Building memories: commemorative deposits at Çatalhöyük

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ABSTRACT

Neolithic Çatalhöyük, Turkey, is well known for its incorporation of animal parts into architecture: bucrania, horns in benches, etc. We examine the less visible placement of items in pits or built into remodeling inside houses to commemorate particular events. Animal parts feature prominently in these deposits, typically found under platforms on the south and west of the house, while human burials are usually in the north and east. We examine the range of contents of these commemorative deposits in relation to other lines of evidence regarding the consumption and meanings of animals at Çatalhöyük.

KEY WORDS Zooarchaeology, ritual, Neolithic, Anatolia, Catalhöyük.

RÉSUMÉ

Construire les mémoires : dépôts commémoratifs à Çatalhöyük

Le gisement néolithique de Çatalhöyük, Turquie, est bien connu pour son incorporation de fractions d'animaux dans l'architecture : bucranes, cornes dans les bancs, etc. Nous examinerons les emplacements les moins visibles de ces artefacts, c'est-à-dire dans des fosses ou lorsqu'ils sont incorporés dans l'architecture des maisons pour commémorer des événements particuliers.

MOTS CLÉS Archéozoologie, rituel, Néolithique, Anatolie, Çatalhöyük. Les animaux occupent une place importante dans ces dépôts. Ils sont généralement retrouvés sous des plates-formes dans les zones sud et ouest de la maison, tandis que les lieux de sépultures humaines sont le plus souvent dans les zones nord et est. Nous étudierons l'ensemble du contenu de ces dépôts commémoratifs par rapport à d'autres sources de données concernant la consommation et la place occupée par les animaux à Catalhöyük.

INTRODUCTION

The Neolithic site of Çatalhöyük in central Anatolia (Fig. 1) is renowned, among other things, for its use of animal parts, especially cattle horns, as architectural elements set into benches, pillars, and plaster heads mounted on walls. These installations, however, form only part of the relationship between houses and animal remains. Here we focus on a less visible way of incorporating animal parts into architecture: sub-floor deposits. Many buildings

contain collections of objects in small pits through the floors or in the packing of rebuilt floors and platforms. The contents of these collections are variable, but they often include animal bones. We argue that these collections, which we term "commemorative deposits", represent ceremonies connected to the buildings.

Çatalhöyük, ca. 7400-6200 cal BC (Cessford 2001), is a large tell (13 hectares). The settlement consisted of closely-packed mud brick houses, with no apparent public buildings or large public spaces. It

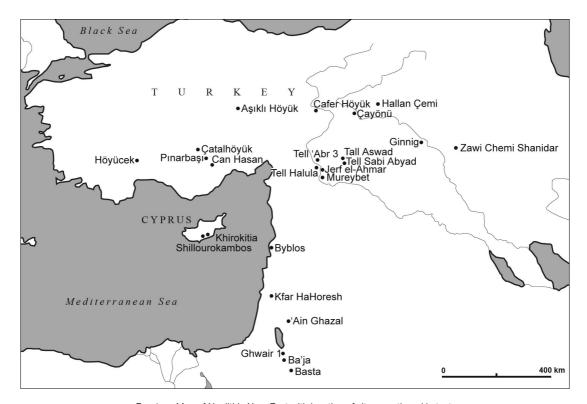


Fig. 1. — Map of Neolithic Near East with location of sites mentioned in text.

was first excavated by James Mellaart in the 1960s (Mellaart 1962, 1963, 1964, 1966a, 1967), and since 1993, Ian Hodder has directed renewed work at the site (Hodder 1996, Hodder & Matthews 1998, Hodder 1999; 2000; 2005). Cereals and legumes were cultivated, while wild plants were also collected (Fairbairn, Near & Martinoli 2005).

Several areas have been excavated by the new project, covering the entire range of occupation levels at the site (Fig. 2). The temporal coverage is uneven, however, with the earliest and latest periods poorly represented. Mellaart's system of building horizons, Levels I-XII (XII being earliest), is still used for orientation. In excavation areas not directly linked to Mellaart's, level assignments are approximate. In addition, five pre-XII levels have been defined, but the only pre-XII area so far excavated appears to be on the edge of the settlement and contains no buildings. Therefore these earliest levels cannot be evaluated in terms of sub-floor deposits. In fact, the earliest buildings excavated by the current project are from Level X.

Like the commemorative deposits, human burials also occur under the floors of houses. They are buried either in pits cut through the house floor (resulting from events during the use life of the house), or less often in the fill built up to form the foundation of a new house (resulting from events before the floors were laid). While there are some exceptions, in general Çatalhöyük burials are found on the north and east sides of the houses, especially those buried during the occupation of the house. The commemorative deposits, on the other hand, tend to be found on the south and west, especially in the earlier periods.

ANIMALS AT ÇATALHÖYÜK

Studies of the animal bone from Mellaart's excavations were hindered by the lack of screening and systematic collection, with the result that cattle were seriously over-represented at ca. 70% of the faunal remains (Perkins 1969, Ducos 1988). Careful recovery in the new project has shown that in fact sheep and goat (mostly sheep) form about 70% of the animal remains in the earlier levels, over 80% from Level VI on. Cattle account for ca. 20% of the earlier assemblages, and ca. 10% or less from

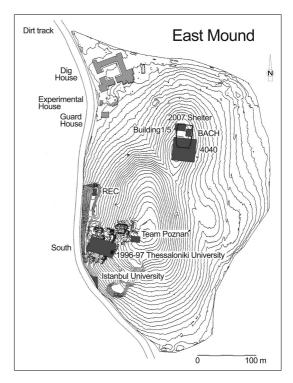


Fig. 2. — Plan of Çatalhöyük, East Mound, showing excavation areas.

Level VI. Equids, boar, red deer, and dogs play minor roles (although in some levels equids are nearly as frequent as cattle), with small amounts of fallow deer, roe deer, hare, and wild carnivores. Birds, fish, reptiles and amphibians occur at low levels. Full analysis (including assessments of domestication status) has so far been carried out only for material from roughly the first two-thirds of the sequence, through Level VI (Russell & Martin 2005). We are focusing on the later levels in the current phase of the project but excavation and analysis are not yet complete, so as yet we can only speak to the earlier levels in terms of domestication. The dogs are clearly morphologically domestic, as are the vast majority of the sheep and goat (there are occasional remains of sheep and goat in the wild size range, as well as a few wolf bones). Mortality profiles also support herding of sheep and goat. Perkins (1969) made a preliminary argument based on a small sample for cattle domestication by Level VI

at Çatalhöyük, while Ducos (1988) suggested the cattle were morphologically wild but loosely herded (in a state of proto-domestication). Our analysis has confirmed Ducos' and Grigson's (1989) observations that the Çatalhöyük cattle fall within the wild size range. Moreover, mortality profiles and other evidence suggest a hunted rather than herded assemblage (Russell & Martin 2005, Russell, Martin & Buitenhuis 2005). Sample sizes are small for the other taxa, but all appear to be morphologically wild, with no evidence to support herding.

While the numbers of cattle at Çatalhöyük are smaller than initially thought, and stable isotope analysis indicates that they played a very minor role in human diet (Richards et al. 2003, Richards & Pearson 2005), their symbolic importance is undiminished. Cattle are over-represented in feasting and other special deposits (Russell & Meece 2006). Everyday meat consumption was dominated by sheep/goat, with the remains heavily processed to extract fat (marrow and bone grease) as well as meat. Feasting deposits consist of concentrations of less heavily processed bones (broken for marrow, but not processed for bone grease) with higher proportions of the larger animals, especially cattle. Moreover, while the sex ratio of cattle in deposits apparently resulting mainly from daily consumption is even, males form about two-thirds of the cattle in feasting and special deposits (Russell & Martin 2005: 52), suggesting a specific selection of bulls for ceremonial consumption. As observed elsewhere (e.g., Altuna 1983, Rice & Paterson 1985, Miller & Burger 1995), symbolic significance does not equate to dietary importance.

SPECIAL DEPOSITS OF ANIMAL BONES AT ÇATALHÖYÜK

We define commemorative deposits as collections of items buried in sub-floor pits or incorporated in remodeled features during the occupation of the house. As will be evident, these deposits are variable in their content and seem to select a few items from an event to bury in the house. It is this aspect that leads us to term them "commemorative". While our focus here is on the commemorative deposits, understanding them requires their contextualiza-

tion within the larger framework of animal bone deposition at the site, and particularly among other kinds of special deposits of animal remains (those that differ from the discard of waste from daily meals that forms the bulk of the faunal assemblage, found mainly in outdoor midden areas). These other types of special deposits can be roughly organized according to their chronological and spatial relationships with buildings.

Building deposits

Building deposits occur before or during construction, and are placed in a building's foundation fill, below walls in foundation trenches, built invisibly into walls, or below the floor. They may contain feasting remains and often have scapulae and horns, mainly of cattle but sometimes from other taxa.

Installations

Installations, like commemorative deposits, are temporally associated with the occupation of a house. However, whereas commemorative deposits are invisible to the occupants, concealed under floors, installations are deliberately placed so as to be visible within the house during occupation. Installations are probably the best-known type of special faunal deposit at Çatalhöyük, and include horns, mandibles, and skulls mounted on walls, benches, and pillars. Cattle horns predominate, although sheep horns and skulls and mandibles of boar and carnivores also occur, as well as a wolf ulna in one case (Russell & Meece 2006).

Ritual trash

Ritual trash (following Hill 2000, who uses the term "ceremonial trash"), like commemorative deposits, derives from the remains of ceremonies, including feasts. But while commemorative deposits contain small selections from these remains buried inside houses, ritual trash is deposited outside, sometimes in larger quantities. Ritual trash appears as pockets in midden or fill deposits, often at the interface of layers or lying against the outer wall of a building; or in between-wall deposits.

Grave goods

Grave goods, of course, are placed in burials, which usually occur during the occupation of the house

although some seem to be building deposits. Animal parts are not very common as grave goods, but do occasionally occur in both the original and the new project. Mellaart (1966b) reports a woman buried with three boar mandibles in Building VII.14. Two babies were buried in Building 1 with bird parts: one with a duck radius by the skull, the other with tracheal rings of a duck-size bird around fingers on each hand (Russell & McGowan 2005). Two Level 0 burials in the TP area included cattle bucrania (horns with connecting skull), in one case placed at the top of the human skull as though it were a hat (Czerniak & Marciniak 2005). This is a departure from earlier levels, where such bucrania appear only as part of installations, or in abandonment deposits where they seem to be from dismantled installations.

Abandonment deposits

Abandonment deposits are placed in houses after occupation is completed. They include feasting remains, dismantled installations, cattle scapulae, and dumps of raw material stores that had probably been kept in the house (Russell *et al.* 2008).

Post retrieval pit deposits

Post retrieval pit deposits are a special type of abandonment deposit. As part of the abandonment process, the wooden posts are typically salvaged from the houses for reuse, leaving the pits dug to remove them around the edges of the walls. These pits often have special materials in them. In some cases they are simply catching part of larger abandonment deposits, but some seem to be discrete deposits (a group of bone points in Building 1, a dog head in Building 2, a cattle maxilla in Building 3, and possibly a human vertebra in Building 45), perhaps compensating for the removal of the post.

In practice, it can be tricky to assign special deposits to one of these types. This fuzziness of categories likely extends to their emic perception as well as their archaeological definition. For example, some building deposits may be essentially (or simultaneously) commemorative deposits associated with ceremonies connected to the construction of the house. If houses are rebuilt soon after abandonment, the distinction between abandonment and building deposits may be slight. Ritual trash may

differ from commemorative deposits, and post retrieval pit deposits from abandonment deposits, mainly in their placement. However, commemorative deposits are more highly selected than most of the other types, and this material distinctiveness might suggest that commemorative deposits result from a discrete set of ritual behaviors.

Finally, while we have concentrated on the animal remains that feature prominently in commemorative deposits, we should note that other materials, particularly stone, are present in some of them. They also appear in separate deposits such as the obsidian caches that also occur in both small pits in floors and in upper fill below floors. Obsidian caches might then be part of the same phenomenon as the faunal deposits, but this relationship is not clear. As the term "cache" indicates, they are usually regarded as secure stores of raw material (Carter 2007). Their contents support this interpretation, typically consisting of large blanks. Small empty pits in house floors have been seen as retrieved caches; however, not all caches are recovered, and some are placed in sub-floor fill with no sign of their location on the floor above. Hence at least some may not be meant to be recovered, and should be seen as offerings rather than caches. Obsidian, of course, retains value as a raw material after long burial, whereas bones and horns do not. Perhaps this explains the apparently mixed functions of obsidian deposits, and that, unlike the commemorative deposits including animal bones, they do occur in houses with no burials, such as Building 2. The two pits reported by Mellaart (1967) in Levels IV and VI containing collections of animal figurines, some of them stabbed, may also be a related phenomenon.

COMMEMORATIVE DEPOSITS

We discuss here a group of deposits that include small collections of material probably derived from ceremonies, buried below house floors during occupation, separate from burials. As we have just outlined, at Çatalhöyük special deposits including animal bones are found in many forms and contexts, most of them somehow linked to the houses. The commemorative deposits thus share some characteristics with other types of animal bone deposits, but they are nonetheless sufficiently distinctive that we consider them a meaningful group. We suggest that these deposits incorporated the memory of ceremonial events into the physical fabric of the house, perhaps conferring protection or blessings on the house and its inhabitants.

There are hints that Mellaart may have encountered such commemorative deposits as well. For instance, he refers to bird bones found in a small pit in the floor of building A.III.1 (Mellaart 1962: 62). However, they are insufficiently documented to study systematically. Therefore, we base our discussion here on the results from the current project. As of the 2007 season, members of the Çatalhöyük Research Project have recorded twenty such deposits. We will first briefly describe these deposits, from earliest to latest, before turning to their interpretation.

Unit 4993 is a small pit in the southeast corner of Space 178 in Building 23 (South area, Level X), near ovens and other small pits with obsidian caches (Fig. 3). The pit contained a large segment of large mammal rib, and two complete cattle scapulae (from two different animals).

Unit 4401 is a small pit in the floor of the first occupation phase of Space 163, Building 6 (South area, Level VIII), near the center of the south wall (Fig. 4). The pit held a cache of objects, perhaps in a bag, including flint, obsidian, and ground stone fragments, shell, a drilled cattle incisor, and a badger mandible.

Unit 4183 is a make-up deposit for platform F. 424 on the north end of Space 163, Building 6 (Fig. 5). It contained a large piece of red deer antler, a goat horn core, a complete boar scapula, and large pieces of large mammal ribs.

Units 1417, 1427, and 1429 appear to include a single cluster of pot sherds, stones, and a partial cattle horn core with attached skull. These are placed in the fill of platform F. 32 in the southwest corner of Space 71, the main room of Building 1 in the North area, ca. Level VI (Fig. 6).

Unit 1430 is a separate deposit in a small pit in the same platform (Fig. 6), containing another pot sherd cluster and large pieces of cattle bone: a distal metacarpal and a distal tibia with articulated malleolus. Unit 6648 is a layer of floor and packing on the west end of Space 158, a narrow side room on

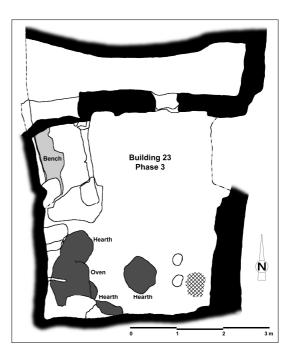


Fig. 3. — Placement of commemorative deposit 4493 (hatched) in Building 23.

the west side of Building 3 in the BACH area, ca. Level VI (Fig. 7). The frontlet (both horns with connecting skull) of a young sheep was concealed under the plaster at the border of the floor and the north wall.

Unit 8243 in Space 158 of Building 3 included two human ribs built into the lining of the fire pit for hearth F. 646 (Fig. 8). The ribs stand out from the rest of the bone in the unit, which is typical of construction material. There is no nearby burial, so they appear to have been deliberately placed here. *Unit 8251* is a cluster of material in packing between floor layers below hearth F. 646 and near ovens and bins in Space 158 of Building 3 (Fig. 8). It included a sheep horn core, nine articulated sheep-size vertebrae with articulated rib heads, seeds, shell, worked stone, obsidian, and a flint polisher.

Unit 6233 in Space 86 of Building 3 has two cattle scapulae between two floor layers (Figs 8, 9). These lie below the floor with an abandonment deposit that included many cattle scapulae.

Unit 8505 is a small pit in a platform on the north side of Space 88, a small room on the south end of

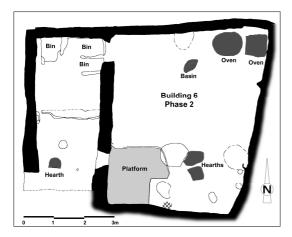


Fig. 4. — Placement of commemorative deposit 4401 (hatched) in Building 6.

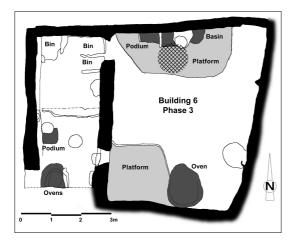


Fig. 5. — Placement of commemorative deposit 4183 (hatched) in Building 6.

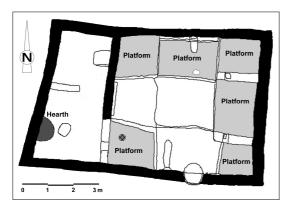


Fig. 6. — Placement of commemorative deposits 1417/1427/1429 and 1430 (hatched) in same platform in Building 1.

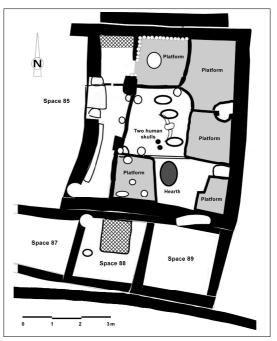


Fig. 7. — Placement of commemorative deposits 6648 (hatched, on the northwest), and 8505 and 6250 (hatched, in same platform on the south) in Building 3.

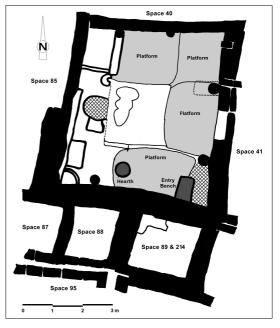


Fig. 8. — Placement of commemorative deposits 8243 and 8251 (hatched, in hearth Feature 646 on the west), and 6233 (hatched, on the southeast) in Building 3.



Fig. 9. — Commemorative deposit 6233, cattle scapulae placed between floor layers in Building 3; photograph courtesy of Mirjana Stevanović.

Building 3 (Fig. 7). It contained a necklace of marine shells with a large stone bead; the front end of a set of female wild boar mandibles (showing evidence of roasting); three sets of articulated sheep vertebrae, the thoracic vertebrae with articulated rib heads, probably all from the same animal (showing signs of roasting and carving marks); a sheep/goat hyoid (from a younger animal than the spine segments), the lower beak of a spoonbill, and the wing of a little bittern (Fig. 10).

Unit 6250 is a cluster in a later rebuilding of the same platform as 8505, containing a piece of worked antler, a bone bead preform, an obsidian tool, and bits of ochre (Fig. 7).

Unit 14009 is a cluster with a circular shape that may have been in a bag, placed under a bench built on top of a platform on the east side of Building 65

in the South area, Level VI (Figs 11, 12). It contained a bone point, a sheep calcaneus, a cattle incisor, some obsidian and many pebbles.

Unit 12879 contains the basal half of a wild sheep horn core with horn removal cuts (rare at Çatalhöyük) in the packing of a platform in Space 122, in the northwest corner of Building 56 in the South area, Level V (Fig. 13).

Unit 11691 is a cluster comprising a necklace of pierced snail shells placed on the floor under a blocking deposit that closes a niche on the west side of the north wall of the main room of Building 56 (Figs 13, 14).

Unit 12492 is a cluster in a layer of fill in the IST area (ca. Level V), containing a cattle foot whose two toes (three phalanges each) were removed from the hoof and separated, and laid next to each other



Fig. 10. — Commemorative deposit 8505, showing boar mandible, sheep/goat segments, and shell necklace; photograph by Jason Quinlan.

but facing in opposite directions (Figs 15, 16). The proximal ends of the first phalanges show signs of being gnawed by a dog, which may have partially disarticulated them, but it would be hard for a dog to achieve this placement. Whether it is intended as a commemorative deposit or simply results from child's play is an open question.

Unit 12459 has a chunk of fallow deer antler in a small pit in fill or packing in the IST area (Fig. 15). Since it is near the surface of the mound, the context is not clear. If it is beneath a floor, it would be a commemorative deposit; if outdoors, more properly seen as ritual trash. The chronological position is uncertain, but ca. Level V-IV.

Unit 10029 is a small pit in the northwest platform of Space 228, the main room of Building 45 in the 4040 area, ca. Level V-IV (Fig. 17). It contained

two articulated cattle ankles from individuals of differing sizes, probably a male and a female.

Unit 5469 is a basket containing an articulated cattle atlas and axis. It was excavated as part of a narrow strip for the footing of the shelter over the South area, so its associations are uncertain, but it is probably in the fill of Building 42, perhaps below the floor of the next building, and probably belongs to Level V. Unit 8004 is a cluster in the make-up of the southwest platform of Building 44 in the South area, Level IV (Figs 18, 19). Erosion and an animal burrow have obscured whether these lay in a pit or were built into the fill, and also the boundaries of the cluster. The cluster includes a mini-pot, at least one piece of ground stone, two crystals, a bone spatula, at least six sheep astragali (two of them slightly abraded), a sheep third phalanx, and a wolf paw.

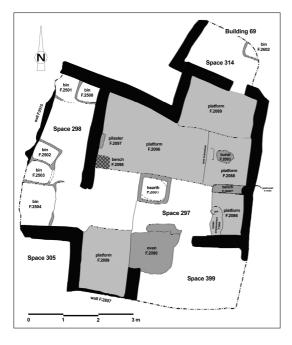


Fig. 11. — Placement of commemorative deposit 14009 (hatched) in Building 65.

Unit 7477 is a small pit in the southeast corner of Building 33 in the TP area, ca. Level II (Fig. 20). It lies below a small hearth and directly above an infant burial (but in a separate pit, and separated by several centimeters). It includes several large pieces of cattle and equid bones (from the meaty portions of the body, mostly the right side), horn cores from a wild sheep and a probably wild goat, and many small stones.

These sub-floor deposits occur in a majority of houses. While many houses have been partially excavated by the new project, only fifteen have been completely excavated through the earliest set of floors, so that all burials or commemorative deposits would be found. Of these fifteen houses, eight have commemorative deposits (Buildings 1, 3, 6, 23, 33, 44, 56, and 65). All of these buildings also contain human burials. Six of the buildings (2, 34, 51, 61, 62, and 72) that lack commemorative deposits also lack burials (Table 1). Additionally, Buildings 42 and 45, while not completely excavated, each have both burials and a commemorative deposit.



Fig. 12. - Commemorative deposit 14009, circular cluster with pebbles and bone point; photograph by Roddy Regan.

Building	Area	Level	Commemorative Deposit(s)	Burials	
1	North	ca. VI	Χ	Х	
2	South	IX			
3	BACH	ca. VI	X	X	
6	South	VIII	X	X	
23	South	Χ	X	X	
33	TP	111-1	X	X	
34	TP	111-1			
44	South	IV	X	X	
51	4040	ca. VI			
56	South	V	Χ	X	
59	4040	VI	?	?	

II-I

Ш

۷I

ca. II

TABLE 1. — Commemorative deposits and burials in completely excavated houses.

Building 59 is an ambiguous case. It has no commemorative deposits that include animal bone, but there is a small pit on the southeast that held an obsidian projectile point and a single bead. While some sub-floor pits with obsidian blanks are reasonably interpreted as caches of raw material (Carter 2007), a finished artifact may rather be a commemorative deposit. Another small pit in the northwest platform of the main room held a cluster of small burnt stones. The only burial associated with this building, on the northwest, seems to have been placed in the foundation fill below it prior to the laying of the floors, and is perhaps best seen as a building deposit. Thus arguments could be made for counting this as a building with both a burial and commemorative deposits (without animal parts), or as one with neither. In general, though, there is a strong correlation between burials and sub-floor deposits including animal parts. These usually are in spatial opposition: burials on the north and east, commemorative deposits on the south and west. The contents of these deposits are clearly selected; they do not mirror the general faunal assemblage. Quantification of the bones in the special deposits is tricky: should an articulated set count as many items or one? Standardized measures such as diagnostic zones (Watson 1979), which we use for

TP

TP

South

TP

the general assemblage, are not applicable here where many of the remains, notably horn cores, do not include diagnostic zones. Therefore we approach the distribution of taxa and body parts in terms of ubiquity: we tally the occurrence of a taxon or body part in each of the deposits (Tables 2 and 3). Cattle occur in 50% of commemorative deposits, sheep/goat (mostly sheep) in 40% (Fig. 21). Other taxa appear much more sporadically. While this ubiquity measure cannot be compared directly with the proportions of taxa in the overall faunal assemblage based on diagnostic zones (see Animals at Çatalhöyük above), it is clear that cattle remains are disproportionately common in the commemorative deposits. This bias is in line with the general over-representation of cattle in feasting and special deposits (Russell & Martin 2005). Apart from some clearly domestic sheep and goats, the animals represented in the deposits are all wild. While dogs occur in other kinds of special deposits, to date they have not been found in commemorative deposits.

Χ

Χ

Horn cores and antlers are the most consistently represented body parts, occurring in eight of the twenty deposits (40%; see Figure 22). Scapulae, which are quite common in abandonment deposits on the floors of houses, and also known from

61

62

65

72

 ${\it TABLE~2.-Presence~of~Taxa~in~Commemorative~Deposits.}$

	Cattle	Boar	Deer	Equid	Sheep/Goat	Wolf	Badger	Bird	Mollusc	Human
4993	Х									
4401	Χ						Χ			
4183		Χ	Χ		X					
1417+	Χ									
1430	Χ									
6648					X					
8251					X					
8243										Χ
6233	Χ									
8505		Χ			X			Χ	Χ	
6250			Χ							
14009	Χ				X					
12879					X					
11691									Χ	
12492	Χ									
12459			Χ							
10029	Χ									
5469	Χ									
8004					Χ	Χ				
7477	Χ			Χ	X					

 ${\it TABLE~3.-Presence~of~Body~Parts~in~Commemorative~Deposits.}$

	Horn core/ Antler	la/ lible	_	nla		bra	(0	Meaty long bone			
	Horn Antle	Maxilla/ Mandible	Tooth	Scapula	Rib	Vertebra	Pelvis	Meat bone	Foot	Wing	Shell
4993				Х	Х						
4401		Х	X								
4183	X				X						
1417+	X										
1430									X		
6648	X										
8251	X				X	X					
8243					Χ						
6233				Χ							
8505		X			Χ	Χ				Χ	Χ
6250	X										
14009			X						X		
12879	X										
11691											Χ
12492									X		
12459	X										
10029									X		
5469						X					
8004									Χ		
7477	Χ	X		X			Х	X			

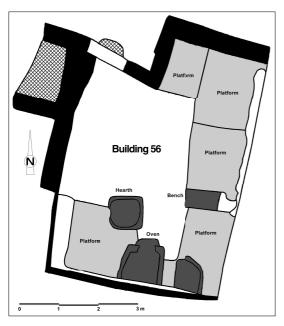


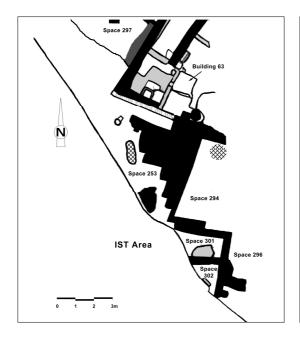
Fig. 13. — Placement of commemorative deposits 12879 (hatched, on the west) and 11691 (hatched, niche in north wall) in Building 56.

building and ritual trash deposits, occur in only three cases (15%). It is notable that the main meatbearing long bones appear only in the latest deposit, unit 7477. Ribs and vertebrae occur throughout the sequence and with some frequency. Often these are articulated segments of spines with the heads of the ribs attached. In the general faunal assemblage, these parts seem usually to have been left off-site, perhaps at the butchery area; the meat was presumably stripped from them and brought on-site (Russell & Martin 2005). Their presence in these deposits therefore suggests that they were deliberately brought to the site in order to place them under house floors. (Some articulated sets of vertebrae and ribs are also found in abandonment and building deposits.) Likewise, there is little evidence for roasting in the general faunal assemblage, so the roasted pieces in 8505, including a segment of vertebrae and ribs, may reflect an off-site practice.

With a sample of this size, we cannot speak with confidence of trends through time. Moreover, the



Fig. 14. — Commemorative deposit 11691, shell necklace under blocking of niche; photograph by Jason Quinlan.



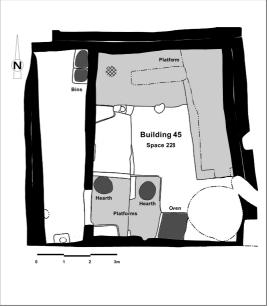
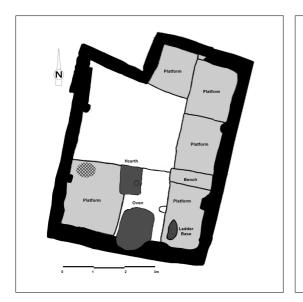


Fig. 15. — Placement of commemorative deposits 12492 (hatched, on the west) and 12459 (hatched, on the east) in the IST area.

Fig. 17. — Placement of commemorative deposit 10029 (hatched) in Building 45.



 $\label{eq:Fig. 16.} \textbf{Fig. 16.} - \textbf{Commemorative deposit 12492, split} \ \text{and rearranged cattle foot; photograph by Turhan \"{\textbf{U}} \textbf{I} \textbf{g} \ddot{\textbf{u}} \textbf{r}.$



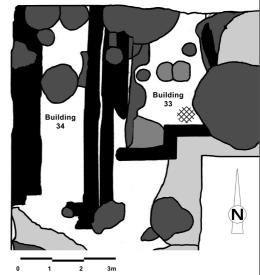


Fig. 18. — Placement of commemorative deposit 8004 (hatched) in Building 44.

Fig. 20. — Placement of commemorative deposit 7477 (hatched) in Building 33.



 $\textit{Fig. 19.} - \textit{Commemorative deposit 8004, showing part of wolf paw, sheep/goat astragali and third phalanx, and mini-pot; photograph by Guðmundur H. Jónsson.$

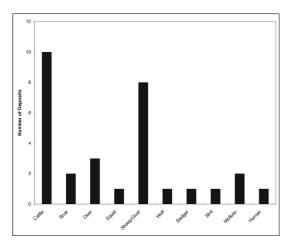


Fig. 21. — Ubiquity of taxa in commemorative deposits (number of deposits containing the taxon).

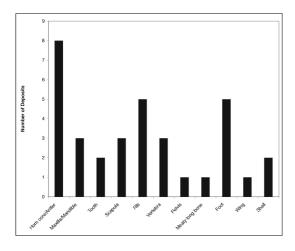


Fig. 22. — Ubiquity of body parts in commemorative deposits (number of deposits containing the part(s) from the body zone).

fifteen completely excavated houses are clustered in Levels VI and III-I. However, while there are nine commemorative deposits from Level VI (which has five of the fifteen completely excavated buildings), we have only a single commemorative deposit from Levels III-I, which also have five completed houses. It is also interesting that the earlier spatial separation between burials and commemorative deposits breaks down in these latest levels. They are still buried separately, but are superimposed.

SPECIAL DEPOSITS OF ANIMAL PARTS IN THE NEAR EASTERN NEOLITHIC

Catalhöyük is not alone in the central symbolic importance of animals; evidence of this is widespread in the Near Eastern Neolithic (e.g., Cauvin 1994, Verhoeven 2002, Helmer, Gourichon & Stordeur 2004). This is not the place for a comprehensive survey of special deposits, but we have assembled information on some relevant deposits from other sites in the region (see Table 4, in Appendix). Since our focus is on commemorative deposits, we have limited this to deposits associated with buildings, and excluding grave goods. This omits the notable deposits at Basta (Becker 2002) and Kfar HaHoresh (Horwitz & Goring-Morris 2004), for example. We have also confined our list to deposits including animal parts, although, just as at Çatalhöyük, special deposits of other materials including chipped stone caches and ground stone tools also occur at many sites; some of these are discussed by Gebel (2002) and Carter (2007). Even within these limits, the list is no doubt incomplete, both because we have surely missed some documented deposits, and because so many important sites lack final reports. Many of these deposits are referred to only in passing, and we suspect that many more have been excavated but not reported. We have attempted to classify the deposits into the same schema we have used for Çatalhöyük.

Given the incompleteness of the data, quantitative treatment is not justified, but we can make a few general observations. Cattle play a major role in these special deposits, although this is less true for the commemorative deposits. Given that cattle form a small part of the faunal assemblages at most of these sites, this suggests deliberate selection of cattle remains for special treatment. As at Çatalhöyük, horns, of cattle in particular but also other animals, are frequent components of special deposits. Scapulae, especially cattle scapulae, also feature prominently in abandonment and building deposits, but are absent from commemorative deposits, again mirroring Çatalhöyük. In many cases the cattle are described as morphologically wild, even though domestic cattle occur at some of these sites. In general, wild animal parts seem to play a large role in these deposits.

There are hints of temporal (and perhaps regional) trends among the commemorative deposits, raising the question whether these really result from comparable behaviors. In the PPNA, the only two commemorative deposits we were able to identify (from Mureybet and Tell 'Abr 3, both in northern Syria) are both collections of bones walled off in small areas within houses, rather than buried under the floor. Since they are concealed deposits apparently placed during occupation, we have included them in the commemorative category. Neither of these buildings appears to contain human burials. In the PPNB and roughly equivalent Cypriot Aceramic, all occur in buildings with human burials, as at Çatalhöyük. Some of these deposits are burials of intact animals (dog, cat, sheep/goat) rather than animal parts (although these often occur as well), so it is unclear whether these are animals buried like people because they hold special status, or sacrificial offerings.

In the Pottery Neolithic we find what may be portable commemorative deposits: bones encased in clay or plaster at Tell Sabi Abyad and Pınarbaşı. Although we have not found such objects at Çatalhöyük (which is contemporary with the part of nearby Pınarbaşı that yielded these objects), they could be seen as reflecting a more general process noted in the later levels of Çatalhöyük. Motifs that had previously been displayed on a large scale as part of architecture (bucrania, animal reliefs, geometric paintings) move onto small, portable objects such as pots and stamp seals (e.g., Türkcan 2007), perhaps exemplifying a shift from the house to the individual as the center of identity (Hodder 2006: 167-168). These bones may have held power that needed to be contained; earlier they would have been buried in houses, but now the "house" (in the form of construction material) comes with them. However, we should note that bones individually covered in clay occur in the PPNA deposit at Tell 'Abr 3, so this may not be entirely a Pottery Neolithic invention.

THE ETHNOGRAPHY OF RITUAL DEPOSITION OF ANIMAL PARTS

The ethnographic literature on special treatment of animal remains is too large to survey here in any

comprehensive manner. We simply note some of the reasons that recent people have given significance to animal parts, and disposed of them in ways that differ from "ordinary" garbage. First, there is a widespread feeling that the remains of hunted animals must be treated with respect in order to maintain supplies of game. Respect is shown by such practices as preventing the carcass and bones from coming in contact with menstruating women (mixing the blood of wounds and death with the blood of life) or being chewed by dogs. Often the bones, or selected parts of the skeleton, generally including the skull, are hung from trees or poles, sometimes with decorations. They may also be thrown in lakes and rivers, or sometimes burned, or gathered and placed in sacred places: hunting shrines. Sometimes there is a belief that the bones will regenerate into new animals. Interestingly, there is usually considerable selection involved, not only in body parts but in taxa. It is mainly the most economically and symbolically (e.g., bear) important taxa that get this treatment (Zachrisson & Iregren 1974, Tanner 1979, Hamayon 1990, Brightman 1993, Nelson 1993, Descola 1994, Gunnerson 1997, Nelson 1997, Sillitoe 2001, Szuter 2001, McNiven & Feldman 2003, Brown 2005). Bulmer (1976) notes another reason for special disposal among the Kalam of Highland New Guinea: remains of ritually cooked meals are imbued with power that makes them dangerous to humans and domestic pigs. These bones are therefore either kept in the male cult houses or hung in bushes.

When animal remains are hung in trees around the camp or settlement, they tend to become de facto trophies bearing witness to the skill of the hunter even if the primary motivation is protecting the bones from dogs or people from their power. In addition, many groups, especially in the Pacific and including the Kalam, also have explicit trophy displays, mostly of skulls and mandibles (Bulmer 1976, Rosman & Rubel 1989, Cooper 2001, Sillitoe 2001). Such displays enhance the prestige of the hunter, and may encourage the hunting of dangerous animals to demonstrate courage and, often, masculinity. In the New World, trophies and ornaments (tooth necklaces, etc.) of large felids are sought not only for their prestige value, but to appropriate the carnivore's physical and spiritual power

(Gunnerson 1997, Hamell 1997, Roe 1997). We generally associate trophies with hunted animals, but domestic animal remains, especially heads, may be displayed to commemorate feasts or sacrifices, especially if these confer special status as in South Asian feasts of merit (Simoons 1968). Remains of ceremonial feasts, both food waste and paraphernalia such as serving ware, may also be disposed of differently and with more care than the remains of daily meals. This is both because these remains may hold some of the power of the ceremony, and because they are more voluminous, and cause more hindrance (Davenport 1986: 107).

There seem to be few ethnographic accounts of foundation or building deposits, although there is some historical information, and they are widely attested archaeologically (e.g., Bartosiewicz 2000, Olsen 2000, Kunen, Galindo & Chase 2002, Woodward & Woodward 2004, Herva 2005). They are generally seen as offerings meant to secure the favor of the gods, or as having inherent apotropaic power to protect the building and its inhabitants.

We are not aware of precise ethnographic parallels for the commemorative deposits. It appears that ethnographers are less likely to be aware of hidden deposits, especially if they are only occasional. Moreover, the ethnographic record does not necessarily include the entire range of human behavior. However, what we can see from ethnography is that symbolically charged animal remains are often considered to hold power, which can be both dangerous and protective. While animal parts used as architectural installations might well be trophies and perhaps also constitute respectful treatment of hunted animals, the commemorative deposits are hidden, and specifically hidden in houses. This certainly suggests that they were considered to carry power that was harnessed for the benefit of the household, and also shielded so as to avoid inadvertent harm to those coming in contact with them, or to prevent outsiders from appropriating their power.

DISCUSSION

What, then, can the animal remains in commemorative deposits tell us about ritual life at Çatalhöyük

and in the Near Eastern Neolithic? While certain materials such as cattle skulls and horns are favorites for inclusion in these deposits, one of their most striking features is their idiosyncratic character. Each one is different, a very personal collection of items. This is the major reason we have labelled them as commemorative deposits. They seem best understood as a selection of items from a larger set used in a ceremony, buried so as to incorporate the memory of that ceremony into the fabric of the house. There is clearly a connection between the ceremonies and the houses. Often the deposits are placed during remodeling, and building and abandonment deposits mark the beginning and end of houses. Thus the ceremonies may mark key points in the life cycle of the house. However, the body parts and burning pattern of some of the items are associated with off-site butchery and cooking, suggesting that these pieces were brought from ceremonies that did not occur in or adjacent to the houses in which they are buried. And those in pits lack an obvious relation to changes in the house itself. So some commemorative deposits may memorialize ceremonies that mark key points of the human life cycle, possibly explaining the individualized character of the selection of items. Of course, the two forms of ceremony may not be mutually exclusive. Changes to the houses may have occurred at liminal times in the lives of their inhabitants, such as marriages and deaths.

The concept of memory played out here does not involve keeping the past present in visible displays, as with the architectural installations. Rather it is about preserving a physical trace of an intangible ceremony, making it a permanent but concealed part of one's daily life. These deposits are private and presumably known to a smaller number of people than the installations visible to all who enter the house. This is the same treatment accorded the dead, and indeed the house, the ancestors, and past ceremonies are all linked in the various sub-floor deposits starting in the PPNB. The strong correlation between burials and sub-floor deposits indicates the importance of this linkage. It is possible that the practice of placing commemorative deposits is in some way parallel to the "skull cult", which also peaks in the PPNB. The removal, sometimes plastering or other decoration, and special deposition of selected human skulls has also been seen in terms of constructing memory, but also forgetting individuals (Kuijt 2008).

The co-occurrence of burials and commemorative deposits in the same houses raises the possibility of a direct linkage: might the commemorative deposits be remnants of funerals or later memorial ceremonies? While possible, this seems unlikely. There is certainly no one-to-one equivalence in the number of burials and commemorative deposits. Building 1 at Çatalhöyük, for example, has more than sixty individuals buried in it, but only two sub-floor commemorative deposits. Perhaps the ceremonies preserved in the commemorative deposits memorialize the ancestors in a more abstract way, or perhaps they are not specifically tied to the burials at all. Rather, not all houses are suitable for holding either burials or commemorative deposits, perhaps because their occupants do not constitute an independent household but are a spatially separated adjunct of another house (Düring 2005), or because houses of lineage heads are the centers of ritual. Both the dead and the items buried in commemorative deposits must have been regarded as powerful, and probably brought protection and good fortune to the inhabitants of the house and their associated households. The animal parts in the commemorative deposits would have gained part of their power from the (usually wild) animals from which they derived, and another part from the ceremonies in which they were used.

At Çatalhöyük, commemorative deposits primarily occur in the area of the house (south and west) where ovens and hearths are usually found, often near and in three cases directly beneath these fire installations. This suggests these physical memories were associated with the symbolism of the hearth, which perhaps represented such concepts as home, family, and life. It is also interesting that in some of these deposits, and in some paintings, reliefs, and figurines (Russell & Meece 2006), we see pairs of animals, and probably specifically male-female pairs. In this case, it would mean that the feasts that formed part of the ceremonies commemorated made a point of serving such a male-female pair of animals, and those collecting the mementos specifically selected matched sets of body parts from the pair. In most cases, these are not animals that habitually move together in pairs, so it would require a carefully targeted hunt to acquire them. Thus balanced male and female principles may have been important in the Çatalhöyük cosmology.

Finally, we return to the temporal trends in these deposits at Çatalhöyük. While there may be some changes, it is striking that the practice of burying commemorative deposits under house floors persists at least from Level X to Level II, and would appear to be part of a larger Near Eastern tradition dating at least to the PPNA. In the latest levels, though, there are hints that ceremonies and symbols are being reinterpreted and perhaps deployed to new ends. There seems to be a certain blurring of previously distinct genres. We see this in the unit 7477 commemorative deposit in Building 33. This deposit has some of the features of a feasting deposit, with many meaty body parts not found in earlier commemorative deposits. It is also located in the same spot, rather than opposite, the only burial in the building. The Level 0 burials containing cattle frontlets would seem to be another such redeployment of symbols.

CONCLUSION

Çatalhöyük does not lack for evidence of ritual behavior, but the commemorative deposits described here represent a previously unrecognized aspect of ritual at the site. Their contents provide a small window into the ceremonies performed in the Neolithic, and what their participants thought was important or emblematic of them. They emphasize the centrality of the house and the ancestors in the symbolic world of the inhabitants of Çatalhöyük, and shed light on other key symbolic themes, such as wild animals and male-female pairs. As more houses are excavated at Çatalhöyük and more of these deposits revealed, we should be able to amplify the tentative suggestions we offer here. It is clear that similar deposits occur at other Near Eastern Neolithic sites, although details are often sketchy. Greater attention to the context of animal bones at Near Eastern Neolithic sites will help to set the Çatalhöyük commemorative deposits in the context of this broader phenomenon.

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