

**THE TRIPODS OF VULCAN AND MARS:
HOMER, DARWIN, AND THE FIGHTING MACHINES OF H. G.
WELLS'S *THE WAR OF THE WORLDS***

Michael Livingston

The summer 2005 release of Steven Spielberg's cinematic retelling of H. G. Wells's 1898 novel *The War of the Worlds* was met with a mixture, we might say, of shock and awe: shock for some of the liberties Spielberg and his writers, Josh Friedman and David Koepp, had taken with Wells's classic tale, awe for the remarkable visual wonders that a reported \$135 million budget can create on screen.¹ In both cases, the criticism tended to fall, for good or ill, on one of the most recognizable features of Wells's vision: the alien tripods.

Artists have struggled to depict the tripods since even before the book's wide release. Wells himself was so displeased with the initial illustrations of them drawn by Warwick Goble for *Pearson's Magazine* in 1897, for instance, that he added a paragraph to the now standard text of chapter two of the novel, in which the unnamed narrator comments on the 'misleading' quality of certain illustrations, which are 'no more like the Martians I saw in action than a Dutch doll is like a human being.'²

The narrator's own observation of one of these machines (book 1, chapter 10) hints at the issues that would be faced by those who would later attempt to visualize them. He calls the machine a 'problematical object' before he rhetorically questions how he can manage to describe 'this Thing' to his audience. He nevertheless tries, terming it a 'monstrous tripod,' 'a walking engine of glittering metal,' before resorting to a striking analogy:

Can you imagine a milking stool tilted and bowled violently along the ground? That was the impression those instant flashes gave. But instead of a milking stool imagine it a great body of machinery on a tripod stand.

The narrator goes on to describe the machine's 'long, flexible, glittering tentacles,' but again and again he seems drawn to 'its strange body.' And no wonder: the notion that these advanced machines are tri-footed is, to say the least, quite odd.

¹ The final budget is unknown, though this is the number given in Ebert's review of the film in the *Chicago Sun-Times*, 29 June 2005.

² On Wells's revisions to the novel, see David Y. Hughes, 'The Revisions of *The War of the Worlds*', *Cahiers Victoriens et Edouardiens* 30 (1989), 141-9.

Roger Ebert, reviewing Spielberg's film for a popular audience, notes how its Hollywood producers had clearly tried to be 'faithful' to the novel at least in their physical depiction of the tripods. Yet the result, he writes, is unfortunate:

Why balance these towering machines on ill-designed supports? If evolution has taught us anything, it is that limbs of living things, from men to dinosaurs to spiders to centipedes, tend to come in numbers divisible by two. Three legs are inherently not stable, as the movie demonstrates when one leg of a giant tripod is damaged, and it falls helplessly to the ground.³

Ebert's review is not positive about much in this film, but it is the anti-nature nature of the tripods that appears to bother him most acutely. As he sums up:

I do not like the tripods. I do not like the way they look, the way they are employed, the way they attack, the way they are vulnerable or the reasons they are here. A planet that harbors intelligent and subtle ideas for science fiction movies is invaded in this film by an ungainly Erector set.

Leaving aside the issue of the 2005 movie's adequacy, or perhaps its lack thereof, what I want to address in this brief essay is the clearly problematic tripod structure Wells chose for these advanced alien machines.

Ebert is not, after all, the first critic of film or book to observe the issues inherent in such a three-legged design. In the 1953 film directed by Byron Haskin, for example, the production designers opted to do away with the metal tripod structure altogether: the machines float on electromagnetic 'legs' and are thus styled to appear as flying saucers. Indeed, concerns with the tripod structure are so rampant as to be the source of jokes both in the classroom and in popular culture. As but one example of how widespread the critique has become, the second volume of Alan Moore's popular comic book *The League of Extraordinary Gentlemen* (2002-3) features a plot that takes place around and within Wells's war. In the course of the book's events, Edward Hyde (from Robert Louis Stevenson's 1886 novella *Dr. Jekyll and Mr. Hyde*) clings to the leg of one of the tripods and wonders aloud about how to take it down:

³ For a more recent, "academic" review of the film, see Crystal Downing, 'Deconstructing Herbert: *The War of the Worlds on Film*', *Literature/Film Quarterly* 35 (2007), 274, 81.

I mean . . . I'm no engineer, and correct me if I'm mistaken, but . . . but don't you have rather a design flaw in these three-legged things? Now, don't get me wrong: God created a lot of useless, stupid-looking creatures on this world too, but He didn't . . . He didn't see fit to make any of them three-legged. Why was that, do you think?⁴

Mr. Hyde then trips up the tripod and disables it by the simple act of injuring one of its absolutely critical supports.

As both Ebert and Moore (via Hyde) point out, odd numbers of legs are a wholly unnatural construct. Yet literary critics have been absent in providing any answer to what seems an obvious question to ask regarding this classic work of late nineteenth-century literature: why do the machines in Wells's *The War of the Worlds* have three legs?

One answer to this question is that Wells's abnormal choice can be explained on the basis of the foregoing observations themselves: a three-legged design is simply artificial and strange to our common experience. The tripod structure itself is thus a crucial means for Wells to force the reader to acknowledge the entirely foreign – entirely alien, to be more precise – aspect of the invasion his novel chillingly depicts. There is, admittedly, certain logic in this explanation, yet it is far from satisfying. For one thing, it is not *three* legs in particular that is foreign. To the contrary, what is alien to our existential reality is *any* odd-number of legs: a pentapod would suit the purpose of alien artificiality just as well as a tripod, and a five-legged machine would not have the disadvantage of three-legged instability that Moore's Mr. Hyde so amusingly exploits. So while Wells's use of the unfamiliar may be part of the answer, it falls short of a full explanation for the iconic design he presented. For a fuller answer as to why Wells chose tripods rather than some other odd-numbered system, we will need to look elsewhere, to an unexpected place: Greek mythology.

I am not the first critic to note the connections between *The War of the Worlds* and classical mythology. In a recent article about Wells's work, Brett Davidson notes that 'science fiction can arguably be described as a mythology transformed,' and that *The War of the Worlds* particularly 'resembles Greek myth'.⁵ There is thematic resemblance, of course, if we are to view the invading Martians as Nemesis, but perhaps more intriguing is the relationship between the Martians and mythological creatures; Davidson notes that – regardless of whether the 'congruence' is coincidental or 'deliberately enhanced' by Wells – the

⁴ Alan Moore, *The League of Extraordinary Gentlemen* Vol.2 (2002-3), 16

⁵ Brett Davidson, "The War of the Worlds Considered as Modern Myth." *The Wellsian* 28 (2005), 39-40.

invaders' 'horrifying and didactic effect is multiplied by their troping of such monsters as Medusa and such beings as Aristophanes' hermaphrodites'.⁶

To Davidson's previous identifications involving the mythological sources of the Martians themselves, I believe we can add the source of their tri-legged machines. In Book 18 of Homer's *Iliad*, the blind poet portrays the visit of Achilles' mother, Thetis, to the home of Hephaestus/Vulcan, magnificent metallurgist craftsman of the Greco-Roman pantheon, who she hopes will create new armor for her son:

Thetis of the silver feet came to the house of Hephaistos, imperishable, starry, and shining among the immortals, built in bronze for himself by the god of the dragging footsteps. She found him sweating as he turned here and there to his bellows busily, since he was working on twenty tripods which were to stand against the wall of his strong-founded dwelling. And he had set golden wheels underneath the base of each one so that of their own motion they could wheel into the immortal gathering, and return to his house: a wonder to look at.⁷

Of all the wonders wrought by Vulcan, of all the glories in a house that outshines those of the other Greek gods, it is his 'tripods' that Homer focuses on in this scene: tri-legged self-propelled mechanical creations, considered by most scholars to be the earliest references to automata. Wells might well have first come upon *The Iliad* as a child reading in the library at Uppark – which Norman and Jeanne Mackenzie note was owned by the Fetherstonhaughs, for whom his mother worked – and at any rate Homer would have formed an integral part of the education programs of his time.⁸ The tripods are mentioned in other Greek sources, too, including the first book of Aristotle's influential *Politics*, which would later play a role in the formation of portions of Wells's *A Modern Utopia* (1905).⁹ Both Homer and Aristotle merit mention in Wells's later *A Short History of the World* (1922), in books 23 and 25, respectively. But even beyond Classical Greek literature, we might point to the appearance of the tripods in many later texts, including Alexander Pope's well-known 1714 poem, *The Rape of the Lock* (4.51). That Wells would have known about these mythological mechanisms seems

⁶ Davidson, 49-50.

⁷ Homer, *The Iliad*, trans. Richmond Lattimore (Chicago: University of Chicago Press), 1961 (18.369-79).

⁸ Norman and Jeanne Mackenzie, *The Life of H. G. Wells: The Time Traveller*. (London: Hogarth, 1987), 6.

⁹ Aristotle, *Politics*, trans. Benjamin Jowett (New York: Colonial Press, 1900), 1.4. In 1.4 Aristotle recalls Vulcan's automata as a counterpoint to reality, pointing out that actual tools, unlike the smith's tripods, require craftsmen to use them in order to fulfil their purpose. See, e.g., *A Modern Utopia* 3.6 (Utopian Economics), for Wells's usage of *Politics*.

without doubt, and it is here, in the tripods of Vulcan, that we find the origins for Wells's tripods of Mars.

In his discussion of myth in *The War of the Worlds*, Davidson makes the salient point that Wells's usage of Greek sources is part of a larger goal: 'Wells's genius lay in his ability to revive elements of an 'outdated' mythical mode that would otherwise be untenable in a post-Industrial Revolution society.' Davidson concludes, therefore, that 'Wellsian science fiction represents a fundamental change in the mythic form, but it also represents, in its changes, a preservation of the essence of myth'.¹⁰ What Davidson does not note, but what I believe is absolutely central to understanding the continuity with mythology that Wells is working to create, returns us full-circle to the criticisms espoused by Ebert's review and Moore's Mr. Hyde regarding the 'ill-designed' and 'stupid-looking' concept of the three-legged structures themselves: they are contrary to the experiential results of the process of evolution.

Charles Darwin had published *On the Origin of Species by Means of Natural Selection* in 1859, just seven years before Wells's birth, and as a young man in 1884 Wells had the opportunity to study biology at the Normal School of Science in London under Thomas Henry Huxley, who was widely known as 'Darwin's bulldog' for his passionate support of Darwinism. The impact of Huxley on Wells can hardly be overstated. As Michael Page puts it in his recent study of the impact of science on nineteenth-century literature: 'the eighteen year old Wells attended Huxley's lecture course on biology and that course was to change his life'.¹¹ The influence of Darwinism is obvious in Wells's novel *The Island of Doctor Moreau* or his essay 'Human Evolution, An Artificial Process', both of which were published just two years before *The War of the Worlds* in 1896, but the author's connection to these scientific concepts reaches far beyond a few select works. Brian Stableford observes that 'Wells adopted the Darwinian faith with the fervour of a religious convert, and it permeated everything that he wrote. Wells took up the task that had been left frustratingly undone, and began to work out the logical consequences of Darwinian theory in a series of literary thought-experiments'.¹² And Wells himself did nothing to deny this pervasive influence of Darwinism on his life; in his 'experimental' autobiography he was effusive in his praise of Huxley, Darwin, and the intellectual revolution that they had achieved:

Darwin and Huxley, in their place and measure, belong to the same aristocracy as Plato and Aristotle and Galileo, and they will ultimately dominate the priestly and orthodox mind as

¹⁰ Davidson, 50.

¹¹ Michael Page, "Continual Food for Discovery and Wonder": Science and the Nineteenth-century British Literary Imagination from Erasmus Darwin to H. G. Wells." Ph.D. Dissertation, University of Nebraska-Lincoln (2008), 226.

¹² Brian Stableford, *Scientific Romance in Britain 1890-1950* (London: Fourth Estate, 1985), 29.

surely, because there is a response, however reluctant, masked and stifled, in every human soul to rightness and a firmly stated truth.¹³

As Page writes, Wells's works are so thoroughly enmeshed with these scientific ideas that 'After Wells almost all science fiction would work with or against the Darwinian premise'.¹⁴ Simply put, the (bio)logical problem of tripod design could not have been lost on Wells.

Davidson neatly summarizes *The War of the Worlds* as representing 'imperialism getting its comeuppance,' and this has perhaps been the most common reading of the work.¹⁵ But more recently Page has written productively of Wells's novel as an 'evolutionary apocalypse', and it is in this vein, against the background of Darwinism, that Wells's borrowing of Vulcan's tripods can be best understood.¹⁶ The idea of a universe indifferent to the fate of humanity, a universe in which man, and even the Earth itself, receives treatment no different from anything else in existence, was one of the most disturbing concepts to derive from an acceptance of full-scale evolutionary theory. Wells returns often to this idea in his work, as in his early short story 'The Star' (1897), in which mass devastation on Earth is viewed, from the distance of Mars, with cool detachment. In *The War of the Worlds*, too, mankind holds no privileged place in the universe. It is no coincidence that the Martians in this novel, the creatures of Mars, are akin to meddling Olympian gods, come down from their distant thrones to make war, dispassionate about the fates of the mortals they use and abuse. What hope humanity can have for survival against such opposition, Wells reveals, is small but not insignificant. For although the Martians have superior technology, they are not *naturally* superior; that position is subject to conditions on a scale that cannot be fully comprehended, much less controlled. They are subject, as equally as are we, to natural selection. And, as it turns out, this Darwinian principle is precisely what undoes them. Humanity survives because the anti-evolutionary, Olympian tripods foreshadow the fault that defeats the Martians: they are not evolutionarily equipped to face our world and so face death at the hands of the seemingly insignificant bacteria, a forgotten, microscopic 'second front' in the macroscopic war between the worlds. The fact that the structure of the Martians' machines, in addition to the other features pointed out by Davidson, corresponds with the 'extinct' mythology of Greece not only aligns Wells's themes with a kind of cultural Darwinism, but also underscores how the invading force functions as a stand-in for the imperialism of a West built on the very foundations laid by the Greeks. Making his monsters too alien would thus be somewhat counter to Wells's purpose: they need to be

¹³ H.G. Wells, *An Experiment in Autobiography* (Boston: Little, Brown, 1934),162-3.

¹⁴ Page, 223.

¹⁵ Davidson, 45.

¹⁶ Page, 263.

different, but not so different that they cannot be seen as a foil for our own faults and behaviors. Vulcan's tripods are thus an ideal choice: both evolutionarily foreign and culturally familiar. Michael Foot, a recent biographer, writes that 'no other writer of the time struggled so boldly to weave together the new knowledge and the old'¹⁷, and we can see now that Wells's attempt to 'revive' mythology (to return to Davidson's phrasing) by utilizing Vulcan's tripods as a model for his alien invaders, is far more complicated than previously suspected.

Spielberg's film adaptation of Wells's novel makes the strange decision to portray the tripods as having been buried underground long ago – rather than having them, as in Wells's original concept, arrive on the planet as an immediate part of the alien invasion. This plot change gives rise to some narrative questions that Wells's vision more convincingly avoided. If the aliens had been on Earth before to bury the tripods, for instance, how could they not have known the planet was toxic to their biology? Aside from that, why did they not wipe out humanity back then, when we were more primitive? Strangely, though, we can now see that Hollywood's change actually fits quite well with the mythological origin of Wells's machines by placing these Vulcan creations, as the Greeks would have them, underground. Though one can imagine that Spielberg and his writers knew this, I doubt it is so.

Unlike the Martians, they probably just got lucky.

¹⁷ Michael Foot, *H. G.: The History of Mr. Wells* (Washington: Counterpoint, 1995), 36.