

1

introduction

Spawned from the radio series of the same name, *The Hitchhiker's Guide to the Galaxy* novels are a whimsical, sometimes cutting, satire on science fiction, life, the Universe and indeed everything. Created by Douglas Adams, a former scriptwriter for the television series *Dr Who*, the 'increasingly inaccurately named' trilogy eventually ran to five volumes. It charts the bizarre escapades of Arthur Dent, a hapless BBC employee rescued by his friend Ford Prefect just as aliens called Vogons demolish Earth to make way for a hyperspace bypass. What follows is a colourful and frequently ludicrous saga in which Dent, Earth's Everyman, is exposed to everything the galaxy can throw at him. Initially played for a knowing laugh, the series becomes darker, ending with the positively bleak *Mostly Harmless*, in which closure, of sorts, is achieved.

The Hitchhiker's Guide is, on one level, a comedy. Much of the 'science' therein is clearly bonkers, and intentionally so. One-time Galactic president Zaphod Beeblebrox has (usually) two heads and three arms. There are improbable planets where it is permanently Saturday afternoon; flying office blocks; a mostly ocean world with an island called, for some reason, France; and a spacecraft marooned for aeons where paralysed passengers are woken every century to be served refreshments while the crew await delivery of lemon-soaked paper napkins. There are triple-breasted whores and an articulate bovine bred to want to be eaten. Yet something else nestles among the gentle mockery of *Who*-style japes, space operas like *Star Wars* and more serious stuff from the pens of Isaac Asimov, Arthur C. Clarke and the rest. The *Guide* records Douglas Adams's fascination with the increasingly strange twists and turns of cutting-edge cosmology and theoretical physics.

The first parts of the *Guide* were written in 1978 when black holes, parallel universes, quantum weirdness and serious debates on alien life first took a real hold on the public consciousness. So despite the whimsy, *Hitchhiker's* bristles with real science and technology. Adams caught the wave of interest in

the New Cosmology – Big Bangs, black holes and Grand Unified Theories – and surfed it with wit. Had he never posed the Ultimate Question of Life, the Universe and Everything, would Stephen Hawking have sold all those books attempting to answer it?

Some of the most interesting themes of the series concern parallel universes and alternate realities. The idea that another, shadow, world lies just round the corner is haunting. Humans, especially young ones, have always been drawn to the notion of an elsewhere – at the bottom of the garden, the back of the wardrobe, the top of the Faraway Tree or from Platform 9¾. Then came the shock that fantastical elsewheres may be the only explanation for the wonderland that is the quantum world.

It is this world that holds the key to some of the weirdest nooks and crannies in the very strange universe that science is uncovering. The land of the quantum is that of the most minute and brief. This is where electrons are not distinct entities but fuzzy wave functions which can be the size of the entire universe or so small that a trillion can be crammed on the point of a needle. Things can be in two places at once, and simply looking at something affects it in a profound and deeply strange way.

The quantum world could, reckon some researchers, open the door to true parallel universes: worlds where D-Day failed and Hitler won the Second World War, worlds where there never *was* a Second World War and where the final Ford Sierra off the production line was painted just a *slightly* less fetching shade of metallic violet. That is the great thing about parallel universes: they can be as different from or similar to ours as you please. Poor Arthur Dent finds and loses the love of his life thanks to an unfortunate tryst with the push-pull of parallels. Trillian, queen of the galactic airwaves and possibly the Universe's least competent mother, confronts her parallel self – a hard-working TV journalist whose feet had only once left the Earth.

Like all the best science fiction, the *Guide* is as much about philosophy as it is about science. Are our lives predetermined? Do we live in an essentially billiard-ball, Newtonian universe where – despite the awkward fuzziness of chaos theory and quantum mechanics – each twist and turn of our future is predictable to infinite precision? Or is the future unknowable both in practice and in theory? Told he will experience his *dénouement* in a place he's never heard of called Stavro Mueller Beta at an unspecified time and date, Arthur is naturally alarmed. We like to think that the past is set in stone, the future just a fog.

To cope with this uncertainty and the alarming reality of our mortality, some – including the super-intelligent mice of the *Guide* – have decided they are striving for the Ultimate Answer to the Ultimate Question. But as pointed out by Deep Thought (the mega-computer built by the mice to find out what is *really* going on), the Answer, whatever it is, will have no meaning until we work out what that Question is.

Which brings us neatly to God. The *Guide* was begun just before reason trotted to the back of the bus and had a quiet smoke, leaving the front seats to be occupied by the gibbering prophets of the New Age. When Adams wrote his original scripts, traditional Church-based faith was on the wane. Then along came the crystals and the tarot cards, the chakras and the wicca women.

This was a rerun of the old Victorian spiritualism, another, essentially decadent, *fin de siècle* fad. New Age belief, with its emphasis on Celtic or Oriental mysticism, self awareness and non-Western approaches to mental and physical health, diet and medicine, was a sort of religion-lite, a reaction to 1960s materialism and technological triumphalism. To slightly misquote G. K. Chesterton: when we stopped believing in God, we didn't start believing in nothing, but came instead to believe in everything.

According to the *Guide*, the Babel fish, possibly the most extraordinary creature ever to have (allegedly) evolved, is

proof enough of the non-existence of God. This small creature sits in your ear and provides a perfect simultaneous translation of any language in the Universe. It is so mind-bogglingly useful and improbable that it seems to prove the presence of intelligent design – thus refuting such proof in an instant, since God relies on faith, not logic, to keep Him going in the long dark teatimes of the soul. In *The Restaurant at the End of the Universe*, we meet the man who rules the cosmos. Except he is not God, just a rather confused individual who lives on a windswept beach with his cat, in a shed. He doesn't seem to know any more about what is really going on than anyone else.

The *Hitchhiker's* series articulates brilliantly the feeling that deep down, beneath it all, Things Are Not What They Seem. As Adams was writing, the idea was gaining ground that NASA had decided early on in the 1960s that a manned flight to the Moon was an impossibility given the paucity of technology at the time. Millions had begun to believe (some still do) that the lunar landings were faked and billions of dollars had been spent convincing the people of the world that America had won its race with Russia to put a human on the surface of another world.

Since 1978, certain scientific assumptions and fashions have been round the wheel of respectability and ridicule, sometimes more than once. Alien life, for instance, is taken for granted in the world of Zaphod, Ford and the Vogons. Yet in the 1970s, extraterrestrials, while in vogue in cinemas, were distinctly unfashionable in the lab. It was accepted wisdom that life was something very special. The early throes of the space age had turned up nothing, either on the dusty surface of the Moon or on Mars's marginally more inviting plains. The 19th-century vision – propounded by astronomers such as Percival Lowell – that the Universe was teeming with life had arguably prompted the entire space programme. This very programme, the astronauts and unmanned robots despatched from Baikonur and Canaveral, was turning up more and more evi-

dence that we are alone. Scientists dubbed the arrival of *Mariner 4* at Mars in 1965 the 'Great Disappointment'. They knew that Lowell's hope of canals and oases was dead, but had hoped for some vestige of the lost Victorian dream. No princesses, perhaps, but maybe some lichens or shrubs?

It was not to be. Mars looked dead and Venus was more hellish than anyone had imagined. Adams's aliens reflect the astrobiological pessimism of the time. He makes little attempt to render them realistic. Most are humanoid, with funny foreheads or strange hairdos. They are the aliens of *Star Wars* and *Star Trek*, human ciphers onto which can be projected more extreme versions of human angst, violent emotions, bad poetry and politicking.

In the past twenty years or so the alien has undergone something of a revival. On Earth we have discovered that microbes can thrive in environments previously thought to be utterly untenable for life. These 'extremophiles' gobble sulphur for breakfast around deep-sea vents, and bask in temperatures which would sterilize a surgeon's instruments. And the latest results from the Mars probes have been more equivocal than those from the early *Mariners*. At the end of the 1970s the Red Planet was a cratered, dusty version of the Moon, with a near-vacuum atmosphere and sub-Antarctic climate. Now we see a world of ancient rivers and lakes, sedimentary layers and the promise of life – if not extant then at least extinct. Jupiter's moon Europa, a smooth blob of ice, probably has a vast ocean under its frozen surface. Inevitably, there is now speculation that microbes may lurk in this alien, inky abyss and – just possibly – beasts beyond imagining. Everywhere they look, it seems, scientists now see possible abodes of life.

The late cosmologist Carl Sagan cautioned against the 'chauvinism' which assumes that alien life must in the most essential ways resemble that here on Earth. *Star Trek* gave a conscious nod to this concept with its brilliant catch-phrase, 'It's life, Jim, but not as we know it'. Nonetheless, since the 1980s, the vastly

improved computing resources of our civilization have been turned, in relatively minor but imaginative ways, to the search for any alien civilizations communicating much as we do. Microbes on Europa are all very well, but what about the little green men of sci-fi lore? SETI, the Search for Extraterrestrial Intelligence, uses spare time on the world's largest radio telescopes, and spare computing power on personal computers worldwide, to scan the heavens for signals broadcast by alien civilizations.

Occasionally, Douglas Adams managed not only to predict the future but also to create it. The Babel fish is now part of the world's cyberlexicon as the name of a website which performs translations – often hilariously badly. The *Guide's* 'Sub-Etha Net' seems like an eerie premonition of the vast internet that runs our lives without us even noticing. 'Life, the Universe and Everything' is now the stock in trade of the punk-cosmologists and new philosophers. When Deep Thought announced that the answer to the said conundrum was '42', Adams was making a joke at philosophy's expense. Then, in 1999, Britain's Astronomer Royal, no less, wrote that the Universe does indeed boil down to six simple numbers.

Plenty of science and technology did not pan out as Douglas Adams mused. His alternate universe is essentially a place of technological optimism. Huge computers thrum silently in the background, acting simply as calculating engines of which Babbage would have been proud. Adams did not conceive of a place where machines with brains the size of a planet sit in every child's bedroom, bringing them into contact with pederasts and pornography. His cosmos is explored not by spacecraft with all the elegance of a flying washing machine or baroque, unsafe shuttles covered with china tiles, but by huge, grey hulking spaceships, sleek black cruisers and the wonderful, gorgeous *Heart of Gold*, the Lamborghini Miura of space travel, so fast that it can cross a galaxy in the wink of a coincidence. His future is, of course, that of 25 years ago.

And yet, and yet. So much that is in these wonderful books time and again bubbles up in the real future. Time itself, for instance. Back in the 1970s, time travel was thought to be essentially ridiculous. A few brave souls ventured that perhaps Einstein's equations did not actually preclude such a monstrosity, but physics generally coughed a polite cough and proclaimed that time travel should really be consigned to the world of fantasy, if not that of the plain silly. Then along came researchers such as Paul Davies, Kip Thorne and Stephen Hawking, who started asking awkward questions about the nature of space-time and whether or not it actually is possible to go back and shoot your own grandfather, or even to go back and *become* your own grandfather

Now physicists sit in their armchairs postulating what such a journey would require. Huge, spinning cylinders made of neutron matter, the stuff of pulsars, so dense that a teaspoonful would weigh as much as an aircraft carrier. Tame, whirling black holes parked a polite distance away from anyone who would be torn to bits or indeed offended by the obscene breakdown in causality that accompanies a naked singularity. Most bizarrely of all, physicists ponder how they could construct a wormhole, a tube of space-time linking anywhere with anywhen. The engineering challenges would be immense – there is talk of harnessing the power of a million galaxies, squashing objects the size of Jupiter into a suitcase, and setting off dozens of H-bombs in formation, like a gigantic and apocalyptic firework display. Actually, one man reckons he can pull off the time travel trick using just a couple of lasers in the lab. If he is right, time travel could be as easy as it is (or will be – with time travel, you have to watch your grammar as carefully as the equations of space-time) at the Restaurant at the End of the Universe.

Ah, Milliways! One of the most fantastical creations in the history of catering. A restaurant built on a ruined planet at which guests are entertained as the fires of cosmic Armaged-

don itself burn around them. The staff take your (fabulously expensive) orders at a time when time is about to run out. 'It's too late to worry about whether you left the gas on now', diners are told. The end of the Universe here is portrayed as a spectacular event: it ain't over till the last fat supernova sings.

Until quite recently, it seemed probable that time would indeed end with a bang – a rewind of the big one with which it all began. Gravity, that all-pervasive and most tricky of forces, would eventually get the upper hand over the pesky expansion of the Universe. At some point in the far, but not infinitely far, future, the Big Bang would run out of steam. As if attached to elastic threads, the galaxies' outward expansion would slow down and eventually stop momentarily, followed by an ever-accelerating rushing together culminating in the Big Crunch. Oh, and at some point the sky would boil with the light of a billion suns.

Now the Big Crunch is off. Probably. Astronomers weigh the Universe with a fastidiousness that would put a dieters' convention to shame and they keep coming up with the wrong number. The place is simply too light to stop cosmic expansion. The Universe, they conclude, ends not with a bang but a whimper. Galaxies continue to rush apart, stars continue to be born and die, and eventually, after an extremely long but still finite time, the stuff starts to run out. In the ultimate fuel crisis, the raw matter powering the nuclear explosions that keep the lights burning becomes ever more scarce. Eventually, the lights go out for the very last time. The Universe is still full of stuff, but it is very, very black. Eventually, nothing interesting will ever happen again.

This news that cosmoskind (for we are all in this together, Betelgeusians, Vogons, Golgafrinchans and the rest) has ahead of it an eternity far bleaker than Hieronymous Bosch contemplated in his darkest of moods is grim. As grim, in fact, as the fate awaiting victims of the Total Perspective Vortex, given one momentary glimpse of the entire unimaginable infinity of the

Universe, and somewhere in it a tiny little marker, a nano-dot on a nano-dot, which says 'You are here'.

As the great biologist J. B. S. Haldane put it, 'The Universe isn't only queerer than we suppose, but queerer than we CAN suppose'. This suspicion lurks at the back of everyone's mind who has ever peered even a little under its bonnet. The Universe is big and supremely odd. It is odd that it is even here. It is odder still that it is here in a way that allows beings like us to have evolved to pose these impossible questions.

Today we know that the Universe is far stranger than even Douglas Adams supposed two decades ago. Most of it is very dangerous indeed; you really wouldn't want to be anywhere else out there that we know about rather than safely down here on Earth. Yet our bit of the cosmos is apparently perfectly tuned for life. To some, it has the smack of a set-up about it. To others, the myriad possibilities afforded by multiverse theory offer some sort of explanation.

Perhaps it *is* a set-up. Perhaps there is a god, but he is only joking. If so, maybe we are owed an apology.