Park, Katharine, 1997. 'The Rediscovery of the Clitoris', in The Body in Parts: Fantasies of Corporeality in Early Modern Europe, ed. David Hillman and Carla Mazzio. New York and London: Routledge: 171–93.

Park, Katharine and Robert A. Nye, 1991. 'Destiny is Anatomy'. The New

Republic 18 (February): 53-57.

Pliny (the Elder), 1963. Natural History, trans. W. H. S. Jones. Vol. 8, libri

28–32. Cambridge MA: Harvard University Press.

Pollock, Linda, 1990. 'Embarking on a Rough Passage: The Experience of Pregnancy in Early-Modern Society', in Women as Mothers in Pre-Industrial England: Essays in Memory of Dorothy McLaren, ed. Valerie Fildes. London and New York: Routledge: 39-67.

Power, D'Arcy, 1927. 'The Birth of Mankind or the Woman's Book: A Bibliograph-

ical Study', The Library 4th series 8, 1: 1–37.

Raynalde, Thomas et al., 2008. The Birth of Mankind: Or, the Woman's Book, ed. Elaine Hobby. Aldershot: Ashgate.

Rhodion [Rösslin], Eucharius, 1535. De Partu Hominis, et quae circa ibsum accidunt. Florence: Ioannis Foucher.

Rösslin, 1910. Eucharius Rösslin's 'Rosengarten', ed. Gustav Klein. Alte Meister in der Medizin und Naturkunde. Munich: Carl Kuhn.

Saunders, J. B. deC. M. and Charles D. O'Malley, 1982. The Anatomical Drawings of Andreas Vesalius. New York: Bonanza.

Sharp, Jane, 1999. The Midwives Book: Or, the Whole Art of Midwifry Discovered, ed. Elaine Hobby. New York and Oxford: Oxford University Press.

Slack, Paul, 1979. 'Mirrors of Health and Treasures of Poor Men: The Use of the Vernacular Medical Literature of Tudor England', in Health, Medicine and Mortality in the Sixteenth Century, ed. Charles Webster. Cambridge and New York: Cambridge University Press: 237–73.

Vesalius, Andreas. 1543. De Humani Corporis Fabrica. Basel.

-, 1969. The Epitome of Andreas Vesalius, trans. L. R. Lind. Cambridge, MA, and London: MIT Press.

-, 1998. On the Fabric of the Human Body: A Translation of De Humani Corporis Fabrica Libri Septem. Book I, The Bones and Cartilages, trans. William Frank Richardson and John Burd Carman. San Francisco: Norman.

-, 1999. On the Fabric of the Human Body: A Translation of De Humani Corporis Fabrica Libri Septem. Book 2, The Ligaments and Muscles, trans. William Frank Richardson and John Burd Carman. San Francisco: Norman.

–, 2002. On the Fabric of the Human Body: A Translation of De Humani Corporis Fabrica Libri Septem. Book 3, The Ligaments and Muscles, Book 4, The Nerves, trans. William Frank Richardson and John Burd Carman. San Francisco: Norman.

Wiesner, Merry, 1993. 'The Midwives of South Germany and the Public/Private Dichotomy', in The Art of Midwifery: Early Modern Midwives in Europe, ed. Hilary Marland. London and New York: Routledge: 77-94.

Wilson, Adrian, 1995. The Making of Man-midwifery: Childbirth in England. 1660-1770. Cambridge, MA: Harvard University Press.

Natural Rights and Natural History in Anna Barbauld and Mary Wollstonecraft

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IN THIS ARTICLE I explore the ways that two writers, Anna Barbauld and Mary Wollstonecraft, used animals and natural history to push for natural rights. In the late eighteenth century cruelty to animals was a significant issue for those on all sides of the political spectrum, from radicals and dissenters to the socially and politically conservative Evangelical thinkers, such as William Wilberforce and Hannah More, who were against slavery and animal suffering but who did not argue for rights for all. Barbauld used animals to promote rights for dissenters, while Wollstonecraft explicitly used natural rights to argue for equality for women. The role of animals in these debates is often complex but also revealing of the political agenda of vulnerable or disenfranchised groups.

During the Romantic period a number of voices began talking insistently about 'natural rights', the rights that everyone had simply because they were alive. These rights became enshrined in the new republics emerging at this time: the American Declaration of Independence (signed on 4 July 1776) stated 'all men are created equal; they are endowed by their Creator with certain inalienable rights; that among these are life, liberty and the pursuit of happiness'. These rights are described as 'the laws of nature' (White 2006, 5). In 1789, the French Declaration of the Rights of Man and of the Citizen stated 'Men are born and remain free and equal in rights'; these natural, inalienable and even 'sacred' rights are defined as 'liberty, property, security, and resistance to oppression' (White 2006, 5). 1788 had been the centenary of the so-called 'Glorious Revolution' and English writers drew comparisons, both favorable and unfavorable, between the settlement reached between the monarch and people then and the events in France. Some radicals felt that the rights that had been given to Englishmen then had subsequently been lost, and that these rights needed to be restored; others felt that the changes of 1688 had not gone far enough. The understanding that there were rights which every person should expect and that should govern how people were treated is one that today we take for granted. As R. S. White has argued in Natural Rights and the Birth of Romanticism, a direct line can be

drawn between the expression of these rights and such modern acts as the 1948 Universal Declaration of Human Rights and the Civil Rights movements in 60s America.

Of course the language of the twentieth century is quite different from that of the eighteenth, particularly in its attempt to be universal. The 1948 act is for Human Rights, rather than the rights of man. In Thomas Paine's book of that name, published in 1791, Paine argued that men were born free and equal and should therefore have equal rights. He was arguing against a system based on hierarchy and privilege, specifically, where power lay with the aristocracy and monarchy. Paine was not the only one to take up this call; Mary Wollstonecraft had published A Vindication of the Rights of Men in 1790, and reviews of the book, whether it was admired or condemned, all commented on the fact that a woman had written it. Many of them were sarcastic about the rights of man being asserted by a 'fair lady' (Wollstonecraft 1997, 11).¹ This seems to make the point clearly; the rights of man were not the rights of humans.

At this time, the rights of man were not even the rights of all men. The Society for Abolishing the Slave Trade was founded at this time too, in 1787. The Abolition of the Slave Trade Act was passed (in 1807) although it was not until 1833 that slavery was finally outlawed in British colonies. The antislavery movement was largely founded by Quakers and Anglican Evangelicals, and throughout the period religious toleration was contested for. Religious non-conformists, otherwise known as dissenters, particularly argued that they should have political rights: since the Test and Corporation Acts of the seventeenth century, dissenters had been unable to hold civil or military public office. During this period, dissenters, particularly Unitarians, often held important roles in literary, political, scientific and religious arenas. They tended to be from the educated middle classes, be politically liberal and to push for parliamentary reform and religious toleration. Again, it is testament to the changed mood at the end of the Romantic period that the Test and Corporations Acts were repealed in 1828. Similarly, Catholics were disenfranchised, denied the vote or any participation in politics, and the Catholic Relief Acts of 1778 and 1791 caused much turmoil and the worst riots on British soil during this period. Eventually bowing to the pressure of forces in Ireland, the Roman Catholic Relief Act was passed in 1829, which allowed Catholics to sit in Parliament.

Women were another disenfranchised group at this time. Mary Wollstonecraft followed her book on the rights of men with A Vindication of the Rights of Woman published in 1792. In arguing for the rights of woman Wollstonecraft was reacting most immediately to the French minister Charles Maurice Talleyrand-Perigord's report on public education that had been presented to the National Assembly in France. The French Revolution offered an important opportunity: rather than be shackled by an unfair and inequitable government, as radical writers saw was the case in Britain, here was the chance to get things right. This was a new beginning. Unfortunately, Talleyrand's proposals did not live up to the promise of the revolutionary ideal that had asserted rights for all, and advocated that girls should only be educated in domestic duties. It seemed to Wollstonecraft that the Declaration of the Rights of Man precisely and specifically concerned men, not in a sense that included all human beings but in one that, in fact, actively excluded women. In her Vindication, Wollstonecraft set out to prove that women should be included in the general term 'man', that they were entitled to what she called the 'natural rights of mankind' (104). Wollstonecraft set out to prove that the mind has no sex, that men and women were all part of 'mankind', which was distinct from the rest of the animal kingdom by virtue of the ability to reason, that women were capable of reason, and that, therefore, women should be recognized as deserving of natural rights. I'll return to Wollstonecraft in the second half of this essay.

It is no accident that during this period when sensibility was a prominent literary movement people began to worry about animal cruelty. The RSPCA began life as the Society for the Prevention of Cruelty to Animals in 1809, and became the Royal Society in 1824. It is surely significant that among these societies' founding members was the Jew Lewis Gompertz, the Catholic Thomas Forster, and the MP who is now most famous for his efforts to abolish slavery, and who himself experienced an evangelical conversion, William Wilberforce. Amy Weldon makes the point that 'the degree to which humanity towards animals harmonized with Dissenting moral and political beliefs makes it likely that dissenters generally supported increased awareness of cruelty and measures to prevent it' and that 'Religiously based public opposition to cruelty against animals seems to have come mostly from outside the Anglican mainstream' (Weldon 2002). Of course, it is also the case that

¹ This is the edition I shall use when quoting from Vindication of the Rights of Woman, abbreviated here to Vindication.

Weldon also notes that principal figures of the antislavery campaign 'were also founding members of the SPCA', citing Wilberforce and Fowell Buxton (2002, n. 2).

the orthodox and politically conservative showed great sympathy for animal suffering. At this time many people were becoming increasingly unhappy at the way that animals were being treated; on 22 July 1822 the Richard Martin's Act was passed in Parliament, to prevent cruelty to farm animals. Of course some people thought that such concerns showed that natural rights were being interpreted too broadly: Thomas Taylor's Vindication of the Rights of Brutes published in 1792 was a parody of the humanitarian calls for reform so prevalent at the time. Today, when many people demand products that have not been tested on animals and when vegetarianism is far more common than it was two hundred years ago, these ideas do not sound so ridiculous. The Great Ape Project is currently campaigning for a Declaration on Great Apes, asking that apes be given basic human rights, specifically the right to life, the protection of individual liberty and the prohibition from torture.

Elsewhere I have argued that a significant reason why these movements began and gathered momentum at this time is to be found in the scientific investigations of the Romantic period. I think there is a connection to be drawn between a new, extended and universalized perception of what it means to be worthy of rights and the study of life in plants, humans and animals.³ Before the eighteenth century, people had been content with the classical idea of a Chain of Being, a hierarchical model showing the different species according to their lessening degree of perfection. God is at the top, followed by his angels, then humans, animals and finally rocks. The divisions between these gradations, however, began to blur as scientists found more similarities than differences between human, animal and plant life.4 The term 'Biology' was coined in this period, otherwise known as 'the study of life'. 5 This was also the age of the museum, and the British Museum (founded in 1753) had collections of plants, fossils and other natural history specimens, while there were often shows of rare animals and the so-called 'monstrous' in London. One surgeon, John Hunter, amassed a huge collection of unusual skeletons, diseased body parts and deformities which now belongs to the Royal College of Surgeons; using these he developed the study of comparative anatomy. Scientists found that plants needed the same elements as humans in order to survive; Joseph Priestley isolated oxygen in 1774 (though he never called it that, leaving the French

chemist Lavoisier to name the gas after its acidity principle) and his work contributed to the eventual identification of it as the vital element in air that was needed to sustain all living things. Without fully articulating the theory, he also discovered photosynthesis. There was a new, specifically Romantic recognition that man was not to be regarded as a separate species, set apart from and central to a divinely ordained hierarchy. Instead, the poet Samuel Taylor Coleridge would write of 'one Life within us and abroad', demonstrating a new awareness of a life that was shared by all living creatures. Christine Kenyon-Jones argues that Coleridge 'articulates his thinking about what it means to be human through brilliant and extensive ruminations in prose about the status of animals vis à vis that of humankind' (2001, 66). His poem 'To A Young Ass' 'addresses animal treatment in language relating to the equality and rights of human groups, particularly slaves' (Kenyon-Jones 2001, 68).

There are two specific instances, one in a painting and another in a poem, when an animal's rights are brought to our attention. Priestley had discovered the importance of oxygen when he burned a candle in a jar turned upside down and the candle went out long before the wax was used up. He also tried this experiment on mice, and found that they too needed the re-introduction of air to survive. This experiment has been immortalized in Joseph Wright of Derby's An Experiment on a Bird in an Air-Pump (1768) (see Figure 3). Wright chose to paint subjects that showed the advances made in science, but this painting has long been recognized as rather ambiguous. In it, an itinerant lecturer is demonstrating to a well-to-do family how a vacuum can be created. The lecturer is rather wild looking, suggesting a figure like Mary Shelley's later character Victor Frankenstein; he stares out of the picture, looking directly at us in a rather challenging way, while his audience experience different reactions. The lecturer removes air from the pump and the white cockatoo droops, suffering from the deprivation of oxygen. If we look at the various reactions of those present, on the lecturer's right, a young man looks fascinated with the demonstration, perhaps by the angle of his head showing that he is looking for hidden tricks or simply that he is fully engrossed by the sight. Another man looks on, possibly at the experiment; hand on hip, he seems confident and assured of the knowledge being imparted. The two lovers have eyes for no one but each other. On the other side of the lecturer, an older man sits looking down at the floor, leaning on his walking stick, thinking deeply and perhaps

³ For a fuller account of the science of life in this period, see Ruston 2005.

See Lovejoy 1936.

⁵ William Lawrence coined this word when he translated a word used by Gottfried Reinhold Treviranus (1819, 60).

⁶ My thanks to Simon Mills for clarifying this point.

⁷ Coleridge, 'Aeolian Harp', line 26.



Figure 3. Joseph Wright 'of Derby', *An Experiment on a Bird in an Air-Pump*. Photograph © The National Gallery, London.

not positively about the march of science. The girls turn away in horror from the scene, revealing their feminine sensibility, while their father tries to get them to watch and learn. We do not know whether the lecturer will save the bird or not.

A similar fate awaits the mouse of Anna Barbauld's poem 'A Mouse's Petition', which is written as though from a mouse's perspective as he awaits Priestley's experiment on him. Barbauld and Priestley were both dissenters, and became good friends when Priestley worked as a tutor in the Warrington Dissenting Academy where Barbauld's father also taught. The dissenters had a close-knit community, bound by ties of faith and a recognition that they were disadvantaged by society, though they also felt that they were on the verge of gaining political rights. Many of Barbauld's poems in this first collection evoke scenes of domestic happiness, in which an ideal circle of family and friends join in the pursuit of intellect and liberty. The story goes that Barbauld wrote this poem as a joke for Priestley and when he came down in the morning to pursue his experiments on air, found it stuck in the bars of the mouse's cage. The poem is partly an

in-joke, a mock petition, which is a form usually used to make demands of governments or monarchs. Barbauld certainly stated that she never intended to criticize her friend Priestley in this poem and yet, the fact that she is both a woman and dissenter is surely significant. Barbauld is refused political rights (the right to vote, to hold government office, to go to university) on two counts: she holds, as Marlon Ross has put it, a position of 'double-dissent' (Ross 1994, 92).

A petition is a prayer or supplication to a higher power, asking in this case for mercy. It also possibly has a specific reference to 'The parliamentary declaration of the rights and liberties of the people, presented to Charles I in a petition in 1627 and assented to by the monarch in 1628' (OED). This meaning links the poem to a language of rights asked by a subject of its king. The poem is in ballad form with four-line stanzas of alternating iambic tetrameter and trimeter. The mouse appeals to his captor on the grounds of his sensibility initially: asking that Priestley 'never' allow his heart to be shut to a 'prisoner's cries' (line 3). In the third stanza he appeals to Priestley as a proud libertarian, someone who prizes his own freedom and having himself 'spurn'd' the 'tyrant's chain' should not then act the part of the tyrant (line 10). There is clearly a sense that Priestley having encountered such treatment himself should help others whom tyrants oppress.

The mouse appeals to his captor for his release on the grounds that he is 'a free-born mouse' and one of 'nature's commoners', pointing out that he breathes the same air as Priestley, drinks the same water, and that these are 'The common gifts of heaven' (lines 12, 23, 24). The word 'common' refers, as Mary Ellen Bellanca notes, to two meanings 'air both ordinary and shared by all' (2003, 56). To be a commoner also has multiple meanings that are all in play here: to be one of the common people, to 'share or take part' in something, 'one who has a joint right in common lands', and 'a member of the community who has civic rights' are all listed as definitions of this word (OED). Similarly, the Oxford

'epitomizes women's need to manoeuvre around cultural proscriptions when they wanted to speak about science' (2003, 53).

⁸ See the headnote to the poem in Barbauld 2002, 69. Bellanca makes the point that this 'surreptitious deposit' of the poem into the bars of the mouse cage

⁹ In a footnote to the third edition of her *Poems*, Barbauld wrote: 'The Author is concerned to find, that what was intended as the petition of mercy against justice, has been construed as the plea of humanity against cruelty. She is certain that cruelty could never be apprehended from the Gentleman to whom this is addressed; and the poor animal would have suffered more as the victim of domestic economy [ed. note 'i.e., in a mouse trap'], than of philosophical curiosity' (Barbauld 2002, 69).

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English Dictionary defines 'free-born' as one who is 'born to the conditions and privileges of citizenship, inheriting liberty'. The mouse asks Priestley what right he has to deny the rights that are natural to all, and these are here defined as the right to life and liberty. The reference to 'the vital air' is surely a nod to Priestley's own discoveries in this field, his recognition of oxygen as the vital principle, and the mouse's own part in this discovery. In arguing for natural rights it was necessary to ask what was natural to all, what was necessary for all living forms, and here Barbauld uses an animal to make the point that we all share certain characteristics and needs, and thus should have the same rights. Of course, this argument extends beyond mice to women, dissenters, slaves, and all other peoples who are disenfranchised and oppressed. The medal cast by Josiah Wedgwood, showing a slave petitioning on his knees, uses a similar language of rights with the words: 'Am I not a man and a brother?'

In the seventh stanza, the mouse appeals to Priestley as a scientist; if he is 'well taught' he should treat all things equally, have 'compassion' and feel 'for all' living beings (lines 25–28). There is some evidence that Barbauld found Priestley wanting in these qualities. Deirdre Coleman has argued that Barbauld set herself the task of trying to 'soften and temper Priestley's masculine rigour', his 'philistinism' and 'rough and unamiable rationality' (2002, 84, 88, 91). In the next stanzas, the mouse also appeals to him on philosophical grounds, referring among those 'ancient sages', to Pythagoras's theory of metempsychosis (which had originated in Ovid's Metamorphoses) in which souls are imagined as transmigrating between creatures (line 29). This theory was used in other animal rights writing. ¹⁰ The mouse issues a warning to Priestley; in killing him he may in fact be dislodging the soul of a brother. Not everyone believed that animals had souls (indeed there was also a question in some minds about whether women had souls as I will examine later in this essay). The mouse in this poem leaves all possibilities open: if, in fact, animals do not have souls, if they have no future existence to look forward to in any form, then surely that is a reason to allow them to enjoy the short life that they are given. The final stanza seems little short of a threat: the mouse reminds Priestley that men can get into trouble too and if he doesn't show compassion now will someone help him when he needs help?

Barbauld is using the perspective of a mouse, a vulnerable, disenfranchised creature to make a wider point. This political tactic is one that I shall continue to focus on for the remainder of the paper. Speaking about the children's writer Sarah Trimmer, G. J. Barker-Benfield has written that 'sentimental fiction's contribution to revolutionizing attitudes towards animals was a kind of surrogate feminism' (1992, 236). Barbauld's views on women's rights are difficult to fathom, and she seems not to have shared Wollstonecraft's more explicit feminism. Despite this. Wollstonecraft obviously found something of instruction to women in 'A Mouse's Petition' since she reprinted the poem in her book The Female Reader. The poem has also been seen as a 'likely source of inspiration' for Robert Burns' poem 'To a Mouse', which has itself been used by ecocritics to demonstrate that the rights of nature were being fought for; this poem has been seen as showing a 'green' sensibility toward non-human creatures (Hitt 2004, 127). Bellanca speculates that the particular association of mice and men (most famous today in John Steinbeck's novel of that name) represents their 'shared vulnerability to the vicissitudes of an uncertain world' (2003, 60). Mary Robinson, also influenced by Barbauld, published a poem called 'A Linnet's Petition' in 1775, in which a caged bird persuades his female owner to set him free and by doing so she learns the importance of compassion and freedom. 11 In my argument, I am, like others, culpable of what David Perkins has called 'displacing the animals' in reading these texts as anthropomorphic, as vehicles for arguing for the rights of specific groups of humans (2003, x).

NATURAL RIGHTS AND NATURAL HISTORY

The tactic of using a mouse to voice the political demands of dissenters was also used in Evenings at Home, a series of fables written for children, which Barbauld wrote with her brother, the trained physician John Aikin (1792–96, I, 98–99). Examining the book closely reveals what Aikin's daughter and biographer, Lucy Aikin, described as a 'hatred of every thing unfair and unequitable which was his leading principle and almost his ruling passion' (Brooks, 2004). Bellanca has noted that this text shares the 'passionate, if relentlessly empirical, fascination with nature that characterizes many educational texts of the 1790s' (2003, 49). Mice in particular figure largely in Evenings at Home, seeming to best represent those treated worst in society. In the story

¹⁰ See, for example, Ruston 2005, 113-32, and the note to line 32 in Barbauld 2002, 72.

¹¹ The particular association between women and caged birds has a long history in literature, culminating most famously in Maya Angelou's autobiographical novel, which is also commenting on slavery, I Know Why the Caged Bird Sings.

'Mouse, Lap-Dog and Monkey. A Fable', 'A poor little mouse, [...] half-starved', ventures into human society to eat 'a few crumbs which were scattered on the ground' only to experience people trying to kill her: 'and the poor terrified animal was driven round the room in an agony of terror' (Aikin and Barbauld, I, 98–99). The authors' sympathies are clearly with the mouse, and the fable teaches us that the world is a harsh place, where the 'fawning' of the lap-dog and the 'buffoonery' of the monkey are rewarded, while the mouse goes hungry (I, 100). At the end of the tale, the mouse says: 'Alas, how ignorant was I, to imagine that poverty and distress were sufficient recommendations to the charity of the opulent' (I, 100).

John Aikin had published *The Calendar of Nature:* Or, Youth's Delightful Companion, also written for young people, which he dedicated to his sister, Anna Barbauld (Aikin 1784). This book interspersed natural history with poetry by James Thompson and other authors. Here and elsewhere, Aikin made explicit the link between art and natural history. In his Essay on the Application of Natural History to Poetry, he finds in modern poets:

descriptions faint, obscure, and ill characterized; the properties of things mistaken, and incongruous parts employed in the composition of the same picture. This is owing to a too cursory and general survey of objects, without exploring their minuter relations; and is only to be rectified by accurate and attentive observation, conducted on somewhat of a scientific plan. (Aikin 1777, 10)

This book was dedicated to Thomas Pennant, the foremost natural historian of the period. In the most general definition, natural history is the taxonomy or classification of species of animals, plants, and minerals; it presents the facts relating to and the properties of these species, and compares them to see how like or unlike each other they are. Since Pliny's natural history, such investigations had been exploited for political purpose; in the sixteenth century, for example, Thomas Elyot argued that the structure of a society of bees proved that it was natural for a single monarch to be head of state. ¹² Not only did natural history in this

period help pave the way for Darwin's ideas of the mutability of species, it also encouraged political and religious calls for equality, reform, toleration and enfranchisement. As I have shown, Aikin and Barbauld used natural history in their educational books for children, in a barely concealed attempt to promote civil and religious liberties. These writers tried to return to a concept of what was natural to argue that they should have equal rights with others. We find another example of this use of natural history in Thomas Percival's A Father's Instructions to his Children, which was published in 1775 by Wollstonecraft's, Aikin's and Barbauld's publisher, Joseph Johnson. Percival, another Unitarian, was the first student to attend the Warrington Academy, became a physician and the President of Manchester's Literary and Philosophical Society. Percival's book was 'designed to promote the love of virtue, a taste for knowledge, and an early acquaintance with the works of nature' (subtitle), and clearly used natural knowledge to instil morals into his child readers:

Mark that parent hen! said a father to his beloved son. With what anxious care does she call together her offspring, and cover them with her expanded wings? ... Does not this sight suggest to you the tenderness and affection of your mother? (1776, 34)

Barbauld's poem 'A Mouse's Petition' was included in A Father's Instructions to his Children, after an essay on the needlessness of animal cruelty in scientific experiments (Percival 1776, 62–65). Percival's book was extremely successful, going into at least eight editions, and it seems that his Moral and Literary Dissertations, published in 1784, and containing an essay 'On the Alliance of Natural History, and Philosophy, with Poetry' was intended as a sequel to this earlier work for children. In this essay, Percival refers to his 'friend' Aikin's earlier 'elegant and ingenious Essay, on the Application of Natural History to Poetry', again making explicit the coterie nature of such concerns and publications (1784, 223–74). While Barbauld did not agree with Wollstonecraft's later desire to reject sexual distinction, believing that 'Each is perfect in its kind. A woman as a woman: a tradesman as a tradesman', she did think that distinction should be ignored in the case of dissenters, who 'wish to bury every name of distinction in the common appellation of citizen'. This similarity

iuste gouernaunce or rule: who hath amonge them one princpall Bee for gouernour' (Book One).

13 Quoted in Taylor 2003, 184, 185.

¹² Thomas Elyot's, *The Booke of the Governor*, first published in 1531: 'One Sonne ruleth ouer the day, and one Moone ouer the nyghte; and to descende downe to the erthe, in a litell beest, whiche of all other is moste to be maruayled at, I meane the Bee, is lefte to man by nature, as it semeth, a perpetuall figure of a

has prompted Barbara Taylor to write that this 'serves as an important reminder of Wollstonecraft's own debt to Dissenting politics' (2003, 185). Like Aikin, Barbauld and Percival, Wollstonecraft used natural history to argue a political point; in A Vindication of the Rights of Woman she used natural knowledge to argue that women should share the natural rights that were being given to man.

For the remainder of this essay, I shall look at Mary Wollstonecraft's Vindication, to see, firstly, how she uses natural history to support her belief that women should be treated equally to men and, secondly, that much of the behavior used as evidence of woman's inferiority is learned rather than natural or instinctive; it is in fact a product of society and civilization.

During the period of the composition and publication of Vindication, Wollstonecraft reviewed a number of works of natural history for Joseph Johnson's Analytical Review: Thomas Bewick's and Ralph Beilby's A General History of Quadrupeds (in July 1790); William Smellie's Philosophy of Natural History; John Rotheram's answer to Smellie, The Sexes of the Plants Vindicated (both October 1790); A New System of the Natural History of Quadrupeds; and an abridged version of the Compte de Buffon's Natural History (both January 1792). The effects of such reading can be found in Vindication, where Smellie's and Buffon's ideas are referred to specifically.

For women to be entitled to what Wollstonecraft calls, the 'natural rights of mankind', they had to prove that they were capable of reason; since, this, she argued, was what distinguished humans from other animals. She asked: 'In what does man's pre-eminence over the brute creation consist? The answer is as clear as that a half is less than the whole; in Reason' (1997, 104, 117). If women could be proved to be capable of reason, they would also be proved to be part of mankind in its most universal sense, and therefore entitled to the rights of man. Wollstonecraft had to prove that the intellectual, moral and even, partly, the physical inferiority of women to men was the corrupting and enervating effect of civilization. Through education Wollstonecraft believed that

woman could be restored to her natural state, be recognized as, in her words, 'a large portion of mankind', rather than a separate and lower species (1997, 158).

In Vindication Wollstonecraft had to face head on those who believed that woman was, in her words, 'the link which unites man with brutes' (1997, 146). In a 'chain of being' woman was considered by some to be between the most perfect or highest specimen of animal, 'man', and those beneath him in the hierarchy. A similar situation existed in contemporary accounts of race, where the European was placed above the African in the physical and intellectual scale. In the Chain of Being, was there a gradation between humans and animals? In different accounts women, Africans, or apes were cast as this link. Edward Long, writing in his History of Jamaica in 1774, did not think that 'an oran-outang husband would be any dishonour to a Hottentot female'. 15 The Manchester physician, Charles White, offered one of the best known theories of racial gradation; moving with apparent ease from an analysis of the material body to aesthetic and moral judgements on race, he argued that 'black people were a different, lesser, species, justifying their enslavement' (Fulford 2005, 97).16

At the beginning of Vindication, Wollstonecraft declares that she will 'pay particular attention to those in the middle class, because they appear to be in the most natural state' (1997, 111). This is a clear reference to Rousseau, who believed that man was born into his natural state but became corrupted by society and adults as he grew older: a child is born good but is corrupted by the company he keeps. In his educational treatise, Emile, Rousseau outlined the ideal education for a child, and argued that children had the right to be children but also should be educated in reason. Wollstonecraft was drawn to this idea, and others of Rousseau, but in his insistence that girls and boys should not be treated equally he seriously let her down. The child that Rousseau spoke about in Emile was explicitly a boy and not a girl. Wollstonecraft thought that the education women received from society caused them to be frivolous, to love pleasure, to be governed by feeling rather than sense. But, this did not 'prove that there is a sex in souls' (1997, 176). In other words, women did not behave in this way naturally; it was just the way that they had been educated.

Wollstonecraft concedes in her treatise that women tend to be infe-

¹⁴ I am following the decision of editors Janet Todd and Marilyn Butler here in assigning these reviews to Wollstonecraft. See Wollstonecraft 1989, VII, 18. Wollstonecraft's reviews will be quoted from this edition hereafter. This is a vexed issue that has been much debated by critics, but given that Wollstonecraft refers to Smellie and Buffon in the *Vindication*, her authorship of these reviews seems even more likely (Wollstonecraft 1997, 204, 187).

¹⁵ Quoted in Schiebinger 1993, 5.

¹⁶ For an extended discussion of the issues of race in Romantic-period literature, see Kitson 2007, 18, 22, 51–66.

rior to men in terms of their physical strength, but even this difference is partly accounted for by the ways in which women are treated in society. She writes:

In the government of the physical world it is observable that the female in point of strength is, in general, inferior to the male. This is the law of nature; and it does not appear to be suspended or abrogated in favour of woman. A degree of natural superiority cannot, therefore, be denied – and it is a noble prerogative! But not content with this natural pre-eminence, men endeavour to sink us still lower, merely to render us alluring objects for a moment. (1997, 110)

The use of the word 'endeavour' here makes clear her belief that men are actively and purposefully trying to push women further down the chain of being. Girls, she points out, are not allowed the physical exercise of boys, and throughout their lives they are taught that physical weakness is attractive to male suitors. Women are encouraged to starve themselves to achieve the appearance of a delicate constitution. Throughout the *Vindication* Wollstonecraft's efforts are to lessen the perceived gap between men and women, to show that many characteristics used to prove women's inferiority are not natural but learned.

Rousseau angered Wollstonecraft when he began to describe how a girl should be educated, in the fifth and final section of Emile: 'He advises them to cultivate a fondness for dress, because a fondness for dress, he asserts, is natural to them' (1997, 137). She bridled at 'The absurdity ... of supposing that a girl is naturally a coquette' and 'His ridiculous stories, which tend to prove that girls are naturally attentive to their persons, without laying stress on daily example are below contempt' (1997, 154, Wollstonecraft's emphasis). Finally, quoting Emile itself, she challenged his idea of women that 'a state of dependence being natural to the sex, they perceive themselves as formed for obedience' (1997, 204). It is Wollstonecraft's response to this last statement that I shall particularly examine here. Her efforts are to prove that such dependence and obedience are anything but natural. Indeed, she describes Rousseau's female ideal, Sophia in *Emile*, as 'grossly unnatural' (1997, 133). In order to ascertain which characteristics are truly natural to the sex, Wollstonecraft turns as Rousseau had done on occasion, to science, specifically invoking the natural historian William Smellie to refute Rousseau's claim that women are 'formed for obedience'. The entire concept of what is 'natural' to women or to humans generally, is in constant debate, and at these points in her argument Wollstonecraft has recourse to those writers who have observed such behaviour as is, in her words, 'common to the whole animal world', and relies on this knowledge to support her opinion (1997, 293).

In the Vindication Wollstonecraft uses evidence gained from Smellie's Philosophy of Natural History to compare woman in her civilized state to domesticated animals. Discussing Milton's portrayal of Eve, Wollstonecraft had written: 'How grossly do they insult us who thus advise us only to render ourselves gentle, domestic brutes!' (1997, 127). Domestic animals are defined by Smellie, and other natural history writers that Wollstonecraft had read, as animals who have been taught to act in a certain manner that is alien to their natural behaviour.

In Philosophy of Natural History, which Wollstonecraft reviewed on its publication in 1790, Smellie speaks of the 'empire of man' that has reduced animals to 'servitude'; he states that man's tyranny has 'degrade[d] and disfigure[d] Nature' (Smellie 1790, 460). Describing the 'mouflon', or, in Smellie's words 'the stock from which our domestic sheep have derived their origin' as 'comparatively a large animal', Smellie asks: 'How different is this from our domestic sheep, who are timid, weak, and unable to defend themselves? Without the protection of man, the whole race would soon be extirpated' (1790, 460). Compared to their wild or natural counterpart, sheep are physically weaker and reliant upon man for protection.

In her review of Thomas Bewick's and Ralph Beilby's A General History of Quadrupeds, Wollstonecraft quotes from only three sections of the text: specifically mentioning the mule, the shepherd's dog, and the wild cat, even though the book described many kinds of exotic animals (Wollstonecraft 1989, VII, 260–62). The mule and shepherd's dog, are linked by their domestication and utilitarian relationships with man, typified by either their submission to man and aid in his labor, or their ability to follow man's instructions. Indeed, the shepherd's dog is singled out for its 'faithfulness', 'discipline' and for being 'well-trained', its ability to receive commands and execute them promptly (Beilby 1790, 284).

In her review of Smellie's book, after quoting him on the 'docility and sagacity of animals', Wollstonecraft makes the point that such behaviour is not to be admired:

The docility of animals is of the most ignoble kind – the *wonderful* instances which are here celebrated were produced by fear; a very strong passion. Animals soon forget their tricks when they are well fed, and are not reminded by signs of voice, of the cruel treatment they endured when they were learning them.

(1989, VII, 299, Wollstonecraft's emphasis)

Wollstonecraft is at pains to point out that such behaviour is not natural to animals but learned; that they behave unnaturally in an attempt to please man, and only do this because they are scared and food is withheld from them otherwise.

To counter Rousseau's belief that 'dependence' and 'obedience' is natural to women in the *Vindication*, Wollstonecraft turns again to Smellie:

This is begging the question; for servitude not only debases the individual, but its effects seem to be transmitted to posterity. Considering the length of time that women have been dependent, is it surprising that some of them hug their chains, and fawn like the spaniel? 'These dogs', observes a naturalist, 'at first kept their ears erect; but custom has superseded nature, and a token of fear is become a beauty.'

(1997, 204)

Explicitly in the *Vindication* Wollstonecraft compares women to domestic animals whose strength has been tamed, and who know so little of their own nature that they 'hug their chains', oblivious to their servitude (1997, 204). Instead, she encourages women to 'endeavour to acquire strength, both of body and mind', in order, by inference, that they might break the bonds that hold them (1997, 111).

Allowing that women are naturally physically weaker than men, Wollstonecraft argues that the difference between them has been artificially widened by the fashions of society. She writes that: 'False notions of beauty and delicacy' encourage women to destroy their health and deliberately to forgo physical or mental exercise: they are, in her words, 'enervated by confinement and false notions of modesty' (1997, 246, 131). Wollstonecraft uses a physiological language to describe what happens to women's bodies:

To preserve personal beauty, woman's glory! the limbs and faculties are cramped with worse than Chinese bands, and the sedentary life which they are condemned to live, while boys frolic in the open air, weakens the muscles and relaxes the nerves. (1997, 153)

The difference in the way that girls and boys are brought up, therefore, accounts for part of their comparative physical weakness later in life.

Wollstonecraft counters the advice given to women that they should not exercise too often. John Gregory, another of the writers Wollstonecraft engages with in *Vindication* and himself a medical man, advises in his A Father's Legacy to his Daughters that women should not 'dance with spirit' (1997, 137). Wollstonecraft asks: 'In the name of truth and common sense, why should not one woman acknowledge that she can take more exercise than another? or, in other words, that she has a sound constitution' (1997, 137). The idea that physical strength is something to be ashamed of is particularly frustrating to Wollstonecraft. In the society of her day she claims that even women who have retained their 'natural strength' by the exercise of their maternal, familial and marital duties are encouraged, she writes, 'to use art and feign a sickly delicacy in order to secure her husband's affection' (1997, 138). One only has to think of the delicacy of Lady Bertram in Austen's Mansfield Park and her use of physical weakness in getting what she wants. It is the case that the women Wollstonecraft points to as those who most use such arts are from the upper classes. In William Godwin's novel Caleb Williams Grimes' first sweetheart, Bet Butterfield, belonging to a lower social class, is described as a 'fine, strapping wench', 'as stout as a trooper' (Godwin 1970, 50-51). Her feats of strength include such masculine activities as romping and wrestling 'with the harvest men' (1970, 51). In contrast, Wollstonecraft recalls in the Vindication, 'a weak woman of fashion, who was more than commonly proud of her delicacy and sensibility' (1997, 155). According to this woman the lack of an appetite is proof of her 'exquisite sensibility' which, while raising her up the social scale, is, according to Wollstonecraft, simultaneously sinking her lower down the chain of being (1997, 155).

To conclude, Wollstonecraft believes that women should be included in the comprehensive term of 'mankind' and the gendering of virtues should, 'more properly speaking', be recognized as custom rather than indicating anything essentially female. This is her intention in the book: 'I shall first consider women in the grand light of human creatures, who, in common with men, are placed on this earth to unfold their faculties' (1997, 110). Women are to be regarded in the first instance as human and only in the second as specifically female, indicating her belief that gendered behaviour is learned rather than natural. Natural history is central to Wollstonecraft's text and argument. In her most famous statement, 'It is time to effect a revolution in female manners', she writes that women must take up the responsibility of being 'part of the human species' (1997, 158). Both Wollstonecraft and Barbauld were writers with sympathies for dissenters, and both used animals and natural history explicitly to promote natural rights. While some work has been done on Barbauld's links with Priestley and her access to scientific knowledge, little attention has been paid to the importance of science in Wollstonecraft's writings. Her reviews of natural history books gave her additional evidence of the characteristics which were both natural and unnatural to women, and enabled her to argue that women should be given equal rights.

Works Cited

Aikin, John, 1777. An Essay on the Application of Natural History to Poetry.

Warrington: I. Johnson.

-, 1784. The Calendar of Nature: or, Youth's Delightful Companion. Containing, details of natural history, the narrative variegated with poetical quotations from the most celebrated authors. Embellished with engravings, representing the four seasons. Warrington: J. Johnson.

[Aikin, John and Anna Letitia Barbauld], 1792-96. Evenings at Home; or, the

Juvenile Budget Opened. 6 vols. London: J. Johnson.

Barbauld, Anna Letitia, 2002. Selected Poetry and Prose, ed. William McCarthy

and Elizabeth Craft. Ontario: Broadview Press.

Barker-Benfield, G. J., 1992. The Culture of Sensibility: Sex and Society in Eighteenth-Century Britain. Chicago and London: University of Chicago Press.

Beilby, Ralph, 1790. A General History of Quadrupeds. The Figures Engraved on Wood by Thomas Berwick. Newcastle-upon-Tyne: Robinsons.

Bellanca, Mary Ellen, 2003. 'Science, Animal Sympathy, and Anna Barbauld's "The Mouse's Petition", Eighteenth-Century Studies 37.1: 47–67.

Brooks, Marilyn L., 2004. 'Aikin, John (1747-1822)', Oxford Dictionary of

National Biography. Oxford: Oxford University Press.

Coleman, Deirdre, 2002. 'Firebrands, Letters and Flowers: Mrs Barbauld and the Priestlevs', in Romantic Sociability, ed. G. Russell and C. Tuite. Cambridge: Cambridge University Press: 82–103.

Declaration on Great Apes. http://www.greatapeproject.org/declaration.php

Elvot, Thomas, 1531. The Booke of the Governor, in Renascence Texts. http:// www.uoregon.edu/~rbear/gov/gov1.htm

Fulford, Tim, 2005. 'Science', in Romanticism: An Oxford Guide, ed. Nicholas Roe. Oxford: Oxford University Press.

Godwin, William, 1982. Caleb Williams, ed. David McCracken. Oxford: Oxford University Press.

Hitt, Christopher, 2004. 'Ecocriticism and the Long Eighteenth Century', College Literature 31.3 (Summer): 123-47.

Kenyon-Jones, Christine, 2001. Kindred Brutes: Animals in Romantic-Period Writing. Aldershot: Ashgate.

Kitson, Peter, 2007. Romantic Literature, Race and Colonial Encounter. New York: Palgrave Macmillan.

Lawrence, William, 1819. Lectures on Physiology, Zoology, and the Natural History of Man, delivered at the Royal College of Surgeons. London: J. Callow.

Idea. Cambridge, MA: Harvard University Press. Percival, Thomas, 1776. A Father's Instructions to his Children: Consisting of tales,

fables, and reflections; designed to promote the love of virtue, a taste for knowledge, and an early acquaintance with the works of nature. London: J. Johnson.

______, 1784. Moral and Literary Dissertations [...]. Warrington: J. Johnson. Perkins, David, 2003. Romanticism and Animal Rights. Cambridge: Cambridge

University Press.

Ross, Marlon, 1994. 'Configurations of Feminine Reform: The Woman Writer and the Tradition of Dissent', in Re-Visioning Romanticism: British Women Writers 1776–1837, ed. C. Shiner Wilson and J. Haeffner. Philadelphia: University of Pennsylvania Press: 91–110.

Ruston, Sharon, 2005. 'Vegetarianism and Vitality in the Work of Thomas Forster, William Lawrence and P. B. Shellev', Keats-Shelley Journal 54 (2005):

113-32.

—, 2005. Shelley and Vitality. Basingstoke: Palgrave Macmillan.

Schiebinger, Londa, 1993. Nature's Body: Sexual Politics and the Making of Modern Science. London: Pandora.

Smellie, William, 1790. A Philosophy of Natural History. Edinburgh: C. Elliot, T. Kay and T. Cadell.

Taylor, Barbara, 2003. Mary Wollstonecraft and the Feminist Imagination. Cambridge: Cambridge University Press.

[Taylor, Thomas], 1792. A Vindication of the Rights of Brutes. London: Edward

Weldon, Amy, 2002. "The Common Gifts of Heaven": Animal Rights and Moral Education in Anna Letitia Barbauld's "The Mouse's Petition" and "The Caterpillar"', Cardiff Corvey: Reading the Romantic Text 8: 2 (June) http://www.cf.ac.uenca/corveyarticlescc08 n02.html

White, R. S., 2006. Natural Rights and the Birth of Romanticism. Basingstoke:

Palgrave Macmillan.

Wollstonecraft, Mary, 1989. The Works of Mary Wollstonecraft, ed. Janet Todd and Marilyn Butler. 7 vols. London: William Pickering.

-, 1997. The Vindications, ed. D. L. Macdonald and Kathleen Scherf.

Ontario: Broadview.