## 'AND EARLY IN THE TWENTIETH CENTURY CAME THE GREAT DISILLUSIONMENT': SCIENCE, POWER, AND H. G. WELLS'S MONSTROUS FUTURES<sup>.</sup>

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The infernal machine which has been scientifically preparing for the last twenty-five years is now on its wild career like one of Mr. Wells's inventions, and wherever it goes it will leave desolation behind it and put all material progress back for at least half a century. There was never anything in the world worthier of extermination, and it is the plain duty of civilised nations to drive it back into its home and exterminate it there...<sup>1</sup>

In this essay, I shall show how monstrous prophetic spectres of warfare and revolution haunted the imagination of the imperial British *fin de siècle*, adding new scientific dimensions of fear to an already over-determined literary symbolism of monstrous historical change. For in drawing upon a wider bourgeois dread that the steadily-encroaching future would herald an apocalyptic loss of power on their behalf, H. G. Wells's greatest contributions to this literature lay in his powerful usage of contemporary science, especially evolutionary theory. That Wells operated to some extent in the *Frankenstein* 

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<sup>&</sup>lt;sup>1</sup> Robert Bridges, letter to the editor, *The Times*, 2 September 1914, cited in Dominic Hibberd, *The First World War*, ed. Arthur Pollard (Basingstoke and London: Macmillan, 1990), 53.

tradition of the mad scientist is made clear by Vincent Brome's perceptive observations upon Wells's ambivalence towards scientific power, for

He saw that science might run off in Frankenstein abandon, gathering more and more power over nature while the ordinary human being had less and less power over himself. Power, the concept of power, of power through scientific experiment, of the need to bring power itself under control, to constrain it for the collective happiness of mankind, dispensing in the end with the necessity for power at all; these ideas fascinated Wells and drove him into one story after another...<sup>2</sup>

Another recurring Wellsian idea, however, is that of an essentially amoral, endlessly changing natural world remaining indifferent, if not actively hostile, to human dreams of dominion over it. During *The War of the Worlds*, for example, the Artilleryman condemns the useless cowardice of *fin-de-siècle* bourgeois norms, for '…it isn't all of us who are made for wild beasts; and that's what it's got to be.... All... those damn little clerks... they'd be no good. They haven't any spirit... [The] Martians will just be a godsend to these... Nice roomy cages, fattening food, careful breeding, no worries...'<sup>3</sup> When considered in this savage futuristic guise, moreover, history itself usually appears as fundamentally inhuman in its chaotic, uncontrollable reactions to scientific attempts to control and exploit such power. Therefore, I shall argue that the Wellsian future also remains essentially unknowable despite such scientific efforts, and that a monstrous, even apocalyptic fear remains that, as in *The Time Machine*, these 'days of weak experiment, fragmentary theory, and mutual discord are indeed man's culminating time!'<sup>4</sup>

The future of science was also becoming monstrously unpredictable even as Wells wrote his scientific romances, and the very foundations of the scientific laws which had driven the growth of industrial technology, and therefore of bourgeois capitalism itself, were steadily undermined. As Eric Hobsbawm comments,

In a sense 'nature' became less 'natural' and more incomprehensible... [Eventually,] most educated human beings found themselves involved in the crisis of the Galilean or Newtonian universe of physics, whose beginning can be fairly precisely dated in 1895, and which was [...] replaced by the Einsteinian universe of relativity. Ideologists on the left

<sup>&</sup>lt;sup>2</sup> Vincent Brome, H. G. Wells: A Biography, (Thirsk: House of Stratus, 2001), 68.

<sup>&</sup>lt;sup>3</sup> H. G. Wells, *The Time Machine & The War of the Worlds*, 'SF Masterworks 24' (London: Millennium / Gollancz, 1999), 250.

<sup>&</sup>lt;sup>4</sup> Wells, *The Time Machine & The War of the Worlds*, 92. Subsequent citations in text.

[rejected] relativity as incompatible with their idea of science, and those on the right condemned it as Jewish. In short science henceforth became not only something which few people could understand, but something of which many disapproved while increasingly recognizing that they depended on it.<sup>5</sup>

In turn, I contend that bourgeois culture also feared historical change as threatening the power of imperial capitalism and that, in Wells, scientific power appears simultaneously as both a potential saviour and a destroyer. Despite all the destruction caused to British imperial pretensions by superhuman Martian technology, for example, the Artilleryman remains convinced that to have any hope of recapturing Earth, or even to live as anything other than animals, 'we must keep up our science – learn more' (253).

For Wells, however, evolutionary history itself appears as the primary scientific vehicle for conveying the monstrous future fears of the bourgeois *fin de siècle*, despite what Hobsbawm identifies as its potentially progressive implications. Certainly, Wells's scientific training would have left him in little doubt of humanity's suicidal potential for violent aggression, or of its basis in evolutionary history. To a large extent, this knowledge, as well as Wells's ambivalence towards its ideological implications, was inherited from his former teacher, T. H. Huxley, then Britain's greatest advocate of contemporary science, and in particular of evolutionary theory. Huxley's discourse, however, remains far more optimistic than Wells's about humanity's potential for future evolutionary growth, especially given Huxley's own faith in science as a liberating force:

Let us understand...that the ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combating it. I see no limit to the extent to which intelligence and will, guided by sound principles of investigation, and organised in common effort, may modify the conditions of existence, for a period longer than that now covered by history. And much may be done to change [...] man himself.<sup>6</sup>

In contrast, *The Invisible Man* describes a scientific establishment that flouts or ignores the communal requirements of Huxley's vision of scientific progress and Griffin himself rages against an unscrupulous professor who 'was a

<sup>&</sup>lt;sup>5</sup> Eric Hobsbawm, *The Age of Empire: 1875-1914* (London: Weidenfeld & Nicolson, 1987), 244-47.

<sup>&</sup>lt;sup>6</sup> Cited in Sally Ledger and Roger Luckhurst, eds., *The Fin de Siècle: A Reader in Cultural History, c. 1880-1900.* (Oxford: Oxford University Press, 2000), 239-40.

scientific bounder, a journalist by instinct, a thief of ideas, he was always prying! And you know the knavish system of the scientific world. I simply would not publish, and let him share my credit'.<sup>7</sup> Ultimately, Wells's protagonist emerges as a monstrously power-hungry, yet singularly ill-adapted evolutionary specimen of a naked superman upon the freezing streets of *fin-de-siècle* London, and we find that 'Griffin, in his maniac delusions of divine superiority, despises humanity.... He no more needs trousers than Jove or Satan. It is beneath his notice to concern himself with such minutiae'.<sup>8</sup> It is, of course, a similarly unscientific failure to focus upon such seemingly petty, but practically vital details – a completely opposite attitude to the core ideology of the *fin de siècle's* greatest literary scientist-hero, Sherlock Holmes - which in The War of the Worlds eventually scuppers the invading Martians' bid for power. Before they succumb to Earth's seemingly insignificant bacteria, however, they demonstrate how the world of British imperial capitalism could disintegrate into chaos before the overwhelming military power of such monstrous invaders. I shall now examine how such *fin-de-siècle* concerns anticipate the future scientific horrors of the First World War of 1914-1918, especially since both Martian and British weaponry alike appear monstrous in Wells's text. After all, when Martian Fighting-Machines encounter the Royal Navy's ironclad torpedo ram, the Thunder Child, they regard 'this new antagonist with astonishment. To their intelligence, it may be, the giant was even such another as themselves....' (203).

## The War of the Worlds and the Great War

One may picture, too [...] the swiftly spreading coils and bellyings of [...] a strange and horrible antagonist of vapour striding upon its victims [...] running, shrieking, falling headlong, shouts of dismay, the guns suddenly abandoned, men choking and writhing on the ground.... And then night and extinction.... Before dawn [...] the disintegrating organism of government was, with a last expiring effort, rousing [...] London to the necessity of flight.... (183)

Here Wells envisions the full horrors of poison gas, the monstrous scientific weapon that would be used, or misused, by the Germans to try to break the bloody stalemate into which the Western Front had degenerated by 1915. Historically, however, the sheer endemic monstrosity of the Great War is evidenced by the speed with which this counterpart of Wells's all-conquering

<sup>&</sup>lt;sup>7</sup> H. G. Wells, *The Invisible Man: A Grotesque Romance*, ed. Macdonald Daly (London: Dent, 1995), 83. Subsequent citations in text.

<sup>&</sup>lt;sup>8</sup> John Sutherland, *The Literary Detective: 100 Puzzles in Classic Fiction* (Oxford: Oxford University Press, 2000), 231-233.

Black Smoke became just another standard weapon of mass destruction, as the manufacture of gas masks and the natural unpredictability of the winds blunted its edge. Nevertheless, Wells anticipates Wilfred Owen's horrific visions of the biological impact of such weapons during the Great War upon bloody, 'froth-corrupted lungs, / Obscene as cancer, bitter as the cud / Of vile, incurable sores on innocent tongues...'.<sup>9</sup> Wells himself, meanwhile, would repeatedly attempt to fuse his desire to root out the militarism which had infected *fin-de-siècle* Germany with his belief in humanity's responsibility to create a united, peaceful world, lest even more monstrous future wars drive it towards evolutionary suicide. In perhaps his most famous wartime pamphlet, *The War That Will End War* (1914), he insisted that an unprecedented opportunity had arisen, for all the monstrous destruction necessary to defeat Germany, to end the greater monstrosity of chaotic historical change, and impose human rationality upon the nature of history itself:

The character of the new age that will come out of the catastrophes of this epoch will be no mechanical consequence of inanimate forces.... No doubt the mass of mankind will still pour along the channels of chance, but the desire for a new world of a definite character will be a force, and if it is multitudinously unanimous enough, it may even be a guiding force, in shaping the new time. The common man and base men are scared to docility. Rulers, pomposities, obstructives are suddenly apologetic, helpful, asking for help. This is a time of incalculable plasticity. For the men who know what they want, the moment has come. It is the supreme opportunity, the test or condemnation of constructive liberal thought in the world...<sup>10</sup>

One German equivalent of Wellsian scientific prophecy had come in 1912 with General von Bernhardi's notorious *Germany and the Next War*, which insists that war 'is a biological necessity of the first importance, a regulative element in the life of mankind which cannot be dispensed with... *Higher civilization and the correspondingly greater power are the foundations of the right to annexation*...'<sup>11</sup> Wells's Martian invasion epitomises the sense of evolutionary dethronement which corresponds to this monstrous scientific vision of German imperial conquest, the narrator noting that 'if we have learned nothing else, this war has taught us pity – pity for those witless souls who suffer our dominion...' (244). The most outspoken visionary of post-Martian survival, the Artilleryman, also acknowledges the historical and imperial ramifications of

<sup>&</sup>lt;sup>9</sup> Wilfred Owen, 'Dulce et Decorum Est', cited Hibberd, The First World War, 149.

<sup>&</sup>lt;sup>10</sup> H. G. Wells, *H. G. Wells: Journalism and Prophecy, 1893-1946*, ed. W. Warren Wagar (London: The Bodley Head, 1964), 59-61.

<sup>&</sup>lt;sup>11</sup> General von Bernhardi cited in Hibberd, *The First World War*, 9-11; my italics.

Britain's defeat, emphasising the necessity of adapting quickly to a world where scientifically-advanced invaders have 'made their footing good and crippled the greatest power in the world... Cities, nations, civilisation, progress – it's all over. That game's up. We're beat...' (247-49).

The question that remained, however, dominates all of Wells's texts: *in order to combat a monstrous enemy, to what extent must one become monstrous in turn*? John H. Morrow Jr, for example, comments that

Like some metal monster, or 'Great Sausage Machine' as British troops referred to the Western Front, the war developed a life of its own, feeding on the bodies of men... The brutalization of the European combatants, with attendant atrocities against soldier and civilian, began in imperial wars and accelerated in the First World War, not with the rise of totalitarian regimes and the Second World War...<sup>12</sup>

One significant result of this monstrous combination of militaristic intoxication and military incompetence was that the war became so destructive as to overturn the social order of Europe itself, most obviously in Russia. When the events of 1917 were judged against the apparently inexorable laws of orthodox Marxist revolutionary history, it appeared that a long-awaited bourgeois revolution 'had finally occurred, only to be snatched from their grasp by sinister and incomprehensible forces... [Non-Bolshevik] Marxists were similarly outraged: the time was not yet ripe for proletarian socialist revolution, and it was inexcusable that a Marxist party should break the rules and seize power...<sup>13</sup> The fact that this seemingly inconceivable event should occur in defiance of all known laws of historical change recalls a similar sense in The War of the Worlds that history is, for all the attempts at scientific prophecy in Wells's texts, fundamentally unknowable. Such unpredictability is ironically underscored when the narrator finds his pre-Martian writings upon 'the probable development of Moral Ideas with the development of the civilising process... "In about two hundred years", I had written, "we may expect -" The sentence ended abruptly...' (270).

## The Time Machine and Monstrous Evolution

I thought of the great precessional cycle that the pole of the earth describes. Only forty times had that silent revolution occurred during all

<sup>&</sup>lt;sup>12</sup> John H. Morrow Jr, *The Great War: An Imperial History* (London: Routledge, 2004), 281-82.

<sup>&</sup>lt;sup>13</sup> Sheila Fitzpatrick, *The Russian Revolution*, 2<sup>nd</sup> edn (Oxford: Oxford University Press, 1994), 41.

the years that I had traversed. And during these few revolutions all the activity, all the traditions, the complex organisations, the nations, languages, literatures, aspirations, even the mere memory of Man as I knew him, had been swept out of existence. Instead were these frail creatures who had forgotten their high ancestry, and the white Things of which I went in terror. Then I thought of the Great Fear that was between the two species, and for the first time, with a sudden shiver, came the clear knowledge of what the meat I had seen might be. Yet it was too horrible! (62).

An important aspect of the treatment of historical monstrosity in The Time Machine is to first show human history in its death-throes, before showing the increasingly monstrous results of a relentless post-human evolutionary process. By the end of the novel's temporal odyssey, every aspect of life on Earth becomes unspeakably monstrous, with the 'abominable desolation that hung over the world. The red eastern sky, the northward blackness, the salt Dead Sea, the stony beach crawling with these foul, slow-moving monsters, the uniform poisonous-looking green of the lichenous plants, the thin air that hurts one's lungs: all combined to an appalling effect...' (84). In scientific terms, contemporary evolutionary theory had contributed to a general fin-de-siècle sense of human dethronement, rendering the hapless human individual no more than an intelligent beast, subject to such monstrous Wellsian historical developments. It is this monstrous sense of humanity's historical and evolutionary destiny as being fundamentally inhuman and uncontrollable that I am concerned with here. This concept of history as essentially monstrous is also discernible through the uncanny distress experienced while trying to explore its mysteries, as the Time Traveller 'cannot convey the peculiar sensations of time travelling. They are excessively unpleasant. There is a feeling exactly like that one has upon a switchback – of a helpless headlong motion! I felt the same horrible anticipation, too, of an imminent smash...' (19).

One ideology which appeared to offer contemporaries some hope of understanding the historical direction of the *fin-de-siècle* world with scientific certainty was Marxism: and notions of the future triumph of communistic visions of human society often recur within *The Time Machine*. Even as the Bolsheviks seized the chance to put such theories into practice after 1917, they believed themselves 'immune from utopianism because their socialism was scientific. But, whether or not they were right about the inherently scientific nature of Marxism, even science needs human interpreters, who make subjective judgements and have their own emotional biases. The Bolsheviks were revolutionary enthusiasts, not laboratory assistants...'.<sup>14</sup> As the Time Traveller

<sup>&</sup>lt;sup>14</sup> Fitzpatrick, *The Russian Revolution*, 83.

discovers, any scientific theories concerning the future history of mankind are themselves vulnerable to the chaotic violence which follows from revolutionary shifts in the relative power of opposing social classes and / or species. The Time Traveller himself becomes a catalyst of devastating power, both in the carnage he provokes in AD 802,701 and in the monstrous historical knowledge he brings back from the future. For if his adventures only serve to confirm his already dark forebodings concerning the possible future of bourgeois civilisation, then his *fin-de-siècle* audience is left powerless, and can only 'live as though it were not so' (92).

## *The Island of Doctor Moreau, The Invisible Man* and the Monstrous Scientific Outcast

I beheld...a magnificent vision of all that invisibility might mean [...] the mystery, the power, the freedom.... And I, a shabby, poverty-struck, hemmed-in demonstrator, teaching fools in a provincial college, might suddenly become – this. I ask you, Kemp, if you – Anyone, I tell you, would have flung himself upon that research.... (84).

With the growth in evolutionary theory occurring alongside ever more dramatic examples of technological change, nineteenth-century scientific thought had, by the fin de siècle, become an engine of historical change to an unprecedented degree, being both the bedrock of Britain's imperial power and a potential tool of its downfall. Increasingly, the fabled 'workshop of the world', whose industrial might had driven bourgeois capitalism to its heights of imperial power, appeared hamstrung by its historic dominance and 'the [crippling] burden of established and tried techniques, entrenched attitudes and heavy investment to be borne... But as long as engineers and industrialists were regarded as inferior in prestige and status to the gentry and the gentrified professions, little change was to be expected...<sup>15</sup> Individual commitment to scientific progress thus hardly guaranteed socio-economic status in Wells's Britain, as reflected in the ignominious exile of both Griffin and Moreau. There was no historical guarantee, after all, that the aims and achievements of such ruthless individuals, or the scientific forces whose power they sought to wield, would prove compatible with the liberal ideals which had been used to justify bourgeois economic and political power. As Peter Kemp comments, the 'idea of the man of destiny has intense appeal to Wells – despite his continual insistence that history is made by mass-movements, not individual personalities. As if trying to reconcile his excitement about the one with his faith in the other, he

<sup>&</sup>lt;sup>15</sup> J. F. C. Harrison, Late Victorian Britain, 1875-1901 (London: Routledge, 1991), 17-20.

ensures that his colossi sooner or later come to grief...<sup>16</sup> Historically, a similar bourgeois desire for an all-powerful individual to take over a world whose Victorian certainties had been shattered by war and economic collapse, and thereby to ward off the monstrous alternative future of communist anarchy, would lie behind much of the sinister appeal of twentieth-century fascist dictators. Meanwhile, Moreau's dedication to pure research renders him historically dangerous in an age of increasing global scientific power, as the 'study of Nature at last makes a man as remorseless as Nature...'.<sup>17</sup>

The failure of Moreau's experiments only reinforces such callousness, for a 'blind fate, a vast pitiless mechanism, seemed to cut and shape the fabric of existence, and [all] were torn and crushed, ruthlessly, inevitably, amid the infinite complexity of its incessant wheels...' (93-94). This controlling influence is itself precisely what I contend the forces of historical change, represented here in evolutionary terms, have upon human life as portrayed in the monstrous literature of the fin de siècle. Griffin, despite his often absurd limitations, embodies Brome's assertion (quoted above) of Wells's obsessive preoccupation with scientific power; the Invisible Man insists that he is now beyond the social norms of 'common people... Surely, Kemp, you're not fool enough to dance on the old strings...' (109). Corresponding to this, and even as bourgeois imperial Britain edged ever closer towards a potentially apocalyptic historical abyss of war and revolution, monstrous literature would abound elsewhere with other degenerate, yet mesmerising creatures, whose monstrous desires echoed those felt by Wells's power-hungry invisible protagonist. Moreover, fin-de-siècle specimens of these not only included such sinister fictional monsters as Bram Stoker's Count Dracula, Robert Louis Stevenson's Mr. Hyde, Sir Arthur Conan Doyle's Professor Moriarty and Oscar Wilde's Dorian Gray, but also monstrous authors, such as Wilde himself. These demonised literary figures would therefore all serve as historical scapegoats for Britain's internal weaknesses, which would themselves be made increasingly apparent by such truly monstrous historical events as the Jack the Ripper murders of 1888. In turn, such criminal atrocities would leave fin-de-siècle Britain longing for the protection of monstrously powerful science to defend it from an increasingly dangerous world: a potent ideological need which would be most convincingly fulfilled in *fin-de-siècle* literature by the creation of the scientific Great Detective himself, Sherlock Holmes. A similar process is also clearly at work within *The Invisible* Man, whose protagonist is feared and betrayed by his ostensible social / scientific superiors, such as Kemp, as well as by such seemingly inferior proletarians as Marvel. Nonetheless, the story concludes with both Kemp and

<sup>&</sup>lt;sup>16</sup> Peter Kemp, *H. G. Wells and the Culminating Ape: Biological Imperatives and Imaginative Obsessions*, 2<sup>nd</sup> edn (Basingstoke: Macmillan, and New York: St. Martin's, 1996), 193.

<sup>&</sup>lt;sup>17</sup> H. G. Wells, *The Island of Doctor Moreau*, ed. Brian Aldiss (London: Dent, 1993), 73; my italics.

Marvel vying to possess and understand the mysterious scientific powers whose secrets are embodied by this now-dead but still fascinating would-be invisible usurper of British imperial power. Thus Griffin, even while fatally vulnerable to violent collective action, aspires to fulfil his own monstrous dreams of imperial destiny through a murderous invisible 'Reign of Terror...' (114). Nevertheless, both he and Moreau find that even their fellow scientists cannot be relied upon to support their radical ideas, for as Prendrick recalls,

It was not the first time that conscience [...] turned against the methods of research. The doctor was simply howled out of the country. It may be he deserved to be, but I still think the tepid support of his fellow-investigators, and his desertion by the great body of scientific workers, was a shameful thing. Yet some of his experiments [...] were wantonly cruel. He might perhaps have purchased his social peace by abandoning his investigations, but he apparently preferred the latter, as most men would [...] under the overmastering spell of research... (32)