

Archaeology and Animal Persons

Toward a Prehistory of Human-Animal Relations

Erica Hill

■ **ABSTRACT:** The discipline of archaeology has long engaged with animals in a utilitarian mode, constructing animals as objects to be hunted, manipulated, domesticated, and consumed. Only recently, in tandem with the rising interest in animals in the humanities and the development of interdisciplinary animal studies research, has archaeology begun to systematically engage with animals as subjects. This article describes some of the ways in which archaeologists are reconstructing human engagements with animals in the past, focusing on relational modes of interaction documented in many hunting and gathering societies. Among the most productive lines of evidence for human-animal relations in the past are animal burials and structured deposits of animal bones. These archaeological features provide material evidence for relational ontologies in which animals, like humans, were vested with sentience and agency.

■ **KEYWORDS:** archaeology, hunting, ontology, personhood, prey animals

Archaeologists working around the world are increasingly recognizing that human-animal relations in the past were constituted in complex ways that go beyond the utilitarian mode. In many Western societies, animals are primarily, though not exclusively, treated and understood as objects: as sources of food and raw materials, resources to be regulated, property to be managed, and commodities to be marketed. Archaeology has largely reproduced this object-oriented perspective (Reitz and Wing 2008). However, recent work informed by the animal studies literature is revealing how diverse human-animal interactions were, making it apparent that animals played subjective, agential roles in many ancient societies. Human-animal interactions were often intimate and relational, integral to the fabric of society and part of the “total social phenomenon,” *sensu* Mauss ([1925] 1966: 1). In this view, central to some perspectives in animal geography (e.g., Philo and Wilbert 2000: 3; Wolch et al. 2003: 192), engagements with and perceptions of animals are as essential to the constitution of society as humans themselves.

This article describes recent advances in the study of human-animal relations in archaeology, illustrating how the discipline has shifted from a narrow, utilitarian perspective on animals as sources of food, raw materials, and transportation to a more expansive and nuanced appreciation of the ontological differences between the modern West and many less complex, noncapitalist societies. Since the early 1990s, “social” or “interpretive” zooarchaeology (Losey et al. 2013a; Marciniak 1999; Milner and Fuller 1999: 5; Russell 2012) has directed attention to the complex roles that animals played in human society—for example, as symbols, sacrifices, companions, and wealth (Anderson and Boyle 1996; Grant 1991; Pluskowski 2005, 2012). Such



a zooarchaeology “emphasizes meaning as it is constructed socially and expressed materially” (Hesse 1995: 205). This literature critiques the privileging of diet and subsistence in interpretations of animal remains (Hesse 1995; Holt 1996; Jones 1998; MacDonald 1991; Serjeantson 2000; Wapnish 1995) and highlights the roles animals played in noneconomic contexts, such as human burial (e.g., Bond 1996; Bond and Worley 2006; Gräslund 2004; Mannermaa 2008; Zachrisson 2009). Yet, as I suggest here, even approaches that position animals in ritual and cosmology and as participants in domestication neglect to acknowledge animals as subjects (Orton 2010)—as agents that constitute society itself. This more radical perspective on human-animal dynamics has already emerged in social anthropology (e.g., Ingold [1988] 1994: xxiv; Pearson and Weismantel 2010) and animal geography, and is now being integrated into archaeological interpretation. I describe this trajectory, suggesting that the next step in writing the prehistory of human-animal relations is to explicitly acknowledge that, in some societies, animals were not animals at all. They were persons.

Archaeology, Animals, and Relational Ontologies

Twentieth-century archaeology embraced the idea that animals in prehistory played one primary role: as subsistence resources. In the United States, the subdiscipline of zooarchaeology became integrated into archaeological practice in the 1970s, with the development of processualism (Thomas 1996). Processual archaeology focused on macro-scale phenomena, such as ecological adaptations and subsistence strategies (Binford 1962, 1964, 1984) and emphasized explanation (Watson et al. 1971), the scientific method (Binford and Binford 1968; Binford and Sabloff 1982), and the use of analogy to generate hypotheses (Binford 1967; Stiles 1977).

Processualism’s most vocal advocate in North America, Lewis Binford, pursued actualistic studies and ethnoarchaeological research, including the influential *Bones* (1981), which distinguished between human and nonhuman agents in the creation of faunal assemblages, and *Nunamiut Ethnoarchaeology* (1978), which identified depositional patterns produced by Inupiaq hunters in Alaska. Questions of greatest processualist concern were taphonomic, paleoeconomic, and dietary—which animals did humans eat, in what quantities, and how did they procure them? Often termed “faunal studies,” or “archaeozoology” in Eurasia¹ (Bartosiewicz 2001; Reitz and Wing 2008: 2–5), the study of animals in the past involved the recovery, identification, and analysis of fauna from sites where humans lived, camped, hunted, buried their dead, and discarded trash. The majority of remains, by far, are in the form of bones and teeth; however, zooarchaeologists also use fish scales, otoliths, antler, horn, ivory, mollusks, and eggshell to reconstruct diet and subsistence patterns.

Archaeologists acknowledge that humans interacted with animals in the past in ways other than simply utilitarian (for a comprehensive review, see Russell 2012), but these forms of engagement consistently assume a human-subject/animal-object dichotomy. Lévi-Strauss’s (1963: 89) oft-quoted observation that “animals are good to think [with]” implicitly denies agency to animals, fostering instead the view that animal bodies and behaviors are simply raw material with which to symbol, sacrifice, bury, represent, and conceptualize. Over the past decade, archaeologists have been increasingly influenced by trends that have expanded the interpretive possibilities presented by prehistoric animal remains. While much of zooarchaeological research in North America, in particular, remains processually oriented and subsistence focused (Losey et al. 2013a: 67), approaches have diversified. Archaeologists in North America, the UK, Scandinavia, and Australia have begun to explore what animals meant to people in the past, acknowledging that animal remains require interpretation within broader contexts and that animals

are implicated in such diverse phenomena as kinship, ethnicity, myth, and social organization (DeFrance 2009; Emery 2004; Lev-Tov et al. 2010; Monks 2005; O'Day et al. 2004).

Some archaeologists have also, but to a lesser extent, been influenced by trends in social and cultural anthropology, which reflected philosophical debates over what it means to be human, sentient, and conscious (e.g., Aaltola 2008; Carruthers 2005; Cartmill 2000; Dennett 1995; Griffin 2001; Haraway 1991; Ritvo 2000; Shriver and Allen 2005). Tim Ingold's work, in particular, has proven highly relevant to archaeological inquiry (e.g., Ingold 1987, 2000b, 2002, 2006). Ethnographers dealt with human-animal relations from multiple perspectives throughout the twentieth century (e.g., Brightman 1993; Douglas 1966, 1996; Morris 1998, 2000; Tambiah 1969; Tanner 1979). However, work on human-animal dynamics in nonindustrial contexts reached a critical mass in Amazonia (e.g., Århem 1996; Descola 1992, 1994; Descola and Pálsson 1996; Fausto 2000, 2007; Pálsson 1996; Vilaça 2002; Viveiros de Castro 1992, 1998, 1999, 2004), where ethnographers explored notions of nature, culture, humanity, and animality. This work addressed ontological issues, showing that non-Western societies, especially those dependent upon hunting, often had permeable, fluid, or even nonexistent boundaries between nature and culture, humans and animals (Ingold [1996] 2000c; McNiven 2010).

Mullin accurately noted as late as 2002 that animal studies were still “largely unknown among anthropologists” (2002: 387). She identified several areas of inquiry to which anthropology could contribute, among them documentation of the contingent nature of human-animal relations and animal agency. These issues have been addressed in the recent cross-fertilization of anthropological research on animals between Amazonia and the Arctic and Subarctic (e.g., Brightman et al. 2012b; Fausto 2007; Laugrand and Oosten 2007b; Nadasdy 2007; Pedersen 2001). Researchers working in both Amazonia and the North have taken relational perspectives on animals and other “things,” describing conceptual distinctions between kinds of animals, examining their roles as sentient actors, and writing cultural biographies of specific animals. Fijn (2011), for example, explored the complex relationships between Mongolian pastoralists and herd animals, suggesting that the animals are active agents in the process of domestication. Another recent contribution is *Relational Archaeologies* (Watts 2013a); several chapters suggest that people in the past often dealt with animals in positional, rather than categorical, terms (e.g., Losey et al. 2013a; McNiven 2013; Whitridge 2013).

Among those animals with particular salience cross-culturally are dogs, prey animals, and predators, including the iconic jaguar in Amazonia and the Andes (Benson 1972; Saunders 1998) and the bear in the Arctic and Subarctic (Brightman et al. 2012a: 7–8). Both jaguars and bears play key roles in myth, cosmology, kin relations, and social organization. Anthropological research on bears, for example, has followed up Hallowell's (1926) classic cross-cultural study of bear ceremonialism with explorations of the ways that humans think through bears about gender, subsistence, and sexuality (e.g., Helskog 2012; Kwon 1999; Laugrand and Oosten 2007a; Saladin d'Anglure 1994; Scott 2007; Shepherd 1995). In both Amazonia and the Arctic, interactions between humans and jaguars or bears tend to be relational (Losey et al. 2013a), with these charismatic predators considered kin or earlier, ancestral, or alternative forms of humans.

The origins of the Ainu of Hokkaido, Sakhalin, and the Kurils, for example, are attributed to a woman and a bear who took the shape of a man (Kitagawa 1961: 136). For the Ainu, bears were deities in animal disguise with whom humans maintained a relationship of mutual dependency. The Ainu routinely captured and raised bear cubs (Kitagawa 1961; Munro 1962), treating them as members of the household, feeding them from rice bowls, and addressing them with kin terms. The cubs were actually deities (sing. *kamuy*) in bear form, who lived in the village as visitors (Kitagawa 1961: 130–31, 134) before being dispatched during the “sending ceremony,” or *iyomante*. Skinning, dismemberment, and consumption of the bear enabled the person within

to shed his or her animal disguise and return home to the mountains. The bear provided its human hosts with food for feasting, claws, skin, and bones; the villagers provided the *kamuy* with sake, dried salmon (Akino 1999: 249), and “souvenirs” (Kitagawa 1961: 145) of its visit to the human world. As gift-exchange (Kimura 1999: 101), *iyomante* formalized relations between humans and *kamuy*, whom they routinely encountered in the forest as bear persons, or in the shapes of other animals.

The Ainu interaction with bears represents an ontological alternative to the subject/object distinction that underpins much of archaeological thinking about animals. Archaeologists interested in such alternatives are exploring relational perspectives in order to more accurately reconstruct human social engagements with animals, artifacts, trade goods, raw materials, and places on the landscape (e.g., Alberti and Marshall 2009; Betts et al. 2012; Bray 2009; Brown and Emery 2008; Groleau 2009; Herva 2009; Herva et al. 2010; Herva and Ylimaunu 2009; Mills and Ferguson 2008; Watts 2013b; Whitridge 2013; Zedeño 2008). Rather than perceiving animals and other “things” as insensate objects, many people in the past—especially foragers—experienced their worlds as comprised of dynamic agents capable of independent and intentional action. Such worlds have been labeled “animist,” though this term carries considerable theoretical baggage in anthropology (Harvey 2006). Here I use the term “relational ontology” to describe those systems in which animals and other “things” act as independent, sentient agents and are constituted socially, through performative interaction.

Relational ontologies appear to be found primarily among hunter-gatherers—people who subsist with minimal reliance upon agriculture and domesticated animals (Nadasdy 2007). The relational mode, however, represents only one, albeit diverse, form of human-animal interaction in the past (Mithen 1999). Pastoralists, such as reindeer herders in Scandinavia and Siberia, appear to relate to animals in ways that are qualitatively different from hunters, indicating that domestication initiates major ontological shifts (Ingold 2000a; Oma 2010; Tapper [1988] 1994), although the nature of those shifts is debated (Anderson 1997; O’Connor 1997; Russell 2002). Orton (2010), for example, suggests that animals become “sentient property” through domestication, while Theodossopoulos (2005) emphasizes an ethic of care in human-domesticated dialogue in rural Greece. Additional forms of human-animal engagement have emerged with urbanism, industrialism, and capitalism. I mention these examples only to illustrate the diverse ways in which mode of production, human-animal relations, and ontology intersect (Philo and Wilbert 2000: 5; Tapper [1988] 1994). Puputti (2008), for example, describes how human-animal relations changed in seventeenth- and eighteenth-century Finland, as people shifted from hunting to reliance upon domesticates. She suggests that, for at least two centuries, people maintained beliefs derived from an earlier, relational worldview in the midst of a modernizing economy, but that by 1800, wild animals were generally perceived in commodified terms. Puputti’s work shows that human-animal relations are historically contingent and that even within a modernizing post-medieval economy, humans and animals interacted in complex ways that cannot be exclusively associated with a single mode of engagement. The discussion below focuses on relational ontologies among hunter-gatherers in the past, with the caveat that there is significant variation in how humans engaged with animals, not only between societies, but between individuals within a single society due to differences in age, sex, occupation, and life experience.

Hunter-Gatherers and Animal Persons

In relational ontologies, animals are persons, possessing traits or capacities that, in the modern West, tend to be restricted to humans. Personhood is a category of “human-like subjectivity”

(Brightman et al. 2012a: 2) that is defined in part through social behavior. Animal persons relate to each other, and to humans, in social terms, as conscious subjects capable of communicating, decision making, and intentional action. Like humans, animal persons live in societies with rules for behavior and moral codes; they are capable of engaging in reciprocal exchanges and gift giving (contra Knight 2005, 2012; Oma 2010). Analogous to the human self, the animal self has no prediscursive existence; rather, it is defined through (inter)action (Aaltola 2008). In other words, a bear is a bear because it behaves like a bear, lives in the forest or on the tundra ice, eats the food of bears and is the prey of hunters. Similarly, humans behave like humans, live in camps, eat human food, and hunt animals. When such activities are not or cannot be performed, distinctions between human and animal blur, facilitating transformation, liminality, or an exchange of perspectives (Vilaça 2002). A hunter, for example, may temporarily shed his humanness to mimic his animal prey. He is, in Willerslev's (2004, 2007) terms, "not animal, but not *not*-animal." In relational ontologies, the external form of skin, fur, fins, or feathers is simply a covering, an envelope that contains a person who, under certain circumstances, may shed one form for another (Viveiros de Castro 1998). Humanity, like animality, is therefore a "meshwork" (Ingold 2006: 13) or "unfolding dialogue" (Jordan 2001: 101) that must be "cultivated" through embodied action (Grotti and Brightman 2012: 164). Personhood, too, is produced (Fowler 2004: 4), often through the acquisition, exchange, or circulation of some essential substance (Hamayon 2001). In many indigenous hunter-gatherer ontologies in the Arctic and Subarctic, then, the person is comprised both of some immutable soul-like awareness and of a malleable body that is constituted through performance. A person may therefore be simultaneously in possession of a discontinuous body that distinguishes it from other bodies and of the capacity for "analogous identification" (Pedersen 2001), a durable awareness shared with other persons (Lavrillier 2012). Significantly for archaeology, this "durable" awareness may be vested in specific bones or body parts, such as the heads of bears (Jordan 2003, 2008; Losey et al. 2013a) or the bladders of seals (Fienup-Riordan 1990, 1994), and persist after the animal is taken and butchered. The integrity of the body part thus parallels the integrity of the animal's spirit or self (Losey et al. 2013a).

Relational ontologies, like that of the Siberian Yukaghir (Willerslev 2004, 2007), have been documented among many societies reliant on hunting and fishing (e.g., Brown and Emery 2008; Descola 2007; Hamayon 2001; Helander-Renvall 2010; Ingold 2000d; Jordan 2003; Morrison 2000; Nadasdy 2007; Tanner 2007; Willerslev 2007). When this mode of human-animal interaction originated is unknown, though the development of European Paleolithic art and changes in hunting technology hint at its antiquity (Mithen 1999). Archaeologists must rely on material remains to identify, date, and reconstruct prehistoric relational ontologies, supplemented when possible with analogies based on ethnographic observation or ethnohistoric documentation (Losey 2010; Mannermaa 2008). Among the lines of material evidence on human-animal relations in the past are imagery; relative frequencies of species at archaeological sites; contexts of animal depiction or display; technologies and architectural features associated with hunting, restraint, management, processing, and domestication; and structured deposits, including animal burials.

Humans have created and represented animals in ceramics, textiles, figurines, and rock art for thousands of years, revealing how they understood, experienced, and idealized animals and their relations with them. Borić (2013), for example, has recently studied the predatory animals depicted on sculptured pillars at Göbekli Tepe, Turkey. Pointing to the emphasis on foxes, wild boars, bared teeth, and erect phalluses, he argues that the representation and placement of animals created a "theater of predation" that highlighted the "strong, dangerous spirits lurking beneath the [animal] skin[s]" (Borić 2013: 54; see also Hodder and Meskell 2011). Such interest

in wild or predatory animals may be especially marked when contrasted with representations and treatment of domesticates.

At Neolithic Çatalhöyük, specific animal skeletal parts were selected for plastering and display on the walls of structures. Meskell (2008) has suggested that site inhabitants blurred distinctions between humans and cattle by representing them as hybrids and through manipulation of their remains. Household installations of horns, tusks, claws, beaks, and teeth further suggest a focus on “wild, dangerous, flesh-eating animals and on their sharp, dangerous body parts” (Hodder and Meskell 2010: 44, 2011) and a concern with piercing and disarticulation. The species represented at Çatalhöyük take on added ontological significance when juxtaposed with the evidence of animal bone. Bones of cattle, sheep, and goats outnumber those of carnivores or predators; despite the economic importance of domesticates, inhabitants were conceptually occupied with *wild* animals. The horn cores of wild sheep and goats, for example, were curated and mounted, whereas those of their domesticated brethren were discarded as butchery waste (Hodder 2006: 171, 198).

Zooarchaeological evidence from the North American Southwest evinces a similar distinction between animal categories. Representations or parts of wild animals, such as mountain lions (Gunnerson 1998), comprised ritual paraphernalia, yet such animals were rarely, if ever, eaten. Similarly, raptors, parrots, and macaws appear in murals, on pottery, and in caches and burials, yet played no apparent role in the Puebloan diet (Hill 2000; Muir and Driver 2004). Through the study of imagery, species frequencies, and the contexts of animal remains, archaeologists may identify animals of symbolic or religious import (Grant 1991) and begin to reconstruct emic animal categories (Serjeantson 2000). These avenues of research have the potential to make major contributions to the prehistory of human-animal relations and the documentation of alternative modes of human-animal interaction, whether relational, paternalist, or exploitative. To date, structured deposits and animal burials have yielded some of the strongest evidence for intersubjective relations between humans and animals.

Animal Remains and Structured Deposits

Animal remains at archaeological sites are often recovered from multiple contexts, such as middens or trash pits, in human burials, associated with house floors, and as isolated bones and teeth. In structured deposits, artifacts and animal remains are intentionally arranged in a pattern for purposes other than expedient discard (Grant 1991; Wilson 1992). These deposits are often categorized as “ritual,” that is, without a discernible rational or utilitarian purpose. Such categories limit interpretation by creating false dichotomies between sacred and profane, ritual and rationality (Brück 1999). Ethnographic and historical evidence indicates that these distinctions were relatively meaningless to hunter-gatherers, who often interacted with other-than-human persons in routine, ritualized subsistence activities.

Animal Burials

While not every deposit of animal remains represents an animal person or materializes a relational ontology, evidence is accumulating that animal burials were often sites where complex social relations between humans and animals were enacted (Lindstrøm 2012). Animal burials are widespread geographically, dating to at least 14,000 years ago (Benecke 1987; Morey 2010: 152; Schwartz 1997). The dog is the species most commonly represented in burials; dogs were

interred both by themselves and with humans. Although often identified as pets or hunting companions, dogs that were interred—sometimes with grave goods—may actually have been perceived as persons.

At two Mesolithic sites, Skateholm I and II in Sweden, several dogs were found in human graves and in graves by themselves. One dog was buried with flint blades and red deer antlers, the same kinds of grave goods found in human male burials (Larsson 1989, 1993: 53). Such treatment indicates that some dogs possessed the inherent “emergent” capacity to become persons (Fowler 2004: 79–80). Like humans, dogs at Skateholm were treated in a variety of ways, some suffering violent ends, some buried richly, and some without any goods at all. Larsson (1989) argues that dogs occupied as many different positions and roles in society as humans. Although some dogs were buried in adult graves, at Skateholm I many dogs were buried in association with the graves of children under age eight, separated from most adults in the cemetery. At Skateholm II, dogs were buried on the east and west boundaries of the site, while children were buried to the north and south (Fahlander 2008). Such placement suggests that dogs and children, if viewed as persons, were qualitatively *different kinds* of persons.

Losey et al. (2011; see also Losey et al. 2013b) recently reported on dog and wolf burials at two sites near Lake Baikal, southern Siberia, dated to between 7000 and 8000 years ago. The authors undermine the usual human-subject/animal-object dichotomy by suggesting not that dogs were pets or “used” for hunting, but rather that some were ontological subjects, persons deserving of treatment similar to that of humans. They reconstruct the lives and deaths of each animal using a life history or “osteobiographical” approach, recognizing that individual animals may experience the world in unique ways, as do individual humans. Life histories are reconstructed through analysis of the archaeological context of the animal, combined with evaluation of its remains, including descriptive osteology; observations of trauma or pathology; osteometrics; DNA and dietary analysis, using trace element or isotopic methods.

While the osteobiographical approach is becoming routine in the study of ancient human remains (e.g., Boutin 2012; Saul and Saul 1989; Stodder and Palkovich 2012), its application to animals is new. And Losey and colleagues (2011) are almost certainly the first to argue explicitly for personhood based on an animal’s life history. Their argument rests on differences in the treatments of individual animals. The canid in the Shamanka cemetery was regularly provisioned, may have assisted with hunting or transport, and was buried with five humans. In contrast, the Lokomotiv wolf was interred with ochre and a human head; the animal apparently hunted for itself and had minimal contact with humans. The differences in life history and treatment at death indicate that these animals occupied distinct ontological positions. Both were buried in ways that paralleled treatment of human dead, suggesting that they may have been considered human-like persons. The unique components of the wolf burial, however, suggest that it was further distinguished from both the humans buried nearby and other canids—perhaps occupying its own conceptual category.

A third animal burial example is the ten horses from Pazyryk, southern Siberia, who were interred, along with a human male, in a burial mound dated to about 300 BC. Each horse was outfitted with a saddle, pendants, tassels, and gear that varied in complexity and design. Argent (2010) rejects traditional explanations of the horses either as gifts to the deceased or as markers of human social status. She suggests that each horse was an individual with a specific personal history and status within the human community (see also Lindström 2012). Variation in burial accouterments of the horses reflected their respective ages, abilities, and accomplishments, particularly prowess in warfare. The horse buried with the greatest elaboration was also the oldest; he wore a massive headdress and saddle bearing feline imagery. Argent (2010) concludes that

the Pazyryk horses were outfitted in ways that reflected not the status of the human in the burial mound, but rather the status of the horse, each of whom had established a personal history sufficiently significant to be marked in burial.

These examples illustrate how the archaeological record of animal burial may be used to reconstruct prehistoric human-animal relations. In each case, authors reject utilitarian models, arguing instead that certain animals were considered persons, and that human-animal engagement took multiple forms, even within a single site or time period. While some dogs or horses were buried as persons, conspecifics often received quite different treatment, evidence that no single mode of human-dog or human-horse relations was operative in the past. The remains of dogs, in particular, reflect a range of roles and statuses, likely due to their sociality and long history of coevolution with humans (Hill 2000: 389; Morey 2010). Although animal burials remain a largely untapped resource in the archaeological study of human-animal relations, the examples above demonstrate that contextual analysis can yield original interpretations and more nuanced prehistories.

Animals in Structured Deposits

Although animal burials and burials that include both humans and animals are relatively common archaeologically, most animal remains are found disarticulated in nonburial contexts. Even when disarticulated—out of proper anatomical order—animal remains have significant interpretive potential. Structured deposits intended for some purpose other than simple expedient discard may include arrangements of specific animal elements, especially those that are iconic or indexical, such as skulls (Jones 1998; Losey et al. 2013a; McNiven 2010; Paulson 1968) or antlers (Äikäs et al. 2009; Olofsson 2010; Salmi et al. 2011; Shapland 2011; Zachrisson 2009). Like the bucrania installed at Çatalhöyük, the contents of structured deposits indicate that specific parts of some animals held particular significance and required special treatment. Contexts carry additional information, marking places on the landscape that were especially salient. Many of these features served as meeting places—sites, like Sami *sieidi* deposits (Äikäs 2012; Äikäs et al. 2009; Olofsson 2010; Salmi et al. 2011), where human and animal persons could engage in interaction and exchange.

Such engagements often took place beyond the bounds of human habitation, at sites considered liminal because they provided access or “pathways” (Plattet 2011) to other worlds, located at natural boundaries where humans and other-than-human persons might meet (Jordan 2011), or where animals might easily access them. Skelly et al. (2011; see also Méry et al. 2009) describe the construction of ritual mounds of dugong bones in Torres Strait, arguing that the mounds were dynamic sites of engagement between humans, animals and other beings. They suggest that the bones themselves, as well as special stones associated with the mounds, were communicative media, helping hunters attract dugong. Some of the mounds are associated with boulders shaped like dugong, which Skelly et al. (2011) and David et al. (2009) argue were part of a sacred “spiritscape” (McNiven 2003) focused on hunting success.

The bone mounds were overwhelmingly comprised of dugong cranial elements, especially parts of the ear, which McNiven (2010) contends were used in “rituals of sensory allurements.” These rituals, mediated by animal bones, enabled hunters to “establish social relationships and interpersonal dialogue with prey” (McNiven 2010: 218; see also McNiven and Feldman 2003), with whom they shared sentience, “cognitive kinship,” and personhood. McNiven (2010: 225) relates the preferential curation of ear bones to attempts to “enhance auditory communion” between hunters and dugong, who are believed to have keen hearing.

Effective human-animal communication combined the proper place and appropriate media with correct behavior. Yup'ik Eskimo (Yup'it) interactions with animals in Southwest Alaska took place both within the confines of the village and at hunting sites and were mediated by animal bodies and body parts. Observance of pro- and prescriptive behaviors involving the handling of animals was critical. Late nineteenth-century observers recorded a number of taboos related to the bones of beluga, or white whale. According to Yup'ik narratives, beluga once lived on land, perhaps as reindeer or wolves, and yearned to return. The archaeological site of Kegcaqurmiut is comprised of hundreds of beluga crania arranged in linear patterns near a well-known beluga-hunting site. Contrary to the common practice of returning the bones of sea mammals to the ocean or constructing piles of them, beluga skulls were carefully curated and arranged. Based on historical evidence, Kegcaqurmiut was likely the site of reciprocal exchange between human hunters and beluga prey. In return for offering themselves to hunters, beluga expected proper treatment of their bones, enabling them to return to land (Hill 2012). The location of the site, while certainly expedient, also ensured that other beluga would see hunters treating prey properly. Beluga would continue to give themselves to hunters as long as hunters observed taboos and deposited their (still sentient) remains in appropriate ways. Eskimo narratives across the Arctic document similar attitudes toward whales, seals, walrus, and orcas, with each species having its own set of taboos and preferred treatment.

McNiven (2010: 217) has suggested that “a key dimension of marine mammal hunting rituals is ontological positioning of prey as kin and of embodied social and sensory dialogues between hunters and prey.” Attention to the sensory elements of human-animal relations is a new development in archaeology (e.g., Salmi et al. 2011). Although animals and humans experience distinct perspectives by virtue of the bodies they occupy, their shared senses enable them to meet and communicate at liminal sites on land- and seascapes. Losey (2010), for example, has recently interpreted Northwest Coast fish weirs as places where humans met fish persons who wished to be harvested. These weirs, like the coastal site of Kegcaqurmiut and Sami *sieidi* sites, emplaced human-animal relations and facilitated reciprocal exchanges. That prehistoric human interactions with animals had a spatial component may appear self-evident; however, from a relational perspective, these sites are more than just places where humans and animals communicated: they may be interfaces between human and animal *territories*, marking boundaries between one kind of society and another. Past human-animal relations therefore have both a prehistory *and* a geography.

Conclusions

I close with a response to claims that hunter-gatherers and animals do not and cannot relate to each other in terms of trust, intimacy, and reciprocity due to the nature of the hunt. This perspective has been recently articulated by Knight (2005, 2012) and reiterated by some archaeologists (e.g., Oma 2007, 2010; Shapland 2011). Knight (2012: 334) suggests that in foraging bands “the conditions of hunting foreclose the development of a personal relationship between the hunter and the animals he hunts.” According to Knight, true human-animal cosociality occurs only with domesticated animals. Here I will deal only with one aspect of Knight’s argument—the idea that the limited duration of interaction during the hunt precludes the development of intimacy between humans and animals. In Knight’s terms (2012: 340), “hunter and prey share neither time nor space” for any appreciable duration. Further, according to Knight (2012: 341), the flight behavior of animals and the final confrontation between the hunter and an animal

“in extremis” mean that prey can only be known in general terms, not as persons. In support of Knight, Oma (2007, 2010) highlights what she sees as a fundamental ontological difference between hunting and herding modes of human-animal production: hunting precludes trust and intimacy between humans and animals, whereas pastoralism fosters it.

Knight’s argument on the extent of interaction between hunters and animals fundamentally misunderstands the nature of human relations with prey in many traditional societies, discounting the ontological principles upon which indigenous engagement with animals are constructed. Knight’s argument that the “hunt” is of short duration reproduces Western notions of human-animal relations by privileging direct visual or tactile engagement between the human body and the intact, living body of the animal.

I want to make two points here. First, tracking, traveling, dreaming, listening, observing, and merely *being* near animals are ways of interacting that Knight discounts because they are not direct confrontations. In societies reliant on hunting, hunters spend hours in the forest, on the tundra or ice engaged with animals, even when a specific animal is not visible. Interaction is sensual, ongoing, and may involve the living and the dead, in addition to prey and hunter (McNiven 2010, 2013). Among the Siberian Yukaghir, some of the most significant engagements with animals take place in dreams, which enable the hunter to discover, seduce, or communicate with prey (Willerslev 2007: 174–78; see also Ingold 2004; Nadasdy 2007) in ways not otherwise possible.

Second, as ethnographers have documented (Nelson 1983; Willerslev 2007) and archaeologists have argued (Hill 2011; Losey et al. 2013a; McNiven 2010, 2013), in many societies, interaction with animals does not end with the death of the animal body. Hunter and animal continue to engage throughout processing, consumption, and discard of remains. Animal persons remain sentient, conscious of the ways that hunters speak, of the observance or violation of taboos, and of the handling of their remains. The hunt itself is thus only one facet of hunters’ engagement with animals (Willerslev 2004, 2007, 2011). Contrary to Knight’s assertion, ethnographic and narrative evidence demonstrate that the hunt may actually be the *beginning* of personal, reciprocal interaction between human and animal (e.g., Hamayon 2001). Among Alaska Yupiit, the bones and bladders of sea mammals and caribou retain the prey animals’ awareness; these body parts may be curated for up to a year, cared for by the wives of hunters, and honored as guests during festivals. Such treatment represents exactly the sort of ongoing dialogue or “enfoldment” (Ingold 2005) of humans and animals that Knight and Oma deny occurs in hunting societies.

In sum, Knight (2012) errs in assuming that the duration of human-animal interaction is equivalent to that of the hunt itself. A concluding example illustrates not only the nature of reciprocal exchange between hunters and prey—in this case between Yupiit and orcas, or killer whales—but also suggests that interactions involving specific animal and human persons unfolded through time. Rather than a temporally bounded one-off encounter between human and prey, engagement was complex, extended, and remembered by both persons.

In the Bering Sea region, orcas are an iconic predator; like humans, they prey on belugas and bowhead whales. Oral narratives relate how humans and orcas cooperatively hunted and exchanged meat, blubber, and ornaments. In return for beads or a necklace, for example, orcas would leave blubber floating on the water’s surface so that humans could retrieve it. Exchanges could also involve human and animal lives. Once, a young orca drowned after becoming entrapped in a hunter’s net by mischance. In response, the mother orca later took the life of a human child to replace her own lost offspring (Fienup-Riordan 2011: 73–79). This story involves a long-term, ongoing relationship remembered by both human and animal persons, a relationship predicated on reciprocity and endangered through human carelessness. Knight and archae-

ologists who have adopted his position reject the possibility of such engagement. Yet, this story, like the examples of animal burial and structured deposits discussed above, is clear evidence for the duration and complexity of human-animal relations in hunting societies and for relational ontologies in which human exceptionalism is absent.

I have argued that in some societies, humans recognized certain animals as persons possessing sentience, intentionality, and agency. Interactions between the members of human and various animal societies were relational; they were social in nature, involved reciprocal exchanges, and adhered to rules for living or codes of conduct. Types of persons were distinguished by the bodies they wore, in corporeal terms, and through behavior or action. The mutable nature of the body combined with a durable sentience facilitated transformation, regeneration, mimicry and, at least in some societies, an exchange of perspectives.

The archaeological interpretations described above are in part the product of recent engagement with the interdisciplinary literature in human-animal studies, or anthrozoology (as defined by Bradshaw 2010). This literature provides alternatives to the materialist, utilitarian perspectives that characterize much of the archaeological research on animals. New interpretations have also drawn on ethnographic work in Amazonia, the Arctic, and Subarctic. Those archaeologists who have considered the evidence of human-animal interactions from relational perspectives recognize that, in many societies, animals were essential components of the “total social phenomenon” that was life in the past. Their work destabilizes essential(ist) archaeological categories, such as wild and domestic, human and animal, person and thing.

We now recognize that human-animal relations have a history. Archaeology—supplemented with indigenous narratives, ethnohistories, and ethnographies—enables us to write a *prehistory*. Such a prehistory requires the re-evaluation of existing assumptions about the ontological positions of both humans and animals and exploration of the alternatives furnished by ethnographies and current philosophical debates over the constitution of humanity and animality. This article has shown that attention to issues of personhood, agency, and indigenous ontology yield new insights on human-animal social dynamics. While not all people in the past interacted with animals in the relational modes described above, and not all animals were persons—even in those societies in which personhood was possible—*some* of them were. A more inclusive prehistory of human-animal relations recognizes the contingent nature of our engagement with animals and embraces the interpretive possibilities of animal personhood.

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■ ERICA HILL is an archaeologist and associate professor of anthropology at the University of Alaska Southeast. She has conducted research throughout the United States and in Chukotka, Mexico, Peru, and Honduras. She is currently working on the prehistory of human-animal relations in the Bering Sea region. Her recent work has appeared in *Cambridge Archaeological Journal* and *Arctic Anthropology*.

NOTE

1. The distinction between zooarchaeology and archaeozoology has been addressed by several researchers, including Legge (1978), Olsen and Olsen (1981), Bobrowsky (1982), and Schramm (1982). Bartosiewicz (2001), for example, links the development of zooarchaeology in English-speaking countries to the discipline of anthropology, whereas, in Central Europe, archaeozoology developed in association with the natural sciences.

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