Chapter 2

Breeding Profits

Animals as Labour and Capital in Euro-American History

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Abstract

This chapter provides a historical context for animal organizational studies by examining selected aspects of human/animal relationships as they evolved from the early-modern period to the present day. It explores how late eighteenth-century improvers turned animals into factories for converting sunlight into profit, and how nineteenth-century social mobility created the modern-day pet industry. It considers the exponential growth of interest in wild animals in the twentieth century, the mechanics and profitability of their display in captivity, and the strategies for their study in the field, before turning to the growth of interest in animal agency and anthropomorphism in twenty-first-century scholarship and its implications for the livestock industry. Fundamentally, this chapter charts the different contexts in which animals are regarded as raw materials, as tools, or as people—and asks what this can tell us about wider human(e) relationships in the Anthropocene.

Keywords:

animal agency, artificial selection, livestock, zoos, pet industry, agricultural industrialization, vermin control, animal culture

Introduction

The present-day understandings and practices that characterize the organization and management of human-animal relations are firmly rooted in a long history of more-than-human cultural and economic global entanglements. Awareness of this wider context is essential for a nuanced analysis in this emergent field of animal organizational studies: this chapter is thus intended to provide a broad historical perspective on the evolution of human-animal relationships from the eighteenth century up to the present day. This period—from the beginnings of the industrial revolution to the emergence of the posthuman—is characterized by a number of critical transformations in these relationships, which can be generally organized around the question of whether, and in which contexts, nonhuman animals were, and are, regarded as raw materials, as tools, or as quasi-people ([Thomas, 1983](#CBML_BIB_ch02_0053); [Haraway, 2007](#CBML_BIB_ch02_0020)).

The industrial revolution itself was based on a series of significant shifts in how Europeans perceived and interacted with the natural world, as well as initiating transformative changes in human culture and communities at the local, regional, national, and global level. Animals, frequently to be found on the boundaries between nature and culture, both reflected and focused these transitions ([Senior, 2007](#CBML_BIB_ch02_0049); [Malamud, 2009](#CBML_BIB_ch02_0032); [Kete, 2011](#CBML_BIB_ch02_0027)). Over the course of the last three decades or so, scholars in the humanities and social sciences have been deeply engaged in exploring the ethical, commercial, and social consequences of these shifts (Manning and Serpell, 1994; [Philo and Wilbert, 2000](#CBML_BIB_ch02_0039); [Kalof, 2007](#CBML_BIB_ch02_0026); [Urbanik, 2012](#CBML_BIB_ch02_0055); [Rees, 2017a](#CBML_BIB_ch02_0042)). This chapter will give an overview of the results of their research, beginning with livestock and the agricultural improvers of the late 1700s, moving through the creation of the pet industry and the mechanics and profitability of the control of vermin and display of wild animals to the growth of interest in animal agency and anthropomorphism in twenty-first-century scholarship.

Domestic Economy

Domestic cattle and sheep arrived in Britain from continental Europe during the Neolithic period ([Cummings and Morris, 2018](#CBML_BIB_ch02_0009); [Ryder, 1964](#CBML_BIB_ch02_0046)), while chickens are known from the Iron Age (Maltby et al., 2018). The origins of domestic pigs are slightly more confused; while domestic pigs arrived in Europe from the Near East in the Neolithic period, there is some evidence that the DNA of modern European pigs also derives from the European wild boar (Frantz et al., 2019). But what is particularly interesting here is that the bodies and behaviour of modern domestic livestock do not just differ from their wild ancestors: they are also very different even from their domestic progenitors. These differences are the result of a conscious series of decisions by humans about how to manage animals most effectively—in essence, about how to make animal bodies into more efficient factories for converting sunlight into financial profit.

From the early eighteenth century onwards, attitudes towards domestic livestock in Britain had started to shift considerably. Rather than looking at animals for what they were, increasingly agricultural reformers and improvers were considering instead what an animal could, or rather should be like. Edward Topsell, for example, advised his readers in 1658 that a sheep ‘ought to be of a large body, so that their wool may be the more’ (<IBT>Topsell, 1658</IBT>: 466), whilst also recommending that an ox should bought in March, when they are lean, so that ‘if they should be unruly and stubborn, they may be the more easily tamed, before their flesh increase their strength’ (ibid, 58). Essentially, farmers were being encouraged to regard their animals as raw material, which both could and should be improved. These endeavours were helped considerably by wider changes in land management practice—in particular, the Enclosure movement, whereby land once held in common was redistributed as private property. For livestock, what this meant was that their daily lives were now conducted under far closer human management: no longer allowed to roam woodlands and meadows for pasture and pannage, animals were instead penned into fields and yards. Their behaviour and their levels of productivity could be monitored more closely, and—crucially—their breeding could be controlled far more carefully. Animals who were not big enough, who were unruly, or who produced substandard wool, meat, or milk, would either be slaughtered or neutered ([Wykes, 2004](#CBML_BIB_ch02_0060)). In the first steps towards the eventual industrialization of livestock production, only the most productive would be admitted as parents to the next generation ([Hribal, 2003](#CBML_BIB_ch02_0022" \o "Hribal, J (2003) ‘Animals are part of the working class: a challenge to labour history’, Labour History, 44: 435–53)).

Sam White’s study of the history of Chinese pig breeds in Europe and North America demonstrates this phenomenon very clearly ([White, 2011](#CBML_BIB_ch02_0057)). In China, as the human population and pressure on the land grew, pigs came to live far more closely and commensally with humans much earlier, creating an ecological niche for themselves out of the waste and leftovers of the household and farm. In Europe, however, they maintained their traditional foraging semi-wild status: they were nominally under the control of human populations but fed themselves through the practice known as ‘pannage’—primarily eating the nuts and fruits of the forest floor that were unwanted by humans. In roaming wild in this way, they had to fend for themselves, ranging widely, fighting off predators (in doing both, using up calories that might have been converted into human food) and mating as they pleased. But as European population densities increased in the seventeenth and eighteenth centuries, so too did the pressure to cut down the forests for farming: urbanization created a new niche in which pigs could scavenge—and the import of Chinese breeding stock accelerated the physical and psychological transformation of the nascent capitalist pig. Now, English farmers could work with animals that ‘are very prolific, are sooner made fat than the larger kind, upon less provisions, and cut up, when killed, to more useful and convenient portions’ (Beilby, 1800 in [White, 2011](#CBML_BIB_ch02_0057): 107).

By the nineteenth century, breeders were learning to produce a range of different types of livestock breed, suited both to different geographical areas and a range of tastes in fashion, whether with regard to external appearance or internal production. The first native UK breed to be recognized was the Hereford. It was primarily associated with the work of Benjamin Thompkins, and valued for its ‘economy in feeding, natural aptitude to grow and gain from grass and grain, rustling ability, hardiness, early maturity and prolificacy’ ([Cattle Site, 2021](#CBML_BIB_ch02_0004)). The Scottish Aberdeen Angus emerged from the combined efforts of three farmers—Hugh Watson, William McCombie, and Sir George Macpherson-Grant, working from 1808 to the early twentieth century. The same period saw an emergent division of labour in cattle. Hitherto, the same animals had been expected by farmers to produce both meat and milk—the mid-nineteenth century saw breeds specializing. Alongside the beef Herefords now could stand the dairy Jersey, Friesans, and Ayrshire cattle. Poultry, too, in the mid-twentieth century and as a result of a series of ‘Chicken of Tomorrow’ contests organized by the American A&P store, would soon specialize into meat (broiler) and egg production.

This production of particular kinds of animals to human specification was not confined to livestock, of course. The nineteenth century, particularly the Victorian period, also saw a tremendous growth of interest in pet breeding, as Harriet Ritvo’s work has clearly shown ([Ritvo, 1987](#CBML_BIB_ch02_0044" \o "Ritvo, H (1987) The Animal Estate: the English and Other Creatures in the Victorian Age, Harvard University Press: Cambridge MA); [2010](#CBML_BIB_ch02_0045)). In 1983, Keith Thomas had defined a pet as an animal that was kept in the home, that was given a name, was never eaten—and which played no economic role. But what later scholarly work has shown is the sheer extent of the economic activity that was inspired by the emergence of the pet industry and specific, ever more distinct, breeds and strains of animals. Before the nineteenth century, dogs were organized and managed according to their function—they could be hunters, herders, guard dogs, turnspit dogs, or lapdogs. From mid-nineteenth century onwards, dogs were known instead by their appearance—their culturally negotiated breed (Worboys, Strange, and Pemberton, 2018). In some cases, this related to their place of origin (Pekingese, Pomeranian, Chihuahua) or their behavioural characteristics (poodles, for their habit of playing in water/puddles, for example). In others, breeds were named for the individual, such as Louis Dobermann, most associated with their creation. Dog shows, modelled on the aristocratic cattle and livestock shows that had been a feature of eighteenth-century rural life, now emerged as part of the urban landscape, as the new middle classes learnt to negotiate status and identity in these new spaces by emulating their social superiors. At these shows, the biological attributes of these new breeds were socially negotiated and managed, often prioritizing fashion and aesthetic taste over the physical wellbeing of the animal. And at the same time, the institutions and accessories that we think of today as part of the pet world—breed clubs and societies, leads, coats, brushes, toys, dishes, books, specialized food—were also being produced. For the first time, you had dogs that were worth money not because they could do something, but simply because of what they looked like. Humans were willing to spend money on individuals and items that primarily functioned to express their own identity as an animal lover/pet owner.

Clearly, the emergence of capitalist modernity and the processes of industrialization and urbanization fundamentally reformulated human relationships with animals in Europe and North America. Domestic animals in particular were increasingly treated as biological capital through which profit (both financial and emotional) could be maximized by control of breeding, while also being mobilized as important signifiers of identity—living brands that could indicate the owner’s wealth, status, class, race, gender, or point of geographical origin. But even as the sheer numbers of livestock animals and the popularity of pets grew, so too did concern with a much less welcome category of animal. Vermin had always been a problem for farmers—but it was one that became an issue of national security in wartime.

Commercial Competitors?

Charles Elton, a zoologist at Oxford, had been trying to understand how and why wild animal population levels varied since the early 1920s. In 1926, he was employed by the Hudson Bay Company to map the annual distribution of fur-bearing animals in the Arctic: fluctuations in these numbers had a major impact on the fur trade, and hence the economy of the entire Canadian Arctic region ([Chitty and Elton, 1937](#CBML_BIB_ch02_0010)). In 1932, he founded the Bureau of Animal Population at Oxford to study the issues of wild animal ecology, particularly with respect to disease and the relationship between wild and domestic animals. His team focused on animals of economic importance—fur-bearing animals and game birds, certainly—but also on those animals that caused economic damage. Voles, for example, destroyed young trees, and hence were of great interest to both government (the Forestry Commission) and industry (the Bryant and May match company) who funded some of Elton’s initial work in England ([Crowcroft, 1991](#CBML_BIB_ch02_0011)). But it was with the outbreak of the Second World War that the Bureau had to step up: scientists and technicians throughout the United Kingdom were exempt from military service if their research benefited the war effort, and Elton and his team had a key role to play in the war on waste. The Bureau turned its attention to pest extermination.

Their focus was on rodents—the brown rat (found in the countryside), the black rat (found on the docks), and the mouse (found in domestic homes throughout Britain). At this point, little was actually known about rodent control—despite the vast range of poisons on offer, their efficacity at exterminating, or even just reducing, populations was not well understood. Elton’s first efforts were to study the use of poison under controlled conditions—and in studying this, in a ramshackle laboratory attached to a pig farm, for the first time scientists started to understand the principles of rat behaviour. Rats, it appeared, avoided new objects like the plague—and if a rat survived ingesting poisoned food, then it would thereafter refuse that food. These are now fundamental principles that govern the use of laboratory rats in behavioural and cognitive psychological research—but they were discovered as part of the extremely pragmatic drive to eradicate food competitors in wartime conditions. Karen Sayer’s history of the emergence of modern rat management ([Sayer, 2017](#CBML_BIB_ch02_0048)) charts the way in which ideas of efficiency and agricultural productivity became central to the scientific study of animal behaviour in the post-war period—even felines, it seemed, could potentially participate in the disciplined army of farm workers. Cats, Elton suggested in the mid-1950s, could be persuaded to form important sources of alternative labour in times of skills shortage, although the reward for their efforts (milk) did need to be carefully managed so as to maintain their productivity levels ([Elton, 1953](#CBML_BIB_ch02_0012)).

While some rodents could only contribute to national economic security by dying, others were being actively created in order to participate in the emergent field of genetics and medical research. Abbie Lathrop, a businesswoman from the American mid-West, began breeding mice, rats, and guinea-pigs in the early 1900s, supplying both the US government and rodent fanciers with animals. Her careful breeding records meant that her animals would become some of the most widely used lab mice strains in the world, critical to the study of cancer and the practices of modern biomedicine (Steensma et al., 2010). The historian Karen Rader has documented the way in which, during the early twentieth century, the mouse body became a mass-produced, standardized variable in and for experimental biology—the use of which in research was in turn dependent on the development of considerable commercial infrastructure, such as cages, handling equipment, feed, bedding, transport, and so forth (Rader, 2004). Laboratory rodents did not, of course, just play a role in cancer research, but were fundamental to the establishment of product safety and reliability in marketing drugs, food additives, beauty/grooming products, and cleaning chemicals. While concern for the welfare of laboratory rodents tended to lag behind care for nonhuman primates, dogs and cats, their exploitation still aroused strong opposition amongst members of the general public (Jasper and Nelkin, 1991; [Petit, 2017](#CBML_BIB_ch02_0038)). In this, rodents demonstrate most clearly the extent to which animal ethics are, in practice, treated as situational and context-dependent: in different geographical spaces (the home, the farm, the sewer, the laboratory) the same animal is subject to radically divergent standards of management and control.

This also, of course, applies to cultural spaces. Large mammalian predators such as wolves, foxes, badgers, coyotes, otters, and bears have seen their status change drastically over the course of the last century, veering from ‘subject-to-eradication-programmes’ vermin to ‘hailed-as-symbols-of-the-wilderness’ charismatic megafauna. The experience of wolves in the United States has been particularly significant here, given their role in the emergence of wilderness management as a profession, and the importance of hunting as a major commercial leisure activity. One of the key players in this new business, Aldo Leopold, was explicit—his ‘profession began with the job of producing something to shoot’([Leopold, 1940](#CBML_BIB_ch02_0028): 343)—that is to say, the job of wildlife managers was to ensure that hunters had targets at which to aim. These targets would usually be elk or deer of some kind—which, of course, were also preyed on by wolves. If you wanted to produce lots of deer, it therefore followed that you had to get rid of the wolves. Since wolves were also a threat to the livestock owned by the farmers spreading across North America, it’s not surprising that wolf eradication became the declared aim of the US Bureau of Biological Survey. As a result, by the 1950s, wolves were all but extinct in the continental United States ([Coleman, 2004](#CBML_BIB_ch02_0007)). The results weren’t quite as anticipated—while deer populations did increase rapidly as a result of the demise of the wolves, they also crashed shortly thereafter, as the animals ate themselves out of their habitat. Aldo Leopold went on to become a key figure in the emerging conservation movement, realizing after seeing the ‘fierce green fire dying’ in the eyes of one wolf, that a new ethical standard was needed in land management theory and practice (Leopold, 1949; [Lorbiecki, 2016](#CBML_BIB_ch02_0029)). The reintroduction of wolves to Yellowstone National Park and elsewhere from the mid-1990s onwards has demonstrated just how central wolves are to managing the wild—that in fact, they themselves can be considered as active agents in land management ([Jones, 2017](#CBML_BIB_ch02_0025)).

Foxes and badgers have faced similar problems in the United Kingdom, as their iconic cultural status conflicted with their economic impact, creating significant ethical and legal problems. For British people in the nineteenth and early twentieth centuries, the killing of a fox by anyone other than a pack of hunting dogs was condemned as vulpicide—and novelists as disparate as Anthony Trollope and Edith Nesbit vividly described the shame associated with the act. The only right way to kill a fox was to hunt it on horseback with a pack of dogs: an activity considered equally horrific by many late twentieth- and twenty-first-century Britons. From the 1960s onwards, the effort to put an end to this activity has provoked considerable controversy and occupied much parliamentary time (Woods, 2000). The issue for badgers had less to do with hunting as a leisure activity—in this case, the problem was the economic harm caused by their alleged role as a disease vector, specifically for bovine TB (bTB). As Angela Cassidy has shown ([Cassidy, 2012](#CBML_BIB_ch02_0006); [2019](#CBML_BIB_ch02_0005)), the significant fictional role played by badgers in English literature (from an Anglo-Saxon riddle poem to Wind in the Willows and the Animals of Farthing Wood) has had a material impact on the management of this problem. Bovine TB, once a serious source of infection for the human population of the United Kingdom, was largely brought under control from the 1960s onwards, through a combination of regular testing and slaughter of infected animals. However, from the mid-1980s and through the 1990s, cases of bTB in cattle started to rise. This had a major economic and emotional impact on farmers, some of whom faced the slaughter of herds that had taken generations to build—and many of these farmers blamed badgers, who had been identified as carriers of bTB in 1971. A succession of government-inspired reports and trials, produced by some of the most influential scientists in the United Kingdom followed. But the conflict between the calls from conservationists and other public figures for the badger to be protected, and the needs of farmers to have their livelihoods safeguarded has proved intractable. The badger/bTB problem in many ways encapsulates the ongoing ethical dilemma of how to manage wild animals alongside industrial livestock production.

Wild Displays

It is important to remember that the industrialization and intensification of domestic livestock production happened during much the same period as the global growth in studies of wild animal behaviour. From the 1960s onwards, at the same time as cows, pigs, chickens—even mice—were increasingly treated as standardized biological machines, some scientists were beginning to talk and write about wild living animal groups in a way that emphasized the individuality and uniqueness of the social relationships that existed within them. Social relationships between domestic animals had been the subject of scrutiny for considerable time—the term ‘pecking order’ comes, of course, from Thorleif Schjelderup-Ebbe’s observations of social dominance in the 1920s ([de Waal, 2001](#CBML_BIB_ch02_0056)). But these observations were revealing something more—the existence, perhaps, even of nonhuman animal culture.

Some of these studies took place in the United Kingdom on foxes and badgers (Macdonald, 1987; [Neal, 1958](#CBML_BIB_ch02_0036)), others in the United States on wolves and bears ([Mech, 1970](#CBML_BIB_ch02_0034); [Craighead, 1982](#CBML_BIB_ch02_0008)). Some of the most interesting studies took place in East Africa, in the national parks of Kenya and Tanzania, and focused on chimpanzees, baboons, elephants, and lions ([Goodall, 1986](#CBML_BIB_ch02_0015); [Strum, 1987](#CBML_BIB_ch02_0052); [Moss, 1988](#CBML_BIB_ch02_0035); [Packer, 1994](#CBML_BIB_ch02_0037)). Again, there was a long history in North America and Europe of observing and writing about wild animals (Lutts, 1990)—what was different about these studies was that they were being carried out in a systematic and (eventually) long-term manner. This was not a case of animal behaviour being watched in passing, or over the course of a week or a month. These scholars went to the field to learn about the social and ecological behaviour of wild-living animals over an extended period of time, and some of these studies (Jane Goodall’s chimpanzee study at Gombe, Craig Packer’s lion research in the Serengeti) have now lasted for more than half a century. In order to study animals systematically, it was clear to researchers from the very start that they needed to be able to identify individuals—fieldworkers needed to be sure that they weren’t surveying the same population twice, or that attention wasn’t being concentrated on one animal at the expense of another. Researchers tried a number of different ways of identifying individuals—ear notches, radio collars, leg rings, even (in the case of Bernhard Grzimek, dyeing a zebra’s coat)—as well as simply learning to recognize ear or whisker patterns, or the type and number of notches in a dolphin’s fin ([Rees, 2017b](#CBML_BIB_ch02_0043)). But once an individual was identified in this way, researchers also needed to be able to refer to them quickly, and one of the first big questions faced by animal field scientists was whether to use numbers or names. Numbers might appear more scientific, especially since names might carry unfortunate connotations—but even a number can become a name once it’s in use.

As a result, observers got to know—and crucially, to write about, individuals—Goodall’s David Greybeard, Dian Fossey’s Digit, Cynthia Moss’ Tuskless, Shirley Strum’s Peggy—later on, and more infamously, Cecil, the lion killed in Zimbabwe by an American tourist on a hunting safari. Names and individual identification mattered, because they enabled researchers to link present-day actions with past events, to make possible connections between cause and effect—in essence, to record the history of these animal societies as it unfolded before them. In fact, many of these researchers literally wrote the history of their populations in the form of books written for the popular market, many of which became bestsellers ([Goodall, 1971](#CBML_BIB_ch02_0016); [Fossey, 1983](#CBML_BIB_ch02_0013))—partly to share the fascination they felt at watching the complexity and depth of nonhuman animal lives, but also to raise awareness of conservation projects and of the need to protect the habitat and integrity of these populations.

This was part of a notable growth of public interest in wild animals in the mid-twentieth century—nature programmes were a key element of the BBC’s television schedules from the early 1950s onwards. Zoo Quest, which ran from 1954 to 1963 and was a joint production by the BBC and London Zoo, charted the adventures of the young David Attenborough as he travelled to exotic locations in order to capture animals for the Zoo ([Gouyon, 2019](#CBML_BIB_ch02_0017" \o "Gouyon, J-B (2019) BBC Wildlife Documentaries in the Age of Attenborough, Palgrave Macmillan, London)). Each episode began and ended with Attenborough in the television studio, displaying and discussing the animals that he had brought back to the United Kingdom, and which the audience would soon personally be able to visit in the Zoo. A few years later, however, attitudes to wild animals, and the social and physical practices of displaying them, began to shift in at least some institutions. Whereas once the highlight of a trip to the zoo might have been the chimpanzee tea party or a ride on an elephant, increasingly audiences were being encouraged to sponsor individual animals, or pay a premium to care for the animals in ‘zookeeper for a day’ programmes (Hancocks, 2003; [Grazian, 2015](#CBML_BIB_ch02_0018)). Rather than presenting animals in cages, architectural reforms displayed them in naturalistic settings, with plenty of water, greenery, mud, or sand, depending on preference. Rather than being organized according to their taxonomic positioning (all big cats caged in one part of the zoo, all horned ungulates in another), animals were grouped according to their ecosystem of origin, with plains animals separated from jungle dwellers. Most interestingly, systems of control changed, with hidden walls and moats rather than bars used to ensure that the animals stayed where they had been put. The impression this gave to the audience, though, was that the zoo inhabitants were in some way ‘choosing’ to stay where they were, to engage with their human visitors by their persistent presence.

A structurally similar elision of human control and activity can be seen in natural history programming, where shots are chosen, edited, and angled so as to exclude evidence of any local human inhabitants. As Chris Sandbrook put it, after watching some of the outputs of the BBC’s Natural History Unit, ‘anyone unfamiliar with East Africa could be forgiven for thinking that there is an unbroken chain of natural wildlife habitat stretching from the Rwenzori in the west to Mount Kilimanjaro in the East. There isn’t’ ([Sandbrook, 2013](#CBML_BIB_ch02_0047)). This is part of the ‘Myth of Wild Africa’ narrative ([Adams and McShane, 1996](#CBML_BIB_ch02_0001)), where Western audiences are both encouraged to believe in the existence of an Edenic wilderness, untainted by human actions, and to think of the African continent as the location of this Eden, thereby literally erasing the existence of the people who live and work around the national parks. This way of displaying wild animals, with zoos on the one hand being presented as Noah’s Ark beacons of conservation hope, while on the other, natural history documentaries depict an unspoiled, unpopulated landscape, can be taken to absolve their audiences from any sense of responsibility for looming Anthropocene extinctions, at the same time as it reproduces postcolonial power relationships (Jones et al., 2019). Westerners are needed, in this narrative, to protect the animals of Africa from Africans, with important consequences for wildlife management as well as the distribution of conservation resources, while wild animals, it seems, recognize their saviours by choosing to stay with them.

Agents, Objects, and the Posthuman?

One of the most notable recent shifts in scholarly studies of human-animal relationships has been a marked growth of interest in exactly this theme of animal agency—the ability of animals to make decisions and choices, and to actively shape the worlds in which they exist ([Steward, 2009](#CBML_BIB_ch02_0051); [Rees, 2017a](#CBML_BIB_ch02_0042); [Bhattacharyya and Slocombe, 2017](#CBML_BIB_ch02_0003)). This is an interest that in many ways parallels the steady growth in the tendency to treat pets as family members and quasi-people—a tendency that has been accompanied by an equivalent increase in the scope of the pet industry’s activities. Seasonal festivities, for example, now often include treats or cards meant for the family dog or cat, health insurance for pets can now regularly be found as part of health care packages. Even after death, it is possible to buy a coffin or a cremation plot for the animal’s remains. This level of care and attention contrasts sharply with the treatment and cultural perception of livestock animals: living lives largely hidden from the public gaze, it is hard for consumers to recognize the presence of the once-embodied animal in ready meals, chicken nuggets, and pre-sliced meats displayed for purchase. Considerable linguistic and commercial practice has gone in to distancing humans from the animals they eat: the reality of industrial livestock lives is only really faced when the system breaks down, as with the BSE crisis of the 1990s, the foot and mouth epidemic (2000), and the horsemeat scandal (2013) in the United Kingdom.

The concept of agency can still, however, be applied to livestock. Domestication and human-controlled artificial selection did not just produce particular configurations of biological bodies, it also affected animal temperament and behaviour. Cattle—despite, or perhaps because of their size—are excellent examples of this. Unlike, for example, deer or sheep, domestic cattle show very high levels of cooperation with humans (notwithstanding the reasonably regular reports of farmers suffering injury or death as a result of an interaction with a cow). Indeed, if it wasn’t for the willing cooperation of cows—voluntarily queuing up and standing still to be milked, for example, as opposed to having to be driven in and tied up—dairy farming would be an even more difficult profession to pursue than it already is. Lewis Holloway and Chris Bear’s study of the evolution of milking systems, from the ‘catheter milking’ of the mid-nineteenth century to the robotic systems increasingly in use today, demonstrate this very clearly ([Holloway and Bear, 2017](#CBML_BIB_ch02_0021)). Their investigation of the co-constitution of human and bovine agency and subjectivity shows the significance of both technology and organizational systems to this process. The introduction, for example, of robotic milking machines ostensibly provides far greater freedom for both human and nonhuman partners: neither is now tied to particular milking times, and both are free to access the systems on demand. But regardless of the time at which the cow chooses to be milked, her output can now be measured and monitored at a very detailed level: not just her overall milk yield, but its quality can be judged alongside the amount of food ingested and medical treatment required. The cow’s performance as a labourer can now be subjected to granular scrutiny, while the farmer now has, not just the costs of the new system to manage, but the impact of the new information on husbandry and marketing practices. In this context, it becomes again appropriate to ask, are animals part of the working class? Are they the tools through which profit is created, or do they themselves labour to produce that profit? When they eat grass and feed, and convert that raw material into muscle fibre, milk, or calves, do they represent farming capital, or labour ([Porcher and Schmitt, 2012](#CBML_BIB_ch02_0040" \o "Porcher, J and Schmitt T (2012) ‘Dairy cows: workers in the shadows?’, Society and Animals, 20: 39–60))?

Even more significant, however, are the consequences of taking animal agency seriously for our understanding of human agency—and even, potentially, for the concept of the posthuman. As with the bovine example explored above, considering animal agency forces us to move away from a notion of agency as located in an individual mind, possessing free will, rationality, and self-awareness, and towards an idea of agency as emergent, relational, bounded, and mediated. Posthumanist debates emerged out of the blurring of the human-machine boundary and the elevation of a free mind above bodily limitations: animal agency, in many ways, returns us to a world of embodied responsibility.

Concluding Thoughts

Characteristic of human-animal relationships in the English-speaking world over the last two centuries or so has been an apparent tension between treating animals as quasi-persons whose preferences and motivations can be identified and (sometimes) respected, or as biological raw material to be reconfigured according to human need, and sometimes with regard only to human whim. Neither position is sustainable. Twenty-first-century scholars might refer to pets as companions, but their position, while often indispensable, remains subordinate. Livestock might be dismissed as ‘walking larders’, but they remain, in Rhonda Wilkie’s term, ‘sentient commodities’, and the emotional and cognitive challenges involved in living with animals born to die have to be carefully managed ([Wilkie, 2010](#CBML_BIB_ch02_0058" \o "Wilkie, R (2010) Livestock/Deadstock: Working With Farm Animals from Birth to Slaughter, Temple University Press, Philadelphia PA)). Challenging the presumption that human-animal relationships are reducible to binary or dyadic analysis is, and will be, one of the fundamental challenges facing animal organizational studies. As the example of agency above demonstrates, taking animals seriously requires the rethinking of some foundational concepts for the social sciences and humanities: for organizational and management studies, these theoretical frameworks will have key empirical and commercial consequences.

As this chapter has shown, relationships between humans and other animals are ambiguous, often contradictory, and governed by a series of situational ethics, whereby the treatment of an animal is determined not so much by species or philosophy as by physical context and individual history. But it’s also important to remember that the treatment of animals reflects our own sense of human(e)ity, not just with the elision of local people in natural history displays and narratives, but—more disturbingly—with the mobilization of animal categories and metaphors to manage relationships between human communities. Most of these apparent paradoxes, whether in the context of wild animals, pets, vermin, or the industrial livestock industry, are rooted in the very clear distinction that is drawn between ‘nature’ and ‘culture’ in the Anglo-American and European world. It will be interesting to see how these develop—and what consequences this has for our sense of what it means to be human—when the consequences of climate change really begin to disrupt life in affluent Western economies.

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