## Joanna Piątkowska-Małecka, Zuzanna Wygnańska

## ANIMAL REMAINS FROM MIDDLE BRONZE AGE GRAVES AT TELL ARBID (SYRIA)

#### Introduction

In the course of a dozen seasons (1997–2008) of archaeological excavations at the site of Tell Arbid in north-eastern Syria, 32 graves from the Middle Bronze Age (MBA) were brought to light. According to a local stratigraphy, the graves were associated with three consecutive phases of the MBA settlement on the site and were dated from the beginning of MBA I until the end of MBA II. There were 6 graves of the earliest phase (phase 1), dated to the MBA I, 24 graves of the intermediate phase (phase 2) dated to MBA II, and 2 graves of the final phase (phase 3), also dated to MBA II; the two latter phases yielded Khabur ware vessels.

MBA graves were located in several places on the site, on the top of the tell (sector S), on its eastern slope (sector SR, later labeled P, and sector SD), on the southern slope (sector W), on the western slope (sector M), and on the north-western slope (sector D) (**Fig. 1**).

Throughout the MBA, the graves from Tell Arbid remained within the same burial tradition. This continuation can be seen in the persistence of *intra muros* burials within family cemeteries, and in a similar construction of the graves. The burials have modest and standardized sets of grave goods. They include vessels (often of poor quality), a few personal ornaments and – very rarely – objects of symbolic meaning indicating the social status of the deceased, such as weapons or an incense burner. Several graves contained also some animal bone remains. This paper presents the results of an archaeozoological analysis of the animal bones and considers the reasons behind their presence in the graves.<sup>1</sup>

#### Material and methods

The material analyzed for this paper consists of animal remains recovered from six graves during excavations by the Polish Centre of Mediterranean Archaeology, University of Warsaw team.<sup>2</sup> This analysis does not cover animal remains from graves found at Tell Arbid in the 2008–2010 seasons in the course of excavations conducted by the team from the Adam Mickiewicz University in Poznań, headed by Prof. R. Koliński.

The bone fragments were subjected to zoological and anatomical analyses (**Tables 1, 2**). Age and sex of the animals were assessed. Age was reconstructed on the basis of epiphyseal union (KOLDA 1936) and dental development (LUTNICKI 1972).

Bones were measured following the unified method of A. von den Driesch (1976). These measurements were then converted into points of the 100 point-scale method for cattle (LASOTA-MOSKALEWSKA 1984), pig (LASOTA--Moskalewska, Kobryń, Świeżyński 1987) and horse (KOBRYŃ 1989). Based on the length of some bones, sheep withers height was calculated according to Teichert's coefficients (TEICHERT 1975), those of goat - according to Schramm's (1967) coefficients, and of horse - based on Kiesewalter's coefficients (KIESEWALTER 1888, after VON DEN DRIESCH, BOESSNECK 1974). In the case of an equid, the proportions of the width of the shaft to the maximum length of its metacarpal and metatarsal bones was calculated. If the respective results are equal/lower than 18.2 and 10.5, the animal is identified as an onager (Ducós 1970). All kinds of traces on the bones were described.

not been included in the archaeozoological analysis: G1-S-36/54 excavated in 1999 (phase 1, pit grave); G7-SD-36/64 excavated in 2003 (phase 1, chamber grave with a "diamond" shape covering); G2/4-SD-36/64 excavated in 2000 (phase 2, vaulted chamber tomb) and G1-SD-35/64 excavated in 2003 (phase 2, cist grave).

<sup>&</sup>lt;sup>1</sup> Results of analysis of animal remains from grave G8/G9-S-37/55-2001 have already been published (PIĄTKOWSKA-MAŁECKA, WYGNAŃSKA 2006).

<sup>&</sup>lt;sup>2</sup> Animal remains are known to have been present in at least 10 of the 32 graves; however, due to either a poor state of preservation of the material or to missing tags, material from four graves has

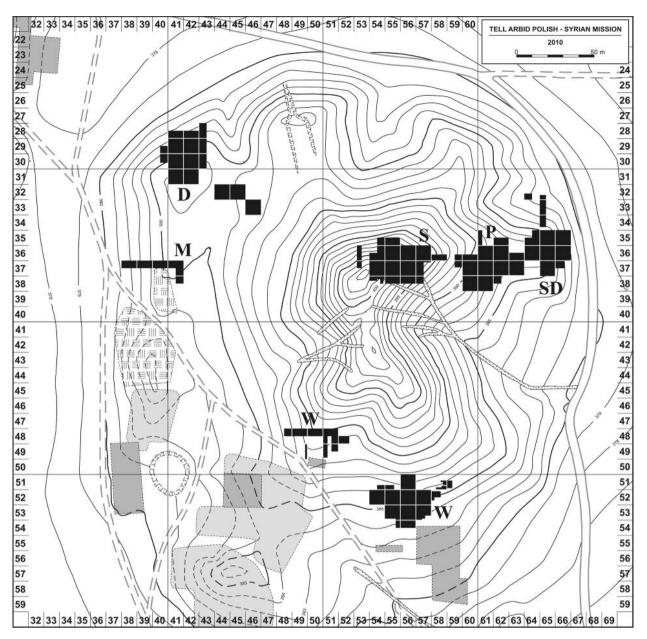


Fig. 1. Contour map of the main tell of the Tell Arbid site (Drawing M. Wagner, M. Momot).

Ryc. 1. Plan warstwicowy głównego tellu stanowiska Tell Arbid.

# Characteristics of animal bone remains (results)

1) G9-S-37/55-2003: grave of unidentified construction; phase 1.

It contained two burials: of a child aged approx. 8 years, of unidentified sex, and of a man aged 15–25 years.<sup>3</sup>

The human remains were displaced due to damage to the grave's construction.

The grave contained also bones of two goats: an adult and a juvenile one. The adult specimen was represented by 31 skeletal fragments lacking, however, the proximal end of the hind limb. Based on metacarpal and metatarsal bone lengths, the withers height of the individual was

<sup>&</sup>lt;sup>3</sup> Human bones were analyzed by Dr. Arkadiusz Sołtysiak from the Institute of Archaeology, University of Warsaw.

Fig. 2. Grave G2-SR-36/59 after removing a "diamond"-shaped covering; view from NE (Photo A. Reiche).

Ryc. 2. Grób G2-SR-36/59 po usunięciu zamknięcia "w karo"; widok od strony północno-zachodniej.



calculated at 81.1 and 83.3 cm. This proves that it represented a large form.

The juvenile goat, whose age at death was determined at  $7{\text -}10$  months, was represented by 13 bone fragments. Most came from distal parts of limbs, which are of lower value in terms of consumption. The animal bone fragments formed a separate cluster in the south-eastern corner of the grave, just next to the skull of the young man.

2) G2-SR-36/59-1998: chamber grave with a "diamond"-shape covering; phase 2 (Fig. 2).

A child of unidentified sex, approx. 6 years of age, was buried there. The body lay on its left side, with the head towards the south-west.

The grave yielded 16 animal bone fragments, 12 of which could be identified. They belonged to sheep/goat, pig and cattle. A jaw fragment and femurs of the

<sup>&</sup>lt;sup>4</sup> A chamber grave covered with bricks wedged vertically between side walls referred to by the excavators as a "diamond" shape covering.

sheep/goat were found in the eastern part of the grave, at some distance from the child's bent legs. The other bones were deposited behind the child's head.

#### 3) G1-SR-36/62-1998: pit grave; phase 2.

It was the burial of a child (7-14 years) of unidentified sex. The body rested on its left side, with the head to the south.

There were nine animal bone fragments in the grave, five of which were identifiable. They came from sheep, goat, pig and cattle. A pig's shoulder blade was blackened by contact with fire. The animal remains rested behind the head of the buried child.

## 4) G8/G9-S-37/55-2001: vaulted chamber tomb; phase 2 (Fig. 3:A-D).

In the chamber (G8) a secondary burial of four people was discovered. Two were women aged 40–45 and 25–30 years, one was a man of 20–25 years of age. The sex of the fourth deceased, who was 12–15 years old at death, could not be identified. In the grave shaft, another burial (G9) was encountered, somewhat above the level of the grave chamber. The body of a young woman had been laid there in an anatomical order, at the right side, with head pointing east.

This tomb yielded animal bones that were both numerous and varied. Among them were post-consumption remains of different species, as well as dog and equid burials.

The post-consumption remains were found in the north-eastern corner of the grave chamber G8, and in at least two concentrations in the horizontal part of the grave shaft G8A leading to the chamber's entrance (Fig. 3:B,D).

In the north-eastern corner of the chamber, 172 bone fragments were found, 122 of which (71%) were identified. All belonged to sheep and goat. An analysis of their anatomical distribution proved that all parts of the skeleton were represented, but rib and vertebrae fragments prevailed. Of the bones, 33.6% belonged to animals killed before reaching morphological maturity, mostly aged between 15 and 24 months. Two astragalus bones of sheep were measured, which allowed for the calculation of their withers height. In both cases it reached 63.5 cm, showing that the animals represented a small morphological type of sheep. The two concentrations of post-consumption remains from the shaft were found at different levels of the fill. One was located in the shaft's north-eastern part, and the other - in its north-western part, near a dog burial (see below). Unfortunately, in the course of exploration the bones from the two concentrations got mixed up and therefore they were analyzed together. They counted 152 bone fragments in total, of which 142 (93.2%) were identified.

The assemblage included bones of sheep, goat, pig, cattle and an equid. Remains of small ruminants were most abundant, with all parts of the skeleton represented, but those of the trunk being most numerous. 15% of bones of

these species belonged to animals slaughtered at a young age – some less than a year old, and some around the age of three. One sheep astragalus was measured and yielded a withers height of 63.5 cm.

Among the cattle, there was one animal aged approx. 3.5 years at the time of death. One calcaneus was measured; it belonged to a small-bodied animal of the *Bos taurus brachyceros* type, approx. 90 cm high in withers.

One of the pigs was ca. 2 years old at death. The width of the distal part of its tibia scored 18 on a 100-point scale, which proves that the specimen was of medium size.

Equid bones came from morphologically adult animals. Based on measurements of two phalange II, their size was judged as small, with withers height no greater than 110 cm. Considering its small size, it most probably was a donkey.

Apart from the post-consumption bone fragments, the shaft yielded also a dog burial (**Fig. 3:A**). The dog was interred in the shaft's south-eastern corner; it was laid on its left side, with legs outstretched and head pointing south, towards the entrance of the tomb. The dog was young, probably approx. 18 months at death. At a later time, when a young woman (G9) was also buried in the grave shaft, the dog's remains were separated from her burial with a small wall.

Outside the whole grave, in a separate pit bordering the grave shaft from the west, a burial of an equid was discovered (Fig. 3:C). It too was presumably connected with the chamber tomb (see below). The bones were found mixed, probably due to a secondary nature of the burial. They represented various anatomical elements, but canine teeth, phalange of a front limb, and a tibia, calcaneus and splint bone of the left hind limb were missing. The bones belonged to an adult animal, aged ca. 15–17 years, most probably a female, as suggested by the lack of the canine. However, it is also possible that the canine was lost either during the skeleton's deposition in the grave or during exploration.

Morphological analysis indicates that the animal was an onager. Such an identification is hinted at by the proportions of the width of the shaft to the maximum length of its metacarpal and metatarsal bones which scored 13.4 and 10.2 respectively, and by the animal's withers height of ca. 121.5 cm.

5) G5-SD-36/64-2003: chamber grave with a "diamond"-shape covering; phase 2.

Burial of a child of unidentified sex, approx. 7 years of age. The body was lying on its right side, with the head pointing west.

There were 33 bone fragments in the grave, 17 of which could be identified. They represented three species: sheep, goat and pig. On a fragment of a pig pelvis, blackening by contact with fire was noticed. The animal bones lay in the north-eastern corner of the grave chamber, near the child's skull.

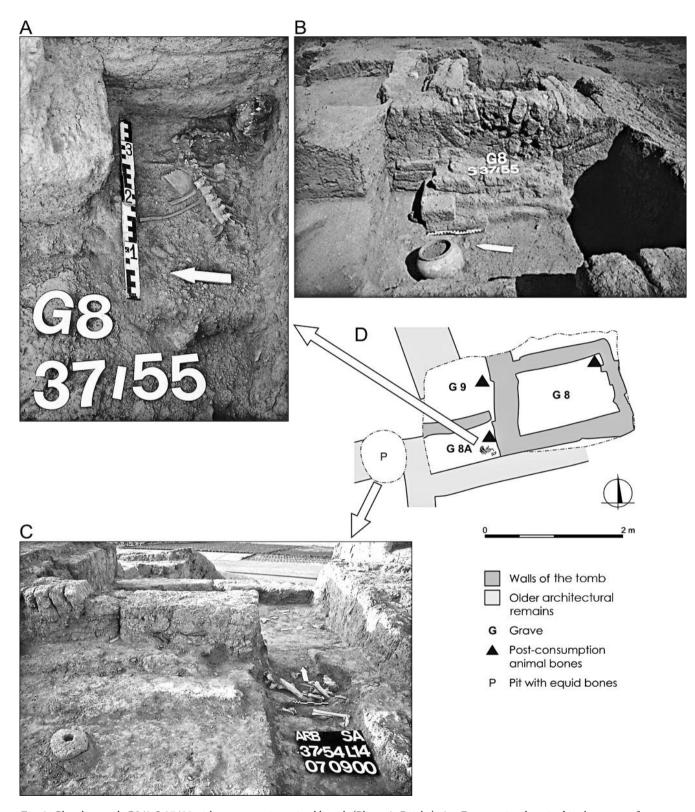


Fig. 3. Chamber tomb G8/9-S-37/55 with accompanying animal burials (Photo A. Reiche): A – Dog remains deposited in the corner of the grave shaft in front of the entrance; B – Chamber tomb G8/9 – view from the grave shaft (the lowermost level with a dog burial and a jar); C – Equid remains buried in a pit situated to the west from the chamber tomb G8/9; D – Plan of the grave G8/9 with a shaft G8A and a pit with equid bones situated west from the grave (Drawing M. Momot).

Ryc. 3. Grobowiec komorowy G8/9-S-37/55 z towarzyszącymi pochówkami zwierzęcymi: A – szczątki psa pochowane w narożniku szybu grobowego przed wejściem do komory; B – grobowiec komorowy G8/9 – widok od strony szybu (najniższy poziom z pochówkiem psa i naczyniem); C – szczątki koniowatego pochowane w jamie usytuowanej na zachód od grobowca komorowego G8/9; D – plan grobu G8/9 z szybem (G8A) i jamą z kośćmi koniowatego usytuowaną na zachód od grobu.

6) G2-D-31/42-2004: vaulted chamber tomb; phase 2.

The grave contained two burials: of a ca. 30 year old man and of another adult of unidentified sex. It was a consecutive burial – the bones of the first deceased were pushed towards the northern wall of the chamber to make space for the next body. The man was then laid in the middle of the chamber, on his right side, with the head pointing east.

Approximately 100 animal bone fragments were found in the grave. All belong to a sheep or goat aged ca. 4–4.5 years.<sup>5</sup> Trunk and long bone fragments could be discerned within the skeletal material. The animal remains were located in the eastern part of the chamber, behind the head of the buried man.

## Discussion

## Animal offerings in the graves

In the early and – especially – in the middle phase of the MBA settlement at Tell Arbid, parts of animals or, more rarely, whole animals were deposited in some graves. In most of the graves the bones' state of preservation (small and fragmented) indicates that they are of a post-consumption character. Splitting and preparing meat for consumption often results in a similar fragmentation of bones. Moreover, some of the bones were blackened, most probably scorched during roasting.

Sheep, Ovis orientalis f. domestica (f. aries) and goat, Capra aegagrus f. domestica (f. hircus), bones were most abundant in the graves. The sheep represented a small type, while the goats were of a large breed. Many belonged to animals slaughtered at a young age, before reaching morphological maturity, that is younger than 3.5 years. Besides the small ruminants' bones, the graves yielded also less numerous remains of pig (Sus scofra f. domestica) and cattle, Bos primigenius f. domestica (f. taurus). The pigs were a fully domesticated, mid-sized form. The cattle was of the Bos taurus brachyceros type. Only one grave yielded the remains of an equid, most probably of a donkey, Equus africanus f. domestica (f. asinus). Although various parts of carcasses were deposited in the graves, in the case of sheep and goat valuable parts of the trunk were most abundant.

The animal bones were most frequently found in graves of a relatively sophisticated and work-consuming construction. In two of the six analyzed cases, they were discovered in chamber graves with a "diamond"-shape covering, in further two – in vaulted chamber tombs, and only once were they encountered in a simple pit grave.

Taking into account also the graves with animal bones which have not been archaeozoologically analyzed, the picture of animal bones' distribution in graves of various construction types is as follows: 3 vaulted tombs, 3 chamber graves with a "diamond" shape covering, 2 pit graves, 1 cist and 1 unidentified grave construction.

The animal remains were encountered in graves with both scarce and fairly abundant grave goods (as the goods were of similar quality and value, it is difficult to describe them as "rich"). This might indicate that there was no correlation between the presence of the animal offering and the abundance of grave furnishings. On the other hand, the more frequent appearance of the offerings in graves of a more intricate construction does hint at an association between the social status of the deceased and the character and complexity of funeral rites.

Post-consumption remains were attested in graves of adults, both women and men, as well as of children aged above six years at death. In single burials, they most often accompanied children of the 7–14 years age group, and in one case – a young woman. In multiple burials, they were found alongside adults of both sexes. However, taking into account the rather small sample, these observations are provisional and may be proven incidental.

In all cases, apart from two chamber tombs, the animal remains were situated solely within the grave chambers. They were usually placed in a corner, behind the head of the deceased. This suggests that they were intended for the deceased him- or herself. Seeing as remains of body parts appreciated for their taste and nutritional value prevailed in the offerings and that they had sometimes been prepared for consumption, the offerings seem to have been intended as provisions for the dead for their journey into the Netherworld.

In chamber tomb G8/G9-S-37/55, post-consumption remains were found not only in the chamber but also in the grave shaft, at the entrance to the grave. The chamber contained secondary burials of four people (all the disarticulated bones had been piled together) and an offering of sheep, deposited probably at the time of the funeral. The reason for the secondary nature of the burial is unknown; perhaps the people had been buried temporarily, with a view of being moved later, or maybe the family of the deceased moved to a new place of residence and took the bones of their relatives to be reburied near their new home. Whatever the reason, this last burial was accompanied by an offering of sheep, which may have played a role in some funeral rites marking the moment of passing to the Netherworld. Only one animal was offered to the four deceased.

72

<sup>&</sup>lt;sup>5</sup> Animal remains from this grave were analyzed by Dr. Anna Gręzak from the Institute of Archaeology, University of Warsaw.

After the human burial, the entrance to the grave chamber was blocked and a dog was buried in the grave shaft (see below). The grave chamber was not reopened afterwards, but at a later date the body of a young woman was deposited in the shaft, opposite the tomb's entrance, beside the dog's body.

Post-consumption bone remains were found at least at two different levels inside the grave shaft of G8/G9-S-37/55-2001. This would suggest that offerings were made not only at the time of burial, but also later. The animal bones may represent traces of offerings deposited as part of ancestor worship performed during post-funeral rites.

Various grave goods were also found in the shafts of other chamber tombs from Tell Arbid. Animal remains were encountered in the shaft of the badly damaged tomb G2/G4-SD-36/64,6 and in tomb G2-D-31/42, vessels – probably at least symbolizing or perhaps actually containing a food offering – were found at three different levels in the shaft. They may attest to funerary offerings being deposited not just at the time of burial, but several times afterwards. Therefore, it seems that at Tell Arbid there was an association between chamber tomb burials and practicing funerary rites that included depositing an offering – also of animals – in the shafts of tombs the entrances of which had already been blocked.

Animal remains and vessels have been found also in graves (both in chambers and shafts) at neighbouring sites from this period. Numerous Khabur ware vessels were found in the chamber and at three levels of the grave shaft of an MBA tomb at Tell Mozan (DOHMANN-PFÄLZNER, PFÄLZNER 2000: 215-216). At the site of Chagar Bazar, chambers and shafts of shaft graves yielded animal offerings. The offerings from the shafts were deposited just once, probably when the shaft was being filled with earth (CORDY, LÉON, TUNCA 2009).7 Also there, as at Tell Arbid, bones of young sheep and pigs were most frequent. As for offerings of sheep, in the chambers, fragments of trunks prevailed, whereas in the shafts, heads and distal parts of limbs were most frequent. At Chagar Bazar goat offerings were rare, as were gazelle, birds and fish (the latter, just one instance). These species (apart from goat) are absent from the Tell Arbid grave assemblages. And, on the other hand, in the Chagar Bazar graves, neither cattle nor equid remains have been attested. This demonstrates some variation in the choice of animals for sacrifices at the two sites.

A unique case at Tell Arbid is the chamber grave G2-SR-36/59 with a "diamond"- shape covering, where the remains of sheep/goat, pig and cattle were located behind the head of the buried child, whereas the bones of a sheep/goat lay near its feet (**Fig. 2**).

This burial was doubly distinguished – firstly by its elaborate structure, and secondly by this double animal offering. The two locations of the animal bones suggest that the two offerings may have had different purposes. The cuts deposited by the head may have been intended for the deceased personally, whereas those deposited by the feet could have been offered, e.g. to the spirits of the dead or to the gods of the Netherworld. In no other grave at Tell Arbid has such a dual location of animal offerings been noted so far. However, it does bring to mind the offerings from the shaft graves at Chagar Bazar; the bones found by the feet of the deceased, that is in the "outermost" part of the chamber, would correspond to the offerings deposited in the shafts of those graves. Yet in grave G2-SR-36/59 no difference has been noticed regarding the value of the two assemblages, whereas at Chagar Bazar the cuts deposited in the two locations clearly differ in that respect.

#### Animal offerings in cuneiform sources

Information on animal sacrifices for the deceased come from cuneiform texts mentioning kispum rituals held during funerals, and later, during ceremonies related to the cult of the dead (TSUKIMOTO 1985: 42-47, 62-64, 79-91). It is not certain if the kispum offerings were deposited directly in the graves, it does, however, seem quite probable (TSUKIMOTO 1980: 132). For Tell Arbid, the closest available information (both in territorial and chronological terms) comes from the Mari archives, where texts mentioning kispum for rulers were found. There are also several contemporary texts from southern Mesopotamia which also mention kispum.8 As attested by the texts, sheep was the most frequent offering, which is mirrored in the bone assemblages found in graves. The kispum texts occasionally mention cattle, but usually the term "meat" is used without reference to the species of the animal.9 Information on the particular meat cuts used for the sacrifice is also lacking from most texts. From the few exceptions we learn that both whole animals and their parts could be offered, and that sometimes they were subjected to some thermal treatment. An early second millennium text from Mari

<sup>&</sup>lt;sup>6</sup> Bones from this tomb have not been analyzed. Animal remains were also found in tomb G7-P-37/62 investigated by the team from the Adam Mickiewicz University in Poznań (KOLIŃSKI 2009: 2).

<sup>&</sup>lt;sup>7</sup> At Chagar Bazar, chamber tombs were also found by Max

Mallowan, but in his excavation reports there is no mention of animal bones.

<sup>&</sup>lt;sup>8</sup> We are referring here to texts edited by Tsukimoto (1985: 39–78).

<sup>9</sup> Piątkowska-Małecka, Wygnańska 2006: 84–88.

(Mari 12803; BIROT 1980: 139–150) contains instructions for a *kispum* offering for royal ancestors. A sheep should be sacrificed, of which the best cuts should be cooked and offered to Shamash before the actual rites for the dead can begin.

In a much later, coming from the first millennium BC, text of an incantation to Shamash, Ea and Marduk and to the ancestral spirits of an ailing person for whom a rite was held (BBR 52; TSUKIMOTO 1985: 167) there is mention of sacrificing a sheep shoulder along with fat and roasted meat. In a royal kispum text coming also from the first millennium BC (ADD 1016; TSUKIMOTO 1985: 108-109),10 there is mention of the meat cuts used for the offerings. They are the valuable parts: two thighs, three shoulders of an undefined kind of animal, then, the stomach, liver, kidneys and heart of an ox and also two cuts of meat of one roast sheep; besides, there was an offering of five whole sheep, one female spring lamb and a duck. It does seem that the nutritional value and taste of the cuts were of importance in the choice of meat joints for the offerings; there is no mention of any religious considerations in this matter. The meat offerings for the deceased were identical to those offered to the gods of the Netherworld or to demons and ghosts.11 According to the texts, the meat could be cooked or roasted but it could also be offered raw.

## Accompanying animal burials

Apart from post-consumption animal remains, tomb G8/G9-S-37/55 yielded also burials of whole animals: a young dog and an equid, presumably an onager.<sup>12</sup> The dog burial was deposited in the shaft leading into the grave chamber at the time of deposition of four people's remains in the tomb's chamber. The dog's remains were buried in an anatomical order, whereas that of the four people was secondary. It seems that the reason for the animal's burial was not of an emotional nature (a pet buried with its owners) but rather that it had a ritual character.

Instances of dogs buried alongside humans are not common in Mesopotamia.<sup>13</sup> Two parallels for the Tell Arbid burial come from the last phase of the Early Bronze

Age from Selenkahiye (CARTER, PARKER 1995: 109) and Tell Madhur (ZARINS 1986: 172–173). All these cases share similarities: a young animal was chosen for the sacrifice, they were accompanied by the burial of other animals (equids, cattle) and they were separated (by a barrier or distance) from the human burials they accompanied. This context might indicate that the dog was intended as a guardian. Different in character was the MBA I burial from Tell Barri, a site situated in the vicinity of Tell Arbid; a dog's skull was deposited with a silver collar behind the head of the child whose skeleton was also not complete (PECORELLA 1999: 15–19). It might be assumed that close relationship was behind the decision to bury the animal with the precious collar and deposit it so close to the deceased human.

Cuneiform texts from the MBA mention dog offerings in the context of rituals accompanying peace treaties between Amorite tribes (ARM II 37).<sup>14</sup> Despite the different context, this text may provide vital clues for the interpretation of the Tell Arbid find, as it is the first mention of a dog sacrifice.

Another animal sacrifice that most probably accompanied the G8/G9 tomb was that of an equid. Its mixed bones were found in a small, irregular pit a bit to the west from the tomb (Fig. 3:C). It abutted the south-western corner of the grave shaft but was not directly joined with the grave pit. In spite of this, there are a few reasons to believe that it was associated with the tomb:

- the pit was dug when the area around the tomb was no longer used for purposes other than burials;
- carrying disarticulated bones of a whole animal to the top
  of a tell and burying them there is tiresome and cannot
  be explained by practical considerations (it would have
  been much easier to bury them almost anywhere else);
- the pit damaged remnants of other Khabur Ware Period structures but did not harm the grave structure.

The bottom of the pit was located much higher than the bottom of the grave chamber – this however may be due to the inclination of the slope in this spot.

 $<sup>^{10}</sup>$  For a new transliteration and translation of the supplemented text see also: SAA VII: no. 197.

<sup>&</sup>lt;sup>11</sup> For instance, in a ritual to banish an evil spirit or demon, a sheep must be offered along with the meat from a shoulder (of an unspecified species), fat and roasted meat (TSUKIMOTO 1985: 157); offerings for Anunnaki, the gods of the Underworld had an almost identical composition (TSUKIMOTO 1985: 195–196).

<sup>&</sup>lt;sup>12</sup> The two accompanying animal burials were already described (PIĄTKOWSKA-MAŁECKA, WYGNAŃSKA 2006).

<sup>&</sup>lt;sup>13</sup> It must, however, be noted that lack of publications concerning animal bones from many sites may be distorting the actual picture.

<sup>&</sup>lt;sup>14</sup> DURAND 2002: 443–445. An official by the name of Ibal-El wrote to the ruler of Mari informing him of his arrival in the city of Ašlakka, where he was to make peace between the tribes of Ida-Maras and the Hannaneans. The tribes proposed to make offerings of a puppy and a goat, but finally it was agreed that a donkey should be offered instead. More on the subject, cf. WYGNAŃSKA 2011.

Parallels for accompanying burials of equids are quite numerous (WYGNAŃSKA 2011). They seem to be of special importance in the burial customs associated with West-Semitic cultural influences in the 1st half of the 2nd millennium BC in Mesopotamia and southern Levant, and even in the Nile Delta at so-called Hyksos sites. Ritual significance of equids is confirmed by the letter from Mari, mentioned above (ARM II 37), referring to the sacrifice of a donkey while concluding a peace treaty. It may be surmised that this mirrored the importance of the animals in economy and everyday life in this particular period. At a time when the horse, although known, was not yet popular, the other equids - the donkey and the onager were the main means of transport for men and goods. Therefore, offerings of these animals in funerary contexts may be taken to mark a high social rank of the buried person. They may have also had some other meaning which is lost to us, as it is not directly reflected in the archaeological material.

## **Summary**

At Tell Arbid, in the Middle Bronze Age, the practice of depositing animal sacrifices in some graves has been attested. The offerings could have taken the form of whole animals or their fragments. The latter came most frequently from the choicest meat cuts of young sheep and goats. Animal offerings were found in 10 of 32 explored graves from this period. They were thus frequent, but not usual, part of grave assemblages. Most (although not all) of the graves containing these sacrifices were of a relatively elaborate construction, which indicates a connection between this kind of offering and the overall social standing of the

deceased. This hypothesis seems to find confirmation in the fact that the offerings were discovered only in graves of adults or older children, who – unlike infants – would have a recognized position in the local society.

Animal remains were most often found in a corner of the grave chamber, close to the head of the deceased; they were probably intended as his or her provisions for the journey to the Netherworld. Only in vaulted chamber tombs were the animal remnants found both in the chambers and in the shafts, next to the chamber's entrance. Deposited at different levels of the shaft's fill, they can be interpreted as traces of rituals celebrated there – perhaps more than once – after the actual funeral. Such rituals and offerings are known from cuneiform texts mentioning the *kispum* ritual.

The sacrifices of whole animals, a dog and an equid, ritually offered to the dead, had probably a different character. They were supposed to mark the social status of the deceased, but they also may be a trace of funeral ceremonies associated with Middle Bronze Age West-Semitic culture.

Dr Joanna Piątkowska-Małecka Institute of Archaeology University of Warsaw jmalecka@uw.edu.pl

Dr Zuzanna Wygnańska Polish Centre of Mediterranean Archaeology University of Warsaw wygnanska@tlen.pl

## Abbreviations (texts editions)

ADD - C.H.W. Johns, Assyrian Deeds and Documents, Cambridge 1898.

ARM II - C.-F. Jean, Lettres diverses, Archives Royales de Mari II, Paris 1950.

BBR – H. Zimmern, Beiträge zur Kenntnis der babylonischen Religion, Die Beschwörungstafeln Šurpu, Ritualtafeln für den Wahrsager, Beschwörer und Sänger, Lepizig 1901.

SAA VII – F.M. Fales, J.N. Postgate, *Imperial Administrative Records. Part I. Palace and Temple Administration*, State Archives of Assyria VII, Helsinki 1992.

## **Bibliography**

#### BIROT M.

1980 Fragment de rituel de Mari relatif au kispum, (in:) B. Alster (ed.), Death in Mesopotamia. Papers Read at the XXVI<sup>e</sup> Rencontre Assyriologique Internationale, Mesopotamia 8, Copenhagen, 139–150.

#### CARTER E., PARKER A.

1995 Pots, People and the Archaeology of Death in Northern Syria and Southern Anatolia in the Latter Half of the Third Millennium BC, (in:) S. Campbell, A. Green (eds.), The Archaeology of Death in the Ancient Near East, Oxbow Monograph 51, Oxford, 96–117.

#### CORDY J.-M., LÉON S., TUNCA Ö.

2009 Les offrandes animales dans les tombes ordinaires de l'Âge du Bronze à Chagar Bazar (Chantier F, H et I). Rapport préliminaire, "Akkadica" 130/I, 53–73.

#### Dohmann-Pfälzner H., Pfälzner P.

2000 Ausgrabung der Deutschen Orient-Gesellschaft in der zentralen Oberstadt von Tall Mozan/Urkeš. Bericht über die in Kooperation mit dem IIMAS durchgeführte Kampagne 1999, "Mitteilungen der Deutschen Orient-Gesellschaft" 132, 185–228.

#### VON DEN DRIESCH A.

1976 A Guide to the Measurement of Animal Bones from Archeological Sites as Developed by the Institut für Palaeanatomie, Domestikationsforschung und Geschichte der Tiermedizin of the University of Munich, Peabody Museum Bulletin 1, Harvard.

#### VON DEN DRIESCH A., BOESSNECK J.

1974 Kritische Anmerkungen zur Wiederristhöhenberechnung aus Längenmasen vor- und frühgeschichtlicher Tierknochen, "Säugetierkundliche Mitteilungen" 22, 325–348.

#### Ducós P.

1970 The Oriental Institute Excavations at Mureybit, Syria, Preliminary Report on the 1965 Campaign, Part 4, Les Restes d'Équidés, "Journal of Near Eastern Studies" 29, 273–289.

#### Durand J.-M.

2002 Les documents épistolaires du palais de Mari I, Littératures anciennes du Proche-Orient, Paris.

#### KIESEWALTER L.

Skelettmessungen am Pferde als Beitrag zur theoretischen Grundlage der Beurteilungslehre des Pferdes, Leipzig (transcript of the Ph.D. thesis in Universität Leipzig – non vidi).

#### Kobryń H.

1989 Zastosowanie metody punktowej w badaniach wykopaliskowych szczątków kostnych konia (Equus Przewalski F. Caballus), "Archeologia Polski" XXXIV/1, 7–12.

#### Kolda J.

1936 Srovnavaci anatomie zviřat domacich se zřetelem k anatomii člověka, Brno.

#### Koliński R.

2009 Report on the Activities of the Polish-Syrian Mission to Tell Arbid, North Eastern Syria, Spring Season of 2009, www.archeo.amu.edu.pl/tellarbid/Summary%20report%202009%20ang.pdf (accessed on 04.12.2011).

#### LASOTA-MOSKALEWSKA A.

1984 Morphotic Changes of Domestic Cattle Skeleton from the Neolithic Age to the Beginning of the Iron Age, "Wiadomości Archeologiczne" XLV/2 (1980), 119–163.

#### LASOTA-MOSKALEWSKA A., KOBRYŃ H., ŚWIEŻYŃSKI K.

1987 Changes in the Size of Domestic and Wild Pig in the Territory of Poland from the Neolithic to the Middle Ages, "Acta Theriologica" 32/5, 51–81.

#### LUTNICKI W.

1972 Uzębienie zwierząt domowych, Warszawa – Kraków.

#### PECORELLA P.E.

1999 Tell Barri/Kahat. La Campagna del 1999. Relazione Preliminare, Firenze.

#### Piątkowska-Małecka J., Wygnańska Z.

2006 Szczątki zwierzęce z grobowca chaburskiego na stanowisku Tell Arbid (Syria) jako przejaw wierzeń i rytuałów pogrzebowych, (in:) L. Kostuch, K. Ryszewska (eds.), Zwierzę jako sacrum w pradziejach i starożytności, Kielce, 77–100.

#### SCHRAMM Z.

1967 *Kości długie a wysokość w ktębie u kozy*, "Roczniki Wyższej Szkoły Rolniczej w Poznaniu" 36, 89–105.

#### TEICHERT M.

1975 Osteometrische Untersuchungen zur Berechnung der Widerristhöhe bei Schafen, (in:) A.T. Clason (ed.), Archaeozoological Studies: Papers of the Archaeozoological Conference 1974, held at the Biologisch-Archaeologisch Instituut of the State University of Groningen, Amsterdam – New York, 51–69.

#### Тѕикімото А.

1985 Untersuchungen zur Totenpflege (kispum) im alten Mesopotamien, Alter Orient und Altes Testament 216, Kevelaer – Neukirchen-Vluyn.

#### Wygnańska Z.

Burial Customs at Tell Arbid (Syria) in the Middle Bronze Age. Cultural Interrelations with Nile Delta and Levant, "Polish Archaeology in the Mediterranean" XX (Research 2008), 605–618.

#### Zarins J.

1986 Equids Associated with Human Burials in Third Millennium B.C. Mesopotamia: Two Complementary Facets, (in:) R. Meadow (ed.), Equid in the Ancient World, Beihefte zum Tübinger Atlas des Vordern Orients, Reihe A (Naturwissenschaften) 19/1, Wiesbaden, 164–193.

Tabela 1. Skład gatunkowy zwierzęcych szczątków kostnych z grobów ze środkowego okresu epoki brązu na stanowisku Tell Arbid. Table 1. Animal remains by species (number of bone fragments) from Middle Bronze Age graves at Tell Arbid.

G2-D-31/42-2004	MBA II	vaulted chamber tomb		1		64 (1 individual)	1	1	30 (?)	94	E end of the chamber behind the head of one of the deceased	2 individuals: man, 30 yrs; ?; body on right side, crouched, head pointing E; adultus, sex?
G5-SD-36/62-2003	MBA II	chamber grave "in diamond"		1	5	12	1	ı	16	33	NE corner of the chamber, behind the head of the deceased	1 individual  – child 7 yrs, sex?; body on left side, crouched, hands near face
G8/G9-SS-37/55-2001	MBAII	vaulted chamber tomb	pit	I		l	I	burial				
			G8A grave shaft	>	3	127	burial	7	10	152+burial		l individual – woman, young
/85		vaul	G8 grave chamber	I	I	122	I	I	50	172		4 individuals: 2 women, a man and a child
G1-SR-36/62-1998	MBA II	MBA II pit grave		1	1	3	ı	1	4	6	S end of pit, behind the head of the deceased	1 individual  – child, <i>infans</i> 2; body on left side, crouched
G2- SR-36/59-1998	MBA II	chamber grave "in diamond"		1	5	9	I	1	4	16	SW part of chamber, behind the head of the deceased; E end of the chamber, by the feet of the deceased	1 individual  – child 6 yrs, sex?; body on left side, crouched, hands near face
G9-SL-37/55-2003	MBAI	pit grave?			I	31 (goat – adult) 13 (goat – juvenile)	I	ı	1	44	NE corner, near human remains	2 individuals: man 15–25 yrs, child 8 yrs, sex?
Grave no.	Dating	Туре		Cattle	Pig	Sheep/goat	Dog	Equid	Unidentified	Total	Location of animal bones in the grave	Human remains

Tabela 2. Skład anatomiczny zwierzęcych szczątków kostnych z grobów ze środkowego okresu epoki brązu na stanowisku Tell Arbid. Table 2. Anatomical distribution of animal remains from Middle Bronze Age graves at Tell Arbid.

Total	32	13	9	~	П	_	П	3	121	127	4	8		12	~	64
Phalanxes	10	∞							2 1	5 1			4			
Long bones																6
Metapodia	2								~						П	
Metatarsal bones	4	3							4	∞						
Tarsal bones											1					
Fibula															_	
Tibia									3	3						
Patella											1					
Femur			1			1			6	4						
Pelvis				1						7					1	
Metacarpus	8								3	8						
Carpal bones									.,	( )	2		2			
											(4		(4			
Ulna										П						
Radius										33						
Humerus			1					П	2	~				П		
Scapula							-							3		
Sternum																1
Ribs	~			1				П	64	34						17
Vertebrae	2								17	22			-			28
Teeth			3	2					~	12		-		∞		
Jaw			П						2	4						
Skull	4			-	-				9	14		П			2	
Species	sheep/goat (adult)	sheep/goat (young)	sheep/goat	pig	cattle	cattle	pig	sheep/goat	sheep/goat (G8)	sheep/goat (G8A)	cattle (G8A)	pig (G8A)	equid (G8A)	sheep/goat	pig	sheep/goat
Grave no.	G9/ SL 37/55	1	G2/ SR 36/59			G1/ SR 36/62			G8/9/ SS 37/55					G5/SD 36/64		G2/ D 31/42

## Szczątki zwierzęce z grobów ze środkowego okresu epoki brązu z Tell Arbid (północno-wschodnia Syria)

Podczas prac wykopaliskowych przeprowadzonych w latach 1997–2008 na stanowisku Tell Arbid (północno-wschodnia Syria) odkryto między innymi 32 groby ze środkowego okresu epoki brązu. Były one usytuowane w bezpośrednim sąsiedztwie osady z tego samego okresu i pochodzą z trzech kolejnych faz osadnictwa środkowobrązowego. Stwierdzono, że pomimo pewnych zmian w sposobie grzebania zmarłych, zachowana była ciągłość tradycji funeralnych. Jednym ze zwyczajów było składanie do grobów ofiar zwierzęcych. Znaleziono je w dziesięciu grobach, a analizie archeozoologicznej poddano szczątki kostne pochodzące z sześciu z nich.

Wśród zwierzęcych szczątków kostnych odkrywanych w grobach z Tell Arbid wyróżnia się dwie kategorie znalezisk: 1. części ciał zwierzęcych składane do grobów jako dar pogrzebowy oraz 2. towarzyszące pochówki całych zwierząt. Znaleziska pierwszego rodzaju w większości przypadków zdeponowane były w obrębie komór grobowych. Szczątki znajdowały się w jednym z narożników, w pobliżu głów zmarłych. Sugeruje to, że były one przeznaczone bezpośrednio dla nich, być może jako pożywienie na drogę w zaświaty.

Jedynie w dwóch przypadkach fragmenty kostne znaleziono zarówno w komorze, jak i w prowadzącym do niej szybie. Znajdowały się one na różnych poziomach i zostały zdeponowane już po zamknięciu grobowca. Sugeruje to, że składano je prawdopodobnie kilkukrotnie, w ramach rytuałów popogrzebowych. Tego rodzaju praktyki mogą być interpretowane jako cykliczne obrzędy ku czci przodków. Znajdują one odzwierciedlenie w źródłach klinowych z tego okresu, które wspominają rytuał *kispum*.

W obrębie komory grobowej, jak również w szybie, znadowano zwierzęce fragmenty kostne o charakterze resztek pokonsumpcyjnych. Wskazuje na to stan ich zachowania, w postaci drobnych, pokruszonych fragmentów, i ślady zaobserwowane na powierzchniach niektórych kości. Należały one przede wszystkim do owcy, *Ovis orientalis* 

f. domestica (f. aries) i kozy, Capra aegagrus f. domestica (f. hircus), rzadziej świni, Sus scofra f. domestica i bydła, Bos primigenius f. domestica (f. taurus). Tylko w jednym z grobów znaleziono nieliczne szczątki zwierzęcia z rodziny koniowatych, najprawdopodobniej osła, Equus africanus f. domestica (f. asinus). W przypadku owcy i kozy, wśród części składanych do grobów dominowały wartościowe pod względem konsumpcyjnym elementy tułowia (fragmenty kręgów i żeber), często pochodzące z osobników zabitych w młodym wieku.

Szczątki zwierzęce znajdowano w grobach różnych typów, wśród których przeważały te o pracochłonnej konstrukcji, np. grobowce z cegły suszonej. Wskazuje to na ewentualny związek obecności ofiary zwierzęcej z wysokim statusem zmarłego. Nie zaobserwowano jednak związku pomiędzy obecnością ofiary a bogatym wyposażeniem; nie stwierdzono również, by składanie ofiary zwierzęcej było uwarunkowane płcią lub wiekiem zmarłego.

Oprócz szczątków pokonsumpcyjnych w niektórych grobach komorowych odkryto pochówki całych zwierząt: psa i zwierzęcia koniowatego, najprawdopodobniej onagra. Interpretacja pochówku psa jest trudna, między innymi z powodu małej liczby analogii. Nie można jednakże wykluczyć, że wiązał się on z rolą psa jako strażnika. Pochówki koniowatych w grobach są natomiast bardzo liczne i wydają się być charakterystyczne dla środkowego brązu na terenach Mezopotamii, południowego Lewantu oraz Delty Nilu (tzw. stanowiska hyksoskie). Popularność zwyczaju chowania zwierząt koniowatych odzwierciedla prawdopodobnie ich ważną rolę, jaką odgrywały w gospodarce tego okresu. W kontekście funeralnym wskazują one prawdopodobnie na wysoką pozycję społeczną pochowanej w grobie osoby. Wydaje się ponadto, że towarzyszące pochówki koniowatych, zwłaszcza osłów, miały szczególny związek ze zwyczajami pogrzebowymi zachodniosemickiego kręgu kulturowego.