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# ARCHAEOLOGICA HEREDITAS

**Sacred space:  
contributions to the archaeology of belief**

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edited by  
Louis Daniel Nebelsick,  
Joanna Wawrzeniuk  
and Katarzyna Zeman-Wiśniewska

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Editorial Board's address:  
1/2 Wóycickiego St., Building 23, PL 01-938 Warsaw, Poland  
tel. +48 22 569 68 17, e-mail: [archeologia@uksw.edu.pl](mailto:archeologia@uksw.edu.pl)  
[www.archeologia.uksw.edu.pl](http://www.archeologia.uksw.edu.pl)

Technical editing and proofreading: Zbigniew Kobyliński  
Layout: Bartłomiej Gruszka  
Cover design: Katja Niklas and Ula Zalejska-Smoleń  
Linguistic consultation: Louis Daniel Nebelsick

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# "Asses were buried with him". Equids as markers of sacred space in the third and second millennia BC in the Eastern Mediterranean

Laerke Recht

## INTRODUCTION

*The death of Ur-Nammu and his descent to the nether-world* records that at Ur-Nammu's burial, "asses were buried with him".<sup>1</sup> Donkeys and other equids increasingly became a part of human lives in the third millennium BC in the Near East and made their impact in the Aegean beginning in the second millennium BC. Equids performed a number of roles, some of which I will examine here. The main focus of this paper, however, is on their symbolic and religious significance, when they are placed within or designate sacred space in human mortuary contexts. In the process, I discuss some of the ways in which equids influenced and played a part in human life and death. I will be looking at the areas of the Eastern Mediterranean that includes the ancient Levant, Syria and Mesopotamia, Cyprus, Mycenaean Greece and Minoan Crete.

## SPECIES

The term "equid" refers to members of the *Equidae* family. The discussion here involves *Equus caballus* (the domestic horse), *Equus asinus* (the domestic ass or donkey), and *Equus hemionus* (a wild donkey, also called onager, wild ass or hemione).<sup>2</sup> Along with these are the highly prized hybrids, usually either donkey X onager or more rarely horse X donkey (mule/hinny).

In many cases, we are not able to identify the species more specifically than to say it is an "equid". This applies not only to faunal remains, but also to iconography and textual sources. For faunal remains, this is partly because many animal bones have not been examined by experts. Even when they have been, it can sometimes be quite difficult to identify the species and there is still not complete agreement on the methods that can be used to do so. Identifying hybrids is especially difficult.<sup>3</sup> The same

can be said for artistic material, where the identifiers that might be used for determining species are often missing, not clear or muddled. Hybrids are again the most difficult to identify because their features lie between those of the others. In cuneiform and Linear B, some species have been identified, but many are still uncertain.<sup>4</sup>

## IDENTIFICATION

Visual and physical characteristics that can be used for determining species include:

- The mane – whether it is erect, lying down or flowing. Usually only horses have a flowing mane, although they do not always have this quality. What can be said is that a flowing or hanging mane almost certainly belongs to a horse; but the opposite is less certain (*i.e.*, that an erect mane excludes the horse from identification). The mane continuing over the crown of the head and onto the forehead is characteristic of horses.
- The tail – whether it is full or with a tuft at the end, and its length. Horses have the fullest tail, but it may be braided and thus appear thinner at the top. Donkeys and onagers have tufted tails, while onagers may have longer and more fully tufted tails.
- How elegant or gracile the animal is. Horses are usually the most gracile, followed by onagers. They may be depicted with more slender bodies and longer legs.
- Markings in the fur, for example the dorsal stripe, a dark line along the spine. This is rarely shown; it is especially a characteristic of onagers and donkeys but can also appear on horses. The shoulder stripe is most common for donkeys.
- The shape and length of ears and muzzle. Donkeys have the longest ears, and a pronounced upper muzzle may indicate donkey, onager or hybrid, while a narrow muzzle may indicate horse.

Since there is great variation within each species, these characteristics are guidelines rather than strict rules. Evidence for interaction with humans include the following archaeological and iconographical features:

<sup>1</sup> Kramer 1967: 118, line 71.

<sup>2</sup> The hemione/onager is sometimes considered part of *Equus asinus*. Zebras are also part of the *Equidae* family, but they are not discussed here as they are not relevant.

<sup>3</sup> Zarins and Hauser 2014: 17–32.

<sup>4</sup> Zarins and Hauser 2014: 149–151.



**Fig. 1.** Map showing geographical distribution of sites with burials with equid remains (drawn by L. Recht)

- gear intended to control or direct the animal, such as halter, bridle, harness or saddle;
- physical changes such as nostril slitting, wear on the teeth or genital contraptions;
- association with chariot and other vehicles;
- indications of grooming or decoration, such as braided manes or tails as well as elaborate gear designed for presentation.

None of these interactive indicators are exclusive to equids, however, and can therefore only be used for understanding the human-animal relationship, not for identifying species. They are, however, revealing of the type of relationship and suggest how animals featured in human lives, and how this bears on their role in sacred space.

## GEOGRAPHICAL DISTRIBUTION

Fig. 1 shows the geographical area discussed in this article, and within it, the distribution of sites where equid bones have been found in association with human burials. This is a rather large geographical area, covering about 1500 years, from around 2600 to 1100 BC.<sup>5</sup>

<sup>5</sup> The present paper is only concerned with equids in the sacred space of mortuary contexts, but equids also denote non-mortuary sacred spaces. Examples come from the *abi* / Underworld channel at Tell Mozan (Buccellati and Kelly-Buccellati 2004; Collins 2004), Tell Brak Areas FS and SS (Clutton-Brock 2001; Oates *et al.* 2001: 41–92), and Tell Haror Area K Sacred Precinct (Klenck 2002: 39–90; Bar-Oz *et al.* 2013). I am not concerned with the origins of

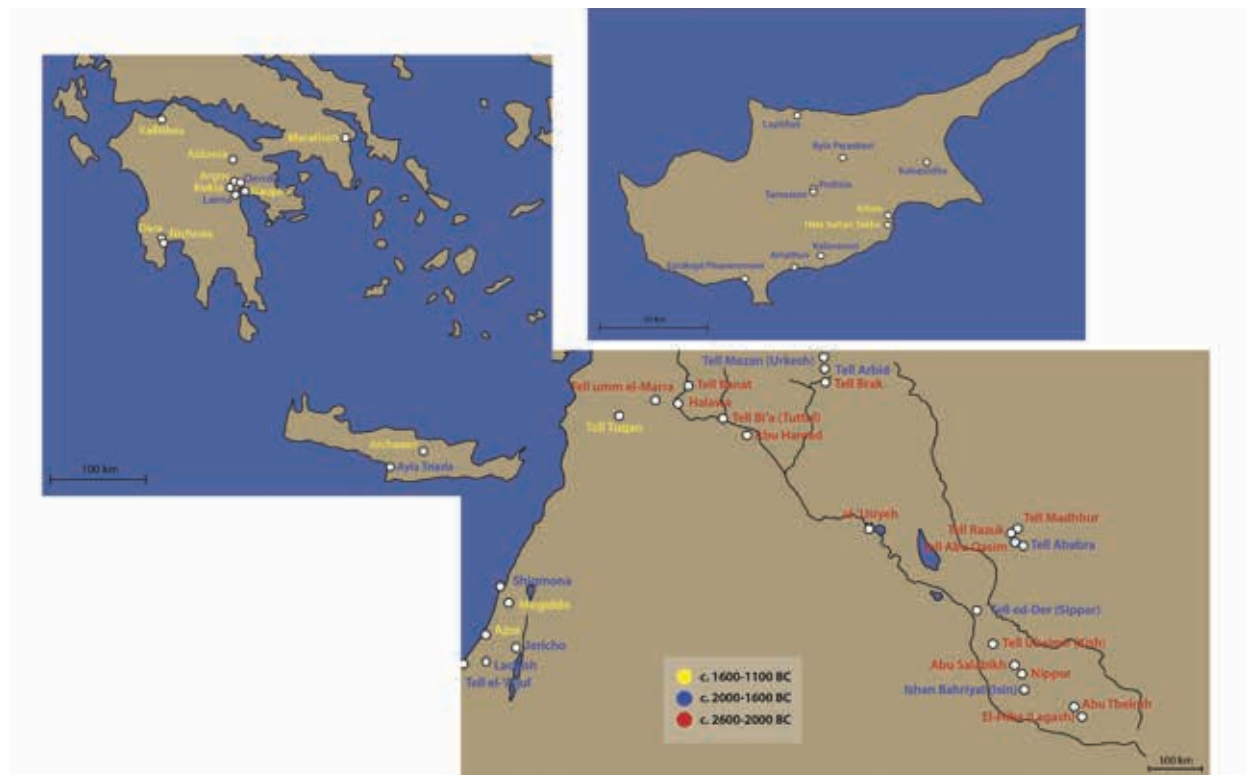
Even though quite a few sites are marked, it should be noted that the practice of including equid remains in human burials or mortuary rituals was never particularly common, and appears to have been especially linked to wealthy members of society. It is a very distinctive practice. At certain sites, equids seem to have had special significance, as they are found in unusually large concentrations. Among them are Dendra (Cat. G6), Tell Madhhur (Cat. I3), Abu Salabikh (Cat. I7), Tell Umm el-Marra (Cat. S2), Jericho (Cat. L1) and Tell el-Ajjul (Cat. L2).<sup>6</sup>

The chronological distribution of the sites (Fig. 2)<sup>7</sup> shows that, within the area concerned, the practice first occurs in the Near East, especially in southern Mesopotamia around the area of Kish, during late Early Dynastic II or the early part of Early Dynastic III (Cat. I2). In contrast, the coastal Levantine area, along with Cyprus and Greece, have more instances of equid interments in the Middle and Late Bronze Ages. In Greece itself, most horse interments are from the Late Bronze Age. The practice thus seems to move from east to west, but it is not clear if this is the result of direct influence.

human – equid relations here: for such treatments Anthony 2007, and Zarins and Hauser 2014 provide excellent discussions.

<sup>6</sup> Cat. numbers refer to the sites listed in the catalogue at the end of this paper.

<sup>7</sup> Some contexts have multiple or prolonged dates, so that the equid remains cannot be more specifically dated within the span. I have taken a conservative approach, using the latest date for the distributional map.



**Fig. 2.** Map showing chronological distribution of sites with burials with equid remains (drawn by L. Recht)

As far as it is discernible,<sup>8</sup> the species distribution seems to correspond to the chronological time line, in which donkeys and onagers are more common in the beginning of the Bronze Age, and horses become predominant in the Late Bronze Age (Fig. 3). In the Near East, donkeys are most common, with a few instances of onagers and hybrids identified or suspected at Al Hiba (Cat. I1), Kish (Cat. I2B), Tell Madhhur (Cat. I3B), Tell Umm el-Marra (Cat. S2), and Abu Hamad (Cat. S6). Only one specimen of horse comes from mortuary contexts in the Near East (Cat. L2B).<sup>9</sup> In Cyprus, we mostly find horses, but donkeys are also reported. Interestingly, at Hala Sultan Tekke, both species are found in the same context: the disturbed remains of two donkeys and one horse were found in the Late Bronze Age Tomb 2 at the site (Cat. C8A).

In Greece, we mainly have horses, although the faunal remains in many places have not been examined by

experts, so it is possible that other equids are present.<sup>10</sup> This suggests that if this practice in the west was influenced by the east, a transformation took place over space and time, during which the preference moved from donkeys/hybrids to horses. This general image largely corresponds to the iconographic and textual evidence. The iconography from Greece almost invariably and quite clearly depicts horses, while donkeys or hybrids are preferred in the iconography of the Near East, although far from exclusively, and in many cases the depictions are not clear-cut enough to make secure identifications.

## COMPLETE EQUIDS

When equids are found in association with human burials, they are most commonly of complete or nearly complete skeletons (Fig. 4). This can be contrasted with other animal remains like cattle, sheep and goat, which are likely to represent joints of meat.<sup>11</sup> The exception is canine remains. They are less frequent than equid remains in mortuary contexts, but when they are found, they are also often complete or nearly complete. They seem to have a special association with equids. If parts of equids are missing, it is most often the skull, or

<sup>8</sup> The map only records specific species in cases where the remains have been analysed by a zooarchaeologist. In all other cases, the broader term "equid" is used.

<sup>9</sup> This should not be taken to mean that horse bones have not been identified in other contexts, which they certainly have (see, e.g., Zarins and Hauser 2014 for early examples). One possible example not included here because the mortuary nature of the context is as yet uncertain is the Middle Bronze Age Monument 1 at Tell umm el-Marra, where possible horse remains were identified in several of the layers (Schwartz *et al.* 2012: 175–179; Schwartz 2013: 511).

<sup>10</sup> Donkeys have been identified outside mortuary contexts in Greece at least as early as MH (Sloan and Duncan 1978: 70).

<sup>11</sup> Recht 2011: 82–89, 157–163, Table 3.



**Fig. 3.** Map showing species distribution of sites with burials with equid remains (drawn by L. Recht)

larger parts of the whole body, for example the whole hind part (Cat. G2, G7B, S2, S3, L2D, L2E). If only a small part of the equid is present, it is often the skull or parts thereof. They are less likely (though not impossible) to represent cuts of meat, but rather had symbolic value. Examples include Cat. R2, G4, G10, C4, C7, C10, I7E, L4A, and L4B.

Complete equid skeletons found with human burials are often assumed to be related to warriors or battle. One would therefore expect to find objects related to military activities, and/or a corresponding context. This could for example be a clear relation between equids and soldiers or warriors and their gear, combined with remains of chariots or trappings. However, most of the burials with associated equids contain multiple human skeletons, and in only one case is a complete equid clearly associated with a male skeleton with weapons (Cat. I3B). In another case, an equid is clearly associated with a female skeleton without any objects that suggest the presence of a warrior (Cat. S5).

Furthermore, although equids are found in teams of two or four, remains of chariots or trappings found in association with them in archaeological contexts are rare. A few possible examples come from the Kish Chariot burials (Cat. 12). Kish Chariot Burial II contained four equids. They were placed about 50 cm above a four-wheeled vehicle. At the same level and in front of the vehicle was a bovid mandible. Kish Chariot Burial I contained two chariot wheels above which were one equid

and three bovid skeletons; and in Kish Chariot Burial III, there were remains of a chariot, equids and bovinds. The equids were apparently placed on the side of the chariot and the bovinds in front.<sup>12</sup> These contexts, along with the comparative material from Ur, make the association between the equids and the vehicles very tentative; in fact, it seems more likely that the vehicles were drawn by the bovinds.<sup>13</sup>

At Ur, remains of a sledge and chariots were found in several tombs in the ED III Royal Cemetery, but these were all in unambiguous relation to bovine animals,<sup>14</sup> for example in tombs PG 789, PG 800 and PG 1232.<sup>15</sup> This should also warn us against inevitably interpreting vehicles as suggestive of military activity, or as always associated with men; PG 800 was probably the tomb of a high-ranking woman, even a queen, and a “sledge” was found here pulled by cattle. An added twist to the story is that a rein ring topped by an equid was found with this same vehicle (Fig. 5).<sup>16</sup>

<sup>12</sup> Moorey 1978: 109.

<sup>13</sup> Small items possibly related to wheeled vehicles were found at Al-'Usiyah (Cat. 16, copper rein ring, Roaf and Postgate 1981: 198), and Tell Mozan (Cat. S8, two small bronze rings, Doll 2010: 264).

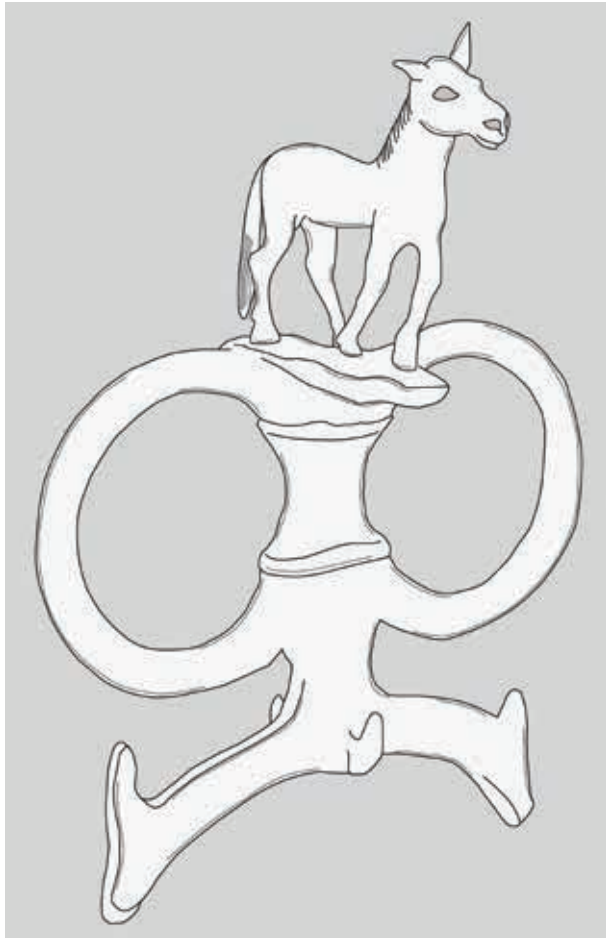
<sup>14</sup> They were initially misidentified as donkeys or onagers by Woolley (Dyson Jr. 1960).

<sup>15</sup> Woolley 1934: 62–71, 73–91, 107–111.

<sup>16</sup> Woolley 1982: pl. LXVIII.2.

	complete or nearly complete equid	dog	equid gender	human gender		complete or nearly complete equid	dog	equid gender	human gender		complete or nearly complete equid	dog	equid gender	human gender
R1	x					I3A					S3			C, ?
R2						I3B			M		S4			
G1	x					I3C					S5		M	F
G2						I4					S6			
G3	x	x	F, M			I5					S7	x	?	F, M
G4		x				I6					S8		F	C, M
G5	x					I7A					S9A			M
G6A	x		M			I7B					S9B			M
G6B	x		M			I7C					L1A	x		
G6C						I7D					L1B	?		
G6D	x					I7E					L1C	?		
G7A	x					I8					L1D			
G7B	x					I9			M		L1E	?		
G8	x					I10			M		L1F			
G9			F, M			I11					L1G	?		
G10			F			I12A					L1H	?		
C1	x	x				I12B			C		L1I	?		
C2						I12C			M		L2A	x		
C3	x	x				I13					L2B			
C4						S1			F, M	M, ?F	L2C			
C5						S2A				M, F, C	L2D	x		F, M
C6	?					S2B					L2E	x		
C7						S2C				M, F, C	L3			
C8A	x					S2D			M	C, ?	L4A			
C8B						S2E			M	C	L4B			
C9						S2F			M	C	L4C			
C10						S2G			M	C	L4D			
I1	x		M			S2H			M	C	L4E			
I2A	x					S2I			M		L4F			
I2B	x					S2J			M		L5			
I2C						S2K			M					

**Fig. 4.** Table indicating burials with complete / nearly complete equids, association with dogs, association with human men / women / children, and sex of equid (compiled by L. Recht)



**Fig. 5.** Rein ring from Ur Royal Cemetery Grave PG 800, U. 10439. Gold and silver alloy (equid), and silver (rings). H. 13.5 cm. ED IIIA, c. 2600 BC (drawn by L. Recht, after British Museum 121348)

## LIMINALITY

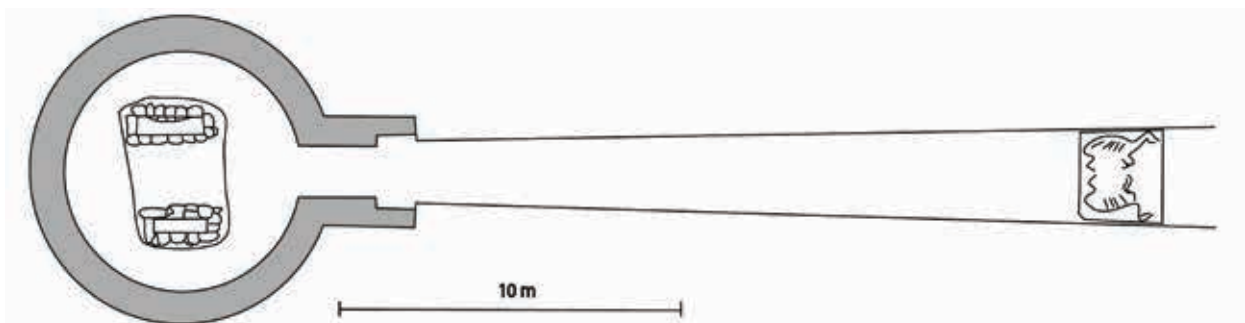
Equid remains associated with human burials are often found in liminal spaces, for example in shafts, *dromoi*, in upper or sealing layers, or in features outside the main area of interment. These spaces are in between, transitional both physically and metaphorically. Due to this transitional nature, identities can be reversed and

social order disputed or turned upside down in the liminal “gaps”, making them very suitable for ritual action.<sup>17</sup> One example comes from a Late Bronze Age *tholos* tomb at Marathon in Mainland Greece (Fig. 6 – Cat. G1). The *tholos* tomb had a *ca* 25 m long *dromos* and a chamber with two stone shafts, each containing a human skeleton. In one was a gold cup and in the other a bronze object. The floor of the tomb was covered in a thick layer of ash mixed with a considerable amount of bones from cattle, pigs, sheep and birds, and Mycenaean pottery sherds. Towards the entrance of the *tholos*, two equids had been placed facing each other in a symmetrical arrangement. Although there is plenty of space, there were no signs of a chariot or harness. The *dromos* is an archetypal liminal space, marking the transition between the living and the dead. It has also been suggested that equids mark out a space between social groups, for example between aristocracy and non-aristocracy, since they occur almost exclusively in wealthy tombs.<sup>18</sup>

A Near Eastern Middle Bronze Age example comes from Tell Mozan, ancient Urkesh, in north-eastern Syria. In this case, Tomb 37 is a chamber tomb, integrated into a domestic house and associated with the ritual Chamber AX (Cat. S8). The burial chamber itself contained the skeleton of a child and a man aged *ca* 60, buried at different times. An equid was interred in front of the tomb. It was the complete skeleton of an adult female donkey. The equid skeleton was placed in a liminal space, directly in front of the entrance to the tomb itself. In these cases, equids could be interpreted as guardians or as animals providing transport for the deceased from this world to the next – again underlining their transitional nature. They may also have transported the deceased to the tomb, acting as a kind of hearse, and subsequently sacrificed as part of the funerary rituals.

<sup>17</sup> The concept of liminality is connected with a vast literature, which cannot be adequately reviewed or discussed here, but most relevant works for the present paper include van Gennep 1960 and Girard 2005. See also discussion in Recht 2014: 405, notes 7–8; cf. 406, note 10 on Jean Baudrillard’s concept of simulation and simulacrum.

<sup>18</sup> Carstens 2005.



**Fig. 6.** Marathon Tholos Tomb (drawn by L. Recht, after Daux 1959: fig. 5)

Given the absence of any remains of chariots, the role of equids marking liminal sacred spaces may not be solely related to their use for pulling vehicles, but certainly they had a high symbolic value that allowed their inclusion in human burials. Moreover, in these cases, they are clearly secondary and function only in reference to the human interments. Though we are able to identify the spaces as physically liminal, the exact metaphorical function may escape our understanding – possible suggestions relate to death versus life, this world versus the otherworld/afterlife, or even as between humans and non-humans.

### EQUIDS AS SOCIAL ACTORS

In other cases, equids appear to have been shown special respect, sometimes separate from or equal to their human counterparts, suggesting a dynamic and active role in human affairs.<sup>19</sup> Tumuli B and C at Middle Bronze Age Dendra in Mainland Greece (Cat. G6A, G6B) can be interpreted in this manner. Each tumulus contained two complete equid skeletons (Figs 7–9). They had been placed in very carefully and deliberately arranged compositions, in Tumulus B as parallel and mimicking a chariot team, and in Tumulus C in a double-mirrored image. No human burials were clearly associated with the equids.<sup>20</sup> It is assumed that the human remains have simply not been identified yet or have not been preserved, but it is also possible that these animals were buried in their own right or as symbols charged enough to function on their own, marking a larger sacred space. The equids have all been identified as male horses, aged 15–17.<sup>21</sup> Their fairly advanced age could suggest that these horses were honoured after a lifetime of service, whether by sacrifice or following their natural death. An option that can be seen as lying between these possibilities is that the horses had become too old to perform their role, and thus were put down in an act that is partly sacrificial and partly respectful, the two not being mutually exclusive.

Although widely different in time and space, it is interesting to compare this material to an Early Bronze Age mortuary complex at Tell umm el-Marra in Syria. This elite complex is dated to the second half of the third millennium and includes tombs with human interments and so-called “installations” with complete equid skeletons,

along with other subsidiary features and rooms that indicate continuous ritual activity (Fig. 10). The tombs contain multiple burials of men, women and infants.<sup>22</sup> In at least one case, the burials are simultaneous and may have included human sacrifices.<sup>23</sup> The tombs also contain many animal bones, both of complete, smaller animals, and of butchered bones,<sup>24</sup> probably remains of cuts of meat.

All the installations contained remains of equids (Cat. S2), with a total of 25 complete animals and at least 15 partial ones.<sup>25</sup> The equids are all of the same species, which Weber convincingly argues to be the highly prized *kunga*, a donkey x onager hybrid.<sup>26</sup> The equids seem to have carried out draft work continuously from an early age, and there is also suggestion of the use of a lip ring.<sup>27</sup>

Installation A consists of a rectangular room, placed north of Tomb 1 (Fig. 11 – Cat. S2E). In the structure were found four complete equid skeletons, a skull and post-cranial remains of a human infant (deposited after the equids), and sherds of a cylindrical ceramic stand in the upper debris. The equids were males, three aged 9–13 and one aged 4–5.

Installation B consists of a 1 m deep subterranean mudbrick structure divided into two chambers (Fig. 12 – Cat. S2F). Each compartment contained an equid skeleton placed standing up, with a detached skull (probably due to decomposition), and at the top of the western wall, in a gap in the brick course, was a spouted jar. Each compartment also contained three puppies. There were also bones of sheep/goat (possibly from joints of meat) and a third equid skull. Remains of four human infants are associated with the installation. The two complete equids were aged males, *ca* 20 years old.

Although there are certain differences between the equid installations and the human tombs (the installations are generally smaller and subterranean, while the human tombs are at least partly above ground), the treatment of the equid remains is striking. They are given their own space, and what could be interpreted as their own offerings.<sup>28</sup> In this sense, they can be seen as being awarded special honour, corresponding to that of the humans allowed to be buried in this space. This is supported by the uniformity of the equids, all being male and of the same species, and by the fact that some aged equids are among them which had been taken well care of beyond the years of their practical use. Weber has argued that the older animals were not sacrificed (as the

<sup>19</sup> A social actor is usually a human, and the concept is greatly discussed across the disciplines, and was especially influenced in archaeology by, *e.g.*, Giddens (1979) and Gardner (2004). Animals are now increasingly also being understood as social actors, in the sense that they are able (or perceived to be able) to shape their surroundings through action, and that this action can be interactive, *i.e.*, social and have some level of intention. Studies include Hribal 2007, Walker 2008, and papers in DeMello 2010.

<sup>20</sup> A single human burial (Grave 1) was uncovered, but does not seem associated with the equids (Protonotariou-Deilaki 1990: 94).

<sup>21</sup> Payne 1990.

<sup>22</sup> Schwartz *et al.* 2003; Schwartz *et al.* 2006; Schwartz 2007.

<sup>23</sup> Porter 2012: 201–202.

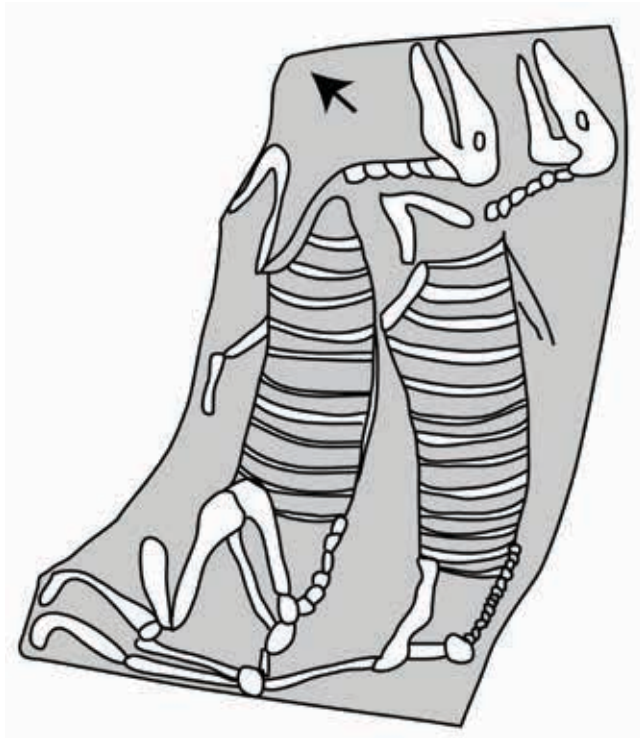
<sup>24</sup> Weber 2012: 164.

<sup>25</sup> Weber 2012: 165.

<sup>26</sup> Weber 2008; 2012.

<sup>27</sup> Weber 2008: 505.

<sup>28</sup> In fact, Weber interprets the older animals in Installations B, C and D (her “Type II”) as substitute human deceased, and the younger animals as possible substitutes for human sacrifices (2012: 172–179).



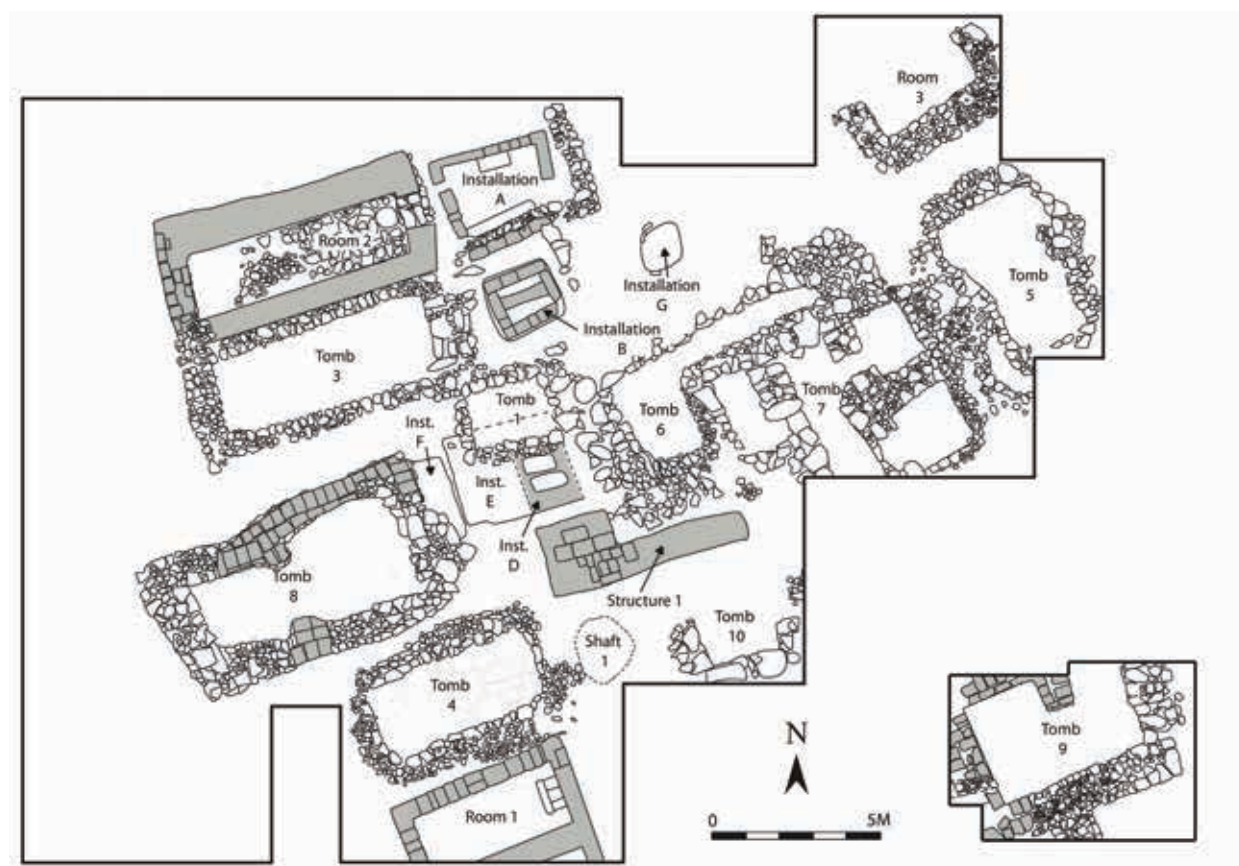
**Fig. 7.** Horses in Dendra Tumulus B (drawn by L. Recht, after Protonotariou-Deilaki 1990: fig. 7)



**Fig. 8.** Horses in Dendra Tumulus C (drawn by L. Recht, after Protonotariou-Deilaki 1990: fig. 17)



**Fig. 9.** Two other sets of horses on display at Dendra (photo by L. Recht)



**Fig. 10.** Plan of the EBA mortuary complex at Tell Umm el-Marra (after Schwartz *et al.* 2012, fig. 2. Courtesy of Glenn M. Schwartz)

**Fig. 11.** Installation A at Tell Umm el-Marra, with excavator Jill Weber (courtesy of Glenn M. Schwartz)





**Fig. 12.** Installation B at Tell Umm el-Marra (courtesy of Glenn M. Schwartz)

younger ones most likely were), but rather died a natural death and acted as substitute human (royal) deceased.<sup>29</sup>

Clearly the equids were an essential part of the life and identity of the people buried in this space, and in this way, occupy a central role in designating it as sacred. The equids can be seen as actors with a social identity of their own, playing their part in the “life” and construction of the complex and shown proper respect along the lines of their human co-habitants. As with the horses at Dendra, some of the older equids at Tell Umm el-Marra may also have been put to sleep, which would explain some of the simultaneous interments taking place<sup>30</sup> – if these were indeed teams of equids, perhaps the whole team was buried together when one of them died naturally.

### CUNEIFORM AND ICONOGRAPHY

Equids appear in various contexts in the artistic material. They are shown with chariots, as ridden, as booty, in scenes of hunting and in mythological and religious scenes. Equids are also mentioned quite extensively in the cuneiform sources of the Near East<sup>31</sup>, and occur in Linear B tablets from Greece. They are recorded with war chariots and other vehicles, as gifts, as sacrificed during treaties, they are awarded food rations, their skins are kept, and they perform a number of roles, such as pack animals, animals of transport, as plow or threshing animals, and as fodder for dogs and lions. These roles have

bearing on how we might interpret the presence of equid remains in sacred spaces.

It was noted earlier how remains of chariots in association with equids are very rare in archaeological mortuary contexts. This is in stark contrast to artistic representations, where equids are most frequently shown with a wheeled vehicle, both in the Aegean and the Near East. These scenes with equids pulling wheeled vehicles do in some cases refer to military action. This is most clearly depicted on the famous “Standard of Ur”, where the panel usually referred to as “war” shows equids trampling or jumping over enemies (Fig. 13). This object is a good example of the difficulty and lack of consensus concerning the identification of equid species in artistic representations.<sup>32</sup> The equids running over enemies in this panel are all at full speed, galloping or charging their opponents. The equids not trampling enemies are walking at a steady pace, either because they are at the back of the action, or because they are part of a procession (in the latter case, probably referring to the other ‘peace’ side, where more extensive processions take place).

The same kind of trampling can be seen on a seal impression from Tell Brak, where actual fighting between human figures is also shown (Fig. 14). The scene is quite schematic and the species difficult to determine, but the large ears and thin, perhaps tufted tail mean it must be a donkey or a hybrid. On a seal from Ugarit, the trampling goes almost unnoticed in a scene of hunting in which an evocative and majestic eagle takes centre stage (Fig. 15). Here the gracile, full-tailed equids are horses, and it is revealing that this Levantine seal is much closer in date to the Aegean material.

<sup>29</sup> Weber 2012: 172–179.

<sup>30</sup> Although in some cases, not all the equids remains in an installation were placed there during a single event (Weber 2012: 179).

<sup>31</sup> The most up to date commentary for the third millennium BC can be found in Zarins and Hauser 2014: 149–245, with a complementary appendix.

<sup>32</sup> For discussion and list of possibilities suggested, see Zarins and Hauser 2014: 128.



**Fig. 13.** "Standard of Ur", "war" side (Woolley 1954: 87–89, pl. 13). From Ur Royal Cemetery Grave 779, Chamber 9. Red lime-stone, lapis lazuli and shell. H. 20.3 cm. British Museum WA 121201. ED, c. 2600 BC (drawn by L. Recht)

**Fig. 14.** Sealing from Tell Brak, Area SS. ED III (drawn by L. Recht, after Matthews 1997: pl. xix, no. 200)



**Fig. 15.** Impression of cylinder seal from Ugarit, Ugarit, Minet el-Beida, trench 25.IY, topographic point I. Black steatite. H. 2.2. cm. RS 4.021, Louvre Museum AO 15772. 14th c. BC (drawn by L. Recht, after Yon 2006: 128–129, no. 8)





**Fig. 16.** Scan of gold signet ring from Mycenae, Shaft Grave IV. LH I. CMS I, no. 15 (courtesy of Ingo Pini / CMS)



**Fig. 17.** Drawing of gold signet ring from Aidonia. LB I – LB II. CMS V Sup. 3, no. 244 (courtesy of Ingo Pini / CMS)

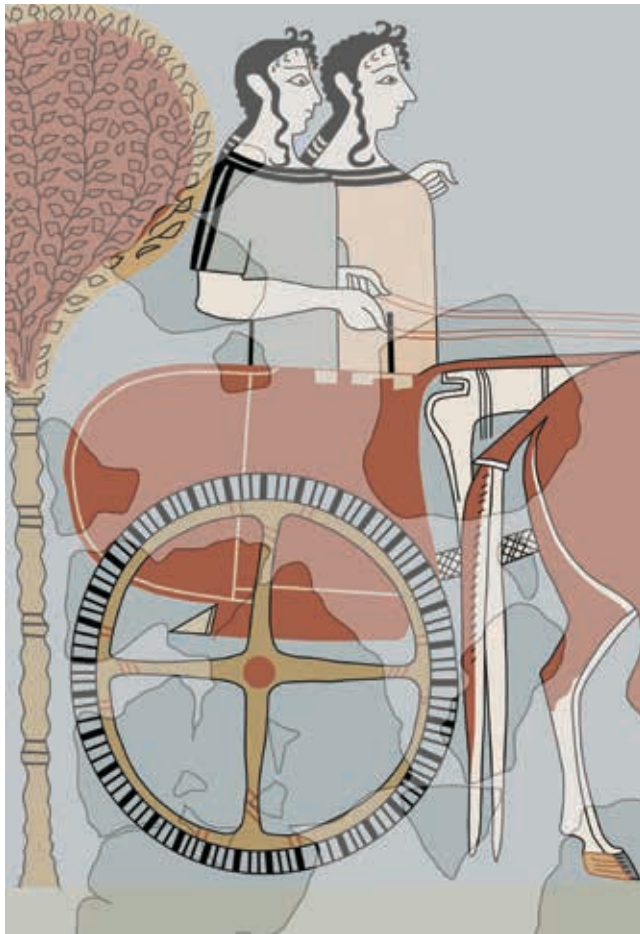
Hunting scenes with horses and chariots are also found in the Late Bronze Age in Cyprus and the Aegean. A gold signet ring from Mycenae shows the extended flying gallop of the horses, and the man in the chariot with the bow echoes that of the Ugarit seal (Fig. 16). Another gold signet ring, in this case from Aidonia, is probably not portraying hunting, since the man in the chariot does not have a bow, but rather a whip or stick to encourage the horses (Fig. 17). On the other hand, it is not a scene of direct combat either, as no enemies are shown, and the horses are moving at a walking pace, or at most trotting.<sup>33</sup>

Two wall paintings from the palace at Tiryns on Mainland Greece show ceremony or procession taking place, perhaps before or after hunting or battle (Figs 18–19). The paintings are part of a fresco which also depicts a boar hunt. The man depicted is dressed

in gear that can be either for war or for hunting, but the women are dressed in their finery, and all the animals are again moving at a slow pace (*i.e.*, walking) in what appears to be an orderly line. Interestingly, we have in Figure 19 a visual association between horses and dogs (the presence of a dog might point toward hunting rather than battle). We can especially note how elaborately decorated everything is, from the attire of the people to the decorated chariot and the accoutred manes and tails of the horses – a sign that presentation was of importance.

The presence of elaborate gear is particularly clear on a scene from an ivory box found at Enkomi, Cyprus (Fig. 20), where the horses' tails have also been braided, but still kept full. The emphasis on visually impressive display is evident in the Linear B tablets from Knossos, which record equids with chariots. The purpose of these teams is not clear, but it is worth noting that there are nearly always descriptions about the state and finery of the chariot, *e.g.*, Knossos tablet Sd4401: "[Two] horse-(chariots without wheels) inlaid with ivory, (fully) assembled, painted crimson, equipped with

<sup>33</sup> This can be compared to similar scenes on CMS I: no. 229; I: no. 230, II.6: no. 19, II.6: no. 87, and VII: no. 87. In all of these depictions, the horses are shown at a fairly steady pace of either walking or trotting, and the person in the chariot is urging them on with a whip or similar item. Given the lack of references to battle or hunting (such as enemies, prey or weapons), and the steady pace, despite urging, these depictions may relate to a kind of sport or game, where the chariot driver displays his expertise at handling the horses.



**Fig. 18.** Wall painting from the palace at Tiryns, west slope epichosis (Immerwahr 1990: pl. 68). Part of the “Boar Hunt” fresco. National Archaeological Museum of Athens. 14th–13th c. BC (drawn by L. Recht)

**Fig. 19.** Wall painting from the palace at Tiryns, west slope epichosis (Immerwahr 1990: pl. 69). Part of the “Boar Hunt” fresco. National Archaeological Museum of Athens. 14th–13th c. BC (drawn by L. Recht)

bridles with leather cheek-straps (and) horn bits”<sup>34</sup> (LM IIIA2-late).<sup>35</sup>

It is also possible that the ceremonies shown as taking place in these images are related to broader mortuary activities that might involve funeral games, feasting and processions to the tomb. This would account for the attention paid to presentation, but this can for the time being only be speculation, and in any case, need not apply to all the depictions or be exclusive of other activities. Support for the idea might be found on a larnax from Tanagra in Greece (Fig. 21). One side shows an upper register with a group of women performing a gesture of mourning by tearing out their own hair.<sup>36</sup> The lower register appears to depict a competitive event that includes horses and chariots flanking two central figures – possibly boxers. The juxtaposition of this event with the mourning women

and the function of the *larnax* (made to hold the remains of a young individual) suggests that funeral games may be depicted. Whether or not the event is strictly related to the function of the *larnax*, it should be stressed that horses are shown as part of a scene that also involves competition between two individual humans (rather than anything resembling an army), and therefore very likely portraying (ritual?) games.

Equids were also used for plowing, at least in the Near East. A tablet from Girsu records the use of both male and female equids for plowing:

1 healthy-eyed male equid hybrid,  
2 healthy-eyed female hybrids,  
(with) Inim-ma-ni-zi.

They are plow team leaders.

(Edin. 09–405, 35. Girsu, ED IIIA<sup>38</sup>)

In Figure 23, a plow is indirectly associated with the equid by being placed below the chariot – perhaps as a reference to this role that the equid could perform.

Equids and chariots are also found as elements of mythological or religious scenes. Two seal impressions

<sup>34</sup> Chadwick 1973: 366, no. 266.

<sup>35</sup> Even more elaborate and costly gear is recorded in the 14th c. BC Amarna letters. For example, EA 22/VAT 395 is a list of gifts that include a chariot covered in gold, *maninnu*-necklaces for horses with gold and precious stones, bridles with elements of ivory, gold, and alabaster, reins with gold and silver, and a leather halter with elements of precious stone and lapis lazuli (Moran 1992: 51–52).

<sup>36</sup> This gesture is well-known from Geometric vase paintings, but also seems to apply here. An alternative interpretation is that the women are dancing, perhaps as part of the event depicted below.

<sup>37</sup> Benzi suggested a rite of passage that reflects the age of the deceased found in the larnax, in the transitional stage between child and adult (1999: 229–231).

<sup>38</sup> Zarins and Hauser 2014: 265.



**Fig. 20.** Ivory gaming box from Enkomi, Tomb 58. H. 6.3 cm. LC IIC – LC III, c. 1250–1050 BC (drawn by L. Recht, after British Museum 1897,0401.996)



**Fig. 21.** Painted decoration on one side of terracotta larnax from Tanagra (Greece), Tomb 22 (drawn by L. Recht, after Preziosi and Hitchcock 1999: 181, fig. 120)

from Tell Beydar in Syria show equids and chariots combined with deities, who are marked by their horned head pieces (Figs 22–23). The scenes are rather enigmatic, but the boat, combined with what appears to be a procession with a four-wheeled vehicle, could be interpreted as a funerary procession with the deceased being the person transported in the boat to the next world.

Apart from the Ur-Nammu text, cuneiform sources rarely indicate the use of equids in relation to funerals or mortuary practices. A few rare exceptions mention equids as part of the funerary assemblage. In another tablet from Girsu, a team of female hybrid equids are recorded, along with a threshing sledge:

- 1 woman's garment (of the wool from) barley-eating sheep,
  - 1 long nig<sub>2</sub>-lam<sub>2</sub>-garment,
  - 1 boxwood bed with thin legs,
  - 1 chair, being open(-work?), of boxwood,
  - 1 sledge (of threshing-sledge type) of boxwood,
  - 1 team female kunga<sub>2</sub>-equids,
  - 1 bronze hand-mirror,
  - 1 ... of bronze,
  - 1 Akkadian copper luxury(?) container,
  - 1 copper ... luxury(?) item,
  - 1 small bun<sub>2</sub>-di-bowl
- (DP 75. Girsu, Ur III. Funeral of Ninenise, wife of Urtarsirsira).<sup>39</sup>

Several interesting things can be noted about this text. One is that the equids are associated with a sledge, rather than a wheeled vehicle. Another is that the sledge is for threshing, and is therefore associated with agriculture rather than military activity. Thirdly, these funerary gifts are for a woman, the wife of a high official, so here we have a case of a woman being buried with equids.

In the LH IIIA2-B period in the Aegean, kraters depicting horses and equids became very popular. They are exported to Cyprus, where we find complete vessels as part of funerary assemblages. The scenes sometimes seem to be of mythological or religious content. On a Mycenaean krater (Fig. 24), horses pull a chariot with female drivers. Both in front of and behind the chariot there are tall figures with upraised arms, which may be female deities or statues that form part of a ritual. The type behind the chariot is well-known as figurines commonly called "Goddesses with upraised arms". Their exact identity and function are much debated, but they were clearly used in ritual contexts.<sup>40</sup> The horses are here completely static, perhaps because they have arrived at their destination. The so-called "Zeus krater" from Enkomi shows horses and chariot, standing in front of a figure holding up scales (Fig. 25). Karageorghis has followed Nilsson in interpreting the scene as "Zeus holding the scales of destiny in front of the warriors before they depart for battle".<sup>41</sup> The

<sup>39</sup> Cohen 2005: 165. An ED III text records the grave goods of Bilalla and his wife with an equid and a chariot (Foxvog 1980: 67).

<sup>40</sup> Zeman-Wiśniewska 2012: 154–157.

<sup>41</sup> Karageorghis 1958: 385.

**Fig. 22.** Reconstructed sealing from Tell Beydar. ED III late (drawn by L. Recht, after Rova 2012: 753, no. 55)



**Fig. 23.** Reconstructed sealing from Tell Beydar. ED III late (drawn by L. Recht, after Rova 2012: 753, no. 62)

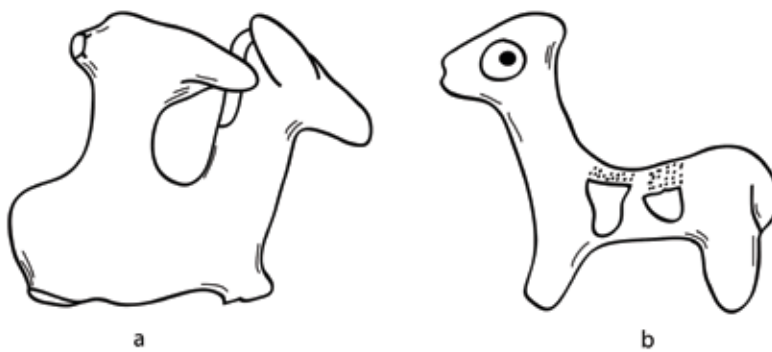


**Fig. 24.** Mycenaean krater. H. 41.6 cm. LH IIIB, c. 1300–1230 BC. The Metropolitan Museum of Art, 74.51.966





**Fig. 25.** "Zeus krater" from Enkomi Tomb 17/1, LH IIIA (after Gjerstad *et al.* 1934: pl. 120,3–4). Cyprus Archaeological Museum (roll-out drawing of decoration by L. Recht)



**Fig. 26.** Terracotta equid and rider figurines from Tell Selenkahiye, SLK 67–895 and SLK 67–206. Ur III (drawn by L. Recht, after Liebowitz 1988: pl. 30.2–30.3)



**Fig. 27.** Equid with rider figurine from Archanes, tomb at Metochi Spiliotaki. LM III (drawn by L. Recht, after Sakellarakis and Sapouna-Sakellarakis 1997: 522, fig. 517)

action does seem to be set in the realm of the supernatural, and the horses are a central part of that realm.

Riding is not depicted very often, but there are some instances from both the Aegean and the Near East. Interestingly, the kind of riding shown is not very suitable for military action. Examples of riding side saddle (Figs 26–27) were likely reserved for either processions and/or transport of royal or elite persons. The riders on the terracotta mould from the British Museum (Fig. 28) and the figurine from Mycenae (Fig. 29) sit very far back on what appear to be horses.<sup>42</sup> This is not a good position for controlling the animal, but may have been especially used for riding donkeys.<sup>43</sup> Riding is one of the activities less frequently mentioned in cuneiform sources. From the third millennium on, riding was associated with messengers and perhaps officials or escorts.<sup>44</sup> There is some indication that in the Near East, riding was not considered as suitable as movement by chariot for royal persons – a famous letter to Zimri-Lim, king of Mari, states that

[Verily] you are the king of the Haneans, [but] secondly you are the king of the Akkadians! [My lord] should not ride a horse. Let my [lord] ride in a chariot or on a mule and he will thereby honour his royal head!

(ARM VI 76: 20–25).<sup>45</sup>

This preference could account for the low frequency of depictions of riding compared to chariot scenes. Hybrids were also more prestigious than both horses and donkeys, as corroborated by cuneiform sources that record donkey and horse prices being much lower than those for hybrids, and cases of donkeys owned by non-elite persons.<sup>46</sup> Hybrids receive more fodder than other equids, were rarely used for agricultural activities, and have stronger associations with royalty and divinity.<sup>47</sup> In the Late Bronze Age, horses seem to take on a larger part of this role, extensively used by royalty and highly valued, as recorded in the Amarna correspondences and sources from Ugarit.<sup>48</sup>

<sup>42</sup> The Mycenaean example is too schematic to be identified as an equid with certainty; the mould depicts an equid, with the full tail of a horse, but a rather oddly shaped head not at all equine.

<sup>43</sup> See however Kelder's (2012) arguments for the possibility of Mycenaean cavalry.

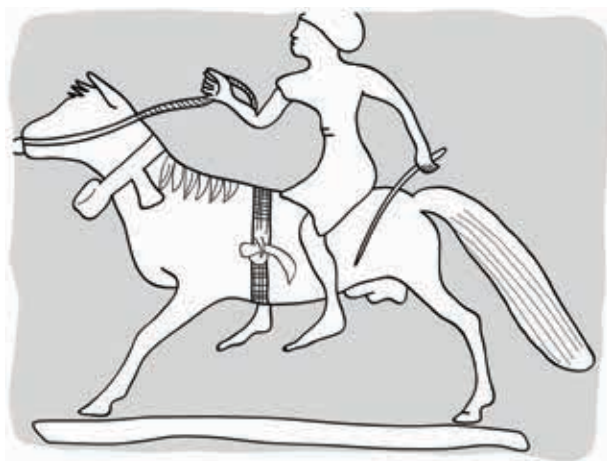
<sup>44</sup> Zarins and Hauser 2014: 198, 204, 215.

<sup>45</sup> Malamat 1987: 33.

<sup>46</sup> Zarins and Hauser 2014: 216, Table 21; Michel 2004.

<sup>47</sup> Heimpel 1994; Zarins and Hauser 2014: 208–217.

<sup>48</sup> Moran 1992; Caubet 2013. The care of horses and other equids was important enough that texts were written about how to treat certain ailments pertaining to them; these have been found at Ugarit and from earlier Akkadian sources (Pardee 1985).



**Fig. 28.** Terracotta mould. L. 9.8 cm. Old Babylonian, c. 2000–1800 BC (drawn by L. Recht, after British Museum 22958)



**Fig. 29.** "Cavalryman" from Mycenae, deposit west of Persia Fountain House (Hood 1953). H. 9 cm. LH IIIB, c. 1300 BC (after Kelder 2012: 3, fig. 1, courtesy of Jorrit Kelder)

## GENDER

### Humans and human figures

Equids are associated with both men and women in the Near East, Cyprus and the Aegean during the Bronze Age. It is possible that the associations reflect different roles of the equids. For example, unambiguous scenes of war and hunting show predominantly men as drivers of chariots. One exception to this is a late second millennium version of the Semitic war goddess Astarte. She is perhaps better known from first millennium sources, but she already appears associated with horses in the late second millennium at Ugarit.<sup>49</sup> We have seen, however, that chariots and other wheeled vehicles with equids also occur with human females, although their use is not always clear.<sup>50</sup> In archaeological contexts and iconography, equids appear with women and men alike. The presence of an equid can therefore not be assumed to indicate one specific activity or to be associated with a specific human gender without taking the complete context into account.

### Equids

The issue of the sex of the equids is more complicated. In some cases, as at Dendra and Tell Umm el-Marra, there is a clear preference for male equids. Overall, the faunal material suggests that male equids were more popular for mortuary rituals, but females do also occur. Unfortu-

nately, there are only a few instances where we actually have reliable data about the sex of the animals.

The artistic material presents another difficulty because the female sexual organs are not immediately visible the same way male ones are on the actual animals, making interpreting representations tricky. The equids on the Standard of Ur (Fig. 13) are very deliberately depicted as stallions. This attention to the genitals must mean that the gender of the equids was considered highly relevant, and presumably serves to enhance the message of the scene. It closely echoes the situation found at Tell Umm el-Marra, with the use of nose/lip rings and the exclusive presence of male equids as draft animals. A subtler depiction of male equids (whether stallions or geldings) can be seen in Figure 17, but generally, when the genitals are shown, they are exaggerated in the manner of the Standard of Ur.

Mares, however, are much harder to identify. Strictly speaking, the lack of genital designation should equal female. Unfortunately, this clashes with how one might depict a neutrally gendered animal, and when no genitals are shown, it may equally mean that the sex was simply not considered an important attribute in the specific context. As an analogy, we might consider modern representations of humans. On toilet doors, for example, female and male are shown differently – the female usually wearing a skirt. This female wearing a skirt is always taken to be just that – female. But the icon for male is also elsewhere taken to mean "human", as for example on traffic lights for pedestrians (notwithstanding efforts in some places to show both!). Similarly, equids without specifically designated genitals in these Bronze Age depictions may indicate either mares or a more generic "equid".

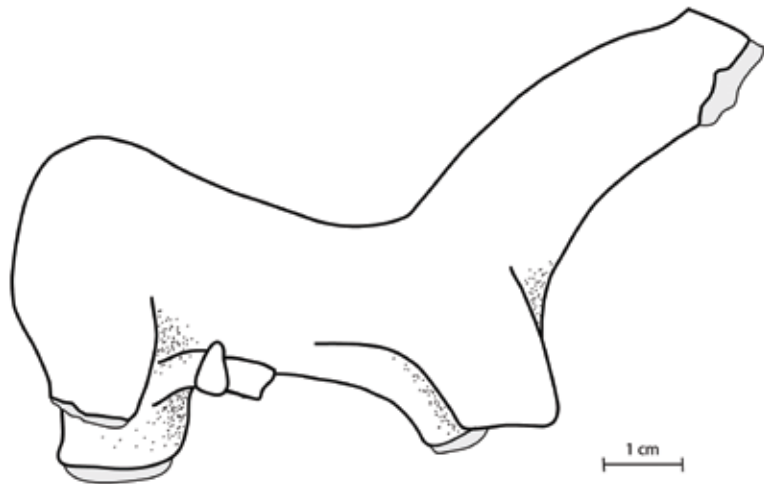
The only artistic instances where we can be more definite about intention concerning gender are in the round. Figurines of equids necessarily include the gen-

<sup>49</sup> Schmitt 2013: 216.

<sup>50</sup> An association between women and equids / equid gear and equipment is not unique. It can be found in various parts of Europe during the Late Bronze Age and Early Iron Age (see, e.g., Metzner-Nebelsick and Nebelsick 1999).



**Fig. 30.** Equid figurine *in oestrus* from Te Mozan, Palace AK, f115/locus 168 (A6.149). H. 4.01 cm (forequarters) (drawn by C. Wettstein, after Hauser 2007: 374, fig. 21, courtesy of Rick Hauser / The International Institute for Mesopotamian Area Studies)



**Fig. 31.** Equid figurine from Tell Brak, Area FS. Second half of third millennium BC (drawn by L. Recht, after Oates 2001: 289, fig. 311, no. 56)

ital area from all angles, and it can therefore be established whether male, female or neutral/ungendered was intended. Neutral examples are the most common, but both mares and stallions appear. Examples can be seen in Figures 30–31. In these cases, when the male and female genitals are indicated, it may be in reference to their reproductive abilities, because the mare appears to be shown as in heat (Fig. 30)<sup>51</sup> and the stallion is depicted with a penile strap, presumably to control breeding (Fig. 31). This suggests that the function of least some figurines is related to the administration of breeding activities and training of equids.

Consequently, it can be noted that certain places and instances required a male equid, but the statement cannot be generalised to include all cases. Whether or not the reverse is true – *i.e.*, that females at times were required – cannot be established. Certainly, mares were used, but there is not enough evidence to prove that gender in mortuary contexts was always significant.

## HUMAN-EQUID ENCOUNTERS

At times, we are allowed rare glimpses into more intimate encounters between humans or deities and equids – ones where there is a sense of mutual respect, and perhaps curiosity. Two seal impressions from Urkesh illustrate such encounters (Figs 32–33). In Figure 32, we find a seated King Shar-kali-sharri – or possibly

a deity, as suggested by Buccellati and Kelly-Buccellati<sup>52</sup>, and Hauser.<sup>53</sup> He is part of a fairly standard Akkadian and Old Babylonian theme usually called a “presentation scene”. He is approached by Ishar-beli, the owner of the seal, who carries a foal<sup>54</sup> and is led by an interceding deity. However, immediately before him, an equid approaches the seated figure, who in turn reaches out with his hand, holding something presumably edible for the equid. The equid is perhaps an onager, as suggested by Hauser<sup>55</sup>, or one of the highly prized *kunga* hybrids, as suggested by Zarins and Hauser.<sup>56</sup> The body is very caballine, but the big-tufted tail point to an onager; a hybrid may therefore be intended. The posture is similar to that of charging equids in front of a chariot (it is certainly not a posture actually used by equids when peacefully approaching something). The striations of the mane are so strongly marked that one might also suspect that a kind of braiding has taken place, reminiscent of those so clearly shown on Aegean imagery. The scene certainly has political overtones, relating to Ishar-beli’s and/or his wife’s official responsibility of obtain-

<sup>51</sup> Hauser 2007: 374.

<sup>52</sup> Buccellati and Kelly-Buccellati 2000: 139.

<sup>53</sup> Hauser 2007: 52.

<sup>54</sup> The animal most commonly carried in these types of scenes is a goat or a sheep. However, the animal looks remarkably like a very young equid, which would be unwonted, but fit the scene, which is in any case highly unusual. This identification is also preferred by Hauser (2007: 52) and Kelly-Buccellati, who further notes that if this the case, we may have a mare with her foal (2010: 187).

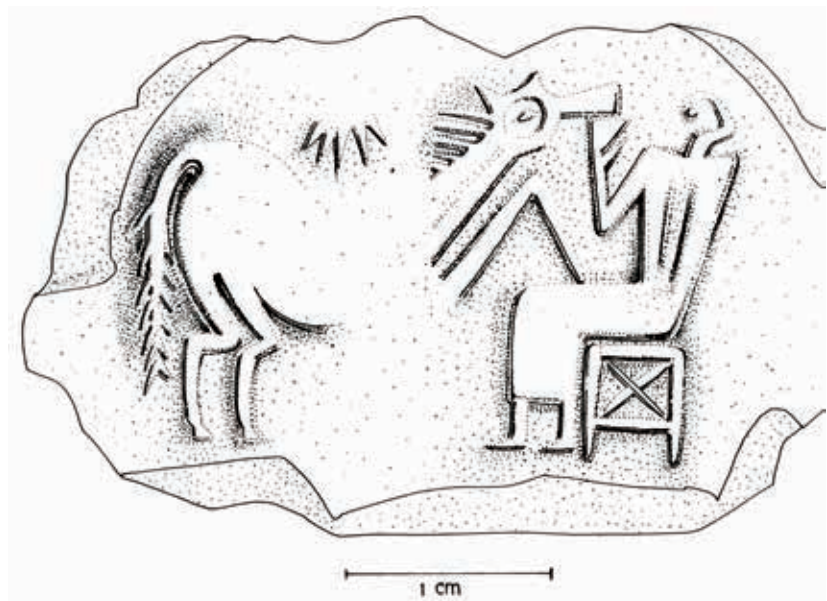
<sup>55</sup> Hauser 2007: 52.

<sup>56</sup> Zarins and Hauser 2014: 138.



**Fig. 32.** Composite drawing of seal impressions from Tell Mozan, Palace AK, Room H2 (A13.28). Akkadian (drawn by P. Pozzi, after Buccellati and Kelly-Buccellati 2000: 140, fig. 5, courtesy of The International Institute for Mesopotamian Area Studies)

**Fig. 33.** Composite drawing of seal impressions from Tell Mozan, Palace AK, f73/q126 (A9.27). Akkadian – Late Akkadian (drawn by P. Pozzi, after Kelly-Buccellati 2015: 118, fig. 6, courtesy of The International Institute for Mesopotamian Area Studies)



ing prime equids.<sup>57</sup> But the encounter is nevertheless remarkably intimate. The two meet without any sign of coercion, and in a Sistine Chapel-like moment, they nearly touch.

The second Urkesh seal impression (Fig. 33) has been interpreted as probably being an imitation of the first.<sup>58</sup> The encounter in this case is perhaps even more intimate. The seated figure is even closer to touching the equid. The posture of the equid is quite different; while this may be a misunderstanding on behalf of the artist, it is just as likely that a slightly different act is depicted. The equid raises at least one leg. The second leg is either not individually engraved, or it was standing on the ground, in the space that is unfortunately not preserved. I consider the latter more likely for several reasons. Although

the style may not be as fine as that of the Ishar-beli seal impression, it is not inaccurate in its anatomical details. The hind legs of the equid are both carefully carved, as are the characteristic erect mane and long, tufted tail. It would thus seem odd if the second front leg were not also depicted. Further, the posture of the front part of the body is not thrust upwards, but in fact is bent slightly downwards or straight, suggesting that one front leg was in fact on the ground. It would not be possible for an equid to take the posture of the mid-body as shown with both legs raised.

However, the position of one leg raised and the other on the ground is a fairly peaceful gesture which an equid might make on meeting a human (or other being), often as a sign of good-willed impatience. If this reading is correct, we here have an exceptional snap shot perception of communication between human and equid in the Bronze Age.

<sup>57</sup> Zarins and Hauser 2014: 140.

<sup>58</sup> Kelly-Buccellati 2015: 119–120.

## CONCLUSIONS

Equids had a highly symbolic value that made them extremely suitable for religious and mortuary contexts. A large amount of expensive material, time and effort was invested into both maintaining and presenting equids in various settings, including death. Horses, donkeys, onagers and hybrids of both sexes appear, and vary in their roles and significance at different times and regions. Equids were used in warfare, hunting, agriculture, transport (including use by messengers and for officials and royalty) and ritual.

They appear with men and women, although some roles seem to mostly occur with either male or female figures. Artistically and textually, equids have strong associations with chariots and other vehicles, as part of battle, hunting, ceremony, transport and possibly competitive events. This is not immediately reflected in the archaeological record, where their symbolic value seems to extend beyond this association. Less frequent but far from insignificant is evidence of riding and maintaining equids. For equids to perform these roles, daily interaction in the form of handling, care, training and breeding was necessary, creating dynamic bonds between human and animal.

All of this influenced human life and perception, both directly and indirectly. Directly through the way in which equids transformed the activities of which they were part – for example, it is clear from the 14th century BC Amarna letters that a city's defence was not complete without chariots and horses. Horses were at this time so integral to the royal courts that they were part of the customary opening greeting of the letters, which otherwise include the family of the king (e.g., letters EA 1–3).<sup>59</sup> Indirectly, equids became part of the ideology and identity of certain groups and individuals, especially among the elite, but we also see specific job titles related to equids for high officials as well as presumably less prestigious ones related to handling of the equids. The equids themselves even receive something resembling titles in the shape of being “team leaders” of plow teams.

It is in particular the ideology, prestige and ritual surrounding equids that create a symbolically charged animal so suitable for marking and participating in sacred space. The activities involving equids necessitate close relations between equids and humans, and ultimately equids are both honoured by and in turn honouring humans by being placed in mortuary sacred space.

<sup>59</sup> Moran 1992.

## A CATALOGUE OF EQUIDS IN MORTUARY CONTEXTS: THE BRONZE AGE AEGEAN AND NEAR EAST

Notes to catalogue: The entries listed here shortly describe the known data for equid remains – for further details, please consult the bibliographical references. If the Latin name is used, the remains have been studied by a faunal expert. If in quotation marks, the identification was instead made by the excavator. Catalogues of selected areas and periods are also presented by Sakellarakis (1970), Kosmetatou (1995), Reese (1995), Doll (2010), and Way (2010).

### THE AEGEAN

#### Crete

##### R1. Archanes Tholos Tomb A

Slaughtered and dismembered *Equus caballus* found in main chamber of tholos tomb. Ca 6 years old. Cut-marks were found on the shoulder bones. LM IIIA.

Sakellarakis 1967: 278–281, 1970; Sakellarakis and Sapouna-Sakellarakis 1991: 72–85, 1997: 158–168, 262–265; Kosmetatou 1993: 38; Reese 1995: 37.

##### R2. Ayia Triada Tholos Tomb A

Jawbone of “horse” found in Room I of tholos tomb. EM I – MM II.

Stefani 1930/1931.

#### Greek Mainland

##### G1. Marathon Tholos Tomb (Fig. 6)

Two complete *Equus caballus* found in mirrored position with legs towards each other in the dromos. LH II / LH IIB, ca 1425 BC.

Lemerle 1935: 253; Orlandou 1959: 23–27; Daux 1959: 583–586; Vanderpool 1959: 280; Sakellarakis 1970: A6 and C1.

##### G2. Argos Tomb 8

Tomb containing “probable horse”, skull missing. LH IIIA2 – LH IIIB.

Vollgraff 1904: 370; Deshayes 1956: 365, 1966: 69–70, pl. 70.3; Sakellarakis 1970: C2.

##### G3. Kokla Chamber Tomb II

Chamber tomb with four complete equids and one dog. *Equus caballus*, size ca 1,31–1,33 m. Horse 1: nearly complete, *in situ*, lower level. Male, aged ca 7. Horse 2: (no longer) complete, upper layer. Female, aged 10. Horse 3: (no longer) complete, upper layer. Male, old. Horse 4: least complete, possibly more

- than one. Female. LH IIIA2 – LH IIIB1, beginning of 13th century BC.  
Boessneck and von den Driesch 1984; Demakopoulou 1989: 83–85; Reese 1995.
- G4. Kallithea Tholos Tomb  
Skull of a “horse” in tomb; also some dog bones. LH I – LH IIIC.  
Papadopoulos 1987.
- G5. Nauplia Chamber Tomb  
Complete “horse” skeleton in tomb. LH.  
Stais 1892: 52–54, 1895: 206–207; Sakellarakis 1970: C7; Kosmetatou 1993: 38.
- G6. Dendra Tumuli  
A. Tumulus B (Fig. 7)  
Two *Equus caballus* in parallel position in pit at the edge of tumulus. Male, aged 15–17. LH IIIA-B.  
Payne 1990; Protonotariou-Deilaki 1990.  
B. Tumulus C (Fig. 8)  
Two *Equus caballus* in double-mirrored position in a pit inside tumulus. Male, aged 15–17. LH IIIA-B.  
Payne 1990; Protonotariou-Deilaki 1990.  
C. Tumulus?  
Portion of leg found at end of trench, *Equus caballus*? LH IIIA-B.  
Payne 1990.  
D. Tumulus? (Fig. 9a–b)  
Two other sets of two equids placed in mirrored positions like those of Marathon are on display at the site. *Equus caballus*. LH IIIA-B.  
Pappi and Isaakidou 2015.
- G7. Aidonia  
A. Chamber Tomb  
In a dromos without chamber, 14 “horse” mandibles and one complete skeleton were found. LH?  
Protonotariou-Deilaki 1990: 102; Kosmetatou 1993: 38; Reese 1995: 35; Krystalli-Votsi 1998: 24–28.  
B. Shaft Grave  
Grave containing remains of decapitated “horse”. LH.  
Krystalli-Votsi 1998: 24–28.
- G8. Dara Tholos Tomb  
On the floor of the tomb were a complete skeleton, “probably horse”, and a “horse” skull. LH IIIA – LH IIIB.  
Parlama 1973/1974; Reese 1995: 37.
- G9. Nichoria MME Tholos Tomb  
One *Equus caballus* upper molar found in a pit near the dromos. LH IIIA2 – LH IIIB2.  
Sloan and Duncan 1978: 69; Wilkie 1992: 231–260; Reese 1995: 37.
- G10. Lerna Pit Grave 65  
“Horse” tooth in grave. MH.  
Blackburn 1970: 67–68; Reese 1995: 36 [Grave 95].
- ## Cyprus
- C1. Lapithos-Vrysi tou Barba Tomb 322  
Bones of one *Equus caballus* found in Chamber B; dog skeleton also found in the tomb. EC III / EC III – MC I.  
Gjerstad *et al.* 1934: 140–157; Reese 1995: 38.
- C2. Episkopi-Phaneromi Tomb 23  
The head and left humerus, radius, metacarpus and first phalanx of one *Equus asinus*. EC III / MC I.  
Reese 1995: 38.
- C3. Politico-Chomazoudhia Pit Tomb 3  
Tomb with “horse” on top of human remains. A dog skeleton was also found in the tomb. Late MC II / MC III.  
Gjerstad 1926: 81; Åström 1972: 245, 278, n. 1–2; Reese 1995: 38.
- C4. Ayia Paraskevi Tomb 14  
“Horse” teeth found in tomb. MC.  
Myres 1897: 134–135, 138; Reese 1995: 38.
- C5. Kalopsidha Tomb 9  
“Horse” teeth and bones, teeth worn, perhaps from use as polishers. MC.  
Myres 1897: 143, 147; Gjerstad 1926: 81; Reese 1995: 38.
- C6. Tamassos Tomb  
“Horse” remains found in the tomb. MC.  
Ohnefalsch-Richter 1893: 419–420, pl. 70, 1–8; Karageorghis 1965: 282, 286; Reese 1995: 38.
- C7. Amathus Burial Caverns  
Jaws and teeth of “horse”, camel and sheep/goat. MC.  
Reese 1995: 38; di Cesnola 1991: 282–283.
- C8. Hala Sultan Tekke  
A. Tomb 2  
Tomb with remains of one *Equus caballus* and two *Equus asinus* (one adult, one ca 2 years old). Late LC I – Late LC II, late 15th century – late 13th century BC.  
Karageorghis 1976: 71–72, 78–90. pl. LV lower right; Ducos 1976; Reese 1995: 38, 2007: 50.  
B. Area 22, F6128  
Deposit with human remains and one bone from an *Equus caballus* and 20 bones from two *Equus asinus*. LC IIIA1.  
Jonsson 1983: 224, 228, 229; Reese 1995: 38.
- C9. Kalavassos Tomb 46  
Equid bones from two individuals (including mandible), not further identifiable. EC IIIB – early MC I.  
Croft 1986: 181; Reese 1995: 38.
- C10. Kition Tomb 8  
Tomb with mandible of *Equus caballus*. LC.  
Reese 2007: 50.

## THE NEAR EAST

## Iraq

11. Al Hiba Burial  
One complete *Equus hemionus* (mature male) found with human remains. ED IIIB.  
Hansen 1973: 70.
12. Kish  
A. Kish Burial I  
Remains of one equid above two chariot wheels and a rein ring. Late ED II.  
Gibson 1972: 83–86; Moorey 1978: 104–107.  
B. Chariot Burial II  
Four *Equus hemionus* or *Equus asinus* found above four-wheeled vehicle. Late ED II.  
Watelin and Langdon 1934: 30; Gibson 1972: 83–86; Moorey 1978: 104–109.  
C. Chariot Burial III  
Burial including equid remains, extent unclear. Late ED II.  
Gibson 1972: 83–86; Moorey 1978: 104–106, 109–110.
13. Tell Madhhur  
A. Grave 7D  
Two equids, “probably donkeys” found in tomb. ED II / ED III.  
Killick and Roaf 1979: 540; Roaf 1984: 114.  
B. Tomb 5G  
Tomb with two *Equus asinus* or *Equus asinus* – *Equus hemionus* hybrid. One ca 2.5 years old; one over 20 years old. ED III / Early Old Akkadian, ca 2300 BC.  
Killick and Roaf 1979: 540; Roaf 1982: 45–46, 1984: 115; Clutton-Brock 1986: 210.  
C. Grave 6G  
Remains of one or two equids in a grave (partly destroyed by later pit). Early Old Akkadian, ca 2200 BC.  
Roaf 1984: 115.
14. Tell Razuk Burial 12  
Two *Equus asinus* in parallel position in grave with one human. Early Akkadian.  
Gibson 1981: 73–75, 1984: 206.
15. Tell Abu Qasim Tomb  
Equids associated with burial at the site. ED III / Early Old Akkadian.  
Zarins 1986: 175.
16. Al-‘Usiyah Tomb  
Remains of three or four equids associated with a copper rein ring. Remains too poor for further analysis. ED III.  
Roaf and Postgate 1981: 198; Zarins 1986: 175.
17. Abu Salabikh  
A. Grave 162  
Remains of five equids, probably *Equus asinus*. Four were placed in two pairs, in parallel position. A fifth animal was not as complete and lying on its own at a higher level. ED III, ca 2450 BC.

Postgate 1982: 55–57, 1984: 95–97, 1986: 201–202; Postgate and Moon 1982: 133–136.

## B. Grave 48

Equid bones found in grave. ED IIIA.

Postgate and Moorey 1976: 151–153; Postgate 1980, 1982: 132, 1985: 3, 101–104.

## C. Grave 38

Equid bones found in grave. ED III.

Postgate and Moorey 1976: 151; Postgate 1980, 1985: 3, 90–96.

## D. Grave 27

Equid bone found in grave. ED III.

Postgate 1980, 1985: 72–75.

## E. Grave 73

Equid tooth found in grave. ED III.

Postgate 1985: 125–131.

## 18. Nippur Burial 14

One equid skeleton in tomb. ED – Late Akkadian.

McMahon 2006: 40–53.

## 19. Tell Ababra Grave 29

One complete *Equus asinus*, young adult male. Poorly preserved. Old Babylonian.

Piesl-Trenkwalder 1981/1982: 252; von den Driesch and Amberger 1981.

## 110. Isin-Išān Baḥrīyāt Grave 116

Grave with lower part of the front leg of an equid. Old Babylonian.

Hrouda 1987: 123, 147.

## 111. Tall Ahmad al-Hattu burial 54/19:II

Burial with animal bones, “perhaps equid”. ED.

Eickhoff 1993: Table 2.

## 112. Abu Tbeirah

## A. Animal Grave 1

Grave containing equid, probably *Equus asinus*, male aged 5.5. Part of larger burial ground, but no human remains in this. End ED – beginning Akkadian, ca 2500–2000 BC.

D’Agostino *et al.* 2015: 219; Alhaique *et al.* 2015a.

## B. Grave 5

Grave with two equid bones. Sumerian.

Alhaique *et al.* 2015b: Table I and II.

## C. Grave 15

Sarcophagus burial with one equid bone. Ca 2500–2000 BC.

D’Agostino *et al.* 2015: 210.

## 113. Tell ed-Der T.272

Tomb with four equid legs in the dromos. MBA.

Wygnańska 2011: 610.

## Syria

## S1. Halawa Grave H-70

Grave with three *Equus asinus*, two female, one male. Ca 2200–2100 BC.

Orthmann 1981: 54; Boessneck and Kokabi 1981: 92–98, 101.

S2. Tell Umm el-Marra (Fig. 10)

All the below entries from the site comes from an elite mortuary complex with human tombs, installations with equids, rooms and isolated but associated finds. The whole complex belongs to the second half of the third millennium (for a reconstruction of the sequence of features, see Schwartz 2013). All the equids belong to the same species, most likely onager-donkey hybrids (Weber 2008, 2012).

A. Tomb 1

Tomb with equid skeleton against exterior of eastern wall, skull missing. *Ca* 2300 BC (built and used 2500–2200 BC).

Schwartz *et al.* 2000, 2003; Schwartz 2007, 2012a: 15–20, 2012b: 60–62.

B. Tomb 3

Tomb with animal bones, including equid. EB IVA, beginning of 25th century BC.

Schwartz *et al.* 2006: 609–610; Schwartz 2007.

C. Tomb 4

Tomb with animal bones, including equid. EB IVA. Lower layer: *ca* 2400 BC. Upper layer: mid 24th c. BC. Schwartz *et al.* 2006: 610–623; Schwartz 2007, 2012b: 62–63.

D. Tomb 8

Equid skeleton found against exterior eastern wall of tomb. EB III.

Schwartz 2012b: 63–64; Schwartz *et al.* 2012: 160–162, 165.

E. Installation A (Fig. 11)

Installation with four complete equid skeletons (male, three aged 9–13, one aged 4–5), skulls separate from body. Partial remains of a fifth equid. EB, *ca* 2500–2200 BC.

Schwartz *et al.* 2006: 624–625, 2012: 164; Schwartz 2007, 2012a: 19–22; Weber 2008: 501–502, 2012: 165–166.

F. Installation B (Fig. 12)

Installation with two complete equids, each in their own compartment (placed standing upright, both male, one aged 20, one a bit younger). The skulls found in a gap in the brick course, and another equid skull (juvenile). Also three puppies in each compartment placed after equid interment. EB, *ca* 2500–2200 BC.

Schwartz *et al.* 2006: 625, 2012: 164; Schwartz 2007, 2012a: 19–22, 2012b: 71; Weber 2008: 502, 2012: 166–167.

G. Installation C

Installation with two nearly complete, articulated equid skeletons in each their compartment (placed standing upright, both male, one aged 20, one a bit younger). Skulls and pelvises were missing, but two equid skulls found in Tomb 1 wall may belong to the installation. Adult dog placed later between the equids. EB, *ca* 2500–2200 BC.

Schwartz *et al.* 2006: 625, 2012: 164; Weber 2008: 502–503, 2012: 166–167; Schwartz 2012a: 19–22.

H. Installation D

Installation with two complete equid skeletons, each in their own compartment (placed standing upright, both male, one over 20 years old, the other aged 15–20). In northern chamber, extremities of two further equids, and in southern chamber, four further skulls, extremities and limb bones. EB, *ca* 2500–2200 BC.

Schwartz *et al.* 2006: 625–627, 2012: 164; Schwartz 2007, 2012a: 19–22; Weber 2008: 503–504, 2012: 166–167.

I. Installation E

Installation with four complete equid skeletons (placed standing upright, all male, aged *ca* 5), each bisected and placed in eight different chambers, with three of the skulls placed on a ledge; articulated hind-quarter of another equid. EBA, *ca* 2500–2200 BC.

Weber 2008: 504, 2012: 165–166; Schwartz 2012a: 19–22, 2012b: 65; Schwartz *et al.* 2012: 164–165.

J. Installation F

Installation with four equids, male of prime age. EBA, *ca* 2500–2200 BC.

Schwartz 2012a: 19–22; Schwartz *et al.* 2012: 164; Weber 2012: 165–166.

K. Installation G

Installation with four relatively young equids (male) in lower pit, two articulated and two disarticulated equid skeletons in upper pit. These both in one larger pit which skull and toe bones of at least another three equids. All male, one aged, the others 3–13 years old. EB, *ca* 2500–2200 BC.

Schwartz 2012a: 19–22, 2012b: 66; Schwartz *et al.* 2012: 165; Weber 2012: 167–168.

S3. Tell Brak TC Oval Burial

Burial with two or more *Equus asinus*, lacking hind legs and heads separate from body. ED IIIB, *ca* 2400–2250 BC.

Emberling and McDonald 2003: 48.

S4. Tell Banat North White Monument

Burial mound with at least four phases: In the latest (Monument A) 40% of the animal bones analysed belonged to equids, with little or no equid bones in the other phases so far. *Ca* 2600–2300 BC.

McClellan and Porter 1999: 107–108; Porter 2002a: 21, 2002b: 160–165.

S5. Tall Bi'a/Tuttul Burial U:22

Burial with complete *Equus asinus*, aged male. *Ca* 2500–2400 BC.

Boessneck and von den Driesch 1986; Strommenger and Kohlmeyer 1998: 93, pl. 17.6.

S6. Abu Hamad Tomb A5

Cist tomb with three complete but poorly preserved *Equus asinus* or *Equus hemionus*. EB IV.

Falb *et al.* 2005: 20–21, 89, 335–337; Vila 2006: 116–117.

S7. Tell Arbid Chamber Tomb G8/G9-S-37/55–2001

Equid interred in pit in front of shaft, disarticulated but complete, probably *Equus asinus*, perhaps female,

aged 15–17. Also dog skeleton found in shaft, and further equid bones, probably *Equus asinus*. MBA II.

Piątkowska-Małecka and Wygnańska 2011: 70; Wygnańska 2011: 610, 2015 – personal communication; Koliński 2012: 549.

S8. Tell Mozan Chamber Tomb 37

Complete *Equus asinus* interred in front of chamber, placed on its back. Adult, female. MBA, ca 2000 BC. Dohmann-Pfälzner and Pfälzner 2001: 129–133; Doll 2010: 264–265.

S9. Tell Tuqan

A. Burial D.451

Grave with equid bone. LBA, ca 1400–1200 BC. Minniti 2006: 323; Peyronel 2006: 186.

B. Burial D.458

Grave with equid bone. LBA, ca 1400–1200 BC. Minniti 2006: 323; Peyronel 2006: 186.

## The Levant

L1. Jericho

A. Tomb B48

Two equids, perhaps *Equus asinus*, in the shaft fill. MB IIB-C.

Ellis and Westley 1964: 695; Kenyon 1964: 211–226.

B. Tomb B50

Remains of two equids in the tomb. MB IIB-C. Kenyon 1964: 303–312; Ellis and Westley 1964: 695.

C. Tomb B51

Remains of one equid found in the shaft of the tomb. MB IIB-C?

Kenyon 1964: 332–357; Ellis and Westley 1964: 695.

D. Tomb D9

Equids' bones found in the chamber. MB IIB-C. Ellis and Westley 1964: 695; Kenyon 1964: 276–286.

E. Tomb D22

Remains of one equid found in the shaft. MB IIB-C. Ellis and Westley 1964: 695; Kenyon 1964: 242–260.

F. Tomb J3

Three *Equus asinus* skulls and forelegs found in the fill. MB IIB, ca 1750–1625 BC.

Ellis 1960: 535–536; Kenyon 1960: 306–314; Ellis and Westley 1964: 695; Clutton-Brock 1979: 145.

G. Tomb J37

Remains of two equids found in the shaft. MB IIB-C? Ellis and Westley 1964: 695; Kenyon 1964: 269–273.

H. Tomb M11

Remains of two equids found in the shaft. MB IIB-C? Ellis and Westley 1964: 696; Kenyon 1964: 226–242.

I. Tomb P21

Remains of two equids found in the shaft. MB IIB-C? Kenyon 1964: 428–438; Ellis and Westley 1964: 696.

L2. Tell el-'Ajjul

A. Tomb 1417

Complete skeleton of “donkey” east of dromos entry. MB IIA.

Petrie 1932: 5, 13, pl. XLVI, XLVII; Tufnell 1962: 2, 4–8, 10–11, 17, 21, 27; Wapnish 1997: 350.

B. Burials 1467, 1474, 1702 (TCH)

Burial 1474 contained incomplete *Equus caballus*, including skull and other bones. MB IIB-C.

Petrie 1934: 15, 16, pls. LVIII, LXII; Wapnish 1997: 350; Raulwing and Clutton-Brock 2009: 8, 21, 43–48.

C. Tomb 101

Four incomplete “asses” associated with the tomb; including many articulated parts. MB IIB-C?

Petrie 1931: 4, pls. VIII:5–6, IX, LV, LX; Wapnish 1997: 350.

D. Tomb 210 (441)

“Horse” associated with tomb, hind part missing. MB IIB-C?

Petrie 1931: 4, pls. VIII:1, IX, LV; Wapnish 1997: 350–351; Way 2010: 223.

E. Tomb 411

“Horse” in central oval pit, three legs missing. MB IIB-C?

Petrie 1931: 4, 4–5, pls. VIII:2–4, LV, LVII, LXI; Petrie 1933:

pls. XLVIII, L; Wapnish 1997: 351.

L3. Megiddo Tomb 1100

Equid bones in tomb. MB I – LB I.

Guy 1938: 88–89, 210.

L4. Azor

A. Area C LB II Burial (no number assigned, Maher 2012 fig. 3.4)

Burial with equid cranium, probably *Equus asinus* aged 4.5–5. LB II.

Ben-Shlomo 2012: 17; Maher 2012: 196.

B. Area C LB II Burial (no number assigned, Maher 2012 fig. 3.5)

Burial with equid mandible fragment, scapula possibly also belonging to equid. Aged min. 3.5. LB II.

Ben-Shlomo 2012: 17; Maher 2012: 196.

C. Area C LB II Burial (no number assigned, Maher 2012 fig. 3.6)

Burial with limb bones of small equid, perhaps *Equus asinus*, aged min. 15–18. Mandible and cranium perhaps also belonging to equid. LB II.

Ben-Shlomo 2012: 17; Maher 2012: 196.

D. Area C LB II Burial (no number assigned, Maher 2012 fig. 3.7)

Burial with limb bones, probably equid, perhaps *Equus asinus*. LB II.

Ben-Shlomo 2012: 17; Maher 2012: 196.

E. Area C Shaft Tomb

Tomb with animal bones, including possible equid skull. MB IIC.

Ben-Shlomo 2012: 16–17.

F. Area B Burial Cave

Cave with equid remains, “burials of human beings and horses side by side”. LB and Iron I.

Dothan 1975: 146, 1993: 127.

Note: Equid bones were found associated with Jera-blus Tahtani Tomb 302, but appear to represent either refuse (Main Chamber) or re-deposited Uruk period material (Mound)<sup>60</sup>. Equid bones are also thought to have been found in Grave IV of Grave Circle A, Mycenae<sup>61</sup>, but no confirmation seems available in the published reports.

<sup>60</sup> Croft 2015: 203, and pers. comm. Jan. 2016.

<sup>61</sup> Protonotariou-Deilaki 1990: 102.

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### Abbreviations

ARM = *Archives royales de Mari*

CMS = *Corpus der minoischen und mykenischen Siegel*

RA = *Reallexikon der Assyriologie*

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## Notes on the authors

**Adriana Ciesielska** – Dr, archaeologist and historian, Faculty of Pedagogy and Fine Arts in Kalisz, Adam Mickiewicz University in Poznań, Poland

**Bożena Józefów-Czerwińska** – Dr, archaeologist and anthropologist, Pułtusk Academy of Humanities, Poland

**Antonia Flontaş** – MA, archaeologist, PhD student in the Institut für Vor- und Frühgeschichtliche Archäologie und Provinzialrömische Archäologie, Ludwig-Maximilians-Universität München, Germany

**Marta Kaczmarek** – MA, archaeologist, Poland

**Zbigniew Kobyliński** – Professor Dr habil., archaeologist and manager of cultural heritage. Director of the Institute of Archaeology of the Cardinal Stefan Wyszyński University in Warsaw

**Grzegorz Łyszkowicz** – MA, archaeologist, excavation company Archeolog.co, Poland

**Krzysztof Narloch** – Dr, archaeologist, Ośrodek Badań nad Antykiem Europy Południowo-Wschodniej, Warsaw University, Poland

**Louis Daniel Nebelsick** – Dr habil., archaeologist, Professor at the Cardinal Stefan Wyszyński University in Warsaw, Poland

**Kamil Rabiega** – MA, archaeologist, PhD student in the Institute of Archaeology, Cardinal Stefan Wyszyński University in Warsaw, Poland

**Laerke Recht** – Dr, archaeologist, Marie Skłodowska-Curie European Fellow in the McDonald Institute for Archaeological Research, Cambridge University, United Kingdom

**Nicola Scheyhing** – MA, Landesmuseum für Vorgeschichte Halle, Germany

**Roman Szlązak** – MA, archaeologist, PhD student in the Institute of Archaeology, Cardinal Stefan Wyszyński University in Warsaw, Poland

**Joanna Wawrzeniuk** – Dr, archaeologist, Institute of Archaeology, Cardinal Stefan Wyszyński University in Warsaw, Poland

**Imke Westhausen** – MA, archaeologist, PhD student in the Institut für Vor- und Frühgeschichtliche Archäologie und Provinzialrömische Archäologie, Ludwig-Maximilians-Universität München, Germany

**Christine Winkelmann** – Dr, archaeologist, Andante Travels Ltd, United Kingdom

**Edvard Zajkovski** – Dr, archaeologist, National Academy of Sciences of Belarus, Minsk

**Katarzyna Zeman-Wiśniewska** – Dr, archaeologist, Institute of Archaeology, Cardinal Stefan Wyszyński University in Warsaw, Poland

