

**Thinking with animals: New perspectives on anthropomorphism, edited by Lorraine Daston and Gregg Mitman, Columbia University Press, New York, 2005.**

**Brutal Reasoning: animals, rationality, and human in early modern England, Erica Fudge, Cornell University Press, Ithaca and London, 2006.**

**The Sacrifice: how scientific experiments transform animals and people, by Linda Birke, Arnold Arluke and Mike Michael, Purdue University Press, Indiana, 2007.**

## **1. Introductory histories**

It makes sense to start with some history, or rather with some histories. There are a number of relevant histories, which introduce these three texts and the use of history sets the scene for an exploration of the themes that link them.

The first of these is the history of animal studies as a sub-disciplinary site of enquiry within the contemporary humanities and social sciences. There is now a small, vibrant and growing group of scholars exploring and rethinking the place of nonhuman animals in different contexts. Many of the authors here have played a key role in the vitality of this interdisciplinary field. *The Sacrifice* is written by feminist biologist Linda Birke and UK sociologist Mike Michael, working here with US sociologist Arnold Arluke. All three have written extensively in the past on contemporary relations to nonhuman animals, particularly within the biosciences. The edited collection, *Thinking with Animals*, includes contributions from philosopher of science Elliott Sober, filmmaker Sarita Siegel and professor of ethics James Serpell, with the greater number of essays from historians of science. Wendy Doniger, Paul White, Sandra Mitchell, Cheryce Kramer and the editors Lorraine Daston and Gregg Mitman, present their analysis of anthropomorphism in a wide diversity of times and places including angels in medieval writing (Daston), experimental animals in Victorian physiology (White), celebrity elephants in conservation practice (Mitman) and digital beasts in photographic archives (Kramer). In *Brutal Reasoning*, literary scholar and historian Erica Fudge extends the chronology back with a detailed exploration of arguments over animal and human rationality in early modern England, until the publication of Descartes' *Discourse on Method* in 1637.

It is impossible to do justice to the full set of ideas in these texts, particularly as I am not an historian. A thorough review of the use of historical sources and analysis in relation to prevailing interpretations will have to wait for another reviewer, and perhaps another journal. Yet, reading the three texts together, something important emerges about the complex use of these histories in giving shape to a wide range of human/animal issues likely to be of direct interest to readers of *Biosocieties*. Such histories reveal the complexity of past relations to animals, belying the way history is evoked and simplified in public debate

over new biotechnological interventions or conservation issues. On an individual scale, human (and animal) biographies reveal histories of development or descent that define boundaries between reason and emotionality, distributing rationality to certain actors whilst disqualifying others. Stories about the weaving together of human ideas and emotions, technological practices and animal bodies, whether in the development of standardized laboratory animals or the emergence of a digital animal gaze, hint that the long *durée* of history also involves shifting affective relations between these actors, which may be changing what it means to be human.

There are also more immediate stories told by authors about the growth of interest in animal studies. Many identify a shift in sensibilities to animals and nature, evidenced through the progress of environmental ethics and the emergence of animal rights. Mitchell suggests these new understandings of animals are enhanced by the growth of sciences like cognitive ethology. Yet elsewhere, there is concern about the increasingly instrumental manipulation of animal bodies and a decreasing trust in science (Birke et al, p.156), which may prompt the search for other disciplinary voices to speak about and sometimes for animals. There are also disciplinary shifts: animals occupy the rich conceptual borderlands of the social sciences and humanities, and exploration of their position within the networks of everyday life is part of an increasing emphasis on materiality and other agencies, rethinking the nature of the social itself. Taking these intellectual threads into history provides further insights and raises additional challenges, particularly in tracing the bodily animal through the partiality of historical and literary texts. The books thus constitute an intriguing set of arguments about the way historical imaginations and material practices constitute a vexed inheritance, which is inescapable in contemporary negotiations around our different ways of living and living alongside animals. So in turning to these complex histories to make sense of a complex present, where do you begin?

## **2. The discourse of reason**

'We begin, as is often the case in these debates, with Aristotle' (Fudge, p.15). Divine classifications are central to early modern ways of knowing animals and humans. As Fudge explains, these classifications are given shape by Aristotle, who posits the existence of different kinds of soul – vegetative, sensitive, and rational. Plants, animals and humans share a vegetative soul, the root of nutrition, growth and reproduction. Animals and humans both have a sensitive soul, the source of perception and movement. The distinguishing characteristic of the human is thus the rational soul. The capacity for reason underpins human superiority, yet it proves to be a precarious definition.

In this discourse, the primacy of the human can only be evidence through the exhibition of reason in action. 'Dog' laughter, mundane dreams, childish exuberance, unwarranted cruelty, imprudence and intemperance all threaten to undo the divine definition of humans based on reason. Following the fall, the human ends up divided against itself, involved in 'a constant struggle of mind against body, reason against desire' (p.13).

Animals are central to shoring up these oscillations of identity. Four chapters, entitled 'being human'; 'becoming human'; 'becoming animal' and 'being animal', elaborate the complex movement between dogmatic classifications and empirical unfoldings in the context of England in the sixteenth and early seventeenth, detailing the rich array of literary and other work concerned with the relation between human and animal behaviours.

Animal identities shift in this account as well, as they occupy the spaces of both real animals and prompts to the abstract. Much of the book charts the replacement of real animals with the symbolic, supporting varied instrumental uses of animals, and of women and other cultures too, but this is an uneasy cosmology full of emergent contradictions. The instability of both human and animal categories causes confusion. As Fudge suggests, 'if an animal is the thing that a human is not, and yet a human can cease to be (or never become) the thing it is, then an animal is something much more than other: it becomes kin' (p. 60). There are several moments when alternative forms of kinship emerge. The lack of resolution offered by the 'discourse of reason' offers space for alternative philosophical views, from Plutarch and others; perhaps most famously from Montaigne. A different kind of animal being is offered by the empirical uncertainty of Montaigne's question: 'When I play with my cat, who knows if I am not a pastime to her more than she is to me?' As Fudge continues, 'This cat, he insists, is his cat, not a fictional one. It is an animal in the world and not a beast in a book' (p.95). These everyday interactions with animals offer another space for interpreting the hold of the discourse of reason within this period. There are glimpses of more mundane encounters, in the give and take of living alongside animals for transport, sustenance and pleasure, but these are rarely recorded. It is possible everyday understandings of animal reason diluted the reach of the discourse of reason, but tricky for a historian to claim so. This paradox is explored in the penultimate chapter, through the apparently wondrous exploits of Morocco - the intelligent horse - and his master Bankes. Yet as Fudge concludes (p.174), it is possible this animal's celebrity flows from the quality and humour, as opposed to novelty, of their performance of intelligent horsemanship.

In the final chapter, the decisive metaphysics of Descartes cuts through these confusions. Here it becomes clear what is at stake is not only alternative ways of knowing animals, but also different epistemologies of life itself. Descartes' animals were automata, bereft of any kind of soul. Descartes managed to formulate an absolute distinction between human and animals. The only soul was a human rational one: the movement of human and animal bodies mechanically given by organic predispositions. It offered resolution to the endless ethical questioning about human conduct and animal behaviour accompanying the discourse of reason. Yet as Fudge suggests, 'rather than presenting an ethical problem, Descartes has it seems, solved some of the most troubling ones' (p.162). This included worries about the growing science of animal vivisection. Suggestions this practice might involve both the suffering of brute creatures and brutalizing of scientific gentlemen were anaesthetized. As

one follower of Descartes writes, 'I exclude them from life, that they never die in pain' (p.160).

The achievement of a mature form of human rationality is defined in the same manoeuvre. The human is now always already human, and failures of reason no longer destabilize the human/animal boundary. Yet, humans can be childish and foolish, if they interpret animal behaviour as if animals had individual human motivations. 'For the Cartesian [...] the almost instinctive anthropomorphic thought processes of humans could be countered by an act of will. Refusing to anthropomorphize, refusing to believe one's childish first impressions, was therefore crucial to a full understanding of the world' (p. 154). Whilst this is a period now seemingly far removed, *Brutal Reasoning* nevertheless introduces a concern with the human self, compassion for animals and performance of reason, which resonate with contemporary animal controversies and the other texts.

### **3. The error of anthropomorphism**

Darwin once wrote a memo reminding himself never to use the terms 'higher' or 'lower', when referring to the evolution of animals (Sober p.91). However, there is no such reticence when narratives of cultural development are mobilized to pass judgement on individual biographies, the status of other societies or on ethical ways of relating to animals. Despite initial hostility to Descartes' ideas in England, the taken for granted dangers of anthropomorphism, as inimical to science, is the dominant narrative explored in the nine chapters of *Thinking with Animals*. Following Darwin, anthropomorphism could be traced back to animal ancestry, it was ascendant at an early stage in the development of the human race, retained by primitive peoples, women and children, and overcome by the civilizing education of modern science (White, p.60).

Sober, in his philosophical analysis of the bias embedded in thinking about the dangers of anthropomorphism, suggests this is still widespread. For science, anthropomorphism is both a factual mistake and an intellectual failing (Sober, p.85). 'Emphasis on the error of anthropomorphism and a relative lack of attention to the opposite part is part of more general pattern in scientific culture in which tough-mindedness is valued' (p.86). Yet, as Sober demonstrates, both anthropomorphism and its converse 'anthropodenial' can be inappropriate. Further, he illustrates that replacing concepts of 'lower' and 'higher' animals with notions of 'ancestral' and 'derived' characteristics can alter this balance. Replacing a linear hierarchy of higher and lower organisms with more intricate evolutionary linkages means 'there is no presumption in favor of treating human beings as different from the rest of nature; on the contrary there is a circumstance in which the presumption is precisely in the opposite direction' (p.96).

It is in the sociological account of Birke, Arluke and Michael that we find some reasons for the continued refutation of anthropomorphism. If Fudge's work demonstrated the complex histories of animal reason, Birke

et al thoroughly document the complex present of animal experimentation in the UK and USA. Theoretical ideas from the sociology of science highlight tensions emerging in the practices of animal research: between procedures inside the laboratory and the circulation of data outside, between desires for standardization and the specificities of animal care-taking, between avoiding public stigma and the need to enrol people into a 'core set', and so on. The search for consensus in the light of these tension is enacted both materially and socially – through the stabilization of animals genetically, the standardization of animal housing and experimentation protocols and through the socialization of animal researchers. The progress of scientists, from childhood dissection classes to medical school 'dog-labs', is part of a right of passage to participate in scientific culture. It involves the development of various strategies to deal with difficult ethical issues, including academic and emotional divisions of labour, as well as the suppression of anthropomorphism in the process of 'becoming a biologist'.

Yet, unlike Fudge, Birke et al, have the opportunity to integrate expressions of public sentiments into their research, and here the complexities proliferate. From the politics of animal rights extremism to public opinion surveys, various forms of public voicing challenge these scientific cultures and framings of animals. The centrality of rationality to continued scientific practice is thrown open. Despite the work done to exclude 'irrational' others, and stage a dialogue with the 'better-informed' members of the public (p.162), emotional repertoires increasingly figure in political life. Those promoting animal experimentation 'most also tackle the tricky terrain of emotions, acknowledging some of their own emotionality as, for example, pet-owners, while diminishing the (over)emotionality of the public'. They conclude, 'for all the emphasis on rationality, emotions – passions – do run high throughout, and on both side of, this debate' (p.170).

#### **4. Tracing exclusions**

Writing about animals, is in a sense, about reading for exclusions. This is a point made historically by Fudge and in the contexts of contemporary science by Birke et al. Reading across these books it possible to suggest they themselves encompass exclusions, which may point to opportunities for future empirical and theoretical work. Firstly, there is the absence of geography. With few exceptions, notably Doniger writing on zoomorphism in ancient Indian texts, a universalized western history of attitudes to animals is narrated and mobilised in these books, and so in this review. What geography there is is evident in its absence. Standardization is seen to effect placelessness in the practices of modern science (Birke et al, p.37); suggestions of alternative epistemologies only existing in the 'othering' by western scientists of those not trained or working in western contexts (Birke et al, p.158). As science becomes increasingly, but also unevenly, globalized there is further scope to explore more symmetrically the nature of these differences. So too, there are differences around gender, appearing in all the books as another 'other' to the dominant conception of the human, but often in a rather partial way.

In relation to the animals, there are absences too. A relatively narrow range of species is used to develop these analyses. Primates have long carried the burden of personifying the human/animal divide, acting as a vehicle from which to explore gender and family relations, and so they do here as well. Elephants figure increasingly as emblematic of an affective wild. Dogs occupy positions that demonstrate the ambiguities of domestication in both home and laboratory spaces. Rats and mice embody the instrumentalism of modern genetics as they increasingly become akin to machines. More opaque are the lives of animals other than mammals, including insects, fish, reptiles and amphibians. In a different context, Descartes wrote 'it is more probable that worms, flies, caterpillars and other animal move like machines than that they all have immortal souls' (Fudge, p.155). The questions now may not be the ensoulment of these animals, yet consideration of the affective and social lives of such animals still has the potential to offer insights into shifting understandings of and relations to the biosphere.

There is also, arguably, scanty attention paid to animals as other than representatives of human practices or species traits. Sometimes this is deliberate. Birke et al acknowledge 'our focus is more on how humans understand animals identities [...] because it is contradictory human understandings that underlie the controversy' in animals research. Yet something may be missing from this, as Fudge points out, our taken for granted conceptions of humans and their understandings already include the animal. It is when the lives of particular animals are explored that they become more than is assumed in the historical category of animal and so generate alternative potentials. Given biography, animal lives are revealed as constituted by and constitutive of their own complex histories, through relations that include the cultural practices of their own kinds, material interventions with the landscape, and interactions with varied care-takers. This is most evident in Gregg Mitman's chapter on the active role of elephant communities in shaping landscapes and Siegel's discussion of the divergent cultures of orang-utan groups. It also emerges in considering the enhanced wellbeing of people living with pets, not as some 'uniform therapeutic intervention', but as dependent on a dyadic interaction between animal and human behaviours (Serpell, p.127). In such accounts, animals overflow their symbolic functions with the potential to transform both human and animal lives.

Yet conversely, there are times when it feels like the emphasis on animals is to the detriment of other things that might have agency. This sounds a contrary criticism of three books seeking to redress the silent effacement of animals in social science. Yet, the risk is in implying biological entities are unique in enacting transformations of human identity and social life. Certainly, their often-ready responsiveness means animals are invested with such capacities, yet, as Daston's analysis of Medieval Angelology alongside Twentieth Century comparative psychology shows, animals are not exceptional in this and a comparative approach can yield insights into the changing nature of anthropomorphism and alternative comprehensions of nonhumans. In *The Sacrifice* Birke et al effectively elaborate the sociological, institutional and technological elements that

embed animals in experimental systems: 'what is represented as comparison between animal and human bodies is thus, in actuality, between animals-in-experimental-systems and humans-in-clinical-systems' (p.53). Yet, the comparative dimensions implied by this, and the further complexities of the alignment of clinical systems, remain to be mapped out.

The transformative transaction between animals and technologies is also evident in suggestions that visual technologies are reshaping contemporary sensibilities around animals. Kramer aligns a global trade in commercial images and changes in the 'emotional configuration of contemporary subjectivity' (p.139). Yet this is not a positive assessment. She identifies a growing uniformity and lack of authentic animal in this work, which seeks sophisticated techniques and affective registers to move viewers as a replacement for meaningful emotional exchange (p.167). Such pessimism is also encountered in the closing line of Serpell's often otherwise recuperative chapter on companion animal relations, that we face a future living alongside a less authentic nature, Serpell's 'strange little people in disguise'. Yet, if nothing else, the complex histories of human-animal relations prompt us to read for alternatives and silences here. We might find different sensibilities in Mitman's account of the role of images in elephant conservation, which values intimacy and appears to construe elephants as active participants. The proliferation of image sharing websites, as opposed to central digital archives, might offer a wider reach and mundane aesthetic of animals, with the potential to challenge contemporary statements about authenticity in the same way Morocco the horse challenges historical interpretations of animal reason.

## **5. Writing animal futures**

In presenting both the complex histories and complex present of human thinking with animals, the books demonstrate the on-going and iterative interactions of which these are made. Therefore, in concluding, it makes sense to ask what kind of intervention these books seek to make to these interactions.

Birke et al declare at the outset that their account is unbiased. By this, they mean they leave their personal judgements about the ethics of animal experimentation unspoken. Yet, as they are no doubt aware, the performance of politics is more complex than this. The emphasis in the book on denaturalising certain kinds of practice, whilst leaving others extant, is not just a methodological choice but also a political one. By collecting together insights from work often already published in specialist social science journals, this book is seeking a wider policy, journalist or researcher audience. By thoroughly situating science in its varied sociological contexts the book emerges as a powerful critique of those who wish to bolster support for the science of animal experimentation only through furthering the authority of science, in regulation, training or science communication. Yet the ethical, emotional, or embodied elements

of debate over animal research are not subject to the same levels of inquiry.

The impact of Descartes on the ethical oscillations around the 'discourse of reason' remind us that focusing on and retaining complexities maybe an ethical act in itself. Yet, there is perhaps an opportunity for further work here. As Birke et al themselves identify, the emotional is an increasingly powerful political repertoire. The turbulent history of rationality and emotionality in understanding human and animal minds might indicate why it has taken social sciences scholars a while to consider the use of affective registers in their own work in this area. (Certainly most of the forms of writing here tend to the conventional, though perhaps the practices of writing early modern history allow a greater appreciation for the absurd). However, it is not a social scientist, but the film-maker Siegel, who talks most eloquently about the moments of enchantment and disenchantment in her work with the rehabilitation of orang-utans in the forests of Borneo, and her ambivalences in channelling these in the practices of film-making.

Work from natural scientists is moving social scientists to reconsider the corporeal and affective capacities of the human animal. Nigel Thrift suggests 'the questions now being raised by biology press on that knot of interests formerly known as social' (2007, p.226). There are hints at this in these chapters. Serpell quotes Steven Mithen, an archaeologist, who suggests anthropomorphism may be one of the defining characteristics of anatomically modern humans (p.123). According to Serpell, the productive transformative qualities of anthropomorphism are central to processes of animal domestication and so to human cultural evolution. Challenges to the standardization of laboratory animal include growing knowledge of the richly affective worlds of these animals, some of which we share. The limits to the mechanisation of these animals, when acknowledged to share these capacities with humans, quickly become evident. To standardize fully the experiences of the laboratory animal would require the standardization of their human caretakers, including pets kept at home, hormonal cycles, food consumption and personal hygiene products.

Our biological, as well as our social, histories are inextricably bound up with our animal relations, so I will leave the last word on future work to an historian:

*"In writing histories without animals, we continue to make natural the ways of thinking that efface those animals, and we hide the fact that the production of meaning and order is the work of many, and not always, human agents. In this way, as well as ignoring animals, we not only misrepresent ourselves and our pasts but limit our possible futures too"* (Fudge, 2006, p.192).

## **Reference**

Thrift, N. (2007) *Non-representational Theory: Space, Politics, Affect*, London Routledge