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Abstract	Intensive farming, or factory farming as it sometimes called, currently involves between 50 and 60 billion animals per year. Its use increased following the ravages of World War II, a fact often explained by advances in science and technology, which were critical to feeding the world's population from the mid-twentieth century. This book, however, argues that intensive production was not so much driven by technology as by commercial and economic imperatives, which technology was able to sustain. These imperatives had shaped the animal product sector from at least the nineteenth century, along a "commodification pathway" that may be described as a utility-driven means of animal management, which objectifies animals as goods in the marketplace, prioritises human uses and lacks meaningful engagement with ethical principles. In effect, the pathway leads to the regulation of animals as bulk commodities, paying insufficient attention to individual wellbeing. When animals become commodified, there are few limits on their use for meat and other products, so that the value of animals is determined by the marketplace, leading to animal exploitation and regard for them as a form of capital.	
Keywords (separated by '-')	Animals as capital - Commodification of animals	

1 Introduction: For What Is the Animal But the Profits Thereof?

Abstract

Intensive farming, or factory farming as it sometimes called, currently involves between 50 and 60 billion animals per year. Its use increased following the ravages of World War II, a fact often explained by advances in science and technology, which were critical to feeding the world's population from the mid-twentieth century. This book, however, argues that intensive production was not so much driven by technology as by commercial and economic imperatives, which technology was able to sustain. These imperatives had shaped the animal product sector from at least the nineteenth century, along a "commodification pathway" that may be described as a utility-driven means of animal management, which objectifies animals as goods in the marketplace, prioritises human uses and lacks meaningful engagement with ethical principles. In effect, the pathway leads to the regulation of animals as bulk commodities, paying insufficient attention to individual wellbeing. When animals become commodified, there are few limits on their use for meat and other products, so that the value of animals is determined by the marketplace, leading to animal exploitation and regard for them as a form of capital.

Keywords

Animals as capital · Commodification of animals

S. Riley, *The Commodification of Farm Animals*, Animal Welfare 21,
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1.1 Animals and Profit

The title for the introduction to this book is a wordplay on a statement made by Edward Coke (1552–1634) in 1628, "for what is the land but the profits thereof".[1] Although not all dealings with land or animals are motivated by profit-seeking, transactions with both are based on property rights that "conceptually separate"[2] land and animals from the benefits of ownership. Farm animals in particular are exploited to produce meat, fibre and other products, in circumstances of total reliance on humans.[3] Yet, neither this vulnerability nor the fact that they are living beings in their own right has persuaded humans that they should not use animals in profit-driven ways.[4] Instead, as this book argues, farm animals have become increasingly commodified.

The word "animal" is used to describe non-human animals, and the term "farm animal(s)" refers to animals "kept or raised in captivity", consistent with the definition developed by the Food and Agriculture Organization (FAO) of the United Nations.[5] However, the FAO definition is very broad, ranging from cattle, sheep, pigs, poultry and camelids to insects such as silkworms and bees, while the scope of this book is more limited, focussing on sheep and cattle, with occasional references to pig and poultry production.[6] As explained in more detail in Sect. 1.4, one of the main reasons for this limitation ensues from the fact that sheep and cattle were the primary focus of regulation throughout the nineteenth century in the UK. This not only draws attention to animals who were important to law and policy throughout the formative years of regulatory regimes overseeing the animal product sector but also keeps the material manageable. At the same time, the term farm animal is not

[1] Edward Coke, *The First Part of the Institutes of the Lawes of England*, Society of Stationers, London (1628), L 1 C 1 Sect 1 of Fee Simple 4 b, available from https://play.google.com/books/reader?id=NOgyAAAAIAAJ&hl=en&pg=GBS.PA5

[2] Robyn Bartel and Nicole Graham, "Property and Place Attachment: A Legal Geographical Analysis of Biodiversity Law Reform in New South Wales", (2016) 54 (3) *Geographical Research*, 267, 270, 272, https://doi.org/10.1111/1745-5871.12151

[3] Dinesh Joseph Wadiwel, "Like One Who is Bringing his Own Hide to Market", (2016) 21 (2) *Angelaki Journal of the Theoretical Humanities*, 65, 69, https://doi.org/10.1080/0969725X.2016.1182725

[4] F Bailey Norwood and Jayson L Lusk, *Compassion, by the Pound: The Economics of Farm Animal Welfare*, Oxford University Press, New York (2011) 66; Amanda Whitfort, "Justice and the Vulnerable: Extending the Duty to Prevent Serious Crimes Against Children to The Protection of Agricultural and Research Animals", (2018) 39 *Adelaide Law Review*, 125, 128–132.

[5] *Constitution of the Food and Agriculture Organization of the United* Nations, opened for signature 16 October, 1945, [1945] *ATS* No 9, entered into force on 16 October, 1945; The FAO has 194 member nations, one organization and two associate members, available from http://www.austlii.edu.au/au/other/dfat/treaties/1945/9.html; Food and Agriculture Organization of the United Nations, *Livestock Statistics – Concepts, Definitions and Classifications*, FAO (2020), Sections II.1 II.2, available from http://www.fao.org/economic/the-statistics-division-ess/methodology/methodology-systems/livestock-statistics-concepts-definitions-and-classifications/en/

[6] Food and Agriculture Organization of the United Nations, *Livestock Statistics – Concepts, Definitions and Classifications*, above, 5.

universally favoured, with critics pointing to its connotations of financial gain.[7] Nevertheless, because the term identifies a subset of animals who are the focus of this book, it is used for that reason.

Worldwide, the manner in which farm animals are raised and sold presents significant regulatory challenges for animal wellbeing, a point exacerbated by the fact that intensive farming, or factory farming as it sometimes called, involves between 50 and 60 billion animals per year.[8] One of the challenges stems from the need to feed the world's population, bearing in mind that not all agricultural land can be used to grow crops.[9] Indeed, the demand for food has been used to explain the prevalence of intensified agricultural production following the end of World War II.[10] However, some 59% of the "world's crop calories are wasted", with 25% being squandered by consumers and retailers, 9% used on biofuels and 25–30% used as animal feed.[11] These statistics call into question whether better use could be made of existing crop yields, eliminating or substantially reducing the need for intensive animal production.

Intensive animal production also attracts criticism because of its entrenched institutionalised cruelty, a fact acknowledged from the 1960s with the publication of Ruth Harrison's *Animal Machines*.[12] Although advances in animal husbandry and veterinary science have resulted in animals being healthier today than they were in previous centuries, pressures of production also mean that today's animals lead poorer quality lives "than those of their ancestors".[13] One of the main reasons for this development derives from the fact that the view of farm animals as manufactured

[7] F Bailey Norwood and Jayson L Lusk, *Compassion, by the Pound: The Economics of Farm Animal Welfare*, above 4, 66.

[8] Compassion in World Farming, indicates over fifty billion per year, *Ending Factory Farming*, available from, https://www.ciwf.org.uk/factory-farming/; Gary L Francione, "The Abolition of Animal Exploitation" in Gary L Francione and Robert Garner (eds), *The Animal Rights Debate: Abolition or Regulation?*, 1, 2, Columbia University Press, (2010), estimates 56 billion animals per year; Dinesh Joseph Wadiwel, "Like One Who is Bringing his Own Hide to Market", above 3, 65, estimates over 60 billion per year.

[9] Gordon Gatward, "*Livestock Ethics*", Chalcombe Publications, Lincoln (2001), 10.

[10] Tim Lang, "Achieving Access to Ethical Food: Animal and Human Health Come Together" in Jacky Turner and Joyce D'Silva (eds), *Animals, Ethics and Trade*, 261, 263, Earthscan (2006).

[11] Emily S Cassidy, Paul C West, James S Gerber and Jonathan A Foley, "Redefining Agricultural Yields: from Tonnes to People Nourished per Hectare" (2013) 8 *Environmental Research Letters*, 1, 4–5, https://doi.org/10.1088/1748-9326/8/3/034015; additional discussion, Compassion in World Farming, web site, *Ending Factory Farming*, available from, https://www.ciwf.org.uk/factory-farming/

[12] Ruth Harrison, *Animal Machines*, first published 1964 by Vincent Stuart Publishers, 2013 Edition J Harrison and J Wilson, CABI Oxfordshire (2013); Donald M Broom, "Ruth Harrison's Later Writings and Animal Welfare Work", in Ruth Harrison, *Animal Machines*, 21, 21, Vincent Stuart Publishers, 2013 Edition J Harrison and J Wilson, CABI Oxfordshire (2013).

[13] Peter Sandøe, Stine B Christiansen and Björn Forkman, "Animal Welfare: What is the Role of Science?" in Jacky Turner and Joyce D'Silva (eds), *Animals, Ethics and Trade*, 41, 46, Earthscan (2006); David Harvey and Carmen Hubbard, "Reconsidering the Political Economy of Farm Animal Welfare: An Anatomy of Market Failure", (2013) 38 *Food Policy*, 105, 106.

and tradeable goods, apparent from at least the nineteenth century, has strengthened with the passage of time.[14]

This is a curious development, if it is kept in mind that the earliest anti-cruelty laws, initiated in the United Kingdom (UK) in 1822, proscribed cruelty to farm animals, specifically cattle.[15] Yet almost 100 years later, farm animals are arguably far less protected than other animals, such as household pets. One proffered explanation is that humans have long used farm animals in accordance with "exploitation principle[s]",[16] so that intensified production became the natural goal of the sector.[17] In reality, while advances in technology from the mid-twentieth century are thought to have initiated intensified animal production, such advances were not unique to that century, with innovations in refrigeration and transportation already having stimulated intensive production from the nineteenth century.[18] As Gunderson argues, one needs to look behind technology to understand that the sector was propelled by economic incentives where "capital's blind drive for self-expansion and self-accumulation" shaped the animal product sector.[19] Accordingly, market expansion and intensive animal farming were not so much driven by technology, as by commercial and economic imperatives, which technology was able to sustain.

For these reasons, this book argues that the building blocks of intensive production can be traced to events of the nineteenth and early twentieth centuries, when authorities laid the foundations for regulating animal production but failed to deal meaningfully with animal wellbeing, let alone threshold issues regarding the legitimacy of animal use. This period saw the instigation of anti-cruelty legislation, growing societal interest in preventing cruelty to animals, increasing importance of veterinary science and the negotiation of international instruments to manage trade in the sector. Throughout these initiatives, science and technology provided the means for satisfying market demand and fulfilling ever-growing commercial objectives. However, commercial and economic imperatives paved the way, not

[14] Gordon Gatward, "*Livestock Ethics*", above 9, 9; Ben Mepham, "The Ethical Matrix as a Decision-making Tool. With Specific Reference to Animal Sentience" in Jacky Turner and Joyce D'Silva (eds), *Animals, Ethics and Trade*, 134, 141, Earthscan (2006).

[15] 1822, *An Act to Prevent the Cruel and Improper Treatment of Cattle 1822*, (3 Geo IV c 71), *The Statutes of the United Kingdom of Great Britain and Ireland 3 George IV. 1822*, his Majesty's statute and law printers London, sold by Butterworths and son, 403, available from https://archive.org/details/statutesunitedk10britgoog/page/n436

[16] Steven M Wise, "Entitling Non-Human Animals to Fundamental Legal Rights on the Basis of Practical Autonomy", in Jacky Turner and Joyce D'Silva (eds), *Animals, Ethics and Trade*, 87, 92, Earthscan (2006).

[17] Compassion in World Farming, web site, *Ending Factory Farming*, available from, https://www.ciwf.org.uk/factory-farming/

[18] John P Huttman, "British Meat Imports in the Free Trade Era", (1978) 52 (2) *Agricultural History*, 247, 259.

[19] Ryan Gunderson, "From Cattle to Capital: Exchange Value, Animal Commodification, and Barbarism", (2011) 39 (2) *Critical Sociology*, 259, 259–260. In addition, an entire volume has been devoted to the subject, Brett Clark and Tamar Diana Wilson (eds), *The Capitalist Commodification of Animals*, Volume 35, Emerald Publishing Limited, Bingley UK (2021).

only recruiting technology and science but also exerting political influence over law and policy, so that farm animals came to be regulated as commodities in the marketplace.[20]

The notion of a commodity is central to this book and is discussed in more detail in Sect. 1.2, as well as Chap. 6. It forms the basis of the "commodification pathway", which may be described as a utility-driven means of animal management, which objectifies animals as goods in the marketplace, prioritises human uses and lacks meaningful engagement with ethical principles. In effect, the pathway leads to the regulation of animals as bulk commodities, paying insufficient attention to individual wellbeing. As such, the concept can extend beyond farm animals to situations such as puppy farms, where animals are arrogated to human uses and managed in accordance with substandard industry practices.[21]

In the context of farm animals, the pathway evolved in stages, each step viewing animals as goods in trade. The origins of the first stage stem from expanding urbanisation during the eighteenth and nineteenth centuries, leading to escalating demand for animal products.[22] Technology was important to this trend because advances in refrigeration and transportation allowed producers to meet this demand. The second stage derives from the way society managed its relationship to farm animals. Although the nineteenth century saw the beginnings of a strong anti-cruelty movement, market expansion occurred against the backdrop of high levels of acceptable violence against animals. This is not to say that animal wellbeing had been ignored throughout history. It had been a matter of concern from ancient times, and for many religions, including Islam, Buddhism and Hinduism.[23] In addition, while domination over animals was reinforced by Judaeo-Christian beliefs,[24] this tenet was accepted from antiquity.[25] Similarly, sporadic regulation such as *An Act Against Plowing by the Tayle, and Pulling the Wooll Off Living Sheep 1635*

[20] Chris Otter, "The Vital City: Public Analysis, Dairies and Slaughterhouses in Nineteenth-century Britain, (2006) 13 *Cultural Geographies*, 517, 517; Gergely Baics and Mikkel Thelle, "Introduction: Meat and the Nineteenth-Century City" (2017) *Urban History*, 1, 1, https://doi.org/10.1017/S0963926817000414; Richard Perren, *Taste, Trade and Technology: the Development of the International Meat Industry Since 1840* (First published 2006 Ashgate) Routledge (2017), 50; Karen Raber, "From Sheep to Meat, From Pets to People", in Matthew Senior, Matthew (ed), *A Cultural History of Animals in the Age of Enlightenment*, Berg (2011) 73, 73.

[21] Kimberley Smith, *Governing Animals Animal Welfare and the Liberal State*, Oxford University Press, New York (2012), 92.

[22] Robert C Allen, "Why was the Industrial Revolution British?", (2009) 4 *Oxonomics*, 50, 52; Mark B Tauger, *Agriculture in World History*, Routledge (2011), 103.

[23] E Szűcs, R Geers, E N Sossidou and D M Broom, "Animal Welfare in Different Human Cultures, Traditions and Religious Faiths", (2012) 25 (11) *Asian-Australian Journal of Animal Sciences*, 1499, 1501–1503, https://doi.org/https://doi.org/10.5713/ajas.2012.r.02

[24] Andreas-Holger Maehle, "Cruelty and Kindness to the 'Brute Creation': Stability and Change in the Ethics of the Man-Animal Relationship 1600–1850", in Aubrey Manning and James Serpell, (eds) *Animals and Human Society Changing Perspectives*, Routledge (1994), 81, 82, 86–7.

[25] Andrew Linzey, *Creatures of the Same God: Explorations in Animal Theology*, Lantern Books, New York (2009), 10–12.

(Ireland)[26] and the *Massachusetts Body of Liberties 1641*[27] prohibited specific acts of cruelty against animals, but these prohibitions were not widespread. In the UK, it was not until the passage of the 1822 Cattle Act that the concept of anti-cruelty gained momentum.[28] As already noted, this legislation specifically targeted farm animals, yet by the late nineteenth century, when market expansion, both domestically and internationally, was in full swing, the treatment of farm animals was of secondary importance to profitability of the sector. The third stage involves advances in veterinary science that concentrated on diseases, such as sheep pox and cattle plague, which were important to trade. This focus was also reflected in treaties of the nineteenth and twentieth centuries, which regulated international trade and which in common with national regimes used veterinary knowledge to shape the notion of animal wellbeing to suit market demands.

These stages, all steppingstones in the commodification pathway, created settled frameworks before World War II, which governed animals in ways that increased their production value. Accordingly, farm animals were regarded as "eating machines", readily converted to "eggs, oven-ready chickens, or beefsteaks as quickly as possible".[29] By the time of World War II, farm animal production had already moved away from a system based on animal stewardship, towards one based on intensive production.[30] This transformation raised issues concerning the extent to which the market should be regulated, how it should be regulated and who should regulate it, issues that to this day have not been satisfactorily addressed.[31]

In truth, society finds it difficult to reconcile their relationship with animals because of the many and contradictory ways humans relate to them: people eat animals, use them, keep them as pets, admire them, experiment on them and understand that they feel pain and suffering.[32] Some, such as Nussbaum, argue that animals are entitled to dignity, to "flourish" as their species was intended to.[33] This last point extends the debate far beyond superficial nods to animal sentience and

[26] Richard Ryder, *Animal Revolution*, Basil Blackwell (1989), 53–54; detailed discussion Piers Beirne, *Confronting Animal Abuse: Law, Criminology and Human-Animal Relationships*, Rowman and Littlefield (2009), Chap. 1, 21–67.

[27] *Massachusetts Body of Liberties 1641*, paragraphs 92 and 93, available from https://history.hanover.edu/texts/masslib.html

[28] Linda Kalof, *Looking at Animals in Human History*, Reaktion Books (2007), 51–52, 89.

[29] F M L Thompson, "The Second Agricultural Revolution, 1815–1880", (1968) 21 (1) *The Economic History Review*, 62, 65.

[30] Harriet Friedman and Philip McMichael, "Agriculture and the State System, the Rise and Decline of National Agricultures, 1870 to the Present", (1989) XXIX-2 *Sociologia Ruralis*, 93, 106.

[31] Roger Horowitz, Jeffrey M. Pilcher, and Sydney Watts, "Meat for the Multitudes: Market Culture in Paris, New York City, and Mexico City over the Long Nineteenth Century", (2004) 109 (4) *American Historical Review*, 1055, 1057–1058.

[32] F Bailey Norwood and Jayson L Lusk, *Compassion, by the Pound: The Economics of Farm Animal Welfare*, above 4, 31.

[33] Martha C Nussbaum, "Beyond 'Compassion and Humanity': Justice for Nonhuman Animals", in Cass R Sunstein and Martha C Nussbaum (eds) *Animal Rights, Current Debates and New Directions*, 299, 305–306, Oxford University Press New York (2004).

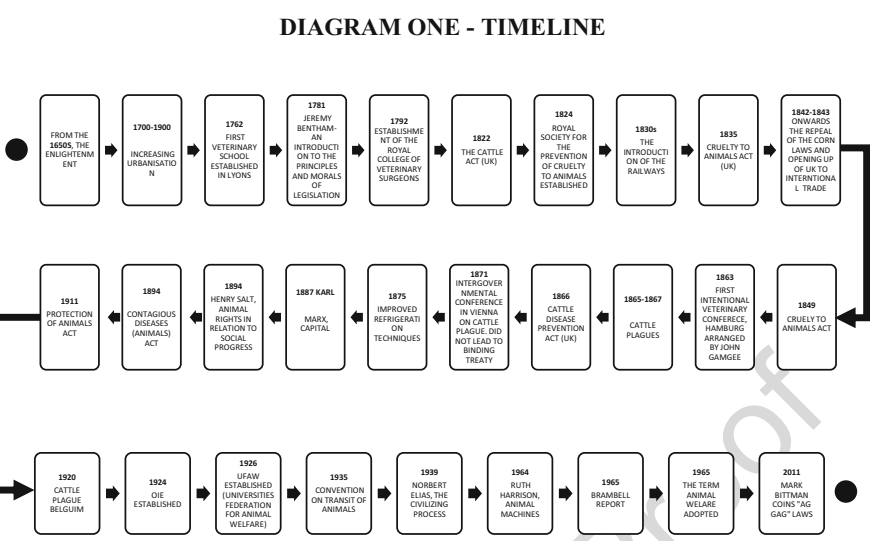

Fig. 1.1 Timeline

turns a spotlight on the legitimacy of human "domination of the animal world", as well as society's complicity in failing to deal with institutionalised cruelty in production systems.[34] As the discussion in this book develops, the arguments increasingly link commodification to state-sanctioned violence against farm animals, so that by the last chapter this theme culminates in arguments that articulate how economic biases support violence becoming entrenched in law and policy.

The book however does not provide detailed economic analyses, instead identifying and examining "relational webs" which emerged during the nineteenth and early twentieth centuries.[35] A timeline, labelled in Fig. 1.1, sets out the main events that occurred during the period under discussion. In particular, the material evaluates how and why stakeholders gained and exercised power during this time. This form of historical analysis allows conceptualisation of a frame of reference,[36] which helps society understand why policies of the nineteenth and early twentieth centuries have been so long-lived, outlasting their initial relevance by compelling regimes in the twenty-first century to continue regulating animals as commodities. Clearly, topics dealing with commodities, commodification and capital are central to this discussion and are taken up later in this book; however, it is helpful to furnish some background material at this point.

[34] Abigail Woods, "From Cruelty to Welfare: The Emergence of Farm Animal Welfare in Britain, 1964–71", (2011) 36 (1) *Endeavour*, 14, 16.

[35] Kristin Hoganson, "Meat in the Middle: Converging Borderlands in the U.S. Midwest, 1865–1900", (2012) 98 (4) *The Journal of American History*, 1025, 1026.

[36] Andrew Linzey, *Creatures of the Same God, Explorations in Animal Theology*, above 25, 5.

1.2 Commodities, Commodification and Capital

References to commodities, commodification and capital with respect to farm animals are found throughout the literature and identify three major points: how the use of animals' bodies for meat and products commodifies them[37], how the value of animals is determined by the marketplace[38] and how trade in animals and their products is predicated on endless growth, leading to animal exploitation and regard for them as a form of capital.[39]

Although each of these points deals with specific facets of animal commodification, the foundation rests on broader questions pertaining to humanity's relationship with farm animals. In particular, these questions underscore the links between capitalism and commodification, probing how both concepts lead to substandard animal wellbeing. Although commodification is often seen as the opposite of treating animals as sentient beings, the latter does not stop the use of animals, with the dividing line being sufficiently fine for Gary Francione to observe that veganism, which proscribes animal use, is critical to ensuring that animals are not looked upon as commodities.[40] Although Francione argues this point based on ethical reasons, in practical terms, the very fact that society puts a price on animals and their products reconstructs both into little more than "consumer goods", governed by the vagaries of the marketplace.[41] The dominance of economic priorities is not new, with Linda Kalof describing commodification in the seventeenth century as a pathway to "untold misery" and suffering by animals.[42]

Commodification effectively objectifies animals and reduces them to a means of generating products and profits for humans.[43] However, even beyond these goals, producers also regard animals as "commodities of exchange for profit", in other

[37] Carol J Adams, *The Sexual Politics of Meat*, Continuum, New York (2010 anniversary edition), 51.

[38] Kimberley Smith, *Governing Animals Animal Welfare and the Liberal State*, above 21, 87.

[39] Christian Stache, "Conceptualising Animal Exploitation in Capitalism: Getting Terminology Straight", (2020) 44(3) *Capital and Class*, 401, 417, available from https://journals.sagepub.com/doi/abs/10.1177/0309816819884697

[40] F Bailey Norwood and Jayson L Lusk, *Compassion, by the Pound: The Economics of Farm Animal Welfare*, above 4, 31; Gary L Francione, "The Abolition of Animal Exploitation", above 8, 62.

[41] Virginia De John Anderson, *Creatures of Empire, How Domestic Animals Transformed Early America*, Oxford University Press (2004), 68; Kimberley Smith, *Governing Animals Animal Welfare and the Liberal State*, above 21, 87.

[42] Linda Kalof, *Looking at Animals in Human History*, above 28, 135.

[43] Josephine Donovan, "Aestheticizing Animal Cruelty", (2011) 38 (4) *College Literature*, 202, 203, 211;

Charles Thorpe and Brynna Jacobson, "Abstract Life, Abstract Labor, Abstract Mind" in Brett Clark and Tamar Diana Wilson (eds), *The Capitalist Commodification of Animals*, 59, 97, Volume 35, Emerald Publishing Limited, Bingley UK (2021).

words as a form of capital.[44] Carol J. Adams describes the process as derogating animals to the status of "absent referents", so that the animal and its death are forgotten and separated from the goods and profit created out of its body.[45] This process is particularly significant for the animal product sector because the measure of a robust economy includes rates of consumption, thereby absorbing farm animals "into the world of commodities", treating them more as a means of accumulating wealth and generating capital, rather than producing food.[46]

For some, these developments represent a problem that can be pinned down to the way capitalism operates, although others question whether a different system would lead to a better outcome for animals, without impacting livelihoods in the sector.[47] A major difficulty derives from the fact that while it is theoretically possible for the government to restrict the way society uses animals, the government is already complicit in the economic biases that shape the sector.[48] Law and policy ostensibly protect animals from cruelty, yet invariably exceptions permit routine husbandry practices and intensive farming, subordinating animal wellbeing to commercial imperatives.[49] This situation exists because animals are objects rather than subjects of the law. Consequently, the law allows owners to create and unlock surplus value in their animals by way of intensive production and the tenets of the marketplace, every stage being sanctioned and facilitated by the state.[50]

[44] Dinesh Joseph Wadiwel, "Like One Who is Bringing his Own Hide to Market", above 3, 69; John Bellamy Foster and Brett Clark, "Marx and Alienated Speciesism", (2018) 70 (7) *Monthly Review*, 1, 14, https://doi.org/10.14452/MR-070-07-2018-11_1

[45] Carol J Adams, *The Sexual Politics of Meat*, above 37, 51.

[46] Matthew Hilton, *Consumerism in Twentieth-Century Britain: The Search for a Historical Movement*, Cambridge University Press (2003), 4; Ryan Gunderson, "From Cattle to Capital: Exchange Value, Animal Commodification, and Barbarism", above 19, 261; Brett Clark and Tamar Diana Wilson, 'The Capitalist Commodification of Animals: A Brief Introduction", in Brett Clark and Tamar Diana Wilson (eds), *The Capitalist Commodification of Animals*, 1, 1, Volume 35, Emerald Publishing Limited, Bingley UK (2021).

[47] Steven McMullen, *Animals and the Economy*, Palgrave Macmillan (2016), 4; John Bellamy Foster and Brett Clark, "Marx and Alienated Speciesism", above 44, 12.

[48] Steven McMullen, *Animals and the Economy*, above 47, 4.

[49] Pamela Fiber-Ostrow and Jarret S Lovell, "Behind a Veil of Secrecy: Animal Abuse, Factory Farms, and Ag-Gag Legislation", (2016) 19 (2) *Contemporary Justice Review*, 230, 230, https://doi.org/10.1080/10282580.2016.1168257; Dinesh Joseph Wadiwel, "Like One Who is Bringing his Own Hide to Market", above 3, 74–75.

[50] Karl Marx, "*Capital, A Critique of Political Economy*", Volume II Book One: The Process of Circulation of Capital, Progress Publishers, Moscow, USSR, first published in German in 1885, English edition first published in 1956, 122, available from https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-II.pdf

1.3 Structure of the Book

The book is arranged so that Chaps. 2, 3, 4 and 5 each deal with a specific steppingstone of the commodification pathway, while Chap. 6 deals with the ethical consequences of that pathway, and Chap. 7 looks to the future.

The first steppingstone, discussed in Chap. 2, is market expansion, which saw supply and demand increase throughout the nineteenth century, extending the animal product sector both domestically and internationally. The UK was at the centre of these developments, as its population transformed from a predominantly rural society to one based on the manufacture and consumption of industrialised goods and services.[51] Animals and their products, once raised for personal or community use, came to be regarded as a commodity, manufactured for the mass market and for profit. Accordingly, consumerism created a cycle of supply and demand reconstructing agriculture into a commercial undertaking and laying the foundations for economies of scale and perceptions of farm animals as industrial goods.

Chapter 3 deals with the Enlightenment and its influence on the human-farm animal relationship. The period was one of scientific and social progresses where rationality and reason became the analytical lenses for scrutinising all levels of society. However, until the end of the eighteenth century, the focus on logic, reason and cognition underscored differences between humans and animals, reinforcing religious views that animals were not an appropriate subject for moral concern.[52] This casts a metaphorical shadow over attempts to include animals within humanity's social and moral spheres, until the issue was re-framed as one of sentience rather than reason.[53] Accordingly, from the nineteenth century, the ethical basis of human-animal relationships centred on utilitarianism,[54] which in a legal context resulted in the passage of a range of anti-cruelty legislation. However, in somewhat of a paradox, the focus on sentience stymied deeper evaluation of the legitimacy of using animals, especially in intensive agricultural systems. Against this backdrop, animal pain and suffering acquired nuanced meanings, depending less on animal sentience and more on the uses humans had for the animal. Consequently, by the twentieth century, the protection afforded to farm animals eroded to a level that was lower than protection afforded to other domestic animals, such as companion animals.[55]

[51] R M Hartwell, *The Industrial Revolution and Economic Growth*, Methuen and Co Ltd. (1971), 158.

[52] John Passmore, "The Treatment of Animals", (1975) 36 (2) *Journal of the History of Ideas*, 195, 202.

[53] Gary Steiner, *Anthropocentrism and its Discontents*, University of Pittsburgh (2005), 153.

[54] Gary L Francione, "Animal Welfare and the Moral Value of Nonhuman Animals", (2010) 6 (1) *Law, Culture and the Humanities*, 24, 26.

[55] For example, *European Convention for the Protection of Pet Animals 1987*; the Convention was adopted on 13 November 1987, *ETS* No 125 (entered into force 1 May 1992) and had 24 ratifications as of July 2019, available from https://rm.coe.int/168007a67d . Preamble recognises the special relationship pets have with humans; Elizabeth Ann Overcash, "Unwarranted Discrepancies in the

Chapter 4 discusses the regulatory consequences of animal disease, predominantly during the latter part of the nineteenth century, concentrating on the UK, for reasons set out more fully in Sect. 1.4. During this time, the veterinary profession came under increasing scrutiny, particularly for its early failures to control cattle plague, which led to calls for improved training and stricter licensing conditions.[56] By the time the plagues of the 1860s had died down, veterinarians were positioned as gatekeepers, acquiring formal roles as government inspectors and certifiers of animal health. This rise in the status of the profession also saw the initiation of professional gatherings, designed to share knowledge and ideas. Nevertheless, these developments occurred against the backdrop of growing trade and commerce in the sector, leading to animal disease being regarded as a trade issue. Consequently, animal health became subsumed into the practicalities of market transactions and the merchantability of goods, thereby providing a further steppingstone towards commodification.

Chapter 5 evaluates how the evolution of international instruments dealing with quarantine, trade in animals and disease prevention shaped the notion of animal wellbeing in an international context. This chapter proceeds from Chap. 4 because as the trade in farm animals and their products became more globalised, it required safeguards against the transmission of disease across international boundaries.[57] Accordingly, international markets followed the pathway already set at the national level, harnessing advances from veterinary science to support trade.[58] Consequently, trading partners negotiated treaties requiring inspections and certification of shipments as part of quarantine regulation. As with national jurisdictions, this resulted in animal disease being seen as a trade issue but this time equated with the "global good" deriving from international trade.[59] Thus, the focus on disease-free shipments contributed greatly to commodification because animals were seen in terms of bulk shipments, which international trade promoted, rather than individual living beings.

Chapter 6 draws together the threads of arguments presented in the preceding four chapters, addressing why anti-cruelty regulation of the nineteenth century, and animal welfare regulation of the twentieth century, did not lead to greater ethical

Advancement of Animal Law: the Growing Disparity in Protection Between Companion Animals and Agricultural Animals", (2012) 90 *North Carolina Review*, 837, 864–872.

[56] Veterinary Surgeons Act 1881, 44 & 45 Victoria c 62, Preamble, The Public General Statutes Passed in the Forty Fourth and Forty Fifth Years of the Reign of Her Majesty Queen Victoria, Printed by G.E. Eyre and W. Spottiswoode, printers to the Queen and W. Clowes and Sons, printers to the Council of Law Reporting, London, (1881), 371, available from https://archive.org/details/publicgeneralst05walegoog/page/n385; discussion, Paul Brassley, "Animal Health and Veterinary Medicine", in Joan Thirsk (general editor) *The Agrarian History of England and Wales* Volume VII 1850–1914, Part 1, 587, 591, Cambridge University Press (2000).

[57] R M Hartwell, *the Industrial Revolution and Economic Growth*, above 51, 207–210.

[58] Ibid, 218.

[59] Mark Harrison, "A Global Perspective: Reframing the History of Health, Medicine, and Disease", (2015) 89 (4) *Bulletin of the History of Medicine*, 639, 642.

treatment of farm animals. Given that from the nineteenth century, market growth in the sector was accompanied by anti-cruelty legislation, an increasing number of animal protection organisations as well as general critiques of the sector, the question "Whither Ethics?" is an important one.[60] The heart of the regulatory dilemma is centred on how to support production and trade while simultaneously dealing with cruelty and animal disease. By the end of the nineteenth century, resolution of this predicament had been set in favour of commerce and trade, exacerbated by the duplicity of national regulation, which dealt with only the worst cases of cruelty and which was reinforced by treaties at the international level, which rarely concerned themselves with animal wellbeing.

These developments ensured that farm animals were primarily treated as articles of trade and their wellbeing subject to the whims of the marketplace.[61] Within these structures, the individual animal became invisible, subsumed into the merchantability of the whole, receiving only what little protection the market could spare. Chapter 6 concludes by evaluating animal commodification and exploitation against the theoretical framework of Karl Marx's (1818–1883) *Capital*, particularly his explanation of different forms of value.[62]

Chapter 7, the last substantive chapter of the book, looks to the future by examining animal commodification in the context of Norbert Elias's civilising process.[63] Elias argues that Western European society, from the Middle Ages to the turn of the twentieth century, has steadily become less violent as a result of increasing disgust and repugnance at violence.[64] Elias's work can be extrapolated to farm animals because violence is an inherent part of animal production. A critical feature of Elias's theory is that the state holds a monopoly over violence, which it should use to pacify society and thus diminish individual and group violence.[65] In addition, farm animals are completely reliant on humans, linking violence against them with society's prevailing stage of civilisation. Although Elias's work is historical in nature, the civilising process is relevant to understanding current regimes because it identifies gaps and weaknesses, highlighting areas in need of reform.

At the same time, the civilising process is subject to de-civilising forces that shape and sway the progress of civilisation, including the content and implementation of law and policy. The political power wielded by the animal product sector has emerged as just such a de-civilising force, evident by the anomaly of regulatory capture and the introduction of "Ag-Gag" laws, which limit the ability of whistle

[60] Kimberley Smith, *Governing Animals Animal Welfare and the Liberal State*, above 21, 28.

[61] F Bailey Norwood and Jayson L Lusk, *Compassion, by the Pound: The Economics of Farm Animal Welfare*, above 4, 258.

[62] Karl Marx, "*Capital, A Critique of Political Economy*", above 50.

[63] Norbert Elias, *The Civilizing Process, Sociogenetic and Psychogenetic Investigations,* Blackwell Publishing, UK (Revised Edition 2000).

[64] Stephen Mennell, "Civilizing Processes", (2006) 23 (2–3) *Theory, Culture and Society*, 429, 429.

[65] Stephen Quilley, "The Land Ethic as an Ecological Civilizing Process: Aldo Leopold, Norbert Elias, and Environmental Philosophy", (2009) 31 (2) *Environmental Ethics*, 115, 115.

blowers to inform regulators and the public of substandard production practices.[66] These events have afforded a substantial degree of ascendancy to market forces, which will continue to exert de-civilising pressures if not counterbalanced.

1.4 Scope and Limits of the Book

The scope of this book is limited by the jurisdictions and periods selected for discussion. With respect to the former, Chaps. 2 and 3 focus on the UK, and Chaps. 4 and 5 provide a more international perspective, while Chaps. 6 and 7 draw examples as appropriate. The time span concentrates on the nineteenth to mid-twentieth centuries, although the discussion also touches on earlier and later events where relevant. In particular, Chaps. 6 and 7 extend beyond the mid-twentieth century to identify how the commodification pathway unfurled after the adoption of animal welfare policies.

The UK has been selected as the focus of this book for a number of reasons. First, the UK Parliament enacted some of the earliest anti-cruelty laws, and they became influential in common law countries around the world, including Australia, New Zealand and North America.[67] Second, by enacting these laws, the UK indicated that societal concern at animal cruelty was a valid reason for government intervention, creating the (unrealised) potential for strong regulation of the sector.[68] Third, during the time under discussion, the UK was the centre of the global trade in animals and their products.[69] Although increasing demand for animal products was not unique to the UK,[70] their markets drove the demand because they were a nation of meat eaters who regarded animal products as a mark of good health and status.[71] Indeed at the turn of the twentieth century, the "British market continued to absorb over 60% of the world meat trade".[72]

[66] Discussion in Chap. 7, Sect, 7.4.1 of this book.

[67] David S Favre and Vivien Tsang, "The Development of Anti-Cruelty Laws During the 1800s" (1993) Spring (1) *Detroit College of Law Review*, 1, 2.

[68] David Harvey and Carmen Hubbard, "Reconsidering the Political Economy of Farm Animal Welfare: An Anatomy of Market Failure", above 13, 107.

[69] Felicity Barnes and David M. Higgin, "Brand Image, Cultural Association and Marketing: 'New Zealand' Butter and Lamb Exports to Britain, C. 1920–1938", (2017): *Business History*, https://doi.org/10.1080/00076791.2017.1344223, 1, 3–4.

[70] Roger Horowitz, Jeffrey M. Pilcher, and Sydney Watts, "Meat for the Multitudes: Market Culture in Paris, New York City, and Mexico City over the Long Nineteenth Century", above 31, 1057.

[71] Patrick Karl O'Brien, "Path Dependency, or Why Britain Became an Industrialized and Urbanized Economy Long before France", (1996) 49 (2) *The Economic History Review*, 231, 239; Chris Otter, "The Vital City: Public Analysis, Dairies and Slaughterhouses in Nineteenth-century Britain, above 20, 526.

[72] I R Phimister, "Meat and Monopolies: Beef Cattle in Southern Rhodesia, 1890–1938", (1978) 19 (3) *The Journal of African History*, 391, 392.

With respect to the time frame of this book, the nineteenth to mid-twentieth centuries were periods of significant change. Notwithstanding the fact that commodification of farm animals had started from at least the sixteenth century, the most profound changes occurred during the nineteenth to mid-twentieth centuries.[73] This period saw the growth of markets, scientific and technological advances as well as the establishment of animal protection organisations. The tussle for dominance that ensued led to a form of "corporate capitalism" which irretrievably fractured the bonds of animal stewardship, so that raising animals came to be regarded as a means of raising capital, commodifying animals and acting as a stumbling block to meaningful reform.[74]

Finally, two additional points warrant special mention. Although Chaps. 4 and 5 critique the role of the veterinary profession, this is not intended to critique the work of veterinarians. Anyone who has had the privilege of sharing their life with a companion animal, or indeed any other kind of animal, will know first-hand the amazing work the profession does. Rather, the critique is aimed at government and industry who then as now harness the expertise and dedication of veterinarians for overtly economic gain.

Last but not least, the book deliberately avoids delving into the animal welfare/animal rights debate, because strictly speaking it is not necessary for the study that has been undertaken. Nevertheless, the book is highly critical of the way anti-cruelty regulation and subsequently animal welfare regulation has evolved in a commercial context, indicating that something beyond the utilitarian underpinnings of animal welfare is required to improve the plight of farm animals. AU1

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[73] Linda Kalof, *Looking at Animals in Human History*, above 28, 135; Ryan Gunderson, "From Cattle to Capital: Exchange Value, Animal Commodification, and Barbarism", above 19, 262.

[74] John Bellamy Foster and Brett Clark, "Marx and Alienated Speciesism", above 44, 12.

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