

EVOLUTION AND SCIENCE FICTION

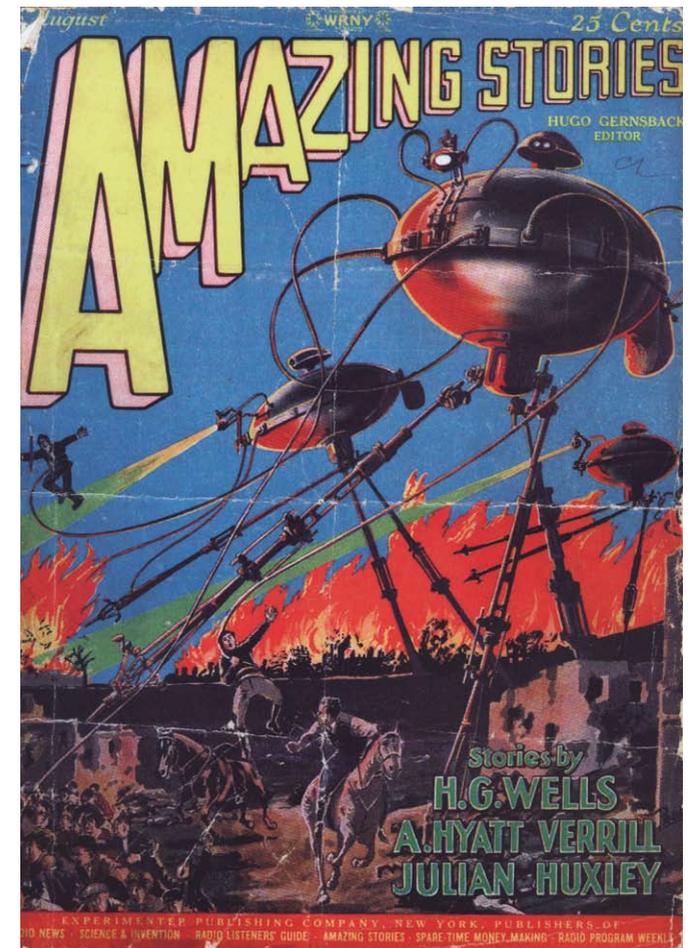
WITH ITS STORIES OF STRANGE EVOLUTIONARY MUTATIONS AND ITS SPECULATIONS ON FUTURE FORMS OF SPECIES, BRITISH SCIENCE FICTION HAS FOR MUCH OF ITS HISTORY BEEN DRIVEN BY THE SAME QUESTIONS THAT WERE RAISED IN DARWIN'S WORK: WHERE DID WE COME FROM? WHERE ARE WE GOING? WHAT WILL WE HAVE CHANGED INTO WHEN WE GET THERE?

Although some trace the origins of science fiction as far back as Thomas More's *Utopia* (1516), it was in the nineteenth century that the genre began to really take shape, developing in a period when science was making dramatic advances, challenging long-established beliefs. The book most frequently cited as the first true science fiction novel is Mary Shelley's *Frankenstein* (1818), which shows the terrifying consequence of taking scientific discovery to extremes and marks one of the earliest fictional appearances of the irresponsible scientist. However, it was not until English translations of the works of Jules Verne were published from the 1860s onwards that the genre really took off.

It was H G Wells who did most to establish "home-grown" science fiction – or, as it was referred to at the time, 'scientific romance' – as part of the literary landscape. Wells' work reflected the emotional and intellectual upheaval brought by the startling new knowledge of how the world worked and what lay ahead for humankind. Despite

the efforts of Charles Lyell and other modern geologists, until the mid-nineteenth century most people were still convinced that the earth had been formed around 4000BC, having calculated back through the ages of the prophets to the time of Genesis. Breakthroughs in geological research and in evolutionary theory undermined this confidence. Now came the astounding news that the earth was in fact millions of years old. What was more unnerving, it was a place of continuous environmental, behavioural and biological change in which decay and death, rather than glory, were the inevitable end result: it was hard to reconcile 'evolution' with that much loved Victorian concept, 'progress'. Once humanity had reached the end of its particular branch on the tree of life, another species would supplant it.

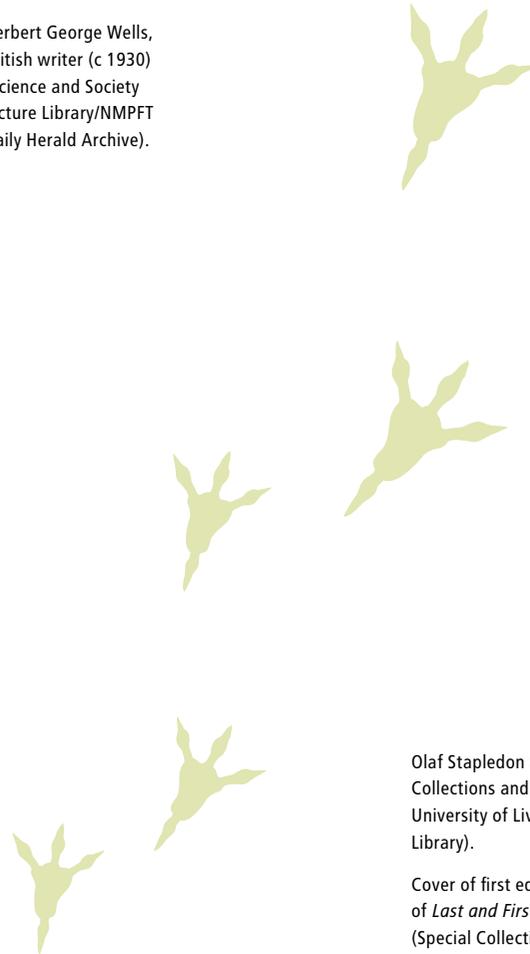
Cover of *Amazing Stories* featuring a story by H G Wells (Special Collections and Archives: University of Liverpool Library). This edition of the magazine contains a story by Julian Huxley, the grandson of Darwin's colleague T H Huxley.





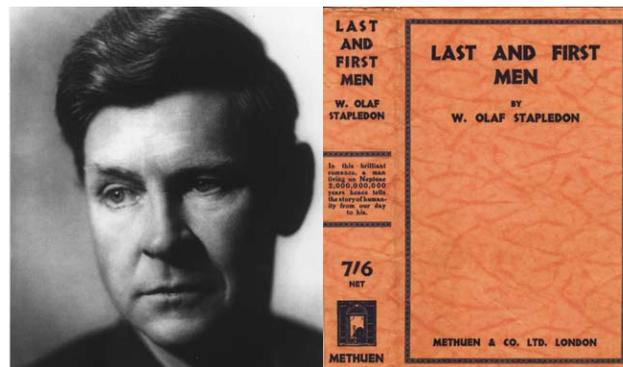
Herbert George Wells,
British writer (c 1930)
(Science and Society
Picture Library/NMPFT
Daily Herald Archive).

One of Wells' most popular novels, *The Time Machine* (1895), moves forwards and backwards through time, revealing different evolutionary stages. In 802,701 AD, the time traveller encounters a world inhabited by the refined, beautiful, surface-living Eloi and the reverted, subterranean Morlocks. The shock is that it is not the physically perfect Eloi who are in the ascendant, as convention might suggest. Their evolutionary path has turned them into simplistic, ineffectual creatures with the sensibility of sheep, providing a passive food supply for the bestial Morlocks. In the book's final sections the traveller moves 30 million years into the future. It was a commonly held belief that by this time the sun would be much cooler as it would have burned off most of its energy. Wells presents the reader with an austere vision of a silent, cold earth where the only living things appear to be the lichens on the rocks and the strange creatures that



Olaf Stapledon (Special
Collections and Archives:
University of Liverpool
Library).

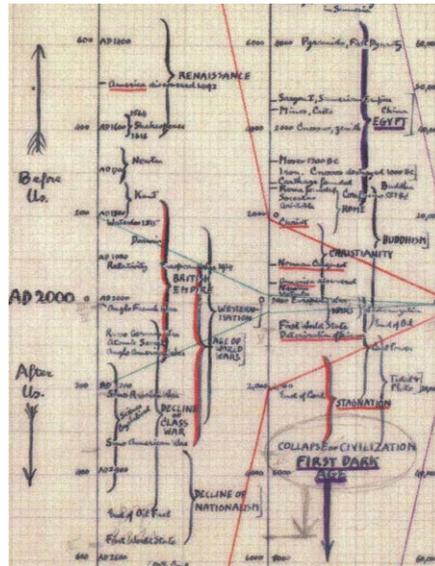
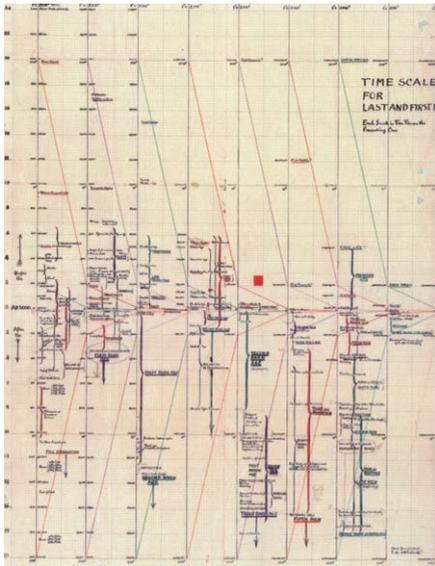
Cover of first edition
of *Last and First Men*
(Special Collections and
Archives: University of
Liverpool Library).



the traveller sees dragging themselves out of the ocean and on to the shore, marking the start of another evolutionary cycle. Like Conan Doyle, Wells was a friend of Edwin Ray Lankester who advised him on what the potential stages of evolutionary degeneration might be like. Lankester and Wells later collaborated on the book *Outline of History* (1920).

Wells' *War of the Worlds* (1898) shows the cruel nature of evolutionary competition in the form of the superior alien invader attempting to destroy or colonise inferior beings. Over many generations, limbs and organs that have proved of little use to the Martians have shrunk or been lost, while those that are of most value have become bigger or multiplied in number. The Martians have big heads and shrivelled arms as on their planet brains are more important than brawn. The Martians are in nearly all respects more advanced than humans, but their fatal flaw is that they have not evolved to a level where they can withstand earth's infectious diseases. In the final pages Wells seems sympathetic to the keening of the last dying Martian, the death being presented as a tragedy. It is interesting to note that as a student Wells had attended lectures by Darwin's friend and colleague T H Huxley whose speculative essay 'The Man of the Year Million' suggested that humanity may evolve towards something not unlike Wells' descriptions of the Martians. Although *The Lost World* is essentially a light-hearted book, like *War of the Worlds* it *does* show the potential cruelty of natural law, this time in the conflict between the ape-men and the Indians, and can also be read in terms of imperialism, with the ape-men comparable to native peoples being exterminated by colonialists.

Wells presented his readers with a godless universe spinning towards its inevitable end. By contrast, the philosopher Olaf Stapledon, one of the great British science fiction writers of the interwar years, offered a more spiritual journey, although the potential outcome for humans might be considered equally bleak. For his 1930 novel *Last and First Men: a story of the near and far future*, Stapledon drew up detailed plans for the projected history of humankind up to the point of extinction. The book moves from the present day to two billion years into the future, describing 18 distinct human species, evolving through a cycle of ascents and falls. One of the species incorporates Martian genes into their bodies to produce descendants that have huge heads and telepathic powers. This raises the question of whether humans might be able to control or direct



their own evolution and thus disrupt the process of natural selection by artificial means. Stapledon's *Star Maker* (1937) also provides a detailed projection of man's future evolutionary forms, going on a mental voyage into the upper most reaches of the cosmos in search of the ultimate ruler, who is revealed as a kind of blind, indifferent watchmaker tinkering with events.

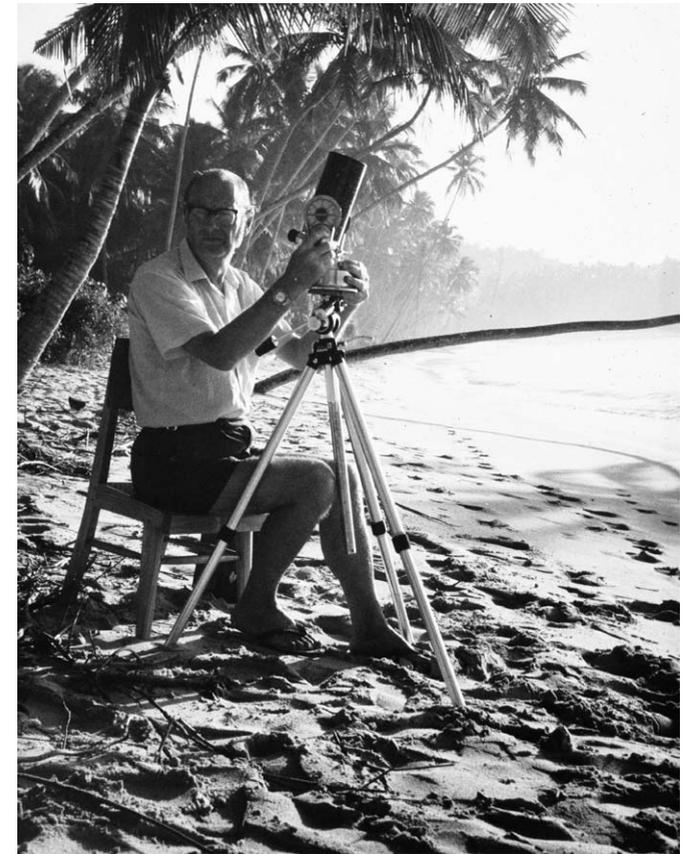
Arthur C Clarke was one of the many authors who acknowledged the influence of Stapledon upon their own writing. In his work Clarke used aliens as benign forces intervening at critical moments along the evolutionary path. In *Childhood's End* (1954), for example, the aliens trigger humankind into a bold evolutionary leap and the last of the old-style humans watch as the new, superior beings ascend to the stars. *2001: a space odyssey* (1968), developed concurrently with Stanley Kubrick's film from an earlier short story, is an account of the shaping of human evolution by an outside force from the remote past to the distant future. Like the work of Stapledon, this journey can be seen as a spiritual quest although Clarke in interview said he did not believe in 'mystical nonsense'. It also hints at intelligent design; a logical, self-contained entity at work in the universe – the 'Overmind' of *Childhood's End*. Further examples of speculations on what humans might evolve into can be found in the fiction of Stephen Baxter, Greg Egan, Charles Stross and Justina Robson, among others. By contrast, in *The Lost*

Time chart (with detail) prepared by Olaf Stapledon for *Last and First Men* (Special Collections and Archives: University of Liverpool Library).

World, Conan Doyle is looking back to where his present-day "civilised" human beings have come from: the cave-dwelling Indians and before them the brutal ape-men.

John Wyndham began writing science fiction in the 1930s but made his commercial breakthrough with *The Day of the Triffids* (1951). In this novel the reader is presented with an imaginative take on the theory of natural selection by which those species best suited to the surrounding environment can survive and thrive, while others die out (in evolutionary theory life is an endless competition, temporarily won by the 'fittest' of the moment).

A meteor storm has rendered most inhabitants of earth blind. The triffids, genetically modified carnivorous plants that have been farmed for their valuable oil, are now in the ascendant. Prior to the disaster, the hero, Bill Masen, worked for a triffid-oil company where



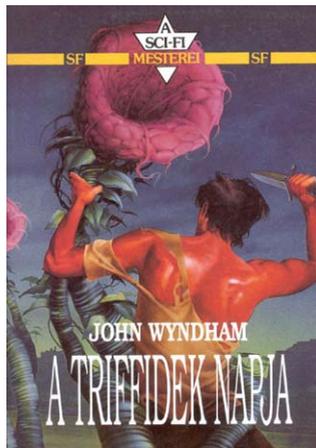
Arthur C Clarke with telescope, Sri Lanka (1970s) (Science and Society Picture Library/ Rocket Publishing).

his colleague Walter had observed signs of intelligence in the plants. Walter thinks it is significant that a high proportion of triffid victims have been stung across the eyes. He says:

Take away our vision, and the superiority is gone. Worse than that – our position becomes inferior to theirs because they are adapted to a sightless existence, and we are not.

In the overall scheme of things, Bill believes that 'It's an unnatural thought that one type of creature should dominate perpetually' and that 'life has to be dynamic and not static'. However, he will not let humanity go the way of the dinosaur without a fight and the book follows his struggle for survival against the odds.

Like Wells and Wyndham before him, the novelist John Christopher described in his fiction how a once comfortable, familiar environment can become strange and threatening. He placed ordinary people in extraordinary circumstances and focused on how successfully they – and the wider society – adapted to the change. His protagonists must make difficult moral decisions, and draw on previously unused skills and mental resources, in order to survive. In *The Death of Grass* (1956), for example, a viral strain kills off much of the planet's vegetation, and anarchy soon sweeps a world faced with starvation. The narrator takes his family from London to the North of England in the hope of finding safety on his brother's isolated farm. Christopher was writing during the Cold War period, when the world seemed to be on the brink of a terrible cataclysm. Who knew what lay beyond this man-made apocalypse and who would be the fittest to survive?



Foreign language editions of *The Day of the Triffids* (Special Collections and Archives: University of Liverpool Library).