

The Anomalous Elephant: Terminological Dilemmas and the Inalcalitrant Domestication Debate

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Abstract. This short essay notes that the relation between elephants' captive and free ranging states is permeable, thereby confounding distinctions between the wild and the domesticated. Consequently, it discusses domestication debates, considering the differences between theories of biological intervention and social appropriation. It not only problematizes the concept of domestication but also the concept of taming, concluding that instead of concerning ourselves with issues of nomenclature, we should instead adopt the perspective of ethnoelephantology; an integrated approach to studying human-elephant relations that recognizes the complex histories of interconnection by which humans and elephants affect each other.

When we reflect on the intertwined histories of humans and elephants in Asia we are reminded that the boundary between 'wild' and 'captive' is by no means clear-cut. Elephants that have been incorporated into human social worlds as vehicles for war, labour, display, tourism, and even research (see Locke 2013), have not been irrevocably separated or made different from their 'wild' brethren, with whom they may even continue to intermingle. The boundary remains permeable, and the relation between these states is dynamic. Indeed, historian and anthropologist Trautmann (2015) even suggests that the persistence of 'wild' elephants in India relates to their value as technologies for war by kings who protected their habitats to ensure their continued procurement. It is curious then to think that the history of the elephant at home with humans (i.e. 'domesticated') may ultimately be implicated with the earliest human projects to ensure elephants survive at home with themselves (i.e. conserved in the 'wild').

Compared to other four-legged mammals co-opted by humans, elephants are quite unusual, provisionally submitting to human governance without having been fundamentally transformed. This then raises the question of animal domestication, the definition of which is far more problematic than might at first be assumed, and

for which the elephant poses particular problems. In this short essay I shall review debates about domestication and consider the terminological quandaries it presents for the elephant, an animal whose captive population in Asia is significant, and the future of which appears uncertain in a changing world.

As anthropologist Ingold (2000) remarks: "The precise meaning of domestication has remained a topic of scholarly debate for well over a century," but there is at least one common denominator to all proposed definitions: "Every one of the competing definitions introduces some notion of human control over the growth and reproduction of animals and plants."

Zooarchaeologists have played a major role in this debate. Bökönyi (1989) also notes the longstanding nature of the debate and along with Ducos (1989), has been a key figure in an ongoing dispute characterised by rather terse exchanges. Bökönyi's approach is concerned with domestication as a pivotal moment in the evolution of human-animal relationships and is both essentialist and authoritatively prescriptive. By contrast, Ducos' definition is logically possibilist and outlines a methodological approach. Clutton-Brock (1994), like Bokonyi, is keen to restrict the term to animals kept

under conditions of controlled breeding, while emphasising its cultural and biological aspects, whereas Ducos considers this but one possible outcome of a process which need not logically entail both behavioural and morphological change as a result of controlled breeding over successive generations (see definition in Ducos 1978, and for his refutation of the osteological method for distinguishing domesticated and wild animals see Ducos 1989). Ducos' definition can be seen to both encompass and transcend Bökönyi's definition, and has been utilised by Ingold to develop his account of domestication as social appropriation.

In an attempt to bring some clarity to this ongoing discussion, Ingold distinguishes two approaches to the definition of domestication, one as a biological intervention, and the other as a social appropriation. However, both approaches presuppose humanity's transcendence over nature, and hence a dualist metaphysic that opposes humanity, in the guise of persons with minds, to animality, in the guise of organisms with bodies (Ingold 2000), a distinction problematic for human-elephant relations in light of current scientific understandings of their similar social and intellectual capabilities (see for example Poole & Moss 2008). It should be evident that both of these approaches emerge from an epistemology that can, for the sake of convenience, be termed 'Western', even if such a designation resists definitive mapping.

As Ingold (2000) remarks: "To the extent that the human condition transcends nature, so nature herself comes to stand as raw material to human projects of construction." Thus we can see how domestication has been conceived as a mode of production, and as such might also concomitantly be considered a feat of engineering, designed according to the intentions of man. Yet this is despite the fact, as Darwin pointed out, that until very recently mankind has only been able to select retroactively from variants that arise spontaneously, and despite the fact that some relations of domestication probably began through mutual association, as with wolves and humans (see Schleidt & Shalter 2003). And so controlled breeding has falsely served as an

analogue for planned modification, which has come to comprise a defining feature for many biological understandings of domestication.

The preoccupation with human control over breeding as a criterion for domestication may then, be traced back to Darwin, whose conclusions about the origin of species by natural selection owed much to his observations of the breeding of domestic animals, as Clutton-Brock (1989) remarks and as anthropologist Feeley-Harnik (2007) explores in relation to Darwin's observation of pigeon fanciers in Spitalfields, London. To husband animals was then to breed them, and where one occurred without the other, as with the keeping of reindeer by northern Eurasian pastoralists, then they had to be dismissed as animals in an unstable, transitional state of 'semi-domestication' (Ingold 2000). According to the logic of Bökönyi, this could be taken to imply an incomplete process of domestication, while also reflecting the ethnocentric limitations of his zooarchaeological concern with the role of domestication in the rise of classical civilisation. Indeed, as the participants in the discourse on domestication themselves concede, definitions have been shaped by their varying disciplinary concerns.

Elephants have traditionally been kept without mankind playing a consistent and decisive role in their breeding until very recently, and even then without overt control over selection (although



Figure 1. Elephant babies rescued from the wild and kept at the 'Elephant Transit Home' until they are old enough to be released back to the wild (Udawalawe, Sri Lanka).

this is not to deny mankind a more subtle role in affecting elephant reproductive patterns). Hecker (1982) avoids the problematic criterion of modification through breeding by providing a category supplementary to that of domestication, speaking of ‘cultural control’ in order to refer to those cases where humans appropriate animals without exerting significant and successive control over their breeding.

An alternative definition of domestication emphasises its social rather than biological aspect. According to Ducos (1978) “domestication can be said to exist when living animals are integrated as objects into the socio-economic organisation of the human group.” This implies that they become a form of property that can be owned, inherited and exchanged. Geographer Tuan (1984) even explains the human propensity for animal domestication in terms of the pleasure derived from initiating a process, the outcome of which signifies the human mastery of nature. From this perspective the taming of a being as powerful and intelligent as an elephant could be taken as the greatest of domesticating achievements, as classicist Shelton (2001) acknowledges in a discussion of the voyeuristic pleasure Roman audiences took in observing the subjugated performances of elephants in the arena.

Incidentally, this social definition need not be limited to livestock, but can also include animals in the category of ‘pet’, which Darwin’s cousin Francis Galton first suggested as the antecedent for the development of increasingly large-scale



Figure 2. Elephants from the ‘Pinnawela Elephant Orphanage’ bathing in the river.

animal husbandry (Serpell 1989). With regard to elephants, considering the inapplicability of the category of livestock, one should not assume that the category of ‘pet’ might present any less difficulty. Contrary to the dominant connotations of ‘pet’, elephants are kept for both utilitarian and symbolic reasons, are of economic utility, yet can also be companions (for an historical and cross-cultural study of pet-keeping, see Serpell 1996). Whereas the former definition sees domestication as an intervention in nature, this definition sees domestication as an appropriation of nature, since humans as subjects can own animals as objects. And again we can see that this too presupposes nature as a realm extraneous to humanity since one can logically only appropriate that which is not contained by one’s self (Ingold 2000).

Clutton-Brock (1981) incorporates both biological intervention and social appropriation in her two fold typology, which distinguishes animals utilised by humans into two primary groups: ‘man-made animals’ and, rather evocatively, ‘exploited captives’, based on the metaphoric resemblance between the husbanding of livestock and the keeping of slaves, a point not lost on animal welfare campaigners (see Singer 1985; Kete 2002). With regard to ‘man-made animals’, livelihood and breeding is conceived as entirely under human control, and it is suggested that it may have been exercised to such a degree that domesticated forms have altered almost out of recognition from their wild progenitors, as is the case with some breeds of dog (the animal that demonstrates the greatest plasticity in its range of domesticate forms). In the case of the ‘exploited captives’ to which the elephant would approximate, wild animals after capture are tamed or trained to some degree (Lair 1997).

While elephants might seem like obvious contenders for the category of ‘exploited captive’ rather than ‘man-made animal’, this does raise the question as to why, when the livelihood and breeding of elephants has potentially been under total human control, has mankind so rarely exercised any significant control over breeding over successive generations. Despite these qualifications, terms such as ‘domesticated’ and ‘tame’ still prove highly problematic when

applied to elephants. Thus a discussion of appropriate nomenclature for referring to ‘non-wild’ elephants is required, to clarify the status of elephants if nothing else.

A variety of differing terminological conventions have been utilised, and like the broader domestication debate already discussed, these all betray the evaluative perspective or those who use them, and/or the specific contexts of utility from which they arise. All have differing connotations, and none are entirely unproblematic. Lair (1997) cites the following terms for *Elephas maximus* in a state of domesticity: ‘tame elephant’, ‘work (or working) elephant’, ‘timber elephant’, ‘domestic elephant’, ‘domesticated elephant’ and most lately in vogue; ‘captive elephant’.

Firstly, with regard to the category ‘tame’, it should be noted that not all elephants held in domesticity, such as many that reside in zoos, have been subject to a process of taming/training (or even derisively termed ‘breaking’), thereby limiting the applicability of the term. This is despite recommendations for captive elephants to be trained for the sake of their own well being (to ease the problem of boredom), as well as for ease of maintenance and safety of care staff (Dudley 1986; Moore & Doyle 1986). Elephant keepers at Port Lympne Zoo in Kent, UK, interviewed by myself in December 2002, were frustrated by regulations laid down by the Health and Safety Executive (HSE), which almost entirely prevented them from physical contact with their elephants, thereby denying them the crucial



Figure 3. Well trained elephants from Whipsnade Zoo on an afternoon walk just outside the zoo (England).

pleasures of their job as well as depriving the elephants of social contact with humans, which is arguably in the interest of elephants’ health and wellbeing. In the world of zoo-keeping these are contentious issues, and proponents of protected contact argue for different approaches toward human-elephant relations in situations of captivity.

The situation of elephants subject to confinement in western zoos and safari parks is considerably different from that of elephants kept for traditional purposes in Asian countries however, so management strategies appropriate in one context may not translate effectively to another. The consequences of these differences is forcefully indicated in a recent comparative study that reveals the unfavourable life expectancy of elephants in western zoos and safari parks in relation to that of working elephants in Asia (Clubb *et al.* 2008, drawing on Khyne U Mar’s extensive data on Burmese timber elephants). An approach of hands-free contact is now becoming the predominant approach to captive elephant management in the west, especially in the context of zoos, although the issue remains contested and controversial (Hammatt, pers. comm.), and cannot be understood outside of the context of concerns for the welfare of ostensibly ‘wild’ elephants confined in zoos, for which both the RSPCA and European Elephant Group have commissioned reports (see Clubb & Mason 2002a, 2002b; Endres *et al.* 2003).

‘Tame elephant’ may also be deemed problematic since understandings might be taken to conflate processes of domestication with those of training. The former suggests an animal that has been genetically modified over time (hence effecting inhering physiological and behavioural changes) by means of humanly controlled selective breeding (Clutton-Brock 1987), while the latter suggests a process of externally imposed, conditioned behavioural modification. In a discussion of reindeer domestication, anthropologist Vitebsky (2005) reminds us however that domestication as entailing selective breeding is a relatively modern understanding of the term, which might more generally be defined according to the following:

“Domestication involves appropriating a wild animal’s behaviour, bending it to human purposes, and continuing this relationship down through generations of animals.” However, the most salient associations evoked by the term ‘animal training’ tend to be applied to animals that have already been subject to modification through selective breeding (the training of domesticated species such as dogs as pets being more widespread and typical than cases of training wild primates in order to answer longstanding anthropological speculations about the purported uniqueness of the human capacity for language, for example).

It should be noted that although elephants are being bred at facilities like the Khorsor Elephant Breeding Center in Chitwan, Nepal, pairing and mating are not under explicit human control (and result from impregnations from both wild and captive males). More generally, in all Asian cultures with traditions of using elephants, there has been reluctance to control breeding over successive generations. Interestingly, in western classical sources, the elephant was credited with a refusal to reproduce in captivity and thereby perpetuate its state of slavery. It was thought that an elephant could accept captivity for itself but not for its offspring, a belief supported by elephants’ supposed need for utmost privacy in order to mate (Rothfels 2008).

Historian Rothfels (2008) explores this further, noting that the great 18th century naturalist George-Louis Leclerc, the Comte de Buffon echoed these sentiments. Regarding the elephant as a being of the finest distinction, and writing in the context of pre-revolutionary France when issues of slavery and subjugation were becoming significant, it made perfect sense to Buffon “that they would deny themselves their deepest desires in order not to perpetuate the slavery of their kind.” At the same time though, he considered them wise and moderate enough to accept their captivity and to comport themselves as ‘model citizens’, capable of enthusiastically obeying instructions (Rothfels 2008). A case can be made that in some cultures the temperament of wild-sired elephants is preferred, alongside a belief that captive-sired elephants will somehow be weaker.

However, rather than invoking some putative cultural prohibition, this can be best explained as due to a lack of incentive. The capture of adults or juveniles from the wild has been an easier mode of procurement in terms of resource input than the lengthy process of breeding babies which will not be of profitable utility until they reach adulthood (Lair 1997).

Furthermore, ‘tame’, associated as it is with animals in the category of ‘pet’, might also be taken to connote ‘harmless’, which any elephant handler can tell you is a very foolish working assumption, and is surely a result of the binary conceptual opposition of ‘wild’ with ‘tame’. In the 1950s, the American TV personality Arthur Godfrey was determined to keep an elephant as a pet. Ignoring the advice of the hunter and safari pioneer John Coapman, this ultimately led to the elephant breaking free, running amok, and having to be destroyed (Coapman, pers. comm.). The history of circus elephants in 19th century America is replete with such examples (see Nance 2013).

Nepali elephant handlers repeatedly invoke the goodwill of the Hindu elephant-headed god Ganesha precisely because they recognise that the ‘wild’ element of an elephant’s nature can never be fully eradicated (they say it always retains a yearning to return to its own life in its own habitat); the elephant is capricious in that experience has taught that it can pose a danger even to its own handlers and at almost any time.

Furthermore in Asian traditions, the period of captivity in which an elephant cooperates with humans, is not always understood to be permanent. For example, in contemporary Nepal, aging elephants effectively retire themselves by increasingly absenting themselves from the stable and their human companions, something that is accepted with sadness. Handlers believe that as an elephant’s last pair of molars wears down that it understands that death approaches, and should therefore be allowed to live its final days in freedom.

Many people might assume that ‘tame’ suggests a relatively permanent if not irrevocable condition,

and although the phenomenon of ‘tamed animals’ surviving or returning to a feral state is well known (for examples of rabbits in Spain and France see Bökönyi 1989, and for sheep, goats, pigs, and cats on Mediterranean islands, see Groves 1989), elephants are peculiarly well-suited to the reclamation of a ‘wild state’ (Lair 1997). And elephants are not unique in the provisionality of their relationship to humans, as Vitebsky (2005) makes clear in his discussion of reindeer domestication, where some members of the herd are tamer than others. “Apart from the males trained for carrying baggage, riding, and pulling sledges, and some females when lactating, most of the animals in a herd never become very tame, in the sense of having an intimate emotional and physical contact with their human carers. Even transport reindeer may become uncooperative and recalcitrant if left unattended for a few days, and any domestic reindeer may revert to the wild if left unattended for longer. The domestication of the reindeer is a hard-earned and provisional achievement” (Vitebsky 2005).

These objections should then convince us that even ‘tame’ can be a misleading category when applied to elephants in a state of domesticity. Indeed, recent ethnographic studies of mahouts in Nepal, Assam, and Sri Lanka all reveal that managing captive elephants involves reckoning with the uncertainties of a ‘wild’ nature never fully ‘tamed’ (see essays by Locke, Lainé, and Klixbull in a forthcoming volume).

‘Work (or working) elephant’ clearly excludes animals kept in zoos, while ‘timber elephant’ obviously only refers to animals kept for specific purposes. Some of the problems of classifying elephants as ‘domestic’ or ‘domesticated’ have already been indicated, in that we know that elephants have not been subject to genetic modification through controlled breeding over successive generations. Elephants have not been subject to intentional morphological or behavioural modification (neither being taught to respond to commands nor adapting to human-imposed routines fulfil the cross-generational permanency implied by behavioural modification). However, it does seem that the impact of human practices of selective capture

may account for phenotypical variation in elephant populations, particularly the low level of tusked bulls in Sri Lanka, who were continuously removed from ‘wild’ populations for export to India as war elephants (see Kurt *et al.* 1995).

However, in keeping with the understanding of domestication as social appropriation, we must remember that ‘domestication’ need not only imply this relatively modern, scientific sense of the term. In its etymological sense of the ancient Greek for, ‘in or belonging to the home’ it is perhaps less objectionable, but the problem of potential ambiguity of meaning remains. This also raises the issue of how culturally inflected ethical differences influence nomenclatural distinctions (just as Ducos 1989 similarly concedes that all proposed definitions for domestication reflect the approach chosen to study the topic rather than an objective reality).

While in Asian cultures a ‘household elephant’ might be a source of pride for its positive regal and sacred associations, in Western culture, by contrast, it might be an object of pity as an abused captive. It is this western bias with its implications of unjust exploitation, thereby excluding the possibility of human-elephant relations as one of mutually-beneficial symbiosis, which also makes the final term in our available repertoire problematic. ‘Captive elephant’ can therefore be seen to prejudge the relationship between human and elephant. Nonetheless, it is possible to discern a field dedicated to issues concerning the care and welfare of ‘non-wild’ elephants, and this



Figure 4. Tusker from the Theppakadu Elephant Camp (India).

has acquired the designation of ‘captive elephant management’.

Perhaps then all this suggests we should simply bypass the problem of nomenclature, acknowledge the dialectical process by which we have investigated, problematized, and refined concepts of domestication and their analogues, and instead recognize the complex interconnections between humans and elephants in relation to their faculties, their histories, and their modes of life. Indeed, this is precisely the agenda of the recent call for ‘ethnoelephantology’ as an integrated approach for researching relations between humans and elephants as companion species, drawing on diverse forms of disciplinary expertise (Locke 2013). After all, it is because the elephant can be so anomalous by conventional criteria; tame but not tamed, domestic but not domesticated, that an increasing number of researchers are recognising the need to rethink the fundamental assumptions informing their fields of enquiry and the need to transcend the limitations they imply by recourse to interdisciplinary dialogue and collaboration.

References

- Bökönyi S (1989) Definitions of animal domestication. In: *The Walking Larder: Patterns of Domestication, Pastoralism, and Predation*. Clutton-Brock J (ed) Unwin Hyman Ltd., London. pp 22-27.
- Clubb R & Mason G (2002a) *Live Hard, Die Young: How Elephants Suffer in Zoos*. RSPCA.
- Clubb R & Mason G (2002b) *A Review of the Welfare of Zoo Elephants in Europe*. RSPCA, Oxford.
- Clubb R, Rowcliffe M, Lee P, Mar KU, Moss C & Mason GJ (2008) Compromised survivorship in zoo elephants. *Science* **322**: 1649.
- Clutton-Brock J (1981) *Domestication From Early Times*. Heinemann/British Mus., London.
- Clutton-Brock J (1987) *A Natural History of Domesticated Mammals*. Cambridge University Press, Cambridge.
- Clutton-Brock J (1989) *The Walking Larder: Patterns of Domestication, Pastoralism, and Predation*. Unwin Hyman Ltd., London.
- Clutton-Brock J (1994) The unnatural world: Behavioural aspects of humans and animals in the process of domestication. In: *Animals and Human Society: Changing Perspectives*. Manning A & Serpell J (eds) Routledge, London. pp 23-35.
- Ducos P (1978) ‘Domestication’ defined and methodological approaches to its recognition in faunal assemblages. In: *Approaches to Faunal Analysis in The Middle East*. Meadow RH & Zeder MA (eds) Peabody Museum Bulletin 2, Harvard University. pp 53-56.
- Ducos P (1989) Defining domestication: A clarification. In: *The Walking Larder: Patterns of Domestication, Pastoralism, and Predation*. Clutton-Brock J (ed) Unwin Hyman Ltd., London. pp 28-30.
- Dudley J (1986) Notes on training captive elephants. *Elephant* **2(2)**: 15-18.
- Endres J, et al. (2003) *Dokumentation 2002 - Elephants in European Zoos and Safari Parks: Comprehensive Data on Elephant Husbandry With an Analysis of The Oxford Study*. European Elephant Group.
- Feeley-Harnik G (2007) “An experiment on a gigantic scale”: Darwin and the domestication of pigeons. In: *Where The Wild Things are Now: Domestication Reconsidered*. Cassidy R & Mullin MH (eds) Berg, Oxford. pp 147-182.
- Groves CP (1989) Feral mammals of the mediterranean islands: Documents of early domestication. In: *The Walking Larder: Patterns of Domestication, Pastoralism and Predation*. J. Clutton-Brock J (ed) Unwin Hyman Ltd., London. pp. 46-58.
- Hecker HM (1982) Domestication revisited: Its implications for faunal analysis. *Journal of Field Archaeology* **9**: 217-236.

- Ingold T (2000) From trust to domination: An alternative history of human-animal relations. In: *The Perception of The Environment: Essays in Livelihood, Dwelling and Skill*. Ingold T (ed) Routledge, London. pp 61-76.
- Kete K (2002) Animals and ideology: The politics of animal protection in Europe. In: *Representing Animals*. Rothfels N (ed) Theories of Contemporary Culture 26. Indiana University Press, Bloomington. pp 19-34.
- Klixbull N (in prep) Cultural values and practical realities in Sri Lankan human-elephant relations. In: *Rethinking Human-Elephant Relations in South Asia*. Locke P & Buckingham J (eds).
- Kurt F, Hartl G & Tiedemann R (1995) Tuskless bulls in Asian elephant *Elephas maximus*. History and population genetics of a man-made phenomenon. *Acta Theriologica* **S3**: 125-143.
- Lainé N (in prep) Conduct and Collaboration in Human-Elephant Working Communities of Northeast India. In: *Rethinking Human-Elephant Relations in South Asia*. Locke P & Buckingham J (eds).
- Lair R (1997) *Gone Astray: The Care and Management of the Asian Elephant in Domesticity*. FAO Regional Office for Asia and the Pacific (RAP), Bangkok.
- Locke P (2013) Explorations in ethno-elephantology: Social, historical, and ecological intersections between Asian elephants and humans. *Environment and Society: Advances in Research* **4**: 79-97.
- Locke P (in prep) Animals, persons, Gods: Negotiating ambivalent relationships with captive elephants in Chitwan, Nepal. In: *Rethinking Human-Elephant Relations in South Asia*. Locke P & Buckingham J (eds).
- Moore DE & Doyle CE (1986) Elephant training and ride operations, Part 1: Animal health, cost/benefit and philosophy. *Elephant* **2(2)**: 19-31.
- Nance S (2013) *Entertaining Elephants: Animal Agency and The Business of The American Circus*. Johns Hopkins University Press, Baltimore.
- Poole JH & Moss CJ (2008) Elephant sociality and complexity: The scientific evidence. In: *Elephants and Ethics: Toward a Morality of Coexistence*. Wemmer C & Christen C (eds) Johns Hopkins Univ. Press, Baltimore. pp 69-98.
- Rothfels N (2008) From *Elephas horribilis* to *Elephas sentiens*: Elephants, the enlightenment, and the problem of captivity. In: *Elephants and Ethics: Toward a Morality of Coexistence*. Wemmer C & Christen C (eds) Johns Hopkins University Press, Baltimore. pp 101-119.
- Serpell J (1989) Pet-keeping and animal domestication: A reappraisal. In: *The Walking Larder: Patterns of Domestication, Pastoralism, and Predation*. Clutton-Brock J (ed) Unwin Hyman Ltd., London. pp 10-21.
- Serpell J (1996) *In The Company of Animals: A Study of Human-Animal Relationships*. Cambridge University Press, Cambridge.
- Schleidt WM & Shalter MD (2003) Co-evolution of humans and canids: An alternative view of dog domestication: Homo homini lupus? *Evolution and Cognition* **9**: 57-72.
- Shelton J-A (2001) The display of elephants in ancient Roman arenas. *ISAZ Newsletter* **21**: 2-6.
- Singer P (1985) *In Defense of Animals*. Basil Blackwell, Oxford.
- Trautmann TR (2015) *Elephants and Kings: An Environmental History*. University of Chicago Press, Chicago.
- Tuan Y-F (1984) *Dominance and Affection: The Making of Pets*. Yale University Press, London.
- Vitebsky P (2005) *Reindeer People: Living With Animals and Spirits in Siberia*. Harper Collins, London.