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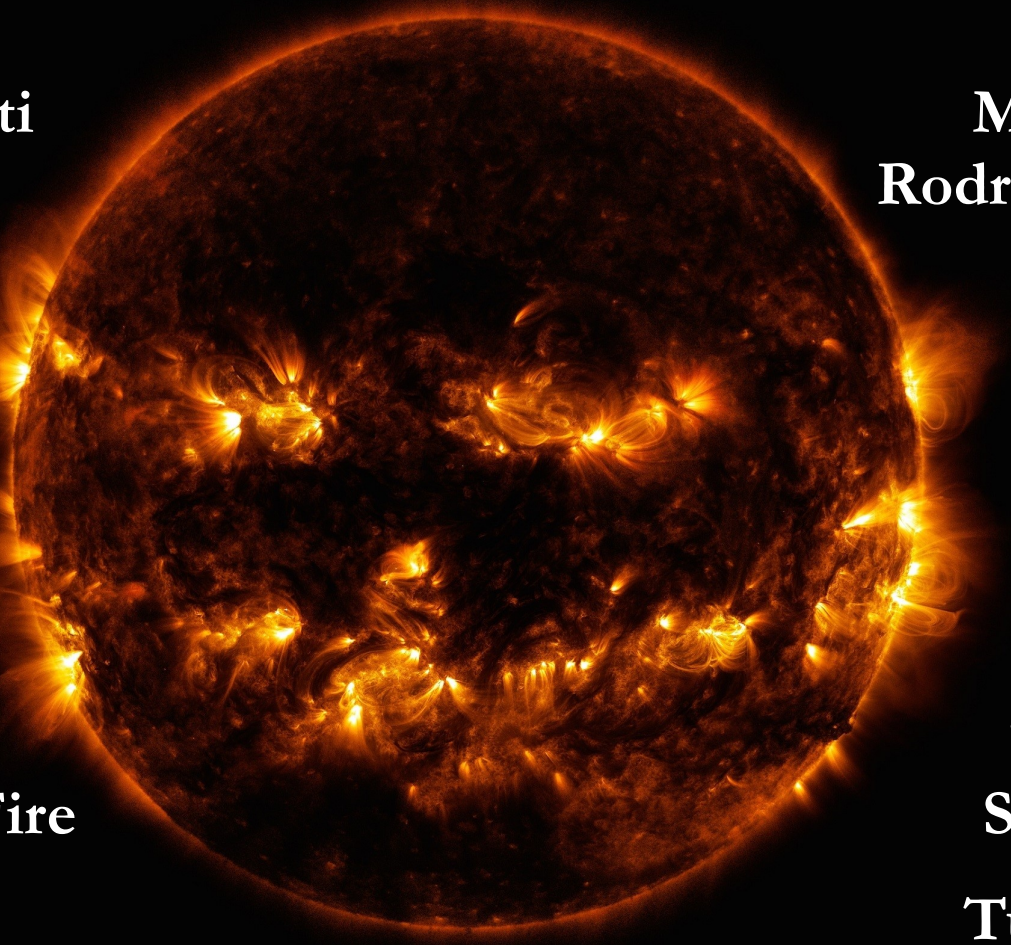
SciPhi JOURNAL



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CONTENTS

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Editorial

Lectori salutem.

As our European home base is emerging from the clutches of the pandemic (or at least its first wave), we hope that our readers, authors and their loved ones have weathered the storm in good health and high spirits.

We resume our standard format this quarter, but given the doom and gloom of recent months, we try to add a cheerful touch this time, with quite a few stories that strike a light-hearted cord. These are punctuated by three essays, each courting controversy in their own particular way; be it the relationship between faith and science fiction, the dearth of SFF translations from languages other than English, or a timely reflection on pandemics as depicted in the sci-phi canon.

During the spring, we had received a record number of submissions – a welcome development, which we, however, ascribe to the unfortunate circumstances of the global lockdown. Solitude is good for literature, it seems.

The rules of social distancing also meant that the crew availed themselves of the opportunity to spend more time with their families, while doing their day jobs (and reviewing submitted stories) confined to their library armchairs. Co-editor Ádám marvelled time and again at the manner in which the world that to him seemed to be closing in, was at the same time opening up for his little daughter, barely three years old, who is at the age when the mere shadow of a cloud on the balcony is ripe with speculative possibilities.

In a way, science fiction (and sci-phi in particular) is a genre that at its core sets out to inspire in readers that same inclination towards subliminal wonder, as if seeing a new phenomenon through the eyes of a child. May we never lose our ability to revel in this playfulness of the human mind!

Speculatively yours,

the co-editors

#

ps: While most of the SPJ crew leads rather old-school, analogue lives, we are following the advice of a couple of kind readers to re-animate the Journal's Twitter account from its long cryogenic slumber. If you wish to support our authors by sharing (re-tweeting?) their work, you may do so by following @sciphijournal (which we are told is not a hashtag, but an account handle, apparently).

~

Cube

Kaolin Imago Fire

No street led to just one other; no window faced another; no entrance was for just one house. Sewer flowed through boudoir with an elegance that defied reason--but that was art in the hands of masters. Cube, as it was prosaically called, was the result of studied generations, clones and imitators, working towards a harmonious cacophony of architecture. Out of the void of other beings, mankind creates its own others--and Cube was the ultimate inhuman thing, an entire planet manufactured to break down the mind and recreate it from environs that knew no boundary.

The greatest living-art project of any time, Cube was populated slowly despite the near-fanaticism it inspired. Volunteers were seeded across the planet to build their own "worlds". Were allowed nothing that could contact Off-cube, simply given the means to support themselves, to provide for the world they inhabited. Were left to fall into madness and either come out the other side or die. Only then were more seeded: hundreds, thousands at a time, all segregated from each other but provided for. And again, madness ran its course.

Slowly they found each other; some madnesses were compatible, some were not. Extremes of violence were removed, the rest were studied from afar. And slowly, ever-more-slowly, they evolved. Technology was remembered, reinvented, re-imagined. Language was a game, never left to one set of rules for too long. They learned to walk through walls, and were never seen again except as ghosts--though it was rumoured that they stepped out as sooth-sayers to sundry wheres and whens. The planet continued to change and be changed by them--in time, it too began to fade, escaping both space and time.

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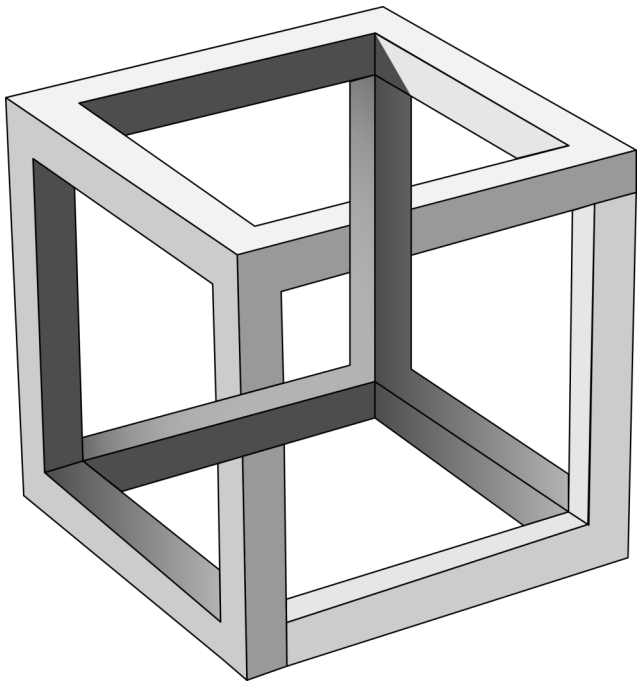

The Real Story

Jonathan Turner

"Why is there no Star Trek in Star Trek?" I asked. That was the question that started it all.

It wasn't meant to be profound. We were killing time between--or instead of--classes, at the Science Fiction Society. Forgive me if I don't name the university. You'll understand later.

"Because it'd make the show really boring?" said Allen. "It'd be all, 'Mr. Spock, have the computer figure out which episode we're in and tell us how we fix this.'"

"Allen" isn't his real name, by the way. None of the names I'm going to use are real, not even "Jonathan Turner". You'll also notice that I'm not giving you much in the way of dates.

"Sure," I said. "That's the real reason. But what's the in-universe reason? I mean, Trek is supposed to be the future, right? The actual future of our actual world. Which includes a TV series named Star Trek."

"It's not the actual world," Lisa objected--Lisa tends to get detail-oriented. "No Eugenics Wars."

We had a lot of conversations like this in the SFS. We called it "The Room That Time Forgot." It was a musty little windowless space in the basement of Wedderburn Hall with a mangy collection of fourth-hand furniture and a carpet that looked like it had been dipped in goat bile. We loved it.

"No, but think about it," said Sean. "It's not just Trek, it's everything. Like, in The Terminator future, why doesn't somebody on the Skynet project say something like, 'Hey, guys? Remember that movie? Should we maybe not do this?'"

"When does Skynet come online?" Lisa asked.

"August 4, 1997," said Allen, who can be relied on to know stuff like that.

"And the movie came out in . . . "

"1984."

"So only thirteen years. And it's not like the movie was obscure."

"Ergo," I said, "in the future shown in the movie, the movie itself either doesn't exist or isn't widely known. Which means that it's not our future."

"I'm good with that," said Lisa.

And that should have been that. This conversation should have gone the way of the one where Allen and I worked out what happens if you cast an invisibility spell on a campfire. (Invisible photons, in case you're wondering.) That is, we would have spread it around a bit, referenced the punch lines periodically, and otherwise gotten on with our lives.

Eventually we all graduated. I went into quantum physics. Lisa and Allen got married; she became a high-powered government lawyer, Allen an AI researcher. Sean was the one who travelled furthest, as a globe-trotting fast-track executive for an international e-commerce company. But we never lost touch. It's one of those groups where it doesn't matter how long you've been away--you walk into the room, and it's like you never left..

So it's maybe not surprising that "the Trek Paradox" kept cropping up. I remember one conversation in particular. Sean had flown in from Japan, and we had gotten together for a weekend of board games and catching up.

"So it looks like Invasion: Earthlight isn't going to happen," Allen said, moving a tiny spaceship. (Yes, that's a made-up title. I told you, I'm being coy about details.)

"Umm . . . good?" said Lisa.

"The antigravity boots would have been nice," said Sean.

"Well, there's your problem right there, sir," I said. "Antigravity's probably not physically possible. Call me a soulless reductionist, but I bet any future that's scientifically impossible won't happen." I moved one of my own spaceships into Sean's territory.

"You're a mean one, Mister Grinch." Sean made a sad face at the game board. "I don't like this future."

The conversation switched to pure game-speak for a while while we blew up each other's spaceships. It popped up again when we broke for pizza, though.

"We could still get The Martian," Sean said hopefully.

"Only if we increase Martian air pressure enough to blow over a lander," Allen objected.

"If your name is Mark Watney, do not leave the lander!" said Lisa.

"NASA should have a checklist on their job applications," I said. "Is your name (a) Mark Watney, (b) David Bowman . . ."

"(c) Ellen Ripley," added Lisa, our resident Alien expert (she also does Godzilla).

"What they ought to do is take all their actual astronauts and write disaster stories about them, so that whatever they write about won't happen." Sean was harboring ambitions to be a writer himself, although we didn't know that then.

"If NASA starts publishing stories where their actual rockets actually blow up their actual astronauts, I think there will be morale issues," I said.

"Do it as non-fiction," said Lisa, who at that point had a good dozen legal articles to her credit.

"I don't think it would work that way." Allen shook his head. "Suppose one expert writes that there will be a mission to Mars within twenty years, and another expert writes there won't. One of them has to come true."

"Stories are more specific," I said. "'A mission to Mars' covers zillions of potential futures. In a story, you're specifying one. The number of possible futures is colossal. The probability that we just happen to land in that specific future is infinitesimal."

It has been noted that I like to lecture.

"Sure," said Sean, "but you don't need much specificity for a paradox. If they discover a monolith on the moon, that's weird, right? Even if there's no Pan Am space shuttle or HAL or whatever."

"Well, there's also active avoidance going on. If somebody invents humanoid androids, they're not going to be called 'replicants,' because of Blade Runner. So the story actually closes off that future. When you publish a story, all futures in which people are unaware of that story become impossible."

"I heard the guys who started Skype named it after Skynet."

"If they did, it was because they were aware of the movie. There are no histories where people aren't aware of the movie. Including its signature elements. So, arguably, those signature elements can't happen."

The conversation veered off from there, but it stuck in my head. I started wondering: could you quantify the effect? How specific would a reference have to be, before it started affecting people's future choices? How widely spread? Does the medium make a difference? The length?

It started out as just a spare-time project in information theory. The longer I went on, though, the more connections I started seeing. We're talking deep, fundamental results here. You've probably already started thinking about quantum mechanics. That's one link, sure, but here's another example.

In the first Star Trek movie, there's a picture of the space shuttle Enterprise on the starship Enterprise. But the space shuttle was named after the starship. The fiction depends on the real depends on the fiction.

Just a cute little in-joke, you think? Now imagine an index card. The front says: "The sentence on the back of this card is true." The back says: "The sentence on the front of this card is false." That's a famous paradox, related to Gödel's Incompleteness Theorem. And it turns out that if you can formally define "real" and "fictional" as analogues of "true" and "false" . . . okay, I'll spare you the math, but take my word on it: it's impressive.

Which is what I said at one of our later meetings. Time had moved on, and we'd all moved up. Considerably up, in fact. If I told you Sean's real name, you'd recognize it. Allen and me you might or might not recognize, but you could Google us. Lisa you would definitely not recognize, nor does she show up on Google; recall that she works for the government, and draw your own conclusions.

This particular get-together had been short on traditional geekery and long on grousing about the state of the world. The topic came up when Lisa said something like "Dammit, why couldn't someone have written a story where He-Who-Must-Not-Be-Named won that election? Then maybe it wouldn't have happened."

That was my cue to give the spiel. It was maybe a little longer than the summary you just read.

"Wait," said Sean, interrupting me. "You think the Trek Paradox is real?"

"I'm not sure," I confessed. "There might be a connection with Shannon entropy, too. If you consider the fiction as a signal from the past to the future, with specificity as analogous to redundancy--"

"Inconceivable!" said Sean. "By which I mean, Incomprehensible!"

"It's the Even Less Certainty Principle," Allen said.

"They called me mad," I retorted, "but I'll show them all! Anyway, this is just a bizarro idea. It'd take like a whole research institute to try to prove any of it."

"So?" said Lisa with a shrug. "Let's do it."

To make matters short: we did it.

Sean got us corporate funding and equipment. Lisa got us government protection and data. Allen set up a quantum-computing deep neural network cluster. (If you think that's impossible, then either you don't know the whole truth, or I'm not telling you the whole truth.) I handled the science and math. We recruited some other friends, whom I'm not going to discuss.

And, yes, the Trek Paradox is real.

Observing changes the thing observed. A sufficiently specific prediction is equivalent to observing the future. Which changes it. The universe, at a fundamental level, does not permit self-reference. You can't dictate what the future will be. But you can determine what it won't be.

We quantified everything. We know how specific you have to be. We know how changes in popularity affect the result. We know why fiction is vastly more powerful than non-fiction. We know how far and fast it happens.

And in the process, we learned a lot about the future. I'm not going to tell you how. You might suppose that we learned to make pretty accurate predictive computer models. Not as good as Hari Seldon's psychohistory (but there will never be a science of psychohistory, or a Hari Seldon). You'd be amazed what you can find out once you've got both secret government information sources and global-scale commercial big data.

Or maybe it wasn't computer modelling. Maybe we actually found out that, in certain limited ways, information can travel backwards in time. You might think of the narrative and the future as being in a state of quantum entanglement. Determine one, and you instantly and time-symmetrically determine the other.

Hey, for all you know, parts of this story take place in the future. Didn't you ever think there was something a little odd about a story that's set in, say, the 30th century, but written in the past tense? If you did, you were right.

Are you starting to realize now why I'm being so short on specifics? But if you really want the details . . . I'm looking for a writer.

There's a science-fiction novel I want you to write.

Call it a near-future thriller, with dystopian elements.

Maybe I could do it myself, but then what? It's no good if the thing doesn't get published. Publishing it is very important. So I need someone with a name, an agent, a track record.

You do the writing. I provide . . . let's call it worldbuilding. Characters, places, dates, events. Especially events. I retain veto power; there are certain things that have to go in there.

Trust me, it will be exciting.

You can put your name on it as sole author. I don't want any money. Any awards it wins are all yours. Assuming there are any awards left.

If we can get this thing into print by, say, November of next year, that'd be great.

~

Faith in the Future, or, Does Religion Have a Place in Science Fiction?

Jim Clarke

I write this while in lockdown due to the global Coronavirus pandemic, amusing myself by reading *Dune* and Nnedi Okorafor. Perhaps, when you read this, the lockdowns will have been lifted. This period, stuck at home and making the most of it by catching up on reading what I like, reminds me of being a doctoral student at Trinity College Dublin. What would any sensible person do, if they had access to a copyright library holding millions of volumes, and most of their thesis written? Obviously, borrow and read as many SF novels as possible!

No more than people today can foresee how the world will look or function post-Corona, I had no idea where my policy of bulk-reading science fiction would lead. The human mind is probably the world's greatest ever pattern recognition system, and I got tripped up when I noticed, in about the third novel in a row, that the protagonist (or antagonist, very often) was a Catholic priest, specifically a Jesuit.

In novel after novel, I found priests in space. Priests converting aliens. Priests condemning aliens. Priests who were scientists and priests who were bitterly opposed to science. There were robot popes. There were alternate histories where the Reformation never happened and the Vatican ruled supreme over the globe. Sometimes they even dominated the entire galaxy. A kernel of an idea formed. Perhaps there might be an academic curio in this, a novelty paper about the prevalence of Jesuits in space, or more broadly on the relationship between SF and Catholicism? I vowed to explore further. I borrowed some more novels. Over seven years later, I published my findings: *Science Fiction and Catholicism: The Rise and Fall of the Robot Papacy* (Gylphi, 2019).

What began as a side-project, a thin veil of legitimacy to justify reading hundreds of SF novels, had spiralled into a 100,000 word monograph. And even that was highly selective. It could have been three times as long. What surprised me during those years was that almost no one had written about this. Or to put it another way, my own pattern recognition wasn't astonishing, but the fact that apparently so few other scholars had spotted the pattern was.

There is, of course, a reason for this. Unlike SF writers, who habitually incorporate the existence of religion into their work, SF scholars are often extremely antipathetic. For some, immersed in a tradition of Marxism, SF by definition must be kept pure from the taint of religion, a kind of exercise in Enlightenment values, narrowly defined. Those values are perhaps best expressed by British journalist Francis Wheen in his excellent book *How Mumbo-Jumbo Conquered the World*. Wheen's theme is that the values of the Enlightenment are in retreat in the modern era. He defines those values as "an insistence on intellectual autonomy, a rejection of tradition and authority as the infallible sources of truth, a loathing for bigotry and persecution, a commitment to free inquiry, a belief that (in Francis Bacon's words) knowledge is indeed power".

These are of course fine values, indeed firmly intertwined with the Enlightenment period. But concomitant with them, in some eyes anyway, is the idea that they are antipathetical to religion in almost all forms. God, it seems, is unreasonable, and faith in God or Gods all the more so. The perception, however, that the main thinkers of the Enlightenment were atheist is somewhat erroneous. D'Holbach and Diderot certainly were and proudly so. It becomes fuzzier when people ascribe atheism to philosophers like David Hume or Spinoza, however. Both, after all, vigorously defended themselves against the accusation. However, there is a broad perspective, running from the Enlightenment period, or indeed even earlier, through to the critics of contemporary and recent SF, that the Enlightenment and religion are diametrically opposed, because they utilise different methods to pursue similar aims.

In this sense, Enlightenment values such as free inquiry are apparently not possible if an ancient text defines the parameters of research, and there is little point in pursuing knowledge if it has already been delivered in revelatory form. As James McGrath has acknowledged, "Both religion and science fiction tell stories that reflect on the place of human beings in the universe, good vs. evil, humanity's future, and at times about the very nature of existence itself." In proposing answers derived from revelation, religion relies upon transcendental authority, whereas science proposes provisional answers derived from the scientific method of observation, investigation, experimentation and analysis.

As a result, religion can be cast as antipathetic to knowledge, and hence to scientific inquiry, and ultimately to SF, the literary form which pursues ideas and which predicates itself on the propagation of science and the emulation of the scientific method in its production. This position is well summarised by the critic Paul Kincaid: "If we recognize SF as a literature forged in the rationalist revolution of the Renaissance and tempered in the secularist revolution of the enlightenment, then … as religion becomes a major issue in the world … a literature espousing rationalism and secularism seems more and more out of step with the world."

What I'd like to question is whether that is indeed the only way to recognise SF? Certainly it seems to be the dominant way that critics have recognised it. Farah Mendelsohn, in a rare instance of a critic acknowledging religion in SF, notes that "SF is full of stories in which superstition is defeated by explanation; the immaterial is tamed by manifestation." If religion must appear in SF, it must do so in order to be a whipping boy, a straw man opponent against the march of rationalist progress, as it does in Arthur C. Clarke's *Childhood's End*. But this is not the entirety of SF by any means.

For sure, a lot of SF authors have indeed been ardent atheists, or at the least, tended to show a greater faith in science than in any revelatory belief system. H.G. Wells loudly proclaimed his atheism and socialism to anyone who would listen, and this can easily be detected in the forms of utopia he expressed in his less interesting novels. In America, the maturing pulp tradition under the editorial eye of firstly Hugo Gernsback and later John Campbell firmly located the stories they fostered in a milieu that envisioned technological answers to all of humanity's problems. The atom bomb blew a sizeable hole in this vision, no less than in Hiroshima and Nagasaki, but it was decades later, with the advent of JG Ballard and the New Wave, before SF finally adopted a less than cheerleading position on scientific development.

SF came to prominence as a popular literary genre in the late-nineteenth and early-twentieth centuries alongside the rise of professional science, and insofar that it too sought to speculate about ontological possibilities and often featured scientific development and a positive attitude to mechanism and technology in its content, SF allied itself closely to science in any developing cultural arguments. In a culture slowly emerging from the legacy of Christian hegemony, SF came to associate itself with a progressivist, even radical, perception that science could and would supplant religion as the *End* (1953), this stance is illustrated by the alien overguiding societal and cultural ontology. In Arthur C. Clarke's *Childhood's* lord Karellen's dismissive speech about the religious Wainwright:

"You will find men like him in all the world's religions. They know that we represent reason and science, and, however confident they may be in their beliefs, they fear that we will overthrow their gods. Not necessarily through any deliberate act, but in a subtler fashion. Science can destroy religion by ignoring it as well as by disproving its tenets."

Even the very title of Clarke's novel suggests an arrogant progressivism; the scientific miracles offered by mankind's alien mentors are, rather than simply swapping a faith in one higher power for another, presented as growing up out of a lengthy cultural adolescence that is defined at least in part by its religiosity. And yet, it is curious that in so many of Clarke's novels, a certain transcendental mode is achieved which, though often argued away as a secular sense of wonder (or sensawunda), often specifically identifies Buddhism as exempt from its inherent antipathy to religion. Even *Childhood's End* permits Buddhism to survive as a faith when all others fail in the face of the rational alien overlord. Buddhism too permeates *The Fountains of Paradise,* the *2001* cycle and many of his short stories too. We lose something important by reading Clarke solely through the prism of atheism. Not for nothing was he praised by the Dalai Lama and once accused of being a canny theologian by the geneticist J.B.S. Haldane.

But not all SF authors are as atheistic as Arthur. And even he, slyly, often referred to himself as pantheist or crypto-Buddhist. Leaving aside the whole welter of consciously religious SF, written by adherents of various faiths, there are reams of SF classics in which religious themes and the issue of faith are not present as mere whipping boys for atheism, but as a central motif and concern. To take three of the greatest mid-60s English language SF novels, Roger Zelazny's *Lord of Light* may posit advanced humans playing at Gods via technology, but the religious milieu is foregrounded much more so than the techno-explanation. Robert Heinlein's *Stranger in a Strange Land* introduces the idea of an alien religion, a theme also explored by Philip José Farmer among others. And Frank Herbert's *Dune,* the best-selling SF novel of all time, presents a Messiah, syncretically generated from a combination of Jesuitism, Arab Islam and the Zen Buddhism which Herbert himself followed.

One might have thought that these three novels, appearing within a few short years, might have put to bed the idea that SF was intrinsically incompatible with religion. But it seems that every generation must reconsider the carefully policed borderlines of SF. In 1974, Theodore Sturgeon was moved to write in justification of the presence of religion in SF: "religion and science fiction are no strangers to one another, and the willingness of science fiction writers to delve into it, to invent and extrapolate and regroup ideas and concepts in this as in all other areas of human growth and change, delights me and is the source of my true love for the mad breed."

Sturgeon, writing nearly a decade after *Dune,* insisted that SF should accommodate what he called the "infrarational", a supralogical mode which includes religion. The infrarational, he wrote, is "that source of belief, faith, and motive which exists beside and above reason. So conditioned have we been by Aristotle, Kant, and Freud that we tend to believe that any force, object, or problem will yield to rational processes; when they don't, we blame the process and call up yet more logic. The infrarational, however, is a very large component in us, and while reason calls it ignorance and stupidity (viz, trying to talk someone out of a fear of the dark or of snakes), it is neither. It is the infrarational, source of many of our motivations and the tint reservoir of much of our thinking. We will never succeed in reaching our optimum as a species until we learn the nature of the infrarational. We may fail as a species unless we do."

However, we may still be failing as a species. In late April, Nnedi Okorafor took to social media after reading one too many well-meaning tweets that praised her novel *Lagoon:* "I wake up to someone saying Lagoon is an 'amazing fantasy story'. Whyyyyy is it so hard for people to say my name and science fiction?? What is that? "Unfamiliar cultures" does not equal fantasy. "Different spiritual worldview" does not equal fantasy. Check yourself. If the story has aliens in it invading Lagos, it's science fiction. And that's my TED Talk for today." Does the presence of aliens alone designate SF? Even according to Marxist critic Darko Suvin, aliens would qualify as a *novum,* his defining characteristic of SF. Yet there appears to be confusion among Okorafor's fans. This is, perhaps, understandable, since mainstream critics like Gary Wolfe and Alexandra Alter have firmly, and perhaps sloppily, located Okorafor within the fantasy genre. Clearly Okorafor, quite legitimately, sees herself as writing in both genres, or perhaps even across them.

Her earliest novel, *The Shadow Speaker,* is set in a post-apocalyptic future with alien planets, but also has a peace bomb made with magic, and features many religious references. *Zahrah the Windseeker*, which won the Wole Soyinka prize in 2008, features magical children who express some of the myths of West Africa. *Who Fears Death,* her first adult novel, won the 2011 World Fantasy Award and obtained nominations for the Locus and the Nebula, despite its post-apocalyptic setting. Again it features magic and African mythology strongly. *Akata Witch,* as the title suggests, again features a magical female child protagonist. It is arguable, therefore, that *Lagoon's* appearance in 2014 was a paradigm shift of sorts for Okorafor, from fantasy to more science fictional material. Certainly, the *Binti* trilogy which followed, with its space travel, tentacled aliens and Hugo and Nebula awards, is indisputably SF.

She is hardly the first writer to move seamlessly between fantastical sub-genres, and she has recognised in the past that she writes on the borders of cultures, which perhaps inspires her ability to traverse those carefully-policed genre borders also. She told NPR in 2016: "That's very much a part of my identity, and it's also very much a reason why I think I ended up writing science fiction and fantasy because I live on these borders – and these borders that allow me to see from multiple perspectives and kind of take things in and then kind of process certain ideas and certain stories in a very unique way. And that has led me to write this strange fiction that I write, which really isn't that strange if you really look at it through a sort of skewed lens."

That skewed lens seems to be throwing some of her fans, who seem incapable of acknowledging a SF novel from an author who had previously delivered fantasy novels inspired by the mythology of her Nigerian heritage. However, they are in good company, no less purblind to the obvious than those critics who insist that religion is misplaced in SF. Perhaps the critics are the more culpable because theirs is a willing blindness to the necessity of the infrarational. It is a necessity that has been explored by Frank Herbert, and Nnedi Okorafor, and a myriad other SF writers. SF inflected not only by Catholicism, but by Buddhism, Hinduism, Mormonism, Islam, Judaism and any number of indigenous belief systems has existed for a very long time and continues to thrive today.

The origin myth of SF told by many of its critics is erroneous. The Enlightenment was mostly the product of religious minds, and was not antipathetic to religion, though religion was often antipathetic to it at times. The scientific method is a method for closing in on truth, not a faith-based belief system in itself as so often misunderstood. And insofar as SF emulates that method, it is not the in-house literature of ardent atheists, but of all future-focused readers interested in speculation and ideas.

It's time for the logical fallacy to come to an end. SF is not only the legacy of HG Wells but also of CS Lewis. At its best, in novels like *Dune* or *Lagoon,* it embraces the infrarational which Sturgeon wrote about, the "different spiritual worldview" which some of Okorafor's readers, and many SF critics, find uneasy. Yet religion is an inherent part of SF - not its totality, but far from something to be denied or excluded. It's okay to have some faith in the future.

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Ragnarok

Alessandro Benedetti

The gathering was as strange as you could imagine.

Osiris, the oldest of them all (just technically, since it is not easy to assign an age to immortal beings), was sitting at one edge of the immense table. He coughed a couple of times and declared the meeting open:

"Gentlemen, for the first time since a couple of million years we have all gathered, looking for a solution to our problem; now, in my opinion our best option would be a compromise. Despite our differences, we and the Cygnus divinities are in the same boat and share the same troubles. Remember what has happened on our own Earth — every time a new religion flourished, several other gods were progressively abandoned and very nearly starved to death. I say we cannot take this risk again and should rather strike a bargain with our extrasolar colleagues; after all, there are enough potential believers for everyone! Yes, Ares, do you want to say something?"

"Indeed, I do", roared Ares, enraged like the god of war he was. "I say there can be no agreement between us, the true gods of an ancient planet, and those charlatans, those upstarts... No conciliation is possible; no agreement should be reached, and no quarter shall be given. Gentlemen, I say there is only one way: war!"

A loud scream echoed his words and filled the majestic hall, as all the gods ever worshipped, by whatever culture in any age on Earth, were angrily shouting and clamouring for —metaphorical— blood.

It must be said that most of them would appear to their believers as anthropomorphic as a wave function, had there been some Earthmen around: very unlikely, however, over the surface of an asteroid just created from nothing, thousands of light years away from our planet.

Every divinity, then, Greeks and Romans, Thor and the Asgardians, the Indian Trimurti with all the minor gods, even Allah and Jahaveh were crying with all the breath they had, or rather signalling through sudden changes of millions of volt in their energy spectra, a single word: WAR.

In such a pandemonium, Buddha quietly sat, whereas most of the Sumerian gods were shaking their heads and Quetzalcoatl tried calming his colleagues by reminding them of the possibility of death by entropy for the whole Universe, alas to no avail...

His was only a faint voice in a sea of cursing, so that there was no need to vote in order to take a decision.

It had all started about a century before, when the first human beings had escaped from the cage of the solar system.

Granted, it had not been easy: three of them had not awaken from the dreamless sleep of hibernation and were now forever orbiting outside the Kuyper belt. The long sleep had taken its toll on the rest of them, but they had reached the outskirts of the Cygnus constellation.

And what they found they could not believe: an extremely evolved species, alien even to the mere concept of violence and survival of the strongest, was anxious to meet them, exchange ideas, collaborate and peacefully share the known universe.

An exchange of technology, notions, opinions and, more importantly, people quickly followed, and inevitably missionaries opened the way for the numerous beliefs of Cygnus to Earth and vice versa, not unlike St Brandan landing in Ireland or Bodhidharma reaching Japan.

Right in the middle of this idyllic scenario — or maybe precisely because of it: no one likes to be supplanted by a foreign upstart—, the ancient Earth gods took offense at their counterparts on Cygnus.

After the failure of the peace meeting, therefore, war was declared and the gauntlet thrown down on their extra-terrestrial rivals, challenging them to a most singular battle.

The battlefield was a planetoid, entirely devoid of life and placed inside a huge static field completely opaque to every type of radiation or matter: nothing, not even a neutrino, was permitted through. Nothing, that is, apart from a narrow wavelength, through which a video and audio signal was transmitted, amplified and broadcasted so that billions of people on both worlds could watch the final battle and support their respective divinities.

And what they did see, they would remember for a long time: the terrestrial army, nearly at full strength —only Buddha and a few others were missing, having decided to seek refuge in a different continuum— and reinforced by Satan with thousands of his devils, facing countless foreign divinities.

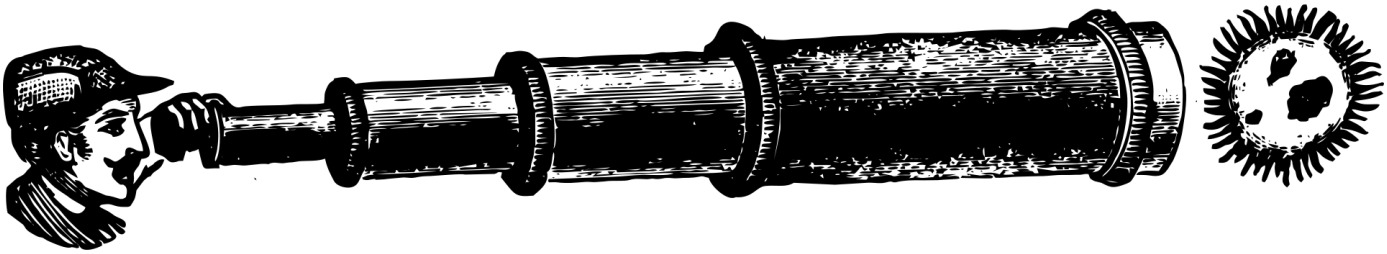
Just an instant of absolute silence, then they threw themselves into the fray, launching at each other tons of radioactive matter and streams of neutrinos, striking again and again with X-rays, heavy particles, all the arsenal available to creatures as almighty as them, which means pretty much every possible form of energy.

On Earth and in the Cygnus constellation both populations saw giants lifting supermassive rocks, throwing thunderbolts, fighting to the death without mercy: they witnessed the fall of Odin and Venus, Satan and Vishnu together with hundreds of others.

And when it was all ended, over the killing field covered by dying gods, the magnetic fields weaker and weaker, the wavelength shifting more and more to the red, Allah and Osiris accepted the surrender of the alien gods.

They screamed in triumph, their fists raised, their bodies soiled with blood, or rather burned tons of hydrogen in massive flares which irradiated in the gamma portion of the spectrum.

But their justified enthusiasm did not last much longer,



as they saw the static field compressing quicker and quicker and at the same time their energy vanishing, the temperature dropping down to absolute zero, the electrons collapsing in on the nuclei: the stars were agonising, the fields were fading away, entropy was running wild...

“Somebody betrayed us”, Osiris tried to say, “but who... and why...”, but he could not finish.

Many light years away, an Earthman and a Cygnus creature watched the needle of an instrument going down and down until zero, then they smiled and shook hands: Ragnarok, the twilight of gods, was complete.

~

Red Card

Madeline Barnicle

FIFA and the AUNZ organizing committee thank fans and players around the world for the trust you have placed in us. We look forward to hosting the following World Cup, and we trust that the forty-eight finalists will compete in the spirit of fair play and friendship.

After much deliberation, the organizing committee has declined to accept the application of the Autonomous Martian Territories (hereafter, "Mars") to compete in the qualifying tournament. We recognize that this decision will be disappointing to many. This is a reflection of current FIFA policies, and we do not intend it to set a precedent for other sports governing bodies.

FIFA traditionally has six continental zones, or regions, from which teams qualify. (Because New Zealand will qualify automatically as co-hosts, and Australia are currently affiliated with the Asian zone, the remaining Oceania Football Confederation teams have been exceptionally drawn against other Asian teams for this tournament.) Mars, for somewhat obvious reasons, does not have an existing affiliation with any continental federation. This is not an insurmountable barrier, however; despite geographical constraints, Israel has been variously part of the Asian, Oceanian, and European federations.

Assuming an existing federation was willing to allow the Martian team entry, qualification would likely require them to play home-and-away legs against some or all of the other competitors in that zone. Many teams have voiced their opposition to travelling to space for competitive or even unofficial matches; notably, the friendly match scheduled between clubs FC Barcelona and Bayern München at the RoyCro Multiplex was cancelled after athletes expressed concern that the travel would needlessly disrupt their training regimen. Many fan organizations also noted that, while a potential revenue opportunity for the clubs, the match would have been played almost entirely in front of residents of the United States Lunar Territories and have been inaccessible to local supporter groups. After that controversy, national teams such as Scotland and Chinese Taipei preemptively declared they would not be willing to travel to matches in non-Earth areas until a more consistent policy was implemented for which teams qualified as "national." (FIFA does not intend this document to resolve that question.)

We have been in consultation with the current Mars staff as they applied for participation. It was impossible to travel to inspect their stadiums or training facilities, as accepting funds for travel to Mars

would have far exceeded the stipends permitted in the Transparency and Oversight Standards of 2033. However, the virtual reality reconstructions of these buildings suggest that they are well-maintained and in compliance with regulations. If and when travel to Mars is feasible for opposing teams, there will be little significant investment needed to bring the pitches up to international standard. The altered uniforms and artificial grasslike fields may present a challenge for visitors unused to this terrain, but it is not an unreasonable disadvantage since the pitch conditions affect both teams equally. Therefore, as with Bolivia's high-altitude stadium, it should be possible to host games.

Fabrice Ekoko, a former manager of the Mars team, has stated that they would be willing to remain Earthside for several months to play their qualification matches in an abbreviated timeframe. The 2025 guidelines on scheduling international matches were written in the context of players who split time between their national teams and domestic clubs. Because the Martian league is not professionalized, we expect that clubs would be willing to release their players for such a compressed qualifying series, so the guidelines could be waived in this case.

However, we believe that the World Cup is not only a celebration of athleticism; it is also a celebration of national spirit. Regardless of its political status, a team unable to play any games in a "home" stadium in front of compatriots is not fully experiencing the opportunity for peaceful competition that the World Cup provides. There are a few exceptions, such as Iraq, where political violence has sometimes made home games impractical. Mars, however, is very socially stable and its population can experience spectator sport in venues other than the World Cup. Rather than make accommodations for a lessened experience, we believe Mars ought to wait until it has the transit infrastructure to play meaningful games against opposing teams, wherever that may be.

It is likely that, were the Mars men's national team approved to participate in World Cup qualification, their women's team would also apply to the next Women's World Cup tournament. However, young men and women are not always on equal footing when it comes to interplanetary travel. Samples of liability contracts from Martian settlements such as Borealis III and 6 Noach suggest that many more women than men have voluntarily agreed to forgo extramartian travel as a condition of their sponsorship, due to concerns about the effects of radiation on egg cells. Certainly, the details of any specific individual, footballers or otherwise, are private matters. Nevertheless, in a roster of twenty-three healthy athletes, it is likely that at least one would be contractually obliged not to play matches on Earth. Giving male players the opportunity to repeatedly travel, when their female counterparts do not necessarily have that right, would be at odds with FIFA's mission of promoting diversity in sport.

Other sports' governing bodies have taken, and will continue to take, different approaches to extraterrestrial sport. For individual rather than team sports, it is increasingly likely that financially-independent athletes will travel to and from Earth in the course of their career. The IWF recognizes its own set of weightlifting records set on the moon and on Mars, which exist alongside the records set in Earth gravity. Table tennis player Sung Bowen competed as an Independent Martian Athlete at the last Summer Olympics. FIFA will continue to monitor the challenges and rewards of non-Earth football, but with the upcoming qualification cycle about to begin, now is the time to issue clear guidelines on eligibility. Questions may be directed to Eileen Bogaerts of the AUNZ team or Gabriel Lopez of FIFA.

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Free Will, or the Sriendi Vastar Method

E. E. King

In 2065, years before I was born, Sriendi Vastar came to our town. You have all heard of him, a man small of stature but large of bearing, of Germanic descent with a shock of white-blond hair and cold, turquoise eyes. He had wandered east and studied Hindu philosophy, Tibetan wisdom, and Gypsy lore. He had drifted west and learned European folk remedies, Yankee practicality, and New World innovation.

He'd invented the Sriendi Vastar method of palmistry, infallible for seeing the past and predicting the future. Before him palmistry had only been a parlor trick, a paltry guess at the meaning of indecipherable lines. He was the Rosetta stone of fortune telling. Those who studied his teachings could read a life in a hand.

It was another leap in communication. Emoticons had replaced words, now lines would replace emoticons. All printed matter, all labels, warnings, and messages were reduced to the indentions on an open hand.

People tattooed their palms, inking their lifelines in red, their career lines in green, and the number of future descendants in orange. Gold shimmered up from the heart lines of romantics like a promise. Illness was marked by black, hubris by light turquoise and imagination by purple. A person only had to hold up his hand to be read like a book.

When my mother, Allison, met my father, Thomas, she was childless, though four unborn orange possibilities, my siblings, crinkled just beneath her little finger. Her career line was broken, dotted her skin like a passing lane, but her love line and lifeline were strong.

Thomas had grinned when he saw them and offered his own palm as testimony of his potential. The strong gold heart line, the solid career, the lifeline running uninterrupted across the entire fatty heel of the hand. He seemed a dream come true.

He asked if he could touch, running his smooth fingers over Allison's hands, feeling the slight indents made visible only through color. She did the same. Thomas's lines could not be felt, but she never considered that lines could be changed, a dotted uncertain future smoothed out by pigment. A deceitful man made to seem true with ink. Fate could not be fooled, though Allison could.

Thus, I was brought up without a father, a destination which is clearly foretold in the mauve loop in the inside of my hand. I suspect my father's deceit and my mother's desertion spurred my first distrust of the Sriendi Vastar method, but this was not recorded in my palm.

Around this time, the time of my birth, many deceptions were practiced by the art of tattoo. Some even carved thin lines in their palms hoping to fool, not only their fellows, but fate. One man tried to achieve immortality, extended his lifeline, making it circle his thumb. He severed a large artery, and died, as his palm predicted he would, at twenty-one.

By the time I was eight, technicians had developed scanners that revealed the truth beneath the ink. Oh, a man or woman might still fool someone at a glance, the colored lines drawing a false picture, but beneath the new scanner all was unveiled. Scars showed up for what they were, grooves carved by man instead of destiny.

Colleges would not admit, nor would employers hire, without performing the scan. So, though a man might get lucky through lying lines, he would not get an education or a job. Resumes became outdated. Work experience immaterial. Your life was in your hand.

Soon cheap pocket scanners became available and after optic fiber-scanners were implanted in everyone's eyes, all could see the truth at a glance. Deception was rendered worse than useless. False lines in ink and self-made scars revealed the deceiver more certainly than a signed confession. Duplicity became a thing of the past. People followed the lines of their palms like a map of their life, a predestine route to their future.

For some it was a good thing. They saw success in their hands, so they struggled upward, persevering against all obstacles. Their career lines were strong, so they studied hard. They read true love in their palms and searched until they found it.

Others saw suicide and despaired. They turned to drugs or risked their necks in thoughtless pursuits.

Politicians no longer made speeches; all they did, all they needed to do, was to hold up their hands.

There was no need for trials. The accused only needed to bare his palm. Guilt or innocence was clear.

I went to school, studying hard to become a doctor. Science was channeled into my hand, as clearly as the diplomas of an earlier age.

I waited to fall in love. A husband and two children intersected my palm between twenty and twenty-five.

Every move had been laid out by the omnipotent chess master… until Abraham was born. He arrived right on time, red faced and healthy as a butcher's dog, but he had no hands. It was an accident of birth. His mother had been given Zolamine, a fertility drug with unintended consequences.

Abraham was the first man free to choose his fate, free as none had been since the discovery of the Sriendi Vastar method.

When Abraham went to school he was treated with trepidation. Was he a freak or a God? All the children could read palms. All had been taught the Sriendi Vastar method. It was the first thing any parent did - after toilet training.

Of course, the children were not experts. They could not decipher the finer lines of a personality, or tell the subtler points of character, that would come later, but they could see if a child would make a good friend or a poisonous enemy. Those who would be false were left alone. Those who would be thieves were shunned. But Abraham, Abraham was a mystery.

By the time of his birth, prosthetics had come a long way. With his plastic appendages Abraham had as much dexterity as a chimp. He could clamber up trees better, farther, faster and higher than any child in his class. He excelled at rope climbing, frosting cupcakes, soldering, pipefitting, model building, macramé, sewing, computer hardware assembly, fly tying, fishing, shooting, carpentry, ceramics, sushi-making, quilting, and badminton twirling. He could play almost any instrument, pick a banjo faster than a hillbilly, and key an arpeggio so smoothly it could make your soul sing. He was also fabulous at crafting tools, gene splicing and peeling bananas.

People began cutting off their hands so they too could become free. But it was too late, their palms had already been scanned and their futures recorded in infancy. It was only Abraham that had no future.

And so, Abraham the unknowable became a leader. People thrilled to his speeches, unsure whether he was a prophet or a pretender. Life, which had become an inescapable series of moves, was once again a mystery.

Women began demanding Zolamine from their doctors in hopes of producing another savior, but alas Zolamine had consequences beyond handlessness. Some infants were born without limbs altogether, not too great a defect in this age of advanced prosthetics. Others lacked eyes and ears, but these too could be dealt with. Optic lens gave the babies better than average sight. Audio implants gifted children with echolocation skills. But mostly Zolamine produced babies with deformities so severe, even doctors could not bear to gaze upon them. These monsters were handled in the only humane way possible. Crematoriums were installed in maternity wards.

But the others, the deaf, the blind, and the limbless survived… and not only survived, but triumphed! They made their own destinies. They forged their own futures. Politicians discussed passing laws that would make Zolamine mandatory. Others suggested severing an infant's hands at birth. Abled rights groups sprung up around the country. The naturally handed maintained that only they could be trusted, as only they were truly transparent.

I was a doctor by this time, an obstetrician. I had enjoyed delivering babies, but I did not like the new onslaught of freaks. The crematorium made me ill. I could not rid myself of the smell of burning flesh, no matter how often I washed. I applied for a transfer, and due to my magenta innovation lines, obtained a position in the research labs of Dr. Giustina.

Dr. Giustina was a geneticist of incredible brilliance. Her palm was scored with lines of intelligence and innovation. Soon I became her top assistant.

Together we worked late in the night together, uncovering microscopic truths. One night, while smearing a slide, our fingers touched. Even through the thin plastic gloves I felt a thrill, a flame racing through my veins, though my palm denied it.

Meanwhile, in daylight world, Abraham the unknowable, brilliant, charismatic, futureless, Abraham, had been robbing the public coffers. Justice was swift and sure.

"If thy hand offends thee, cut it off!" people cried. "And if there is no hand, sever the neck!"

Many, whose hands had foretold greatness, had been hoping for just such a revelation. All the handless were rounded up and relocated to distant labor camps where their dexterous prosthetics were used to manufacture minute optic scanners, our protection against deceivers.

Never again would someone whose truth was not visible, whose future was not certain, be allowed to hold the reins of power. Billboards of honest palms appeared everywhere. Zolamine was outlawed.

In the lab, Dr. Giustina was trying to find the DNA links between dominance and ability.

"This will explain the science behind the Sriendi Vastar method," she said.

But I no longer cared about science or the Sriendi Vastar method. All I wanted was to defy my palm and its chart, with husband and children so clearly marked. I wanted to take another path.

I watched her preparing slides, face outlined with light like an angel. Such feelings had no place in a lab, no place in a life mapped out by lines, but I could no more control them than change my fate.

"Oh my, no!" she gasped, motioning me over.

I bent over, resisting the temptation to kiss her neck. There, beneath the light of the microscope, clearly visible on the transparent glass of a slide, was the truth. The genetically dominant hand was the one that was manually inferior. All this time, all these lives, we had been reading the wrong palm.

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For a Truly Multicultural Science Fiction: Do Translations Matter?

Mariano Martín Rodríguez

Science fiction is arguably becoming truly cosmopolitan today. After this genre was baptised in the United States and its fandom developed there, it was soon forgotten that scientific romance (or its equivalent forms of fiction often called utopian in non-English literary areas) had existed for decades, and that this truly international form of mainstream fiction was cultivated by critically acclaimed writers from Argentina to Japan, from Sweden to Bengal. Many soon believed that science fiction was only, or mainly, a US invention, that science fiction did not exist as such elsewhere and, if it existed, it could not be but a slavish imitation of American models. It might have been so in some instances, as the Perry Rhodan serial pulps from Germany amply demonstrate. Focusing only on the products of cultural 'coca-colonization' failed however to do justice to science fiction written in different languages by many gifted writers. Non-Anglophone science fiction was ignored in most instances. Hardly a couple of international authors, namely Stanislaw Lem and the Strugatsky brothers, succeeded in getting wider recognition, perhaps thanks to their being considered representatives of an allegedly alternate way of writing science fiction coming from the Eastern Bloc, a way that was moreover quite similar to contemporary New Wave literary and ideological experimentalism. By contrast, similar science fiction writers from the Western Bloc were little known, unless their speculative stories were received as mainstream literature written by authors having acquired a high critical reputation for their previous non-science fiction books. This was the case, for instance, of Nobel Prize winner José Saramago, whose novel *Blindness* (*Ensaio sobre a Cegueira*, 1995) about a pandemic outbreak and its societal consequences was, however, rarely received as science fiction, despite its clearly speculative approach and subject matter.

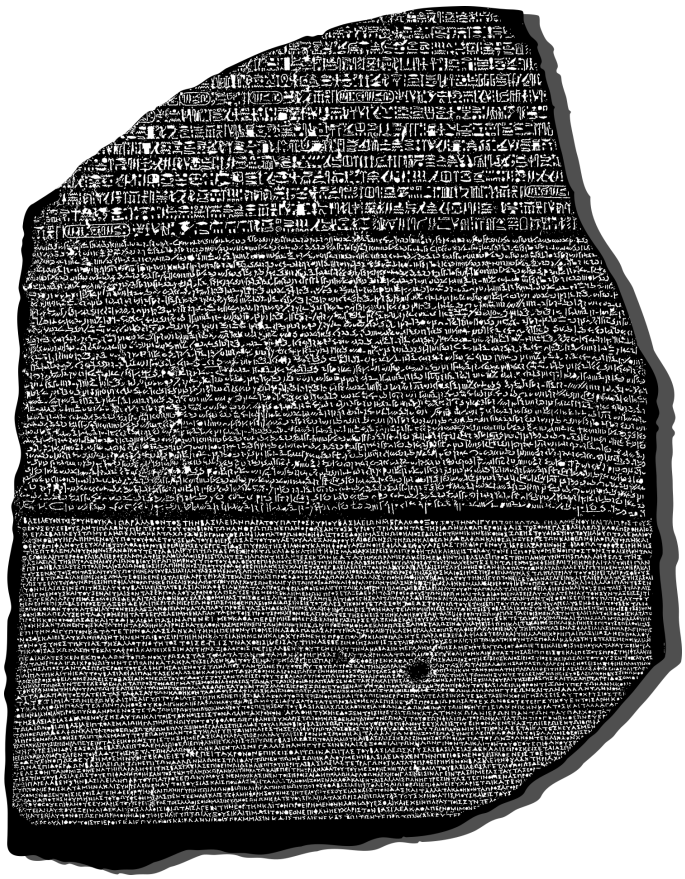
Fortunately, this situation appears to be changing in the 21st century. Following already existing trends, in recent decades science fiction has been the subject of extensive historical surveys, and by no means limited to the Anglosphere. Bibliographies, encyclopedias, literary research by both fans and scholars still tend to emphasize works in English but there has always been an awareness of the international dimension of science fiction history. It was widely known that one of the fathers of science fiction *avant la lettre* was Jules Verne, or that one of the greatest prospective dystopias is Yevgeny Zamyatin's *We* (1924).

Now these are not just token international names as they used to be in the first considerations of science fiction as a particular genre of fiction. Competent translations into English having appeared in series such as 'Early Classics of Science Fiction' from the Wesleyan University Press, among other academic initiatives, are showing the variety and originality of European and Asian scientific romances. Thanks to these and other translations Anglophone readers can find quality renditions of significant science fiction classics from China, Bengal, Italy, Spain, Germany, Russia and other literary regions. Furthermore, Brian Stableford has undertaken a colossal task of translating into English a cross-section of the huge French output in scientific romance and related genres. He has translated into English dozens of novels and stories, some of which are quite difficult to come by in France and other French-speaking countries. Many of them have appeared with his own prefaces, where his astonishing literary learning and critical acumen make of them examples of what science fiction scholarship should be about.

Contemporary international genre science fiction has not fared equally well, though. Liu Cixin's success can be explained by Ken Liu's adaptation of the original works to the American pop style of writing, as well as the chance of having occupied the same niche as the Strugatsky brothers as 'the' representative of science fiction coming from the main geopolitical, ideological and economical rival of the United States: earlier the Soviet Union, now China. There are signs, however, that science fiction with different origins will not be ignored this time. One of the main Anglophone publishing companies, Penguin, has a new collection called 'Penguin Science Fiction.' Among its titles so far announced, almost half of them are translations from languages as varied as Japanese (Kobo Abe), Russian (Yevgeny Zamyatin, Arkady and Boris Strugatsky), Spanish (Angélica Gorodischer) and German (Andreas Eschbach). It is hoped that this catalogue will continue to be internationally balanced as it seems now. There are still many fine science fiction works awaiting translation under the good editorial and marketing conditions that Penguin and similar corporations can afford. Only if they are translated into English, the *lingua franca* of science fiction, this genre could become truly global and multicultural in a meaningful way. A monolingual multiculturalism, with supporters unable to read anything but English, as it is unfortunately the case in all too many instances, is a contradiction in terms, a mockery of true diversity. Does it genuinely serve multiculturalism that scholars and critics eulogize science fiction works by 'non-white' writers produced in English following postmodern-leftist American biases while ignoring genuine world-views from other cultures, 'white' or not, expressed in their own languages and conceived having their own local readerships in mind? An example among those appearing in the above-mentioned Penguin science fiction collection comes especially to mind.

Gorodischer's *Trafalgar* (1979) deconstructs in one of her stories the Whig stereotype of Anglo-American good imperialism versus Spanish evil imperialism (beware the Spanish inquisition!). Its eponymous hero intervenes on an alternate Earth to ensure that the Spanish Empire does not neglect the Northern subcontinent during its colonization of the Americas. He thus prevents future US interventions in Latin America like those supporting the dictatorship oppressing Argentina at the time when the book was published. Such an approach is nowhere to be found in alternate histories in English, which tends to portray any victorious Catholic Spain as intrinsically evil (c.f. Keith Roberts, Harry Turtledove, etc.). Exposure to translations of speculative and science fiction written in languages other than English (for example, Italian alternate histories re-assessing Benito Mussolini's rule) by authors averse to the current politically correct consensus would be helpful to achieve a truer form of multiculturalism. We might want to embrace that consensus for its being perhaps fairer and more (post) humane; but democracy as well as literature thrive in a varied cultural ecosystem. It is this wealth of dissenting voices that science fiction can tap into through the power of the translated word. We might well rejoice, while still regretting that the number of translations remains lower than desirable. There is the huge obstacle of the diminishing linguistic skills of all too many Anglophones, who seem less and less willing to make the necessary effort to learn foreign languages.

What is the need for memorizing thousands of exotic words and difficult grammar when English is, at least in theory, understood everywhere? Is there anything interesting to read or talk about that it not produced in English? Laziness being a fundamental feature of human nature, there is now little use of trying to convince anybody of the pleasure, if not the convenience, of learning how to encounter foreign 'others' as they really are, even if only to enjoy holidays abroad, in a more humane way than just getting drunk and suntanned (or burned, rather) in, let's say, Benidorm. When classic languages are no longer treasured by educated Anglophones, when French is no longer the language of diplomacy, when cultural studies and various postmodern ideologies have displaced philological research at most universities, it is perhaps understandable that quite a few native speakers of English dismiss foreign languages as an utter waste of time, unless they are encouraged to learn them by enlightened entities such as the Irish Republic or the Mormon churches... Nevertheless, there still remains a sizeable demographic able to translate all kind of texts into English including, dare we say, literature. Globalization is increasing the number of bilingual people due to international marriages. Growing proficiency of English allows native speakers of other languages to skillfully translate texts from theirs to the current global tongue.



For many of them, the issue might be either to be paid for their endeavors or, if they translate for the sheer love of languages and culture, to find a publishing venue. *Sci Phi Journal* is one of them, at least for short fiction. Translators have, however, rarely answered this journal's call, perhaps for obstacles that no publication can overcome on its own. Students and scholars able and willing to translate foreign science fiction into English are not encouraged to do it in a competitive academic environment where the principle of 'publish or perish' prevails and translations are not acknowledged as highly as, say, original scholarship. Writers able to translate seem to have forgotten that their earlier peers found translation to be an excellent school for good writing. The formidable rhetorical and stylistic resources of English seem to remain all too often untapped simply because writers forget that literary fiction requires a deep understanding of its raw material, language. The act of translation makes writers transcend the comfort zone of their mother tongue. When trying to reproduce the effects that arise from foreign authors successfully exploiting the rhetorical potential of their native language, translators are forced to reflect on the resources of their own language, and use them, both in their translation and eventually in their original writing. Is monolingualism an explanation for the limited rhetorical skills and the flat ("easy listening") language now sadly prevalent in Anglophone (science) fiction? Is that the reason preventing us from having more stories written using sophisticated syntax, rich vocabulary and effective rhetoric? Such a statement would be a risky contention. It is not, however, that translation helps to improve one's linguistic proficiency and therefore literary abilities, what more, it opens one's mind to the world through the deep identification with the Other that literary translation always entails. The increasing numbers of translated science fiction works suggest that these advantages are being understood. Let us hope that many more will follow this path. Because the science fiction universe is too vast to reduce it to the literature produced in one single language.

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The Meaning of His Own Words

Andy Dibble

The foundation stone Kabbalists retrieved from the ruins of Mohenjo-Daro seemed a veritable Rosetta stone. Indologists would finally understand the language of the ancient Indus Valley Civilization. Linguists hoped it would determine why many ancient languages are staggeringly complex.

Like the Rosetta stone, "The Lord of Wide Rivers" repeated the same message in parallel, once in Harappan and again in an archaic version of Vedic Sanskrit. Vedic was known, so scholars could read the Harappan message, and thereby unlock the other four thousand Harappan inscriptions discovered hitherto.

The Vedic was a prayer to the four-faced god Brahma beseeching him to stay awake a little longer (or if he sleeps, may the night be brief and day short in coming). It spoke of cycles, of stars whirling in the firmament, of cosmogonic tides and undertows, of perigee and apogee, of the shackling of words to meanings, and of the bewildering darkness in which all bonds shall break.

The unnamed author chose every Vedic noun, verb tense, and prefix with care, even to the extent of violating the poetic meter of his verses, a mortal sin according to later pundits. With such obsessive clarity, breaking into the Harappan language should be easy.

It seemed an eye in the Harappan script meant both sight and thought, a winged-horse meant transformation, and that stacked parentheses indicated quantity. But none of these inferences made sense when checked against other Harappan inscriptions, and all predictions about the function of the prongs, dots, and other modifications to the base symbols proved groundless.

In hindsight, this difficulty was unsurprising. Vedic was fiendishly complex, and if Vedic descended from Harappan, Harappan should be even more intricate because grammars tend to simplify as speakers use a language over time.

Tellingly, the Vedic began, "The Lord of Wide Rivers will execute me for betraying the hidden language to our adversaries, but if even I--one of his code-slaves--cannot understand, the language is already lost. So as the cycle dips down, I write this so that I might understand the meaning of my own words."

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In the late 2020's, there was a revolution in natural language processing. The dream of six decades, that programmers would program in everyday language, was almost realized. Most lawyers were out of work because software could write briefs indistinguishable from the work of the average legal mind. Social media persona could be software or human or both, and rumor on the matter diverged from reality more often than it agreed.

Deep learning algorithms began to unriddle Harappan. The chief difficulty was that every inscription had multiple meanings, much like the picture of a duck that is also a picture of a rabbit. One message was ostensibly a contract to exchange a quantity of sheep for garnets. But read another way, the same symbols divulged a murderous conspiracy. Beneath that was the intimation, potentially of proto-Zoroastrian origin, of a cosmic sacrifice.

One Harappan seal was a picture of entwined water serpents, secondarily a game of snakes and ladders, and thirdly the first four axioms of Euclidean geometry. But supposing the eye of a serpent in retreat was a vanishing point, the image took on perspective, and the axioms established hyperbolic geometry. The Harappans had refuted Euclid, more than two millennia before Euclid.

But even the most scrupulously trained algorithms could infer nothing with high probability. Human intuition was necessary to complete the picture, and intuition keened that Harappan symbols were in fact ciphers, that subterranean meanings are realer than surface meanings, that Harappan was always closer to meaning everything than one thing.

But a language that always expresses everything, expresses nothing.

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The 2030's were the Age of the Panopticon. As within the panopticon of Jeremy Bentham and of Michel Foucault, it did not matter if someone--whether corporation, deep state, foreign power, or AI overlord--was watching, only that they *could be*, and not just in the stupid way of keyword scanning, hypertext semantics, and search engine indexing. Machines could read, and in reading they understood.

Many retreated from social media, or frequented closed forums that, supposedly, were inaccessible to the uninvited. Courts would not rule against the possession of concealed mobile phones; there was an exodus from public spaces too. Utopian communes swelled.

But for the marketeers, the busy bees of the gig economy, the celebrities, and the wannabes, the dominate impulse was to shout as loudly and as publicly in as big a space as one could, and there is no space bigger than the Internet. They reassured themselves: the Powers That Be only wished to present ads more intelligently. Still, they avoided alleged "trigger words," deployed hopelessly standardized locutions, and prayed the Argus eyes of AI were resting.

When it came out that Kabalsoft's reclusive CEO was not man but machine, everyone assumed the firm's meteoric rise was the machination of an all-wise Executor. Pressured by shareholders, publicly-traded companies everywhere automated their leadership in a frenzy. No company could remain competitive with mere organisms at the helm.

Rapid-fire legislation, first in the European Union and then in the United States and China, mandated that software serve a strictly advisory function, and so it was. But executives and directors still deferred to their calculating counselors, and when they defied, who could say whether that defiance was itself anticipated by inscrutable neural networks, whether computers knew even the shrewdest minds better than they knew themselves?

#

When Kabalsoft unveiled a quantum computer architecture advanced enough to shatter all available encryption, the last redoubt of online privacy was overwhelmed. Now, there was just one unbroken code: Harappan. But as a code, it was useless. It could not be modern or general purpose. Artificial cultivation would inevitably sterilize it, render it dumb and limpid to machines.

But Harappan proved that human genius for language could confound machines. And who are the true sages of language? Young children, as Noam Chomsky demonstrated.

The United States skimmed children, aged four to seven, from its melting pot and abroad. No more than two of the conscriptees spoke the same language, and like the pairs of Noah's Ark, most every language was represented: Dutch so rich in idioms, English the ever-weird, Finnish for its fifteen cases, Sanskrit squirming with ambiguous compounds, Arabic for Qur'anic convolution, six-toned Vietnamese, Japanese to say much with little, Dyirbal rife with unspeakable taboos, isolate languages like Basque and Burushaski, Ebonics and argots, patois and pantomime, clicks and whoops and growls.

Miraculously, it worked. The code-talking children inverted entropy, inverted Babel. They understood one another, and *only they* understood one another. They learned secrecy and resilience, and only then learned state secrets.

The best minds of China wrestled with the fabulous omniglot but failed to master it. They learned from failure, and in rugged Xinjiang, assembled an omniglot pod, which drew most on Silk Road languages, Zen koan, temurah, and haiku.

Nations hung in equipoise until a day when even the ten Sefirot blinked. A terrorist faction, "Kabalsoft Reborn," published grammars for both omniglots in two-hundred sixteen languages.

No one read them. They were too huge for comprehension, but the unknown is fearful, and fear suddenly thickened again.

#

There was one last code to slice and splice, a last descent. The little ones were already so nearly right, the unfathomable genius already there, if it could only be unfurled, the cerebral cortex grown within a roomier skull (and taught compliance--the young are too forthright, too prone to defect).

All this could be done with genomics. And it was.

But as the cycle dips down, as entropy overcomes information and words detach from meanings, one will master himself and recount this story so that he might understand the meaning of his own words.

~

How to Check if Your Peacekeeper-2000 Is Loaded

David F. Shultz

Congratulations on your purchase of a fully-licensed *Peacekeeper-2000* from *Interplanetary Defense Innovations, LLC*. The PK2K tactical squad assault machinegun features fully automatic plasma discharge effective to 800 meters, built-in grenade launcher compatible with the full line of *IDI* minicell cartridges (please see attached ordering form 2A for tactical grenade options), and the artificial intelligence *SmartKill(TM)* system. The PK2K is your total peacekeeping solution.

Loyalty, duty, honor, purpose. *IDI* understands what it means to be a soldier. For more than three-hundred years *IDI* has provided peacekeeping solutions, combining cutting-edge developments in military science and technology from across the galaxy. We stood with the Terrans on Ceta-Gamma. We were there for the uprising on Ares-6. We are the leading supplier of armaments for the Alpha-Quadrant Allegiance, the only manufacturer approved by both the Cerulean Empire and the Legion of the Fallen, and the official sponsor of Captain Kelly Donovan and the Freedom Brigade. We are now proud to offer the PK2K assault model as our flagship assault weapon for close quarters combat.

You need a weapon that's as reliable as you are, that's as much a part of you as you are a part of your people (or faction). Whether you are a brave freedom fighter defending your homeworld of Yll'Risa from villainous imperial tyrants, or a noble soldier of the empire pacifying the terrorist rebel scum of Yll'Risa, *IDI* has solutions for your peacekeeping needs.

The PK2K is equipped with biometric fingerprinting to ensure that your trusted weapon does not fall into enemy hands. This is *your* weapon—it's a part of you. If the PK2K does not recognize its user, it will discharge the fusion cartridge through our patented *KILLoWATT* system, neutralizing all threats within a radius of five meters. Upon initial activation, please follow calibration procedures to ensure the PK2K syncs with your identity. In accordance with standard assault weapon good practices, please ensure that your weapon is safely secured when not in your possession. *IDI* is not liable for any injuries and/or deaths to owner, family, squad members, or others as a result of accidental activations of the *KILLoWATT* system due to negligence of the owner or failure to follow weapon protocol as outlined in the full terms of your license.

Thanks to our AI *SmartKill*(TM) system, you don't even need to pull the trigger — in *Kill Assist* mode, the weapon will discharge automatically during sweeps to maximize tactical advantage and lethality when directed towards legitimate combatants. The AI recognizes targets, accepts strategic orders from command, coordinates activity across squads, and maximizes the effectiveness of your unit, firing when you've got the perfect shot. The *SmartKill* system automatically tracks confirmed kills, facilitating strategic planning and promotion decisions. To reduce friendly fire incidents, your PK2K comes packaged with four *IDI Friendly Forces* ID chips (please see attached ordering form 2C for additional squad tag options).

Owing to our state-of-the-art power system, you never need to check if your PK2K is loaded! *IDI*'s microfusion cartridge revolutionizes the industry, ensuring your weapon is always ready to serve — the ideal firearm for the ideal fighter. The cartridge is to a weapon what a warrior is to their country: indispensable. That's why we've designed the PK2K cartridge with a microfusion reactor for maximum reliability, providing a usage of 20+ years under proper conditions, and a life-time replacement guarantee. If at any time your fusion cartridge is operating below performance specifications, simply return the damaged or malfunctioning unit for safe disposal and *IDI* will provide a replacement. You never need to worry about spent cartridges again.

As a licensed PK2K owner, you are eligible for our *Galaxy Hero* rewards program, which awards free equipment and supplies based on individual and squad standings in the *SmartKill* performance ladder. Simply activate the *SmartKill* system, and your confirmed kills will automatically place you and your squad in the competitive ladder. *IDI* is proud to recognize soldiers and squads for outstanding performance in the field. Don't just be a hero—be a *Galaxy Hero*!

The PK2K model is affiliated with the Trans-Galactic Bounty Program. As a licensed owner, you may opt-in to the TGBP in order to earn galactic credits and bonus rewards. Your weapon will be updated with bounty data, including locations, targets, and credit values. If the *SmartKill* system is active, your PK2K's legitimate target list will include active bounties, so you can begin supplementing your income with freelance work and improve your ranking in the *Galaxy Hero* ladder. *IDI* is here to help you do what you do best.

Thanks to myriad industry and government partnerships, *IDI* is able to offer extended support to licensed veteran users of any series-1 *IDI* ground-level product, including the PK2K. If you have been afflicted during the course of your service by PTSD, loss of limbs, death, or any approved ailment specified in form 17-D, you may be eligible for credit assistance. Simply submit forms 16 A-through-D to their respective organizations' appropriate channels or representatives. Void where prohibited by law. Additional limitations and restrictions may apply. Consult your organization's relevant information services or human resources representative for locally applicable rules and regulations.

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Who's Afraid of the Big Bad Bug?

Mina

The words "virus" and "pandemic" are all around us. The media is constantly bombarding us with them and friendly acronyms such as "COVID-19" and "SARS". We are currently living in a climate of fear and anxiety most of us would prefer to find only in SF movies about alien invasions and post-apocalyptic futures. It is a fear of the unseen because we cannot see the virus that has become part of our everyday lives, as have lockdowns, confinement and isolation. We have lost our freedom of movement and countless small liberties we used to take for granted. Have we entered an era of mass hysteria or are the measures imposed upon us right and reasonable? Are we on the verge of a breakdown in our social order? These are the sorts of questions often posed in Sci-Phi, so I set myself the task of finding parallels in SF. I have tried to avoid horror fiction, but all good disaster SF has an element of horror and formless fear to it.

The best place to start is with the classics of this genre: H. G. Wells' *The War of the Worlds* (1898) and John Wydnham's *The Day of the Triffids* (1951). *The War of the Worlds* is, on the surface, an alien invasion story. Digging deeper, it is an exploration of societal and personal collapse. The narrator and other main characters are never named, giving it a universal feel: this could happen to you or to me. The Martian invasion in this story can be likened to the spread of a virus, just with the unseen made viscerally visible. Wells himself drew parallels to the social devastation wrought by British imperialism and, today, we could draw parallels to rampant globalisation obliterating all resistance in its path.

The alien tripods protecting the fragile bodies of the Martians come armed with "heat rays" and a poisonous "black smoke" – we cannot help but think of chemical warfare today. This thought comes with uncomfortable questions for – are not humans an infestation that needs to be wiped out from the point of view of the "superior" Martians? As well as their deadly weapons, the Martians bring with them the "red weed" to take over the surface of our planet like a vibrant parasite. In the end, the Martians are killed by simple pathogens, unseen infectious agents. This is the closest parallel to COVID because we too, in our hubris, could be wiped out by such microscopic organisms.

My favourite adaptation of the novel is Jeff Wayne's 1978 rock opera with the mesmerising voice of Richard Burton as the narrator. The basic plot of the novel was maintained in the rock opera but several details were changed, for example if we look at the SF anthem, "The Spirit of Man". In it, the nameless pastor from the novel becomes Nathaniel whose wife Beth, a character that does not exist in the book, argues with him as he despairs. Nathaniel has been driven mad by the invasion and is ranting and raving about the end of times:

"Listen, do you hear them drawing near
In their search for the sinners?
Feeding on the power of our fear
And the evil within us?
Incarnation of Satan's creation of all that we dread
When the demons arrive those alive would be better off dead!"

The pastor is lost in his fear: for him the world has descended into hell and there is no hope of salvation, not even for a chosen few. Beth refuses to accept this:

"No Nathaniel, no, there must be more to life
There has to be a way that we can
Restore to life the love we used to know
(No) Nathaniel, no, there must be more to life
There has to be a way that we can
Restore to life the light that we have lost."

Beth believes in the spirit of man, that humanity will survive somehow. As Nathaniel sings of darkness and demons, she clings to love and light with unwavering faith. Interestingly, the power of religious faith is not really part of the original story. In the novel, the narrator has a nervous breakdown after the ignominious end of the Martians and is helped by kind strangers, so there is perhaps some faith in basic humanity. Upon his return home to find his wife alive and well, the narrator still cannot shake off the anxiety caused by his recent ordeal, as humanity cannot hope to survive a disaster of such proportions unscathed. Unlike a great deal of disaster SF, we have no hero saving the world; humanity is saved by pure chance.

Nightmarish as Wells' scenario might be, it remains small in scale. All the action occurs in and around Woking, touching briefly upon South London. The scale of Wyndam's *The Day of the Triffids* is much larger – it is a global disaster. The aliens are replaced by a manmade enemy: bioengineered carnivorous plants capable of locomotion, armed with stingers and poison. The triffids could be compared to an opportunistic virus that spreads after a freak "meteor storm" blinds most of humanity (the protagonist wakes from an eye operation and several weeks with bandaged eyes to a world gone to hell, ironically spared permanent blindness because he could not witness the lights in the sky). Social order breaks down completely and the triffids sweep through like a ferociously efficient pandemic. These monsters do not seem particularly intelligent, acting mostly on instinct, but they only have to bide their time and strike at the weakest, just like COVID kills those with the lowest defences.

There is much ordinary courage in *The Day of the Triffids* with the protagonist/narrator and the small family unit he manages to build surviving against all odds. There is even a love story which, although it is a pragmatic partnership in many ways, is real and solid in a disintegrating world. Towards the end of the novel, the protagonist reflects without bitterness that humanity probably brought the disaster on itself, theorising that the "meteor shower" was actually the result of manmade satellite weapons systems being set off by accident and producing blinding radiation. He hopes that future generations will learn from the mistakes of their ancestors. He and his family unit will retreat with others to an island they can defend (the Isle of Wight) until they can find a way to fight back. The spirit of man does survive in this novel.

The zombie apocalypse film *28 Days Later* about a rage -inducing virus spreading from animals (chimpanzees) and causing societal the UK clearcollapse in ly borrows a lot of ideas from *The Day of the Triffids* (for example, the protagonist wakes up from a coma to a devastated world). The infected can no longer function cognitively and simply starve to death. The sequel *28 Weeks Later* shows the "Rage virus" being spread to Europe (the pandemic originally having been contained within Britain) by an asymptomatic carrier – one of the biggest fears in any pandemic scenario.

Ray Bradbury's short-story collection *The Martian Chronicles* (1950) contains a short story that also touches upon disease, "And the Moon Be Still as Bright". In this story, the fourth manned expedition to Mars discovers that the Martians have been mostly wiped out by chickenpox (an infection caused by a virus), brought by one of the previous expeditions. It is ultimately a story about colonisation. Bradbury ponders on whether there is a right or wrong form of colonisation, with wrong being an attempt to recreate Earth (thereby repeating old mistakes) and right having respect for the fallen civilisation (and learning from it). We are left with the question – are humans an infestation on Mars or will they become the new Martians in a brave new world? This question is highlighted in another short story in this collection, "Night Meeting", where two characters meet outside time but without us knowing which one represents the past and which the future. It is almost irrelevant as civilisations will always rise and fall and disease will always be one agent of change.

The *Star Trek* canon also examines viruses in different contexts. The most fun episode is "Macrocosm" in Season 3 of *Voyager*. In it, we see Captain Janeway single-handedly fighting giant viruses in a spoof of *Aliens*. She is combating the result of a viral infection with insect-like macro-viruses flying around the ship infecting the crew and propagating from their living flesh. The doctor and Janeway manage to exterminate the giant bugs in the end with an antiviral gas. In reality, antiviral medication cannot be produced in less than one hour.

In the episode "The Quickening" in Season 4 of *Deep Space Nine*, Dr Bashir tries to find a cure for the "blight" caused by biological warfare, where the series' archenemy, the Jem Hadar (the military arm of the Dominion), infect a planet that resisted them. Bashir is unable to cure it but finds an anti-viral treatment that acts as a vaccine – when injected into pregnant women, the baby is born disease-free. This is the hope in any pandemic, that a vaccine can be found to preserve at least the next generation. Ironically, Earth later hits back at the Dominion by infecting an unwitting carrier who, in turn, infects other Changelings like himself. *Deep Space Nine* does not shy away from the tough questions of whether anyone (including humans) has the right to use biological warfare to potentially wipe out an entire race.

The most interesting viral analogies are the indirect ones made by the existence of the Borg. We first encounter them in *Star Trek – The Next Generation*. In the double episode, "The Best of Both Worlds" (which ends season 3 and begins season 4), Captain Picard is "assimilated" and briefly becomes Locutus, a mouthpiece for the Borg Collective's hive mind. The Borg are clearly presented as a militaristic virus – taking over entire races, using "nanoprobes" to infect their technology, and disposing of the weak.

My final example is a less well-known film, *Daybreakers*. It is an interesting mix of SF and vampire tropes, where a plague caused by an infected bat has transformed most of the world's population into vampires. The remaining humans are captured and harvested for blood but, as the human population shrinks, there is a shortage of blood for food. Vampires deprived of blood and who drink their own blood instead become psychotic and increasingly bat-like "subsiders" – a whole underworld culture is suggested with blood as the currency. The protagonist is a vampire scientist attempting to create synthetic blood. He discovers that an accidental cure has been found for vampirism – using the right amount of sun and water. Drinking the blood of a "cured" vampire will cure the drinker too, but the protagonist must fight against the corporate powers that do not want to change the status quo and lose their profits.

To summarise, SF is full of disaster scenarios involving viruses beyond our control, whether they kill humans or alien enemies. Sci-Phi also goes further, where humanity itself may be seen to be the disease, asking hard questions about colonisation and colonialism. Viruses can also become a much more abstract agent that may transform rather than kill us, although the transformation is rarely a desirable one. I expect that this is partly because a plot where we all are infected with, for example, love and peace, would make for a very short story.

The fears and anxieties triggered by COVID are primal ones and, as we have seen, ones that are widely explored in SF and Sci-Phi fiction. So how can we best respond to the panic arising both at a social level (e.g. mass hysteria or a breakdown of social systems) and a personal one (e.g. people suffering from increased anxiety and compulsive disorders, or depression due to isolation)? I would like to finish with this quote from C. S. Lewis. As you read it, replace "atomic bomb" with "coronavirus" in your head:

> In one way we think a great deal too much of the atomic bomb. "How are we to live in an atomic age?" I am tempted to reply: "Why, as you would have lived in the sixteenth century when the plague visited London almost every year… or indeed, as you are already living in an age of cancer, an age of syphilis, an age of paralysis, an age of air raids, an age of railway accidents, an age of motor accidents."
>
> In other words, do not let us begin by exaggerating the novelty of our situation. Believe me… you and all whom you love were already sentenced to death before the atomic bomb was invented: and quite a high percentage of us were going to die in unpleasant ways…
>
> … If we are all going to be destroyed by an atomic bomb, let that bomb when it comes find us doing sensible and human things – praying, working, teaching, reading, listening to music, bathing the children, playing tennis, chatting to our friends over a pint and a game of darts – not huddled together like frightened sheep and thinking about bombs. They may break our bodies (a microbe can do that) but they need not dominate our minds.
>
> — "On Living in an Atomic Age" (1948) in *Present Concerns: Journalistic Essays*

Of course, C. S. Lewis had not met the concept of "social distancing" but the central tenet stands: we must face our fear of death head on, whatever form it takes. And Sci-Phi gives us a safe forum in which to stare straight into the eye of the monster.

[*My thanks to Ian H for drawing my attention to the quote from C. S. Lewis.*]

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Last Entry

Ahmed A. Khan

(*Last entry found in the diary of the famous astrophysicist, Dr. Wendel Hubbi, written just days before he was carted away to the asylum.*)

Imagine a drop of water free-floating in a vacuum. Imagine you are sub-molecular in size. Now imagine yourself inside the drop of water.

What do you see?

You see H_2O molecules moving away from you on all sides.

Why?

Is the water molecule expanding due to some unexplained reason?

You ponder for some time and come up with a more rational scenario: the drop of water is evaporating. As the molecules on its surface are pulled away into space, new molecules move up into their place. And the process continues. This is the movement you see – the molecules moving away from you and towards the surface on all sides. In short, the water molecule is not expanding but shrinking. Soon, a point will come when it will be all gone.

Do you perceive the analogy?

The red shift of astral bodies all around us does not signify expansion of the universe. In actual fact, the universe is shrinking as its matter evaporates into the super universe.

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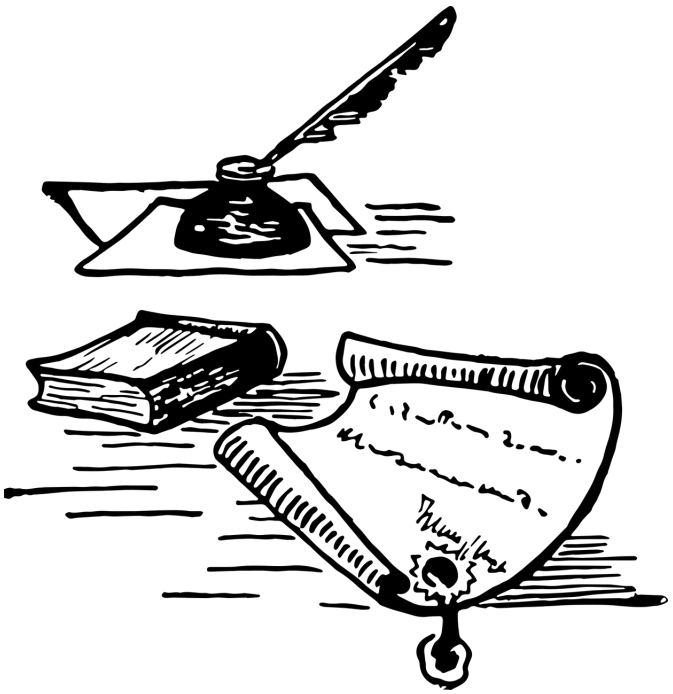

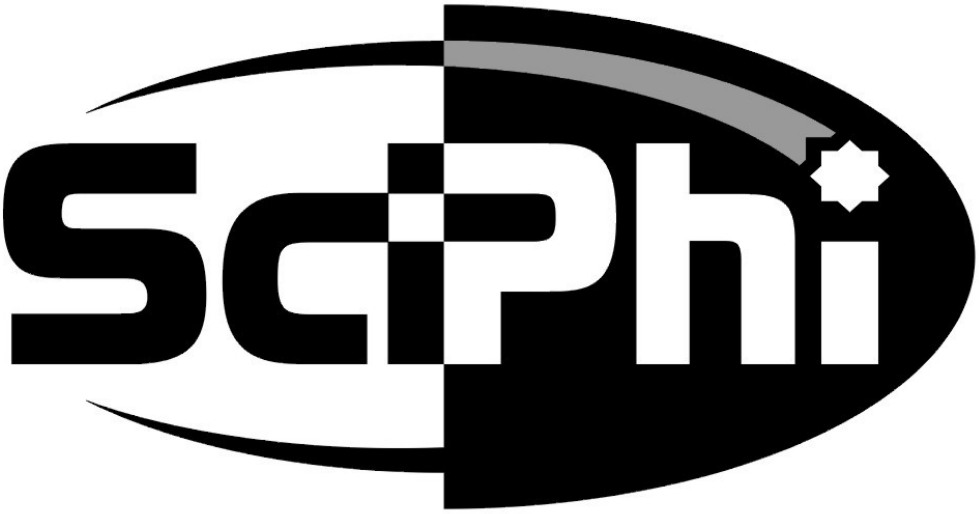

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