

Thought Experiment

James Gunn

SPACE OPERA AND THE QUEST FOR TRANSCENDENCE

Half a dozen years ago I chose to return to a kind of science fiction I had turned my back on almost sixty years earlier—space opera.

Jack Williamson, my collaborator in one of my two first 1955 novels, wrote that space travel was to science fiction what the Trojan War was to the Greeks—a defining myth. That myth became a reality, of sorts, after the Moon landing and unmanned research vessels to Venus, Mars, Jupiter, Saturn, and beyond. But that was only the first small step. Still to come in the fulfillment of humanity's explorations into the unknown and the untouched were the exploration of the planets and then, in the more distant future, extrasolar expeditions. That imagined future was fueled by recent astronomical discoveries of planets around other suns, some of them with conditions resembling those on Earth.

Focus on space started early. A substantial number of magazine covers, beginning with *Amazing Stories*, featured spaceships, aliens, or other worlds. In the twenties and thirties the spaceships were fanciful; by the fifties they had become more technologically plausible as the realization of the myth became more credible with the use of rocket-propelled missiles in World War II. When book publishers began to issue science fiction, Doubleday identified its hardcover science fiction line with a rocketship on the spine. I would look for it in the new-books section at the public library.

John Campbell once defined science fiction as “the dreams . . . of a technological society.” Space travel was its central dream. It was not the only dream, but it was the one that dominated the science fiction imagination. Even the imagination of the earliest humans, who looked up at the Moon and thought of it as an island in the sky that some wonderful contrivance or cosmic accident or spiritual ascent could make accessible. It was a striking example of what critic Northrop Frye called “the world beyond the hill,” the place where authors could place their fantastic stories or imaginary societies beyond the reach of validation. Pre-science fiction literature is filled with tales of Moon voyages—by whirlwind, by spiritual transport, by demons, by swans, by bottles of dew and mechanical grasshoppers equipped with firework rockets. Scholar Marjorie Nicholson filled a 1948 book with them.

It took the Industrial Revolution and the Scientific Enlightenment to bring an element of real-world possibility to these stories. Edgar Allan Poe wrote about a balloon equipped with an air-compressor. Jules Verne's engineers built a cannon sunk into the soil of what later would become known as Cape Canaveral. H.G. Wells imagined Cavorite, an anti-gravity substance that Verne derided as unscientific.

But the space opera, the grand vision of humanity bursting out of its Solar System into the galactic unknown, with all of its discoveries and perils, required the invention of the science fiction magazine in 1926 by technology-enthusiast Hugo Gernsback. *Amazing Stories* provided a market and readers for E.E. “Doc” Smith and Lee Hawkins Garvey's 1928 epic serial *The Skylark of Space*, and what had been an occasional novel of cosmic adventure in the nineteenth and early twentieth centuries became a genre. Smith was soon joined by Edmond Hamilton, John W. Campbell, Jr., Jack Williamson, and others. In their hands, the story of extraplanetary discovery of strange creatures, adventure, and romance became a category with such distinguishing characteristics as expansive scale, battles in space, advanced technology,

melodrama, and often the survival of humanity, humanity's home world, and the triumph of good over galactic evil.

That this explosion of cosmic concern occurred at this particular time and place may owe a great deal to Edwin Hubble's 1924 announcement that the Universe was not just the Milky Way but involved billions of other galaxies, and that the Universe was not only bigger than anyone had imagined but getting bigger.

The space-travel category continued to dominate the magazines (the creation of science fiction magazines seemed to extinguish the interest of book publishers) through the 1930s, with Smith's Lensman series, Hamilton's world-saving and world-destroying stories for *Weird Tales*, Williamson's *Legion of Space* serials, and many more. They got so commonplace and predictable that by 1941 fan (later author) Wilson "Bob" Tucker gave the stories the derisive "space opera" name (inspired by radio's "soap opera" and film's "horse opera"). And in 1950, when *Galaxy* was first published, it advertised on its back cover that readers would never find such stories in its pages.

But that didn't slow down science fiction's love affair with vast expanses and flamboyant concepts yet to be explored. Smith continued publishing into the 1950s, and when postwar fan publishers began to turn the previous two decades of magazine serials into hardcover books, Smith's Lensman series was one of the first, issued as a boxed set under the title of "The History of Civilization." After his death the series was continued by several authors.

The category opened new vistas in 1942 when Isaac Asimov published the first of his Foundation stories, and the vast galactic empire became a subject for social and political speculation with no aliens and no space battles. Appropriately, it got its inspiration from the fall of the Roman Empire, but projected on a vaster scale, and it imagined how the Dark Ages could have been avoided or shortened. Donald Wollheim suggested in *The Universe Makers* that the Foundation Trilogy transformed science fiction. After that the story of humanity's expansion into extrasolar space could have other uses.

The old-fashioned space opera was still thriving when Jack Williamson approached me in 1952 about taking over his ideas and material for a novel he had been blocked on for a number of years, and in 1955 Gnome Press published *Star Bridge*. The book got no particular attention when it appeared (though the *New York Times'* Gerald Jonas gave it a glowing review ten years later), but it has been reprinted numerous times since, most recently by Tor Books. It was galactic romance at its most typical, although it had no space battles, no aliens except a diamond-eating, shape-changing parrot, and it substituted energy tubes for spaceships. My other space-opera contribution the same year, *This Fortress World*, was grimmer—a naturalistic response to all the spotless avenues and casual extinctions of the category up to that time.

The list of authors who contributed to the legends of men and women in space is diverse: C. L. Moore in the thirties, Leigh Brackett and A. E. van Vogt in the forties, Gordon Dickson, Poul Anderson, James Blish, Robert Silverberg, and Jack Vance in the fifties, along with Britain's Kenneth Bulmer, John Brunner, and E.C. Tubb. In following years, many of these authors would continue to publish space operas and would be joined by a substantial body of others, including C.J. Cherryh, Michael Moorcock, Samuel R. Delany, Ursula K. Le Guin, Alan Dean Foster, Philip José Farmer, Ben Bova, Mike Resnick, and lots of others.

While many writers offered the same good old stuff of large-scale adventures with species survival in the balance, even resulting in a sub-category that became known as combat or military SF, most brought something of their own to the category. Some authors focused on the voyage, some on the perils along the way, some on the aliens

to be encountered. Murray Leinster's 1934 "Proxima Centauri" dealt with all three in a generation ship and its interception by superior aliens who turn out to be descended from carnivorous plants, and Robert Heinlein's 1941 "Universe" focused on the psychological adaptations of the descendants of generation-ship passengers and crew in a ship that lost its way and its purpose. It was a concept picked up by a rich variety of subsequent authors, including Brian Aldiss with *Non-Stop*, Harry Harrison with *Captive Universe*, and Gene Wolfe with *The Book of the Long Sun*, as well as Harlan Ellison with his TV series *The Starlost*. A good number of space operas dealt with alien invasion, beginning with the grandfather of them all, H.G. Wells's *The War of the Worlds*. Others dealt with adventures on alien worlds, typified by Edgar Rice Burroughs's *Mars* novels. Space travel also provided authors with more credible locales for strange creatures and lost civilizations after unknown locations on Earth became less believable. More recently the alien-invasion narrative evolved into "destroy them before they destroy us" scenarios informed by contemporary speculation about world and even Solar System obliteration by scientifically plausible new weapons like neutronium in Greg Bear's *The Forge of God* or relativistic missiles in Charles Pellegrino and George Zebrowski's *The Killing Star*.

Gradually the narrative of immensity and spectacular conflict became adapted to more artistic purposes by authors concerned more with language and human interactions than a sense of wonder. In fact, keen observers might note that the term space opera now covers a substantial number of sub-categories that share only in general terms the use of space, aliens, space travel, planetary exploration, and the clash of cultures and ideas. The fact that the term continues to exist may be a matter of tradition and convenience, like the survival of the term "science fiction" itself in spite of efforts to find what some consider more descriptive language.

Although the pure space opera continues to be published, it is at its most typical in the visual media. Visual media were quick to pick up on space opera. Not long after the publication of *The Skylark of Space*, Buck Rogers made his first appearance in *Amazing Stories* and was soon transported into comic books, followed by Flash Gordon, and then adapted into film serials. Ultimately space opera found its greatest visual expression in *Star Trek* on television and *2001: A Space Odyssey* in film, and particularly in *Star Wars*, the grandest space opera of them all. Space opera continues to expand its universe in television and film.

A series of events and publications led to a reevaluation of the space opera in the 1970s, beginning with Brian Aldiss's 1974 anthology *Space Opera* and his 1976 *Galactic Empires*, and continuing through David Hartwell and Kathryn Cramer's 2006 *The Space Opera Renaissance* and Gardner Dozois and Jonathan Strahan's 2007 *The New Space Opera*. They were mostly celebrating British authorship, beginning with M. John Harrison's 1976 *The Centauri Device* and David Pringle and Colin Greenland's challenge in the 1984 *Interzone* for British authors to reinvent space opera. British writers responded, led by Stephen Baxter, Paul McAuley, Alis-tair Reynolds, and others, particularly the late Ian M. Banks, whose "Culture" novels turned traditional space opera concepts, like Larry Niven's *Ringworld*, into furniture for his dramas about a far future when the traditional concerns about life and death, love, gender, and beliefs have become irrelevant.

Meanwhile, in the U.S., David Brin introduced a new element into space opera with his "uplift" series in novels including his 1984 *Startide Rising*. Lois McMaster Bujold began her Vorkosigan series, and Vernor Vinge created some new concepts of the influence of artificial intelligences on human and alien affairs in his 1992 *A Fire Upon the Deep* and 1997 *A Deepness in the Sky*. Long-time leading writers such as Kim Stanley Robinson brought new hard-science concerns to interstellar travel in his 2015 *Aurora*, and Carter Scholz considered the special circumstances required to

construct and launch a generation ship and the hazards of such travel in his 2015 "Gypsy."

Unpacking the term reveals that "space opera" includes a variety of narratives, the most ancient involving a journey to encounter strange creatures and people with strange customs. This is a tradition at least as old as *The Travels of Sir John Mandeville*, a popular thirteenth-century, mostly fictional, journal written at a time when people were largely ignorant of, but curious about, unknown areas of the world. Its way had been prepared by Marco Polo's description a century earlier of his journeys to the Orient.

Another element is the journey itself, with all its perils and adventures, which became a staple during the age of discovery. In the age of invention, particularly in transportation, this provided a model for Jules Verne's *voyages extraordinaires*.

Then there is the threat of invasion by creatures unlike ourselves. Wells gave it a dramatic entrance into what was then called the scientific romance when his Martians landed on Earth, but there were ample precedents of invasions from beings that were not considered fully human, going back to the barbarians sacking Rome, and, as recently as the early twentieth century, what was termed "the Yellow Peril" featured in the first Buck Rogers story in 1928.

Perhaps most central to the space opera tradition is the battle of civilizations, glorified in mythology as early as the Trojan War and continuing up through Western and Eastern history as the critical moments when victory or destruction were the only options. Randall Garrett's 1959 "Despoilers of the Golden Empire" for *Astounding* described an apparent alien invasion that turned out to be Pizarro's conquest of Peru.

Finally, a concern with what defines humanity came into the category—or perhaps it had always been there (John Campbell's 1934 story "Twilight" defined it as curiosity). The search for "the other" has always involved a discovery of self, and the truly alien brings this issue clearly into focus.

That was where I began half a dozen years ago when I was considering writing another novel. I had not written a space opera for almost sixty years. After the publication of *Star Bridge* and *This Fortress World*, I had turned to stories and novels about more immediate issues, possibly responding to the increasing emphasis on social science fiction. I got an idea from a book on a half-bookcase on top of a table in my university office. It was Cory and Alexei Panshin's study of the development of science fiction ending with the Golden Age, *The World Beyond the Hill: Science Fiction and the Quest for Transcendence*. I had a vision of a machine actually producing transcendence, not some mystical development of super abilities or transformed existence or spiritual transformation after death, but a process that would select the ideal and leave the flaws behind.

Creating a novel is not a task assumed lightly. At best it requires a dedication of months; at worst, years. It is like gathering an army to attack a fortress or workmen to build a bridge. The author of a science fiction novel has to create a world in which his characters can plausibly confront the problems with which the world afflicts them. Some space operas place their actions in the far-distant future, like Asimov's Foundation stories, which makes less credible his human characters behaving and talking like people do today. Some, like "Doc" Smith's Skylark and Lensman novels, start in contemporary times, which creates a need for technological breakthroughs or alien intervention. I decided upon a time one thousand years in the future, when interplanetary exploration might be plausible but humanity would still be relatively unchanged except, perhaps, for a nod to changes in language. After that came the invention of a galactic situation into which to introduce my human and alien characters. The answer I came up with was a galactic federation controlled by a variety of

aliens, not only making plausible advanced technologies developed over millennia but providing competition, and possibly opposition, for humans, as well as expanding a theme of transcendence to all rational and self-aware beings. And then the novel required a special location for a “transcendental machine.” It had to be inaccessible or it would already have been put to use. A possible remote place might be an unexplored part of the Galaxy: an adjacent spiral arm of the Galaxy presented itself, unexplored because of the difficulties of going from one spiral arm to another. I could not remember seeing that problem raised before.

All that led to a quest for the transcendental machine, a quixotic and possibly spiritual journey involving humans and aliens. That reminded me of similar literary pilgrimages, particularly Geoffrey Chaucer’s “*Canterbury Tales*,” and suggested a long voyage in which the characters might have a chance to tell their stories to relieve the boredom and anxieties of their journey.

That is how *Transcendental* came together, and only the long slog of putting it all in appropriate characters, incidents, and language remained. The Chaucer inspiration, honored by the name of the spaceship in which the pilgrims make their journey, suggested tributes to the authors and stories that had built the foundations of space opera and science fiction itself. For instance, the ending of *Transcendental*, which, along with the first chapter, was written before the rest of the novel, reminded me of the ending of H. Rider Haggard’s *She*, and I decided to name my heroine after Haggard’s Ayesha, which I had read somewhere was pronounced “Asha.” Somewhat to my surprise I later discovered in a couple of TV dramas female characters actually named “Asha.” I paid tribute at other points in the novel to other authors I have admired or been inspired by, such as a use of Heinlein’s iconic “the door dilated”; Samuel R. Delany’s red and blue suns from his essay about the protocols for reading science fiction; the protection associations from A.E. van Vogt’s *The World of Null-A*; and many others, including Asimov’s “Trantor” and Murray Leinster’s “Proxima Centauri”: Asha’s generation ship was named the *Adastra* in Leinster’s honor and intercepted mid-flight. Readers interested in such matters may want to seek out other examples, many of them presented less obviously. Every science fiction text draws upon the authors who have preceded it and the traditions and concepts they helped create; *Transcendental* chose to acknowledge them.

Science fiction is an ongoing dialogue among authors about the human condition experiencing change. Sometimes the responses are deliberate, as they were to Robert Heinlein’s *Starship Troopers*. My own example was my reaction to Fred Pohl’s “The Midas Plague,” which, as great a story as it was, I thought didn’t address the problem of robots producing and then consuming the torrent of goods that were overwhelming human society. I published “Little Orphan Android” in the same magazine, *Galaxy*. I also published “The Gingerbread Man” as my response to Asimov’s “The Bicentennial Man,” though not many readers may have noticed, in spite of the fact that I gave my character the same name as Asimov’s robot, whom I thought was superior to the humans he served so faithfully.

The opportunity to have the characters in *Transcendental* tell their own stories allowed the novel an opportunity to discuss the issue of what represents transcendence in a variety of circumstances and to dramatize the cultural forces that might lead different species toward species improvement, and to technological means over the slow and uncertain methods of evolution. And I found a personal satisfaction in the final outcome (that might not have been shared by all readers). Science fiction is the literature of change, and it is most typical (and perhaps best) when it considers unanticipated consequences. As Asimov commented at the end of an essay on “Futuristics,” the most difficult development to predict is the side effect. It was easy to predict the automobile, he wrote; what is difficult to predict was the traffic jam. It

was easy to predict radio; what was difficult to predict was the soap opera. It was easy to predict the income tax; what was difficult to predict was the expense account.

So, in a sense, it was easy to imagine transcendence, even transcendence by machine, but in what form and by what means? That is what *Transcendental* was about—what it means to transcend our human limitations.

It might be of interest to readers who like to read between the words on the page that while *Transcendental* was modeled after *The Canterbury Tales*, its sequel *Transgalactic* was modeled after *The Odyssey*, and the third volume in the trilogy, *Transformation*, was modeled after “Jason and the Golden Fleece” and its Argonauts. There are traces of those works throughout the novels.

I had never written a trilogy before. I had never even written a sequel, although I had broken up big concepts into smaller segments to be published in magazines that I later brought together into novels. But I thought of a trilogy when I first came up with the idea for *Transcendental* and described it in my two-page proposal.

Having gone to the effort of creating a galaxy (or at least one spiral arm of one) of humans and aliens, the civilizations they built and the challenges they faced, and the characters who populated them along with their individual stories, it occurred to me that I had not finished with them, or they with me. Eight of my characters had told their stories in their own words, but I thought they deserved to have their lives considered and expanded as more traditional narratives. And so I have set down what I call “*Transcendental Tales*” as a tribute to those characters and a kind of prequel to the *Transcendental* trilogy.

I hope you enjoy reentering the *Transcendental* universe. Fiction may be our own transcendental machine.

At ninety-four, James Gunn may be the oldest author publishing regularly in our pages. He is certainly one of the busiest. Jim is working on a revised and updated edition of *Alternate Worlds* for McFarland Books. “They propose to publish it in a more standard 7 by 10 format, but are allowing me to include about 350 illustrations. I’m about done with the revisions and now must select the photos. My memoir, *Star-Begotten*, was published last fall, and Mike Page has completed work on my 1951 thesis, *Modern Science Fiction*, which probably will be out in the spring. It’s been a remarkable experience, with one novel and one book about me (*Saving the World Through Science Fiction: James Gunn, Writer, Teacher and Scholar* by Michael Page—McFarland 2017), and the memoir coming out now, and probably the Chinese edition of *Alternate Worlds*, and eight more books (six in China) scheduled for 2018 or the years that follow.”

