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Spirit Birds at Neolithic Çatalhöyük

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ABSTRACT

As they soar into the air and dive below the water's surface, birds inspire awe for their superhuman capacity to pass among earth, air, and water. People often see birds as spirits, or as messengers to and from the spirit world. Whereas at earlier sites in the region birds made a significant contribution to human diet, at Neolithic Çatalhöyük in Central Anatolia their nutritional significance is small. Body part distributions suggest that for the most part feathers were more important than meat. Bird remains, mainly the feathery parts of wings, appear in a number of special deposits at Çatalhöyük. Together with artistic representations, these deposits suggest that cranes and vultures played key roles in life cycle transitions and were invoked mimetically through dance. Additionally, waterbirds, particularly in association with newborn human infants, may have mediated between human and spirit worlds. Although there is little indication that Çatalhöyük residents made much use of brightly coloured feathers, bird wing deposits do attest to the importance of colour symbolism at the site. Thus bird remains offer material evidence of aspects of Neolithic cosmology and ontology, as well as social structure.

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Birds have attracted human attention around the world because they combine human traits, such as bipedalism, interactivity, song, and dance, with capabilities out of our reach, notably flight. Thanks to this combination, and particularly their ability to ascend into the heavens, people have often seen birds as embodied spirits or messengers from the gods or the otherworld (e.g. Balzer 1996; Clarke 2016a; Forth 2004; Green 1992; Krech 2009; Moreman 2014; Murray 2011; Sault 2016). Bird behaviour, then, takes on special meaning as humans try to understand and communicate with spirit birds.

The details of bird augury may be lost in prehistory, but contextual analysis of bird remains and representations of birds can provide some clues to the ways that humans entered ancient bird worlds. Here I will examine the evidence from the Neolithic East Mound at Çatalhöyük, a large tell site on the Konya Plain in central Anatolia, occupied from approximately 7100–6000 calBC (Figure 1). First excavated by James Mellaart (1967, 1998) in the 1960s, Ian Hodder (1996, 2005a, 2005b, 2006a, 2006b, 2007, 2013a, 2013b, 2014a, 2014b) has directed renewed work at the site since 1993. I base my discussion on bird remains from this new project, excavated from 1995–2009 and spanning virtually the entire sequence. Several areas have been excavated on the northern and southern lobes of the East Mound, separated by a dip (Figure 2). Çatalhöyük is a mega-village of superimposed, closely-packed mudbrick houses. There is no public architecture, but abundant evidence of ritual

activities in the houses, such as burials, wall paintings, animal bones incorporated into the architecture, and other special deposits. Birds occur in all these contexts.

At earlier sites in the Konya Plain, birds form a substantial part of the animal bone assemblages (the ratio of mammal to bird specimens is 31:1 at 9th millennium BC Pınarbaşı A and 134:1 at 7th millennium Pınarbaşı B, contemporary with Çatalhöyük; study of both mammal and bird remains from 9th millennium Boncuklu is in progress and thus the ratio cannot be calculated, but birds appear at least as abundant as at contemporary Pınarbaşı), and body part distributions indicate that most were eaten (Baird et al. submitted; Caruthers 2003, 2005). At Çatalhöyük, though, bird remains are relatively scarce, with a ratio of mammals to birds of 394:1. Most are waterbirds, especially geese and ducks (anatids; Figure 3).

Some birds were consumed at Çatalhöyük, but for most species the body parts are skewed toward the feathery part of the wings, suggesting that feathers were more important than flesh (Russell submitted). I use the most common bone in each of the three main body zones (coracoid for breast, ulna for wing, tibiotarsus for leg) to quantify relative body zone abundance (Figure 4). Since they occur with equal frequency in the body, deviations from equal abundance indicate biased representation of these body zones. It is unlikely that this patterning is the result of density-mediated attrition, as the ulna is of similar and often slightly lesser density than the coracoid and tibiotarsus in most species (primarily ducks and geese) tested by



Figure 1. Location of sites mentioned in the text.

Broughton, Mullins, and Ekker (2007; see also Higgins 1999).

Bovy (2012) has explored the reasons for over-representation of wings in assemblages, although she was particularly concerned with the phenomenon of near-exclusive representation of the distal wing (carpometacarpus and beyond) for some taxa, which is not the case at Çatalhöyük, where ulnae are the most frequent wing element and other body parts are present for most taxa. The low representation of meaty parts for many but not all taxa ((Russell submitted) indicates that wings, perhaps attached to skins, were selectively brought to the site. These birds may have been eaten away from the site where they were killed, or may have been discarded because they were taboo, as some ducks were for the Nukak of Colombia, who nevertheless hunted them for their feathers (Politis and Saunders 2002). Wings may also have been brought to the site for their bones, as wing bones are favoured for beads, but bird bone artefacts are too uncommon (17 of 1798 worked bones: Russell and Griffiths 2013) to account for the strong selection for wings, so feathers were most likely the main focus. Feathers have many uses, and there are indications of multiple functions at Çatalhöyük. Here I will concentrate on evidence that feathery wings and other body parts were used in practices linking human to bird persons.

The midden areas that formed amongst the houses at Çatalhöyük were locations of both intensive discard and outdoor activities (Shillito 2011); they have dense deposits of most of the materials found on site, so it

is not surprising that most bird bones come from middens and other secondary (discard) deposits (Figure 5). Bird remains are rare in feasting deposits (concentrations of large pieces of mostly large animals). They do occur in special deposits: items or assemblages that contextual and taphonomic information indicates were placed rather than discarded. Examples include grave goods, architectural installations, and subfloor deposits (Russell, Martin, and Twiss 2009). Crane and vulture remains are found disproportionately in special deposits (Figure 5); I also discuss another phenomenon: the placement of waterbird remains in infant burials and other special deposits.

Cranes

Cranes are depicted at Çatalhöyük and other Near Eastern Neolithic sites, including Göbekli Tepe and Bouqras (Clason 1989/90; Peters et al. 2005; Russell and McGowan 2003), and are always shown in dancing postures. I have elaborated elsewhere on why crane dances have been so compelling to people around the world (Russell and McGowan 2003). In particular, cranes dance not only in mating displays but also in groups (Dinets 2013; Johnsgard 1983; Snow et al. 1998). Humans imitating their dance can stimulate cranes to start dancing, so people can literally enter crane worlds through dance. Even without the physical presence of cranes, humans dancing in costume can mimetically become cranes (Lonsdale 1982). I have argued that a modified crane wing (distal humerus

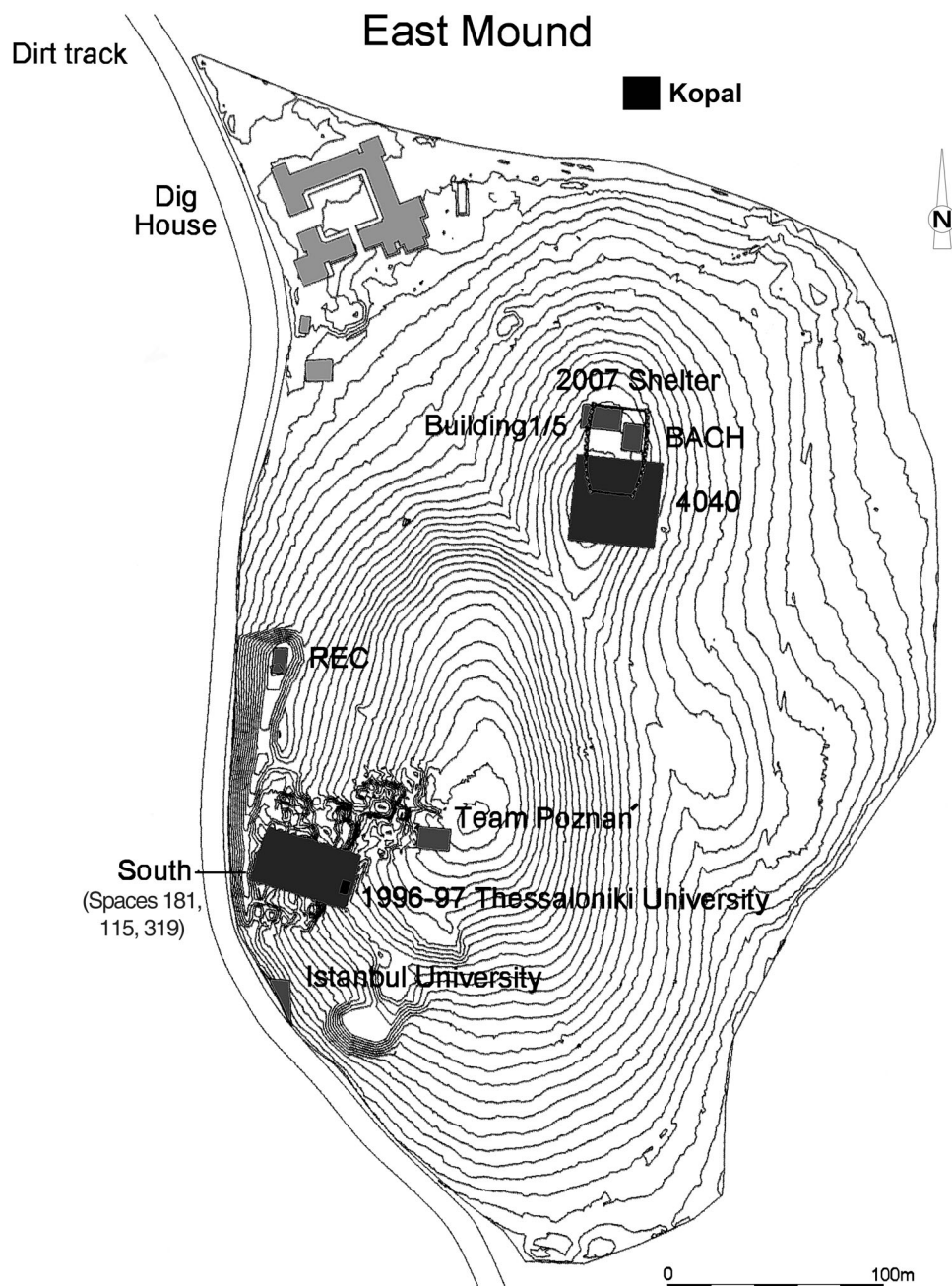


Figure 2. Plan of East Mound at Çatalhöyük with excavation areas.

through phalanges) from a deposit associated with the construction of Building 1 on the northern lobe at Çatalhöyük was likely part of such a costume (Figure 6), and Gourichon, Helmer, and Peters (2006) suggest similar use for crane wings at Göbekli Tepe and Jerf el-Ahmar.

Several Common Crane (*Grus grus*) bones from throughout the body were found in midden and fill deposits and are probably food remains. But crane bones were more often modified than other taxa; the only non-crane worked bird bone is simple tubular beads. In addition to the wing, modified crane bones comprise one huge (6 cm) tubular bead on a crane ulna (Figure 7a) from a small pit with a collection of ground stone artefacts including a mace head; another ulna shaped into a very long tube (33 cm), which may

be a whistle or simple flute (Figure 8), accompanying an adult male in an unusual burial (Russell and Düring 2006); and two points made on tarsometatarsi, both from middens (Figure 7b).

The special treatment of many crane bones, and the emphasis on dance in depictions and materially, suggests a particular closeness with cranes, perhaps even a kinship. Cranes are often clan totems (e.g. Clarke 2016b; Lévi-Strauss 1963; Thomas, Carr, and Keller 2005); they may also have been considered ancestors of some or all Çatalhöyük inhabitants.

Vultures

Vultures, often with headless humans, are a still more pervasive motif than cranes in the Near Eastern

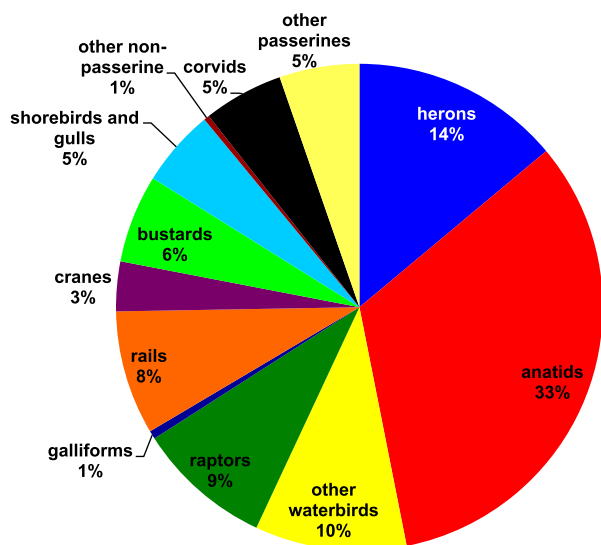


Figure 3. Bird taxa groups by Number of Identified Specimens (NISP), corrected for articulations.

Neolithic. Wall paintings at Çatalhöyük are some of the most dramatic depictions (Figure 9), but there are also figurines, carvings, and etched plaques from Çatalhöyük, Göbekli Tepe, Nevalı Çori, Körtik Tepe, Jerf el-Ahmar, and Nemrik 9 – spanning more than 3000 years from the PPNA-Pottery Neolithic and Upper Mesopotamia to Central Anatolia (Helmer, Gourichon, and Stordeur 2004; Kempisty and Kozłowski 1990; Russell and Meece 2006; Stordeur 2003). The persistence of this imagery through time and space suggests that it references a myth (or more likely a set of related myths).

Like cranes, at Çatalhöyük some vulture remains (all Griffon Vulture, *Gyps fulvus*) come from midden deposits, some of them containing feasting remains.

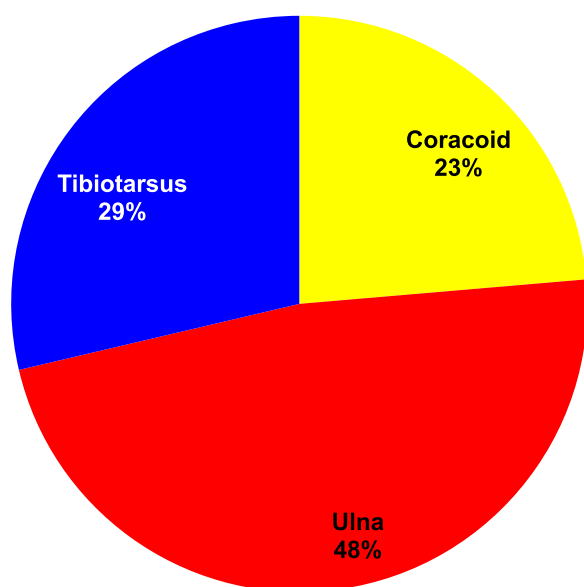


Figure 4. Standardised body zone comparison for all bird taxa, based on NISP of coracoids (breast), ulnae (wing) and tibiotarsi (leg).

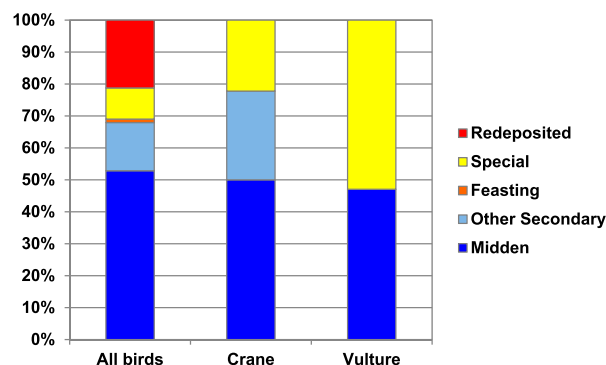


Figure 5. Distribution of bird bones among context types, based on NISP, corrected for articulations. Midden and other secondary deposits contain general discard; feasting deposits contain discarded feasting remains; special deposits are composed of placed items; redeposited materials derive from deposits that have been recycled, often from multiple sources, into fill or construction material.



Figure 6. Imagined crane dance at Çatalhöyük (John-Gordon Swogger, Çatalhöyük Research Project).

Vultures are an exception to the selection for wings; there is only a single wing bone, a distal humerus from a midden. Rather, vulture remains in general



Figure 7. a) Large tubular bead, crane ulna (13904.X23); b) Point on crane tarsometatarsus (8178.F55).



Figure 8. Crane ulna tube (10840.X1) from burial of adult male human accompanied by a lamb in Building 50, with position of tube indicated (reconstruction by John-Gordon Swogger, Çatalhöyük Research Project).



Figure 9. Painting of vulture with headless human, Building VII.8, Mellaart excavations (photograph by Ian Todd, Çatalhöyük Research Project).

are spread through the body but tend to the feet, while those in special deposits are more selected. The only identified bird bone from Mellaart's excavations is the skull of a Griffon Vulture (Mellaart 1967) mounted on a wall and concealed in a clay lump (interpreted as a breast by Mellaart); two sizeable fragments of Griffon Vulture skull from a midden in the new excavations are possibly redeposited from such an installation, given that bird skull remains are very rare at the site. From the recent excavations, vulture remains in special deposits are all from the feet: a talon placed on the chest of a young adult male human buried in Building 75 (South area), and four articulated feet (three left, one right, probably both male and female) from the side room of Building 77 (4040 area). This burned house had many spectacular remains, such as aurochs horns on pillars, that suggest a rich ritual life (House 2014a). Other uses are possible (Bulmer [1976] describes the Kalam of New Guinea keeping large

raptor talons both as ornaments and to remove thorns and splinters), but it seems likely that the feet were part of costumes or otherwise put to use in dances, healing rituals, or other performances. Vultures at Jerf el-Ahmar are represented largely by cranial, distal wing, and lower leg elements (Gourichon, Helmer, and Peters 2006), while at both Zawi Chemi Shanidar and Hallan Çemi wings, and at Hallan Çemi especially feet, of large raptors are found in contexts associated with public ceremonies (Zeder and Spitzer 2016). In all three cases, these are interpreted by the authors as the remains of costumes or props for performative rituals. Building 77 may have belonged to a household charged with caring for the ritual paraphernalia of a sodality between ceremonies (Mills 2014).

Vultures have an obvious association with death, but are not always cast as negative. In Zoroastrian and Tibetan traditions, vultures perform the service of removing the polluting flesh (Boyce 1993; Wylie 1964–1965). Mellaart (1967) interpreted the Çatalhöyük paintings as a fairly straightforward representation of a similar funerary ritual by exposure. Early bioarchaeological work in the Hodder excavations rejected this notion, since small bones that tend to be left behind when bodies are exposed and later collected are present in the burials beneath house floors (Andrews, Molleson, and Boz 2005). This team argued that nearly all burials were originally intact, but most were disturbed and rearranged by later interments. However, a new set of bioarchaeologists has recently revived the exposure scenario (Pilloud et al. 2016; cf. Cook 1999). They note that vultures usually produce little damage and do not disarticulate skeletons immediately, and that many burials are flexed so tightly that they were likely defleshed. They posit that the skeletonised remains were recovered quickly after initial defleshing by vultures, while still held together by connective tissue. In sum, it is currently an open question whether vultures participated actively in routine funerary rituals, or whether their role was only mythic, carrying souls into the heavens (Gourichon 2002; Helmer, Gourichon, and Stordeur 2004). A third interpretation, pushed most notably by Testart (2008) and linked to the larger debate over the meaning of Neolithic skull removal, reads the imagery of vultures with headless humans as depictions of defeated enemies. The paucity of contemporary evidence for warfare renders this unlikely unless, again, as part of a myth.

Birds in Burials

Apart from bone tools, animal remains rarely serve as grave goods at Çatalhöyük; these do include a few bird bones. As well as the vulture talon mentioned above (and the worked crane ulna), an intact Eurasian Wigeon (*Anas penelope*) radius accompanied a human neonate foundation burial in Building 1. It

could have been discarded from a recent meal caught in the fill, but its pristine condition suggests it was deliberately placed, and it fits a pattern of waterbird remains associated with neonates. The ulna is absent, so the radius was buried as a bone, not a feathery wing. Another neonate foundation burial in the same house wore segments of goose-size trachea as rings on the fingers of both hands (Cessford 2007). In Building 44 (4040 area), a neonate in a likely foundation burial was interred with an articulated left wing (mid-shaft of radius and ulna through phalanges) of a Lesser White-fronted Goose (*Anser erythropus*).

The frequent practice of burying neonatal humans in the foundation layers of houses suggests they played some special role in consecrating or protecting the houses and their inhabitants (Moses 2012; Patton and Hager 2014; Whitehouse et al. 2014). Barely in this world, the babies may have been suitable messengers to the spirit world (Gottlieb 1998). Most infant burials lack bird remains, but where these occur they may invoke spirit birds to help carry the young souls on their way.

Placements of Wings

I have already mentioned the crane wing in a special deposit, and the goose wing in an infant burial. Several other articulated wings have also been recovered at Çatalhöyük, often in groups. One Mallard (*Anas platyrhynchos*) and two White-fronted Goose (*Anser albifrons*) wings (mallard: complete ulna and radius through phalanges; geese: one with distal ulna through phalanges, the other carpometacarpus through phalanges; as the wings were not entirely included in the flotation sample, some parts may have been lost in the 4 mm sieve), all right side, were found in Building 67 (4040 area) together with several large obsidian artefacts and possible remains of a feast tied to the closing of the house (House 2014b). Two Ruff (*Philmachus pugnax*; complete ulna and carpometacarpus in one case, distal ulna and complete carpometacarpus in the other) and one Bar-tailed Godwit (*Limosa lapponica*; complete humerus, ulna and radius; for all three wings some bones may have been lost as these did not come from a flotation sample) wings, all left side, come from an unusual deposit buried in a platform of Building 49 (4040 area) during remodelling (Eddisford 2014). The contents seem to derive from special meals and other activities, with an unusually broad range of taxa, all lightly processed and rapidly buried.

Adjacent and contemporary Building 52, with two rooms filled with cattle horn installations and other special deposits (Farid 2014), in an earlier phase had a closing deposit in the oven of another room that included ground stone fragments, several large mammalian bones, and the right wings of a Spoonbill

(*Platalea leucorodia*; carpometacarpus and phalanges) and a Little Egret (*Egretta garzetta*; distal humerus, proximal ulna and radius). Placing closing deposits in ovens at the end of their life cycles was a repeated practice in this neighbourhood, where a cattle skull and a partial dog skeleton were placed in the ovens of other houses. Nearby in this same level, another right Spoonbill wing (carpometacarpus and phalanges) must have been placed in the fill of Building 3 as it was being closed, since it is articulated and in pristine condition. An outer room of this house contained what I term a commemorative deposit (Russell, Martin, and Twiss 2009), likely a selection of items from a ceremony, with a shell necklace, the front of a female wild boar mandible, some segments of a roasted sheep spinal column, a left juvenile Little Bittern (*Ixobrychus minutus*) wing (distal humerus through carpometacarpus), and the lower beak of a Spoonbill. A lower deposit contained a fragment of upper beak; if this had been carried down by an animal hole so that originally both upper and lower beaks were present, it might imply something like a costume.

Discussion

The bird remains from Çatalhöyük that appear deliberately placed exhibit several interesting qualities. They are body parts particularly evocative of birds, mainly wings, with heads and feet only where they are distinctive of the species (spoonbill beak, vulture head and talons). Second, both wings of a single bird never occur in the same deposit. This partial quality is typical of feasting remains and ceremonial trash deposits at Çatalhöyük, and suggests that these remains were shared out among participants. Third, in deposits with multiple wings, all are from the same side, although there seems to be no overall bias to left or right. This implies rules for the distribution of animal parts. Fourth, where deposits contain wings of multiple species, not only side but colour is matched: white egret and spoonbill wings; mottled brown ruff and godwit, grey goose and mallard. Aside from a single bee-eater bone in an early midden, the Çatalhöyük residents seem not to have taken birds with brightly coloured feathers, but colour symbolism was important and perhaps associated with groups of people or particular ceremonies. Colours may also have had religious or cosmological significance, linked to cardinal directions (the consistent orientation of architectural elements shows that these were important to the inhabitants), life and death, supernatural beings, or other important concepts for the Çatalhöyük dwellers.

A negligible part of the diet, birds played a key role in the spiritual life of Neolithic Çatalhöyük. The birth of houses was marked by burials of newborns (Carter et al. 2015); waterbirds sometimes joined them. Linking earth, air, and water, waterbirds are often seen as

having special spiritual power (Green 1992; Schmidt 2000). Their wings appear in other deposits associated with key points in the life cycle of houses (in turn probably correlated to major human life events).

Cranes and vultures are of particular and perhaps linked significance. Both are recurring motifs in the art of the Near Eastern Neolithic, and the remains of both at Çatalhöyük indicate a performative aspect, in which humans impersonated these impressive large birds. Some of the paintings seem to show vultures with human legs, while others clearly have bird feet (Mellaart 1967). Perhaps those with human legs show dancers, but on the principle that people rarely depict rituals, which are themselves representations (Cauvin 1972), they may rather illustrate a myth in which humans become vultures and soar into the heavens. The dances could have re-enacted myths of crane and vulture people, where spirits were not confined to single bodies. As perhaps with babies and smaller waterbirds, souls passed from bird to human bodies and back again. This passage of souls was likely thought to occur at birth and death, but perhaps also during life in altered states of consciousness (Lewis-Williams 2004), and through the mimetic experience of costumed dance (Garfinkel 2003; Willerslev 2007).

The fascination with heads and headlessness of both humans and animals seen in the art and mortuary practices of the Neolithic Near East (e.g. Croucher 2012; Hodder and Meskell 2011) strongly suggests a belief that a soul or spiritual essence resided in the head and remained there after death. It also indicates a belief that such spirits inhabited bodies of species other than humans, and perhaps could pass from one body to another. If vultures (and for infants waterbirds?) were considered to be psychopomps, bearing souls to an afterlife in the sky, it would be testimony to a notion of multiple souls that are separated at death (Ingold 1987). One soul remains in the skull to become an ancestor that circulates between the surface-world of the living and the world of the dead buried beneath their feet (Parker Pearson 1999). Another ascends into the sky, consorting with and perhaps becoming birds.

Although this cannot be fully separated from their spiritual significance, birds also appear to have served as social markers at Çatalhöyük. The dances may have belonged to particular sodalities, and birds might also be clan totems. Interestingly, all the bird remains that would qualify as 'ceremonial trash' (Walker 1995), that is, costume elements and items from special deposits other than grave goods, come from the northern lobe of the tell and in all but one case from a period (North G; the Building 67 wings are from the following North H) marked by intense ritual activity and many changes in architecture and material culture at the site (Hodder and Doherty 2014). Spirit birds may thus have played a key role in

the redefinition of social order that happened at this time at Çatalhöyük.

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Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Nerissa Russell is Professor of Anthropology at Cornell University. She has conducted zooarchaeological research in eastern Europe, Turkey, and Pakistan. Her work has explored human-animal relations in ancient societies, focusing on the Neolithic.

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