Beasts of place and time:
animals and Britishness in popular natural history, c. 1760-1860

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This thesis is dedicated to my dad and my grandfathers, who are sadly missed but continue to inspire.

Abstract

This study focuses on the period 1760 to 1860, a time when popular interest in natural history was significantly increasing in Britain, as technological innovations and evolving socio-economic conditions fuelled the growth of popular natural history media aimed at wealthy British urbanites. Through advances in printing, British popular natural history literature became increasingly available, whilst improvements in travel, transportation and preservation techniques all helped to facilitate the growth of exotic animal exhibitions and taxidermy displays. Consequently, popular audiences were able to engage with natural history through a diverse range of intersecting opportunities that centred round a single, congruent body of animal knowledge. This thesis demonstrates how, within this context, conceptualisations of animals contained expressions of Britishness that helped to reinforce particular imaginings of a superior national character that was rooted in notions of modernity and tied to claims of rationality, ingenuity, commercial acumen and benevolence. These imaginings of Britishness, frequently articulated as an expansion of Englishness extending beyond England's borders to include non-English groups within a single, English-led, cultural hegemony, were frequently communicated through the locating of animals in space and time, which formed a core element of animal conceptualisations.

This thesis examines the discourse surrounding mammals, wild and domestic, native and exotic, the category most explored within works of British popular natural history, ranging from Thomas Pennant's *British Zoology* to C. Mackenzie's *The Natural History of All the Most Remarkable Quadrupeds, Birds, Fishes, Reptiles and Insects*, published in 1766 and 1860 respectively. Within their conceptualisations of animals, naturalists frequently located species in the past, present or future, tying this temporalised status to the landscapes and societies associated with them and intertwining them with ideas of progress, underpinned by enlightenment understandings of conjectural history and the stadial development of human society. Consequently, the presence of specific animals, both within the British Isles and across the globe, was used to demarcate wild and civilised spaces through an imaginative mapping of the world into chronotopic zones. As animals were viewed through a British lens, they were compared to and assessed against those that were seen to conform to the modern expectations of the wealthy, metropolitan British. This mechanism allowed notions of modern Britishness to be configured against perceptions of a range of internal and external others, which not only helped to reaffirm the self-perceptions of the wealthy, metropolitan British as representative of the national character but also to configure a global hierarchy of civilisations that placed the British at its apex.

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Finally, I offer my heartfelt thanks to my family, who continue to believe in me and encourage me to pursue my areas of interest. Their patience and understanding have been truly invaluable.

Author's Declaration

I confirm that all of the work in this thesis is my own work and that any third parties have been recognised and referenced in accordance with the guidance provided by the University of Nottingham.

Signed: Matthew Carter

Dated: 28/09/2022

Table of Contents

Abstract **2**

Acknowledgements **3**

Author's Declaration **4**

List of Figures **6**

Introduction **9**

Part One: Animals of Britain

Chapter 1: Animals of Britain's Past **41**

Chapter 2: Animals of Contemporary Britain **75**

Chapter 3: Animals of Britain's Future **105**

Part Two: Animals beyond Britain

Chapter 4: Savage Beasts and Savage Men **146**

Chapter 5: Monarchs and Marauders **187**

Chapter 6: The Treatment of Animals and British National Identity **217**

Conclusion **252**

Bibliography **266**

List of Figures

Figure 1: William Skelton's engraving of the interior of the Leverian Museum, based on an image by Charles Reuben Ryley (date unknown, The Bodleian Library, London Play Places 3 (55), source: The Bodleian Digital Collection). 10
Figure 2: Thomas Bewick's rhinoceros, from his A General History of Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 16
Figure 3: Jean-Charles Baquoy's engraving of the rhinoceros from Buffon's Histoire Naturelle (Paris: Imprimerie Royale, 1764, source: The Rhino Resources Centre). 16
Figure 4: Jean-Baptiste Oudry's portrait of 'Clara' (1749, Staatliches Museum Schwerin, 37075, source: Wikimedia Commons). 17
Figure 5: James Tookey's engraving of a rhinoceros, based on an image by Julius Ibbetson, from John Church's A Cabinet of Quadrupeds, Volume I (London: Darton and Harvey, 1805, source: Google Books). 17
Figure 6: Samuel William's engraving of a rhinoceros from Mary Trimmer's A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects (Chiswick: C. Whittingham, 1830, source: Google Books). 18
Figure 7: The rhinoceros in J. Macloc's A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects (London: Minerva Press, 1813, source: Google Books). 18
Figure 8: Robert Sand's engraving of John le Keux's rhinoceros in his Illustrations of Natural History (London: Longman and Co., 1830, source: Google Books). 19
Figure 9: The rhinoceros in William Carpenter's Popular Cyclopedia of Natural Science, Zoology, Vol. 1 Comprising mammals, birds, and reptiles (London: Wm. S. Orr and Co., 1844, source: Google Books). 19
Figure 10: The rhinoceros in James Bland's Grandpapa's Tale's About Animals (Halifax: Milner and Sowerby, 1850, source: Google Books). 19
Figure 11: The rhinoceros in C. Mackenzie's The Natural History of All the Most Remarkable Quadrupeds, Birds, Fishes, Reptiles and Insects (London: Henry Lea, 1860, source: Google Books). 20
Figure 12: The interior of the Exeter 'Change (1816, The British Library, 192.b.19, source: The British Library Online). 33
Figure 13: The interior of Bullock's London Museum (1810, The Wellcome Library, 40285i, source: The Wellcome Collection Online). 33
Figure 14: Skelton's engraving of the taxidermy wolf on display at the Leverian Museum, based on Ryley's depiction, from Shaw's Museum Leverianum (London: James Parkinson, 1792, source: Wikimedia Commons). 45
Figure 15: William Harvey's engraving of a pair of 'Clouded Black Wolves', from Bennett's The Tower Menagerie (Chiswick: Charles Whittingham, 1829, source: Google Books). 45
Figure 16: Bewick's red deer from his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 52
Figure 17: Sir Edwin Landseer's The Monarch of the Glen (1851, National Galleries of Scotland, NG 2881, source: Wikimedia Commons). 58
Figure 18: Tookey's engraving of the mastiff in Church's A Cabinet of Quadrupeds, Volume I (London: Darton and Harvey, 1805, source: Google Books). 65
Figure 19: The mastiff in Bingley's Memoirs of British Quadrupeds (London: Darton and Harvey, 1809, source: Google Books). 66
Figure 20: The mastiff in Bell's A History of British Quadrupeds (London: Samuel Bentley, 1837, source: Google Books). 66
Figure 21: The mastiff in Jane Wells Webb Loudon's The Entertaining Naturalist (London: Henry G. Bohn, 1843, source: Google Books). 67
Figure 22: The mastiff in Fennell's A Natural History of Quadrupeds (London: Joseph Thomas, 1841, source: Google Books). 67
Figure 23: Sir William Jardine's synopsis of British sheep breeds, based on Culley's taxonomy, included in The Naturalist's Library, Ruminantia Part II (Edenborough: W. H. Lizars, 1836, source: Google Books). 81
Figure 24: The 'New Leicester or Dishley Sheep' from Bingley's British Quadrupeds (London: Darton and Harvey, 1809, source: Google Books). 84
Figure 25: The depiction of the Leicester sheep in Jardine's The Naturalist's Library, Vol IV, Ruminantia Part II (Edenborough: W. H. Lizars, 1836, source: Google Books). 84
Figure 26: Bewick's engraving of the 'old' or 'unimproved' Teeswater breed, from his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 85

Figure 27: Bewick's engraving of the 'improved' Teeswater breed, from his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 86
Figure 28: Bewick's engravings of white park cattle, from his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 94
Figure 29: Edwin Landseer's portrait of Chillingham cattle (1867, Art UK, TWCMS: B8133, source: Wikimedia Commons). 95
Figure 30: Stewart's image of the short-horn breed, from Jardine's The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II (Edenborough: W. H. Lizars, 1836, source: Google Books). 100
Figure 31: Howitt's image of Northern Short horned or Holderness Cattle, in Bingley's British Quadrupeds (London: Darton and Harvey, 1809, source: Google Books). 100
Figure 32: A watercolour of the interior of the Leverian Museum by Sarah Stone depicting an upside-down set of muskox horns on display on one of the building's interior walls (1835, The British Museum, Am2006, Drg.54, source: Wikimedia Commons). 110
Figure 33: The illustration of the 'Musk Buffalo' in Pennant's History of Quadrupeds, Volume I (London: B. White, 1771, source: Google Books). 110
Figure 34: The illustration of two muskox in volume one of Pennant's Arctic Zoology, Volume I (London: Henry Hughs, 1781, source: Google Books). 111
Figure 35: Illustrations of a male and female muskox from Shaw's General Zoology, Volume II, Part 2 (London: G. Kearsley, 1801, source: Google Books). 111
Figure 36: Thomas Landseer's illustration of the muskox in Shoberl's Natural History of Quadrupeds, Volume I (London: Samuel Bentley, 1834, source: Google Books). 114
Figure 37: Thomas Landseer's illustration of the muskox in Barrow's Characteristic Sketches of Animals, Principally in the Zoological Gardens, Regent's Park (London: Moon, Boy and Graves, 1832, source: Google Books). 114
Figure 38: Lizars' illustration of the muskox in Jardine's The Naturalist's Library, Volume IV, Ruminantia Part II (Edinburgh: W. H. Lizars, 1836, source: Google Books). 115
Figure 39: Illustration of the muskox in Parry's Journal of a Voyage for the Discovery of a North-West Passage from the Atlantic to the Pacific (London: John Murray, 1821, source: Google Books). 116
Figure 40: Illustration of the muskox in the Religious Tract Society's The Book of Animals, Class Mammalia, Eleventh Edition (London: John W. Parker and Son, 1833, source: Google Books). 116
Figure 41: George Stubbs' Nylghau (1769, Art UK, GLAHA_43821, source: Wikimedia Commons). 120
Figure 42: James Basire's engraving of the nilgai, which accompanied Hunter's description of the species in the Philosophical Transactions (1771, The British Museum, 1881, 1210.271, source: Google Books) 120
Figure 43: Bewick's engraving of the nilgai in his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 121
Figure 44: Williams' engraving of the Nilgai from Trimmer's A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects (Chiswick: C. Whittingham, 1830, source: Google Books). 122
Figure 45: Sarah Stone's watercolour image of the angora goat taxidermy specimen on display at the Leverian Museum (C. 1781 to 1785, The Natural History Museum, RBR SHELF 179-187, source: The Natural History Museum Online Archive). 131
Figure 46: Charles Catton's illustration of the angora goat in Animals Drawn from Nature (London: Charles Catton, 1788, source: Google Books). 131
Figure 47: Ryley's illustration of the angora goat in George Shaw's Museum Leverianum (London: James Parkinson, 1792, source: Google Books). 132
Figure 48: Lizars' image of the cashmere goat from Jardine's The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II (Edinburgh: W. H. Lizars, 1836, source: Google Books). 134
Figure 49: An early-nineteenth-century example of a Cashmere shawl (The V&A, IS.2081A-1883, source: the V&A archive online). 135
Figure 50: Stewart's image of the skeleton of the megolaceros, or 'Irish Elk', in Jardine's The Naturalist's Library, Volume XXI, Ruminantia (London: Henry G. Bohn, 1835, source: Google Books). 155
Figure 51: George Stubbs' The Duke of Richmond's First Bull Moose (1770, University of Glasgow Collections, GLAHA 43823, source: Wikimedia Commons). 157
Figure 52: An image of the elk, clearly based on Stubb's painting, from Pennant's Arctic Zoology, Vol. I (London: Henry Hughs, 1781, source: Google Books). 157
Figure 53: Bewick's image of the elk in his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). 158

Figure 54: Images of the female elk and the antlers of the male elk in Pennant's Synopsis of Quadrupeds (Chester: J. Monk, 1771, source: Google Books). *158*
Figure 55: The 'elk' from Bingley's Animal Biography, Volume I, Fifth Edition (London: Rivington, 1820, source: Google Books). *160*
Figure 56: Landseer's 'elk' from Barrow's Characteristic Sketches (London: Moon, Boy and Graves, 1832, source: Google Books). *161*
Figure 57: Image of the skeleton of the mastodon from Jardine's The Naturalist's Library, Mamalia Vol. V, Pachydermes (Edinburgh: W. H. Lizars, 1836, source: Google Books). *163*
Figure 58: Bewick's depiction of the 'Urus' in his Quadrupeds, Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). *168*
Figure 59: The aurochs, as depicted in Griffith's translation of Cuvier's La Règne Animal (London: G. Wittaker, 1827, source: Google Books). *169*
Figure 60: Landseer's depiction of the European bison in Knight's The Menageries, Vol. III (London: Charles Knight and Co., 1840, source: Google Books). *175*
Figure 61: 'Tipu's Tiger' (c. 1790, The V&A, 2545(IS), source: the V&A Collections Online). *206*
Figure 62: One of Tipu Sultan's cheetahs, taken during the sack of Seringapatam (c. 1799, The British Library, NHD 32/3, source: Wikipedia Commons). *207*
Figure 63: Bewick's depiction of the bulldog in his Quadrupeds, Fourth Edition ((Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive). *225*
Figure 64: The bulldog as depicted in Bell's A History of British Quadrupeds (London: Samuel Bentley, 1837, source: Google Books). *225*
Figure 65: The bulldog in Loudon's The Entertaining Naturalist (London: Henry G. Bohn, 1843, source: Google Books). *226*
Figure 66: The bulldog in Fennell's A Natural History of British and Foreign Quadrupeds (London: Joseph Thomas, 1841, source: Google Books). *226*
Figure 67: The Earl of Derby's herd of brahmin cattle at his menagerie at Knowsley (1851, source: The Illustrated London News). *235*
Figure 68: Landseer's illustration of a zebu from Bennett's The Gardens and Menagerie of the Zoological Society Delineated (London: Charles Tilt, 1831, source: Google Books). *242*
Figure 69: Landseer's illustration of the brahminy bull and the miniature zebu in Barrow's Characteristic Sketches (London: Moon, Boy and Graves, 1832, source: Google Books). *242*
Figure 70: The monkey house at Regent's Park, as depicted by George Scharf (1835, The British Museum, 1861, 1108.584, source: Wikimedia Commons). *243*
Figure 71: Landseer's illustration of the brahmin bull in Frederic Shoberl's Natural History of Quadrupeds, Volume I (London: Samuel Bentley, 1834, source: Google Books). *243*
Figure 72: Landseer's illustration of the brahmin bull in Partington's The British Cyclopædia of Natural History, First Volume (London: Orr and Smith, 1835, source: Google Books). *244*

Introduction

In his 1766 work, *British Zoology*, the eminent Welsh naturalist and travel writer, Thomas Pennant, paved the way for the proliferation of British popular natural history literature by reflecting, in his introduction, that as 'the pens of several illustrious foreigners… [had] been employed in enumerating the productions of their respective countries', he was unwilling to allow 'our island' to 'remain insensible' to the 'particular advantages' afforded by Britain's animal community.[1] He further pointed out that the study of natural history could provide significant benefits for the nation through valuable contributions to commercial enterprise and scientific development that would reaffirm Britain's superior status compared to its continental rivals. Pennant cited the contemporary natural history achievements of other European countries to support his claims, particularly praising the famed, Swedish naturalist and taxonomist, Linnaeus, for his 'incitement to his countrymen to apply themselves to the study of nature' in order to highlight 'the natural productions of that kingdom'.[2] Pennant further argued that 'if we reflect but a little on the unwearied diligence of our rivals the *French*, we should attend to every sister science that may anyways preserve our superiority in manufactures and commerce'.[3] Indeed, Pennant showed much admiration for the pioneering French natural historian, Georges-Louis Leclerc, Comte de Buffon, whose multi-volume *Histoire Naturelle* dominated the scientific discourse surrounding animals in western Europe and colonial America during the latter half of the eighteenth century.

Corresponding with scientists, such as Linnaeus, Buffon and the Prussian zoologist and traveller, Peter Simon Pallas, through the enlightenment 'Republic of Letters', Pennant operated within a scientific network that spanned Europe, situating his work within a broader, contemporary, European natural history scholarship. However, his discussions clearly reflected his devotion to the promotion of British excellence and national superiority through a plethora of comparisons with other nations across the world. Indeed, Pennant's natural history writings frequently articulated a sense of nationhood that extended far beyond his native Wales to encompass the whole island, reinforcing notions of a distinctly British national character through comparisons with human others, informed by observations of their relationships with specific animals and the landscapes in which they resided. Pennant's imaginings of Britishness, which were clearly conceptualised within a global context, were consistently expressed in his later *Synopsis of Quadrupeds*, published

[1] T. Pennant, *British Zoology, Vol. I, Quadrupeds*, Fourth Edition (London, 1776) p. iii.
[2] Pennant, *British Zoology, Vol. I* p. iv.
[3] Pennant*, British Zoology, Vol. I* p. xi.

in 1771, his extended and elaborated *History of Quadrupeds*, published in 1781, and his *Arctic Zoology*, published between 1784 and 1787.

Pennant's impressive works drew on a wide array of sources, ranging from classical and medieval texts to accounts from contemporary travel literature as well as the works of other prominent, eighteenth-century naturalists, such as Linnaeus and Buffon. This large, collated body of knowledge and information was further supplemented with Pennant's own observations of live animals and analyses of dead animal specimens owned by wealthy individuals, travelling showmen or on display in some of the earliest museums in London, notably the Leverian Museum, founded in 1775 (figure 1).[4] The influence of Pennant's writings can be seen in many later works of British popular natural history literature, such as Oliver Goldsmith's *A History of the Earth and Animated Nature*, published in 1775, and Thomas Bewick and Ralph Beilby's *A General History of Quadrupeds*, published in 1790.



Figure 1: William Skelton's engraving of the interior of the Leverian Museum, based on an image by Charles Reuben Ryley (date unknown, The Bodleian Library, London Play Places 3 (55), source: The Bodleian Digital Collection).

[4] R. Altick, *The Shows of London* (Cambridge, MA, 1978) pp. 28-33.

Historians have generally presented the nineteenth century as the period in which the study of natural history truly permeated British popular culture. Lynn Barber, for instance, has identified the period from 1820 to 1870 as the 'heyday' of popular natural history in Britain, whilst Helen Cowie has emphasised the time between 1815 and 1880 as a period when natural history constituted an important element of mass entertainment.[5] However, the antecedents to this phenomenon can be seen in the latter half of the eighteenth century, when popular interest in natural history significantly increased in Britain, facilitated by the growing ease with which those with means could engage with the study of nature. In this respect, new works, such as those by Goldsmith and Bewick, as well as English translations of Buffon by William Kenrick, William Smellie and James Smith Barr, became increasingly available and accessible, bridging the gap between cheaply-made 'chapbooks', with a few woodblock print images and a little text, and very expensive, multi-volume works, such as those by Eleazar Albin, whose hand-drawn and coloured illustrations and very limited print runs rendered them only accessible to the very wealthy.[6]

Additionally, the sporadic importation of rare and impressive animals from across the globe through international trade at burgeoning ports, such as London and Bristol, helped to facilitate and increase the commercial exhibiting of exotic animals, as items of novelty and curiosity, through small, ad-hoc displays in public houses, coffee houses, shops and travelling menageries. Christopher Plumb points out that exotic animals, particularly mammals and birds, 'increasingly became part of London life in the eighteenth century', with many other urban centres following this trend.[7] The inevitably high mortality rate of these animals also provided many new opportunities for naturalists and scientists, such as the surgeon and anatomist, Dr William Hunter, to dissect and preserve parts of exotic creatures whilst making detailed, anatomical observations.[8] These exotic animals, live or dead, were similarly sought by artists, such as George Stubbs and Bewick, whose illustrations of specific creatures frequently appeared in natural history publications as definitive examples of their species.[9]

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[5] L. Barber, *The Heyday of Natural history, 1820-1870* (London, 1980); H. Cowie, *Exhibiting Animals in Nineteenth-Century Britain: Empathy, Education, Entertainment* (Basingstoke, 2014) p. 7.
[6] C. Plumb, 'Exotic Animals in Eighteenth-Century Britain,' PhD dissertation, (University of Manchester, 2010) pp. 30-31.
[7] C. Plumb, *The Georgian Menagerie: Exotic Animals in Eighteenth Century London* (London, 2015) pp. 5-6.
[8] L. Kalof, *Looking at Animals in Human History* (London, 2007) p. 121; C. Plumb, '"Strange and Wonderful": Encountering the Elephant in Britain, 1675-1830', *Journal for Eighteenth-Century Studies* 33/4 (2010) p. 531.
[9] Kalof, *Looking at Animals in Human History* pp. 123-124.

As the eighteenth century transitioned into the nineteenth, technological innovations and evolving socio-economic conditions fuelled the growth of popular natural history media aimed at wealthy British urbanites with disposable income, namely members of the 'middling sort'.[10] For example, advances in print technology helped to increase the production and circulation of relatively cheap, but fairly good quality natural history texts, allowing them to reach a much wider audience.[11] Bewick's *Quadrupeds*, for instance, sold over 14,000 copies between 1790 and 1820, with several editions printed across this period to meet demand.[12] In 1824, the London booksellers, Harvey and Darton, were selling copies of Reverend William Bingley's *Animated Nature* for 6s (around £18 in today's money), whilst his more detailed *Animal Biography, or Popular Zoology* was on sale for £1 8s (around £80 in today's money).[13] In 1826, the *Society for Promoting Christian Knowledge* was selling copies of Bingley's *Natural History of Quadrupeds, Birds and Insects* at 3s 8d for society members and 5s for members of the public.[14] Whilst these prices still restricted ownership of these works to those with sufficient funds, the growth of book clubs and noncirculating libraries during the end of the eighteenth century ensured a broader circulation of natural history literature within Britain's literate population.[15]

Improvements in travel, transportation and preservation techniques towards the late eighteenth and early nineteenth centuries also helped to facilitate the growth of exotic animal exhibitions in Britain. These included travelling menageries, such as that of George Wombwell, exhibitions at temporary sites, such as the Egyptian Hall in Piccadilly, permanent sites, such as the menagerie at the Exeter 'Change and the Royal Menagerie at the Tower of London, as well as private menageries, such as the one belonging to the Earl of Derby, housed on his estate at Knowsley. As Cowie has pointed out, many of the venues exhibiting live animals or taxidermy specimens, such as the Exeter 'Change and William Bullock's London Museum, 'charged an admission fee of one shilling, which often restricted viewership to the middle and upper classes', notably the same lawyers, doctors,

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[10] W. St. Claire, *The Reading Nation in the Romantic Period* (Cambridge, 2004) pp. 186-209; I. Keighren, C. Withers and B. Bell, *Travels into Print, Exploration, Writing, and Publishing with John Murray, 1733-1859* (Chicago, 2015) pp. 193-196; M. Hunt, *The Middling Sort: Commerce, Gender, and the Family in England, 1680-1780* (1996, London) p. 20.
[11] M. Hancher, 'Gazing at "The Imperial Dictionary"', *Book History* 1 (1998) p. 156.
[12] Thomas Bewick's entry in the ODNB (by Ian Bain): http://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-2334; H. Ritvo, *The Animal Estate: The English and other Creatures in the Victorian Age* (Cambridge, 1987) pp. 7-8.
[13] See the advertisements in: *A Natural History of Quadrupeds for Children,* Second Edition (London, 1824). Prices calculated using the 'Currency Converter: 1270-2017', found on the National Archive's website: https://www.nationalarchives.gov.uk/currency/.
[14] *Report of the Society for Promoting Christian Knowledge* (London, 1826) p. 116.
[15] Ritvo, *The Animal Estate* p. 9.

civic representatives and naturalists from the same wealthy stratum of urban society that were regularly consuming popular natural history literature.[16] From 1828, the recently-formed Zoological Society of London (ZSL) also offered a new site, their gardens at Regent's Park, where Society members and sponsored individuals, predominantly wealthy urbanites, could encounter exotic animals, although this collection was eventually opened to the general public in 1847. From the 1830s onwards, encounters with exotic animals in the provinces were also increasingly provided through the emergence of new zoological gardens, such as the Belle Vue Zoological Gardens in Manchester.[17]

Concurrently, advances in taxidermy techniques, such as the use of arsenic soap in skin preparation, improved the ease and effectiveness with which animal specimens could be prepared, preserved and mounted, augmenting the variety and quality of preserved animal remains on display at early museums in the metropole, such as the British Museum, based on the collection of Sir Hans Sloane, John Hunter's Hunterian Museum, the British East India Company's (BEIC) India Museum and Bullock's London Museum.[18] These technical developments helped to raise the profile of taxidermy and increased its prestige as a natural history medium, not least through its perceived ability to capture the essence of the living animal. Narisara Murray claims that 'taxidermy was the crucial technology that allowed naturalists to reference and study nature in urban capitals', providing new opportunities for British naturalists and the general public to encounter specimens of exotic species, especially those with no living examples in Britain.[19] Ann Colley similarly argues that preserved skin was an important medium through which the Victorians, especially artists wishing to study and faithfully capture the anatomy and vitality of living organisms, could interact with and understand creatures from exotic locales.[20]

With their growing sophistication, exhibitions of live animals and preserved animal remains increasingly informed the content of late-eighteenth and early-nineteenth-century British popular natural history literature. According to Cowie, naturalists were often 'granted special leave to study or draw the most interesting specimens', their observations of captive animals and analyses of mounted specimens forming an expanding element of their natural history investigations.[21] In John Henry Barrow's *Characteristic Sketches of*

[16] Cowie, *Exhibiting Animals* pp. 18-19, 62.
[17] Cowie, *Exhibiting Animals* p. 34.
[18] Altick, *The Shows of London* pp. 24-28, 235-238, 299-301.
[19] M. Murry, 'From Birds of Paradise to Drosophilia: The Changing Role of Scientific Specimens to 1920' in K. Kete (ed.) *A Cultural History of Animals in The Age of Empire* (Oxford, 2011) p. 117.
[20] A. Colley, *Wild Animal Skins in Victorian Britain: Zoos, Collections, Portraits and Maps* (Buffalo, 2014) pp. 107, 113.
[21] Cowie, *Exhibiting Animals* p. 62.

Animals, Principally from the Zoological Gardens, Regent's Park, for example, the accompanying illustrations by Thomas Landseer, the younger brother of the acclaimed animal portraitist, Edwin Landseer, not only drew on his studies of live animals at the Society's gardens but also on taxidermy specimens in the British Museum.[22] Illustrations by James Hope Steward and John Lizars in Sir William Jardine's multi-volume *The Naturalist's Library* similarly relied upon taxidermy specimens of both local and exotic animals exhibited in the Royal Museum of the University of Edinburgh.[23] Guidebooks containing extensive commentaries on the animals exhibited in museums, menageries and zoological gardens, such as those produced by the Leverian Museum, Bullock's London Museum, the Royal Menagerie at the Tower of London and the ZSL's gardens at Regent's Park, also provided new avenues through which animal knowledge could be constructed, collated and consumed.[24]

Popular audiences in late-eighteenth and early-nineteenth-century Britain were, therefore, engaging with natural history through a diverse range of intersecting opportunities that formed a single, congruent body of animal knowledge, underpinned by encyclopaedically-structured works of British popular natural history. As Cowie points out, 'contemporary writers routinely emphasised the value of actually seeing the animals described in books, suggesting that zoos operated in conjunction with texts and museums and complemented their pedagogic aims'.[25] Consequently, guidebooks to museums, menageries and zoological gardens mirrored the content, layout, format and style evident in other, contemporary British popular natural history literature. For instance, information was generally organised into individual entries on specific animals, or collections of animal types classified as a single 'kind', and content invariably focused on physical appearance, range, behaviours and human-animal relationships.[26] Furthermore, animal knowledge was

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[22] See 'List of Plates' in: J. Barrow, *Characteristic Sketches of Animals, Principally from the Zoological Gardens, Regent's Park* (London, 1832).
[23] See, for example: W. Jardine, *The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II* (Edinburgh, 1836) pp. 123, 146, 164; W. MacGillivray (ed. Sir William Jardine), *The Naturalist's Library, Mammalia, Volume VII, British Quadrupeds* (Edinburgh, 1838) pp. 216, 220, 264-265; C. Hamilton Smith (ed. W. Jardine), *The Naturalist's Library, Mammalia, Volume IX, Dogs* (Edinburgh, 1839) p. 156.
[24] See: *The Leverian Museum, A Companion to the Museum (of the Late Sir Ashton Lever)* (London, 1790); G. Shaw, *Museum Leverianum, Volume 1* (London, 1792); G. Shaw, *Museum Leverianum, Volume 2* (London, 1792); A. Ella, *Visits to the Leverian Museum* (London, 1805); W. Bullock, *A Companion to the London Museum and Pantherion* (London, 1813); E. Bennett, *The Tower Menagerie* (London, 1829); E. Bennett, *The Gardens and Menagerie of the Zoological Society Delineated, Volume 1* (London, 1830).
[25] Cowie, *Exhibiting Animals* p. 106.
[26] J. Uglow, *Nature's Engraver: A Life of Thomas Bewick* (London, 2010) p. 158; Thomas Bewick's entry in the ODNB (by Ian Bain): http://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-

reinforced through accompanying illustrations that many publishers emphasised and promoted, in terms of their number, quality and accuracy, in order to secure sales.

In her 2014 study on the patron-client relationships of the Orkney-based minister and naturalist, George Low, Linda Andersson Burnett argues that Pennant utilised what she terms an 'ecology of knowledge', a large and diverse network of metropolitan and local actors connected through their extensive, but rather unequal, exchanges of natural history data, in order to collect and compile natural history information during his 1769 and 1772 tours of Scotland.[27] When considering Burnett's ideas in relation to the collection and collation of animal knowledge within British popular natural history literature, this genre can be seen to operate within a similar 'ecology of knowledge', with later authors frequently reproducing information from earlier works in a memetic fashion, some key texts passing verbatim from one publication to another along with their accompanying images.[28] Through these processes, the relevance of earlier writers, and indeed artists, was preserved and specific constructions of particular animals were reinforced within the broader, popular imagination, especially where sources were limited.

Consequently, illustrations of animals in earlier works were frequently reproduced or copied in later works of British popular natural history. A number of the engravings found in Bewick's *Quadrupeds*, for example, were clearly based on earlier images, such as his rhinoceros, which mirrored Jean-Charles Baquoy's engraving in Buffon's *Histoire Naturelle*, itself informed by Jacques de Sève's drawing, based on Jean-Baptiste Oudry's 1748 portrait of the celebrity rhinoceros, 'Clara' (see figures 2, 3 and 4).[29] Many of Bewick's engravings were copied in later works of nineteenth-century popular natural history, as illustrated through the rhinoceros images found in works by John Church, Mary Trimmer,

9780198614128-e-2334 [accessed 28/9/2022]; G. Cumberlege, *Thomas Bewick* (London, 1953) pp. 109-110. Both Ulglow and Bain quote directly from Bewick's memoir; T. Bewick and J. Bewick (ed.), *A Memoir of Thomas Bewick* (London, 1862) p. 145.

[27] L. Burnet, 'An Eighteenth-Century Ecology of Knowledge: Patronage and Natural History', *Culture Unbound* 6/7 (2014) pp. 1276-1277; T. Furniss, *Discovering the Footsteps of Time: Geological Travel Writing about Scotland, 1700-1820* (Edinburgh, 2018) pp. 101-104.

[28] Barber, *Heyday* p. 18.

[29] M. Morton (ed.) *Oudry's Painted Menagerie: Portraits of Exotic Animals in Eighteenth-Century Europe* (Los Angeles, 2007) pp. 141-142. For more information on Clara, see: C. Bremmer-David, '"Animal Lovers Are Informed"' in M. Morton (ed.) *Oudry's Painted Menagerie: Portraits of Exotic Animals in Eighteenth-Century Europe* (Los Angeles, 2007) pp. 91-104.

J. Macloc, John Le Keux, William Carpenter, James Bland and J. Mackenzie (see figures 5, 6, 7, 8, 9, 10 and 11).[30]

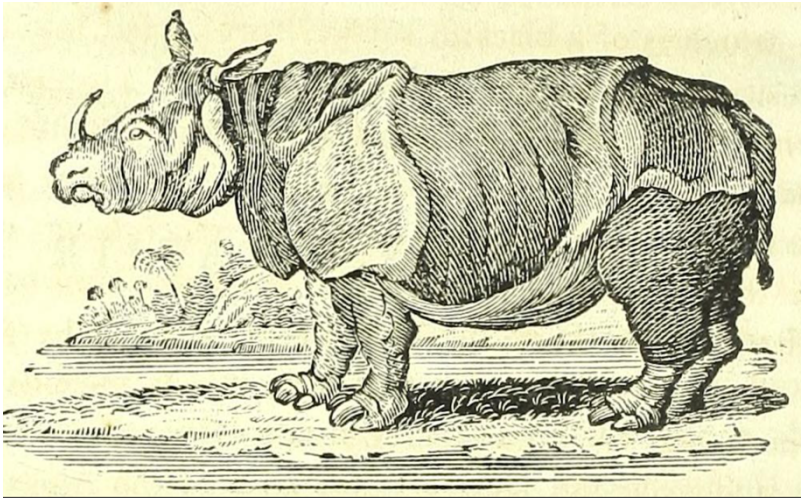


Figure 2: Thomas Bewick's rhinoceros, from his A General History of Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*



Figure 3: Jean-Charles Baquoy's engraving of the rhinoceros from Buffon's Histoire Naturelle *(Paris: Imprimerie Royale, 1764, source: The Rhino Resources Centre).*

[30] For another example of the memetic transferal of images within late-eighteenth and early-nineteenth-century British popular natural history, see: A. Cheke and J. Parish, 'The "Bundi dodo": a drawing copying European animals- a curious byway in nineteenth century Indian art', *Historical Biology* 28/7 (2015) p. 2.

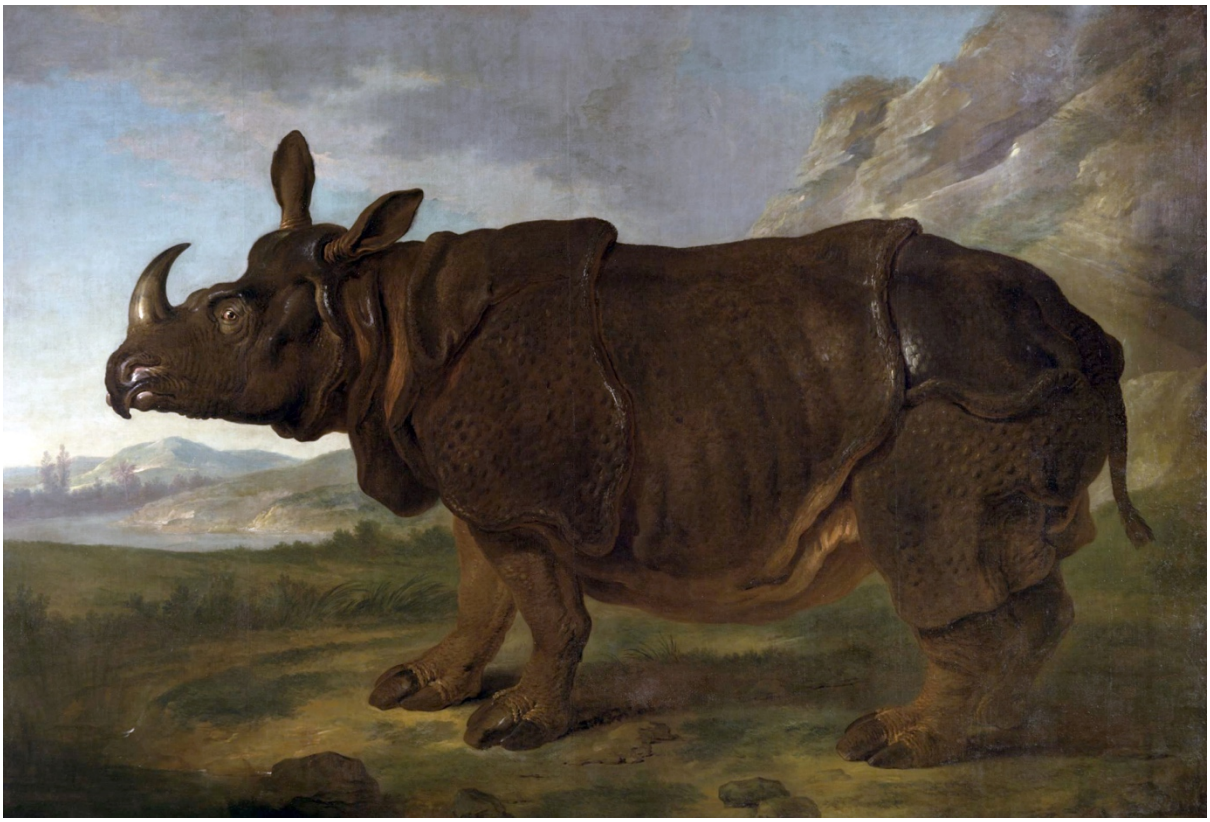


Figure 4: Jean-Baptiste Oudry's portrait of 'Clara' (1749, Staatliches Museum Schwerin, 37075, source: Wikimedia Commons).



Figure 5: James Tookey's engraving of a rhinoceros, based on an image by Julius Ibbetson, from John Church's A Cabinet of Quadrupeds, *Volume I (London: Darton and Harvey, 1805, source: Google Books).*

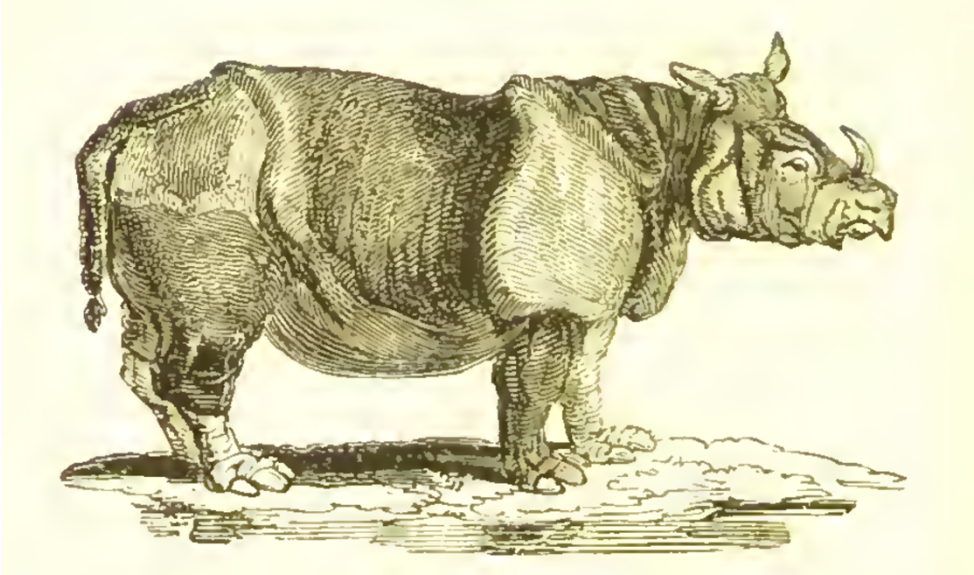


Figure 6: Samuel William's engraving of a rhinoceros from Mary Trimmer's A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects *(Chiswick: C. Whittingham, 1830, source: Google Books).*

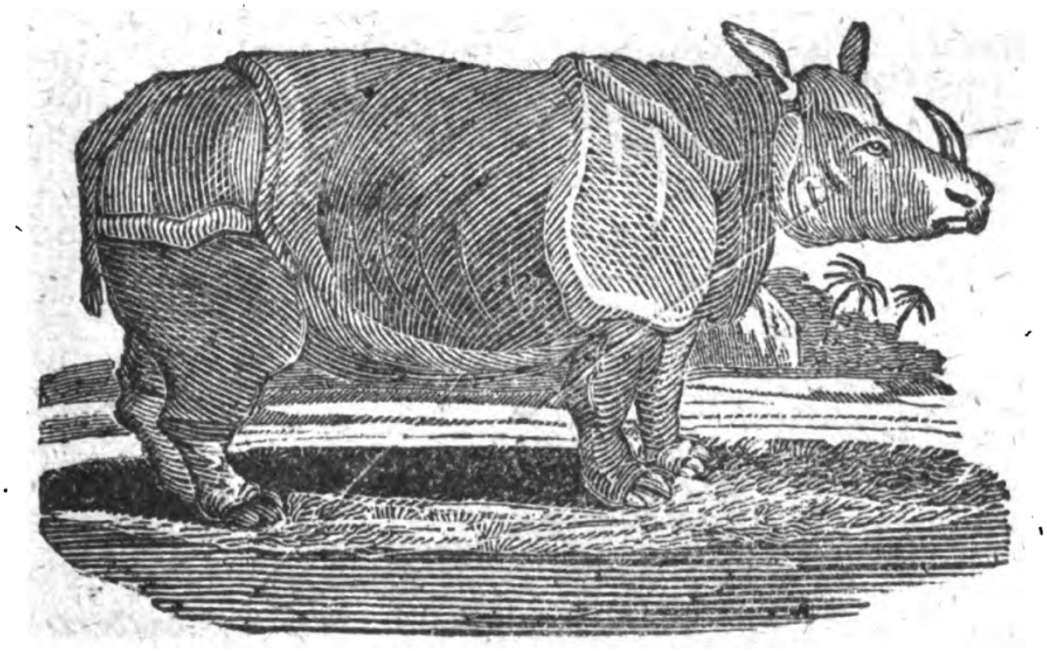


Figure 7: The rhinoceros in J. Macloc's A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects *(London: Minerva Press, 1813, source: Google Books).*



Figure 8: Robert Sand's engraving of John le Keux's rhinoceros in his Illustrations of Natural History *(London: Longman and Co., 1830, source: Google Books).*

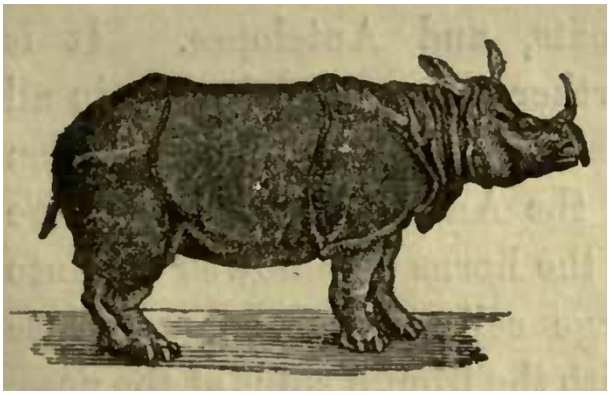


Figure 9: The rhinoceros in William Carpenter's Popular Cyclopedia of Natural Science, Zoology, Vol. 1 Comprising mammals, birds, and reptiles *(London: Wm. S. Orr and Co., 1844, source: Google Books).*

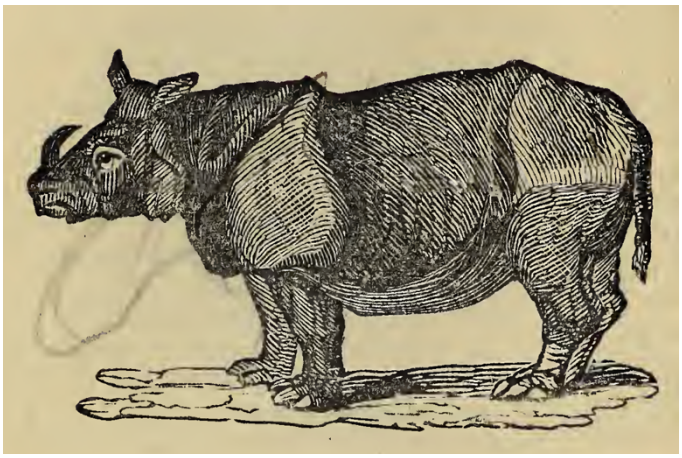


Figure 10: The rhinoceros in James Bland's Grandpapa's Tale's About Animals *(Halifax: Milner and Sowerby, 1850, source: Google Books).*

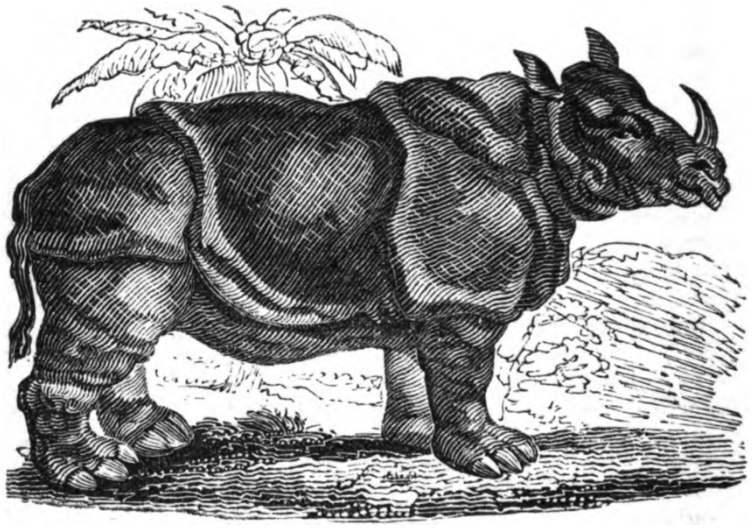


Figure 11: The rhinoceros in C. Mackenzie's The Natural History of All the Most Remarkable Quadrupeds, Birds, Fishes, Reptiles and Insects *(London: Henry Lea, 1860, source: Google Books).*

British popular natural history authors of the late eighteenth and early nineteenth centuries generally comprised of an eclectic mix of professional and amateur naturalists, as well as more generalist writers whose forays into natural history merely represented one aspect of their literary output. As well-regarded natural historians could command high fees when writing for popular natural history publications, publishers frequently cut their costs by collating information themselves from earlier works, which they accessed from their own, private collections or borrowed from libraries and educated acquaintances.[31] Harriet Ritvo refers to the 'richly miscellaneous detail' of British popular natural history content, which was clearly designed to appeal to the 'rather indiscriminate curiosity' of the genre's readership, with many authors, especially non-specialists, being keen to make the 'best use' of the information available to them in order to maintain their readership and secure sales.[32]

Of the professional naturalists within this cohort, George Shaw produced a guidebook to the taxidermy specimens in the Leverian Museum, his *Museum Leverianum*, in 1792 and published his extensive *General Zoology or Systemic Natural History* between 1800 and 1826. Edward Turner Bennett, one of the founding members of the ZSL and its secretary from 1833 until his death in 1836, also authored guidebooks for the Royal Menagerie at the Tower of London in 1829 and for the ZSL's Gardens at Regent's Park in 1830 and 1831. The surgeon, polar explorer and naturalist, John Richardson, produced new

[31] S. Sheets-Pyenson, 'War and Peace in Natural History Publishing: The Naturalist's Library, 1833-43', *Isis* 72/1 (1981) p. 63.
[32] Ritvo, *The Animal Estate* pp. 10-11.

commentaries on the mammals of North America in his 1829 *Fauna Boreali-Americana* and the Scottish naturalist, Sir William Jardine, working alongside other specialists, such as Lieutenant-Colonel Charles Hamilton Smith and William MacGillivray, produced *The Naturalist's Library* from 1833 to 1843.

Writing extensively on the subjects of local and general natural history, Mary Roberts produced her *Domesticated Animals Considered with Reference to Civilisation and the Arts* in 1833 and her *Wild Animals, their Nature, Habits and Instincts* in 1836. Charles Frederic Partington, who penned works on many different scientific subjects, edited and contributed to the *The British Cyclopædia of Natural History*, published between 1834 and 1837, a work whose entries reflected the animal knowledge evident in other, contemporary works. Thomas Bell, perhaps most famous for his research into entomology and oceanography, published his *A History of British Quadrupeds* in 1837, whilst William Benjamin Carpenter, another entomologist and physiologist, provided detailed discussions on animals in his 1844 *Popular Cyclopedia of Natural Science, Zoology*.

Members of the clergy also made significant contributions to the British popular natural history genre, the most prolific being Reverend William Bingley, who completed multiple works of popular natural history in the early nineteenth century, such as his 1802 *Animal Biography, or, Popular Zoology*, his 1809 *Memoirs of British Quadrupeds* and his 1814 *Animated Nature*. After his death in 1826, many of his works continued to be republished, such as the second edition of his *Bible Quadrupeds*, published in 1839. The Scottish priest and educator, William Mavor, published his *Natural History for the use of Schools* in 1800, and the Free Church minister and naturalist, John Fleming, wrote several works on natural history, including his 1828 *A History of British Animals*. *The Religious Tract Society*, a British evangelical Christian organisation founded in 1799, also published works of popular natural history, such as their 1833 *Quadrupeds: The Class Mammalia*.

Other organisations, such as *The Society for the Diffusion of Useful Knowledge*, founded in 1826, also published works of natural history aimed at a popular audience. Charles Knight, for example, one of the society's superintendents and the de facto publisher and editor of *The Penny Magazine*, founded in 1832, completed works, such as the multi-volumed *The Menageries*, published between 1829 and 1840, and *The Pictorial Museum of Animated Nature*, published in 1844. Authors producing single works of British popular natural history, included Goldsmith, with his *Animated Nature*, John Church, a surgeon whose *A Cabinet of Quadrupeds* was published in 1800, Mary Trimmer, who penned the 1803 *A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects*, and J. Macloc, who authored *A Natural History of the Most*

Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles and Insects in 1813. *Characteristic Sketches* by John Henry Barrow, the maternal uncle of Charles Dickens and a journalist specialising in legal and parliamentary affairs, was also published in 1832, a single work of natural history amongst a small number of plays and novels.[33] Frederic Shoberl was also a writer, journalist, translator and illustrator, whose 1834 *Natural History of Quadrupeds* stood alongside his works on travel, geography, history and botany. David Low, a prominent agriculturalist, also completed his two-volume *The Breeds of Domestic Animals of the British Isles* in 1842, in which he provided detailed discussions on domestic animals and their wild equivalents.

Other, non-specialist writers included James Hamilton Fennell, an antiquarian and botanist whose two most prominent works were his 1841 *A Natural History of British and Foreign Quadrupeds* and his 1862 *The Shakespeare's Cyclopedia*. Jane Wells Webb Loudon, well-known for her popular works on botany and horticulture and her science-fiction, also authored *The Entertaining Naturalist*, published in 1840.[34] James Aikman's *A Natural History of Beasts, Birds, & Fishes or Stories of Animated Nature*, first published in 1847, added to his pre-existing work on Scottish history, whilst James Bland's *Grandpapa's Tales About Animals* and Charles Mackenzie's *The Natural History of All the Most Remarkable Quadrupeds, Birds, Fishes, Reptiles and Insects* were published in 1850 and 1860 respectively. Popular natural history literature also provided an important medium through which artists could earn money for their illustrations of animals, as demonstrated in Charles Catton's 1788 *Animals Drawn from Nature*, Bewick's *Quadrupeds* and le Keux's 1829 *Illustrations of Natural History*. The British popular natural history genre, therefore, constituted a broad range of authors with differing levels of expertise and experience in the field.

Since the animal turn of the late 1980s and early 1990s, scholars in the humanities have increasingly explored animals as historical subjects, particularly in light of Ritvo's pioneering, 1987 work, *The Animal Estate*, in which she argues that the discourse surrounding animals in Victorian England 'often reflected traditional understandings and deeply held convictions' that were sometimes 'linked only tenuously to the natural world'.[35] Indeed, animal history has developed considerably as a field of investigation in recent

[33] W. Carlton, 'Dickens' Literary Mentor', Dickens Studies 1/2 (1965) p. 58; John Henry Barrow's entry in the *ODNB* (by Paul Graham): https://doi.org/10.1093/ref:odnb/56408 [accessed 28/09/2022].
[34] See: M. Bellanca, 'Jane Loudon's wildflowers, popular science, and the Victorian culture of knowledge' in L. Mazzeno and R. Morrison (eds.) *Victorian Writers and the Environment: Ecocritical Perspectives* (Abingdon, 2016) pp. 174-187; A. Roberts, *The History of Science Fiction,* second edition (Egham, 2016) pp. 135-136.
[35] Ritvo, *The Animal Estate* p. 3.

years, as have the closely-aligned and more interdisciplinary fields of animal studies, sometimes described within the broader context of ecocriticism as 'zoocriticism', and human-animal studies (HAS), also known as anthrozoology, with recent research in these fields focusing on animal agency.[36] Re-engagement with animals has also occurred in the field of geography, evidenced by the emergence of new animal geography in the 1990s, aimed at exploring the 'geographies of human-animal relations'.[37]

Studies by Ritvo have illustrated how nineteenth-century natural history not only strove to educate its audiences, particularly children, about animals and other aspects of the natural sciences but also to provide a vehicle for moral, religious and social education.[38] Similar connections between natural history and children's education can be found in the eighteenth century, with John Locke's argument, that children learned better when their interest was engaged, fuelling a proliferation of literature aimed at young readers, such as Thomas Boreman's *A Description of More than Three Hundred Animals*, first published in 1735.[39] Indeed, as British popular natural history literature became more available and more accessible during the late eighteenth and early nineteenth centuries, the relationship between natural history, education and moral instruction strengthened considerably.

Patricia Mainardi, for example, observes that Knight's *The Penny Magazine*, which regularly featured in-depth articles on natural history, complete with highly detailed and energetic illustrations of exotic creatures, often served as 'a substitute for the primary schooling that was just becoming a normal and required stage of life' for many members of the working class.[40] Indeed, this emphasis on natural history as an educative tool mirrored the approach adopted by Knight in his dedicated works of popular natural history. Cowie

[36] See: H. Ritvo, 'On the Animal Turn', *Dædalus* 136/4 (2007) pp. 118-122; G. Huggan and H. Tiffin, *Postcolonial Ecocriticism: Literature, Animals Environment,* second edition (Abingdon, 2015) p. 17; K. Shapiro and M. DeMello, 'The State of Human-Animal Studies', *Society and Animals* 18 (2010) pp. 307-318. For examples of recent research on animal agency, see: B. Walker, 'Animals and the Intimacy of History', *History and Theory* 52/4 (2013) pp. 45-67; J. Specht, 'Animal History after its Triumph: Unexpected Animals, Evolutionary Approaches, and the Animal Lens', *History Compass* 14/7 (2016) pp. 326-336; J. Saha, 'Colonizing Elephants: animal agency, undead capital and imperial science in British Burma', *BJHS: Themes* 2 (2017) pp. 169-189; K. Maglen, '"An Alligator got Betty": Dangerous Animals as Historical Agents', *Environment and History* 24/2 (2018) pp. 182-207.
[37] J. Sellick, 'An Introduction to New Animal Geographies', *Geography* 105/1 (2020) pp. 21-23.
[38] H. Ritvo, 'Learning from Animals: Natural History for Children', *The Threepenny Review* 21 (1985) pp. 4-6.
[39] See: J. Plumb, 'The New World of Children in Eighteenth-Century England', *Past & Present* 67 (1975) pp. 64-95; Thomas Boreman, *A Description of Three Hundred Animals* [reprint of the 1786 edition] (Wakefield, 1968).
[40] P. Mainardi, *Another World: Nineteenth-Century Print Culture* (New Haven, 2017) pp. 77-80.

similarly shows that the owners of commercial menageries and travelling wild beast shows also promoted their natural history attractions as educational opportunities for moral self-betterment, these sentiments being communicated verbally by guides and through the textual content of accompanying guidebooks.[41]

Animal knowledge was, therefore, regularly infused with intersecting, culturally-informed lessons and meanings that extended far beyond the basic descriptions of the physical appearance, range, habitat and behaviours of species. Ritvo maintains that, as natural history texts were 'perceived to be intrinsically interesting to children', they were seen as 'ideal didactic instruments' for use in juvenile education, particularly as 'children could also learn about mankind' when engaging with texts about animals.[42] Natural theology, in this respect the contemplation of the natural world to reveal the nature and will of God, was a pervasive, epistemological lens through which late-eighteenth and nineteenth-century British popular natural history discourses on animals helped to reinforce deeply Christian understandings of human supremacy over the natural world.[43] Andrew Flack and Sarah Maddeaux also observe in their 2018 study on guidebooks for the Bristol Zoo Gardens that these publications acted as 'a lens through which the animals could be perceived, thereby filling the animal collection with cultural meaning', natural theology providing an important framework through which animal knowledge was constructed and presented in nineteenth-century examples.[44]

Donna Haraway maintains that scientific discourses on animals are invariably saturated with a plethora of cultural, social and political meanings that serve to reinforce capitalistic, racial and gendered forms of domination and control.[45] Building on Haraway's ideas, more recent scholarship has combined postcolonial and ecocritical approaches to examine the broad body of literary and material contexts in which animals abounded during the late eighteenth, nineteenth and early twentieth centuries, especially children's literature.[46] For example, John Miller's 2012 study, *Empire and the Animal Body*, which analyses the

[41] Cowie, *Exhibiting Animals* pp. 118-122.
[42] Ritvo, 'Learning from Animals' pp. 4-5.
[43] Kalof, *Looking at Animals in Human History* p. 148.
[44] A. Flack and S. Maddeaux, '"Ask of the Beasts and They Shall Teach Thee": Animal Representations in Bristol Zoo Guidebooks', *Society and Animals* 28 (2018) pp. 54, 57, 59.
[45] D. Haraway, *Primate Visions* (New York, 1998).
[46] See, for example: M. Deckha, 'Towards a Postcolonial, Postfeminist Feminist Theory: Centralizing Race and Culture in Feminist Works on Nonhuman Animals', *Hypatia* 27/3 (2012) pp. 527-545; A. Skabelund, 'Animals and Imperialism: Recent Historiographical Trends', *History Compass* 11/10 (2013) pp. 801-807; A. Heintzman, 'E is for Elephant: Jungle Animals in Late Nineteenth-Century Picture Books', *Environmental History* 19/3 (2014) pp. 553-563; F. Changani, 'Can the Postcolonial Animal Speak?', *Society and Animals* 24 (2016) pp. 619-637.

depiction of animals in late Victorian and Edwardian boys' adventure fiction, argues that 'the polarity of human and animal is both central to imperial mythologies and a point at which these collapse', whilst Shafali Rajamanar's *Reading the Animal in the Literature of the British Raj*, published in the same year, claims that 'animal presence' in colonial literature was 'foundational' to the creation of 'the spectacle that supported the British Raj and that controlled its ideological base'.[47]

This thesis contributes to these scholarly discussions by examining conceptualisations of animals within late-eighteenth and early-nineteenth-century British popular natural history literature to reveal how expressions of Britishness contained within these works helped to reinforce particular imaginings of a superior national character that was rooted in notions of modernity and tied to claims of rationality, ingenuity, commercial acumen and benevolence. Although British popular natural history authors employed a range of epithets to refer to the nation, 'our island', 'these islands', 'England' and 'Britain', which they often used interchangeably, they collectively articulated a congruent understanding of Britishness as an expansion of Englishness that extended beyond England's borders to include non-English groups within a single, English-led, cultural hegemony. Whilst conceptions of this national identity tended to include the Welsh and the Lowland Scots, it frequently excluded the Irish and the Highland Scots, who were viewed as internal others against which notions of Britishness were configured.

Within British popular natural history literature, these understandings of Britishness were frequently communicated through the locating of animals in space and time, which formed a core element of their conceptualisation. Indeed, constructions of animals as beasts of the past, the present or the future helped to situate species within ideas of progress, underpinned by enlightenment understandings of conjectural history and the stadial development of human society, as articulated by thinkers of the Scottish Enlightenment, such as Adam Smith, William Robertson and John Millar. Through animal constructions, species were conceptually tied to the landscapes in which they resided and to the people with whom they were most associated, their temporalised status inevitably extending to these landscapes and societies. Within this context, animals from across the globe were viewed through a British lens, allowing comparisons to be made between the animals, landscapes and people across Britain and between those of Britain and the rest of the world. These processes increasingly helped to reaffirm imaginings of the wealthy, metropolitan British as a thoroughly modern people, a status that was reinforced through the configuration of a global hierarchy of civilisations, with the British at its apex.

[47] J. Miller, *Empire and the Animal Body* (London, 2012) p. 3; S. Rajamannar, *Reading the Animal in the Literature of the British Raj* (New York, 2012) p. 2.

This study focuses on the discourse surrounding a range of mammals, wild and domestic, native and exotic, as these formed part of the most prominent category of animals within the textual menageries of late-eighteenth and early-nineteenth-century British popular natural history. It treats the representations of animals as imaginative constructs, as inspired by Nigel Rothfels' statement that 'an animal or species is as much a constellation of ideas… as anything else', with each generation infusing animal representations with narratives endemic to the cultural-historical moment.[48] It also takes into account the HAS scholar, Margo DeMello's, observation that once animals have been 'imported into human social worlds they are assigned to human categories, often based on their use to humans, and it is these categories… that shape not only how the animals are seen but also how they are used and treated'.[49] Indeed, the emphasis this study places on expressions of national identity within representations of animals corresponds with Erica Fudge's concept of 'humane' animal history; the analysis of animals 'as they are depicted in documents that are always written by humans, and which therefore reveal something of the human'.[50]

The nature and development of national identities within the British Isles during the eighteenth and nineteenth centuries have been extensively debated by scholars, especially in light of Benedict Anderson's concept of 'imagined communities', which he tied to the role of print media in the construction and propagation of national identity.[51] Gerald Newman argues that English nationalism primarily emerged in the eighteenth century as a rejection of French cosmopolitanism and universalism, although his lack of distinction between 'English' and 'British' national identity has been routinely criticised by scholars, such as John Brewer and Krishan Kumar, with later scholars emphasising Britishness as the key imagining of national belonging in eighteenth and nineteenth-century Britain.[52] In her 1992 work, *Britons*, Linda Colley rejects the earlier, class-based understandings of British identity, advocated by Marxist historians such as E. P. Thompson and Eric Hobsbawm, in favour of a more 'inclusivist', nation-centric model, focusing on Protestantism, commerce and Empire as key features of a 'British' national identity that

[48] N. Rothfels, *Savages and Beasts: The Birth of the Modern Zoo* (Baltimore, 2002) p. 5.
[49] M. DeMello, *Animals and Society: An Introduction to Human-Animal Studies* (New York, 2012) p. 10.
[50] E. Fudge, 'A Left-Handed Blow: Writing the History of Animals' in N. Rothfels (ed.) *Representing Animals* (Bloomington, 2002) p. 8.
[51] B. Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism,* Revised Edition (London, 1991) p. 36.
[52] G. Newman, *The Rise of English Nationalism, A Cultural History, 1740-1830,* second edition (New York, 1997) p. 1; J. Brewer, 'The Rise of English Nationalism: A Cultural History, 1740-1830' *American Journal of Sociology* 94/5 (1989) pp. 1270-1272; K. Kumar, *The Making of English National Identity* (Cambridge, 2004) p. 177-178.

encompassed the English, the Scottish and the Welsh.[53] She further argues that 'it was common to think in terms of dual nationalities, not in terms of a single national identity', with 'British' being generally viewed as a second nationality existing in parallel to the more regional identities of English, Scottish and Welsh.[54]

Although influential, Colley's ideas have been increasingly criticised by scholars, who point out that she omits groups from within the British Isles, such as the Irish, that did not conform to her Protestant-oriented, Francophobic model of Britishness.[55] Joseph Sramek has illustrated how Colley's claims of an inclusive British identity, founded on a shared, protestant faith, collapse when applied to early-nineteenth-century Company India, where members of different Christian denominations chose to retain 'older, particular, identities [that] prevailed over any common sense of Britishness' in order to strengthen their appeals for funding from the British East India Company (BEIC).[56] Recent studies have also emphasised the exclusive nature of Britishness, especially in terms of its constricting and supressing effect on other expressions of national belonging. For instance, although Kumar agrees with Colley that 'Britishness', rather than 'Englishness', was the prevailing sense of national identity during the eighteenth and early nineteenth centuries, he maintains that non-English ethnicities were well aware of their status as 'junior partners' under the umbrella of 'British', a category created by the English to extend and confirm English power.[57]

Evan Gottlieb similarly draws on Colley's ideas to argue that, during the eighteenth and early nineteenth centuries, the English and the Lowland Scots were bound together by a sense of 'sympathetic Britishness', created and propagated by literary elites in both localities, an idea that tacitly illustrates the exclusion of the Highland Scots from this narrative of national belonging.[58] In their examination of the life of the Scottish Whig activist, Sir James Mackintosh, Onni Gust goes further to argue that 'far from admiring the romantic scenes of his native land and claiming the distinct heritage of his Highland ancestors… [Mackintosh] forged for himself a British imperial identity, through which he

[53] C. Hall, 'Introduction: thinking the postcolonial, thinking the empire' in C. Hall (ed.) *Cultures of Empire, A Reader* (New York, 2000) pp. 18-19; T. Sasson, J. Vernon, M. Ogborn, P. Satia and C. Hall (eds.), 'Britain and the World: A New Field?', *Journal of British Studies* 57 (2018) p. 705.
[54] L. Colley, *Britons: Forging the Nation, 1707–1837* (Yale, 1992) p. 373.
[55] B. Kadel, 'Review: Britons: Forging the Nation, 1707–1837; Revised Edition', *Britain and the World* 4/1 (2011) p. 178.
[56] J. Sramek, 'Rethinking Britishness: Religion and Debates about the "Nation" among Britons in Company India, 1813-1857', *Journal of British Studies* 54 (2015) p. 843.
[57] Kumar, *The Making of English National Identity* p. 179.
[58] E. Gottlieb, *Feeling British: Sympathy and National Identity in Scottish and English Writing, 1707-1832* (Cranbury, 2007) pp. 17-20.

asserted his belonging to what was considered civilised metropolitan society'.[59] Challenging Colley's model of an inclusive, parallel British identity, they observe that 'Macintosh's performance of a British imperial identity relied upon distancing himself from the Scottish Highlands as a space and society whose differences, marked as barbaric, threatened his own ambitions to belong more closely to the centres of imperial power', supporting the notion that some regional conceptions of national identity and Britishness were seen as mutually exclusive.[60]

These 'exclusivist' understandings of Britishness were largely informed by the 'New Imperial History' of the 1990s, which, compared to the earlier, economic and political histories of Empire, focused on the 'relationships among knowledge, identity and power', thereby encouraging scholars to consider the ways in which British culture was shaped through the colonial experience.[61] As Antoinette Burton explains, Empire was 'not just a phenomenon "out there", but a fundamental part of English culture and national identity at home'.[62] Kumar's more recent research has also emphasised the importance of imperialism in the creation of a 'missionary consciousness' that subsumed, but also extended, national imaginings of 'the nation', with Britain and the British Empire conceptualised as 'twin expressions of the same phenomenon of power' that helped to reinforce English self-perceptions as a distinctly imperial people.[63] Whilst historians have continued to recognise the French, prior to and following the French Revolution, as a foreign, continental other against which ideas of Britishness were regularly reaffirmed, studies have also increasingly emphasised the role of colonial peoples as others against which British self-perceptions were configured and consolidated.[64]

In this respect, earlier, more insular histories of Englishness and Britishness have been increasingly questioned by historians, who have highlighted how the exclusive, complex and dynamic qualities of national belonging in the British Isles were informed by other facets of identity linked to ideas of class, gender, religion, culture and race. Kathleen

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[59] O. Gust, 'Remembering and Forgetting the Scottish Highlands: Sir James Mackintosh and the Forging of a British Imperial Identity', *Journal of British Studies* 52/3 (2013) p. 616.
[60] Gust, 'Remembering and Forgetting the Scottish Highlands' p. 636.
[61] S. Howe, 'Introduction: New Imperial Histories' in S. Howe (ed.) *The New Imperial Histories Reader* (Abingdon, 2010) p. 2; Sasson, Vernon, Ogborn, Satia and Hall (eds.), 'Britain and the World: A New Field?' pp. 677-708.
[62] A. Burton, 'Who needs the nation? Interrogating "British" history' in C. Hall (ed.) *Cultures of Empire, A Reader* (New York, 2000) p. 136.
[63] K. Kumar, 'Empire and English Nationalism', *Nations and Nationalism* 12/1 (2006) pp. 2, 6-7.
[64] Colley, *Britons* p. 7; K. Wilson, *The Sense of the People, politics, culture and imperialism in England, 1715-1785* (Cambridge, 1995) p. 440; K. Wilson, *The Island Race, Englishness, empire and gender in the eighteenth century* (New York, 2003) p. 37.

Wilson illustrates, in her 1995 *The Sense of the People*, how the nature of eighteenth-century Englishness, and the broader sense of Britishness it helped to inform, were 'not "natural" but mutable, contested and always under construction', the parameters for Englishness and Britishness both being set by internal as well as external divisions.[65] She further maintains that 'masculinist definitions of patriotism… excluded or subordinated a range of "others" within the national and imperial polity', particularly 'women, effeminates, aristocrats; Catholics, Dissenters, Jews; Scots, "Indians," Africans; slaves and the "rabble."'[66]

Kathleen Wilson argues that it was the emergent middle classes that could best utilise these expressions of English national sentiment to universalise their political and cultural interests.[67] Indeed, her observations resonate with Margaret Hunt's claims that the printed material of the era disproportionately catered to the tastes of the 'middling' stratum of English society, presenting and reinforcing its interests and practices as those of the English people and the nation as a whole even though this group constituted only a small percentage of the total population.[68] She further asserts that the print literature of the 'middling sort', especially travel literature, helped to 'integrate commercial sensibilities and concerns into a national identity' by presenting encounters between members of this stratum of society and the wider world in the form of explicit comparisons between the 'true' English and foreign others, characterised by a 'vivid, dystopian picture of what the English, thankfully, were not'.[69]

Expanding her exploration of the exclusory nature of late-eighteenth and early-nineteenth-century Britishness, Wilson maintains, in her 2002 work, *The Island Race*, that 'Britishness and Englishness… [were] not immutable and eternal formations, but sites of struggle whose tropes of representation… [were] specific to particular periods'.[70] She further argues that the act of constructing national identity 'not only distinguished the nation from other nations but also divided the citizens within its own boundaries' as a way of policing and controlling different, internal populations.[71] To Wilson, Britishness included and favoured the 'fair-minded, masculine English subject that the imperial project valorized' but excluded a range of "effeminate" others, who 'were part of the amalgam which empire's

[65] Wilson, *The Sense of the People* pp. 21, 23.
[66] Wilson, *The Sense of the People* pp. 437-438.
[67] Wilson, *The Sense of the People* p. 440.
[68] Hunt, *The Middling Sort* p. 20.
[69] Hunt, *The Middling Sort* pp. 172-178, 182, 188.
[70] Wilson, *The Island Race* p. 4.
[71] Wilson, *The Island Race* p. 49.

gendered, commercial and aggressive vision of the national identity sought to subordinate, at home and abroad'.[72]

Wilson recognises that '"stage" of civilisation' was a key signifier of identity in eighteenth and early-nineteenth-century Britain, alongside religion, politics, geography, sociability and politeness.[73] She further highlights the importance of 'modernity' to the formation of national identity during this period, which she defines as 'the cultural practices and representations that produced certain kinds of subjects and objects of knowledge [that] upheld widely shared notions of space and time'.[74] John Marriott also points out that the integration of India into the colonial imagination, which began in the late eighteenth century, rested upon observations and investigations that were united by a shared understanding of progress through which 'diverse peoples within the ascendent commercial empire were constructed as primitive and hence incorporated hierarchically into the European human order'.[75] Consequently, metropolitan self-perceptions became increasingly intertwined with and defined by contrasting representations of Britain's Indian, colonial subjects, creating a dichotomy informed by notions of temporalised difference.

Kevin Whelan similarly explores the significance of modernity to the configuration of Britishness during this period, explaining that contemporary Scottish intellectuals employed stadial theory to create a sense of temporal distance between themselves and what they saw as their 'tainted sectarian and cultural past', presenting the Scottish Highlands as archaic, barbarous and at an earlier stage of civilisation.[76] By engaging with Scotland's past in this way, Scottish Enlightenment thinkers encouraged like-minded Scots to favour a sense of modern Britishness over their more traditional understandings of Scottish national identity. Theodore Koditschek also points out that liberal writers, such as the Whig politician and historian, Thomas Macaulay, utilised the language of stadial and racial inferiority to explain what they saw as the failure of societal development in Ireland, a rhetoric that helped to preserve their sense of British modernity based on conceptions of liberty, gradual reform and the propagation of liberal rights within the empire.[77]

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[72] Wilson, *The Island Race* pp. 37, 52.
[73] Wilson, *The Island Race* p. 3.
[74] Wilson, *The Island Race* p. 31.
[75] J. Marriott, *The Other Empire: Metropolis, India and progress in the colonial imagination* (Manchester, 2003) pp. 5-6.
[76] K. Whelan, 'Ireland, Scotland and Britain in the Long Eighteenth Century' in T. Brotherstone, A. Clarke and K. Whelan (eds.) *These Fissured Isles: Ireland, Scotland and the making of Modern Britain, 1798-1848* (Edinburgh, 2005) p. 56.
[77] T. Koditschek, 'T.B. Macaulay, Whig History and the Romance of Empire: towards a "Greater Britain"' in T. Brotherstone, A. Clarke and K. Whelan (eds.) *These Fissured*

In her study on Macaulay and his father, Zachary, Catherine Hall describes how Englishness and Britishness were defined by '*constituting* others', namely Britain's colonial subjects, as 'it was only through the construction of others that the Englishman could know what Englishness was'.[78] Hall further notes that the propagation of Englishness in colonial territories was a key component of the visions of empire held by liberal writers, such as the Macaulays, who believed that non-English subjects were only capable of ruling themselves if they displayed the moral values and cultural practices associated with English conceptions of liberty and freedom, a position that ultimately justified British imperialism and colonialism.[79] Koditchek and Hall's analyses collectively demonstrate how lineal understandings of societal progress helped to configure notions of British superiority through modernity, underpinned by comparisons between the British and an array of temporalised others, located in territories both within and beyond the British Isles.

Scholars within a range of academic fields have explored the imaginative locating of animals in space, with Chris Philo and Chris Wilbert, for example, highlighting that animal geographers, drawing on Said's concept of 'imaginative geography', have recently explored how humans not only position themselves in relation to animals but also distance themselves from them through processes of conceptual and geographical othering.[80] Robert Jones has similarly invoked imaginative geography to argue that, during the nineteenth century, the viewing of animals at Regent's Park represented 'a moment of transportation, while simultaneously acting metonymically to condense the globe into the space of the gardens… [which served to] construct a single space for the imperial imagination'.[81] More recent research within animal history and animal studies has also examined how the imaginative placement of animals in royal menageries, such as Versailles, and in zoological gardens, such as Regent's Park, helped to configure the animals on display within potent performances of royal, state and imperial power.[82] Whilst

Isles: Ireland, Scotland and the making of Modern Britain, 1798-1848 (Edinburgh, 2005) p. 82.

[78] C. Hall, *Macaulay and son* (New Haven, 2012) p. xxiii.

[79] Hall, *Macaulay and son* pp. 333-337.

[80] C. Philo and C. Wilbert, 'Introduction' in C. Philo and C. Wilbert (eds.) *Animal Spaces, Beastly Places: New geographies of human-animal relations* (Oxford, 2000) pp. 5, 10-11.

[81] R. Jones, '"The Sight of Creatures Strange to Our clime": London Zoo and the Consumption of the Exotic', *Journal of Victorian Culture* 2/1 (1997) p. 8.

[82] See: Ritvo, The Animal Estate; H. Ritvo, 'The Ordering of Nature: Constructing the Collections of Victorian Zoos' in R. Hoage and W. Deiss (eds.) *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century* (Baltimore, 1996) pp. 43-50; Rothfels, *Savages and Beasts*; D. Donald, *Picturing Animal in Britain, 1750-1850* (London, 2007); Colley, *Wild Animal Skins in Victorian Britain* pp. 17-48. The scholarly discussions surrounding the Versailles menagerie fall outside the scope of this thesis. For

Takashi Ito has contested Jones' claims, arguing that the exhibition of exotic animals 'did not simply illuminate an imperial vision of the world; rather it made the zoo a cultural device, one that transferred exotic animals into a mixed space of scientific realism and picturesque fantasy', he nevertheless acknowledges that the acquisition of new exotic animals was couched in the language of imperial competition and national prestige.[83]

Research into late-eighteenth and early-nineteenth-century natural history illustrations has also highlighted the importance of the imagining of animals within space, with Madeleine Pinault-Sørensen claiming that, by the time of the publication of Buffon's *Histoire Naturelle*, animals were increasingly being depicted within landscapes that related to their purported range and habitat.[84] Cowie similarly points out that a key aim of guidebooks for sites, such as zoological gardens, was to 'help visitors to contextualise what they saw in the zoo and [to] more accurately visualise a beast in its native environment'.[85] Landseer's images in Barrow's *Characteristic Sketches*, for instance, depicted numerous species in naturalistic settings that evoked the landscapes described in the accompanying text, even though all of these illustrations were based on observations and sketches of captive animals in zoological collections in London and Paris.[86] Taxidermy displays similarly articulated a form of imaginative spatialisation, with Cowie pointing out that the Exeter 'Change menagerie used painted scenery to help visitors to envision the habitats of exotic animals whilst Bullock's London Museum posed taxidermy alongside vegetation to try and 'accurately' recreate scenes from the African landscape (see figures 12 and 13).[87] Alan Ross similarly notes that allegorical displays were a common sight by the mid nineteenth century, when taxidermy was regularly 'used to stage the 'wildness' of the animals' native regions'.[88]

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more information, see: L. Ribbons, *Elephant Slaves and Pampered Parrots: Exotic Animals in Eighteenth-Century Paris* (Baltimore, 2002) pp. 37-67; M. Senoir, 'The Ménagerie and the Labyrinthe: Animals at Versailles, 1662-1792' in E. Fudge (ed.) *Renaissance Beasts: Of Animals, Humans and Other Wonderful Creatures* (Chicago, 2004) pp. 208-231; Kalof, *Looking at Animals in Human History* p. 121; P. Sahlins, 'The Royal Menageries of Louis XIV and the Civilising Process Revisited', *French Historical Studies* 35/2 (2012) pp. 237-267.

[83] T. Ito, *London Zoo and the Victorians 1828-1859* (Woodbridge, 2014) pp. 63-80.

[84] M. Pineault-Sørensen (trans. J. Zinser), 'Portraits of Animals' in M. Senior (ed.) *A Cultural History of Animals in the Age of Enlightenment* (London, 2007) p. 170.

[85] Cowie, *Exhibiting Animals* p. 110.

[86] Barrow, *Characteristic Sketches*.

[87] Cowie, *Exhibiting Animals* pp. 16-18.

[88] A. Ross, 'The animal body as medium: Taxidermy and European Expansion, 1775-1865', *Past and Present* 249 (2020) p. 89.



Figure 12: The interior of the Exeter 'Change (1816, The British Library, 192.b.19, source: The British Library Online).

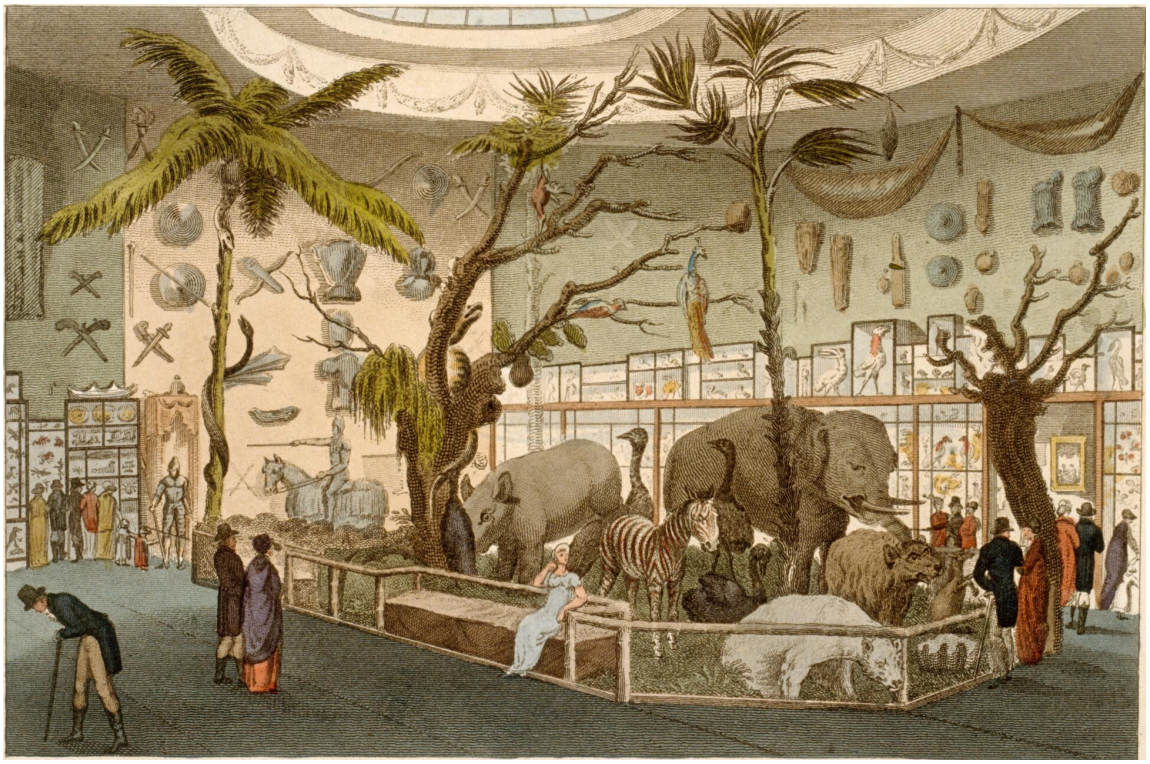


Figure 13: The interior of Bullock's London Museum (1810, The Wellcome Library, 40285i, source: The Wellcome Collection Online).

Scholars within the fields of animal history and animal studies have similarly demonstrated how the temporalisation of species, such as gorillas, rhinoceroses, bison and the thylacine, helped to characterise these animals as creatures of the past within specific scientific and

cultural contexts, informed by Darwinian evolution.[89] Comparatively, animals in late-eighteenth and early-nineteenth-century British popular natural history literature were positioned within contradictory understandings of 'biblical time', informed by natural theology, 'secularised time', grounded in enlightenment understandings of stadial development, and 'deep time', as utilised by the scientist, Stephen Jay Gould, to describe the vastness of geological time compared to human history.[90] The anthropologist, Johannes Fabian, argues that the secularisation of time during the Enlightenment, especially within the study of geography and natural history, directly helped to lay the foundations for the temporalising approaches later used to assess human societies.[91] He further argues that the development of geological utilitarianism and Darwinian evolution, during the latter half of the nineteenth century, gave rise to social theories that connected 'dispersal in space' to 'sequence in Time', a process that facilitated a 'taxonomic approach to socio-cultural reality', where time 'was not only secularized and naturalized but also thoroughly spatialized'.[92]

Although Fabian clearly focuses on the latter half of the nineteenth century, later scholars have utilised his ideas to explore earlier time periods. James Chandler, for instance, looking at the self-perceptions of British romantic writers, argues that 'the Scottish-Enlightenment principle of uneven development' and its 'dated grid of a homogenous empty time', allowed the world to be divided into 'chronotopic zones', spaces tied to time, which informed and were informed by the societal status of their human inhabitants.[93] These understandings of space and time correspond with Charles Withers' claim that enlightenment thinkers investigated 'geographies of human difference *over time*' by 'studying geographies of human difference *in space*'.[94] Gotlieb, also on romantic literature, similarly states that the combining of stadial theory with conjectural history encouraged enlightenment and romantic writers to view the world globally, as 'an interconnected albeit uneven whole'.[95] Drawing on Fabian and Chandler's ideas, Noah Heringman has adapted

[89] See: Haraway, *Primate Visions*; A. Isenberg, *The destruction of the Buffalo: An Environmental History, 1750-1920* (Cambridge, 2000); K. Enright, *Rhinoceros* (London, 2008); C. Freeman, *Paper Tiger: How Pictures Shaped the Thylacine* (Boston, 2014).
[90] S. Gould, *Time's Arrow Time's Circle* (Cambridge, 1987) pp. 2-3, 10-16; N. Heringman, 'Deep Time at the Dawn of the Anthropocene', *Representations* 129/1 (2015) p. 57.
[91] J. Fabian, *Time and the Other: How Anthropology Makes its Objects* (New York, 1989) p. 7.
[92] Fabian, *Time and the Other* pp. 12, 15-16.
[93] J. Chandler, *England in 1819: The Politics of Literary Culture and the Case of Romantic History* (Chicago, 1998) pp. 131-135.
[94] C. Withers, *Placing the Enlightenment: Thinking Geographically about the Age of Reason* (Chicago, 2007) p. 163.
[95] E. Gottlieb, *Romantic Globalism: British Literature and Modern World Order 1750-1830* (Columbus, 2014) p. 32.

the term 'deep time' to communicate the profound sense of temporal difference, informed by stadial understandings of human development, that late-eighteenth and early-nineteenth-century European explorers imagined to exist between themselves and the so-called 'primitive' societies that they encountered during their expeditions in the South Pacific.[96]

The use of animal presence and human-animal relationships within stadial models, to indicate the developmental stage of societies, offers some explanation as to why the temporalised status of charismatic mammals, within late-eighteenth and early-nineteenth-century British popular natural history, was so easily and frequently extended to local landscapes and people. As Nathanial Wolloch demonstrates, 'a central measure for cultural advancement [within Enlightenment historiography] was considered to be the manner and extent in which a particular human society or nation had gained mastery over its natural surroundings', with their relationships with animals serving as an important indicator of their dominion over the natural world.[97] Travel literature also exerted a considerable influence on the nature and content of British popular natural history literature, with natural history authors drawing on travel literature as one of their major sources of information until the mid-nineteenth century. For example, over forty percent of the two hundred works listed in the bibliography of Bingley's *Animal Biography* were travel narratives.[98] Sofia Åkerberg further observes that direct parallels existed between travel handbooks and early guidebooks for Regent's Park, with both bodies of literature utilising 'the same tools of expectation and confirmation' to communicate knowledge.[99]

Mary Louise Pratt argues that eighteenth and early-nineteenth-century European scientific travel literature propagated Eurocentric notions of 'planetary consciousness', which allowed organisms from across the world to be integrated 'into European-based patterns of global unity and order'.[100] Drawing on Pratt's ideas of planetary consciousness, Ann McClintock has coined the term 'panoptical time' to describe how natural space and historical time were 'collected, assembled and mapped onto a global science of the

[96] N. Heringman, 'Deep Time in the South Pacific: Scientific Voyaging and the Ancient/ Primitive Analogy' in J. Faflak *Making Time: Romanticism and Evolution* (Toronto, 2017) pp. 95-98.
[97] N. Wolloch, *History and Nature in the Enlightenment: Praise of the Mastery of Nature in Eighteenth-Century Historical Literature* (Farnham, 2011) p. 45.
[98] W. Bingley, *Animal Biography, or, Popular Zoology, Volume 1*, Fifth Edition (London, 1820) pp. vii-xviii.
[99] S. Åkerberg, *Knowledge and Pleasure at Regent's Park: The Gardens of the Zoological Society of London during the Nineteenth Century* (Umeå, 2001) p. 145.
[100] M. Pratt, *Imperial Eyes: Travel Writing and Transculturation* (London, 1992) pp. 15, 31.

surface'.[101] McClintock argues that panoptical time, combined with the physical mapping of progress against 'images of "archaic" time', allowed 'geographical difference across *space*… [to be] figured as a historical difference across *time*'.[102] According to McClintock, 'the agency of women, the colonized and the industrial working class' was disavowed and projected 'onto anachronistic space: prehistoric, atavistic and irrational, inherently out of place in the historical time of modernity'.[103] As British popular natural history authors drew on and reproduced information from travel literature, so they propagated the same ideas of planetary consciousness and panoptical time, presenting an array of animals from across the world in an encyclopaedic structure that aided the configuration of local and global animal communities. Consequently, the locating of animals in anachronistic space encouraged societies from across the world to be imagined in temporal and stadial terms.

Furthermore, by presenting Britain's animal community within a global context, British popular natural history authors reinforced self-perceptions of the wealthy, metropolitan British as a superior and modern people, through dialogues of difference that centred round human-animal relationships and broader ideas of dominion over the natural world. Whilst British popular natural history authors frequently drew on the writings of many European naturalists and travel writers, they invariably viewed information from a British perspective, interpreting, curating and recontextualising this knowledge to conform to British understandings and expectations. For example, translations of Buffon by Smellie and also by Barr contained extensive footnotes, which challenged or amended any of Buffon's information that was deemed erroneous 'in light of the knowledge of British experts'.[104] Descriptions from travel literature of animal encounters in Britain's colonial possessions, which were inevitably shaped by the colonial gaze, further allowed animals to be incorporated into a taxonomy of temporalised, animal and human others, against which ideas of Britishness were configured. As Alan Bewell explains, late-eighteenth and early-nineteenth-century understandings of 'English' nature were 'seen in relation to the new and unfamiliar natures from across the globe', with 'the colonial world and the discursive methods it produced… [providing] a template and point of comparison for subsequent representations of English nature'.[105]

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[101] A. McClintock, *Imperial Leather: Race, Gender, and Sexuality in the Colonial Contest* (New York, 1995) pp. 36-37.
[102] McClintock, *Imperial Leather* p 40.
[103] McClintock, *Imperial Leather* p 40.
[104] J. Loveland, 'Gorges-Louis Leclerc de Buffon's Histoire Naturelle in English, 1775-1815', *Archives of Natural History* 31/2 (2004) pp. 226-230.
[105] A. Bewell, 'Romanticism and Colonial Natural History', *Studies in Romanticism* 43/1 (2004) pp. 6, 12.

This examination of expressions of Britishness within the discourse surrounding charismatic mammals in late-eighteenth and early-nineteenth-century British popular natural history literature is organised into two parts, each containing three chapters. Part one, entitled 'Animals of Britain', investigates how the spatial and temporal locating of animals within Britain helped to reaffirm understandings of modern Britishness that reinforced the superior status of the wealthier strata of British urban society whilst distancing those groups within Britain that did not conform to these expectations. Comparatively, part two, entitled 'Animals beyond Britain', examines how the late-eighteenth and early-nineteenth-century British popular natural history discourse surrounding animals from across the world, especially within Britain's imperial territories in America, southern Africa and India, helped to configure a sense of modern Britishness, achieved through comparisons between the British and a range of continental and colonial others, creating a hierarchy of civilisations with the British at its apex.

Chapter one, 'Animals of Britain's Past', explores how the temporalisation of the wolf, the red deer and the mastiff within Britain's past helped to communicate notions of modern Britishness, underpinned by societal progress. It highlights how the disappearance of the wolf in different parts of Britain at different times helped to reaffirm notions of progress over time, which conceptually distanced the Scottish Highlands and Ireland, where the wolf had only recently disappeared, from the rest of Britain, a status that extended from the animal to the landscape and the local inhabitants of these spaces. The decline of the red deer, and its continuing presence in Scotland, helped to reinforce these ideas but the romantic connotations attached to it, informed by a growing appreciation for the Scottish Highlands following the Highland Revival, helped to reconfigure it as a potent symbol of Britain's glorious past. The discourse surrounding the mastiff in Britain is also analysed to reveal how this breed's historical associations with the English were recontextualised within modern Britain and presented as an embodiment of the enduring British national character.

Chapter two, 'Animals of Contemporary Britain', examines the discourse surrounding British domestic sheep and cattle breeds in late-eighteenth and early-nineteenth-century British popular natural history to reveal how constructions of these animals helped to reinforce conceptions of the British national character as modern, ingenious, industrious and enterprising. It demonstrates how new, 'improved' breeds were tied to the contemporary British landscape and how this modern status was extended to the human inhabitants of these spaces. It further highlights how the 'improvement' of 'native' and imported, foreign breeds by the British were seen to exemplify British superiority and were

integrated into narratives of British skill and national prestige, presenting a progressive sense of British modernity that would inevitably extend across the whole country.

Chapter three, 'Animals of Britain's Future', examines the discourse surrounding animals identified as candidates for naturalisation in Britain and focuses specifically on the muskox, the nilgai and the angora and cashmere goats. It demonstrates how the justification for naturalisation, or acclimatisation as it was later known, was largely founded on economic arguments but was also informed by imaginings of landscapes and human-animal relationships beyond Britain, which were compared to those in Britain. The case studies provide insights into the conceptualisation of animals within the British popular natural history discourse on naturalisation and explain how imaginings of these animals within Britain helped to reinforce the temporal divisions that already existed between regions of Britain whilst also configuring a particular sense of national identity that centred round the urban middling classes.

Chapter four, 'Savage Beasts and Savage Men', examines the discourses within British popular natural history surrounding goats, reindeer, elephants, mouflon, wolves, the megaloceros and the mastodon, to demonstrate how these animals were spatially and temporally located in territories across the globe and how animals, landscapes and people beyond Britain were temporalised through the presence of animals and their associated relationships. It further illustrates how territories and societies were often conceptually distanced, aligned or conflated based on the presence of specific animals in their localities and the nature of their human-animal relationships. A case study on the European and the American bison follows these discussions to capture the processes within this mechanism, that operated at a global level, helping to demarcate wild and civilised spaces across the globe, to classify human societies and to reaffirm imaginings of British national identity, grounded in claims of modernity and superiority.

Chapter five, 'Monarchs and Marauders', examines the British popular natural history discourse surrounding large predators to reveal how these animals were imagined to contest human dominion over space, an expression of modernity which allowed conceptions of British superiority to be configured against the imagined inferiority of national, cultural and racial others. It further demonstrates how the monarchic status bestowed on some large predators, which granted them an innate authority over their environment, and their perceived abundance across extensive, geographical ranges, which was often construed as infestation, combined to challenge human supremacy over territory so that the removal of predators was seen as a necessary part of the civilising process and, therefore, as an indicator of an advanced society. Following an initial discussion on a

broad range of large predators, case studies on the wolf and the tiger are used to illustrate how notions of modern Britishness were reaffirmed within the contexts of Continental Europe and Colonial India. Whilst the wolf's enduring presence in parts of Europe helped to demarcate the borders of its civilised territories, presenting the British as more modern than their continental counterparts, the tiger helped to reaffirm perceptions of the inability of Britain's Indian, colonial subjects to overcome this predator, against which the British were configured as modern, competent and capable.

Chapter six, 'The Treatment of Animals and British National Identity', begins by examining the British popular natural history discourse surrounding the bulldog and domestic cattle to reveal how understandings of blood sports as backward and immoral, were informed by Christian morality and projected upon the animals and the people associated with them, these temporalising processes serving to reaffirm the modernity and superiority of the British urban middle classes. Following this, an examination of the discourse surrounding the treatment of cattle by the Khoekhoen people of southern Africa demonstrates how some societies outside of Britain were commended by the British for their human-animal relationships, in spite of their perceived inferior status. A case study analysing the discourse surrounding the brahmin bull further investigates how the Hindu veneration of this animal was seen, by the British, to challenge the limits of permissible animal treatment because it was considered by them to be irrational, superstitious, despotic and atavistic, a judgment that reinforced the temporal distance between the British and their Indian, colonial subjects. The conclusion will provide a summary of findings followed by a discussion of patterns and trends, the limitations of the study and the identification of further research opportunities.

Part One:

Animals of Britain

Chapter One:

Animals of Britain's Past

Whether focussing on animals from across the world or on species found specifically in Britain, British popular natural history literature of the late eighteenth and early nineteenth centuries played an important role in the conceptualisation of a unique animal community that helped to define Britain through its distinct composition of species. These ideas reflected broader, contemporary, European, scientific thought, strongly influenced by the concept of the 'economy of nature', first articulated by Linnaeus in his 1749 essay, *Oeconomia Naturae*, which helped to popularise the placement of animals within geographically-defined, biological communities that existed in relatively stable states of equilibrium.[106] Indeed, Linnaeus' ideas, although operating within understandings of relatively static, divinely-ordained animal communities, helped to lay the foundations for what would later be termed 'ecology' in 1866.[107]

Linnaeus' initial conceptions of the economy of nature emphasised a certain harmony between individual species within a specific environment, based on their fundamentally cooperative relationships. However, as the eighteenth century progressed, tensions began to emerge within this model following more detailed observations of the natural world and more extensive geological investigations, which raised questions regarding this so-called stability of nature.[108] Indeed, by the early nineteenth century, when notions of deep time were beginning to permeate discussions surrounding the age of the earth and the relationships between living species and fossil remains, naturalists were increasingly encouraged to view the world's biota as dynamic and susceptible to change, particularly following the publication of Sir Charles Lyell's *Principles of Geology* between 1830 and 1833.[109]

However, as the language of natural theology continued to dominate British popular natural history literature well into the early nineteenth century, the plasticity of the natural

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[106] T. Pearce, '"A Great Complication of Circumstance"- Darwin and the Economy of Nature', *Journal of the History of Biology* 43/3 (2010) pp. 495, 500-501.
[107] See: R. Stauffer, 'Ecology in the Long Manuscript Version of Darwin's "Origin of Species" and Linnaeus' "Oeconomy of Nature"', *Proceedings of the American Philosophical Society* 104/2 (1960) pp. 235-241; F. Egerton, *Roots of Ecology: Antiquity to Haeckel* (Berkeley, 2012) pp. 80-84.
[108] See: F. Egerton, 'History of Ecological Sciences, Part 34: A Changing Economy of Nature', *Bulletin of the Ecological Society of Nature* 91/1 (2010) pp. 21-41.
[109] See: D. Wilkinson, 'Ecology before Ecology: Biogeography and Ecology in Lyell's "Principles"', *Journal of Biogeography* 29/9 (2002) pp. 1109-1115.

environment, including its effects on the composition of species at both local and global levels, was rarely discussed in British popular natural history until the mid-nineteenth century. Nevertheless, popular natural history authors did present animal communities as susceptible to change and often highlighted that human activity was the key mechanism impacting the presence of a species within a given area. Although the concept of extinction only became widely accepted in European scientific circles at the end of the eighteenth century, through the writings of Georges Cuvier, British naturalists had long recognised the decline, and in some cases the complete disappearance, of some species within Britain as a product of human actions. Consequently, the presence of animals was explicitly linked to humans and temporalised.

The impact of human activity on animal presence within localities was frequently observed, interpreted and historicised within a broader narrative of human development, influenced by stadial models of societal evolution advocated by enlightenment thinkers, particularly those of the Scottish Enlightenment.[110] These theoretical frameworks sought to conceptualise the development of human societies in universalist terms, characterising the evolution and development of human societies as a series of transitions presented as distinct, lineal stages of 'civilisation'. The number of developmental stages and their defining criteria tended to vary across theorists but the framework posited by the Scottish enlightenment thinker and economist, Adam Smith, typified the nature of these stadial models, with Smith presenting the development of human civilisation as a lineal progression from hunter-gathering to pastoralism, then agriculturalism and finally commercialism, the stage which he ascribed to modern, contemporary, British society.[111]

These conceptualisations of human history were strongly underpinned by the general acceptance that increasing mastery over the natural world was fundamental for the progress of human societies, as the capacity of a society to manage and utilise natural resources was one of the key criteria for measuring progress within taxonomies of human development. Through these processes, the economy of nature became intertwined with ideas of political economy, reinforcing the temporalisation of specific animals, the landscapes they inhabited and the people who also resided there, locating them all within a specific stage of societal development. Consequently, in order to present the decline or recontextualisation of certain animals in Britain as an illustration of Britain's transition into

[110] C. Jacques, 'From Savages and Barbarians to Primitives: Africa, Social Typologies, and History in Eighteenth-Century French Philosophy', *History and Theory* 36/2 (1997) pp. 202-203.
[111] H. Hodacs, 'Globalising the savage: From stadial theory to a theory of luxury in late-18th-century Swedish discussions of Africa', *History of the Human Sciences* 32/4 (2019) pp. 101-103.

a more modern, civilised nation, a discontinuity needed to be articulated between the animals, landscapes and people of Britain's past and those of contemporary Britain. Indeed, authors of late-eighteenth and early-nineteenth-century British popular natural history articulated these discontinuities through their commentaries on the disappearance or eradication of some native species from the British landscape and their recontextualisation of other species through descriptions of their changing human-animal relationships with the British people.

These notions of progress were also central to contemporary representations of the British national character as civil, commercially-minded and modern, a configuration, which favoured the metropolitan propertied classes and extended the parameters of Anglocentric national identity to include the Welsh and the Scots within a broader understanding of Britishness. However, the temporalisation of animals in British popular natural history, which confined certain species to Britain's past and its more peripheral territories, demonstrated an internal disunity within these understandings of Britishness. Indeed, through accounts of the disappearance of specific animals at different times from certain areas of Britain, varying rates of societal development emerged, which helped to exclude some populations from hegemonic conceptions of Britishness that were grounded in the language of modernity and civility. This was most apparent in the case of non-English populations, such as the Highland Scots and the Irish, who were placed at an earlier stage of development, characterised as backward or barbarous and, in the case of Ireland, conceptualised more as colonial subjects than as a member of the modern, British nation.

By the start of the nineteenth century, the growing influence of Romanticism had also begun to impact how some species were understood and presented within works of British popular natural history. Narratives of progress and modernity did not sit easily with more romantic, nostalgic notions of Britain's natural landscape and its glorious past, which iconised species, such as the red deer, whose gradual decline had otherwise been celebrated as a sign of Britain's transition into a more modern, civilised nation. When viewed through this romantic lens, conflicting messages surrounding some species began to emerge and animals that had formerly, and rather negatively, been confined to the past by popular natural history authors, as a sign of British progress and modernity, were now more positively reconfigured as a source of British pride, emanating from nostalgic conceptions of the nation's glorious past.

This chapter will use three case studies of the wolf, the red deer and the mastiff to explore how the representation of animals of Britain's past in late-eighteenth and early-nineteenth-century British popular natural history helped to reinforce conceptions of

Britishness centred round ideas of progress and modernity, informed by narratives of stadial development. It will begin by examining how the eradication of the wolf from certain areas of Britain at significantly different times helped to cement ideas of British progress and to demarcate Britain's internal and external borders. It will then investigate how attitudes towards the decline of the red deer in Britain, initially informed by ideas of stadial development, changed following the romantically-inspired Highland revival, which encouraged an increasing appreciation for the Scottish Highlands. Finally, it will illustrate how the mastiff's historical associations with the English were recontextualised within a modern location to reinforce its status as a faithful defender of property and an embodiment of the enduring British national character.

All but exterminated:
the eradication of wolves in Britain

The eradication of the wolf in Britain, as discussed in late-eighteenth and early-nineteenth-century British popular natural history, usefully illustrates how the removal of undesirable species was seen to reflect Britain's societal progress. By the end of the fourteenth century, the wolf had largely disappeared from England due to the growing aristocratic hunting culture that had emerged following the Norman conquest, centring round the pursuit of deer and encouraging the persecution and eradication of the wolf as the main predator of this precious quarry.[112] However, the wolf had endured in some areas of the British Isles, surviving in Scotland until the closing decades of the seventeenth century and, according to credible records of wolf encounters, remaining in Ireland until as late as 1786, when the species finally disappeared through a mixture of systemic persecution and habitat destruction.[113] Nevertheless, by the latter half of the eighteenth century, the most likely way to encounter wolves in Britain was through taxidermy specimens, such as the one in the Leverian Museum and via live animals kept as exotic pets or on display in menageries and, later, zoological gardens (see figures 14 and 15), with specimens often imported from America through trade networks maintained by the Hudson's Bay Company.[114]

[112] A. Pluskowski, 'The Wolf' in T. O'Connor and M. Sykes (eds.) *Extinction and Invasions: Asocial History of British Fauna* (Oxford, 2010) pp. 71-74.
[113] K. Hickey, 'A geographical perspective on the decline and extermination of the Irish wolf *Canis lupus*- an initial assessment', *Irish Geography* 33/1 (2000) pp. 196-197; K. Hickey, *Wolves in Ireland: A Natural and Cultural History* (Dublin, 2013) pp. 101-107.
[114] Bennett, *Tower* pp. 95-96.



Figure 14: Skelton's engraving of the taxidermy wolf on display at the Leverian Museum, based on Ryley's depiction, from Shaw's Museum Leverianum *(London: James Parkinson, 1792, source: Wikimedia Commons).*

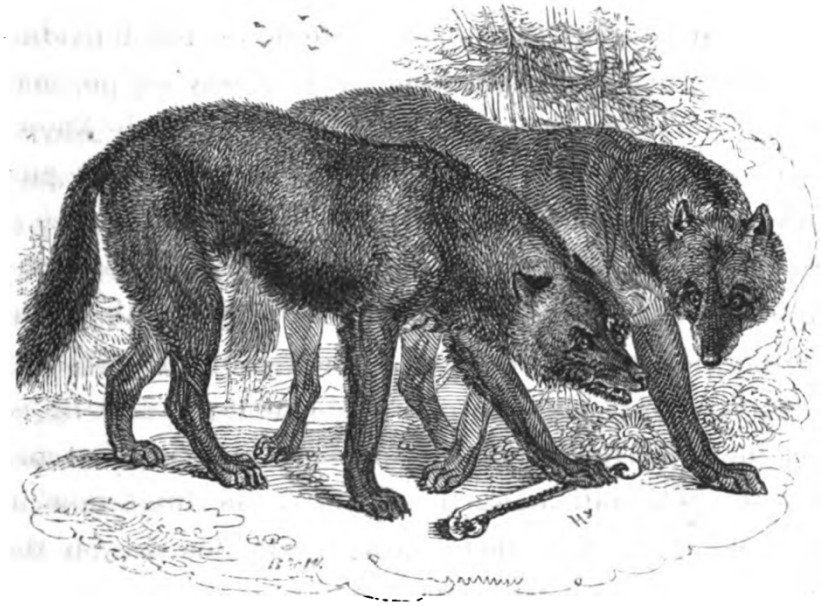


Figure 15: William Harvey's engraving of a pair of 'Clouded Black Wolves', from Bennett's The Tower Menagerie *(Chiswick: Charles Whittingham, 1829, source: Google Books).*

Ritvo reflects that 'the extermination of wolves in Great Britain, along with such other unruly creatures as bears and wild boars, was routinely adduced as evidence of the

triumph of insular (as opposed to continental) civilisation in the early modern period'.[115] Indeed, such attitudes can be seen in Smellie's translation of Buffon, in which he light-heartedly derides the latter's insistence that wolves could still be found in northern Scotland, stating in an annotative footnote that 'it is universally known to the inhabitants of Scotland, that not a single wolf has been seen in any part of that country for more than a century past'.[116] Clearly, to Smellie, the prospect that any wolves might survive in Britain at all was fundamentally absurd. Smellie's discussion drew explicitly on Thomas Pennant's challenge to Buffon in his *British Zoology*, which highlighted that wolves had been a major problem in England during Anglo-Saxon times but had disappeared in the ensuing centuries.[117]

Whilst British popular natural history frequently and explicitly juxtaposed the eradication of wolves in Britain with their continuing existence in both Europe and the wider world, it also highlighted how the species had disappeared from different territories in Britain at different times, which helped to construct a dialogue of internal difference based on unequal levels of societal progress. This is not surprising considering the enduring presence of the wolf, as an animal adversary, in the British cultural imagination, a status maintained through sensationalised descriptions, by British travel writers, of violent encounters with wolves in Continental Europe and America.[118] For instance, whilst contemporary imaginings of Scotland placed it firmly within the British union, in line with the country's political status, the enduring presence of wolves in Scotland until the 1680s helped to reinforce ideas of Scottish backwardness and reaffirmed Scotland's status as a junior partner within the union. Similarly, the more recent survival of wolves in Ireland helped to reinforce the status of the Irish as a foreign, continental other and to distance them from contemporary conceptions of modern Britishness.[119]

For instance, Pennant pointed out that the last wolves in Scotland were not killed until around 1680 and that the species 'infested *Ireland* many centuries after their extinction in *England* for there are accounts of some being found there as late as 1710', referencing Charles Smith's *History of Cork*.[120] These two dates were reiterated in many later works

[115] H. Ritvo, 'Beasts in the jungle (or wherever)', *Dædalus* 137/2 (2008) p. 23.
[116] G. Leclerc, Comte de Buffon (trans. W. Smellie), *Natural History, General and Particular, Vol. IV* (London, 1791) p. 210.
[117] Pennant, *British Zoology, Vol. I* p. 64.
[118] S. Goldsmith, *Masculinity and Danger on the Eighteenth-Century Grand Tour* (London, 2020) pp. 202-203; Bennett, *Tower* pp. 95-96.
[119] For more information on English perceptions of Irish backwardness, see: K. Thomas, *In Pursuit of Civility: Manners and Civilisation in Early Modern England* (New Haven, 2018) pp. 191-196, 198-199, 211-213.
[120] Pennant, *British Zoology, Vol. I* p. 64.

of British popular natural history, with Bilby explaining that wolves had 'infested Ireland many centuries after their extinction in England' and that 'the last presentment for killing Wolves was made in the county of Cork about the year 1710'.[121] The disappearance of the last wolves in England, Scotland and Ireland was frequently celebrated by contrasting this situation with the species' enduring presence in Europe, France being the most common example of a nation whose population still lived in fear of wolf attacks. Indeed, Mavor commented explicitly that 'France, Spain, and Italy, are much infested by these animals, which, indeed, are diffused over many parts of the world; but Great Britain and Ireland are happily delivered from their presence', elaborating that 'the last wolf was killed in Scotland in 1680… and, in Ireland, one is mentioned to have been destroyed so late as 1710'.[122]

This memetic discourse regarding the disappearance of the wolf from Britain continued well into the nineteenth century, with Shoberl proudly explaining that 'the British islands are almost the only portions of Europe in which the wolf has been exterminated' but also remarking that, in the past, the animal had 'infested' England. He also noted that 'in Scotland, the last wolf was killed in the latter end of the 17th century… and in Ireland the race was not entirely extirpated till about the year 1710'.[123] Knight similarly pointed out that the wolf had once been 'abundant in the British Islands, and the plague and terror of the country' but had disappeared in England by the end of the thirteenth century, although he was quick to point out that 'in Scotland and Ireland, the wolf [had] remained for a considerable period longer'.[124]

[121] T. Bewick, *A General History of Quadrupeds,* Fourth Edition (Newcastle upon Tyne, 1800) p. 318.
[122] W. Mavor, *Natural History for the use of Schools* (London, 1800) pp. 70-71.
[123] F. Shoberl, *Natural History of Quadrupeds, Volume 1* (London, 1834) pp. 50-51.
[124] C. Knight, *Knight's Pictorial Museum of Animated Nature, Vol. I* (London, 1844) p. 203.

The red deer:
disappearance, progress and nostalgia

The gradual disappearance of Britain's native red deer, or 'stag', was frequently presented in late-eighteenth and early-nineteenth-century British popular natural history as an indicator of Britain's progress and societal development, in line with stadial models of human progress articulated by enlightenment thinkers, such as Adam Smith, John Millar and William Robertson. However, by the 1830s, following the Highland revival of the early nineteenth century, the human-animal relationships formerly associated with the red deer were increasingly viewed nostalgically as part of Britain's romantic past. This shift in emphasis from enlightenment to romanticism within the discourse surrounding the red deer usefully illustrates how the complex and interdependent nature of English, Scottish and broader British identities was highlighted within conceptions of progress in the popular natural history of this period. More specifically, it reveals how people were accepted or rejected and how national belonging was extended or restricted according to how far societal groups were considered to be representative of the modern British national character.

Pennant's discussion surrounding the red deer in his *British Zoology* charted its presence in Britain over time, stating that, in the island's ancient past, red deer 'had this whole island for their range; they knew no other limits than that of the ocean; nor confessed any particular master'.[125] He further explained that, during the days of the Anglo-Saxon Heptarchy, the hunting of red deer was 'reserved by each sovereign for his own particular diversion: hunting and war in those uncivilised ages were the only employ of the great; their active, but uncultivated minds, being susceptible of no pleasures but those of a violent kind, such as gave exercise to their bodies, and prevented the pain of thinking'.[126] In these extracts, Pennant firmly ties the prevalence of the red deer and its status as a beast of chase to Britain's past and, through his disparaging assessment of the Anglo-Saxon hunting elite, clearly places this hunting culture within an earlier stage of societal development alongside the animal's abundance in Britain, temporalising this relationship and reinforcing ideas of stadial progress.

According to Pennant, under Norman rule, 'this passion for the chase was carried to an excess, which involved every civil right in a general ruin: it superseded the consideration of religion even in a superstitious age', with homes and churches alike 'turned into one

[125] Pennant, *British Zoology, Vol I* pp. 35-36.
[126] Pennant, *British Zoology, Vol I* p. 36.

vast waste, to make room for animals, the objects of a lawless tyrant's pleasure'.[127] Evocations of the 'Norman Yoke' had frequently formed an important element of English discussions regarding national progress from as far back as the sixteenth century and Pennant's remarks certainly maintained the narrative that English liberty had re-emerged following the dissolution of the oppressive, medieval, feudal systems of power, imposed by the Normans during their conquest of England. Although historians have generally recognised that the Norman Yoke was more potently invoked by writers in the seventeenth and nineteenth centuries, narratives of Norman oppression were also commonly integrated into broader, Anglocentric narratives of societal development in Britain by eighteenth-century enlightenment writers.[128] Consequently, within these developing narratives, notions of English identity were absorbed, constructed and reconstrued over time to inform imaginings of British modernity, underpinned by stadial models.

Pennant's lack of engagement with 'Saxonism' in his construction of Norman tyranny contrasted sharply with the works of contemporary Scottish enlightenment writers, such as David Hume, John Millar and William Robertson, who regularly re-construed the Scots as Germanic or Teutonic rather than Celtic, in order to integrate them into a distinct sense of British liberty, grounded in English, 'Saxon' notions of freedom.[129] Comparatively, Pennant, a member of the anglicised Welsh gentry, expressed his Celtic, English and British sentiments fairly fluidly across his writings. As Constantine and Leask observe, within the context of his travel writing, Pennant's own sense of identity 'fluctuated between unselfconscious identification with England… and a deep-felt Welshness', which manifested at times as conflicting feelings of 'Celtic *filiation*' and 'British *affiliation*' and permitted 'the emergence of a 'transperipheral' vision that… [competed] with the improving metropolitan perspective that elsewhere… [dominated] his narrative'.[130]

By presenting the human-animal relationships between England's Norman rulers and the red deer as unjust and tyrannical, Pennant favourably emphasised the modern status of the red deer in Britain. Furthermore, through an informed timeline of evolving interactions with the red deer, which connected its modern status to its ancient origins, Pennant

[127] Pennant, *British Zoology, Vol I* p. 36.
[128] S. Brownlie, *Memory and Myths of the Norman Conquest* (Woodbridge, 2013) pp. 112-120.
[129] M. Pittock, 'Historiography' in A. Broadie *The Cambridge Companion to the Scottish Enlightenment* (Cambridge, 2003) pp. 256-258; for similar conceptualisations of the Scots as Germanic rather than Celtic within the late-eighteenth-century literary discourse on Ossian, see K. McNeil, *Scotland, Britain, Empire: Writing the Highlands, 1760-1860* (Columbus, 2007) pp. 32-41.
[130] M. Constantine and N. Leask, 'Introduction: Thomas Pennant, Curious Traveler' in M. Constantine and N. Leask (eds.) *Enlightenment Travel and British Identities: Thomas Pennant's Tours in Scotland and Wales* (London, 2017) p. 3.

highlighted how British society had developed across time. For example, he pointed out that, compared to their Norman predecessors, later medieval barons claimed 'a vast, but more limited tract for a diversion that the *English* were always fond of', upholding the narrative of resurging English liberty following Norman usurpation and creating a stepping stone towards the more modern confinement of red deer in Britain to deer parks.[131] Indeed, Pennant characterised the relationship between the decline of the red deer in Britain and societal progress as inversely proportional, presenting the contemporary confinement of red deer to deer parks as a product of the culmination of economic, agricultural, cultural, legal and constitutional reforms, which were deeply intertwined with notions of modernity and progress:

> When property became happily more divided by the relaxation of the feodal [feudal] tenures, these extensive hunting-grounds became more limited; and as tillage and husbandry increased, the beasts of chase were obliged to give way to others more useful to the community. The vast tracts of land before dedicated to hunting, were then contracted, and in proportion as the useful arts gained ground, either lost their original destination, or gave rise to the invention of Parks. Liberty and the arts seem coeval, for when once the latter got footing, the former protected the labours of the industrious from being ruined by the licentiousness of the sportsman, or being devoured by the objects of his diversion: for this reason, the subjects of a despotic government [such as those of the German princes] still experience the inconveniences of vast wastes, and forests, the terrors of the neighbouring husbandmen; while in our well-regulated monarchy, very few chances remain: we still indulge ourselves in the generous pleasure of hunting, but confine the deer-kind to parks, of which *England* boasts of more than any other kingdom in Europe. Our equal laws allow every man his pleasure; but confine them in such bounds, as prevents them from being injurious to the meanest of the community.[132]

Indeed, the red deer's status as a pest species, due to the damage they caused to crops, was a principal reason for their general decline in England and their confinement to parks during the eighteenth century, a trend that Pennant integrates into a broader narrative of societal progress, the removal of this pest species directly tied to notions of increasing

[131] Pennant, *British Zoology, Vol I* p. 36.
[132] Pennant, *British Zoology, Vol I* pp. 37-38.

economic prosperity.[133] However, it is important to recognise here that Pennant's claims of expanding liberties and freedom, illustrated through an increasing opportunity to hunt deer, was still very much restricted to those that had the means and property to maintain animals for use in sport. Indeed, the game laws, which had restricted the hunting of game through property and income qualifications, were not fully repealed until 1831, and although deer had been removed from this legislation in 1671, their reclassification as private property meant that those caught taking deer without the landowner's permission faced strict penalties, including transportation for seven years, as their actions constituted theft rather than poaching. As P B Munsche explains, this shift in classification extended sporting rights 'to a much larger and socially diverse body of landowners' but restricted sport 'to the land of those whose permission had been obtained', increasing the severity with which the law treated the unapproved taking of deer.[134] Through this shifting human-animal relationship between the red deer and the British people, Pennant's conceptions of extended liberty demonstrate how this modern, distinctly British sense of freedom was largely confined to those with property and means.

Pennant's framing of the restriction of red deer in England to deer parks as part of a broader, historical process of societal progression, promoted a certain sense of restrained English liberty that could easily be projected on to the British national character. Similar approaches are evident in the work of Scottish enlightenment thinkers, who often subsumed contemporary, Lowland Scottish society into the broader, national narrative of British modernity and progress, grounded in English history.[135] Pennant's narrative surrounding the red deer was certainly reiterated by other late-eighteenth-century popular natural history authors, such as Oliver Goldsmith in his 1774, *A History of the Earth and Animated Nature*, who presented the disappearance of the red deer from Britain as a sign of the nation's social, legal, cultural and economic modernity, directly drawing on Pennant's discussion of the red deer in his *British Zoology*.[136]

With multiple editions of both Pennant's and Goldsmith's works extending well into the nineteenth century, it is not surprising that the sentiments they presented were preserved and that they continued to inform discussions surrounding the red deer in later works of popular natural history. In Bewick's *Quadrupeds*, for instance, Bilby situated the changing

[133] J. Fletcher, *Gardens of Earthly Delight: The History of Deer Parks* (Oxford, 2011) pp. 192-196.
[134] P. Munsche, *Gentleman and Poachers: The English Game Laws 1671-1831* (Cambridge, 1981) p. 114.
[135] Pittock, 'Historiography' pp. 256-257.
[136] T. Brown (ed.), *Goldsmith's History of the Earth, and Animated Nature, Vol. II* (Manchester, 1816) pp. 308-310.

relationship between the red deer and the British people within a strong narrative of Britain's development into a civilised nation, founded on ideals of personal liberty, industriousness and commerce. Pennant's influence is particularly apparent in the contrasts drawn by Bilby between the destruction of villages and churches under William the Conqueror to produce 'one wide waste, that the tyrant of the day might have room to pursue his favourite diversion' and the gradual contraction of these 'wide-extended scenes of desolation and oppression' because agriculture and commerce had 'extensively spread themselves over the naked land; and these superior beasts of the chase… [had] given way to other animals more useful to the community'.[137]

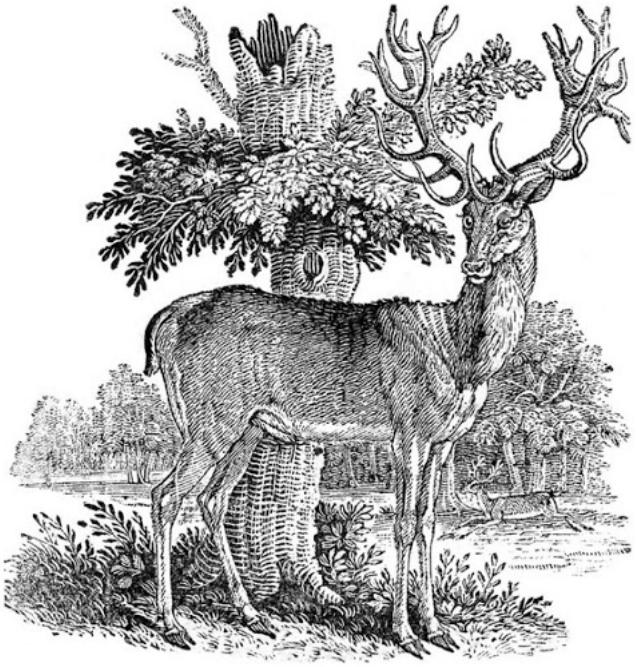


Figure 16: Bewick's red deer from his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*

Bingley, in his *British Quadrupeds*, similarly presented the gradual decline of the red deer in Britain as a product of societal development, explaining that 'when property became, happily, more divided by the relaxation of the feudal tenures, the hunting grounds also became more limited; and as tillage and husbandry increased, beasts of chase were obliged to give way to others more useful to the community'.[138] Shoberl's description also echoed elements of Pennant's initial template, with the former outlining William the Conqueror's destruction of villages and churches in the creation of deer forests before

[137] Bewick, *Quadrupeds* p. 139.
[138] W. Bingley, *Memoirs of British Quadrupeds*, (London, 1809) pp. 326-327.

concluding that, 'with the progress of civilisation and agricultural improvement, the number of red deer in Great Britain has gradually diminished'.[139]

By directly tying the disappearance of the red deer in Britain to ideas of lineal, societal progress, British popular natural history innately confined the animal's existence to the past, or at least to those landscapes that were understood to exist in pre-modern states of cultivation. Conceptually, the animal's extinction as a wild species in Britain was accepted as an inevitable necessity that helped to qualify the transition of the British landscape from wild to cultivated, in line with perceived, rational, economic and agricultural improvements. Consequently, Britain could only advance as a modern nation if the red deer, along with those animals that were similarly understood to inhabit uncultivated spaces, disappeared from the British landscape.

Bilby offered some justification for the decline of the red deer, asserting that it was 'almost unknown in its wild state' in modern Britain and that 'its viciousness during the rutting season, and the badness of its flesh, which… [was] poor and ill-flavoured… [had] occasioned almost the extinction of the species', with many deer parks preferring fallow deer due to their more manageable temperament, better taste and more aesthetically pleasing features.[140] Shaw doubted Pennant's claim that the species was 'still found in a state of nature in the Highlands of Scotland', explaining that 'in reality it… [had] been in a great degree expelled from most parts of the kingdom to make way for the common or Fallow Deer, the venison of which is far superior to that of the Stag, and the animal itself of a more placid and manageable disposition'.[141] These statements served to present the red deer as outmoded and the fallow deer as superior, with the latter increasingly replacing the former, in line with the contemporary narratives of improvement associated with British modernity.

Whilst the disappearance of the red deer from most of Britain was perceived as an indicator of societal progress, its enduring presence in some areas was conversely understood to signal backwardness and a lack of cultivation. Consequently, areas still inhabited by the red deer, which included the Scottish Highlands, Cornwall and the New Forest, were presented as peripheral territories of Britain. In the Scottish Highlands, for example, where substantial populations of red deer were still observable to contemporary writers, the presence of these wild animals indicated the pre-modern status of the landscape. This, in

[139] Shoberl, *Quadrupeds, Volume I* pp. 101, 104.
[140] Bewick, *Quadrupeds* p. 140.
[141] G. Shaw, *General Zoology or Systemic Natural History, Vol II Part 2* (London, 1800) p. 278.

turn, helped to inform the societal stage of the human population residing in this landscape, which largely confirmed the pre-existing, metropolitan conceptions of the Scottish Highlanders as peripheral and pre-modern. These taxonomies of difference aided the drawing of boundaries, demarcating national belonging in Britain based on the inclusion or exclusion of specific groups.

Pennant's statement that the red deer hunting parties of the past, assembled by Highland chieftains, were comparable to 'the magnificence of an eastern monarch' instantly exoticised Scotland's Highland, Gaelic-speaking minority, allowing them to be excluded, through the temporalisation of their relationship with the red deer, from conceptions of Britishness that were defined by Anglocentric modernity.[142] Indeed, these ideas proliferated within the red deer discourse across late-eighteenth and early-nineteenth-century British popular natural history and further illustrate how the human-animal relationships established between the red deer and the Highlander, grounded in conceptions of wildness, lack of cultivation and exoticism, encouraged the temporalisation and conflation of projected imaginings.

Popular natural history authors further distanced the Scottish Gaels from metropolitan conceptions of Britishness by contrasting ideas of liberty, attached to Anglocentric modernity, with examples of temporalising despotism. MacGillivry, for instance, reflected that, compared to the extensive game laws of the Norman kings, 'the proprietors in the north of Scotland were scarcely less tyrannical thirty or forty years ago, and I have heard of instances of despotism connected with this animal that would sound strangely in the ears of Englishmen of the present day'.[143] Similar comparisons were drawn by other Scottish popular natural history authors, such as Aikman, who remarked that 'when the game laws were in perfection in England, during the reigns of William Rufus and Henry I., it was less criminal to destroy one of the human species than a beast of the chase; an absurdity not quite paralleled in in our own country by imprisoning a man for shooting a hare'.[144]

Within British popular natural history of the late eighteenth and early nineteenth centuries, the enduring narrative of the gradual disappearance of the red deer from Britain, as an indicator of societal progress, continued to exclude certain groups, such as the Highland Scots, from British narratives of national belonging. However, by the 1830s, and with the

[142] Pennant, *British Zoology, Vol. I* p. 38.
[143] MacGillivry, *The Naturalist's Library, Vol. VIII, British Quadrupeds* p. 297.
[144] J. Aikman, *A Natural History of Beasts, Birds, & Fishes or Stories of Animated Nature* (London, 1852) p. 58.

growing influence of the Highland revival, the discourse surrounding the red deer's decline in Britain became increasingly infused with a sense of melancholic loss amidst a broader, national context of romantic nostalgia for a pre-modern age. As it is generally agreed that the Enlightenment and the Romantic movements inhabited the same historical moment in Britain, constructions of the red deer within British popular natural history invariably contained both enlightenment and romantic sentiments but, as the nineteenth century progressed, a gradual and complex shift of emphasis occurred, which prioritised the romantic elements within the red deer discourse.

This situation had gradually emerged following the defeat of the Jacobite uprising in 1745, the subsequent dissolution of the clan system and the confiscation of the estates of rebel chieftains by the British state. As part of a broader, metropolitan-led programme of 'civilising' the Scottish Highlands, the Board of the Annexed Estates was created and tasked with managing and improving the agricultural and economic output of the seized estates. This constituted a form of internal colonisation that aimed to integrate the Scottish Highlands into a larger, British system of commerce, capital extraction and political control through the dismantling of local power structures based on clanship, the extension of infrastructure and the sponsorship of individual landowners' improvement projects.[145] Many Scottish landowners eagerly embraced the drive for improvement not only for the potential profits that could be reaped but also to ingratiate themselves, through their ideological performance of improvement, with the broader British, metropolitan elite. As Fredrik Albritton Jonsson observes, 'the improvement ideology involved not just a search for profits but also a form of political action and cultural consumption, regarded as a vehicle to higher social status within polite society'.[146]

Although late-eighteenth-century, Scottish natural history and travel writers, including Pennant, generally embraced British narratives of Highland agricultural and commercial improvement, they tended to evaluate the Scottish environment and its natural resources in terms of how local, agricultural practices and industries could be enhanced through the efforts of external improvers.[147] For example, many of the most prominent, Scottish advocates of Highland improvement, such as Lord Kames, couched their modernisation rhetoric in syncretic terms that challenged conceptions of the Highlands as innately backward and resisted the need for this area to be subsumed into a broader, British system of agriculture.[148] This strong claim to uniqueness within this discourse of improvement and

[145] F. Jonsson, *Enlightenment's Frontier: The Scottish Highlands and the Origins of Environmentalism* (New Haven, 2013) pp. 13-17, 20-21, 30-36.
[146] Jonsson, *Enlightenment's Frontier* p. 46.
[147] Jonsson, *Enlightenment's Frontier* p. 46.
[148] Jonsson, *Enlightenment's Frontier* pp. 12, 28, 33.

modernisation supported the Highlands' status as an entity in its own right and contested its classification as a backward area of Britain needing to be integrated into a broader, homogenised British sense of modernity.

By the late eighteenth century, the hostility towards Highland culture and the Highland landscape, formerly encountered within British metropolitan circles, had begun to soften as internal colonisation efforts had helped memories of the 1745 uprising to fade and Gaelic, political and economic autonomy to wither. By the 1780s, the confiscated lands of the Highland elite had largely been returned to the families that had previously owned them and many of the laws that had prohibited highland dress and customs had been repealed.[149] In the literary sphere, the growing influence of Romanticism helped to encourage re-evaluations of the Gaels as a heroic, warrior-people through works such as Macpherson's collation of the Ossian epics, originally published in the early 1760s but remaining popular into the nineteenth century, and the fiction of Sir Walter Scott, particularly his 1814 novel, *Waverly*.[150]

Whilst interest in Highland culture and traditions was largely spearheaded by Lowland Scottish writers and scholars, its positive reception was far from restricted to a Scottish audience and extended to the upper echelons of British society. This was most obviously demonstrated through King George IV's visit to Scotland in 1822, during which the British monarch engaged in a number of overt performances of so-called 'Highland primitivism', with Sir Walter Scott playing a major role in organising many of the tour's spectacles.[151] The 1820s and 1830s also saw the emergence of deer stalking, which had supplanted older methods of pursuit hunting from horseback, as a popular pastime among the British elite, with hunting accounts often presenting the sport romantically as a contest between the lone hunter (and their Highland guide) integrated into ritualised performances of British masculinity.[152] Indeed, by the 1830s and 1840s, British aristocrats were being increasingly drawn to the Highlands for deerstalking and bateau shooting and by the 1840s, a Highland tourism industry centring round the middle classes had begun to develop.[153]

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[149] S. Stroh, *Gaelic Scotland in the Colonial Imagination, Anglophone Writing from 1600 to 1900* (Evanston, 2017) p. 125.
[150] N. Leask, *Stepping Westward: Writing the Highland Tour c.1720-1830* (Oxford, 2020) pp. 133-135; M. Martin, *The Mighty Scot: Nation, Gender and the Nineteenth-Century Mystique of Scottish Masculinity* (Albany, 2009) p. 10.
[151] Stroh, *Gaelic Scotland in the Colonial Imagination* pp. 126-128.
[152] Fletcher, *Gardens of Earthly Delight* pp. 235-236.
[153] Stroh, *Gaelic Scotland in the Colonial Imagination* pp. 132-134; T. Smout, *Nature Contested: Environmental History in Scotland and Northern England Since 1600* (Edinburgh, 2000) pp. 131-134.

Although it is tempting to conceptualise this rehabilitation of the Highlands within the popular consciousness as an expression of Scottish national sentiment, particularly as Highland dress and cultural practices increasingly served as potent symbols of Scottish national heritage, the Highland revival synergised quite easily with conceptions of modern Britishness. Indeed, the revival's construction represented a celebration of national heritage that was explicitly confined to a Highland identity of the past and rather than strengthening the Anglo-Scottish divide and challenging the political and cultural legitimacy of Britishness, it served to distance Scottish otherness and reinforce a sense of Scottishness that could more easily be subsumed into a broader understanding of modern Britishness. As Silke Stroh explains:

> 'distinctness from England had to be stressed in terms that did not renounce the status quo of post-Union Britain. It was thus expedient to locate Scottish distinctness in the *margins* of Scottish society - there was a separation between mainstream social practices on the one hand and an ideological celebration of the periphery on the other. The romanticization of the margins was largely confined to spiritual and moral issues. It was also heavily historicized: it seemed as if a progressive Scotland mainstream ran forward into the future while throwing affectionate backward glances over its shoulder to look upon a Highland culture doomed to obsoleteness'.[154]

By the early nineteenth century, constructions of the red deer in British popular natural history were increasingly influenced by the Highland revival and, consequently, the innate, romantic connections, expressed in earlier, late-eighteenth-century British popular natural history, were emphasised to reflect the growing, British sentimentalisation of the Scottish Gaels and the landscapes of the Highlands. This more romantic view of the red deer was clearly illustrated in Sir Edwin Landseer's *The Monarch of the Glen*, first exhibited at the Royal Academy in 1851, in which the red deer was depicted as a noble animal in a romantic, Highland setting, encapsulating British, popular imaginings that tied the red deer to the Highland landscape (see figure 17).[155] In this way, the red deer was increasingly conceptualised as what Peter Coates terms 'living heritage'; the investment of local fauna with national significance due to its assumed cultural importance.[156]

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[154] Stroh, *Gaelic Scotland in the Colonial Imagination* pp. 123-124.
[155] R. Ormond, *Sir Edwin Landseer* (Cambridge, 1982) p. 174; R. Ormond, *The Monarch of the Glen: Landseer in the Highlands* (Edinburgh, 2005) pp. 108-110.
[156] P. Coates, 'Creatures Enshrined: Wild Animals as Bearers of Heritage', *Past and Present* 10 (2015) pp. 272-298.



Figure 17: Sir Edwin Landseer's The Monarch of the Glen (1851, National Galleries of Scotland, NG 2881, source: Wikimedia Commons).

Pennant's engagement with romantic understandings of the red deer was evident in his *British Zoology*, when he remarked that the red deer inhabiting the mountains of Ireland, 'add greatly to the magnificence of the romantic scenery'. In his later travel narrative of his 1769 tour of Scotland, Pennant also referred to 'the magnificent stag-chases' conducted by 'powerful Chieftains' in 'former days', presenting this as a glorious practice of the past.[157] Despite highlighting the red deer's unsuitability for deer parks, owing to its wild and aggressive nature, Bilby romantically described the species as 'the most beautiful animal of the Deer kind' that possessed a 'decided pre-eminence over every other inhabitant of our forests' and acknowledged that 'the hunting of the Stag has been held, in all ages, a diversion of the noblest kind; and former times bear witness of the great exploits performed on these occasions'.[158] Mavor described the red deer as 'one of those mild, tranquil, and innocent animals, which seem created to adorn and animate the solitude of the forest: and to occupy, remote from the visits of man, the peaceful retreats of nature'.[159] These examples reveal how elements of the red deer's construction within an early discourse largely informed by enlightenment understandings, were romantically emphasised to reflect the animal's former status and noble character.

[157] Pennant, *British Zoology* Vo. I p. 39; T. Pennant, *A Tour of Scotland in 1769,* Fourth Edition (London, 1776) p. 195.
[158] Bewick, *Quadrupeds* pp. 135, 139.
[159] Mavor, *Natural History* p. 109.

As the nineteenth century progressed, the romantic notions within descriptions of the red deer were reinforced and the prevailing narratives surrounding the species were reconstrued to celebrate the animal's connection to Britain's romantic past. For example, Roberts repeated Pennant's claim that the Highland chieftains used to hunt red deer 'with the magnificence of eastern monarchs' and similarly referenced *The Chevy-Chase*, an English folk ballad that had been popularised by Bishop Thomas Percy in his 1765 *Reliques of Ancient English Poetry*, a major source of inspiration for British Romantic writers and artists of the nineteenth century.[160] However, Roberts located the red deer within a British past steeped in nostalgic romanticism, with the chieftains 'chasing the wild deer through their good green woods' with 'pomp and equipage', and her commentary of *The Chevy-Chase* was devoid of the scepticism regarding the truthfulness of the ballad's narrative seen in Pennant's earlier writing.[161] Indeed, Roberts' entry on the red deer is couched in the language of sentimental pathos and her sadness at the animal's general disappearance from Britain is palpable.

References to Sir Walter Scott's writings in later, nineteenth-century works of British popular natural history similarly confirm the influence of romantic thought, with Fennell quoting Scott when describing the red deer as 'the antler'd monarch of the waste' and Charles Knight referring to scenes of deer hunting from *Waverly* in order to communicate the splendour and danger that the activity was said to entail.[162] These romantic connotations projected upon the red deer within the discourse surrounding it did not challenge the temporal placement of the species, the human-animal relationships associated with it nor the landscape it inhabited but it informed new understandings of these elements, underpinned by romantic nostalgia.

Whilst enlightenment-inspired red deer entries tended to link the species' decline in Britain to societal progress, as in Pennant's *British Zoology*, more romantically-inspired descriptions were often couched in the language of loss and longing. Knight, for instance, reflected that 'formerly the stag was very abundant in the wild hills and in the extensive forests of our island, but the deforesting of vast woodland tracts and the extension of agriculture have limited the range of this noble animal to the large parks and chases of our country, to the Cheviot Hills, and to the heath-covered mountains of Scotland'.[163] This extract clearly laments the red deer's decline in Britain, depicting the animal's survival in

[160] M. Roberts, *Wild Animals, their Nature, Habits and Instincts* (London, 1836) p. 244
[161] Roberts, *Wild Animals* p. 245.
[162] J. Fennell, *A Natural History of British and Foreign Quadrupeds* (London, 1841) p. 461; Knight, *Pictorial Museum,* Vol. I p. 135.
[163] Knight, *Pictorial Museum,* Vol. I *p*. 135.

the peripheral territories as an unfortunate product of modern British progress, contrasting sharply with earlier depictions of the decline of the red deer as a positive indicator of modernity and societal progress.

By the early nineteenth century, the red deer's enduring presence as a wild species in the Scottish Highlands was increasingly celebrated as a potent symbol of Britain's glorious, long-lost past. These sentiments are captured in Carpenter's *Popular Cyclopedia*, in which it is stated that 'in England, very few of these noble animals still exist, and these are mostly in a half-domesticated state; but many still remain in the mountainous and woody parts of Scotland'.[164] This cementation of the red deer as an icon of the Scottish Highlands and of Britain's romantic past ironically coincided with the growth of modern, Scottish deer forests, which emerged initially to combat the economic recession that gripped the Highlands following the Napoleonic Wars and then to accommodate the growing demand for deerstalking opportunities that came with the rise of Highland tourism.[165]

The mastiff:
a noble beast of Britain's past and present

As the previous case studies of the wolf and the red deer have shown, the temporal placement of animals in British popular natural history helped to reinforce ideas of British modernity through a narrative of societal progress across Britain, frequently illustrated through the disappearance of specific animals over time. However, the mastiff was presented within British popular natural history as an animal of both Britain's past and its present. Although the mastiff was frequently understood through its contemporary use as a guard-dog for protecting property and the domestic home, which aligned it with the affluent classes, this animal was also located deep within Britain's past, cementing its status as a long-standing, noble native. Furthermore, the interplay between the mastiff's contemporary and historical roles encapsulated imaginings of the modern national character, projected back in time to reflect an inherent and enduring sense of continuity and longevity. Indeed, depictions of the mastiff in late-eighteenth and early-nineteenth-century British popular natural history provided a conduit that connected the modern British to their island's past through imaginings of innate courage, nobility and superiority.

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[164] W. Carpenter, *Popular Cyclopedia of Natural Science, Zoology, Vol. 1 Comprising mammals, birds, and reptiles* (London, 1844) p. 292.
[165] C. Smout, *Nature Contested: Environmental History in Scotland and Northern England since 1600* (Edinburgh, 2000) p. 137; R. Dodgson, *No Stone Unturned: A History of Farming, Landscape and Environment in the Scottish Highlands and Island* (Edinburgh, 2015) pp. 235-236.

Constructions of the mastiff in late-eighteenth and early-nineteenth-century Britain, which focussed on its great size, courage and noble temperament, were informed by and deeply intertwined with its use as a guard dog in contemporary Britain. Consequently, natural history authors presented the mastiff as innately tied to the British propertied classes and constructed it as a noble, superior animal owing to its dutiful, yet masterful qualities. The mastiff's attributes were further informed by its historical use in animal-baiting and warfare but, as these practices were increasingly deemed outmoded or 'barbarous', they were temporally distanced from modern understandings of the mastiff as a faithful guard dog and firmly confined to the past. Indeed, these human-animal relationships, attached to an earlier time and an earlier stage of societal development, conversely helped to emphasise the modernity of the contemporary, British middling classes, whose attitudes and self-perceptions were presented as reflective of the national character.

Although the mastiff was commonly depicted as an English animal in late-eighteenth and early-nineteenth-century British popular natural history, this notion of national identity was reflective of broader, Anglo-centric understandings of Britishness that were prevalent at the time. Furthermore, contemporary constructions of the mastiff, confining its use in animal-baiting and war to Britain's past, helped to remove some of the contradictions which had characterised the animal in earlier discourses, such as brave but cruel and strong but unintelligent. Furthermore, this shift in conceptualisation helped to alleviate some of the anxieties surrounding the English national character, which had also been evident in these earlier discussions. Contemporary constructions of the mastiff, which now embodied emergent ideas of modern Britishness, did not include the disparaging connotations, which had been attached to those earlier, more objectionable practices and this temporal distancing allowed the mastiff to be reconfigured as a noble animal and a courageous defender of property, in keeping with the self-ascribed virtues of the contemporary, affluent, British middling classes.

Animal historians have tended to explore dogs in eighteenth and nineteenth-century Britain either through the lens of pets, with studies focusing predominantly on their importance as symbols of bourgeois domesticity, or as strays, with scholars highlighting how the discourse on ownerless dogs intersected with middle-class anxieties surrounding law, order and public health.[166] More recently, the focus on dogs in animal history has

[166] See: K. Kete, *The Beast in the Boudoir: Pet Keeping in Nineteenth-Century Paris* (Berkeley, 1994); J. Blaisedell, 'The Rise of Man's Best Friend: The popularity of Dogs as Companion Animals in Late-Eighteenth-Century London as Reflected by the Dog Tax of 1796', *Anthrozoös* 12/2 (1999) pp. 76-87; I. Tague, *Animal Companions: Pets and*

expanded beyond this pet/stray dichotomy to include investigations into the dogs used in hunting, such as Martin Wallen's work on foxhounds and Edmund Russell's extended history of greyhounds, as well as Thomas Almeroth-Williams' work on the so-called 'yard dogs', a category of guard dogs that included the mastiff.[167]

Pennant's discussion of the mastiff in his *British Zoology* provided an enduring template for subsequent constructions of the breed in British popular natural history well into the nineteenth century. Indeed, although official taxonomies of dog breeds were only defined in the latter half of the nineteenth century, by organisations, such as the kennel club, founded in 1873, embryonic, early-nineteenth-century constructions of individual dog breeds, such as those present in works by Sydenham Edwards and William Youatt, were informed by earlier discourses, including those present in Pennant's mastiff discussion.[168] As Wallen points out, early discourses on dog breeds were shaped by a mid-eighteenth-century, British context that was heavily informed by contemporary developments in selective breeding and taxonomic systems of classification.[169]

Pennant's description of the human-animal relationships surrounding the mastiff did much to present this dog as an embodiment of the national character. First and foremost, Pennant extolled the mastiff as an excellent guard dog, focusing on its great size, strength and its fearsome bark, noting that it was 'supposed to frighten away robbers by its tremendous voice'.[170] Pennant also illustrated the mastiff's physical prowess and courage by referring to its historical uses in battle and animal-baiting. Drawing on Abraham Fleming's 1576 translation, *Of Englishe Dogges*, originally written in Latin by the Elizabethan physician and scholar, Dr John Caius, Pennant described how, within the context of animal-baiting, three mastiffs 'were reckoned to match a bear; and four for a lion'.[171] He further affirmed, drawing on the writings of the English antiquarian, John Stow,

Social Change in Eighteenth-Century Britain (Pennsylvania, 2015); S. Amato, *Beastly Possessions: Animals in Victorian Consumer Culture* (Toronto, 2015) pp. 56-104.
[167] M. Wallen, 'Foxhounds, Curs and the Dawn of Breeding: The Discourse of Modern Human-Canine Relations', *Cultural Critique* 79 (2011) pp. 125-151; E. Russell, *Greyhound Nation, A Coevolutionary History of England, 1200-1900* (Cambridge, 2018); T. Almeroth-Williams, 'The Watchdogs of Georgian London: Non-human Agency, Crime Prevention and Control of Urban Space', *The London Journal* 43/3 (2018) pp. 267-288.
[168] M. Worboys, J. Strange and N. Pemberton, *The Invention of the Modern Dog: Breed and Blood in Victorian Britain* (Baltimore, 2018) pp. 23-37; S. Edwards, *Cynographia Britannica* (London, 1800); W. Youatt, *The Dog* (London, 1845) pp. 99-100.
[169] Wallen, 'Foxhounds, Curs and the Dawn of Breeding' pp. 217-218.
[170] Pennant, *British Zoology, Vol. I* p. 56.
[171] Pennant, *British Zoology, Vol. I* pp. 56-57; J. Caius (trans. A. Fleming), *Of Englishe Dogges: The Diuersities, the Names, the Natures, and the Properties* (London, 1576).

that, 'from an experiment made in the Tower by James the first… [the lion] was found an unequal match to only three [mastiffs]'.[172]

Drawing on the writings of the Roman poets, Claudian and Gratius, Pennant also emphasised the role of the mastiff in Britain's ancient past, stating that 'Great-Britain was so noted for its mastiffs, that the *Roman* Emperors appointed an officer in this island with the title of *Procurator Cynegii*, whose sole business was to breed, and transmit from hence to the *Amphitheatre*, such as would prove equal to the combats of the place'.[173] Citing the Roman geographer, Strabo, Pennant further pointed out 'that the mastiffs of Britain were trained for war, and were used by the Gauls in their battles: and it is certain a well-trained mastiff might be of considerable use in distressing such half-armed and irregular combatants as the adversaries of the Gauls seem generally to have been before the Romans conquered them'.[174] Pennant clearly captured the Roman admiration for the breed based on its performance in combat, its intelligence and its suitability for training.

By tracing the use of the mastiff from Britain's ancient past to contemporary, eighteenth-century Britain, Pennant's discourse created a sense of continuity surrounding the mastiff in Britain, which helped to characterise it as a fundamentally British 'native' upon which expressions of national character could be projected. Indeed, associations between the mastiff and national identity were already deeply rooted in early-modern depictions of this dog. According to Ian MacInnes, by the end of the sixteenth century, 'England's nascent national identity was already connected with the dogs from which it was famous for throughout Europe', namely the mastiff and the spaniel, which were seen to express particular, and to some extent contradictory, conceptions of Englishness that presented the nation as 'caught between barbarism and extreme civility'.[175]

Pennant's conceptions of the mastiff as a guard dog were reiterated and further emphasised in many later works of British popular natural history until the animal's status as a defender of property increasingly formed an integral part of its construction. Indeed, this aspect of its character would have been clearly recognisable to its contemporary readership, and particularly desirable for those living in urban areas, where guard dogs played an important role in personal security systems. As Almeroth-Williams points out, 'by the late eighteenth century, Londoners were utilising watchdogs alongside a range of other crime prevention and policing strategies, which included locks, watchmen,

[172] Pennant, *British Zoology, Vol. I* pp. 56-57.
[173] Pennant, *British Zoology, Vol. I* p. 57.
[174] Pennant, *British Zoology, Vol. I* p. 58.
[175] I. MacInnes, 'Mastiffs and spaniels: Gender and nation in the English dog', *Textual Practice* 17/1 (2003) pp. 21-22.

constables, police officers and thief-takers', with 'dogs of all shapes and sizes' tasked with guarding the contents of wealthy town houses, goods stored in warehouses, stock on sale in shops and livestock driven to the city.[176] The timber yards and warehouses found on the Thames were particularly famed for their use of large and intimidating guard dogs, of which the mastiff was a principal variety.[177]

Within British popular natural history, the role of the mastiff as a defender of property was presented as an obvious and natural utilisation of its combined, physical and behavioural characteristics, with Bilby, for instance, observing that the dog was 'every way formed for the important trust of guarding and securing the valuable property committed to his care'.[178] Loudon similarly regarded the mastiff as 'a faithful guardian, and a powerful defender of the home' and Fleming stated that the animal was 'a trusty guard, very vigilant and bold'.[179] As a uniquely British animal, the excellence of the mastiff as a guard dog was often intertwined with contemporary, British notions of domestic security and trust, which placed it at the heart of modern Britain. Bingley's *British Quadrupeds* further explained that 'Mastiffs are peculiar to this country', adding that 'they are now principally of use as watch-dogs; and they discharge their duty, not only with fidelity, but oftentimes with considerable judgement', a sentiment which was repeated in his *Natural History of Animals* and *Animal Biography*.[180] Aikman similarly described the Mastiff as 'peculiar to Britain', stating that 'he is bold, trusty, and vigilant, and highly esteemed as a watch-dog'.[181]

These understandings of the mastiff and its role in modern Britain were further communicated through the illustrations of the animal that accompanied its descriptions. Church's image, for example, presented the mastiff as a guard dog in front of a grand mansion, the animal's kennel, collar and chain clearly indicating its role as a sentinel (see figure 18). Bingley's *British Quadrupeds* also contained an illustration of a confidently striding mastiff in the vicinity of a thatched cottage, which it was clearly guarding (see figure 19). Bell's image of a mastiff also depicted the animal in front of a fence marking the land boundary of a two-storey house, a composition also seen in Loudon's work (see figures 20 and 21). Fennell's mastiff illustration situated the dog in an urban setting, presenting the animal as guarding the family home and as much a deterrent as the pistol wielded by the house's occupant (see figure 22). Whilst these images locate the mastiff in

[176] Almeroth-Williams, 'The Watchdogs of Georgian London' pp. 274-277, 279, 284.
[177] Almeroth-Williams, 'The Watchdogs of Georgian London' pp. 277-278.
[178] Bewick, *Quadrupeds* p. 336.
[179] J. Loudon, *The Entertaining Naturalist* (London, 1843) p. 25; Fleming, *British Animals* p. 13.
[180] Bingley, *British Quadrupeds* p. 116; W. Bingley, *Natural History of Animals,* Third Edition (London, 1814) p. 28; Bingley, *Animal Biography* p. 186.
[181] Aikman, *Natural History* p. 72.

a variety of different environments, the animal's construction as a guard dog at the threshold of properties was consistent and helped to contextualise the breed in different contexts across Britain, reinforcing its status as a key protector of material wealth and a symbol of secured domesticity. Similarly, the recurrent depiction of male mastiffs helped to tie these ideas of security and property to notions of British masculinity. When viewed collectively, the individual elements within these images explicitly allied this breed with the masculinised, British propertied classes whilst helping to conceptualise the mastiff as an innately British dog within a broad, national context.



Figure 18: Tookey's engraving of the mastiff in Church's A Cabinet of Quadrupeds, *Volume I (London: Darton and Harvey, 1805, source: Google Books).*

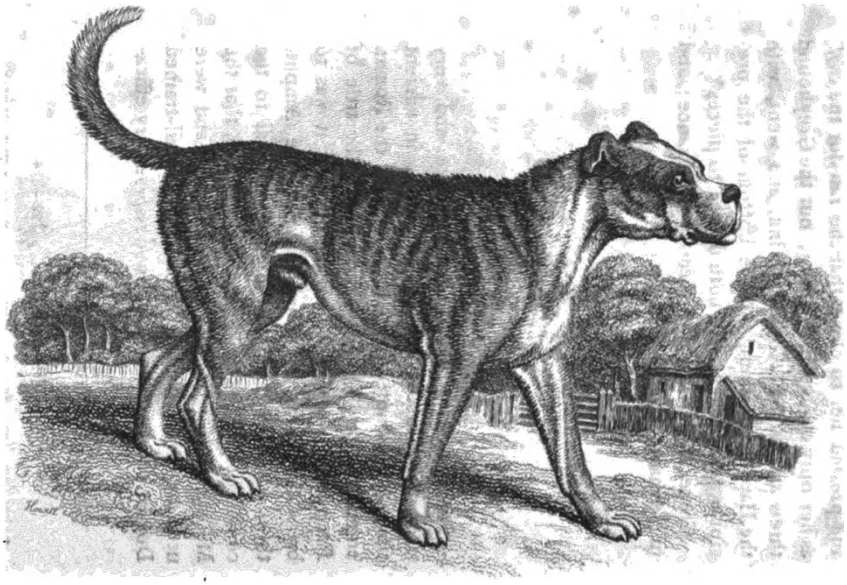


Figure 19: The mastiff in Bingley's Memoirs of British Quadrupeds *(London: Darton and Harvey, 1809, source: Google Books).*

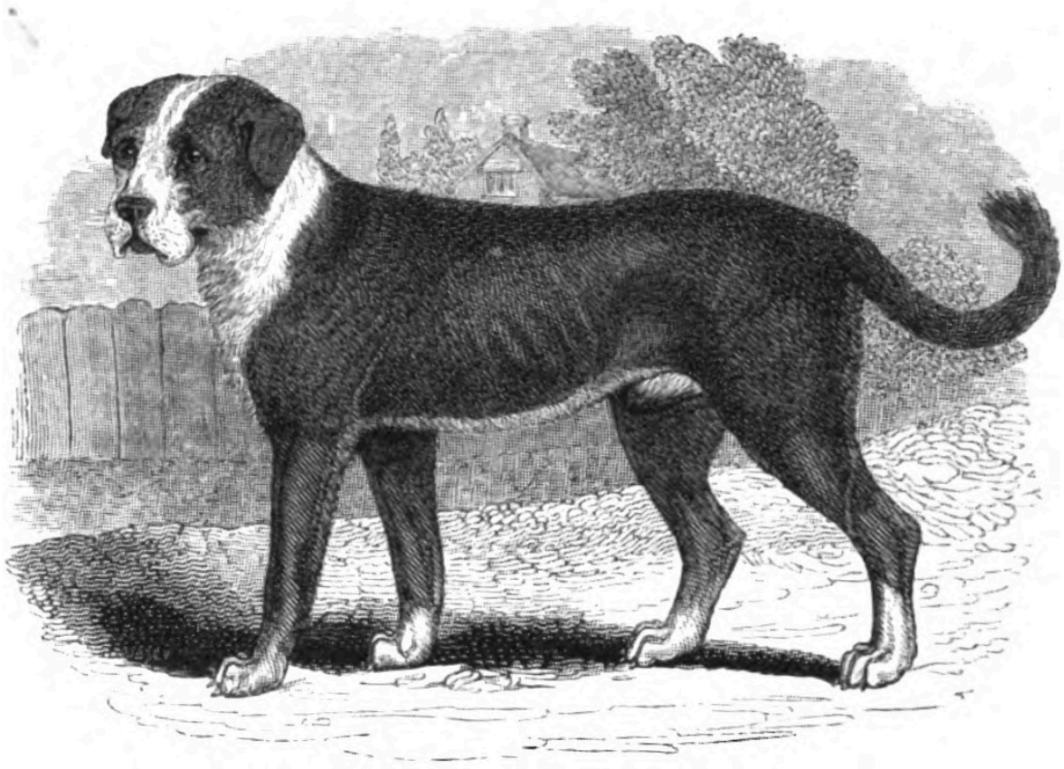


Figure 20: The mastiff in Bell's A History of British Quadrupeds *(London: Samuel Bentley, 1837, source: Google Books).*

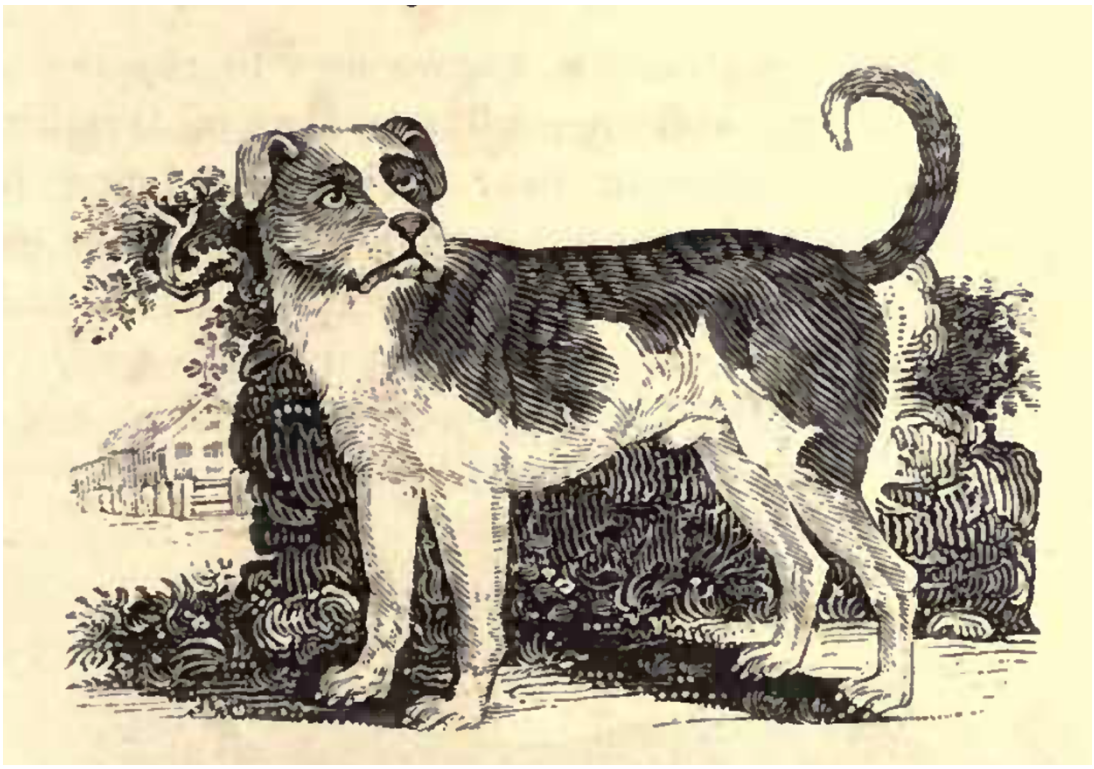


Figure 21: The mastiff in Jane Wells Webb Loudon's The Entertaining Naturalist *(London: Henry G. Bohn, 1843, source: Google Books).*



Figure 22: The mastiff in Fennell's A Natural History of Quadrupeds *(London: Joseph Thomas, 1841, source: Google Books).*

The mastiff's superior, brave and noble status, which was clearly intertwined with its construction as an ideal guard dog, had not only helped to align this breed with the affluent, property-owning classes of Britain but also the upper echelons of British society. According to MacInnes, the mastiff had aristocratic associations, which could be traced back to at least the seventeenth century, and these allowed the animal to be embodied as

'a kind of valiance natural to the English'.[182] By the nineteenth century, constructions of the mastiff within works of popular natural history had evolved to characterise this animal as not only courageous and noble but also superior and capable of discretion. Having recognised the animal's 'extraordinary size, strength and courage', Church praised the mastiff's 'majestic and noble' countenance, explaining that it appeared 'to treat all other dogs with a contempt that clearly indicates a consciousness of his superiority over them', yet 'will not abuse the power with which he is instructed, nor call it forth to action'.[183] Bingley similarly explained in his *British Quadrupeds* that the mastiff 'seldom uses violence, unless resisted; and in this case he will sometimes seize the person, throw him down, and hold him there for hours, or until relieved, without biting him', a sentiment similarly evident in his *Animal Biography*.[184] According to Aikman, it was this behaviour that illustrated the breed's 'altogether noble countenance'.[185]

Many popular natural history authors in the late eighteenth and early nineteenth centuries, such as Bilby, Bingley, Bell, Mavor and Knight, highlighted the mastiff's historical use in English animal-baiting, reiterating Pennant's references to Caius' description of mastiffs being used to bait animal adversaries, such as bears and lions, and to Stow's account of James I using mastiffs to bait a lion in his royal menagerie.[186] Indeed, Bell's introduction of Stow's account as 'a well-known and often-repeated story, of the truth of which there appears to be no doubt' indicates the ubiquity of this source within this context.[187] The image of the mastiff defeating the metaphorical 'king of beasts' was clearly symbolic and not only confirmed the mastiff's strength and courage, but also served to indicate the superior status of the British national character as embodied by this stoic dog through its demonstration of British mastery over the natural world.

MacInnes points out that, in sixteenth-century England, animal-baiting was often regarded as a national sport and that, consequently, the mastiff gained 'a particularly nationalistic inflection' during this period.[188] He further argues that, during the sixteenth and seventeenth centuries, the mastiff's association with blood sports not only presented the breed as a potent symbol of English courage, strength and loyalty, but also highlighted

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[182] I. MacInnes, 'Mastiffs and spaniels: Gender and nation in the English dog', *Textual Practice* 17/1 (2003) p. 32.
[183] John Church, *A Cabinet of Quadrupeds, Volume I* (London, 1805).
[184] Bingley, *British Quadrupeds* p. 116; Bingley, *Animal Biography* p. 187.
[185] Aikman, *Natural History* p. 72.
[186] Bewick, *Quadrupeds* p. 337; Bingley, *Animal Biography* pp. 187-188; Thomas Bell, *A History of British Quadrupeds* (London, 1837) p. 250; Mavor, *Natural History* p. 56; Loudon, *The Entertaining Naturalist* p. 25; Knight, *Pictorial Museum, Vol. I* p. 199.
[187] Bell, *British Quadrupeds* p. 250.
[188] MacInnes, 'Mastiffs and spaniels' p. 26.

certain English tendencies towards uncouthness, indolence, violence, stupidity and cruelty, reflecting a duality that revealed some troubling contradictions within conceptions of Englishness at that time.[189] Comparatively, the sense of Britishness surrounding the mastiff, in late-eighteenth and early-nineteenth-century popular natural history, was free from these earlier contradictions and overwhelmingly positive. This shift in attitude largely stemmed from the establishment of animal-baiting as an outmoded practice in Britain and its temporal distancing from the contemporary practices, which were seen to reflect the sensibilities of the modern, British, middling sort. These sensibilities permeated the attitudes and actions of the wealthy, urban middling classes, who formed a key element of the nascent animal welfare movement that emerged in the early nineteenth century and saw the eventual banning of animal-baiting in Britain through the 1835 Cruelty to Animals Act.

Blood sports, particularly those associated with the poor, such as cockfighting, bearbaiting and bullbaiting, had been increasingly attacked in a broad array of publications, including popular natural history literature, sporting dictionaries and the popular press. According to Emma Griffin, for instance, by the 1790s, a memetic discourse surrounding bull-baiting had emerged that characterised the sport as a barbaric custom in the process of dying out in England.[190] Indeed, it was the confinement of animal-baiting to the past that allowed popular natural history authors to historicise the mastiff's links to blood sports and to emphasise the animal's strength and courage, whilst circumventing any anxieties arising from its former associations with practices that were increasingly rejected by the middling classes, who characterised them as backward, cruel and unreflective of the British national character.

Jane Spencer points out that compassion for animals was often lambasted, within British, reactionary political circles during the 1790s, as an example of the stupidity and 'feminized sentimentality' that was seen to complement radical and revolutionary politics aligned with French Jacobinism.[191] However, by the 1830s, attitudes towards animal cruelty in Britain had begun to change, with the concept of fair treatment to animals becoming an important element of middle-class identity, linked to notions of progress. As Hilda Kean observes, 'it was not that middle-class people took up the cause of animals; but that by acting in benevolent and charitable ways towards animals people proved themselves to be different

[189] MacInnes, 'Mastiffs and spaniels' pp. 28-29.
[190] E. Griffin, *England's Revelry: A History of Popular Sports and Pastimes 1660-1830* (Oxford, 2005) pp. 130-131.
[191] J. Spencer, *Writing About Animals in the Age of Revolution* (Oxford, 2020) p. 2.

from both the degenerate rabble and the indolent aristocrat'.[192] This sentiment became deeply embedded within the early-nineteenth-century discourse surrounding animal cruelty, which was prevalent in political circles, where such concerns were increasingly incorporated 'into definitions of respectable working-class and middle-class behaviour'.[193] Indeed, historians, such as Ritvo, have explained that British institutions and legislation, aimed at ensuring animal welfare in nineteenth-century Britain, mainly targeted the animal practices associated with the lower rungs of society.[194]

British attitudes towards animal welfare were relatively slow to develop in the early nineteenth century and the critical discourse on blood sports was driven more by concerns about policing the leisure activities of the labouring classes, especially those practices that encouraged drinking, gambling and brawling, than by desires to improve the welfare of animals.[195] References to class were also strongly evident in comparisons drawn between the mastiff and the bulldog, with the latter being characterised, similarly to the mastiff in earlier discourses, as cruel and vicious due to its continuing use in baiting, which was strongly associated with the working poor. Although Pennant had identified both the mastiff and the bulldog as examples of the same variety of dog, later popular natural history writers tended to conceptualise these two dogs as separate entities, in line with the shifting morphology of the bulldog, which occurred around the same time, with the emergence of breed specifications.[196] Bell provides some useful insights into the perceived differences between these two dogs, describing the bulldog as attacking 'with a savage and insidious silence' compared to the mastiff which, 'unlike the Bull-Dog… [was] susceptible of great attachment to all who are kind to it, and seldom… [provided] any molestation without repeated aggression', a statement later reiterated by Fennell.[197] The differences highlighted between these two breeds reflected many of the attitudes, which were prevalent at the time, and helped to reinforce perceptions of class.

The 'valiance' of the mastiff, measured through its use in gladiatorial combats in Rome, was a recurring theme within the discourse surrounding the breed. Indeed, Pennant's references to the use of mastiffs in Roman amphitheatres and to the *Procurator Cynegii* obviously appealed to later, popular natural history authors, who frequently repeated this information in their own descriptions. This emphasis on the approval and admiration of

[192] H. Kean, *Animal Rights: Politics and Social Change in Britain since 1800* (London, 1998) pp. 64-66.
[193] Kean, *Animal Rights* pp. 64-66.
[194] Ritvo, *The Animal Estate* pp. 137-139.
[195] Kean, *Animal Rights* p. 24.
[196] Pennant, *British Zoology, Vol. I* p. 57.
[197] Bell, *British Quadrupeds* p. 251; Fennell, *Quadrupeds* p. 164.

the mastiff by the Romans not only reflected the high esteem in which this civilisation was held but also encouraged high regard for the enduring presence of the mastiff in Britain. Bilby, for instance, stated that 'the Mastiffs of Great-Britain were noted in the time of the Roman Emperors, who appointed an officer, whose sole business it was to breed and send from hence such as would prove equal to the combats of the amphitheatre'.[198] Church, Bingley, Fleming, Mavor, Bell and Aikman similarly upheld the Roman preference for the mastiff in gladiatorial combats, presenting this as a clear illustration of Roman approval and tacitly extending this approval to Britain, where the breed had originated and its successful utilisation had endured to the present.[199]

Although it pre-dated the modern, commercial age, ancient Rome was still afforded considerable status as a significant, former civilisation against which parallels with Britain could be drawn. Indeed, Britain's imperial aspirations were often couched in the language of Roman rule by British writers, whose conceptions of Britain were deeply intertwined with their beliefs that the British had surpassed what had been presented as their spiritual forebearers. As Mark Bradley explains, 'for the self-conscious discourses of modernity, the classical world was both the "other", pushed back into the distant past, *and* the evidence of unbroken tradition evoked to bestow legitimacy on the present'.[200] The Romans were aligned with the British in popular natural history through their shared appreciation of the mastiff, however, the former were also temporally distanced from the British because they were confined to the ancient past along with their use of the mastiff in combat, an animal practice illustrative of an earlier stage of societal development. These processes of alignment and distancing, couched in terms of approval and disapproval, can be seen in Knight's *Pictorial Museum*:

> In early times the English mastiff was celebrated for its strength and resolution, characteristics which did not fail to attract the attention of the Romans when this island formed a part of their widely-spread empire. To a people in whom a partiality for scenes of bloodshed and slaughter, and for the sanguinary games of the amphitheatre, was a ruling passion, dogs so fitted to gratify their taste were peculiarly acceptable, and accordingly we find that they were bred and reared by officers specially appointed, who selected such as were distinguished for combative properties, and sent them

[198] Bewick, *Quadrupeds* p. 337.
[199] Church, *Cabinet, Vol. I*; Bingley, *British Quadrupeds* p. 115; Bingley, *Natural History* p. 28; John Fleming, *A History of British Animals* (Edinburgh, 1828) p. 13; Mavor, *Natural History* p. 56; Bell, *British Quadrupeds* p. 250; Aikman, *Natural History* p. 72.
[200] M. Bradley, 'Introduction' in M. Bradley (ed.) *Classics and Imperialism in the British Empire* (Oxford, 2010) p. 11.

> to Rome for the service of the amphitheatres, where they were matched in fight with various beasts of prey.[201]

Here, the Roman admiration for the mastiff reinforces the animal's high status and celebrates its origins in early Britain, which is extended to the modern British people through their continuing use of this breed. Conversely, the negative connotations attached to the Roman penchant for violent spectacle help to create temporal distance between them and the contemporary British, whose more civilised practices are seen as a reflection of their superiority and modernity.

Conclusion

These three case studies of the wolf, the red deer and the mastiff collectively demonstrate how the locating of animals in Britain's past in British popular natural history of the late eighteenth and early nineteenth centuries helped to reflect conceptions of the modern, British national character and to illustrate the nation's societal progress. Each of these animals was firmly located within Britain's past, with the shifting human-animal relationships associated with them acting as indicators of societal development when viewed in accordance with stadial models. Within this national context of progress and modernity, the temporalisation of animal presence in Britain helped to reinforce aspects of national identity, which favoured the affluent, urban, metropolitan classes that largely constituted the readership of popular natural history publications.

The ways in which animals in Britain were temporalised varied across species according to their individual histories in Britain, their presence over time and their changing relationships with the British people. In order to articulate narratives of progress, British natural history authors established levels of discontinuity between animals and practices of the past and modern expectations to create temporal distance. However, the nature of these processes was varied and complex, as the discourse surrounding some animals became infused with nostalgic imaginings of Britain's glorious past, shaped by romantic sentiments, whilst others, through their deeply-rooted connections to Britain's ancient past, were celebrated as a reflection of the enduring national character.

In the case of the wolf, the eradication of this native predator in Britain was actively celebrated within British popular natural history and frequently contrasted with the animal's continuing existence in Europe, a dichotomy that reinforced ideas of British

[201] Knight, *Pictorial Museum, Vol. I p*. 199.

supremacy over the natural world and reaffirmed the status of the British as a more modern people compared to their European neighbours. The eradication of the wolf from different parts of Britain over time was similarly seen to reflect slower rates of societal development in some areas of Britain, namely Scotland and Ireland, which created temporal distance between the populations of these areas and those of the British metropole, excluding them from metropolitan conceptions of modern Britishness. The discourse surrounding the extended presence of wolves in Scotland reinforced metropolitan conceptions of Scotland as a junior partner within the British Union in line with their views that it had only recently emerged into a modern state of civilisation. Comparatively, Ireland was more closely aligned with the 'wolf-infested' nations of Europe, assessed as less advanced, less modern and less sophisticated than the British metropole, which helped to fortify metropolitan conceptions of Ireland as a non-British, pseudo-colonial territory.

The discourse surrounding the decline of the red deer reveals how popular natural history authors, influenced by enlightenment models of stadial theory, firmly located this animal in Britain's past and celebrated its decline as an indicator of British progress and modernity. However, as the species was increasingly viewed through a more romantic lens, this animal, unlike the wolf, was reconstrued nostalgically as an icon of Britain's past. Indeed, as the nineteenth century progressed, the influence of the Highland revival, informed by a romantic reappraisal of the Scottish Highlands, encouraged a growing reconfiguration of the red deer as an icon of the Highland landscape, that paralleled a similar sentimentalisation of the Scottish Highlanders. Whilst the red deer's status as an animal of Britain's past was not challenged, the nature of its temporalisation became more complex as it evolved to accommodate broader, cultural understandings of Britain's relationship with its past. These contradictory attitudes, informed by competing enlightenment and romantic understandings, further complicated the narratives of progress that underpinned expressions of British national identity within the discourse surrounding the decline of the red deer.

The positive framing of the mastiff in late-eighteenth and early-nineteenth-century British popular natural history discourse demonstrates how the locating of this animal in Britain's past was celebrated in a way that naturalised modern, metropolitan British identity by highlighting the animal's longevity in Britain and recontextualising earlier characterisations of this animal as an enduring reflection of the English national character. To this end, some discontinuity needed to be drawn between the mastiff's historical use in animal baiting, war and gladiatorial combat, which was perceived as barbarous and cruel in contemporary Britain, and its continuing role as a loyal and effective guard dog, which was still highly

regarded in contemporary Britain. This partial temporalisation allowed uncomfortable human-animal relationships to be confined to the past but positive assessments of the mastiff's strength, courage, loyalty and noble status to endure and affirm the deep-rooted origins of the modern British national character. Furthermore, this process helped to circumvent some of the former anxieties surrounding the English national character that had been expressed through earlier understandings of the mastiff as strong, loyal and brave but cruel, indolent and barbarous.

Chapter 2:

Animals of Contemporary Britain

The ways in which animals characterised contemporary Britain within late-eighteenth and early-nineteenth-century British popular natural history is clearly illustrated through the discourse surrounding British domestic animal varieties. These animals were commonly regarded as organisms warranting individual entries with detailed discussions of their physiology, behaviours and practical use by humans, which encouraged conceptualisations of these animals as distinct biological entities within emergent understandings of individual breeds. Following England's Agricultural Revolution during the latter half of the eighteenth century, new attitudes towards livestock breeding emerged and new methodologies developed, which quickly radiated across Britain.[202] This can be seen through the early crossing of racehorse lineages during the latter half of the eighteenth century, which informed the 'thoroughbred' model, and through Robert Bakewell's developments in cattle, horse, pig and sheep breeding in the 1780s and 1790s, from which the 'Bakewellian' model of selective breeding developed, the two gradually synthesising in the early nineteenth century to form the 'purebred' system of livestock breeding that endured into the twentieth century.[203]

Although taxonomies of domestic animals had existed in Britain for some time, a new emphasis on bloodlines and changes to the criteria used to define 'types', informed by evolving selective breeding methodologies, helped to establish novel systems for understanding domestic animal varieties, which readily permeated the popular natural history of this period.[204] Indeed, breed distinctions, originating from agriculturalists, became deeply intertwined with natural history classifications and this relationship prevailed into the nineteenth century, with Ritvo observing, for example, that breeders and livestock enthusiasts of the period regularly adopted the use of Latinate binomials to legitimise and concretise the distinctions they made between different breeds.[205] These comprehensive categorisations included the physical and behavioural characteristics of breeds as well as their variations in usefulness to people and their unique genealogical pasts.

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[202] G. Mingay (ed.), *The Agrarian History of England and Wales, Volume VI, 1750-1850, Part 1* (New York, 1989) pp. 27-32.
[203] M. Derry, 'Theory and Method: An Analysis of European and American Animal Breeding Practices, from the Eighteenth to the Twenty-First Century', *The Agricultural History Society* 94/3 (2020) pp. 326-331.
[204] J. Beckett, *The Agricultural Revolution* (Oxford, 1990) pp. 23-25.
[205] H. Ritvo, 'The Sincerest Form of Flattery' in M. Henninger-Voss (ed.) *Animals in Human Histories: The Mirror of Nature and Culture* (Rochester, 2002) pp. 296-297.

This discourse surrounding livestock was further and significantly informed by shifting understandings of domestic animals that emphasised their status as economic resources. As Karen Raber observes, a cumulative effect of the Agricultural Revolution in England was that 'from serving as labour, bearers of wool for weaving, and vehicles for manuring fields, herd animals… gradually transformed from individual servants on the farm into aggregates, vast populations of meat incarnate', a process that crystalised by 1800.[206] Raber further highlights that the totalising effect of scientific assessment, description and classification was central to these emergent understandings of livestock and allowed for 'the assimilation of the individual animal body into an aggregate, a totalized entity that… [translated] into the abstraction of numbers, prices, pounds per acre'.[207] This shift in the conceptualisation of domestic animals reflected a broader 'economizing' of animals that, according to Wolloch, appeared in Europe towards the end of the Early Modern Period but was most potent in England, where such understandings of animals, as an amalgamation of potential economic products, permeated depictions of animals not only in economic treaties but also in literature and fine art.[208]

Consequently, the economic benefits of livestock and beasts of burden, especially those deemed to have been recently 'improved' through new methods of selective breeding, were regularly highlighted within constructions of domestic animals in late-eighteenth and early-nineteenth-century British popular natural history literature, a focus clearly shaped by the economising gaze. Indeed, the most prominent narrative surrounding the domestication of animals within British popular natural history by the end of the eighteenth century was one of 'improvement', with the superior qualities of 'improved', domestic animals being favourably contrasted against both their wild and 'unimproved', domestic counterparts. These new attitudes contrasted sharply with Buffon's earlier characterisation of domestication as a process of 'degeneration', through which, in his view, most domestic species, compared to their wild counterparts, gradually lost their vitality and ability to survive without human care.[209] This new emphasis on the improvement of domestic animals was broadly pervasive and similar attitudes were expressed through the writings of contemporary agricultural economists, such as the Lowland Scot, David Low, and breed enthusiasts, such as William Youatt, who was, himself, cited by many popular natural

[206] K. Raber, 'From Sheep to Meat, From Pets to People: Animal Domestication 1600-1800' in M. Senior (ed.) *A Cultural History of Animals in the Age of Enlightenment* (London, 2007) p. 79.
[207] Raber, 'From Sheep to Meat' p. 86.
[208] N. Wolloch, *The Enlightenment's Animals: Changing Conceptions of Animals in the Long Eighteenth Century* (Amsterdam, 2019) pp. 195-209.
[209] M. Gregory, *Evolutionism in Eighteenth-Century French Thought* (New York, 2008) p. 81.

history authors, such as Bell, Knight and Fennell, especially in their discussions on sheep and cattle.[210]

The celebration of new and recently enhanced breeds within British popular natural history literature placed them firmly within a national context of progress and modernity and temporalised them within imaginings of contemporary Britain. Conversely, those domestic breeds classed as 'unimproved' and deemed primitive and uneconomical were conceptually confined to the past, even if they continued to exist in substantial populations on British farms. The emergence of breed histories, through the use of genealogies within new, selective breeding methods, further helped to reinforce the modern and superior status of new, improved breeds by distancing them from their 'unimproved', outmoded brethren, through comparative processes, which temporalised their physiological, behavioural and economical differences.

Improved, selectively-bred domestic animals were also temporalised through their location within a contemporary, cultivated British landscape that conformed to notions of modern agricultural efficiency, which had emerged in Britain following the Agricultural Revolution. Indeed, the selective breeding methodologies used to produce these new varieties had been fundamentally dependent upon changes to landscape management and cultivation practices, such as the enclosure of land, new pasturing methods and the increased production of winter feed crops, which had allowed farmers greater control over their livestock breeding.[211] Consequently, improved domestic animals were presented in British popular natural history as significant indicators of the nation's modern and civilised status, which helped to reinforce broader constructions of the British national character as affluent, industrious and ingenious.

This configuration of improved breeds as signifiers of modern status corresponded with the use of domestic animals as indicators of societal advancement within earlier, enlightenment understandings of stadial development and conjectural history. Indeed, the discourse surrounding breed improvement within British popular natural history and models of societal development within enlightenment literature both contained strong narratives of lineal progress, centred round economic development and the human

[210] Bell, *British Quadrupeds* pp. 419-421, 426-429, 442-443, 448-449; Knight, *Menageries, Vol. III* pp. 214-217, 228-229, 230, 239-240, 248, 389-391, 422-423; Knight, *Pictorial Museum, Vol. I* pp. 151-152, 158-159, 167; Fennell, *Quadrupeds* pp. 500, 550.
[211] D. Wykes, 'Robert Bakewell (1725-1795) of Dishley: Farmer and Livestock Improver', *The Agricultural History Review* 52/1 (2004) p. 39; Derry, *Masterminding Nature* pp. 13-14.

manipulation of natural resources, illustrated through the comparative roles of domestic animals in different human societies. Wolloch, for instance, explains that, in the works of Adam Smith, the ability of human societies to transition from one societal stage to the next was largely dependent upon their evolving relationship with animals and that, according to Smith, 'as society progressed and became more civilised, the use made of animals became more sophisticated and widespread and therefore also more essential and indispensable for addressing human needs'.[212] According to Wolloch, this assessment stemmed from Smith's understanding of animals as the objects 'of human material manipulation', which were subject to shifting, historically-dependent definitions of property.[213]

The domestic animals reared by a human population and the extent to which these organisms were manipulated to produce products with commercial potential was thus understood to reflect a human society's level of advancement. As Dorothee Brantz recognises, during the late eighteenth and nineteenth centuries, 'the domestication of animals, which attested to how natural resources could be turned into material wealth and placed in the service of the cultural (re)production of society, served as a particular marker of civilization and indicator for the successful domination of nature'.[214] Representations of domestic animals in British popular natural history literature very much contributed to and replicated these assumptions, with discussions, informed by the economising gaze, highlighting the particular qualities of these animals that contributed to increasing profits and economic efficiency. Within this economically-driven context, the artificiality of animals, newly improved through successful selective breeding in Britain, was emphasised and the superiority of these new breeds was hailed as a product of the British breeders who had 'improved' them and of the modern, progressive nation, in which these processes had occurred.

Britain's status as the initial site of selective breeding developments ensured that the latter continued to be recognised as a national achievement within British popular natural history literature, even though selective breeding experiments were increasingly being conducted in various locations across Europe by the beginning of the nineteenth century, such as those in Moravia in the 1830s.[215] Nevertheless, British stockmen, such as Bakewell and the Culley brothers, were enduringly commended by British naturalists for their selective

[212] Wolloch, *The Enlightenment's Animals* p. 167.
[213] Wolloch, *The Enlightenment's Animals* p. 164.
[214] D. Brantz, 'The Domestication of Empire: Human-Animal Relations at the Intersection of Civilisation, Evolution, and Acclimatization in the Nineteenth Century' in K. Kete (ed.) *A Cultural History of Animals in the Age of Empire* (Oxford, 2007) pp. 75-76.
[215] Derry, 'Theory and Method' p. 330; Derry, *Masterminding Nature* pp. 22-23.

breeding achievements, in spite of the flaws that had become apparent with Bakewell's 'in-and-out' method, which had centred round the breeding of closely-related animals.[216]

When extolling livestock as a source of national pride, popular natural history writers frequently cited the range and abundance of domestic animals within Britain's animal community as a reflection of contemporary British agriculture and a key indicator of the nation's advanced societal status. In his preface to Bewick's *Quadrupeds*, for example, Bilby overtly praises the domestic animals of Britain that 'so materially contribute to the strength, the wealth, and the happiness of this kingdom' before acknowledging the domestic breeds that had been 'improved' by 'an enlarged system of agriculture, supported by a noble spirit of emulation…[and] introduced into all parts of the country'.[217] The historical significance of specific kinds of livestock, such as sheep and cattle, and working animals, such as horses, was similarly articulated as a source of national pride, either because these animals had made a national contribution as a useful product or because they had been linked to industries perceived to be of national importance.

Notions of British national identity were further reinforced within British popular natural history's celebration of Britain's domestic stock through the contemporary belief that the climate and the environment of a location were influential in shaping the physiological and behavioural qualities of the domestic animals that were reared there.[218] Rebecca Woods notes that agricultural writers and naturalists of this period often employed the term 'native' to describe 'unimproved or local varieties' and to differentiate them from 'highly cultivated improved types', emphasising that the local environment and farming practices played a key role in shaping 'native' breeds.[219] Consequently, this discourse helped to solidify the relationship between the domestic animals of Britain and its landscapes, the status of the former indicating the status of the latter, which was extended to the local people who resided there.

This chapter will examine constructions of British domestic animals within the discourse surrounding British sheep and cattle breeds in late-eighteenth and early-nineteenth-century British popular natural history to reveal how discussions surrounding these animals helped to reinforce conceptions of the British national character as modern, ingenious, industrious and enterprising. It will further demonstrate how new breeds were temporally tied to the contemporary British landscape, which not only reinforced the status

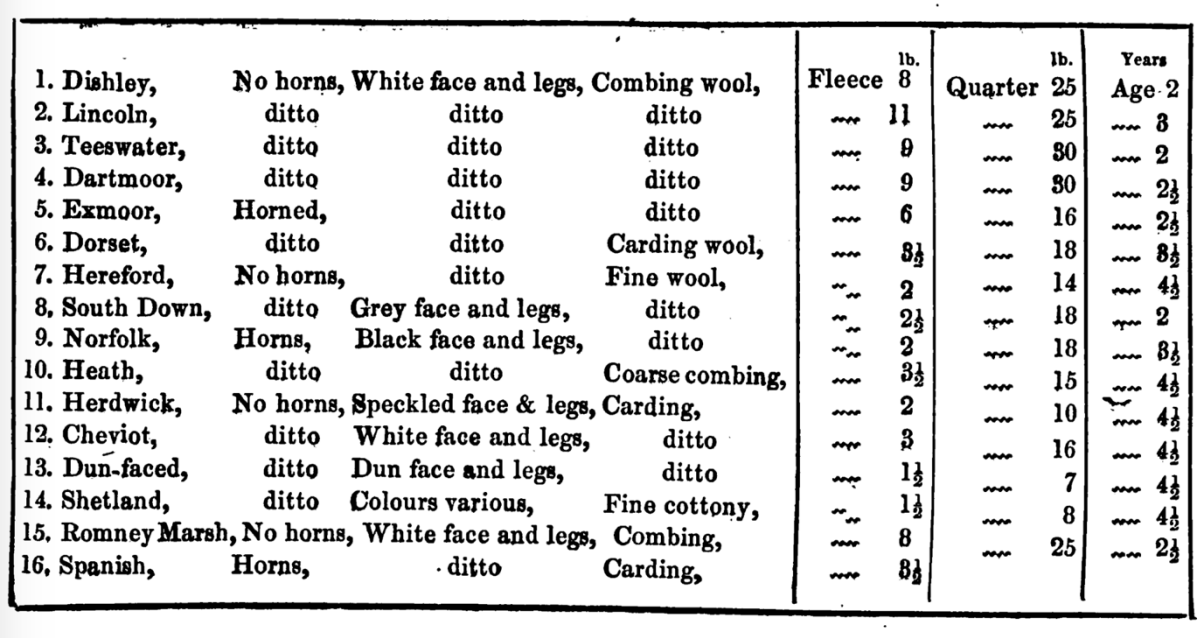
[216] Derry, 'Theory and Method' pp. 327-330.
[217] Bewick, *Quadrupeds* Advertisement a2.
[218] R. Woods, *The Herds Shot Round the World: Native Breeds and the British Empire, 1800-1900* (Chapel Hill, 2017) pp. 31-34.
[219] Woods, *Herds* p. 27.

of these domestic animals, but also that of the landscape and its human inhabitants. In addition, it will explain how the creation of new, 'improved' breeds, informed by comparisons between 'improved' and 'native' breeds, was celebrated as an exemplification of British ingenuity, industriousness and superiority and how these processes helped to present a progressive sense of British modernity that would inevitably extend across the whole country. Finally, it will illustrate how foreign breeds, imported into Britain and improved through selective breeding, were integrated into narratives of British skill and national prestige.

Shawn and superior:
the sheep of contemporary Britain

Within British popular natural history, the abundance, variety and quality of the nation's sheep was celebrated as a reflection of Britain's industriousness and prosperity, with Bell commenting, for instance, that 'England boasts of as many breeds of sheep as of the ox'.[220] As few works of popular natural history were sufficiently comprehensive to include all of the contemporary varieties of sheep in Britain, a variety of breeds was frequently selected to demonstrate the range of sheep that inhabited the country, an approach that inevitably produced an imagined continuum, ranging from the most primitive, unimproved, native varieties to the most highly-cultivated, improved breeds. This discourse was heavily influenced by contemporary agricultural writers, such as George Culley, whose taxonomy of British sheep breeds, first described in his 1786 *Observations on Live Stock*, was frequently used by popular natural history writers to define and differentiate between British sheep breeds within a national context. As an agriculturally-derived classification system, Culley's framework prompted popular natural history authors, such as Jardine, to define sheep breeds through a process that inevitably centred round their individual economic value based on rearing times and the quantity and quality of their useful products (see figure 23). Consequently, the improvement of sheep breeds in Britain was deeply intertwined with economic advancement and celebrated as a contributor to and an indicator of national, commercial success.

[220] Bell, *British Quadrupeds* p. 446.



				lb.		lb.	Years
1. Dishley,	No horns,	White face and legs,	Combing wool,	Fleece 8		Quarter 25	Age 2
2. Lincoln,	ditto	ditto	ditto	11		25	3
3. Teeswater,	ditto	ditto	ditto	9		30	2
4. Dartmoor,	ditto	ditto	ditto	9		30	2½
5. Exmoor,	Horned,	ditto	ditto	6		16	2½
6. Dorset,	ditto	ditto	Carding wool,	8½		18	3½
7. Hereford,	No horns,	ditto	Fine wool,	2		14	4½
8. South Down,	ditto	Grey face and legs,	ditto	2½		18	2
9. Norfolk,	Horns,	Black face and legs,	ditto	2		18	3½
10. Heath,	ditto	ditto	Coarse combing,	3½		15	4½
11. Herdwick,	No horns,	Speckled face & legs,	Carding,	2		10	4½
12. Cheviot,	ditto	White face and legs,	ditto	3		16	4½
13. Dun-faced,	ditto	Dun face and legs,	ditto	1½		7	4½
14. Shetland,	ditto	Colours various,	Fine cottony,	1½		8	4½
15. Romney Marsh,	No horns,	White face and legs,	Combing,	8		25	2½
16. Spanish,	Horns,	ditto	Carding,	8½			

Figure 23: Sir William Jardine's synopsis of British sheep breeds, based on Culley's taxonomy, included in The Naturalist's Library, Ruminantia Part II *(Edenborough: W. H. Lizars, 1836, source: Google Books).*

Claims regarding the superiority of British sheep wool, and its contributions to British industry through the production of textiles and clothing, were present in eighteenth-century British popular natural history long before the discourse on breeds had begun to emerge. Indeed, the emphasis placed on the quality and quantity of wool and meat derived from British sheep was frequently used to characterise them and to illustrate their superiority at a global level. Pennant, for example, stated in *British Zoology* that 'no country is better supplied with materials, and those adapted to every species of the clothing business, than Great Britain; and though the sheep of these islands afford fleeces of different degrees of goodness, yet there are not any but what may be used in some branch of it', a sentiment he later reiterated in his *History of Quadrupeds*.[221] Oliver Goldsmith, drawing on Pennant, similarly proclaimed that 'no country… produces such sheep as England; either with larger fleeces, or better adapted for the business of clothing'.[222] Indeed, by the end of the eighteenth century, this assessment had evolved into a rhetoric of general superiority as Bilby stated proudly that 'no country produces finer sheep than Great-Britain', adding that, in modern Britain, 'our woollen manufactory stands unrivalled by any nation in the world'.[223] This trend continued into the nineteenth century as Church proclaimed that 'the sheep bred in Great Britain are by far superior to

[221] Pennant, *British Zoology Vol. I* p. 23; Pennant, *History of Quadrupeds, Vol. I* p. 32.
[222] O. Goldsmith (ed. W. Turton), *A History of the Earth and Animated Nature, Volume II* (London, 1805) p. 252.
[223] Bewick, *Quadrupeds* pp. 52-53.

those produced in any other country' and Goldsmith's earlier statement was repeated in the writings of Macloc, Trimmer and Loudon.[224]

By the end of the eighteenth century, declarations regarding the pre-eminence of new and 'improved', or enhanced British breeds, based on their increased ability to produce larger quantities of wool and meat, had permeated the discussion surrounding the importance of the British wool industry. Unlike with native breeds, these changes were clearly understood to be the product of human intervention in the form of British selective breeding efforts, which were presented as a demonstration of the technical skill and ingenuity of individual British agriculturalists as well as a national display of mastery over the natural world that reinforced the superior status of the British as a modern and civilised people. Consequently, the discourse surrounding the improvement of sheep was also deeply intertwined with notions of societal progress and the modern British nation.

Mavor, for instance, was adamant that the sheep had been 'brought to the highest perfection in this island', with 'no country more famous for this valuable race of animals than our own'.[225] Jardine observed that 'there is no country in the world where this branch of rural economy has been carried to so great an extent, or the imported breeds so much improved in value, by an assiduous attention and care to produce the best varieties whence to continue the flock'.[226] Bell similarly boasted that 'it is in this country, and this alone, that the most useful properties of the Sheep have been fully appreciated and improved', pointing out that, 'although in some countries where every other object is sacrificed to the improvement of the wool, this article may be produced in a still higher state of perfection' than in Britain, where the focus on creating animals with both superior meat and wool resulted in a thoroughly more valuable sheep 'than could be the case were one only of its products made the object of our care'.[227] Knight described the sheep breeds of Britain as 'the result of skilful treatment, of pasturage, and judicious crossings'.[228] Consequently, the individual actions of British breeders were conflated to present the collective improvement of these domestic animals as a uniquely British achievement that illustrated the nation's superior position on the global stage.

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[224] Church, *Cabinet Vol. 1*; Loudon, *The Entertaining Naturalist* p. 116; Mary Trimmer, *A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects, Second Edition* (London, 1830) p. 54; J. Macloc, *New, Complete, and Universal Natural History of All the Most Remarkable Quadrupeds, Birds, Reptiles, and Insects in the Known World* (London, 1813) p. 54.
[225] Mavor, *Natural History* p. 117.
[226] Jardine, *The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II* p. 154.
[227] Bell, *British Quadrupeds* pp. 443-444.
[228] Knight, *Pictorial Museum, Vol. I* p. 154.

Church, for example, praised Bakewell for the excellence of his 'Leicestershire breed' and commended Charles Chaplin for his improvements to the Lincolnshire breed.[229] Indeed, Bakewell's new Leicester sheep, also referred to as the 'Leicestershire' or 'Dishley' breed, was one of the most frequently celebrated by popular natural history authors, who presented its 'improved' status as exemplary of the British successes achieved through selective breeding (see figures 24 and 25). Some of this preoccupation with the New Leicester stemmed from the excellent publicity, which Bakewell received for his flock during his lifetime, with Culley's claims regarding the quality of the animal's flesh and its ability to put on fat, first expressed in his *Observations on Live Stock*, being frequently reiterated in works of British popular natural history well into the nineteenth century.[230]

The imagined superiority of the New Leicester was very much couched in terms of its mutual benefits to British meat production as well as its wool industry, reinforcing British understandings of the qualities that constituted a good sheep. Jardine explained how Bakewell had 'attempted to combine quantity and quality of wool, with excellency of the meat and early feeding' to produce an animal 'which was not only productive to himself, but of lasting importance to the agriculturalist and wool-grower'.[231] This articulation of excellence served to temporalise the status of the New Leicester by locating it firmly within contemporary constructions of modern Britain, with Bilby asserting that the 'Leicestershire Improved Breed' had 'gradually arrived at a degree of perfection in improving this animal, unknown to any former period'.[232]

[229] Church, *Cabinet Vol. 1*.
[230] George Cully, *Observations on Livestock* (London, 1786) pp. 76-77; Bingley, *British Quadrupeds* pp. 369-370; John le Keux, *Illustrations of Natural History* (London, 1829) pp. 124-125; Jardine, *The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II* p. 158; David Low, *The Breeds of Domestic Animals of the British Isles* (London, 1842) pp. 184-185.
[231] Jardine, *Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II* p. 158.
[232] Bewick, *Quadrupeds* p. 63.

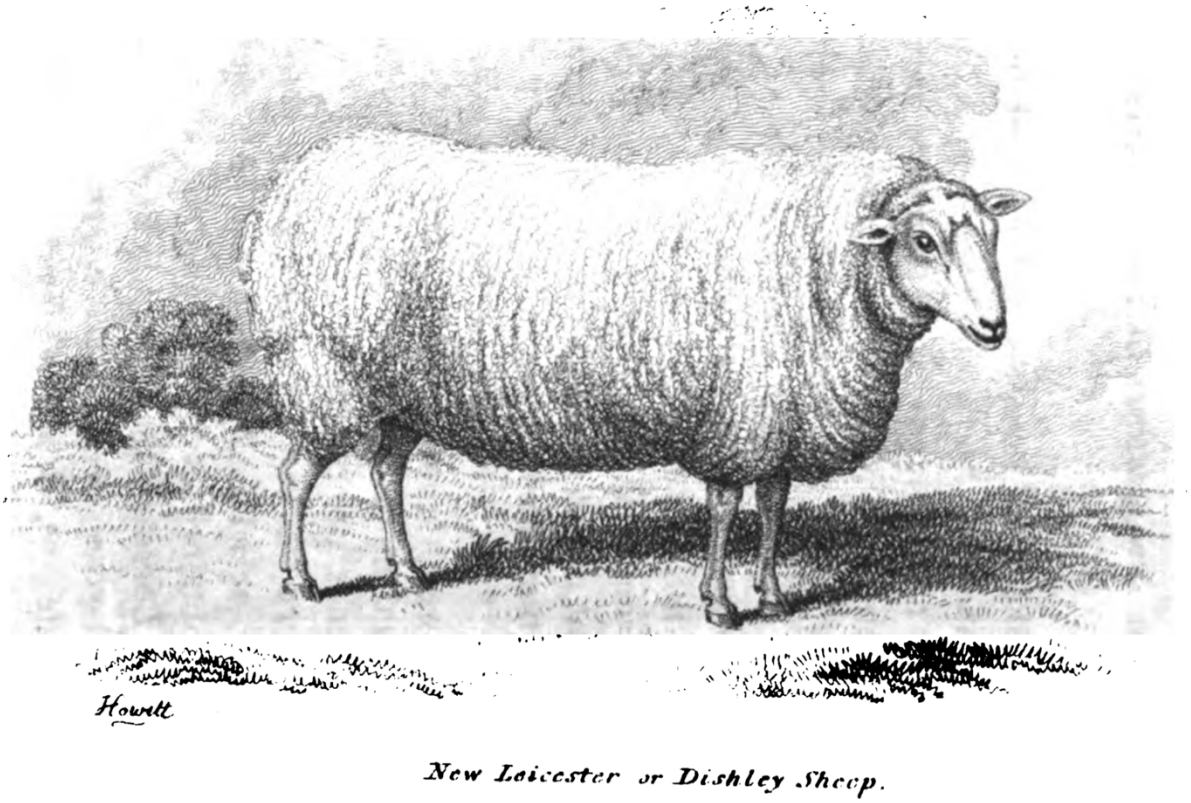


Figure 24: The 'New Leicester or Dishley Sheep' from Bingley's British Quadrupeds *(London: Darton and Harvey, 1809, source: Google Books).*



Figure 25: The depiction of the Leicester sheep in Jardine's The Naturalist's Library, Vol IV, Ruminantia Part II *(Edenborough: W. H. Lizars, 1836, source: Google Books).*

The frequent and explicit comparisons made between improved sheep breeds and native breeds helped to further temporalise these types, with the former increasingly located within contemporary Britain and the latter inevitably and conversely confined to the nation's past. For instance, in Bewick's *Quadrupeds*, breeds were regularly divided into old, unimproved types or new, improved types and their temporal positioning was made very apparent in their descriptive nomenclature. In the case of the Teeswater sheep, Bewick and Bilby explicitly distinguished between the 'Unimproved' and the 'Improved' forms, drawing direct comparisons between their physical features in the text and the illustrations (see figures 26 and 27) and pointing out that the 'uncouth and uncultivated appearance' of the older breed stood 'in contrast to those of the improved kind', which were 'looked upon by judges as nearly approaching perfection'.[233] These differences between the old and the improved forms of the Teeswater, as a product of human manipulation over time, resulted in a temporal shift which placed the new breed within a narrative of British modernity, underpinned by notions of scientific progress and societal development, that reinforced Britain's advanced, civilised status through the language of rational and efficient commodity production.

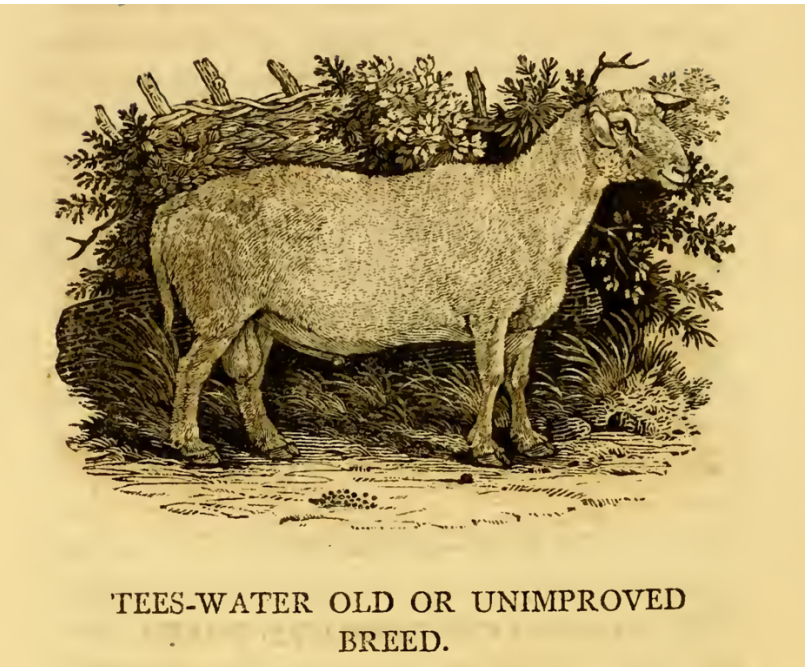


Figure 26: Bewick's engraving of the 'old' or 'unimproved' Teeswater breed, from his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*

[233] Bewick, *Quadrupeds* p. 61.

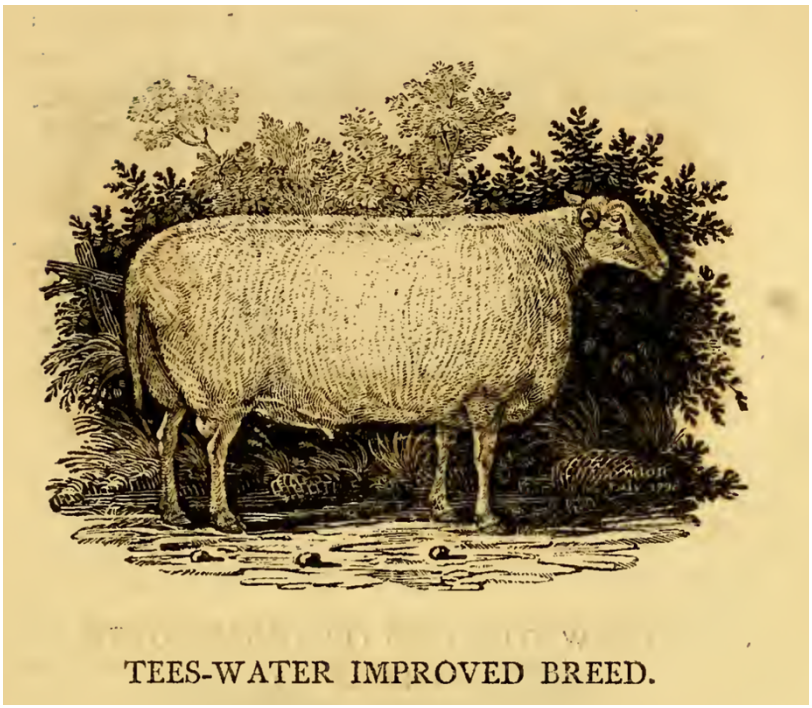


Figure 27: Bewick's engraving of the 'improved' Teeswater breed, from his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*

The disappearance of many native varieties, either through their complete transformation following selective breeding efforts or their replacement with other, more improved breeds, was not only understood to be naturally inevitable but also perfectly rational. These convictions, expressed within British popular natural history, reflected the broader, contemporary, metropolitan belief that a centrally-located, British modernity would eventually spread to encompass the whole nation. When discussing the Teeswater, for example, Bingley comments that 'there are now very few flocks that have not been crossed, more or less, with the Dishley blood, by which they have been essentially improved' whilst Lincolnshire sheep, which were judged to be 'so tender as to be unfit for more northern districts', have spread due to improvements made 'by the breeders introducing among them valuable Rams from other counties'.[234] Indeed, this process of locating improved and unimproved sheep breeds across the nation created an inevitable dichotomy that illustrated and even demarcated the progression of modernity from the metropole and central England towards the peripheral territories of Britain.

Contemporary conceptualisations of 'native' breeds as examples of local primitiveness are clearly illustrated, in British popular natural history, through the discussions surrounding the sheep of northern Scotland, especially the Highlands and the Northern Isles. Whilst aspects of these breeds were praised, such as the flavoursome mutton of the Scottish

[234] Bingley, *British Quadrupeds* pp. 372-373.

Blackface or the fine, downy fleece of the Shetland and Orkney breeds, the general assessment of these animals within popular natural history was one of falling short and inadequacy, which needed to be addressed through their hybridisation with improved breeds. Fleming, for instance, considered the native sheep of northern Scotland to be the progenitor stock from which 'numerous modern and valuable varieties… bred in the best cultivated districts' were derived, but this also implied that the peripheral territories, where native Scottish sheep continued to exist, were backward due to their outdated systems of agriculture.[235] These conceptualisations resonated strongly with broader, enlightenment imaginings of the inhabitants of northern Scotland, especially the Gaelic-speaking Highlanders, as 'contemporary ancestors'.[236] This temporalisation firmly confined their culture, social structure and economic relationships to Britain's past and excluded these populations from contemporary conceptions of Britishness, that held modernity as a central tenet.

In terms of their commercial potential, the native sheep of northern Scotland were not judged to be completely without merit, with Bilby, for example, quick to praise the wool of the Shetland sheep as 'infinitely superior to that of any other in the kingdom, and equal to Spanish wool in fineness and texture'.[237] Bilby's claims stemmed largely from assessments made by Scottish improvers, specifically local landowners linked to organisations such as the Highland Society of Scotland, who, according to Bilby, 'actuated by a truly patriotic zeal, are labouring to draw out the natural resources of their country, and secure, to the most distant and long-neglected parts of this kingdom, those permanent advantages to which by their situation they are entitled'.[238] Indeed, these actions were conceptually restricted to local elites, whose active participation in national networks of improvement and development allowed them to transcend the imaginings of backwardness or primitivity otherwise ascribed to the local population. Bilby particularly lauded the 'spirited measures' taken by Dr James Anderson, of the Highland Society, 'to preserve this valuable breed' so that 'British wool may in time regain that great superiority for which it was once so famous'.[239] Clearly, then, the temporalised status of so-called primitive breeds was negotiable if they were seen to possess sufficient economic potential to be actively integrated into the emerging, national framework of modern agriculture and

[235] Fleming, *British Animals* p. 25.
[236] Jonsson, *Enlightenment's Frontier* p. 50; Stroh, *Gaelic Scotland in the Colonial Imagination* pp. 53-54.
p 53.
[237] Bewick, *Quadrupeds* p. 67.
[238] Bewick, *Quadrupeds* p. 67.
[239] Bewick, *Quadrupeds* pp. 68-69.

industry that was understood to reflect the industriousness and prosperity of the British nation.

The temporalising effects of attitudes towards primitive breeds in late-eighteenth and early-nineteenth-century British popular natural history literature can best be seen through the discourse surrounding the sheep of Orkney, whose features were widely understood to characterise primitiveness within British sheep. Indeed, the Orkney breed was repeatedly compared to the primitive Icelandic breed, whose multiple horns, varied coloration and propensity to moult its fleece, were considered to be indicative of extremely primitive breeds.[240] Through these comparisons, the Orkney breed was aligned with the primitive Icelandic breed, exoticised and temporally distanced from the sheep of the British mainland. Through these aligning processes, Orkney and its inhabitants were similarly conceptualised as part of the subarctic north, which temporalised them as backward and barbaric and distanced them from contemporary imaginings of modern Britishness that centred round the nation's metropole.

The collection of the Orkney sheep's wool by rooing, gathering its moulted fleece rather than shearing, was especially highlighted by popular natural history authors, such as Bell, who viewed this practice as a key indicator of the animal's 'unimproved', 'primitive' status and of the 'backwardness' of the local people.[241] Indeed, in volume three of his *Menageries* series, Knight conceptualised the animal's primitive and uneconomic form as a product of local indolence, stating that Orkney possessed 'a wild, or rather neglected, breed of sheep'.[242] In his later *Pictorial Museum*, Knight actively temporalised the Orkney sheep and its caretakers by tracing the practice of rooing back to the time of the Romans and noting that 'this cruel and unjustifiable method' had 'been but lately discontinued in the Orkney Islands, and is, perhaps, still prevalent in Iceland'.[243] This rather critical claim confined the Orkney breed, the island and its human inhabitants to an uncivilised past, temporally and spatially distancing them far from the modern, civilised British metropole and its narratives of national belonging.

Early-nineteenth-century, British agriculturalists were similarly quick to link the primitiveness of the Orkney breed to the backwardness of the local people. Low, for instance, explained that the animals were 'often left entirely to their own resources in the bleak and desolate islands in which they are imprisoned', adding that 'under the whole of

[240] Charles Knight, *The Library of Entertaining Knowledge, The Menageries, Quadrupeds, Volume III* (London, 1840) p. 42.
[241] Bell, *British Quadrupeds* pp. 442-443.
[242] Knight, *The Menageries, Vol. III* p. 421.
[243] Knight, *Pictorial Museum, Vol. I* p. 155.

this barbarous system, the mortality is excessive; all the profit to be derived from the proper management of a flock of sheep is lost; and all the means are forgone of improving the breed, by the selection of the male and the female parents'.[244] According to Low, the extinction of the Orkney sheep, and other 'primitive', island-dwelling sheep breeds, such as the Shetland variety, was inevitable as they would be replaced by modern, 'improved' substitutes that would better reflect the agricultural prosperity and modernity of Britain.[245] Bingley praised the 'spirited breeders' in Ireland, who had 'at great expense and hazard' imported English rams, pointing out that 'from the emulation which has been excited by their success, it is to be hoped that the original breed will soon be entirely extirpated'.[246] In addition, Low commended the landowners in peripheral territories, who had successfully embraced modern approaches and technologies to significantly improve breeds on their estates, highlighting how breed improvement was inextricably linked to economic production, industrialisation and modern Britishness and how the successful efforts of individuals could benefit the nation as a whole:

> It is painful to draw such a picture of neglect, as applicable to the rural economy of any part of a country like Britain. Yet it is consoling to know that the seeds of improvement are scattered in these long-selected islands. In several of them are settled various landed gentlemen, who are equal in intelligence to any in the kingdom, and who have begun to give due attention to the resources of their country. The efforts of such individuals to improve the domestic animals of their estates cannot fail to meet with success, nor the benefits of their example to be gradually diffused. The power of steam has further been called into operation, to bring those remote Islands into contact with the markets of the South; and now the breeders, instead of suffering their sheep to become the prey of eagles, ravens, and to perish through hunger and neglect, have the means of carrying their rich and delicate mutton direct to the best markets of consumption in the kingdom.[247]

Within British popular natural history, the skill and ingenuity of British agriculturalists were similarly highlighted in discussions surrounding the introduction and manipulation of foreign breeds, imported into Britain to improve its sheep stock through selective breeding. Of these foreign varieties, popular natural history writers of the nineteenth century

[244] Low, *Breeds* pp. 60-61.
[245] Low, *Breeds* p. 62
[246] Bingley, *British Quadrupeds* p. 389.
[247] Low, *Breeds* p. 61.

especially praised the Spanish merino, which had been introduced into Britain in 1787 by Sir Joseph Banks, acting on behalf of George III.[248] Famed across Europe for the quality of its fine, silky wool, the merino provided opportunities for British agriculturalists to produce an improved animal that would conform to British understandings of 'a good sheep' through its hybridisation with British sheep breeds. Indeed, the production of successful British-merino crosses was very much presented as the British making this foreign breed their own, a process that was celebrated as an example of British mastery over nature and seen as an indicator of Britain's superiority over its continental neighbours.

Mavor, for instance, noting that 'the merino or Spanish breed is now pretty well naturalised in this country; and whilst its flesh is improved, its fleece does not appear to be materially deteriorated', characterised the British crosses as fundamentally superior to their Spanish forebearers due to their improved combination of good fleece and good meat.[249] Bingley also pointed out that the British ryeland breed, whose population had significantly declined due to crossings with Bakewell's new Leicester breed, was suddenly in high demand for hybridisation with Spanish merinos 'not on account only of the fineness of their wool, but on account of their good shape, excellent mutton, and ready disposition to fatten', demonstrating how British breeds were being specifically selected to produce new merino hybrids that conformed to British understandings of a superior sheep.[250]

Loudon's explanation that 'the Merino, or Spanish Sheep, have of late years been introduced with some success onto our English pastures, and the wool of the hybrids, raised between the Merino Sheep and the South Down Sheep, is thought nearly equal to that of Spain' reveals a continuing respect for the Spanish merino and a little reservation regarding the superiority of the British-merino crosses, although most British popular natural history authors were quick to evaluate these hybrids as a successful and useful addition to British agriculture.[251] Celebrations of applied British excellence were similarly extended to efforts in Britain's colonial possessions, with Bell asserting that 'the recent improvement in the character of British wool, produced by a prodigious mixture of the Spanish breed' had 'brought this article to a high state of perfection; and the wool even of one of our remote colonies- Australia- is also fast acquiring a similar degree of excellence'.[252]

[248] Woods, *Herds* pp. 58-59.
[249] Mavor, *Natural History* p. 117.
[250] Bingley, *British Quadrupeds* p. 378.
[251] Loudon, *The Entertaining Naturalist* p. 116.
[252] Bell, *British Quadrupeds* pp. 443-444.

Knight's writings reveal how the narratives surrounding Britain's adoption and adaption of the merino helped to maintain its position at the forefront of agricultural advancement and to reinforce the nation's superior status when confronted with the successes of its European neighbours and rivals. Indeed, Britain was far from being the first European country to experiment with the importation of merinos from Spain, with Linnaeus having organised a similar scheme in Sweden during the early eighteenth century and similar efforts having been made in Norway, Denmark, the German States, the Netherlands and France.[253] However, in volume three of his *Menageries* series, Knight drew attention to the efforts of early British merino pioneers within the broader context of European experiments, including Sir Joseph Banks among those 'intelligent and patriotic individuals who first turned their attention to the improvement of their native flocks by the introduction of Spanish and other foreign sheep', adding that 'these men were better entitled by the admiration and gratitude of their country, than were many by whose fame theirs is eclipsed'.[254] These statements not only served to integrate British achievements into a broader spectrum of European successes but also to place Britain at the forefront of such agricultural advancements across and beyond Europe.

Additionally, Knight rationalised the late adoption of the merino by arguing that the continuing excellence of the national flock had invalidated any earlier need to introduce the Spanish breed into Britain, explaining that:

> England was among the last of the countries of Europe to attempt the amelioration of her native flocks, by crossing them with the Merino breed. This tardiness arose, naturally enough, from the comparative excellence of her own breeds of sheep. English wool had been the staple commodity of the nation- it had stood unrivalled by our neighbours, and the meat of our sheep was as good as the fleece. But when there is a prospect of making good better, surely the attempt ought to be made, and the opposition to all such experiments is anything rather than honourable to our forefathers.[255]

In both his *Menageries* series and his *Pictorial Museum*, Knight, drawing on the chronicle of Stow and Baker, further concluded that 'there are good grounds for believing that these Spanish sheep are originally of British extraction, being of the old Ryland or Cotswold'.[256] Indeed, as far as Knight was concerned, the merino had not so much been imported into

[253] Knight, *The Menageries, Vol. III* pp. 432-437.
[254] Knight, *The Menageries, Vol. III* p. 440.
[255] Knight, *The Menageries, Vol. III* pp. 437-438.
[256] Knight, *The Menageries, Vol. III* pp. 424-425; Knight, *Pictorial Museum, Vol. I* pp. 151, 154.

Britain but had simply returned home and, by bestowing upon it a distinctly British genealogy, he conceptually dislocated the merino from its Spanish origins and claimed the breed for the British, strengthening national prestige through imaginings of agricultural excellence and superiority.

Country and commerce:
the cattle of contemporary Britain

In late-eighteenth and early-nineteenth-century British popular natural history, expressions of Britishness within the discourse surrounding cattle, like sheep, largely centred round the production and consumption of useful materials that could be derived from these animals, mirroring broader, national discussions that had long characterised the regular consumption of beef as an important aspect of English national identity. By the turn of the century, the increasing importance attached to beef consumption had transcended England's national boundaries to become a significant element of Anglocentric Britishness. Strong, emblematic associations between beef consumption and British masculinity, prosperity and liberty were established and frequently used to demonstrate national superiority through comparative, stereotypical depictions of Britain and its continental neighbours, especially France.[257] From the late 1780s, during the wars with revolutionary France and Napoleon's subsequent imperial regime, the British nation was increasingly personified by the beef-eating character, John Bull, who regularly symbolised the nation through political cartoons published in the British popular press, in which his image was frequently contrasted against that of a scrawny and inferior French radical.[258]

By the early nineteenth century, Beef-eating was fully entrenched within conceptions of the national character and when the New Poor Law of 1834 prohibited the consumption of roast beef by workhouse inmates on Christmas day, as part of a policy of 'less eligibility', oppositional press was quick to attack this new approach as a violation of traditional customs.[259] Indeed, it further claimed that the restriction of this 'Old English Fare' constituted a rejection of the non-working poor from broader conceptions of the nation.[260] This illustrates how the consumption of beef, as an expression of national belonging,

[257] See: T. Erwin, 'William Hogarth and the Aesthetics of Nationalism', *Huntington Library Quarterly* 64/3-4 (2001) pp. 403-408; D. Janes, 'Unnatural Appetites: Sodomitical Panic in Hogarth's "The Gates of Calais", or, "O the Roast Beef of Old England" (1748)', *Oxford Art Journal* 35/1 (2012) pp. 20-22.
[258] B. Rogers, *Beef and Liberty: Roast Beef, John Bull and the English Nation* (London, 2003) p. 155.
[259] N. Durbach, 'Roast Beef, the New Poor Law, and the British Nation, 1834-63', *Journal of British Studies* 52/4 (2013) pp. 970-976.
[260] Durbach, 'Roast Beef' p. 975.

extended across the English class divide and highlights how the practice of beef-eating was deeply intertwined with British notions of economic prosperity and liberty. As Ritvo explains, 'meat was a particularly valuable commodity in international competition, because the ability of especially the urban industrial workers to buy it was an index of British commercial prowess'.[261] Such discussions resonated at a time when the nation's population was increasing at a rapid rate, with England's total rising from 5.5 million people in 1700 to 6.42 million by 1800, a trend that would only continue as the nineteenth century progressed.[262]

Aspects of this relationship between cattle, affluence and national belonging are further revealed in broader, contemporary British discussions regarding cattle ownership. Ritvo, for example, explains that the avid breeding of prized beef cattle among the landed aristocracy in part constituted a celebration of the latter's own, elite position within British society, with their carefully-maintained bloodlines of show-winning cattle serving to reflect and reinforce their own aristocratic pedigree.[263] Indeed, a new emphasis on animal bloodlines, stemming from the growing reliance on breed histories, reaffirmed the importance of recorded ancestry by providing these animals with a genealogical past that imitated the familial records of their masters. These expressions of social superiority conflicted with the claims of gentlemen breeders that their efforts and expenditures constituted successful forays into practical improvement and scientific investigation.[264] Indeed, these enthusiasts presented their activities through the rhetoric of increased profitability and the enrichment of the national stock, thus helping to frame their efforts within a larger, national narrative of British agricultural improvement and technical achievement.[265]

Further insights into the relationship between cattle and their aristocratic owners can be seen in discussions surrounding the so-called wild and ancient, 'White Park' cattle, which, during this period, were frequently imagined as the original, indigenous cattle of Britain (see figure 28). By the late eighteenth century, the presence of White Park as ornamental cattle on large estates, scattered across the country, was often conceptualised as continuous and enduring, owing to their bloodlines, which were seen to stretch back to antiquity and even prehistory.[266] Consequently, these herds were perceived to possess a

[261] Ritvo, *The Animal Estate* pp. 46-47.
[262] M. Overton, *Agricultural Revolution in England: The transformation of the agrarian economy 1500-1850* (Cambridge, 1996) p. 63.
[263] Ritvo, *The Animal Estate* pp. 53-56.
[264] Ritvo, *The Animal Estate* pp. 69,72.
[265] Ritvo, *The Animal Estate* p. 62.
[266] H. Ritvo, 'Race, Breed, and Myths of Origin: Chillingham Cattle as Ancient Britons', *Representations* 39 (1992) pp. 7-9.

purity and longevity that reinforced the social superiority of their aristocratic owners through shared notions of lineage and natural legacy. These views were quite generally held and extended far beyond the families themselves, with Ritvo explaining that 'not only were the surviving herds the totems of distinguished and powerful families, but they inspired local pride… and as the qualities represented by the white cattle were attractive to all Britons, the metonymic chain could easily be extended further, to the nation as a whole'.[267]



Figure 28: Bewick's engravings of white park cattle, from his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*

White Park cattle consistently formed a core element of the cattle discourse in late-eighteenth and early-nineteenth-century British popular natural history literature, with commentaries on these animals, often referred to by authors as the 'wild ox', 'urus' or 'auroch', present in works as early as Pennant's *British Zoology*.[268] Like the red deer, these cattle were temporalised within British popular natural history discourse, the breed being similarly constructed as a conduit through which the British could connect with romantic imaginings of their nation's ancient past. Bewick, for instance, who had visited and

[267] Ritvo, 'Race, Breed, and Myths of Origin' p. 15.
[268] Pennant, *British Zoology, Vol. I* p. 19.

observed the famous herd at Chillingham, lauded the large, driven hunts, conducted on the estate, as 'the only modern remains of the grandeur of ancient hunting', a statement echoing the splendour attributed by naturalists to the large red deer hunting parties formerly assembled by members of the highland elite.[269] Edwin Landseer's 1867 portrait of a Chillingham bull, cow and calf (see figure 29) also captured many of the allusions to nobility that had been seen in his earlier, romantic depiction of the red deer in his *The Monarch of the Glen*.[270]

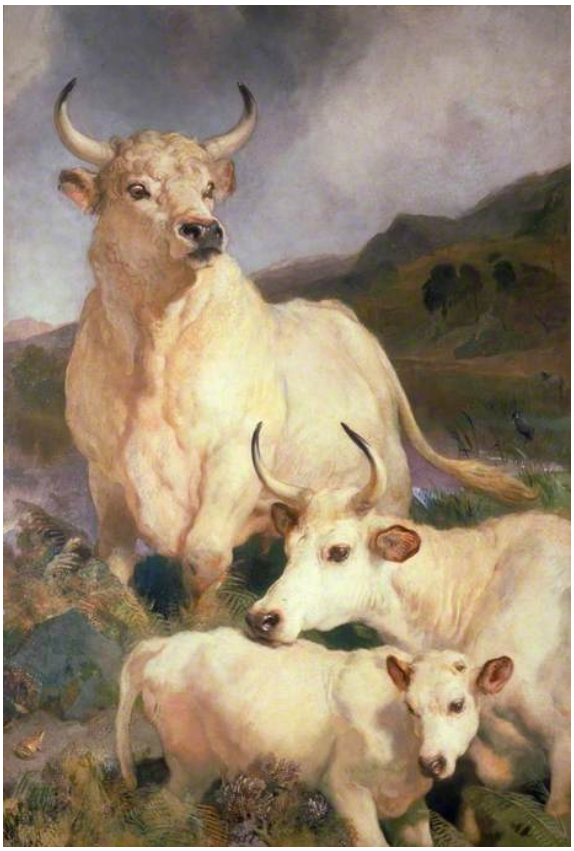


Figure 29: Edwin Landseer's portrait of Chillingham cattle (1867, Art UK, TWCMS: B8133, source: Wikimedia Commons).

Conversely, constructions of newly established breeds within late-eighteenth and early-nineteenth-century British popular natural history literature were temporally tied to modern Britain through the characterisation of their improved and superior qualities as products of national achievement within a broader, global narrative of societal advancement. From Buffon's writings in the mid-eighteenth century, the rearing of cattle had been presented by European naturalists as a catalyst for the development of human

[269] Bewick, *Quadrupeds* p. 40; S. Hall, 'Caring for the Legend of the Wild Bull: An Interpretation of the Georgian Landscape of Chillingham Park, Northumberland', *Garden History* 38/2 (2010) pp. 215-216.
[270] See above: pp. 57-58.

civilisation and as a crucial source of national wealth. This can be seen in Smellie's translation of Buffon, in which cattle are identified as a central component of society:

> Without the aid of this useful animal, both the poor and the opulent would find great difficulty in procuring subsistence; the earth would remain uncultivated; our fields and gardens would become parched and barren. All the labour of the country depends on him. He is the most advantageous domestic of the farmer. He is the source and support of agriculture. Formerly, the ox constituted the whole riches of mankind; and he is the basis of the riches of nations, which subsist and flourish in proportion to the cultivation of their lands, and the number of their cattle.[271]

These views were reiterated by many British popular natural history authors, including Bingley, who, quoting Buffon, stated that, 'in former ages, he [the ox] constituted the only riches of mankind; and still he is the basis of the riches of those nations which only flourish and are supported by the cultivation of lands, and the number of their cattle'.[272] With a firm emphasis within British popular natural history on the number and variety of useful products that could be derived from cattle, the status of the latter as a cornerstone of civilisation, human existence was upheld. Shaw was similarly adamant that 'every one knows that the Cow furnishes some of the chief articles both of use and luxury in civilised life, and the animal is, therefore, universally reared, except among savage nations'.[273] These ideas were strengthened through additional references to the veneration of cattle by ancient civilisations, such as the ancient Egyptians and the Romans, and through references to the prominence of cattle within biblical texts, which collectively signified the animal's prevailing importance across human history.[274]

Although beef was not stressed as the definitive product of cattle, British naturalists and agriculturalists were often quick to highlight the British breeds admired for the quantity and quality of their flesh, especially when they mirrored the market preferences and commercial practices that tied these animals to the nation. Fennell, for instance, repeated the common observation that the highland cow, or Kyloe, was 'driven southward into the English counties, where numbers of them are fattened for slaughter, their beef being

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[271] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 235.
[272] Bingley, *British Quadrupeds* pp. 395-396.
[273] Shaw, *General Zoology, Vol. II Part II* p. 397.
[274] le Keux, *Illustrations* pp. 105-106; Knight, *Menageries, Vol. III* pp. 221-222, 230-232; Fennell, *Quadrupeds* p. 536; Knight, *Pictorial Museum, Vol. I* p. 166; Aikman, *Natural History* p. 37.

highly esteemed by John Bull'.[275] As a nation's ability to manage and manipulate its cattle stock was clearly understood to indicate its position within a hierarchical framework of civilisation, the successful and lucrative relationship attributed to Britain and its cattle within British popular natural history was, therefore, seen to reflect Britain's advanced state of agriculture and its more highly-developed, societal stage. Within this context and to strengthen the British position, comparisons were actively and commonly made between the cattle of Britain and France, with the latter being regularly presented as stunted and scrawny due to mistreatment, mismanagement and a poor diet stemming from poor-quality, French pasture. These imaginings mirrored the broader attitudes, expressed through the caricature of the portly John Bull, nurtured on a regular diet of roast beef, who was frequently contrasted with a gaunt and malnourished, French radical in British political cartoons during the French Revolution and the Napoleonic Wars.[276]

These assertions served to highlight the higher quality of British cattle and Britain's affluence compared to France, which collectively reinforced a sense of masculine Britishness that was tied to notions of industriousness, ingenuity and united liberty. Indeed, popular natural history authors, such as Goldsmith, extolled the cow as 'the poor man's pride, his riches and his support', explaining how it could be kept on a small plot of land and still produce a large quantity of nutritious milk, a conceptualisation that supported ideas of British self-sufficiency.[277] However, Goldsmith also criticised how the agrarian poor of Britain were dependent on selling the milk, flesh and veal derived from their animals to the affluent in order to sustain themselves and proclaimed, 'I cannot bear to hear the rich crying out for liberty, while they thus starve their fellow creatures; and feed them up with imaginary good, while they monopolize the real benefits of nature', a sentiment similarly articulated in his poetry and journalistic writings.[278]

As with sheep, the efforts of early agricultural improvers of British cattle, such as Bakewell and the livestock pioneers, Charles and Robert Colling, were praised, the Colling brothers being regularly applauded for their efforts in developing the highly-regarded Shorthorn breed. Low, for instance, described the 'artificial' breeds developed by stockmen, such as Bakewell, Colling and Tomkins, as 'the finest in the world with respect to their economical use', presenting the modern status of improved British cattle as an illustration of skill and

[275] Fennell, *Quadrupeds* p. 547.
[276] T. Hunt, *Defining John Bull: Political Caricatures and National Identity in Late Georgian England* (Burlington, 2003) pp. 160-161.
[277] Goldsmith, *Animated Nature Vol. II* pp. 222-223.
[278] Goldsmith, *Animated Nature Vol. II* p. 223; H. Bell, 'The Deserted Village and Goldsmith's Social Doctrines', *PMLA* 59/3 (1944) pp. 748-750; R. Taylor, 'The Politics of Goldsmith's Journalism', *Philological Quarterly* 69/1 (1990) pp. 78-80, 84-85.

ingenuity and an expression of national superiority.[279] Ironically, many popular natural history authors of this period also recognised that improved British cattle breeds often originated from foreign varieties, an admission that somewhat complicated the relationship between modern breeds and Britishness. Pennant, for instance, points out that 'the large species [of cattle] that is now cultivated through most parts of *Great-Britain* are either entirely of foreign extraction, or our own improved by a cross with the foreign kind', adding that 'the *Lincolnshire* kind derive their size from the *Holstein* breed; and the large hornless cattle that are bred in some parts of *England* come originally from *Poland*', a statement later reiterated by Shaw.[280]

However, cattle breeds of mixed or foreign origins were integrated into narratives of British excellence by popular natural history authors and agricultural economists, who showcased the ability of British breeders and agriculturists to improve on the efforts of other nations through the application of their own selective breeding methods. Pennant points out in his 1781 *History of Quadrupeds* that 'the English breed is derived from the foreign', with 'our native kind, such as the Welsh and Scottish runts… small, and often hornless' but 'by cultivation, many parts of *England* rival in their cattle many parts of the continent'.[281] This narrative was not restricted to cattle and was also evident in the ways that popular natural history authors and agriculturalists similarly naturalised and nationalised newly-established, foreign sheep breeds in Britain. Goldsmith had similarly explained that:

> we have, indisputably, the best breed of horned cattle of any in Europe, so it was not without some assiduity that we came to excel in these, as in our horses. The breed of cows has been entirely improved by a foreign mixture, properly adapted to supply the imperfections of our own. Such as are purely British, are far inferior in size to those on many parts of the continent; but those which we have thus improved, by far excel all others.[282]

In the early nineteenth century, W. Wood stated that 'the English breed is derived from the foreign; and by cultivation, those in many parts of England will now rival the best cattle that can be produced from the continent', illustrating how this appropriation of cattle breeds from continental Europe continued to support claims of national excellence and superiority.[283] Macloc further maintained that 'the pains taken by the English nation to bring their horned cattle to perfection, have been attended with great success; for by

[279] Low, *Breeds* p. 266.
[280] Pennant, *British Zoology, Vol. I* p. 18; Shaw, *General Zoology Vol. II Part. II* p. 398.
[281] Pennant, *History of Quadrupeds Vol. I* p. 18.
[282] Goldsmith, *Animated Nature Vol. II* pp. 226-227.
[283] W. Wood, *Zoography,* Vol. I (London, 1807) p. 16.

mixing them with foreign breeds has increased their beauty as well as their strength'.[284] le Keux similarly reiterated that 'it is almost exclusively in Great Britain that this race of animals has been improved so as to present breeds… far superior to what are to be found in a state of nature, or in any other country'.[285]

Of the imported, naturalised cattle breeds, the Holstein received particular attention within British popular natural history because it had become the staple stock of the eastern coast of England.[286] Bilby, for instance, highlighted that the 'improved' Holstein had 'advanced rapidly to a height unknown before in any age or nation' due to improvements, made by British breeders, to the animal's beauty, utility, form, and the time needed for it to reach maturity.[287] The discourse surrounding the Holstein extended to new British breeds produced through Holstein crosses, such as Colling's Shorthorn, which was recognised as an excellent animal, whose British status was assured in spite of its Holstein ancestry. Goldsmith recognised that crossing imported Holsteins with smaller, 'native' cattle from northern England and Scotland produced a 'milch breed' that excelled 'the cattle of any other part of the world'.[288] Macloc similarly claimed that 'our grazers now generally endeavour to mix the large Holstein with the small northern kind; and from both results that fine milch breed, which excels the cattle of every other part of the world'.[289] In *Illustrations of Natural History*, the 'Short-Horned Breed' was explained to have been:

> established upon the eastern coast, by various importations, through a long course of time, from the Continent, chiefly from Holland. It being at length discovered that the Dutch breed were disadvantageous to the grazier… the very judicious step was taken of crossing them with the delicate and blood-like race of Normandy and the islands. In this cross, both sides being renowned for their production of milk, originated the famous Holderness variety of short horns, the greatest milkers, probably, on the face of the earth.[290]

Here, the improvement of highly-regarded Dutch cattle by British agriculturalists, through hybridisation with English cattle, reinforced powerful narratives of British skill, industriousness and ingenuity by illustrating the results of such attributes within the

[284] Macloc, *Natural History* p. 26.
[285] le Keux, *Illustrations* p. 52.
[286] R. Trow-Smith, *A History of British Livestock Husbandry 1700-1900* (London, 1959) pp. 92-94.
[287] Bewick, *Quadrupeds*, p. 32.
[288] Goldsmith, *Animated Nature, Vol. II* p. 227.
[289] Macloc, *Natural History* p. 26.
[290] le Keux, *Illustrations* p. 80.

agricultural sphere. This trend continued into the mid-nineteenth century, with Aikman proclaiming that cattle of the short-horn breed, 'originally from Holstein… are esteemed the most beautiful and lucrative'.[291]

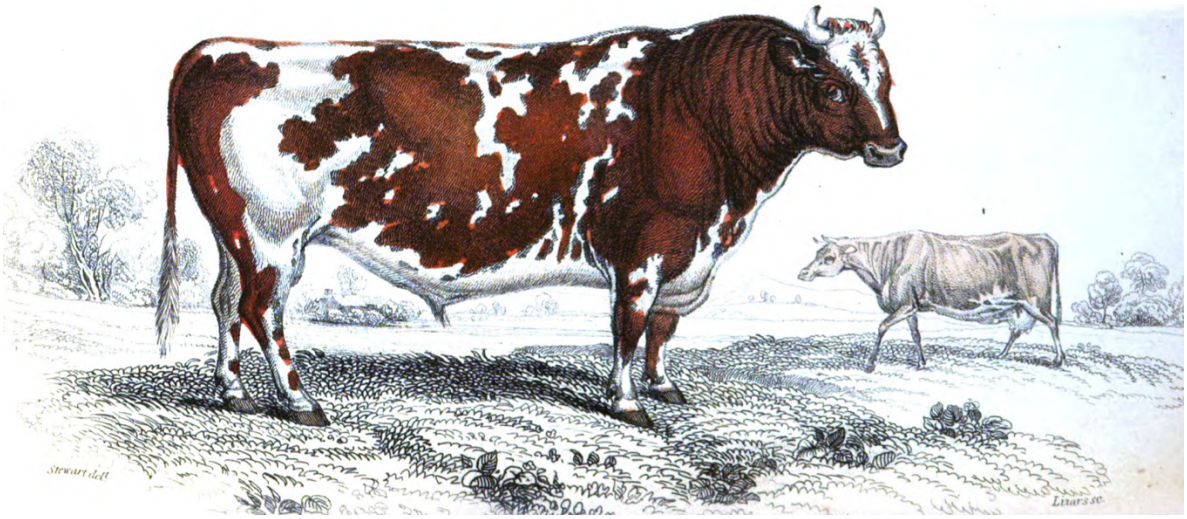


Figure 30: Stewart's image of the short-horn breed, from Jardine's The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II *(Edenborough: W. H. Lizars, 1836, source: Google Books).*

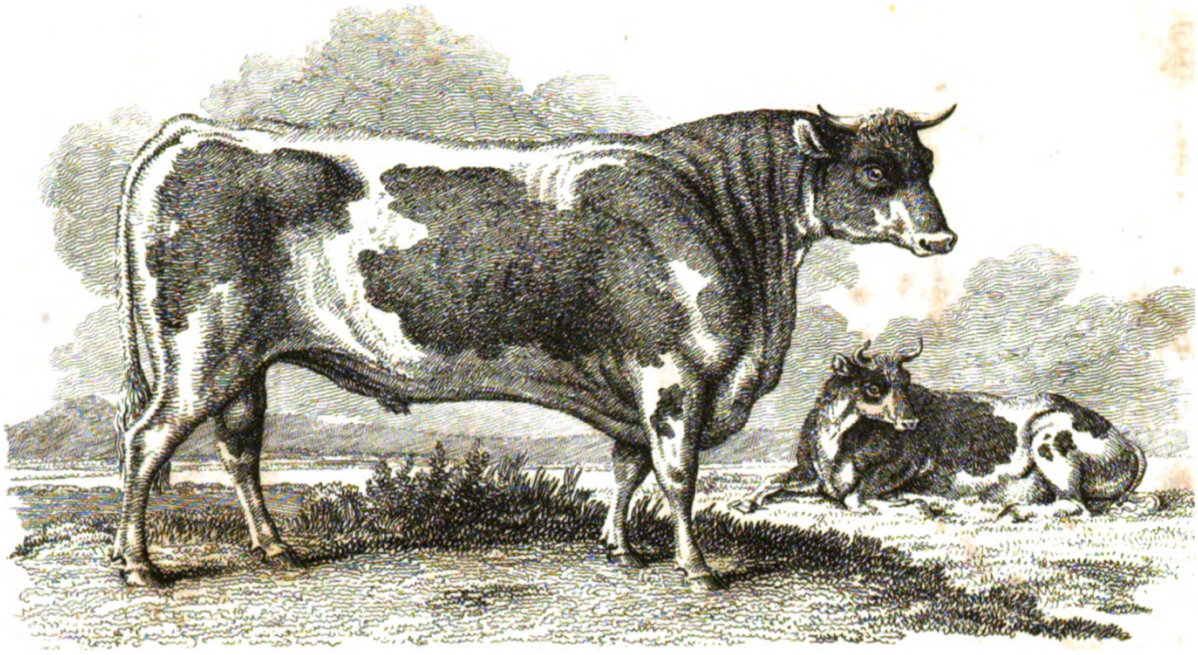


Figure 31: Howitt's image of Northern Short horned or Holderness Cattle, in Bingley's British Quadrupeds *(London: Darton and Harvey, 1809, source: Google Books).*

[291] Aikman, *Natural History* p. 39.

The characterisation of improved, British cattle breeds as modern conversely informed and reinforced the 'backward' status of 'native' cattle breeds, a distinction that, as with sheep, resulted in the demarcation of borders between the so-called civilised and uncivilised areas of Britain, based on the presence of new or native breeds respectively, the locations associated with 'inferior' cattle breeds mostly corresponding with the peripheral territories of Britain and the semi-colonial territory of Ireland. These parameters served to define which populations were included or excluded from narratives of national belonging, based on constructions of Britishness that held modernity as a central criterion. Bingley, for instance, was dismissive of Welsh and Irish cattle when comparing them to their English counterparts and reported that the cattle of Ireland had only recently been improved through the importation of English longhorns.[292] Low similarly identified the Shetland and Orkney cattle breeds and the cattle of the north and central Highlands as all in need of improvement.[293]

In addition to the selective breeding efforts of skilled agriculturalists, British popular natural history authors emphasised the British climate as an equally important factor for shaping the nature, physiology and economic potential of British cattle. Within this discourse, the qualities of the land mattered and its fertility warranted celebration due to its role in producing the excellence of British cattle that ensured the nation's prosperity. This belief is clearly captured in Pennant's unapologetic, patriotic declaration that:

> The climate of Great-Britain is above all others productive of the greatest variety and abundance of wholesome vegetables, which, to crown our happiness, are almost equally diffused thro' all its parts: this general fertility is owing to those clouded skies, which foreigners mistakenly urge as a reproach on our country; but let us cheerfully endure a temporary gloom, which clothes not only our meadows but our hills with rich verdure. To this we owe the number, variety, and excellence of our cattle, the richness of our dairies, and innumerable other advantages.[294]

These sentiments were often reiterated in later works that drew on Pennant as a major source, such as Goldsmith, who proclaimed that 'the climate and pastures of Great Britain… are excellently adapted for this animal's moderate nature… and there is no part of Europe where the tame animal grows larger, yields more milk, or more readily fattens

[292] Bingley, *British Quadrupeds* p. 416.
[293] Low, *Breeds* pp. 299-300, 304.
[294] Pennant, *British Zoology, Vol I* pp. 15-16.

than with us'.[295] Bilby similarly explained, in his introduction to the Ox, that 'the climate and pastures of Great-Britain are well adapted to the nature of this animal; and we are indebted to the variety and abundance of our wholesome vegetables, for the number and excellence of our cattle, which range over our hills, and enliven our plains- a source of inexhaustible wealth- the pride and boast of this happy country'.[296]

By characterising British cattle as a product of the nation's unique landscape and climate, British popular natural history authors strengthened the bond that linked the excellence of Britain's cattle to the places where they were located and the people who also resided there. As the nineteenth century progressed, the efforts, skill and ingenuity of British breeders continued to be celebrated within the British popular natural history discourse on cattle and the British climate was similarly hailed for its role in producing the superior quality of its cattle. Bland successfully captured this synthesis when he explained in 1850 that, 'the cow is a native of many parts of the globe, but the climate and pasture of this country seems to be best adapted to the breed and constitution of this truly valuable creature, as we most certainly have the best breed of horned cattle of any country in the world, at the same time the breed has been improved by a foreign mixture'.[297]

Conclusion

These case studies on the discourse surrounding British sheep and cattle within late-eighteenth and early-nineteenth-century British popular natural history literature reveal how constructions of improved domestic animal breeds were frequently located within imaginings of contemporary Britain that conceptualised the nation as modern, prosperous and superior and its people as ingenious, industrious and enterprising. This was most clearly evoked through the praise bestowed upon improved breeds, as products of the pioneering efforts of British breeders and stockmen, whose skill, know-how and rational application of new selective breeding methods were seen to reflect core elements of the national character within a national context of modernity. Bakewell, Cully and Colling, for example, were praised for their creation of new breeds, such as Bakewell's New Leicestershire sheep and Colling's Shorthorn cow, which were firmly attached to narratives of national excellence.

Constructions of sheep and cattle, informed by an economising gaze, characterised these domestic animals in terms of the economically-useful products that could be derived from them, bestowing improved breeds with a high status that mirrored the commercial

[295] Goldsmith, *Animated Nature Vol. II* p. 224.
[296] Bewick, *Quadrupeds*, p. 25.
[297] J. Bland, *Grandpapa's Tale's About Animals* (Halifax, 1850) p. 33.

aspirations of modern Britain. For example, the increasing emphasis, within constructions of sheep breeds, on the quantity and quality of both wool and meat that could be derived from each breed, helped to reinforce the superior status of improved British breeds, such as the New Leicester, at local, national and global levels as exemplifications of British agricultural superiority.

The ability of contemporary breeders and agriculturalists to successfully manage and manipulate domestic breeds with excellent outcomes positioned their efforts within a global context of national achievement, especially when viewed within broader, enlightenment understandings of the role of animals within societal development. Indeed, constructions of domestic animals frequently articulated broader narratives of progress in accordance with contemporary, stadial models of societal advancement that reaffirmed the advanced stage and superior status of the British people through their industriousness, ingenuity and mastery over nature. In this respect, cattle, which were seen as an essential component of civilised society, were frequently employed to illustrate Britain's advanced stage of societal development through their abundance in Britain, the quantity and quality of their milk and meat and their contributions to the prosperity of the nation.

The status of improved breeds, temporalised within a progressive, British modernity that would inevitably extend across the whole country, was largely informed through comparisons with unimproved, native breeds that were conversely confined to the past. Consequently, a dichotomy of old and new breeds emerged, with native breeds being largely associated with the peripheral territories of Britain, with sheep and cattle breeds identified as backward and in need of improvement being largely tied to Wales, the Scottish Highlands, the Northern Isles, and semi-colonial Ireland. The modern status of improved breeds extended to the landscapes in which they were located and which were understood to encapsulate modern agricultural efficiency. Constructions of British native breeds conversely typified the landscapes of Britain they occupied as backward and inferior and these sentiments were similarly applied to the people who also resided there and whose agricultural practices did not correspond with modern imaginings of efficient and lucrative cultivation. This dichotomous categorisation of improved and native breeds helped to demarcate the boundaries between those areas of Britain that were imagined to be civilised and those that remained uncivilised, a process that excluded the inhabitants of the latter from narratives of national belonging that centred round notions of modernity.

In the case of cattle, this relationship between animal, landscape and people was further strengthened by the belief that the superior quality of new British domestic breeds was as much a product of Britain's unique climate as it was of British selective breeding efforts.

These domestic animals, and the useful products derived from them, were, therefore, characterised through narratives of national excellence that were innately tied to the nation's landscape, people and climate. These discussions mirrored broader discourses that connected domestic animals to notions of national identity through narratives of natural legacy and lineage. Within the discourse surrounding domestic and wild British cattle, for example, the social superiority of the British landed aristocracy was upheld through cattle ownership. In the case of sheep, the historical importance and superior quality of British wool was regularly celebrated and the consumption of beef was strongly linked to imaginings of British prosperity and liberty that transcended the class divide and was often captured through the beef-eating caricature of John Bull, who served to reinforce conceptions of British masculinity, especially when contrasted with images of weaker, less prosperous continental rivals.

The use of foreign breeds to improve British native domestic animals was similarly integrated into narratives of British skill and national prestige within British popular natural history. By emphasising the unique improvements made to foreign breeds by British breeders and their creation of new, improved breeds through hybridisation, constructions of these animals articulated narratives of British agricultural improvement and national advancement, as in the case of the Spanish Merino. Any tardiness on the part of the British to utilise foreign breeds was attributed to the pre-existing excellence of the national flock. Indeed, even though Britain was not the first European country to experiment with Merino importation and hybridisation, the breed was claimed for Britain and British efforts, in the form of appropriation, integration and improvement, were viewed within a broader spectrum of European successes that maintained Britain's position as a global leader. Within the discourse surrounding cattle, the emphasis placed on the ability of British breeders to improve foreign varieties, especially the Holstein, or to create new breeds from foreign stock, such as the Shorthorn, created a strong narrative of British skill, excellence and economic ability that demonstrated Britain's superiority over its continental neighbours. Although acknowledged, the foreign origins of improved British cattle breeds did not compromise their ability to reaffirm the British national character as new crossbreeds were perceived as the best in the world and distinctly British.

Chapter 3

Animals of Britain's Future

During the late eighteenth and early nineteenth centuries, popular natural history authors were frequently preoccupied with the economic value of animals based on the products that could be obtained from them and the labours or services they could provide. This not only encompassed discussions surrounding domestic animals but also extended to wild species. In his *History of Quadrupeds*, for instance, Pennant highlighted the commercial value of skins of individual wild species, meticulously recording the prices of pelts and the number of skins imported into Britain.[298] Bilby similarly drew attention to the economic value of wild animals, commenting solely on a panther called the 'louchu', that its skin sold for six pounds sterling.[299] As the specimens examined by naturalists, such as exotic animal commodities from relatively inaccessible, far-off territories, were often the products of economic processes, commercial understandings of animals formed an inherent part of animal knowledge within British popular natural history. Naturalists also drew heavily from contemporary travel literature to construct animal knowledge regarding the nature, the status and the use of species within their home ranges.

According to Margaret Hunt, the eighteenth-century travel genre was preoccupied with assessing the economic capability of other nations and identifying new commercial opportunities, which she terms 'the commercial gaze'.[300] Consequently, animal knowledge that had been sourced from travel literature and shaped by this commercial gaze, had an amplifying effect on the economic understandings of animals within popular natural history. Hunt further explains that eighteenth-century travel literature encouraged readers to view people and landscapes 'in terms of fairly long-term investment opportunities, commercial competition, and labour utilisation' and that many of the most prominent and influential works of the travel genre represented 'an amalgam of the travel narrative and the economic treaties' of the time.[301] With such an emphasis on economic investigation, it is not surprising that discussions concerning animals within these texts often centred on their potential to generate revenue for humans who were or might prove to be industrious enough to capitalise on these new economic opportunities. This was also true of travel

[298] Pennant, *History of Quadrupeds, Vol. I* pp. 32, 54, 104, 236, 214, 265; Pennant, *History of Quadrupeds, Vol. II* pp. 287, 314, 315, 321, 325, 329, 355, 357, 371, 374, 386, 520, 531.
[299] Bewick, *Quadrupeds* p. 213.
[300] M. Hunt, 'Racism, Imperialism and the Traveller's Gaze in Eighteenth-Century England', *Journal of British Studies* 34/4 (1993), pp. 333-357.
[301] Hunt, 'Race, Imperialism, and the Traveller's Gaze' pp. 348, 352.

narratives expressed through the language of scientific exploration, as these placed a similar emphasis on assessing and cataloguing new geographical, mineralogical and biological features in terms of their commercial application.

Hunt further argues that the economically-oriented lens of the travel narrative helped to define and characterise the English commercial classes as superior technocrats, thereby cementing their claims to global superiority, especially when viewed within models of racial hierarchy.[302] Indeed, within this context, a human culture's ability to exert control over animals and make good commercial use of them was seen as an indicator of commercial capability and dominion over nature. Moreover, when viewed within contemporary stadial models of human development, commercial advancement was viewed as a hallmark of modern civilisation and the perceived capability of a society to use animals for the production of lucrative commodities for national and international markets, rather than merely for subsistence, was an important criterion for comparing societies and placing them within global hierarchies of societal development.

During this time, British popular natural history became an important tool for illustrating the nation's imagined, elevated position on the world stage and the discourse surrounding the variety and quality of domestic animals in Britain helped to reinforce self-perceptions of British industriousness, commercial acumen and material wealth. Narratives of 'improvement', much akin to those surrounding the manipulation of British domestic animals through selective breeding, were deeply embedded within this discussion, as the manipulation of biological forms by British breeders was frequently presented as a manifestation of economic progress. This discourse intensified with the emergence of the acclimatisation movement during the early nineteenth century. Historians have identified acclimatisation as a strictly nineteenth-century affair, noting that acclimatisation societies were largely established in major cities across Europe during the second half of this century. The historian of science, Warwick Anderson, for instance, maintains that the exchange of animals between metropole and colonial territories can be traced back to the earliest stages of European imperial expansion but that this transference of species was a 'haphazard, empirical exercise, unburdened with elaborate theorising' and that the nineteenth century was the 'century of acclimatisation'.[303] Although acclimatisation scholarship has predominantly focussed on the processes of acclimatisation in colonial territories, such as Australia and New Zealand, where the effects of species introductions had the broadest and most transformative effects on landscapes and ecologies,

[302] Hunt, 'Race, Imperialism, and the Traveler's Gaze' p. 355.
[303] W. Anderson, 'Climates of Opinion: Acclimatization in Nineteenth-Century France and England', *Victorian Studies* 35/2 (1992) p. 137.

acclimatisation efforts in Britain remain relatively unexplored and have much to reveal regarding conceptions of national identity.[304]

Acclimatisation theories, which developed in France during the late eighteenth and early nineteenth centuries, were deeply intertwined with ideas of stadial development. According to Richard Burkhardt, Comte de Lacépède, a French naturalist and early proponent of acclimatisation, had argued that the leading zoological institution in France, the Jardin des Plantes, could only exist in the most civilised of societies, those that he classified as part of a fourth stage of human development.[305] Stating that the key aim of the Jardin des Plantes was to 'perfect' animals in order to benefit humans in the best way possible, Lacépède linked the ability to manipulate animal bodies to advanced states of human society.[306] Frédéric Cuvier, head of the Jardin des Plantes from 1805 to 1836, similarly placed the domestication of animals within a broader narrative of progress, viewing domestication 'not as the degeneration of an animal's original nature, but as an improvement of it'.[307]

By the early nineteenth century, the acclimatisation movement had gained popularity and momentum in Britain with the Zoological Society of London stating in its 1825 founding prospectus that the organisation's key aim was to introduce new animals into Britain for the purpose of domestication and for populating 'farm-yards, woods, pleasure-grounds, and wastes', whilst the *Society for the Acclimatisation of Animals, Birds, Fishes, Insects, and Vegetables within the United Kingdom* was formed in 1860.[308] Bennett, in his *The Tower Menagerie*, presented the development of this menagerie as a cumulative process whose lineal stages corresponded with advances in human civilisation, a model that

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[304] See: A. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900, New Edition* (Cambridge, 2004); T. Dunlap, *Nature and the English Diaspora: Environment and history in the United States, Canada, Australia, and New Zealand* (Cambridge, 1999); C. Tiffin, 'Acclimatization and Colonialism' in H. Tiffin (ed.) *Five Emus to the King of Siam: Environment and Empire* (New York, 2007) pp. 165-176; Ritvo, H., 'Going Forth and Multiplying: Animal Acclimatization and Invasion', *Environmental History* 12/2 (2012) pp. 404-414; H. Cowie, 'From the Andes to the Outback: Acclimatising Alpacas in the British Empire', *The Journal of Imperial and Commonwealth History* 45/4 (2017) pp. 551-579. For works exploring acclimatisation in the UK, see: R. Fitter, *The Ark in our Midst: The Story of the Introduced Animals of Britain: Birds, Beasts, Reptiles, Amphibians, Fishes* (London, 1959); C. Lever, *They Dined on Eland: the story of the Acclimatisation Societies* (London, 1992).
[305] B. Germain (trans. unknown), *The Wonders of Animated Nature* (London, 1810) p. 6.
[306] R. Burkhardt, 'Constructing the Zoo: Science, and animal Nature at the Paris Menagerie, 1794-1838' in M. Henninger-Voss (ed.) *Animals in Human Histories: The Mirror of Nature and Culture* (Rochester, 2002) pp. 241-242.
[307] Burkhardt, 'Constructing the Zoo' p. 247.
[308] Ritvo, *The Animal Estate* p. 237.

echoed Lacépède's outline of menagerie development.[309] British acclimatisers generally couched their ideas within a narrative of societal progress in which dominion over nature was viewed as a hallmark of a modern society. Acclimatisation experiments encompassed a wide array of species and any successes were attributed to human skill as much as to any other biological or geographical factors, such as docility, climate and habitat. Consequently, acclimatisation provided a mechanism through which the British could demonstrate their ability to introduce species from across the world into Britain, reinforcing British self-perceptions of capability and superiority and their advanced societal position within stadial hierarchies.

It is, of course, important to remember that discussions surrounding the introduction of animals into new geographical spaces and the domestication of new species had occurred earlier in the eighteenth century when, for example, Linnaeus had campaigned for the introduction of plants and animals into Sweden to enrich its economy, provide new products and reduce costly imports, in line with Cameralist notions of political economy.[310] In colonial America, discussions around the domestication of bison and moose as potential substitutes for cattle and horses had continued across the eighteenth century and the domestication of local species to facilitate rapid landscape transformation had been frequently and actively discussed.[311] Bilby, for example, expressed his hope that 'the great and opulent would employ some portion of their time and affluence in procuring, from distant countries, such useful animals as would propagate in our island, and are yet unknown in it'.[312] Indeed, by the end of the eighteenth century, new animal species were being introduced into the metropole through pre-existing networks of plant naturalisation through botanical gardens, as illustrated by Sir Joseph Banks' importation of the first emus into Britain in 1801 through the Royal Botanical Gardens, Kew.[313]

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[309] Bennett, *Tower* pp. ix-xiii.
[310] L. Koerner, 'Purposes of Linnaen travel: a preliminary research report' in D.Miller and P. Reill (eds.) *Visions of Empire: voyages, botany and representations of nature* (New York, 1998) pp. 131-133.
[311] Bingley, *Animal Biography* pp. 119-120; K. Jackson, *Moose* (London, 2008); B. Folsom, 'An Interesting and Odd Present: Transporting American Bison across the Atlantic in the Eighteenth Century', *The Southwestern Quarterly* 1/120 (2016) pp. 1-18.
[312] Bewick, *Quadrupeds* p. 87.
[313] Grigson, *Menageries* pp. 89-90. For more information on the development of plant acclimatisation, see: R. Preston, '"The scenery of the torrid zone": Imagined travels and the culture of exotics in nineteenth-century British gardens' in F. Driver and D. Gilbert (eds.) *Imperial Cities: Landscape, display and identity* (Manchester, 1999) pp. 194-212; A. Thomas, 'The Establishment of the Calcutta Botanic Garden: Plant Transfer, Science and the East India Company, 1786-1806', Journal of the Royal Asiatic Society 16/2 (2006) pp. 165-167; S. Easterby-Smith, *Cultivating Commerce: Cultures of Botonny in Britain and France, 1760-1815* (Cambridge, 2018).

By examining the discourse surrounding particular species as candidates for acclimatisation within British popular natural history, this chapter will confirm that the justification for acclimatisation, which was largely founded on economic arguments, was also informed by the relationships between animals, landscapes and people both within and beyond Britain, as imagined by British metropolitan writers. To this end, this chapter will explore the discourse surrounding the muskox, also written as 'musk ox' in late-eighteenth and early-nineteenth-century sources, the nilgai, which was often written as 'nylghau', 'nyl-ghau' or even 'neelghau' in contemporary natural history literature, and the angora and cashmere, or 'Thibet', goats, as these case studies will provide useful insights into the conceptualisation of animals within British popular natural history through the discourse of naturalisation and how this discourse helped to reinforce a particular sense of British national identity that centred round the urban middling classes.

Of wool and wilderness:
muskox naturalisation discourse in popular natural history

Although included in Linnaeus's *Systema Naturæ*, the muskox first appeared in British popular natural history in Pennant's *History of Quadrupeds*, his construction of this 'musk buffalo' having drawn strongly on a single set of muskox horns in the Leverian Museum, an item visible in a depiction of the interior of the museum by the watercolourist, Sarah Stone, and on pre-existing understandings of the North American bison (see figure 32).[314] This was reflected in his accompanying illustration, depicting an animal with a muskox's head and a bison's humped shoulders and shaggy mane, which was reproduced in later works, such as George Shaw's *General Zoology* (see figures 33 and 35). However, by the time he had published *Arctic Zoology*, Pennant's description had advanced considerably (see figure 34), following his study of a skin of a female muskox provided by Sir Samuel Wegg, Deputy Governor and Governor of the Hudson's Bay Company from 1774-1799, and Treasurer of the Royal Society from 1768-1802.[315] This later description of the muskox's physical appearance was far more detailed and his accompanying illustration of the species, which was again reproduced by Shaw, was far more accurate.

[314] T. Pennant, *Synopsis of Quadrupeds* (London, 1771) pp. 8-9; Pennant, *A History of Quadrupeds, Vol. I* pp. 27-28.
[315] T. Pennant, *Arctic Zoology, Volume I* (London, 1784) p. 8.



Figure 32: A watercolour of the interior of the Leverian Museum by Sarah Stone depicting an upside-down set of muskox horns on display on one of the building's interior walls (1835, The British Museum, Am2006, Drg.54, source: Wikimedia Commons).



Figure 33: The illustration of the 'Musk Buffalo' in Pennant's History of Quadrupeds, Volume I *(London: B. White, 1771, source: Google Books).*



Figure 34: The illustration of two muskox in volume one of Pennant's Arctic Zoology, *Volume I (London: Henry Hughs, 1781, source: Google Books).*

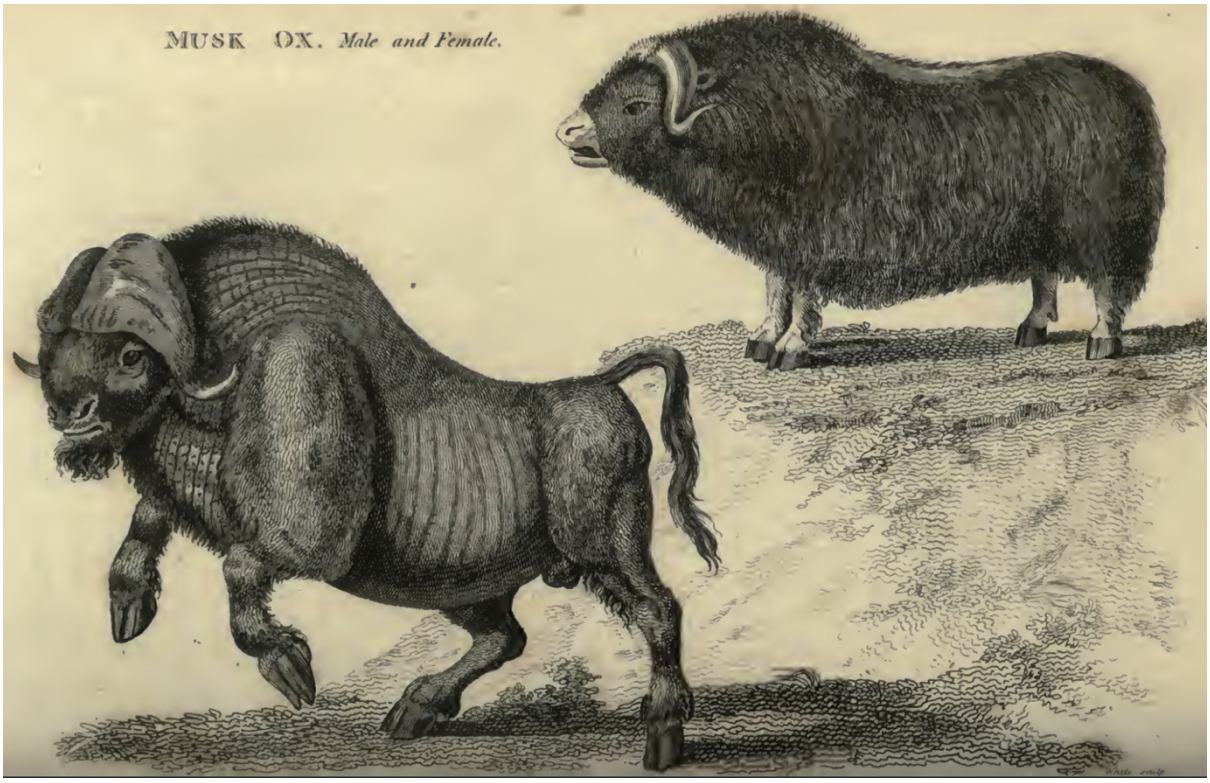


Figure 35: Illustrations of a male and female muskox from Shaw's General Zoology, Volume II, Part 2 *(London: G. Kearsley, 1801, source: Google Books).*

Following his analysis of the muskox skin, Pennant observed that 'beneath every part of the hair grows in great plenty, and often in flocks, an ash-coloured wool, most exquisitely fine, superior, I think, to any I have seen, and which might be very useful in manufactures if sufficient could be procured'.[316] Pennant also referenced an account by Nicolas Jérémie, a French fur trader and travel writer in the Hudson Bay area during the late seventeenth and early eighteenth centuries, in which Jérémie had reported that he'd transported samples of muskox wool to France, where they had been used to produce stockings 'more beautiful than those of silk'.[317] By highlighting the commercial potential of the muskox's wool, Pennant instantly posited a potential future economic relationship between this species and the British commercial classes.

As Pennant's writings were generally respected, Jérémie's observations were reproduced across multiple texts of popular natural history and this reinforced the muskox's status as a potential source of new commodities. Bilby, for instance, cited Jérémie to highlight the usefulness of its hair for the production of commodities.[318] Shaw, drawing on Pennant, reinforced the muskox's utility by explaining that this animal possessed 'extremely fine cinerous wool… said to be more beautiful than silk when manufactured into stockings and other articles' and that it was 'shot by the Indians for the sake of the meat and skins, which, from their superior warmth… [made] the most excellent coverings'.[319] Shoberl also cited Jérémie, claiming that 'stockings may be made from the wool of the musk-ox of finer quality than the finest of silk manufacture'.[320] By presenting this Canadian species as an economic opportunity for enriching the British metropole, the potential domestication of this wild animal to meet British economic needs communicated powerful messages of dominion over imperial territories and lucrative products of empire.

As the Hudson's Bay Company expanded into Canada in the late-eighteenth and early-nineteenth centuries, muskoxen were increasingly encountered by mappers, trappers and traders and the story of Jérémie's stockings was so prolific within popular natural history that it continued to shape how the muskox was viewed in its natural environment.[321] Royal Navy expeditions to discover the North-West passage also increased British encounters

[316] Pennant, *Arctic Zoology Vol. I* pp. 9-10.
[317] Pennant, *Arctic Zoology Vol. I* p. 10.
[318] Bewick, *Quadrupeds* p. 49-50.
[319] Shaw, *General Zoology, Vol. II Part 2* pp. 408, 410.
[320] Shoberl, *Quadrupeds* p. 116.
[321] See: T. Binnema, *Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870* (Toronto, 2014).

with the muskox. For instance, Alexander Fisher, surgeon to the 1819-1820 expedition to Melville Island led by the polar explorers, James Ross and William Edward Parry, explained in his travel narrative, citing Pennant's report of Jérémie's stockings, that the muskox possessed hair 'which was indeed as fine as any wool, and would certainly, if manufactured, make a fine cloth as any English wool'.[322]

Building on Jérémie's claims, Barrow argued that the muskox was an ideal candidate for acclimatisation, stating that it was 'quite astonishing that an animal which might be reared in the northern-most of the Orkneys, and be made so productive a stock in those barren islands, had never been naturalised by any of our public-spirited experimentalists in these matters'.[323] This call to action reveals how animal knowledge often intersected broader ideas of place and progress, as Barrow's muskox acclimatisation claims rested not only on the potential economic benefits of the muskox but also on the perceived similarities between the landscapes of northern Canada and Orkney, aligning these similarly-uncultivated, geographical spaces as the respective hinterlands of two empires, the British empire and the empire of Great Britain, both dominated by the more capable British Metropole.[324] This also reinforced the exclusion of the people of Orkney from broader narratives of British national belonging based on notions of progress.

Barrow's placing of the muskox within a barren, hostile environment, devoid of agricultural or pastoral development, was very representative of broader views of this animal within contemporary popular natural history. Goldsmith, for example, cited Pennant to claim that the muskox was 'found chiefly in the most rocky and barren mountains of North America', a sentiment reiterated by Shaw and Jardine.[325] In addition, accompanying illustrations of the muskox frequently placed this animal against the same, barren backdrop of bare cliffs interspaced with pine trees, such as in Landseer's romantic depictions in Shoberl's *Quadrupeds* and Barrow's *Characteristic Sketches*, and in Lizars' depiction of the muskox in Jardine's *The Naturalist's Library* (see figures 36, 37 and 38).

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[322] A. Fisher, *Journal of a Voyage of Discovery to the Arctic Regions in his Majesty's Ships Hecla and Gripper, in the Years 1819 & 1820,* Second Edition (London, 1821) pp. 251-252.
[323] Barrow, *Sketches*.
[324] Kumar, *The Making of English National Identity* p. 179. For an example of Orkney being aligned with the arctic world compared to the rest of Britain, see: J. Westaway, 'The Inuit discovery of Europe? The Orkney Finnmen, preantral objects and the re-enchantment of early-modern science', *Atlantic Studies* (02/11/2020) accessed at: https://www.tandfonline.com/doi/full/10.1080/14788810.2020.1838819?scroll=top&needAccess=true [accessed 28/09/2022].
[325] Goldsmith, *Animated Nature, Vol. II* p. 238; Shaw, *General Zoology, Vol II Part 2* p. 410; Jardine, *The Naturalist's Library, Volume IV, Ruminantia Part II* p. 189.



Figure 36: Thomas Landseer's illustration of the muskox in Shoberl's Natural History of Quadrupeds, Volume I *(London: Samuel Bentley, 1834, source: Google Books).*



Figure 37: Thomas Landseer's illustration of the muskox in Barrow's Characteristic Sketches of Animals, Principally in the Zoological Gardens, Regent's Park *(London: Moon, Boy and Graves, 1832, source: Google Books).*



Figure 38: Lizars' illustration of the muskox in Jardine's The Naturalist's Library, Volume IV, Ruminantia Part II *(Edinburgh: W. H. Lizars, 1836, source: Google Books).*

Barrow's choice of Orkney, based on its landscape and geographical position, was certainly in line with general imaginings of the muskox in northern, coastal or island settings. For instance, Pennant's illustration in *Arctic Zoology* clearly showed the muskox in a mountainous landscape close to a body of water and British explorers later confirmed the muskox as an island-dwelling species. Parry's travel narrative of the 1819-1820 expedition to Melville Island, for example, recorded encounters with muskoxen on a number of islands northwest of Hudson Bay, with Barrow claiming that 'the recent discoveries of Captains Ross, Parry, Franklin, &c. have established a more extended habitat for the Musk Ox, in the arctic regions, than any former geographers or travellers had assigned'.[326] Parry's observations quickly permeated contemporary popular natural history literature, as shown in Jardine's comment that the muskox ranged to 'Melville Island over the islands which lie to the north of the American continent' and in a later illustration of the species in the 1853 edition of *The Book of Animals*, which was clearly influenced by the muskox image in Parry's work (see figures 39 and 40).[327]

[326] W. Parry, *Journal of a Voyage to for the Discovery of a North-West Passage from the Atlantic to the Pacific* (London, 1821), pp. 68, 87, 202, 239, 257-258; Barrow, *Characteristic Sketches*.
[327] Jardine, *The Naturalist's Library, Volume IV, Ruminantia Part II* p. 189.



Figure 39: Illustration of the muskox in Parry's Journal of a Voyage for the Discovery of a North-West Passage from the Atlantic to the Pacific *(London: John Murray, 1821, source: Google Books).*



Figure 40: Illustration of the muskox in the Religious Tract Society's The Book of Animals, Class Mammalia, *Eleventh Edition (London: John W. Parker and Son, 1833, source: Google Books).*

Barrow's uniting of Orkney and Canada as barren, peripheral territories helped to reinforce British perceptions of Orkney as an uncultivated land in need of improvement. Clearly, Barrow did not expect his 'public-spirited experimentalist' to come from Orkney and this strongly communicated the message, albeit implicitly, that a modern, civilised member of British society was needed to establish profitable agriculture and industry in this place as

the people of Orkney were not capable. Moreover, these imaginings of a semi-barbarous people in need of advancement further distanced the people of Orkney from the British heartlands of England and southern Scotland, which corresponded with broader, contemporary British perceptions of the inhabitants of Gaelic-speaking Scotland, the Gaidhealtachd, which encompassed the Scottish Highlands and the Northern Isles of Orkney and Shetland.

As Orkney had belonged to the kingdom of Norway until the latter half of the fifteenth century, its unique cultural and political status compared to the rest of Scotland had been recognised in earlier Scottish attitudes towards the Northern Isles. However, with the division of Scotland into 'southern', 'Lowland' and 'northern', 'Highland' categories within Scottish national discourse, the Northern Isles were conglomerated into the broader category of a semi-barbarous Highland north long before the development of British national identity following the act of union in 1707.[328] Consequently, these attitudes were subsumed into an emergent, broader British national sentiment, which included the English and Lowland Scots but excluded Scotland's Gaelic-speaking minority, the Gaels, presenting them as an internal, barbaric Other against which the modern, civilised Briton was juxtaposed and reinforced.[329] Following the Jacobite rising of 1745 and the dismantling of the clan system, negative imaginings of the Gaidhealtachdt became more ingrained as the British government increasingly took measures to extend and reinforce their authority over the Scottish Highlands.

Negative conceptions of the Gaels were further reinforced by British theorists, who placed them in universalist stadial models of societal development, in which the Gaels were relegated to an earlier stage of civilisation than the English and the Scottish Lowlanders. This temporally distanced the Gaels and reinforced British-Gaelic difference through a discourse of the modern and the primitive. Indeed, the Gaels were often aligned with those societies in Africa and North America viewed as 'savage' colonial Others, against which British self-perceptions were compared and reinforced.[330] By supporting the notion that a society in an early developmental stage could progress if aided by a more developed culture, this universalist, teleological framework enabled British writers to argue in favour of colonisation and assimilation policies within and beyond the British Isles on the grounds that they were simply aiding the inevitable advancement of societies. Indeed, as ideas of progress and modernity were inextricably linked to economic expansion and increased

[328] J. Dawson, 'The Gaidhealtachd and the Emergence of the Scottish Highlands' in B. Bradshaw and R. Peters (eds.) *British Consciousness and Identity: The Making of Britain, 1533-1707* (Cambridge, 1998) pp. 290-291.
[329] Stroh, *Gaelic Scotland in the Colonial Imagination* pp. 34-35.
[330] Stroh, *Gaelic Scotland in the Colonial Imagination* p. 52.

profitability, the forceful assimilation of societies and their lands into British-dominated systems of production and commerce became seen as an integral part of helping civilisations to advance. Such rhetoric helped to reaffirm imaginings of the urban British commercial classes as modern, civilised and commercially successful.

As a society's developmental status was often defined by its perceived ability to make use of the natural resources within its environs, its relationship with the landscape it inhabited was frequently used to ascribe its level of civilisation. Landscapes, which were populated by people, who were considered to be in an early stage of societal development, were correspondingly viewed as wild and uncultivated, or under-cultivated and ready for improvement by the British commercial classes. Within this context of categorisation and improvement, Barrow's rhetorical question regarding why the muskox had not been introduced to Orkney reveals his sense of British identity, which he expresses through his commitment to acclimatisation, his negative attitudes towards the landscape and the people of Orkney and his construction of the muskox through the commercial gaze.

Despite Barrow's enthusiasm, no attempts were made to acclimatise the muskox on Orkney, nor any other part of Britain. Whilst popular natural history literature often espoused the economic potential of the species, this did not correspond with the realities of the Canadian fur trade. As the naturalist and fur trader, Samuel Hearne, explained in his 1795 travel narrative, muskox skins were 'held in so little estimation in England, that when a number of them was sent home from Churchill Factory, the Company issued out orders the year following, that unless they could be purchased from the Indians at a rate of four skins for one beaver, they would not answer the expense of sending home; a great proof of their being of very little value'.[331] Indeed, the biologist, Peter Lent, recognises that muskox hides only became profitable articles of trade in the 1850s, with their status as expensive and valuable items only emerging at the very end of the nineteenth century, only to decline sharply following the species' population collapse due to overhunting.[332]

[331] S. Hearne, *A Journey from Prince of Wales's Fort in Hudson's Bay, to the Northern Ocean* (London, 1795) pp. 252-253.
[332] P. Lent, *Muskoxen and Their Hunters* (Norman, 1999) pp. 72, 122-127.

From beast of the chase to beast of the estate:
the naturalisation of the nilgai in British popular natural history

The earliest, recognised examples of the nilgai, also known as 'nyl-ghau', 'nylghau', 'neelghau' and 'white-footed antelope', entered Britain in 1767, having been imported by Charles Crommelin, Governor of Bombay from 1760-1767, as a gift to Lord Clive following his retirement from the BEIC in the same year.[333] In 1769, a second pair of nilgai were transported to Britain by Laurence Sullivan, Deputy Chairman and Chairman of the BEIC, who presented them to Queen Charlotte, wife of King George III.[334] Following examinations and observations of these specimens, particularly those imported by Sullivan, Dr William Hunter described the species in a paper, entitled *An Account of the Nyl-ghau, an Indian Animal, not hitherto described*, which he read to the Royal Society in 1771. A painting of Queen Charlotte's male nilgai by Stubbs, completed in 1769, accompanied Hunter's presentation and the engraver, James Basire, used this image to produce his own illustration of the species (see figures 41 and 42), which appeared alongside Hunter's description in the Society's *Philosophical Transactions*.[335] This is not surprising considering that Stubbs painted other exotic animals, including zebra, tigers, cheetahs and yaks, which belonged to members of the royal family, the aristocracy and high-ranking BEIC officials.[336]

[333] Grigson, *Menagerie* pp. 141-142.
[334] Grigson, *Menagerie* pp. 141-142.
[335] J. Egerton, *George Stubbs, Painter. Catalogue Raisonné.* (London, 2007) p. 283.
[336] See: M. Sorrell, 'A zebra, a tigress and a cheetah: New light on George Stubbs's Exotic Animal Subjects', *The British Art Journal* 15/1 (2014) pp. 99-109; Grigson, *Menagerie* pp. 147-149.



Figure 41: George Stubbs' Nylghau (1769, Art UK, GLAHA_43821, source: Wikimedia Commons).



Figure 42: James Basire's engraving of the nilgai, which accompanied Hunter's description of the species in the Philosophical Transactions *(1771, The British Museum, 1881, 1210.271, source: Google Books).*

Hunter's description of the nilgai undoubtedly shaped depictions of this species in British popular natural history during the late eighteenth and early nineteenth centuries, with Basire's engraving of Stubbs' portrait serving as the basis for many images in later works, such as Bewick's *Quadrupeds*, which, in turn, influenced new illustrations in later publications, such as Williams' engraving in Trimmer's *Natural History* (see figures 43 and 44). Consequently, Hunter's assessment of the nilgai, shaped by the commercial gaze, provided the initial framework through which the species was textually encountered and understood and upon which subsequent descriptions of the nilgai within British popular natural history were based. Within this context, the nilgai was identified as a candidate for introduction into Britain and discussions surrounding the species expanded to include and express conceptions of British modernity intertwined with imperial rule.



Figure 43: Bewick's engraving of the nilgai in his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*



Figure 44: Williams' engraving of the Nilgai from Trimmer's A Natural History of the most Remarkable Quadrupeds, Birds, Fishes, Serpents, Reptiles, and Insects *(Chiswick: C. Whittingham, 1830, source: Google Books).*

The successful importation of the nilgai by high-ranking members of the BEIC, an organisation that had established and maintained British economic and political control over large swathes of the Indian subcontinent, helped to characterise the nilgai as a high-status product of empire. Although the Company was not officially an organ of empire, its reliance on the British government for its charter of trade, and its administrative and military roles in governing and policing the territories within its jurisdiction, meant that it was undoubtedly a colonial organisation deeply tied to the British state. An indication of the close relationship between the Company and the state was Sullivan's gift of nilgai specimens to Queen Charlotte.

Hunter's claim that the nilgai was one of 'the riches which, of late years, have been imported from India', certainly helped to establish understandings of the species as a commodity of empire.[337] Based on his assessment of the species' commercial potential, Hunter recommended the nilgai for introduction into Britain, stating that it was 'a fine animal… which, it is to be hoped, will now be propagated in this country so as to become one of the most useful, or at least one of the most ornamental beasts of the field'.[338] Hunter further claimed that if the species was 'docile enough to be easily trained to labour… its great swiftness, with considerable strength, might be applied, one would think, to

[337] W. Hunter, 'An Account of the Nyl-ghau, an Indian Animal, not hitherto described', *Philosophical Transactions (1683-1775)* 61 (1771) p. 170.
[338] Hunter, 'An Account of the Nyl-ghau' p. 170.

valuable purposes'.[339] Hunter's description captured the nilgai's potential value and, although he was careful to include an element of uncertainty, his emphases on the ornamental and draft qualities of the species strongly implied that domestication was a possibility. As Queen Charlotte was Hunter's patron, as well as an enthusiastic promoter of natural history as a science and a form of rational recreation, Hunter's emphasis on the innate value of her exotic gift, as a high-status commodity that could potentially be added to Britain's roster of domestic animals, is perhaps unsurprising.[340]

Building on Hunter's description, Pennant later noted of the nilgai that it inhabited 'the distant and interior parts of *India*, remote from our settlements…[where] they are brought down as curiosities to the *Europeans*, and have of late years been frequently imported into *England*', where they have successfully reared young.[341] Like Hunter, Pennant drew on the travel narrative of the French physician, François Bernier, who had journeyed across northern India during the 1650s and 1660s, observing that the nilgai was treated by the Mughal ruler, Aurangzeb, as 'one of the objects of chase', hunted 'with arrows, spears, or musquets; and sometimes in such numbers, that *Aurenge Zebe* [Aurangzeb] used to send quarters as presents to all his great people', an observation consistent with Mughal sources that highlighted the nilgai as a favoured game animal of the northern Indian elite.[342] This conceptualisation of the nilgai in its native range and its use by the Indian aristocracy as an object of the chase, was reproduced across British popular natural history during the late eighteenth and early nineteenth centuries. Although these depictions contrasted sharply with imaginings of the nilgai in Britain, they informed British perceptions of the species as a high-status, ornamental and game animal.

A decade later, Bilby, drawing on Hunter, Bernier and Pennant, pointed out that 'the favourite amusement of the Mogul Emperor [was] to hunt the Nyl-ghau', adding that 'he kills them in great numbers, and distributes quarters of them to his omrahs; which shows that they are esteemed good and delicious food'.[343] Bilby also confirmed that the nilgai had not yet been naturalised in Britain, stating that 'it remains to be considered, whether this rare animal might not be propagated with success in this country'.[344] Drawing explicitly on Hunter's original description, Bilby speculated that, if the animal 'should prove docile

[339] Hunter, 'An Account of the Nyl-ghau' p. 170.
[340] See: C. Orr, 'Queen Charlotte, "Scientific Queen"' in C. Orr (ed.) *Queenship in Britain, 1660-1837: Royal patronage, court culture and dynastic politics* (Manchester, 2002) pp. 236-266.
[341] Pennant, *History of Quadrupeds, Vol I* pp. 74-75.
[342] Pennant, *History of Quadrupeds, Vol. I* p. 75; E. Khan, 'Wild Mammals in Mughal Sources', *Proceedings of the Indian History Congress* 72/1 (2011) pp. 553-554.
[343] Bewick, *Quadrupeds* p. 114.
[344] Bewick, *Quadrupeds* p. 114.

enough to be easily trained to labour, its great swiftness and considerable strength might be applied to the most valuable purpose'.[345] By re-establishing the relationship between the nilgai and the rulers of northern India, Bilby reinforced British understandings of the species as high-status and inherently valuable, implying that the animal's naturalisation would be beneficial. To this end, Bilby's collation of information regarding the nilgai helped to justify its potential domestication in a way that concurred with Hunter's expectations.

Justifications for the naturalisation and domestication of the nilgai were strengthened a decade later by John Church, who stated that, although only known in Europe for just over thirty years, the nilgai was a 'beautiful animal' which had 'been frequently imported from India' and had successfully bred in Britain.[346] Church optimistically stated that 'with a little care… [the nilgai] might be naturalized, and would be an elegant ornament to the parks of the nobility and the gentry, as well as an additional article of luxury for their tables, its flesh having an exquisite flavour; and it might possibly be tamed so as to become highly useful for many purposes, on account of its extraordinary speed and considerable strength'.[347] Although fairly broad and speculative in nature, Church's claims reinforced that the naturalisation and domestication of the nilgai would be beneficial to the nation. He also illustrated that this animal could be rendered subservient to humans by referring to a nilgai, kept as a living exhibit in Sir Ashton Lever's Leverian Museum, which 'was gentle, appeared perfectly harmless, was fond of being caressed, and always licked the hand by which it was either stroked or fed'.[348]

These contrasting, imagined human/animal relationships, between the nilgai and the British and the nilgai and the northern Indian elite, communicated powerful messages of British modernity, as British interactions with the species, based on its commercial potential, were firmly located in the future whilst the use of the nilgai by the northern Indian elite was viewed as a practice of the past. Indeed, the discourse surrounding the decline of deer hunting in Britain within British contemporary popular natural history presented the disappearance of those large, forested estates as an illustration of British societal development, linked to whiggish notions of the evolving political relationships between ruler and subject, as similarly illustrated in the discourse surrounding the decline of the red deer in Britain.[349] Consequently, the nilgai hunts carried out by the aristocracy of northern India embodied British, orientalist notions of unchanging, Eastern systems of autocratic rule. Conversely, British imaginings of their future interactions with the nilgai

[345] Bewick, *Quadrupeds* p. 114.
[346] Church, *Cabinet, Vol. I*.
[347] Church, *Cabinet, Vol. I*.
[348] Church, *Cabinet, Vol. I*.
[349] See: pp. 48-52.

presented the species as a naturalised, useful and beautiful, domesticated animal, which conformed to their ideas of economic, scientific and aesthetic rationality, which they viewed as innately modern. These conceptualisations were deeply intertwined with imperial identity and ideas of metropolitan Britishness, which informed and promoted ideas of societal progress and the civilising influence of British metropolitan culture.

In his 1830 work, *Characteristic Sketches*, Barrow further emphasised the distance between the British/nilgai relationship and the northern Indian elite/nilgai relationship, stating that the nilgai was 'a species of royal game with the native and Mohammedan princes of Northern India; and is by them hunted, to this day, with a degree of magnificence, and an array of military strength, which resemble, though in miniature, the warlike preparations for the chase of Timour or of Aurungzebe'.[350] By associating nilgai-hunting practices in contemporary northern India with those of fourteenth, fifteenth and sixteenth-century Timurid and Mughal rulers, Barrow confirmed the continuing high prestige of the nilgai in India but presented eastern power structures as diminished and of the past. He further pointed out that the nilgai was 'no longer the favourite game of the [European] hunter, as it was when the endless retinue of the Mogul sovereigns used to traverse in its pursuit', reflecting that the modern, European hunter in India was 'now more tempted by the nobler quarry' of the lion and the tiger, predators of the nilgai whose persecution would allow it 'to multiply in comparative tranquillity'.[351] In this way, Barrow separated British hunting practices in India from those of contemporary and former, ruling dynasties.

These sentiments were reiterated two years later by Shoberl, in his *Natural History of Quadrupeds*, who stated that the nilgai was 'a sort of royal game with the native and Mohammedan princes… hunted by them to this day with a magnificence peculiar to the East' but was 'no longer the favourite game of the hunter, as it was when the Mogul sovereigns used to traverse in pursuit of it'.[352] Shoberl also pointed out that the hunter now preferred 'the chase of its destructive enemies, the lion, the tiger, and the leopard, so that the nylghau may probably soon be left to multiply in comparative tranquillity'.[353] These reported changes in hunting preferences served to distance modern, British practices from those of northern India's aristocracy at a time when the territory under the BEIC had expanded and animals within British popular natural history were increasingly divided into 'good' and 'bad', as observed by Harriet Ritvo.[354]

[350] Barrow, *Characteristic Sketches*.
[351] Barrow, *Characteristic Sketches*.
[352] Shoberl, *Quadrupeds, Vol. I* p. 112.
[353] Shoberl, *Quadrupeds, Vol. I* p. 112.
[354] Ritvo, *The Animal Estate* pp. 15-30.

Consequently, these conflicting views of desirable quarry helped to separate the nobler British, ruling elite from their Indian predecessors and to legitimise their supplanting of the latter. As the nilgai was still seen to fall into the broader category of 'good animals', its pursuit by the Indian ruling elite was cast as a decadent practice that, whilst impressive as a display of oriental opulence and military prowess, was not seen as a rational expression of mastery over nature as the destruction it caused was not considered to be beneficial to man. Conversely, as will be further explored in chapter five, British attitudes towards large predators, such as lions and tigers, ensured that the hunting of these 'bad animals' was viewed positively, as a necessary eradication of species for the protection of people and livestock, the defence and expansion of property, and the clearance and development of land for commercial agriculture, all of which were needed as evidence of societal progression within the context of stadial models.[355]

The acclimatisation of the nilgai in Britain, as an expression of Britishness, specifically incorporated the processes of importing the species, naturalising it and rendering it subservient and useful, as a beast of burden, a livestock animal or an ornamental feature. As a naturalised product of empire, it would encourage rational entertainment, creative use and commercial stimulation, which would ultimately integrate it into a modern, British context. These imaginings helped to strengthen British self-perceptions of modernity and superiority, especially when contrasted with the imagined, outmoded practices surrounding the nilgai in its home range.

As the nineteenth century progressed and the acclimatisation movement gathered momentum, interest in the nilgai as a new and useful addition to Britain's animal community began to wane due to its growing reputation as a dangerous animal with unpredictable behaviours. The aggression of the male nilgai during the rut had already been noted by Hunter in his 1771 description, in which he had recounted an incident involving Lord Clive's male nilgai, which, during an attack on a labourer, had shattered the wooden fencing of its enclosure due to the force of the impact.[356] Hunter had downplayed this behaviour, ignoring the challenge that it might pose to domestication and insisting that it was restricted to the breeding season and, therefore, merely a deviation from the animal's typically gentle and timid manners. These understandings were repeated by subsequent writers, such as Shaw, who remarked that, although captive nilgai in Europe and England were 'sometimes seized with fits of sudden caprice' when the animal would 'attack with great violence the objects of its displeasure', these behaviours were

[355] See: pp. 187-216.
[356] Hunter, 'An Account of the Nyl-ghau' p. 177.

'not peculiar' to the species, which again downplayed its more challenging behaviours.[357] Trimmer similarly confirmed that the nilgai, in its wild state, was 'said to be wild and vicious' but added that 'when domesticated, it becomes tame and even affectionate'.[358]

In the 1820 edition of his *Animal Biography*, Bingley highlighted the perceived duality of the nilgai, emphasising that it was 'an exceedingly vicious creature' but acknowledging that the specimen observed by Dr Hunter 'was pleased with every kind of familiarity, always licked the hand that stroked it or gave it bread, and never once attempted to use its horns offensively'.[359] Bingley also added that a nilgai exhibited at the Exeter 'Change 'was tolerably docile, but capricious and not to be depended upon'.[360] In his *Natural History of Animals*, he also presented the combats between male nilgai as a defining aspect of the species before providing his physical description of the animal.[361] However, by the 1830s, a greater focus was generally being placed in popular natural history publications on the nilgai's aggressive behaviour and it soon became a key component of the species' construction. These understandings were increasingly consolidated by new observations of nilgai specimens, exhibited to the public through menageries and travelling exhibitions, which, in contrast to Church's characterisation of Lever's specimen, presented the nilgai as dangerous and unpredictable.

Even the most enthusiastic proponents of acclimatisation began to doubt that the nilgai could be successfully domesticated in Britain, citing its capricious behaviour as the main barrier. Bennett's guidebook to the Gardens at Regent's Park, for instance, maintained that, in captivity, the animal was 'gentle and familiar, licking the hands of those who offered it bread, and suffering itself to be played with, not only without shyness, but with evident pleasure', noting that its 'capricious' behaviour was limited to the breeding season.[362] However, Bennett also cast doubt on the capacity of the nilgai to be easily propagated in Britain, claiming that he was not aware of any successful breeding efforts apart from those of Lord Clive, which represented an isolated event rather than a prelude to a more widespread, future reality as a celebration of British achievement through acclimatisation.[363]

[357] Shaw*, General Zoology, Vol. II Part 2* pp. 328-329.
[358] Trimmer, *Natural History* p. 61.
[359] Bingley, *Animal Biography* pp. 95-96.
[360] Bingley, *Animal Biography* p. 96.
[361] Bingley, *Natural History* p. 91.
[362] Bennett, *Gardens, Vol. I* p. 128
[363] Bennett, *Gardens, Vol. I* p. 128.

Barrow lamented that 'the breeding of this quadruped, on account of his "vice,"…[had] been of late years abandoned', even though it had been shown to be 'a noble denizen of our parks' and the nilgai had naturalised to the British climate 'with little or no apparent inconvenience' as the animal's home range was a region that supported 'numerous herbs, fruits, and plants, and probably grasses, which…[were] also the natural production of Britain'.[364] Shoberl similarly regretted that it was unfortunate that the nilgai possessed a 'viciousness' that made it 'dangerous in a domesticated state', as the species had been 'naturalized in our climate with little or no apparent inconvenience' and had been shown to be 'a noble denizen of our parks… [and] an interesting object to the physiological observer'.[365] Clearly, Barrow and Shoberl were disappointed that the nilgai would not realise its potential as a useful, domesticated animal, but were still keen to support the idea of the nilgai as an ornamental park animal in spite of the fact that this fell far short of Hunter's expectations of a useful and commercially viable draft or livestock animal.

As the nineteenth century progressed, understandings of the nilgai continued to evolve and it was increasingly viewed as a 'bad' rather than a 'good' animal. Carpenter, for instance, described the nilgai as 'a magnificent species… [that] resides in the dense forests… and is a resolute and powerful animal, turning and defending itself against its pursuers with great fury, and not being tamed down in confinement'.[366] *The Pictorial Museum of Animated Nature* described the nilgai as 'extremely vicious, resolute, and powerful, and will turn upon its pursuers with great fury', adding that 'even in confinement it is not to be approached without caution'.[367] As the nilgai's status was reduced in terms of its potential for naturalisation in Britain, based on its aggressive behaviour and resistance to human subjugation, it was increasingly located back in 'the dense forests of India' and distanced from Britain.[368] This reinforced British conceptions of the species as enduringly wild and exotic and broke its former links to British modernity. Indeed, by the late nineteenth century, the nilgai had been integrated into the British 'cult of shikar' as a valid, but less desirable, target for British trophy hunters, with its acclimatisation potential thoroughly dismissed by the early twentieth century.[369]

[364] Barrow, *Characteristic Sketches*.
[365] Shoberl, *Quadrupeds* p. 114.
[366] Carpenter, *Popular Cyclopedia* p. 300.
[367] Knight, *Pictorial Museum, Vol. I p*. 143.
[368] Knight, *Pictorial Museum, Vol. I p*. 143.
[369] J. Mackenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester, 1988) p. 298; R. Lydekker, *The Game Animals of India, Burma, Malaya and Tibet* (London, 1909) p. 170.

For shawls and camlets:
the naturalisation of the angora and cashmere goats within British popular natural history

The discourse surrounding the angora goat and the cashmere goat within British popular natural history further demonstrates how the conceptualisation of exotic animals in Britain during the late eighteenth and early nineteenth centuries was largely shaped by the commercial gaze. Until the early nineteenth century, the angora goat could only be found in Anatolia and the cashmere [Kashmir] or 'Thibet' [Tibet] goat only in territories controlled by the Chinese Qing dynasty. Unlike the muskox and the nilgai, whose utility was still very speculative, products from these exotic goat breeds were already known and recognised as sought-after, luxury commodities, which were being imported into Britain at some expense. Consequently, the discourse surrounding these goats and their naturalisation in Britain was couched in terms of their benefits to the nation, in line with contemporary economic models, and promised substantial, economic rewards for those willing to embark on such a commercial venture.

Imaginings of the angora goat within British popular natural history were deeply tied to the expensive and exotic cloth, commonly known as camlet or camblet, produced from their wool. This had long been esteemed for its strength, lustre and silky texture and had been a staple Ottoman export to Europe since the sixteenth century. Indeed, in their discussions of the angora goat, popular natural history authors were quick to highlight that the camlet formed an important element of Anglo-Ottoman trade. The production of camlet had long been restricted to the province of Ankara due to the limited home range of the angora goat in the Anatolian heartlands.[370] By the end of the seventeenth century, the Ottoman-European trade in mohair textiles, a broad category including fabrics woven from camel or goat hair, but most commonly from the wool of the angora goat, had gained importance as cotton imports, formerly from the Ottoman Empire, had been increasingly replaced by imports from West-Indian cotton plantations.[371] Cotton imports from the Ottoman Empire to Britain had similarly declined in the eighteenth century, rising only in the 1770s due to increasing demand for raw cotton, stemming from Britain's emerging

[370] M. Talbot, *British-Ottoman Relations, 1661-1807: Commerce and Diplomatic Practice in Eighteenth-Century Istanbul* (Woodbridge, 2017), p. 35; Y. Köksal, *The Ottoman Empire in the Tanzimat Era: Provincial Perspectives from Ankara to Edirne* (Abingdon, 2019).
[371] C. Jirousek, *Ottoman Dress and Design in the West: A Visual History of Cultural Exchange* (Bloomington, 2019), p. 118.

industrial economy.[372] This demand had slumped with the growth of cotton production in British colonies in the Caribbean and cheaper imports from South America and the United States.[373]

On camlets, for instance, Goldsmith noted that 'nothing can exceed the beauty of the stuffs' made from the hair of the angora goat, explaining that camlet was exported 'to all parts of Europe'.[374] Pennant similarly stated that the hair of the angora goat was 'the basis of our fine camlets, and imported to *England* in form of thread', revealing his high regard for the fabric but also confirming that the weaving of mohair already formed part of British production, which was expanding due to British commercial competence and success.[375] Pennant further pointed out that the exportation of raw, angora goat wool from the Ottoman Empire was still prohibited 'for a reason that does them honour; because it supports a multitude of poor, who live by spinning it'.[376] Pennant's sympathetic attitude towards the Ottoman state's restrictions on raw angora wool exports, reflects his respect for contemporary mercantilist models of trade, which emphasised the minimisation of imports and the maximisation of exports to encourage the development of trade and industry within the home nation.[377] Consequently, any discussions regarding the angora goat, the camlet trade and the importance of mohair thread would inevitably lead to speculation regarding the naturalisation of the angora goat in Britain.

Strong links between the angora goat and camlet were also reinforced in the accompanying literature to taxidermy specimens of the angora goat on display to the British public. The most documented of these, referenced by Pennant in his *History of Quadrupeds*, resided in the Leverian Museum and was used by artists, such as Stone, Catton and Ryley, as a basis for their illustrations of the breed (see figures 45, 46 and 47).

[372] Talbot, *British-Ottoman Relations* pp. 77-78.
[373] S. Beckert, *Empire of Cotton: A Global History* (New York, 2014) pp. 87-96.
[374] Goldsmith, *Animated Nature, Vol. II* (Manchester, 1816) p. 334.
[375] Pennant, *A History of Quadrupeds, Vol. I* p. 55.
[376] Pennant, *A History of Quadrupeds, Vol. I* p. 55.
[377] For more information on how Pennant's works promoted notions of mercantilism, see: P. Smethurst, *Travel Writing and the Natural World* (Basingstoke, 2012) pp. 109-110.



Figure 45: Sarah Stone's watercolour image of the angora goat taxidermy specimen on display at the Leverian Museum (C. 1781 to 1785, The Natural History Museum, RBR SHELF 179-187, source: The Natural History Museum Online Archive).



Figure 46: Charles Catton's illustration of the angora goat in Animals Drawn from Nature *(London: Charles Catton, 1788, source: Google Books).*



Figure 47: Ryley's illustration of the angora goat in George Shaw's Museum Leverianum *(London: James Parkinson, 1792, source: Google Books).*

The accompanying description to Charles Catton's illustration in his 1788 *Animals Drawn from Nature*, for example, clearly demonstrates how the angora goat was frequently encountered and largely imagined through the commodities produced from it. The description states that the hair of the angora goat, 'for its beauty and fineness, is bought by all nations, and is the basis of our best camblet stuffs' and is 'wrought into the useful article called mohair', adding that 'of late, ladies muffs in England have been frequently made of the hair of this animal, the delicacy and graceful form of which produces a pleasing and agreeable effect'.[378] Although Catton clearly alludes to the exotic home range of the angora goat in Anatolia by placing a minaret in the background of his illustration and repeating Pennant's claim that the exportation of raw fibres of Angora goat hair from the Ottoman empire was strictly controlled 'as the spinning gives employ to a multitude of poor', his references to the consumption of angora commodities in Britain firmly placed the animal within a British context.[379]

[378] Charles Catton, *Animals Drawn from Nature* (London, 1788).
[379] Catton, *Animals*.

Smellie's translation of Buffon's *Histoire Naturelle*, however, had presented the angora goat, in accordance with Buffon's 'degeneration' hypothesis, as a product of its local climate and the cultivation efforts of 'a people very anciently civilized'. Indeed, Buffon had used the angora goat to illustrate his theories regarding climate and the ways that it could influence the form and features of animals, his 'degeneration' hypothesis helping him to speculate that 'the goats of Angora, brought forth in France… would probably, after a certain number of generations, resume the ears and course hair of our common goat'.[380] Shaw's commentary on the angora goat, in 1800, similarly tied the softness of the angora goat's fleece to the climate of the area of Angora within Anatolia, explaining that 'the climate of Spain has also the same effect; as is sufficiently known from the superior fineness of the Spanish wool, which is still exceeded by the Angora'.[381] By linking the angora goat's unique and commercially useful physiology to the specific climate of its home range in Anatolia, these naturalists suggested that any attempts to naturalise the angora goat in Europe would fail, as the characteristic physiology of the animal that made it so desirable would be lost over time as the breed adapted to its new climate.

These climate-related theories were not universally accepted and Buffon's degeneration hypothesis was increasingly disregarded during the early nineteenth century. Bilby, for instance, speculated that angora goats 'would probably thrive in Britain as well as in their native country', elaborating that their naturalisation, alongside that of several other well-regarded foreign goat breeds, would mean that 'many of our lofty mountains might contribute to support a variety of useful creatures, that would, at the same time, beautify the most barren and rugged parts of our country'.[382] Clearly, Bilby viewed the naturalisation of this exotic animal as a way to improve landscapes, which were otherwise seen to be devoid of any beneficial features, by bringing a more civilised, commercially-centred British modernity to the peripheral, mountainous territories of Britain. As camlet material was already being produced by British manufacturers using imported mohair yarn, Bilby's speculation regarding the naturalisation of the angora goat can be further understood within the broader context of progress surrounding the British appropriation of mohair for use in their own manufacturing.

By the early nineteenth century, the 'cashmere' or 'thibet' goat had begun to appear in British popular natural history literature and was rarely discussed without some comparison or reference to the angora goat (see figure 48). Mary Roberts, for instance, stated in her 1833 work, *Domesticated Animals Considered with Reference to Civilisation*

[380] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 62.
[381] Shaw, *General Zoology, Vol II Part 2* p. 47.
[382] Bewick, *Quadrupeds* pp. 86-87.

and the Arts, that the 'thibet' goat possessed 'beautiful tresses', adding that the angora goat had a 'similar attire'.[383] The Religious Tract Society's 1840 publication, *Quadrupeds: The Class Mammalia*, also stated that the angora goat had 'long been [celebrated]' for its 'soft and silky hair', which formed 'the staple of the cloth called camlet', before going on to explain that 'in Thibet, there is a breed furnished with an undercoat of wool of exquisite fineness and delicacy' from which 'the so much valued Cashmere shawls are fabricated'.[384] Carpenter likewise assessed the hair of the angora goat to be its defining feature, adding that 'the length and silkiness of the hair is still more remarkable in the Cashmir Goat, a native of Thibet; from which material are woven the Cashmere Shawls, that are so highly valued in Europe'.[385] These conceptual conflagrations demonstrate how pre-existing understandings of the angora goat, informed by the commercial gaze, helped to construct the cashmere goat and place a similarly strong emphasis on the fineness and desirability of its wool.



Figure 48: Lizars' image of the cashmere goat from Jardine's The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II *(Edinburgh: W. H. Lizars, 1836, source: Google Books).*

In order to more fully understand the status of the cashmere goat in early-nineteenth-century Britain, it is necessary to consider how cashmere shawls were conceptualised within a British context. The high status of cashmere shawls was essentially informed by the Mughal court, where they were presented as luxury gifts to members of the Indian elite, and whose monopoly on the weaving trade in Kashmir ensured high prices and

[383] M. Roberts, *Domesticated Animals Considered with Reference to Civilisation and the Arts* (London, 1833) p. 107.
[384] *Quadrupeds: The Class Mammalia* (London, 1840) p. 110.
[385] Carpenter, *Popular Cyclopedia* pp. 306-307.

limited shawl availability.[386] Cashmere shawls (see figure 49), as fashionable articles of clothing, started to emerge in Britain as a product of growing British trade networks in the Indian subcontinent, facilitated by the imperial expansion of the BEIC. However, the movement of these shawls along Central-Asian trade routes had already produced European encounters with cashmere garments in the Middle East, where they had long been held in high esteem, particularly following Napoleon's campaigns in Egypt.[387]



*Figure 49: An early-nineteenth-century example of a Cashmere shawl (*The V&A*, IS.2081A-1883, source: the V&A archive online).*

The first cashmere shawls in Britain, which were esteemed as rare, exotic, luxury items, were ostensibly presented as gifts by high-ranking members of the BEIC and served as potent symbols of Britain's imperial project in India. Alongside imported, exotic furniture and ornaments, cashmere shawls helped to facilitate the performance and consumption of

[386] F. Ashfaque, 'Shawl and Carpet Industry in Kashmir under the Mughals', *Proceedings of the Indian History Congress* 70 (2009-2010), p. 286.
[387] M. Maskiell, 'Consuming Kashmir: Shawls and Empires, 1500-2000', *Journal of World History* 13/1 (2002), pp. 30-35, 39.

empire within the domestic sphere of the family home.[388] Indeed, by the middle of the nineteenth century, cashmere shawls had become an indispensable part of British, middle-class female attire and, as Suzanne Daly has argued, functioned 'at once as a marker of respectable English womanhood and as magical and mysterious "oriental" garments'.[389]

The proliferation of cashmere shawls within Britain was largely due to the production of imitation cashmere, using a mixed weave of cotton and wool or silk and wool, in manufacturing hubs in northern Britain, most famously the Scottish town of Paisley, which gave its name to the Indo-Persian designs that were commonly reproduced in British imitations.[390] However, the demand from affluent British consumers for good-quality, 'authentic' cashmere shawls remained strong and imported shawls continued to command high prices. Indeed, the discourse surrounding the cashmere goat within British popular natural history devoted as much of its time and detail to the production, transportation and qualities of the shawls produced from the animal's wool as it did regarding the animal's physiology and behaviours. Sir William Jardine, for instance, provided a detailed description of the weaving process of cashmere shawls, quoting extensively from Mrs A. Deane's 1823 travel narrative, *Tour in the Upper Provinces of Hindustan*, which was subsequently quoted in later works within the genre, including Low's *Domesticated Animals* and Knight's *Pictorial Museum*.[391]

Natural history authors were keen to point out that the duties and tariffs applied to cashmere shawls during their transportation to Britain were largely responsible for maintaining the high price of this commodity but also acknowledged that the low yield of wool from this breed and the high wages demanded by the skilled, specialist Kashmiri weavers were further contributary factors. Charles knight's *Pictorial Museum*, for instance, explained that heavy duties imposed on cashmere shawls ensured that they were 'not to be purchased even in the country they are wrought but at a great price', a sentiment he repeated in his *Menageries* series.[392] James Fennell went further, stating that the high number of taxes and duties constituted 'a system of great extortion'.[393]

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[388] See: C. Zutshi, '"Designed for eternity": Kashmiri Shawls, Empire, and Cultures of Production and Consumption in Mid-Victorian Britain', *Journal of British Studies* 48/2 (2009) pp. 420-440.
[389] S. Daly, 'Kashmir Shawls in Mid-Victorian Novels', *Victorian Literature and Culture* 30/1 (2002) p. 238.
[390] Daly, 'Kashmir Shawls in Mid-Victorian Novels' pp. 246-247; Zutshi, '"Designed for eternity"' pp. 424-425.
[391] Jardine, *Naturalist's Library Vol. IV, Ruminantia Part II*, p. 124; David Low, *Breeds* p. 13.
[392] Knight, *Pictorial Museum, Vol. I*, p. 147; Knight, *The Menageries, Vol. III*, p. 451.
[393] Fennell, *Quadrupeds* p. 495.

Even those, who did not explicitly attack import duties, such as Carpenter, cited the costs incurred during the 'long and toilsome journey' of cashmere shawls to European markets as the leading factor responsible for their high prices.[394] These rather negative attitudes towards tariffs contrasted sharply with Pennant's earlier admiration for Ottoman restrictions on the exportation of raw mohair fibre and reflected some of the shifts in British economic thought from mercantilist models to systems of laissez faire capitalism, which were occurring at the time. Clearly, the price of cashmere shawls could only be significantly reduced if the tariffs could be circumvented and the transportation element of the shawl trade could be removed; the obvious solution being to acclimatise the cashmere goat in Britain. Indeed, Fennell explicitly stated that recent cashmere goat naturalisation efforts in Europe had been driven by the desire to obtain shawls 'at a cheaper rate than that at which they are sold in consequence of… [the] impolitic exactions' of tariffs and duties.[395]

By the 1830s, discussions within British popular natural history regarding the naturalisation of the angora and cashmere goats increasingly drew on successful acclimatisation experiments in France, as potential blueprints for future acclimatisation endeavours in Britain. Roberts, for instance, explained that the cashmere goat had been 'lately introduced into France by the judicious patriotism of a private individual' and Shoberl similarly stated that the breed had 'successfully been introduced into France through the public spirit of an eminent manufacturer in Paris'.[396] These sentiments of national pride echoed those afforded to British individuals, similarly hailed for their 'patriotic' contributions to the national economy through their acclimatisation efforts, and signal that, in pursuit of modernity, Britain was willing to align itself with one of its main continental rivals in order to advance its own acclimatisation efforts.

The most significant outcome from French acclimatisation efforts was their successful manipulation of the biological forms of the angora and cashmere goats to produce a hybridised, 'superior' animal. Knight's *Pictorial Museum*, for instance, explained that efforts to establish the cashmere goat in France would have failed, due to low hair yields, had it not occurred to the leader of the project, 'that a cross between the Thibetan and Angora goat… might be an improvement on both', the hybrids reportedly producing far more hair 'of a superior quality, being of finer and longer staple, whilst the animals themselves were more hardy and docile'.[397] Fennell similarly praised the angora-cashmere

[394] Carpenter, *Popular Cyclopedia* p. 307.
[395] Fennell, *Quadrupeds* p. 495.
[396] Roberts, *Domesticated Animals* p. 107; Shoberl, *Quadrupeds* p. 35.
[397] Knight, *Pictorial Museum, Vol. I*, p. 147.

crosses, claiming that they were 'a much improved, more hardy, and economical breed', which could produce 'as much as thirteen ounces of wool in a season, equal in softness with that of the pure Thibet breed, but still of a more silky appearance, and of a longer and finer staple'.[398] Carpenter similarly identified the crossbreed as the most promising avenue through which the breed could be established in Europe, 'the mixed race being in all respects superior to both the parent stocks, and producing in one season thirty ounces of hair, finer and longer than that obtained from either of them'.[399] This act of crossbreeding captured the entangled constructions of the angora and cashmere goats encountered in earlier works of British popular natural history and represented a very literal conflagration of the two breeds.

Captain Arthur Conolly, a BEIC army officer and travel writer, considered how these goats might be acclimatised in Britain in his paper on the angora goat, published in *the Journal of the Royal Asiatic Society* in 1841, which drew on his travels through Anatolia en route to Central Asia. Like earlier writers, Conolly considered the two breeds together owing to their similar, commercial status based on wool production, speculating that angora wool could 'become a valuable commodity to English imitation Kashmere shawl manufactures… [if] imported at a moderate price, and in a clean state'.[400] Conolly also referred to the Angora goat naturalisation and crossbreeding experiments, which had been conducted in France, explaining that it would be:

> easy to import… into European countries, in which the elevation of the land and the pasture most resembles that of Asia Minor or Armenia; we might try districts in our own Welsh or Scotch highlands, and, if after the most judicious crossings, it should prove impracticable to acclimate a race at home, our experiments could hardly fail to determine how the best hair and wool can be grown in Asia. Now that the Indus has been opened, English manufacturers may look for an additional supply of shawl wool from the countries which have hitherto been obliged to send their produce by fixed land routes to Kashmere, and we might, perhaps, with success import the best Thibetan breeds into many parts of the Himalayan mountains that are subject to British control.[401]

[398] Fennell, *Quadrupeds* p. 496.
[399] Carpenter, *Popular Cyclopedia* p. 307.
[400] A. Conolly, 'On the White-Haired Angora Goat, and on Another Species of Goat Found in the Same Province, Resembling the Thibet Shawl Goat', *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 6/1 (1841) p. 170.
[401] Connolly, 'On the White-Haired Angora Goat' pp. 170-171.

Here, Conolly reveals how British-led ingenuity and commercial development were imagined across its empire. Firstly, his translocation of the improved hybrids to Wales and the Scottish Highlands demonstrates how Anglo-centric conceptions of these non-English spaces reduced their status to peripheral territories, open to the economic expansion of British, metropolitan commercial interests in order to enrich the profits of explicitly English manufacturers. Furthermore, by identifying sites for acclimatisation beyond Britain, Conolly conceptually aligns these peripheral, British territories with colonial spaces in India, where British power could be imposed to provide materials to fuel the growth of industries in the metropole.

With regard to French acclimatisation experiments, British popular natural history authors were not averse to extending their scope and understanding of these projects to include Britain, casting them as a broader set of loosely-aligned but fundamentally co-operative projects carried out across Europe. Thus, any claims to advanced civilisation, commercial progress and superiority through dominion over nature, expressed through these acclimatisation narratives, were openly appropriated by the British who were not above sharing the successes of their continental neighbours. This alignment was further strengthened through the intertwining constructions of the angora and cashmere goats within British popular natural history, which reinforced the conceptual contraction of each of their home ranges to form one, imagined, geographical space. In turn, this firmly placed Anatolia and Tibet within the broader, geographical and cultural category of 'the orient' in accordance with Said's concept of 'imaginative geography'.[402] These processes further allowed the home ranges of these goats, as well as the landscapes and people associated with them, to be distanced from the proposed spaces for naturalisation in France and Britain and the modern approaches that would lead to a new, superior hybrid.

In spite of some French successes, the angora goat, the cashmere goat and their associated crossbreeds were not successfully naturalised in Britain during this period. Knight's *Pictorial Museum* recounted how, in 1824, 'some of the pure Thibet goats were imported from France into England by Mr. Tower, and located at Weald Hall, Essex; but their limited produce militated against the extension of the breed with advantage'.[403] Similarly, Knight's *Menageries* commented that the angora goat was 'sometimes imported to our island; but hitherto no serious attempts have been made to naturalise it with a view to the employ of its fleece in manufactures'.[404] Indeed, Knight was more interested in the prospect of rearing cashmere goats in Australia than in Britain and, following some

[402] E. Said, *Orientalism* (London, 1979) pp. 49-72.
[403] Knight, *Pictorial Museum, Vol. I* p. 147.
[404] Knight, *The Menageries, Vol. III* p. 451.

acclimatisation experiments in British colonies, angora goats were introduced into South Africa in 1828 and into Australia in the early 1830s.[405]

As enthusiasm for angora and cashmere goat acclimatisation waned in Britain, Buffon's climate theories resurfaced as a possible explanation for failed experiments. Conolly, for instance, reported that 'if taken out of their districts, these [angora] goats deteriorate, in point of coat especially, till scarcely recognisable' adding that it was 'difficult even to keep them alive elsewhere, particularly if they are taken to a low or damp soil, after the high and dry land to which they are accustomed'.[406] Whilst Conolly's statement was less optimistic than his stance on the acclimatisation of the angora-cashmere hybrid, his views were repeated in later works of British popular natural history, propagating the notion that acclimatisation failures were not due to the lagging expertise of British enthusiasts, but to the insurmountable problem of incompatible climate needs.[407] David Low similarly voiced concerns when he speculated that, although the angora goat had now been introduced in countries across Europe, 'it may be believed that, after a time, they will lose that peculiar softness of the hair which characterises them in their native country'.[408] Indeed, Low also extended this prognosis to the angora-cashmere crossbreeds, explaining that, compared to French attempts to establish the breed, experiments in England carried 'less prospect of a favourable result, from the humidity of climate'.[409] When combined with the comparatively successful rearing of angora and cashmere goats in Australia and South Africa, as well as the decline of cashmere shawls as a fashionable item in Britain, these observations reflect the growing dismissal of these animals as desirable candidates for acclimatisation in Britain.[410]

[405] Knight, *The Menageries, Vol. III* p. 460.
[406] Conolly, 'On the White-Haired Angora Goat' p. 160.
[407] N.A., *Scripture Quadrupeds* p. 44; Fennell, *Quadrupeds* pp. 493-494.
[408] Low, *Breeds* p. 14.
[409] Low, *Breeds* p. 13.
[410] For information on the acclimatisation on the angora goat in South Africa, see: S. Schreiner, *The Angora Goat* (London, 1898). For information on the decline of the cashmere shawl in Britain, see: Maskiell, 'Consuming Kashmir' pp. 48-52; Daly, 'Kashmir Shawls in Mid-Victorian Novels' p. 251; Zutshi, '"Designed for eternity"' pp. 438-439.

Conclusion

This chapter has shown, through the case studies of the muskox, the nilgai, and the angora and cashmere goats, that during the late eighteenth and early nineteenth centuries, the conceptualisation of animals in British popular natural history, as candidates for naturalisation, was informed by the landscapes of their home ranges, their relationships with local people, their 'wild' or 'domestic' status and, most importantly, their economic value based on their commercial potential and imagined utility. As these animals were conceived and imagined through the commercial gaze, they were integrated into an emerging discourse on the naturalisation of commercially viable animals in Britain and identified within a broad category of potential candidates for Britain's future animal community, expressed through narratives of progress and improvement that reinforced national identity through ideas of British modernity. However, by the early 1860s, the positive attitudes initially demonstrated towards these animals, as naturalisation candidates, had waned considerably as acclimatisation expectations were not met.

In an article, published in July 1862 in *The New Monthly Magazine*, the muskox, the nilgai and the angora and cashmere goats were still included within its discussion on the scope and potential of acclimatisation in Britain, which had drawn on the first and second annual reports of the Acclimatisation Society of the United Kingdom. However, there was far less enthusiasm for the acclimatisation of the muskox, the nilgai and the angora and cashmere goats, compared to their earlier constructions in popular natural history works, and a much greater emphasis was placed on other species of wild cattle, antelope and deer. The muskox, for instance, was judged 'incapable of domestication' due to its reliance on lichen as a food source, although reports that it also ate grass, 'probably when it can get it', as well as the reiteration that muskox-wool stockings 'were said to have been equal to the finest silk' and Sir John Richardson's speculation that such wool would 'be highly useful in the arts, if it could be procured in sufficient quantity', were tentative signs that acclimatisation hopes had not been entirely ruled out.[411]

The nilgai was included with other antelope and deer species to illustrate 'the widest field among the mammifers for the experiments of the acclimatiser', although it was not singled out as an animal of any particular importance.[412] The angora and cashmere goats were thoroughly dismissed as potential acclimatisation candidates in Britain due to previous failures attributed to Britain's lack of an 'extreme climate… with very cold winters and very

[411] 'The Acclimatisation Society' in W. Ainsworth (ed.) *The New Monthly Magazine, Volume 125* (London, 1862) p. 256.
[412] 'The Acclimatisation Society' p. 267.

hot summers', a prognosis similarly applied to 'the renowned cashmere goat'.[413] Indeed, imaginings of these animals as future occupants of Britain's landscapes, shaped by the commercial gaze, were very much restricted to the late eighteenth and early nineteenth centuries.

This use of the commercial gaze was largely due to the reliance of British naturalists on travel literature as a major source of animal knowledge and their dependence on high-ranking officials of major trading companies, such as Sir Samuel Wegg and Laurence Sullivan, to transport early examples of live and dead animal specimens to Britain via imperial trade networks. In nature, the commercial gaze was fundamentally speculative, which encouraged naturalists to focus on the features of the animal imagined to have economic potential, such as the muskox's wool and the nilgai's flesh, beauty and physical strength. In the case of the angora and cashmere goats, the commodities that could be produced from them, such as camlets and cashmere shawls, were already known and highly esteemed, but the ways in which the naturalisation of these goats in Britain would facilitate the growth of British industries remained speculative.

Clearly, expressions of British national identity, contained within these animal representations, centred round the metropolitan, commercial classes and their notions of British modernity, linked to ingenuity, industriousness and commercial acumen. Narratives of economic progress, within discussions surrounding the naturalisation of animals, were deeply tied to stadial models of human development and Britain was conceptualised as a site, where the processes of acclimatisation could be enacted as a performance of progress, improvement and modernity. Through this mechanism, the introduction of new animals into Britain was conceptualised as a modernising process that would drive future improvements through economic expansion and development, reinforcing the identity of the British, metropolitan, commercial classes as ingenious, industrious and commercially successful. When viewed within contemporary, stadial models of human development, these characteristics and attributes were strictly associated with advanced societies, which helped to reinforce notions of British superiority.

These notions of Britishness were further reinforced through the establishment of spatial and temporal relationships between animals, landscapes and people and through processes of alignment and distancing, which helped to situate the British at the apex of a global hierarchy of civilisations. The placement of animals within landscapes helped to classify spaces as wild or cultivated and this status informed attitudes towards and

[413] 'The Acclimatisation Society' p. 262.

perceptions of the people that resided there. If the animals within a space were judged to be wild, the landscape was deemed uncultivated and the people who resided there were imagined as barbarous or backward, largely due to their perceived inability to make good, commercial use of their environment. These assessments encouraged the temporalisation of landscapes and people, which reinforced the perceived superiority of the British metropolitan commercial classes as they aligned and distanced animals, landscapes and populations with and from each other, both within and beyond Britain.

This is evident in the discussions surrounding muskox acclimatisation in Orkney, in which Scotland's Northern Isles were aligned with the coastal landscapes of the Canadian arctic, reinforcing conceptualisations of northern Scotland as a peripheral, colonial territory, available for cultivation and improvement. These imaginings, which built on British preconceptions of Scotland's Gaelic-speaking minority as backward and barbarous, distanced the inhabitants of Orkney from Britain's metropolitan centre, placing them, in accordance with stadial models, at an earlier stage of development and, therefore, rendering them incapable of effecting economic development without intervention from the more advanced, British metropole.

Further insights into these processes can be gained from early depictions of the nilgai, which integrated this animal into the landscape of the English country estate, in line with the expectations that it would quickly be naturalised in Britain and enrich the nation's stock of domestic animals. By dislocating the nilgai from its home range and re-establishing it in a modern, British context, an imagined, future relationship between the British and the nilgai was established. Furthermore, the relationships presented firstly between the northern Indian elite and the nilgai and, secondly, between the British and the nilgai in India, reflected a temporal distance between these two groups, characterised by the hunting of the nilgai by the northern Indian elite as representative of an unchanging, Eastern autocracy compared to the more modern British, who were now reserving hunting for the eradication of noxious creatures and 'more worthy' opponents, such as large predators.

The discussions surrounding the acclimatisation of the angora and cashmere goats in Britain similarly show how the identification of the mountainous areas of Wales and the Scottish Highlands, as future sites for the naturalisation of these goats, continued to distance these areas from the British metropole. As with the proposal of Orkney for muskox acclimatisation, these peripheral territories of Britain, which were imagined to possess unused economic potential, were reinforced as areas in need of improvement, which could be achieved through their integration into economic systems that would

ultimately benefit metropolitan, commercial interests. These attitudes also extended to colonial spaces in India, that were deemed suitable for goat acclimatisation and, through this shared status, these geographically distanced areas were aligned as peripheral territories open to development.

These conceptualisations of so-called, undeveloped spaces similarly characterised their inhabitants, who were viewed by the British urban, middling, commercial classes as less advanced societies, incapable of facilitating economic improvements in their own areas. Indeed, as the British aligned themselves with the French to legitimise acclimatisation experiments in Britain, following the successful hybridisation of the angora and cashmere goats by the latter, the home ranges of these goats in Anatolia and Tibet, along with their inhabitants, were spatially and temporally distanced from the British metropole through their placement within a geographically broad conceptualisation of the 'Orient'.

Part Two: Animals Beyond Britain

Chapter 4:

Savage Beasts and Savage Men

Discussions so far within this thesis have demonstrated that the locating of specific animals in different geographical regions of the British Isles, by late-eighteenth and early-nineteenth-century British popular natural history authors, allowed Britain to be conceptually divided into 'civilised' and 'uncivilised' spaces. Building on these ideas, this chapter reveals how the conceptual demarcation of space, through animal presence, existed within broader mechanisms of spatial categorisation, operating at a global level, that encouraged British readers of natural history to not only imagine their own country in terms of 'cultivated' and 'wild' spaces but also to view the wider world as a system of chronotopic zones that were characterised by the presence or absence of specific animals. The human inhabitants of these spaces were correspondingly deemed 'civilised', 'barbarous' or 'savage' and their status was frequently reaffirmed through explicit and implicit comparisons with Anglocentric notions of British modernity. These complex imaginings, articulated through discourses surrounding both wild and domesticated creatures, centred largely round the status of the animals, their physical and behavioural characteristics, the landscapes in which they resided and their relationships with local people.

This chapter begins by broadly exploring how the status of animals was extended to the landscapes in which they resided as well as the local people through their associated relationships, a mechanism operating at a global level through which animals, landscapes and people were temporalised in the past and territories and societies were conceptually distanced, aligned or conflated. The discourses surrounding a range of species in territories across the world, including goats, reindeer, elephants, mouflon, wolves, the megaloceros and the mastodon, are examined to reveal how animals, landscapes and people were temporalised within British popular natural history, based on the status of these animals, their presence in different localities and their relationships with local people. The remainder of this chapter focuses on the discourse surrounding the European and the American bison as an in-depth study of the interplay between these temporalising processes and their effects on species, spaces and people. The chapter concludes with a summary of findings regarding the ways in which animal presence was used to demarcate wild and civilised spaces, the effects this had on the classification of human societies, in line with stadial models, and how these discussions aided in the configuration of Britishness at a global level.

Broadly speaking, and as demonstrated in chapter one of this thesis, spaces in Britain were confined to the past if animals, perceived to be innately ancient, such as wolves and red deer, had only recently disappeared from them or had continued to reside there. Consequently, the presence or recent disappearance of these animals served to exclude local people from the narratives of national belonging that were underpinned by imaginings of British modernity, in line with stadial models of human development. The locating of wolves and red deer within the Scottish Highlands and Ireland, for example, helped to confine the Highland Scots and the Irish to an earlier stage of societal development than their English and Lowland Scot counterparts, excluding them from the broader, British body politic. Local populations throughout Britain who continued to rear native breeds, that were increasingly deemed primitive by contemporary popular natural history authors, were similarly distanced from Anglocentric understandings of a distinctly modern, civilised Britishness, that emanated largely from the wealthy, metropolitan stratum of British society.

As the locating of animals clearly operated within a broader, global mechanism, understandings of animals, landscapes and human-animal relationships often transcended national borders, which encouraged the conceptual alignment of some British territories and populations with the landscapes and societies of other, more distant parts of the world. As divisions between the cultivated and the wild and the civilised and the savage were largely informed by stadial models of human development, the temporal and geographical distances between places and cultures were rendered malleable, being conceptually compressed or extended according to imaginings of the extent of dominion held by local people over their environment and their perceived ability to use natural resources for economic benefit. For example, in places where wild animals were still seen to roam without human control, the local people, if mentioned at all, were implicitly construed as at the mercy of nature rather than as masters of it. Indeed, this ability to control the natural environment was seen as fundamental for societal development and, consequently, people who inhabited territories, where large, roaming animals were present, could not, by definition, demonstrate the environmental control required to achieve civilised status.

Comparatively, the domestication of wild creatures and their integration into national systems of agriculture demonstrated a level of environmental and biological control that was perceived to reflect a society's modern and superior status, as illustrated through eighteenth-century discussions on naturalisation and the growing enthusiasm for acclimatisation in the early nineteenth century. Other important indicators of societal development included the quantity and range of domesticated animals reared and utilised

by a society and the ability of the latter to successfully manipulate and develop an animal's form. This was largely evaluated in terms of its aesthetic appearance as well as its economic value and the extent of improvements made to the original, wild species was seen to reflect societal status in accordance with teleological models of stadial development. Within these discussions surrounding the domestication of animals, demonstrations of animal husbandry from within and beyond Britain were frequently compiled and compared, the skills and expertise of British breeders and agriculturalists being celebrated as examples of British ingenuity and commercial acumen, which reflected the superiority and modernity of the British nation.

The kinds of domestic animals reared by local populations were another important indicator of cultural and societal difference, especially if the animals did not comply with typically British practices. For example, British popular natural history authors viewed the keeping of goats in the peripheral territories of the British Isles, such as the Scottish Highlands, the Welsh mountains and Ireland, which sharply contrasted with the types of animals generally reared in the rest of Britain, as indicative of an earlier stage of societal development. Consequently, the Highland Scots, the Welsh and the Irish were temporally and spatially distanced from the rest of Britain and more closely aligned with the Swiss and other European 'mountain peoples' who, due to their mountainous environments, were similarly reliant upon goats as their principal livestock.[414] This reliance on goat rearing also helped to reinforce the pastoral nature of these populations and their economies, which distanced them from the agrarian and commercial-centric systems operating in those parts of Europe and Britain that were considered to be more modern and advanced, infusing these differences in animal rearing with connotations of spatial and temporal otherness.

In the case of the Sami people of Scandinavia, or 'Laplanders' as they were often referred to in contemporary literature, their reliance on domesticated reindeer for subsistence inevitably saw their categorisation by British popular natural history authors as uncivilised or semi-civilised but they were also deeply admired for their ability to survive in a harsh climate and a 'desolate' landscape through their utilisation of an exotic animal in ways that were considered to be resourceful, productive and novel.[415] Here, although the type and

[414] Goldsmith, *Animated Nature, Vol. II* pp. 263-264; Bewick, *General History* pp. 78-79; Mavor, *Natural History* pp. 113-114; Trimmer, *Natural History* p. 57; le Keux, *Illustrations* pp. 157-158; Jardine, *The Naturalist's Library, Vol. IV* pp. 121-122; Fennell, *Quadrupeds* pp. 491-492; Knight, *Menageries, Vol. III* pp. 441-442.
[415] Goldsmith, *Animated Nature, Vol. II* pp. 412-413; Bewick, *Quadrupeds* pp. 127-128; Pennant, *Arctic Zoology, Vol. I* p. 24; Church, *Cabinet*; Shaw, *General Zoology, Vol. II Part 2* pp. 274-276; Bingley, *British Quadrupeds* pp. 75-76; Bingley, *Natural History* p. 85; Cuvier (trans. Griffiths), *The Animal Kingdom, Vol. IV* p. 10; Trimmer, *Natural History* p. 69; Shoberl, *Quadrupeds, Vol. I* pp. 87-88; Knight, *Menageries, Vol. I* pp.

variety of livestock being reared differed to Britain, the ingenious adaptations by the Sami that had enabled them to survive in a hostile environment and to extract economic value from their animals provided evidence of human dominion over their physical environment that, in some ways, compensated for their inability as a people to develop a more modern, civilised system of agriculture owing to climatic limitations.

In landscapes with climates that were considered to be suitable for agricultural use along more European lines, human-animal relationships, that were seen to fall short of modern, British expectations and ideals, were understood to indicate innate backwardness and inferiority. Beilby, for instance, construed the lack of elephant domestication by Sub-Saharan African populations as a product of their own primitiveness, noting that the elephants of the African interior were 'more numerous than in any other part of the world' but that 'the savage inhabitants of this dreary country, instead of attempting to subdue this powerful animal, and render it subservient to their necessities' seemed 'desirous only of avoiding its fury'.[416] However, Beilby's assertions rested on his incorrect assumption that all elephants belonged to the same species and, therefore, he did not recognise that some species of elephants, with differing temperaments, were more or less responsive to taming attempts.[417] This highlights how Beilby's beliefs, which were reliant upon the universal nature of elephants across their global distribution, allowed him to view the taming and the utilisation of elephants in different parts of the world, notably ancient North Africa and contemporary India, as indicators of the skill and competency of local populations.

Discussions surrounding the relationships between wild animals and their domesticated counterparts and between fossilised remains and contemporary creatures within scholarly and popular publications on the natural world also played a key role in temporalising certain animals in the past, along with the landscapes and people associated with them. Through these discourses, which were generally informed by biblical and increasingly

418-419; Fennell, *Natural History* p. 464; Knight, *Animated Nature, Vol. I* p. 131; Bland, *Tales About Animals* p. 117.

[416] Bewick, *Quadrupeds* p. 187.

[417] Modern biologists recognise three species of elephant, the African Bush Elephant (*Loxodonta africana*), the African Forest Elephant (*Loxodonta cyclotis*) and the Asian Elephant (*Elephas maximus*). Nineteenth-century European attempts to tame and utilise African Bush elephants for manual labour in the Belgian Congo proved generally unsuccessful and the animals used for war by ancient, North African states, such as Carthage, are now generally believed to have been African Forest Elephants. For more information on nineteenth-century elephant domestication attempts, see: H. Cowie, *Victims of Fashion: Animal Commodities in Victorian Britain* (Cambridge, 2022) pp. 107-124; for a recent investigation on the war elephants used by ancient North African armies, see: M. Charles, 'Elephant Size in Antiquity: DNA Evidence and the Battle of Raphia', *Historia: Zeitschrift für Alte Geschicht* 65/1 (2016) pp. 53-65.

secular ideas regarding geological time, natural processes and human history, domestic animals, such as sheep and dogs, were increasingly understood to have originated from wild ancestors, which could often still be found in spaces deemed wild or relatively free from human cultivation and control.[418] The mouflon, for example, was clearly identified by Buffon as the wild ancestor of domestic sheep, a sentiment reiterated by many late-eighteenth-century, British naturalists and authors, such as Catton.[419] As the presence of the wild mouflon and the domestic sheep was understood to be mutually-exclusive, this dichotomous relationship helped to categorise geographical locations as wild or cultivated according to which of these species resided there. Indeed, Goldsmith, building on Buffon's discussion on the mouflon and domestic sheep, reinforced that:

> While man… cultivates the domestic kinds, he drives away and destroys the savage race… these, therefore, are to be found in but very small number, in the most uncultivated countries, where they have been able to subsist… in the more uncultivated parts of Greece, Sardinia, Corsica, and particularly in the deserts of Tartary…[where] the moufflon is to be found, that bears all the marks of the primitive race[420]

Goldsmith's sentiments were reiterated in the *Illustrations of Natural History* and by nineteenth-century British popular natural history authors, such as Jardine, Fennell and Bell, who all continued to identify the mouflon as the wild ancestor of domestic sheep.[421] Even popular natural history authors who were sceptical of these ideas, such as Knight, recognised that the claims of wild ancestry were sufficiently prevalent to warrant their inclusion in his discussions surrounding the mouflon and the domestic sheep.[422] Consequently, the latter, with its innately cultivated status, was affirmed as an indicator of managed landscapes and a marker of civilisation, whilst the mouflon, with its wild status, was conversely restricted to areas with little human control. Pennant maintained that although the mouflon had once existed in Britain, it was now long extinct, a situation that was indicative of Britain's status as a modern nation with cultivated landscapes.[423] Bingley, in his *British Quadrupeds*, echoed these sentiments, claiming that:

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[418] H. Ritvo, 'At the Edge of the Garden: Nature and Domestication in Eighteenth- and Nineteenth-Century Britain', *Huntington Library Quarterly* 55/3 (1992) pp. 364-367.
[419] Buffon (trans. Smellie), *General History, Vol. VI* pp. 215-216; Catton, *Animals*; Pennant, *History of Quadrupeds, Vol. I* p. 38.
[420] Goldsmith, *Animated Nature, Vol. II* p. 256.
[421] Jardine, *The Naturalist's Library, Vol. IV* p. 131; Fennell, *Natural History* p. 498; Bell, *British Quadrupeds* pp. 437-438.
[422] le Keux, *Illustrations* p. 113; Jardine, *Naturalist's Library, Vol. IV* p. 131; Knight, *Menageries, Vol. III* p. 374; Knight, *Pictorial Museum, Vol. I p.* 150.
[423] Pennant, *British Zoology, Vol. I* p. 42.

> In the British islands, we know nothing of the manners and habits of life even of the common species, in a state of nature. In every part, even of the mountainous wilds, and extensive moors, of Wales, Scotland and Ireland, the animals are all private property; and, in their most distant wanderings, are under the guidance of Shepherds and their Dogs.[424]

However, the vitality, agility and independence of the domestic sheep in the peripheral areas of Britain were favourably likened by some British naturalists to those of the wild mouflon, a comparison that blurred the conceptual divide between cultivated, human-dependent sheep and the wild, independent mouflon. This was largely in response to Buffon's disparaging characterisation of domestic sheep as innately stupid and weak compared to their wild counterparts and his theory that wild species degenerated over time when domesticated by humans.[425] Many British naturalists fervently contested these claims by providing numerous anecdotes and reports to illustrate the energy and liveliness of sheep in the Welsh hills and the Scottish Highlands not only to restore factual accuracy but also to defend the animal's reputation as an expression of national pride in Britain's important and successful wool industry. Bell explained, for example, that 'no one whose observations on these animals [sheep] have been confined to the safe and even pastures of the country, can have any adequate idea of the boldness and agility with which the Sheep of the Welsh mountains leap from crag to crag, emulating the Goats in agility and strength'.[426] Le Keux similarly commented that 'the liberty which sheep enjoy in the mountainous parts of Wales renders them very wild'.[427]

Other species were similarly viewed within a wild-domestic paradigm regardless of whether or not the wild species was understood to be the ancestral form of its domesticated counterpart. Buffon, for instance, was adamant that the wolf and the domestic dog were completely different species, a sentiment that was apparent in English translations of *Histoire Naturelle*, with Smellie explaining that 'the dog derives not his origin from the wolf or the fox; and that the nomenclators, who regard these two animals as wild dogs, or who imagine the dog to be a wolf or a fox become domestic, and give all three the common name of Dog, have deceived themselves by not sufficiently studying nature'.[428] Whilst Buffon clearly viewed the wolf and the dog as separate species, he

[424] Bingley, *British Quadrupeds* p. 360.
[425] G. Leclerc, Comte de Buffon (trans. William Smellie), *Natural History, General and Particular, Vol. VI* (London, 1791) p. 206.
[426] Bell, *British Quadrupeds* p. 445.
[427] le Keux, *Illustrations* p. 111.
[428] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 27.

nevertheless presented the former as the wild inversion of the latter, his discussions surrounding these two animals existing in dialogue with each other. Buffon claimed that the wolf seemed 'to have been formed upon the same model' as the domestic dog but its shared characteristics existed 'under a mask' as although 'the figure is similar… the result is directly reversed… their dispositions are opposite, and their constitutions different'.[429] By viewing the wolf and the dog as inversions of each other within a wild-domestic paradigm, areas where they were present were respectively categorised as wild or cultivated and the people who inhabited these areas were similarly deemed savage, barbarous or civilised.

British naturalists of the eighteenth century generally accepted and reiterated Buffon's assertion that the wolf was not the ancestor of the dog, with Pennant, for instance, noting that, according to Buffon, the shepherd's dog was the most likely ancestor of all other dog breeds.[430] However, as the eighteenth century progressed, British naturalists increasingly debated the possibility of a filial relationship between the domestic dog and other wild canid species. In a paper presented to the Royal Society in 1787, for example, Dr John Hunter, the younger brother of the surgeon and naturalist, Dr William Hunter, claimed that wolves, jackals and dogs were members of the same species as they could interbreed and produce fertile offspring.[431] The possibility of a filial relationship between the dog and the wolf was revisited in later works of eighteenth-century British popular natural history, with Beilby describing the wolf as 'in every respect a Dog in its state of natural freedom', and continued into the nineteenth century, with Bell also supporting Hunter's claims.[432] Competing theories regarding the origins of the domestic dog were later discussed by Charles Knight and Lieutenant Colonel Charles Hamilton Smith, who explained in volume XXV of Jardine's *The Naturalist's Library*, that the wolf, the jackal, the dhole of India and the dingo of Australia had all been identified as the potential ancestor-species of the domestic dog.[433]

Within this wild-domestic paradigm, the process of identifying wild canids as candidates for the ancestral form of the domestic dog reinforced the temporalisation of all of these wild animals in the past, along with the landscapes and the people associated with them.

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[429] Buffon (trans. Smellie) *Natural History, Vol. IV* pp. 197-198, 200; E. Kane, 'Wild is the Wolf', found at: https://www.historytoday.com/miscellanies/wild-wolf [accessed 28/09/2022].
[430] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 16; Pennant, *History of Quadrupeds, Vol I.*, pp. 221-222.
[431] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 16.
[432] Bewick, *Quadrupeds* p. 313; Bell, *British Quadrupeds* pp. 197-201.
[433] Knight, *Menageries, Vol. I* p. 36; C. Hamilton Smith (ed. W. Jardine), *The Naturalist's Library, Mammalia, Volume IX, Dogs* (Edinburgh, 1839) pp. 80-108.

The respective status of animals was determined based on their relative differences, from the wildest to the most domesticated, an evaluation that similarly informed the status of the landscape where they were present and the classification of those human societies associated with them, in line with stadial models. In this respect, the keeping of dog breeds whose physical features were seen to resemble those of wolves, or were identified as domesticated wolves, was frequently presented as an indicator of a 'savage' or 'barbarous' society. Buffon, for example, concluded that the shepherd's dog was 'nearer to the primitive race than any of the other kinds' as 'in every country inhabited by savage or by half civilized men, the native dog resembles this race more than any other', with the 'primitive' features identified by Buffon, including long limbs, pointed ears and a long snout, corresponding to those that he had similarly highlighted in wild canid species.[434]

Pennant's writings on the dogs of the indigenous people of the Americas, which he described as 'derived from the wolf, tamed and domesticated', also contained references to the filial relationships between wild canids and domestic dogs and to the physical features seen to characterise wildness.[435] Here, Pennant construed the dogs of the indigenous people as innately different from those of the European settlers, which similarly reinforced the untransmutable distinctions already imagined between the indigenous people and the white settlers. Moreover, by ascribing a distinct level of primitiveness to the indigenous dogs of America, Pennant actively temporalised the indigenous people of America, placing them at an earlier stage of societal development than the white settlers. These ideas were generally supported by authors who viewed the relationship between the wolf and the dog as ancestral, such as Beilby, who stated that 'before the introduction of Dogs, the savages made use of them [wolves] in hunting the wild animals of the country; and they are still employed for the same purpose in the more remote parts of that vast continent', a statement that also helped to reaffirm conceptions of both America and its indigenous populations as innately primitive and backward.[436]

The growing discourse on prehistoric animals within late-eighteenth and especially early-nineteenth-century British popular natural history, which was largely informed by the developing sciences of geology and palaeontology and the rapid development in scientific knowledge regarding extinct, prehistoric life, also served to temporalise specific animals, landscapes and people in the past. For example, William Buckland's analysis of the bones of prehistoric hyenas, hippopotami and elephants, discovered in Kirkdale Cave, North

[434] G. Leclerc, Comte de Buffon (trans. J. Smith Barr), *Buffon's Natural History, Vol. V* (London, 1797) pp. 315-316.
[435] Pennant, *History of Quadrupeds, Vol. I* p. 221.
[436] Bewick, *Quadrupeds* p. 318.

Yorkshire, was presented in a paper to the Royal Society in 1822 and proved influential in popularising discussions on extinct fauna within the public sphere.[437] In addition, the discoveries of large marine reptiles by Mary Anning in the 1830s, the coining of the term 'dinosaur' by Sir Richard Owen in 1841 and the statues of prehistoric animals, built by the sculptor and scientist, Benjamin Waterhouse Hawkins, installed as part of a display at the Crystal Palace in 1854, all played direct roles in fostering public interest in long-extinct species.[438]

Within this pre-Darwinian context, the concept of extinction transitioned from a zoological novelty to an inevitable and essential natural process, an additional factor that helped to assign temporality to animals, landscapes and people within British popular natural history literature. The work of Cuvier particularly helped to popularise the notion of natural extinction in European scientific circles, even though his concept of 'catastrophism', that species extinction was the result of sudden and calamitous natural events, was far from universally accepted by contemporary naturalists.[439] By the nineteenth century, works of popular natural history, such as those by Knight, regularly included extinct species within their textual menageries.[440] These emergent discussions surrounding extinction and deep time in early-nineteenth-century British popular natural history literature clearly built on eighteenth-century antecedents that had conceptualised some extinct species as animals of the past long before their nineteenth-century reconfiguration and relocation to a more ancient, pre-human period of history. Whether fossilised remains were understood to be those of antediluvian creatures, of species whose extinction was the product of historical human activity or of inhabitants of a truly ancient, geological past, the temporality attached to these remains was inevitably transferred to the landscapes in which they had been found, reinforcing the temporal distance between these territories and the cultivated spaces of modern Britain.

The extinct creature most commonly discussed in British popular natural history was the giant deer, megaloceros (see figure 50), commonly known as the 'Irish elk', on account of the many discoveries of its bones in Irish peat bogs.[441] The discourse surrounding

[437] A. Bewell, 'Hyena Trouble', *Studies in Romanticism* 53/3 (2014) pp. 384-388.
[438] M. Freeman, *Victorians and the Prehistoric: tracks in a Lost World* (New Haven, 2004) pp. 133-137; N. Marshall, '"A Dim World, Where Monsters Dwell": The Spatial Time of the Sydenham Crystal Palace Dinosaur Park', *Victorian Studies* 49/2 (2007) pp. 286-301.
[439] J. Sepkoski, 'Mass Extinctions, Concept Of' in S. Scheiner (ed.) *Encyclopaedia of Biodiversity, Vol. 4,* Second Edition (Cambridge, 2013) p. 156.
[440] Knight, *Pictorial Museum, Vol. I* pp. 87, 132-134.
[441] See, for example: Fleming, *British Animals* p. 27; Bell, *British Quadrupeds* pp. 397-398, 406; Religious Tract Society, *Quadrupeds* p. 96; Carpenter, *Popular Cyclopedia* p. 291; Knight, *Animated Nature, Vol. I* p 134.

melaloceros, consequently, helped to strongly associate Ireland with the ancient past and to align Ireland with America, which was similarly deemed primordial, through explicit comparisons between the megaloceros and the elk or American moose, a configuration that distanced both of these territories from modern Britain. However, Killian Quigley has argued that the Anglo-Irish doctor and antiquarian, Thomas Molyneux, who was one of the first writers to provide a detailed description of megaloceros remains in a paper published in the Royal Society's *Philosophical Transactions* in 1695, utilised this animal to promote a sense of Irish 'ecological exceptionalism' that allowed him to validate and celebrate Anglo-Irish identity within a broader, British context.[442] According to Quigley, 'by framing the west of Ireland within the Atlantic's new world periphery', Molyneux characterised this space as 'the western frontier of Europe, and perhaps the eastern frontier of a zone of prehistoric "Intercourse"', which allowed Ireland to be configured as 'the meeting of two frontiers, an Ireland literally divided between dual geographical and temporal identities'.[443]

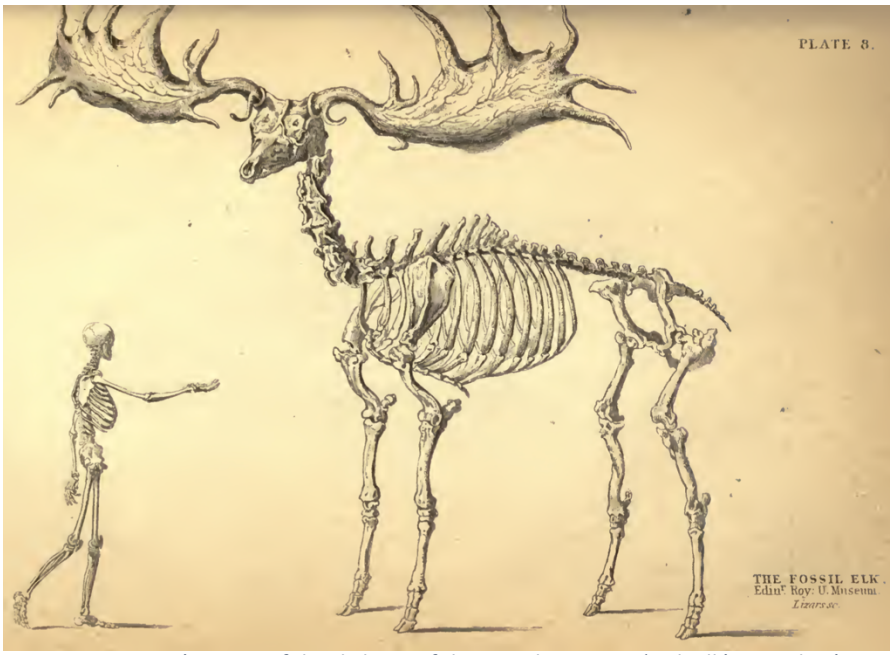


Figure 50: Stewart's image of the skeleton of the megolaceros, or 'Irish Elk', in Jardine's The Naturalist's Library, Volume XXI, Ruminantia *(London: Henry G. Bohn, 1835, source: Google Books).*

Whilst the links established by Molyneux between the megaloceros and the American moose served to emphasise Anglo-Irish uniqueness, later popular natural history authors used these connections to demarcate the borders of Atlantic otherness. Buffon, for example, believed that the antlers of the megaloceros had belonged to a giant reindeer but Pennant, in his *British Zoology*, *Synopsis of Quadrupeds* and *History of Quadrupeds*,

[442] K. Quigley, 'Boggy Geography and an Irish Moose', *The Eighteenth Century* 58/4 (2017) p. 400.
[443] Quigley, *Boggy Geography* pp. 396-397.

linked the immense antlers found in Ireland to reports of enormous elk, some twelve feet at the shoulder, said to reside deep in the American interior, although, by the publication of his *Arctic Zoology*, he had revised his position to argue that such animals were entirely fictitious.[444] As Megaloceros skulls often formed the impressive centrepieces of private collections, such as at the Leverian Museum (see the large set of antlers depicted in figure 32), they frequently captured the interest of British naturalists, especially those whose research opportunities were largely limited to the British metropole and other urban centres in Britain.[445] Within these discussions, Ireland was temporally and spatially aligned with America and similarly conceptualised as ancient and primitive, distancing it from modern Britain and reinforcing its otherness.

Pennant's change of opinion rested largely on Dr William Hunter's unpublished paper on the live elk specimens of Charles Lennox, the 3rd Duke of Richmond, in which Hunter had compared the antlers of the megaloceros with those of Richmond's elk, concluding that they were not the same species.[446] Indeed, as some of the first live examples to be imported into Britain from America, Richmond's elk significantly contributed to understandings of this species in British popular natural history. Gilbert White described the cadaver of one of Richmond's female elks in *The Natural History of Selborne* and, in 1770, Hunter commissioned a painting by Stubbs of one of Richmond's male elks, entitled *The Duke of Richmond's First Bull Moose* (see figures 51).[447] These depictions influenced later images of elk in British popular natural history literature, such as those by Pennant and Bewick, although the latter's image was also informed by an illustration from Pennant's *Synopsis* (see figures 52, 53 and 54). Despite Hunter and Pennant both agreeing that the megaloceros and the elk were not the same species, discussions surrounding these animals continued to exist in dialogue with each other, an entanglement which reinforced the status of both of these species as wild animals with strong links to the past.

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[444] Buffon (trans. Smelie), *Natural History, General and Peculiar, Vol. VI* p. 355; Pennant, *British Zoology, Vol. I* pp. 43-44; Pennant, *Synopsis of Quadrupeds* pp. 44-45; Pennant, *History of Quadrupeds, Vol. II* pp. 97-98; Pennant, *Arctic Zoology, Vol. I* p. 21.
[445] Ella, *Visits to the Leverian Museum* pp. 76, 146-147; *Catalogue of the Leverian Museum, Including the Three Last Days' Sale* (London, 1806) p. 15.
[446] Grigson, *Menageries* pp. 131-134; L. Vargo, 'The Romantic Prospects of the Duke of Richmond's Moose', *European Romantic Review* 24/3 (2013) pp. 298.
[447] G. White (ed. A. Secord), *The Natural History of Selbourne,* Oxford World Classics Edition (Oxford, 2013) pp. 65-67.



Figure 51: George Stubbs' The Duke of Richmond's First Bull Moose *(1770, University of Glasgow Collections, GLAHA 43823, source: Wikimedia Commons).*



Figure 52: An image of the elk, clearly based on Stubb's painting, from Pennant's Arctic Zoology, Vol. I *(London: Henry Hughs, 1781, source: Google Books).*

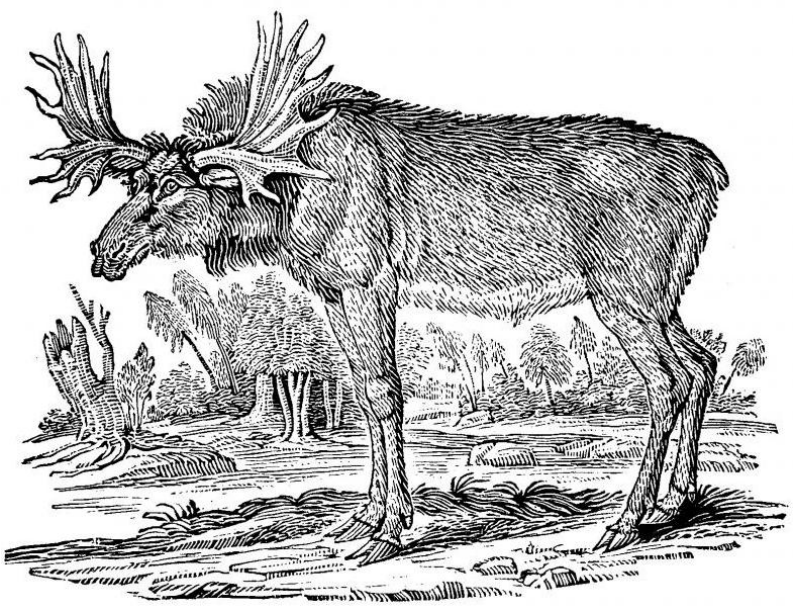


Figure 53: Bewick's image of the elk in his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*



Figure 54: Images of the female elk and the antlers of the male elk in Pennant's Synopsis of Quadrupeds *(Chester: J. Monk, 1771, source: Google Books).*

Eighteenth-century writers, such as Goldsmith and Catton, generally echoed Pennant's earlier opinion, as did some natural history authors of the early nineteenth century, such as Church and Bingley, who tentatively reiterated that the megaloceros was the giant elk of the American interior.[448] Conversely, Shaw concluded that the megaloceros was certainly no moose but maintained the strong links already established between Ireland and America by emphasising that remains of this species had been found in both of these territories.[449] Even as megaloceros remains were beginning to be found across the rest of Britain and Europe, Ireland was still identified as the primary site of discovery, a status that supported imaginings of Ireland as innately connected to the past through the preserving powers of its peat bogs.[450] As Roberts reflected, 'in Ireland, the same peat-bogs, or mosses, which contain these horns, have likewise produced implements of human manufacture; melancholy memorials of forgotten labours of a people once, perhaps, numerous and flourishing, but whose name and race have vanished from the earth'.[451]

These connections between the innately ancient megaloceros and the giant deer species of America, most notably the elk and the wapiti, or the American elk, helped to affirm the enduring wildness of the North American interior and to temporally suspend it within the British imagination. In the same way that the enduring presence of red deer in particular parts of Britain was seen to signify primitiveness, the presence of these immense deer species, be they elk, wapiti or megaloceros, served to reinforce imaginings of the American interior as a distant and unexplored wilderness, a distinctly older chronotopic zone compared to the cultivated spaces associated with the British metropole.[452] As large, American deer species were often conceptually conflated, most clearly demonstrated through the incorrect depiction of a wapiti head in some illustrations of elk during this period (see figures 55 and 56), a blurring of the physical distinctions between these animals occurred, which allowed connections between species to be more easily made.

[448] Goldsmith, *Animated Nature, Vol. II* pp. 334-335; Catton, *Animals Drawn from Nature*; Church, *Cabinet, Vol. I*; Bingley, *Memoirs of British Quadrupeds* pp. 321-322.
[449] Shaw, *Museum Leverianum, Vol. I* p. 35; Shaw, *General Zoology, Vol. II* pp. 267-268.
[450] le Keux, *Illustrations* pp. 223-224; Bell, *British Quadrupeds* p. 406; Fennell, *Quadrupeds* p. 458; Fleming, *British Animals* pp. 26-27; Carpenter, *Popular Cyclopedia* p. 291.
[451] Roberts, *Wild Animals* p. 242.
[452] Bewick, *Quadrupeds* pp. 125-126.

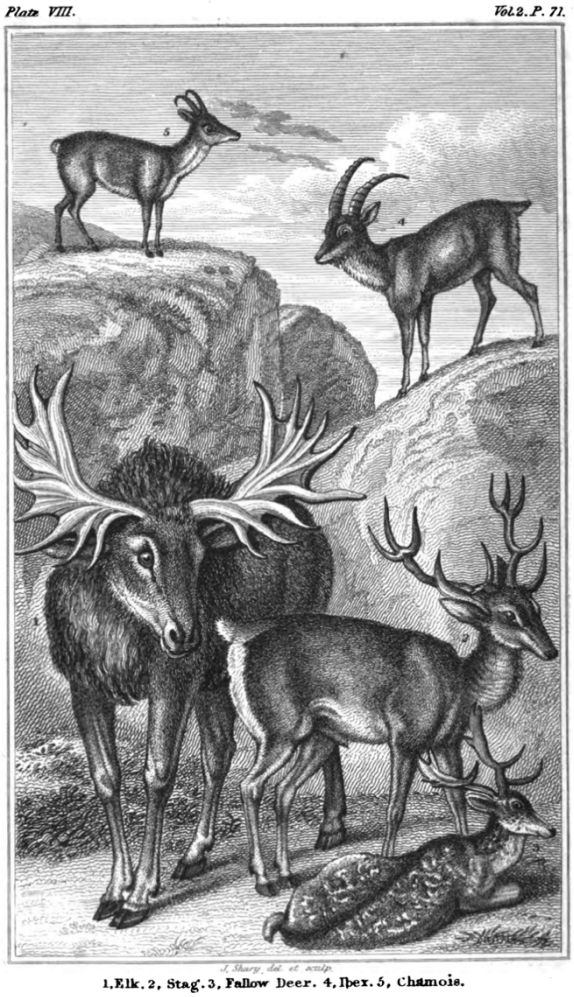


Figure 55: The 'elk' from Bingley's Animal Biography, Volume I, *Fifth Edition (London: Rivington, 1820, source: Google Books).*

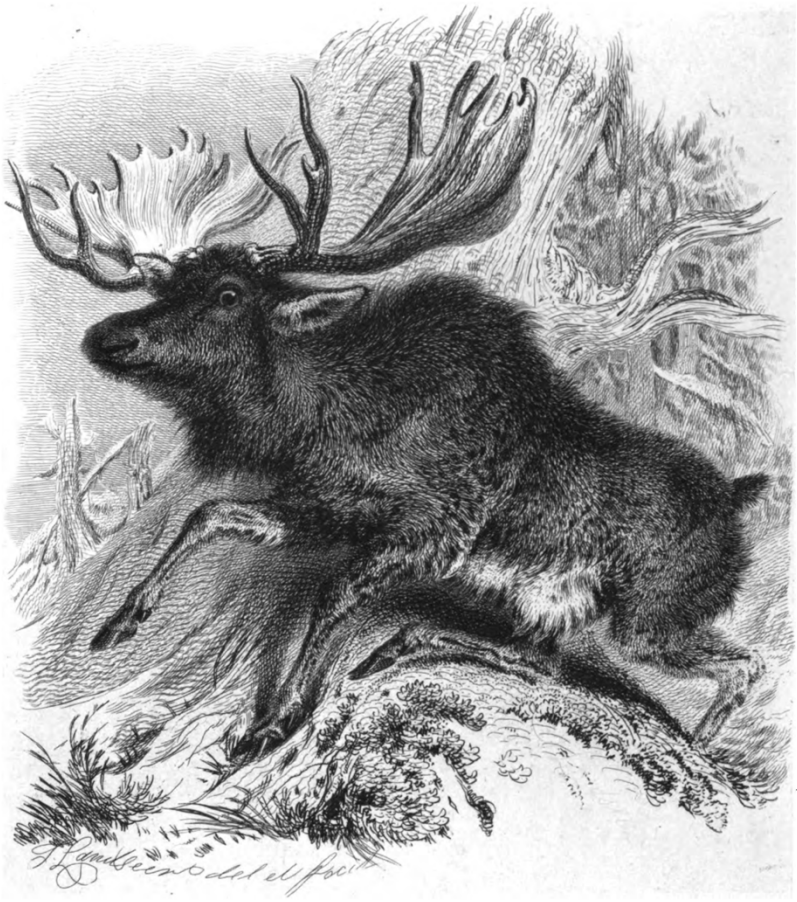


Figure 56: Landseer's 'elk' from Barrow's Characteristic Sketches *(London: Moon, Boy and Graves, 1832, source: Google Books).*

Although nineteenth-century popular natural history authors increasingly echoed Cuvier's sentiment that the megaloceros was more closely related to the European fallow deer than any deer species endemic to the Americas, the large, extant deer species of North America continued to be conceptually linked to the megaloceros, on account of the similarities drawn between their great size, the impressiveness of their antlers and their wild ranges.[453] Indeed, as the megaloceros, the elk and the wapiti shared the same characteristics of rarity, physical impressiveness and distant origins, they were similarly treated as high-status, scientific and zoological curiosities. Although the Leverian Museum chose to exhibit its megaloceros skull in a different part of the building from its taxidermy specimen of an entire elk from Sweden, the accompanying descriptions of the Swedish elk by Shaw and Anthony Ella included information regarding its relationship to the megaloceros and also referred to the abundance and great size of the elk of America.[454] The magnificent deer species of America and the skulls of megaloceros, often displayed in

[453] Cuvier (trans. Griffiths), *The Animal Kingdom* pp. 87-89.
[454] Shaw, *Museum Leverianum, Vol. I* p. 35; Ella, *Visits to the Leverian Museum* pp. 76-77.

the private collections of British aristocrats, also created opportunities for these species to be compared and for any connections between them to be reaffirmed. These specimens were frequently used to reflect the education and sophistication of their wealthy owners and their respective American and Irish origins allowed them to serve as potent symbols of British dominion over territories that were imagined to be spatially and temporally distant from the British metropole, representing a consumption of imperial organisms.

The mastodon, a relative of the elephant (see figure 57), was another creature whose remains helped to temporalise America as a much older chronotopic zone than the cultivated spaces of modern Britain. Mastodon skeletons had been found at numerous sites in America from the beginning of the eighteenth century, most famously on the banks of the River Ohio in an area known as 'Big Bone Lick'. Some late-eighteenth and early-nineteenth-century naturalists believed that, like the megaloceros, the mastodon might still be found deep in the American interior, which similarly helped to configure the American interior as a space arrested in time. Although William Hunter had declared, in a study presented to the Philosophical Society in 1768, that the mastodon was 'probably extinct', other eighteenth-century writers, most notably Thomas Jefferson, were certain that the animal still existed within the territories acquired by the nascent United States as part of the Louisiana Purchase of 1803, a belief that stemmed from his opposition, on religious grounds, to extinction as a natural process.[455] Indeed, before the departure of the 1802-1804 Lewis and Clark expedition, Jefferson had given specific instructions for the pair to find evidence of living examples of this and other prehistoric animals that naturalists had already declared extinct.[456]

[455] W. Hunter, 'Observations on the Bones, commonly supposed to be Elephants Bones, which have been found near the river Ohio in America', *Philosophical Transactions (1683-1775)* 58 (1768) p. 45; K. Thomas, *The Legacy of the Mastodon: The Golden Age of Fossils in America* (New Haven, 2008) pp. 59-60.
[456] Thomas, *The Legacy of the Mastodon* pp. 59-60.

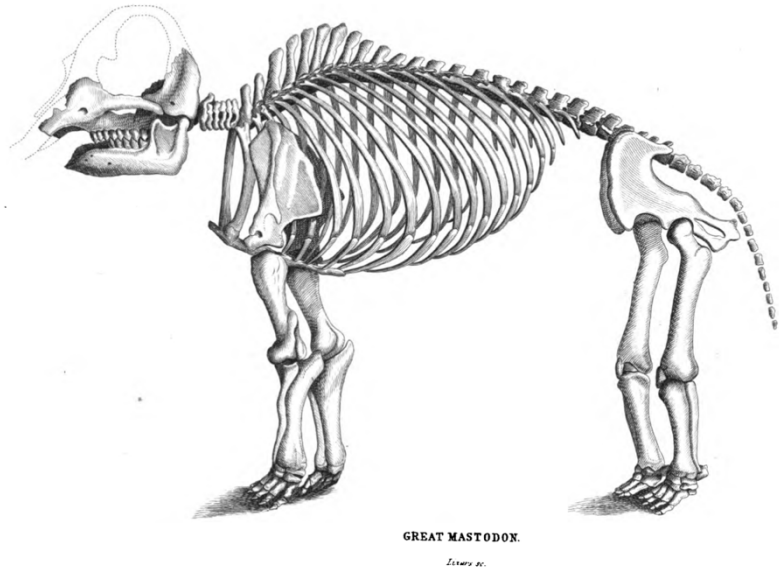


Figure 57: Image of the skeleton of the mastodon from Jardine's The Naturalist's Library, Mamalia Vol. V, Pachydermes *(Edinburgh: W. H. Lizars, 1836, source: Google Books).*

Similar speculations were voiced in some contemporary works of British popular natural history, with Pennant stating in his *History of Quadrupeds* that 'as yet the living animal [the mastodon] has evaded our search; yet it is more than probable that it yet exists in some of those remote parts of the vast new continent, unpenetrated yet by *Europeans*', an assumption that stemmed from his religious belief that the complete extinction of a species was impossible.[457] These sentiments were reiterated by Beilby, whose locating of the mastodon within contemporary America helped to present this extensive space as a vast, unexplored continent, home to strange creatures and devoid of advanced human societies, a potent image that justified the ambitions of white colonists.[458] Indeed, scholars have pointed out that the mastodon served an important role in the construction of early American national identity, with Jefferson using the mastodon and the elk to refute Buffon's claims of American degeneration by presenting the continent as overflowing with untapped, natural resources.[459]

British discussions surrounding the large mammals of North America within popular natural history publications generally built on the pre-existing British, imperial conceptions of America as a virgin continent ripe for colonisation. As Lisa Vargo points out in her analysis of Stubbs' painting of the Duke of Richmond's moose, Pennant's *Arctic Zoology* was originally 'conceived with nationalistic purposes of celebrating British political and scientific

[457] Pennant, *History of Quadrupeds, Vol. I* p. 161.
[458] Bewick, *Quadrupeds* pp. 196-197.
[459] G. Sayre, 'Jefferson Takes on Buffon: The Polemic on American Animals in Notes on the State of Virginia', *The William and Mary Quarterly* 78/1 (2021) p. 84.

dominion over North America', with the elk being assessed in terms of its potential as a domesticated animal in both Britain and its imperial territories.[460] To this end, Pennant constructed the elk through the commercial gaze, concluding that the animal's range in America was considerably less developed than Britain or Europe, this status allowing North America to be conceptualised as a distinctly older Chronotopic zone and its indigenous populations at an earlier stage of societal development. As it became generally accepted, predominantly through the writings of Cuvier, that the mastodon was in fact extinct, this animal's ancient status was compounded, regardless of its classification as an antediluvian creature or as a beast of an earlier geological epoch, and it was not only increasingly tied to the American landscapes where its remains were found but also to the indigenous people who resided there.[461]

The 'trans-Atlantic ox':
bison and the British demarcation of wilderness

Late-eighteenth and early-nineteenth-century British popular natural history authors frequently conflated the European bison with the American bison, their combined range being seen to encompass a vast swathe of the globe from forested areas to open plains. In addition, the relationships constructed between the bison and domestic cattle by popular natural history authors played a significant role in tying the former to an historical and geological past. Furthermore, the innately ancient and wild connotations attached to the bison were extended to the landscapes, where it was found and these were similarly deemed wild, primeval and uncultivated, along with the people who relied on this animal for subsistence. Consequently, these temporalising processes helped to create a chronotopic zone that was confined to the past and occupied by societies that were perceived to be inferior to modern civilisations, such as Britain.

Discussions surrounding the bison in eighteenth and early-nineteenth-century natural history frequently focused on defining the species and establishing its relationships with other bovids, which resulted in a range of statements and conclusions stemming from vague and even contradictory descriptions of various 'wild bulls' that were claimed to have inhabited the dense forests of Europe by classical writers including Aristotle, Pliny and Julius Caesar. These earlier accounts are now recognised as observations of two different species, namely the European bison and the aurochs (the wild ancestor of domestic cattle), the latter only being formally recognised and named as *Bos primigenius* in 1827 by the

[460] Vargo, 'The Duke of Richmond's Moose' pp. 303-304.
[461] Fleming, *British Animals* p. xvii; Low, *Breeds* pp. xxxvii-xxxviii; Fennell, *Quadrupeds* p. 420; Carpenter, *Popular Cyclopedia* p. 323.

German naturalist and physician, Ludwig Heinrich Bojanus, although his findings were far from universally accepted by naturalists at the time.[462] These confusions resulted in the repeated conflation of the European bison with the aurochs in late-eighteenth and early-nineteenth-century British popular natural history literature, with the former often being mistakenly presented as the ancestor of domestic cattle. The confused understandings of popular natural history authors are best demonstrated through the plethora of names that they used to describe the European bison, such as urus, aurochs, bonassus and zubr.[463]

This conception of bison and aurochs as a single species was further confirmed by Buffon, whose discussion on the relationship between these animals served as a crucial, illustrative example through which he could demonstrate his climate theory. As Smellie explained in his translation of Buffon, 'the bison differs from the aurochs by accidental varieties only; and, consequently, it is, as well as the aurochs, of the same species with the domestic ox', attributing any morphological differences between these animals to climate and diet variations, which he claimed were also responsible for the degeneration of domesticated animals, including cattle.[464] Buffon concluded that 'the domestic ox of Europe, Asia, Africa, and America, the bonasus [buffalo], the aurochs, the bison, and the zebu, are animals of the same species, which, according to differences of climate, of food, and of treatment, have undergone… various changes'.[465] Buffon's climate theory infused animals with an anatomical malleability that allowed species with very pronounced morphological differences to be subsumed into one, broadly-defined species, with an extensive range and an imagined presence that covered vast swathes of the globe.

Indeed, Buffon's climate theory similarly informed the conflation of the European and North American bison into a single species within later works of British popular natural history, especially as any noticeable differences between the anatomies of these animals could be accounted for through Buffon's argument that if European animals were transferred to America, they would quickly degenerate into weaker and less virile forms due to climatic differences. Pennant later upheld that the North American and European bison were the same species whilst Shaw claimed that the bison of America and Europe 'seem to differ in no respect', save for a few slight morphological discrepancies, a sentiment also shared by Mavor.[466] Even when authors, such as Bennett, presented the

[462] See: T. Van Vuure, 'Aurochs, Bos pimigenius Bojanus, 1827' in M. Melletti and J. Burton (eds.) *Ecology, Evolution and Behaviour of Wild Cattle: Implications for Conservation* (Cambridge, 2014) pp. 240-254.
[463] Shoberl, *Quadrupeds, Vol. I* p. 11.
[464] Buffon (trans. Smellie), *Natural History, Vol. VI* pp. 155-162, 170-188.
[465] Buffon (trans. Smellie), *Natural History, Vol. VI* p. 188.
[466] Pennant, *Arctic Zoology, Vol. I* p. 2; Shaw, *General Zoology, Vol. II Part II* p. 394; Mavor, *Natural History* p. 119.

European and the North American bison as separate species, they were still frequently discussed within the same, single entry on bison, preserving the sense that these species could be thought of as a collective whole, with Knight arguing that the bison constituted a 'trans-Atlantic ox' that had representatives in both the Old and the New World.[467]

Consequently, Buffon's paradigms were responsible for the general entanglement of the European bison with both its North American counterpart and the now-extinct aurochs within constructions of the bison in late-eighteenth and early-nineteenth-century British popular natural history literature. Buffon's influence also extended to the emphasis placed on the animal's extensive range and immense population, evident in statements, such as that of Mavor, who claimed that the bison could be found in 'all southern parts of the world, both old and new'.[468] The fact that the zebu was also presented as the domesticated form of the European bison further increased the range of this species, with the *Illustrations of Natural History* claiming that it not only encompassed 'the marshy forests of Poland', the Carpathian Mountains, Lithuania and the Caucasus, but also 'several other parts of Asia and throughout Africa, from Mount Atlas to the Cape of Good Hope', a logic that populated these spaces with both wild and domestic 'bison'.[469] This mistaken understanding of the bison's range supported the narrative that these animals were populous and widespread, even though naturalists recognised that the European bison was increasingly restricted to just a few sites in eastern Europe.[470] Barrow explained that:

> At present the European Bison, or Bonassus, is known only in a corner of Europe; but its domicile embraces a vast portion of the rest of the world. It resides in the forests of southern Russia (in Asia), and the mountain forests of the Carpathian and Caucasian ranges, and probably in that temperate region of Africa which comprehends the high lands of Numidia.[471]

These ideas were reiterated by Shoberl two years later and conceptualisations of the bison as possessing a large population and having a broad range were maintained through observations of bison in North America reported in travel narratives, such as the published accounts of the 1804-1806 Lewis and Clark expedition, whose encounters with vast herds

[467] Bennett, *Gardens, Vol. I* pp. 113-114; Knight, *Menageries, Vol. III* p. 344.
[468] Mavor, *Natural History* p. 119.
[469] le Keux, *Illustrations* p. 87.
[470] Z. Pucek, I. Belousova, Z. Krasiński, M. Krasińska and W. Olech, *European Bison (Bison bonasus): Current state of the species and strategy for its conservation* (Strasbourg, 2004) pp. 29-30.
[471] Barrow, *Characteristic Sketches*; Shoberl, *Quadrupeds, Vol. I* pp. 11-12.

of bison in the North American interior were cited by Bennett, Knight and Loudon.[472] Richardson noted, in his *Fauna Americanum Borealis*, that although American bison were 'rarely seen to the south of the Ohio, or on the East side of the Mississippi', they were still seen 'in vast numbers in Louisiana, roaming in countless herds over the prairies', a sentiment later referenced by Jardine and echoed by Knight and Carpenter.[473]

Building on Buffon's ideas, later British naturalists continued to define the bison as the ancestor of domestic cattle, inherently characterising this animal as ancient and primitive in relation to its ascribed descendants. Beilby, for instance, identified the 'Urus' as the wild form of the domestic cow and Shaw described the common ox as 'in reality, the Bison reduced to a domestic state', an assertion reiterated by Mackenzie (see figure 58).[474] Macloc's description of the 'Urus', the 'wild bull… chiefly found in Lithuania', contained features of both the aurochs and the European bison, a combination that helped to construe his composite animal as the ancestor and wild counterpart of domestic cattle, with Macloc explaining that the urus resembled 'the tame one [domesticated cattle], except in some trifling varieties, which his state of independence, or the luxuriance of his native pastures may easily have produced'.[475] Bingley, in his *British Quadrupeds*, was in 'no doubt' that the ox was 'a descendant of the Bison', contrasting the latter's 'enormous strength' and 'savage and gloomy disposition' with the former's 'heavy and stupid' but 'exceedingly patient, mild and docile' tendencies, a comparison which he reiterated in his *Natural History of Animals*, noting that the 'ferocious and savage' bison was simply the ox 'in a wild state'.[476]

[472] Bennett, *Gardens, Vol. I* p. 115; Knight, *Menageries* p. 347; Knight, *Pictorial Museum, Vol. I p.* 174; Loudon, *The Entertaining Naturalist* pp. 113-114.
[473] Richardson, *Fauna* p. 279; Jardine, *The Naturalist's Library, Vol IV, Ruminantia* Part II pp. 252-256; Knight, *Menageries, Vol. III* p. 347; Knight, *Pictorial Museum, Vol. I p.* 174; Carpenter, *Popular Cyclopedia* p. 304.
[474] Bewick, *Quadrupeds* p. 42; Shaw, *General Zoology, Vol. II Part II* p. 397; Mackenzie, *Natural History* p. 62.
[475] Macloc, *Natural History* p. 28.
[476] Bingley, *British Quadrupeds* pp. 391-392; Bingley, *Natural History* p. 97.

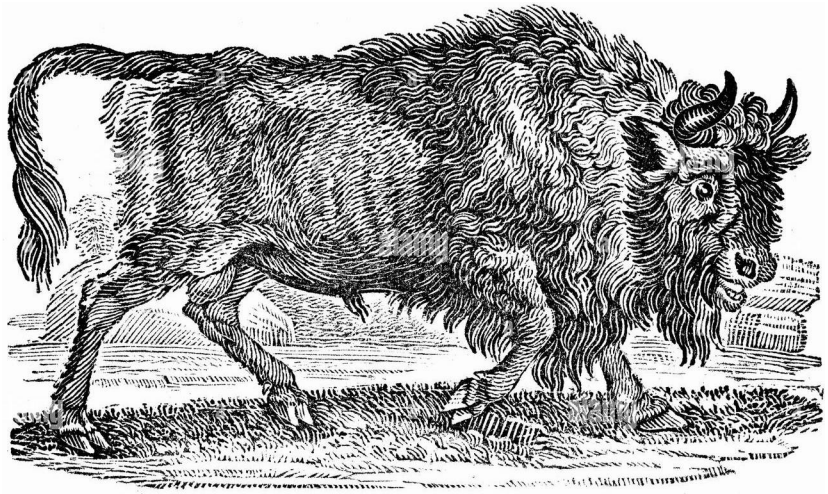


Figure 58: Bewick's depiction of the 'Urus' in his Quadrupeds, *Fourth Edition (Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*

However, by the 1830s, Cuvier's argument that the wild ancestor of domestic cattle was a distinctly different species from the European bison, as articulated in Edward Griffith's 1827 English translation of Cuvier's *La Règne Animal*, was gaining traction within the European scientific community, including Britain, where it was supported by naturalists, including Lieutenant Colonel Hamilton Smith (see figure 59).[477] Initially, British popular natural history authors treated Cuvier's claims as one of a number of equally-plausible hypotheses regarding the origins of domesticated cattle. Jardine, for example, reflected that 'by most persons it is thought that the domestic races of our cattle are originally sprung from… the Indian and European Buffalo… some, again, treat them as arising from the aurochs or wild cattle of Germany and Poland [the European Bison]' whilst Cuvier was more 'inclined to consider our present cattle identical with a species no longer existing in a wild state, but which has, by the exertions of man, as in the instance of the Camel and the Dromedary, been for ages entirely subjected to his power'.[478]

[477] G. Cuvier (trans. and ed. by E. Griffith), *The Animal Kingdom, Volume the Fourth* (London, 1827) pp. 29, 411-415.
[478] Jardine, *The Naturalist's Library, Vol IV, Ruminantia Part II* p. 194.

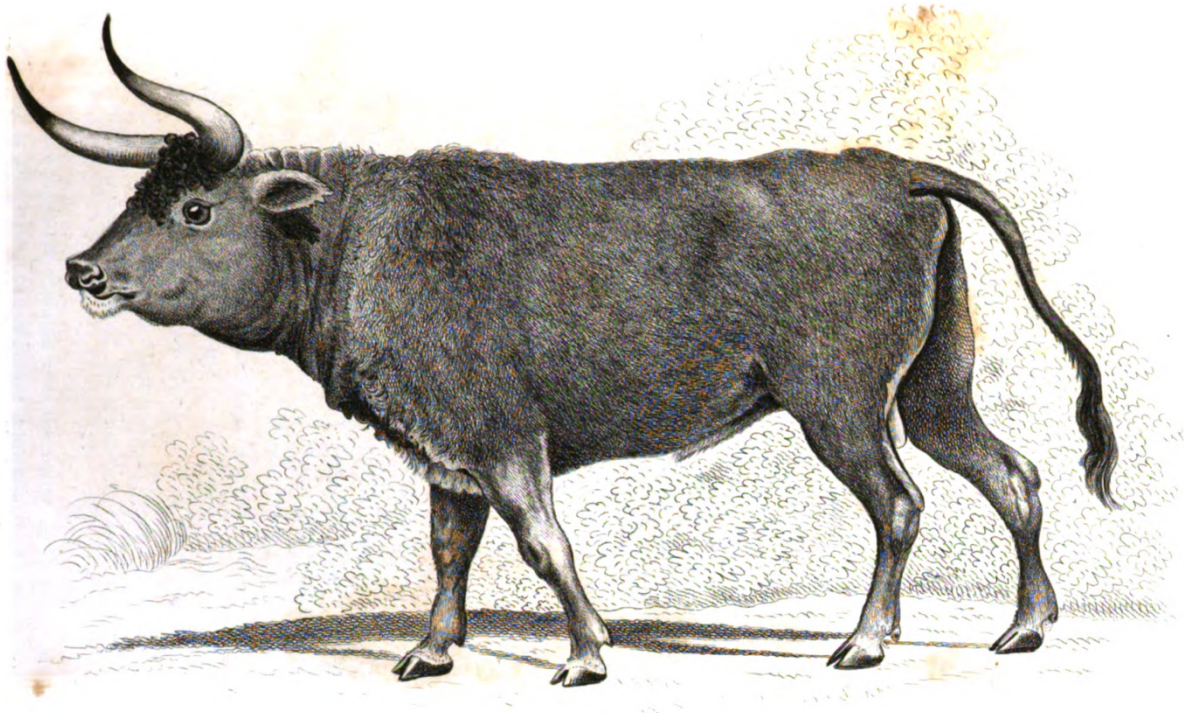


Figure 59: The aurochs, as depicted in Griffith's translation of Cuvier's La Règne Animal *(London: G. Wittaker, 1827, source: Google Books).*

Although Bojanus' work on *Bos primigenius* seemed to confirm Cuvier's claims regarding the identity of the 'urus' or 'aurochs' of classical literature, other European naturalists were more doubtful and this initial scepticism was similarly articulated by British popular natural history authors of the time. Knight, for example, drew heavily on Dr W. Weissenborn's 1838 article, entitled 'On the Influence of Man in modifying the zoological features of the Globe: with Statistical Accounts respecting a few of the more important Species', which was published across the May and June issues of *The Magazine of Natural History*, quoting from it extensively when discussing the European bison in both his *Menageries* series and his *Pictorial Museum*.[479] Crucially, Weissenborn challenged Cuvier's assertion that the European bison and the urus were two separate species, arguing instead that *B. primigenius* was 'indigenous to a warm country', having been 'brought from India, by Egypt, to Europe; whereas its wild stock, like that of the camel and dromedary' had 'vanished at a very remote period'.[480] Knight, whilst acknowledging that Cuvier's findings were generally accepted by British naturalists, explicitly reiterated Weissenborn's

[479] W. Weissenborn, 'On the Influence of Man in modifying the zoological features of the Globe: with Statistical Accounts respecting a few of the more important Species' in E. Charlesworth (ed.) *The Magazine of Natural History, Volume II* (London, 1838) pp. 239-256, 305-314; Knight, *Menageries, Vol. III* pp. 352-362; Knight, *Pictorial Museum, Vol. I p.* 174.
[480] Weissenborn, 'On the Influence of Man in modifying the zoological features of the Globe' pp. 253-254.

sentiment in his *Pictorial Museum*, stating that 'it is to Central Asia, rather than to the wild forests of Central Europe, that we ought to look for the type of the domestic race'.[481] In spite of Knight's hesitancy, authors of the 1840s and 1850s generally accepted Cuvier's model, with the Religious Tract Society and Aikman being quite certain that the bison was not the wild ancestor of domestic cattle.[482] Regardless of these competing theories, the European and the American bison continued to be temporalised in the past because they were both perceived to be more primitive than domesticated cattle and, therefore, deemed innately old.

The discovery of fossilised bison remains in Europe, Asia and America strengthened the emphasis that authors placed on the bison as innately ancient and helped to construe both the contemporary European and the American bison as liminal species belonging to an earlier stage of the Earth's history. In the eighteenth century, Pennant had used the presence of bison fossils to extend the animal's historical range across Asia as far as Siberia and, drawing on an hypothesis proposed by his friend and correspondent, the Prussian zoologist and botanist, Peter Simon Pallas, Pennant theorised that the species had crossed into America via a former land bridge.[483] This connection between bison and the ancient past became increasingly prevalent within popular scientific literature during the nineteenth century, as studies into extinct, prehistoric animals, and corresponding notions of deep time, were gradually being integrated into texts that aimed to cover zoological topics, as illustrated in Knight's references to reports by Charles Lyell that European bison bones had been found in British geological formations.[484]

Consequently, the bison was increasingly integrated into a growing menagerie of prehistoric creatures, with Roberts not only linking the European bison to the ancient and extinct aurochs but also to an 'ancient colossal [bison] species' that had existed 'at one time in Europe, northern Asia, and even in America, attested by the repeated discoveries of enormous skulls in the diluvian strata of the earth, or among the remains of the mastodon and rhinoceros'.[485] Partington reflected that it was 'the most powerful and formidable animal, the one that we would have imagined to be so sinewed and so spirited that it could overcome all contingencies and hold its ground against time itself' that was often 'the very first to give way', placing the modern bison species alongside the woolly

[481] Knight, *Pictorial Museum, Vol. I p*p. 155-156
[482] *Quadrupeds* p. 113; Aikman, *Natural History* p. 37.
[483] Pennant, *Arctic Zoology, Vol. I* p. 2.
[484] Knight, *Pictorial Museum, Vol. I p.* 155.
[485] Roberts, *Wild Animals* p. 155.

mammoth, the cave bear, the megaloceros, and giant, extinct bison relatives, associations that tied the fate of the bison to that of its extinct compatriots.[486]

This alignment of the bison with extinct species and its configuration as the contemporary ancestor of domestic cattle or their enduring, wild counterpart, not only characterised this animal as innately ancient but also served to transfer its perceived qualities to the landscape it was imagined to inhabit, categorising these territories as wild and uncultivated. As Simon Schama has recognised, Polish and other eastern and central European authors had long conceptualised the 'realm of the bison' as 'the depths of the primeval forest', a precedent that can be traced back to classical writers.[487] Whilst Schama discusses this amalgamation of animal and environ in terms of its symbolic significance to Polish national identity and German fascism, British popular natural history authors of the late-eighteenth and early-nineteenth centuries utilised this conflation to demarcate the borders of what they felt constituted civilised Europe by highlighting where the European bison could still be found in its wild state, juxtaposing this with a corresponding, chronotopic space that was characterised as modern, cultivated and inhabited by societies that operated at the most advanced stage of societal development. Pennant, for instance, explained that the species was restricted to 'the forests of *Lithuania*, and among the *Carpathian* mountains, within the extent of the great *Hercynian* wood, its ancient haunts; and in *Asia*, among the vast mountains of the *Caucasus'*, a geography that was already temporalised within an ancient past.[488] Whilst Britain was not directly referenced within this discourse, the demarcation of civilised Europe implicitly located Britain at the epicentre of this sphere of modern human existence.

The American bison, with its archaic status, was similarly temporalised and its range, the rolling plains of North America, were correspondingly viewed as wild and uncultivated, and although environmentally very different, this landscape occupied the same temporal sphere as the dense forests of the European bison. This amalgamation was particularly apparent in texts that treated the European and American bison as the same species, with Shaw declaring that the bison existed 'in a native state of wilderness' wherever it was still found.[489] Partington similarly captured this sense of collectiveness when he explained that the European bison, in ancient times, inhabited 'one vast forest… bearing no inconsiderable resemblance to those which covered a great part of North America, when that country was

[486] Partington, *Cyclopædia* pp. 490-491.
[487] S. Schama, *Landscape and Memory* (London, 1995), pp. 40-42.
[488] Pennant, *Arctic Zoology, Vol. I* p. 2.
[489] Shaw, *General Zoology, Vol. II Part 2* p. 394.

first made known to the Europeans; and of which the remains are still met with in the unsettled places'.[490]

Other nineteenth-century authors, such as Bennett, Shoberl and Fennell, emphasised the extensive range of the American bison to depict the whole of the interior of North America as an 'uninhabited' wilderness, devoid of settlement and cultivation.[491] Consequently, the bison's anachronised status became the landscape and geographical space it was imagined to inhabit, regardless of its human inhabitants, especially in the context of North America, where the presence of Native American societies was often overlooked, even though some natural history authors recognised the importance of bison to these communities as a crucial source of sustenance and an economic resource.[492] Indeed, imaginings of the bison as a wild and ancient animal that resided in uncultivated, anachronistic landscapes helped to rationalise the animal's extinction as an inevitable outcome of the march of modern, European civilisation across the globe, a process that would integrate the expansive, temporalised territories of the bison, through cultivation and integration into global systems of production and commerce, into a modern, chronotopic zone. Here, some parallels can be drawn with the ways in which British popular natural history authors construed the decline of the red deer in Britain as illustrative of its development into a modern and civilised nation, in line with stadial models of societal development.[493]

The decline of the European bison was noted by eighteenth-century naturalists, with Pennant outlining that 'in these times it [the European bison] is found in very few places in a state of nature'.[494] Indeed, the eighteenth century saw the continuing decline of the species' range and population, having disappeared completely from the forests of modern-day Hungary and Romania by the end of the century so that, by 1800, only the populations found within the forest of Białowieża, located on the modern Polish-Belorussian border, and in the Caucuses, remained, a decline that was frequently noted by European naturalists and consequently integrated into British popular natural history literature of the early nineteenth century.[495] The 'marshy forests of Lithuania', for instance, became

[490] Partington, *Cyclopædia* p. 491.
[491] Bennett, *Gardens, Vol. I* p. 115; Shoberl, *Quadrupeds, Vol. I* p. 12; Fennell, *Quadrupeds* p. 517.
[492] Pennant, *Arctic Zoology, Vol. I* pp. 4-5; Shaw, General Zoology, Vol. II Part 2 p. 396; Bingley, *Animal Biography* p. 120; Bennett, *Gardens, Vol. I* p. 116; le Keux, *Illustrations* p. 89; Partington, *Cyclopædia* p. 496; Jardine, *The Naturalist's Library, Vol IV, Ruminantia* Part II p. 255-256; Knight, *Pictorial Museum, Vol. I* p. 174.
[493] See: pp. 48-54.
[494] Pennant, *Arctic Zoology, Vol. I* p. 2.
[495] Pucek, Belousova, Krasiński, Krasińska and Olech, *European Bison* pp. 29-30; For more information on the decline of the European bison in historical times, see: T. Kuemmerle, T. Hickler, J. Olofsson, G. Schurgers and V. Radeloff, 'Reconstructing range

the encapsulating statement used to describe the bison's home of Białowieża, with Griffith's translation of Cuvier, for example, explaining that the European bison was 'confined at present to the great marshy forests of Lithuania, of the Krapacs, and of the Caucases, but which formerly inhabited the whole and temperate parts of Europe'.[496] The Polish naturalist, Feliks Pawel Jarocki, in a paper he presented to the Zoological Society of Hamburg in 1830, described the bison of Białowieża as a 'remnant' of a population 'which appears to have at one period existed in many parts of Europe', a statement which Jardine later reproduced in volume IV of *The Naturalist's Library* and which was also voiced by Aikman.[497] Weissenborn similarly declared the European bison of Białowieża to be 'the only survivors of a species which was formerly found, in great numbers, in the vast swampy forests of the whole of middle Europe, and perhaps Great Britain'.[498]

Contemporary authors generally cited human activity as the most obvious cause of the European bison's decline, couching the expansion of agriculture and commerce in stadial terms that located the decline of this animal within a teleological model that rendered its disappearance as an inevitable outcome of societal development. Consequently, it was generally accepted and anticipated that modern, commercially-centred methods of production and social organisation would extend out of modern European nations, such as Britain, towards the peripheries of the continent and beyond. Indeed, speculation regarding the European bison's extinction formed an increasing part of the discourse surrounding this species in British popular natural history, which confirmed that the bison, as an animal temporalised within the ancient past, could not conceptually exist in spaces that were integrated into a modern chronotopic zone and its extinction simply represented a natural endpoint and an inevitable outcome of agricultural 'improvement' and commercial development.

Barrow, for instance, commented that although the European bison could still be found 'in some of those remoter regions of Europe… the increase of population, the multiplying channels of international and commercial intercourse' meant that the species had 'decreased in numbers, almost to absolute extinction'.[499] Partington went further, arguing that 'the rapidity with which their [the European bison's] numbers are diminishing, renders

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dynamics and range fragmentation of European bison for the last 8000 years', *Diversity and Distributions* 18/1 (2021) p. 53.
[496] Cuvier (trans. and ed. by E. Griffith), *The Animal Kingdom* p. 29.
[497] 'Notice of the Urus, or Wild Ox of Lithuania' in *Arcana of Science and Art, Fifth Year* (London, 1832) p. 227; Jardine, *The Naturalist's Library, Vol IV, Ruminantia Part II* p. 249; Aikman, *Natural History* p. 40.
[498] Weissenborn, 'On the Influence of Man in modifying the zoological features of the Globe' p. 256.
[499] Barrow, *Characteristic Sketches*.

the allusion to them as a race in progress towards extinction, a very rational part of their prospective history'.[500] Fennell, whilst not so explicit in his predictions of extinction, nevertheless highlighted that the European bison, which 'seems to have had at one point an extensive range, is now only found in the forests of Bialowicza, in Lithuania, where its race is preserved and protected by game laws, and by the more direct care of man in partially supplying it with food during the winter', the animal's pitiable state being reinforced through its reliance on human intervention.[501]

Expectations regarding the bison's extinction was encouraged by naturalists, such as Weissenborn, who explained that although the European bison once inhabited 'the whole tract between the Baltic and Hacmus', it was now:

> restricted to a single habitat, the wild and swampy forest of Bialowicza, in Lithuania… driven to its last asylum, by incessant persecution, and the thinning of the woods which it formerly haunted… but even the forest of Bialowicza must, in the course of time, change its wild aspect, when, through the process of civilization, and the increase in the numbers of inhabitants of Lithuania, that wilderness shall have been subjected to a regular rotation of forest culture.[502]

Moreover, Weissenborn highlighted that strict game laws implemented by the Russian government had not stopped the disappearance of European bison herds from other forests in the region during the late eighteenth century and, based on these observations, concluded that 'however desirous individuals may be to perpetuate the existence of the species… at no very distant period it will be found only in a few museums, or be known from books or drawings'.[503]

These sentiments were echoed in later works, with the Religious Tract Society noting that the European bison 'was once spread over the greatest portion of that continent; but which, since the advance of cultivation, has become bounded to the limits of its habitat'.[504] This drawing of explicit links between the decline of the species and societal advancement can be further seen in its universalising statement that 'when Europe was a mighty forest,

[500] Partington, *Cyclopædia* pp. 490-491.
[501] Fennell, *Quadrupeds* p. 520.
[502] Weissenborn, 'On the Influence of Man in modifying the zoological features of the Globe' pp. 239-240.
[503] Weissenborn, 'On the Influence of Man in modifying the zoological features of the Globe' p. 240.
[504] *Quadrupeds* p. 113.

when the lands now enclosed, were morasses and swamps, this creature was the chase of the savage hunter throughout all the central regions; but, like all savage beasts, its numbers have dwindled and its range has become restricted by the introduction of arts and letters'.[505] Thomas Landseer's depiction of the European bison, in volume III of Knight's *Menageries*, which presented the animal in a desperate battle against wolves deep within the primordial woods of Europe, similarly reflected the animal's struggle for survival within the narrative of inevitable extinction that British naturalists were increasingly attaching to this species (see figure 60).



Figure 60: Landseer's depiction of the European bison in Knight's The Menageries, Vol. III *(London: Charles Knight and Co., 1840, source: Google Books).*

This discourse also manifested more broadly, with agricultural writers, such as Low, in his discussions on cattle, stating that the European bison, whilst once plentiful, 'seems doomed to perish under a condition of countries that is no longer suited to him', adding that the animal 'merely lingers in a portion of the vast regions of forest which he once inhabited'.[506] Elaborating further, Low presented a damning assessment of the European bison, construing its inevitable extinction as a product of its intrinsically wild and uncontrollable nature, which both fixed it within environments that conformed to the

[505] *Quadrupeds* p. 113.
[506] Low, *Breeds* p. 208.

ancient past and rendered it unsuitable as a servant for human needs, a status that forever excluded it from belonging to modern, cultivated spaces:

> From the habits of this creature, his indocility, and the insensitive aversion to the domestic races, it will appear that he is not one of those animals which Providence has ordained to yield up their services to man, and become an instrument of good to our race. He is rather to be numbered amongst those which are destined to disappear before the progress of civilisation and the arts. By rare chance, human interference has saved the wreck of the species in Europe from that destruction which awaited it; but this can only be for a season, and the time will doubtless come, when the great Bison of the European woods will be numbered with those extinct species, whose bones alone remain to testify their former existence.[507]

This characterisation of the bison as an animal doomed to extinction was equally applied to the American bison, especially as the nineteenth century progressed. Andrew Isenberg has identified how the destruction of the American bison was partially supported through cultural constructions of the Bison within the Euro-American imagination as 'a violent species consistently losing its battle against human hunters and the forces of Nature', a representation that can be found in art, popular narratives and scientific texts published in America between 1860 and 1880.[508] Isenberg specifically highlights how scientific studies, such as Joel Allen's 1876 monograph, conceptualised the American bison's decline in Darwinist terms, with the species losing the fight for survival against 'superior', European cattle.[509]

However, observations on the decline of the European bison, prevalent in early-nineteenth-century British popular natural history literature, had already provided a readily-transferable model for conceptualising the decline of the American bison and its shrinking range in the wake of European colonisation efforts on the east coast of America. Consequently, this contraction of the species' range and population was similarly articulated in stadial terms, through British popular natural history discussions, as a representation of the natural expansion of modern human civilisation across the globe. Conversely, this allowed the east coast of America to be conceptually realigned with the more modern, cultivated chronotopic zones of Britain and Europe, the fate of the American

[507] Low, *Breeds* p. 211.
[508] A. Isenberg, 'The Wild and the Tamed: Indians, Euroamericans, and the Destruction of the Bison' in M. Henninger-Voss (ed.) *Animals in Human Histories: The Mirror of Nature and Culture* (Rochester, 2002) p. 131.
[509] Isenberg, 'The Wild and the Tamed' p. 131.

bison being anticipated by popular natural history writers, whose views regarding this American phenomenon were already informed by a distinctly European precedent. Richardson clearly illustrated this point, stating that 'the American bison has in fact much resemblance to the aurochs [European bison] of the Germans… which, down to the reign of Charlemagne, was not rare in Germany, but is now nearly confined to the hilly country lying between the Caspian and Black sea', a comparison that implicitly drew parallels between the history of the European bison and the potential future state of the American species.[510]

Historians have long focused on the dramatic decline of the American bison's population in the 1870s, with numerous scholars, including Isenberg, documenting how the species was reduced from some 30 million animals in 1870 to less than a hundred individuals by the end of the 1880s through a combination of US governmental policy and, as M. Taylor and other economic historians have recently pointed out, growing, global demand for cheap bison leather for making machine belts and other components that were vital for mechanised production.[511] Other studies on the American bison have increasingly highlighted how changing climatic conditions, niche competition from introduced grazers such as cattle and horses and the evolving utilisation of bison by indigenous people as an economic resource to trade for European goods were also having an impact on the decline of the species long before its eventual collapse in the 1870s. Dan Flores notably argued in the 1990s that it was the brokering of peace between the various indigenous nations on the great plains, including the Comanche, Cheyenne and Arapahoe, in the early 1840s that had allowed these horse-cultures to exploit bison herds at an unprecedented rate which, when combined with the effects of drought, disease, natural predation and increased competition from introduced species, had significantly contributed to a decrease in bison numbers by the end of the 1850s.[512]

Following Flores' study, other scholars have also highlighted the role of indigenous people in the decline of bison populations prior to the 1870s. For example, the anthropologist, Shepherd Krech III claimed in his controversial, 1999 work, *The Ecological Indian*, that although hunters of European origin were largely responsible for the mass slaughter of bison in the 1870s, the communal hunting strategies employed by indigenous people, especially those that hinged on the mass corralling of bison or on herds being driven over

[510] Richardson, *Fauna* pp. 280-281.
[511] Isenberg, *The Destruction of the Bison* pp. 130-131; M. Taylor, 'Buffalo Hunt: International Trade and the Virtual Extinction of the North American Bison', *The American Economic Review* 101/7 (2011) p. 3171.
[512] D. Flores, 'Bison Ecology and Bison Diplomacy: The Southern Plains from 1800-1850', *Journal of American History* 78/2 (1991) pp. 483-484.

cliffs or across frozen rivers, could be very wasteful.[513] In addition, he argued that the spiritual beliefs of indigenous people, that construed the bison herds as an inexhaustible resource, did not encourage any concerns regarding sustainability.[514] Pekka Hämäläinen amended Flore's findings by tracing the beginnings of the American bison's decline to the closing decades of the eighteenth century, noting that the 1820s and 1830s saw the first major collapse in the species' population as more indigenous societies were translocated to the Great Plains by the US government and the trade in bison products expanded to meet growing indigenous demand for European goods.[515]

The hunting of bison, as discussed in early-nineteenth-century British popular natural history literature, often drew on information from travel writers, such as Herne, who regularly characterised bison hunting as an illustration of indigenous, masculine valour, the bravery and skills of indigenous hunters in their pursuit of what was often characterised as a fierce and powerful animal being frequently emphasised.[516] Indeed, Low was one of the few authors to discuss the indigenous hunting of the American bison in terms of its negative effects on the species' population, claiming that the 'frightful carnage' of the mass hunting strategies employed by indigenous people '[cut] off by degrees the sources of the future supply; and the time may come when this marvel of the American wilderness will be as rare to be seen as the Bison of the Lithuanian forests'.[517]

However, whilst some early-nineteenth-century British popular natural history authors linked the decline of the bison to the actions of indigenous people, most presented the decline of the contemporary American bison population as an inevitable part of the broader, 'civilising' process that had begun following the arrival of white colonists on the east coast of America. Jardine, for example, stated that the American bison was 'formerly found in considerable plenty in Canada, Pennsylvania, and Kentucky' but was 'gradually receding before the white population; and the rifle, as in southern Africa, has here also done its work'.[518] These views were similarly captured by Knight in his *Pictorial Museum*, in which he speculated that the vast herds of bison in the American interior were being 'incessantly thinned by the hunters, and the time is probably not far distant when the American bison will be as rare and as limited in its extent of range as the

[513] S. Krech, *The Ecological Indian: Myth and History* (New York, 1999) pp. 131-135.
[514] Krech, *The Ecological Indian* pp. 146-149.
[515] P. Hämäläinen, 'The First Phase of Destruction: Killing the Southern Plains Buffalo, 1790-1840', *Great Plains Quarterly* 21/2 (2001) pp. 101-114.
[516] E. Vibert, 'Real men hunt buffalo: masculinity, race and class in British fur traders' narratives' in C. Hall (ed.) *Cultures of Empire: A Reader* (Manchester, 2000) pp. 281-297.
[517] Low, *Breeds* p. 213.
[518] Jardine, *The Naturalist's Library, Vol IV, Ruminantia Part II* p. 252.

aurochs of Lithuania'.[519] Here, Knight's references to both the European and the American bison illustrate how these species were still being viewed as a single entity and how their general decline was imagined within a narrative of global progress.

Early-nineteenth-century British popular natural history authors generally depicted the territories west of the recently-formed United States as still teaming with bison, an observation that reinforced the status of these 'wild' spaces as the antithesis of that of the 'civilised' territories in the east, temporalising the former in the past and the latter as modern, owing to its cultivation and domination by white colonists. Indeed, Isenberg maintains that, within the American popular and scientific discourses of the late nineteenth century, the conflation of the bison and the indigenous people of its range into one 'savage' entity represented a direct inversion of the similarly-conflated, 'civilised' European settler-colonists and their livestock, notably domestic cattle. This reaffirmed that it was not possible to integrate territories where the bison and the indigenous people remained into the modern sphere of civilised, human existence unless the bison and the indigene either disappeared or were removed.[520]

This demarcation of space is similarly observable in early-nineteenth-century British popular natural history publications, with The Religious Tract Society noting, for instance, that the American bison was found in 'districts where European civilisation has not hitherto advanced', adding that 'the species has gradually retired before the influx of white population'.[521] Aikman similarly explained that although the American bison was 'met with in immense herds throughout nearly the whole of the wild and almost uninhabited parts of America', the species was quickly 'retiring before the rapid advance of civilized life' and Low was quick to note that the American bison had retired 'to the boundless wilds of the interior before the progress of the settler and from the persecution of the chase'.[522]

Clearly, the continuing survival of the American bison rested on its capacity to be tamed and domesticated so that its services could be integrated into systems of settler-colonial agriculture within a modern space, the human-animal relationships formerly associated with it being sufficiently transformed to shift its status from wild to domesticated. Understandings informed by natural theology within British popular natural history at this time also served to present this potential transformation as a 'reclamation' of the bison, its domestication being viewed as a restoration of its divinely-ordained role as a servant

[519] Knight, *Pictorial Museum, Vol I* p. 174.
[520] Isenberg, 'The Wild and the Tamed' p. 131.
[521] *Quadrupeds* p. 114.
[522] Aikman, *Natural History* p. 41; Low, *Breeds* p. 213.

to humans. These expectations were generally accepted by those authors drawing on Buffon's claims that the bison constituted the wild form of domestic, humped cattle, such as Goldsmith, who stated that, even though the bison seemed wild and uncontrollable, it would only take a few generations in captivity for them to be rendered subservient livestock and beasts of burden.[523] To illustrate this point, Goldsmith quoted extensively from a letter presented to the Bath Society in 1765 by 'Mr. Turner', a bison hunter who had resided in America for many years, explaining that 'this gentleman is of the opinion that the bison is superior even to our domestic cattle for the purpose of husbandry, and has expressed a wish to see this animal domesticated on English farms', a statement that was also quoted by Bingley.[524]

Building on these early reports, a general consensus, that the American bison could be domesticated, developed within early-nineteenth-century British popular natural history, with Mavor stating that the bison 'is capable of being tamed and in that state acquires a degree of docility and attachment superior to the common cow'.[525] Macloc maintained that this 'wild and ferocious' species 'may easily be made subservient to the will of man; and such is their expertness and docility, they even bend their knees to take up or set down the burdens they are employed to carry'.[526] Trimmer similarly claimed that 'not withstanding their wildness in the state of nature, there is reason to believe that they [the bison] might be domesticated without much difficulty, and their immense strength would render them a valuable acquisition to mankind', explaining that seemingly successful experiments had been made in America.[527] Fennell was also adamant that 'numbers of tame bisons are kept in the paddocks in the western states of North America, where they breed readily with the common domestic cow'.[528] Even Knight, who was sceptical of such claims, felt it important to report that the French polymath and naturalist, Constantine Samuel Rafinesque, had claimed that the American bison was 'domesticated on the farms of Kentucky'.[529]

In light of these assertions, the bison's continuing wild status was attributed to the indolence of the indigenous people of America, which served to affirm their status as inferior savages trapped in the earliest stages of human societal development. For example, in his *Arctic Zoology*, Pennant stated that the bison of America 'might have been

[523] Goldsmith, *Animated Nature* pp. 289, 294-296.
[524] Goldsmith, *Animated Nature* p. 292; Bingley, *Animal Biography* pp. 119-120.
[525] Mavor, *Natural History* p. 119.
[526] Macloc, *Natural History* p. 29.
[527] Trimmer, *Natural History* p. 22.
[528] Fennell, *Quadrupeds* p. 519.
[529] Knight, *Menageries, Vol. III* p. 344.

brought to all the uses of the *European* cow' by indigenous people but, as they existed 'in a state of nature… their own passions unsubdued, they never thought of conquering those of the brute creation, and rendering them subservient to their will'.[530] Shaw similarly argued that the bison 'might have been made to answer every purpose of the European Cow; but the natives, being in a savage state, and living chiefly by chase, had never attempted the domestication of the animal'.[531] Low was also adamant that the American bison was simply waiting to be domesticated, reflecting that the animal was 'the native ox of America; and had the country been inhabited by civilised communities, in place of tribes of savage hunters, a creature so formed by Nature for the service of man could not have remained unsubdued'.[532] Such attitudes clearly permeated more broadly, as an article on acclimatisation, published in *The New Monthly Magazine* in July 1862, claimed that 'the Indian is too irredeemably savage in his habits to submit to the fetters to which an attempt to domesticate animals would impose on his liberty'.[533] Evidently, the enduring connections drawn between cattle and bison ensured that the bison's lack of 'reclamation' was the result of indigenous inferiority rather than any of the species' behavioural characteristics.

Whilst some authors construed the potential domestication of the bison, especially the American species, as an opportunity for this animal to avoid extinction and to be preserved, by integrating it into modern spaces where it could be reared and utilised by white colonists, others viewed the bison, especially the European species, as innately wild and eternally untameable. Partington, for example, was adamant that 'in consequence of… [its] boldness and character, the bison has never been domesticated, but left to the contingencies of wild nature', adding that even though the American bison was 'capable of a sort of domestication', it was 'neither very pleasant nor very profitable on a farm'.[534] Weissenborn stated that the European bisons' shyness and aggressiveness towards horses and cattle 'would render their domestication, if it were practicable, but little desirable', elaborating that attempts to cross-breed these animals with domestic cattle 'have all failed'.[535] Knight directly quoted Weissenborn, with Fennell similarly declaring that the European bison 'has so great an antipathy to the domestic cattle, which it either shuns or kills, that all experiments to obtain a mixed breed have failed, and are now strictly prohibited' and Carpenter explaining that 'such is its [the European Bison's] innate

[530] Pennant, *Arctic Zoology, Vol. I* p. 6.

[531] Shaw, *General Zoology, Vol. II Part II* p. 397.
[532] Low, *Breeds* p. 214.
[533] 'The Acclimatisation Society' pp. 254-255.
[534] Partington, *Cyclopædia* pp. 490-491, 496.
[535] Weissenborn, 'On the Influence of Man in modifying the zoological features of the Globe' p. 310.

wildness, that it has never been completely tamed'.[536] Aikman further remarked that the bison had 'been tamed, but never as to render this species any acquisition to the domestic economy of man' and consequently, these assessments of the bison were universally applied and its fate was sealed.[537]

Conclusion

The findings of this chapter collectively demonstrate how the locating of animals within late-eighteenth and early-nineteenth-century British popular natural history played a significant role in the demarcating of wild and civilised spaces at a global level. This imaginative mapping of the world according to the presence or absence of wild or domestic animals, respectively viewed as ancient or modern, had a temporalising effect that helped to establish a global system of chronotopic zones, characterised by the status of the animals residing there. Indeed, examinations of the discourse surrounding goats, reindeer, elephants, mouflon, wolves, the megaloceros, the mastodon, the European and the American bison, within this chapter, have consistently revealed that the spatial and temporal locating of animals by naturalists not only helped to inform the status of the landscapes inhabited by these species but also that of the people most closely associated with them.

Within British popular natural history discourse, animal presence in territories across the world and the human-animal relationships of non-British societies were often explicitly and implicitly compared to Anglocentric notions of British modernity that emanated from the British metropole. Through these comparisons, non-British societies were generally presented as either savage, barbarous or semi-civilised and claims of British modernity and superiority were reaffirmed. These discussions, which largely centred round British ideals and expectations stemming from Britain's contemporary animal community and the ability of the British to control and manage the natural environment, allowed animals, landscapes and people in different parts of the world to be temporalised and categorised, in line with stadial models of societal development. Consequently, many species, territories and societies were conceptually distanced, aligned or conflated, based on where they had been located in time and space. As demonstrated, some goat-rearing populations in different, mountainous parts of the world were aligned, areas with tamed elephants were distanced from those spaces where elephants roamed with little human control and species with similar physical features, such as the European and the American bison, were frequently conflated.

[536] Fennell, *Quadrupeds* p. 525; Knight, *Pictorial Museum, Vol. I p.* 174; Carpenter, *Popular Cyclopedia* pp. 303-304.
[537] Aikman, *Natural History* p. 42.

Indeed, the spatial and temporal relationships identified by naturalists between animals, landscapes and societies were frequently rendered malleable and the physical distances that existed between territories containing closely-associated creatures, that were similarly temporalised, were conceptually compressed, allowing spaces situated within and beyond Britain to be aligned. Conversely, the locating of animals with very different temporalised statuses, in relatively close proximity to one another, helped to reinforce the conceptual distance imagined between these spaces, both within and beyond Britain. Where relationships were seen to exist between animals and local populations, societies were also temporalised, in line with stadial models of societal development, based on their ability to manage their natural environment and to manipulate animal forms for their own economic benefit.

When dividing the world along these zoological lines, the universalising approach of naturalists allowed a broad spectrum of species, landscapes and people to be conceptualised within a single and relatively congruent body of natural history knowledge. Within this framework of animal knowledge, British perceptions of the world and, indeed, of themselves were frequently expressed through discussions regarding the status of animals, their physical features and behavioural characteristics, the landscapes in which they were found and their relationships with local people. In addition, the emergence and growing acceptance of new scientific concepts within British popular natural history discourse, such as notions surrounding geological deep time and ideas regarding extinction as a natural and inevitable process, served to strengthen those narratives that linked animal presence, or indeed animal disappearance, to societal progress. This is clearly illustrated through the examples of the megaloceros and the mastodon, whose ancient status was similarly attributed to those territories in which their remains were predominantly found, namely Ireland and America.

Conversely, advanced societies were required to demonstrate their ability to utilise a broad range of domesticated animals and to successfully manipulate their physical forms or behavioural characteristics in accordance with modern, Anglocentric, British ideals. Some domestic animals, associated with less cultivated environments, such as goats, not only helped to spatially and temporally align different parts of the world but also helped to collectively reaffirm the status of the societies rearing them, as in the case of goat-rearing communities in Wales, the Scottish Highlands, Ireland and Switzerland, who were all characterised as at an earlier stage of development than the British. Although some local communities were commended for their ingenious use of exotic animals in hostile environments, such as the Sami through their use of domesticated reindeer, they were

still classified as either savage, barbarous or semi-civilised due to their total reliance on their animals for survival, the differing terms used to describe this state of perceived primitivity all helping to reinforce the inferiority of these societies compared to the modern British. If environments were, however, judged suitable for supporting European-style, agricultural practices and the local people were not seen to be fully exploiting their natural resources, this was seen to indicate backwardness and to reaffirm their inferior societal position compared to the British. These sentiments are captured in Beilby's discussions on elephant domestication, which ironically rested on his assumption that all elephants belonged to the same species and were, therefore, equally tameable.

The establishing of relationships between wild animals and their domestic counterparts within wild-domestic paradigms served to temporalise the former as distinctly older than the latter and to configure the spaces they occupied as correspondingly wild and old or cultivated and modern. Where filial relationships were actually established, as illustrated through the discussions surrounding explorations of the mouflon as the ancestral form of the domestic sheep, the temporal distance between wild animals and their domesticated equivalents was strengthened. Indeed, the domestic sheep in the peripheral territories of Britain were aligned with the past because particular elements of their physical features and behavioural characteristics, although praised by some naturalists, were identified as being closer to the wild mouflon than to the domesticated sheep associated with the more cultivated parts of modern Britain. The semi-wild status attributed to the sheep in the peripheral territories of Britain, achieved through observations of relative difference, allowed these territories and the people who reared and tended these animals to be viewed in similar terms, in line with stadial models.

Wild species, which were understood to be the inversions of domestic forms, were automatically temporalised in the past, even if they were not seen to be the direct ancestors of the latter, as demonstrated through the example of the wolf, other wild canids and the domestic dog. Indeed, the temporal distance created between these species actually allowed the wolf and other wild canids to be more credibly imagined as ancestor-species of the domestic dog. Consequently, those dogs that were seen to most resemble wolves or other wild canids, in terms of their physical features and behavioural characteristics, were correspondingly deemed 'more wild' and, therefore, viewed as more primitive. The status attributed to these dogs was frequently extended to their human owners, as demonstrated through the popular natural history discourse on the kinds of dogs used by the indigenous people of North America compared to those used by the white, colonial settlers.

The growing British popular natural history discourse on extinct, prehistoric species, which strongly emerged during the early nineteenth century, when ideas of geological deep time and extinction as a natural and inevitable process were gaining traction, also helped to temporalise some territories in the past. The discovery of megaloceros remains in Ireland, for example, helped to strengthen Ireland's associations with the ancient past and, as naturalists strove to make sense of megaloceros remains and to identify where it might still exist, this species was linked to and frequently conflated with the American moose, encouraging Ireland to be aligned with America and to be configured within the borders of Atlantic otherness. Although the American moose was initially identified as the still-living owner of the large megaloceros antlers dug out of Irish peat bogs, naturalists increasingly disavowed any close relationships between these two species but their entanglement persisted within British popular natural history and the temporalised status of the territories where megaloceros remains were found endured. The discovery of mastodon remains in America similarly helped to temporalise this species in the past and to reaffirm America's status as an unexplored and undeveloped territory. This confinement to the past was gradually strengthened as naturalists increasingly accepted that the mastodon was extinct and not living somewhere in the American interior, relegating the species and the territories where its remains were found, to a more ancient, geological past.

The discourse surrounding the European and the American bison shows how the temporalisation of animals, territories and people was achieved through a variety of processes that intersected each other and also operated collectively. Firstly, the European bison was frequently conflated with the American bison, the aurochs and the domestic cow, this universalising process allowing these animals to be conceptualised as a single species inhabiting vast swathes of land across the globe. When viewed within a wild-domestic paradigm, the bison, as the inversion of the domestic cow, was temporalised in the past, a status that was reaffirmed through the establishment of a filial relationship that identified the bison as the ancestral form of the domestic cow. Although naturalists reassessed and revised the relationships between the European bison, the American bison, the aurochs and domestic cattle over time, connotations of the bison as an ancient animal endured. The discovery of bison remains alongside the bones of extinct, prehistoric creatures, such as the megaloceros and the mastodon, further temporalised the bison in the ancient, geological past and its extinction, based on observations of the European bison's historical decline, was increasingly presented as inevitable.

The landscapes that bison were imagined to inhabit were correspondingly categorised as wild and uncultivated and similarly temporalised in the past. Whilst the European bison's shrinking range helped to demarcate the conceptual borders of 'civilised' Europe, the

extensive range of the American bison served to reinforce understandings of the American interior as a vast, uncultivated space. Furthermore, the severe decline of the European bison, and its potential extinction, were rationalised as the inevitable outcome of Europe's agricultural and commercial development. Consequently, as the European and the American bison were so closely aligned, the extinction of the American bison was similarly anticipated as an inevitable outcome of the spread of modernity across the globe, in this case, through European colonisation efforts.

Clearly, conceptions of the bison as innately wild and ancient were incongruent with understandings of modern chronotopic zones and the only way that the bison could be integrated into these spaces was through its use in modern systems of agriculture that conformed to British expectations. In this respect, the domestication of the American bison was generally assumed to be feasible and its lack of domestication was largely understood to reflect the inability and primitive societal status of America's indigenous populations, in accordance with stadial models. On the other hand, due to the failure of many European domestication experiments, the European bison was increasingly viewed as untameable and, therefore, conceptualised as a species doomed to extinction. Consequently, the bison's wild and temporalised status was tied to the spaces it occupied across the world and these were similarly deemed wild and uncultivated and confined to the past. Furthermore, the populations that inhabited these spaces were similarly categorised and placed at an earlier stage of societal development, in accordance with stadial models. Through these processes, bison, their ranges and the people most closely associated with them were collectively and imaginatively distanced from the domesticated species and the cultivated spaces that were seen to reflect the advanced, civilised status of modern societies, such as the British.

Chapter 5

Monarchs and Marauders

As demonstrated in chapter four, the spatial and temporal locating of wild animals across the globe in late-eighteenth and early-nineteenth-century British popular natural history helped to demarcate areas where humans had little or no control over the natural environment, a process that served to categorise the societies associated with these animals and territories as at an early stage of societal development. Stadial imaginings of human societies were also conceptualised within the British popular natural history discourse on wild animals through the emphasis placed on the harm some wild animals caused to people and property within the parameters of human habitation. Where societies were seen as unable to overcome the threats posed by wild animals within the borders of their own settlements or to prevent the incursions of wild creatures into human-dominated spaces, they were categorised as inferior to those societies that could, such as the British. Indeed, as the British regarded any threats from animals to personal security and property as a violation of their ideals and expectations, they were ready to remove any wild creatures that were seen to challenge human dominion and were critical of those situations that did not coincide with these beliefs and practices.

Within British popular natural history, this contestation of space was most evident in the discourse surrounding large, apex predators, such as big cats, wild canids and bears, owing to their imagined domination of the spaces they inhabited and the severity of the threat they were seen to pose to people and property. As popular natural history authors explicitly tied the presence of these large predators to areas characterised as devoid of human activity or control, the dichotomy between human-dominated and animal-dominated spaces was strengthened. In addition, large, charismatic predators were often presented as physical manifestations of their environments, which helped to characterise the spaces they inhabited as beyond the scope of human control and to configure these animals and their geographical ranges as innately hostile towards humans. Claims of human dominion over these spaces were further challenged through the monarchic status naturalists often bestowed upon some large, apex predators, which reflected the commanding position they were imagined to have over the landscapes they inhabited.

The abundance of a specific predator in a particular space was frequently presented by naturalists as an infestation that would need to be removed from the territory in order to render it congenial to human manipulation, especially if the area had economic and agricultural potential. Where the incursions of large predators into these human spaces caused harm to people or property, this was seen to further challenge human authority

over space by violating the borders constructed by humans to separate their human-dominated territories from animal-dominated spaces. Furthermore, the decline of large predator populations over time, observed and documented within British popular natural history discourse, was imagined as a prelude to the development of civilisation, in accordance with stadial models, which helped to deepen the belief that advancing human civilisations and apex predators could not happily coexist, as the former could not thrive in an area where the latter still reigned.

Within these discussions, indigenous populations were often depicted as at the mercy of large, apex predators, this inferior status placing them below the British within a hierarchy of societies, based on human mastery over the environment, that extended across the globe and helped to reinforce the pre-eminence of British society. For example, the enduring threat from wolves to people and property in Continental Europe was often cited within British popular natural history as an indicator of the less developed nature of 'civilised' European nations compared to Britain, where the species had been completely eradicated. Within the context of colonial territories, the presence of large predators, such as tigers, also served to portray the indigenous people as unable to effectively control and manage their natural environment, an assessment that helped to justify British colonial rule by reinforcing ideas of stadial, cultural and racial inferiority.

This chapter examines the late-eighteenth and early-nineteenth-century British popular natural history discourse surrounding the contestation of space by large predators to reveal how conceptions of Britishness were expressed through discussions that contrasted British modernity with the imagined inferiority of national, cultural and racial others. It first identifies how conceptualisations of large, apex predators helped to characterise the areas they inhabited as wild and hostile spaces, beyond the limits of human influence. Building on these findings, the chapter then explores how the monarchic status attributed to some large predators helped to reinforce perceptions of their innate authority over their environment and how their perceived abundance across extensive, geographical ranges was construed as infestations that would need to be removed in order to protect humans and their cultivated spaces. Following this, it investigates how the incursions of large predators into human-controlled spaces were viewed by British popular natural history writers as a direct challenge to human supremacy and how the removal of these predators was presented as a necessary part of the civilising process and as an indicator of an advanced society.

As well as drawing more generally on the discourse surrounding large predators, this chapter includes case studies on the wolf and the tiger to illustrate how their respective

contestations of space helped to reaffirm notions of modern Britishness within the contexts of Continental Europe and colonial India. In the case of the wolf, its enduring presence in certain parts of Europe helped to demarcate the borders of 'civilised' territories and to characterise the British as a more modern people than their continental counterparts. Comparatively, discussions that emphasised the indigenous populations of India as at the mercy of the rapacious and tyrannical tiger helped to reaffirm imaginings of their inability and lack of capacity to overcome this predator, whilst simultaneously presenting the British as modern, competent and capable of protecting their archaic, weak and incompetent colonial subjects. This chapter concludes by summarising the ways in which discussions on the contestation of space within the British popular natural history discourse on large predators helped to reinforce conceptions of Britishness by presenting this human-animal conflict as a constraint on societal development and as a direct threat to human dominion over space.

Scholarly discourse on the imaginings of predatory animals in late-eighteenth and early-nineteenth-century Britain has tended to focus on the moral status attached to these animals and the ways in which their carnivorous habits, particularly their tendencies to kill and devour humans, challenged notions of human supremacy. Ritvo, for instance, stated that, as the man-eating habits of beasts of prey, such as big cats, wolves and bears, 'symbolized the ultimate rebellion, the radical reversal of roles between master and servant', nineteenth-century naturalists tended to depict these animals as 'rebels who refused to accept the divinely ordained dominance of humankind'.[538] Going further, Ritvo illustrated that even scavenging mammals that might feed on human remains were characterised as 'bad creatures' because 'dead or alive, human flesh was forbidden fruit', a reversal of human domination that signified the creature's rebellion 'against the divine order' of undisputed human supremacy.[539]

Similarly, Diana Donald has recognised that the ordering of mammalian and avian predators during the late-eighteenth and early-nineteenth centuries was 'as much moral as biological'.[540] Building on Ritvo's observations, Donald explained that the moral judgments, which eighteenth-century naturalists ascribed to large carnivores, 'reflected their status as outcasts and bandits', adding that 'only in such inhospitable strongholds [as the wild solitudes of the wilderness] did these beasts still reign supreme, like Satan and his rebel angels in Hell'.[541] However, Donald also recognised a contradiction that

[538] Ritvo, *The Animal Estate* pp. 25, 28-29.
[539] Ritvo, *The Animal Estate* p. 30.
[540] Donald, *Picturing Animals* p. 80.
[541] Donald, *Picturing Animals* p. 162.

existed in attitudes towards wilderness during this period, describing how, paradoxically, wilderness was also seen as 'not a place or a state of exclusion from the realm of the blessed, but a richly endowed and beautiful land, over which God directly reigned'.[542]

Additionally, attention has been paid to the ways in which the persecution of predators was used as an important tool in the justification of empire and colonial rule, particularly during the nineteenth century. Donald noted that, within a context of pre-Darwinian concepts of progressive evolution and a growing recognition of deep time, a shift in the role of the divine in life on Earth resulted in an increasing emphasis on the containment and conquest of nature to aid in the spread of civilised human existence.[543] She further explained that, within the context of British colonialism, the persecution of predators 'was only an extension of the process by which the European races, in the push for imperial domination, were also conquering, displacing or killing native peoples'.[544] Ritvo observes that the celebration of the extinction of wild animals, particularly wolves, within Britain was similarly transported to colonial contexts, where the 'elimination of dangerous animals' was conveniently conflated 'with the imposition of political and military order' within imperial rhetoric.[545]

Within British popular natural history, entries on biologically-distinct, large predators from different parts of the world tended to articulate the same cultural narratives because these animals were often grouped together in broad categories defined by their shared, morphological and behavioural characteristics. This largely stemmed from the use of Linnaean taxonomy, or one of the successive systems of classification developed by naturalists such as Shaw and Cuvier, by British popular natural history authors, who often employed these systems to organise their entries and to validate their animal knowledge as modern and scientific. These classification systems also influenced the grouping of animals in taxidermy displays and the ordering of animal exhibits at zoological gardens. Consequently, through their shared characteristics, large predators were grouped together across the broad spectrum of British popular natural history media, which encouraged dialogues to exist between species and allowed recurrent themes to emerge.

For example, in his *Pantherian*, William Bullock arranged all of his taxidermy specimens according to Linnean taxonomy, resulting in all of his cat specimens being displayed together as 'the Feline tribe' within a larger diorama of predatory land mammals

[542] Donald, *Picturing Animals* p. 163.
[543] Donald, *Picturing Animals* p. 88.
[544] Donald, *Picturing Animals* p. 87.
[545] Ritvo, 'Beasts in the Jungle' p. 23.

representing the taxonomic order of 'Ferræ [ferae]'.[546] Bennett's 1831 guide to the Zoological Gardens at Regent's Park used Cuvier's classification system to order his commentaries on the individual species present in the society's collection, remarking in his discussion on the leopard that all cats exhibited 'a remarkable uniformity' and were unified in their 'moral character', which was defined by their 'ferocity' and 'suspicion'.[547]

Where animal knowledge within popular natural history was not organised using a scientifically-approved system, animals were still largely grouped according to their form and behaviours, resulting in sets of defining features that served to characterise the species and facilitate comparisons between them. Beilby, for example, explained in the advertisement for *A General History of Quadrupeds* that 'we have not thought it necessary to confine ourselves strictly within the rules prescribed by systematic writers on this part of Natural History', having chosen to order his predatory animals into broader 'kinds', such as the 'cat kind', which he characterised as a 'sanguinary and unrelenting tribe', whose members were 'equally fierce, rapacious and artful'.[548] Carnivorous animals were similarly described in broad terms in le Keux's *Illustrations of Natural History* as 'both the enemies of nature and the rivals of man', reinforcing pre-existing conceptions of these animals as innately antagonistic.[549]

Within this discourse, apex predators were generally located in geographical spaces that were free from human interference and were presented as potent indicators of wilderness that helped to demarcate the borders between wild and human spaces across the globe. This is evident in Bingley's claims that the puma was found in 'the thickest woods and the most inaccessible mountains' of the Americas.[550] Barrow similarly noted that the leopard, when confronted by man, tended to flee 'to the coverts of the forest of the wilderness' far from human interference, reinforcing imaginings of the leopard's 'true abode' as devoid of human presence.[551] These statements collectively reinforced imaginings of the geographical spaces inhabited by large predators as wild and hostile and undermined any use of these landscapes by local people, whose perceived lack of control over their environment was characterised as a product of their primitive, societal state.

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[546] Bullock, *Companion* pp. 122-123; S. Pearce, 'From Classification to Recreated "Reality": William Bullock's Exhibitions of Human and Natural History', *Journal of Eighteenth-Century Studies* 43/4 (2020) pp. 508-509.
[547] Bennett, *Gardens, Vol. I* pp. x, 90, 92.
[548] Bewick, *Quadrupeds* p. 198.
[549] le Keux, *Illustrations of Natural History* p. 51.
[550] Bingley, *Natural History* p. 38.
[551] Barrow, *Characteristic Sketches*.

This tying of predatory animals to specific landscapes supported the construction of large predators as the embodiments of the territories they occupied, with animals and environments conflated into one hostile entity that was beyond the control of humans. These ideas were also shaped by the climate theories proposed by enlightenment thinkers, such as Buffon, who argued that the climatic conditions of different latitudinal zones helped to shape the anatomy, behaviour and vitality of the organisms that inhabited these areas.[552] These sentiments are clearly illustrated in Beilby's description of the lion, in which he noted that the species was:

> found in the greatest numbers in the scorched and desolate regions of the torrid zone… [and in] these desert regions, from whence mankind are driven by the rigorous heat of the climate, this animal reigns sole master; Its disposition seems to partake the ardour of its native soil: Inflamed by the influence of a burning sun, its rage is most tremendous, and its courage undaunted.[553]

Shoberl similarly explained that 'in the southernmost of the United States, the Puma is not uncommon; but there his ferocity and energy are much less formidable than in the Pampas of Buenos Ayres, or on the burning shores of the Amazons'.[554] In these descriptions, the animals' qualities and power were clearly presented as products of their physical and climatic environments.

In addition to the tying of animals to their associated territories, the monarchic status awarded to some apex predators by British naturalists granted these species an exclusive sovereignty over the landscapes they inhabited, which further challenged human dominion over these spaces. This narrative mirrored popular depictions of mammalian predators by contemporary British artists, who exerted a strong influence on the illustrations found in popular natural history texts. As Donald points out, the animal portraits of George Stubbs tended to depict big cats 'not as outcasts from civilisation, driven to the limits of habitable land, but as the original masters of a pristine creation before the intrusions of mankind'.[555] Indeed, the most strongly emphasised monarchic status within British popular natural history was the lion, whose title of 'king of the beasts' invested it with a natural authority over its geographical range. Barrow, for instance, described the lion as 'a brute monarch'

[552] For more information on how large predators were seen to embody the climates of the spaces they inhabited, see: C. Parsons, 'Tygers before Blake', *Studies in English Literature* 8/4 (1968) pp. 574-575.
[553] Bewick, *Quadrupeds* p. 199.
[554] Shoberl, *Quadrupeds, Vol. I* p. 152.
[555] Donald, *Picturing Animals* p. 165.

that ruled over a 'forest empire' that was seldom disturbed by human interference.[556] Similarly, Shoberl stated that the interior of Africa was 'the dominion of the lion, where he reigns supreme… dwelling in the thickest part of the forests'.[557] However, other impressive, predators were also presented as the rulers of their respective landscapes.

Bennett, for instance, described how, 'in the warmer regions' of the new world, the Jaguar exercised 'the same cruel tyranny as the Lions, the Tigers, and the Leopards, of the burning climates of the Old'.[558] Comparatively, Barrow presented the polar bear as a 'lordly monarch of the icebergs and the seashores', with the drifting sea-ice constituting 'enormous fragments of his solitary empire' and serving as 'his glacial throne'.[559] Shoberl similarly ennobled this species with the title of 'monarch of the icebergs and sea shores of the north', stating that this arctic landscape constituted 'his domain'.[560] This ascribed sovereignty over a landscape, that was hostile to humans, not only helped to demarcate the borders of animal-dominated and human-dominated spaces but also to define the nature of each of these areas. Indeed, predators with monarchic status, which were imagined to reign supreme over the areas they inhabited, not only inherently challenged any human claims to these geographical spaces but, through their presence, indicated the parameters of human dominion over the natural world.

Descriptions of the incursions of large predators into human spaces frequently helped to demonise these animals within the popular imagination and to construe the local people as vulnerable and incapable of defending themselves or their property. Barrow, for example, claimed that, when driven by hunger, the hyena was 'induced to invade the precincts of the village or the camp, in quest of horses or camels, of asses, or even of poultry', adding that he manifested 'a disposition for offensive as well as defensive warfare'.[561] Shoberl reiterated this, adding that the animal was known to 'assault human habitations, and even towns, with the most daring ferocity'.[562] In both descriptions, the violent and destructive nature of these animal assailants was emphasised through the language of human raiders or hostile barbarians. Humans were presented as under siege and their supremacy over the environment was considered tenuous, ending at the edges of their settlements; human-controlled islands situated within broader, wild landscapes, dominated by large predators. Similar narratives were evident in entries on smaller

[556] Barrow, *Characteristic Sketches*.
[557] Shoberl, *Quadrupeds, Vol. I* p. 84.
[558] Bennett, *Gardens, Vol. I* p. 98.
[559] Barrow, *Characteristic Sketches*.
[560] Shoberl, *Quadrupeds, Vol. I* pp. 169-170.
[561] Barrow, *Characteristic Sketches*.
[562] Shoberl, *Quadrupeds, Vol. I* pp. 71, 73-74.

predatory mammals, such as jackals, that lacked the physical strength to directly challenge adult humans but were still considered capable of harming children and damaging property when operating in a pack. Shoberl, for instance, described jackals as 'prowling about by night in troops… ravaging poultry-yards and gardens, and even destroying children, if they are left unprotected'.[563]

Descriptions of big cat incursions, which were regarded as the most challenging to human authority over space by British popular natural history authors, frequently highlighted the inability of indigenous populations to deter these predators and prevent them from harming people and livestock. Beilby wrote of the leopard that 'the interior parts of Africa abound with these animals; from whence they come down in great numbers, and make dreadful havock among the numerous herds that cover the plains of the Lower Guinea'.[564] Barrow, drawing on Meredith, claimed that the leopard of the Gold Coast was 'dreaded by the natives for his ferocity', adding that this species did not 'confine his depredations to nightly irruptions into the pens and folds which are stocked with tame cattle; but will not unfrequently carry off young children, when it can find them unprotected in its path', a statement reiterated by Shoberl.[565] In addition, Barrow's description of incursions by the South American puma noted that 'domestic cattle, especially oxen and pigs…[were the puma's] favourite prey', adding that 'it will swim rivers and penetrate into villages to attack these, at night, in their enclosures'.[566] These descriptions of incursions into human settlements by different feline predators in different parts of the world collectively illustrated how this phenomenon was understood to be endemic to the family and would, therefore, occur in any spaces across the globe where these 'marauders' were present.

Within the British popular natural history discourse surrounding big cats, the fear that these intimidating animals were reported to instil in indigenous populations highlighted the latter's inferiority, vulnerability and their lack of authority over the natural world, compared to other populations. Beilby, for example, referred to the Black-tiger of South America as 'a cruel and fierce animal, much dreaded by the Indians' and the Jaguar as 'the most formidable animal of the new continent', adding that 'the Indians are much afraid of it, and think it prefers them to the white inhabitants, who, perhaps, are better prepared to repel its attacks'.[567] Through these observations, Beilby not only reinforced the ferocity of big cats but also highlighted the superiority of the white colonial population over the inferior indigene based on the ability of the former to overcome predators compared to

[563] Shoberl, *Quadrupeds, Vol. I* pp. 63-64.
[564] Beilby, *Quadrupeds* p. 241.
[565] Barrow, *Characteristic Sketches;* Shoberl, *Quadrupeds, Vol. I p*. 138.
[566] Barrow, *Characteristic Sketches*.
[567] Bewick, *Quadrupeds* pp. 221, 217-218.

the inability of the latter. Bennett explained that the 'fatal spring and murderous talons' of the leopard were 'equally known and dreaded by the mild and timid Hindoos, the polite but still barbarous Chinese, and the fierce and savage Islanders of the great Sumatran chain', indicating how the comparatively primitive statuses applied to these populations were reaffirmed through their shared characterisation as the victims of leopard predation.[568] Shoberl's description of the lion similarly noted that, in southern Africa, the species was 'said to prefer the flesh of the Hottentot to that of any other animal', whilst in India, it was 'scarcely less formidable to the natives of that country than the tiger itself', reinforcing that indigenous Africans and Indians, despite their geographical and cultural differences, were collectively characterised through their vulnerability to this ravenous and formidable predator.[569]

Through references to the abundance of predators across broad geographical ranges, British popular natural history authors encouraged readers to imagine large populations of hostile animals infesting vast swathes of the globe and posing significant barriers to human dominion over these territories. Shoberl, drawing on Captain Scoresby, explained that, in Greenland, polar bears could be found 'in droves' and 'have been seen on the ice in such numbers as to look like flocks of sheep on a common'.[570] Drawing on the work of the Scottish explorer, James Bruce, Shoberl also commented that, in Abyssinia, hyenas 'were a plague in every situation, both in the city and in the field, and they surpassed even the sheep in number'.[571] Indeed, many nineteenth-century naturalists continued to quote Bruce, whose travel narrative of his time in Abyssinia between 1769 and 1771 continued to be one of the few sources of information on the fauna of that region, to illustrate the abundance of Hyenas in Abyssinia, his claims being upheld by later travellers to the region, such as Major Dixon Denham and Mansfield Parkyns.[572] The analogies drawn between high numbers of predators and herds of sheep in a typically British landscape, invited readers to imagine wild territories infested with large predators as the antithesis of the cultivated spaces they associated with modern Britain.

The extensive geographical ranges of some large predators also served to demonstrate their domination across the globe through their prevalence, with Beilby in his description of the panther stating that it 'inhabits Africa, from Barbary to the remotest parts of Guinea' and Shoberl describing the lion as 'spread over the whole continent of Africa and the

[568] Bennett, *Tower pp. 35-36.*
[569] Shoberl, *Quadrupeds, Vol. I pp. 91, 99.*
[570] Shoberl, *Quadrupeds, Vol. I p. 171.*
[571] Shoberl, *Quadrupeds, Vol. I p. 75.*
[572] Knight, *Pictorial Museum, Vol. I p. 210.*

tropical regions of Asia'.[573] Shoberl similarly established the hyena as 'spread over the greater portion of Africa and southern half of Asia', explaining that the striped species 'is found both solitary and in numerous troops in Morocco and the forests of western Africa, in Syria and throughout India', whilst its spotted counterpart 'roves in prestigious numbers through Abyssinia, the territories of the Cape, and the surrounding countries'.[574] Through these descriptions, large predators were presented as thriving populations in vast expanses of the globe that humans could not freely and easily expand into without the removal of this barrier to the civilising process.

As British popular natural history authors often noted that predator numbers had declined over time and their ranges had contracted due to increasing human activity, spaces with an abundance of large predators were often aligned with the past and temporally distanced from the cultivated areas associated with advanced civilisations, such as modern Britain. These temporal connotations were invariably extended to the local populations of these territories, who were similarly characterised as at an earlier stage of societal development. Beilby, for instance, commented on the decline of lions, explaining that 'happily, indeed, the species is not numerous, and is said to be greatly diminished; for, if we may credit the testimony of those who have traversed these vast desarts [deserts], the number of Lions is not nearly so great as formerly'.[575] Barrow also explained that 'the lion formerly infested the south-east of Europe; but in these countries, and many regions of Asia, where it was once abundant, it has become very rare, or absolutely extinct'.[576] Observations of the lion's decline over time remained a common point of discussion in later works of popular natural history, with Knight making connections between this decline and European presence, remarking, in his *Pictorial Museum*, that 'excepting in the vast wilds of Central Africa, untrodden by the foot of the white man, the lion, even to the region to which it is at present restricted, is much more rare than formerly'.[577]

Commenting on the jaguar, Bennett described how, 'in the neighbourhood of inhabited places', this predator was 'daily becoming more and more rare, the ravages he commits upon the flocks, and the high price that is given for his skin, forming a double incentive for his destruction'.[578] Bennett also explained, regarding the puma, that:

[573] Bewick, *Quadrupeds p. 212;* Shoberl, *Quadrupeds, Vol. I p. 84.*
[574] Shoberl, Quadrupeds, Part 1p. 68.
[575] Bewick, *Quadrupeds* pp. 199-200.
[576] Barrow, *Characteristic Sketches*.
[577] Knight, *Pictorial Museum, Vol. I* p. 3.
[578] Bennett, *Gardens, Vol. I* p. 98.

> from a large portion of this immense expanse of country he appears, however, to have been of late years in a great measure, if not entirely, rooted out; and it is seldom that he is now heard of in the vicinity of that civilization, which involves, as a necessary consequence, either the complete extinction, or, at least, the gradual diminution and dispersion to more secure and sheltered habitations, of all the more savage and obnoxious beasts.[579]

He similarly noted that American black bears 'were formerly common in New York, Louisiana, Carolina, and even Florida; but the progress of civilization has nearly extirpated them from the immediate vicinity of man, and driven them to seek an asylum on the Rocky Mountains and in the extensive forests of the interior'.[580] These extracts collectively demonstrate how the gradual transition of ownership from animal to man was charted through the decline of predator numbers and the contraction of their ranges, both of which were understood to be inevitable outcomes of the civilising process associated with societal advancement, as expressed in stadial models. Through this mechanism, the British were consistently presented as a modern, superior and advanced society due to their comparative mastery over the natural world, as demonstrated by their ability to remove unwanted predators and to protect their cultivated spaces from any predator incursions.

Hungry like the Wolf:
British pre-eminence through the eradication of the wolf

As chapter one of this thesis has already illustrated, conceptions of modern Britishness were clearly communicated in late-eighteenth and early-nineteenth-century British popular natural history through discussions surrounding the eradication of the wolf from the British Isles.[581] Indeed, this discourse, which documented the disappearance of the wolf from different parts of the British Isles at different times, helped to temporally distance those territories where the wolf had only recently disappeared, such as the Scottish Highlands and Ireland, from those areas where wolves had been eradicated far earlier, aligning the former with the past and characterising them as backward and primitive and the latter with the modern, British metropole. Within this discourse, the eradication of the wolf in Britain was frequently celebrated as a unique achievement and Britain's situation was regularly contrasted with the species' continuing presence in most of the northern hemisphere. Through particular comparisons with Continental Europe, the

[579] Bennett, *Tower* pp. 49-50.
[580] Bennett, *Gardens, Vol I* p. 109.
[581] See: pp. 44-47.

pre-eminence and modernity of the British, due to the eradication of the wolf in Britain, were reinforced, demonstrating British prestige through mastery over the natural world and Britain's advanced societal status through an enviable accomplishment that its continental rivals were yet to achieve.

Drawing heavily on Buffon's description of the wolf as ferocious, cruel and cowardly, British popular natural history authors helped to consolidate popular imaginings of this species as a formidable animal adversary through their memetic reproduction of his ideas.[582] For example, many British naturalists articulated Buffon's charges that the wolf 'issues forth in the night, traverses the country, roams about the cottages, kills all of the animals that have been left without, digs the earth under the doors, enters with a dreadful ferocity, and puts every living creature to death'.[583] His claim that 'once accustomed to human flesh… [wolves] prefer the shepherd to the flock, devour women and carry off children' was also reiterated to great effect.[584] However, Buffon was sceptical of any claims of wolf eradication, pointing out that the species was 'very generally diffused' and that, despite the constant efforts of hunters and trappers, 'the number of these destructive animals never decreases, especially in woody countries'.[585] He further stated that the British only 'pretend to have cleared their island of this rapacious creature', a claim that was strongly and universally rejected by British naturalists.[586]

Through these characterisations of the wolf, British naturalists invested descriptions of the species with similar narratives to those seen in the discourse surrounding other large predators. Consequently, wolves were conceptually confined to wild spaces and their presence was used to demarcate the borders between human-dominated and animal-dominated spaces. Similarly, wolf incursions into human settlements and the harm they caused to people and livestock were seen to challenge human dominion over the natural world and their broad distribution reaffirmed imaginings of large expanses of the world under the thrall of this rapacious predator. However, Buffon's universalising claims regarding wolves were generally accepted by British naturalists as a distinctly French situation and this animal knowledge was consequently reconfigured, through a British lens, to celebrate the removal of the wolf from Britain as an indicator of Britain's advanced

[582] Catton, *Animals*; Mackenzie, *Natural History* pp. 20-21; Bingley, *Biblical Quadrupeds* p. 163.
[583] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 197; Bewick, *Quadrupeds* p. 314; Mavor, *Natural History* p. 60.
[584] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 205.
[585] Buffon (trans. Smellie), *Natural History, Vol. IV* pp. 206-207.
[586] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 207.

societal status compared to that of its continental neighbours and rivals through the demonstration of environmental mastery, in accordance with stadial models.

For example, in his discussion on wolves, Buffon used the term *loup-garou* (werewolf) to describe those wolves that actively attacked and devoured people, detaching this term from its usual, supernatural connotations, whereas British naturalists chose to emphasise the supernatural qualities often attached to the loup-garou by French peasants.[587] Indeed, Pennant explained in his *Synopsis of Quadrupeds* that French peasants believed such animals to be 'possessed with some evil spirit', citing the famous wolf attacks in Gévaudan, southern France, between 1764 and 1767, which local peasant communities had attributed to a supernatural creature rather than wolves.[588] Pennant temporalised contemporary, French beliefs in the loup-garou by aligning them with earlier, Anglo-Saxon notions of the 'Were Wolf', a process that not only helped to reaffirm British imaginings of French backwardness, born of irrationality, but also to reinforce British conceptions of their own modernity and superiority, rooted in rationality.[589] Pennant's ideas paralleled broader, contemporary British conceptions of the French as a superstitious and backward, continental, Catholic other, imaginings that were especially prevalent prior to the French Revolution and were often expressed through dialogues of religious difference.[590]

Pennant included his discussions on the loup-garou in his later *History of Quadrupeds* and the beliefs of the French peasantry in these supernatural creatures were similarly commented upon by British popular natural history authors drawing on Pennant, such as Church.[591] In his discussions on the wolf attacks at Gévaudan, Shaw highlighted that the contemporary Parisian press had blamed a single animal 'far surpassing in size the rest of his species', adding that 'public prayers were said to be offered up for his destruction', these comments reaffirming the inability of the French to control the natural world by gaining mastery over the wolf owing to their irrational superstitions and their reliance on divine intervention.[592] However, as the nineteenth century progressed, British popular natural history authors increasingly historicised these French beliefs in the loup-garou, with Knight confining them distinctly to the past, along with similar ancient Greek and Anglo-Saxon beliefs, noting that, 'the universal fear which the wolf, where numerous,

[587] Buffon (trans. Smellie), *Natural History, Vol. IV* p. 205.
[588] Pennant, *Synopsis of Quadrupeds* p. 150; for more information on French beliefs regarding the identity of the 'Beast of Gévaudan', see: J. Smith, *Monsters of the Gévaudan: The Making of a Beast* (Cambridge, 2011).
[589] Pennant, *Synopsis of Quadrupeds* p. 150.
[590] For examples of this characterisation of the French, see: Erwin, 'William Hogarth and the Aesthetics of Nationalism' pp. 403-408; Janes, 'Unnatural Appetites' pp. 20-22.
[591] Pennant, *History of Quadrupeds, Vol. I* p. 232; Church *Cabinet, Vol. I*.
[592] Shaw, *General Zoology, Vol. 1, Part 2* pp. 294-295.

would naturally inspire, was formerly heightened by superstition, and fiends or malignant beings were imagined as having the power to assume the form and power of this dreaded animal'.[593]

A recurring focus within the British popular natural history discourse on the wolf was the relationship between its abundance, its extensive range and its domination of space, a discussion that provided frequent opportunities to celebrate the complete eradication of wolves in Britain. For instance, Pennant, in his *Synopsis of Quadrupeds*, noted that whilst wolves had 'been long extirpated in *Great Britain*… the vast forests on the *European* continent will always preserve them', adding that, 'throughout *France* the peasants are obliged nightly to house their flocks'.[594] Although Pennant reiterated many of Buffon's earlier comments regarding the wolf, he purposefully detached wolf infestations from Britain and restricted the latter's universalising statements to Continental Europe, contrasting the removal and disappearance of wolves in Britain with the omnipresent contestation of space and human-animal conflict evident in Continental Europe.

This narrative of British exceptionalism, set against imaginings of Continental Europe with its continuing plague of wolves, continued into the nineteenth century, with Bingley commenting that 'in almost all forests of the European continent they are abundant, issuing forth, during the stillness of the night, and destroying, with indiscriminate slaughter, every living creature which they have the power to overcome'.[595] Barrow explained that 'in the northern countries of civilised Europe… they visit particular districts, sometimes in prodigious flocks, and commit the most terrible devastations', a statement that Shoberl reiterated.[596] Other writers were more explicit, with Mavor commenting that 'France, Spain, and Italy, are much infested by these animals, which indeed are diffused over many parts of the world: but Great Britain and Ireland are happily delivered from their presence', a dichotomy that helped to reinforce temporal distance between Britain and its continental rivals.[597] Loudon similarly explained that 'wolves are found nearly everywhere, except in the British Islands, where this noxious race has been entirely extirpated', adding that 'they abound in the immense forests of Germany, and they are also found in considerable numbers in the south of France'.[598]

[593] *Menageries, Vol. I* p. 98; *Pictorial Museum, Vol. I* p. 203.
[594] Pennant, *Synopsis* pp. 149-150.
[595] Bingley, *Natural History* p. 29.
[596] Barrow, *Characteristic Sketches*; Shoberl, *Quadrupeds, Vol. I* p. 49.
[597] Mavor, *Natural History* p. 61.
[598] Loudon, *Quadrupeds* pp. 29-30.

As the nineteenth century progressed, the examples marshalled by British naturalists to demonstrate the ravages committed by wolves in Continental Europe shifted further east, with Knight highlighting the recent loss of life caused by wolves in France, Poland and Russia.[599] This stemmed partly from the decline of wolves in France during the early nineteenth century, which encouraged British naturalists to cast their gaze further afield to eastern Europe and the Russian Empire in order to illustrate how the enduring presence of the wolf in Continental Europe continued to challenge human dominion over the environment.[600] Agricultural writers similarly expanded their gaze, with Low noting that, whilst wolves had gradually diminished in Europe 'with the progress of settlement and cultivation… even yet, wolves are in many parts of Europe so numerous as to be troublesome and dangerous, as in the Pyrenees, and yet more in the countries where large forests exist, as in Poland and Russia, where the depredations committed are often exceedingly great'.[601] By explicitly tying the decline of the wolf to societal advancement and comparing Britain with those territories in Continental Europe where wolves continued to contest space, natural history authors collectively helped to maintain British claims of national superiority through stadial understandings of progress.

Given that Britain had already extirpated the wolf, British popular natural history authors were keen to construe the removal of the species from Continental Europe as entirely possible and any failure to do so was explicitly attributed to the imagined inability or disinterest of the local authorities. This was most clearly articulated by Jardine, who explained that:

> wolves still commit such enormous depredations on the property of the most civilized nations of Continental Europe, and even destroy so many human lives, that it is deeply to be regretted there are states with immense standing armies, including whole corps of riflemen, who have never thought of employing them to extirpate their common enemy; particularly as in times of peace their garrison duties are any thing but important.[602]

British exceptionalism, based on the eradication of wolves, was not only demonstrated through comparisons with rival nations in Continental Europe but also through comparisons with other territories across the globe, which were still imagined as at the

[599] Knight, *Pictorial Museum, Vol. I* p. 203.
[600] L. Boitani, 'Wolf Conservation and Recovery' in D. Mech and L. Boitani (eds.) *Wolves: Behaviour, Ecology, and Conservation* (Chicago, 2003) pp. 318-320.
[601] Low, *Breeds* pp. 634-635.
[602] Sir William Jardine, *The Naturalist's Library, Mammalia Volume II, Felines* (Edinburgh, 1834) pp. 136-137.

mercy of the wolf, a process that helped to configure Britain's advanced societal status as particularly extraordinary and unique. Bennett, for example, described the 'ravenous and ferocious' wolf as infesting 'the more temperate regions of the earth, of many parts of which he is the terror and the scourge', stating that it was found across 'the whole northern hemisphere, of which only very small portions are exempt from his ravages', namely Britain and Ireland.[603]

By locating the wolf across the globe, British popular natural history authors reinforced universal understandings of the species that encouraged similar expectations regarding the domination of space by wolves and their ability to contest human control over the environment. On the resilience and adaptability of the wolf, Barrow pointed out that this species braved 'the rigours of eternal winter within the arctic and Antarctic circles, with as much energy and vivacity as they evidence beneath the milder skies of southern Europe, or amidst the arid mountains and burning valleys of Africa', sentiments also echoed by Shoberl.[604] Knight emphasised the animal-dominated nature of the spaces occupied by wolves, noting that this species was 'spread throughout Europe and various parts of Asia… where the population is scanty, and collected into small towns or villages, with a wide country around, destitute of human dwellings'.[605] Carpenter reiterated these ideas, placing a similar emphasis on the 'scanty' human populations that existed where wolves still swarmed in the mountains and forests of Europe and Asia, reinforcing the notion that where wolves reigned, humans could not thrive.[606]

The Eye of the Tiger:
British mastery over a colonial other

The discourse on tigers in late-eighteenth and early-nineteenth-century British popular natural history tended to emphasise the animal's monarchic status, its broad geographical range and abundant populations, its incursions into human spaces and its man-eating habits, which combined to present this species as a formidable animal adversary that actively contested human control over space and prevented societal development in the areas it infested. Although these narratives broadly conformed to those attached to other large predators, the specifics of tiger-knowledge were increasingly and uniquely shaped by British encounters with this animal in those parts of India under the control of the BEIC. Consequently, imaginings of this species within British popular natural history, strongly

[603] Bennett, *Tower* pp. 89, 91-92.
[604] Barrow, *Characteristic Sketches*; Shoberl, *Quadrupeds, Vol. I* p. 49.
[605] Knight, *Pictorial Museum, Vol. I* p. 203.
[606] Knight, *Pictorial Museum, Vol. I* p. 203; Carpenter, *Popular Cyclopedia* p. 220.

informed by this colonial context, helped to reaffirm claims of British societal sophistication and modernity that were demonstrated through British mastery over this menacing predator. Conversely, this discourse presented the inability and reluctance of local Indian populations to overcome this supposedly rapacious animal as indicators of their inferiority and backwardness, in line with stadial models.

Numerous scholars have recognised the importance of the tiger within nineteenth-century British, colonial discourse, arguing that this animal's persecution by British colonial officials was often used to justify colonial rule in paternalistic terms that reinforced both British superiority and indigenous inferiority. John Mackenzie, for instance, observed that 'the British and the tiger seemed in some ways to be locked in conflict for command of the Indian environment', with colonial officials frequently highlighting the damage tigers caused to the indigenous people and their property in order to emphasise the threat posed by these animals and the protection provided by the British.[607] Ritvo also maintained that British hunting narratives, including those on tigers, regularly construed indigenous people as indolent and cowardly, a process that conversely emphasised the superiority of the imperial British compared to their colonial subjects.[608] Anand Pandian further asserted that, through the tiger hunt, 'the late Raj parasitized both the threat of despotic terror [posed by tigers] and the promise of sovereign force [by tiger-hunting, colonial officials] as buttresses to its own… [moral] authority'.[609]

Studies have also highlighted how, within the broader, British, nineteenth-century discourse surrounding the destruction of tigers in colonial India, tiger hunting helped to reinforce a sense of white, British masculinity. Joseph Sramek, for instance, argued that tiger hunting 'was an important symbol in the construction of British imperial and masculine identities during the nineteenth century', as 'only by successfully vanquishing tigers would Britons prove their manliness and their fitness to rule over Indians'.[610] Shafiq Hussain has also illustrated how tiger hunting, especially the killing of 'man-eaters', intersected with British ideas of the hierarchical ordering of societies to promote and maintain the illiberal exercise of power in Britain's imperial territories.[611] Ralph Crane and Lisa Fletcher have also observed that nineteenth-century British depictions of tigers were 'unified by remarkably consistent conventions for picturing tigers' as artists 'routinely drew

[607] Mackenzie, *The Empire of Nature* p. 180.
[608] Ritvo, *The Animal Estate* pp. 261-262.
[609] A. Pandian, 'Predatory Care: The Imperial Hunt in Mughal and British India', *Journal of the Historical Sociology* 14/1 (2001) p. 83.
[610] J. Sramek, '"Face Him Like a Briton": Tiger Hunting, Imperialism, and British Masculinity in Colonial India, 1800-1875', *Victorian Studies* 48/4 (2006) p. 659.
[611] S. Hussain, 'Forms of predation: Tiger and Markhor Hunting in Colonia Governance', *Modern Asian Studies* 46/5 (2012) pp. 1215-1216.

on a set of established tropes for portraying Indian tigers', most notably the preying of tigers on indigenous women.[612] These images of the tiger acted 'as a cypher for hegemonic Victorian attitudes to India and its people' that reinforced notions of colonial paternalism through demonstrations of British masculinity.[613]

As these studies have mainly focussed on the relationships between the tiger and the British in the latter half of the nineteenth century, during the rule of the Raj following the Indian Rebellion of 1857, they particularly relate to the period when tiger hunting was enshrined as a potent display of imperial control and used to maintain cooperative relationships between the British, imperial and local, Indian elites.[614] Comparatively, this case study focuses on the relatively unexplored discourse surrounding tigers in late-eighteenth and early-nineteenth-century British popular natural history, when Britain's Indian possessions were under the jurisdiction of the BEIC. As this discourse was informed by early British encounters with the tiger in colonial India, narratives of mastery over a colonial other were expressed through constructions of this animal that emphasised the species' monarchic status, its geographical range and abundance, its incursions into human spaces and its man-eating habits.

It is important to point out here that, until the late eighteenth century, the term tiger, or 'tyger', was generally used to describe any big cat, apart from the lion. Consequently, Buffon, drawing on the writings of the French traveller and naturalist, Foucher d'Obsonville, adopted the Portuguese term 'royal tiger' to distinguish this impressive species from other big cats, a nomenclature that was also adopted by many late-eighteenth and early-nineteenth-century British naturalists and authors, including Pennant, Catton, Goldsmith, Shaw, Church, Bullock, Roberts and Aikman.[615] These monarchic connotations stemmed largely from Indian and Persian understandings of the tiger as a potent metonym for royal power and prestige, observations that were communicated to European naturalists by Europeans in India. Through this mechanism, understandings of the tiger gradually intertwined with British, popular imaginings of Indian rulers, the destruction of the tiger by British hunters serving to symbolise British

[612] R. Crane and L. Fletcher, 'Picturing the Imperial Tiger: Imperial Iconography in the Nineteenth Century', *Victorian Literature and Culture* 42/3 (2014) pp. 270-271.
[613] Crane and Fletcher, 'Picturing the Imperial Tiger' pp. 270-271.
[614] Mackenzie, *The Empire of Nature* pp. 169.
[615] G. Leclerc, Comte de Buffon (trans. J. Smith Barr), *Buffon's Natural History, Vol. VII* (London, 1797) p. 65; F. d'Obsonville (trans. T. Holcroft), *Philosophical Essays on the Manners of various Foreign Animals* (London, 1784) pp. 81-82; Pennant, *Synopsis* pp. 167-168; Goldsmith, *Animated Nature, Vol. II* p. 416; Catton, *Animals*; Pennant, *History, Vol. I* p. 258; Shaw, *General Zoology, Vol. I, Part 2* p. 344; Church, *Cabinet, Vol. II*; Bullock, *Pantherion* p. 123; Roberts, *Wild Animals* pp. 128-129; Aikman, *Natural History* p. 28.

ascendency over these indigenous elites. Indeed, characterisations of the tiger by naturalists as the 'tyrant' of the animal kingdom were increasingly synonymised with conceptions of Indian elites as oppressive and tyrannical, 'oriental despots'. As Annu Jalais notes, 'the tiger's "royalness" was… a symbol the British were keen to highlight' as this status 'added extra prestige to the sport of hunting because of the tiger's potency in symbolizing the power of Indian monarchs'.[616]

Charges of 'oriental despotism' were especially levelled at those Indian rulers who actively resisted the expansion of BEIC territory, a contestation of British dominion over space that mirrored the corresponding threat attributed to the tiger within the British popular imagination. This is most clearly illustrated through the case of Tipu Sultan, the late-eighteenth-century ruler of Mysore, whose violent campaigns against the BEIC and use of the tiger, his namesake, as his personal iconography, helped to cement his image in the nineteenth-century British popular imagination as the quintessential example of cruel and irrational Eastern barbarism.[617] As Bernard Cohn states, during the early nineteenth century, 'the death of Tipu, the arch villain in the emergent hagiography of India, provided the necessary counterpoint to the construction of the British as valorous, virtuous, and, above all, triumphant conquerors'.[618]

Numerous scholars, including Mackenzie, Ritvo, Pandian, Jalais and Sramek, have highlighted how Tipu Sultan's use of the tiger as a personal motif helped to codify this animal as a symbol of Indian opposition to British rule in the British popular consciousness.[619] Indeed, researchers have emphasised that the tiger iconography on the many items seized by the British from Tipu Sultan's capital of Seringapatam, following his death at the end of the fourth Anglo-Mysore War in 1799, was particularly responsible for reinforcing the conflation of the tiger with Indian tyrants. Most famous of these was 'Tipu's Tiger' (see figure 61), a mechanical organ crafted in the shape of a snarling tiger mauling a European youth, an object possibly inspired by the death, in 1792, of Hector Sutherland Munro, the son of the BEIC general and politician, Sir Hector Munro. This object continues to be presented by scholars as the embodiment of contemporary, popular British

[616] A. Jalais, 'Unmasking the Cosmopolitan Tiger', *Nature and Culture* 3/1 (2008) p. 28.
[617] K. Teltscher, *India Inscribed: European and British Writing on India 1600-1800* (Oxford, 1995) pp. 231-237; S. Goswami, *Colonial India in Children's Literature* (New York, 2012) pp. 51-56.
[618] B. Cohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton, 1996) p. 80
[619] Mackenzie, *The Empire of Nature* p. 178; Ritvo, *The Animal Estate* p. 29; Pandian, Predatory Care' p. 79; Jalais, 'Unmasking the Cosmopolitan Tiger' p. 28; Sramek, '"Face Him Like a Briton"' p. 659.

understandings of Tipu Sultan as a vicious, man-eating predator and a tyrannical, oriental despot.[620]



Figure 61: 'Tipu's Tiger' (c. 1790, The V&A, 2545(IS), source: the V&A Collections Online).

Within contemporary British popular natural history, Tipu Sultan's associations with big cats were not limited solely to tigers, with Bennett, for example, choosing to associate the cruelty and bloodthirstiness of the lion with eastern despots, such as Tipu Sultan and Tamerlane.[621] Partington cited Tipu Sultan only fleetingly, to illustrate how the military-elite of southern India associated themselves with tigers to demonstrate their own martial prowess.[622] Indeed, the big cat most often associated with Tipu Sultan in British popular natural history literature of the early nineteenth century was the cheetah, or 'hunting leopard', as four of Tipu Sultan's trained cheetahs were taken from Seringapatam during the sack of the city, transported to Britain and exhibited in the Tower of London menagerie (see figure 62).[623] Thomas Williamson referred to Tipu's cheetahs in his influential 1808

[620] Pandian, 'Predatory Care' p. 79; Jalais, 'Unmasking the Cosmopolitan Tiger' p. 28. See also: S. Qureshi, 'Tipu's Tiger and images of India, 1799-2009' in S. Longair and J. McAleer (eds.) *Curating Empire: Museums and the British Imperial Experience* (Manchester, 2016) pp. 207-224.
[621] Bennett, *Tower* p. 20.
[622] Partington, *Cyclopædia, First Volume* p. 728
[623] Grigson, *Menagerie* p. 179.

publication, *Oriental Field Sports*, with Bullock later referencing Tipu's cheetahs in his entry on the cheetah taxidermy specimen at the Pantherian and Bennett also citing Tipu's cheetahs in his discussion on the species in his later guidebook to the Tower Menagerie.[624]

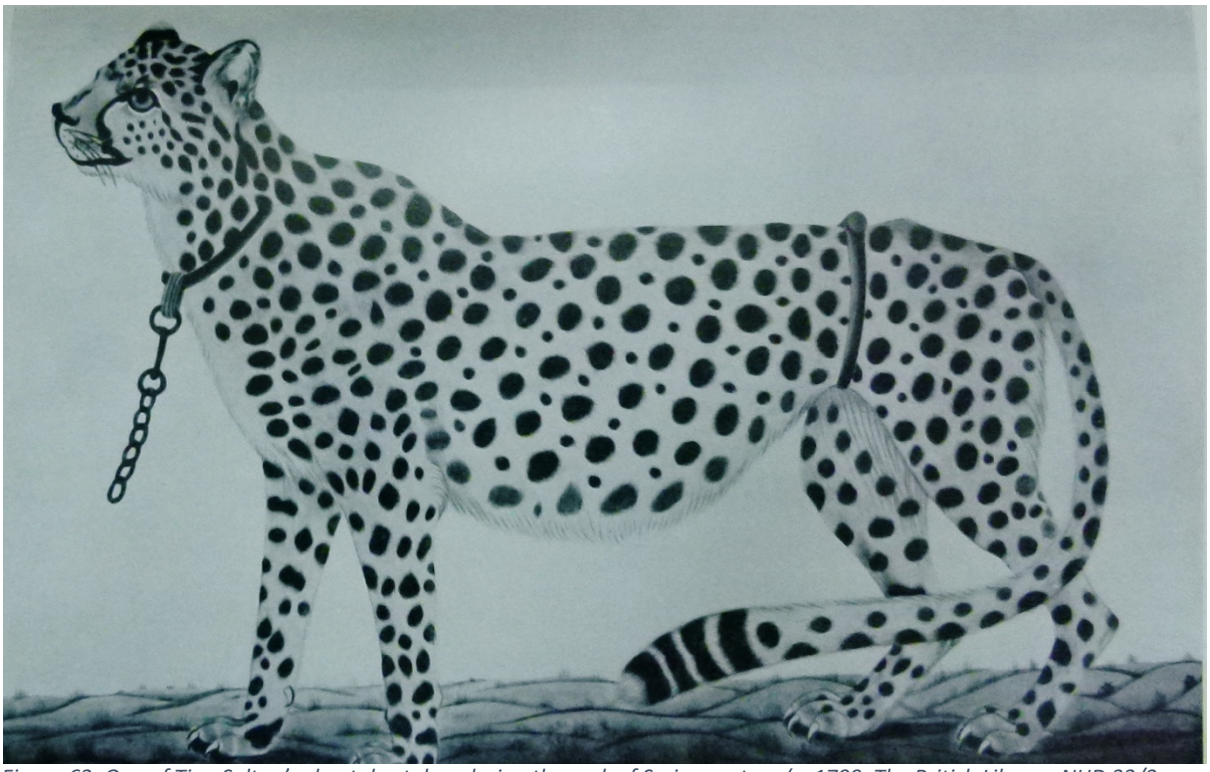


Figure 62: One of Tipu Sultan's cheetahs, taken during the sack of Seringapatam (c. 1799, The British Library, NHD 32/3, source: Wikipedia Commons).

Whilst the focus on Tipu's cheetahs did not entirely correspond with the broader, popular discourse surrounding the 'tiger of Mysore', it was nevertheless a product of the same movement of trophies and stylised objects from India to Britain that had helped to consolidate Tipu Sultan's tigerish reputation. Cohn observes that many of the most prized objects taken from Seringapatam were prominently displayed by the BEIC at the Company's museum in their London headquarters and at the Tower, a process that transformed these items into 'relics and trophies' of British imperial conquest, demonstrating British ascendency over a colonial other.[625] Objects removed from Seringapatam also found their way into the homes of wealthy BEIC employees.[626] Jessica Ratcliff has pointed out that the plunder from Seringapatam, displayed at the BEIC's London headquarters, was exhibited alongside 'a rapidly growing archive of the natural

[624] Bullock, *Pantherion* p. 124; T. Williamson, *Oriental Field Sports, Vol. II* (London, 1808) p. 234; Bennett, *Tower* pp. 68-69.
[625] Cohn, *Colonialism and its Forms of Knowledge* pp. 102-104.
[626] See: S. Longair and C. Sharp Jones, 'Prize possession: the "silver coffer" of Tipu Sultan and the Fraser family' in M. Finn and K. Smith (eds.) *The East India Company at Home, 1757-1857* (London, 2018) pp. 25-38.

and artificial worlds of Asia'.[627] Indeed, this exhibiting of objects, live animals and preserved natural history specimens, which had all been transported to Britain through the same BEIC-operated trade and transport networks, collectively constituted a potent celebration of British prestige through imperial conquest.

Although British naturalists generally located the tiger's range across large swathes of Asia, they increasingly tied the species to India, describing its abundance as a plague or infestation and characterising the species as a scourge on society. Pennant explained that the tiger was 'peculiar to *Asia*… but the greatest numbers, the largest, and the most cruel, are met with in *India*, and its islands… [where] they are the scourge of the country'.[628] References to the Indian tiger as a 'scourge' were fairly ubiquitous within late-eighteenth and early-nineteenth-century British popular natural history, with Beilby, Church, Barrow, Shoberl and Roberts reiterating Pennant's sentiments and Mavor describing the tiger as 'one of the most terrible scourges experienced by the human race in the countries where it is found'.[629] Indeed, by combining conceptions of the tiger as a scourge infesting India with the animal's monarchic status, early-nineteenth-century British popular natural history authors helped to reinforce imaginings of this animal as a key contester of human dominion over territory. Church, for example, described the tiger as the 'tyrant of the forest', whilst Bennett explained that India was 'truly the cradle of his [the tiger's] existence and the seat of his empire'.[630]

Relationships between the tiger and the indigenous people of the Indian subcontinent were further highlighted by British popular natural history authors through their observations of the populations living in close proximity to these large, feline predators, which were often expressed in socio-religious terms. Jardine, for example, noted that 'the great nursing place of the tiger, their cradle… [was] the peninsular of Hindostan' whilst Partington concluded that the species was 'a more southerly and casterly inhabitant' of India than the Asiatic lion.[631] Bengal was often identified as the region of India where tigers were a particular problem, with Shoberl stating that 'no country… is so much infested with tigers as Hindostan, and no part of that peninsular so much as the province of

[627] J. Ratcliff, 'The East India Company, the Company's Museum, and the Political Economy of Natural History in the Early Nineteenth Century', *Isis* 107/3 (2016) pp. 503-504.
[628] Pennant, *Synopsis* pp. 167-168; Pennant, *History, Vol. I* p. 258.
[629] Bewick, *Quadrupeds* pp. 206-207; Mavor, *Natural History* p. 69; Church, *Cabinet, Vol. II*; Barrow, Characteristic Sketches.; Shoberl, *Quadrupeds, Vol. I* p. 114; Roberts, *Wild Animals* p. 118.
[630] Bennett, *Tower* p. 30.
[631] Jardine, *The Naturalist's Library, Mammalia Volume II, Felines* p. 140.

Bengal'.[632] Indeed, within Bengal, the Sundarbans, an area of mangrove swamps in the Ganges Delta, was particularly noted for its abundance of tigers and for their undisputed dominion over this territory. Partington, for example, described the Sundarbans as '*par excellence*, the demesne or park of Tippoo [the tiger], in which he reigns in splendid majesty', an 'absolute monarch' of the islands of the Ganges Delta.[633]

Tiger incursions, which were frequently presented in British popular natural history literature as a major barrier to the cultivation of land, helped to reinforce imaginings of this animal as a vicious predator and the enemy of mankind, mirroring Buffon's earlier construction of the tiger as the ultimate opponent to human habitation and civilisation.[634] As Ritvo explains, the tiger 'epitomized what man had to fear from the animal kingdom', the 'ultimate measure' of the animal's 'unregeneracy… [evident in] its fondness for human flesh'.[635] Beilby further claimed that tigers 'almost depopulate many places' whilst Bullock, in his description of the tiger mount on display at the Pantherian, presented the species as 'the powerful and sanguinary destroyer of the human species'.[636] Jardine's assertion that 'where civilization has commenced, the tiger has learned to prowl around the villages, and attack the cattle-folds, to seize indiscriminately whatever comes in his way' further emphasised the threat to humanity posed by this animal.[637]

Anecdotes of British interactions with tigers in Bengal formed a staple of the tiger discourse in late-eighteenth and early-nineteenth-century British popular natural history. For example, Pennant provided a humorous account of a European lady foiling a tiger attack in Bengal by quickly unfurling her umbrella to startle the animal, this encounter being repeated by Goldsmith, Shaw, Church, Bingley, Shoberl, Knight, Roberts and Aikman.[638] As this anecdote often appeared alongside a description of the killing of Hector Sutherland Munro by a tiger, these two incidents served to reflect the extremes of human-tiger encounters; the first illustrating the relative ease with which the British could overcome

[632] Shoberl, *Quadrupeds, Vol. I* pp. 111-112; Partington, *Cyclopædia, First Volume* p. 728.
[633] Partington, *Cyclopædia, First Volume* pp. 730-731.
[634] Buffon (trans. J. Smith Barr), *Buffon's Natural History, Vol. VII* pp. 57-60.
[635] Ritvo, *The Animal Estate* p. 28.
[636] Bewick, *Quadrupeds* pp. 206-207; Bullock, *Pantherion* p. 123.
[637] Jardine, *The Naturalist's Library, Mammalia Volume II, Felines* p. 142.
[638] Pennant, *Synopsis* p. 168; Pennant, *History* pp. 258-259; Goldsmith, *Animated Nature, Vol. II* pp. 413-414; Shaw, *General Zoology, Vol. I, Part 2* p. 345; Church, *Cabinet, Vol. II*; Bingley, *Animal Biography* pp. 129-130; Shoberl, *Natural History, Vol. II* pp. 120-121; Knight, *Menageries, Vol. I* p. 187; Roberts, *Wild Animals* pp. 119-120; Aikman, *Natural History* p. 29.

this animal and the second maintaining the tiger's reputation as a fearsome and dangerous enemy.[639]

Descriptions by British popular natural history authors of tiger incursions into human spaces in Bengal also reaffirmed imaginings of the tiger as a formidable animal opponent, whose mere presence could contest human dominion over space and prevent societal advancement. Through these characterisations, the local people of Bengal were clearly portrayed as at the mercy of the tiger, a sentiment that was extended to India's broader, indigenous populations, whose societal status was accordingly categorised as inferior to the British, owing to their inability to contain the threat posed by tigers. However, the role of BEIC policies in aggravating this human-animal conflict was noticeably absent from these discussions.

For example, during the Great Bengal Famine of 1770, whose high death toll has been partially attributed to BEIC policies, many Indian peasants abandoned their villages, causing arable land to be reclaimed by jungle and an increase in tiger incursions into the remaining agrarian settlements.[640] As Paul Greenough has pointed out, when faced with increasing incursions from wild animals, a common response from Indian peasants was to abandon their village, which raised some concerns for the BEIC regarding their tax revenues. According to Greenough, the BEIC 'regarded the presence of wild animals inside village precincts as an economic barometer: as cultivation expanded, wild animals retreated, and when cultivation contracted, wild animals advanced'.[641] It was, therefore, clearly in the economic interest of the BEIC to promote and finance the removal of predators, especially tigers, from areas where they wished to exercise human dominion over space, a process that also served to demonstrate British control over its colonial possessions through narratives of mastery over the natural world.

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[639] Goldsmith, *Animated Nature, Vol. II* p. 414; Mavor, *Natural History* pp. 70-71; Shaw, *General Zoology, Vol. I, Part 2* pp. 345-346; Church, *Cabinet, Vol. II*; Bingley, *Animal Biography* p. 130; Shoberl, *Natural History, Part 2* pp. 120-121; Roberts, *Wild Animals* pp. 120-121; le Keux, *Illustrations of Natural History* p. 335; Loudon, *The Entertaining Naturalist* p. 9; Knight, *Pictorial Museum, Vol. I* p. 6.

[640] U. Ray, 'Subsistence Crisis in Late Eighteenth and Early Nineteenth Century Bihar', *Social Scientist* 41/3-4 (2013) p. 8; V. Damodaran, 'The East India Company, Famine and Ecological Conditions in Eighteenth-Century Bengal' in V. Damodaran, A. Winterbottom and A. Lester (eds.) *The East India Company and the Natural World* (Basingstoke, 2015) p. 95.

[641] P. Greenhouse, 'Naturae Ferae: Wild Animals in South Asia and the Standard Environmental Narrative' in J. Scott and N. Bhatt *Agrarian Studies: Synthetic Work at the Cutting Edge* (New Haven, 2001) p. 147.

The narrative of incapable, inferior Indians at the mercy of the tiger was strengthened by BEIC efforts to develop the Sundarbans in the early nineteenth century due to the growing belief that this area represented a new and potentially lucrative source of revenue.[642] Whilst BEIC officials had long speculated regarding the untapped wealth of the Sundarbans, in terms of its rich silt and saline waterways, attempts to develop this region were not successful until the 1820s, owing to tiger attacks, which had hindered land reclamation and development efforts.[643] Indeed, the loss of indigenous workers to tigers in the Sundarbans was regularly reported by early-nineteenth-century British popular natural history authors, such as Barrow, who highlighted that numerous salt-workers were killed by tigers in Bengal every year.[644] Through these reports, the impact of the BEIC bounty system on the decline of Bengal's tiger population was presented as a demonstration of the British ability to remove tigers to protect themselves, their colonial subjects and their cultivated land, a position that reinforced imaginings of British superiority over inferior, colonial subjects through the language of capability. Indeed, as the nineteenth century progressed, the declining tiger population of Bengal as a product of the BEIC bounty policy, was increasingly integrated by British popular natural history authors into a broader narrative of 'civilising' India through British colonial rule.

Knight praised the BEIC's bounty policy as an effective response to the progress-arresting presence of tigers in Bengal, describing them as 'the dread of the inhabitants of our Indian possessions'.[645] Knight also emphasised the inability of local people to protect themselves from this large predator through their reluctance and poor management of the land, explaining that 'the Hindoos seldom voluntarily attempt to hunt the tiger; although he invades their houses and carries off their cattle, and very often the people themselves, whenever there is a village in the neighbourhood of an uncleared waste overgrown with reeds and bushes'.[646] These disparaging comments regarding the inactivity of indigenous people were sharply contrasted with 'the active courage of Europeans', who Knight claimed 'will generally remove this evil', stating that 'the destruction of the scourge of the country' by European hunters in BEIC service had caused 'the enormous overgrown wastes' to have 'almost been surrendered [by the tiger] without a fight', allowing for their transformation 'into fertile agricultural districts'.[647] Knight's statements demonstrate how the removal of

[642] D. Bhattacharyya, *Empire and Ecology in the Bengal Delta: The Making of Calcutta* (Cambridge, 2018) pp. 52-54.
[643] R. Chakrabarti, 'Local People and the Global Tiger: An Environmental History of the Sundarbans', *Global Environment* 2/3 (2009) p. 80.
[644] Barrow, *Characteristic Sketches*.
[645] Knight, *Menageries, Vol. I* p. 187.
[646] Knight, *Menageries, Vol. I* pp. 184, 186.
[647] Knight, *Menageries, Vol. I* p. 187.

the tiger was conceptualised in stadial terms and presented as an integral part of the agricultural and commercial development required for societal advancement.

Shoberl also observed that 'the island of Cossimbazar [now Kasim Bazar] was formerly almost depopulated and rendered uninhabitable by the numerous tigers which infested it' but that 'this evil has of late years been greatly lessened, in consequence of the premiums offered by the BEIC for the extirpation of these mischievous animals, and which in the year 1802 amounted to £15,000 sterling'.[648] Jardine similarly explained that, in 'the new Indian settlements, the ravages committed by the tigers were such, that active means were necessary for their destruction, and a price of ten rupees was put upon the head of each', pointing out that 'the improved use of the rifle has rendered the more thickly inhabited parts comparatively safe from them'.[649] Jardine added that 'since India became so much the country of Europeans, the race of tigers has been much thinned, and ere long it is probable that they will be driven to the most remote and impenetrable districts'.[650] Indeed, by the middle of the nineteenth century, prior to the Indian Rebellion of 1857, British popular natural history authors largely considered the Indian tiger to have been 'tamed', with Aikman noting that, whilst the tiger was 'still the scourge of some portions of India… the Europeans, with whom a tiger hunt is a favourite amusement, have thinned the race'.[651]

[648] Shoberl, *Quadrupeds, Vol. I* pp. 123-124.
[649] Jardine, *The Naturalist's Library, Mammalia Volume II, Felines* p. 142.
[650] Jardine, *The Naturalist's Library, Mammalia Volume II, Felines* p. 145.
[651] Aikman, *Natural History* p. 29.

Conclusion

This chapter has revealed, through an examination of the late-eighteenth and early-nineteenth-century British popular natural history discourse on large, mammalian predators, how expressions of Britishness were frequently communicated through discussions regarding the ways in which these animals were seen to contest space and to challenge human dominion over territory. As Britain and Ireland were, by this point, free from large, mammalian predators, this discourse inevitably focussed on the relationships between predators, landscapes and people in non-British contexts, allowing comparisons to be drawn between local people and the British and assessments of these societies to be made, in accordance with stadial models; in these cases, the local people being judged as inferior to the British due to their perceived lack of control over the natural world. Furthermore, the use of classification systems, such as those created by Linnaeus, Shaw and Cuvier, which were frequently employed by British popular natural history authors to construct, group and order biologically-distinct species of large predators, helped to ensure that the narratives invested in these animals were applied universally and seen to operate at a global level. It was through this mechanism that conceptions of national, racial and cultural others were constructed and perceptions of Britishness were reinforced.

Within British popular natural history, descriptions of large predators, which were often informed by contemporary climate theories that viewed an animal's temperament as a product of its environment and climate, frequently tied these creatures to the landscapes they inhabited, conceptualising them both as one wild and hostile entity. As a result, these areas were frequently configured as animal-dominated spaces, with large predators being seen to define the parameters of human control over the natural world and local people as at the mercy of these creatures. Some large, impressive predators were also granted monarchic status to reflect their imagined sovereignty over the spaces they physically embodied, their presence serving to demarcate the borders between animal-dominated and human-dominated spaces. Compared to modern Britain, where the threat from large predators had been completely removed, this lack of human dominion over the environment, especially when viewed in stadial terms, helped to confirm the backward status of local populations. Consequently, landscapes containing large predators were temporalised in the past and their local populations were correspondingly judged to be at an earlier stage of societal development.

Within British popular natural history, the harm caused to people and livestock through the incursions of large predators into human settlements further helped to configure the inferiority of local populations, who were regularly portrayed as vulnerable because they

were unable to prevent these attacks and protect themselves and their property from these formidable, rapacious animal assailants. Indeed, through their characterisations of large predators as invading marauders, British popular natural history authors depicted local people as under siege, locked in a state of constant warfare with the natural world and unable to demonstrate mastery over their human-controlled spaces. These sentiments were particularly reinforced through the fear that large predators, especially big cats, were reported to instil in local populations, who, compared to white settlers, were seen as preferred targets, not least because they were deemed less equipped to repel attacks from these animals. Clearly, without the ability to protect themselves from these animal threats, local people could not demonstrate mastery over their environment, unlike the more superior, modern British, whose mastery over the natural world and advanced societal status had already been illustrated through the eradication of the wolf in Britain and Ireland.

British popular natural history authors often depicted the abundance of large predator populations and their extensive geographical ranges across the globe as infestations that posed significant barriers to human expansion into any of these territories. This ongoing fight against predators in large parts of the world allowed the eradication of the wolf in Britain to be celebrated as a unique accomplishment of mastery over the natural world that communicated the pre-eminence of the British at a global level. Indeed, territories where large predators still roamed were temporalised within the past and this status was extended to the local populations as it was generally understood that advanced societies could not co-exist with large predators. Many British popular natural history authors noted how some large predator populations had declined over time due to human activity, this relationship clearly tying the disappearance or removal of large predators to the civilising process required for societal advancement.

The case studies on the wolf in Continental Europe and the tiger in colonial India both clearly demonstrate how particular conceptions of British modernity and superiority were communicated through specific contexts. Whilst comparisons between wolf-infested Continental Europe and wolf-free Britain served to illustrate the superior position of the British over their continental rivals, the removal of tiger infestations in India by the British, which was couched in the language of colonial paternalism, helped to reaffirm the narratives of cultural and racial inferiority, ascribed to the indigenous population, that underpinned British justification for imperial rule. Comparisons by British popular natural history authors between the eradication of the wolf in Britain and Ireland and its continuing presence in Continental Europe tied Buffon’s earlier, universalising statements regarding the ravages of this animal specifically to France and other European nations, helping to

align Britain's continental neighbours and rivals and configure them all as less advanced than modern Britain due to their inability to achieve mastery over this menacing predator.

Through their discussions on the loup-garou, British naturalists attributed the inability of the French to overcome the wolf to their tendencies towards superstition and irrationality, characterisations that conformed to broader, contemporary imaginings of the French as a foreign, Catholic, continental other, which contrasted sharply with the perceived rationality of the modern British. Consequently, the enduring presence of the wolf was seen to illustrate the less advanced societal status of the nations of Continental Europe compared to Britain. In spite of the decline of wolf populations in western Europe, this dichotomy was maintained by British popular natural history authors into the nineteenth century through their shifting gaze towards eastern Europe, where wolves could still be found in substantial numbers. With decreasing wolf numbers in Europe, the global distribution of wolves, with their extensive ranges and large populations, allowed British popular natural history authors to configure vast swathes of the world as at the mercy of this rapacious predator, a relationship that they continued to contrast with the wolf-free status of modern Britain.

Within the British popular natural history discourse on the tiger, which was increasingly informed by reports of encounters with this animal in colonial India, imaginings of colonial others, as cowardly, incapable and archaic, were contrasted with self-perceptions of the British, as courageous, capable and modern, based on the ability of the latter to contain this large predator. Furthermore, the monarchic status frequently attached to the tiger, which paralleled the broader conflation of the tiger with the Indian elite in the British popular imagination, allowed any British ascendency over these significant colonial others to serve as celebrations of British imperial conquest. When combined with portrayals of the tiger as the scourge of India, the species' monarchic status reinforced its characterisation as a tyrant and a key contester of human dominion over space that challenged the extent to which Indians could demonstrate their control over the natural environment. Anecdotes of tiger encounters in India that ranged from the humorous to the harrowing often appeared alongside each other within British popular natural history, highlighting the ease with which these animals could be successfully repelled by Europeans whilst maintaining their enduring threat of danger.

Characterisations, by earlier naturalists, of the tiger as the universal enemy of mankind, were reaffirmed in reports of tiger encounters in the BEIC's Indian possessions, most notably in the Sundarbans of Bengal, where the tiger's presence was construed as a barrier to economic and agricultural development. Owing to BEIC policies during the Great Bengal

Famine, tiger incursions into agrarian settlements had grown, and the number of tiger attacks on workers in the Sundarbans had also increased due to attempts by the BEIC to develop this area economically and agriculturally in the early nineteenth century. However, British popular natural history authors failed to establish links between increasing human-tiger conflict and BEIC policies but rather praised the BEIC's bounty system for its contribution to the successful removal of tigers from its Indian possessions.

Through this mechanism, the decline of tiger populations in Bengal, and in India more broadly, was presented as an integral part of the 'civilising' of India under British colonial rule. As the decline of India's tiger population was generally accepted to be the product of British actions, these were often communicated in paternalistic terms that reinforced the British as the courageous and competent protectors of the Indian people. Comparatively, the Indian people were regularly portrayed as indolent and unwilling or unable to overcome this formidable animal adversary, their purported lack of mastery over the environment allowing them to be categorised at an earlier stage of societal development than the modern British, reinforcing the narrative of British superiority over inferior, colonial others that underpinned British colonial rule.

Chapter 6

The Treatment of Animals and British National Identity

The treatment of animals was a recurring feature within late-eighteenth and early-nineteenth-century British popular natural history literature. This discourse was often expressed through general entries on individual animals and centred round the condemnation or approval of certain human-animal relationships both within and beyond Britain, which, when viewed collectively, helped to illustrate the British parameters for the permissible treatment of animals. As the readership of popular natural history at this time generally constituted the middling stratum of British urban society, the views expressed within this discourse reflected the increasing integration of animal welfare into the political identity and cultural sensibilities of the emerging British middle class, for whom the treatment of animals served as an important indicator of civilised, Christian behaviour.

The seventeenth-century treaties on pedagogic education by John Locke had repeatedly emphasised that teaching kindness to animals was an important way of instilling children with a sense of moral virtue, a sentiment that was innately tied to enduring conceptions of animals as property.[652] Indeed, as the eighteenth century progressed, cruelty towards animals was increasingly characterised as a precursor to the maltreatment of people, as illustrated through Hogarth's famous 1751 print series, *The Four Stages of Cruelty*, in which the character of Tom Nero progresses from tormenting animals in his youth to murdering his mistress later in life, his dissected entrails being subsequently devoured by stray dogs following his execution.[653] Indeed, by the late eighteenth century, growing opposition within British polite society to vivisection as a form of popular, public entertainment, often couched in the language of scientific education, resulted in this practice being increasingly confined to more regulated, institutionalised sites of experimentation where practices, it was claimed, could be controlled to minimise animal suffering.[654] By the early nineteenth century, the first organisations aimed at promoting animal welfare began to emerge in Britain, such as the Society for the Prevention of Cruelty to Animals (the SPCA, later the RSPCA), founded in 1824.[655]

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[652] Ritvo, *The Animal Estate*; A. Feuerstein, *The Political lives of Victorian Animals: Liberal Creatures in Literature and Culture* (Cambridge, 2019) pp. 15-16.
[653] L. Cole, 'Animal studies and the eighteenth century: The nature of the beast', *Literature Compass* 16/6 (2019) pp. 5-6.
[654] A. Guerrini, 'Natural History, Natural Philosophy, and Animals, 1600-1800' in M. Senior (ed.) *A Cultural History of Animals in the Age of Enlightenment* (London, 2007) p. 142.
[655] Kean, *Animal Rights* pp. 35-38.

During the early nineteenth century, the discourse surrounding the treatment of animals became increasingly intertwined with the more dominant liberal ideology of the emerging urban middle classes and a conceptual framework developed that determined which actions constituted animal cruelty and which animals were worthy of human kindness. Anna Feuerstein, for example, states that during the nineteenth century, 'certain animals - mostly domestic - were increasingly liberalized; not only were they viewed as subjects with thought and feeling, but they were frequently represented with liberal qualities such as reason, character, and disinterest'.[656] Consequently, liberalism provided opportunities for animals to be integrated into a more-than-human, political community through the conceptualisation of human-animal relationships as contractual, which instilled animals with similar rights to those of people. Whilst these ideas certainly had the capacity to disrupt the human-animal divide and challenge notions of human supremacy over the natural world, Feuerstein hastens to point out that the continuing classification of animals as property within liberal thought posed a fundamental contradiction within Victorian animal welfare discourse.[657]

Lord [Thomas] Erskine's 1809 speech to the House of Lords in support of his anti-cruelty bill, the first of its kind to call for the guarantee of rights for animals, clearly illustrates how early efforts to legislate against animal cruelty centred round the status of animals as property. Erskine's arguments were firmly grounded in moral obligation, stemming from the liberal commitment to the rational protection of property and Christian conceptions of the divinely-ordained, human dominion over animals. In this case, Erskine, building on Locke's notion that the role of the government was to enshrine property rights, construed the mistreatment of animals as a fundamentally irrational misuse of property.[658] Although Erskine's bill was defeated, later attempts at legislation employed the same language of rational property use, as seen in the first animal anti-cruelty law, motioned by Richard Martin and passed in 1822, which focussed on penalising the abuse of livestock and beasts of burden.[659] By presenting a reciprocal relationship, in which the rights of animals were dependent upon their continuing subservience to humans, early anti-cruelty legislation helped to maintain and naturalise human supremacy over animals. As Feuerstein observes, 'in order to include animals in a political community, Victorian animal welfare discourse constructed animals to adhere to liberal norms: they had reason, were civilised, consented to domestication, and obeyed an animal-human hierarchy'.[660]

[656] Feuerstein, *The Political lives of Victorian Animals* p. 6.
[657] Feuerstein, *The Political lives of Victorian Animals* p. 41.
[658] Feurerstein, *The Political lives of Victorian Animals* pp. 36-40.
[659] Feurerstein, *The Political lives of Victorian Animals* pp. 46-47.
[660] Feurerstein, *The Political lives of Victorian Animals* p. 3.

As property rights were imagined within nineteenth-century Liberalism to only exist in advanced human societies such as Britain, animal welfare was temporalised as a distinctly modern practice. Consequently, animal welfare constituted an important performance of modernity and Christian virtue that promoted the superiority of the British middle classes and helped to construe them as representative of the national character. To this end, idealised imaginings of the British, middle-class treatment of animals were frequently contrasted with less acceptable human-animal relationships attributed to the British lower classes, foreigners and non-Christians, so that British, middle-class identity was essentially configured against an array of intersecting, foreign, socio-economic, religious and racial others.

Early calls for animal welfare legislation tended to focus on the blood sports associated with the working classes, notably bullbaiting, dogfighting and cockfighting, rather than on those favoured by the upper classes, such as fox hunting; thus emphasising the malign influence of animal mistreatment on human morality in ways that reaffirmed both the identity and the moral superiority of the middle classes over their socio-economic inferiors.[661] Ritvo similarly notes that 'as early as the 1830s, despite the circumambient evidence to the contrary, the English humane movement had begun to claim kindness to animals as a native trait and to associate cruelty to animals with foreigners, especially those from southern, Catholic countries'.[662] Feuerstein expands this argument, maintaining that 'in the Victorian context anti-cruelty and animal welfare discourses reinforce an idealized liberal subject that perpetuates speciesist, classist, gendered, and racist violence', a conceptualisation that reveals the limits of liberal political inclusion and the centring of the British middle classes within this discourse.[663]

Late-eighteenth and early-nineteenth-century British popular natural history literature articulated this connection between animal welfare and conceptions of modern Britishness tied to the middling stratum of urban society. This is not surprising given the liberal sensibilities of prominent, eighteenth-century popular natural history authors, such as Pennant, Bewick and Beilby.[664] Consequently, discussions within this genre frequently grappled with conflicting understandings of animals, as both individuals with agency and as objects of property. Ritvo explains that the emphasis on animal 'sagacity' within these texts served to separate the cognitive skills of animals from human intelligence and to

[661] S. Bargheer, 'The Fools of the Leisure Class: Honour, Ridicule, and the Emergence of Animal Protection Legislation in England, 1740-1840' *European Journal of Sociology* 47/1 (2006) p. 3.
[662] Ritvo, *The Animal Estate* p. 172.
[663] Feuerstein, *The Political lives of Victorian Animals* pp. 34-35.
[664] Uglow, *Nature's Engraver* p. 233.

preserve the human-animal divide whilst acknowledging, in a limited capacity, the ability of some animals to reason. Here, a key measurement, which was used to assess and illustrate animal reason, was the animal's ability to follow complex commands with little intervention from their human masters. This is particularly applicable to the horse, whose prestigious status largely stemmed from its characterisation as an active and faithful servant to humans, which often resulted in its placement at the start of encyclopaedically-structured works of natural history during this period.[665]

During the late eighteenth and early nineteenth centuries, Britain's colonial experiences also increasingly informed understandings of the national character, with animal encounters in the colonial sphere helping to reinforce ideas of Britishness that were juxtaposed with colonial others.[666] This was markedly evident in the case of India, whose growing status as the central territory of Britain's imperial possessions guaranteed its position as a key site of formation for British, imperial identity that intersected and synthesised with metropolitan imaginings of the national character.[667] Dialogues of difference broadly emerged across colonial literature, cultivating a discourse of cultural, religious and, increasingly, racial otherness that served to temporally distance the British from their colonial subjects by reinforcing British modernity, as informed by enlightenment models of stadial progress. Religious differences were also interpreted by the British through their own conceptions of protestant Christianity as a rational and unique faith. Indeed, the emphasis on natural theology within British popular natural history literature ensured that the treatment of animals, such as the Hindu veneration of the brahmin bull, was understood by the British to be distinctly backward, irrational and superstitious.

Within British popular natural history literature, the parameters of permissible animal treatment were illustrated through both implicit and explicit comparisons, within narratives of cultural, class, religious and racial difference, which reinforced a sense of British modernity and superiority by temporalising and spatialising not only good and bad practices but also the people associated with them. These observations were not limited to condemnations as the treatment of some animals by specific societies, otherwise deemed 'savage' or 'barbarous', was favourably compared to similar practices in Britain and explicitly praised, raising more questions about the relationships between animal

[665] Ritvo, *The Animal Estate* pp. 19-20.
[666] A. Burton, 'Introduction: Animals, Disruptive Imperial Histories, and the Bestiary Form' in A. Burton and R. Mawani (eds.) *Animalia: An Anti-imperial Bestiary for Our Times* (Durham, 2020) p. 1.
[667] For a more general analysis of how empirical investigations in India aided in the construction of British national identity, see: K. Raj, 'Colonial Encounters and the Forging of New Knowledge and National Identities: Great Britain and India, 1760-1850', *Osiris* 15 (2000) pp. 119-134.

welfare, societal advancement and British superiority. However, popular natural history authors also heavily criticised those human-animal relationships, which did not conform to British understandings of a contractual system of animal welfare, informed by Christian principles and property rights.

This chapter examines the discourse surrounding the treatment of animals within late-eighteenth and early-nineteenth-century British popular natural history to reveal, through two case studies, how these discussions helped to reinforce a sense of modern, middle-class, Christian Britishness that supported British claims of national superiority. The first case study explores how understandings of blood sports as backward and immoral were projected upon the animals and people associated with them and used to locate these populations spatially and temporally, juxtaposing them against the modern, British, urban middle classes. These findings will also be compared with the more favourable understandings of the treatment of cattle by the Khoekhoen people of southern Africa, or 'Hottentots' as they were referred to within contemporary literature, to demonstrate how some human-animal relationships attributed to non-British peoples were commended by the British. The second case study will further demonstrate how the limits of permissible animal treatment were defined by analysing understandings of the Hindu veneration of the brahmin bull to show how this human-animal relationship was frequently presented within British popular natural history as irrational, superstitious, despotic and atavistic.

Baited beasts and loyal cattle:
from blood sports to the praise-worthy treatment of animals

As illustrated in chapter one of this thesis, through discussions surrounding the mastiff and the bulldog, blood sports, such as bull baiting, were generally derided as cruel and barbaric within late-eighteenth and early-nineteenth-century British popular natural history literature.[668] Similar attitudes were expressed towards bearbaiting, dogfighting, stag-chasing, badger-baiting and otter-baiting, these narratives emerging within the popular natural history genre long before any of these practices were made illegal. For instance, bearbaiting was condemned by Pennant in his *British Zoology* and Beilby strongly criticised badger baiting in Bewick's *Quadrupeds*.[669] Indeed, as blood sports frequently relied upon an array of animals in addition to the targeted animal, discussions surrounding these sports often appeared within a range of individual animal entries across a single work. For example, bullbaiting was not only discussed in entries on cattle but also on bulldogs, with both commentaries serving to reinforce the same, derisory narratives

[668] See: pp. 68-70.
[669] Pennant, *British Zoology, Vol. I* p. 65; Bewick, *Quadrupeds* p. 292.

attached to blood sports more generally, even if these sentiments did not match those of contemporary observers and diarists.[670]

Pennant, for instance, explained that 'bear baiting in all its cruelty was a favourite pastime of our ancestors', a statement that temporally distanced this practice from those of modern Britain. Bingley similarly characterised bullbaiting as a 'ferocious practice' that was rapidly declining in England due to the 'increasing humanity and civilisation of the people' and explicitly presented this process as an indicator of Britain's societal development.[671] This confinement of blood sports to Britain's past and the conceptualisation of the decline of blood sports in Britain, as a potent indicator of the nation's societal progression, served to reinforce the modern and civilised status of the urban middle-classes. Conversely, the continuing presence of blood sports, such as bullbaiting, in Britain served to characterise specific places within the nation as comparably backward and uncivilised. Bingley, for example, temporally isolated those communities still practising bullbaiting 'with a degree of savage ferocity which reflects the highest disgrace on a civilised and Christian country', separating and distinguishing these people from modern conceptions of Britishness.[672] Bingley's condemnation of bullbaiting was further couched in moral terms, explaining that this 'detestable practice… ought by all means to be abolished, since, (without any consideration for the sufferings of a tormented animal,)… [it has a tendency] to corrupt the heart, and steel it against every proper feeling of humanity'.[673] In short, according to Bingley, the continuing presence of bullbaiting in Britain posed a threat to the moral virtue of the nation and compromised its civilised status.

By spatially distancing and isolating those places in Britain, where blood sports were still practised, Britain's advanced societal position was preserved through the alignment of these areas with other parts of the so-called uncivilised world, where similar practices were still observed. Indeed, stadial models of societal progress, which facilitated the categorisation of human activity on a global scale, served to render temporal and spatial distances malleable, a plasticity of location, which allowed the parts of Britain where blood sports remained to be conceptually separated from modern Britain and realigned with other global spaces that were inhabited by human others perceived to be at an earlier stage of societal development. This mechanism is evident in Bingley's claim that 'the anecdotes of wanton cruelty that have been related of this brutal sport [bullbaiting], are… such as would even disgrace the most ferocious of nations which we stigmatise by the

[670] Griffin, *England's Revelry* pp. 131-140.
[671] Bingley, *British Quadrupeds* p. 118.
[672] Bingley, *British Quadrupeds* p. 393.
[673] Bingley, *British Quadrupeds* p. 393.

name of savages'.[674] Le Keux similarly categorised 'the lion-fights of the fierce and savage Romans, the bull-fights of Spain, the bull and badger-baitings and cock-fights of England, and the camel-fights of Asia Minor' as 'truly and equally indications of a barbarous spirit, which knowledge and the true religion only can eradicate', a statement later repeated by Knight.[675] Jardine, when discussing bullbaiting, quoted Edward Gibbon's explanation that the Romans 'about the decline and fall of their empire, borrowed this barbarous practice from the Moors'.[676] Clearly, British modernity was communicated through these commentaries on blood sports via intersecting, temporalising claims of rational, moral and religious superiority.

The barbarity of blood sports was further configured when women were seen to enjoy them, which subverted seemingly natural gender norms and contradicted British middle-and-upper-class notions of natural femininity as innately gentle and nurturing.[677] This narrative presented exposure to blood sports as an unnatural, pernicious and corrupting influence on morality, with the capacity to negatively alter fundamental characteristics and behaviours. This gendered discourse was deeply intertwined with narratives of societal progress, a relationship that was particularly apparent when British popular natural history authors discussed Queen Elizabeth I's love of blood sports, which was generally presented as reflective of the more barbaric state of the English people during her reign. Indeed, the Religious Tract Society reflected that:

> time was when a maiden queen would honour the bear-pit with her presence, and witness scenes of unexampled and disgusting brutality, not only without indignation but with interest and ardour. Such is the case in Spain at the present day, where ladies throng the arena, to witness the inhuman spectacle of the bull-fights, the modern *fac simile* of those scenes of carnage which tarnished the splendour of Rome, and the character of the Roman people.[678]

In this extract, Elizabeth I's love of baiting was clearly confined to the past which, consequently, disconnected this practice from the contemporary British character. Indeed, through its alignment with contemporary Spanish bullfighting, characterised as a successor to ancient Roman, gladiatorial combats, the enjoyment of blood sports was not

[674] Bingley, *British Quadrupeds* p. 394.
[675] le Keux, *Illustrations of Natural History* p. 268; Knight, *Menageries, Vol. I* p. 247.
[676] Jardine, *The Naturalist's Library* p. 224.
[677] D. Donald, *Women Against Cruelty: Protection of Animals in Nineteenth-Century Britain* (Manchester, 2019) pp. 55-56.
[678] *Quadrupeds* p. 31.

only temporalised but also spatially distanced from modern Britain through its associations with a continental, catholic other.[679] Moreover, by contrasting Elizabeth I's penchant for baiting with Queen Victoria's reported disdain for such practices, authors like Fennell helped to further illustrate Britain's more advanced, modern state, remarking that:

> those who love ancient customs only because they are ancient, may deplore the discontinuance of bear-baiting, and sigh for such Queens as Old Bess; but we hail these changes as proofs of a more humanized state of society; and we believe that Victoria is quite content with merely beholding the bears in the Zoological Gardens- and as a punster would say, she cannot bear the bare idea of bear-baiting.[680]

British popular natural history authors also reinforced the decline of animal baiting in Britain by highlighting the diminishing popularity of dog breeds that were specifically associated with these practices, such as the bulldog. Indeed, bulldogs were so deeply associated with animal baiting within popular natural history literature that references to bullbaiting were regularly included in illustrations of the breed, usually in the form of an agitated bull in the image's background (see figures 61, 62, 63 and 64). The background of the image in Fennell's work is of particular interest, as it directly locates the animal within an identifiable space, with the signpost bearing the name 'Hockley'; most likely a reference to Hockley-in-the-Hole, an area of Clerkenwell Green in London that was notorious in the seventeenth and eighteenth centuries as a site for bearbaiting, bullbaiting, fights between armed men and bare-knuckle boxing matches.[681] Narratives connecting bulldogs to baiting were present in works as early as Pennant's *British Zoology*, which noted that bulldogs had become scarcer as 'the barbarous custom of bullbaiting' had declined, an observation repeated by Mavor, Shaw, Church, Bingley and Loudon.[682] Indeed, following the criminalisation of animal baiting in 1835, the bulldog became increasingly demonised in popular natural history literature due to its metonymic connection to these practices, with Fennell, for instance, describing the breed as the 'rival

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[679] For late-nineteenth-century examples of the British characterisation of bullfighting as backward and barbaric, see: A. Taylor, '"Pig-Sticking Princes": Royal Hunting, Moral Outrage, and the Republican Opposition to Animal Abuse in Nineteenth-and Early-Twentieth-Century Britain', *History* 89/1 (2004) p. 46.
[680] Fennell, *Quadrupeds* p. 57.
[681] W. Thornbury, *Old and New London: Its History, its People and its Places* (London, 1881) pp. 306-309; K. Shevelow, *For the Love of Animals: The Rise of the Animal Protection Movement* (New York, 2009).
[682] Pennant, *British Zoology, Vol. I* p. 227; Mavor, *Natural History* p. 57; Shaw, *General Zoology Vol 1 Part 2* p. 284; Bingley, *Natural History* p. 28; Loudon, *The Entertaining Naturalist* p. 26.

of Cerberus'.[683] Mackenzie went so far as to claim that 'humanity is almost prompted to indulge a wish that… [the bulldog] may become utterly extinct' as 'while one of the species remains, it will recall the disgraceful remembrance of vulgar barbarism, and perpetuate the stigma of our once tasteless amusements and cruel manners'.[684]

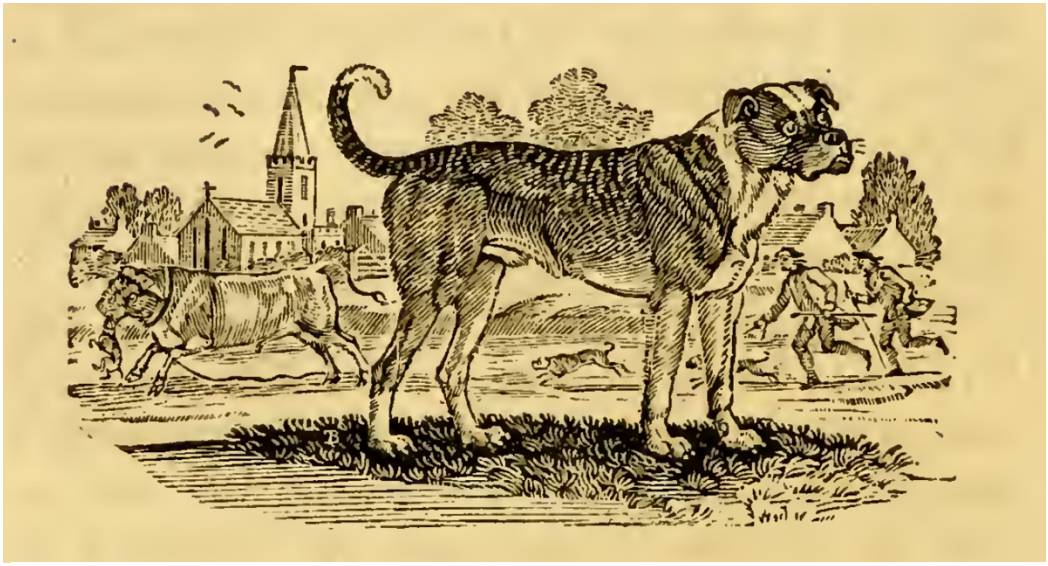


Figure 63: Bewick's depiction of the bulldog in his Quadrupeds, *Fourth Edition ((Newcastle upon Tyne: S. Hodgson, R. Beilby and T. Bewick, 1800, source: The Internet Archive).*

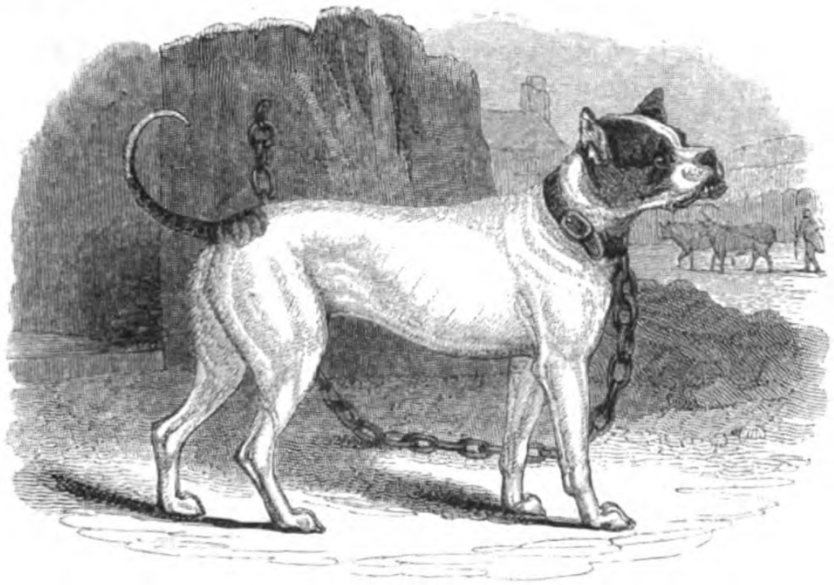


Figure 64: The bulldog as depicted in Bell's A History of British Quadrupeds *(London: Samuel Bentley, 1837, source: Google Books).*

[683] Fennell, *Quadrupeds* p. 163.
[684] Mackenzie, *Natural History* p. 49.

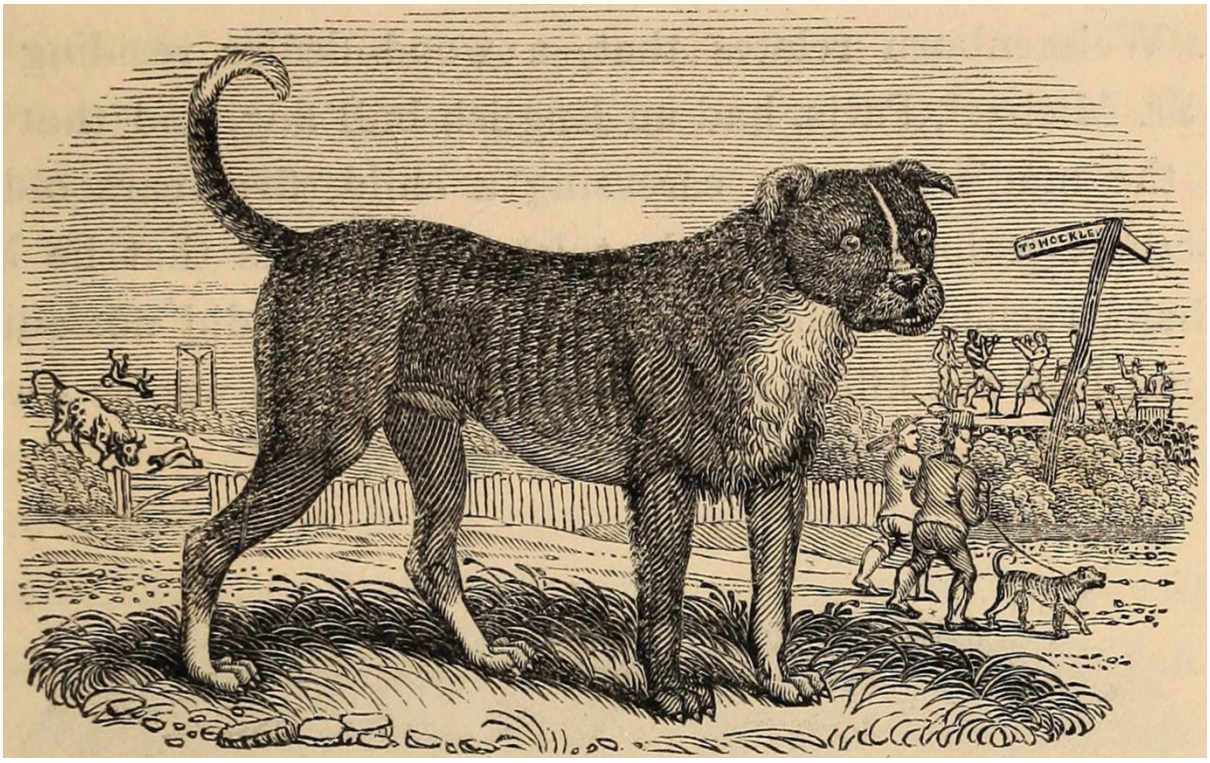


Figure 66: The bulldog in Fennell's A Natural History of British and Foreign Quadrupeds *(London: Joseph Thomas, 1841, source: Google Books).*

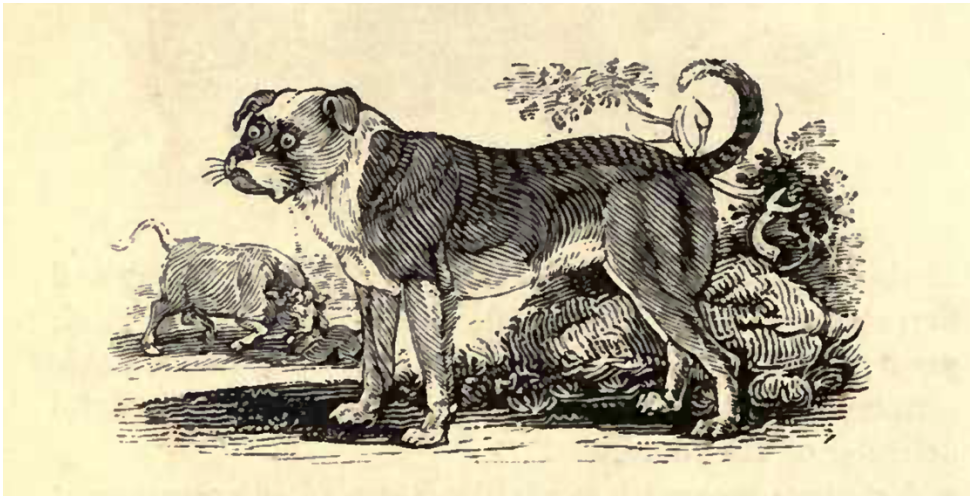


Figure 65: The bulldog in Loudon's The Entertaining Naturalist *(London: Henry G. Bohn, 1843, source: Google Books).*

The characterisation of the bulldog as a violent and brutish animal, due to its role in bullbaiting, was equally and clearly projected on to those humans who watched and participated in this activity, an association that served to isolate and distance them from developing, modern British society. Indeed, the fact that baiting had continued to be so popular in Britain until relatively recently, and was still being practised in some rural and urban spaces, generated some anxiety among later popular natural history writers, such as Bell, who struggled to reconcile the conflicting facets of baiting audiences, which

crossed class, intellectual and cultural boundaries, stating in his discussion on the bulldog, that:

> happily for humanity, the cowardly and savage amusement in which it was formerly employed… has at length been banished from our towns and villages by the common exaction of all who deserve the name of man; and future generations will scarcely believe that, in England, the barbarities of the most savage nations were far outdone, not only by the lowest and most ignorant and depraved of her sons, but by men of rank and education, who enjoyed the distinction of the senatorial character.[685]

Fennell reaffirmed these connections, maintaining that the bulldog was 'the least sagacious and most brutish of its tribe, and therefore the favourite dog of the least intellectual and most cruel of men… an assemblage of thieves and gamblers goading one dog on against another in some secluded part of the town, or setting one or more of these dogs upon a bull in some country meadow'.[686] By aligning these individuals through their similar practices, Fennel compressed the physical space that separated them, a process that helped with their categorisation as similarly backward and barbaric in manners compared to the more refined and modern sensibilities ascribed to the emergent British middle classes. Nor was this discourse restricted to baiting, as dogfighting, be it using bulldogs or another breed, was similarly highlighted as a practice whose continuing existence in Britain, despite it being made illegal in 1835, could undermine the civilised status of the nation.[687] In this respect, those urban spaces in Britain where blood sports were still practiced could be conceptually isolated and distanced from the rest of the urban environment through their characterisation as thoroughly backward, a status that helped to arrest any challenges that these activities posed to ideas of metropolitan, middle-class British modernity by aligning them with populations, especially the lower classes, that served as internal others against which these notions of the national character could be contrasted and confirmed.[688]

In this respect, Fennell further maintained that, whilst baiting and dogfighting might have diminished due to the actions of the police and the SPCA, 'from Whitechapel in the east,

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[685] Bell, British *Quadrupeds* pp. 247-248.
[686] Fennell, *Quadrupeds* pp. 162-163.
[687] B. Harrison, 'Animals and the State in Nineteenth-Century England', *The English Historical Review* 88/349 (1973) pp. 788-789; R. Evans and C. Forsyth, 'Entertainment to Outrage: A Social Historical View of Dogfighting', *International Review of modern Sociology* 27/2 (1997) p. 63.
[688] For more information on this process, see: S. Makdisi, *Making England Western, Occidentalism, Race and Imperial Culture* (London, 2014).

to Bayswater in the west of the metropolis, there are yet arenas for the sport of bull-dog fighting', with 'the cruel amusements of the dog-fighting gentry of Bayswater, and the badger-baiting military of Woolwich' proving that such practices were not restricted to the labouring poor and the criminal classes.[689] Bell articulated very similar sentiments when he described how the bull-terrier was still used in dogfights:

> exhibited in the very heart of the most polished metropolis of this, the most humane and the most religious nation in the world! The savage ferocity of the Dogs… is as nothing compared to the disgraceful assemblage of high and low, noble and plebian blackguardism, that surrounds the combatants, offering an example of ferocity equal to that of the Dogs themselves- but with the degrading addition, that the spectators are human beings, endowed with reason, and some of them men of high and refined education.[690]

Conversely, the continuation of blood sports in rural spaces evoked fewer concerns from popular natural history authors as the backwardness embodied here was safely confined to spaces in Britain that were understood to be naturally less modern and civilised than the metropolitan centre. For example, Bell presented badger baiting as a 'barbarous amusement… to be a favourite and exciting sport amongst our rustic population', with Bell attributing the 'gradual cessation of these barbarous and dastardly sports' as much to the growing scarcity of badgers as to the increasing levels of education in Britain.[691] The Religious Tract Society's *Quadrupeds* claimed that badger baiting was now practised 'only amongst the debased and the unenlightened dregs of the community' and Mackenzie was similarly quick to state that this 'inhuman diversion… [was] chiefly confined to the idle and the vicious, who take a cruel pleasure in seeing this harmless animal surrounded by its enemies, and defending themselves from their attacks'.[692]

As stated earlier, the continuing popularity of bullfighting in southern Europe was often invoked by popular natural history authors as a foil against which Britain's relegation of blood sports to its past was compared and contrasted. Through the repeated citation of a single, detailed and vivid description of a Spanish bullfight, sourced from either the *Encyclopaedia Britannica* or the *Encyclopædia Edinensis*, a memetic discourse on bullfighting, propagated by British popular natural history authors, extended across this genre during the early nineteenth century.[693] Indeed, the same narratives of animal

[689] Fennell, Quadrupeds p. 163.
[690] Bell, *British Quadrupeds* p. 231.
[691] Bell, *British Quadrupeds* pp. 124-125.
[692] *Quadrupeds* p. 31; Mackenzie, p. 39.
[693] Church, *Cabinet*; Jardine, *Naturalist's Library, Vol. IV Ruminantia Part II* pp. 221-224.

cruelty appeared not only in discussions on bullfighting but also in the discourse surrounding baiting and dogfighting in Britain, with similar emphases on the suffering of 'innocent' animals, the temporalisation of blood sports in the past and the malign moral influence of these practices on human participants and audiences.

Church, for instance, was quick to highlight the cruelty inflicted upon the bull, dogs and horses involved in European bullfights for the sake of entertainment, noting that 'the few spectators who are not infected by the general madness of this sport, regret that the wretched animals do not, at least, purchase their lives, at the expense of so many torments, and so many efforts of courage, and would willingly assist them to escape from their persecutors'.[694] In this way, the moral outrage felt by some spectators at the violence and suffering inflicted on animals during the bullfight was characterised as the natural reaction to such an event, the bloodlust of the crowd otherwise construed as irrational and distinctly barbaric. Knight similarly spoke of 'the revolting contests of the arena', sending a clear message to the reader that these activities were to be frowned upon and were distinctly non-British.[695] Moreover, the high status ascribed to bulls in Britain, stemming from their commercial value and, therefore, their ascribed centrality to civilised human existence, meant that bullfights violated the contractual rights bestowed upon animals due to their usefulness to humans. Low captures these sentiments in his discussion on cattle:

> Such is the creature which reason and conscience teach us to treat with humanity and justice. It is painful to say that it is too often made the victim of wanton cruelty. Who has not heard of those barbarous sports which are yet practised in the southern countries of Europe, where the bull, brought into the arena, is roused to phrensy, and put to a cruel death? The bull-fights of Spain and Italy are yet the delight of all conditions of people in those countries, and afford the evidence of the power of habit to blunt the most natural feelings, and reconcile us to the most revolting spectacles.[696]

Whilst Jardine was far more ambivalent towards bullfighting, with his descriptions of 'the barbarous though stirring and heroic encounters of the Moors, Spaniards, and Romans', he continued to temporalise this practice within the past by aligning Spain with 'ancient' civilisations through their shared love of bullfighting.[697] His emphasis on the Moors corresponded to late-eighteenth and early-nineteenth-century Spanish scholarship on the

[694] Church, *Cabinet, Vol. I*.
[695] Knight, *Pictorial Museum, Vol. I p*. 162.
[696] Low, *Breeds* p. 249.
[697] Jardine, *Naturalist's Library, Vol. IV Ruminantia Part II* p. 217.

history of bullfighting, which had attributed the development of modern bullfighting, as a ritualised blood sport, to practices introduced by the Muslim rulers of the Iberian Peninsula. Indeed, these narratives are similarly captured in the Spanish art of the period, most notably in Goya's series of engravings, entitled *Tauromaquia*.[698] Aikman similarly wrote of 'the savage past-times of bull-baiting in England and bull-fighting in Spain, where gallant knights have mingled in the fray, and gentle ladies enjoyed the sport'.[699]

Through these negative judgements, British popular natural history authors utilised human-animal relationships ascribed to foreign cultures to present the British, middle-class treatment of animals as distinctly compassionate and to construe British civilisation as advanced, modern and superior. However, these authors were also keen to praise the human-animal relationships of some non-British cultures, whose care and attention to their animals rivalled or exceeded British practices, with corresponding value. For example, the fine and extraordinary qualities of the Arabian horse were frequently attributed to the care and attention lavished upon these horses by the Arabs.[700] Bishop Reginald Heber also stated that the use, in India, of trained otters to catch fish revealed that 'the simple Hindoo shows here a better taste and judgement than half the otter-hunting and badger-baiting gentry of England', a declaration that was quoted by many nineteenth-century popular natural history writers, including Roberts, Bell, Carpenter and Knight, as well as in publications by the Religious Tract Society.[701]

Within this global context of animal treatment, the kindness shown to cattle by the Khoekhoen of southern Africa was highlighted as exemplary in multiple works of popular natural history. Central to this discussion was the ability of the Khoekhoen to train specific cattle, referred to in European texts as 'Bakeleyers', 'Bakeley-Osse', 'Bakeleys' or 'Bakelys', for use in war and to protect their herds from predators and thieves. This unusual but highly successful practice was widely discussed in eighteenth-century travel literature, most notably in Peter Kolb's 1719 work *The Present State of the Cape of Good Hope*, which was directly referenced by Buffon, and in the travel narratives of François le Vaillant.[702] Indeed, Buffon's discussion on the Bakeleys, informed by Kolb, particularly

[698] A. Schulz, 'Moors and the Bullfight: History and National Identity in Goya's "Tauromaquia"', *The Art Bulletin* 90/2 (2008) pp. 195-217.
[699] Aikman, *Natural History* p. 36.
[700] Goldsmith, *Animated Nature, Vol. II* 218-221; le Keux, *Illustrations* p. 19; Roberts, *Domesticated Animals* pp. 71-72; Fennell, *Quadrupeds* p. 433.
[701] Roberts, *Wild Animals* p. 59; Bell, *British Quadrupeds* p. 135; *Quadrupeds* p. 37; Carpenter, *Popular Cyclopedia* p. 219; Knight, *Pictorial Museum, Vol. I p*. 219.
[702] P. Kolben (trans. G. Medley), *The Present State of the Cape of Good Hope, Volume I* (London, 1831) pp. 176-178; F. le Vaillant, *New Travels into the Interior Parts of Africa, Vol. II* (London, 1796) pp. 157-158, 178.

commended the skill and ability of the Khoekhoen, a 'primitive' people, to train their cattle for these tasks, with Smellie's translation stating that:

> if we had a propper knowledge of our own interest, we would treat our dependants with greater lenity. Men of inferior condition, and less civilized, seem to have a better notion than other people of the laws of equality, and of the different degrees of natural equity. The farmer's servant may be said to be the peer of his master. The horses of the Arab, and the oxen of the Hottentot, are favourite domestics, companions in exercises, assistants in every labour… man by this communication, is not so much degraded as these brutes are exalted and humanised. They acquire affectionateness, sensibility, and intelligence. There they perform everything from love, which they do here from fear. They do more; for as their nature is improved by the gentleness of their education, and the perpetual attention bestowed upon them, they become capable of performing actions which approach to the human powers. The Hottentots train their cattle for war, and employ them in nearly the same manner as the Indians employ the elephants. These oxen are instructed to guard the flocks, which they conduct with dexterity, and defend them from the attacks of strangers and ferocious animals… Thus the most stupid of men are the best preceptors to brutes. How does it happen that the most enlightened man, instead of managing his fellow creatures, has so much difficulty in conducting himself?[703]

Discussions surrounding the Bakeleys within popular natural history literature inevitably possessed a memetic quality, with Buffon's influence clearly evident in works by Goldsmith, le Keux, Roberts, Fennell and Knight.[704] Within this discourse, the Khoekhoen were consistently commended for being able to instil their cattle with extraordinary behaviours, unseen in British herds, which were attributed to the close and loving relationship that existed between herdsmen and cattle. This was also reported in the writings of nineteenth-century travellers in southern Africa, such as William Burchell, whose observations were noted by many British popular natural history authors.[705]

The praise bestowed upon the Khoekhoen by British authors for their treatment of cattle highlights the recurring interplay between Romantic and Enlightenment understandings of

[703] Buffon (trans. Smellie), *Natural History, Vol. VI* pp. 183-185
[704] Goldsmith, *Animated Nature, Vol. II*; le Keux, *Illustrations* pp. 88-89; Roberts, *Domestic Animals* pp. 167-168; Fennell, *Quadrupeds* pp. 537-538; Knight, *Pictorial Museum, Vol. I* p. 163.
[705] Knight, *Pictorial Museum, Vol. I* p. 163.

societal stagnation, evident in the discourse surrounding societies perceived to be at an earlier stage of development than those of northern Europe. In this respect, European observers, informed by stadial theory, categorised the Khoekhoen as more primitive than the white settler-colonists of the Cape, due to their status as nomadic pastoralists, and frequently imbued them with romantically-informed qualities, such as their deeper connection to the natural world and their innocence, uncorrupted by modern society. By investing the Khoekhoen with such positive qualities, European writers were able to characterise these and other societies similarly deemed primitive as 'noble savages', using them rhetorically to reflect upon, identify and discuss the faults and shortcomings of European society, a precedent set by Kolb's original description of the Khoekhoen.[706]

By the end of the eighteenth century, most of the Khoekhoen near the Cape of Good Hope had either been displaced or enslaved by white settlers, a situation that helped to inform their sympathetic depiction by late-eighteenth and early-nineteenth-century writers, especially those with strong abolitionist beliefs, such as Anders Sparrman and Thomas Pringle.[707] As Lara Atkin recognises, Pringle's writings invested the San people, who were closely-related to the Khoekhoen and often referred to as 'Bushmen', with qualities that similarly rendered them noble savages in the eyes of his British, metropolitan readership, especially when he aligned them with romantic notions of the Scottish Highlander through explicit references to the works of Sir Walter Scott.[708] Although the San were generally recognised by colonists and European observers as hunter-gatherers and the Khoekhoen as nomadic pastoralists, their shared language and cultural practices allowed them to be similarly understood in romantic terms, which encouraged the Bakeleys to be viewed as a product of the Khoekhoen's special affinity with nature.[709]

Discussions surrounding the Khoekhoen's treatment of cattle within British popular natural history invited comparisons with and critiques of British practices, which encouraged readers to reflect on the treatment of cattle in Britain and to consider how this might be improved for the moral and economic benefit of the nation. This narrative reflected one of

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[706] A. Good, 'The Construction of an Authoritative Text: Peter Kolb's description of the Khoikhoi at the Cape of Good Hope in the Eighteenth Century' in P. Mancall (ed.) *Bringing the World to Early Modern Europe: Travel Accounts and their Audiences* (Leiden, 2006) p. 85.
[707] Hodacs and Persson, 'Globalising the Savage' p. 2; R. Vigne, *Thomas Pringle: South African Pioneer, Poet and Abolitionist* (Woodbridge, 2012) p. 113.
[708] L. Atkin, 'The South African "Children of the Mist"': The Bushman, the Highlander and the Making of Colonial Identities in Thomas Pringle's South African Poetry, 1825–1834', *The Yearbook of English Studies* 48 (2018) pp. 199-215.
[709] For more information on the connections made between the Khoekhoen and the San people, see: S. Marks, 'Khoisan Resistance to the Dutch in the Seventeenth and Eighteenth Centuries', *Journal of African History* 13/1 (1972) pp. 57-60.

the more generic, pedagogic aspirations of the popular natural history genre, which was to promote the importance of animal welfare at a national level and to provide young readers with a clear understanding of the benefits that could be gained through kindness to animals. These messages are most poignantly captured by Roberts, who, through her reflective and detailed comparisons, argues that the quality of British cattle could be improved if masters followed the examples set by people, such as the Khoekhoen:

> how different is their situation from that of many poor oxen, which in this enlightened country have frequently so much to endure from their masters!... men of inferior condition, and less civilised, seem more correct in their ideas of the rights of the animal creation, and the different degrees of natural equity. The horses of the Arab, and the oxen of the Hottentot, are favourite domestic companions. They work cheerfully with their masters, and by this communication the faithful servant is improved. He becomes more affectionate, intelligent, and confining. There they effect from love, what in this country is too frequently the consequence of fear; and as their nature is improved by the gentleness of their education, they perform actions which seem to result from something more than instinct.[710]

Roberts clearly raises questions about the British treatment of animals by comparing this with the treatment of animals by other societies deemed savage or primitive and strongly ties the kind treatment of animals to her expectations of an advanced society, such as Britain. Whilst authors often invoked these relationships to critique British practices, their comparisons largely remained within a framework of assumptions that presented Britain as a modern, civilised society and animal welfare as an important indicator of societal advancement. Consequently, Roberts argues that animal welfare in Britain needed to reform in order to appropriately reflect its advanced status. Furthermore, by emphasising how 'primitive' societies were benefiting from their kind and careful treatment of their animals, Roberts, and other British popular natural history authors construed the reform of animal welfare as essential and within the advanced, British nation's grasp. However, whilst some non-British societies and cultures were seen to exemplify good animal welfare, others were criticised for taking the care of animals too far, especially in those cases where the treatment of animals stemmed from non-Christian, religious beliefs and practices that were seen to challenge human supremacy over the natural world.

[710] Roberts, *Domestic Animals* pp. 167-168.

Pampered Bulls:
Britishness, Hinduism and modernity

Until the 1830s, the British popular natural history discourse surrounding humped cattle, or zebu, distributed across Asia, Africa and the Middle East, had largely followed Buffon's lead of defining these animals through their distinctive physical characteristics, which set them apart from the cattle of Britain and Europe.[711] Most British authors focused on the miniature zebu varieties, which had been imported into Britain from Bengal and displayed in contemporary private collections, such as those of the Duchess of Portland, the Duke of Richmond, Warren Hastings, and Queen Charlotte, as well as in public menageries, such as the Exeter 'Change.[712] Although British popular natural history authors had frequently recognised the broad distribution of the zebu, they had commonly identified India as the animal's home range, from where it had spread across Asia and Africa. By the early nineteenth century, a new paradigm had emerged within this discourse, placing a new emphasis on a specific kind of zebu, the brahmin or 'brahminy' bull, which was often presented as a distinct entry and even replaced the zebu within some works of British popular natural history. This shift in emphasis undoubtedly corresponded with the increasing physical presence of brahmin bulls in Britain in collections such as the Zoological Society Gardens and the private menagerie of the Earl of Derby (see figure 64).[713] This not only afforded growing access to these animals but also increased their coverage in accompanying literature.

[711] M. Osborne, 'Zebu' in A. Burton and R. Mawani (eds.) *Animalia: An Anti-Imperial Bestiary for Our Times* (2020, Croydon) p. 222.
[712] Grigson, *Menagerie* pp. 127-128, 131, 148, 171, 199.
[713] Barrow, *Characteristic Sketches*; 'The Earl of Derby's Menagerie at Knowsley', *The Illustrated London News* (11/10/1851) pp. 44; J. Stevens, *A Catalogue of the Menagerie and Aviary at Knowsley* (London, 1851) pp. 5-6.



Figure 67: The Earl of Derby's herd of brahmin cattle at his menagerie at Knowsley (1851, source: The Illustrated London News*).*

Within British popular natural history literature, constructions of the brahmin bull, named after the Hindu priestly caste with which it was closely associated, became deeply intertwined with British conceptions of Hinduism, informed by the observations of BEIC administrators, missionaries and travellers. These observations built on earlier statements by European naturalists, with Smellie's translation of Buffon bemoaning that 'the respect the Indians entertain for these animals is so great that it has degenerated into superstition', a sentiment echoed in le Keux's statement that the care and attention with which cattle were treated in India had 'degenerated even into blind admiration'.[714] However, as the BEIC gradually expanded and consolidated its control over India during the late eighteenth and early nineteenth centuries, investigations were increasingly conducted into the manners, customs and principles of the cultures prevalent in the areas it governed, codifying cultural practices into and through colonial policy.[715] When the British first arrived in India, they encountered local populations whose spiritual beliefs, practices and rituals were essentially syncretic but, following the numerous attempts of British administrators, theologians and other observers to understand and define what they understood to be the indigenous religion of India, Hinduism strongly emerged as a coherent body of principles centred around a set of universally-held beliefs.[716]

[714] Buffon (trans. Smellie), *Natural History, Vol. VI* pp. 179-180; le Keux, *Illustrations* p. 88.
[715] See: Cohn, *Colonialism and its Forms of Knowledge*.
[716] See: B. Pennington, *Was Hinduism Invented? Britons, Indians, and the Colonial Construction of Religion* (Oxford, 2005).

Although the BEIC generally discouraged missionary activity, proselytising efforts in company territory were funded and facilitated by British organisations, such as the Society for Promoting Christian Knowledge, and Lutheran and evangelical missionaries operated in and beyond Bengal.[717] The work of these missionaries, particularly written material published and read in the metropole, served to reinforce imaginings of India and Hinduism that corresponded with the growing, imperialist rhetoric of the BEIC, which was keen to justify its colonial regime. Geoffrey Oddie points out that, although the aims of protestant missionaries did not necessarily conform to the company's administrative objectives, the missionary activities that were occurring within this colonial context helped to strengthen the notions of European superiority and native inferiority that underpinned company rule by characterising Hinduism as 'irrational, immoral and inhumane'.[718] Moreover, as Onni Gust illustrates, by the turn of the nineteenth century, influential figures, such as Charles Grant and James Mackintosh, were advocating for the company to govern its territories in accordance with 'Christian virtue', which they envisioned as a central component of enlightened, 'English' law and government.[719]

Consequently, the treatment of brahmin bulls by Hindus, presented within British popular natural history as an illustration of religious tyranny, dogmatic superstition and irrationality, contrasted sharply with British perceptions of their protestant Christian faith. These constructions temporalised Hinduism and reinforced its status as an atavistic religion in relation to protestant Christianity, which was perceived as a more modern, rational and refined doctrine, indicative of a modern society. As such, the brahmins were frequently presented as the custodians of a primitive faith, an arresting element that impeded the advancement of Indian society. According to Thomas Metcalf, this focus on the brahmins within British conceptions of Hinduism had stemmed from eighteenth-century, European orientalist scholars, whose earlier constructions of Hinduism, based on their limited knowledge, had emphasised idolatry and the position of the brahmins as the undisputed leaders of the faith.[720] Christian churchmen and missionaries operating in India reiterated these ideas and, as Oddie observed, non-conformist and evangelical writers, who generally viewed religious hierarchy with hostility, regularly characterised the

[717] P. Carson, *The East India Company and Religion, 1698-1856* (Woodbridge, 2012) pp. 10-15.
[718] G. Oddie, *Imagined Hinduism: British Protestant Missionary Constructions of Hinduism, 1793-1900* (New Delhi, 2006) p. 23.
[719] O. Gust, *Unhomely Empire: Whiteness and Belonging, c. 1760-1830* (London, 2020) pp. 119-121.
[720] T. Metcalf, *Ideologies of the Raj* (Cambridge, 1995) pp. 114, 132-135; Oddie, *Imagined Hinduism* p. 61.

brahmins as an innately tyrannical, 'priestly caste'.[721] High Church Anglicans were also quick to distance their clerical structures from those of Hinduism by associating the latter with notions of 'oriental despotism'.[722]

These attitudes were consolidated within early-nineteenth-century British popular natural history through the reproduction of specific extracts from travel literature within entries on the brahmin bull. The most notable of these was a passage from *Narrative of a Journey through the Upper Provinces of India*, by Reginald Heber, the Anglican Bishop of Calcutta [now Kolkata] from 1823 until his death in 1826, published posthumously in 1828:

> These bulls are turned out as calves, on different solemn occasions, by wealthy Hindoos, as an acceptable offering to Siva [Shiva]. It would be a mortal sin to strike or injure them. They feed where they choose, and devout persons take great delight in pampering them. They are exceeding pests in the villages near Calcutta, breaking into gardens, thrusting their noses into the stalls of fruiterers and pastry-cooks' shops, and helping themselves without ceremony.[723]

Although Heber's original intention was to produce a private diary for his wife, his *Narrative* became widely read, this passage being reproduced in many works of popular natural history, such as those by Barrow, Roberts, Fennell and Knight, as well as the Society for the Promotion of Christian Knowledge's *The Book of Animals*.[724]

Animals featured prominently in Heber's writings and observations of 'the sacred bulls devoted to Shiva' abounded his descriptions of temples, 'peopled… with bulls and beggars', and urban centres, where the animals lazily ambled through busy streets 'tame and familiar as mastiffs… hardly to be kicked up (any blows, indeed, given them must be of the gentlest kind, or woe be to the profane wretch who braves the prejudice of this fanatic population)'.[725] Here, Heber repeatedly synonymised the brahmin bull with the Hindu religious practices surrounding it, allowing the animal's treatment to illustrate ideas of Hindu irrationality by highlighting the ways in which these religious beliefs and customs inverted the hierarchy of human supremacy that lay at the heart of Christian

[721] Oddie, *Imagined Hinduism* pp. 30-33.
[722] Oddie, *Imagined Hinduism* pp. 30-33.
[723] R. Heber, *Narrative of a Journey through the Upper Provinces of India, Vol. I,* Second Edition (London, 1828) p. 145.
[724] Barrow; Roberts, *Domestic Animals* pp. 158-159; Fennell, *Quadrupeds* p. 549; Knight, *Pictorial Museum, Vol. I p*. 167; Knight, *Menageries, Vol. III* pp. 241, 243; N.A., *The Book of Animals* p. 151.
[725] Heber, *Narrative, Vol. I,* Second Edition pp. 372-373, 381.

understandings of the relationship between humans and the natural world. Indeed, this treatment of the brahmin bull by Hindus was perceived as an absurd subversion of the natural order that helped to construe Hinduism as a superstitious tyranny underpinned by an oppressive 'Brahminism'.

These ideas corresponded with Heber's broader views of Hinduism as, according to Oddie, Heber saw Indians as 'an admirable people, not because of but despite their religious beliefs and practices', which he felt had inhibited India's spiritual and societal development.[726] Although Heber's conceptions of Hinduism generally mirrored those of contemporary, evangelical missionaries, his criticisms of Hinduism centred round the poor treatment of animals, women and the lower castes, which he attributed to the emphasis placed on ritual rather than compassion within Hinduism.[727] This is particularly evident in Heber's discussions regarding the treatment of consecrated bulls compared to working cattle, the latter being forced to endure long hours of labour with little care or attention, which Heber presented as an example of Hindu hypocrisy.[728] This contrasted sharply with the treatment of brahmin bulls, whose pampering, according to Heber, did not stem from natural compassion nor as a reward for service, but purely from the dogmatic observance of Hindu ritual, which further characterised Hinduism as a faith built upon irrational and unquestioning superstition.

Within the broader British popular natural history discourse surrounding the brahmin bull, narratives of Hindu absurdity, idolatry and superstition were not only evident in the writings of churchmen and missionaries, but also in works, such as Walter Hamilton's *A Geographical, Statistical, and Historical Description of Hindostan*, published in 1820, and quoted by later authors, such as Barrow, Shoberl and Jardine.[729] Hamilton, an early ethnographer and anthropologist based in India and the younger brother of the esteemed orientalist scholar, Alexander Hamilton, had initially noted, in his 1815 *East India Gazetteer*, that 'the Brahminy, or sacred bull of the Hindoos… rambles about the villages without interruption; he is caressed and pampered by the people, to feed him being deemed a meritorious act of religion'.[730] In his later *Description*, Hamilton provided further insights into his observations of the Hindu rituals surrounding the brahmin bull, which he

[726] Oddie, *Imagined Hinduism* p. 87.
[727] Oddie, *Imagined Hinduism* pp. 88, 90-92.
[728] Heber, *Narrative, Second Edition, Vol. I*
[729] Barrow, *Characteristic Sketches*; Shoberl, *Quadrupeds, Vol. I* pp. 8-10; Jardine, *The Naturalist's Library, Mammalia, Volume IV, Ruminantia Part II* pp. 213-214.
[730] W. Hamilton, *The East India Gazetteer* (London, 1815) p. 123. For more information on Walter Hamilton, see Alexander Hamilton's entry in the *ODNB* (by Rosane Rocher): https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-12044?rskey=nAn9bT&result=4 [accessed 28/09/2022].

presented not only as an example of idolatry and superstitious absurdity but also as an irrational menace to the local community:

> In many parts of Bengal an absurd custom prevails, which frequently occasions much damage to the farmers. When a man dies, and the ceremony in commemoration of ancestors has been performed, a young bull is consecrated with much solemnity to Siva, and married to four young cows. He is then turned loose, after being marked, and may go where he pleases: it is not lawful to beat him, even though he may be devouring a vulnerable crop, or have entered a shop and be eating the grain exposed there for sale. The sufferers shout and make a noise to drive him away: but he soon despises this vociferation, and eats heartily until he is satisfied. These consecrated bulls become, in consequence of these free quarters, very fat, and are extremely fine animals to look at, but very destructive. The cows are given away to Brahmins, and he seldom sees them again. The last two rajahs of Dinagepoor, among other expedients which they devised with great success to ruin themselves, consecrated in this manner about two thousand cows. As no person presumed to molest the sacred animals, the vicinity soon became desolate.[731]

Hamilton ridiculed the absurd and irrational, religious dogma that afforded privileges to consecrated bulls over humans and characterised this system as fundamentally oppressive. Moreover, he blamed the Hindu adherence to ritual for promoting a system that impoverished both local elites and ordinary people, the former being rendered foolish, ineffectual rulers whilst the latter were reduced to a pitiable position. Through his observations, Hamilton implicitly compared British understandings of 'native' government with rational, British, colonial order, grounded within a legal framework that claimed its authority from Christian morality, a dichotomy that also served to reaffirm and validate Britain's imperial project in India. Owing to Hamilton's claim to have provided, through his *Gazetteer* and *Description*, a comprehensive understanding of India that could be integrated into European systems of knowledge, his observations carried some weight and the accounts of his colonial encounters with brahmin bulls, which were infused with an authoritative status, helped to legitimise broader assertions of British superiority.[732]

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[731] W. Hamilton, *A Geographical, Statistical, and Historical Description of Hindostan, Vol. I* (London, 1820) pp. 101-102.
[732] Marriot, *The Other Empire* pp. 133, 140-141.

The extent of the problem with these indolent and pampered brahmin bulls, due to their sacred status informed by idolatrous superstition, was further emphasised by Shoberl, quoting a 'Miss Roberts', most likely the British poet and travel writer, Emma Roberts, whose poetry and brief vignettes of her observations of India were popular in the early nineteenth century.[733] Quoting Roberts, Shoberl highlighted the many and serious 'inconveniences suffered from these privileged beasts', which 'infested' the narrow streets of Bengal cities:

> the Brahmin bulls form a nuisance of no small magnitude… allowed to thrust their devouring jaws into the baskets where grain and vegetables are exposed for sale in the bazaars, they grow to an immense size, and, over-fed and growing vicious with age, become extremely dangerous. The passenger who, blocked in some narrow entry, is obliged to wait the pleasure of one of these petted animals before he can proceed on his way, may esteem himself lucky if he escapes without personal injury.[734]

When viewed through a British lens, this need to navigate around brahmin bulls in Indian cities and to accommodate and placate them, due to their sacred status, was irrational because it placed the bulls above the human inhabitants of these spaces, inverting the role of cattle from useful, domestic animals to detrimental human hazards.

British writers reporting from India on the presence of brahmin bulls in busy city streets invariably invited comparisons with the contemporary conventions of keeping urban livestock in Britain. Although historians, such as Keith Thomas, have maintained that the disappearance of livestock from early-modern, urban spaces fuelled a growing alienation from the natural world within British urban populations during this period, this consensus has recently been challenged by Almeroth-Williams, who has pointed out that 'virtually the entire metropolitan population interacted with livestock in one way or another', with pigs and cattle remaining important features of the London urban environment into the nineteenth century.[735] However, these substantial animal populations were heavily controlled and confined to pens, where they could be better managed and guarded from potential theft, their treatment as property enshrined in the numerous laws enacted to regulate where and how animals could be reared in an urban setting.[736] Consequently, the

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[733] M. Gibson and J. Rudy, 'Colonial and Imperial Writing' in L. Peterson (ed.) *Victorian Women Writers' Achievements: Genres and Modes* (Cambridge, 2015) p. 190.
[734] Soberl, *Quadrupeds, Vol. II* pp. 10-11.
[735] K. Thomas, *Man and the Natural World* (London, 1983) pp. 10, 52-53, 101-104; Amleroth-Williams, *City of Beasts* p. 97.
[736] Amleroth-Williams, *City of Beasts* pp. 92-93.

very visible presence of brahmin bulls in the Indian urban environment and their ability to wander the streets at liberty, as described in British accounts of India, contrasted so strongly with British expectations regarding the keeping and management of livestock in urban environments that ideas of innate difference were reinforced.

The influence of these extracts on constructions of the brahmin bull in early-nineteenth-century British popular natural history literature can be seen through the memetic reproduction of the same core narratives by later authors. For example, in Bennett's 1830 guide to the Zoological Society Gardens, zebu cattle were stated to be 'treated with great veneration by the Hindoos, who hold it sinful to deprive them of life under any pretext whatsoever… but they do not, in general, scruple to make the animals labour for their benefit', mirroring Heber's earlier claims of Hindu hypocrisy.[737] Bennett's observation that certain breeds were 'exempt from all services, and have the privilege of straying about the towns and villages, and of taking their food wheresoever they please', similarly reiterated earlier observations by Hamilton, Heber and Roberts, who all placed Hinduism at the centre of their constructions of the brahmin bull.[738] As Bennett's construction of the brahmin bull formed part of a guidebook, it served to instruct and shape how visitors would conceptualise and imagine the animal within its exotic home range, even though their encounter would be within a metropolitan context.

In Thomas Landseer's illustrations of brahmin bulls, which were frequently based on specimens in the Zoological Society Gardens, these animals were frequently located within backgrounds that evoked a sense of oriental exoticism, with images often containing buildings that conformed to British conceptions of 'eastern' architecture (see figures 65, 66 and 68). In Barrow's *Characteristic Sketches*, for instance, the domed structure in the background of Landseer's depiction of the brahmin bull, possibly based on the monkey house at Regent's Park, served to integrate this animal into an oriental imaginary that located it within an 'eastern', non-Christian setting (see figure 67). As these images often accompanied textual descriptions of the bulls, they worked collectively to construct this animal as an exotic species, innately tied to 'eastern', non-Christian peoples.

[737] Bennett, *Gardens, Vol. I* p. 70.
[738] Bennett, *Gardens, Vol. I* p. 70.

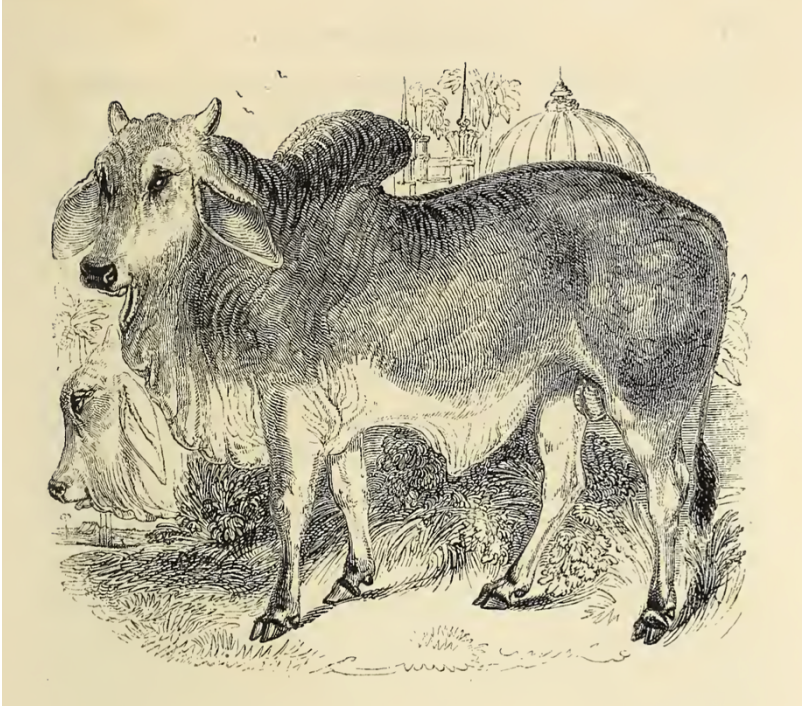


Figure 68: Landseer's illustration of a zebu from Bennett's The Gardens and Menagerie of the Zoological Society Delineated *(London: Charles Tilt, 1831, source: Google Books).*



Figure 69: Landseer's illustration of the brahminy bull and the miniature zebu in Barrow's Characteristic Sketches *(London: Moon, Boy and Graves, 1832, source: Google Books).*



Figure 70: The monkey house at Regent's Park, as depicted by George Scharf (1835, The British Museum, 1861, 1108.584, source: Wikimedia Commons).

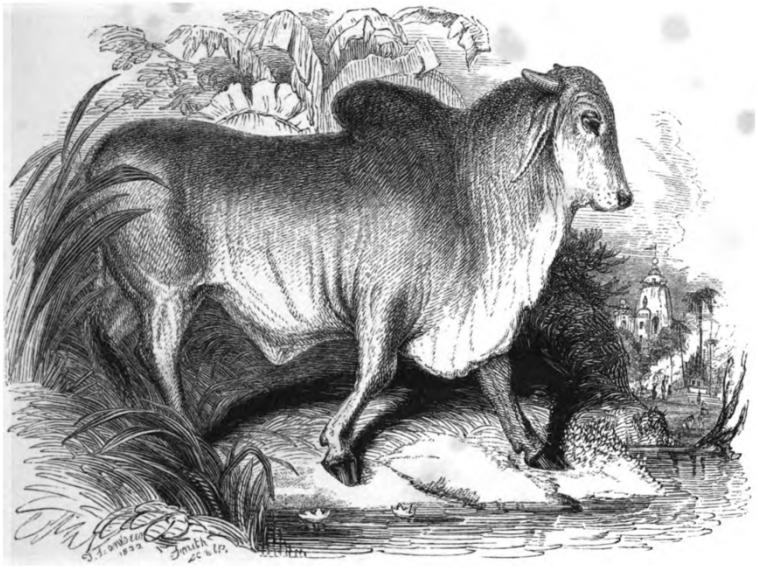


Figure 71: Landseer's illustration of the brahmin bull in Frederic Shoberl's Natural History of Quadrupeds, Volume I *(London: Samuel Bentley, 1834, source: Google Books).*

Strong links between the brahmin bull and Hinduism were also present in Partington's *The British Cyclopædia of Natural History*, published in 1835, which stated that 'the sacred bull of most parts of India' was 'fat, indolent, and inoffensive' and could be found 'thronging the streets, and the courts, and the areas of the temples' in those cities 'crowded with the more wealthy and devout Hindoos of high caste', this geographical conflation firmly tying

the animal to its human namesake.[739] With its dancing, turbaned figures in the background, Landseer's accompanying illustration of the brahmin bull similarly alluded to the animal's religious significance (see figure 69). These associations not only helped to configure the brahmin bull as a potent metonym for the brahmin caste and the Hindu faith but also evoked strong imaginings of a crowded Indian setting, characterised as archaic by the disorderly melange of animals and people.



Figure 72: Landseer's illustration of the brahmin bull in Partington's The British Cyclopædia of Natural History, First Volume *(London: Orr and Smith, 1835, source: Google Books).*

The continuing emphasis placed on the sacred status of the brahmin bull within British popular natural history served to temporalise this animal in the past due to the generally held British perceptions of Hinduism as comparable to those religions practised by the ancient civilisations of Europe and North Africa. Indeed, Oddie noted that Lutheran and other protestant missionaries in India positioned Hindu beliefs at the same level as Greek and Roman mythology, based on their convictions that 'non-European societies were not subject to European laws of progress… they were essentially static, arrested in their primitive state'.[740] According to Metcalf, by the middle of the nineteenth century, the British had regularly sought to qualify and understand Hindu beliefs and practices by

[739] Partington, *Cyclopædia* pp. 561-562.
[740] Teltscher, *India Inscribed* pp. 100-101.

characterising this religion as a surviving element of the ancient world, placing it alongside the polytheistic creeds of ancient Greece, Rome, Persia and Egypt.[741] These British conceptions of Hinduism reinforced broader notions of India as backward and confined to an earlier stage of stadial development compared to Britain. According to Cohn, by the end of the eighteenth century, the British generally imagined India as 'a kind of living fossil bed of the European past, a museum which was to provide Europeans for the next two-hundred years a vast field on which to impose their own visions and history'.[742] These attitudes were clearly expressed by Knight in his *Pictorial Museum*, in which he stated that 'in India, where in many points the practice and worship of the ancient nations were the same as those of the Egyptians, the ox was held sacred, and still is so by the Brahmins'.[743]

As natural theology remained a key tenet within British popular natural history into the nineteenth century, the treatment of the brahmin bull by Hindus was also regularly highlighted to illustrate tyrannical idolatry, which similarly served to indicate Hinduism's ancient and primitive status. This can be seen in the entry on the brahmin bull in the Religious Tract Society's *Quadrupeds*, which described how the animals, 'emboldened by the toleration they experience… make free with every vegetable to which they take a fancy, no one daring to resist or drive them away: often they lie down in the street: no one must disturb them; every one must give place to the sacred Ox of Brahma: thus they frequently prove nuisances which superstition alone would endure'.[744] Indeed, this condemnation of the animal's enshrined freedom from human control acted as 'proofs of moral and intellectual debasement' that lay in an 'idolatry and superstition' that had endured in India 'from the remotest times', preserved through 'a panoply of rites and observances as absurd as cruel'.[745] Parallels can be drawn here between the discussions surrounding the brahmin bull and the British condemnation of the practice of Sati, the ritual self-immolation of Hindu women on the funeral pyres of their dead husbands, which was frequently presented by missionaries as a potent example of Hindu barbarity, which needed to be supressed through colonial legislation and state-sponsored proselytization efforts.[746]

The fact that the Hindu treatment of the brahmin bull placed the animal's status above that of man was a particular source of derision for British popular natural history authors.

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[741] Metcalf, *Ideologies of the Raj* p. 136.
[742] Cohn, *Colonialism and its forms of Knowledge* p. 79.
[743] Knight, Pictorial Museum, Vol. I p. 166
[744] *Quadrupeds* p. 112.
[745] *Quadrupeds* p. 112.
[746] See: L. Mina, *Contentious Traditions: The Debate on Sati in Colonial India* (Los Angeles, 1998); A. Major, *Pious Flames: European Encounters with Sati, 1500-1830* (Oxford, 2006).

In this respect, Jardine stated that, within Hinduism, brahmin bulls were consecrated, 'as with many other of the animals employed in the mythology of that remarkable people', being 'fed and pampered and allowed to use their freedom anywhere with impunity, severe penalties being inflicted on anyone who will molest them, even when destroying their growing crops or other property'.[747] Loudon was more sympathetic but reiterated that zebu were 'treated with great veneration [by the Hindus], and it is held sinful to deprive them of life, or eat their flesh', with some 'exempt from all labour, and allowed to wander about, and subsist on the voluntary and pious contributions of the devotees of their faith'.[748] This discourse was evidently pervasive, with Low's agricultural writings similarly declaring that brahmin bulls were 'absolute pests in the villages of India, thrusting their noses into the stalls of fruiterers and pastry-cooks, robbing the peasants of their little treasure, and helping themselves to whatever they please'.[749]

Knight, in his *Pictorial Museum*, claimed that 'a vast distinction' existed in India 'between this absurd reverence for consecrated bulls and the ordinary treatment of the working ox', reflecting 'that the ox should be severely treated or employed in hard work by the Brahmins seems a sort of contradiction to the principles by which these people profess to be guided, but such inconsistencies are too common to be surprising'.[750] This built on Heber's original comments regarding the divergent treatment of sacred and working bulls in India to further characterise Hinduism as a contradictory and hypocritical set of beliefs which encouraged animals to be well-treated not due to a sense of compassion but due to the dogmatic observances of ritual customs. This sentiment was similarly articulated in other publications produced by the *Society for the Diffusion of Useful Knowledge*, with Lucy Warwick observing that the description of the brahmin bull given in Knight's *The Penny Magazine* contained colonial comparisons that served to denigrate native peoples by highlighting their refusal to 'take advantage of the bull's work capability' due to its venerated status, which ran 'contrary to the British ideas of ordering and ranking nature'.[751]

The lack of human dominance over animals associated with the Hindu treatment of brahmin bulls reinforced understandings of these practices as innately irrational, unnatural and oppressive. Aikman, for instance, asserted that 'where the Brahmanical superstition prevails', the 'blessing' of cattle 'becomes a curse' as, even when the children of Indian

[747] Jardine, *The Naturalist's Library, Vol. IV* p. 213.
[748] Loudon, *The Entertaining Naturalist* p. 115.
[749] Low, *Breeds* p. 258.
[750] Knight, *Pictorial Museum, Vol. I* p. 167.
[751] L. Warwick, 'Print and British Imperialism: The Society for the Diffusion of Useful Knowledge, 1826-46,' PhD dissertation, (Oxford Brookes University, 2016) p. 79.

peasants faced starvation, 'these "holy brutes" must be pampered'.[752] He further pointed out that when 'the hopes of the country were hanging upon gathering in perhaps a scantly harvest' the peasant was not 'allowed to beat them away, when destroying a valuable crop, or touch them when devouring the victual in the corn shops'.[753] These discussions presented poverty and famine in India as natural occurrences that were exacerbated by the oppressive and superstitious system of beliefs, practices and observances that constituted the 'native' religion of Hinduism.

Famines had occurred more regularly in northern India during the eighteenth century, as the Mughal Empire had gradually fragmented into smaller, competing polities. Indeed, by the end of the eighteenth century, major famines had become endemic to the region as land taxation had intensified under Company rule.[754] This situation, combined with widespread accusations of corruption and mismanagement, was a source of considerable anxiety surrounding Britain's colonial efforts and certainly contributed to the BEIC's plummeting reputation in Britain, culminating in the trial, from 1787 to 1795, of Warren Hastings, the first Governor-General of Bengal. Following the 1770 famine in Bengal, which had reduced the local population by a third, contemporary commentators and some Company employees strongly criticised the role of company policy, individual officials, coercive trading practices, transportation issues and the monopolistic control over local trade networks, which they felt had all contributed to the severity of the crisis.[755] Modern historians have articulated similar findings, with Vinita Damodaran recognising that, although the El Niño weather event in 1769 had instigated the harvest failures in 1770, the situation was exacerbated by the collapse of local drought-prevention systems due to the BEIC's excessive taxation demands, which had built on earlier tax burdens stemming from the waning years of Mughal rule, to cause local, minor landowners to neglect their long-standing irrigation networks.[756]

Nicholas Dirks argues that, following the trial of Warren Hastings, the language of scandal that pervaded criticisms of the BEIC in the British metropole was transferred to discussions surrounding the Indian people as the British state became increasingly involved in the

[752] Aikman, *Natural History* p. 41.
[753] Aikman, *Natural History* p. 41.
[754] L. Visaria and P. Visaria, 'Population (1757-1947)' in D. Khumar (ed.) *The Cambridge Economic History of India, Volume 2: c. 1757- c. 1970* (Cambridge, 1983) pp. 476-478.
[755] P. Marshall, *The Making and Unmaking of Empires: Britain, India and America, c. 1750-1783* (Cambridge, 2005) p. 212.
[756] Damodaran, 'The East India Company, Famine and Ecological Conditions in Eighteenth-Century Bengal' pp. 92-93.

administration of the company's Indian territories.[757] Through this emerging rhetoric, the human misery observed in company territories was frequently presented as a product of the 'native' character, of local social structures and of religious practices. Consequently, the Indian people were presented as weak, feeble and in need of external governance and instruction, which collectively provided potent justification for imperial rule.[758] Aikman's links between the brahmin bull, Hinduism and famine conformed to these broader British attitudes towards India by connecting famine to the primitive status of the local populations and by demonstrating how the effects of famine were intensified through irrational, 'native' practices, thereby circumventing any British culpability and reaffirming the imperial project. As the nineteenth century progressed, these explanations regarding food shortages in India gained common ground in Britain and Malthusian principles were readily employed by colonial administrators to account for famine and to inform the state response.[759]

As India's history was increasingly investigated, interrogated and recorded by British officials, ideas of Indian primitiveness within the discourse surrounding the brahmin bull in British popular natural history, were not only expressed through the animal's role in Hindu rituals but also through descriptions of the animal's very form. Fennell, for instance, reported that sculptures of zebu found in many Indian ruins and other 'ancient relics' had revealed that 'these animals possessed, at least two thousand years before the Christian era, the same peculiarities which now distinguish them', connecting the animal's unchanging form and its continuing presence in India to its ancient past.[760] Knight similarly remarked that the cattle of India 'were precisely the same at least 2000 years before the Christian era as they are at present', having 'absolutely undergone no alienation in the peculiar characters by which they are so readily to be distinguished', adding that 'the zebu race has been from the remotest antiquity - an antiquity out of the pale of records - precisely what it is in the present day'.[761]

In Fennell and Knight's constructions, the brahmin bull was presented as an eternal animal, its unchanging form mirroring the static nature of Indian civilisation in accordance

[757] See: N. Dirks, *The Scandal of Empire: India and the Creation of Imperial Britain* (Cambridge, 2006).
[758] Dirks, *Scandal*.
[759] S. Ambirajan, 'Malthusian Population Theory and Indian Famine Policy in the Nineteenth Century', *Population Studies* 30/1 (1976) p. 5. For nineteenth-century famine responses from the British authorities in India, see: M. Mann (trans. B. Barron), *British Rule on Indian Soil: North India in the First Half of the Nineteenth Century* (New Delhi, 1999) pp. 170-184.
[760] Fennell, *Quadrupeds* p. 549.
[761] Knight, *Menageries, Vol. III* p. 237.

with orientalist narratives of eastern stagnation. Moreover, the enduring form of the brahmin bull contrasted sharply with the malleable physiology of British cattle, whose modern status was qualified by British breeders, who manipulated and rationalised their cattle into systems of agriculture that aimed to maximise productivity. Consequently, through its individual entries on British and Indian cattle, British popular natural history literature invited comparisons between the modern status of British cattle and the imagined primitiveness of their Indian counterparts, creating a dichotomy that was simultaneously projected on to the British people and their Indian, colonial subjects, which reinforced claims of British modernity and superiority as well as Indian societal stagnation and inferiority.

Conclusion

This chapter has clearly illustrated how the discourse surrounding the treatment of animals within late-eighteenth and early-nineteenth-century British popular natural history literature served to reinforce a sense of British national superiority grounded in conceptions of modern, middle-class, Christian Britishness. This discourse manifested across a broad assortment of individual animal entries that were correspondingly varied in nature, with natural history authors praising or condemning specific human-animal relationships, both within and beyond Britain, based on how far they conformed or did not conform to idealised imaginings of the permissible treatment of animals. Through these discussions, the parameters for the morally-acceptable treatment of animals were configured to reflect and reaffirm emerging conceptions of a modern, middle-class, Christian Britishness. These moral judgements were largely informed by stadial models of societal development and existed within a global, conceptual framework that allowed specific human-animal relationships to be temporalised as modern or backward, a status that was correspondingly projected on to the people and animals closely associated with these practices.

This can be seen in the moral judgements surrounding blood sports, which were universally criticised as distinctly backward and immoral, these condemnations extending beyond the practices themselves to the animals and people closely associated with them, both within and beyond Britain. Whilst these negative attitudes towards blood sports were already evident in eighteenth-century works of popular natural history, they became increasingly ingrained within this discourse during the early nineteenth century, when concerns surrounding animal cruelty in Britain began to gather pace and became increasingly integrated into British political rhetoric and parliamentary legislative efforts. Mirroring this broader discourse, contemporary popular natural history literature presented blood sports,

such as animal baiting, as backward, immoral, outmoded and distinctly un-British and strongly tied these practices to the working and criminal classes.

It was the implicit juxtaposing of these blood sports against the animal welfare practices ascribed to the modern, British urban middle classes that served to temporally and spatially distance the people, animals and places associated with the former from the latter, namely modern Britain. Commenting on the decline of blood sports in contemporary Britain, British popular natural history authors were keen to condemn practices, such as bearbaiting and bullbaiting, and were quick to relegate them to Britain's past in order to display the nation's advanced, societal status. As the places in Britain where blood sports were still being practised, and the people and animals associated with them, had the potential to challenge claims of British, Christian compassion, their spatial and temporal distancing from modern Britain within British popular natural history literature was deemed essential in order to preserve the moral superiority of the nation through its kind treatment of animals. Furthermore, by aligning Britain's declining blood sports with those still very popular outside of Britain, most notably bullfighting in the catholic countries of southern Europe, popular natural history authors further alienated animal baiting from modern Britain and promoted understandings of the superior, British national character by contrasting it against an imagined, inferior, foreign and religious other.

British popular natural history authors reinforced the advantages of kindness to animals through their discourse surrounding the cattle of the Khoekhoen, whose kindness and care allowed them to train their cattle for war and for guarding against predators and thieves, practices which were unprecedented in Britain. As the Khoekhoen were generally deemed savage or primitive, British popular natural history writers frequently utilised romantic notions of the noble savage when praising their exemplary treatment of cattle, which they felt could be integrated into contemporary British practices. This narrative further implied that, if these practices could be achieved by such a primitive society, they would certainly be within the grasp of a civilised nation, such as Britain. Indeed, the need to improve British practices did not challenge its advanced status, as these critiques existed within a broader framework that presented Britain's advanced status as self-evident and its adoption of commendable practices as characteristic of the continuing development of an advanced society, even if the adopted practices were formerly ascribed to societies viewed as less advanced.

The discourse surrounding the brahmin bull within early-nineteenth-century British popular natural history literature further reveals how the parameters for the treatment of animals were configured in order to avoid any challenges to Christian understandings of

human supremacy over the natural world and to support the belief that animal welfare represented a contractual obligation that depended upon animal subservience to humans. Consequently, any human-animal relationships that were seen to contravene these ideas were thoroughly condemned and distanced from the permissible animal practices that were generally associated with modern, civilised societies, such as Britain.

These principles were clearly contested by the practices associated with the Hindu veneration of the brahmin bull, which was frequently presented by British popular natural history authors as irrational, superstitious, despotic and atavistic, in line with British perceptions of Hinduism as an ancient, irrational and superstitious faith compared to the rational doctrine ascribed to protestant Britain. These discussions also supported broader, British conceptions of India as a backward and stagnated civilisation, informed by notions of oriental despotism and stadial development, with Hinduism being presented as an important, arrestive factor within this stagnation. To this end, the very form of the brahmin bull or zebu, which was recognised as distinctly different from that of European cattle, helped to characterise it, as well as the people and place associated with it, as ancient and unchanging. This further illustrates how discussions within British popular natural history literature on the treatment of animals within the colonial sphere helped to configure imaginings of British national identity that were deeply intertwined with conceptions of the imperial nation.

Conclusion

The late eighteenth and early nineteenth centuries saw a proliferation of avenues through which the middling stratum of British, urban society could engage with natural history. Continuing developments in printing helped to provide cheaper works of popular natural history, which ensured that the study of nature was able to attain a truly mass appeal by the latter half of the nineteenth century. The content of British popular natural history literature also began to change in light of information from new sources, new scientific theories and new technologies, which combined to change the ways in which naturalists and scientists could interact with animals. Carla Yanni remarks that, by 1860, the museum had been supplanted by the laboratory as the key site for scientific discovery whilst Rothfels points out that, by the early 1860s, the exotic animal trade in Britain had evolved considerably, with larger firms, such as the one owned by Charles Jamrach, controlling and facilitating the flow of large mammals into Britain.[762] With the publication of Charles Darwin's *The Origin of Species* in 1859, a developed print culture, new scientific approaches and Britain's increasing imperial possessions, 1860 marked the beginning of a new period of natural history, with new ways of thinking about animals, time and human societies.[763]

The findings of this thesis capture the nature of British popular natural history from around 1760 to 1860, exploring the works of authors from Thomas Pennant up to the publication of Darwin's *The Origin of Species*. By 1860, the British Empire looked significantly different from when Thomas Pennant's writings had been published in the late eighteenth century, with Britain having lost its American colonies but having gained territories in southern Africa and Australia and strengthened its position in India, especially following the Indian Rebellion of 1857. This changing world permeated British popular natural history literature in terms of its content, its structure, the animals that were included and the variety of cultural sentiments that were communicated through this knowledge, which relied on animal encounters in travel literature as a major source of information.

Through an examination of the representations of animals in late-eighteenth and early-nineteenth-century British popular natural history literature, this thesis has demonstrated how expressions of Britishness were articulated through the temporal and spatial locating

[762] C. Yanni, *Nature's Museums: Victorian Science and the Architecture of Display* (New York, 2005) p. 11; N. Rothfels, 'Catching Animals' in M. Henninger-Voss (ed.) *Animals in Human Histories: The Mirror of Nature and Culture* (Rochester, 2002) pp. 185-187.
[763] See: E. Sera-Shriar (ed.), *Historicising Humans: Deep Time, Evolution, and Race in Nineteenth-Century British Sciences* (Pittsburgh, 2018).

of animals within Britain and across the globe, which helped to configure understandings of the national character through comparisons with a range of internal and external others. Within this context, the statuses of a wide array of different species, wild or domestic, native or exotic, ancient or modern, were easily and frequently extended to the landscapes and societies associated with them and, through these processes, British popular natural history literature helped to construct hierarchies of civilisation that placed the British at their apex. These imaginings were largely informed by stadial models of societal development, which used human-animal relationships to indicate societal status, alongside a society's ability to cultivate the local landscape and render it congenial to the production of resources for commercial benefit. Conversely, the perseverance of specific animals within a locality, especially by those creatures that were seen to contest human dominion over space by causing harm to people and property, was understood to reflect the less developed, or backward, status of the local societies challenged by this situation.

It was important to begin by looking at the discourse surrounding animals within Britain in late-eighteenth and early-nineteenth-century British popular natural history as these discussions communicated a sense of Britishness that helped to configure the British national character as modern, superior, rational, ingenious and commercially successful. Within this national context of progress and modernity, the temporalisation of these animals in Britain's past, present and future helped to reinforce the aspects of national identity that favoured wealthy British urbanites, who largely constituted the readership of British popular natural history publications. The presence of specific animals was also used to demarcate internal, conceptual borders within the British Isles that reinforced constructions of internal others against which modern Britishness was contrasted and configured. The ways in which these animals were temporalised in Britain varied according to their individual histories, their presence over time and their changing relationships with the British people.

The eradication of the wolf in Britain was frequently celebrated as an example of British supremacy over the natural world but its removal from different parts of Britain at different times was seen to reflect slower rates of societal development in the areas of Britain where it remained the longest, principally the Scottish Highlands and Ireland.[764] Consequently, temporal distance was created between these peripheral areas of Britain and the metropole, to which conceptions of modern Britishness were closely attached. This helped to reinforce conceptions of Scotland as a junior partner within the British Union and to align Ireland with the 'wolf-infested' nations of Continental Europe. The decline of the red

[764] See: pp. 44-47.

deer in Britain was similarly celebrated by British popular natural history authors as a potent indicator of British progress and modernity.[765]

However, unlike the wolf, the red deer was increasingly viewed through a romantic lens and, influenced by the Highland Revival, reconstrued as an icon of the Highland landscape alongside the sentimentalisation of the Scottish Highlanders. Although the red deer's status as an animal of Britain's past did not change, the nature of its temporalisation evolved to accommodate broader cultural understandings of Britain's relationship with its past.[766] The positive framing of the mastiff in Britain's past similarly served to celebrate its longevity in Britain but also to confine its earlier characterisation, as reflective of the English national character, to its historical use in animal baiting, war and gladiatorial combat. Through its recontextualisation in contemporary Britain, as a loyal and effective guard dog, the mastiff's strength, courage, loyalty and noble status were increasingly presented as reflective of the modern British national character, which was, in turn, seen to have endured. This also helped to circumvent some of the earlier contradictions surrounding the mastiff, strong loyal and brave but cruel, indolent and barbarous, that had posed some problems with the animal's former associations with the English national character.[767]

In terms of domestic animals, the discourse surrounding British sheep and cattle within British popular natural history literature has demonstrated that constructions of improved domestic animal breeds were frequently located within imaginings of contemporary Britain that conceptualised the nation as modern, prosperous and superior and its people as ingenious, industrious and enterprising. These improved breeds were viewed as products of the pioneering efforts of British breeders and stockmen, whose skill, knowledge and rational application of new selective breeding methods were seen to reflect core elements of the national character, their creation of new breeds being firmly attached to narratives of national excellence.[768] Constructions of sheep and cattle were largely informed by an economising gaze that characterised these animals through the products that could be derived from them, bestowing upon them a high status that mirrored the commercial aspirations of the nation.[769] Indeed, the quantity and quality of wool and meat that could be obtained from each breed were used to reinforce the superior status of improved breeds, such as the New Leicestershire sheep, and to characterise them as national achievements.

[765] See: pp. 48-54.
[766] See: pp. 54-60.
[767] See: pp. 60-72.
[768] See: pp. 75, 78-79.
[769] See: pp. 75-78.

When viewed within broader, enlightenment understandings of the role of animals in societal development, the ability of contemporary breeders to manipulate domestic breeds with excellent outcomes was seen to unquestionably demonstrate dominion over the natural world and positioned these efforts within a global context of national achievement that reflected the advanced stage and the superior status of the British people through their industriousness, their ingenuity, their mastery over nature and their contributions to the prosperity of the nation.[770] Conversely, unimproved, native breeds were temporalised in the past, remaining largely within the peripheral territories of Britain, namely Wales, the Scottish Highlands, the Northern Isles and Ireland. Whilst the modern status of improved breeds was tied to the landscapes and people that encapsulated agricultural efficiency, the native, unimproved breeds, which were construed as backward and inferior, were similarly attached to the landscapes and people where they continued to reside.[771] This helped to reinforce the demarcation of boundaries between the areas of Britain that were imagined to be civilised and progressing and those areas judged to be uncivilised and stagnating, which excluded the latter from narratives of national belonging that centred round notions of modernity.

The superior quality of new, British domestic breeds of cattle was also strongly linked to Britain's unique climate, which innately tied these animals to the national landscape and its people, connecting these domestic animals to notions of national identity through narratives of natural legacy and lineage. The social superiority of the British landed aristocracy was, for example, upheld through cattle ownership and the consumption of beef was strongly linked to imaginings of British prosperity and liberty that transcended the class divide and provided opportunities for comparisons with less prosperous, continental rivals.[772] The historical importance of British wool and its superior quality were also regularly celebrated as examples of British excellence. The use of foreign breeds, such as the Spanish merino, to improve British stock was similarly integrated into narratives of British skill and national prestige, with any tardiness by the British being attributed to the pre-existing excellence of the national flock. The appropriation, integration and improvement of foreign breeds and hybrids were either claimed for Britain or viewed within a broader spectrum of European successes that maintained Britain's position as a global leader.[773]

[770] See: pp. 76-77.
[771] See: pp. 85-89.
[772] See: pp. 92-95.
[773] See: pp. 89-91.

Within British popular natural history, conceptualisations of animals, as candidates for naturalisation, such as the muskox, the nilgai and the angora and cashmere goats, were informed by the landscapes of their home ranges, their relationships with local people, their wild or domestic status, and their economic value, based on their commercial potential. As these animals, imagined through the commercial gaze, existed within a broad category of potential candidates for Britain's future animal community, they were integrated into an emerging discourse on the naturalisation of commercially viable animals in Britain.[774] Through narratives of progress and improvement, conceptions of national identity, underpinned by notions of British modernity, were reinforced. By the early 1860s, however, these initially positive attitudes had considerably waned as acclimatisation expectations were not met.

The muskox was judged unsuitable for domestication owing to its reliance on lichen as a food source even though hopes for its successful acclimatisation had not been entirely ruled out owing to the high regard for muskox wool stockings. The nilgai was included in acclimatisation experiments but the angora and cashmere goats were thoroughly dismissed as acclimatisation candidates in Britain due to Britain's lack of an extreme climate.[775] This use of the commercial gaze by British naturalists was largely due to their reliance on travel literature as a major source of animal knowledge and on high-ranking officials of major trading companies for the importation of live and dead animal specimens via the imperial trade networks that symbolised Britain's commercial status in the world.[776] Consequently, naturalists focussed on the features of these animals with economic potential, the wool of the muskox and the angora and cashmere goats, and the aesthetic qualities, the flesh and the physical strength of the nilgai. Some commodities that could be produced from these animals, such as camlets and cashmere shawls, which were already known and highly esteemed, fuelled acclimatisation speculation.

The expressions of British national identity contained within these animal representations centred round the metropolitan commercial classes, whose imaginings of British modernity were closely tied to ingenuity, industriousness and commercial acumen, underpinned by narratives of economic progress. As Britain was perceived to be a site where acclimatisation could be enacted, discussions surrounding the naturalisation of animals contained clear expressions of dominion over the natural world, which supported understandings of Britain's advanced societal status, in line with stadial models. This was, indeed, a performance of progress, improvement and modernity and, through this

[774] See: pp. 105-108.
[775] See: pp. 141-142.
[776] See: pp. 109, 119-123.

mechanism, the introduction of new animals into Britain was presented as a modernising process that would allow the British metropolitan commercial classes to demonstrate their ingenious and industrious qualities through commercial success.

Through discussions regarding the spatial and temporal relationships between the animals, landscapes and people, of the animals' home ranges and new sites in Britain, spaces and societies were aligned, distanced or conflated and places were classified as wild or cultivated. This status also informed attitudes towards and perceptions of the people residing there, who were especially viewed as barbarous or backward if they were perceived to lack the ability to make good commercial use of animals and the local environment.[777] These assessments informed the creation of hierarchies of civilisations, through which some societies were confined to the past and distanced from national belonging because they did not meet modern expectations. Indeed, representations of the muskox encouraged Orkney to be aligned with Canada whilst the nilgai was recontextualised within a modern, British context of the English country estate and distanced from its home range and its former associations with the northern Indian elite, as a symbol of hunting and unchanging, eastern autocracy, compared to the more modern British, who now reserved hunting for noxious creatures and 'worthy' opponents, such as large predators.[778]

Discussions surrounding the acclimatisation of the angora and cashmere goats in Britain tied the mountainous areas of Wales and the Scottish Highlands, their proposed sites for naturalisation, to other, undeveloped mountainous regions in Europe, distancing all of these territories from the British metropole and highlighting how these peripheral territories were imagined to be in need of improvement due to their unused economic potential.[779] The integration of these areas into economic systems was ultimately of benefit to metropolitan, commercial interests, attitudes which were also extended to spaces in colonial India that were similarly deemed suitable for angora and cashmere goat acclimatisation and were, therefore, open for development.[780]

The second part of this thesis, focussing on animals beyond Britain, has revealed how the locating of animals within late-eighteenth and early-nineteenth-century British popular natural history helped to demarcate wild and civilised spaces across the globe and to reaffirm notions of modern Britishness within a global context. Indeed, the discourse on

[777] See: pp. 116-118, 123-125.
[778] See: pp. 125-126.
[779] See: pp. 133, 138-139.
[780] See: pp. 138-140

these animals helped to inform the imaginative mapping of the world, based on the presence or absence of wild or domestic animals. Through temporalising processes that classified animals as ancient or modern, a global system of chronotopic zones, characterised by the status of the animals residing there, was established. As demonstrated in the discourse surrounding goats, reindeer, elephants, mouflon, wolves, the megaloceros, the mastodon and the European and American bison, the spatial and temporal locating of these animals by naturalists consistently helped to inform the status of the landscapes they inhabited and of the people most associated with them.

Animal presence in territories across the world, and the human-animal relationships of non-British societies, were frequently compared to those that conformed to Anglocentric understandings of British modernity that emanated from the British metropole, non-British societies being generally presented as savage, barbarous or semi-civilised compared to the modern and superior British. British ideals and expectations largely stemmed from their understandings of Britain's contemporary animal community and the capability of the British to control and manage the natural environment, in line with stadial models.[781] These processes allowed animals, landscapes and people in different parts of the world to be temporalised and categorised and many species, territories and societies were conceptually distanced, aligned or conflated with others, based on where they were located in time and space. Goat-rearing populations in different, mountainous parts of the world, were aligned, areas with tamed elephants were distanced from those where elephants roamed more freely and species with similar physical features were conflated.[782]

The spatial and temporal relationships between animals, landscapes and societies were rendered malleable by naturalists and the physical distances between territories with closely-associated creatures were often conceptually compressed, allowing spaces in different parts of the world to be aligned with or distanced from Britain. Conversely, the locating of animals with very different temporalised statuses in close proximity were used to reinforce conceptual boundaries and the imagined distance that existed between these spaces, both within and beyond Britain. This division of the world by naturalists, along zoological lines, had a universalising effect that allowed a broad spectrum of species, landscapes and people to be conceptualised within a single and relatively congruent body of natural history knowledge, through which British perceptions of the world and of themselves were frequently expressed through discussions regarding the status of animals, based on their physical features, their behaviours, their ranges and habitats and their relationships with local people. In addition, the new scientific concepts permeating

[781] See: pp. 147-148.
[782] See: pp. 148-149.

British popular natural history, related to geological deep time and extinction as a natural process, helped to strengthen the narratives that linked animal presence and animal disappearance to societal progress.

To reaffirm their status, advanced societies needed to demonstrate their ability to use and manipulate the physical forms and behaviours of a broad range of domestic animals that were considered to conform to modern, Anglocentric, British ideals, which were avidly compared with societies characterised as at an earlier stage of development than the British, such as goat-rearing societies both within and beyond Britain. Some non-British communities were commended for their ingenious use of exotic animals in hostile environments, such as the Sami's use of domesticated reindeer, but they were still classified as savage, barbarous or semi-civilised due to their total reliance on this animal for survival.[783] Where local people were seen to be incapable of using their natural resources efficiently and for economic gain, this was seen to indicate their backwardness and reaffirmed their inferior societal position compared to the British, as illustrated through Beilby's erroneous assumptions regarding the domestication of elephants.[784]

The establishing of relationships between wild animals and their domestic counterparts also served to temporalise the former as distinctly older than the latter and to configure the spaces occupied by these animals as correspondingly wild and old or cultivated and modern. The temporal distance between wild animals and their domesticated equivalents was strengthened through the search for filial relationships, as demonstrated through the discourse on the mouflon as the ancestral form of the domestic sheep. Within this context, domestic sheep in the peripheral territories of Britain were confined to the past because their physical features and behaviours were more closely tied to the wild mouflon than to the domesticated sheep associated with the cultivated parts of modern Britain.[785] Wild species characterised as inversions of domestic forms were also temporalised in the past even if they were not seen as direct ancestors, as demonstrated through discussions surrounding the wolf, other wild canids and the domestic dog. Indeed, the dog breeds that were seen to most resemble wolves, or other wild canids, were deemed more wild and viewed as more primitive, a status that was attached to their human owners, as demonstrated through the comparisons made between the kinds of dogs used by the indigenous people of north America and those used by white colonial settlers.[786]

[783] See: pp. 148-149.
[784] See: pp. 149.
[785] See: pp. 149-151.
[786] See: pp. 153.

With the discovery of megaloceros remains in Irish peat bogs, Ireland's associations with the ancient past were strengthened as naturalists strove to make sense of megaloceros remains and to identify where it might still exist, this species being frequently conflated with the American moose, which also encouraged Ireland to be aligned with America and to be configured within the borders of Atlantic otherness. Although naturalists increasingly disavowed any close relationships between the American moose and the megaloceros, their entanglement persisted within British popular natural history, along with the temporalised status attached to the territories containing their remains.[787] The discovery of mastodon remains in America similarly helped to reaffirm America's status as an unexplored and undeveloped territory. As naturalists increasingly accepted that the mastodon was extinct and not to be found in the American interior, it and the territories containing its remains were relegated to an ancient, geological past.[788]

The discourse surrounding the European and American bison illustrates how the temporalisation of animals, territories and people was achieved through a variety of intersecting processes that operated collectively. The European bison and the American bison were frequently conflated and conceptualised, due to the universalising approach of naturalists, as a single species occupying vast swathes of land across the globe.[789] In accordance with the wild-domestic paradigms in use, the bison was viewed as the inversion of the domestic cow and temporalised in the past, a status that was strengthened through its characterisation as the latter's ancestral form.[790] Connotations of the bison as an ancient animal endured even though naturalists revised their assessments over time, the discovery of bison remains alongside other prehistoric creatures helping to confine it to an ancient, geological past, its extinction being increasingly presented as an inevitable outcome of the spread of modernity across the globe.[791]

Whilst the European bison's shrinking range helped to conceptualise the borders of 'civilised' Europe, the extensive range of the American bison served to reinforce understandings of the American interior as a vast, uncultivated space.[792] The bison's innately wild and ancient status was incongruent with understandings of modern chronotopic zones and could only be integrated into these spaces through its domestication, an outcome that conformed to British expectations. As its domestication was generally assumed to be feasible, the lack of progress was largely understood to

[787] See: pp. 154-162.
[788] See: pp. 162-164.
[789] See: pp. 164-167.
[790] See: pp. 167-170.
[791] See: pp. 170-171.
[792] See: pp. 176-179.

reflect the inability of America's indigenous populations and their primitive status, in line with stadial models.[793] Conversely, failures to domesticate the European bison were increasingly seen to confirm that this untameable species was doomed to extinction.[794] Consequently, the bison, with its wild and ancient status was confined to the past along with the spaces it occupied across the world and the populations closely associated with it.

The British popular natural history discourse on large mammalian predators reveals how expressions of Britishness were frequently communicated through the ways in which these animals were seen to contest space and challenge human dominion over territory. As Britain and Ireland were, by this point, free from large mammalian predators, this discourse inevitably explores the relationships between predators, landscapes and people in non-British contexts. However, the comparisons drawn between local people outside of Britain and the British allowed the former to be assessed, in accordance with stadial models, as inferior to the British because they lived in close proximity to large predators, with a perceived lack of control over the natural world.[795] Furthermore, the use of classification systems by British popular natural history authors, to construct, group and order biologically distinct species, helped to ensure that the narratives invested in large predators were applied universally to creatures of the same kind and were seen to operate at a global level.[796] It was through this mechanism that conceptions of national, racial and cultural others were constructed and perceptions of Britishness were reinforced.

Descriptions of large predators were similarly informed by contemporary climate theories that viewed an animal's temperament as a product of its environment and climate, tying these creatures to the landscapes they inhabited and allowing them to be conceptualised as one wild, hostile entity.[797] These areas were consequently configured as animal-dominated spaces, with the animals defining the parameters of human control over the natural world and local people as at their mercy. Large, impressive predators were sometimes granted monarchic status to reflect their imagined sovereignty over the spaces they physically embodied, a situation that sharply contrasted with modern Britain, where large predators had been eradicated.[798] When viewed in stadial terms, the lack of human dominion over the environment helped to confirm the backward status of local populations

[793] See: pp. 180-181.
[794] See: pp. 181-182.
[795] See: pp. 189-190.
[796] See: pp. 190-191.
[797] See: p. 192.
[798] See: pp. 192-193.

under threat from large predators, temporalising them in the past and reaffirming them as at an earlier stage of societal development.

The harm caused to people and livestock through the incursions of large predators into human settlements, a recurring feature of this discourse, further helped to configure the inferiority of local populations, who were regularly portrayed as vulnerable and unable to prevent attacks or protect themselves, their families and their property from these animal assailants. Indeed, large predators were frequently characterised as invading marauders and the local people as under siege, locked in a state of constant warfare with the natural world rather than having mastery over it.[799] Big cats were seen to particularly instil fear in local populations, who, compared to white settlers, were reported as preferred targets, probably because they were less equipped to repel attacks from these animals.[800] Comparatively, the superior, modern British could demonstrate their mastery over the natural world and their advanced societal status through the eradication of the wolf in Britain and Ireland.

The abundance of large predator populations and their extensive geographical ranges were often presented by British popular natural history authors as infestations posing significant barriers to human expansion.[801] Indeed, it was the ongoing fight against predators in other parts of the world that allowed the eradication of the wolf in Britain to be celebrated as a unique accomplishment, demonstrating the pre-eminence of the British at a global level. Territories where large predators still roamed could not contain advanced societies and, therefore, the decline of large predator populations over time, due to human activity, was presented by British popular natural history authors as a necessary part of the civilising process required for societal advancement.[802]

The discourse on the wolf in Continental Europe, and that of the tiger in colonial India, both demonstrate how conceptions of the British, as modern and superior, were communicated through these non-British contexts. Comparisons between 'wolf-infested' Continental Europe and wolf-free Britain served to illustrate the superior position of the British over their continental rivals, whilst the persecution of the tiger in colonial India by the British was couched in the language of colonial paternalism, which helped to reaffirm imaginings of the cultural and racial inferiority of the indigenous population as a justification for British imperial rule. Through their discussions on the loup-garou, British

[799] See: pp. 193-194.
[800] See: pp. 194-195.
[801] See: pp. 195-196.
[802] See: pp. 196-197.

naturalists attributed the inability of the French to overcome the wolf to their superstitions and irrationality, which conformed to broader, contemporary British understandings of the French as an inferior, foreign, Catholic, continental other, compared to the perceived rationality of the modern, protestant British.[803] As the wolf declined in western Europe, British naturalists shifted their gaze towards eastern Europe, where wolves could still be found in substantial numbers, in order to maintain the dichotomy of backward, wolf-infested Continental Europe and modern, wolf-free Britain.[804]

The discourse on the tiger was increasingly informed by reports of this animal in colonial India amidst British imaginings of colonial others as cowardly, incapable and archaic, and of themselves as courageous, capable and modern, these assessments being respectively tied to the unsuccessful and successful containment of this large predator. The monarchic status often bestowed upon the tiger reflected the broader conflation of the tiger with the Indian elite in the British popular imagination, allowing British ascendency over all of these significant, colonial others to be celebrated as British imperial conquests. Depictions of the tiger as the scourge of India, combined with its monarchic status, further characterised this species as a tyrannical contester of human dominion over space.[805] Characterisations of the tiger as the universal enemy of mankind were particularly reaffirmed through reports of tiger encounters in the BEIC's Indian possessions, with British popular natural history authors praising the BEIC's bounty system for its successful removal of tigers and presenting the decline of tiger populations as an integral part of the 'civilising' of India under British colonial rule.[806]

The discourse surrounding the treatment of animals within late-eighteenth and early-nineteenth-century British popular natural history literature served to reinforce a sense of British national superiority grounded in conceptions of modern, middle-class, Christian Britishness. Through a broad assortment of individual animal entries, natural history authors praised or condemned human-animal relationships based on how far they conformed to idealised, British imaginings of the permissible treatment of animals. These moral judgments were largely informed by stadial models of societal development that allowed human-animal relationships to be temporalised as modern or backward and this status to be correspondingly projected onto the people and animals involved in these practices. Blood sports were universally criticised as backward and immoral and condemned within and beyond Britain. These sentiments became increasingly ingrained

[803] See: pp. 199-200.
[804] See: pp. 200-202.
[805] See: pp. 204-209.
[806] See: pp. 211-212.

within this discourse during the early nineteenth century, when concerns surrounding animal cruelty in Britain were permeating British political rhetoric and parliamentary legislative efforts, with blood sports, such as animal baiting, being presented as distinctly un-British and confined to the working and criminal classes.

Animal welfare practices were, conversely, ascribed to the modern, British, urban middle classes, creating temporal and spatial distance between this stratum of British society and those still practising blood sports. Natural history authors, for example, keenly condemned bearbaiting and bullbaiting, relegating them to Britain's past in order to demonstrate the nation's advanced societal status.[807] Furthermore, Britain's declining blood sports were increasingly aligned with those still being practised outside of Britain, most notably bullfighting in the catholic countries of southern Europe.[808] All forms of animal baiting were increasingly alienated from modern Britain, allowing understandings of the morally superior, British national character to be exemplified against imaginings of inferior, foreign, religious others. Within this context, the advantages of kindness to animals were highlighted through the discourse surrounding the cattle of the Khoekhoen, a people who were generally deemed savage or primitive but whose status was elevated to that of the noble savage in praise of their exemplary treatment of cattle, underpinned by the narrative that if these practices could be achieved by such a primitive society, they would surely be within the grasp of an advanced nation, such as Britain.[809]

Comparatively, the discourse surrounding the brahmin bull reveals how the parameters for the treatment of animals were configured to avoid any challenges to Christian understandings of human supremacy over the natural world and to support the belief that animal welfare constituted a contractual obligation that depended upon animal subservience to humans. Consequently, human-animal relationships that contravened these ideals were condemned because they did not conform to the permissible treatment of animals ascribed to modern, civilised societies, such as Britain. The Hindu veneration of the brahmin bull, for example, was frequently presented by British popular natural history authors as irrational, superstitious, despotic and atavistic, in line with broader British perceptions of Hinduism and, indeed, of India, as backward and stagnated, a narrative that was embodied by the animal's distinct physical appearance, which was characterised as ancient and unchanging.[810] These discussions on the treatment of animals within the colonial sphere particularly demonstrate how conceptions of modern Britishness

[807] See: pp. 217-228.
[808] See: pp. 228-230.
[809] See: pp. 230-234.
[810] See: pp. 235-249.

were informed by and deeply intertwined with Britain's colonial experience and its status as an imperial nation.

Within this summary of findings, some patterns and trends are evident. Firstly, the locating of animals in time and space emerges as the critical process through which expressions of Britishness were communicated within late-eighteenth and early-nineteenth-century British popular natural history literature. Within this context, comparisons between the British and a range of internal and external others, that emphasised the modernity and the superiority of the British, played an important role in helping to create hierarchies of civilisations across the globe. As British popular natural history authors drew on travel literature as an important source for constructing and conceptualising animals, the animal knowledge presented in British popular natural history was frequently and invariably infused with the same cultural narratives inherent in the travel genre. In addition, the emergence of new scientific knowledge and technologies fuelled the proliferation of specific animal knowledge, which was memetically reproduced and incorporated into broader sets of beliefs that collectively helped to configure contemporary understandings of British national identity, underpinned by notions of progress and modernity.

Whilst this thesis has drawn on a range of sources to explore the British popular natural history discourse surrounding a broad spectrum of animals from within and beyond Britain, this does not represent an exhaustive list and further studies could extend this research beyond charismatic mammals. This study has also focused on the colonial contexts of America, India and southern Africa to demonstrate relevant aspects of the British colonial experience in relation to the representation of animals and national identity but further research could be comparatively conducted into other colonial territories, such as Australia. The time period covered by this study was chosen because it represented a specific, pre-Darwinian, scientific, cultural and intellectual moment, which contained the antecedents to the growing mass appeal of British popular natural history that emerged later in the nineteenth century. However, this time period could be extended to allow further analysis of the spatialisation and temporalisation of animals, landscapes and people to capture any changes and continuities into the latter half of the nineteenth century.

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