

Human-Animal Interactions in Anatolian Mortuary Practice

Pınar Durgun

From the bull and deer paintings of Çatalhöyük houses to the lion and vulture carvings of Göbeklitepe pillars, Neolithic Anatolia has given us a glimpse of the variety of roles animals play in human imagination and in daily human life: in imagery, in symbolism, in stories and rituals. In cases where there is a lack of detailed imagery, conventional interpretations have focused on animals exclusively as resources for survival. This approach limits our understanding of the relationships humans had with their natural and material world.

Compared to the Neolithic, the Anatolian Bronze Age is poor in terms of representations of animals, however extramural cemeteries in this period have yielded a great variety of animal remains, both disarticulated and complete. By considering the different ways in which animals were interred in mortuary context, this paper aims to analyze the human-animal interaction beyond subsistence and economy.

Introduction

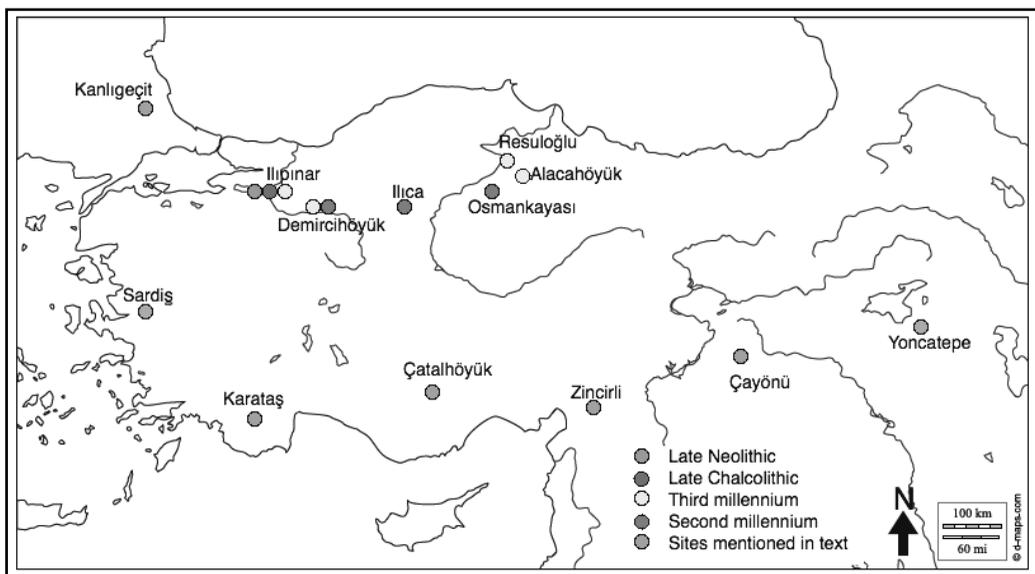
“Because we have viewed other animals through the myopic lens of our self-importance, we have misperceived who and what they are.”¹

Animals are great economic resources. However, they are not only a means for human survival, but also an inseparable part of human life. We admire animals, which is why they have been important components of imagery, religions, and other symbolic expressions throughout human history. Yet, we also exploit them; we keep, ride, eat, use, and kill them. It is these ambiguous human-animal relationships that define the roles of animals in mortuary rituals. Even though human-animal interactions have attracted scholars across different disciplines,² archaeological approaches to the study of relationships between humans and animals are often limited to practical and economic themes such as domestication and traction, where animals are regarded no differently from material resources.³ Despite the variety of burial practices including animals, burial

objects have dominated discussions in the study of death and burial. The remains of the living (both human and animal) in mortuary contexts have only started to receive attention recently. Still there is a need for studies that consider animals more than just “grave goods”.⁴

Animal imagery is commonly attested in the Neolithic period of Anatolia both in domestic and symbolic contexts; the famous the bull and deer paintings of Çatalhöyük come from houses, the lion and vulture carvings of Göbeklitepe pillars are located in a non-domestic site. During this period, when burials are interred only intramurally (i.e. within settlements, under house floors, or under public buildings), actual animal remains in mortuary contexts are very rare. However, with the emergence of extramural cemeteries, animal remains —complete and disarticulated— start to become more common across the Mediterranean.

The presence of animal remains in mortuary context is traditionally categorized as evidence for feasting or a belief in an afterlife



Map 1: Burial and cemetery sites used as case studies in the text.

without any further analysis. Even though there is evidence for the consumption of animals in relation to mortuary feasts, not all animal remains were part of a consumption activity. In this paper, by looking at the ways animals were interred, I present the evidence for the different roles that animals played in the formation and continuation of mortuary practices in Anatolia. I focus on the evidence from Bronze Age cemeteries while also referring to evidence from the other periods to see if there are differences between human and animal interactions in the mortuary context over time.⁵ Most of the evidence for animal remains comes from north-western and north-central regions of the Anatolian peninsula (Map 1), which will be the main cases studies presented here.⁶

Dying for the dead: Sacrificed animals

Sacrifice is difficult to identify archaeologically. Butchering of animals for food can leave the same archaeological traces as sacrifices for a feast.⁷ It is the context that makes the killing a sacrifice. The term “sacrifice” often indicates a religious or ritual function: in many cases animals are killed to satisfy the gods, ancestors, or to have effects on supernatural forces. A clear example for ancestral and mortuary sacrifice comes from the recently discovered Katamuwa stele at Iron Age Zincirli, which was found in a private mortuary chamber next door to a temple. In the inscription Katamuwa asks whoever comes to the procession of this mortuary chamber to sacrifice a bull and rams for gods, and for his soul.⁸ Without associated texts, it is more difficult to identify such sacrificial functions of animal remains.

Sykes has noted that there is a tendency to consider animals as a “sacrifice” only when their skeletons are complete ABGs (Associated Bone Groups) and deliberately interred.⁹ Not all sacrifices result in the use

of the same ways of killing or interacting with an animal. Leaving a complete animal by the human burial does not require much interaction with flesh and blood. The animal’s throat would be cut and blood would be spilled, but the bodily integrity of the animal would still be preserved. On the other hand, disarticulating an animal involves killing the animal and chopping it up, a completely different task and experience that would also leave different archaeological traces. It is very possible that disarticulated animal remains found in Anatolian cemeteries could be sacrifices as well. However, in many cases partial animal remains seem to point to an activity where the rest of the animal could be used or consumed for other purposes. In this section I will discuss complete animals, and animals that have a more or less complete ABGs found in and around burials as “sacrificial animals”. Due to these different ways of interacting with the disarticulated animal remains, these will be discussed in the following sections.

The earliest instances of complete animal burials in Anatolia come from Neolithic period. The first example is a puppy skeleton that was found lying on top of the northeast platform of Building 3 at Çatalhöyük.¹⁰ Excavators concluded that there was no direct connection between the puppy and the adult man who was buried beneath this platform, since the platform was re-plastered at least twice subsequent to this burial.¹¹ This makes it clear that the puppy was not a sacrifice for the human burial, but had a different function —perhaps it was a grave exclusively for the puppy. The second case is a double burial of an adult man and a young female sheep buried divided by a mat and facing opposite directions.¹² Russell and Düring argue that burials placed on top were oriented based on the memories of the earlier burials,¹³ since no human was buried on top of the sheep burial. They conclude that this

was an indication that it was inappropriate to bury animals and humans together.¹⁴ The fact that this burial did include an animal and a human together raises the question whether such assumptions are valid for all the burials, or all the burial phases. The sheep was put in the grave complete and fully fleshed, which made Russell and Düring suggest that perhaps this sheep's role was not to provide food for the afterlife, but to honor the dead person or propitiate their or other spirits.¹⁵

Even though complete animal burials are only attested in very few instances in Neolithic Anatolia, more evidence starts to appear with the emergence of extramural cemeteries in the Late Chalcolithic. Complete animal burials become a common practice in the Bronze Age. Cattle, sheep/goats, dogs, and equid skeletons were often found outside the human burials, sometimes in direct alignment with the human bodies. Cattle are the most common animals found in third millennium cemeteries. One of the richest cemeteries in terms of cattle is the EBA cemetery of Demircihöyük where seven cattle skeleton pairs were found in association with adult

human burials, sometimes placed directly outside the burial (see Table 1).¹⁶ The cattle were placed next to the head of the human burial, or on top of the burial container itself.¹⁷ More interestingly, the heads of the cattle were aligned with the heads of the humans in the burials (fig. 1),¹⁸ even though the human body would be covered and would not be visible after the burying. This is a good indication that the animals were killed simultaneously or right after the internment of the human. It is possible that there was a social memory surrounding the idea how dead bodies —animal and human— needed to be oriented. The completeness of the skeletons, and the aligned orientation of the animal and human bodies show us that there was careful attention given to the animals, and that perhaps the animal was not only a means to display one's (or one's family's) disposable wealth, as it is often suggested,¹⁹ but also to display the relationship between the animal and the human.

Seeher has suggested that these complete cattle pairs could have been used to pull the funerary wagons during the burial processions.²⁰ The possibility for dismantled wagons has also been suggested for the Alacahöyük burials,²¹ where cattle skulls were found oriented towards the west, just like the human internments.²² Equids were found together with vehicle remains in third millennium Mesopotamia,²³ but no actual wagons or other vehicles are known from any of Anatolian Bronze Age cemeteries.²⁴ Recently, it has been suggested that the metal socketed points found in Alacahöyük burials were probably used as cattle-prods designed to encourage animals to accelerate their

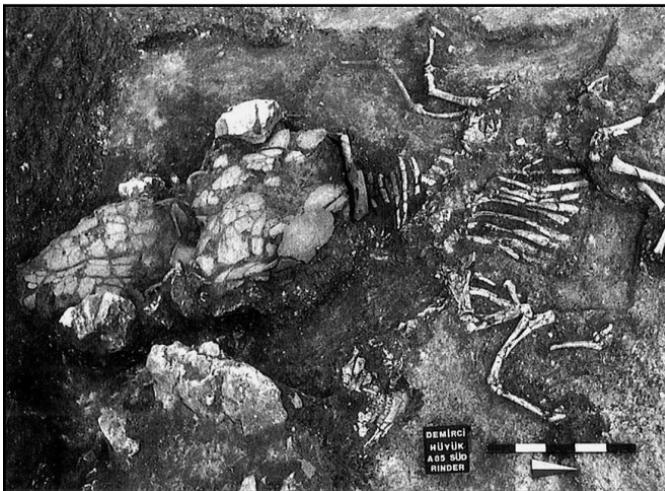


Figure 1. Cattle skeleton pair from Demircihöyük. Seeher 2000: Tafel 17-1. (Published with permission by Jürgen Seeher).

Table 1: Animal remains found in mortuary context in Anatolia.

Period	Site	Animal	Burial type	Complete/ disarticulated
Neolithic	Çatalhöyük	Dog puppy	Intramural	Complete
Neolithic	Çatalhöyük	Sheep	Intramural	Complete
Neolithic	İlıpınar	Sheep/goat	Intramural	Disarticulated
Neolithic	Çayönü	Dog	Intramural	Complete
Neolithic	Çayönü	Boar	Intramural	Disarticulated
Late Chalcolithic	İlıpınar	Sheep/goat	Extramural	Complete
EBA	Demircihöyük	Cattle	Extramural	Complete
EBA	İlıpınar	Cattle	Extramural	Disarticulated
EBA	İlıpınar	Dog	Extramural	Disarticulated
EBA	İlıpınar	Dog puppy	Extramural	Complete
EBA	Alacahöyük	Cattle	Extramural	Disarticulated
EBA	Alacahöyük	Sheep/goat	Extramural	Complete
EBA	Alacahöyük	Dog	Extramural	Disarticulated
EBA	Alacahöyük	Pig	Extramural	Disarticulated
EBA	Alacahöyük	Equid	Extramural	Disarticulated
EBA	Resuloğlu	Cattle	Extramural	Disarticulated
MBA	Arıbaş	Cattle	Extramural	Disarticulated
MBA/LBA	Osmankayası	Equid	Extramural	Complete
MBA/LBA	Osmankayası	Equid	Extramural	Disarticulated
MBA/LBA	Osmankayası	Dog	Extramural	Disarticulated
MBA/LBA	Osmankayası	Pig	Extramural	Disarticulated
MBA/LBA	İlıca	Sheep/goat	Extramural	Disarticulated
MBA/LBA	İlıca	Cattle	Extramural	Disarticulated
MBA/LBA	İlıca	Pig	Extramural	Disarticulated

pace.²⁵ This suggests that cattle could be part of a funerary procession without being attached to a wagon, and that the absence of an actual wagon does not indicate that these animals were not used for traction. Detailed zooarchaeological analyses could also reveal evidence for pathologies on bones, which would answer our questions about traction.

Equids are discussed less frequently than

cattle in the context of traction.²⁶ Evidence for the earliest ritual use of equids in Anatolia comes from Kanlıgeçit's main megaron dating to the EBA, where horse skulls were found in a "ceremonial pit".²⁷ The earliest evidence for equids in mortuary contexts was found in the EBA burials of Alacahöyük. These were disarticulated remains of donkeys.²⁸ The only example for a complete equid burial in Anatolia comes

from the second millennium cemetery of Osmerkayası (fig. 2).²⁹ Even though equid use and consumption in Anatolia is not fully understood, rare evidence from cemeteries such as the complete equid burial from Osmerkayası, disarticulated remains from Alacahöyük, and objects such as the horse bridle from the second millennium cemetery at Miletos,³⁰ show that equids were part of certain burial rituals. On the other hand, the scarcity of equid remains from settlement assemblages makes it clear that equids were not a regular part of the everyday diet.

Another animal that is represented in small percentages in the faunal assemblages of Bronze Age sites is the dog. The only dog burial associated with a human before the Bronze Age comes from the southeastern Anatolian Neolithic site of Çayönü, where a dog was buried near a male human burial.³¹ In the third millennium we see dog remains in the cemetery of Ilıpınar, where burials of children and young adults were accompanied by canine skulls and other bones.³² Next to one of these burials (burial UM), which belonged to a 18-19 year old male, the only semi-complete dog burial was found.³³ This dog was decapitated and placed in the same alignment (N-S) as the human burial (fig. 3). A dog burial was also found in the MBA settlement of Demircihöyük, not far from a child burial.³⁴ The case of Demircihöyük makes it clear that this association between children and puppies was not an exceptional to Ilıpınar or to the mortuary context.

The association between children and dogs could have protective connotations,

or could represent a similar relationship between a pet and a pet-owner. Dogs may have had a “quasi-human status” if they were taken as pets.³⁵ This status could explain why dog skeletons were found in association with children, since children are also often treated differently by being buried within settlements, even when adults are buried elsewhere. The reason for the different treatment of children burials can be due to a ritual sanction due to their “not-fully-human” status in their communities.³⁶

Even though it is tempting to assume these dogs were pets, we need to be careful in applying our notions of pets and companion animals to archaeological situations. In the Neolithic: “not all dogs and cats (much less cattle and sheep) were treated as companion animals, as most get no special treatment in death and may have been skinned and eaten.”³⁷ However, the decapitation and the placing of dog burials in cemeteries show us that in the Anatolian cases dogs were definitely receiving special treatment, even if they were not “pets” in our modern terms. Whether this special treatment had positive

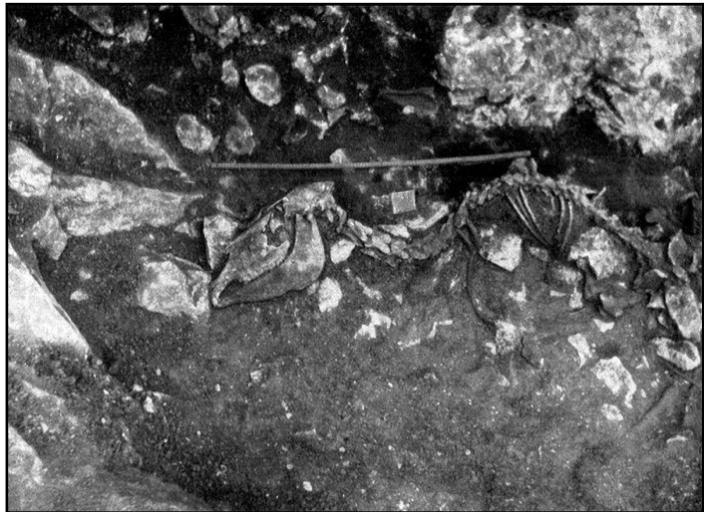


Figure 2. Equid skeletons from Osmerkayası. Bittel et al. 1958
Tafel XI.

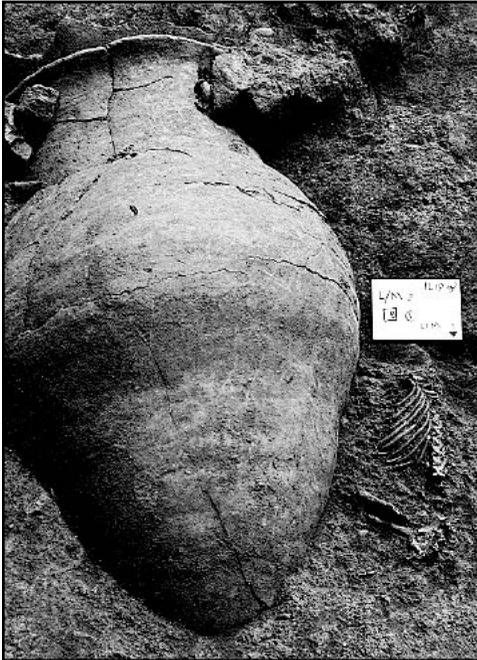


Figure 3. Decapitated dog next to pithos burial. UM, Ilıpinar. Alpaslan-Roodenberg 2002. (Published with permission by Alpaslan-Roodenberg).

or negative connotations is difficult to presume for prehistoric periods when there are no texts mentioning rituals or mortuary practices related to dogs.

Evidence for dog's positive status as both real and mythical companion can also be found in mythological characterizations. For example, the Greco-Roman goddess Hekate, who is a chthonic goddess,³⁸ would travel the night together with the souls of the dead and accompanied by her whining dogs.³⁹ She was connected to the realm of the dead and to funerals, and was also the messenger between the worlds of the dead and of the living.⁴⁰ Furthermore she was the one who could help women in labor at childbirth.⁴¹ It is perhaps through this connection that dogs, as Hekate's symbols, were associated with dead children. It has been suggested that

Hekate had Anatolian origins,⁴² which makes it possible that the tradition of infant burials with dog skeletons spread through Anatolia to the Greco-Roman world.

Textual evidence in the LBA suggests that in certain Hittite rituals, ritually "unclean" animals such as dogs and pigs could divert the anger of the deity from the threatened victim.⁴³ After they received the pollution or curse, the animals were killed, and either placed in a freshly dug hole in the earth and covered over, or else burned.⁴⁴ The treatment of sheep/goat in Ilıpinar's Late Chalcolithic cemetery could be evidence for a similar practice. At Ilıpinar complete skeletons of sheep/goat were placed among human burials, and were interpreted as offerings by the excavators.⁴⁵ Complete sheep/goat burials with human burials are not common, but examples are known from the EBA cemetery Alacahöyük.⁴⁶ What is distinct about Ilıpinar's examples is that the two sheep/goat burials had large stones placed on their skulls, and they were covered with and surrounded by smaller stones (Fig. 4). The Ilıpinar sheep/goat did not show any traces of burning. Moreover, unlike the Alacahöyük and Demircihöyük cattle, their heads were not aligned with the human heads: the animals were oriented towards the east, whereas the human burials in the cemetery were oriented to the west. We have already seen with the Çatalhöyük sheep that animal and human orientations could be exactly the opposite of each other. The difference in the orientation, and in the way the animal was buried could act as a way to mark the divergence or uncleanness of the animal. On the other hand, pollution was perhaps not too concerning since these animals were still buried with humans or close to humans.

More animals were part of mortuary interactions than they are represented archaeologically. Most simply, when dealing



Figure 4. Ilipinar sheep/goat skeletons with stones. Roodenberg 2008 Fig. 14 and Fig. 15 (Published with permission by Alpaslan-Roodenberg).

with dead humans and animals one has to interact (often involuntarily) with maggots, flies, and other insects. There could also be animals that would be active participants of certain mortuary rituals without being killed. In Indonesia for example, chickens are part of the Hindi cremation ceremonies to absorb evil spirits so that they cannot enter human bodies.⁴⁷ Contrary to what we would expect, the chickens are not killed after the ceremony; they are released. These kinds of interactions with animals would be extremely difficult to detect from the archaeological record without textual evidence. An interesting Hittite text describes a royal funerary ritual where goats are part of the mortuary ceremony, perhaps without being sacrificed:

“On the day, that s/he becomes god, they do as follows. They dedicate one plow of ox of the finest quality to his/her soul. They slaughter it at his/her head and speak thus: ‘As you have become, let this one become likewise, and let your soul descend in this ox.’ Then they bring a jug of wine and liberate it to the soul, then they break it. When it gets dark they swing one billy goat over the deceased. (...) Then they give him to drink (...), then in front of the t[able] and on [the table] and to the deceased [they ...] it. (...)”⁴⁸

They release it, sacrifice it? Or do they eat it? Even though we do not know what

exactly happens to the goat, it is clear that the presence of the goat in the mortuary context was not limited to its killing, if that happened at all. It is also important to note that the sacrificed ox had a very specific role in this ritual where it did not serve as a beast of burden, or as a means of food or display (as archaeologists often assume), but as a place where the deceased’s soul descends. This highlights the importance of considering animals not only as tools or passive elements in the ritual, but instead as important actors in the performance and outcome of the ritual.

To eat or not to eat: Animals in funerary feasts

Feasts are inherently about consumption, which includes consumptive display. Feasting in mortuary spaces or at funerary occasions can express the close relationship between death and the consumption of food and drink, connecting eating and digestion with death and decay.⁴⁹ Animals are very much linked in all of these aspects of feasting: they are killed, displayed, and consumed.

Consuming large quantities of meat can be considered a luxury.⁵⁰ One sheep or goat, for example, could provide about 35 kilograms of meat,⁵¹ whereas a bovine would provide between 350-500 kilograms of meat.⁵² Feasting therefore can be considered as an extension of the “gift economy”,⁵³ where the

sacrificed animal is physically destroyed in the giving.⁵⁴ As was shown in the previous section with the complete animal remains, sometimes animals are not eaten but are left for the dead. We could then distinguish between actual consumption of the animals (by the mourners who visit the cemeteries), and the symbolic consumption (by the dead). This distinction often goes unnoticed. In this section I will present the evidence for animal parts left for the dead that may be considered a result of an actual or symbolic feasting activity.

Animal remains associated with mortuary contexts in the third and second millennium are always domesticated species.⁵⁵ Wild red deer was one of the main staples in the Indo-European diet,⁵⁶ which makes their infrequent appearance in funerary feasts puzzling. Wild animals, including deer, are also not part of the Hittite sacrifices or other Bronze Age burials rituals. According to second millennium Hittite texts, wild animals were not desirable sustenance for the gods.⁵⁷ It is not clear whether there was such a religious restriction in the third millennium; however, the absence of wild species in burials may imply a similar belief. The main reason why deer do not appear in burials is perhaps due to the fact that the deer would not be readily available and would have to be hunted before the burial ceremony itself. The hunting of wild animals is unpredictable, especially during certain times of the year,⁵⁸ which perhaps made it difficult to have these animals as a regular element of the (unexpected) burial ceremonies.

Among the domestic animal remains found in cemeteries, cattle were the most common, and among the largest, most valuable, and most symbolically potent.⁵⁹ As has been demonstrated above, cattle played very specific roles in certain mortuary rituals.

Furthermore, cattle were also used to advertise conspicuous wealth and were redistributed, gifted, and feasted on in order to emphasize social position and relations,⁶⁰ while also feeding a large number of people. Evidence for the actual consumption of cattle comes mostly from central Anatolian cemeteries. In the EBA site of Alacahöyük, two burials yielded skulls and hooves of at least six cattle.⁶¹ In addition, there were intact carcasses as well as disarticulated bones, sometimes arranged in rows or piles between the tombs and throughout the necropolis.⁶² Even if the animal had not been killed specifically for the burial ceremony (skulls and hooves could have been kept from a previous butchering), the presence of carcasses around the burials is a good indication that a funerary consumption was taking place at different times throughout the cemetery. Similarly, at Resuloglu a few examples of cattle skulls and feet bones were found between the cover stones and on the sides or around the base of the burial containers.⁶³ The foot bones were interpreted as “gifts” since feet are assumed not to be eaten or cooked.⁶⁴ However, the fact that the rest of the animal was not deposited in the burial means that it was probably consumed. In such cases, it is ambiguous if the animal was consumed at the time of the burial or if the animal parts were remains of a previous non-mortuary consumption activity.

Evidence for cooking animals comes from the burned animal remains found in third millennium burial at Alacahöyük (Tomb R bas 102).⁶⁵ Interestingly, at Arıbas some vessels were left by the burials containing animal bones that were not burned. These were interpreted as food for the dead.⁶⁶ Unfortunately, cemetery publications do not analyze the butchering or cut marks on animal bones found specifically in the mortuary context.⁶⁷ Such analyses would enable us to

distinguish differences in killing, cutting, and cooking practices.

As we have already seen with the complete animal skeletons, not all animals that were brought to the cemeteries were eaten or were left as food for the dead. Dogs for example were not eaten, at least in the third and second millennium Anatolian sites. Even though cynophagy is a common practice in third millennium Attica,⁶⁸ dog remains from Anatolian sites have not been reported to have butchering marks or any other evidence that they were a part of the regular diet.

Disarticulated dog remains are found in third millennium cemeteries such as Alacahöyük (Tomb B) and Ilıpınar (Tomb UL, UG, UH, skulls and other parts),⁶⁹ and in second millennium Osmankayası (only skulls). This brings to mind the dog burials found in Sardis in the fifth century B.C. These dogs were killed, dismembered, and then buried in pots as part of the feasting ritual to Hermes Kandaoulas, but they would not be eaten.⁷⁰ It is therefore possible that the dogs, and perhaps other animals that are found dismembered but not burned were symbolically a part of the feasting rituals without actually being consumed.

The ways in which animals were treated and used in Anatolian cemeteries seem to be site-specific. On the other hand, one rule that seems to apply to the cases across the board is the strict exclusion of wild animals in the mortuary space, both in the third and second millennium sites.⁷¹ There seems to be also a general agreement across these sites on the consumption of dogs and equids, who were not often eaten in cemetery and settlement contexts, but could still be killed in activities related to feasting.

Burial gifts or animal burials?

Any of the animals mentioned above can be considered a burial gift: remains of a feast could be left at the burials as a gift, or animals that were sacrificed could have been killed to act as a gift to the dead. Some animals might not have been killed specifically during the burial ceremony, but their remains could have been kept to be put with the dead which could also be considered a burial gift. It has been suggested that the cattle skulls and feet bones from Resuloglu were “gifts” since feet are assumed not to be eaten or cooked.⁷² The same practice can be observed with the famous case of Alacahöyük, where two burials yielded skulls and hooves of at least six cattle.⁷³ It is possible that animal hides attached to the skull and hooves were left in some burials; however, at Alacahöyük the skulls and feet bones are next to each other, suggesting that they were perhaps placed separately, not attached to the hide. In cases like these it is difficult to draw a line between what could be considered food for the dead (symbolic food) and what would be left as a material “gift”.

Roodenberg makes a distinction between disarticulated animal remains and bovid mandibles found in the EBA cemetery of Ilıpınar (fig. 5), linking the former to food offerings, and the mandibles to “a different category”.⁷⁴ Sheep/goat mandibles are known to have been used as tools.⁷⁵ For instance, at Arıbas, the cattle mandible was found in the same context with the hearths, deer antler tools, obsidian and other tools such as grinding stones and pestles. This makes it possible that mandibles were used together with these other tools in a preparation or cooking activities.⁷⁶ These tools could have been made and used before the burial ceremony.

Also at Ilıpınar’s Neolithic cemetery, sheep/

goat scapulae and mandibles were found near human skeletons.⁷⁷ These could be considered gifts since in one of the cases the animal mandible was placed on a middle-aged man's upper leg and an animal scapula was laid close to his foot.⁷⁸ The mandible and scapula do not provide as much meat as the other parts of the animal just like the hooves and the skull. The careful placement of these animal parts suggests that they perhaps had



Figure 5. Bovine mandibles found in Burial UA, Ilipinar. Alpaslan-Roodenberg 2002, Fig. 3 (Published with permission by Alpaslan-Roodenberg).

symbolic purpose rather than having been left as food.

Burned animal remains have been found in relation to second millennium cremation burials. At Ilica for example, burned (and unburned) cattle, sheep/goat, and pig were identified in the cremation urns.⁷⁹ Moreover, knuckle bones of animals were commonly found in the urns of the second millennium cemetery of Aribas.⁸⁰ The fact that animal remains were found inside these cremation

urns raises the possibility that the animals were burned with the humans. This however, may or may not be the result of a consumption or gifting activity. It could instead be the result of a similar mortuary treatment that both animals and humans received.

Were animals also receiving burial gifts? Burial objects can be found in burials where humans and animals are interred together. For example, all the EBA burials at Demircihöyük with cattle skeletons had burial objects.⁸¹ At Ilipinar, some of the EBA burials that yielded dog remains contained burial objects including ceramic vessels, metal pins, a spindle whirl, and a shaft hole axe.⁸² These belonged to a child (burial UH), a young adult (burial UM), and an adult male and female (burial UN). On the other hand, some other burials with dog remains and which belonged to a baby (burial UL) and a child (burial UO), did not contain burial objects.⁸³ The burials with the disarticulated bovid mandibles at Ilipinar contained ceramic vessels, and belonged to adults. The evidence from Ilipinar suggests that both adults and children were buried with animal remains and burial objects. It is interesting that in contrast to the EBA animal burials, the Late Chalcolithic sheep/goat burials from Ilipinar did not contain any objects. There is not enough evidence to determine whether the lack of burial objects in the Late Chalcolithic Ilipinar was because these burials did not contain humans, or due to the differences in mortuary practices between the Late Chalcolithic and the EBA.

What part of an animal was considered as symbolic food, gift, or a burial in itself is a question that cannot be answered with certainty. The animals found in cemeteries may have been killed for the human burials, but they could also be animal burials interred in the same cemetery as humans. If killing

and consuming an animal was a way of displaying wealth, power, or any other social symbolism, burying an animal could have served the same conspicuous purpose without being connected to food or feasting. The fact that the direct relationship between the complete animals and human burials is often not clear⁸⁴ makes it even more challenging to distinguish between animals that were killed for humans and animals that were interred in a manner similar to that of deceased humans.

Secondary interments are known from various cemeteries such as Karataş and Alacahöyük, where disarticulated human skulls and long bones were reburied and relocated. It is possible that the disarticulated animal remains resulted in a similar secondary activity. Moreover, at Osmankayası, in the older burial group, human skulls and bodies were not interred any differently than the equid skulls and burials.⁸⁵ Therefore, the possibility that animal remains mirrored human remains (in orientation, location or treatment), or that in some cases humans and animals were treated similarly in mortuary contexts, should not be eliminated.

Conclusion

The categories used here to describe animal burials were created for the purpose of organizing the data into a coherent structure based on the types of animal remains and interments, not to suggest that there are limited types of interactions between animals and humans. As it has become clear throughout this paper, definitive categories are not sufficient for representing the variety of roles that animals played in mortuary practices.

In many of the case studies presented here the same type of animal appeared to have several roles in different mortuary practices

that were not all related to animals' economic function or value. If animals were only a means of displaying wealth and social power or a source of food, their killing and consumption would be enough to fulfill that purpose. Why also place animal parts next to humans, or decapitate them, place skulls and hoofs in pairs, or orient animal bodies in a specific direction? The fact that only domesticated species were found in contexts associated with mortuary rituals could be a practical response where people preferred using animals that were readily available to them. However, the careful arrangement of complete animals in cemeteries, or the specific use of disarticulated animal parts in certain mortuary rituals suggest that animals were important elements of the mortuary rituals, and they were not always responses to practicalities or socio-economic demands.

Perhaps our modern emotional relationship with animals hinders our interpretation about what constitutes an animal: a pet, a source of subsistence, a sacrificial victim, a burial gift? People who have experienced the Islamic sacrificial holiday, Eid al-Adha, can perhaps better understand how an animal can be *all of these* at once; you care for an animal for a certain amount of time, it is a pet that you buy to sacrifice, consume, and distribute as a gift for a ritual and religious purpose.

There is definitely a need for more studies that analyze the ways in which animals were killed, treated, prepared, or cooked in mortuary contexts. This could be achieved by zooarchaeological analyses, which so far have mostly focused on domestication and economic aspects of animals in Anatolia. The animal remains found in cemeteries should be studied separately than the ones found in habitation contexts to see whether specific ages, sexes, or properties of animals were preferred for certain mortuary activities. One example of such a study is the examination

of the bone weight of dogs buried in the first millennium BC. necropolis of Van-Yoncatepe. The large size of these dogs showed that they were close to the sporting breeds in the Gundog and Hound group, and may have served as hunting partners and as sheepdogs.⁸⁶ On the other hand, we should also be aware of archaeologically inaccessible features or characteristics of animals that could have affected their selection for certain rituals. For example, in Egypt the god Apis was worshipped in the form of a bull that specifically had to be black and have a diamond-shaped mark on its forehead.⁸⁷

The parallel alignment of animal and human bodies in cemeteries is an interesting practice that can be observed in different periods and sites. This is perhaps the best example for the human-animal interaction where the interment of one affects the interment of the other. The possibility of animals buried independently from human burials, especially in cases where there is no clear relationship between the human and animal burial, is often disregarded. Cemetery publications usually do not specify the location of animal remains unless they are found in relation to human burials.

Moving away from human-centered approaches can help us understand some of the ambiguities in the interactions between humans and animals. The evidence from Anatolian cemeteries shows that animal remains were used as tools, were consumed, and gifted. They were also buried in similar ways to humans. Animals were not only passive elements in mortuary practices. They played an important role in the lives and deaths of the Bronze Age communities, not only as a source of subsistence or transportation, but also in diverse ways as protectors, pets, sacrifices, companions, and ritual actors.

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Endnotes:

1. Tom Regan's foreword for Kowalski 1999.
2. Campana et al. 2010, Marom et al. 2016, MacGregor 2012, Desmond 2016, Freund et al. 2016, Russell 2014.
3. For studies that look at animals from a different perspective see Hamilakis and Overton, Russell 2014.
4. A section title in Collins 2002.
5. Neolithic: 9600-6000/5500 BC., Chalcolithic: 6000/5500-3100 BC., Early Bronze Age (EBA): 3100-2000 BC., Middle/Late Bronze Age (MBA/LBA): 2000-1200 BC.
6. There is naturally an imbalance between the detail of the archaeological evidence for different sites or periods: western Anatolia in the third millennium (EBA), and central Anatolia in the second millennium (MBA/LBA) have more evidence (and publications) for cemeteries and burials. Therefore, the readers should be aware of the fact that cemeteries not mentioned here might not have evidence for animal remains, or they might simply not be published in detail.
7. Russell and Düring 2006
8. Pardee 2015.
9. Sykes 2014, 121.
10. Russell and Düring 2006, 75.
11. Stevanovic and Tringham 2000 in Russell and Düring 2006.
12. Russell and Düring 2006.
13. Ibid, 78.
14. Ibid.
15. *ibid*, 81
16. Seeher 2000.
17. Ibid.
18. Ibid.
19. See for example Massa 2014.
20. Seeher 2000, 30.
21. Orthmann and Helmuth 1967.
22. Bachhuber 2015, 101.
23. see Kish Chariot burial, Gibson 1972.
24. This could be due to preservation. For a detailed discussion for the archaeological evidence see Bachhuber 2015.

25. Zimmermann and Genis 2011.
26. I use “equids” as a category that involves wild, semi-domesticated, and domesticated equids since the question of the domestication of horses is still ongoing (see Anthony 2007). Even though Bökönyi has shown that the horse remains from Chalcolithic sites in southeastern Anatolia were domesticated (1991), in many cases it is also difficult to distinguish between wild and domesticated horses (Anthony 2007), which makes the archaeological study of domestication even more complicated. For further discussion see Anthony 2007.
27. Özdoğan et al. 2012.
28. Kosay 1951.
29. Bittel et al. 1958, 16 see Tafel (Plates) XI-4: The forelegs of this animal were missing, but they were found close by suggesting that they were moved due to the later burials (ibid).
30. Potratz 1941.
31. Özdoğan 1999.
32. Roodenberg 2008a, 338, Alpaslan-Roodenberg 2002: 93.
33. Aslan-Roodenberg 2002.
34. Seeher 2000, 185.
35. Russell and Düring 2006, 81.
36. For example, in medieval Ireland, unbaptized children would be buried away from the scared ground. see Finlay 2000.
37. Vigne and Guilaine 2004.
38. Day 1984.
39. Sarian 1992.
40. Gräslund 2004.
41. Ibid.
42. Bachvarova 2010.
43. Gurney 1977, 52-8.
44. Collins 2002, 324.
45. Roodenberg 2008b, 320.
46. Arik 1937.
47. Squire 2012, 80.
48. KUB XXX 16+KUB XXXIX i 1-18, ii 1-14 in van den Hout 1994, 59. (Square brackets imply a break in the tablet or illegibility in the actual text, whereas parentheses indicate the parts of the text that were skipped here.)
49. Parry 1985.
50. Goring-Morris and Belfer-Cohen 2011.
51. Hesse and Perkins 1974, 159.
52. Goring-Morris and Belfer-Cohen 2011, Arbuckle 2014.
53. Russell 2014, 89.
54. Ibid.
55. Equids are questionable: see note #26 above. The only known boar skull in Anatolian burials was found in Neolithic Çayönü’s Grill Building very close to a male burial (Özdoğan 1999, 47). There is no detailed zooarchaeological information on the boar, therefore it may or may not be a wild suidae species.
56. Collins 2002, 311.
57. Ibid, 320.
58. Kelly 2001.
59. Arbuckle 2014.
60. Ibid.
61. Kosay 1944.
62. Arik 1937, and Kosay 1951.
63. Yıldırım 2006, 7.
64. Yıldırım-Ediz 2006, 58.
65. This was not a cremation burial.
66. Ibid.
67. Bittel 1958, Seeher 2000, Roodenberg and Roodenberg 2008.
68. Hadjikoimis 2016.
69. Roodenberg 2008a, 338.
70. Robertson 1982, 129.
71. This tradition seems to change in the first millennium in eastern Anatolia where fox remains were unearthed in the necropolis of Van-Yoncatepe (Onar et al. 2005).
72. Yıldırım-Ediz 2006, 58.
73. Kosay 1944.
74. 2008a, 338.
75. Hesse and Perkins 1974.
76. Öztan 1998, 171.
77. Alpaslan-Roodenberg 2008, 46.
78. Ibid.
79. Orthmann and Helmuth 1967.
80. Berkcan 2006, 24.
81. Seeher 2000.
82. Roodenberg 2008, 340.
83. Ibid.
84. For example, at Demircihöyük, only one burial showed direct association with the cattle skeletons: the animal skeletons were located in the burial pit right outside the human burial. Seeher 2000.
85. Bittel et al. 1958 Abb. 6 pg. 13.
86. Onar 2005.
87. Herodotus 3.28.

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