# 1AR

#### On first contention

#### Turn internet access, space x increases inequality and doesn’t provide access.

Song and Bloom 20 “Big Tech is leading the new space race. Here's why that's a problem” Steve Song is a Fellow with the Mozilla Foundation where he works to promote policy and regulation that will increase equitable and affordable access to communication in rural and underserved regions of the world. Peter Bloom is a community digital defense activist and the founder and General Coordinator of Rhizomatica, an international non-profit that helps communities build their own communications infrastructure. He is a former Shuttleworth Foundation fellow and was named an Innovator under 35 by MIT Technology Review and appeared on Foreign Policy's 100 Leading Global Thinkers list in 2015. November 14, 2020 <https://www.salon.com/2020/11/14/big-tech-is-leading-the-new-space-race-heres-why-thats-a-problem/> SM

Big Tech is leading the new space race. Here's why that's a problem

New satellite tech could bring billions more online. But will Big Tech bring their extractive ethos into space?

The coronavirus pandemic has made having a stable and reliable internet connection a matter of extreme urgency, as people all over the world struggle to work, access education, and participate in society while staying safe. Yet universal affordable access is far from being achieved; indeed, half of the world still lacks access to the Internet, despite sustained efforts from governments and corporations.

One popular proposal for ubiquitous connectivity comes from Low Earth Orbit (LEO) satellite constellations. LEO boosters claims that such satellites will have the ability to deliver high-speed broadband anywhere on the planet. These satellites provide internet access from space, and require placing thousands of satellites into orbit at a much closer proximity to Earth than traditional satellites.

The prospect of a globe-encircling mesh of broadband communication satellites has attracted the interest and investment of billionaires ranging from Bill Gates in the 1990s to Elon Musk and Jeff Bezos today. Currently there are at least four major LEO initiatives from the US and Europe, including Starlink (SpaceX), Project Kuiper (Amazon), OneWeb, and Telesat. China has announced at least three LEO constellations, and Russia one. The size and scope of these projects are massive. To put current LEO satellite ambitions in context: the current total number of satellites of any kind orbiting Earth is just over 2,500. Starlink, who already have nearly 900 satellites in orbit, recently petitioned the US communications regulator for permission to launch a total of 12,000 satellites. Not to be outdone, OneWeb recently applied for permission to launch 48,000 satellites.

So what's not to love?

While the goal of these companies to ensure broadband anywhere and everywhere is laudable, the technology and the approach to connectivity are not free from concerns. Recent history, especially the development of the Internet itself, has shown us that simply having the capability to build something doesn't necessarily make it a good idea. The Silicon Valley ethos of "move fast and break things," perhaps valid in developing small applications, becomes irresponsible when the consequences of failure may be catastrophic and irreversible. Criticism of LEO constellations to date have focused on practical concerns around a variety of issues, including: the economic viability of the constellations, the occlusion of the night sky from astronomers, wireless interference between different constellations, and the potential chain reaction of collisions from a single error in satellite trajectory, leaving near-space an inaccessible junkyard of debris.

Beyond that, LEO constellations have deeper and longer-term implications that have yet to find their way into mainstream public debate. For one, LEO constellations are part of a larger process in which space exploration is being redefined and reframed in military and commercial terms. Closer to Earth, LEO constellations raise important concerns around the potential for the further entrenchment of a global internet oligopoly that increases inequality and disempowers citizens.

The scramble for space

Over the past seven decades, as our ability to explore beyond our planet has evolved, national security interests in space have aligned with commercial ones to an extent that they are nearly indistinguishable today. In the United States, private space launch companies like SpaceX and United Launch Alliance are major recipients of government contracts and now provide the bulk of US launch capacity for both scientific and military missions. While close ties between the defense and aerospace industries is nothing new, we are in a decidedly new phase of this relationship due to technological advancement, new policy priorities and the rise of private actors.

As commercial launch capacity has increased and space exploration technologies have advanced, the decades-old agreements around how we treat space and recognize our solar system as a commons for the benefit of all humanity are beginning to unravel. One clear example of this is the White House's recent "Executive Order on Encouraging International Support for the Recovery and Use of Space Resources," which emphasizes that "the United States does not view outer space as a 'global commons'" and refers to the Moon Agreement as "a failed attempt at constraining free enterprise."

It is necessary to better understand the deep ties of LEO companies to the hegemonic designs of national governments on near space. Recently, in exchange for $28 million USD, Starlink provided the services of its satellites for live-fire demos with the US Air Force to test its Advanced Battle Management System and lay the groundwork for a military Internet of Things. Speaking after the latest live-fire demo, William Roper, Air Force acquisition chief, opined that "the military needs to be ready to play a strategic role because we need communications in many areas of the world that there are no commercial providers . . . we can be the stability case for companies like SpaceX and others who want to sell communications worldwide."

SpaceX's connections to the military-industrial complex were made clear in comments by SpaceX president Gwynne Shotwell in 2018, who stated that her company would be willing to launch a space weapon to protect the US, in contravention of established space norms. Only weeks ago, SpaceX signed a contract with the Pentagon to jointly develop a rocket that can deliver up to 80 tons of cargo and weaponry anywhere in the world in just one hour.

The Internet, too, from its very inception until today, has proven to be a useful tool for pursuing military and security objectives. Of these, surveillance remains at the heart of Silicon Valley's highly profitable business model of manipulating our attention and preferences for the sake of profit. This profit model facilitates the designs of space-obsessed billionaires like Jeff Bezos who make it no secret that their ultimate goal and passion is the human colonization of other planets in our solar system. In general terms, with material and economic support from taxpayers through defense spending, the profits from the colonization of our data-bodies are being invested in the militarization, privatization and colonization of space.

Telecommunications: driving inequality or empowering citizens?

The telecommunications sector has always been a battleground for regulation. While the early days of the Internet seemingly teemed with competition and diversity, power and control has ultimately become concentrated with the growth of giant internet companies that now dominate our online life. The consequences of unregulated, technology-fueled expansion of globalization and inequality can now be seen in almost every aspect of life.

Digital technology plays a critical role in amplifying inequality, highlighting the need to reframe how we approach network technology development. Some governments and citizen groups understand the connection between economic mobility and tech skills development.

One great example of this comes from Broadband for the Rural North (B4RN), a cooperative in Northern England, that delivers 1 gigabit-per-second fiber-optic capacity to homes in a region deemed economically unviable by the incumbent telecommunications giant. B4RN's ability to build and sustain an affordable internet service at speeds many times that of commercial offerings is based upon the investment they make in both community engagement and the development of local capacity. Contrast this with the prospect of a broadband service from a LEO constellation, in which the role of the citizen is that of a consumer only. It is also worth noting that B4RN's profits are reinvested locally, while revenues from LEO constellations are beamed straight out of the country.

The failure to invest in alternatives that build local capacity replicates itself at the national level as well. LEO constellations have the potential to further abstract Internet service to a supra-national level in a manner that disempowers not just individuals but nation-states themselves in terms of domestic expertise and infrastructure. Investment and deployment costs for LEO constellations are so "astronomical," and in many cases so tied to national/military investment and subsidies, that only a small handful of corporations/countries will be capable of owning and managing their own constellation. This is likely to open up a new front in the ongoing wrangling by geo-political power blocs over the future of the Internet.

Furthermore, it is far from clear that LEO constellations have either the capacity or the economic model to deliver on their claims of providing affordable connectivity to the unserved in most parts of the world. Consider that the half of the world's population that remains unconnected to the Internet are the most economically disadvantaged. As such, most people will not be direct consumers of LEO services but will instead need to rely on a telco building infrastructure and using LEO as backhaul—a scenario which already exists with conventional satellite services. A further concern is that LEO constellations may ultimately create a disincentive to investment in rural connectivity, based on the assumption by service providers and governments that LEO constellations will address that gap.

It is troubling that companies like Amazon and Google (the third largest shareholder in SpaceX), which already wield tremendous power and influence over society, are vying to expand their dominance by becoming global internet service providers with support from taxpayers via subsidies and military spending. With their hands in essentially every layer of the communication stack, it will prove challenging to regulate or even know about the data they harvest and how those are used to competitive advantage in other areas of their businesses.

At the time of their emergence, both space exploration and the Internet served as beacons of hope and of potential transcendence for humanity—one of shared imagination and resources, and of cooperation in human development. In both cases, that hope has been dimmed in a quest for profit and geo-political power. If we want to recover a sense of shared purpose as a species, the question as to "who gets to put their satellites into low earth orbit?" is more important than we might think. Is space for everyone, or just a few huge corporations and global superpowers? This is the question we ask when we ask who gets to park their satellites in orbit.

There is an opportunity to return to the spirit of internationalism that infused the early days of space exploration in which space was held as a shared resource to be protected and guarded from exploitation. Similarly, here on Earth, we see successful efforts to manage Internet infrastructure as a commons in contrast to Silicon Valley's model of surveillance capitalism. Recognizing that individual and collective empowerment and agency are as important as the actual infrastructure itself is the key to a more egalitarian Internet. LEO satellite networks may deliver connectivity (although many doubts remain), but they are less likely to empower people and move us toward a more equitable world. The development of a healthy Internet that actually benefits humanity involves not just the end result of affordable access, but also the process through which people gain that access.

#### On second contention

#### 1] We have 10 yrs to solve climate change and mining isn’t ready to start within that time.

#### 2] Terrestrial mining isn’t the cause of climate change – fossil fuels industry is and

#### 3] Space mining won’t mean capitalists stop earth mining – since they only care about maximizing profits they’ll do both and doubly increase emissions.

#### 4] Space Capitalists are entangled with the fossil fuel industry.

Marx 20 [Paris Marx, Paris Marx is a freelance writer, host of left-wing tech podcast Tech Won't Save Us, and editor of Radical Urbanist, Jacobin, “Yes to Space Exploration. No to Space Capitalism.” 06/08/2020, [https://www.jacobinmag.com/2020/06/spacex-elon-musk-jeff-bezos-capitalism]/](https://www.jacobinmag.com/2020/06/spacex-elon-musk-jeff-bezos-capitalism%5d/) lm

In 2016, Musk claimed he would [begin sending rockets to Mars in 2018](https://observer.com/2016/06/elon-musk-charts-path-to-colonizing-mars-within-a-decade/). That never happened, but it hasn’t ended his obsession. Musk is determined to make humans a multi-planetary species, framing our choice as either space colonization or the risk of extinction. Bezos says that Earth is the best planet in our solar system, but if we don’t colonize space we doom ourselves to “[stasis and rationing](https://jacobinmag.com/2019/07/space-colonies-jeff-bezos-blue-origin).”

These framings serve the interests of these billionaires, and make it seem like colonizing space is an obvious and necessary choice when it isn’t. It ignores their personal culpability and the role of the capitalist system they seek to reproduce in causing the problems they say we need to flee in the first place.

Billionaires have a [much greater carbon footprint](https://www.vox.com/energy-and-environment/2017/12/1/16718844/green-consumers-climate-change) than ordinary people, with Musk [flying his private jet](https://arstechnica.com/cars/2019/01/elon-musk-private-jet-flew-150000-miles-in-2018-washington-post-reports/) all around the world as he claims to be an environmental champion. Amazon, meanwhile, is [courting oil and gas companies](https://gizmodo.com/amazon-is-aggressively-pursuing-big-oil-as-it-stalls-ou-1833875828) with cloud services to make their business more efficient, and Tesla is selling [a false vision of sustainability](https://jacobinmag.com/2020/01/elon-musk-climate-apocalypse-tesla-spacex) that purposely serves people like Musk, all while capitalism continues to drive the climate system toward the cliff edge. Colonizing space will not save us from billionaire-fueled climate dystopia.

# Star Trek AC

[brackets for clarification]

### 1AC

#### Space: the final frontier. These are the voyages of the Starship *Enterprise*. Its five-year mission: to explore strange new worlds. To seek out new life and new civilizations. To boldly go where no man has gone before!

[Star Trek, Original 60's Series Star Trek Intro and Credits]

#### September 8th, 1966, the first episode of Star Trek airs on live TV in the US, piggybacking off the public fervor of the ongoing Space Race, offering a vision of a utopian communist society in space.

Gittlitz 17 [A. M. Gittlitz is a writer from Brooklyn who specializes in counterculture and radical politics, The New York Times, Red Century, “‘Make It So’: ‘Star Trek’ and Its Debt to Revolutionary Socialism” July 24th, 2017, [https://www.nytimes.com/2017/07/24/opinion/make-it-so-star-trek-and-its-debt-to-revolutionary-socialism.html]/ lm](https://www.nytimes.com/2017/07/24/opinion/make-it-so-star-trek-and-its-debt-to-revolutionary-socialism.html%5d/%20lm)

H. G. Wells’s foundational work of political science fiction, “The Time Machine,” predicted a future in which a small utopia of sprightly elites is kept running by a subclass that lives below the ground and is reduced to bestial violence. This prediction, carried to a horrifically logical extent, represented the intense wealth disparity of the Victorian England in which Wells wrote the novel. Judging from the major political narratives of the fictions of our era, films like “The Hunger Games,” “Elysium” and “Snowpiercer,” the certainty of a future rendered increasingly barbarous by class division remains essentially the same.

But this was not always the case. In 1920, Wells met Vladimir Lenin, a fellow world-building visionary who planned “the inauguration of an age of limitless experiment” to rebuild and industrialize his country from ruination by years of war, abolishing class society in the process. Wells was impressed by the pragmatic revolutionary and his planned “utopia of electricians.”

If Wells had been less skeptical of Communism and joined the party, he wouldn’t have been the first sci-fi or futurist thinker to do so. Alexander Bogdanov, an early political rival of Lenin’s, wrote “Red Star,” a utopian novel about a Communist colony on Mars where everything was held in common and life spans were greatly extended through the use of parabiosis, the mutual sharing of blood. Along with Anatoly Lunacharsky and Maxim Gorky, Bogdanov proposed a program of “God Building,” which would replace the rituals and myths of the Orthodox Church through creation of an atheistic religion.

For his part, Gorky was a fan of the Cosmism of Nikolai Fyodorov and Konstantin Tsiolkovsky, a scientific and mystical philosophy proposing space exploration and human immortality. When Lenin died four years after meeting with Wells, the futurist poet Vladimir Mayakovsky’s line “Lenin Lived, Lenin Lives, Lenin Will Live Forever!” became not only a state slogan, but also a scientific goal. These Biocosmist-Immortalists, as they were known, believed that socialist scientists, freed from the constraints of the capitalist profit motive, would discover how to abolish death and bring back their comrades. Lenin’s corpse remains preserved for the occasion.

Bogdanov died in the course of his blood-sharing experiments, and other futurist dreams were sidelined by the industrial and militarist priorities that led up to World War II. In the postwar period, however, scientists inspired by Cosmism launched Sputnik. The satellite’s faint blinking in the night sky signaled an era of immense human potential to escape all limitations natural and political, with the equal probability of destroying everything in a matter of hours.

Feeding on this tension, science fiction and futurism entered their “golden age” by the 1950s and ’60s, both predicting the bright future that would replace the Cold War. Technological advances would automate society; the necessity of work would fade away. Industrial wealth would be distributed as a universal basic income, and an age of leisure and vitality would follow. Humans would continue to voyage into space, creating off-Earth colonies and perhaps making new, extraterrestrial friends in the process. In a rare 1966 collaboration across the Iron Curtain, the astronomer Carl Sagan co-wrote “Intelligent Life in the Universe” with Iosif Shklovosky. This work of astrobiological optimism proposed that humans attempt to contact their galactic neighbors.

Such views were less fringe and more influential than you might think. Beginning in 1966, the plot of “Star Trek” closely followed Posadas’s propositions. After a nuclear third world war (which Posadas also believed would lead to socialist revolution), Vulcan aliens visit Earth, welcoming them into a galactic federation and delivering replicator technology that would abolish scarcity. Humans soon unify as a species, formally abolishing money and all hierarchies of race, gender and class.

“A lot has changed in the past 300 years,” Captain Picard explains to a cryogenically unfrozen businessman from the 20th century in an episode of a later “Star Trek” franchise, “The Next Generation.” “People are no longer obsessed with the accumulation of things. We’ve eliminated hunger, want, the need for possessions. We’ve grown out of our infancy.”

For all its continued popularity, such optimism was unusual in the genre. The new wave of sci-fi in the late ’60s, typified by J. G. Ballard and Philip K. Dick in the United States and by the Strugatsky brothers and Stanislaw Lem in the East, presented narratives that undercut this theme of humans’ saving themselves through their own rationality.

The grand proposals of the ’60s futurists also faded away, as the Fordist period of postwar economic growth abruptly about-faced. Instead of automation and guaranteed income, workers got austerity and deregulation. The Marxist theorist Franco Berardi described this period as one in which an inherent optimism for the future, implied by socialism and progressivism, faded into the “no future” nihilism of neoliberalism and Thatcherite economics, which insisted that “there is no alternative.”

The fall of the Soviet Union cemented th[e]is “end of history,” in Francis Fukuyama’s phrase, and signaled a return to late-capitalist dystopian narratives of the future, like that of “The Time Machine.” Two of the most popular sci-fi films of the ’90s were “Terminator 2” and “The Matrix,” which both showcased a world in which capital had triumphed and its machinery would not liberate mankind, but govern it. The recent success of “The Road,” “The Handmaid’s Tale” and “The Walking Dead” similarly predict violent futures where only small underground resistance movements struggle to keep the dying flame of humanity alight.

Released the same year as “Star Trek: First Contact” — and grossing three times as much — “Independence Day” told a story directly opposed to Posadism, in which those who gather to greet the aliens and protest military engagement with them are the first to be incinerated by the extraterrestrials’ directed-energy weapons. (In Wells’s 1897 vision of alien invasion, “The War of the Worlds,” the white flag-waving welcoming party of humans is similarly dispatched.)

The grotesque work of 1970s white supremacist speculative fiction, “The Camp of the Saints” by Jean Raspail — recently referenced by the White House strategist Steve Bannon — has a similar story line. A fleet of refugee ships appears off the coast of France, asking for safe harbor, but it soon becomes apparent that the ship is a Trojan horse. Its admission triggers an invasion of Europe and the United States.

The recent rise of right-wing populism indicates a widening crack in the neoliberal consensus of ideological centrism. From this breach, past visions of the future are once again pouring out. Peter Thiel, Elon Musk and Mark Zuckerberg feel empowered to propose science fiction premises, like space colonization and post-scarcity economics, as solutions to actual social problems. Absent, however, are the mass social movements of the 20th century calling for the democratization of social wealth and politics. While rapid changes in the social order that are the dream of Silicon Valley’s disruptors are acquiring an aura of inevitability, a world absent of intense poverty and bigoted hostility feels unimaginable.

Shortly after World War II, Wells became so convinced of humanity’s doom, without a world revolution, that he revised the last chapter of “A Short History of the World” to include the extinction of mankind. Today we are left with a similar fatalism, allowing the eliminiationist suggestions of the far right to argue, in effect, for a walling-off of the world along lines of class, nationality and race, even if this might condemn millions to death.

If humanity in the 21st century is to be rescued from its tailspin descent into the abyss, we must recall the choice offered by the alien visitor from the 1951 sci-fi film classic “The Day the Earth Stood Still.”

“Join us and live in peace,” Klaatu said, “or pursue your present course and face obliteration.”

I think of it as science fiction’s useful paraphrasing of Rosa Luxemburg’s revolutionary ultimatum: “socialism or barbarism.”

#### October 13th, 2021, Captain Kirk and Jeff Bezos go to Space – in the age of the billionaire space race, we see private appropriation extend beyond reality itself, appropriating the Sci-Fi of Star Trek. Beam me up, Bezos!

Anthony 21 [Ted Anthony, Ted Anthony, director of new storytelling and newsroom innovation at The Associated Press, has been writing about American culture since 1990 and watching “Star Trek” since 1969, Orlando Sentinel, “As William Shatner heads toward the stars, visions of space collide” October 12th, 2021, [https://www.orlandosentinel.com/space/os-bz-william-shatner -space-blue-origin-visions-of-space-20211012-xrxgvgowrzad7f2e5rifln7wsy-story.html]/](https://www.orlandosentinel.com/space/os-bz-william-shatner%20-space-blue-origin-visions-of-space-20211012-xrxgvgowrzad7f2e5rifln7wsy-story.html%5d/) lm

“Risk is our business,” James T. Kirk [once said.](https://www.youtube.com/watch?v=PqI-PdZ2U_o) “That’s what this starship is all about. That’s why we’re aboard her.”

More than a half-century later, the performer who breathed life into the fabled Enterprise captain is, at age 90, making that kind of risk his own business and [heading toward the stars](https://apnews.com/article/william-shatner-star-trek-blue-origin-space-jeff-bezos-e10877d624a4cc0be9385585c2647cdd) under dramatically different circumstances than his fictional counterpart. And in doing so, William Shatner is causing worlds to collide, or at least permitting parallel universes to coexist — the utopian spacefaring vision of “Star Trek” and the evolving, increasingly commercial spot that “space” holds in the American psyche.

When [Shatner](https://www.seattlepi.com/ae/tv/article/Shatner-the-inimitable-conquering-new-frontiers-1275869.php) boards Jeff Bezos’ Blue Origin NS-18 in Texas at around dawn Wednesday, his one small step into the craft creates one of the ultimate crossover stories of our era.

It’s about space and exploration, sure, and certainly about capitalism and billionaires and questions of economic equity. But it’s also about popular culture and marketing and entertainment and nostalgia and hope and Manifest Destiny and, and, and … well, you get the idea.

It will be a complex blend of human dreams superimposed upon technology and hope, braggadocio and cash, and the notion that space travel elevates us — all orchestrated by a company under criticism for what some call the decidedly un-utopian, tech-bro ways that it operates.

Is all that and “Star Trek” a good fit?

THE WORLD OF `STAR TREK’

Since its 1966 premiere with one of the most diverse casts TV had ever seen, “Trek” has grown from Gene Roddenberry’s fever dream of a “‘Wagon Train’ to the stars” into an intricate transmedia universe full of subtleties and traditions and rules.

Among them: Human beings avoid killing each other. Money is generally outdated, as are hunger and poverty. Greed is aberrant. Noninterference in other cultures is the most sacred principle of all. And within the United Federation of Planets, the spacefaring United Nations of “Star Trek,” exploration, not domination, is the coin of the realm. In short, unlike a lot of humanity right now.

That 1966-69 original series used allegory to evade network censors and tell stories about racism and xenophobia and even the Vietnam War. How could they get away with all that? Because the adventures of Kirk’s Enterprise took place against a backdrop of 23rd-century space travel — something directly relevant to the world as well, given that humans [first set foot on the moon](https://www.newschannel10.com/story/10749277/space-is-the-final-frontier-all-it-used-to-be/?outputType=amp) 47 days after the original series’ final episode.

Over the next half century, backed by a vocal fan base, “Star Trek” roared back for more and, in the process, led the way in cementing space travel as an ideal canvas for relevant storytelling.

Even as NASA’s Apollo era ebbed into the space shuttle program (where [an early craft](https://www.nasa.gov/feature/40-years-ago-space-shuttle-enterprise-rolls-to-the-pad) was named “Enterprise”) and eventually into uncertainty, “Trek” remained one of the culture’s central vehicles for a spacefaring future.

In all that varying storytelling, though, one constant remained: the notion that human space travel would become a vector of ethics and goodness that elevated the galaxy rather than plundered it.

THE PROFITABLE FRONTIER

Which brings us to companies like Blue Origin, Elon Musk’s SpaceX and Richard Branson’s Virgin Galactic — endeavors that build their brands not upon countries but corporations.

They offer the culture a late-stage capitalism variation on the theme — a narrative that space travel isn’t just for scientists and diplomats but for you and me, too. If, that is, you and me happen to have a few hundred thousand dollars or more of walking-around money on hand.

“The United States always has had private people working for the public purpose,” says [Ravi S. Rajan,](https://directory.calarts.edu/administration-offices/ravi-s-rajan) president of the California Institute for the Arts and a “Trek” fan since childhood. “But how much is done privately and how much is done publicly, that changes.”

Many have impugned the billionaire space moguls’ actions, including the [secretary-general of the United Nations,](https://apnews.com/article/united-nations-general-assembly-technology-lifestyle-antonio-guterres-richard-branson-3179653c716a2e6a703815f1df80d0e9) and the troubles of Blue Origin’s [corporate culture](https://apnews.com/article/science-business-lifestyle-elon-musk-jeff-bezos-ccb58b2b24f43b1820f18496c19bc1a9) are [well-documented](https://www.washingtonpost.com/technology/2021/10/11/blue-origin-jeff-bezos-delays-toxic-workplace/) of late.

But the motives of the Amazon founder himself remain unclear. It is evident, though, that the popular culture of space travel has influenced him deeply.

Bezos, who tells a story of exploring space to help ensure Earth’s continued prosperity, is a longtime “Trek” fan. He made [a cameo as an alien Starfleet official](https://www.geekwire.com/2016/jeff-bezos-alien-star-trek-beyond-amazon/) in the 2016 movie “Star Trek Beyond.” And according to [biographer Brad Stone,](https://www.amazon.com/Everything-Store-Jeff-Bezos-Amazon/dp/0316219282/ref=sr_1_3?dchild=1&keywords=%22the+everything+store%22&qid=1633978436&sr=8-3) Bezos even fleetingly considered calling Amazon “[Makeitso.com](http://makeitso.com/),” after Capt. Jean-Luc Picard’s favorite command in “Star Trek: The Next Generation.”

“The whole ethos of `Star Trek’ showed people who were different-looking, with different skills, working together. We are in the opening moments of something like that,” says [Richard B. Cooper,](https://www.spacefoundation.org/human/richard-b-cooper/) vice president of the Space Foundation, a nonprofit that advocates for the global space industry. “People can look at this environment and say, `Hey — I belong there, too.’”

Prohibitive costs aside (and that’s a big aside), Cooper has a point. Though the likes of Shatner may not be “regular people,” the shift from the dominance of the test pilot and the scientist tracks with the populism of our era, where — it must be said — the exactitude of science is being called into question as never before. And as Cooper points out, “it gives people hope. And if there’s one thing the world’s in short supply of, it’s that essential payload.”

That kind of storyline — hope, heroism, competitive dominance and an unerring sense of competence that can at times overlap with testosterone — could be one key reason why the commercial space outfits are thriving. At a moment when NASA and nation-focused space travel lacks a compelling Hollywood narrative, the entrepreneurs and their marketers step right in.

“American dominance in space, nobody cares about it. It’s Bezos who says, `We can’t go on living like this. We have to save the planet,’” says [Mary-Jane Rubenstein,](https://mrubenstein.faculty.wesleyan.edu/) a professor of religion and science in society at Wesleyan University. What results, she says, is “a kinder, gentler colonialism” in which humans take to orbit under premises that seem justifiable but require closer scrutiny.

“It’s the billionaires who have the utopian visions,” says Rubenstein, author of the upcoming book “Astrotopia: The Dangerous Religion of the Corporate Space Race.”

“The states can’t muster them,” she says. “They have no story.”

LAUNCHING SHATNER

We live in an era where the fictional and the real have an intricate relationship, and sometimes it’s [are] hard to separate them. Something like this, a collision of dreams and real-life ambition and achievement, couldn’t have a more effective ambassador than the outsized personality that is William Shatner.

“I was there last week rehearsing, whatever they call it,” Shatner told Anderson Cooper.

“Training I think is what they call it,” Cooper said, to which Shatner responded: “I think[s] of [training] it as rehearsal.”

And there it is again — the storyline, compelling as ever, stealing oxygen from other important questions. Should we even be colonizing space? Don’t we have enough going on here at home to worry about? Aren’t there people with problems more pressing than this who could use the cash?

And what if we encounter life that’s not life as we know it, and harm it out of obliviousness or greed? It’s not as if that hasn’t happened countless times here on the ground, in the land that put a man on the moon but still grapples with a history brimming with horrors from slave markets to smallpox blankets. These are only some of the questions that will ascend and descend with Shatner on Wednesday.

Is it a stunt? Sure. Is it a genius marketing ploy? Absolutely. Is it cynical and self-aggrandizing and designed solely to make more money and grab more attention for the world’s richest man? You’re going to have to decide that one yourself. In the meantime, consider the autobiographical song called [“Real”](https://www.youtube.com/watch?v=hsKfZ3wvLkE) that Shatner recorded in 2004 with country singer Brad Paisley.

“I’d love to help the world and all its problems. But I’m an entertainer, and that’s all,” he says in it. “So the next time there’s an asteroid or a natural disaster, I’m flattered that you thought of me — but I’m not the one to call.”

Turns out, he is — this time. But next time? In the future of the final frontier and the culture that has grown up around it — in this unusual realm where risk IS the business — that’s eventually going to have to be addressed.

#### The launch of the richest man in the world and the protagonist of Star Trek encapsulates the world of the hyperreal. Sci-Fi becomes Reality, and thus the boundary between them is destroyed, imploding all meaning in the universe.

Baudrillard 81 [Jean Baudrillard, Baudrillard was a French sociologist, philosopher and cultural theorist. He is best known for his analyses of media, contemporary culture, and technological communication, as well as his formulation of concepts such as simulation and hyperreality, “Simulacra and Simulation”]/ lm

Three orders of simulacra:

simulacra that are natural, naturalist, founded on the image, on imitation and counterfeit, that are harmonious, optimistic, and that aim for the restitution or the ideal institution of nature made in God's image;

simulacra that are productive, productivist, founded on energy, force, its materialization by the machine and in the whole system of production - a Promethean aim of a continuous globalization and expansion, of an indefinite liberation of energy (desire belongs to the Utopias related to this order of simulacra);

simulacra of simulation, founded on information, the model, the cybernetic game - total operationality, hyperreality, aim of total control.

To the first category belongs the imaginary of the Utopia. To the second corresponds science fiction, strictly speaking. To the third corresponds - is there an imaginary that might correspond to this order? The most likely answer is that the good old imaginary of science fiction is dead and that something else is in the process of emerging (not only in fiction but in theory as well). The same wavering and indeterminate fate puts an end to science fiction - but also to theory, as specific genres.

There is no real, there is no imaginary except at a certain distance. What happens when this distance, including that between the real and the imaginary, tends to abolish itself, to be reabsorbed on behalf of the model? Well, from one order of simulacra to another, the tendency is certainly toward the reabsorption of this distance, of this gap that leaves room for an ideal or critical projection.

This projection is maximized in the Utopian, in which a transcendent sphere, a radically different universe takes form (the romantic dream is still the individualized form of Utopia, in which transcendence is outlined in depth, even in unconscious structures, but in any case the dissociation from the real world is maximized, the island of Utopia stands opposed to the continent of the real).

This projection is greatly reduced in science fiction: it is most often nothing other than an unbounded projection of the real world of production, but it is not qualitatively different from it. Mechanical or energetic extensions, speed, and power increase to the nth power, but the schemas and the scenarios are those of mechanics, metallurgy, etc. Projected hypostasis of the robot. (To the limited universe of the preindustrial era, Utopia opposed an ideal, alternative universe. To the potentially infinite universe of production, science fiction adds the multiplication of its own possibilities.)

This projection is totally reabsorbed in the implosive era of models. The models no longer constitute either transcendence or projection, they no longer constitute the imaginary in relation to the real, they are themselves an anticipation of the real, and thus leave no room for any sort of fictional anticipation - they are immanent, and thus leave no room for any kind of imaginary transcendence. The field opened is that of simulation in the cybernetic sense, that is, of the manipulation of these models at every level (scenarios, the setting up of simulated situations, etc.) but then nothing distinguishes this operation from the operation itself and the gestation of the real: there is no more fiction.

Reality could go beyond fiction: that was the surest sign of the possibility of an ever- increasing imaginary. But the real cannot surpass the model - it is nothing but its alibi.

The imaginary was the alibi of the real, in a world dominated by the reality principle. Today, it is the real that has become the alibi of the model, in a world controlled by the principle of simulation. And, paradoxically, it is the real that has become our true Utopia - but a Utopia that is no longer in the realm of the possible, that can only be dreamt of as one would dream of a lost object.

Perhaps science fiction from the cybernetic and hyperreal era can only exhaust itself, in its artificial resurrection of "historical" worlds, can only try to reconstruct in vitro, down to the smallest details, the perimeters of a prior world, the events, the people, the ideologies of the past, emptied of meaning, of their original process, but hallucinatory with retrospective truth. Thus in Simulacra by Philip K. Dick, the war of Secession. Gigantic hologram in three dimensions, in which fiction will never again be a mirror held toward the future, but a desperate rehallucination of the past.

We can no longer imagine any other universe: the grace of transcendence was taken away from us in that respect too. Classical science fiction was that of an expanding universe, besides, it forged its path in the narratives of spatial exploration, counterparts to the more terrestrial forms of exploration and colonization of the nineteenth and twentieth centuries. There is no relationship of cause and effect there: it is not because terrestrial space today is virtually coded, mapped, registered, saturated, has thus in a sense closed up again in universalizing itself - a universal market, not only of merchandise, but of values, signs, models, leaving no room for the imaginary - it is not exactly because of this that the exploratory universe (technical, mental, cosmic) of science fiction has also ceased to function. But the two are narrowly linked, and they are two versions of the same general process of implosion that follows the gigantic process of explosion and expansion characteristic of past centuries. When a system reaches its own limits and becomes saturated, a reversal is produced - something else takes place, in the imaginary as well.

Until now we have always had a reserve of the imaginary - now the coefficient of reality is proportional to the reserve of the imaginary that gives it its specific weight. This is also true of geographic and spatial exploration: when there is no longer any virgin territory, and thus one available to the imaginary, when the map covers the whole territory, something like the principle of reality disappears. In this way, the conquest of space constitutes an irreversible crossing toward the loss of the terrestrial referential. There is a hemorrhaging of reality as an internal coherence of a limited universe, once the limits of this universe recede into infinity. The conquest of space that follows that of the planet is equal to derealizing (dematerializing) human space, or to transferring it into a hyperreal of simulation.Witness this two-bedroom/kitchen/shower put into orbit, raised to a spatial power (one could say) with the most recent lunar module. The every-dayness of the terrestrial habitat itself elevated to the rank of cosmic value, hypostatized in space - the satellization of the real in the transcendence of space - it is the end of metaphysics, the end of the phantasm, the end of science fiction - the era of hyper-reality begins.

From then onward, something must change: the projection, the extrapolation, the sort of pantographic excess that constituted the charm of science fiction are all impossible. It is no longer possible to fabricate the unreal from the real, the imaginary from the givens of the real. The process will, rather, be the opposite: it will be to put decentered situations, models of simulation in place and to contrive to give them the feeling of the real, of the banal, of lived experience, to reinvent the real as fiction, precisely because it has disappeared from our life. Hallucination of the real, of lived experience, of the quotidian, but reconstituted, sometimes down to disquietingly strange details, reconstituted as an animal or vegetal reserve, brought to light with a transparent precision, but without substance, derealized in advance, hyperrealized.

In this way, science fiction would no longer be a romantic expansion with all the freedom and naivete that the charm of discovery gave it, but, quite the contrary, it would evolve implosively in the very image of our current conception of the universe, attempting to revitalize, reactualize, requotidianize fragments of simulation, fragments of this universal simulation that have become for us the so-called real world.

Where would the works be that would meet, here and now, this situational inversion, this situational reversion? Obviously the short stories of Philip K. Dick "gravitate" in this space, if one can use that word (but that is precisely what one can't really do any more, because this new universe is "antigravitational," or if it still gravitates, it is around the hole of the real, around the hole of the imaginary). One does not see an alternative cosmos, a cosmic folklore or exoticism, or a galactic prowess there - one is from the start in a total simulation, without origin, immanent, without a past, without a future, a diffusion of all coordinates (mental, temporal, spatial, signaletic) - it is not about a parallel universe, a double universe, or even a possible universe - neither possible, impossible, neither real nor unreal: hyperreal - it is a universe of simulation, which is something else altogether. And not because Dick speaks specifically of simulacra - science fiction has always done so, but it played on the double, on doubling or redoubling, either artificial or imaginary, whereas here the double has disappeared, there is no longer a double, one is always already in the other world, which is no longer an other, without a mirror, a projection, or a Utopia that can reflect it - simulation is insuperable, unsurpassable, dull and flat, without exteriority - we will no longer even pass through to "the other side of mirror," that was still the golden age of transcendence.

Perhaps a still more convincing example would be that of Ballard and of his evolution from the first very "phantasmagoric" short stories, poetic, dreamlike, disorienting, up to Crash, which is without a doubt (more than IGH or Concrete Island) the current model of this science fiction that is no longer one. Crash is our world, nothing in it is "invented": everything in it is hyper-functional, both the circulation and the accident, technique and death, sex and photographic lens, everything in it is like a giant, synchronous, simulated machine: that is to say the acceleration of our own models, of all models that surround us, blended and hyperoperational in the void. This is what distinguishes Crash from almost all science fiction, which mostly still revolves around the old (mechanical and mechanistic) couple function/ dysfunction, which it projects into the future along the same lines of force and the same finalities that are those of the "normal" universe. Fiction in that universe might surpass reality (or the opposite: that is more subtle) but it still plays by the same rules. In Crash, there is neither fiction nor reality anymore - hyper- reality abolishes both. It is there that our contemporary science fiction, if there is one, exists. "Jack Barron or Eternity", some passages from "Everyone to Zanzibar".

In fact, science fiction in this sense is no longer anywhere, and it is everywhere, in the circulation of models, here and now, in the very principle of the surrounding simulation. It can emerge in its crude state, from the inertia itself of the operational world. What writer of science fiction would have "imagined" (but precisely it can no longer be "imagined") this "reality" of East German factories - simulacra, factories that reemploy all the unemployed to fill all the roles and all the posts of the traditional production process but that don't produce anything, whose activity is consumed in a game of orders, of competition, of writing, of bookkeeping, between one factory and another, inside a vast network? All material production is redoubled in the void (one of these simulacra factories even "really" failed, putting its own unemployed out of work a second time). That is simulation: not that the factories are fake, but precisely that they are real, hyperreal, and that because of this they return all "real" production, that of "serious" factories, to the same hyperreality. What is fascinating here is not the opposition between real factories and fake factories, but on the contrary the lack of distinction between the two, the fact that all the rest of production has no greater referent or deeper finality than this "simulacra!" business. It is this hyperreal indifference that constitutes the real "science-fictional" quality of this episode. And one can see that it is not necessary to invent it: it is there, emerging from a world without secrets, without depth.

Without a doubt, the most difficult thing today, in the complex universe of science fiction, is to unravel what still complies (and a large part still does) with the imaginary of the second order, of the productive/projective order, and what already comes from this vagueness of the imaginary, of this uncertainty proper to the third order of simulation. Thus one can clearly mark the difference between the mechanical robot machines, characteristic of the second order, and the cybernetic machines, computers, etc., that, in their governing principle, depend on the third order. But one order can certainly contaminate another, and the computer can certainly function as a mechanical supermachine, a superrobot, a superpower machine, exposing the productive genie of the simulacra of the second order: the computer does not come into play as a process of simulation, and it still bears witness to the reflexes of a finalized universe (including ambivalence and revolt, like the computer from 2001 or Shalmanezer in Everyone to Zanzibar).

Between the operatic (the theatrical status of theatrical and fantastical machinery, the "grand opera" of technique) that corresponds to the first order, the operative (the industrial, productive status, productive of power and energy) that corresponds to the second order, and the operational (the cybernetic, aleatory, uncertain status of "metatechnique") that corresponds to the third order, all interference can still be produced today at the level of science fiction. But only the last order can still truly interest us.

#### Art imitates life, and life imitates art. But what happens when this cycle has repeated for so long, that you can no longer tell the difference between the two?

#### Welcome to hyperreality, where the symbolic no longer stands in for the Real as a copy, but instead stands on its own as a copy of a copy. The market operates through the exchange of signs and symbols, overwhelming the subject in the digital matrix of data, making truth inaccessible and information dissuasive. Thus, the RoTJ is to deconstruct the hyperreal.

Shapiro 17 [Alan, transdisciplinary thinker who studied science-technology at MIT and philosophy-history-literature at Cornell University. He is the author of “Star Trek: Technologies of Disappearance” (Berlin: AVINUS Verlag, 2004), a leading work in science fiction studies and on the conception of futuristic technoscience. He is the editor and translator of “The Technological Herbarium” by Gianna Maria Gatti (Berlin: AVINUS Verlag, 2010), a major study of art and technology. His book “Software of the Future: The Model Precedes the Real” was published by the Walther König Verlag art books publisher of Cologne, Germany in 2014. At his website “Alan N. Shapiro, Technologist and Futurist” (www.alan-shapiro.com), he has already published more than 250 articles (by himself and others). He is recognised as one of the leading experts on the philosophy and cultural theory of Jean Baudrillard. He is currently working on a book of essays for an Italian book publisher. 01/05/2017. “Baudrillard and Trump: Simulation and Object-Orientation, Not True and False,” <http://www.alan-shapiro.com/baudrillard-and-trump-simulation-and-object-orientation-not-true-and-false-by-alan-n-shapiro/>] / lm

In other words, Trump is the candidate of the era of simulation. Invoking “the truth” against him does not work as a strategy. Trump is already more advanced than the discourse of truth. We are in a hyper-reality where there is no more truth and no more falsehood. Carl “The Truth” Williams, a former heavyweight boxing champion of the world, passed away in April 2013.

Alan Cholodenko comments: If hyper-reality was born for Baudrillard during or just after the Second World War, then there have already been several simulation-Presidents: JFK the first televisual President, Reagan the Hollywood actor and first TV show host (of the General Electric Theatre)-President. Trump takes his place in this lineage. He is the second TV show host (of The Apprentice)-President, the first live show, reality TV show CEO host become live show, reality TV show CEO host-President of the live show, reality TV show America, Inc.)

The mistake of the multitudes of journalists and editorialists like the Washington Post’s Greg Sargent is to not understand that the system of “truth and lies” is not some eternal, ahistorical or “scientifically objective” reality. It is an historically constructed cultural discourse or arrangement tied to an epoch which is finite in time. As Foucault might say, the concern with “true” and “false” is an epistème – an epistemological a priori, an expression of a specific power-knowledge constellation within an era – whose time has come and gone. The insistent belief in “truth and lies” is also embedded in the Plato-initiated “metaphysics” of the “human subject,” the subject-centered worldview, the sovereign (democratic or scientific) subject who “knows” and can therefore judge and determine when “knowledge” or a “fact” has been betrayed.

In the new epistemological system beyond “truth and lies” to which Trump is finely attuned, of which he is the master, and which liberals do not get, the object itself is the hot thing. The spotlight is on objects (conceptual not physical), and they are a relationship, an association which knows nothing of whether they are real or fake. They transcend and straddle true and false. “Things have found a way of avoiding a dialectics of meaning that was beginning to bore them: by proliferating indefinitely, increasing their potential, outbidding themselves in an ascension to the limit, an obscenity that henceforth becomes their immanent finality and senseless reason.” (Baudrillard, Fatal Strategies; p.7) Trump will change what he says on any given topic from day to day, or on any given Sunday. The liberal media will “prove him wrong” with evidence, but this demonstration will have an effect exactly the opposite than that intended upon and for the “silent majority” of half of Americans for whom they are the liars. When did this happen (when was the “Canetti point”)? Impossible to say. To know the point of origin of that would be to overstate the claims of knowledge, to violate the methodological recursivity of our awareness of being lost within the culture of simulation (as Baudrillard has taught us in his fascinating lengthy discussions of the “Canetti point,” and as Gerry Coulter has taught us, for example, in his essay on America).

When Trump said that thousands of Muslims were celebrating on rooftops in Jersey City, New Jersey on 9/11, he was right. 100% right, as he later tweeted. Within the epistemology (theory of knowledge) of the humanist-democratic subject and of truth, the alleged rooftop event of course “did not take place.” Yet in the hyper-modernist epistemology, the rhetorical and emotional power of the words invoked and the mental images evoked by Trump (the advent of hyper-imagination) carry the weight and dynamic force of the image-immersed beyond-chimerical “object” of those evil Muslim celebrators. Probably Trump saw on TV in September 2001 some cynical celebrations in the Palestinian territories. The clandestine wormhole connection between physically remote points in space is plausibly extant. In the culture of virtual images, it is perfectly OK to transpose the bin Laden-sympathetic revelers from one geographical location to another, the hyper-space of Trump’s creative memory mingled with the hyper-dimensional expanding televisual space on the interior of the flatscreen.

Fantasy is possible in a world that is still real. A fantasy could be said to be not true, some sort of illusion (in the non-Baudrillardian meaning of this word) or deception. But when images are everywhere, and they are universally exchangeable with each other, the made-up mental images become hyper-real. Which now (literally) means (hyper-means) more real than real. Meaning becomes hyper-meaning.

Would not the ubiquity of video documentation and recording devices of every kind increase the availability of truth? Whipping the cam around, looking amazing from every angle? No, the effect is just the opposite. When documentation and recording are everywhere, then they are nowhere. They cease to exist in any meaningful sense. They serve no purpose whatsoever anymore. They are pure technology fetish in the bad sense, decoupled through their excess from what they were supposed to enhance or invent. As a hybrid radical-leftist-and-mainstreamer, I do believe that there is a good side to surveillance, a deterrence of crime. But if surveillance is everywhere, then this good side no longer functions. This is the same paradoxical logic that is operative for all virtual and digital media technologies. Yes, all of these wonderful new things are available to us, but we omitted the step of thinking carefully about the appropriate measure of their application. We forgot to humanly judge this. Hybrid posthumanist and humanist. We never took seriously the great thought of Albert Camus, that in almost every area, we need to have a sense of limits (as Dominick LaCapra pointed out). Academic referentiality – which Baudrillard was opposed to – is like this too. If you overdo it, become obsessed with footnotes, then you enter into the twilight zone of hyper-referentiality and then the whole business does not function anymore. You do it because you have to do it and the original purpose is lost.

The “proof” (ha ha!) is now upon us that Baudrillard was right all along. We are now fully in the era of simulation and telemorphosis, of the New Truth of the omnipresent image (both picture-image and word-image – the multi-media of the screen having transformed written words from texts into images). The New Truth is not a lie – that would be too easy and the claim is retrograde. The New Truth institutes its own hyper-reality, which is at present our only reality. The only way to contest simulation and the New Truth would be a strategy or perspective of “taking the side of objects” (see, for example, my most recent IJBS essay, for an elaboration of this). We would have to get to know the codes which underlie and instantiate simulation and reverse them. Reversibility of the code comes from “objects” within the code which want more objecthood. Until we can start to do that, to paraphrase David Cronenberg’s Videodrome: LONG LIVE THE NEW TRUTH!

#### In the final stages of postmodern capitalism Space Billionaires such as Bezos are looking up towards the stars. Out of the ashes of the old world, NewSpace emerges – the next object of appropriation, the next colonial project. The final frontier.

#### NewSpace is a simulacrum of the emerging cosmic hyperreality that reproduces colonialism. The logics of semiotic space capitalism entrench us in the simulation.

Genovese 17 [T. R. (2017). [The new right stuff: Social imaginaries of outer space and the capitalist accumulation of the cosmos (Doctoral dissertation, Northern Arizona University)]

The discussion of human futures is a difficult topic with which to engage. Within the Western conception of linear time, the future is temporally forward and veiled within statically three-dimensional existence. Therefore, in this chapter, I will turn to some postmodern theorists and philosophers in order to engage with how to situate the role of science fiction, science, and NewSpace within human futures in outer space. This section is also a dreamscape of ideas that may not be fully fleshed out, but are here to generate discussion, hence the heavy reliance on phenomenology. The ideas of hyperreality were first generated by Jean Baudrillard ([1981] 1994) who defined the concept as “the generation by models of a real without origin or reality” (1). Hyperreality is a simulation; an intense blending of “reality” and representation so that there is no longer any clear line wherein one ends and the other begins—and in fact, if one accepts the theory of hyperreality, there is no reality anymore, only simulations of reality, which are unmeasurable because reality and hyperreality are indistinguishable—there’s nothing to measure against the two since reality no longer exists as a separate entity (Baudrillard [1981] 1994). Umberto Eco (1986) expands on Baudrillard’s ideas to suggest that hyperreality is created through a desire for a certain “reality,” and in order to realize that desire, one must fabricate a reality that can be consumed as real. Like Baudrillard before him, Eco (1986) uses Disneyland as an example of hyperreality that manufactures desires that can only be realized within the hyperreality it has created, leading one to wish for the hyperreal rather than nature/the “real.” Eco (1986) illustrates this by saying In this sense, Disneyland not only produces illusion, but—in confessing it— stimulates the desire for it: A real crocodile can be found in the zoo, and as a rule it is dozing or hiding, but Disneyland tells us that faked nature corresponds much more to our daydream demands. When, in the space of twenty-four hours, you go (as I did deliberately) from the fake . . . wild river of Adventureland to a trip on the Mississippi, where the captain of the paddle-wheel steamer says it is possible to see alligators on the banks of the river, and then you don’t see any, you risk feeling homesick for Disneyland, where the wild animals don’t have to be coaxed. Disneyland tells us that technology can give us more reality than nature can. (44) Baudrillard ([1981] 1994) further discusses what happens when science emerges out of science fiction and what happens when the difference between the two is indistinguishable—in other words, the real recedes and all that is left are simulations of the hyperreal and “science fiction in this sense is no longer anywhere, and it is everywhere” (126). In this age of accelerated technoscientific development—as I have argued in previous chapters—science and science fiction are melded into a Baudrillardian simulation where artificial intelligence, autonomous rocket boosters that land on autonomous drone ships, and a constant human presence in outer space is the sedimentation of hyperreality where, as Milburn (2003) has said, “the model becomes indistinguishable from the real, supplants the real, precedes the real, and finally is taken as more real than the real” (267). When the hyperreal meets the hyperobject of the cosmos, a term coined by Timothy Morton (2013) to describe a thing that is “massively distributed in time and space relative to humans” (1), interesting (and confusing) discussions can arise. For the purpose of this thesis, I would like to argue that the nebulous entity of NewSpace— which is multifaceted in that it is philosophical, ideological, and physical in itself—has emerged as a simulacrum from the hyperreality of contemporary space developments. Baudrillard ([1981] 1994) describes a simulacrum as not exactly a copy or imitation of the real, but a thing that becomes a truth in itself—as it has emerged from hyperreality, which is its own truth. I believe Gilles Deleuze (1990) defined simulacra (plural of simulacrum) best when he said: “The copy is an image endowed with resemblance, the simulacrum is an image without resemblance” (257). The overarching colonial romanticism—of a rustic pioneer traveling to a distant land—that is utilized so often by NewSpace plays into similar romanticisms employed by NASA, but instead of the objectives remaining the same, the NewSpace agenda is only concerned with profits. This is why I argue that NewSpace is acting as Saturn devouring his son, simultaneously destroying and emerging as a simulacrum from the 32 hyperreality of cosmic imaginaries. In essence, NewSpace is a copy without an original —feeding off of imaginaries that are simulations and creations of their own devising. The public, in turn, is buying into this vision as if it is the only reality possible. To utilize Eco’s (1986) example above, NewSpace is Adventureland in Disneyland and NASA and other governmental agencies of “OldSpace” are the paddle-boat on the Mississippi. No one wants to wait ten years for a scientific mission when Elon Musk can bring them to Mars in half that time. However, this is not a defense of the “real.” I am a proponent of “utopic thinking,” which in itself is hinged on a dislocation from reality in order to imagine a better world. The tyranny of the so-called real—a term that is often defined by governments and corporations in order to sustain the status-quo (Collins 2008)—is precisely how NewSpace is able to invade the imaginaries of the future so easily. If one is able to dismiss a social justice minded futurologist or science fiction writer with a “Get real!” or “That could never work in reality” then it shuts down entire social theories that resist the established ideology. David Harvey (2000) discusses this in relation to alternatives to capitalism, which fits quite well when discussing the resistance to NewSpace: If the mess seems impossible to change then it is simply because there is indeed “no alternative.” It is the supreme rationality of the market versus the silly irrationality of anything else. And all those institutions that might have helped define some alternatives have other been suppressed or—with some notable exceptions, such as the church—brow-beaten into submission. (154) In the “rationality of the market” all that remains are “degenerate utopias” (Collins 2008; Marin 1993), places like the previously mentioned Disneyland, which presents itself as a utopic place, but is actually shrouding the commercial “reality”—“the Main Street façades are presented to us as toy houses and invite us to enter them, but their interior is always a disguised supermarket, where you buy obsessively, believing that you are still playing” (Eco 1986, 43). According to Eco (1986), Disneyland’s hyperreality begins when one submits to the complete “fakeness” of the simulation in order to bask in the desirous visions of the utopia that it presents. Thus it becomes completely real. I saw this attempt at creating a hyperreality at Spaceport America, with the science fiction inspired door frames and the tour guides dressed in flight suits. Elon Musk presents it to us when he utilizes a four-stage image of Mars, starting with the red planet and ending with a terraformed, Eden-like utopia of oceans and clouds and green forests; a new Earth that beckons to colonizers with new possibilities and untapped markets. This photo is a Debordian “spectacle” that establishes and mediates a social relationship with the public through images (Debord 1994). Photos like the one above are preambles to the spectacle of 1,000 ships departing to Mars every 26 months. Even if that does not become a reality, Musk and other NewSpacers have already begun to creep into the social imaginary of space and supplant their own ideologies as truth into the cosmic hyperreality, which may relate to why my survey results contained foundationally contradictory answers. These photos are part of a larger trend within the space science hyperreality. Messeri (2016) ethnographically uncovers how Martian mapmakers are creating incredibly detailed maps that are created without direct reference to the landscape, since we have never set foot there. Therefore, “the primary goal of today’s [Martian] maps is . . . to establish Mars as inviting to human explorers,” much like the images of a terraformed Mars advertised by SpaceX (Messeri 2016, 74). Like the Jorge Luis Borges short story Del rigor en la ciencia, the map precedes the territory, and the obsession of creating a perfect map makes that map the new reality (as a simulation), while the empire it’s supposed to represent—or in this case, the planet Mars—crumbles away, ceding to the hyperreality of its representation. NASA—in its neoliberal present—is enveloped within this hyperreality as well, perhaps as it recognizes the simulation that NewSpace exists within, and how powerful it can be in the sphere of public relations. However, their production of nostalgia inducing travel posters for places humans have never been are coded to invite—and exclude—certain types of futures (Messeri 2016). Namely, these futures are white, colonial, and evoke vintage 1950s–1960s travel advertisements, a period of U.S. history ripe with inequality and oppression. The political cannot be divorced from aesthetic, no matter how much opponents may try to argue against this point; I’m sorry but Foucault 33 was right. And these theoretical frameworks are the reason why I have argued for social science to take science fiction seriously, especially science fiction that does not espouse the tropes of Spencerian social theory. Science fiction writers who identify as people of color, Indigenous, women, and LGBTQI+—with enough critical mass—can create a simulation and hyperreality with their own work that forces change at the root. The power of words, of worldmaking, of placemaking that is so inherent in science fiction writing are the catalysts for social change, especially in Earth-bound space science. Furthermore, social scientists should not only embrace the political world that science fiction inhabits, but we should be working together as a collective to actively disseminate the social science that good science fiction writers are already conducting. CHAPTER 11: WHAT IS TO BE DONE? This chapter title should really be the title of the entire thesis since it is the question that I have been muttering since the beginning of this research project—except that the title has already been skillfully used by the likes of Nikolai Chernyshevsky, Leo Tolstoy, and Vladimir Lenin. I do not think that my name has quite the prestige to fit in with the company of those gentlemen. So instead, I have decided to make it the name of my final chapter in which I try to discuss how we move forward from the rather bleak present I have divulged in these pages; but I will also throw in some radical tangents in order to keep with the titular theme. As I have argued extensively in this thesis, American imaginaries of the future are dominated by right-libertarianism. NewSpace venture capitalists like Elon Musk and Peter Thiel have latched on to futurist thinking and have the power and capital to begin enacting some of their visions. This is no surprise; engagements with the future emerged as a distinct field of social inquiry during the Cold War when neoliberal capitalism was battling state Communism for supremacy—and the political context has changed very little (Tolon 2012). However, NewSpacers depend on a climate of stress and conflict in order to justify their drastic socio-political-economic actions. For example, Peter Thiel—founder of PayPal, Facebook board member, and heavy investor in SpaceX—has said: “Because there are no truly free places left in our world, I suspect that the mode for escape must involve some sort of new and hitherto untried process that leads us to some undiscovered country; and for this reason I have focused my efforts on new technologies that may create a new space for freedom” (Gittlitz 2016, para. 8). To Thiel, and many of his right-libertarian venture capitalist revolutionary vanguard, these places are threefold: artificial island micro-nations, the Internet and cyber-communities, and outer space (Gittlitz 2016). Thiel has invested in all three of these areas and was recently placed on Trump’s transition team. Soon after Thiel’s appointment, Trump decided to divert NASA funds from climate change studies to deep space exploration. This has a lot to do with the fostering of another American frontier. As of the time of my writing this thesis, Trump has announced plans to build a wall along the United States / Mexico border. These Earthly enclosures are direct manifestations of the cosmic enclosures championed by NewSpace—and often these two proclamations are advocated by the same people in the same positions of power. Is the cosmic frontier doomed to represent the same tragedies and oppression as our Earth frontiers? Not necessarily. And here, I will begin to take a long needed—albeit brief—shift toward optimism. Today, our borderlands are places of violence, where states exert their influence in order to destroy or capitulate the Other—either figuratively or literally. However, this was not always the case. As Durrenberger (2016) has said: [In the past] the borderlands were less foreboding, places the regularizing reach of states had bypassed because they were not worth the effort. To them went those castoffs the states threw off in their great drives to define and unify: prophets, anthropologists, missionaries, and more recently revolutionaries and terrorists. Many who have lived in those areas return with stories of human potential, encouraged by what they have seen of the power of our species’ humanity. (para. 5–6) Could outer space provide a space to unleash the human potential for compassion? With the absolute vastness of the cosmos, it seems impossible—past a certain technoscientific level that I believe we are rapidly approaching—for dominant power systems like states or corporations to garner control over such enormous distances. A certain degree of anarchy—if not full fledged social anarchism or anarchistcommunism—seems to be, in my mind, an inevitability. As I have argued in previous publications, direct democracy within communities outside of the Earth’s influence seems to be the most equitable and efficient way to socially organize in a hostile environment (Genovese 2016d). Haqq-Misra (2015) proposes “liberated settlements” on Mars that reject Earthly authority and operate within their own self-determination. Philosophers, social scientists, and science fiction writers all seem to be contributing socio-political theory to this new “Space Age of Enlightenment.” With the continued generation of liberatory work, we may have a chance at chipping away at NewSpace’s hegemonic lineage of the frontier that I introduced in Chapter 6 and establish a lineage of liberation instead. In fact, I do not think that we have a choice any longer. As of this writing, as I sit behind the abrasive glow of my computer screen at 11:49pm on February 1, 2017, the United States and the world seem to be at a dangerous tipping point. The fascist creep has turned into a fascist sprint, and those that wish to claim neutrality or inaction are implicitly siding with the dominant powers that wish for nothing less than the destruction of the environment for capital gains, a stripping of what little civil protections are left, a mass defunding of all educational systems, a homogenizing of this country utilizing Nazi-era racial order schemes, a villainization of anyone who is not a right, white, Christian man, continued colonial expansion into sovereign Indigenous land while repeatedly breaking treaties, rampant hetero-patriarchy, and the list continues ad nauseam. It is our duty as anthropologists, as social scientists, as science fiction writers, as space enthusiasts, as educators, as human beings to make sure that while we are on Earth, we will fight for the weak, the marginalized, and the disenfranchised by any means necessary and with respect, ears open to the requests of those people who have suffered for years under the boots of oppression, and for whom we may have very little frame of reference in regard to their suffering under structural violence. And as we begin to journey and live away from the only place we have ever called home, we must leave into the cosmos for the right reasons—not for capital, for power, or for narcissistic perceptions of glory, but in the spirit of equity, mutual aid, love, diversity, as well as playful curiosity, and we must do it with soul, with heart, and with joy.

#### The commercial space race furthers the project of securitization of the world through the deployment of satellites. As Space X seeks thousands of satellites into orbit in pursuit of efficiency and internet connectivity, the question arises; do we govern the satellites or do the satellites govern us?

Baudrillard 83 [Jean Baudrillard, Baudrillard was a French sociologist, philosopher and cultural theorist. He is best known for his analyses of media, contemporary culture, and technological communication, as well as his formulation of concepts such as simulation and hyperreality, *Simulations* translated by Paul Foss, Paul Patton and Philip Beitchman 1983]

The "space race" played exactly the same role as the nuclear race. This is why it was so easily able to take over from it in the '60's (Kennedy Khrushchev), or to develop concurrently in a mode of "peaceful coexistence." For what is the ultimate function of the space race, of lunar conquest, of satellite launchings, i[s]f not the institution of a model of universal gravitation, of satellisation, whose perfect embryo is the lunar module: a programmed microcosm, where nothing can be left to chance? Trajectory, energy, computation, physiology, psychology, the environment - nothing can be left to contingency, this is the total universe of the norm - the Law no longer exists, it is the operational immanence of every detail which is law. A universe purged of every threat to the senses, in a state of asepsis and weightlessness - it is this very perfection which is fascinating. For the exaltation of the masses was not in response to the lunar landing or the voyage of man in space (this is rather the fulfillment of an earlier dream) - no, we are dumbfounded by the perfection of their planning and technical manipulation, by the immanent wonder of programmed development. Fascinated by the maximisation of norms and by the mastery of probability. Unbalanced by the model, as we are by death, but without fear or impulse. For if the law, with its aura of transgression, if order, with its aura of violence, still taps a perverse imaginary, then the norm fixes, hypnotises, dumbfounds, causing every imaginary to involve. We no longer fantasise about every minutia of a program. Its observance alone unbalances. The vertigo of a flawless world.

The same model of planned infallibility, of maximal security and deterrence, now governs the spread of the social. That is the true nuclear fallout: the meticulous operation of technology serves as a model for the meticulous operation of the social. Here, too, nothing will be left to chance; moreover, this is the essence of socialisation, which has been going on for some centuries but which has now entered into its accelerated phase, towards a limit people imagined would be explosive (revolution), but which currently results in an inverse, irreversible, implosive process: a generalised deterrence of every chance, of every accident, of every transversality, of every finality, of every contradiction, rupture or complexity in a sociality illuminated by the norm and doomed to the transparency of detail radiated by datacollecting mechanisms. In fact, the spatial and nuclear models do not even have their own ends: neither has lunar exploration, nor military and strategic superiority. Their truth lies in their being models of simulation, vector models of a system of planetary control (where even the super-powers of this scenario are not free-the whole world is satellised). 8

Reject the evidence: with satellisation, the one who is satellised is not whom you might think. By the orbital inscription of a space object, the planet earth becomes a satellite, the terrestrial principle of reality becomes excentric, hyperreal and insignificant. By the orbital establishment of a system of control like peaceful coexistence, all terrestrial microsystems are satellised and lose their autonomy. All energy, all events are absorbed by this excentric gravitation, everything condenses and implodes on the micro-model of control alone (the orbital satellite), as conversely, in the other, biological dimension everything converges and implodes on the molecular micromodel of the genetic code. Between the two, caught between the nuclear and the genetic, in the simultaneous assumption of the two fundamental codes of deterrence, every principle of meaning is absorbed, every deployment of the real is impossible.

The simultaneity of two events in July 1975 illustrates this in a striking way: the linkup in space of the two American and Soviet super-satellites, apotheosis of peaceful existence - and the suppression by the Chinese of character writing and conversion to the Roman alphabet. This latter signifies the "orbital" establishment of an abstract and model system of signs, into whose orbit will be reabsorbed all those once remarkable and singular forms of style and writing. The satellisation of their tongue: this is the way the Chinese enter the system of peaceful coexistence, which is inscribed in their sky at the very same time by the docking of the two satellites. The orbital flight of the Big Two, the neutralisation and homogenisation of everybody else on earth.

Yet, despite this deterrence by the orbital authority - the nuclear code or molecular-events continue at ground level, mishaps are increasingly more numerous, despite the global process of contiguity and simultaneity of data. But, subtly, these events no longer make any sense; they are nothing more than a duplex effect of simulation at the summit. The best example must be the Vietnam war, since it was at the crossroads of a maximal historical or "revolutionary" stake and the installation of this deterrent authority. What sense did that war make, if not that its unfolding sealed the end of history in the culminating and decisive event of our age?

Why did such a difficult, long and arduous war vanish overnight as if by magic?

Why didn't the American defeat (the greatest reversal in its history) have any internal repercussions? If it had truly signified a setback in the planetary strategy of the USA, it should have necessarily disturbed the internal balance of the American political system. But no such thing happened.

Hence something else took place. Ultimately this war was only a crucial episode in a peaceful coexistence. It marked the advent of China to peaceful coexistence. The long sought-after securing and concretising of China's non-intervention, China's apprenticeship in a global modus vivendi, the passing from a strategy of world revolution to one of a sharing of forces and empires, the transition from a radical alternative to political alternation in a now almost settled system (normalisation of PekingWashington relations): all this was the stake of the Vietnam war, and in that sense, the USA pulled out of Vietnam but they won the war.

And the war "spontaneously" came to an end when the objective had been attained. This is why it was de-escalated, demobilised so easily.

The effects of this same remolding are legible in the field. The war lasted as long as there remained unliquidated elements irreducible to a healthy politics and a discipline of power, even a communist one. When finally the war passed from the resistance to the hands of regular Northern troops, it could stop: it had attained its objective. Thus the stake was a political relay. When the Vietnamese proved they were no longer bearers of an unpredictable subversion, it could be handed over to them. That this was communist order wasn't fundamentally serious: it had proved itself, it could be trusted. They are even more effective than capitalists in liquidating "primitive" precapitalist and antiquated structures.

Same scenario as in the Algerian war.

The other aspect of this war and of all wars since: behind the armed violence, the murderous antagonism between adversaries - which seems a matter of life and death, and which is played as such (otherwise you could never send out people to get smashed up in this kind of trouble), behind this simulacrum of a struggle to death and of ruthless global stakes, the two adversaries are fundamentally as one against that other, unnamed, never mentioned thing, whose objective outcome in war, with equal complicity between the two adversaries, is total liquidation. It is tribal, communal, pre-capitalist structures, every form of exchange, language and symbolic organisation which must be abolished. Their murder is the object of war - and in its immense spectacular contrivance of death, war is only the medium of this process of terrorist rationalisation by the social - the murder through which sociality can be founded, no matter what allegiance, communist or capitalist. The total complicity or division of labour between two adversaries (who can even make huge sacrifices to reach that) for the very purpose of remolding and domesticating social relations.

"The North Vietnamese were advised to countenance a scenario of the liquidation of the American presence through which, of course, honour must be preserved."

The scenario: the extremely heavy bombardment of Hanoi. The intolerable nature of this bombing should not conceal the fact that it was only a simulacrum to allow the Vietnamese to seem to countenance a compromise and Nixon to make the Americans swallow the retreat of their forces. The game was already won, nothing was objectively at stake but the credibility of the final montage.

Moralists about war, champions of war's exalted values should not be greatly upset: a war is not any the less heinous for being a mere simulacrum - the flesh suffers just the same, and the dead ex-combatants count as much there as in other wars. That objective is always amply accomplished, like that of the partitioning of territories and of disciplinary sociality. What no longer exists is the adversity of adversaries, the reality of antagonistic causes, the ideological seriousness of war - also the reality of defeat or victory, war being a process whose triumph lies quite beyond these appearances.

In any case, the pacification (or deterrence) dominating us today is beyond war and peace, the simultaneous equivalence of peace and war. "War is peace," said Orwell. Here, also, the two differential poles implode into each other, or recycle one another - a simultaneity of contradictions that is both the parody and the end of all dialectic. Thus it is possible to miss the truth of a war: namely, that it was well over before reaching a conclusion, that at its very core, war was brought to an end, and that perhaps it never ever began. Many other such events (the oil crisis, etc,) never began, never existed, except that artificial mishaps - abstracts, ersatzes of troubles, catastrophes and crises intended to maintain a historical and psychological investment under hypnosis. All media and the official news service only exist to maintain the illusion of actuality - of the reality of the stakes, of the objectivity of the facts. All events are to be read in reverse, where one perceives (as with the communists "in power" in Italy, the posthumous, "nostalgic" rediscovery of gulags and Soviet dissidents like the almost contemporary rediscovery, by a moribund ethnology, of the lost "difference" of Savages) that all these things arrive too late, with an overdue history, a lagging spiral, that they have exhausted their meaning long in advance and only survive on an artificial effervescence of signs, that all these events follow on illogically from one another, with a total equanimity towards the greatest inconsistencies, with a profound indifference to their consequences (but this is because there are none any more: they burn out in their spectacular promotion) - thus the whole newsreel of "the present" gives the sinister impression of kitsch, retro and porno all at the same timedoubtless everyone knows this, and nobody really accepts it. The reality of simulation is unendurable - more cruel than Artaud's Theatre of Cruelty, which was still an attempt at a dramaturgy of life, the last flickering of an ideal of the body, blood and violence in a system already sweeping towards a reabsorption of all the stakes without a trace of blood. For us the trick has been played. All dramaturgy, and even all real writing of cruelty has disappeared. Simulation is master, and nostalgia, the phantasmal parodic rehabilitation of all lost referentials, alone remain. Everything still unfolds before us, in the cold light of deterrence (including Artaud, who is entitled like all the rest to his revival, to a second existence as the referential of cruelty).

#### Thus, I affirm that the appropriation of Star Trek by Jeff Bezos is unjust – Star Trek is the ultimate metaphor for the hyperreal, as each reboot represented a copy of a copy, but the launch of William Shatner represents the final break where Reality and Sci-Fi collide – my reading of Star Trek produces a glitch in the matrix of hyperreality.

Shapiro 10 [Alan N. Shapiro (born 23 April 1956 in [Brooklyn](https://en.wikipedia.org/wiki/Brooklyn), [New York](https://en.wikipedia.org/wiki/New_York_(state))) is an [American](https://en.wikipedia.org/wiki/United_States) [science fiction](https://en.wikipedia.org/wiki/Science_fiction) and [media theorist](https://en.wikipedia.org/wiki/Media_theory). He is a lecturer and essayist in the fields of [science fiction studies](https://en.wikipedia.org/wiki/Science_fiction_studies), [media theory](https://en.wikipedia.org/wiki/Media_theory), [posthumanism](https://en.wikipedia.org/wiki/Posthumanism), [French philosophy](https://en.wikipedia.org/wiki/French_philosophy), [creative coding](https://en.wikipedia.org/wiki/Creative_coding), technological art, [sociology of culture](https://en.wikipedia.org/wiki/Sociology_of_culture), social choreography, software theory, [robotics](https://en.wikipedia.org/wiki/Robotics), [artificial](https://en.wikipedia.org/wiki/Artificial_intelligence), and futuristic and transdisciplinary design, Hypermodernism, Hyperreality, Posthumanism, “[Home](http://www.alan-shapiro.com/) [Datenschutz](http://www.alan-shapiro.com/datenschutz/) [About](http://www.alan-shapiro.com/about/) [Impressum](http://www.alan-shapiro.com/impressum/) [Baudrillard and Trek-nology (Or Everything I Know I Learned From Watching Star Trek and Reading Jean Baudrillard), by Alan N. Shapiro](http://www.alan-shapiro.com/baudrillard-and-trek-nology-or-everything-i-know-i-learned-from-watching-star-trek-and-reading-jean-baudrillard/)” October 10th, 2010, [http://www.alan-shapiro.com/baudrillard-and-trek-nology-or-everything-i-know-i-learned-from-watching-star-trek-and-reading-jean-baudrillard/]/](http://www.alan-shapiro.com/baudrillard-and-trek-nology-or-everything-i-know-i-learned-from-watching-star-trek-and-reading-jean-baudrillard/%5d/) lm

We should be greatly mistaken were we to view science fiction as an escape from everyday reality: on the contrary, it is an extrapolation from the irrational tendencies of that reality through the free exercise of narrative invention.2

I. Introduction

It was my childhood in New York in the late 1960s. As a good Jew, I was supposed to acquire a Jewish education. But instead I loved Star Trek. Everything I know I learned from watching Star Trek. Among other things, I learned to love science. This made me a good American. So I went to the elite technology university. But I didn’t like the complicity of science with the Vietnam War that existed there. So I dropped out. I was radicalized. I then went to the elite humanities university. But the American radical thinkers were all Marxists. Then I read Jean Baudrillard’s book The Mirror of Production. I grasped that Marx was not radical enough.3 Everything I know I learned from reading Baudrillard. Later I tried to practice a compromise between technology and the humanities known as sociology. Then I read Baudrillard’s book In the Shadow of the Silent Majorities. There he says that sociologists, just like marketing executives and politicians, want to socialize the masses. But the masses resist by going silent and “playing dead.”4 They disappear into over-consumption and fandom.

The disappearing act of today is techno-culture, or more precisely, Star Trek. Star Trek is the most prevalent “icon” of techno-culture. Physicists, engineers, computer programmers, graphic artists, and media practitioners are its adamant fans. But the Star Trek industry neutralizes Star Trek‘s original creativity. It programs an automatic system of endless simulated differences, to ensure that viewers will never be able to see any true other. That is why I read Star Trek against Star Trek. Through doubling and decentering, I parodistically map Baudrillard’s system of thought onto Star Trek.5 On two levels, there is an uncanny resemblance between Baudrillard and Star Trek. First, there is an exact correspondence between Baudrillard’s keywords and the principles of “The Original Series” Star Trek episodes: radical uncertainty, recognition of otherness, accident and surprise of technology, symbolic exchange, the dual relationship. Second, there are the pataphysical science fiction technologies: the transporter, warp speed, time travel, the Holodeck. These Trek-nologies are based on quantum physics uncertainty and chaos theory complexity. By applying pressure at both ends – Star Trek as literature, Star Trek as wily technologies – there is a double-strategy of adding a little “critical theory” real and speaking only in this “fatal theory” futuristic language. Now please follow me to explore strange new worlds in outer space. Let us consider a few Star Trek episodes and technologies up close, starting with virtual reality.

II. Treknology

The Holodeck is the most famous virtual reality system, created in the 1990s for the series Star Trek: The Next Generation. But this post-television technology merely brings to fruition total visual information and leads to the end of aesthetic illusion. By contrast, the invention of virtual reality in the original Star Trek episodes of the 1960s artistically embodies Baudrillard’s principles of radical uncertainty, the vital illusion, and the surprise of technology.

In the episode “Shore Leave,” Captain Kirk and Dr. McCoy enter the virtual reality system of the Amusement Park Planet by chance and without knowing what it is. They [and] encounter mysterious and enchanting physical appearances from their daydreams which play on the tension between real and imaginary. At the beginning of the episode, McCoy leads an away team scouting a planet with no apparent life-forms. He is alone for just a moment when a four-foot tall white rabbit appears, then disappears again into a deep hole in the ground. Dumbfounded, the Doctor motions towards the hole when Alice (from Alice’s Adventures in Wonderland) appears and asks if he has seen a large white rabbit come along. At the same time, Kirk sees an old schoolmate named Finnegan whom he owes a day of reckoning. Kirk runs after Finnegan. When he at last catches up with him, it occurs to Kirk that he has no idea how Finnegan has gotten here. Captain’s Log, Stardate 3025.8: “We are seeing things that cannot possibly exist, yet they are undeniably real.”

The episode “A Taste of Armageddon” is a perfect parallel to Baudrillard’s thesis in The Gulf War Did Not Take Place that “we are no longer in an Aristotelean logic of passage from the virtual to the actual, but in a hyperreal logic of deterrence of the real by the virtual.”6 The explanation of Anan-Seven of the Planetary Division of Control to Captain Kirk is interrupted by an air raid siren. “Vendikar is attacking.” A Council chamber wall slides open to reveal a War Room, filled with mainframe computers and illuminated graphs. Anan tells Kirk that a vicious onslaught has just been carried out by the ruthless adversary. A half-million people were killed. In spite of all the talk of annihilation, scans by Yeoman Tamura’s tricorder indicate no bomb blasts or radiation disturbances anywhere on the planet. The War of the Worlds is waged entirely by computer simulation. After a cyberwar program determines which inhabitants have been terminated in a given virtual explosion, “deaths are registered.” The designated victims have twenty-four hours to report to a disintegration machine. As in America’s wars, those who actually die are the Data Trash ejected by the war video game.7 These shadow-people furnish the necessary dose of reality-effect. The hyperreal simulation of war is above all a method of domination of Western citizens by their states and institutional elites, embedded in the power system of the virtual spaces of the media. America is a simulacral power engaged in the simulacrum of war, using the Other as a convenient alibi for its perfect crime.

To practice a radical “after sociology” “after Baudrillard,” we must bring together critical theory and fatal theory. As Rex Butler says in his indispensable book Jean Baudrillard: The Defence of the Real, we must devise a way of writing about a system that follows its internal logic to the end, adds nothing to it, yet inverts it entirely. This écriture is totally specific to each system examined.8 In the case of Star Trek, we must unify Star Trek as literature and Star Trek as wily technologies. Later, in the context of the most famous Trek-nology – the transporter, I demonstrate how these two analyses come together. Before getting into the implications of “beam me up Scotty,” I want to briefly discuss two other Trek-nologies: time travel and warp speed. The latter is the Star Trek synonym for faster-than-light speed.

III. Real (Pata)physics

A surprising amount of theoretical physics research is directed towards establishing the scientific prerequisites for time travel. As defined by Alfred Jarry, whom Baudrillard often cites with good humor, pataphysics is the painstaking elaboration of imaginary scientific solutions, expressed in persuasive language.9 “Exotic theories” about the workability of time travel are today furiously debated in serious physics journals. About fifteen new scholarly papers a year are published on the subject.10

…

IV. Evil Protects Us

…

The necessary accident of the duplicate Kirk turns a questioning spotlight on the “essence” or punctum of the transporter, which is the absolutist phantasmagoria of total knowledge of a person captured in a digital pattern image or quantum physics snapshot of their subatomic particles. It is the dream of a human being understandable entirely through her information, identical to herself, and leading a completely knowable existence. As Baudrillard writes:

Evil protects us from the worst-case scenario… We are traditionally sensitive to the threat which the ‘forces of Evil’ pose for the Good, whereas it is the threat posed by the forces of Good which is the fateful threat to the world of the future. …We are on course for the perfect crime, perpetrated by Good and in the name of Good, for the implacable perfection of the technical, artificial universe which will see the accomplishment of all our desires, of a world unified by the elimination of all anti-bodies. This is our negentropic phantasm of total information. That all matter should become energy and all energy information. …That all genes should be operational…11

V. Conclusion

…

Baudrillard admonished the Simulationist and Appropriationist artists of the 1980s (Richard Prince, Sherrie Levine and Peter Halley), who sought legitimacy for their works by making reference to his writings on simulation, simulacra, and the end of the real.12 But the referent has “long ago” been substituted by the sign. “If you take Baudrillard seriously,” he told them, then “you must forget Baudrillard.”13 Academic attempts at “applying deconstruction” have also seemed notoriously contrived. By identifying Star Trek as a “media precognition” of Baudrillard (as Stefan Höltgen commented earlier at this symposium); and by writing about “what I love”; via a mutual anagrammatizing that finally renders Baudrillard and Star Trek indistinguishable; and through performing the illusion, joy, poetics, irony, disappearance and Trojan horse strategies outlined in Baudrillard’s essay “Radical Thought,” I have engaged in an experiment to cross over from French theory to American hyper-reality.14 I hope I have avoided the missteps of the Simulationist artists in my effort to contribute to an understanding of the emergence of the “Baudrillard turn.”

### Underview

**Weigh the aff against theory and give me cross-apps from substance.**

Koh 13 [Ben Koh, NSD Update, October 1st, 2013 “Breaking Down Borders: Rethinking the Interaction Between Theory and Ethics” [http://nsdupdate.com/2013/breaking-down-borders-rethinking-the-interaction-between-theory-and-ethics/]

First: Fairness is at its basis is an ethical concept. For instance at its basis, fairness as Rawls explains is, “a number of persons engage in a mutually advantageous cooperative venture according to certain rules and thus voluntarily restrict their liberty, those who have submitted to these restrictions have a right to a similar acquiescence on the part of those who have benefited from their submission.” That is to say, the basis of fairness rises from benefiting from cooperation. In the debate context, the “benefit” as Rawls refers to could be the actual ability to debate, or speaking without interference etc. In the same way that it’s considered immoral under most ethical systems to take without recompense, fairness is relevant due to it being the “recompense.” Additionally, equality’s importance is as a moral concept. The utterance that we ought to both start with the same amount of speaking time is morally relevant for it guides or at least constrains our actions, or the rightness and wrongness thereof (i.e. if I go a minute longer in the NR, I would usually be dropped or at least penalized due to its wrongness). Second, Fairness is normative: A) The idea that there is a consequence to a certain unfair act implies its relevance to our action. Debaters generally don’t read theory just because they wanted to point out something interesting or amusing, they do so to win or to rid the round of the problematic argument. B) The voluntary concession of the basic rules for the round renders fairness as being “obligatory.” Loland explains, “the obligation of fairness does not arise unconditionally. One basic premise is that the parties are voluntarily engaged. They have chosen participation in favor of nonparticipation and have thus more or less tacitly agreed to follow the commonly accepted rules and norms of the practice play the game. Loland further explains that “in sporting games, the predominant distributive norm is meritocratic. The norm on equal tratemnt, then, becomes a necessary condition for a game to take place. To be able to evaluate the relevant inequalities satisfactorily, participants have to compete on the same terms. All competitors ought to be given equal opportunity to perform.” The implication is that an argument that questions ethical assumptions (or even more basically assumptions at all) needs to be open to criticism.