autointoxicationist terms. Ideas expressed in all apparent sincerity in Anticipations are attributed in The History of Mr Polly to an 'unpleasant' Highbury intellectual and just to add insult to injury Wells also lends him the enormous forehead of the Fabian Society's Sidney Webb. 45 In this reading of *The History of Mr Polly*, the conflict between Wells's priggish programme of social reform and his affection for his fictional characters has been resolved in favour of the plucky little shopkeepers. The radical (even murderous) intervention required to save the social organism from self-poisoning is reduced to the mock-heroic unseen battles taking place inside Mr Polly - conflicts which are resolved by a dose of fresh air and exercise. Rather than facing literal elimination, Mr Polly ceases to exist in a legal sense only - when he is officially declared dead in a bureaucratic mix-up (203).

What such a reading ignores, however, is that even while Wells seems to poke fun at his own ideas, The History of Mr Polly is discreetly carrying out the social programme regarding society's failures first put forward in Anticipations. A Modern Utopia makes it clear that the islands to which society's failures are to be banished need not be unpleasant places. In fact, there is no reason why they should not resemble the rural idyll in which Mr Polly finds himself...

## BICYCLES, TRICYCLES, AND TRIPODS: LATE VICTORIAN CYCLING AND WELLS'S THE WAR OF THE WORLDS Jeremy Withers

As evident from several of H. G. Wells's writings from the 1890s, most notably his novel The Wheels of Chance (1896), the social, cultural, and technological changes initiated by late Victorian developments in the bicycle fascinated him. Furthermore, as his early 'scientific romances' like The Time Machine (1895) and The War of the Worlds (1898) demonstrate, Wells's interest in the bicycle was accompanied by a keen interest in the overall cultural implications of machines and of technological development in general. However, scholars have yet to comment on any larger significance of bicycles appearing so often during the devastating attack of the Martian invaders in The War of the Worlds, the work published only two years after the much more overtly and unabashedly bicycle-oriented The Wheels of Chance. When added up, references to bicycles occur just over a dozen times in the relatively short text that is The War of the Worlds. Some references are fleeting and only a few words long, while others anchor entire paragraphs. Yet surely in a novel so keenly fascinated by the various technologies and machines employed by both the Martian attackers in their war for control of the earth and by the humans in their war of defence and in their attempts at escape from the Martians, it can be no mere coincidence that that much celebrated and much written about technological achievement of the 1890s - the so-called 'safety bicycle' - appears as often as it does. However, even though scholars overwhelmingly perceive Wells's earlier The Wheels of Chance as sounding clear notes of praise for the bicycle's technological progress and of approval for what the bicycle has done to help liberate women and the British working class, his perspective on the bicycle in The War of the Worlds manifests itself as much more dismissive and much less celebratory. Put simply, Wells's inclusion of occasional references to the bicycle function as integral elements of the novel's overall project of undercutting humanity's smugness regarding its own accomplishments, especially its technological ones. As Colin Manlove has usefully stated: 'The thrust of Wells's attack [in his scientific romances] is against the overweening pride of intellect, even while he admires its products.'2 Manlove's comment certainly applies to The War of the Worlds, a work fascinated with military and transportation technologies of various kinds, while still offering up a scathing critique of the bicycle, for, to put it in

<sup>45</sup> See John Sutherland, 'Introduction', The History of Mr Polly, xiii-xxix (xxii).

<sup>&</sup>lt;sup>1</sup> The defining features of the safety bicycle will be discussed below. For now, let it just be said that not that much has changed between the safety bicycle of the 1890s and many of the bicycles of today; thus, the safety can be looked at as the prototype of the modern bicycle. The safety gets its name from being a safer alternative to its predecessor, the so-called 'ordinary' or 'penny-farthing' bicycle (named after the two British coins of different sizes). The ordinary, with its massive front wheel and smaller rear wheel, was notorious for accidents that flung the rider forwards over the handlebars, often causing injury and on rare occasions even death. <sup>2</sup> Colin Manlove, 'Charles Kingsley, H. G. Wells, and the Machine in Victorian Fiction,' Nineteenth-Century Literature, 48 (1993), 233 (212-39).

Manlove's words, in the novel the bicycle symbolises humanity's 'overweening pride.'

Of course, The Wheels of Chance and The War of the Worlds do not, by any means, contain the alpha and omega of Wells's engagement with issues of transportation in general, or of cycling in particular. For example, an early nonfiction work Anticipations of the Reactions of Mechanical and Scientific Progress (1901), a collection of prophetic musings regarding the twentieth century opens with a chapter entitled 'Locomotion in the Twentieth Century.' This chapter contains ruminations on such topics as railroads, urban congestion, 'motor carriages' and 'motor trucks' - and a few scattered references to the bicycle. Arguably, Wells's The War in the Air (1908) embodies the author's most sustained preoccupation with issues of transportation, for that novel's pages brim with frequent mention of such varied transportation technologies as bicycles, motor-bicycles, monorails, motor cars, submarines, and (most prominently) the aeroplanes and airships gestured towards by the work's title. Wells can still be found reflecting on bicycles as late in his career as his Experiment in Autobiography (1934) and about technologies of transport in general as late as The Shape of Things to Come (1933).

However, this article focuses on images of bicycles in The War of the Worlds (and to a far lesser extent, in The Wheels of Chance), because these two texts were written during what scholars call 'the bicycle boom' of 1894-97, an era described by Nicholas Oddy as 'when the activity [of cycling] was at the height of fashion, the market was characterised by the monied classes buying top-grade machines and the industry was bloated by huge speculation by capitalists eager to profit from the potential it offered.<sup>3</sup> Because cycling was all the rage at this time in England, and the zeal for all things cycling in this era has never really been surpassed, the largely negative depiction Wells gives us of bicycles in The War of the Worlds is all the more striking and interesting.

In an article entitled 'The Wheels of Chance and the Discourse of Improvement of Health', Hiroshi So points out how, for Wells, the bicycle was an important device that allowed lower and middle class citizens to escape the 'poverty-stricken areas of London [...] characterised by pollution and a lack of fresh air' to the more undeveloped English countryside, a location whose pastoral beauty provided an access to nature associated with improved health for the Victorians. 4 So goes on to argue that in Wheels the bicycle functions as a 'revolutionary leveller' that helps 'reduce [...] social distance' between people of

various social classes like the lower-middle class protagonist of the novel, Mr. Hoopdriver, and the upper class young woman Jessie. 5

Yoonjoung Choi, in another study of The Wheels of Chance, agrees with So that the bicycle possesses keen emancipatory powers for Wells. For Choi, Wells depicts bicycling as embodying a Bakhtinian carnivalesque spirit and as a sport 'ideal [...] for breaking class and gender boundaries'.6 Lastly, Simon J. James argues that Wells depicts the bicycle as not only providing a newfound freedom of movement to a population who had never really known it before, but also as providing a 'corresponding freedom of thought' too.7 This is because Wells depicts the bicycle in Wheels as often delivering Hoopdriver over to splendid reveries and daydreams while cycling, something his normal and deadening work as a draper's assistant rarely, if ever, seems to allow.8

In sum, what the above paragraphs show us is that in his romance published just two years prior to The War of the Worlds, Wells perceived the bicycle in categorically glowing terms. The Wheels of Chance depicts the bicycle as the liberator and redeemer par excellence of the Victorian middle and lower classes. However, when we turn to the bicycle in The War of the Worlds, a decidedly different attitude emerges regarding this 'miraculous' machine of the Victorian era. For it is here, when Wells is focusing less on the bicycle's social and cultural significance and more on its technological and evolutionary significance, that readers see him writing much less favorably and much less optimistically about the bicycle.

When turning to a discussion of The War of the Worlds and bicycles, it is important to remember how fervently invested that novel is in reflecting upon the function and significance of machines of all types. Wells devotes passage after passage in the novel to detailed descriptions of the cylinders in which the Martians arrived on Earth, of the tripods in which the alien invaders move around and fight, of the weaponry such as the heat-ray and the poisonous black smoke by means of which the Martians annihilate so many humans, and so forth. Here is one brief, representative passage showing the unnamed narrator of The War of the Worlds sharing his fascination with the eerily organic quality of Martian machinery, in this case a Martian handling machine: 'Its [the handling machine's] motion was so swift, complex, and perfect that at first I did not see it as a machine, in spite of its metallic glitter. [...] People who have never seen these structures, and have only the ill-imagined efforts of artists or the imperfect descriptions of such eye-witnesses as myself to go upon, scarcely realise that

<sup>&</sup>lt;sup>3</sup> Although not published in book form until 1898, Wells began composing *The War of the Worlds* in 1895, and the text was first published in a 1897 serialisation in Pearson's Magazine. On the writing and publication history of the novel, see H. G. Wells, A Critical Edition of The War of the Worlds: H. G. Wells's Scientific Romance (1898), introduction and notes by David Y. Hughes and Harry M. Geduld (Bloomington: Indiana UP, 1993), 1-9. All citations will be from this edition. Nicholas Oddy, 'The Flâneur on Wheels?' in Cycling and Society, ed. Dave Horton, Paul Rosen, and Peter Cox (Aldershot, Hampshire: Ashgate, 2007), 97-112 (99). For another discussion of the 'boom' years, see David Herlihy, Bicycle: The History (New Haven: Yale UP, 2004), 251-82. <sup>4</sup> Hiroshi So, 'The Wheels of Chance and the Discourse of Improvement of Health,' Wellsian 29 (2006), 37-47

<sup>&</sup>lt;sup>6</sup> Yoonjoung Choi, 'The Bi-Cycling Mr. Hoopdriver: Counter-Sporting Victorian Reviving the Carnivalesque,' Critical Survey 24:1 (2012), 106 (102-15).

<sup>&</sup>lt;sup>7</sup> Simon J. James, 'Fin-de-Cycle: Romance and the Real in *The Wheels of Chance*', in H. G. Wells: Interdisciplinary Essays, ed. Steven McLean (Newcastle: Cambridge Scholars, 2008), 34-48 (41).

<sup>&</sup>lt;sup>8</sup> James, unlike Choi and So, sees Wells as placing some clear limits on the degree to which bicycles can indeed improve and liberate people's lives. That is, James argues that Wells depicts the realities of money and of labour as ultimately proving more potent than the bicycle. As James sums it up, 'Without money, the carnivalesque holiday...must end. [...] For a comic romance, the conclusion [of the text] is pessimistic. James, 43.

living quality' (148). Time and time again, the narrator returns to descriptions like these of the Martians and their various machinery. Thus, it might at first seem out of place to talk about the role of the lowly and seemingly simplistic bicycle in a book that repeatedly showcases the dazzling technological sophistication of the Martians.

However, around the time Wells wrote The War of the Worlds, bicycles were routinely referred to as, quite simply, 'a machine.' Wells's own The Wheels of Chance serves as a striking reminder of this, for seldom in that book is a bicycle referred to simply as a bicycle. Instead, the preferred nomenclature in that novel which is repeated when referring to a bicycle is 'machine.'9 Furthermore, the particular form of bicycle called the 'safety bicycle' which came to dominate cycling in the 1890s was often hailed as a technological marvel due to such innovations as the newly invented pneumatic tyres, the diamond-shaped frame, and the rear-wheel chain drive. To David Rubenstein concludes: With its increasingly sophisticated tyres, gears, and other accessories, the diamond-frame safety bicycle of the 1890s was recognisably modern and efficient, despite the survival of certain primitive features. It Additionally, as one article on bicycling from 1896 states by way of trumpeting the bicycle's technological sophistication: 'the bicycle is assisting the electric railroad and the automobile carriage to relegate the horse-drawn vehicle to the past. The evolution of the bicycle from the primitive forms has been by a series of positive steps, each step marking a distinct advance in the march of improvement.'12 In this quote, the anonymous author shows the bicycle clearly – and surprisingly - equated with such technological marvels of the Victorian era as the locomotive and the automobile.

In short, to most Victorians the word bicycle was indeed synonymous with sophisticated machinery and technology. 13 As already indicated, however, The War of the Worlds reveals a Wells who does not share many of his contemporaries' enthusiastic celebration of the bicycle, or even his own enthusiasm of a few books earlier, and reveals instead an author referencing the bicycle as a stark warning against human pride, and as a stark reminder of

<sup>9</sup> An article from 1895 includes references to the bicycle as 'machine' such as the following: 'the assumption of horse dealers that bicycle riding is a mere fad...does not seem to be justified. Evidently the machine has come to stay [...] As a machine for various uses [and] as a means of necessary transportation it must continue to be employed permanently by greater and greater numbers of people." The Horse and the Bicycle, Scientific American 73:3 (1895), 43.

human limitation and fallibility. Or in the words of Manlove: 'relativism is precisely one of the purposes of Wells's invented machines [such as the Martian tripods]: he wants to throw ironic light on our own technological pride by imagining infinitely superior technology.114

To begin now a discussion of the text proper, one of the striking things readers learn early on about the narrator is that at the time of the Martian invasion he is 'much occupied in learning to ride the bicycle', in addition to his scholarly work on 'the probable developments of moral ideas as civilisation progressed.115 Wells inserts this curious detail about the narrator's penchant for cycling within a paragraph, interestingly, devoted to ridiculing how committed people are to adhering to their routines and to worrying about inconsequential matters. 'It seems to me now almost incredibly wonderful,' the narrator tells us in this paragraph, 'that, with that swift fate hanging over us, men could go about their petty concerns as they did' (55, emphasis added). As Steven McLean points out apropos of this reference to the narrator's cycling, the 'early chapters of the novel carefully establish the complacency of humanity at the time of the Martian invasion.'16

Thus, in opposition to how culturally significant his novel The Wheels of Chance (and many other Victorian texts) perceive cycling to be, Wells here depicts his narrator as deplorably immersed in two activities that embody the narrator's conviction that humanity has progressed and evolved: working on a scholarly paper that naively asserts that progress is inevitable across time and indulging in an activity many Victorians equated with technological modernity: cycling. 17 Rather than being radiant with the promise of liberating women or of levelling social ranks, cycling early on in The War of the Worlds constitutes only an indulging in so much wasted time and complacent neglect of more vital pursuits. The suggestion in this early section of the novel seems to be that the narrator (and other cyclists) could be engaging in practices much more worthwhile and that do lead to clearer evidence of human progress and technological innovation, rather than the illusory displays of progress and innovation embodied by the bicycle.

Even more damning for the bicycle are the frequent ways in which the bicycle is depicted in The War of the Worlds as failing to live up to its late Victorian reputation as a bona fide technological marvel, such as when the novel shows people relying on the bike as a technological apparatus that will save them from destruction by the Martians, only to find such attempts at escape

<sup>&</sup>lt;sup>10</sup> For a recent, comprehensive history of the bicycle that includes a focus on the Victorian era, see Herlihy. <sup>11</sup> David Rubenstein, 'Cycling in the 1890s,' Victorian Studies 21:1 (1977), 47-71 (48). For another overview of key technological developments in the bicycle around the 1890s, and one that emphasises late 19th-century developments in spokes, pedals, pneumatic tires, frames, and prototypes of the gear-shifting technology known as the derailleur, see Christopher S. Thompson, The Tour de France: A Cultural History (Berkeley: University of California Press, 2006), 10.

The Bicycle', Scientific American 75/4 (1896), 68-69 (68).

<sup>&</sup>lt;sup>13</sup> Although focusing mainly on the history of bicycling in Canada, Glen Norcliffe argues throughout his book The Ride to Modernity: The Bicycle in Canada, 1869-1900 (Toronto: University of Toronto Press, 2001) that in Victorian-era Canada, England, and the United States the bicycle was synonymous with the forces of modernity and with technological progress.

<sup>14</sup> Manlove, 228

<sup>15</sup> Wells, War of the Worlds, 55. As several scholars have noted, this reference to the narrator's cycling is an interesting moment in which the narrator and Wells's own life synchronise. We know from Wells's Experiment in Autobiography that he and his wife were learning to cycle at the time Wells was beginning work on The War of the Worlds. See endnote 37 in Wells, War of the Worlds, 201.

<sup>16</sup> Steven McLean, The Early Fiction of H. G. Wells: Fantasies of Science (Basingstoke: Palgrave Macmillan,

<sup>&</sup>lt;sup>17</sup> The idea that progress is inevitable across time is, of course, an idea that Wells attacks in other works of his, most notably The Time Machine (1895) and The Island of Doctor Moreau (1896).

futile. These people's confidence in the bicycle's capabilities for escape is not without justification, for we should recall that in the 1890s the new breed of bicycles was clearly associated with newfound human capabilities for speed. As one contemporary source poetically expressed it, There is a sense of romance which comes of [the bicycle's] rapid flight...All this great gain of speed comes from one's own feet; it is like treading the air with wings on one's heels; we skim the road as a swallow skims a stream' (59). When the Martians increasingly expand their all-out assault on England, however, Wells provides us with images of people foolishly and erroneously putting their faith in this celebrated speed of the bicycle to carry them out of harm's way.

Admittedly, in some of the early sections of the novel, the bicycle is clearly acknowledged as a machine that has helped humanity shrink vast distances and overcome certain spatial limitations. <sup>18</sup> For example, after the first Martian cylinder crashes on Horsell Common near Woking, the narrator discovers that the first people to get to the crash site are 'a couple of cyclists' (59). Additionally, when the Martians are beginning to approach London, we are told of a 'man on a bicycle' who had saved people's lives earlier in the day by riding through Byfleet, and going 'from door to door warning [the people] to come away' (111). Also, after returning to his home in order to get some work done after the first cylinder's landing in Woking, the narrator eventually returns to the crash site, a walk that ends with him 'standing in the road by the sand-pits' where the first cylinder landed, and where he notices gathered there 'a half dozen flys or more from the Woking station,' as well as a 'rather lordly carriage' and a 'basket-chaise.' However, in addition to the three types of carriages the narrator makes note of here (flys, a basket-chaise, and a regular carriage), he also spies 'quite a heap of bicycles' (60) in the road by the pit. A 'heap' is, of course, an ambiguous amount, but it does suggest that the cyclists have made their way to the scene of this exciting event in greater numbers and with greater alacrity than those symbols of upper class wealth, power, and privilege: the carriage. Furthermore, it is noteworthy that even though we know from the reference in this passage to 'the Woking station' that there is convenient rail travel available to this area, cycling is still depicted as the preferred mode of transportation by most of the onlookers in this scene. Wells suggests with such an image that the bicycle is threatening to supersede the technological supremacy of the train, or at least is nearing an equal footing with the train. 15

In any event, once the Martian invasion is underway in earnest, Wells moves more towards depicting the bicycle as representing an illusion of technological sophistication and spatial mastery. For example, the narrator's own brother believes in the capabilities of the bicycle to save him when, 'after a fruitless struggle to get aboard a North-Western train,' he has 'the luck to be

foremost' in a mob's 'sack of a cycle shop' during the mob's chaotic, mass exodus from London (121, 122). Robert Crossley describes this scene as one of 'wanton looting of bicycle shops by people desperate for a means of transport'.20 However, the brother's hope of a quick and successful escape from London via bicycle is swiftly dashed when the front tire of the machine he got was punctured in dragging it through the window' (122).

It is significant that Wells here depicts the tire specifically as being the component of the bicycle that fails the brother during this all-important attempt at escape, for, from around 1888 when they were patented in the United Kingdom by John Boyd Dunlop, pneumatic tires were increasingly hailed as an important technological development in the evolution of the bicycle. Formerly, bicycle tires were made from wood and metal, materials which led to an uncomfortably jittery and rough ride.<sup>21</sup> The new pneumatic tires, on the other hand, were equipped with inner tubes filled with compressed air and attached to the rim of the bicycle, and became much more the preferred option due to the ability of a rider to repair it easily enough, the increased smoothness of the ride, and the increased speed of the overall machine. One renowned Irish racer proclaimed these new pneumatic tires 'the tyre of the future'.22

Despite the bicycle's now flattened tire, the brother does, however, ride 'up and off' on the bicycle after the sacking of the shop, but he obviously lacks sufficient speed for a successful escape from the Martians, for the narrator informs us that the brother was 'passed by a number of cyclists, some horsemen, and two motor-cars' (122). Furthermore, eventually 'the rim of the wheel broke and the machine became unridable' (122), a mechanical failure apparently due to the stress the rim was subjected to without a properly inflated tire tube for protection. Lest it appear, however, that those other cyclists who passed the brother on the road are evidence of Wells's conviction that bicycles do indeed represent an adequate technology for evading the Martian threat, one should recall that several chapters later the narrator stumbles upon 'three smashed bicycles in a heap, pounded into the road by the wheels of subsequent carts' (142). These might not at all be the same bicycles that earlier passed the brother, but they do suggest that, for Wells, bicycles only take you so far before ultimately the Martians destroy the machine, or the bicycle's own inherent limitations render the machine useless. Put simply, when Wells writes that, while fleeing London, 'most of the fugitives at that hour were mounted on

<sup>&</sup>lt;sup>18</sup> For a discussion of some late nineteenth-century views on the bicycle's ability to conquer time and space, see

For a brief discussion of the perceived competition between trains and bicycles, see Thompson, 26-7.

<sup>&</sup>lt;sup>20</sup> Robert Crossley, Imagining Mars: A Literary History (Middletown, CT: Wesleyan UP, 2011), 119.

<sup>&</sup>lt;sup>21</sup> It might also be part of Wells's anti-imperialist agenda in the novel that he shows the newfangled *rubber* tires as failing at this moment. Rubber, of course, was a lucrative colonial commodity at this time, and showing its failure here might be a way of suggesting that England is not, in fact, becoming stronger and more protected through its plunder of resources from far flung colonies. One scholar notes: 'Rubber was exclusively a tropical product, extracted by the atrocious exploitation of natives in the rain forests of the Congo and the Amazon, the target of early and justified anti-imperialist protest. E. J. Hobsbawm, Age of Empire, 1875-1914 (New York:

<sup>&</sup>lt;sup>22</sup> Quoted in Herlihy, 256. See pages 246-54 in Herlihy for his discussion of the invention and significance of the pneumatic tire, and pages 59-62 in Norcliffe.

cycles' (122), he is showing people tragically putting an excessive faith in humanity's machines in general and in the bicycle in particular to save their lives, only to find such machines failing them in their hour of need.

Interestingly, it is not only images of the modern safety bicycle glimpsed in The War of the Worlds, but also, during the frantic scenes of flight from the suburbs surrounding London as the Martians approach the capital, 'a man in work-day clothes, riding one of those old-fashioned tricycles with a small frontwheel' (111) as he flees the suburb of West Surrey.<sup>23</sup> 'Old-fashioned' is certainly an apt designation here, for by the time The War of the Worlds is being written, the tricycle was passé indeed. The tricycle had enjoyed a small 'boom' of its own in the two decades leading up to the 1890s, reaching the height of its popularity in the mid-1880s.<sup>24</sup> As Herlihy states, 'by the late 1870s, the speed gap between two- and three-wheelers had narrowed to only about two or three miles an hour 125

However, by the last decade of the nineteenth century, the low-mount, two-wheeled safety bicycle was clearly the preferred bicycle for speed and efficiency, for the tricycle was 'undoubtedly slower and heavier.'26 In Wells's own early journalistic sketch 'On a Tricycle,' he portrays the three-wheeled tricycle as associated with the leisurely pace of sightseers and of female riders, whereas the same sketch associates a two-wheeled bicycle with the 'hardbreathing, crook-shaped, whirling, bell-banging' racers who like to 'whizz by'.27 Thus, the sombre joke with the tricyclist in The War of the Worlds appears to be that this representative of a humanity that considers itself highly evolved and superior to all other life forms is surely doomed, for he is ridiculously trying to outrun the Martians on an obsolete machine. It is as if this one character has not only failed to realise that the advanced nature of the Martian machines makes most attempts at escape futile, but he also does not realise how much swifter and more effective the new breed of bicycles such as the safety are. In short, humanity's fundamental technological ignorance rears its head yet again in this fleeting glimpse of the tricycle in the novel.

In addition to images of frantic citizens attempting to flee on bicycles and tricycles, Chapter Two of Book Two in The War of the Worlds contains a more sustained discussion of the bicycle in a chapter brimming with philosophical and evolutionary reflections by the narrator. Here the bicycle can be seen as functioning as just so much technological accourrement to compensate for the natural shortcomings of the human body. Specifically, the narrator opines that the Martians inside their tripods are merely 'wearing different bodies according to their needs just as men wear suits of clothes and take a bicycle in a hurry or an umbrella in the wet' (152). Again, it might sound like the text extols the human ingenuity at work behind our various clothing, our umbrellas, and our bicycles, and how all of these devices have allowed humans to overcome various corporeal limitations and various environmental restrictions. Nevertheless, this section of the text also states that humanity 'with our bicycles and road-skates, our Lilienthal soaring-machines, our guns and sticks and so forth, are just in the beginning of the evolution that the Martians have worked out' (152). The bicycle, the novel ultimately declares, is nothing special and nothing about which humans ought to feel overly smug and self-satisfied.

Furthermore, this same chapter also directs attention to that aspect of our technological development that is often held up as a triumph of human ingenuity and as emphatically setting us apart from the 'lesser' beings of the world: the wheel. The narration goes on to mock the development of the wheel as being something that Nature, in all of its diversity, splendor, and success, has never saw much need to bother with. After pointing out that the Martians rely on the wheel not one bit for their astonishing technological might, the narrator makes this aside: 'it is curious to remark that even on this earth Nature has never hit upon the wheel, or has preferred other expedients to its development' (153, emphasis mine). Wells here belittles the human accomplishment of inventing the wheel by reminding the reader that countless organisms have lived and thrived on this planet for eons without depending on that component - the wheel - that is absolutely necessary for all of the celebrated innovations in late Victorian transportation technology: the locomotive, the automobile, and, of course, the bicycle. Here again, the novel chips away at humanity's pedestal, at its own sense of self-importance, and at its excessive reliance on and infatuation with technology.

As the novel shows, the attainment of an advanced technology can constitute a Pyrrhic victory in the eyes of Wells. Clearly, the narrator of The War of the Worlds at times marvels at the complex relationship between the Martian bodies and their inorganic technology. But even the advanced Martian technology is shown to be lacking and to possess limitations, for the invaders' technology does not protect them from the assault of common terrestrial bacteria. That is, their technology has been so wildly successful at eliminating indigenous Martian bacteria long ago, that their current bodies are now paying the price by being highly susceptible to new attacks by bacteria. Therefore, like humans in the novel, the Martians have been lulled into a dangerous complacency by their technology.

<sup>&</sup>lt;sup>23</sup> The endnote by Hughes and Geduld informs us that this is a type of tricycle nicknamed the 'Tuppencefarthing bike' because 'the cycle-saddle was located between two large wheels (the 'pence' of the nickname), and a third, much smaller wheel (the 'farthing') was at the front of the vehicle.' See War of the Worlds, 213 (endnote 20).

For a useful overview of the tricycle, see Ritchie, 100-19.

<sup>&</sup>lt;sup>25</sup> Herlihy, 210. Also, an article on bicycling from 1896 says of the tricycle that it was 'at one time very popular' and that these 'large, cumbersome vehicles which traveled over our streets are now rarely seen.' 'The Bicycle',

<sup>&</sup>lt;sup>26</sup> Ritchie, 118.

<sup>&</sup>lt;sup>27</sup> H. G. Wells, 'On a Tricycle,' in Selected Conversations With an Uncle: (Now Extinct) with Two Hitherto Unreprinted Conversations, ed. David C. Smith and Patrick Parrinder (London: University of North London

Additionally, when readers glimpse the Martian body itself at several points in the novel, it is depicted as atrophied, and as clumsy and sluggish due to its over-reliance on technologies like the tripod machine for mobility (although it could be sluggish from Earth's higher gravity, as the narrator at times conjectures). Given the inherent weaknesses of the Martian body, Wells is reluctant to excessively celebrate any machinery in the novel, for an underlying argument of the text is that an over-dependence on any form of technology - be it tripod, bicycle, locomotive, whatever - can render its users weak, dependent, and vulnerable. Manlove makes a similar point to this when he states: 'The irony of the story is obvious: because the Martians have rejected the organic, become "dissociated" from it, they are at its mercy.'28

There were, of course, many texts in the Victorian era which celebrated the health benefits of cycling (although some also clamoured about cycling's possible deleterious effects on the body).<sup>29</sup> Wells himself acknowledges cycling's role in improving bodily health at various points in his own corpus, such as in his Anticipations where he depicts an imaginary future historian looking back from the perspective of the historian's own era of overly congested cities, cities now too snarled by 'ferocious traffic' to accommodate bicycles, and lamenting how 'the bicycle might have served its most useful purpose [...] in affording a healthy daily ride to the innumerable clerks and such-like sedentary toilers. 30 Additionally, in Experiment in Autobiography, Wells discusses learning to ride the bicycle in the mid-1890s, and mentions how after riding the bicycle he experienced 'a state of my legs which became the opening chapters of The Wheels of Chance,' a reference to how bruised and battered the legs of the main character, Mr. Hoopdriver, are due to his novice's lack of the athleticism required to ride a bicycle properly.<sup>31</sup> However, The War of the Worlds intentionally ignores the discourses which foregrounded cycling's health benefits and it athleticism in order for the novel to further its primary agenda of attacking human pride and critiquing an over-reliance on technology.

One of the more salient reminders in the novel of this danger of a machine becoming more dominant and more powerful than its operator is when the narrator, holed up in a crumbled house with the curate, spies a Martian handling machine working in a pit independently of its Martian creators. The handling machine 'piped and whistled as it worked,' the narrator informs us, while going on to add, 'so far as I could see, the thing was without a directing Martian at all' (153). This machine has become completely autonomous, and

rendered its operators and creators, the Martians, largely superfluous. The narrator's (and Victorian society's in general) over-infatuation with the bicycle appears to be, for Wells, a step in the direction of being displaced and disabled by one's own technological achievements, a dangerous fate that has already befallen to some degree the sophisticated and highly evolved Martians in the novel.

Strikingly, in the closing chapters of the novel, it seems as if Wells loses his nerve a bit and pulls his narrative back from the brink of unmitigated, unrelenting criticism of humanity in general and of his fellow British in particular. We see the same pulling of his punches at the last minute occurring in Wells's well-known apocalyptic tale 'The Star' (1897) when, after several strident and unflattering pages revealing humanity's ignorance and egotism, Wells depicts in the second to last paragraph of his story an optimistic vision of a humanity united in a 'new brotherhood' and of a humanity that has easily adapted to the altered climate conditions on Earth caused by the near-hit of the 'star' (actually, a comet) by simply moving 'northward and southward towards the poles of the earth. 32

Similarly, in The War of the Worlds, after so many pages dedicated to belittling humanity and depicting it as so selfish and vain as to essentially be deserving of dethronement at the hands of the Martians, Wells shows us his narrator suffused with confidence that the 'dear vast dead city' of London will 'be once more alive and powerful,' and that London's miraculous resurrection from the brink of apocalyptic ruin will be accomplished in the timespan of only 'a year'. Such confidence on the part of the narrator in London's phoenix-like rise from the ashes is validated in the glimpses we catch in the epilogue's closing paragraphs of Byfleet Road brimming with 'vehicles [...] a butcher-boy in a cart, a cabful of visitors, a workman on a bicycle, children going to school, as well as of 'busy multitudes in Fleet Street and the Strand' (193). Likewise, after repeatedly puncturing humanity's pride over its technological achievements like the bicycle. Wells gives us the following description of life in England immediately after the bacteria-caused demise of the Martians: 'Men on cycles, lean-faced, unkempt, scorched along every country lane shouting of unhoped deliverance, shouting to gaunt, staring figures of despair' (187).

Thus, at the end of the epic confrontation between humans and Martians, the Martians have been 'swept out of existence' (to use a frequent expression of Wells's in the novel); humans, however, and their 'scorching' bicycles, still endure. These 'men on cycles' were, like the rest of humanity, beaten down but not knocked out by the invaders, and have quickly reappeared to reassert their control over space and distance, a control indicated by the cyclists being described as appearing 'along every country lane' to proclaim the news of the collapse of the Martian invasion. However, such fleeting glimpses at the end of

<sup>&</sup>lt;sup>28</sup> Manlove, 237.

<sup>&</sup>lt;sup>29</sup> On late 19th-century beliefs on the alleged negative health effects of cycling, see Robert Smith, A Social History of the Bicycle (New York: American Heritage Press, 1972), 63-71. As Smith discusses, much of the discourse regarding the supposed negative health effects of cycling were aimed at keeping women from riding bicycles and, thus, from gaining the newfound freedoms that cycling granted their sex. <sup>30</sup> H. G. Wells, Anticipations of the Reaction of Mechanical and Scientific Progress Upon Human Life and

Thought (1902) (Mineola, NY: Dover, 1999), 14.

<sup>&</sup>lt;sup>31</sup> H. G. Wells, Experiment in Autobiography (New York: McMillan, 1934), 458. For a discussion of cycling's health benefits in Wells's The Wheels of Chance and in other Victorian texts, see So.

<sup>32</sup> H. G. Wells, 'The Star', The Short Stories of H. G. Wells (Garden City, NY: Doubleday, Doran and Co., Inc., 1929), 631-642 (642).

both 'The Star' and *The War of the Worlds* of Wells's faith in the resilience of humanity and in the ability of its technologies to survive catastrophes of apocalyptic proportions do not eclipse the fact that the overwhelming majority of both texts remains focused on humanity's need to comport itself with greater humility, and to recognise that its technological achievements never legitimate the prideful behavior in which it indulges.

Additionally, the fact that Wells uses the verb 'scorched' to describe the actions of his cyclists at the end of The War of the Worlds suggests that Wells intends these cyclists to signify that the humans who were spared the Martian onslaught have not been chastened and have not learned much by way of meekness. The verb 'scorched' would have been a loaded word for the contemporary Victorian reader, for 'scorchers' was a derogatory term used often at this time to refer to cyclists reviled for their reckless and dangerous highspeed racing through crowded streets. It was, in short, a term synonymous with brash and boorish cycling practices. As one contemporary writer put it, by way of maligning the scorcher: 'The scorcher sees little, hears little, and is conscious of little but the exhilaration of the moment. [...] Scorching is a form of bicycling hardly to be commended. 33 Put simply, the scorcher is a representative of that type of human being Wells's novel has been condemning throughout its pages: the prideful person living only in the present, and one behaving with complete self-interest and disregard for the welfare of others. Granted, Wells's 'scorchers' could be said to be doing something praiseworthy and for the common good in his depiction of them. They are, after all, doing the important and surely appreciated work of delivering the news of the Martian defeat. However, the verb 'scorched' here still suggests there is something unsavory about the way the cyclists are going about doing their work of proclaiming this news. They are still riding, it seems, in a manner suggestive of self-importance and of swagger, and not at all in way indicative of having learned profound lessons about how to comport oneself with greater meekness and humility.

This essay has argued that the references to the bicycle throughout *The War of the Worlds* play a fascinating and integral role in the work's overall attacks on human arrogance. Through the novel's repeated references to humans being made to feel vulnerable, insignificant, and subjugated during the course of the Martian invasion, it is clear that Wells employs his text to castigate humans for believing that their recent technological successes guarantee them continued supremacy over the earth. As McLean puts it, the novel undermines such a belief in human supremacy by showing the reader that 'viewed from a cosmic

standpoint which reveals the fragility of terrestrial life, the need for humanity to abandon its anthropocentric preconceptions and co-operate as a means to combat its precarious position in the natural order becomes imperative. <sup>34</sup> This essay has shown how Wells, despite the perceived technological sophistication of the 1890s safety bicycle and despite the singular levels of enthusiasm for cycling at the time the novel was being written, depicts the cyclist in a surprisingly negative light and as a person inhabiting as much as anyone else the 'precarious position in the natural order' described above by McLean. Although not representing the end of his engagement with issues of transportation and of cycling, the association Wells establishes in *The War of the Worlds* between bicycles and human arrogance makes his text a singular one from cycling's 'boom years.' Additionally, this association between cycling and arrogance helps explain Wells's startling shift in tone towards the bicycle that occurs between *The Wheels of Chance* and *The War of the Worlds*.

**BOOK REVIEW:** David C. Smith, *The Journalism of H. G. Wells: An Annotated Bibliography*, ed. Patrick Parrinder, with a descriptive index by Mike Ashley (Haren: Equilibris, 2012), 431 pp.: ISBN 978-90-5976-000-4 (Hardcover) € 119; ISBN 978-90-5976-015-8 431 (PB) € 78. [Keith Williams]

This monumental volume is a worthy memorial to one of the most significant Wells scholars of recent years, David C. Smith (formerly Bird Professor of American History at the University of Maine), who passed away in 2009 before completing this herculean labour of reclamation lasting nearly four decades. (Appropriately it took another Wells scholar of comparable calibre to finish it: Patrick Parrinder, Vice-President of the H. G. Wells Society and Emeritus Professor of English at the University of Reading.) Smith is best known to the Wellsian community as editor of four volumes of *The Correspondence of H. G. Wells* (1998), (with a fifth posthumously to come) and for his authoritative biography, H. G. Wells: Desperately Mortal (1986). The annotated biography is also a fitting memorial to Wells. Acutely aware of the entanglement between class privilege and Highbrow aesthetics in the Britain of his time, Wells often belied the quality of his own literary gifts as novelist and short story writer by insisting his vocation, first and foremost, was that of 'journalist'.

Published with financial support from the Science Fiction Foundation and from the scholarly expertise of the H. G. Wells Society, it is the first volume to make comprehensively visible the 'lost continent' of Wells's actual journalism. Its main bibliography inventories and describes over 2,000 items, from Wells earliest undergraduate essays on education and social injustice (which remained a constant and theme in his work) in *The Science Schools Journal* of 1886, to

<sup>&</sup>lt;sup>33</sup> Maria Ward, *Bicycling for Ladies* (New York: Bretano's, 1896), 79. For more on "scorchers," see Ritchie, 137; Smith, 183-203; and Norcliffe, 181-187. For another Victorian-era description of "scorchers," and of how detested they were by people like the police due to the cyclists' aggressive riding style that often harried other road users, see the 1896 essay by Stephen Crane entitled 'New York's Bicycle Speedway' in *The Literatry Cyclist: Great Bicycling Scenes in Literature*, ed. James E. Starrs (New York: Breakaway Books, 1997), 255-6. In this piece, Crane clearly uses the verb "scorched" to refer to cyclists known as scorchers: "When the scorcher scorches beyond the patience of the law, the bicycle policeman, if in sight, takes after him" (256).

<sup>34</sup> McLean, 101.