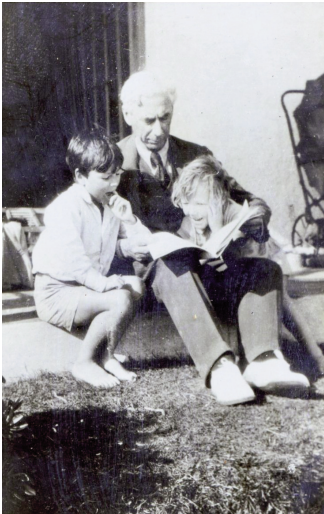


Scientific Romance

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Russell reading to his children, John and Kate, at Carn Voel

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Who links a marshy field on the outskirts of a Cornish village with Einstein and his Theory of Relativity? “In the very centre of the slough ... lived the Great God Zoomp, the tutelary deity of all swamps and quagmires” our link told his children “to while away the tedious climb from the beach to our house”. “Let us suppose that a drug is administered to you which makes you temporarily unconscious” writes our link in the opening chapter of his book, *The ABC of Relativity*.

The link is, of course, Bertrand Russell who – during the 1920s – lived and worked at Carn Voel, the house at the top of the valley in Porthcurno, Cornwall, where he wrote his exploration of Einstein’s theories and “made up stories for my children”. Of course, Russell wrote a lot more than this during his Cornish residency. But when thinking about Russell’s fiction, his stories and his enthusiasm for literature – ‘high’ and ‘low’ – Cornwall is a good place to start, especially considering his connection to ‘scientific romances’, or science fiction as we know it today.

The existence of a marsh-dwelling Great God Zoomp, who wails constantly in the night, seems as improbable a scenario as being drugged unconscious only to awake in “a balloon, which ... is sailing with the wind on a dark night – the night of the fifth of November if you are in England, or the fourth of July if you are in America”. What unites Zoomp, conjured from Russell’s imagination as an entertainment for children (a serious business in and of itself), and his balloon scenario is that they both allow the reader to engage in a leap of imagination, all the better to understand

something complex and profound. The balloonist awakes with a loss of memory but not of reasoning powers:

You can see fireworks which are being sent off from the ground, from trains, and from airplanes travelling in all directions, but you cannot see the ground or the trains or the airplanes because of darkness. What sort of picture of the world will you form? ... If an ordinary mortal were with you in the balloon, you would find his speech unintelligible. But if Einstein were with you, you would understand him more easily than the ordinary mortal would, because you would be free from a host of preconceptions which prevent most people from understanding him.

This paragraph is not, in itself, the complete story. There is no detailed characterisation and no plot, as such. These words do not stand alone and above Russell's consideration of the theory of relativity. But did Russell imagine how such an encounter between Einstein and our amnesiac balloonist would develop? Surely he did, but no evidence confirms such a possibility. Russell's purpose was to illustrate just how profoundly strange our understanding of the universe had become and how – in order to understand it fully – old prejudices must be thrown off. A leap into the realm of fantasy could provide some clarity around the developments and dangers ahead of humanity.

“I also invented a story that was never published”, writes Russell in his *Autobiography*,

From the time when Rutherford first discovered the structure of the atom it had been obvious that sooner or later atomic force would become available in war. This had caused me to foresee the possibility of the complete destruction of man through his own folly. In my story a pure scientist makes a little machine which can destroy matter throughout the universe.

Russell's first public speculation on the prospect of atomic weapons appeared in another work of ‘popular science’, published in 1923, and now re-published by Spokesman. *The ABC of Atoms* – another Carn Voel work – observes that:

Sherlock Holmes at his best did not show anything like the skill of the physicists in making inferences, subsequently verified, from minute facts which ordinary people would have thought unimportant. It is remarkable that, like Einstein's theory of gravitation, a great deal of work on the structure of the atom was

done during the war. It is probable that it will ultimately be used for making more deadly explosives than any yet invented.

Russell alone cannot be credited with predicting the development of atomic weapons. H. G. Wells in *The World Set Free* (1914) warned:

Never before in the history of warfare had there been a continuing explosive; indeed, up to the middle of the twentieth century the only explosives known were combustibles whose explosiveness was due entirely to their instantaneousness; and these atomic bombs which science burst upon the world that night were strange even to the men who used them.

H. G. Wells in 1914 imagined that the development of such bombs would lead to war “becoming impossible”, much in the same way that he thought the First World War would be the “war to end all wars”. Russell took a different view, both of the eventual development of atomic weapons and of the First World War. Nevertheless, Russell – who knew and generally admired Wells – wrote of him in *Portraits from Memory* (1956) that:

His belief in scientific method is healthy and invigorating. His general optimism, although the state of the world makes it difficult to sustain, is much more likely to lead to good results than the somewhat lazy pessimism which is becoming all too common. In spite of some reservations ... I hope he may have successors, though I do not at the moment know who they will be.

In the same year that *Portraits from Memory* was published, Russell appeared on the fortieth episode of ‘The Brains Trust’, which aired on BBC television on 10 June 1956. Alan Melville, in the chair, asks Russell: “Jules Verne and H. G. Wells wrote science fiction which was good literature and good prophecy. Can science fiction achieve as much today?” Russell replies:

Well, I should like to bring up a book which is not a new book by any means, but seems to mean a little to contradict what you say, and this is Stapledon’s Last And First Men, which I think is a very good book, and it is not good because of the characters in it. It is science fiction but it is really, I think, quite good – I mean an important book, worth writing; so that I think science fiction can be written if a man is clever about it; it is only a question of having capacity.

Nineteen years earlier, Russell reviewed Olaf Stapledon's *The Star Maker* ('War in the Heavens', *London Mercury*, July 1937), where he credits the writer of *Last and First Men* with a "very remarkable cosmological imagination". In contrast to Wells, who imagined future utopias, Stapledon imagines a "dramatic and exciting" future "with an alternation of tragedy and victory". More attractive to Russell, perhaps, than unending tests of the human spirit is his judgement that Stapledon's "science is as correct as is compatible with the purposes of a romance". In Russell's judgement, as compared to *The Star Maker*, "*Last and First Men* was parochial: it confined itself to man and to the solar system, whereas this book deals with life throughout the universe ..."

In the end, however, the civilized remnant conquer through telepathy. But the second law of Thermo-dynamics defeats them, and the universe grows too old to support life. By this time, however, the survivors have grown so completely philosophical that they find consolation in the prospect of new universes ... The last shivering sages, as they expire, take comfort in the thought that some of the defects of this universe will be avoidable next time.

Stapledon was not the first to employ the 'second law' for fictional ends. As Émile Torres notes in his recent work, *Human Extinction* (2023):

While scientists ... were grappling with the eschatological implications of thermodynamics, the notion of entropic death was also making its way to the public arena via science fiction novels within the 'Dying Earth' genre, which was anticipated by the work of de Grainville, Lord Byron and Mary Shelley.

Shelley's own contribution to the "Dying Earth" genre, *The Last Man*, must have been known to both Russell and Stapledon despite the work's obscurity when compared to *Frankenstein*. Russell was an admirer of Percy Shelley – "he has remained important to me for the purity of his passion, the intensity of his love of beauty, and the scope of his constructive imagination" (*Fact and Fiction*) – and deployed Mary's better known work in his analysis of Byron and critique of Romanticism ('Byron and the Byronic', *The Spokesman* 143). Stapledon's *Last and First Men* seems to directly reference Shelley's work but whereas Shelley has a plague wipe out humanity, in Stapledon the laws of physics deliver ultimate doom.

In my interpretation, Russell remarks on Stapledon's "fine intellectual courage" not because of the latter's deployment of the 'second law' itself

but because he dares to recognise the long-term travails of humanity and to speculate on other possible paths. Russell himself reflected upon the ‘second law’ more than three decades before Stapledon in ‘A Free Man’s Worship’ (1903), where he writes – with overt melancholy – that:

... all the labours of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system, and that the whole temple of Man’s achievement must inevitably be buried beneath the debris of a universe in ruins.

For Russell in ‘A Free Man’s Worship’, Stapledon in *First and Last Men*, Shelley in *The Last Man* and for numerous other writers, the ultimate fate of humanity – that is, its ultimate and predictable demise or the mortal nature of humanity as a whole – rests upon the external ‘forces of nature’ or perhaps specific physical laws or the dynamics of a deadly pandemic. The emergence of mechanised warfare, where hundreds of thousands could be killed in short order, and – even more so – the opening of the ‘atomic age’, where the instantaneous killing of hundreds of thousands became possible, opened a very different set of considerations.

The German philosopher Günther Anders (see *The Spokesman* 154) classified three ‘epochs’ of thought related to these issues in his 1956 work, *The Outdatedness of Human Beings*: “1. All human beings are mortal. 2. All human beings are killable. 3. Humankind as a whole is killable.” If the ‘second law’ confirmed the mortality of “all human beings” – present and future – and if the First and Second World Wars demonstrated that highly organised and concentrated slaughter was now possible, with the Holocaust representing the inhuman dimensions of human technological ‘skill’, then the atomic and nuclear age – made possible by leaps of understanding in physics – demonstrated an ability to kill humankind in its entirety without waiting for the long-term tendencies of the universe to run their course.

We will return to Russell’s thoughts on this ‘new reality’ – including the impact on his own fiction writing – but one last word on Stapledon. Footnote 2 on page 348 of Russell’s *An Inquiry into Meaning and Truth* (1940) reads: “Cf. ‘The Star Maker’ by Olaf Stapledon”. The paragraph to which this reference is attached reads:

There will still be propositions as to which there is no evidence whatever, for instance: ‘there is a cosmos which has no spatio-temporal relation to the one in which we live.’ Such a cosmos can be imagined by a writer of scientific

romances, but by the very nature of the hypothesis there can be no inductive argument for or against it. I think that we imagine a Deity contemplating all the worlds that He has made, and thereby we surreptitiously restore the link with our own world which, in words, we have denied.

If further evidence was needed of Russell's regard for Stapledon, then it comes in his inclusion as a footnote in serious philosophical argument. But how did Stapledon feel about Russell's philosophy? Olaf Stapledon is chiefly remembered as a writer of science fiction but less well remembered as a lecturer in philosophy at the University of Liverpool in the North West of England. Stapledon wrote on Russell's philosophical and other works on more than one occasion but this extract from 'Mr. Bertrand Russell's Ethical Beliefs' (*International Journal of Ethics*, July 1927) – an essay review of *What I Believe* – seems apt:

Of course he assures us again and again that he is only telling us what he happens to desire, and that there is nothing 'virtuous' in the good life or 'sinful' in its opposite. For, he says, 'these are conceptions which seem to me to have no scientific justification.' Yet somehow I cannot help suspecting that he believes far more than he has confessed.

It seems likely that Russell would have been aware of this review but there is no ready evidence of Russell's reaction to it at the time. If he was aware of Stapledon's philosophical views and philosophical works, Russell did not write about them as far as we know. Whatever the case, Russell's admiration for the 'scientific romances' was undimmed.

In her analysis of Russell's fiction, 'Spirited Satire' (*russell: the Journal of the Bertrand Russell Archives*, no 13, summer 1993), Gladys Garner Leithauser writes:

It is significant that narration, while ostensibly a minor mode of discourse for Russell, gathered strength as a method for him. Under the impetus of the World Wars and driven by fear of the Bomb, Russell turned more and more of his primary work into non-fictional social criticism and warning. Quite rightly, this lucid and powerful prose brought his chief recognition. But under these influences, in a late and dramatically new chapter in a lifetime of creativity, he also produced varied and imaginative literature. Fiction allowed him to enter realms where he otherwise would have been silent.

Russell's *Autobiography* tends to confirm Stapledon's assertion "that he

believes far more than he has confessed” and Leithauser’s observation that fiction permitted Russell to range over areas not otherwise addressed. Russell did “not wish to be thought coldly indifferent to ethical considerations” and wrote in 1954 – too late for Stapledon, who died in 1950 – his book, *Human Society in Ethics and Politics*. The book attracted positive reviews but, as Russell observed, “nobody paid much attention to what I considered most important about it, the impossibility of reconciling ethical feelings with ethical doctrines...”

In the depths of my mind this dark frustration brooded constantly. I tried to intersperse lighter matter into my thoughts, especially by writing stories which contained an element of fantasy. Many people found these stories amusing, though some found them too stylised for their taste. Hardly anyone seems to have found them prophetic ... The writing of these stories was a great release from my hitherto unexpressed feeling and of thoughts which could not be stated without mention of fears that had no rational basis. Gradually their scope widened. I found it possible to express in this fictional form dangers that would have been deemed silly while only a few men recognised them. I could state in fictions ideas which I half believed in but had no good grounds for believing in. In this way it was possible to warn of dangers which might or might not occur in the near future.

Russell did not confine his warnings to his fiction, especially not when there were substantial grounds for believing in real dangers and especially when they fell into the third of Anders’ categories discussed above. In ‘A Fireball in the Marshall Islands: How a Nuclear test Changed the World’ (*LA Review of Books*, September 20 2023), Émile Torres explains:

Several months after the Castle Bravo incident, Bertrand Russell published a book [Human Society in Ethics and Politics] with a closing chapter titled ‘Prologue or Epilogue?’ In contrast to his earlier worries that atomic bombs could ‘merely’ destroy civilization, he cautioned that we now face the possibility of ‘the extermination of mankind.’ His question, then, was whether humanity was writing the beginning or the end of its autobiography: total annihilation had become technologically feasible, but if we survived, the human species could exist for ‘another million million years,’ he estimated, during which great achievements and unimaginable wonders awaited our descendants. ‘Is all this hope to count for nothing?’ he wondered.

During this period, Russell’s *Satan in the Suburbs* and then *Nightmares of*

Eminent Persons were published, to be followed – in 1961 – by *Fact and Fiction*, which included further stories. By 1972, Barry Feinberg compiled and edited *The Collected Stories of Bertrand Russell*, to mark the centenary of Russell's birth. It's an incredibly valuable volume in its own right. Many of the stories are, as Leithauser puts it, 'Spirited Satire'. Some are very funny indeed. There are stories for children – some seemingly nonsensical – and there are 'Parables', such as 'The Misfortune of Being Out of Date'. Russell notes that few people find these stories 'prophetic' and characterisation and plot are sometimes lacking. However, as I hope to have indicated with this collection of possible links, references, coincidences and suggestions, there is – as might be expected from Russell – something somewhat more profound than whimsy, satire, and fantasy at play in these stories.

The Great God Zoomp suffers a terrible disruption when happened upon by "an eminent zoologist in pursuit of rare ferns". In the way that zoologists of the time were inclined to make specimens of the most extraordinary and rare beauty, this example "pulled [Zoomp] out with extraordinary labour." Zoomp was then dried out and displayed at the Natural History Museum where "the night watchman complained that throughout the hours of darkness he heard a melancholy voice wailing 'Zoomp, Zoomp, Zoomp'." Zoomp was suffering terribly and the zoologist contrived to return him to the marsh where "all who heard him rejoiced in the cheerfulness of his 'Zoomp, Zoomp, Zoomp'."

One hundred years after its first telling, the story of Zoomp has a striking relevance – as with Zoomp, so with many of Russell's other stories, and his interest in 'scientific romances'.

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The Atlantic Peace Foundation has recently acquired Carn Voel from the extended Russell family with a view to establishing an international education centre and museum there. The Atlantic Peace Foundation, a registered charity, was established by Bertrand and Edith Russell in 1963.

Bertrand Russell's *The Good Citizen's Alphabet*,
Gaberbochus, 1953. Drawings by Franciszka Themerson ►