

Explorations in Ethnoelephantology

Social, Historical, and Ecological Intersections between Asian Elephants and Humans

Piers Locke

■ **ABSTRACT:** Humans and elephants have lived together and shared space together in diverse ways for millennia. The intersections between these thinking and feeling species have been differently explored, for different reasons, by disciplines across the sciences, humanities, and social sciences. Such disciplinary divisions, predicated on oppositions of human-animal and nature-culture, are integral to the configuration of modernist thought. However, posthumanist and biocultural thinking questions the underlying epistemological conventions, thereby opening up interdisciplinary possibilities for human-animal studies. In relation to issues of conflict and coexistence, this article charts the emergence of an interdisciplinary research program and discursive space for human-elephant intersections under the rubric of ethnoelephantology. Recognizing continuities between the sentient and affective lifeworlds of humans and elephants, the mutual entanglements of their social, historical, and ecological relations, and the relevance of combining social and natural science methodologies, the article surveys recent research from anthropology, history, and geography that exemplifies this new approach.

■ **KEYWORDS:** captive elephant management, elephant conservation, elephant welfare, ethnoelephantology, ethnoprimateology, human-elephant relations, more-than-human geography, multispecies ethnography

Shared Social Complexity and Human-Elephant Entanglement

During the twentieth century, the animal behavioral sciences began discrediting the conviction that humans are unique in their sociality, individuality, and intelligence. At first, these revelations derived from field and laboratory research with the great apes, the closest phylogenetic relatives of *Homo sapiens*. Later, these findings were supported by research from other large-brained, but less closely related mammals, particularly whales, dolphins, and elephants. In Western science it is now known that like humans, elephants maintain enduring social relationships in fluid social systems, which involve individual personalities influencing patterns of interaction that unfold according to behavioral conventions. Like humans, elephants are also capable of learning, retaining, and transmitting practical skills and social information. Like humans, elephants recognize each other as individuals, appreciate the thoughts and feelings of other sentient beings, and engage in strategic behavior. Like humans, elephant brains have a high encephalization quotient



(brain/body weight ratio), a highly developed neocortex, and a high neuron density, all of which are associated with complex learning skills and behaviors. Finally, like humans, elephants grieve for lost friends and relatives (Poole and Moss 2008). Significantly, this brief summation of the scientific understanding of elephant intelligence and social complexity seems consonant with the knowledge of elephant handlers who have interacted with elephants over millennia.

These cross-species continuities between human and elephant are crucial to the thesis of this article; equally important is the historical depth, diversity, and meaning of human engagement with elephants. Various representing weapons of war, emblems of prestige, symbols of divinity, objects of entertainment, icons of conservation, commodities for exchange, vehicles for labor, as well as intimate companions, elephants are animals caught up in human enterprises of power, wealth, worship, pleasure, and preservation. Feared or worshipped, killed or conserved, captured or maimed, appropriated for stories and symbols, they are animals with whom humanity is profoundly entangled. As Whatmore and Thorne remark, the elephant is “a creature so long caught up in social networks of livelihood and transport, commerce and war, ceremony and entertainment, that traces of its presence litter the histories and geographies of civilizations and everyday lives” (2000: 187).

These contentions—that like us, elephants are thinking, feeling, and socially complex beings who are variously implicated in the material and semiotic orders of human life—represent the principal insights from which this article proceeds. Concerned both with the diversity of disciplines that engage the various aspects of the human-elephant relationship, and with emerging trends for interdisciplinarity, the article proposes an integrated discursive space and research program called *ethnoelephantology* (see Locke 2013a; Mackenzie and Locke 2012), characterized by three defining principles:

1. Possessing subjective agency, both humans and elephants dwell in sentient and affective lifeworlds.
2. Humans and elephants have coevolved such that their social, historical, and ecological relations are mutually entangled.
3. The human-elephant nexus can be productively explored by combining methodological perspectives from the natural and the social sciences.

First, this article indicates the disciplinary interests brought to bear in exploring the intersections between human and elephant, whilst also acknowledging work concerned with transcending the discrete discursive domains in which such interests traditionally operate. Second, it situates ethnoelephantology in relation to multispecies perspectives, using the parallel precedent of *ethnoprimatology* as theoretical and methodological model. Third, it reviews anthropological, geographical, and historical research exemplifying this more integrated approach to human-elephant relations, albeit restricted to intersections with Asian elephants.

From Multidisciplinarity to Interdisciplinarity

The interrelations between human and elephant cover a broad spectrum that includes a diversity of meanings, purposes, and concerns through time and space. Correspondingly, these interrelations appear in a multitude of accounts across a disparate mix of disciplines, reflecting a variety of interests, as demonstrated by the following indicative inventory: Archaeologists have been intrigued by steatite seals of elephants from the Indus Valley Civilization (Delort 1992: 42–44). Ancient historians have sought to understand Macedonian encounters with Indian

war elephants and the subsequent adoption of this military technology by the Diadochi, the Persians, the Egyptians, and the Carthaginians, who subsequently began taming African forest elephants, famously led over the Alps by Hannibal (Bosworth 2002: 166; Lobban and de Liedekerke 2000; O'bryhim 1991). World historians have investigated the development and proliferation of the trade in elephant ivory from ancient times on (Chaiklin 2010), while historians of the Enlightenment have looked at changing representations and conceptions of the elephant in the European imaginary (Rothfels 2008). Historians of subaltern groups have documented revolts against elephant catching obligations in Mughal-era Assam (Bhadra 1983) and Raj-era Bengal (van Schendel 1985). Indologists have interpreted ancient literary sources on elephant management (Edgerton 1931; Lainé 2010; Meulenbeld 2002: 557–79; Olivelle 2013). Art historians and religious studies scholars have explored the symbolic significance of elephants in Thai culture (Ringis 1996), and the elephant-headed deity Ganesh in Hindu society (Brown 1991). Furthermore, colonial officials have documented the use of elephants in forestry and in regal hunts in South Asia (e.g., Millroy 1922; Sanderson 1878; Smythies 1942; Stracey 1957), a topic that has received limited commentary (Bist 2002; Wemmer 1995).

Moving from the cultural and the historical toward the ethnographic, the ecological, and the applied, we find political scientists analyzing welfare, tourism, and elephant-back safaris (Duffy and Moore 2010), and the contemporary global ivory trade and its prohibition (Duffy 2008; Moore 2011). Meanwhile, anthropologists have explored the professional relationship between mahout and elephant (Hart 1994; Hart and Locke 2007; Locke 2011a, 2013b), the institution of the elephant stable (Locke 2011b), and regional traditions of elephant handling expertise (Locke 2008). Animal advocates have documented the welfare and survival of elephants in zoos and circuses (Clubb and Mason 2002; Clubb et al. 2008), and elsewhere in captivity (Ghosh 2005; Varma and Kumar 2010). Planners for captive elephant management have considered the questions raised by policy-driven studies (Kurt and Mar 2003; Kurt et al. 2008), and the protocols recommended by elephant handling manuals (Chowta 2010; Namboodiri 1997; Phuangkum et al. 2005). Conservation biologists have researched human-wildlife conflict involving elephants (Fernando et al. 2005; Jadhav and Barua 2012; Sukumar 2003), while veterinarians have studied reverse zoonotic disease transmission and the problem of tuberculosis in elephants (Mikota and Maslow 2011).

This list does not merely indicate the multitude of concerns and the diversity of expertise with which human-elephant intersections have been explored. Closer inspection of the sources cited here also reveals that disciplinary interests are by no means exclusionary, with animal behavioral scientists conducting ethnographic research (Hart), anthropologists engaging in literary analysis (Lainé), and conservation biologists writing history (Wemmer). Indeed, I argue that the human-elephant relationship does not merely afford multidisciplinary, but that its manifold complexity encourages an integrative interdisciplinarity.

For example, *The Story of Asia's Elephants* by elephant ecologist Raman Sukumar (2011) represents an extensive and vividly illustrated history of elephants that is both cultural and ecological. In 2003, a group of wildlife biologists, social scientists, philosophers, historians, and veterinarians, were assembled for a symposium to consider the mutually entangled history of humans and elephants and the ethical questions posed by these fascinating but problematic relationships. From this emerged a pioneering volume, *Elephants and Ethics: Toward a Morality of Coexistence* (Wemmer and Christen 2008). Edited by a zoologist and an environmental historian, it signals the possibilities for a strongly interdisciplinary approach to human-elephant relations, its component contributions indicative of the conversation across disciplinary boundaries the symposium helped foster. More recently, the Symposium on Human-Elephant Relations in South and Southeast Asia was held at the University of Canterbury (see Eason 2013; Locke

and Eason 2013). Anthropologists, conservation biologists, geographers, historians, Indologists, political scientists, and zoo elephant experts met to discuss new approaches in the study of human-elephant relations, presenting papers on human-elephant histories, the ethnography of captive elephant management, relations between human and elephant welfare, and conflict and coexistence in elephant conservation, an edited volume from which is forthcoming.

The need for multiple contributions from a range of disciplines had been recognized earlier in Richard Lair's *Gone Astray: The Care and Management of the Asian Elephant in Domesticity* (1997). Although limited to a practical consideration of human interactions with tamed elephants, its advocacy of disciplinary collaboration is significant, and arguably has served as an impetus for the development of interdisciplinary sensibilities. Lair writes:

The scientific and technical disciplines of biology, forestry, veterinary medicine, animal husbandry, and law are obviously essential in managing domesticated elephants. Less obviously, the crucial caretaking function performed by mahouts and owners requires the entry of humanities such as social anthropology, as well as more arcane subjects such as comparative religion, social history, linguistics, etc. (1997: 1).

Multivariate as the human-elephant nexus is then, I argue that its investigation, and the human projects associated with it, including concerns with habitat, husbandry, preservation, and welfare, requires an approach that traverses traditionally compartmentalized forms of disciplinary expertise. As I explore below, posthumanist thought is reconfiguring the boundaries of modernist scholarship, while the biocultural turn is articulating a research program that bridges the natural and social sciences. From these parallel developments interdisciplinary approaches to human-elephant relations are now emerging, which can be integrated under the rubric of ethnoelephantology.

Ethnoelephantology and the Multispecies Turn

Along with nature-culture and subject-object, the opposition of human to animal has been integral to the conceptual edifice of humanism; an anthropocentric discourse in which the figure of “man” naturally stands at the center of things, distinct from animals, objects, and other non-human entities as the essential source of history and meaning (Castree et al. 2004: 1345). This insistence on ontological insularity has depended on the intellectual separation of human from animal, and nature from culture, a conceit that has played a significant role configuring the architecture of modernist thought and the disciplinary silos produced by it.

Posthumanism represents a prominent contemporary strand in the critical interrogation of these dualist oppositions. Rather than suggesting a temporal break in the human condition, or an outright rejection of the legacies of humanist scholarship (Castree et al. 2004: 1341, 1349), it is perhaps best conceived as a critical sensibility skeptical of the ways in which the human is discursively constituted through conceptual segregation. Posthumanist thinker Donna Haraway designates the humanist denial of cross-species entanglement a form of human exceptionalism, based on “the premise that humanity alone is not a spatial and temporal web of interspecies dependencies” (2008: 11). Bruno Latour exemplifies this contention when he asks: “What would a human be without elephants, plants, lions, cereals, oceans, ozone or plankton?” concluding that such a human would be: “A human alone, much more alone even than Robinson Crusoe on his island. Less than a human. Certainly not a human” (1998: 16).

In other words, without the animal other, there can be no human, not just ecologically as the quote from Latour suggests, but also intellectually as the defining comments about post-

humanism suggest (Castree et al. 2004:1352). This situation calls for nonhuman animals to be incorporated into social theory by means of a more expansive conception of social life, ideally understood as a multispecies phenomenon (see Emel and Wolch 1998). Haraway provides an arsenal of conceptual tools for this epistemological task, much of which informs the *ethnoelephantological* work identified in this article. Her compounded term *naturecultures* designates a strategy for subverting the dualist ontologies of humanist scholarship, with the effect of “refiguring the ontological disposition of research” (Whatmore 2006: 602). This is demonstrated in many of the studies discussed here, which confound these ontological boundaries through their attempts at a symmetrical approach to the mutual involvements of humans and animals. Haraway’s formulation of *becoming animal* suggests a relational perspective that considers how animal subjects are configured through multisensual engagements, categorical orders, and practical arrangements, which Whatmore and Thorne (2000: 186) describe as *becoming elephant* in the quote about elephant entanglement in social networks. Finally, Haraway’s (2003) notions of *companion animal* in the particular singular and *companion species* in the abstract plural are useful because elephants represent animals with whom humans share imbricated histories of intimacy and coexistence.

However, it is not only posthumanism but also the biocultural turn that challenges the anthropocentric logic maintaining the conceptual boundaries between animal and human, nature and culture. For instance, frustrated by imperatives to repudiate cross-species continuities in the animal behavioral sciences, despite the phylogenetic continuum confirmed so long ago by Darwin, cultural primatologist Frans de Waal (2000) counters the injunction against anthropomorphism with the neologism *anthropodenial*. Indeed, there is increasing acceptance that culture—in the qualified sense of socially transmitted skill and knowledge—is a phenomenon that extends beyond the human (for a general discussion, see Byrne et al. 2004; for primates McGrew 1998; Sapolsky 2006; Wrangham et al. 1994; for cetaceans Norris 2002; Rendell and Whitehead 2001; and for elephants Bradshaw et al. 2005; McComb et al. 2001).

These affirmations of cross-species continuities establish porous boundaries between the sciences of the cultural human and the natural animal. These once-sacred divisions are further undermined by work demonstrating the virtue of methodologies that traverse the social and the natural sciences. For instance, Dominique Lestel (2006) argues for the methodological commonalities of ethological and ethnographic fieldwork, evident in Jane Goodall’s (1998) use of participant observation studying the Gombe chimpanzees. Similarly, biodiversity conservation increasingly incorporates sociological methods and perspectives, just as ethnobiology incorporates biological methods and perspectives to understand how human populations use and understand their biophysical environments (Newing 2010). These are both relevant to ethnoelephantology in terms of understanding human-elephant conflicts, and local comprehensions of elephant interactions, behaviors, and habitats. Indeed, Kierin Mackenzie (2013) is using the ethnoecological methods of ethnobiology to explore relations between elephant handling practices, local environmental knowledge, and their prospective applications in elephant conservation.

Arising from these posthumanist and biocultural trends are the parallel developments of multispecies ethnography (see Kirksey and Helmreich 2010) and more-than-human geography (see Whatmore 2006). Informing work subsequently discussed in this article, they both typify what might be termed “the multispecies turn.” Both are concerned with an epistemologically reconfigured and consequently more ecologically contextualized approach to the relations between humans, other lifeforms, and their shared environments. They are also concerned with animating nonhuman life previously rendered theoretically inert; in other words with putting the animal back in as more than just biophysical entity or intangible symbol. Rather than fully

formed theories with substantive definitions and programmatic statements, they are perhaps best understood as intellectual sensibilities concerned with the artificial separation of nature-culture and human-animal, with decentering the human, with multispecies agency and cohabitation, and thus with recognizing; “the messy heterogeneity of being-in-the-world” (Whatmore 2002: 147). This can variously involve denaturalizing and historicizing environmental conditions, exploring the coproduction of new subjectivities through affective relations of conflict and cooperation between humans and nonhumans, as well as engaging with the animal behavioral sciences. Also relevant are issues of embodiment, performance, and skill as competencies and relational forces that cross species divides, as we find in accounts of captive elephant management discussed here.

Ethnoprimateology is one particular multispecies field that instantiates the posthumanist insights and biocultural methodology acknowledged here, serving as an instructive precedent for ethnoelephantology. Situated at the confluence of primatology and sociocultural anthropology, ethnoprimateology employs a revised primatological practice that allows for analyses of the intersecting lifeworlds of humans and other primates in an integrated, shared, social, and ecological space. Agustin Fuentes, one of its most prominent exponents, explains that the ethno prefix “marks the inclusion of anthropogenic elements, including social, economic, and political histories and contexts” (2010: 601). This is because humans and primates, as with humans and elephants “are simultaneously actors and participants in sharing and shaping mutual ecologies” (2010: 600). The crucial concept of mutual ecology entails two elements: first the “structural ecology” of the biotic landscape and physical environment in which humans and primates, or indeed humans and elephants live; and second the “social ecology” by which different agents interact, creating social networks that can cross species lines, and which keep “the forces of history, political economy, interindividual relationships and culture clearly in view” (Fuentes 2010: 600). To think about mutual ecologies is to consider how interacting organisms coconstruct their niches in behavioral, ecological, and physiological senses, as becomes evident in some of the case studies that I retrospectively designate as exemplars of ethnoelephantology.

In a 2010 special issue of *Cultural Anthropology* dedicated to multispecies ethnography, Fuentes illustrates the defining characteristics of the ethnoprimateological approach through his research on monkeys, temples, and tourists in Bali. Framed around Haraway’s idea of natural-cultural contact zones, he analyzes the Padangtal Temple and Ubud Monkey Forest as spaces involving a host of agencies, practices, and transactions. This resists any simple distinction between nature and culture, with each domain, traditionally conceived, so thoroughly intertwined as to warrant compounding. The validity of this ontological position is evident in the complex, cross-species intersections of Fuentes’s analysis.

The distribution of edible religious gifts entangles economies, bodies, and daily practice in the coproduction of niches, affecting the size, composition, population genetics, and social dynamics of macaque groups. It also plays a role constituting a mosaic landscape comprising wet rice agro-ecological systems and riverine forest corridors. Macaque bodies also have epidemiological significance for zoonotic disease transmission to humans, while in a more conventionally ethnographic register, his analysis also considers the roles of macaques as crop raiding pests, tolerated coresidents, household pets, tourist attractions, and participants in the Balinese Hindu mythos. With these roles comes an attendant range of emotions: anger, tolerance, and affection. Finally, macaques stimulate the local tourist economy, supporting village community building, temple enhancement and restoration, and agricultural projects, in turn encouraging the expansion of macaque habitat. Using a hybrid methodological and conceptual toolkit, Fuentes has then provided an example of the mutual shaping of social, historical, and ecological relations through the modification of interfaced niches as part of a multispecies system.

As an approach to multispecies contact zones, Fuentes's articulation of ethnoprimateology analogously reveals the key principles for ethnoelephantology: first, the subjective agency shared by humans and other social mammals; second, their social, historical, and ecological mutuality as coevolving companion species; and third, the transdisciplinary research strategy such intersections encourage. In the sections that follow I explore how similar perspectives on human-elephant relations are simultaneously emerging from the fields of anthropology, geography, and history, arguing that this work can be collectively identified as ethnoelephantology. In this research three broadly conceived, interconnected dimensions are of particular significance—the historical-geographic, designating attention to temporal and spatial contexts; the sociocultural, designating concern with practices, relations, and representations; and the ecological, designating concern with environmental interactions.

Anthropology, Ethnography, and Ethnoelephantology

Until recently there has been limited anthropological treatment of the Asian elephant as a companion species, whether through ethnographies of captive elephant management, human-wildlife conflict, or the conservation of charismatic megafauna. However, there is a small but growing body of work dedicated to ethnographic explorations of coexistence and interspecies intimacy. Much of this work is still confined to postgraduate theses and conference papers, including the aforementioned symposium on human-elephant relations, which brought together anthropologists working in Assam, Kerala, and Tamil Nadu in India, as well as Laos, Nepal, and Thailand. Besides providing novel ethnographies of wild and captive elephant management that convey the amity and enmity of proximate interactions, most of these researchers are also incorporating the epistemological and methodological perspectives of the multispecies turn.

Influenced by Whatmore and Thorne's (2000) application of actor-network theory (ANT) in human geography, anthropologist Michael Hathaway (2013: 152–84) develops an account of China's last remaining wild elephants that demonstrates the concept of mutual entanglement integral to ethnoelephantology. Hathaway is interested in understanding how elephants have been mobilized to forge transnational environmentalist connections, at the same time accounting for the role they have played in shaping the social and natural landscapes of Xishuanbanna in southern Yunnan. He recognizes that animals play a significant if unequal role in transnational networks that advance human projects, arguing that elephants represent significant agents in assemblages comprising humans, landscapes, local government, and international conservation organizations, through issues of human-animal conflict, animal welfare, and species survival.

Hathaway contends that, like the panda, the elephant has become an important transnational animal that links scientists, government officials, farmers, conservationists, and tourists (a topic also explored by geographer Maan Barua). The figure of the elephant is used to elicit support from members of international conservation organizations, national government leaders, ecotourists, and all those who build networks through them. Hathaway also reminds us that elephants are not merely symbols or objects, since they also play a role as biophysical agents creating large-scale change—wandering, eating crops, colliding with cars, destroying houses, for which land use laws and practices are changed to accommodate their actions. As elephants have obtained conservation status, they have become a greater source of tension for local people, who can no longer legitimately respond to their depredations in the same ways, placing them in a situation of helplessness that locals claim the elephants have learned to exploit. Indeed, the elephants confound the plans of the conservationists, such that the failure of fence initiatives,

premised on negative conceptions of slash and burn agricultural practices, leads to the realization that perhaps human-elephant conflict could be reduced if local people grew crops for the elephants in the reserve, thereby providing a disincentive for them to raid their villages. Hathaway also remarks that this policy shift coincides with the rise of discourses on rural justice and indigenous rights in biodiversity conservation.

However, in Hathaway's analysis the agency of elephants is treated generically, understood in terms of effect rather than intentionality, thereby downplaying the subjective individuality of elephants as social beings with similarities to humans. This is understandable however, since China represents a zone of retreat for elephants (Elvin 2004), whereas South Asia, from where Münster and Locke report, represents a zone of persistence for elephants (Trautmann 2013). Crucial for understanding this persistence are the elaborated forms of interspecies intimacy resulting from practices of elephant husbandry, which yield studies more likely to attend to non-human subjectivities and scientific findings about elephant intelligence and behavior, in accord with the principles outlined for ethnoelephantology. Nonetheless, Hathaway connects the material and the semiotic aspects of elephants as biophysical entities and as symbolic capital, while also hinting at the ways in which elephant lifeworlds are coproduced through their relations with humans. Most significant though, by exploring the configuration of living spaces intended to keep humans and elephants apart, Hathaway shows cross-species interactions transforming the social and physical landscape, mediated by assemblages of actors, organizations, and discourses that extend beyond national boundaries.

In her paper on nonhuman personhood, multispecies justice, and human-elephant conflicts in Kerala, India, presented at the recent symposium on human-elephant relations, anthropologist Ursula Münster (2013) is primarily concerned with violence between humans and elephants. This involves consideration of the dualist ontologies that sustain ideologies for fortress conservation approaches to wildlife management, and the conciliatory countercurrents that recognize elephants as "other-than-human persons" (Bird-David and Naveh 2008: 60) sharing a mutually constituted landscape. Based on fieldwork with scientists, indigenous forest watchers, mahouts, environmental activists, farmers and foresters at the fringes of the Wayanad Wildlife Sanctuary in the densely populated Western Ghats, she argues that elephants represent neglected agents in the political ecology of the region and its conservation landscape. Furthermore, she contends that understandings of elephant cognitive ability and social behavior in both local and scientific discourses converge, are integral to making sense of human-elephant conflicts, and to the possibility of environmental justice in a multispecies world.

Münster reminds us that the history of humans and elephants at the wildlife sanctuary is intertwined, and that they represent dwellers of a common, multispecies landscape. Populated by a variety of nonhuman and human actors, it is a landscape in which competing forms of conservation, development, and livelihood are at stake, configured by histories of extraction and enclosure, subsistence and deforestation, involving human migration, technocratic governance, and environmental degradation, but also, as Hathaway acknowledges for China, by elephant movements, feeding behaviors, and group dynamics. As in my own work with Nepali elephant handlers, she finds consonance between the claims of her interlocutors regarding elephants' similarities to humans and recent advances in the behavioral animal sciences (see Varner 2008). Münster also explores the reported role of elephants' remembered experience and adaptive social intelligence in responding to human attempts to control elephant movement and crop raiding (as Barua reports for Assam). This leads her to ask how the synergies between technoscientific knowledge and local, lived experiences of elephants might be combined to combat the antiwildlife sentiments of mainstream society that obstruct conflict mitigation, in order to imagine a multispecies future of tolerated coexistence.

Moving from China, South India, and onto Nepal, I present an ethnographic study of Nepali captive elephant management focused on the institution of the elephant stable (*hattisar*) in and around the Chitwan National Park. Involving a very active form of participant observation, my research explores indigenous understandings, skilled practices, and intimate relations between humans and captive elephants. My own apprenticeship forced me to reconceive my research in multispecies terms. By attending to two types of person, only one of whom is human, I strive for a species-symmetrical analysis that challenges the humanist epistemology underlying ethnographic traditions of fieldwork, thereby exemplifying the ethnoelephantological principle of dual subjective agency through the social dimension. This work includes a concern with apprenticeship learning as mastery of a cross-species relationship within a multispecies community of practice (Locke 2007: 207–34), and an analysis of elephant training as a multispecies rite of passage, involving sacrificial rituals and prohibitions, and the acquisition of new competencies and status roles for elephant and handler alike (2007: 159–206, 2011a: 37–39). Here though, I discuss the ontological states and relational modes of elephants as animals, persons, and gods (Locke 2012).

My concern is with the affective and semiotic relations of a multispecies total institution in which elephant and human bodies and lifeworlds are intertwined in fulfillment of their shared role in and around the territory of a national park. I argue that government elephant handlers (*hattisare*), influenced by cultural traditions of the Tharu ethnic group, attribute to their elephants states of animality, personhood, and divinity, which are most closely revealed in correspondence with modes of relation designated as domination, companionship, and veneration (Locke 2011a: 36–37, 2012). Only the dynamic of companionship is balanced, with the others placing human and elephant in converse hierarchies, making a handler a master in one, and a devotee in another. These discrete categories of being are not exclusively allied to particular modes of relation however. Rather, they are variably emphasized according to spatial location, practical activity, and discursive context. This has the effect of yielding patterned assertions of being that remain unstable. Boundaries between animality, personhood, and divinity are understood then as permeable and contingent, conflicting even, but nonetheless coextensive (Locke 2012). Handlers (and elephants) in this traditional management regime represent subaltern actors whose expertise tends to be ignored (as Münster reports for the Kattunaika in Wayanad), making this work significant for ethnoelephantology by setting a precedent for greater consideration of handlers' skills, the mutual attunement of elephant and human bodies, and the shared social and ecological worlds in which they are both embedded.

Geography, Connectivity, and Ethnoelephantology

I have suggested that the multispecies turn manifests in the cognate disciplines of anthropology and human geography through multispecies ethnography and more-than-human geography. Similarly, each of these disciplines is at the vanguard of human-elephant research displaying the characteristics of ethnoelephantology. In geography, Whatmore and Thorne (2000) instigate the more-than-human geography of human-elephant relations with an analysis of networks connecting the species through the computerized records of lineages and breeding properties held and shared by zoos, and through an international program of conservation research involving corporate donors, paying volunteers, and field scientists. In so doing they introduce the influential theme of spatial connectivity by which projects of preservation and conservation create assemblages of actors, objects, spaces, and relations that involve the creative presence of elephants and other nonhumans in the fabric of social life. This concern with “spatial forma-

tions of wildlife exchange” demonstrates the principle of entanglement, as well as the historical-geographic, social, and ecological dimensions of ethnoelephantology. Their pioneering essay on African elephant wildlife formations has proven significant for the ethnoelephantologies of Asian elephant conservation by Jamie Lorimer and Maan Barua.

Lorimer (2010) extends the theoretical concerns of Whatmore and Thorne in an essay on the biogeography of Asian elephants in Sri Lanka. Drawing on science studies and biophilosophy to explore nonhuman agency, vitality, and interspecies conviviality, Lorimer engages with the nascent discipline of conservation biogeography, which is concerned with the distributional dynamics of biological life and its implications for biodiversity conservation (see Whittaker et al. 2005). Reminding us that there is no wilderness in Sri Lanka, only shared space, he explains that the elephant population inhabits a fragmented territory of protected areas, orphanages, and cultivated land, with various modes of private and religious captivity. The principal actors in this island biogeography include elephants, conservationists, farmers, mahouts, and veterinarians, caught up in a sometimes lethal drama of terror, death, and injury for humans and elephants alike.

Just as Hathaway traces the assemblages of Chinese elephant conservation, so too Lorimer traces an assemblage linking actors, practices, organizations, and legislation involved in encountering and protecting elephants in Sri Lanka, recognized as charismatic flagships for animal conservation and welfare. His exploration of the environmental history of Sri Lanka as a hydraulic civilization reveals how an anthropogenic landscape sustained a high elephant population despite dense human habitation. Lorimer also applies a corporeal concern, considering the role of gene-sequencing technologies for documenting the phylogeography of elephant population distribution, and epidemiological investigations of microbial zoonotic exchange between humans and elephants. In terms of genetics, bodies, and spaces then, this serves to refute the idea of elephants as denizens of a wilderness-other unsullied by humans. Indeed, each case supports the claim of humans and elephants as coevolving companions in a naturalcultural situation, in accord with the second principle for, and three dimensions of ethnoelephantology.

The parallels with Fuentes’s *ethnoprimatological* study of macaques should be evident since the consideration given to anthropogenic factors in population genetics, disease, and landscape, indicates the mutual ecology by which humans and elephants coconstruct their behavioral, physiological, and ecological niches. Furthermore, Lorimer explores “the conjoined potential of ethological and ethnographic methodologies for witnessing human–animal companionship ... and interpreting the multisensory knowledges, bodily practices and affective energies that flow between sentient animals” (2010: 497). Clearly, this speaks to the first principle of shared lifeworlds and dual subjective agency, and to the third principle of methodological engagement with both the natural and the social sciences.

Jadhav and Barua (2012) make a significant contribution in their study of the psychosocial and bureaucratic implications of human–elephant conflict in Assam, India. The authors note that conservation science typically treats human–wildlife conflict in terms of the most visible and immediate impacts of crop damage, livestock predation, property damage, and physical injury. Such approaches tend to neglect the social and psychological well-being of communities in close proximity to wildlife, leading the authors to argue for an integrated approach linking ecology, culture, and the clinic. Situated at the intersection of human geography, conservation science, and clinical ethnography, Jadhav and Barua present four case studies illustrating how conflict generates psychiatric illness and aggravates existing social inequalities.

The authors identify the mediating role of alcohol in human–elephant conflict as a substance desired by elephants, encouraging their domestic incursions, and abused by afflicted locals seeking solace. They also identify the bureaucratic inadequacies that prevent the disempowered poor

from claiming compensation, which amplifies the effects of conflict. An assemblage of social suffering is thereby revealed, constituted by nonhuman animals (elephants), materials (alcohol), and institutions (bureaucracy). Through the parallel presentation of ethnographic and psychiatric profiles, the authors argue that clinical diagnosis tends to edit out the social and ecological context in which humans and elephants encounter and affect each other; thereby precluding understanding that might inform policy. Furthermore, displacement due to flooding and ethnic conflict represents an additional factor of consideration, leading to uprooted settlers infringing on elephant habitats in a context of environmental governance predicated on the separation of human and elephant living space, supposedly mitigated by the creation of elephant corridors to allow movement between spaces reserved for elephant populations.

Thekaekara's (2013) research around the Mudumulai National Park, South India is relevant here. Drawing on ethnoecological approaches, he finds that communities with the longest experience of living in proximity to elephants have developed the greatest tolerance to the problems of competing interests in shared space, and therefore that an approach based on cohabitation rather than separation is preferable and possible. Based on detailed fieldwork, Thekaekara's work represents a zoomed-in perspective, while the preoccupation with spatial connectivity in human geography represents a zoomed-out perspective (Ingold 2011: 6).

At this more expansive level, mobility, circulation, and connectivity emerge as analytic themes, leading Barua (forthcoming) to the thesis of the elephant as a cosmopolitan animal. Barua argues that we must rethink cosmopolitanism in relation to Latour's (2004) contention that humanist theory fails to embrace the nonhuman entities that make humans act, a concern also evident in Locke's multispecies ethnography. Barua asks how the circulation of animals contributes to the enterprise of linking the commonality of the "cosmos" with the diversity of the "polis," and how elephants get caught up in networks that mold environmental governance. By means of a multisited ethnography employing a species-symmetrical analysis, he explores three interspecies encounters that reveal how cosmopolitanism, associated with travel, circulation, and contact with itinerant others, is coconstituted with nonhumans.

The first encounter engages with the travels of an elephant and her English companion in postcolonial India, highlighting bodily and affective connection between human and elephant. The second engages with a public art event in London in which decorated elephant sculptures are mobilized to raise funds and enroll actors into conservation assemblages. The third returns to the unruly behavior of living, breathing elephants on the ground in India, where they serve as tools of persuasion to govern partitioned landscapes intended to separate humans from wildlife. These sites and their interconnections allow Barua to demonstrate the cosmopolitanism of elephants through a series of multispecies becomings in which a common world opens up. Significantly, this cosmos is constructed by ontologically heterogeneous entities. Just as Whatmore, Thorne, and Lorimer have argued in their ethnoelephantologies of conservation, so Barua argues that elephants knit together diverse epistemic communities and publics in assemblages that entangle differing interests, fields of responsibility, and modes of knowledge.

History, Indology, and Ethnoelephantology

Shifting from a geographical to a historical register, we find numerous general histories of human-elephant interrelations (e.g., Delort 1992; Kistler 2005; Scigliano 2002). Sources such as these typically provide informative summary narratives useful for scholars of human-elephant relations. Elsewhere we find synoptic surveys, such as Lahiri-Choudhary (2008) on elephant capture and management in India, or Csuti (2006) on war elephants, ceremonial elephants, and

working elephants. Also relevant but relatively underexplored by Indologists, are Asian literary traditions that compile knowledge about elephant anatomy, behavior, habitat, and husbandry.

The Sanskrit genre frequently termed *gajashastra* provides clues to ancient practices of wild-life management, to the capture and use of tamed elephants, and to an observational science arising from coordinated interaction. For instance, Edgerton remarks on the vernacular etymologies of key terms that suggest “the codification of orally-transmitted traditions of practical knowledge” (Locke 2008: 14). Sukumar (2011: 48–51) comments on the remarkably astute understanding of musth in bull elephants, which—until recently—has puzzled Western scientists. Lainé (2010) discusses its Assamese redactions, while Locke (2008: 14, 2011b: 60) notes the formal, stylistic and substantive similarities with a Nepali veterinary manual from the early twentieth century. These literary sources and their legacies provide crucial insight into the antiquity and persistence of knowledge about elephants deriving from the practical experience of interspecies intimacy, as motivated by politically coordinated concerns with animal labor and resource management. As such, they represent a vital resource for constructing a deep history of human-elephant relations in Asia.

What has been lacking in human-elephant historiography to date are more historically contextualized and theoretically informed studies attentive to the intersecting lifeworlds and environmental mutualities of human and elephant. As geographer Jamie Lorimer remarks: “We know very little about the materialities of interspecies relationships. Traces of human-elephant companionship must be gleaned from the margins of existing work” (2010: 495). Indeed, constructing accounts of elephants as subjective agents in shared spaces represents a challenge of scholarly synthesis, both in terms of historical materials, and theoretical perspective.

Locke’s history of captive elephant management in Nepal represents an instructive example of historical ethnoelephantology (2011b). Concerned with the institution of the *hattisar*, I draw on the Panjjar Documents (Krauskopff and Meyer 2000) and other archival sources, to explore the connections between elephants, the state, and the Tharu, an ethnic group of the lowland Tarai region involved in the capture and training of elephants for at least 300 years. Investigating issues of functional redeployment, organizational reconfiguration, adaptive practice, and relational intimacy, I highlight the varied significance of elephants as a commodity exchanged in trade and tribute, as auspicious animals, as symbols of political prestige, as pivotal instruments in royal hunting expeditions, and as vehicles for transport, haulage, and agriculture, later deployed in biodiversity conservation and ecotourism. Recognizing that elephants were valued both as generic bodies and as particular beings, I also investigate the links between royal rewards for elephant catching practices and local tenurial relations. Violently captured and tamed as prestige commodities, while also subject to loving care and commitment as close companions, elephants are revealed as beings caught up in contradictory relationships with humans.

As a modest contribution to a more ambitious comparative history of the depth and spread of traditions of elephant husbandry (see Trautmann 2013), I present a dynamic tradition of humans and elephants as coeval companions. On the one hand, I explore transmission and dissemination in terms of state sponsorship of Tharu elephant husbandry, the consolidation of the ranks and roles of the elephant stable and its spread across lowland Nepal, and the role of kinship and community recruiting elephant handlers. On the other hand, I explore rupture and innovation in terms of the decline in wild elephant populations, the shift from wild capture to captive breeding and training, the emergence of a private sector of elephant ownership for tourism, and the recruitment of other ethnic groups as handlers.

Most important, this analysis argues for the relationship between the material-semiotic interface of meanings and practices as they pertain to the historical development of the *hattisar* as a state-sponsored institution employing subaltern experts. By virtue of the state’s values for,

and uses of elephants, it traces the emergence of an occupational subculture with its own ranks and roles, predicated on sustained intimacies binding human to elephant. Although it explores human-elephant entanglements, the role of multispecies interactions configuring the physical as well as the social landscape through interconnections between elephant activity and the values, practices, and governance of humans goes underemphasized. In other words, the ecological dimension outlined for ethnoelephantology is relatively neglected.

Münster (2012) also contributes to historical approaches, but in a way that demonstrates the mutual ecology outlined for ethnoelephantology, and hence the ecological as well as the social, and historical-geographical dimensions. She explores environmental governance, forest extraction, and the silent labor of humans and elephants in the forests of Wayanad. Drawing theoretical inspiration from environmental history, multispecies ethnography, and more-than-human geography, she explores the interconnected role of elephants and the Kattunaika *adivasi* (tribal group) in transforming a landscape of colonial resource extraction into a modern conservation zone commodified for urban tourists. We learn that only as a result of the colonial encounter did the Kattunaika become involved with training and handling elephants, their interspecies union economically essential to logging and timber production, as well as for understanding how the forest landscape was configured by extraction and then conservation at the behest of bureaucratic authority.

But this is not merely an account of colonial power, environmental change, and subaltern subjects influenced by political ecology (even if, unusually, nonhumans also figure prominently). Münster also provides an account of captive elephant management that speaks to the nascent project of a comparative history of mahoutship, reminding us of the ruptured histories of elephant handling traditions. Under British rule, forests were surveyed, mapped, and divided into administrative units for managing monoculture plantations of valuable hardwoods, with the effect that *adivasi* groups like the Kattunaika lost their customary rights to the forest, thereby criminalizing many of their traditional subsistence practices. However, these forests were remote and malarial, so that extraction required the low-paid labor and environmental expertise of locals like the Kattunaika, as well as the vehicular power and agility of trained elephants.

Before the advent of British rule, local kings and landowning castes captured elephants in trapping pits, and the majority of mahouts were Hindus and Muslims rather than tribals. Although the British colonial officer G. P. Sanderson introduced the North and Northeast Indian practice of *khedda*, which involves corralling herds of elephants into enclosures, this method was not suited to the rugged terrain of Wayanad, where pit trapping remained the exclusive technique for elephant capture. From 1885, the British began employing Kattunaika laborers for catching, taming, and managing elephants by this method, establishing training centers (*anapanthi*) throughout Wayanad. As with Locke's account for Nepal, Münster also discusses the role of political agencies in producing conditions for ambivalent relations between humans and captive elephants. She notes that, on the one hand, training wild elephants depends on structures of power, violence, and inequality; on the other hand, the association between elephant and mahout produces affective relations of intimacy and companionship. The historical accounts of Locke and Münster are significant then for making contributions to both aspects of ethnoelephantology; theoretically as research program, and substantively as discursive space.

With Susan Nance's *Entertaining Elephants: Animal Agency and the Business of the American Circus* (2013) we encounter the first book-length study in historical ethnoelephantology. From the outset, she makes it clear that she is not merely concerned with the figure of the genial circus elephant as an American entertainment icon. Instead, she is keen to emphasize the agency of the living elephant individuals whose physical and cultural labor was innovatively deployed by the circus in a developing consumer society. Her account does not merely chart the his-

tory of an industry that has its roots in animal exhibitions and antebellum menagerie wagon shows, unified to become highly capitalized ventures utilizing modern technologies, human and animal workforces, and management schemes dedicated to the commercial possibilities of an expanding nation space. Nor is her account limited to exploring the birth of animal celebrity, the proliferation of elephant symbolism in an ever-evolving media-scape, and the supremacy over nature implied by packaged experiences of wild animals as educational and patriotic signs of American power.

Even though historians have rarely asked how entertainment ventures pioneered modes of captive animal management so integral to selling animal celebrity, what makes her history different is that it does not treat the elephant merely as a cipher for human interests. Nance concurs with the multispecies view that we are constituted through our life with animal others, rather than in opposition to them (Lestel and Taylor 2013: 183). She demonstrates this by contending that the key to trans-species history is recognizing that human and nonhuman lives exist in symbiosis, that there has never been a purely human space in world history, and therefore that we must account for nonhumans not just as representations, but as living beings. She advocates the symmetrical analysis suggested for ethnoelephantology by arguing for a history that makes humans players in a story that is equally nonhuman, claiming an ethical imperative for such a strategy since ignoring the animal other in a time of mass extinctions would replicate in scholarship the attitudes that have imperiled the planet.

Nance's history of circus elephants therefore goes beyond using human biographies and documentations of the human use of and ideas about elephants. She concedes that elephants could not fully understand the capitalist context and cultural projects producing the conditions of their experience. However, she seeks to recognize elephants as sentient beings who expressed their agency by rejecting the conditions of their captivity. This leads her to discuss how one might write a trans-species history cognizant of nonhumans as historical actors with consciousness and subjectivity. She remarks on the various traces circus elephants leave on the historical record, noting that evidence regarding elephant behavior, intention, and character can be verified by recourse to behavioral ecology, ethology, and animal welfare science. Nance exemplifies the principles of ethnoelephantology then by insisting on the subjective agency of elephants, their human-entangled lifeworlds, and the contribution of the natural sciences for symmetrical understandings of shared life.

Conclusion

This article represents a preliminary exploration that is necessarily selective, far from exhaustive, and restricted to a consideration of human intersections with Asian elephants. It has sought to establish the validity of ethnoelephantology as research program and discursive space. This has depended on the contention that disciplinary approaches to human-elephant intersections are converging and increasingly adopting an integrated interdisciplinary perspective. Next, it has involved tracing the intellectual development of what I call the multispecies turn, acknowledging the overlap between the posthuman and the biocultural, and identifying the disciplinary variants through which it has manifested, namely multispecies ethnography, more-than-human geography, and trans-species history. Finally, it has involved the identification of commonalities in multispecies approaches to human-elephant relations in the fields of anthropology, geography, and history, through a survey of exemplars from each field.

I argue that these contributions, while ostensibly deriving from particular disciplinary practices, collectively represent a shared agenda, occupying a shared discursive space of cross-

disciplinary borrowings and engagements. Indeed, it is clear that a network is emerging comprising experts from different disciplines, who are finding common ground, and conversing productively across academic boundaries. The recent symposium on human-elephant relations and the Ethnoelephantology blog (<http://ethnoelephantology.wordpress.com>) supporting it are testament to this.

The term ethnoelephantology carries the ethno-prefix to suggest the mediating role of cultural factors in cross-species encounters. This is important because intersections between humans and elephants, whether they concern shared space or interspecies intimacy, conflict or coexistence, the real or the virtual, are always about entanglements that reveal how lives are mutually shared and shaped across species boundaries (Lestel and Taylor 2013: 184). It should be noted that the three principles outlined for ethnoelephantology are provisional, and are not intended as a rigid theoretical framework. Rather, their purpose is to stimulate further focused research through recognition of the unifying themes, concerns, and approaches that characterize this new trend in research. Similarly, the three dimensions are presented as useful axes with which to map the terrain of human-elephant studies, and could be subdivided and extended.

Finally, I argue ethnoelephantology has a significant role to play with regard to pressing issues of environmental conflict, captive welfare, and species survival. In a world of threatened habitats, conflicting interests, neglected expertise, and ethical controversy, ethnoelephantology has much to offer in better understanding and better attending to the problems of the human-elephant relationship in all its social, philosophical, and ecological complexity. Such challenges can be more effectively met if informed by research that recognizes the human-elephant nexus as a phenomenon of coevolving companion species sharing intertwined lives in overlapping spaces.

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■ **PIERS LOCKE** is a social anthropologist at the University of Canterbury, New Zealand. Piers conducts field research in Chitwan, Nepal, where his primary interest is human-elephant relations. He has curated two exhibitions based on his field photography, and co-produced the ethnographic film *Servants of Ganesh* (2010). Piers recently convened an interdisciplinary symposium on human-elephant relations in South and Southeast Asia, and his latest research concerns the historical photography of humans and elephants in colonial South Asia. He is also writing a monograph about his research with Nepali handlers and their elephants.

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