BOOK REVIEW: John S. Partington, ed., *H. G. Wells in 'Nature', 1893-1946: A Reception Reader* (Frankfurt am Main: Peter Lang, 2008). v + 514 pp. ISBN 978-3631-57110-1, PB, £55.70 / €79.50 / US\$115.95. [Roslynn D. Haynes]

By the end of his long literary life Wells was most widely known for his science fiction, then for his novels and perhaps least well for his essays. More than six decades later, despite the competition from a proliferating science fiction industry, Wells's scientific romances retain their hold on the popular imagination and new film versions of *The War of the Worlds*, *The Island of Doctor Moreau*, *The Time Machine*, endowed with special visual effects, continue to intrigue audiences. The sociological novels have fared less well as many (though by no means all) of their proposed reforms have been implemented; but with the current concern in most Western nations about literacy and numeracy levels and falling enrolments in science courses, Wells's emphasis on the need for communicating, teaching and popularising science remains as urgent as it was a century ago – possibly more so. It is therefore most timely that John S. Partington, editor of *The Wellsian* since 1999, has produced this collection of Wells's essays that appeared in the premier scientific journal *Nature*, together with the correspondence they elicited, reviews of Wells's writing, fiction and non-fiction, and other comments on his work.

H. G. Wells in Nature is particularly valuable on several counts. Firstly it returns to circulation Wells's essays on a wide range of subjects. Written with

clarity, conciseness and verve, they provide in themselves a benchmark for communicating science and well deserve to be read by those who may not have accessed their original source. Secondly, Partington's overall introduction to the volume and especially his introductory essays to Parts 1 and 2, 'The Essays, Reviews and Letters by H. G. Wells' and 'Reviews of the Works of H. G. Wells' respectively, set the essays, together with the comments and counter-arguments they elicited, in their historical and cultural context. By citing some key passages he flags important points and connections that enhance and facilitate a first reading of the essays.

It is worth pausing to reflect how extraordinarily rare it was (and is) for a writer of fiction to be published or reviewed in *Nature*; yet between 1893 and 1944 Wells himself published twenty-five items, including essays, reviews and letters to the editor, and his fiction and non-fiction works received fifty-three reviews. Retracing this material chronologically gives a new appreciation of how much Wells influenced Western thought and the extent to which his apparently diverse ideas had an inner unity and architectural cohesion that gave them particular force. George Orwell, who was by no means uncritical of Wells, acknowledged this in 1941:

Thinking people who were born about the beginning of the century are in some sense Wells's own creation. [...] I doubt whether anyone who was writing books between 1900 and 1920, at any rate, influenced the young so much. The minds of all of us, and therefore the physical world, would be perceptively different if Wells had never existed.¹

Reading these trenchant essays as a continuum along with the reviews of his fiction we can see how remarkably consistent Wells's thinking remained over more than half a century, based on his unshakeable belief in efficiency, education, innovation and a future-oriented manner of thinking. From these he evolved his sociological theories for a realisable utopian society and a World State that would remove war, poverty, crime and social disaffection and usher in a life of creativity, innovation and fulfilment for all. In numerous essays, from 'Popularising Science' (1894) to 'The Discovery of the Future'(1902), Wells proposed this philosophy with evangelistic zeal.

Partington points out the symbiotic relationship between Wells and *Nature*. Richard Gregory had a long and honourable association with the journal from his appointment as assistant editor to Sir Norman Lockyer in 1893 and then as editor from 1919 to 1939. He had been a fellow student of Wells at South Kensington and was a skilled assistant astronomer before becoming a lecturer at Oxford University.

¹ George Orwell, 'Wells, Hitler and the World State' in *Collected Essays* (London: Secker and Warburg, 1961), 164.

He supported Wells in numerous ways – giving him space in *Nature*, writing and publishing reviews of his work, frequently providing scientific information for Wells's stories and finally, in August 1946, writing Wells's obituary, which also appears in this volume. This association was immensely valuable for Wells's career, conferring a cachet that other contemporary writers lacked, as well as guaranteeing exposure to the journal's scientific and educational readership. The reviews of his novels almost invariably stressed their scientific interest and accuracy. Thus the first critique in Nature of The Time Machine in 1895 emphasised that 'it is based so far as possible on scientific data, and while not taking it too seriously, it helps one to get a connected idea of the possible results of the ever-continuing processes of evolution'; and in his obituary Gregory, writing of the scientific romances, commented: 'Wells knew, better than any other man of letters, what such natural events and processes had been and [that] they were due to forces acting continually and uniformly. It was this scientific knowledge, combined with brilliant powers of expression, that made him unique in his own particular field' (447).²

But, equally, Wells provided a service to *Nature*. In 1889 the Technical Instruction Act, setting out how science should be taught in schools, had come into force, but in Lockyer's opinion its implementation fell woefully short of its promise and throughout the 1890s *Nature* continued to address the issue of science education and keep it before the public eye. In this consciousness-raising exercise Wells was a valuable ally. Indeed, his essay, 'Popularising Science' was almost tailor-made for the purpose. As well as attacking the under-funding of science education he censured scientists who were unable to communicate with those outside their discipline in readily accessible terms and tried to inculcate the need for clarity, eloquence and enthusiasm in delivering public lectures about science, his model being the great Huxley.

Lockyer and Gregory also recognised the power of Wells's fiction to appeal to general readers and educate them in the principles of scientific method. Gregory's review of *The War of the Worlds* concluded: '[I]t is worth remark that scientific romances are not without a value in furthering scientific interests; they attract attention to work that is being done in the realm of natural knowledge, and so create sympathy with the aims and observations of men of science' (181).³

The original impetus for Wells's science-grounded philosophy arose from the *annus mirabilis* when he read biology at South Kensington under Huxley. Thirty-three years later he wrote:

That year I spent in Huxley's class was, beyond all question, the most educational year of my life. It left me under the urgency for coherence and consistency, that repugnance from haphazard assumption and arbitrary

² Richard Gregory, 'H. G. Wells: A Survey and Tribute', *Nature*, 21 September 1946.

³ Richard Gregory, 'Science in Fiction', *Nature*, 10 February 1898.

statements, which is the essential distinction of the educated from the uneducated mind.⁴

Yet Wells soon became less interested in science for its own sake and more concerned with its role, as a mode of thinking, in sociology, especially in moral issues and the mediation between the scientist and society. In retrospect he saw Huxley's biology course as having engendered 'a vivid, sustained attempt to see life clearly and to see it whole [...] to see its interconnections'.⁵ He coined such phrases as 'social biology' and 'human ecology', which are now an integral part of our thinking. His *Outline of History* and *World Encyclopaedia* were ammunition in the crusade against ignorance, fragmentation and nationalism that he saw as the root causes of war, waste and poverty. It is intriguing to reflect, as Partington does, on the extent to which Wells's call for a 'super university, a world brain' has been met by the world wide web and its 'information revolution'. His proposal that the 'proper' teaching of scientific method (causality, as opposed to scientific facts) should begin in elementary school has finally been vindicated in the teaching of philosophy in schools.

Until now Robert M. Philmus and David Y. Hughes's collection H. G.*Wells: Early Writings in Science and Science Fiction* (1975) has been almost the only source of reprints of his scientific writings. This new volume, as well as providing all the *Nature* articles, also acts as a continuation to Philmus and Hughes's selection, extending Wells's science journalism from the 1890s to the 1940s and thereby demonstrating the extraordinary consistency of his thought from the 1890s to the end of his life. As Hyman Levy, reviewing Geoffrey West's biography of Wells, wrote in 1931:

Throughout thirty years of strenuous writing, there runs this extraordinary thread of continuity in his work – the same theme – the universal solvent of ignorance is scientific knowledge, scientifically applied: this, whether the problem be moral or pedagogic, social or industrial, national or international. $(417-18)^6$

The very useful section 'Reviews of the Works of H. G. Wells' also includes responses to the reviews, both by Wells and by others who had criticisms to offer. Partington points out:

⁴ H. G. Wells, *Experiment in Autobiography: Discoveries and Conclusions of a Very Ordinary Brain (since 1866)*, 2 vols. (London: Gollancz / Cresset, 1934), I: 201.

⁵ Wells, *Experiment in Autobiography*, I: 210.

⁶ Hyman Levy, 'Science in Literature', *Nature*, 11 April 1931.

Not only do these reviews reveal a historical reception of Wells's work, but more significantly they reveal how a literary artist and a world figure was considered by the scientific community, and how seriously Wells's writings were taken as contributions to a scientific discourse, not simply in terms of the science Wells used in his scientific romances, but also in his scientific approach to questions of education and politics. (4)

It is intriguing to note that no review of The Island of Doctor Moreau appeared in *Nature* and only the most passing mention of it in Gregory's review of The War of the Worlds: 'The Island of Doctor Moreau, though decried by some critics, is a distinctly powerful work, and the worst that can be said of it is that the pabulum it provides is too strong for the mental digestion of sentimental readers'. This omission can perhaps tell us something about *Nature* and its public relations. The Island of Doctor Moreau did, indeed, provoke an outraged response from those who were revolted by its gory descriptions, the immediacy of the descriptions of the tortured animals in Moreau's laboratory (vivisection was a highly contentious issue at the time) and the implication that there were so few essential differences between man and beast that grafting operations and cultural re-education would erase them. Recent film versions of Doctor Moreau have substituted genetic engineering and mind-controlling drugs for Moreau's crude transplants but the disturbing nature and purpose of Moreau's program remains. This may have influenced Lockyer's decision against reviewing it in Nature but there was perhaps a more pressing reason. The novel was seen by many contemporaries as irreligious and Wells himself later referred to it as 'a theological grotesque',⁷ because of the many indications that Moreau represented an image of the Creator and several aspects of Judaeo-Christian orthodoxy. In fact Moreau is not just a scientist playing god but a brilliant personification of the creative process implicit in Darwinism, a figure whose procedures inevitably entail chance, waste and suffering. In 1896 such a presentation of evolution would not have sat comfortably with a journal of science.

Wells was certainly not intending to castigate Darwin, still less Huxley, of whom he was to write only five years later, 'I believed then [in his student days] that he was the greatest man I was ever likely to meet, and I still believe that all the more firmly today'. The immediate inspiration for *The Island of Doctor Moreau* was almost certainly Huxley's own Romanes Lecture of 1893, 'Evolution and Ethics', in which he had countered the facile optimism of social Darwinism and emphasised that the evolutionary process was a ferment of struggle, chance and change, entailing great suffering and death. Yet it would seem that *Nature* was not prepared to risk evoking a storm of anti-scientific feeling by publishing a review of *Doctor Moreau*.

⁷ H. G. Wells, 'Introduction', in *The Atlantic Edition of the Works of H. G. Wells* (London: Fisher Unwin, 1924), II: ix.

On the other hand Lockyer was happy to print 'The Discovery of the Future' (*Nature*, 6 February 1902), Wells's lecture to the Royal Institution two weeks earlier. Developing his preoccupation with the future (first expressed in *Anticipations* the previous year) Wells contrasted two ways of thinking: one which automatically refers to history and sees the present as the consequence of the past; and one which characteristically sees in the present the seeds and potential of the future. Wells expressed immense enthusiasm for this latter attitude as 'the active mood of thought, ... the mind of youth' and he concluded his lecture with an image that was to be repeated many times in his fiction and non-fiction:⁸

All this world is heavy with the promise of greater things, a day will come, one day in the unending succession of days, when beings, beings who are now latent in our thoughts and hidden in our loins, shall stand upon this earth as one stands upon a footstool, and shall laugh and reach out their hands amidst the stars. (86)

Possibly no other symbol is so characteristic of his fearless hope for the future development of the race, a process that he believed inseparable from the pursuit of a scientific mode of thought.

H. G. Wells in Nature is a treasure-trove of the multitude of ideas that Wells generated as a result of this forward-looking habit. It shows him as a genuinely Renaissance man, passionate about science, education, politics, history, sociology – not as separately boxed theoretical disciplines but as intimately interconnected facets of life, essential to our survival. These writings, brought together in one volume, are a valuable gift for Wells scholars and must certainly elicit new and important studies of Wells's work and thought; but equally they will offer general readers who have hitherto known Wells only though his science fiction or novels, a multidimensional view of this 'Discoverer of the Future'.

⁸ E. g., in *The Food of the Gods* (1904), *Marriage* (1912), *The Outline of History* (1920) and *Men Like Gods* (1923).