

The Culture of Nature in Britain 1680-1860

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Reviewer: Fredrik Albritton Jonsson

In our age of climate change and peak oil anxiety, environmental problems loom increasingly large in politics as well as everyday life. Yet even if ecology were to become the preeminent science, it is difficult to imagine a future where the authority of nature will form a unified source of morality, aesthetic value, and scientific truth. Such a world seems irretrievably lost to us. The eclipse of this unity is the subject of P. M. Harman's new book *The Culture of Nature in Britain 1680–1860*. Harman chronicles the heyday of the authority of nature through the long 18th century between Isaac Newton and James Hutton and then charts its decline starting with the Romantics down to Charles Darwin and John Ruskin.

The ambitious scope of *The Culture of Nature in Britain 1680–1860* justifies a comparison with such magisterial works as Keith Thomas' *Man and the Natural World*, Donald Worster's *Nature's Economy*, and Raymond Williams' *The City and the Country*.⁽¹⁾ An urge 'for system, order and design' defined the unity of 18th-century thought according to Harman (p. 340). It gave birth to a 'culture of nature' which successfully reconciled the modernity of science with traditional values (p. ix). Like Worster and Williams, Harman's sprawling chronology extends across the conventional boundaries between the Georgian and the Victorian periods. Harman's background as a scholar of Isaac Newton and James Clerk Maxwell makes him eminently suited for this sort of endeavor. The broad narrative includes a wide cast of intellectual figures both major and minor. While the argument for the dominance of natural theology is hardly new – John Pickstone and Peter Dear both make use of it in recent surveys ⁽²⁾ – Harman tracks its diverse permutations in far greater detail than other scholars. What gives the book much of its intellectual novelty is Harman's insistence that we must connect the history of science firmly with the history of art and aesthetics. Landscape painting and color theory are given as much attention as natural theology, vitalism and botanical classification. Perhaps most controversially, Harman makes the Victorian art critic and social visionary John Ruskin a central end point to his narrative through which the unity and disunity of the 'culture of nature' must be understood.

The methodological and theoretical basis for Harman's analysis remains somewhat understated. While much of the argument is occupied with discursive unity, a certain amount of attention is given to social forces, including agrarian capitalism, landscape gardening, and scientific travel. However, Harman avoids the predilection of recent histories of science for detailed case studies of craft knowledge and experiments. The aesthetic orientation bears certain similarities with the work of Lorraine Daston and Peter Galison who have

also privileged the history of form and vision in their attempt to chart the development of 18th- and 19th-century natural knowledge.⁽³⁾ In addition, Harman shares with them a style of crisscrossing arguments, which leap back and forth over chronological and disciplinary boundaries. But he avoids the ‘bottom-up’ approach to epistemology favored by Daston and Galison. There is no attempt here to link ethics and epistemology at the level of epistemic virtues in order to explore how habits of attention have shaped different scientific objects and their classification.

Instead, Harman seems to favor a poetic approach to the history of science. The aesthetics of design derived from ‘biblical imagery and classical literature’ (p. 341). William Paley’s natural theology was grounded in ‘the metaphor of mechanism’ (p. 32). Similarly, the move away from design was predicated at least in part on a shift in representations. Darwin’s principle of natural selection blended the ‘metaphor of warfare in nature’ with a concept of fecundity borrowed from Humboldt (p. 219). Harman seems to suggest that images inspired new lines of inquiry while also covering up inconvenient silences. Specifically, Darwin’s use of metaphor served as a substitute for a proper mechanism of selection (p. 227).

This poetic approach to the history of science places great stress on the transformation wrought by romantic aesthetics. By the end of the 18th century, critical observers challenged the old synthesis of classical culture and providential science epitomized in the horticultural discipline of the landscape garden. The century-old consensus was breaking down (p. 345). A yearning for pure nature, free of human intervention, drove this alternative vision (p. 337). Echoing the romantic generation, Ruskin called in 1843 for painters to study ‘nature in her liberty ... nor stiffened into court-dress by the landscape-gardener’ (p. 338). Hence, the romantics and their successors severed the realm of nature from the sphere of human technology. The natural order could no longer be represented in terms of a ‘designed artifact’. The ‘accommodation between the aesthetics of nature and the language of design [in] natural theology ... was dissolved’ (pp. 346–7). For Harman, this loss of justification wounded the enterprise of natural theology fatally since so much of its authority was vested in the unifying force of ‘aesthetic language’ (p. 346).

Harman’s interpretation provokes a number of questions. First and foremost, it would be useful to hear a more explicit discussion of the methodology and theory underpinning the thesis. What exactly was the relation between metaphor and knowledge in the 18th century? The connection between aesthetics and disciplinary specialization also remains obscure. In Harman’s account, the ‘re-ordering of the sciences into new and specialized discourses’ appears to follow as a consequence of the rise of romantic aesthetics (p. 346). Was there a strong causal connection between the two phenomena? Throughout the book, there are hints about the affinity between agrarian capitalism and natural theology. To what degree was the romantic critique of design predicated on changes within agrarian capitalism or other economic and political factors?

Though Harman certainly can be forgiven for offering merely an ‘illustrative rather than systematic’ view of such a vast topic (p. ix), some of his omissions seem particularly problematic. Notably, there is hardly any discussion of classical political economy. Margaret Schabas has forcefully reminded us of the central role of natural philosophy and natural history in classical political economy.⁽⁴⁾ Schabas suggests that Adam Smith and his successors modeled the order of market exchange on Newtonian gravitation and Linnaean food chains. We might add that Smith’s famous image of the invisible hand contained an aesthetic element, presented in the section on the beauty of utility in *The Theory of Moral Sentiments*. To what extent can we link Smith’s thought with the orientation of late eighteenth figures like James Hutton and Erasmus Darwin? Both according to Harman saw the cosmos ‘as a self-regenerating system of circulating active powers’ (p. 332)? Hutton’s unpublished work on the elements of agriculture in fact attempted to integrate Smithian economics with a theory of climate.⁽⁵⁾ The development of classical political economy also raises a question about the legacy of the ‘culture of nature’ in the 19th century. Might we say that the naturalism of political economy from Smith to John Stuart Mill conserved the 18th century urge for ‘order and design’ long after natural theology and aesthetics had come apart?

Harman is careful to accentuate the diversity of views within the ‘culture of nature.’ For example, he traces the development of a concept of ‘active powers’ in matter from James Hutton to Erasmus Darwin while

stressing the contrast between Hutton's deistic eternalism and Darwin's Lucretian materialism (pp. 304-5). Yet some of the deeper rifts in 18th-century British society do not surface so clearly in Harman's analysis. Take the case of useful knowledge. Margaret Jacob and Larry Stewart (6) have argued that a strong current of popular Newtonianism was a crucial factor behind the Industrial Revolution. They point to a broad popular movement of mechanics, chemists, and natural philosophers involved with technological innovation, including Erasmus Darwin's Lunar Society of Birmingham. To a considerable extent, these circles were also politically and socially radical, supportive of religious Dissent and the American Revolution. During the same period in British history, a very different version of useful knowledge rose to prominence in the naturalist networks surrounding Sir Joseph Banks. Banks was an aristocratic patron of Linnaean natural history who gained fame and political influence after accompanying Cook's first voyage of circumnavigation on the Endeavour. Once back in Britain, Banks assumed control of Kew Gardens outside London and turned it into a hub for ecological exchange. As John Gascoigne and Richard Drayton have shown, Banks' political ambitions can best be described as a form of agrarian patriotism or neo-mercantilism. (7) The great aim of Kew Gardens was to diversify the British colonies with new cash crops. Through the expertise of natural history, Banks sought to bolster the landed interest and revive the economic fortunes of the empire in the age of political and military crisis between 1776 and 1815. What should we make of this contrast between the manufacturing and landed interest? At a certain level of abstraction, it does seem possible to subsume both Newtonian manufacturers and Banksian natural historians under the rubric of a 'culture of nature.' No doubt both movements embraced an ethos of 'system, order and design.' But do we miss something crucial by insisting on their overarching unity? To speak of a common culture here may stretch the concept of culture to a quite tenuous point.

A final question concerns the place of John Ruskin in Harman's account. We have heard already about Ruskin's critique of landscape gardening. There are also stimulating discussions of Ruskin's critique of Charles Darwin as well as the religious character of his theory of color among. But perhaps a stronger focus on the environmental context of Ruskin's ideas would serve to strengthen Harman's larger argument. The anxiety about industrial capitalism and atmospheric pollution in Ruskin's late thought flowed from a growing sense of nature's fragility. While the 18th-century 'culture of nature' was ultimately expressed in the confident design of the landscape garden, Ruskin's own garden at Brantwood in the Lake District manifested a deep unease about the forces of modernity. Here, Ruskin hoped to restore a semblance of native woodland even as the natural world around him showed alarming signs of deterioration. The garden also constituted a social experiment in wasteland reclamation, employing local labor in virtuous agriculture. 'The man who could remain a radical in a wood country,' Ruskin wrote, 'is a disgrace to his species'. (8) Hardwicke Rawnsley's campaigns against railways and roads extended this idea of the *Hortus Inclusus* to the Lake District as a whole and eventually contributed to the foundation of the National Trust. (9) While the 'culture of nature' was predicated on the assumption of a harmonious fit between environment and technology, Ruskin's aesthetic and social critique of Victorian civilization forced him to imagine a natural world under severe pressure and lacking the resilience to withstand technological progress. Arguably, only the loss of the 'culture of nature' made such a perspective possible in the first place.

Notes

1. Keith Thomas *Man and the Natural World* (Oxford, 1996); Donald Worster, *Nature's Economy* (Cambridge, 1994); Raymond Williams, *The City and the Country* (Oxford, 1975). [Back to \(1\)](#)
2. John Pickstone, *Ways of Knowing* (Chicago, IL, 2000); Peter Dear, *The Intelligibility of Nature* (Chicago, 2006). [Back to \(2\)](#)
3. Lorraine Daston and Peter Galison, *Objectivity* (Boston, MA). [Back to \(3\)](#)
4. Margaret Schabas, *The Natural Origin of Economics* (Chicago, IL, 2005). [Back to \(4\)](#)
5. NLS MS 23165-66. [Back to \(5\)](#)
6. Margaret Jacob and Larry Stewart, *Practical Matter* (Cambridge, MA, 2004). [Back to \(6\)](#)
7. John Gascoigne, *Science in the Service of Empire* (Cambridge, 1998); Richard Drayton, *Nature's Government* (New Haven, CT, 2000). [Back to \(7\)](#)

8. John Illingworth, 'Ruskin and Gardening', *Garden History*, 22, 2 (Winter 1994), 218-33.[Back to \(8\)](#)
9. *Ruskin and Environment*, ed. Michael Wheeler (Manchester, 1995).[Back to \(9\)](#)

The author is pleased to read the review and does not wish to comment.

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