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1

Introduction

I am simply a story-teller who happens to be a student of science. If a man writes the best that is in him, he cannot help some of his serious speculations appearing.

H. G. Wells, Interview with
the *Weekly Sun Literary Supplement*, 1 December 1895¹

In 1887, H. G. Wells left the Normal School of Science, though without taking a degree. After a stint as a schoolteacher – and having finally completed his degree in zoology in 1890 – he discovered journal editors to be highly receptive to the endeavours of a recent ‘student of science’ who was able to formulate ‘some of his serious speculations’ in a digestible form. It would, indeed, be difficult to understate the role of the periodical press in shaping the fortunes of the young Wells. His first published scientific essay, ‘The Rediscovery of the Unique’, appeared in the *Fortnightly Review* in July 1891. Following this initial success, he took advantage of a number of opportunities in the early 1890s to publish his scientific, literary and educational journalism in such prestigious journals as the *Saturday Review* and *Nature*.

As Wells merged his ‘serious speculations’ with the skills as ‘a story-teller’ he had been developing since 1884, the periodicals were again pivotal to his success. The first significant breakthrough in his literary career occurred when *The Time Machine*, the first of his quick succession of brilliant scientific novels, or ‘scientific romances’, was published in the pages of the *New Review* between January and May 1895.² Subsequently, he continued to serialise his scientific romances in the lucrative periodical market prior to their publication in book form. This market included, of course, popular magazines such as *Pearson’s*, in which *The War of the Worlds* was serialised between April and December 1897.³

2 *The Early Fiction of H. G. Wells*

From the mid 1890s onwards Wells not only sustained a high level of journalistic output alongside his fictional endeavours, but also diverted his energies into other fields. This meant that by the time later scientific romances like *The First Men in the Moon* (1901) and *A Modern Utopia* (1905) appeared, he had published contributions to the nascent discipline of sociology and immersed himself in the contemporary debates of social reform.

Critics have often explored the interconnections between Wells's scientific romances and the non-fiction he was concurrently producing.⁴ However, they have neglected to examine how his journalistic speculations begin to reveal the full extent to which his scientific romances are immersed in the discourses of contemporary science, and indeed in the social, psychological and moral disputes that were stimulated by scientific advances.

The assessment of Wells as something of a 'founding father' of science fiction has, perhaps, worked to obscure a full examination of the relevance of contemporary science in understanding his early fiction. This assessment encourages the popular conception that the significance of his scientific romances lies not so much in their engagement with scientific debates, but rather in the contribution of a number of literary tropes toward the creation of the modern genre of science fiction. Yet, his statements at the time he was actually producing scientific romances are highly instructive in revealing how Wells himself conceived of his work. In a very early interview with the *Weekly Sun Literary Supplement* at the end of 1895, he assessed the status of modern-day fiction in the following terms:

'It is singular enough,' went on Mr Wells, 'how fiction is widening its territory. It has become a mouthpiece for science, philosophy and art. That is the natural tendency of things. You cannot blame science for welcoming so popular an expression, and then speculation itself is so romantic. The dream of the philosopher has all the richness and variety of imagination necessary to a fascinating novel. The only difference is that the scientist builds his airy palace on solid ground. Thus his speculation becomes the recreation of other men'.⁵

At the moment he gave this interview, *The Time Machine* was Wells's only published scientific romance, although *The Island of Doctor Moreau* would appear just a few months later. This statement is especially relevant, therefore, because it suggests the influence that contemporary

debates – scientific, philosophical and sociological – would have on the development of his conception of the scientific romance.

This book investigates the relationship between Wells's scientific romances and the discourses of science in the 1890s and early years of the twentieth century. More specifically, I examine how Wells was drawing upon the discourses of contemporary science – primarily evolutionary biology, but also physical science, astronomy, anthropology, linguistics and entomology – in the creation of the imaginative worlds of his scientific romances. I also investigate how – still more importantly – he used his own fiction as 'a mouthpiece for science', since his scientific romances participate directly in topical scientific debates. The contribution of his early romances to contemporary scientific disputes incorporates Wells's evolving response to the work of leading 'men of science', particularly T. H. Huxley, Herbert Spencer and Francis Galton. The discussion further investigates how his scientific romances were immersed in other present-day discourses, including those concerned with social reform, which might – following Wells himself – be loosely defined as the 'philosophy' of the contemporary moment.

A significant part of the methodology employed in this work consists of resituating Wells's scientific romances in their initial publishing context. It is rather surprising that critics have yet to examine his early fiction in the crucial publishing milieu of the contemporary periodical press. The significance of the periodicals for Wells in the 1890s and 1900s was not restricted simply to his publishing material within them. His relationship to the periodical press was, rather, a reciprocal one.

It would be remarkable indeed if Wells were not also reading the periodicals in which his journalism appeared.⁶ There was a substantial amount of space dedicated to science within those journals which published his scientific writings. In order to maintain the basis of his fiction in contemporary science, Wells appears to have appropriated numerous scientific ideas from the pages of various journals. As I indicate in the chapters which follow, he sometimes makes explicit reference to these periodical sources within his scientific romances. More often, however, his appropriation of scientific ideas from journals is implicit. Wells's own scientific, educational and literary journalism, as well as his early correspondence, reveal precisely which scientific debates and sources – both from within the periodical context and otherwise – informed the construction of his scientific romances.

Some of the earliest examples of his scientific journalism reveal the eagerness of the young Wells to engage in debate with the leading

scientific figures of his time. His emphasis on the importance of co-operation in the evolution of species in 'Ancient Experiments in Co-Operation' (1892), for example, aligns him with T. H. Huxley in his opposition to the economic individualism of Herbert Spencer. In this work, I examine how the imaginative endeavour of his scientific romances enabled Wells to participate in debates with Huxley, Spencer and Galton. Throughout his scientific romances, he was continually adjusting his position in relation to Huxley and Spencer (though he was more consistent in his attitude towards Galton). While he is widely considered to have thoroughly endorsed Huxley's conception of 'ethical' evolution,⁷ this book demonstrates that the work of Spencer was increasingly important to the development of Wells's scientific romances.

Huxley and Spencer represent opposing interpretations of the implications of evolutionary theory for humanity. Huxley rejected the gladiatorial theory of existence as a guide for ethical conduct, and instead argued that humanity should initiate a programme of co-operative ethical evolution in order to ensure the survival of as many as possible. Spencer, conversely, was adamant that humanity could not escape the model of competition between individuals suggested by nature. Indeed, it was for Spencer imperative that humanity did not interfere with this model. To do so would only result in the propagation of the weak, which would in turn lead to the degradation of the species as a whole.

While Francis Galton was active in many fields of scientific research, his primary significance in the context of this book concerns his work towards establishing the nascent science of eugenics. In a number of works, Galton researched family genealogies and advanced the conception of 'positive' eugenics. This consisted of the public endowment of marriages between gifted individuals, in order to accelerate the evolution of humanity.

The impact of the disputes between such figures as Huxley, Spencer and Galton was not restricted to scientists alone. Science in the late Victorian and Edwardian period encompassed a wide range of social debates. The difference between a Huxleian and a Spencerian interpretation of the implications of evolutionary biology, for example, amounted to a clash of worldviews which could influence such issues as conceptions of social reform and the provision of social welfare. Alongside those scientific speculations published in the periodical press – including of course Wells's own – appeared articles dealing with the social, psychological and ethical implications of science. In this book, I investigate how in his scientific romances Wells endeavoured to engage in debate with those articles dealing with the social implications of science that

were published at the same time, and often in the same journals, as his own scientific journalism.

Wells's educational journalism indicates a further context which is significant in developing our understanding of his early fiction. As Brian Stableford has pointed out in his stimulating history of the genre, the development of the scientific romance was facilitated by an unprecedented period of literary experimentation from the 1880s onwards.⁸ This period found publishers attempting for the first time to cater for the demands of near universal literacy that had been achieved as a result of the 1870 Education Act.⁹ Since the Education Acts implemented earlier in the century had provided Wells with access to higher education and so – in an indirect sense – created him as a writer, it seems somehow appropriate that his scientific romances contain a definite educational function. Wells was fully aware of the interest in scientific topics among the newly created popular readership. Consequently, his use of comical incidents in such novels as *The First Men in the Moon* – which was serialised in the popular *Strand Magazine* – indicates his intention to communicate scientific ideas to a non-specialist readership of the scientific romances.

The emergence of the Wellsian scientific romance as a literary mode that satisfied the public curiosity about science depended upon the adoption and transformation of other popular late-Victorian genres, such as the adventure narrative and the future war story. Simultaneously, Wells's scientific romances continue long-standing literary genres as he engages with satirical and utopian discourse, from Jonathan Swift to William Morris.¹⁰ It is important to acknowledge that, in addition to participating in topical scientific discussions, these works continue intellectual debates from earlier in the Victorian era. This is particularly true of Wells's theorising of individuality.

While the focus of this work is on those of his romances which engage with contemporary science, Wells was concurrently publishing novels that might be defined as purely fantastic. Thus shortly after *The Time Machine* appeared in 1895, he also published *The Wonderful Visit*, the story of an angel that falls to earth. Similarly, one year after *The First Men in the Moon* appeared, *The Sea Lady* (1902) – a story featuring a mermaid – was published. The fact that they do not have a scientific basis, however, means that these fantastic novels fall outside the scope of the present study.

The development of Wells's scientific romance was, I will argue, characterised by three distinct – and yet related – stages. These three stages parallel the development of the author's thought as he adjusts his

position in relation to specific contemporary debates and leading scientific figures. This book comprises a series of six case studies of individual texts, beginning with *The Time Machine* and ending with *A Modern Utopia*, and its three parts correspond to the successive stages in Wells's development as an author of scientific romances.

The first of these stages, which I have entitled 'Misadventures in a Post-Darwinian Universe', concerns the pessimistic vision of Wells's 'evolutionary fables'. The discussion of *The Time Machine* in Chapter 2 considers how Wells deliberately extrapolates the pessimistic implications of evolutionary theory regarding the creation of a disturbing vision of future humanity. In particular, I consider how the potential for retrogression in human evolution identified in the work of Huxley and – more especially – Ray Lankester informed his construction of the Eloi and the Morlocks, the two degenerate remnants of humanity the Time Traveller encounters in the future. In this initial case study, I examine how the disturbing future portrayed in Wells's first novel signifies something of a break from Huxley.

In my discussion of *The Island of Doctor Moreau* (1896) in Chapter 3, I indicate how in his second scientific romance Wells continues to draw upon the pessimistic implications of evolutionary theory for humanity. By examining the novel in relation to periodical debates that concerned the capacity of animals to attain reason through language, my analysis reveals a new context in which to understand *The Island of Doctor Moreau*. I also investigate how his fictional engagement with these debates provided Wells with an alternative means of exploring the degenerative potential of humanity, since the entire species *homo sapiens* represented in the novel is implicated in the linguistic retrogression of the Beastfolk.

The theme of misadventure is especially prominent in the evolutionary fables, as the protagonists are confronted with temporal and spatial displacement respectively. I examine how both the temporal explorer of *The Time Machine* and Prendick, the shipwrecked survivor of *The Island of Doctor Moreau*, are subjected to the harsh realities of existence in a post-Darwinian universe. In my discussion of each of these protagonists, I investigate how their degradation to bestiality in the space of less than a single generation relates to existing fears concerning 'acquired characteristics'.

I have labelled Wells's second stage of development as a writer of scientific romances 'Science and Society'. The title refers to the fact that in the two novels included in this category, *The Invisible Man* (1897) and *The War of the Worlds* (1898), Wells for the first time presents his

reader with a recognisable social setting. This enables him to explore the implications of recent advances in scientific knowledge for society. The analysis of *The Invisible Man* in Chapter 4 centres on Wells's exploration of the complexities inherent in the relationship between scientist and society. I investigate how in the novel he warns against both the reticence of scientists to communicate their knowledge effectively and a continued failure on the part of society to facilitate a broader understanding of scientific knowledge. I also examine how *The Invisible Man* contributes to existing debates over the nature of scientific method itself.

In *The War of the Worlds*, Wells shifts the focus from the relationship between scientist and society onto disputes over the implications of Darwin's theory of natural selection for human ethical conduct. Chapter 5 investigates how he uses the social disintegration created by the Martian invasion in the novel as a means to participate in the debate between Huxley's ethical evolution and the economic individualism of Spencer. The analysis also explores the implications of the Martian invasion for the conduct of Western humanity towards supposedly 'inferior' races and species.

The final stage I have identified in the development of Wells's scientific romances is entitled 'Towards the Shaping of Humanity'. As the title implies, in the last phase of his development in this genre of writing Wells became much more interested in utilising the scientific romance to suggest possible future directions for humanity. This emerges in *The First Men in the Moon* and is more explicitly stated in *A Modern Utopia*. His interest in using his fiction to suggest the future shape of humanity is signalled by Wells's divergence after 1901 into the emerging field of sociology.

Chapter 6 examines *The First Men in the Moon* in the context of Wells's first full-length sociological work, *Anticipations* (1901). The opposition between earthly and lunar society in the novel is understood in the context of the analysis in *Anticipations* of the emergence of a unified 'world state' in the twentieth century. I investigate how the human society portrayed in the novel corresponds to Wells's assessment of those factors which obstruct the emergence of the world state in the contemporary world. The global unity of the Selenites is considered as a tentative articulation of this world state – though it is clear that the writer never univocally endorses the lunar global order since his satirical intentions are distinctly apparent.

A Modern Utopia was intended as a form of hybrid between the type of philosophical engagement Wells had himself earlier identified as

significant for contemporary fiction and novelistic endeavour. In order to understand the element of philosophical discussion in the work, Chapter 7 traces how the social policies advanced in *Utopia* emerge from the process of intellectual development Wells underwent between the publication of *Anticipations* and the appearance of *A Modern Utopia*. However, I also consider how, as a consequence of the artistic limits he imposes upon himself in *A Modern Utopia*, Wells cannot endorse the Utopia his protagonists visit as a practical means of instigating social reform.

This study is not the first book to examine the scientific basis of Wells's work. As its title implies, Roslynn D. Haynes's *H. G. Wells: Discoverer of the Future, The Influence of Science on His Thought* (1980) examines the impact of science on the writer.¹¹ However, the broad focus of Haynes's study on Wells's entire output between 1895 and 1946 generates a series of overviews which results in the specific scientific engagement of the early romances being largely overlooked. William Greenslade's *Degeneration, Culture and the Novel, 1880–1940* (1994) examines some of Wells's early fiction as part of a wider response to degeneration theory, thereby pre-empting something of the discussion in Part One of this book.¹² Yet Greenslade's preoccupation with degeneration – and indeed his focus on a number of authors – means that he touches only slightly on the scientific engagement of Wells's early work. What distinguishes *The Early Fiction of H. G. Wells: Fantasies of Science* from previous studies is that it investigates the full extent to which Wells's romances are immersed in the discourses of science in the 1890s and 1900s.

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