

# Faunal Remains in Burial Contexts

ANJA PRUST

## Introduction

The close connection between houses and burials – single and collective burials of mainly infants (Gebel *et al.* 2017, 2019, 2020; Benz *et al.* 2019)<sup>1</sup> – indicates a funerary culture with sub-floor burials. Animals also undoubtedly played an important role in the beliefs of early societies (for a recent review see Boyd 2017). Pre-Pottery Neolithic B (PPNB) sites such as Çatalhöyük (Czerniak and Marciniak 2005; Russel *et al.* 2009: 107) and Kfar Hahores (Horwitz and Goring-Morris 2004; Goring-Morris and Horwitz 2007) provide good evidence as to the special importance of animals within the local burial rites. Whether this aspect of human-animal relationship also applies to Ba`ja was investigated by analysing the faunal assemblages from burial contexts. It goes without saying, that the taxonomic identifications hardly represent any emic quality to this relationship and are merely of heuristic value. The aim of this study was to find out more about this relationship: whether animals played an important role during burial rituals; whether there was a specific selection of certain animal species, age groups, or skeletal elements; and whether human-animal relationships represented in burial rituals differed from the human-animal relationship in daily life (*cf.* Prust and Pöllath forthcoming).

## Material and Methods

The material was collected by handpicking and sieving and includes collections from Late PPNB burial contexts in Area C (2005, 2018, 2019) and

Final PPNB/ PPNC burial contexts in Area A, TU7 (2005) and Area D (2019).<sup>2</sup> With the exception of a mixed context (Area C, Loc. CR6:19), all assemblages come from grave fillings. The collection of finds from Loc. CR17:132 was not completed during the 2019 field campaign; however, the preliminary results are included in the following statistics.

In total, the faunal remains comprise 1,294 specimens with a weight of 1,238.6g. Only 35.1% (NISP 454) could be identified to species or family level; 64.9% are indeterminate specimens (NSP 840) of mainly mammals (Table 1). The number of finds varies greatly between the individual burial contexts (Table 2) and does not provide representative data for a convincing evaluation. Consequently, the following interpretations should be treated with caution. Artificially modified specimens (tools, objects, *etc.* made of bones, teeth, or molluscs) were examined and discussed separately and are not statistically recorded here (Abuhelaleh forthcoming).

Morphological identifications were realised by using reference skeletons from the Staatssammlung für Anthropologie und Paläoanatomie, München (SAPM).<sup>3</sup> If an identification to the species level was not possible, the higher taxonomic rank is given. Some specimens could only be assigned to size categories, *i.e.*, as “large mammal” (size cattle/ deer), “medium-sized mammal” (size sheep/ goat/ gazelle), “small mammal” (size hare/ cat/ fox), and “micromammal” (small rodents). Indeterminate specimens were listed as “indet.”, or, if possible, according to the taxonomic class as “Mammalia indet.” or “Aves indet.”. Although the finds were

<sup>1</sup> The respective excavation reports on the *Household and Death Project* (seasons 2016, 2018 and 2019a) are available at [www.exoriente.org/baja](http://www.exoriente.org/baja) (Gebel *et al.* 2017, 2019, 2020). This analysis was done in the frame of the *Household and Death Project*, financed by the German Research Foundation (BO 1599/16-1) and ex oriente e.V.

<sup>2</sup> See also the contribution by Benz *et al.* this volume.

<sup>3</sup> Thanks to Nadja Pöllath for the helpful support.

Table 1 Faunal remains from burial contexts.  
Taxonomic distribution (molluscs and  
culturally modified specimens excluded; MNI  
is given in brackets, weight in g).

Taxon	NSP	Weight
<b>I. Domestic mammals</b>		
<i>Ovis aries/ Capra hircus</i>	330	641.5
<i>Capra hircus</i>	52	218.5
<i>Ovis aries</i>	18	66.9
<b>II. Domestic or wild mammals</b>		
<i>Capra</i> sp.	7	18.9
<i>Ovis/ Capra/ Gazella</i>	33	16.8
<b>III. Wild mammals</b>		
<i>Gazella</i> cf. <i>gazella</i>	3(2)	3.9
<i>Vulpes</i> sp.	3(3)	2.0
<i>Lepus capensis</i>	1	0.5
<i>Martes foina</i>	1	0.3
<i>Apodemus</i> sp.	1	0.1
<i>Meriones</i> sp.	1	0.1
<i>Rattus rattus</i>	3(1)	0.3
<b>IV. Birds</b>		
<i>Milvus</i> sp.	1	0.6
<b>NISP</b>	<b>454</b>	<b>970.4</b>
<b>V. Indet.</b>		
Medium-sized mammal	382	161.1
Small mammal	48	3.5
Micromammal	117(7)	5.2
Mammalia indet.	287	97.2
Aves indet.	6	1.2
<b>Total</b>	<b>1,294</b>	<b>1,238.6</b>

carefully pre-sorted, some human remains may have been documented as “Mammalia indet.” due to the poor state of preservation and the high degree of fragmentation. The differentiation between sheep and goat is based on Boessneck *et al.* (1964), Zeder and Lapham (2010), and Zeder and Pilaar (2010). Specimens that could not be clearly identified as wild or domestic mammal were listed within the category “domestic or wild mammals”. This concerns finds of goats (*Capra* sp.) and of small ruminants (*Ovis/ Capra/ Gazella*). Quantification follows the standard units NSP (number of specimens), NISP (number of identified specimens), and MNI (minimum number of individuals). Age determination is based on the stage of epiphyseal fusion, tooth eruption and tooth wear. The latter follows the criteria from Payne (1973) for sheep/ goat, and from Grant (1982)

for cattle. Age determination for gazelle is based on the data given by Munro *et al.* (2009). All bone measurements follow the standards from von den Driesch (1976).

All the investigated animal remains are in a rather poor condition and highly fragmented; completely preserved elements are rare. Consequently, the number of bone measurements is rather small (Appendix 1).

Regarding natural/ non-anthropogenic modifications, post-depositional surface weathering (NSP 409; 31.6% of the total assemblage) dominated and affected finds from all excavation areas. Furthermore, coating with calcareous sinter (NSP 11; 0.9%), root etching (NSP 5; 0.4%) and rodent gnawing (NSP 5; 0.4%) could be observed. 96 specimens

Table 2 Taxonomic distribution per burial context (MNI is given in brackets, weight in g).

	CR5:48	CR6:32	CR6:38	CR6:49	CR17:115	CR17:117	CR17:127	CR17:130	CR17:135	CR17:136/137	C10:170/170A	DR19:110	TU7:6	CR6:19	CR17:132																					
	NSP	weight	NSP	weight	NSP	weight	NSP	weight	NSP	weight	NSP	weight	NSP	weight	NSP	weight																				
<b>I. Domestic mammals</b>																																				
<i>Ovis aries/ Capra hircus</i>	3	11.8	2	16.5	10	12.7		16	38.7	1	20.2	7	12.9	2	1.2	1	0.7	28	44.0	213	334.5	2	2.3	5	6.8	38	127.3	2	11.9							
<i>Capra hircus</i>				1	3.4	4	7.9	2	8.2						1	10.4	1		12.4	18	62.9					25	113.3									
<i>Ovis aries</i>					1	5.7		1	6.9									15	48.9	1	5.4															
<b>II. Domestic or wild mammals</b>																																				
<i>Capra sp.</i>																						2	3.0	3	10.5		2	5.4								
<i>Ovis/ Capral Gazella</i>				2	0.7	3	1.4	18	2.9						1	0.6	9	11.2																		
<b>III. Wild mammals</b>																																				
<i>Gazella cf. gazella</i>																																				
<i>Vulpes sp.</i>						1	1.4		0.2																					1	0.4					
<i>Lepus capensis</i>	1	0.5																																		
<i>Meriones foinea</i>																																				
<i>Apodemus sp.</i>						1	0.1																													
<i>Meriones sp.</i>																																				
<i>Rattus rattus</i>																																				
<b>IV. Birds</b>																																				
<i>Milvus sp.</i>																																				
<b>NISP</b>	<b>4</b>	<b>12.3</b>	<b>2</b>	<b>16.5</b>	<b>12</b>	<b>14.2</b>	<b>4</b>	<b>4.7</b>	<b>25</b>	<b>53.9</b>	<b>21</b>	<b>31.3</b>	<b>8</b>	<b>19.8</b>	<b>2</b>	<b>1.2</b>	<b>6</b>	<b>12.0</b>	<b>40</b>	<b>69.5</b>	<b>250</b>	<b>451.4</b>	<b>6</b>	<b>18.2</b>	<b>5</b>	<b>6.8</b>	<b>66</b>	<b>246.3</b>	<b>3</b>	<b>12.3</b>						
<b>V. Indet.</b>																																				
Medium-sized mammal	9	6.2	2	1.5	2	0.3	9	3.5	21	21.0	3	2.3	3	4.4	1	1.5	2	2.8	7	15.8	296	77.3	6	7.6	14	13.0	7	3.9								
Small mammal						11	1.3											2	0.3	35(1)	1.9															
Micromammal						57(2)	2.3	1	0.1									26(2)	1.4	32(1)	1.3	1	0.1													
Mammalia indet.	2	0.7	13	2.9	55	16.5		25	11.0	3	0.9	28	15.8						1.25	27.0		7	7.9								29	14.5				
Aves indet.								2	0.3										1	0.1																
<b>Total</b>	<b>15</b>	<b>19.2</b>	<b>17</b>	<b>20.9</b>	<b>137</b>	<b>34.6</b>	<b>14</b>	<b>8.3</b>	<b>73</b>	<b>86.2</b>	<b>27</b>	<b>34.5</b>	<b>39</b>	<b>40.0</b>	<b>3</b>	<b>2.7</b>	<b>36</b>	<b>16.5</b>	<b>240</b>	<b>115.6</b>	<b>547</b>	<b>528.8</b>	<b>19</b>	<b>33.7</b>	<b>19</b>	<b>19.8</b>	<b>76</b>	<b>251.0</b>	<b>32</b>	<b>26.8</b>						

(7.4%), mainly from Room CR17, show small black, spotty discolouration due to natural manganese precipitation.

## Results

The total faunal assemblage from burial contexts comprises the remains of at least 11 different taxa, including domestic and wild mammals, and one specimen of a bird (Tables 1 and 2). Remains of caprine-sized ruminants clearly dominate.

Domestic mammals are only represented by sheep and goats, which are also the most common species in the total assemblage studied within the *Household and Death Project* (88.1% of NISP) and within the assemblage studied by von den Driesch *et al.* from the 1997 excavation season (89.4%). The ratio between sheep and goat is almost 1:3 – as it was also observed for the assemblages from

household contexts (von den Driesch *et al.* 2004; Prust and Pöllath forthcoming).

Due to the small sample size, calculations concerning the skeletal element distribution do not provide representative data. It should be noted however, that the assemblages contained neither complete nor partial skeletons. A conspicuous accumulation of certain elements could also not be observed.

Age-at-death data for domestic sheep (*Ovis aries*), domestic goats (*Capra hircus*) and animals categorised as “domestic sheep/ goat” (*Ovis/ Capra*) is based on 43 specimens that permit comments on epiphyseal fusion stages (Table 3).

The generated survivorship curve for all caprines usually shows an age-of-death between six and 18 months (Fig. 1). Few animals died older than two years. The age determination based on tooth wear stages resulted

Table 3 Epiphyseal fusion data for sheep (*Ovis aries*, n=5), goats (*Capra hircus*, n=13), and sheep/ goat (*Ovis aries/ Capra hircus*, n=25) in burial contexts. Fusion ages based on Zeder (2006).

Fusion Group (age in months)	Element	<i>Ovis aries</i>			<i>Capra hircus</i>			<i>Ovis/ Capra</i>		
		unfused	in fusion	fused	unfused	in fusion	fused	unfused	in fusion	fused
A (0–6)	<i>radius prox.</i>						1			
B (6–12)	<i>scapula</i>							1		
	<i>humerus dist.</i>						2	1		2
	<i>coxa (acetabulum)</i>	1								
C (12–18)	<i>Ph1</i>	1			1		1	2		1
	<i>Ph2</i>				3	1		2		
D (18–30)	<i>tibia dist.</i>	1						1		1
	<i>metacarpal dist.</i>									
	<i>metatarsal dist.</i>									
	<i>metapodial dist.</i>				1			2		
E (30–48)	<i>radius dist.</i>	1		1	1					
	<i>ulna prox.</i>							1		
	<i>ulna dist.</i>									
	<i>femur prox.</i>							4		
	<i>femur dist.</i>							1		
	<i>tibia prox.</i>							3		
	<i>calcaneus</i>				1		1	1		
F (> 48)	<i>humerus prox.</i>							2		

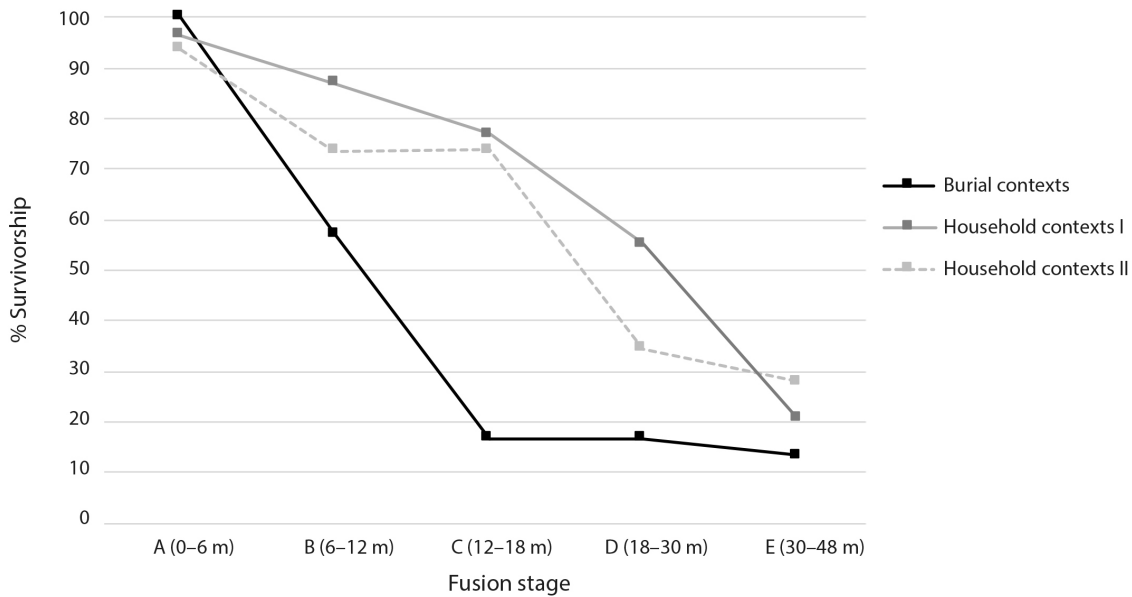


Fig. 1 Survivorship curves for sheep/ goat based on epiphyseal fusion data. Household contexts I = data based on faunal analyses by von den Driesch *et al.* (2004); household contexts II = data based on faunal analyses by Prust and Pöllath (forthcoming). (Graph: A. Prust)

Table 4 Tooth wear stages for sheep (*Ovis aries*), goat (*Capra hircus*), and sheep/ goat (*Ovis aries/ Capra hircus*) in burial contexts; tooth wear stages according to Payne (1973), age given in month.

Taxon	0-2 m	2-6 m	6-12 m	12-24 m	24-48 m	> 48 m
<i>Ovis aries</i>					1	2
<i>Capra hircus</i>					1	1
<i>Ovis aries/ Capra hircus</i>			5	5		

in broadly similar data, even if only a small sample size (n=15) was available: Most of the animals were slaughtered as juveniles/ subadults between six and 24 months, while only a few reached an age of two years and beyond (Table 4).

Since sheep and goats were exploited differently in Late PPNB sites (Makarewicz 2013), more information on sex ratios is needed to identify specific herding strategies. Unfortunately, the number of specimens and the poor state of preservation do not provide enough representative data needed to create meaningful, species-specific survivorship curves. Nevertheless, the age distribution points to a harvesting strategy for meat, especially tender meat (Vigne and Helmer 2007).

Comparing the faunal remains from burial and household contexts, differences can be seen.

Previous age-at-death-analyses of the caprine remains excavated in Area C, in 1997 (Ba'ja

settlement, respectively household contexts) resulted in an average slaughter age of less than 2.5 years, with only few animals slaughtered in their first year of life (von den Driesch *et al.* 2004: 281). Based on the state of epiphyseal fusion, most of the animals were slaughtered between 18 and 30 months, with some individuals reaching an age of four years and beyond (Fig. 1). This corresponds to the results of the current study on faunal remains from household contexts (Prust and Pöllath forthcoming).

To conclude that the slaughter of very young animals, especially between the ages of 6-18 months, is related to funeral rites or ritual feasts, would be initially hypothetical.

The category “domestic or wild mammals” was created for small ruminants that could not be precisely identified, due to the poor state of preservation. It includes seven specimens of *Capra* sp. and 33 specimens of *Ovis/ Capra/ Gazella*. While Nubian ibex (*Capra ibex nubiana*) and gazelle (*Gazella cf. gazella*,

*Gazella* sp.) are attested on the site (von den Driesch *et al.* 2004: 272, 273; Prust and Pöllath forthcoming), the presence of wild goats (*Capra aegagrus*) can be expected.

Remains of wild mammals are rare and have only been found as single bones in various loci (Table 2). Noticeable accumulation in certain features cannot be seen.

Gazelle bones were found in Room CR34, in the collective Burial CG12 (Loc. C10:170A; rib and cranium of probably one individual) and in Room CR17, on a plaster floor, immediately beneath the collective Burial CG11 (Loc. CR17:136; *os coxa* of a female individual). According to the shape of horn cores found in the household context Loc. BNR23:111, the presence of mountain gazelle (*Gazella gazella*) is expected (Prust and Pöllath forthcoming). Gazelle remains have been excavated in various areas on site, but the overall small number of finds suggests that hunting for wild game was of minor importance in the local subsistence economy – a phenomenon also seen at other Late PPNB sites resulting from an increase in sheep and goat herding (Horwitz *et al.* 1999; Makarewicz 2013).

The situation is different with the hunt for fur-bearing animals, which is already well documented for Ba`ja (von den Driesch *et al.* 2004: 274, 285, 286). Among other species, fox (*Vulpes* sp.), Cape hare (*Lepus capensis*) and stone marten (*Martes foina*) are regularly found in the bone collections – albeit in small numbers (as in the burial contexts). A specific use within ritual activities is not evident.

Birds did not play a significant role – neither in burial contexts nor in household contexts. Overall, the taxonomic distribution resembles that of household contexts (Fig. 2). Domestic sheep and goats are the most common – and economically most important – species, while gazelles were only an additional source of meat, and small game was possibly hunted for the purpose of fur processing.

Anthropogenic modifications, including traces caused during slaughter, dissection, food processing and bone crafting, are rare. Accordingly, only eight specimens (0.6%) were documented (Table 5).

Of note is a fragmented radius of *Ovis aries/ Capra hircus* with a small, powdery reddish discolouration. It was found in a layer with human bones and “typical burial items such as red pigments...” (Gebel *et al.* 2020: 23) in Room CR17, Loc. CR17:136.

Traces of fire were observed on 17 specimens (1.3% of the total material), most frequently on finds from Room CR17 (Table 6). Since not all finds in a collection show these traces but only individual specimens, it can be assumed that the material was exposed to fire before the deposition. A conscious ritual activity cannot be proven here either.

### Animals in Ritual Activities?

The enormous symbolic importance ascribed to animals in the Pre-Pottery Neolithic (*e.g.*, Verhoeven 2002a, 2002b; Helmer *et al.* 2004) is evident at numerous sites from this period. The most frequently documented are representations of animals, so, for example, the animal figurines from ‘Ain Ghazal (McAdam 1997; Rollefson 2000), Nevalı Çori (Hauptmann 1993, 1999) or the intentionally “killed” figurines from Çatalhöyük (Mellaart 1967; Russel and Meece 2006). The T-shaped pillars with animal representations from Göbekli Tepe (Peters and Schmidt 2004), the wall paintings from Çatalhöyük (Russel and Meece 2006) and the intentional arrangement of bones to depict animals as documented from Kfar Hahoreh (Horwitz and Goring-Morris 2004: 169-172), are rare to unique.

As for Ba`ja, no representations of animals have been found so far, but the placement of animals and animal remains in special deposits (pits, fills, middens, installations *etc.*) and contexts (in burial and domestic contexts or in architecture) may also reveal the local importance of symbolism and ritual (Gebel 2002).

In the context of burials – and the ritual treatment of decedents in a broader sense –, animals have been used in different ways (Russel 2012: 64-69). The most common is the arrangement and placement of complete animals/ almost complete animals and symbolic elements, *e.g.*, skulls, horn cores, antlers, astragali, tusks. Such a deposition is known, for example, from the “PPNB mortuary cult centre” in Kfar Hahoreh (Horwitz and Goring-Morris 2004: 176). A

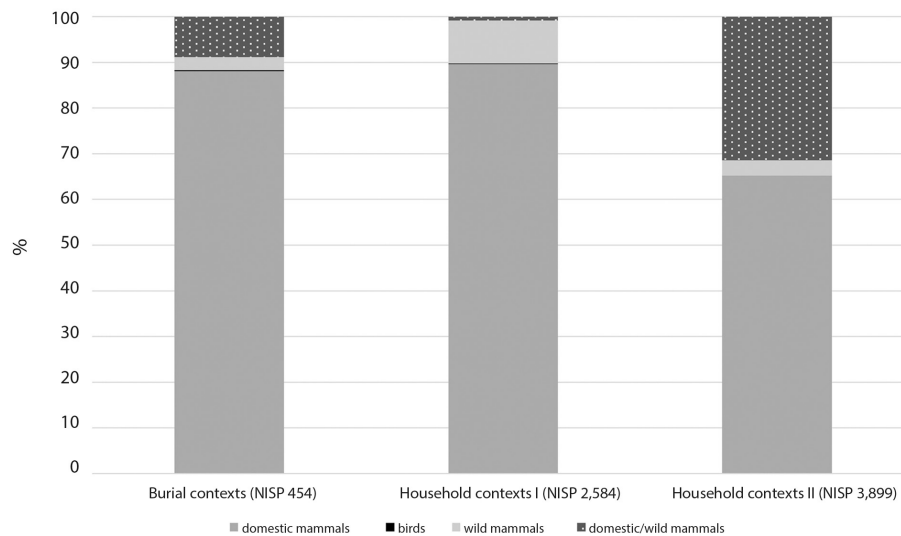


Fig. 2 Summarised distribution of mammals and birds in burial and household contexts. Household contexts I = data based on faunal analyses by von den Driesch *et al.* 2004; household contexts II = data based on faunal analyses by Prust and Pöllath forthcoming). (Graph: A. Prust)

Table 5 Ba'ja, burial contexts. Modifications: marks of butchery/ dissection/ food processing.

Locus	Room	Taxon	Skeletal Element	NISP	Modification	Comment
CR6:19	CR5/6	<i>Ovis aries/ Capra hircus</i>	<i>cranium, os occipital</i>	1	cut mark	5 fine, parallel cut marks
CR17:136	CR17	<i>Gazella cf. gazella</i>	<i>coxa (acetabulum/ os pubis)</i>	1	cut mark	several deep, short cut marks, <i>corpus ossis pubis</i>
CR17:115	CR17	<i>Ovis aries/ Capra hircus</i>	<i>vertebra thoracica</i>	1	cut mark	deep, short cut marks near <i>crista ventralis</i>
CR17:127	CR17	<i>Ovis aries/ Capra hircus</i>	<i>vertebra cervicalis</i>	1	split	split in the middle longitudinal
C10:170	CR34	<i>Ovis aries/ Capra hircus</i>	<i>mandibula</i>	1	chop mark	chop mark near <i>diastema</i>
C10:170	CR34	<i>Ovis aries/ Capra hircus</i>	<i>atlas</i>	1	cut mark	2 deep, short cut marks, area of <i>fovea art. cran.</i>
C10:170	CR34	<i>Ovis aries/ Capra hircus</i>	<i>costa</i>	1	cut mark	4 fine, parallel cut marks
DR19:110	DR19	<i>Capra sp.</i>	<i>calcaneus</i>	1	cut mark	several fine, long cut marks next to one another, <i>corpus-area medial</i>
<b>Total</b>				<b>8</b>		

“complete, but headless skeleton of a mountain gazelle (*Gazella gazella*)” was found next to a “lime-plaster modelled human skull” (Horwitz and Goring-Morris 2004: 174) and other human bones. Moreover, a human burial above a “Bos-pit” with bones of at least eight headless aurochs was uncovered and interpreted as leftover from a mortuary feast (Horwitz and Goring-Morris 2004: 172, 173; Goring-Morris

and Horwitz 2007). The special deposit of a pregnant cow and further characteristic animal portions in the proximity to a human burial in Basta is also associated with a former ritual feast (Becker 2002). Human skeletons with skulls and horn cores of cattle/ aurochs are documented from the PPNB Skull-Building at Çayönü (Verhoeven 2002a: 239) and from Çatalhöyük (Czerniak and Marciniak 2005;

Table 6 Ba`ja, burial contexts. Modifications: traces of fire.

Locus	Room	Taxon	Skeletal Element	NSP	Effects of Fire
CR6:19	CR6	<i>Ovis aries/ Capra hircus</i>	<i>cranium os occipital</i>	1	completely carbonised
CR6:19	CR6	<i>Ovis aries/ Capra hircus</i>	<i>dens inferior</i>	1	completely carbonised
CR6:19	CR6	<i>Ovis aries/ Capra hircus</i>	<i>tibia</i>	1	burnt
CR17:115	CR17	<i>Ovis aries/ Capra hircus</i>	<i>scapula</i>	2	partially carbonised
CR17:127	CR17	Mammalia indet.	indet.	5	completely carbonised, partially calcinated
CR17:127	CR17	Mammalia indet.	indet.	2	partially carbonised
CR17:130	CR17	<i>Ovis aries/ Capra hircus</i>	<i>phalanx 1 ant.</i>	1	partially carbonised
CR17:135	CR17	Medium-sized mammal	indet.	1	completely carbonised
C10:170	CR34	<i>Ovis aries/ Capra hircus</i>	<i>ulna</i>	1	partially burnt
C10:170	CR34	<i>Ovis aries/ Capra hircus</i>	<i>costa</i>	1	partially burnt
TU7:6		Medium-sized mammal	long bone	1	completely calcinated
<b>Total</b>				<b>17</b>	

Russel *et al.* 2009: 107). Moreover, there are reports from Çatalhöyük about animal remains (boar mandibles and bird bones) that were given as grave goods (Russel *et al.* 2009: 106, 107).

Apart from burial contexts, special deposits of animals at PPN sites are often related to architecture. Mainly skulls, bucrania, horn cores and antlers were fixed on walls and benches or were placed on the floors. Such installations for instance, are known from Çatalhöyük (Russel and Meece 2006: 218; Russel *et al.* 2009), Çayönü (Özdoğan 1999), Körtik Tepe (Özkaya and Coşkun 2011), Hallan Çemi (Rosenberg and Redding 2000), ‘Abr 3 (Yartah 2013), and Jerf el Ahmar (Stordeur 2015).

Other building deposits include foundation offerings and hidden deposits (in- and between walls, in- and sub-floor deposits *etc.*) such as found in Ba`ja<sup>4</sup> and Basta (Gebel 2002), and also

<sup>4</sup> The „between-wall deposit” of animal bones in Loc. 15, Area B22 is “giving the impression of resulting from a single event” (Gebel 2002: 127). Another “in-floor deposit” includes few human bones and “a small animal bone arrangement [...] laid out horizontally in a not yet understood pattern or design” (Gebel 2002: 127). The faunal analyses of both collections have not yet been completed.

commemorative deposits found, for example, in Çatalhöyük (Russel *et al.* 2009). The latter often comprises the remains of feasting events evidenced by a conspicuous number of skeletal elements rich in meat, and often with traces of consumption.

The investigated faunal remains from burial contexts in Ba`ja initially show no evidence of ritual activities. Special deposits in the form of complete animals, animal parts and articulated bones, skeletal elements with symbolic character, and characteristic leftovers of feasts, have not been observed so far. There is no pattern in species distribution nor in the frequency of skeletal elements. The collections from burial contexts rather resemble those from the household contexts – even though cattle are completely missing in the former. This may seem surprising since cattle played an important symbolic role in the PPNB (Russel *et al.* 2009: 118), probably due to their limited local occurrence, and certain ideas about the strength and characteristics of the animals, especially the aurochs. The absence of cattle may ultimately have various causes. Above all, it is the site’s topography high up in the mountains, but it does not necessarily be due to any ritual or ideological ideas.



Compared to the animal remains from household contexts, only the age profiles for sheep and goats are striking, with a remarkably high number of younger animals found in burial contexts. It remains questionable whether this is due to the sample size or related to the burials. The faunal assemblages associated to subadult and adult burials show no noticeable differences or patterns; no characteristic features indicating elaborate feasts were observed. Burnt bones occurred only occasionally, and always as individual finds within the collections. Fire events related to burials, possible ceremonies or deliberate destruction activities could not be attested according to the animal bones (*cf.* Benz *et al.* this volume).

Finally, the animal remains of the investigated burials in the context of the *Household*

*and Death Project* do not reveal any indication of a special importance or role of animals in burial rituals.

The selection is not specific, nor is there any indication of large-scale feasts. Since the frequency of taxa and elements, and as the state of preservation is similar to those finds from household contexts, the material most likely originated from site fills and accumulations related to domestic activities. However, the early age-at-death observed in some caprine remains associated with burials, is striking and deserves further investigation.

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## Appendix 1

Table 7.1 Ba`ja, burial contexts, bone measurements.  
Ovicapripines: o = *Ovis aries*; c = *Capra hircus*;  
no abbr. = *Ovis/ Capra*. Further abbreviations  
acc. to von den Driesch (1976).

<b>scapula</b>	<b>SLC</b>			
Loc. CR6:19	20.7			
<b>humerus</b>	<b>BT</b>	<b>Bd</b>		
Loc. CR17:136 c	31.5	32.2		
Loc. CR17:135 c	30.2	31.0		
<b>MC</b>	<b>Bp</b>			
Loc. CR6:19	21.7			
<b>radius</b>	<b>Bp</b>	<b>BFp</b>	<b>Bd</b>	
Loc. C10:170A c	27.8	26.7		
Loc. C17:115 o			29.7	
<b>calcaneus</b>	<b>GL</b>	<b>GB</b>		
Loc. C10:170A c	66.7	25.5		
<b>talus</b>	<b>GLI</b>	<b>GLm</b>	<b>DI</b>	<b>Bd</b>
Loc. C10:170A o	30.9	30.4	18.0	20.9
Loc. CR6:49 c	26.4	24.3	13.9	17.4
Loc. CR6:19 c	26.3	24.6	14.2	17.3
<b>Ph1</b>	<b>Bp</b>			
Loc. CR17:115 c	15.4			
<b>Ph2</b>	<b>Bp</b>	<b>SD</b>		
Loc. CR6:19 c	14.6	9.7		
<b>Ph3</b>	<b>DLS</b>	<b>Ld</b>	<b>MBS</b>	
Loc. CR6:19	27.9	20.6	4.3	
Loc. CR6:19	27.3	20.0	4.0	
Loc. CR6:19			6.9	
Loc. CR6:19			6.0	
Loc. CR6:19			4.4	

Table 7.2 Ba`ja, burial contexts, bone measurements.  
(Blanford's) Fox, *Vulpes cf. cana*.

<b>MC IV</b>	<b>GL</b>	<b>Bp</b>	<b>SD</b>	<b>Bd</b>
Loc. CR17:132	38.3	4.5	3.3	4.7
<b>Ph1</b>				
Loc. CR17:115	17.6	5.1	3.1	4.2

Table 7.3 Ba`ja, burial contexts, bone measurements.  
Cape hare, *Lepus capensis*.

<b>MT III</b>	<b>GL</b>	<b>Bp</b>	<b>SD</b>	<b>Bd</b>
Loc. CR5:48	40.0	4.2	3.6	4.6