lost its significance since Bronze Age. Pastoralism has been the main part of the economy along with this international trade route in the region. As like other parts of Southeast Anatolia, Kızıltepe plain is currently a semi-humid area in the continental climate zone experiencing very hot summers (being one of the hottest places in Turkey) and cold winters with occasional snow. It is also amongst the areas with an average highest wind speed in Turkey¹⁸. Although short-term drought is not uncommon, profound sunlight and almost all precipitation (annual mean 500-600 mm) falls as rain during the winter and spring¹⁹ have transformed this plain as a perfect pastoral ground since prehistory encouraging the growth of dense vegetation.

Fieldworks were the data source of this study and have been conducted on 76 agro-pastoral families in 6 villages of Kızıltepe district namely Akziyaret köyü, Hocaköy, Buyuktepe köyü, Kara köyü, Dikmen köyü and Yolüstü Mezra köyü (village). The main objective of this research was to measure the emotional level of various social groups, mainly of agro-pastoral groups, for their domestic animals as well as the response and love of distinct animal individuals for their fellow human friends. Aiming this, instead of collecting wide range of quantitative data, qualitative research questionnaire and ethnographic in-depth interview have been applied to understand short-time and long-time emotional bonds between herders and their herd animals. Personal interviews have been taken from 156 subjects of both adults and children.

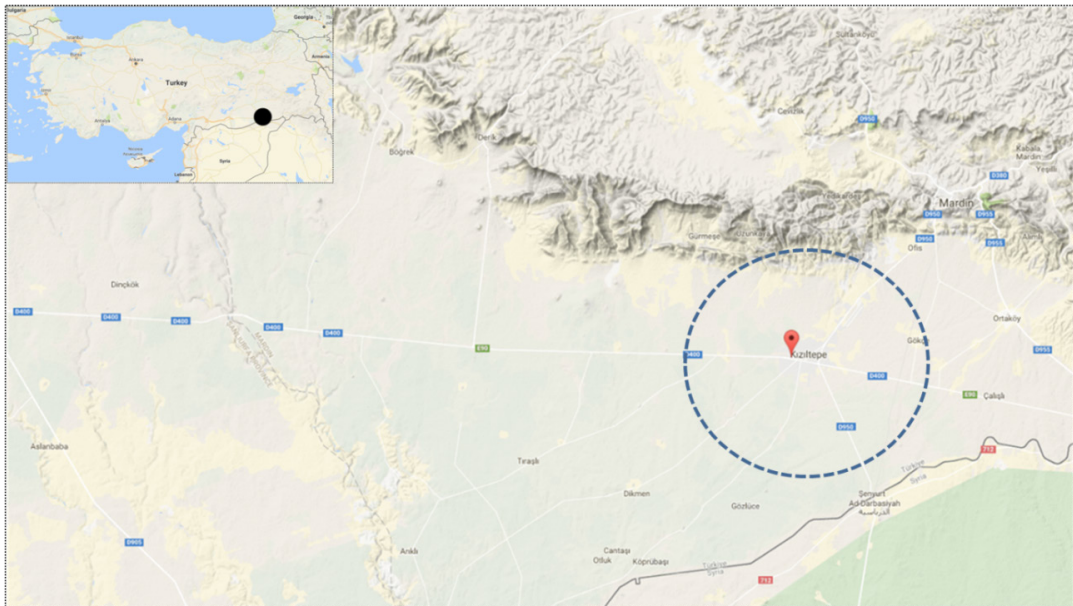


Figure 1. Location and Topography of the Study Area

18 Serhat Sensoy et al., "Türkiye İklimi", MGM web site, (2008) http://www.mgm.gov.tr/FILES/iklim/turkiye_iklimi.pdf (accessed on 13.08.2017).

19 Siddiq, 'Pastoral societies of Mardin province', 257.

Alongside of the household and personal interviews, 173 individual cases have been studied especially from old and very experienced shepherds and women who are involved with managing animals for long time. Some cases have also been well studied to understand children's involvement and affection for their family herds. Exploratory cases have been recorded from shepherds and family members ranging 9 to 101 year old. While the real and complete name of nonhuman individuals' have been used, the abbreviations of human individuals' full name (e.g. E.D. = Esra Demir) have been followed in this study for anthropological ethics albeit mentioning the full name was permitted by the subjects.

Results

The agro-pastoral families in Kızıltepe generally have cattle instead of sheep or goat. Most families generally have one or two cows because of regular need of milk, yogurt and cheese as because cheese and yogurt are the basic food for breakfast and lunch in the region. Since agriculture has been rapidly developed in the region in last 30 years, people have almost abandoned sheep-goat pastoralism as the means of living. Agro-pastoral families in Kızıltepe prefer raising cattle, mainly cow, because they are comparatively calm and more submissive than that of sheep or goat. Besides, they do not require the grazing area since one can raise the cattle just feeding them in the pan. However, there are some families (about 15%) who prefer raising sheep or goat instead of cow for their daily necessary dairy products as because they think that sheep and goats are most suitable and most resourceful animals in this region as well people should raise goats or sheep to maintain very long traditional pastoral practice of their ancestors. However, instead of grazing, these families are also forced to keep their sheep or goats inside the house complex since there are no grazing field available in the region.

In most case among the agro-pastoral families (>55%) in Kızıltepe, cows are kept for a long time for about 6 to 12 years. People usually do not want to sell their cows unless they are too old to give birth and produce milk. On the other hand, only around 30% owners prefer keeping sheep or goats for a long time. Many individuals from sheep and goats are being raised for 7 to 8 years in the same household and therefore have very emotional bonds with their owners. In some cases, goats and sheep are found living with the same owner for over 12 years.

People usually love their animals very much. In addition to their economic value, animals form very emotional connections with human individuals in the household. Most families (>70%) consider domestic animals as part of their family members. Many people have remarkable memories with their beloved animals. They still recon their memory even after a very long time.

About 30% families see their herd animals mainly as economic value. They seasonally and occasionally butcher their animals to host their guest as well as for family needs. However, about 70% families do not butcher any sheep or goat from their own herd. Instead, they commonly buy an animal from neighbour or another's herd to

host their guest as well as for different occasional need. This is because they cannot tolerate the pain of the animals raised by their own. Moreover, they even cannot see the blood as well as cannot swallow the meat of their own animal. In some case, family individuals become very upset for long time as well as cried after their favourite cow, sheep or goat was butchered. Killing an animal have strongest effects on women and children in the family who were the closest to their herd animals and have raised them since those were calves, lambs or kids. It is found that major families from Kızıltepe do not prefer butchering animals from their own herd by any means; instead, they prefer selling their animals that will be killed far away of their eye sight.

If any animal die of accident, illness or by wolf attack, all the families become very upset both because of their economical values and emotional connections. Long-time effect is foreseeable in the case of favourite animals. People usually do not forget their dead animal for a long time as like their dead relatives.

Some people are found so emotional that they never stay at the spot where the animals are being sold. Although they always accept that animals have to be sold because of their economic value, some people still feel very sad and some even cry while selling their favourite animals. However, some people even do not their favourite animals in any conditions. Most notably, cows are raised for the longest period of time. Some even stay with their owners for over 12 to 15 years and have very strong bond with owners. In this case, almost all families are not willing to sell their cows even for the double market price. Emotional bonds between cows and their owners are controlling factors in this case. When people are forced to sell their cows or calves in strong economic crisis or because of their old age, they always feel very bad and especially women cry a lot for their cows. In most case, they never forget their animals. Some people even can remember the faces of distinct animal individuals after long time they were sold. For example, M.E. (64) from Büyüktepe village had to sell his horse about 15 years ago and he still feels that he had apparently lost his child.

On the other hand, some people are usually not emotionally affected after selling or killing the animals believing that humans and animals cannot be equal as well as one cannot compare between the emotion for their children and their animals since animals are created for the service of humanity and therefore humans have every right to consume, sell or butcher the animals.

Over 85% people have deep affection for different animal individuals in their herds. Most people miss their beloved past animals very much especially when they remember them. In many cases, people dream their animals in their dreams. Sometimes especially women acquire cows or sheep from their parents when they have their own family after marriage. In this case, most of the presented animals have very deep affection and close interactions with their owners. People usually keep their memories in their mind for many years after they are sold. Sometimes seasonal fresh grass or even certain places in the village awaken these women's poignant memories with their favourite animals.

While most agro-pastoralists think that animals want to love and be loved, some argued that animals have no feelings like people. They think animals are so unconscious that they even sometimes do not distinguish their own children. However, most people think non-human animals can think, get angry, hate, love and have feelings and suffering alike of humans. They think sometimes people are cruel to nonhuman animals but the nonhumans are not cruel like humans. They also experienced that nonhuman animals are very indulgent and they understand if their owners are angry at them. Moreover, most of the agro-pastoralists agreed that as like the human individual sense and emotion also differ according non-human individuals. For example, B.Ç. (44) thinks that according to his experience, herd animals have mind like humans. This is because when a cow or a sheep is hungry and thirsty it moos or baas. He thinks there is only difference between human and nonhumans that they cannot speak human language. B.Ç. further explained when he sold his cow two or three years ago to another village, the cow turned her head and looked at him deplorably. B.Ç. believes that one can only understand every move of an animal once they feed it regularly. As like B.Ç., most people believe that their herd animals certainly have minds and they show feelings and emotional response for their owners. People also think that if they had capacity to speak human language, their herd animals would tell that they love their owners. Knowing that they are bound to, most of the agro-pastorals regret selling their animals. However, most people (over 80 %) told that if their animals could speak human language, they would tell their favourite animals that they are so sad and did not want to sell the animals.

On the other hand, most families mentioned that they experienced their sheep, goats, cows, dogs, and horses expressed love and compassion for human while some claim that animals only love their own babies and they do not have feelings like humans do. These animals recognize as well as response to the distinct voice of human individuals. Some claim that animals recognize their owners and loved or hated human individuals from their smells and clothes. Their animals can further recognize who are children (and therefore naive) and who are adults (and therefore serious) among humans around them.

In these agro-pastoral villages of Kızıltepe, 96% of 5 to 13 year old children like the animals very much while 3-4 % of them do not like animals. Over 90% of those children spend most of their play time with animals. Children of 6-9 year old prefer playing with calves, sheep, goats, lambs, kids or even chicken while 10-15 year old children like to play with the dogs most. Most children consider their animals (mainly sheep-goats, lambs, kids, dogs and calves) as their living toys that show response to their feelings and compassion. Over 60% of children stated that they love the animals more than their best friend in the school or in their locality as well as everyone has their favourite animals from family herds. About 20% stated they love their best friend in school and animals equally and 15% stated that they love their best friend in school more than their animals. Surprisingly not a single child was found harmed or attacked by animals except chased by dogs in the remote neighbourhood.

About 70 % of agro-pastoralists name their animals while others do not prefer naming dog, donkey, horse, cattle or sheep-goat. Most cows in the villages are named by their owners or children. Cows are generally named as Bozê (blonde), Sermezin (large headed), Çêleka min (my beloved cow), Zafer (victory), Simge (symbol) etc. Dogs are usually named as Xamle (well built); however, sometimes people amusingly name their dogs Topal (lame). Sheep and goats are usually named by their physical features such as Serzer (golden yellow headed).

While asking about cross-species odd friendships in their animals some families claimed that they sometimes experienced this kind of unusual friendship between different species. For example, A.S. from Karaköyü village described that one year ago one of her hens was regularly feeding her kittens which was the talk of the village. Presently A.S. has a dog and a cat who are very good friends and always move around the village together, eat together and come back home together.

Many people still use different animal parts and animal products for medicinal purpose although some family do not prefer traditional treatment. The most common animal based treatment is to wrap the broken legs or arms with fresh animal skin or using mashed beef or lamb on the injured area. People also use tortoise blood and flesh of mole to treat cancer. Some people also used camel milk for cancer like chronic disease. Many families especially use dog skull to protect their garden or agricultural field from the evil eyes.

Some Selective Cases on Mutual Bond

There are 173 cases on long-time emotional bonds between human and nonhuman individuals have been recorded in this study. Sheep (ewes and rams), goats (does and bucks), dogs, horses and donkeys were the most recorded animals in these cases. To illustrate and holistic picture of socio-economic and cultural contexts of these case, a total of 14 cases are shortly presented in this paper.

H.H. (61) from Hocaköy village used to play a lot with lambs owned by his family. He still remembers a lamb with black head in his childhood. The lamb used to follow him wherever he were in the village. They used to play together and whenever the front door was opened, the lamb entered into the house to be with H.H.

H.E. (36) from Akziyaret village had a cow about six years ago. She bought the cow as a calf and raised it. The cow stayed with her family for over 10 years and six years ago it became very ill. H.E.'s family took care of the cow for a long time and in some nights H.E. could not sleep because her cow was ill. H.E.'s family provide treatment and took care of the cow for a long time although it did not get well at all. Having no option, H.E.'s family had to decide to sell the cow. However, the cow did not want to leave H.E.'s family. Hasna cried a lot when she sold her cow. She also cried hearing that her cow was butchered in Kızıltepe town.

H.B. (38) from Hocaköy village also had a cow. Her cow was pregnant and gave birth at midnight. It was very difficult for the cow to give birth and it could not endure

the pain, and therefore, it died soon after giving birth. H.B.'s family did not notice because it was midnight and was not able to help the cow. Remembering this, tears were falling out from H.B.'s eyes.

The dog of B.Ç. (44) from Hocaköy village was accidentally shot while B.Ç. was just scaring the dog firing his dog. However, B.Ç. was in grief and cried for over a month for his dog. B.Ç. also had a horse that got very ill in a winter about 11 years ago. B.Ç.'s family took care for the horse for over 3 months but the horse did not get well. In the end the horse got that sick that it was not able to stand itself. The horse was suffering very badly and B.Ç.'s father wanted to kill the horse to relief it from pain. B.Ç. was very upset for a long time after the horse was shot. B.Ç. described how close bond he had with his horse; they were always together and spent most of their time visiting different places in the country.

Ş.D. (65) from Büyüktepe village had a sheep named 'Serzer'. She brought the sheep with her to her new home after getting married. The sheep had so close interactions with Ş.D. that she did not sell or butcher the sheep. Moreover, she buried 'Serzer' in a chosen place after it died naturally.

A.D. (57) from Karaköyü village mentioned that he and his family members cannot sleep when the animals become sick. Once A.D. had a ram named 'Kara Kar'. The ram was so attached to his family that he never thought about selling or killing it. Eventually Kara Kar died naturally and they buried him. A.D. and his family still remember their good memories with 'Kara Kar'.

A.S. (51) from Büyüktepe village still has poignant memories of her beloved cow that she lost 6 years ago. The cow was very close to her. A.S. claims that the cow used to understand every motions she expressed to it. Unfortunately the cow died of disease and A.S.'s sorrow changed into mourning when its calf also died 10 days following the grief for its mother. A.S. has mentioned that she will not be able to forget her cow and beloved calf rest of her life.

M.E. (64) from Büyüktepe village once had a horse with very friendly relationship. He used to go to the hill sides with his horse and a hunting dog. Once he fell off the horse while chasing a very fast rabbit to hunt. They were running so fast that the horse passed over hundred metres after M.E. fell off from it. However, the horse started to neigh very loud and returned as quickly as possible to save him. M.E. still remembers the emotions and very protective expression in the eyes of his beloved horse in that day. M.E. also had a buck kid in his childhood. The buck spent about 12 years with him and once became leader of his herd when it was grown. The buck always wanted to be with M.E. whenever in grazing field or at home. He still clearly remembers the face of his favourite buck and its compassion for him. Mentioning about the interactions with animals, M.E. said that he always goes to the barn to see and spend time with sheep whenever he wakes up at night. He mentioned that the smell in the barn seems very sweet to him.

K.B. (73) from Yolüstü Mezra village had a doe about 16-17 years ago. He loved her so much that he did not kill or sell it like other goats. Once the doe gave birth to four kids which was a very unusual incident because goats in the region usually give birth to one or hardly two kids. The doe grew old and eventually had a natural death. K.B. was very sad for long time after he lost her. K.B. passionately expressed that he still misses his favourite doe.

H.S. (62) from Kara köyü village had a ewe lamb over 25 years ago. Once the lamb got sick and H.S. took intense care of the lamb and since then they form very strong bond what lasted for over 12 years. H.S. named her 'Ali' after his best friend albeit she was an ewe. He used to share his own meal with 'Ali' while he was in the grazing field with his sheep and goats. The ewe was born earless and she was known to other villagers because of his special physical feature as well as her bond with H.S. However, he had to sell his ewe having very strong financial crisis as well as the ewe become very old. Nevertheless, H.S. stated that he still misses and he wishes to bring back his good time with his most favourite ewe.

The 101 year old Ş.S. from Kara köyü village spent 80 years of his as a well-known shepherd. In some years, he used to spend months away of home with his animals. He told us many wonderful cases about emotional bonds between him and animal individuals in his herd. He particularly mentioned about his camel (cow) that he owned about 40 years ago. He loved his camel so much. Once the camel got ill following a spring rain and it took Ş.S. month long intensive care to get his camel well. Ş.S. still remembers his anxiousness and passion for his camel. Once, the camel gave birth to twin dead calves. Ş.S. stated that he saw his camel was crying for over a month for her calves.

M.E.K. (52) from Dikmen Village had a very favourite ewe named 'Bozo' about 18 years ago. The ewe used to come inside their house and even was shared food with them. The ewe, unfortunately, once fell from the stairs and died. M.E.K. candidly stated that he cried for over two week after the death of his beloved 'Bozo'.

Many people take photos of their favourite sheep, goats or cow, frame them and keep on their wall. For example, C.O. (37) from Dikmen Village had to sell her favourite cow 6 years ago. She framed the photo of her cow and kept with her. Whenever she feels sad or misses her cow she takes out the frame and looks at it as like she is seeing the photo of her children.

A.A. (65) Dikmen Village had a favourite ram named 'Serzer'. She loved Serzer very much and it was with her family for over 8 years. However, one day her husband sold Serzer when they were facing very strong financial difficulties albeit she strongly opposed it. A.A. cried a lot after Serzer was sold. She openly expressed that she still misses and cannot forget Serzer.

Discussion

Cattle have more ratio of successful close relationship with their owners. This is perhaps because they have slow reproductive rate²⁰ and commonly give birth to fewer offspring than those of goats or sheep. They also need more efforts and longer time to be raised and provide results in comparing to sheep or goats. Therefore, agro-pastoralists in Kızıltepe usually have deeper affection and interactions with cattle considering them big resource of their wealth and having scope to form relatively a prolonged attachment and bond with the longer lifespan of cattle (i.e. 18 to 22 years in captivity).

Being a companion, nonhuman animals can fulfil 'basic social needs' of their owners²¹. Therefore, their owners often feel strong emotional connections to their animals²², in many cases considering them part of the family and providing them with levels of affection²³, comfort, and support similar to that of another human family member²⁴. However, very selective animals such as dogs, cats, horses, birds, fish, and mice have only been focused and commonly been considered as companion animals in classic and contemporary researches²⁵. In Kızıltepe, however, it has been observed that sheep (and lambs), goats (kids) and cows (and calves) often provide their human owners companionship as well as emotional attachment, social integration, wealth and status, and reliable alliance along with economic benefit regular nourishments. Cats do not have any companionship with their owners, albeit people often keep cats in their house to control pests. On the other hand, very few dogs have companionship and emotional relationships with their owners although they are regularly fed and sheltered by them.

Distinctive sheep, goats as well as horses, donkeys and cattle have strongly response to the love from their human companions. Moreover, it has been experienced in many cases that these nonhuman animals express their affection for distinctive human individuals. Several recent studies²⁶ have proven sheep's capacity in the recognition of humans, other animals and sheep individuals²⁷. Likewise, it is found that

20 Nematollah Dayyani, Keyvan Karkudi and Hasan Bakhtiar, "Reproductive performance definition in dairy cattle: affective factors", *International journal of Advanced Biological and Biomedical Research*, 1/11 (2013): 1392-1396.

21 Marie Jose Enders-Slegers, "The meaning of companion animals: Qualitative analysis of the life histories of elderly dog and cat owners", in *Companion Animals and Us: Exploring the Relationships between People and Pets*. Podberscek, A. L., Paul, E. S. & Serpell, J. A. (eds.) Cambridge: Cambridge University Press, 2000, p. 237-256.

22 Molly J. Hall, Anthony Ng, Robert J. Ursano, Harry Holloway, Carol Fullerton and Jacob Casper, "Psychological impact of the animal-human bond in disaster preparedness and response", *Journal of Psychiatric Practice*, 10/6 (2004): 368-374.

23 Sigal Zilcha-Mano, Mario Mikulincer and Phillip R. Shaver, "An attachment perspective on human-pet relationships: conceptualization and assessment of pet attachment orientations", *Journal of Research in Personality*, 45 (2011): 345-357.

24 Kevin M. Donohue, "Pet loss: Implications for social work practice", *Social Work*, 50 (2005): 187-190.

25 e.g. Sharon E. Bolin, 1987; Andrew Gilbey and Kawtar Tani. 2015; Hellen R. Kemp, Nicky Jacobs and Sandra Stewart, 2016; Pim Martens, Marie-José Enders-Slegers and Jessica K. Walker, 2016; Hirschenhauser et al., 2017.

26 e.g. Keith M. Kendrick et al., "Sheep don't forget a face", *Nature*, 414/6860 (2011): 165-166.

27 Franziska Knolle, Rita P. Goncalves, and A. Jennifer Morton, "Sheep recognize familiar and unfamiliar human faces from two-dimensional images", *R. Society Open Sci.*, 4 (2017): 171228.

in some cases that certain individuals (especially from sheep, goats and cattle) show very abnormal behaviour, become upset and stressed, and even sometimes give up eating food habit if their very bonded human friend leaves out of sight for some days or a week. In some case the brides had to bring their favourite animals in their husbands' house because their beloved nonhuman friends changed their complete behaviour after they got married and left their parents' house.

Attitudes toward animals are influenced by both animal traits (e.g., similarity to humans, aesthetic quality, size) and individual human attributes (e.g., gender, age, educational level, cultural factors) as well as socio-economic condition²⁸. On the other hand, it is observed in Kızıltepe that the attitude of both the human and nonhuman individuals help shaping their relationship and affection. For example, cows and goats which are more aggressive to human in their herds who cares the animals only for their products with economic value. However, animals are commonly responsive to human affection and serene with those people who have compassion for their animals and see them as indissoluble part of their family.

Bertenshaw & Rowlinson (2009) have presented that that naming has positive effects on farm animals and helps them to produce more milk. However, naming does not show any significant behavioural change, forming bond or relationship, milk production or animal health in the research area. Instead, people name their animals only after forming close bonds with them. In some case people do not discriminate their friendships between a human and nonhuman friend. Consequently, in some other regions of Southeast Anatolia, people often name their favourite animals after their close human friends or beloved ones²⁹. In most case, however, animals understand their own names and only those animal (sheep or goats) individuals response and come to their owners who are called by their name.

It is found that humans' grief and prolonged grief are associated with loss or death of closely bonded nonhuman animals and, in the case of 'new' normal life, the animal remained as a memory³⁰. Findings further support that this kind of loss grief is broad, complex³¹, sometimes can be very complicated, and have a direct effect on depression³². Grief and prolonged grief for the loving animals is a common picture in the study. However, religious idea seems to be an active agent in the healing of depression. While their emotion does not accept selling their favourite animals in any condition or they have prolong grief in the loss or death of their favourite animals, people are seen always to have a consolable solution to accept the fate of their animals as religious beliefs define it as the natural rule.

28 Marta Borgi and Francesca Cirulli, "Attitudes toward animals among kindergarten children: species preferences", *Anthrozoös*, 28/1 (2015): 45-59.

29 Siddiq, 'Pastoral Societies of Mardin Province in Southeast Anatolia', 258-59.

30 Hellen R. Kemp, Nicky Jacobs and Sandra Stewart, "The lived experience of companion-animal loss: a systematic review of qualitative studies", *Anthrozoös*, 29/4 (2016): 533-557.

31 Donohue, 'Pet loss', 187-190.

32 Ines Testoni et al., "Pet loss and representations of death, attachment, depression, and euthanasia", *Anthrozoös*, 30/1 (2017): 135-148.

Attitudes toward animals are influenced by individual human attributes such as age, culture or socio-economic condition. Moreover, these attitudes develop in childhood interest and preference in animals³³. It is inevitable that human individuals' level of emotion and compassion for animals is heavily influenced by their childhood perceptions of animal welfare, socio-cultural influences about animals and their experience or beliefs about whether animals are sentient³⁴. In the study area, children are being socio-culturally educated about animal welfare, nature and significance of animal companionship and the role and value of the animals in their life. Therefore, most people in the study area find strong trust and affection as well as deep compassion for the herd animals throughout their life time and the closeness grows even stronger when they grow old. On the other hand, studies highlighted about the gender effects on human-animal relationship focusing that girls commonly have intense relationships with their animals and in addition to this, children without siblings have stronger attachment to their animals than children who have siblings³⁵. This study, however, has found no gender or sibling effects on children's bond with animals. Nonetheless, 13 year or older children are found having closer relationship with dogs (who can bark louder than sheep or goat) and larger animal individuals in comparing to 5 to 9 years children. Physical features and physical power of animal individuals perhaps influence this choice of relationship.

Conclusion

Multiple forms of human-animal interactions have been observed among pastoral societies in Kızıltepe. However, intimate bond and affection between human and nonhuman individual is most prominent and have long time effects among them. Far from the severe effects of modernity and amusement commodities, animals support much of the need of leisure and play activities for both children and adult groups. Albeit the pastoral groups do not procure their animals as like pets in the town; however, they embrace them since the animals are born and constantly involve in life-end intimate bonding alike the pastoralists' relationships and friendships with other human individuals in their society.

On the other hand, most of the cases in our study illustrate that, not only the economic value inspires hard work for the very tough pastoral life in the region, but also the compassion and affection for their herd animals supports achieving their eagerness. Inevitably, the behaviour and personality of animal individuals are shaped by the level of affection and attitudes of shepherds and their family members. In most case, children spend more intimate time with their animals than the other family members. They grow up with them, often share food with them, and spend most of their leisure time with them. Consequently animals become significant part of their social and emotional life. However, no case of sibling effect or differentiation (between male and female children) has been found in children-animal relationships

33 Borgi and Cirulli, 'Attitudes toward animals', 47-48.

34 Siddiq and Habib, 'Anthrozoology', 45-62.

35 Katharina Hirschenhauser et al., "Children love their pets: do relationships between children and pets co-vary with taxonomic order, gender, and age?", *Anthrozoös*. 30/3 (2017): 441-456.

in our study. Women nurse, feed and take care of calves, kids and lambs in their family and found the strongest bonds with them while the animals are grown. In many cases, women cannot help but naming the animals with their beloved children. Surprisingly most of the women in Kızıltepe pastoral groups never want to sell the animals that they have been taking care for long time. However, it is their husbands who decide which animal should be sold and which are not.

There is a constant dilemma that helps making the human-animal bonds more complex in Kızıltepe region. Albeit their hearts do not permit to sell or kill their selective and favourite ones, pastoralists has always been bound to sell or kill them, and then handling the grief by accepting this life cycle as the natural rules which they have been practicing for generations. Human life demands new resources, therefore they start another beginning with a new herd; but the scares in their mind are always in evidence and they cannot help but missing their long gone beloved ones. These conflicts and complexities in human minds consequently become an inevitable social force and eventually produce various cultural complexities in the pastoral societies of Southeast Anatolia.

Acknowledgements

This study was supported by the Mardin Artuklu University Scientific Research Projects Commission (BAP) Grant No. MAÜ-BAP-17-EF-11. We would like to present our sincere thanks to the families in the study area for their kind cooperation and unforgettable hospitality.

References

- Bertenshaw, Catherine and Peter Rowlinson. "Exploring stock managers' perceptions of the human-animal relationship on dairy farms and an association with milk". *Anthrozoös*. 22/1 (2009): 59-69.
- Bolin, Sharon E. "The effects of companion animals during conjugal bereavement". *Anthrozoös*. 1/1 (1987): 26-35.
- Borgia, Marta and Francesca Cirulli. "Attitudes toward animals among kindergarten children: species preferences". *Anthrozoös*. 28/1 (2015): 45-59.
- Brown, Christina M., Selena M. Hengy and Allen R. McConnell. "Thinking about cats or dogs provides relief from social rejection". *Anthrozoös*. 29/1 (2016): 47-58.
- Clutton-Brock, Juliet. "The unnatural world: Behavioural aspects of humans and animals in the process of domestication". in *Animals and Human Society: Changing Perspectives*. Manning, A. & Serpell, J. A. (eds.). London: Routledge, 1994, p.23-35.
- Dayyani, Nematollah, Keyvan Karkudi and Hasan Bakhtiar. "Reproductive performance definition in dairy cattle: affective factors". *International journal of Advanced Biological and Biomedical Research*. 1/11 (2013): 1392-1396.
- Donohue, Kevin M. "Pet loss: Implications for social work practice". *Social Work*. 50 (2005): 187-190.

- Enders-Slegers, Marie Jose. “The meaning of companion animals: Qualitative analysis of the life histories of elderly dog and cat owners”. in *Companion Animals and Us: Exploring the Relationships between People and Pets*. Podberscek, A. L., Paul, E. S. & Serpell, J. A. (eds.). Cambridge: Cambridge University Press, 2000, p.237-256.
- Ertürk, Devrim and Süleyman Şanlı (eds), *Türkiye’de Devecilik Kültürü ve Deve Güreşleri*, Ankara: Gece Kitaplığı, 2017.
- Friedmann, Erika, Sue A. Thomas, Linda K. Cook, Chia-Chun Tsai and Sandra J. Picot. “A friendly dog as potential moderator of cardiovascular response to speech in older hypertensives”. *Anthrozoös*. 20/1 (2007): 51-63.
- Gilbey, Andrew and Kawtar Tani. “Companion animals and loneliness: a systematic review of quantitative studies”. *Anthrozoös*, 28/2 (2015): 181-197.
- Gray, Peter B., Shelly L. Volsche, Justin R. Garcia and Helen E. Fisher. “The roles of pet dogs and cats in human courtship and dating”. *Anthrozoös*. 28/4 (2015): 673-683.
- Hall, Molly J., Anthony Ng, Robert J. Ursano, Harry Holloway, Carol Fullerton and Jacob Casper. “Psychological impact of the animal–human bond in disaster preparedness and response”. *Journal of Psychiatric Practice*. 10/6 (2004): 368-374.
- Hirschenhauser, Katharina, Yasmine Meichel, Sabrina Schmalzer and Andrea M. Beetz. “Children love their pets: do relationships between children and pets covary with taxonomic order, gender, and age?”. *Anthrozoös*. 30/3 (2017): 441-456.
- Kemp, Hellen R., Nicky Jacobs and Sandra Stewart. “The lived experience of companion-animal loss: a systematic review of qualitative studies”. *Anthrozoös*. 29/4 (2016): 533-557.
- Kendrick, Keith M., Ana P. da Costa, Andrea E. Leigh, Michael R. Hinton and Jon W. Peirce, “Sheep don’t forget a face”. *Nature*. 414/6860 (2011):165-166.
- Kimura, Birgitta, Fiona B. Marshall, Shanyuan Chen, Sónia Rosenbom, Patricia D. Moehlman, Noreen Tuross, Richard C. Sabin, Joris Peters, Barbara Barich, Hagos Yohannes, Fanuel Kebede, Redae Teclai, Albano Beja-Pereira and Connie J. Mulligan. “Ancient DNA from Nubian and Somali wild ass provides insights into donkey ancestry and domestication”. *Proceedings of Biological Society*. 278/1702 (2011): 50-57. doi: 10.1098/rspb.2010.0708.
- Knolle, Franziska, Rita P. Goncalves, and A. Jennifer Morton. “Sheep recognize familiar and unfamiliar human faces from two-dimensional images”. *Royal Society Open Science*. 4 (2017): 171228. <http://dx.doi.org/10.1098/rsos.171228>.
- Konok, Veronika, András Kosztolányi, Wohlfarth Rainer, Bettina Mutschler, Ulrike Halsband and dám Miklósi. “Influence of owners’ attachment style and personality on their dogs (*Canis familiaris*) separation-related disorder”. *PLoS One*. 10/2 (2015): e0118375.
- Martens, Pim, Marie-José Enders-Slegers and Jessica K. Walker. “The emotional lives of companion animals: attachment and subjective claims by owners of cats and dogs”. *Anthrozoös*. 29/1 (2016): 73-88.

- Morey, Darcy F. "The early evolution of the domestic dog". *American Scientist*. 82 (1994): 336-47.
- Outram, Alan K., Natalie A. Stear, Robin Bendrey, Sandra Olsen, Alexei Kasparov, Victor Zaibert, Nick Thorpe and Richard P. Evershed. "The earliest horse harnessing and milking". *Science*. 323/5919 (2009): 1332-1335.
- Özbaşaran, Mihriban. "The Neolithic on the Plateau". in *The Oxford Handbook of Ancient Anatolia (10.000-323 B.C.E.)*. S. Steadmann & G. McMahon (ed.). Oxford: Oxford University Press, 2011, Pp. 99-124.
- Pepperberg, Irene M. "Cognitive and communicative abilities of Grey parrots". *Applied Animal Behaviour Science*. 100/1 (2006): 77-86.
- Peters, Joris and Angela von den Driesch. "The two-humped camel (*Camelus bactrianus*): new light on its distribution, management and medical treatment in the past". *Journal of Zoology*. 242/4 (1997): 651-679.
- Royal, Kenneth D., April A. Kedrowicz and Amy M. Snyder. "Do all dogs go to heaven? Investigating the association between demographic characteristics and beliefs about animal afterlife". *Anthrozoös*. 29/3 (2016): 409-420.
- Sanders, Clinton R. *Understanding Dogs: Living and Working with Canine Companions*. Philadelphia: Temple University Press, 1999.
- Sanders, Clinton R. "The impact of guide dogs on the identity of people with visual impairments". *Anthrozoös*. 13/3 (2000): 131-139.
- Savolainen, Peter, Ya-ping Zhang, Jing Luo, Joakim Lundeberg and Thomas Leitner, "Genetic evidence for an East Asian origin of domestic dogs". *Science*. 298/5598 (2002): 1610-1613. doi: 10.1126/science.1073906.
- Sensoy, Serhat, Mesut Demircan, Yusuf Ulupinar and Izzet Balta. "Türkiye İklimi", MGM web site, (2008) http://www.mgm.gov.tr/FILES/iklim/turkiye_iklimi.pdf (accessed on 13.08.2017).
- Siddiq, Abu Bakar. "Anatolian farmers in Europe: migrations and cultural transformation in Early Neolithic period". in *Proceeding book of 1st International Symposium on Migration and Culture (Vol. 2)*. Kahraman, et al. (eds.). Amasya: Amasya University, 2016, Pp. 519-532.
- Siddiq, Abu Bakar. "Pastoral societies of Mardin province in southeastern Turkey -some anthrozoological aspects". *Mukaddime*. 8/2 (2017): 253-265. doi: 10.19059/mukaddime.296314.
- Siddiq, Abu Bakar and Ahsan Habib. "Anthrozoology –an emerging robust multidisciplinary subfield of anthropological science". *Green University Review of Social Sciences*. 3/1 (2016): 45-67.
- Siddiq, Abu Bakar and Ahsan Habib. "Antropoloji'de ortaya çıkan çokdisiplinli güçlü bir alt bilim: Antrozooloji". *Artuklu İnsan ve Toplum Bilim Dergisi*. 2/1 (2017): 22-35.
- Testoni, Ines, Lorian De Cataldo, Lucia Ronconi and Adriano Zamperini. "Pet loss and representations of death, attachment, depression, and euthanasia". *Anthrozoös*. 30/1 (2017): 135-148.

- Zeder, Melinda A. “Domestication and early agriculture in the Mediterranean basin: origins, diffusion, and impact”. *PNAS*. 105 (2008): 11597-11604.
- Zeder, Melinda A. “Pathways to Animal Domestication”. in *Biodiversity in Agriculture: Domestication, Evolution, and Sustainability*. Gept, P. et al., (eds.). Cambridge: Cambridge University Press, 2012, Pp. 228-259.
- Zilcha-Mano, Sigal, Mario Mikulincer and Phillip R. Shaver. “An attachment perspective on human–pet relationships: conceptualization and assessment of pet attachment orientations”. *Journal of Research in Personality*. 45 (2011): 345-357.

Güneydoğu Anadolu Bölgesinde Kızıltepe'deki Agro-Pastoral Topluluklar Üzerine Bir Antrozoolojik İnceleme

SÜLEYMAN ŞANLI

ABU BAKAR SIDDIQ

Öz: İnsanlar varoluştan beri dünyada diğer hayvanlarla karmaşık ilişkiler kurup yaşamaktadır. Bu karşılıklı ilişkiler, hayvanların evcilleştirilmesinin ardından yoğunlaşmıştır. Güneydoğu Anadolu bölgesi, koyun, keçi, sığır ve domuzun ilk evcilleştirildiği önemli bölgelerden birisidir. Bunun yanı sıra, sosyo-kültürel açıdan evcil sürüler de bölgede bugüne kadar temel bir yer tutmaktadır. Bu nedenle, Güneydoğu Anadolu bölgesi pastoral çalışmalar ve insan-hayvan ilişkileri çalışmaları için ideal bir yer olarak kabul edilmektedir. Kızıltepe'deki pastoral toplumlarda yapılan saha çalışması ve vaka araştırmaların sonucunda insan ve evcil sürü hayvanları arasındaki ilişkilerin yanı sıra, bu araştırma bireyleri kendi türlerinde olduğu gibi ayırt edebilen ve tanıyabilen belirli koyun, keçi ve sığırların olduğunu tespit etmektedir. Kızıltepe'deki toplumlar için sürü hayvanları besin açısından protein kaynağı ve sosyal statü olarak da zenginlik kaynağı olarak kullanılmaktadır. Buna ek olarak kentteki ev hayvanları da insanlara karşı derin sevgiye ve duygusal bağlara sahiptir. Öte yandan, bazı çağdaş araştırmalarda odaklanılan aksine, Kızıltepe'deki çocuk-hayvan ilişkisi içinde herhangi bir cinsiyet veya kardeşlik etkisi gözlemlenmemektedir. Genel gözlemlerimiz ve bulgularımız, aynı zamanda, Güneydoğu Anadolu bölgesinde insan ve sürü hayvanları arasındaki karmaşık ilişkiler nedeniyle teşvik edilen bazı somut olmayan kültürel faktörleri de göstermektedir.

Anahtar kelimeler: Antrozooloji, İnsan-hayvan ilişkisi, Pastoralizm, Güneydoğu Anadolu, Kızıltepe.