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In this issue

SFRA Review Business
Another One?!........................................................................................................... 3

SFRA Business
Winter Is Here ............................................................................................................ 4
Incoming! ....................................................................................................................... 4

SF Retrospectives
Stan Lee ....................................................................................................................... 5

Features
Historical Fantasy as SF in Osamu Tezuka’s Muramasa................................. 8
The SF in Translation Universe ............................................................................. 11
Meet the Future ........................................................................................................ 12

Symposium: Worlding SF
Symposium Introduction ......................................................................................... 14
Immersion and Fictionality in Westworld ............................................................. 14
Queering the Wayfarer Universe ......................................................................... 17
The Future, Wouldn’t That Be Nice? ................................................................. 20
Cyberpunk’s Commodification of Bodies .......................................................... 25
Building Reynolds’s Revelation Space ............................................................. 29
The Outerspace within Us in Villeneuve’s Arrival ......................................... 33
Semiotic Concepts of Gravity in Solanas’s Upside Down .................................. 37
The Otherworldly Self in Tarkovsky’s Solaris ..................................................... 41
Intersexuality in Heinlein’s “—All You Zombies—” ............................................. 45
Alternate History and Racial Capitalism in Shawl’s Everfair ......................... 48
Eschatology in Star Trek.................................................................................... 51
Novelty and Age in Butler’s Fledgling ............................................................. 54
Throw Grandma Out the Airlock........................................................................ 57
Naturalism and the Ontological Complexity of SF Worlds ......................... 60

Nonfiction Reviews
La ideología de Star Wars ....................................................................................... 65
Essays on Gender and Identity in the Star Trek Universe ................................ 66
Where No Black Woman Has Gone Before ....................................................... 67
Trekonomics .......................................................................................................... 69
CFP: SFRA Annual Conference 2019

Friday, 21 June - Monday, 24 June 2019
Chaminade University, Honolulu, Hawai‘i

**Conference Theme:** Facing the Future, Facing the Past: Colonialism, Indigeneity, and SF

**Keynote Speaker:** Nalo Hopkinson

The SFRA invites proposals for its 2019 annual conference, to be held on the campus of Chaminade University, Honolulu, Hawai‘i.

“I ka wā mua, ka wā ma hope” is a Hawaiian proverb that can be translated, “In the past lies the future,” or more literally, “In what is in front of you is found what is behind you.” In the Native Hawaiian way of thinking, according to scholar Lilikalā Kame‘eleihiwa, “The Hawaiian stands firmly in the present, with his back to the future, and his eyes fixed upon the past, seeking historical answers for present-day dilemmas.” Another way of interpreting this saying might be, you must face the past to prepare yourself for the future. Thinking about this Hawaiian proverb in the context of science fiction brings up questions about ways of knowing, ways of orienting ourselves in time and space, the relation of our notions of the possible to our understanding of history, the ethical and political obligations of our scientific-technological practice in relation to the past and the future, and our expectations of social change as well as our sense of how it comes about.

SFRA 2019 will meet in Hawai‘i, a set of islands that after two and a half centuries of Western contact has become the world leader in species extinction, while being transformed during the nineteenth century from a wholly self-sustaining civilization into a plantation economy dominated by export crops and ravaged by epidemics that reduced the Native Hawaiian population by 80% or more, and whose political sovereignty was stolen by the settler-controlled and US-military-aided overthrow of the monarchy in 1893. As we plan to meet on this occupied land with its long history of indigenous resistance to colonial incursion, we welcome papers and panels on the relation of science fiction to colonial history and its ongoing effects, to the contemporary ecological crisis, to issues of political and economic justice, and to past and ongoing visions of the future.

300-500 word abstracts should be sent to SFRAHonolulu@gmail.com or through the Abstract Submission form by 1 March 2019. Notification of acceptance will occur by 8 April 2019.

Questions concerning this call for papers, preconstituted panels, & roundtables can be directed to SFRAHonolulu@gmail.com with the subject line "CFP QUESTION,” or to the conference’s local organizers, John Rieder (rieder@hawaii.edu) and Ida Yoshinaga (ida@hawaii.edu) of the University of Hawai‘i at Mānoa, and Justin Wyble (justin.wyble@chaminade.edu) of Chaminade University.
but rather reflect a new shift toward producing shorter, in-progress scholarship and fiction.

That said, I want to invite all readers to submit articles to me for the “Features” section!

Moving on, I want to note briefly that I will now be adding images of book covers and media in the review sections in order to spruce up the visual appeal of the Review, and also because I finally learned how to incorporate images into InDesign files (see the penultimate page of SFRA Review #326 for my first attempt to do so). This was requested by my editors and they do such incredible work for the Review that I feel obliged to make their dreams come true. Here’s to you, editors!

Finally, you might have noticed that this issue is about double the typical length, if not longer. In December I attended the Worlding SF: Building, Inhabiting, and Understanding Science Fiction Universes conference at the University of Graz in Austria, organized by Stefan Rabitsch, Michael Fuchs, and Stefan Brandt. I’ve put together a symposium of conference papers that reflect the range, diversity, and incredible new thoughts of just a few of the many presenters. I’ve never had such a fun time at a conference!

Well, that’s all until next time. Be seeing you.
Winter Is Here
Keren Omry

2019 IS UPON US and with it I’d like to roll out the welcoming mat for our newest Executive Committee members. In their new roles, Sonja Fritzsche, as Vice President, and Hugh C. O’Connell, as Treasurer, round out the team of award-committee members, conference hosts, Review editors, webmasters, and ongoing EC folk, who keep the SFRA running. All of these jobs are volunteer positions and it is inspiring and heartwarming to see the generosity and energy with which this team steps up to the plate. Warmest thanks go to Gerry Canavan and David Higgins for their contributions and hard work over the past two years!

We’ve got an exciting conference coming up, and with its focus on colonialism and indigeneity, our hosts couldn’t have come up with a more timely topic. While we realize that holding the conference in Hawai‘i presents some difficulty for some of our members, we trust that the attractions of the location and the promise of a stellar conference will serve as an incentive enough to overcome the obstacles. Moreover, we welcome our new members and attendees from the Pacific, for whom this location may prove more convenient. Further details can be found on the SFRA website and we hope you’ll consider sending in abstracts and proposals by March 1st. You should also be receiving reminders to renew your membership, if you have not yet done so.

As it is a time for new beginnings, we have many ideas and thoughts about directions and possibilities for the Association which we hope to be able to share with you by the next Issue. We welcome any ideas or requests from our members and so please do not hesitate to contact any of us. In the meantime, wishing us all a spectacular year.

Incoming!
Sonja Fritzsche

I AM THRILLED and honored to begin my term as Vice President of the SFRA and thankful for the trust placed in me to carry out the position. The society has always been such a supportive and creative, scholarly space and I am eager to help to continue that tradition, particularly with an eye to the fostering the careers of graduate students and pre-tenure faculty.

Outgoing VP Gerry Canavan worked hard to extend the outreach of the organization, particularly on Facebook https://www.facebook.com/sfresearchassociation/ and Twitter @sfranews. If you have not already, please “like” this page on Facebook and “follow” us on Twitter. Please also share or retweet the information posted on these pages. This will help to extend the reach of the society and also increase the success of what has been posted. A win-win. Please feel free to send me a cfp or other information of interest to the society membership. Contact me directly via the society’s social media or contact me at fritzsc9@msu.edu or @sfritzsc.

I know we are all excited about this summer’s conference at the Chaminade University, Honolulu, Hawai‘i from June 21-24, 2019. Its theme is “Facing the Future, Facing the Past: Colonialism, Indigeneity, and SF” following the Hawaiian proverb “I ka wā mua, ka wā ma hope.” The keynote speaker is Nalo Hopkinson. More information can be found at http://www.sfra.org/SFRA-Annual-Conference. Be sure to submit your 300-500 word abstract to rieder@hawaii.edu by the March 1, 2019 deadline. Thank you for John Rieder and Ida Yoshinaga for hosting! Please pass this cfp on to scholars who you think would be interested! Each new location brings the promise of new contributions and members to SFRA! Propose a panel that includes someone who has never attended an SFRA before to bring them into a broader conversation.
Stan Lee (Dec. 1922 –Nov. 2018)

Jason Sacks

Stan Lee, born Stanley Martin Lieber on December 28, 1922, and who died on November 12, 2018, at the age of 95, was arguably the most important figure in American comic book history. Over his 75 years in the industry, Lee presided as editor-in-chief and later Publisher at Marvel Comics, overseeing the rise of the Marvel line to become the premier comic book company in America. After he was pushed out of Marvel in 1998, Lee provided his name to several different startups, including Stan Lee Media, POW! Entertainment and 1821 Comics.

Lee was primarily known for his essential role in shaping Marvel Comics in the 1960s. During a time of a budding comic book renaissance, fueled by adolescent baby boomers seeking entertainment that emphasized power fantasies, Lee co-created some of the most iconic characters of the era, including the Fantastic Four, Spider-Man, Iron Man, Doctor Strange and the Black Panther. In collaboration with his artists, most notably Steve Ditko and Jack Kirby, Lee pioneered the idea of super-heroes with feet of clay. Lee’s characters contrasted with those of his competitors by having seemingly realistic problems. Peter Parker worried about his costume shrinking in the wash, Tony Stark worried about getting a heart attack, and the X-Men were angst-ridden about powers thrust upon them during adolescence.

Lee is properly lauded for those accomplishments. Unfortunately, many obituaries of Lee begin and end with them. To properly account for Stan Lee, one must reckon both with his undeniable achievements and the more controversial and lesser-known elements of his career.

Leiber began his comics career at the age of 17. Always dreaming of becoming a professional writer, Lee prevailed on his uncle Robbie Solomon to give him a job at the family business, what then was called Timely Comics.

Leiber published his first work, under the pseudonym Stan Lee, in Captain America Comics #3 (May 1941). Comics were booming after the explosive 1939 debut of Superman and the jaw-breaking 1941 debut of Captain America. After Joe Simon and Jack Kirby left the editorial reins at Timely in late 1941 to move to more lucrative National Comics, Lee’s uncle Martin Goodman, then managing Timely’s business affairs, installed Lee as the comic line’s editor-in-chief despite the fact young Lee was only 19 years old. Apart from a short diversion while serving in World War II, writing promotional material for the military, Lee would hold that role until 1972.

Though the super-heroes of the early 1940s rapidly declined in popularity after the war, the newly renamed Lee helped lead the company to embrace a tremendous diversity of genres unthinkable in today’s comics industry. By 1948, Timely was releasing some two dozen comics per month spanning fields such as crime, western, teen romance and funny animals, along with a handful of super-hero comics. The company developed a reputation throughout the late 1940s and into the 1950s as a trend follower as Lee and staff embraced the hottest genres in the industry. When romance comics gained massive popularity in 1947, Lee flooded the market with knockoffs. When war comics boomed in the wake of the Korean War, Lee again organized knockoff anthologies. And when EC’s horror comics dominated the industry in the early 1950s, Lee launched numerous similar series. Throughout this era, Lee’s stories were average for their time – neither as innovative as EC’s series nor as exploitative as those published by competitors Harvey or Avon.

In this light Lee can be seen mainly as an opportunist, looking simply to maintain market share. But that opportunism was coupled with compassion. Lee showed loyalty to the comics creators of the time, keeping Atlas Comics’s roster of artists employed even while sales declined dramatically after the early 1950s US Congressional investigation into comic books. In doing so, Lee created a serious cash-flow crisis for the company which led, ironically, to the “Marvel recession” of 1958, when Lee bought so many stories ahead of their need that he had to temporarily lay off nearly all his creative staff. Coming out of this recession, Lee managed a truncated line of 16 bimonthly titles. That line featured art by some of Lee’s star artists, including Steve Ditko, Jack Kirby and Joe Maneely. Lee developed a strong rapport with all his artists of the time—especially Ditko and Kirby, after Maneely’s tragic death.

Debuting in 1961, Fantastic Four #1 was little
noted by comic readers of the time. However, within a year, the story of a bickering quartet of super-heroes had emerged as the hottest title on the market. Driven by Kirby’s bold artwork and Lee’s slick and clever scripting, FF represented a radically different take on super-heroes as compared with National’s conservative takes on Superman, Batman, Green Lantern and the Justice League of America. Where Justice League and their peers read at times like insurance salesmen with super-powers, Lee and Kirby imbued the Fantastic Four with aggressively bold personalities that grabbed the attention of older readers. It seemed there might be a future with super-heroes at Marvel Comics.

In June 1962 Marvel debuted a quartet of new heroes who showed the future of Lee’s business. That single month saw the debuts of icons Thor, Ant-Man, Iron Man and Spider-Man. While all were important to Marvel, it was Spider-Man who brought the most attention, in Amazing Fantasy #15. The neurotic, complex Peter Parker struck many readers as the most realistic teen hero of his era, and he was the one who garnered the most attention from the cognoscenti.

As these new heroes gained in popularity, joined by such luminaries as the Hulk, Daredevil and Sgt. Fury (later to become Nick Fury, Agent of S.H.I.E.L.D.), Lee found he had to develop a new method for producing many comics quickly each month. Rather than deliver a full script to his artists, Lee fell into a method in which he would simply deliver a plot (sometimes a very skeletal one) for each issue and have his artists deliver a twenty-page story. In effect, Lee delegated the actual storytelling for each issue to his artists. Some, especially Ditko and Kirby, thrived under the near-complete autonomy Lee granted them. Others chafed at the lack of focus provided in a one-page plot synopsis. For Kirby and Ditko, the so-called “Marvel Method” resulted in a level of collaborative creativity unprecedented in the industry. Kirby’s storytelling in such series as Thor and Fantastic Four grew to legendary levels as he introduced titanic creations such as the Black Panther, the Inhumans and especially the Silver Surfer to stories Lee and Kirby produced in collaboration. Meanwhile, Ditko orchestrated the adventures of Spider-Man and Doctor Strange with scant input from Lee, driving each series to new levels of intensity and cleverness.

Many critics find this era to be the peak of Marvel’s greatness, but Lee’s role in that work has proven to be the most controversial as well as the most significant aspect of his career. Proponents of the auteur theory of comic art credit the artists for their breakthrough work on these series while downplaying Lee’s work providing a level of slickness to the sometimes awkward edges Kirby and Ditko displayed. Indeed, these proponents of the “Satan Lee” theory of Marvel history claim, with some merit, that Lee would downplay the work of his collaborators as a way of boosting his own image and ego.

That claim is boosted somewhat by Lee’s dual role at Marvel. Not only was he responsible for scripting a half-dozen series per month, Lee also was the public face of Marvel. Each comic included a page called the Bullpen Bulletins, full of breathless commentary about each month’s new titles as well as gossip about the comings and goings of staff members. That page also included “Stan’s Soapbox,” a monthly editorial whose subjects spanned such weighty topics as racism and the Vietnam War as well as such light subjects as the fun of Hallowe’en. While many latter-day commentators downplay that rapport as simple savvy promotion, it nevertheless helped drive a feeling of connection between Marvel and its readers that often was as important as the comic stories themselves to his brand-building. Lee also coined the phrase House of Ideas for Marvel, an appellation that fit the 1960s boom period and contrasted nicely with its more hidebound competitors.

By 1967, Marvel passed DC as the sales leader in American comic books. Much of that triumph was predicated on the relationship Lee built with his fans. To be fair, Marvel jumped to the top of the sales charts while industry sales in general were declining as Baby Boomers grew older and color TV took deeper hold of America. Nevertheless, Lee’s triumph was unprecedented. Indeed, Spider-Man survived the 1966 departure of Steve Ditko and even achieved greater sales under longtime Marvel staffer John Romita, and the Marvel line continued to grow both in popularity and fan acclaim. By the time Lee stepped away from his editor-in-chief role in 1972, delegating the role to protégé Roy Thomas, Lee was perhaps the most popular and best-known name in American comics. This is despite Jack Kirby’s defection to DC Comics in 1970 in a cloud of anger and recrimination around assertions by Kirby that Lee was inappropriately taking credit for his work.

Indeed, Lee’s legacy is weakest in the area of cre-
ator ownership of intellectual properties. Whereas he essentially traded his proprietary interest in his characters for a lucrative lifetime job at Marvel, his artists received no such deals. None of Lee’s collaborators, not even Kirby or Ditko, received royalties or official credit for the characters they either created or co-created. Some fans complained that Lee underplayed the credit due the artists in the books The Origins of Marvel Comics and Son of Origins. This sparseness of credit (and remuneration) caused a great deal of acrimony, an issue complicated further by Lee’s silence when Kirby and Marvel entered into a bitter dispute about the return of some of Kirby’s vintage original art (worth hundreds of thousands of dollars on the open market) in the early 1980s.

Lee was also often accused of promoting his own credit for characters he never worked on at all. Many biographies of Lee claim he created or co-created characters such as Captain America, Wolverine, Deadpool and the Punisher, all of which he had little or no stake in developing. Those mistakes, which Lee often didn’t correct, led to an inaccurate view that Lee was the sole creator of these iconic characters.

By the late 1970s, Lee was largely a figurehead at Marvel in New York, having relocated to Hollywood as a kind of ambassador to Hollywood studios. Despite Lee’s presence, Marvel was largely a nonentity in the film and TV realms during that era. The Incredible Hulk TV series was a minor hit but did not touch on stories Lee wrote or spearheaded. Other shows of the time were either largely flops – for instance, the live-action Spider-Man show lasted a handful of episodes and 1978’s Fantastic Four cartoon embarrassingly replaced the Human Torch with a robot – or eminently forgettable (the cartoon Spider-Man and His Amazing Friends). In some ways this era can be seen as the nadir of Lee’s career. As “minister without portfolio” to the Hollywood studios, Lee belly-flopped in his attempts to gain attention for Marvel properties.

By the later ‘90s, Lee became a voice-over talent on new Fantastic Four, Iron Man and Spider-Man cartoons. However, that move also proved to be short-lived as Lee found himself forced out of the very company he developed to its potential as Marvel hurtled into bankruptcy under the rapacious hands of investor Ron Perelman, who pushed Lee out of the company – though with both a million-dollar golden parachute and with the tremendous equity brought by his famous name.

In 1998, the Internet was in the height of the dotcom boom. Though Lee was a septuagenarian by that time, he lent his name to one of the major dot-com companies of the day. Stan Lee Media was devoted to the creation of new intellectual properties for a new millennium, and main investor Peter Paul was deeply involved in helping Lee deliver new characters intended to recapture the Marvel lightning in a bottle. Lee’s first creation for his eponymous company, The 7th Portal, was briefly massively popular in early 2000, even crashing the servers for supporting technology Macromedia Shockwave. That success proved to be short-lived, however. By December 2000, Stan Lee Media had closed its doors, and Paul fled to Brazil to escape creditors.

It was an ignominious low point in Lee’s career, though Lee’s involvement in the venture appeared to be quite shallow, primarily a matter of lending his name to the endeavor. Lee subsequently bounced around various companies, becoming associated with much-despised characters like Stripperella produced (with lesser talents) for companies like POW! Entertainment and 1821 Comics.

Thankfully for Lee, new editors had taken over Marvel by the mid-2000s. New editor-in-chief Joe Quesada ensured Lee received the credit he felt Lee deserved. Lee was reinstated to Marvel’s payroll as a kind of roving ambassador. It became a running in-joke that Lee would have a cameo in all movies produced by Marvel Films. As a result, Lee became part of a legacy of filmmaking that would validate his legacy and prove the robustness of the characters he helped create.

As befits a man with a 75-year career in comics, Stan Lee’s reputation is complex. On the one hand, he kept Marvel alive in the 1950s and helped guide the company’s rise to unparalleled popularity in the 1960s. On the other hand, Lee was arguably an exploiter of his collaborators, and can be seen as a huckster who favored hype over substance. Indeed, the cover to The Comics Journal 181 (October 1995), painted by humorist Drew Friedman, presented Lee as a kind of carnival Barker, spreading endless hype and ignoring true quality.

That attitude towards Lee’s career deliberately downplays the brilliance of Lee at his peak. While it is unquestionably true that Kirby created the Silver Surfer and Ditko created the Green Goblin, it’s also
unquestionably true that Lee’s dialogue and rapport with readers helped build a relationship that propelled Marvel to become the biggest company in the industry. Lee brought charisma and joy to comic titles that frequently appealed to introverts, and he did so in a way that seemed to elevate his readers. Lee always seemed happy to be playing a game he had mastered, and fans always were pleased to be part of that game. That was as true of Fantastic Four in 1961 as it was of Robert Downey Jr.’s Iron Man in 2008.

For all his abundant faults, Stan Lee was a transformative figure in American culture. His co-creations have become modern myths, embraced throughout the world. Just as importantly, Lee was one of the final comics professionals to have spanned nearly the entire history of the medium. In losing him, we also lose a crucial link to comics’ past. His death truly marks the end of an era.

**Historical Fantasy as SF in Osamu Tezuka’s Muramasa**

**The Past Is Prologue: Historical Fantasy as Speculative Fiction in Osamu Tezuka’s *Muramasa***

Daniel Martin  
Korea Advanced Institute of Science and Technology  
d.martin@kaist.ac.kr

JAPANESE ANIMATOR and manga artist Osamu Tezuka is rightfully acknowledged as the master of his profession, and his works, from Astro Boy to Black Jack and Kimba the White Lion, were widely influential and hugely popular. Tezuka was also known for more personal and experimental works, and his short film Muramasa was one of the last he made; in a prolific career characterised by incredible depth and variety, this animation nonetheless stands out as unusually dark, and painfully profound. Expressing a fascinating variation on Tezuka’s typically humanistic—and ultimately optimistic—worldview, the film draws on historical fantasy in order to pass judgment on contemporary society, offering a scathingly pessimistic speculation on the consequences of nuclear weapons. Muramasa tells a simple story, without the aid of dialogue or intertitles, in a running time of less than nine minutes. The film ends as it begins, and proposes an inescapable cycle of violence and self-destruction: a wandering samurai discovers a powerful sword, but is driven insane and compelled to kill indiscriminately, leading to the loss of his humanity (literally and figuratively) and death, at which point the blade is discovered by another warrior. The film is one of Tezuka’s more daring animations, entirely self-funded and produced without mainstream commercial ambitions. Muramasa premiered at the 1987 Hiroshima International Animation Festival and is understandably regarded as one of Tezuka’s “minor” productions (McCarthy 211). Yet in spite of the film’s short length and apparent simplicity, it remains one of the director’s most revealing works, illuminating his views on the perilous nature of post-war society and the fundamental decency of humankind. This depiction of a pre-industrial society stands as a potent metaphor for the perils of...
technology and scientific development: science fiction disguised as fantasy.

Muramasa takes its inspiration from both myth and history, drawing on the story of Sengo Muramasa, a swordsman in sixteenth century Japan, whose blades were highly prized for their sharpness and beauty. Jonathan Clements notes that Muramasa's historical notoriety, however, began 200 years later, when his swords became the subject of myth, with reports that Muramasa "was half-mad, and the weapons he made could impel their wielders into murderous rages" (271). Muramasa was therefore long dead when these myths formed around his life, and the origins appear to be as mundane as some superstitious local governors; nonetheless, the legend became one of Japan's most enduring supernatural myths, and his swords "were associated with a whole series of half-remembered macabre tales of murder and betrayal" (Clements 271). The Muramasa story had been fictionalized as the subject of kabuki plays from the late eighteenth century, and by the time Tezuka started his career in manga, it was part of popular culture. This is where the second inspiration for Tezuka's 1987 version of the story comes in: Tezuka himself had told the story before, twenty years earlier, in the pages of his masterful manga series Dororo (1967). In chapter eight of the story, the heroes encounter a samurai called Tanosuke who wields a possessed sword he calls "Nihil." The samurai explains that he kills unwillingly in order to satiate the blade's bloodlust, and is defeated by the heroic Hyakkimaru only after an intense psychic and physical duel. Though not explicitly described in the manga as a Muramasa blade, and given a different origin story, this is nonetheless an obvious variation on the same tale.

For Tezuka's 1987 short film, then, he draws on the myths not just of Japan's past but of his own body of work, offering a retelling of the cursed sword story that is at once more realistic yet more poetic and dreamlike, and significantly bleaker. The aesthetic style of the film also makes nostalgic reference to one of the earliest forms of animation in Japan—the kiri-gami style of cut paper collage animation. Muramasa is an animated film that is frequently barely animate. Characters are stiff and static, giving the film a sense of distance from the modern world. Frames look like they have been painted, or etched, rather than fluidly drawn. This represents an ironic departure for Tezuka. Just as his manga was praised as innovative because it made the drawn image more cinematic, Muramasa is interesting for its strong resemblance to the flat, drawn image rather than animation. Likewise, Tezuka's characters are cherished, typically, because they feel so alive in spite of their simplistic character design. Here, conversely, the characters seem not to connect with the viewer precisely because they belong to history.

The formal style throughout the film emphasizes this point: often the animation/illustration does not fill the entire frame, with blank spaces left to signify the bleakness of the world in which the story takes place. The effect of this visual style is that the film feels ever more like a historical artefact damaged by time, an oral history with parts missing or misremembered, or even a fragmented (if symbolically precise) dream. Indeed, symbolism is the primary method through which the story is told: without dialogue, subtitles, or intertitles, everything is communicated through visuals (the film also lacks any diegetic sound, and is instead accompanied by a constant musical score, which only briefly gives way to Buddhist chanting). Color communicates mood and atmosphere: the opening shows a foreboding blood-red sky, while later, the way color drains out of the frame signifies the feverish obsession of the central character with the cursed sword.

The key points of the film's plot are all conveyed through this kind of visual symbolism. When the swordsman first discovers the blade, it glows brightly against a darker backdrop (Tezuka used the same visual cue in Dororo, where the blade emitted light, even in blackest night). Later, the swordsman's eyes flash and flicker with eerie red highlights as he gazes upon the blade, confirming both the weapon's power and the man's obsession. Though initially disturbed, he appears to embrace this evil power, praying to icons of demon-gods with the sword. The film offers an insight into the mind of its central character as he slips into madness, and explains what compels him to kill. A straw man—used as a training dummy among samurai to test the sharpness of blades and practice sword thrusts—is the central symbolic image of the film. The sword is first discovered protruding from the chest of such a straw figure, inexplicably in an isolated area in a forest. Yet once the swordsman has tested the blade and discovered its incredible sharpness, he starts to see illusions of straw dummies everywhere. Only after they have been cut down do they then transform into reality:
the corpses of innocent, ordinary men.

Muramasa has obvious visual and narrative connections to the Japanese live-action period drama (jidai-geki) genre, but this is also a horror film. It presents a fatalistic cycle of violence; a curse that can be escaped only in death. The swordsman’s demise begins when his willpower—his humanity—is sufficient to prevent him from slaying a child. This triggers a final physical transformation in the swordsman: he flees back into the forest as dusk encroaches—underscored by the powerful, emotive sounds of Buddhist chanting—and collapses at the foot of a tree. As the swordsman’s body begins a horrifying transformation into straw, his final act is to thrust the blade into his own chest. This cycle of murder and self-destruction is both inevitable and inescapable: in a profoundly pessimistic—but poetically justified—final mirror image, another wandering warrior encounters the blade and the straw man.

This ending is much darker than is typically found in Tezuka’s work. In his telling of this story in the pages of Dororo in 1967, the cursed samurai sacrificed himself in the exact same way, but this also triggered the destruction of the sword and the demon that possessed it. The difference in tone and meaning between these two works, separated by twenty years, can be explained with the deepening of Tezuka’s thematic concerns and the increased creative freedom he enjoyed later. The thematic and philosophical message at the heart of Muramasa is apparent to even those without knowledge of Tezuka’s career; viewed in the context of his strong anti-war beliefs, its meaning is ever clearer. Helen McCarthy argues that Tezuka intended Muramasa “as a warning of the fragility of the current peace, resting solely on nuclear deterrence” (211). This interpretation is encouraged by the film’s sombre opening inscription: “A man with arms which can kill people like puppets is not aware that he himself has already become a puppet.” This reading remains the most persuasive interpretation of the film. Muramasa reflects many of the specific anxieties surrounding the threat of nuclear war. It presents a warrior who acquires a weapon more powerful than any other, and is robbed of the ability to see the faces—or even to comprehend the reality—of those he has killed. It is only by dehumanizing his victims that the warrior is able to continue his killing spree; the parallels with weapons of mass destruction are obvious.

Scholars agree that it was Tezuka’s own experience of the indiscriminate violence of the Second World War that influenced him so strongly. McCarthy suggests that his traumatic memory of witnessing the firebombing of Osaka haunted him for years later (24). Natsu Onoda Power also views World War Two as the central theme of Tezuka’s post-1960s animation, and notes that Tezuka even claimed “his experiences of the war were his primary motivation for producing work” (36). Tezuka’s works have often been scornful of irresponsible scientists (most notably in his iconic science fiction Astro Boy, in which a genius inventor creates a robot son he cannot love). More specifically, Tezuka has depicted elsewhere his feelings on the nuclear bombing of Hiroshima and Nagasaki; surely the single most profound image from all of Tezuka’s animation is the moment in his short film Memories (1964), in which a nuclear mushroom cloud transforms into a love heart, and then a woman’s body and smiling face, and finally a glass of beer, as the voiceover narration proposes that even these painful memories might eventually heal.

Muramasa’s commentary on the corrupting power of weaponry is clear. In the film, the sword’s evil spirit is visualised as a demonic samurai with a skeletal face, offering the delusional swordsman a golden helm (topped with a skull). The promise of power—at the cost of humanity—is another of Tezuka’s consistent themes, but it has rarely been expressed in such stark terms. The film’s ultimate message is that there can be no end to the cycle of destruction and self-destruction while the weapon exists, and it ends without any promise of redemption or salvation. Kajii Jun has argued that Tezuka was fundamentally humanistic, and that he incorporated a message of peace into each of his works, usually in a direct and didactic manner (Power 38). Again, Tezuka’s own comments support this, and his most oft-quoted summary of his own thematic mission statement is this: “Love all the creatures. Love everything that has life. I have tried to express this message in every one of my works.” This might summarise the vast majority of Tezuka’s work, but the optimism inherent in his statement is missing from Muramasa. Here, Tezuka argues that violence begets violence, that the cycle of destruction is inescapable, and that the tragedies of the past are a prologue of what is to come. The film is ultimately elegiac; it’s a celebration of Japan’s culture and history, a reflection on Tezuka’s experiences with animation and
manga, and a warning that the best and most precious aspects of humankind must be preserved and protected from its worst side.

Works Cited

The SF in Translation Universe
Editor’s Note: “The SF in Translation Universe” is a regular column appearing in the Features section of SFRA Review (beginning with issue #325).

Rachel Cordasco
SFinTranslation.com
rcordasc@coglib.com

ANOTHER YEAR, another exciting crop of SFT coming our way. These next three months, in particular, will bring us Chinese fantasy, Czech space opera, surrealism from the Balkans, and much more. Get ready.

But first, a brief look back. 2018 saw the publication of 79 novels/collections/anthologies of SFT (up from 52 the previous year) and 68 short stories (weirdly, the exact same number as the previous year). Books translated from Japanese, French, and Spanish continued to dominate, as did short stories from Chinese, French, and Spanish. We can thank publishers like Haikasoru, Vertical, Kurodahan, and Black Coat Press; and magazines like Clarkesworld, World Literature Today, and Latin American Literature Today, for consistently publishing Japanese, French, Spanish, and Chinese SFT. The number of SFT source languages being translated, however, is growing each year, such that we now have, for example, Slovakian, Croatian, Catalan, and Montenegrin speculative fiction in English.

The first quarter of 2019 is filled with follow-ups in the best sense of the term: we have the second book in the Chinese fantasy series Legends of the Condor Heroes by Jin Yong (tr. Gigi Chang), the second book in English by Argentine surrealist Samanta Schweblin (Mouthful of Birds, tr. Megan McDowell), the second anthology of Chinese SFT edited and translated by Ken Liu (Broken Stars), and the second postapocalyptic narrative by Quebec native Christian Guay-Poliquin (The Weigh of Snow, tr. David Homel). Black Coat, too, continues to publish Brian Stableford’s translations of French proto-sf (two collections each month).

Czech sf author Jan Kotouč’s Frontiers of the Imperium (Book 1) (tr. Isabel Stainsby), which comes out in January, adds to the growing list of Czech SFT that we have the great privilege to read, a list that has grown quickly over the past few years thanks to the efforts of author, editor, and translator Julie Novakova. Also from Eastern Europe we have Bosnian author Asja Bakić’s darkly humorous collection Mars (tr. Jennifer Zoble). Like Schweblin’s collection, this group of stories explores the strange and unsettling simmering just beneath the surface of reality.

From Korea we have The Nine Cloud Dream by Kim Man-Jung (tr. Heinz Insu Fenkl), considered the greatest work of classic Korean fiction. Set in 9th-century Tang China, this Buddhist journey, reminiscent of Dante’s Inferno, troubles the notion that reality and dreams are separate realms. This is the first new translation of the work in forty years.

Collections from Germany and India are of particular interest in March, given that we don’t often see SFT from those countries. Viswanadha Satyanarayana’s Ha Ha Hu Hu: A Horse-Headed God in Trafalgar Square (tr. Velcheru Narayana Rao) is the story of a creature with a horse’s head and human body that suddenly appears in London and speaks an unknown language. Satyanarayana was a renowned and prolific Telugu author of the mid-20th century, and this collection will introduce Anglophone readers to his particular blend of satire and political commentary. From Germany, we get a book of interlocking stories (Franz Fühmann’s Science Fiktion, tr. Andrew B.B. Hamilton and Claire van den Broek) that tell a steampunk version of the Cold War from the East German perspective. The “k” in the title is Fühmann’s deliberate attempt to write a different kind of science fiction, one that defies genre
constraints even as it draws on those generic tropes.

In terms of short fiction, we already have Italian, Croatian, and Japanese SFT freely-available on the internet, so dive right in (https://www.sfintranslation.com/?page_id=27).

I expect to hear about even more SFT in this first part of 2019, but what we know about already is reason enough to celebrate. And speaking of celebrating, the first “Favorite SF in Translation Poll” is live and open to anyone who wants to recognize the stories, translators, and publishers that have brought joy to their reading lives (https://www.surveymonkey.com/r/MYSZ5WS). The poll closes on March 1.

Until next time in the SFT Universe!

Meet the Future

Editor's Note: "Meet the Future" is a regular column appearing in the Feature 101 section of SFRA Review (beginning with issue #326). It is an interview series conducted by the SFRA Review editor that highlights the work of up-and-coming sf scholars, typically graduate students, postdocs, and recent hires.

Amandine Faucheux
PhD in English and Women’s and Gender Studies*

*This interview was conducted in December 2018. In late February 2019, Amandine completed her dissertation and passed the defense. Congratulations, Dr. Dine!

Hi, Dr. Faucheux, could you tell us a bit about yourself? As much (or as little) as you’d like!

Hi! I am an international student from France and I’ve been living in the US for 7 years. I have an MA in Cultural Studies from the University of New Mexico and I’m currently finishing my PhD at LSU in Baton Rouge, LA. Besides science fiction I am a huge horror fan and if you don’t like the new IT, we can’t be friends. My roller derby team calls me Feminasty.

How do you describe yourself professionally?

I’m still a graduate student but I would call myself a speculative fiction scholar. I think it’s important for grad students everywhere to see their work as meaningful and exciting scholarship.

Why does sf matter to you?

I’ve chosen to study sf because I feel like it’s the most relevant genre of literature to dissect, criticize, and reimagine current social issues. As a feminist and a queer scholar I get most excited by science fiction’s weird experiments with gender—what text can replicate Ann Leckie’s novels with basically no use of the pronouns he/his/him? (Not to mention hivemind AIs and genderless societies? Just read Ancillary Justice). Or Seth Dickinson’s polyamorous cultures and genderqueer characters? (See his new The Monster Baru Cormorant). I love the creativity with which sf says “screw it” to all forms of real-life constraints.

What brought you to sf studies?

When I was a fresh student in my MA program with little understanding of how American academia worked (let alone grad school), my advisor told us that we should begin our studies with the kind of literature we read the most. I started making a list of my favorite novels and a lot of them were Utopias and dystopias—with a lot of sf and horror in between. My MA thesis ended up being about representations of reproduction in dystopian fiction—especially Octavia Butler’s Xenogenesis trilogy and the Alien franchise. When I began my PhD work I thought I was going to do something radically different and I started exploring futurism movements—in particular Afrofuturism—but in the end my dissertation is still about utopian and dystopian stories (how does this always happen??).

What project(s) are you working on now, and how did you get there? What question(s) really drive your work?

Right now I’m finishing my dissertation entitled Carceral Dreams: Punishment in Contemporary Utopian Fiction. It examines punitive institutions and practices in Utopias and dystopias from the 20th and 21st century. I argue that imaginary societies’ stance vis-a-vis punishment plays a pivotal role in defining either texts on the utopian-to-dystopian spectrum. Read my essay on Orwell’s Nineteen Eighty-Four hopefully forthcoming somewhere soon! I think I started writing about punishment because the history behind modern prisons and the discourse around them is fascinating to me. It simply boggles my mind that prisons have essentially never fulfilled their intended purposes (far from it—they’re actually mostly counter-productive) and yet prison abo-
itionism is an extremely marginal political position. The fierce passion with which people will demand increased prison sentences is only matched by the wide empirical evidence that prisons simply do not affect crime rates (except when they increase them), vastly fail in “reforming” criminals, and serve very little purpose to crime victims. I think in my research at large I’m always fascinated with obvious contradictions like this. In Carceral Dreams I’m constantly juxtaposing utopian planning of modern prisons to our most dystopian texts, which (surprise) resemble prisons—and here Bentham’s Panopticon is the key example as a project that was clearly intended as a Utopia but turned out to be the most powerful symbol of dystopianism in the most famous dystopia of all time (Big Brother in Nineteen Eighty-Four).

What do you envision for the future of sf studies and sf scholars? What do you want to see us accomplish?

I’d love to see less disputes about generic boundaries and more historical/archival work of little known writers, especially women and people of color. There are huge archives of unknown writers writing exciting works of sf out there in all parts of the world, and I want to know more about that. I would also pay big money for a movie on Alice Sheldon.

If you could write a dream book, or teach a dream course, what would it/they be?

My dream book and/or course explores the role of non-monogamy in 20th and 21st century speculative fiction. I’m particularly interested in polyamory and any type of non-traditional marriage.

Thank you, Dr. Faucheux! Your labor and thoughts are valued and appreciated, and we look forward to seeing all the amazing things you will contribute to our growing community.
Symposium Introduction
Edited by Sean Guynes

THE FOLLOWING PAPERS are from the World SF: Building, Inhabiting, and Understanding Science Fiction Universes conference at the University of Graz in Austria, December 6-8, 2018, organized by Stefan Rabitsch, Michael Fuchs, and Stefan Brandt. The symposium was collected and edited by SFRA Review editor Sean Guynes, and reflect a good sampling of the incredible range of scholarship presented at the conference. The papers are as close to the original papers as possible, with minor edits made in collaboration with the authors for clarity, grammar, and to make the shift from conference address to academic prose.

In total, 14 papers were collected. They are organized by date and time of presentation, and brief information about the panel is given before each paper. For more information about the presenters, the panels the papers appeared on, and the conference itself, please see the conference website: http://worlding-sf.com/.

Immersion and Fictionality in Westworld

“Gratify the Desires of the People that Visit Your World”: Immersion and Fictionality in Westworld

Maximiliano Jiménez
University of Amsterdam, Netherlands

Day 1 | December 6, 2018 | 3pm
Worldbuilding Beyond Storytelling

DIRECTLY BASED on Michael Crichton’s 1973 homonymous film, HBO’s Westworld is deeply engaged from its very premise and title with the concept of worlding. Westworld is set in a future in which artificial intelligence allows the creation of androids that are virtually indistinguishable from humans and other life forms. The first two seasons of the show, which aired in 2016 and 2018 respectively, revolve around the conception, construction, and eventual fall of Westworld, an innovative amusement park that offers its visitors the pleasures and enjoyment of a fully immersive experience in a simulation of the American Old West. For the park’s guests—the human visitors who pay to gain access to this artificial world—Westworld represents an opportunity to momentarily exit the real world, as the characters call it, and do what they please without fearing consequences or judgement. As it would be expected, though, things start getting out of control. Some of the hosts—the androids that inhabit the park and whose identities are programmed into their code, and who can be repeatedly subjected to the whims of the guests—become conscious of their nature and of the various horrors they suffer, which eventually leads to their rebellion and self-made emancipation.

Thematic and formally, Westworld is an intricate and rich text that elicits interpretations of contemporary social, political, and technological concerns. Thinking about how Westworld dramatizes the tyrannical influence of technology on human communication, for instance, Ivan Lacko argues that in the show “the underlying principle . . . remains unchanged—stories are the core of human existence and storytelling is the essence of the human capacity for rational thinking, emotional involvement and structural imagination and perception” (36). Lacko elaborates on this principle to explain that “in the post-digital environment of Westworld . . . [t]he only aspect that changes is the form of storytelling” (36), which nevertheless for him “raises a warning finger at the . . . dehumanizing effect of digital and post-digital technology” (38). Related to this thematic discussion, what I am interested in highlighting here is also subordinated to the supremacy that storytelling has in Westworld, but I approach the show trying to pay attention to a concept that has been gaining more critical prominence in narrative genres—that is, the concept of fiction. After all, as Catherine Gallagher puts it, fictionality is usually neglected by scholars and critics; she thinks it is a specific feature of narrative that needs recovery (336). Here I do not want to focus, as Lacko does, on the ways in which new forms of storytelling affect our perception of the world, but rather on how certain narratives that demand a high degree of involvement or, actually, immersion, seem to stretch
the very notion of fiction.

I argue that, in directly engaging with worlding as part of its plot, Westworld draws attention to the increasing ease with which we literally access and inhabit fictional worlds in the 21st century. As a result of the interest in this fiction-reality dichotomy, alongside the exploration of identity and humanity as common science-fictional themes, I suggest that the TV series hints at a possible new conceptualization—or perhaps questioning—of fictionality in terms of how we are now relating to narrative in its various forms. Since the critique of fictionality in Westworld responds to the series’s depiction of a universe in which the boundary between fiction and reality is not only blurred, but thematically addressed—which, moreover, gains new dimensions in relation to the exploration of the human versus the non-human—I focus particularly on notions of diegesis, fictionality, and corporeality to ultimately wonder where lies the conceptual distinction between fiction and reality.

Espen Aarseth’s concept of cybertexts is helpful to get us started because Westworld combines in an innovative way aspects that amount to a kind of narrative that goes beyond more “traditional” notions of storytelling. Defining cybertext as a text whose structure demands the active involvement of the reader “as a more integrated figure than even reader-response theorist would claim” (1), Aarseth explores the possibility of seeing the readers of cybertexts more as users or players who experiment with the process of storytelling. While I do not claim that Westworld can be categorized as a cybertext, the show presents and theorizes the role of the park’s guests as players, readers, and even characters, which for me ultimately means the dramatization of contemporary reading and/or gaming practices in the context of fiction.

It is important to explain how Westworld engages with and, to a certain extent, subverts the logic of fictionality inside the futuristic setting it portrays. As I mentioned before, the park which gives the show its name is explained by its creators and its visitors, if not as fictional, at least as a fantasy that lies beyond the so-called real world. What is most striking, though, and what for me already destabilizes the narrative concepts I am interested in, is the fact that this “fictional world” is a place that requires no mediation or, rather, which is not on a different narrative plane. Even for sf this is quite an original premise: as one of the hosts pitching the idea of the park tells Westworld’s potential investors, “Everyone is rushing to build the virtual world. We’re offering something a little more tangible” (“Reunion”). In other words, the world that Westworld constructs, even though it is entirely different to reality, is not a place in a different realm or ontological plane, as happens with the worlds projected in the novel and film adaptation of Ready Player One (2011, 2018) or even in The Matrix trilogy (1999-2003), to present some well-known examples. The Westworld park is indeed separated from the real world in that it occupies a large island somewhere, it seems, in the Pacific Ocean, but the guests merely need to get there, put on a cowboy hat, and holster a couple of guns to be fully “immersed” in this other reality—no need to be plugged in and “leave” their physical bodies behind. However, what is clear is that the park does function differently than the world in which the park exists, with its own logics and rules, and that this space does change not the bodies of the guests, but what they can do with them. In this new world, the newcomers can venture into the wilderness and kill Indians, hunt buffalo, rob trains, become sheriffs, rape and murder farm girls, and overall release their supposedly dormant murderous instincts and desires without having to worry about the things that would usually restrain them—legally, ethically, morally. In a way, and as many of the guests repeatedly comment, in Westworld people can become whoever they want and pursue whatever adventures they desire. It is like becoming one’s own avatar inhabiting a fictional space.

Under this logic, it seems safe to affirm that Westworld constitutes two fictional worlds for us, the viewers: on the one hand, the science-fictional futuristic space in which such technological developments have made the park possible and, on the other, the simulated space that, while on the same plane of reality and tangibility, works according to its own narrative elements. If we establish this distinction, though, and we think of what happens in the Westworld park as another reality—a fiction—such an understanding seems to bypass one of the basic tenets of storytelling: the construction of a diegesis. I use this term diegesis in the sense that Gérard Genette suggests, not in contrast to mimesis—that is, not as a Platonic mode of representation. For Genette, the diegesis is “not the story but the universe in which the story takes place” (17); it is, in a way, not a physical place which we can physically
visit, in which we can be physically immersed. In any case, it can be seen as a metaphysical place which is created through narrative discourse, be it literary or cinematographic, for example. In other words, it does not matter whether we can see this fictional universe, as in film or theatre, or if we construct and visualize it in our heads through textual discourse: if there is storytelling, the story has to take place somewhere (even in our imagination), so there is always a diegesis. Although this concept is not widely employed in narrative theory—at least not in Anglophone scholarship—thinking about it here helps to underline the particular spin that Westworld gives to worlding: under the logic of the park, people have physical access to the diegesis, they inhabit and populate it. Thus, the immersion is literal.

Yet, while it is clear for the audience, due to convention, that in the show there are two narrative realms—the futuristic framing narrative and the inner, simulated fantasy of the Old West—it is also telling that the narrative potentiality of the Westworld park is similarly understood by the human characters in the series. The people in charge of running and managing the park, for example, perform tasks that revolve around the stories which the hosts are meant to follow. There is one character, for instance, the Head of Narrative and Design, who is in charge of writing the plots and dialogues of the hosts. This also involves the design of the hosts’ personalities, their motivations, their backstories and the cornerstones which determine how they behave and relate to the guests. In turn, the Programming Division is responsible for translating the hosts’ stories and identities into code and ensuring that their attitudes and behavior remain within the parameters of what the hosts can and cannot do, including their not being able to harm the guests in any way. Therefore, the people who visit Westworld can engage and participate in different narratives that develop in a constant loop led by the hosts, whose artificial intelligences allow them to improvise and adapt their predetermined paths to the presence and actions of the guests. The success of this immersive narrative experience as a business model is thus explained in the series as a capitalization on people’s desires. “[Y]ou and everyone you know we built to gratify the desires of the people who pay to visit your world” (“The Original”), explains the Head of Programming to a host during a diagnostic session; as the show insists on emphasizing, such desires are closely linked to corporeal pleasure, be it sexual or in whichever form of violent delight.

There seems to be a point, then, regarding the shared corporeality of hosts and guests: Westworld is profitable because immersion in this diegesis guarantees guests can directly interact with and have power over the hosts’ bodies and, to some extent, their stories. It follows that, if the hosts can be conceptualized as characters that populate the diegesis (they are, after all, designed and given a story, physical features, drives, and ultimately are “not real”), then the human guests who share the space and participate in the narrative also adopt some of the qualities of fictional characters. What Westworld claims to sell to its guest, in the end, is the chance to become whoever they want, which can therefore mean that the human visitors acquire a dual nature: they become characters that are part of the stories developing in the park, but they also remain players, viewers, or even writers of those same stories. This dual nature, while in Westworld, allows one of the human protagonists of the series to ask one of the hosts, “Are you real?” to which she replies, “Well, if you can’t tell, does it matter?” (“Chestnut”). This brief exchange introduces to the show a notion that, given the subversion of the diegesis, signals further theorizations of narrative concepts—that is the notion of the hosts as “not real,” which seems to refer both to their artificial life as manmade androids and to their fictional nature as characters in the park. We are actually used to thinking about fiction in contrast to reality, but in a setting like the one presented in Westworld, what is and isn’t real? Or more accurately, what is really fictional? The show addresses this matter directly: when one of the hosts who has fully gained consciousness by the beginning of season two is told by the Head of Narrative that her backstory is simply that, a story programmed into her code, and therefore not “real,” she answers, “Not real? But what about me? My dreams? My thoughts? My body? Are they not real? And what if I took these unreal fingers and used them to decorate the walls with your outsized personality? Would that be real?” (“Journey into Night”).

The question then stands: in a world where fiction is no longer somewhere else, outside of people’s reach, where the diegesis is shared by characters and non-fictional entities, where does reality lie? If it cannot be seen in opposition to
fiction, what is reality? Certainly, as a potential investor, surrounded unexpectedly by hosts, asserts, “Nobody can do this... We are not here yet. Nobody is” (“Reunion”). Nevertheless, even when the technological developments of Westworld ground their innovation on the potential corporeality of fiction beyond the virtual world, the TV series might be nodding towards things that are already here, such as the so-called augmented reality. What is that if not the addition of a fantasy element to the very physicality of our real world? Of course, we cannot touch or really capture the Pokémon that started populating this plane of reality with the release of Pokémon GO in 2016, but as Alfie Bown explains referring to the depiction of a dystopian videogame future, we expected the importance of physical environment to recede in favor of the imaginary electronic world, but Pokémon GO shows that such predictions were wrong. . . . We now live in a dystopia where Google and its subsidiaries send us madly around the city in directions of its choosing in search of the objects of desire, whether that be a lover on Tinder, a bowl of authentic Japanese ramen, or that elusive . . . Pikachu. (22)

Simply put, “it is less a question of games becoming like reality but of reality becoming like games” (Bown 8). The way I see it, we can even substitute games with the vague notion of fiction and still reach the same conclusion. Ultimately, by combining the logics of immersion, games, desire, and corporeality, and by framing it all in a reflection on fictionality and its increasingly literal presence in reality, Westworld not only portrays the ways in which we are becoming more like androids whose drives and desires can be programmed by the tools we use to relate to the world. The show also suggests that, in becoming android-like, “non-real,” while thinking that we still have agency, the world we inhabit and construct becomes much more like a shared fiction that cannot really be contained by our flimsy notion of reality.

Works Cited

Queering the Wayfarer Universe

Queering Human and Alien Cultures in the Wayfarer Universe

Jennifer Brown
Boston College, USA

Day 1 | December 6, 2018 | 5:30pm
Sex and Gender

BECKY CHAMBERS’S Wayfarer series imagines a future in which humans are only one sentient species in a diverse universe. While it contains hallmarks of science fiction such as spaceships and wormholes, the focus of the series is undeniably on human (and alien) relationships and how we deal with that which is Other—both in the present moment and in Becky Chamber’s imagined future. The series allows readers to confront the fact of diversity inherent in such varied combination of races and cultures, but
more importantly allows readers to confront human alterity and its place in humanity’s future not only in fiction, but beyond the text in real life.

One central aspect to the multicultural future Becky Chambers has imagined, in which disparate species have differing social norms, is that of what we consider in the present moment to be queer identities. When talking about queer identities, it is important to define what is considered “queer.” As Kristen Barber and Danielle Antoinette Hidalgo define it,

Queer is often used as an umbrella term to denote sexual identity within a particular community. A queer community may be made up of people who identify as lesbian, gay, bisexual, transgender, and so on. Some find queer an easy way to describe such a large community. Labeling people whose sexual identities fall outside of heterosexuality may create solidarity among people based on commonality. Besides sexuality, queer is also used to describe a particular gendered community. This is a community made up of people who fall outside society’s prescribed male/female and masculine/feminine dichotomies. Their gender identities and the way they embody and perform gender do not coincide with either the fixed biological notion of sex or societal notions of gender.

The Wayfarer series deals with both non-normative sexual identities and gender identities. This paper, written before the publication of the third book in the series, focuses on the presentation of queer identities in the first two books and anticipates ways in which the third book may continue to develop queerness in its representations of both human and alien cultures.

There are two ways in which the first two books present the audience with examples of non-normative gender identities. In the first book (A Long Way to a Small Angry Planet), we are presented with the Sinait Pairs, aliens who are actually symbiotic joinings of two species in one being. They refer to themselves as “they” throughout the series, presenting a society that is not influenced by gender but rather by this symbiotic presentation of the self. The gender-neutral pronoun initially excited me when I read the series, because I was curious about a species that existed seemingly outside of gender constraints. However, when the Sinait Pair Ohan loses their alien other half, the pronouns for the character switch from the gender neutral “they” to the masculine “he,” with which he is referenced for the remainder of the book.

There are two potential readings of this shift. The first is that Ohan’s society does not truly exist outside of gender norms, if the masculine/feminine binary is simply understood but unstated because they feel that their unity with their alien symbiotes is more important to their construction of self-identity. Even in this reading, where the masculine/feminine binary is enforced, there is an interesting question presented: what could be more important to our self-definition than gender? A second reading of this shift is that Ohan, having abandoned his world and culture, has begun to adopt other aliens’ (including humans’ normative cultural definitions of gendered difference, and allows them to refer to him as well as refers to himself as a “he” in an attempt to fit in and adopt a new culture. This too reinforces the question raised by the first reading, as Ohan in this interpretation does not self-identify with the gender binary enough to have a preference in the pronouns used to describe him; he can, in this way, be read as existing simultaneously within and outside of the gender binary.

The second representation of non-normative gender is in A Closed and Common Orbit (the second book), with the depiction of the Aeluons, and specifically the Aeluon character Tak. The Aeluons have four genders, each corresponding to their reproductive function: those that are fertile, those that can fertilize eggs, those that are infertile, and those that switch between fertile and fertilizing. He/She pronouns are still standard, but nonbinary pronouns are also added into the mix, such as Ze. Tak is a character that I would call genderfluid, although zir gender is linked specifically to the sex that ze is presenting. While zir’s character is an interesting exploration of the way in which personality remains fixed despite a fluid gender identity, the formulation of gender as tied to sex continues to be less progressive for a genderfluid character in Chambers’s series than one would anticipate. It is also worth pointing out that this fluid gender formulation is marked by the narrative as something inherently alien, increasing the Othering of non-normative gender identities.

There is a third, implicit representation of nonnormative gender in the series, seen through the lens of dysphoria. In a queer context, Gayle Rubin defines gender dysphoria as “a technical term for
individuals who are dissatisfied with the gender to which they were assigned (usually at birth) on the basis of their anatomical sex” (472). The AI Lovelace, who takes on the name Sidra at the beginning of A Closed and Common Orbit, experiences a great deal of dysphoria in the transition from being housed in the ship to being housed in what passes for a human body. From the opening sentence of the book, this dysphoria is apparent: “Lovelace had been in a body for twenty-eight minutes, and it still felt every bit as wrong as it had the second she woke up inside it” (location 251). She refers to her body as a “thing” in which she is “trapped” (location 262); even when she begins to become used to her body, she still refers to it as “the kit” in which her consciousness is housed, rather than feeling like it is a body that belongs to her (Location 491). Yet she does not have this problem with claiming other things as hers; upon her introduction to her room in Pepper’s home, she muses, “How did one place value on a room? She couldn’t say if the room was good or not, but it was hers” (location 470). So her insistence upon distancing herself from her human body is an intentional effort, one that is indicative of the dysphoria she feels associated with personhood and the ability to pass as a naturally born rather than constructed intelligence.

This pervasive dysphoria that controls Sidra’s progress and development throughout A Closed and Common Orbit makes the lack of a gendered element to her dysphoria all the more apparent. The dysphoria functions necessarily as a metaphor for the gender dysphoria some queer individuals experience, because the series is so open to queer identities, and because gender dysphoria is the primary form of dysphoria discussed in our present day, real world society. The fact that gender dysphoria is never discussed in the text allows it to be metaphorically implied instead through the body dysphoria Sidra experiences. However, the metaphorical link between body dysphoria and gender dysphoria is problematized by Sidra’s eventual acceptance of her body, which communicates an expectation that gender dysphoria must also fade with time or that the symptoms must be ignored until they are no longer severe or noticeable. It would have been better for Becky Chambers to discuss gender dysphoria, either as similar or different to the dysphoria Sidra experiences, so that it could be made clear that gender dysphoria does not go away in most cases, and that there should not be societal pressure to ignore gender dysphoria in an effort to fit in.

Switching to sexuality, there is one main case of queer sexuality depicted in A Long Way From a Small Angry Planet, that of the relationship that develops between the human woman, Rosemary, and the alien woman Sissix. Their relationship is queer in a multitude of ways, not least being their cross-cultural/cross-species pairing. Sedgewick writes, “That’s one of the things that ‘queer’ can refer to: the open mesh of possibilities, gaps, overlaps, dissonances and resonances, lapses and excesses of meaning when the constituent elements of anyone’s gender, of anyone’s sexuality aren’t made (or can’t be made) to signify monolithically” (8). Sissix and Rosemary hit many points on Sedgwick’s suggested list of what is considered out of the norm in our society: most notably, the idea of having a self-perception of being “gay or straight” is absent; they merely are as they are. When their relationship is questioned, it is not because it is queer in the sense that we think of the word, but because it is cross-species with cultures whose sexual norms do not specifically align. Furthermore, Foucault argues that “The legitimate couple, with its regular sexuality, had a right to more discretion. It tended to function as a norm, one that was stricter, perhaps, but quieter” (qtd. in Sedgwick 9). For humanity in The Wayfarer series, this norm has not shifted; they are still firmly embedded in the cultural norms of today. However, the acceptance of alterity has increased, allowing for more open expression of non-normative, queer relationships.

The Wayfarer series (so far) at times fails to contemplate the ways in which contact with other predominant alien cultures may affect the way that humanity’s social norms develop and progress, but there are instances in which we see this idea being broached. Sedgewick cites the norm of our society as “heterosexual monogamy” (9); this idea is directly contrasted by the way in which Rosemary and Sissix are both female-identifying and engage in a relationship that is polyamorous, in direct opposition to the standard of monogamy. However, even here monogamy is reinforced as the human standard; Sissix explicitly states that she is hesitant to enter a relationship knowing she may not be able to provide what Rosemary needs or expects. This reinforcement of one half of our binary norm implicitly lends a credible reinforcement to the
other half, which labels their relationship as “queer” despite the popular acceptance of same-sex pairings.

In the series Becky Chambers explores non-normative sexuality and sociological family groupings but does so in a way that is carefully removed from what is human, making them examples instead of how alien cultures function, raising the question: how do we bridge the gap and show that these “queer” relationships are not essentially alien, and can instead be understood as human and experienced by humans? However, the series is young yet, and with the third book set to focus on humanity and its place in the alien diversity of the Wayfarer universe, there is hope that queer identities will continue to be developed and a socially progressive future in which queer people exist within, rather than outside of, the norms of society can be realized.

Works Cited

The Future, Wouldn't That Be Nice?
Erin Horáková
University of Glasgow, UK

Day 2 | December 7, 2018 | 9:15am
Scarcity and Abundance

WHY DISCUSS popular SF television’s economic modeling? That time and energy could arguably be better devoted to exploring the socioeconomic dreaming of SF books interested in making perhaps more intentional and sophisticated contributions to thinking about the future of labor. Yet I think there are two excellent reasons to pay attention to series like Doctor Who and Star Trek’s depictions of post-scarcity. First, more people have seen them than have taken up the invitation to consider Phlebas, or read anything else from Ian Banks’s Culture series (or engaged with Asimov’s robotics-predicated abundance, etc.). The very fact of these shows’ outsized, international reception gives weight to their economic depictions, which millions—largely mainstream, non-fannish audiences, in themselves divergent economies—have engaged with over decades. SF is one of the few forms of cultural production interested in addressing how people and societies might operate beyond paradigms of scarcity. Conceptualising potentialities is a vital prerequisite to reaching towards them, and such potentialities best enter public consciousness through wide dissemination.

Second, television series’ medium-dependent qualities make them particularly interesting vehicles for economic thinking. Shows’ lengths allow their worlds and paradigms to play out in a variety of sometimes jangling and mutually unintelligible ways. Many hands are involved in their writing and realization, which gives rise to both friction and polyphony. If we think of televisual texts as developing Bakhtin’s dialogic theory of the novel, we can appreciate the rich juxtapositions of opinion and complications on stated socioeconomic premises that heteroglossia can offer. Shows also provide conflicting and generative information about their storyworlds via aesthetic, acting, and direction decisions. Television series’ duration and the multivocality of every stage of their production
processes combine to make them unusual and potentially rewarding sites of economic dreaming.

Doctor Who and Star Trek depict life beyond the constraints of scarcity in rather different ways, and yet while neither’s storyworld requires its protagonist(s) to work to live, their lead characters nonetheless choose to perform intensive, vocational work to give their lives meaning. In some ways it’s difficult to conceptualize the world the Doctor comes from in any detail, because he (and for the purposes of this particular pre-2005 reboot or ‘Classic’ Whopredicated analysis, that’s the pronoun I want) detaches himself, or is forcibly exiled (depending on who’s telling the story and when), from his homeworld, Gallifrey. The planet is most important to the narrative after it’s gone (or is it?, etc.). Yet it’s clear that Time Lords are so technologically sophisticated that at least materially, they want for nothing. Unlike the peoples of the Federation, who by and large are a little more robust and live a little longer than contemporary humans, Time Lords even enjoy something within spitting distance of immortality.

There isn’t one singular, replicator-ish secret to the Time Lords’ apparent prosperity. Even in the introductory Hartnell era (1963-1966), Gallifrey has sophisticated food machine technology (this doesn’t come up much: it could be anything from a replicator to an advanced ration rehydrator). A whole bevy of inventions appears to sustain the planet as a galactic power. Time Lords are practically invulnerable behind their planetary shield, and until the Time War, the only military they seem to require is Andred’s rather decorative Chancellery Guard. If any single thing could be said to ensure their prosperity, the clue’s in the name. Taking anything from anywhen is as good as making it. But unless we’re discussing “Trial of a Time Lord”, ‘modern’ Time Lords even enjoy something within spitting distance of immortality.

In leaving his civilization, the Doctor doesn’t necessarily acquire any fixed new social context for us to read him against. He dips into various situations to perform labour or skim experiences and materials, but does not lastingly enter into the chain of consequences associated with given places and times. In most of the show’s eras, he doesn’t have to stick around for the aftermath of his interventions. Even when he’s marooned in time nominally working for UNIT (1970-1972) in Three-era (-1974), the Doctor finds the prospect of earning a wage unattractive (“Spearhead from Space”). He and the Brigadier work out a barter system whereby the Doctor is given a flash car and even flashier clothes in exchange for regularly saving the world. Given that he presumably can’t entirely sustain himself off the sandwiches we sometimes see him steal from his assistant Jo Grant and the offerings of the UNIT tea lady he initially confuses Jo with (or can he, like a soldier on rations?), how does the Doctor eat? The question seems markedly less important to him than whether he can access a truly surprising variety of velvet suits.

Though the Doctor largely lives in post-scarcity security and hails from a society that enjoys similar prosperity, it’s awkward to characterize him as as extra-economic in any sense; he too neatly slots into generic figurations developed under capitalist and proto-capitalist regimes. Romance and its inheritors typically relegate the responsibilities involved in their protagonists’ aristocratic positions to the background in favour of presenting their characters as agents with limitless opportunities for movement and intervention. Doctor Who is, among many other
things, a classic swashbuckler narrative about a privileged aristocrat—the Scarlet Pimpernel, but less reactionary. The Doctor isn’t obviously reliant on inherited wealth or the present labor of serfs; but what would change if he were? The question then becomes, is Doctor Who best read as an individualist treatment of post-scarcity, or does Gallifrey’s post-scarcity derive from the Time Lords’ inherited wealth?

Until its very recent break into American audiences, Doctor Who spoke primarily to the UK and secondarily to the commonwealth (earlier in its run this was arguably a four-tier system: England, the rest of the UK, the ‘White Dominions,’ the rest of the commonwealth) (Horáková). Global leftist thinkers have observed that even if the UK were to abandon its current disastrous austerity policies and build on its historic and ongoing exploitation of the Global South. Walking through London, you navigate a series of definitively British grand buildings and monuments made possible by the slave trade, the subjugation of India, or some similar repressed atrocity. The line of descent is so direct one almost wonders whether if you put your ear to the well-cut stone you could still hear screaming. Nothing is as British as tea, and nothing is so directly a precipitate of empire.

Because Doctor Who functions as a modern British national epic, perhaps the defining and ancestral prosperity of the Time Lords is a science-fictional way of talking about Britain’s brutally repressed memories of empire, which bubble up in this refracted form. Gallifrey wasn’t always as involved in the wider storyworld universe as it is in Classic Who. Rassilon, the father of Time Lord society as we know it, was not a pacifist. In “State of Decay” (1980) the Doctor alludes to a vast and terrible Eternal War against the Great Vampires, a sort of precursor to the Dalek conflict, which took place at least in part during Rassilon’s reign. Even Gallifrey’s present ‘noninvolvement’ can be self-serving, absolutist and devastating. In “The War Games” (1969) the Time Lords casually sentence another species to planet-wide permanent exclusion from history for running temporal experiments the Time Lords decide were unethical. Yet Gallifrey’s own Death Zone bears a striking similarity to these very experiments. The Death Zone is a source of historic shame, to the Doctor at least, but this doesn’t stop a contemporary Gallifreyan politician from using it once more to advance his personal agenda.

Without consciously articulating the point, in mirroring British society Doctor Who says something poignant about where the post-scarcity of science-fictional fantasies might come from, drawing our attention to the probability of present prosperity and future post-scarcity’s reliance on other societies not sharing that wealth. Within and without the literal bubble that surrounds the Time Lords’ citadel, being post-scarcity doesn’t guarantee being “post social problems.” Romana doesn’t need to be paid to be mercilessly over-achieving and conservative when we first meet her, because her whole society apparently prioritises these qualities. Borusa is nigh-immortal, but that’s not enough for him. He re-opens the Death Zone in an effort to capture even greater rewards. Gallifrey is prosperous and, not unrelatedly, immensely self-interested and repressive. It’s tempting to think of abundance as the rising tide that lifts all boats, but evidently a society can end wealth stratification and (barring Outsider hippies) live together in a massive citadel, safe and replete, and still have a lot to work through.

The more communally-focused Star Trek presents an economy that transitions beyond the use of currency after TOS. The Federation remains reliant on energy and dependent on the acquisition of difficult or impractical to replicate materials. Energy is abundant, true, but many plots center around dilithium crystals. This is clearly a narrative contrivance, but crystal-sourcing also stands as a facet of Star Fleet’s work. Replicator use is rationed in emergency situations, and there may always be limits on personal energy consumption. It’s not clear whether a Federation citizen can temporarily or permanently opt out of pursuing some socially beneficial employment, but it’s fairly evident that this society could support its citizens’ basic subsistence with negligible labor. The Federation “makes work” for itself: possibly for the satisfaction of its inhabitants, possibly to ensure they remain secure in a not necessarily benign universe that positions them in an ongoing arms race, and possibly so that whoever does the minimal work necessary to ensure collective subsistence doesn’t feel they’re being freeloaded off of.

In contrast to Doctor Who, which has attracted
both wonderfully thorough production archeology and a startling de
darth of theoretical engagement, Star Trek has provoked several essays about its
economic system. The quality of these analyses is highly variable. Most choose to engage with the
series' American production and preoccupations by recapitulating an enthusiastically propagandist
stance worthy of Radio Free Europe. Rick Webb's well-received article “The Economics of Star Trek:
The Proto-Post Scarcity Economy” is particularly
anxious about the future of the market economy. Webb repeats pearl-clutching Cold War American
ideas that bear only a limited resemblance to either communism, the theory, or Communism, the fractal
lived practice of several countries. Even though they have nothing whatever to do with the means
of production, Webb asserts that since personal, sentimental, heritage, and artisanal property exist
in the Federation, its economy can have nothing whatever to do with communism. He’s similarly
insistent that any degree of input into your work is also incompatible: space communism is coming to
take your grandma’s wedding photos and make you
keep bees against your will.

Webb has an admirable facility with the details of
various iterations of the series, but an odd inability to inter-relate or read those details. He uses instances
of trade in the Federation to argue that its society must operate according to contemporarily-styled
markets. However an equivalent degree of trade was also present in the agrarian capitalism of the 16th
century and even in pre-existing feudal structures, and these are no more meaningfully coequal with
our late-stage capitalism than I am with my great grandmother. Correlation isn’t causation. Webb
refuses to understand that way language works as a patchwork of nonliteral survivals that bear semantic
weight. Because Federation personnel sometimes use contemporary monetary figures of speech, that
must mean they are paid exactly as we are—just as I might say someone took forty pieces of silver
because we still use silver coins. Ultimately Webb has no sympathy with how difficult it is to get a large
group of writers (and audiences!) to think outside
a present moment constructed by capitalism and a hundred other contingent ideological structures.
Webb’s stubbornly defensive position derives, in
all probability, from his being an occasional angel
investor for tech companies. This must render
him about as steeped in the professional and
psychological need to defend capitalism as necessary
as it’s possible for a person to be.

Economist Joshua Gans also exhibits an emotional
desire to keep Star Trek a market economy. No one
is simultaneously more committed to ideology and
more convinced that only they are free of such vice
than a Hayek-stan. Manu Saadia’s Trekonomics is
less frantically committed to markets, but equally
circumscribed by capitalist and colonial conceptions
of the possible. Saadia is also involved in tech
company startups. Victor and Peter Grech, who
quote Saadia significantly in their article “Star Trek’s
Federation: A Keynesian Post-Scarcity Utopia,” are
so intent on speaking about the trans-historical,
trans-cultural “nature of man” in relationship to
commodity that they misread A Christmas Carol to
make their case, proving that for everyone who says
Dickens is too didactic, there’s someone who’s failed
to grasp even his most instrumental work. As this
haphazard treatment of historical materialism might
indicate, the Greches, while far more interested in
economics than Saadia, are almost as constrained by
capitalism’s ideological framework.

Webb positions capitalism, communism, and
modern Western economic hobbyist thought
experiments as the only possible economic
realities. But extra-capitalist societies beyond those
parameters exist right now. Resource-sharing tribal
groups struggle to maintain their non-participatory
independence from expansionist capitalism. India
is engaged in a long internal martial conflict to “civilize” Adivasi people in Bastar, primarily to
dispossess them of their resource-rich lands.
According to postcolonial scholar Samira Nadkarni,
“Adivasi activists like Gladson Dungdung have protested at the idea that Adivasis are unskilled and
uneducated because they do not conform to colonial ideas of modern enlightenment in capitalism.
Their coexistence with the forest is both skillful and educated by tradition.” Webb and Saadia are at
pains to explain what work could look like beyond
capitalism, but they reinvent the wheel crudely and
to no purpose. People work in extra-capitalist
communities today! People also work in ways not directly related to compensation even within
capitalist economies: undervalued female domestic
and reproductive labour, centuries of hobbyist
science and philosophy, modern academia, fandom,
the third sector. Even in the midst of capitalism, we
live with the economic realities Webb and Saadia
find so at odds with “human nature.”

Peter Frase’s short essay “Anti-Star Trek: A Theory of Posterity” describes Star Trek as “basically communist,” but Frase here understands communism as post-scarcity. This 2010 essay on how wealth stratification might be made to function, zombie-like, even in a post-scarcity world, has since developed into Frase’s social-science-(non)fiction, Four Futures. Matthew Yglesias lets some light in by hypothesizing that the Federation operates as a gift economy, with fairly nominal credits.

Jeff Ewing’s “Federation Trekonomics: Marx, the Federation, and the Shift from Necessity to Freedom” is the most serious scholarship on the matter thus far. Ewing elucidates the difference between private property and means of production, putting to bed the tedious insistence that the Picard winery’s existence obviously indicates that the Federation still has a stock market. He also meaningfully contests Webb’s assertion that the Star Trek universe is not “post scarcity” because it experiences some natural disasters: “The fact that famines and natural disasters are possible—such as the fungus-caused food shortage on Tarsus IV in ‘The Conscience of the King’ (TOS)— [...] stands in acknowledgment that real crises can and do happen. Postscarcity economic systems don’t render accidents impossible, but instead improve the ability to respond to them in a quick, egalitarian manner—as we see the Enterprise and its successors respond effectively to various disease outbreaks or other disasters”.

It’s reasonable to assume, as Ewing does, that when post-fiat Star Trek speaks of credits, they mean something like this:

We can imagine that Federation Credits exist primarily to let people consume government-provided scarce resources. Housing, interstellar transportation, child and elder care, energy-intensive capital goods for your hobby/business. This is not a currency per se. It exists to ensure that there isn’t wild overconsumption of goods that are nevertheless intended to be generally available. The Federation probably also uses them to facilitate transactions with other cultures. A non-Federation individual or organization who performs some useful service gets “Credits” entitling him to claim Federation energy or logistical services in the future.

Ewing’s suggestion of course raises questions regarding the social valuation of labour and the position of the disabled, the elderly, or others less able to work. The dialogic and distended storytelling native to television presses many such fault lines. We briefly see punitive prison labour in Voyager. We don’t get much insight into how the Federation sources its delivery men, such as the one Q pretends to be to taunt Picard. We don’t know how people gain or lose the right to live on Earth itself, which seems as though it might well be coveted beyond the capacity of the planet’s resources to support, or what motivates colonial settlement after the post-original series abolition of currency. As per Doctor Who, post-scarcity does not necessarily mean post social problems. Utopia is a process of eternal becoming. There are still logistical, cultural, and political tensions to negotiate. It is interesting, even useful, to consider how this text, or even a society, might approach such issues in the absence of capital as a (deeply flawed and largely inequitable) resolution mechanism.

The original Star Trek chose the most comprehensible, conservative structure within its new world order, the pseudo-military, as a window into its unusual vision of the future. While DS9 pushed at this formula, we’ve since circled back around. New Star Trek expansions could show us the problems and lives of people outside the pseudo-military, playing more with what this story-world can do, but instead they generally make more conservative creative decisions than the original series. These decisions are symptomatic. The circumstances of Star Trek’s production have changed dramatically over the decades; the ‘property’ is now an over-invested behemoth, tasked by its corporate masters with bearing too much weight for anyone involved in it to be genuinely reckless. To say something politically exploratory or meaningful, creatives might need to abandon Star Trek as a framework.

Yet such an abandonment would necessitate jettisoning or ceding a highly cathected, internationally effective semantic network. It’d be a huge loss of emotional-capital, of a history that amounts to more than “sunk costs.” Besides, there’s little guarantee that fresh properties made in contemporary circumstances, under the regime of knowing and adaptive late capital, would enjoy what Olga Goriunova has called a “moment of rupture” that enables new thinking. The situation might call for a multi-pronged approach—for people working both within and alongside these established
networks of significance to meaningfully subvert the deranging corporate processes that threaten to render narratives the ever-less-resistant tools of the people financing them.

Capitalism is dedicated to its own narrative, an endlessly-reiterated story about how we need it. It also tells a somewhat contradictory story: that there is and can be nothing else. But there are many extra-capitalist relations between people, their labour, and the world—historically, in the present, and yet-undreamed. Popular television offers us a wide-reaching and ripe opportunity to begin dreaming a future of such bright possibility together.

**Works Cited**


Horáková, Erin K. “‘Do You Speak For This Planet?: Doctor Who as a Dialogic National Epic.” Presentation, Goldsmiths University, 2011.


THE GENRE OF science fiction is not the most reliable source for predicting the future. And yet, when one engages in prophecy, be it political, social, ecological, or economic, science fiction seems to be a staple for the visualization of one’s prognostication. In fact, culturally speaking science fiction seems to be our most reliable resource to drive home the point that purely statistical predictions are unable to transport to mainstream audiences.

Take for example, the two degrees of global warming that we have all been warned will have massive effects on weather patterns, threatening, for example, more intensity in rainfall and storms. But only the science fictional imagination is able to package this, so that it hits home. Films such as Geostorm or The Day after Tomorrow are drastic representations of climate effects and will produce more debate and interest in climate science than any reporting on the Paris Agreement. It seems then, that the sf imagination is a pretty good indicator of both the challenges we will face and the solutions that might be possible.

This is, of course, not only true of climate change but also of other pressing issues such as globalization, automatization, or social inequality—all of these topics, including climate change and its results, are touched upon by the thought experiments that sociologist Peter Frase presents in his book Four Futures. Frase describes the possible future world shaped by automatization—his (only in its extremity somewhat science-fictional) premise is that capitalism as we know it will no longer exists, mostly because we will automate work and thus potentially free humans from labor. He then continues by arguing that our future will be determined by two factors: “the first axis dictates the economic base of the post-capitalist future, while the second pertains to the
socio-political superstructure” (“Four Futures” n.p.). On the one hand, then, our future will be determined by our continued access to natural resources, to the Earth’s ability to sustain our need for raw materials. On the other hand, our future will be determined by our determination to keep or to eradicate social inequality—the question of our division by classes, however these are constituted. He sums up that we will have the choice of four futures determined by these two axes: “Two possible futures are socialisms . . . while the other two are contrasting flavors of barbarism” (“Four Futures” n.p.).

Now, taking into consideration the depiction of futures in science fiction, especially in the subgenre of cyberpunk, one could argue that an oft depicted and not quite so unlikely scenario is the one described by Frase as “exterminism,” in which workers are no longer needed, as they are replaced by automated processes. But since the scarcity of resources limits the ability for all humans to be wealthy, those with money will face more and more people that cannot participate in society. Frase poignantly calls these people “superfluous from the standpoint of the ruling elite” (“Four Futures” n.p.).

In this, he echoes Zygmunt Bauman, who argued that the progression of the capitalist economy—meaning, for example, automatization and globalization—produces “surplus population” (37), people that are no longer needed in economic production. Because they produce no labor and thus earn no money in a “society of consumers, they are ‘flawed consumers’—people lacking the money that would allow them to stretch the capacity of the consumer market” (39). Within the hypercapitalist society of exterminism, Bauman would see these flawed beings as “human waste” (39), a descriptor that expresses the cynical tendency of our society to determine any object according to its economic production value. We are what we earn and consume.

Turning to the science-fictional and especially the cyberpunk imaginary, one could see such an economy of exterminism exemplified in Neil Bloomkamp’s film Elysium. For those who don’t know the film, a short recap of the setup might help: The future sees the planet destroyed by pollution and overpopulation—Los Angeles has become dusty, hot, and decrepit (in terms of production, it looks like Mexico City, where the film was shot). Most humans live in poverty and fight over the scraps of jobs and food. Crime is rampant and people barely manage to survive. Sickness is ever-present and neither medical nor social services are functioning anymore. The ruling elite, though, have escaped to the eponymous orbital station of Elysium and live there, served and secured by robots.

In the mindset of the Elysian elites, the population of Earth is considered somewhere between a nuisance and a threat—echoing the Trumpian rhetoric of the so-called “migrant caravan” or the “bad hombres” from Latin America. For the population of Earth, opportunities are few and far between. Existing jobs (outside of crime or the very exclusive specialized jobs, such as nurses or doctors) are mainly unlearned and unqualified, thus can be fulfilled by anybody (maybe even: any “body”). Workers become exchangeable biomass, cheaper than automated production because they are more expendable. A scene early in the film makes this painfully clear: Max (Matt Damon) is an ex-con and works in such an unskilled job at a factory building robots—the irony of manually producing automated labor is not lost on the viewer here. When the production is halted because of a blocked piece of equipment, his precarious job position does not allow him to refuse an order retrieve the piece from the radiation chamber. He goes in, gets locked in the mechanism and receives a fatal dose of radiation. When he wakes up, a robot is standing over him, informing him in a mechanical voice that he has been lethally poisoned and will die in five days. His boss John Carlyle (William Fichtner) is called, upset about the production halt and detachedly discusses Max’s accident with a foreman. The shot takes Max’s perspective, Carlyle shown through the secure glass barrier, talking about Max and deciding his fate without any consideration for his imminent death. Carlyle shakes his head, looks mildly frustrated at the loss of production time. When the scene cuts back to him, Carlyle asks about Max’s state and whether he will bleed or his skin might fall off. But not compassion is driving this query: “I don’t want to replace the bedding in there, just get him out!” is his order, before he turns back to managing his company. Max is then handed a release form to sign (for which he barely manages a scribble) and some heavy pharmaceuticals that will keep him functioning until his death in five days—when ultimately his body will shut down.

What is interesting about work and automation in the film is its insight into the economics of
exterminism. Max is an unskilled worker, doing a job that is repetitive, has little complexity, and is in a hazardous environment—a job that in today’s economy seems destined to be automated. Yet, in the future of Elysium, the economy clearly says it is more productive to use human labor than cost intensive automation. Peter Frase links automation to workers’ rights and organizational structures: “This development illustrates a recurrent capitalist dynamic: as workers become more powerful and better paid, the pressure on capitalists to automate increases. When there is a huge pool of low wage migrant farm labor, a $100,000 fruit picker looks like a wasteful indulgence. But when workers are scarce and can command better wages, the incentive to replace them with machinery is intensified” (Four Futures 8). So, ironically, the fact that human workers can be exploited and exchanged at will, without issues of work conditions or human rights interfering, actually secures these jobs for humans.

On the other end of the spectrum, jobs that involve an understanding of human interactions, jobs that rely on emotional involvement, are today considered relatively safe from automation. But Elysium reveals the logic of exterminism and challenges this idea. Here, police and security forces as well as social caretakers such as Max’s probation officer are automated. For Frase, this is a logical conclusion as the “impoverished, economically superfluous rabble poses a great danger to the ruling class” (“Four Futures” n.p.) and will need to be beaten into submission (as is literally done to Max in the film)—the automation of the forces that control the multitudes is a logical conclusion. And should suppression not suffice any longer, then exterminating this type of “human waste” (to use Bauman’s term) must be the ultimate endpoint.

In between policing the poor as a first step and exterminating them as the final step, stands the idea of what Frase in reference to Bryan Turner calls “enclave society” (“Four Futures” n.p.). Enclave societies restrict and regulate “the flows of people, goods and services’ by means of ‘enclosure, bureaucratic barriers, legal exclusions and registrations” (qtd. in “Four Futures” n.p.). In the film, the Elysium station is such an enclave—literally reigning from high above the Earth—enacting restrictions to migrants seeking refuge and medical aid, but also regulating the movement of Earth’s citizens by forcing a no-fly zone and jamming communication signals.

What Frase does not make explicit, but what informs this logic of exterminism is a central theme of cyberpunk narratives—the commodification of bodies. For the necropolitical logic of exterminism to function, human beings need to move from a status of personhood to that of commodity (or worse even, that of biomass). As the scene before shows, Max has value only insofar as he impacts the bottom line of his employer Armadyne and its CEO Carlyle—cynically this means that his death is not a loss in terms of labor, as that can be easily be replaced, but his sickness threatens to cause cleaning and medical fees. But Armadyne is not the only institution that commodifies Max’s body. The human trafficker and wanna-be-revolutionary Spider similarly only sees the value that Max provides as a commodity. His dying is the necessary motivation for the extreme transformation of Max into a weapon and data storage tool. Max is forced to be fitted with technology invading his dying body, an exoskeleton and a data port in his head. Ironically, through his commodification, and in rather weak Hollywoodian ending, he becomes the savior of the disenfranchised on Earth. He sacrifices himself, foregoing any chance of healing, by installing a computer routine that changes the status of anyone on Earth to that of citizen of Elysium, thus reinstating their humanity and personhood.

Elysium is not the only cyberpunk film that deals with how work, automation, scarcity, and inequality intersect to produce the commodification of human bodies. The Mexican independent production Sleep Dealer similarly addresses this complex topic, and, just as Elysium, imagines work not automated to the fullest extent possible. Instead, in Mexico, as a representation of the Global South, there are multitudes of workers willing to commodify their bodies and sell their labor to the Global North, logically represented by the US.

In the film, the border has become a militarized zone, patrolled by drone technology and thus heavily defended. The US shoots migrants on sight. But their sovereignty goes further, as they also control the economy of their southern neighbor, for example restricting access to water and basically providing all of the industrial work available to unskilled workers. Through so-called Sleep Dealer factories, workers can remote control automated systems in the US—“all the work from Mexico, none of the workers” is how one of the foremen puts it in
the film. Access to the global economy and thus to wealth is, as Sherryl Vint argues, “via the very rooted embodyment of the construction robot” and remains “marginalized in both material and virtual realms” (“Cyberwar” 265). In effect, then, all of the US has thus become an enclave society, restricting access and flow of people and services, automating their border security to suppress the poor. Ultimately, the film shows how human bodies become commodified as mere operators of automation—the risk, both financially and physically, of installing the hardware in their bodies is left to the workers. Malfunction or accidents are handled by merely replacing the operating body.

In its resolution, Sleep Dealer is more complicated than Elysium. The security used to enforce the enclave is similarly part of the commodification of human bodies. The drone pilot is similarly enmeshed with the weaponry that he uses to secure the border. In an intradiegetic TV segment, he is portrayed as a loyal US citizen, whose parents immigrated to the US from Mexico before the border restrictions were applied. The film here shows, how conformity with enclave society produces both compliance and guilt, but it also shows that commodification does not stop with unskilled labor. Realizing his position in this system of oppression, the pilot turns his weapons against the system and teams up with the workers in Mexico, forcing a change. This is remarkable, as it shows that solidarity of disparate social groups is central to overthrowing oppression. The differences we need to overcome are not just found along lines such as national borders, languages, or cultures, but strongly intersect with our positions within the socio-economic system. And, as Vint has pointed out, there is a strong link between economics, digitalization, and power distribution: it determines the “restructuring of our work lives and prospects as we find that capital has been able to take flight globally while we have remained immured in the body and in local time and space” (“Afterword” 231).

This effect of digital technologies on our bodies as much as on our social-economic status is deeply ingrained into our systems of oppression. And it is one of the main themes of the cyberpunk television series Altered Carbon. In the show, consciousness is separated from the body via the technology of cortical stacks, which house personality traits and memory. Embodiment can be exchanged at will (given that one has the money) via both biological and artificial bodies, so-called sleeves. In the show, money affords the possibility via cloning, artificial bodies and stack backups to effectively live forever. In terms of economics, this means that privileges and inequalities are never challenged, but instead get deeply entrenched into society. Consequently, traits of exterminism can be found in many aspects of the series. For one, the rich—here called Meths or Methuselhahs, for their biblical age—have founded enclaves to secure access to their wealth. They literally removed themselves from earth-bound life and reside in gate communities above the clouds. These are heavily patrolled and secured and use automatization to run their day-to-day.

What differs from the representations of exterminism in Elysium or Sleep Dealer is that in Altered Carbon natural resources are not scarce, as space travel is possible and other planets provide energy and raw materials for production. Scarcity is a concept that is—given the intersection of technology and power—upheld artificially for stack and sleeve technology. Bodies are used by the Meths to secure their immortality, as well as put on display and used for any and all kinds of entertainment. Bodies are thus the real resource that is scarce (for the multitude). In the series, bodies are used as a living commodity in contact sports, abusive violence, and sexual deviancy. Throughout the show, the rich use human bodies as replaceable things to consume, either as objects to manipulate and discard, or as accessories to wear and exchange at a whim.

As Vint has pointed out, “capitalism expands to fill all previously non-commodified spaces in private life” (“Afterword” 231), in this case even placing the human body under what Steven Shaviro calls “real subsumption,” which he defines as follows: “Everything without exception is subordinated to an economic logic, an economic rationality. Everything must be measured, and made commensurable, through the mediation of some sort of ‘universal equivalent’: money or information” (29). Any and all objects, processes and goals are placed within this framework of economics. A cyberpunk show, such as Altered Carbon, thus directly relates to “real subsumption” and provides the ideal imaginary for this exterminist reality.

All three examples show, how digitized and automated sovereign systems remain rooted in inequality. Contrary to Silicon Valley’s utopian ideals, automatization does simply free up human
labor, but further entrenches the socio-economic disparity of social class. Access to technology becomes a valuable resource that the elite will wield as a weapon. Peter Frase’s concept of exterminism thus is not as far-fetched as it might seem. Instead, it provides a valuable extrapolation of how technology can be used to secure social strata and move along the commodification of human bodies until they ultimately lose all value except for their value as biomass—which would ultimately leave us with another cyberpunk future.

Works Cited

Building Reynolds's Revelation Space
How the World of Alastair Reynolds's Revelation Space Is Being Built: Revealing What the Story Does Not Say

Aurélie Villers
University of Picardy, France

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Scarcity and Abundance

ALASTAIR REYNOLDS’S Revelation Space (2000), the first novel of a series, is an “ensemble” narrative, focusing on three main characters in alternating chapters and at the beginning, they seem totally estranged from one another. It is quite long, however, before the reader gets to see how they are all connected and why they are all pursuing Dan Sylveste. To add to the confusion, the narrative is not told chronologically and relies heavily on ellipses. Just like in a whodunit, the reader is after some revelations, which will be granted belatedly and in pieces, through clues and parts of the whole story that each character knows already or discovers with time.

At the beginning, the questions the reader wants answers for are quite numerous. They could be enough to sustain an entire novel, but they are doubled up by unexpected developments, which took place before the diegesis, are impossible to guess, and yet are means to make sense of it all.

The gaps in the diegesis are characteristic of the novel’s overall approach (a detective or detection story to uncover what Sylveste initially did and what initially happened to the Amarantin). They are also typical of the Big Dumb Object trope in science fiction. Lastly, they are typical of the choice of the “ensemble” form (in what way are the characters all linked) but as well of the sf genre in the way it builds and presents its universe.

There is nothing much original in this. Yet the effect is heightened because somehow all these narrative choices add a layer of discontinuity to the other. James Gunn defined science fiction as the literature of discontinuity or even of change. He wrote in his introduction to Speculation on Science Fiction:

Traditional fiction . . . is the literature of continuity. Whatever the situation, it is continuous with everyday experience . . . The moment characters in any kind of fiction encounter new situations or attempt new solutions to traditional situations, the story begins to feel like science fiction. . . . science fiction is the literature of discontinuity . . . We only recognize the work as science fiction if the extrapolation produces a significant enough accumulation of change that is, in actuality, discontinuous. (8)

Here then, the reader is constantly looking for what the story doesn't say to try and build a coherent world (or a world that would have coherently changed from hers) and reestablish a continuous timeline. The reader is therefore constantly running after the story. Indeed, as Samuelson writes, “Good Science Fiction must exert continuous effort to stay ahead of itself, predicting, asking and unveiling, for (t)he cutting edge is always somewhere between
the known and the unknown, the proven and the unproven . . . always threatening to resolve into the mundane or the marvelous” (149).

The diegesis presents the key events in a reverse order, suggesting that reading science fiction means digging up our own distant past. The final key revelations are piled up in the last fourth of the book. More remarkable, the apparent missing time (linking the reader’s world to the novel’s), our known history, is quite difficult to place precisely in relation to the novel’s timeline. The missing time also represents a missing space, the spatial link between the Earth and the Solar System as we know them, and the precise location of Resurgam, Yellowstone, the Shrouders and the Inhibitors’ device. The novel only “innocently” mentions that the “Banished” branch of the Amarantin (i.e. the Shrouders) had reached “the edge of the Solar system.”

There is a first paradox here. The entire chain of events finally makes sense at the end of the novel, except for one element: the link between the reader’s world and the novel’s—that is one part of the diegesis’s past: how did humans get to the stars? This is the major breach to continuity, to refer to James Gunn. Quite like in Cixin Liu’s The Three-Body Problem, we are given here a dizzying picture of the evolution of life in the universe, but the one big mystery, for the human reader, remains humanity.

The diegesis grants some clues: The Conjoiners are a branch of humanity living on Mars (Reynolds 83), the Captain was born in the solar system (169), the Yellowstone settlers have Franco-Sino genes (267), the past “Amerikano era” is mentioned (409), as well as the “23rd century” and the “first European Demarchy” (473; the term is never defined).

Interestingly, however, the most puzzling element in the book is the spaceship, a “lighthugger” bearing the enigmatic name of Nostalgia for Infinity. All we learn, roughly, was that it was built by the Conjoiners (so it is of human origin) and yet seems totally alien to its own current human crew: “after eighteen hours in consultation with various simulations of once living figures from the ship’s distant past. She had been trying to catch them out, hoping one or more of them would disclose some revealing fact about the origin of the cache” (17). This, by the way, illustrates the evasive nature of the characters’ past, and in particular, of its articulation with ours.

This shows on a small scale that the characters and readers seem to be constantly brought back to some problematic past. Then, the final event in the book—the characters entering the Inhibitors’ Device—instead of restarting chronology, appears to bring it to a halt since they all died and now live in some no-place or parallel space out of time, or maybe, timeless. Nevertheless, he novel is itself calling for a cyclic approach to time, in a dizzying “abyrne effect” with metatextual overtones. Ilia Volyova is musing: Perhaps . . . in a few million years other beings would arrive on Resurgam, sharing something of humanity’s curiosity. They would want to learn of the planet’s history, and in doing so they would take core samples, reaching far back into Resurgam’s past. Doubtless that deposited layer of dust would not be the only mystery they had to solve . . . . And she had no doubt that those hypothetical future investigators would come to a totally wrong conclusion regarding the layer’s origin. It would never occur to them that it had been put there by an act of conscious volition (Reynolds 11)

The perfect form of the cycle is misleading since some gaps remain. The novel is here explaining its present world through conjectures about its future. As the extract hints to, the layers of the past accessible to the characters are both superficial (‘dust’) and far-reaching (‘core samples’). This is programmatic. Although the reader is focused, just like the characters, on a recent past, he will have to dig deeper towards a more distant origin that had been placed here to trap him. Funnily, the passive voice (“it had been put there”) allows the narrator not to name the author (of the act). The world, here, has been built to be a trap.

On a more microscopic scale, the reader is also taught lessons to get to understand the world and the way the narrative works. Ana Khouri, for example, reminisces about the sculptures the Mademoiselle had in her apartment. “She had these jagged metal sculptures, too—at least I thought they were sculptures to start with. Later they began to look like parts of a wrecked spaceship. Like she was keeping them around her as a reminder of something” (378). The past has to be revisited to be made sense of, then. More puzzling here is the use of the simile (“look like”) since precisely it is not a simile but the reality. The Mademoiselle surrounding herself with pieces of her wrecked ship should put the reader on the way to revelation: she is Carine Lefebvre who, according to Dan Sylveste, died—or at least was harmed—
when she accompanied him in the Shroud and was sent back to their ship. The play on the comparison is quite intelligent here. A comparison or simile is a means of description that “relates the unfamiliar back to the known world,” writes Thomas Van Parys, who adds that the comparison is “also used as an auxiliary support for the reader’s imagination and visualization” (294). Then, the unfamiliar would be the sculptures, while the known world is the ship. Here is one more means to play with the reader, a first form of lie: hiding reality under the guise of a comparison. It looks like it, therefore it can’t be it exactly; except that here, it is.

Info-dump passages are a classic means of bridging the readers’ and the characters’ worlds in science fiction, and are therefore a trait of the genre, though not specific to it. The importance of the pre-diegetic past can account for their relative absence in this novel whose highly developed technology would yet be calling for them. Info-gaps are here as essential to keep the readers—or “investigators,” as Volyovna calls visitors who will come after Sylveste on Resurgam—interested. In this novel, with the info-gaps taking the place of the former info-dumps as a constitutive trait of the genre, it is as if science fiction was revisiting its own past way of being made, and changed or modernized into its opposite.

It remains so far that the narrative, through discontinuity, seems not only to keep ahead of the reader, but also to mislead them, and (temporarily) work against them. To that end, the novel is teeming with means to play the reader. The info-gaps are not specific to the chronology.

The narrator is extradiegetic and omniscient; which is probably why the narrator can so easily play with chronology. It is obvious in sentences such as these: “Except none of that was going to happen” (440); “What she was about to tell him not only confirmed that they were approaching something dangerous, but it also touched on something of deep personal significance for him” (368). He even resorts to free indirect speech: “The decision had not been one of the simpler ones in his life. Now he knew that, for all or part of this, he had been manipulated. How deep had that manipulation gone? Had it extended to his very powers of reason? Had his thought processes been subjugated towards this one end for most of his life, since returning from Lascaille’s Shroud?” (531-532), to quote a small extract. This all-knowing narrator makes a sadistic point in showing he knows and yet does not tell much.

Beyond “innocent” ellipses such as this (“Eighteen months since Nils Giradieau had shown him the buried city; a year since their wedding had been mooted” [Reynolds 141]), it is a global system of lying that has been developed in the novel. Mostly, they are lies by omission. The first liar is the narrator through a narrative means called “paralipsis” and defined by Gérard Genette as “the omission of such important action or thought from the focalized hero, which neither the hero nor the narrator can ignore, but that the narrator chooses to hide from the reader.” (Genette 212) The examples are numerous, but here one explicit example: “Sun Stealer waited silently and then continued to answer all the questions she had for it” (Reynolds 485), except that the reader is not given these answers.

On rare occasions in the novel, the paralipsis is reversed and the reader happens to know more than the reader. For instance, Dan Sylveste learns that he is his own father’s clone, which the reader has been knowing for hundreds of pages. Then, the reader gets ahead of one character, in a narrative which rarely gives him the impression of getting the big picture.

Seemingly to mix both paralispes and the reader’s advance on the characters, there are strange moments of delayed information in the narrative. Here, Ilia reveals what she learned that disturbed her so much:

> What she was about to tell [Sylveste] not only confirmed that they were approaching something dangerous, but it also touched on something of deep personal significance for him.

> “I found something,” she said .

> “Then it’s something human that you’ve found out there?” Pascale said.

> “A Conjoiner drive,” Hegazi said.

> “Then there’s another ship out there?” Pascale said.

> “It was my first thought,” Volyova said.

But she had studied the object orbiting Cerberus in considerably greater detail.

She zoomed in on it now. At first it was just a slightly elongated whitish-grey smudge, backdropped by stars . . . . That was how it had looked to her days ago . . . . But even then she had found it hard to ignore her suspicions. As more details appeared, it became harder still.

The smudge took on definite attributes of solidity and form now. It was a vaguely conic
shape, like a splinter of glass. Volyova made a
dimensional grid envelop the object, showing
its approximate size. It was clearly several
kilometers from end to end . . .

“At this resolution,” Volyova said, “the neutrino
emission resolved into two distinct sources.” She
showed them: grey-green blurs spaced either
side of the thickened end of the conic shape. As
more detailed phases in, the blurs could be seen
to be attached to the body of the splinter by
elegant black-swept spars.

“A lighthugger,” Hegazi said. . . . What they
were looking at was another ship, much like their
own. (368-369)

Ilia chooses to tell her discovery in the chronological
order of its revelation – a rare case in the novel—
for suspense’s sake. Besides justifying belatedly why
the team’s lighthugger, Nostalgia for Infinity, was
never described from the outside (so the description
given here remains enigmatic and the identification
cannot be made), this passage is hugely misleading
since Ilia’s remark (“It was my first thought”) implies
for everyone, reader included, that it could not be
another ship, then.

Among this vague lexical field used to describe
the ship (the “object” becomes an “it,” and then a
“smudge” and “blurs,” all references mixing with a
“vaguely conic shape” often described through the
merging of three adjectives—“whitish-grey,” “grey-
green,” “clack-swept”), the simile “like a splinter
of glass” stands out. The figure is again used in an
unfamiliar way. It meets the aim of a simile and
apparently ends up being like the previous simile
we studied: it is the real thing, actually, since in
the second mention (“the body of the splinter”), all
means of explicit comparison (“like”) disappears and
it does not sound like a metaphor. Yet by comparing
the lighthugger to something smaller and somewhat
inadequate in the characters’ world (a piece of
glass) stands out. The figure is again used in an
unfamiliar way. It meets the aim of a simile and

emission,” the reader is expected to be at a loss, to
be all the more struck by the revelation. Once again,
he was lied to, by omission or erring (by cachotterie
(secretiveness) and tricherie (cheating), as Genette
calls them).

As can be quite expected, within the diegesis, the
characters are also obviously lying to one another.
At times, the reader knows it beforehand, like in this
case: “Khouri had told Volyova the lie about being an
infiltrator for another crew. The Mademoiselle had
long ago primed her for that particular little chat
and it seemed to have worked perfectly . . . . Volyova
had also accepted the story about Sun Stealer being
a piece of human-designed infiltration software”
(280). Ultimately, the characters often end up being quite
suspicious of one another: “Volyova reminded
herself that she was being told events as filtered
by Khouri’s perception of things, which might not
necessarily be complete, or even reliable . . . . But at
the end it seemed unlikely that any large portion
of the truth had not been related, whether Khouri knew
it or not” (364). The litote lives room for a little more
doubt than an affirmation (it was likely that a large
portion of truth had been related), as to that.

Thus, this all makes for a paranoiac narrative where
neither the characters—any of them—nor the
narrator can be trusted, making everyone suspicious
(see Sajaki for instance: “Alicia’s story could have
been faked. . . . I shan’t believe things entirely until
something jumps out of Cerberus and starts attacking
us” [Reynolds 386]). Paranoia can be defined as a
form of psychosis developed through a systematic
and coherent delirium, which is predominantly
referential and interpretative. More precisely even,
some characters, like Sylveste or Volyova, are the
subjects of sensitive paranoia, defined as a set of
delirious interpretations generated by conflicts,
deceptions, painful circumstances in highly sensitive
and emotional subjects. To get back to the paralipsis
we mentioned earlier: “what she learned disturbed
her enormously. But she decided to wait until they
were closer before announcing her fears” (365). Her
“fears” here stand for the truth she had discovered.
The cause, the revelation, is then replaced, or even
bypassed, by its (emotional) effect. Sylveste also
combines excessive sensitivity and emotion, and a
tendency to doubt and (over?)interpretation. For
example, his reaction to the discovery of the other
lighthugger is this, proving once more his facility for
lying: “Sylveste tried to keep his voice completely calm, allowing only natural curiosity to show, purging it of the emotions he really felt, which were largely variations on pure dread” (271). A few pages afterwards, he doubts, retrospectively, what might have been done to him in the past. About the woman who abducted him on Resuragm, he wonders: “[ha]d she really neglected to mention this detail – or had she spared it, disclosing the facts in a manner calculated to keep him permanently disoriented?” (276). The liar could have been lied to... Accordingly, the reader is bound to indulge in a paranoiac reading, as most elements in the diegesis have metafictional overtones. And he is made to give, retrospectively, a new meaning to the various doubtful elements.

In Revelation Space, the knowledge needed to build a coherent world is disseminated throughout the story, mostly in its hidden past and in its many characters. Lies (real or by omission, through ellipses, gaps, or paralipses) seem to be the only common elements between all of them. So once again Ana Khouri was right, and even programmatic, when she said to Ilia Volyova: “you know you don’t want that to become common knowledge” (261), inciting her to lie. Common knowledge, revelation, means the end of the story. As long as the narrative keeps lying or emitting paranoiac interpretations, as long as it keeps pointing to a more and more distant past, as long as the novel’s world keeps being built, it is straying from the closure of the final revelation, pretty much fighting for survival as the Shrouders did. Lies and parceling keep the revelation space, the novel, and its world open.

**Works Cited**

Genette, Gérard. Figure III. Seuil, 1972.


Translated by Ken Liu, Tor, 2016.


be possible in the future. Hence, we can say that sf often represents a process of historicization by transforming the audience’s world into a yesterday of the sf-universe shown on screen. Thus, sf movies serve as an experimental space of vision of the future, they are a modification of our reference world in which we can try out different possible constellations. Although, the sf novelties often remove the diegetic narration from our extradiegetic world, sf can be a reflective platform, serving as a mirror of our reality and is thus a call for re-evaluation of the existing world structure. In this context, sf can be understood as a knowledge-enhancing mode (cf. Spiegel 243).

In Arrival these novelties are not only localized in the exterior: obviously they consist on the one hand of the heptapods, who land on earth, and of everything around them, including their spaceships, the matter the ship is made of, new physical laws at work within the spaceships, and their language. On the other hand, the movie is not all about the aliens; it is also about humanity and the change of human perception as well as the expansions of human consciousness through the faculty of language. This is why we locate the novelties not only in the outer world, but also within humans themselves. Simon Spiegel refers to this phenomenon in particular when he states that the spectator’s urge for knowledge flows smoothly into the desire to overcome human boundaries and reach a higher level of consciousness (Spiegel 248). This happens with the characters in Arrival as they learn to speak heptapodic and thus to think heptapodically.

Louise’s task as a linguist is to ask the heptapods the decisive question: “What is your purpose on earth?” In order to do this, she tries to understand the linguistic sign system of the extraterrestrials which is characterized by teaspot-like ink circles produced by their tentacles. Since these are circular logograms, the signs transmit a meaning rather than a sound. A logogram instead consists of several logographic characters that are assigned to a morphological unit. We know that from Chinese, Japanese, Korean, and other languages that use logographic writing systems (the sign for “tear” in Chinese is for example a combination of the signs of “water” and “eye”; tear = water in the eye). Furthermore, the movie itself explains the non-existent temporality of the heptapodic logograms: “unlike speech a logogram is free of time . . . their written language has no forward or backward direction. Linguist call this ‘nonlinear orthography’.” Circularity becomes thus a leitmotif in Arrival: The logographic ink circles have neither a temporality nor a beginning or end as the narrative itself does not seem to have. In this way, past, present, and future are no longer in a fixed order according to a linear time stream. They are linked by causality and this also means that the future can influence the past just as the past can influence the present. It becomes clear that by learning heptapod, the experience of temporality is restructured. The borders of temporal concepts dissolve and intertwine and the readers of the signs are able to “foresee” the future like “memories.” So Louise does, although her physical life on earth remains linear. She remembers the future and moves therefore mentally but not physically through time as it is the case in a classical time travel. When the protagonist recognizes this new gift, her vocabulary is no longer sufficient to explain what is happening to her. “I’m not sure it’s something I can explain,” she expresses, confused. With the recognition of her ability, the future events (as a product of their past) begin to influence her present. Since Louise, for example, foresees that her research colleague Ian will one day be the father of her daughter; she feels more attracted to him in the present. Present and future are thus mutually dependent and follow the leitmotif of circularity.

Within Arrival, the new way of non-temporal thinking and thus the expansion of consciousness is justified by the controversial Sapir-Whorf hypothesis. According to this hypothesis, first posited by Benjamin Sapir in the 1920s, and later developed by Edward Whorf in the 1950s, a person’s way of thinking is determined by the linguistic structures of their mother tongue, and is often referred to as linguistic relativity. Under this hypothesis, the extralinguistic reality is evaluated differently by the speakers of different languages. Moreover, Sapir-Whorf suggests that the semantics of a language determines the possibilities of conceptualizing the world, a concept known as linguistic determinism. Thus, some use the Sapir-Whorf hypothesis to argue that a language determines its speaker’s perception of the world. Taking this hypothesis seriously, Louise is able to change her way of thinking detached from any kind of temporality when learning heptapod. Today’s linguists do not agree on the validity of the hypothesis, since there is no empirical evidence, but the cognitive scientist Lera Boroditsky is convinced
that the 7000 different languages on earth shape their speaker's universe and their ways of thinking differently to at least some degree.

In addition, the Sapir-Whorf hypothesis underlines the dilemma of untranslatability, which is also a problem in Arrival. An example: In English there is no equivalent for the German word “Geborgenheit,” which describes the feeling of safety when you are surrounded by loved ones. Hence, a German speaker would not be able to express this feeling with an English expression. Maurice Merleau-Ponty notices in this context: “We may speak several languages, but one of them always remains the one in which we live . . . to [completely] assimilate a language, it would be necessary to make the world which expresses one’s own, and one never belongs to two worlds at once.” (218) Louise’s inaccurate translation of the heptapodic answer to the decisive question “What is your purpose on earth?” confirms this point of view. Her translation fluctuates between the meanings “offer weapon” or “offer tool,” which refers obviously to the unifying and dividing nature of language itself as the foundation of complex human societies (or “civilizations,” as the beginning of the movie claims) but which also emphasizes the fact that there must be a common understanding and system of perception when teaching and learning a foreign language. Louise tries to create this level of understanding between herself and the heptapods, but she also admits at the same time: “Our language, like our culture, is messy and sometimes one [a weapon or a tool] can be both.” And in the case of Arrival the linguist is not only confronted with an undiscovered human tribe but with the linguistic cosmos of an extraterrestrial species.

At the latest when the protagonist crosses the border to the spaceship the spectator also exits the extradiegetic frame. Earthly rules are turned upside down even gravitation and the logic of the cadrage which is reversed. A new perspective begins, not only for the researchers but also for the audience. But when Louise drives to the middle of nowhere, enters a spacious dark room—the spaceship—by passing a dimly lit tunnel, and finds herself finally in front of a huge illuminated screen-like window behind which the aliens appear, the experience of the unknown seems to take place in a well-known setting for the spectator; one not unlike cinema. Like Louise’s meeting with the heptapods, cinema can be frightening, involve sometimes physical effort, and is always a confrontation with something different that has to be interpreted by the spectator comparable to Villeneuve’s character who has to decode the meaning of the heptapodic logograms. The “screen” serves as the interface between Louise and the aliens as well as analogously between spectator and movie.

In today’s world (touch-)screens are common communication interfaces (smart phones, computer, tablets etc.) that encompass physical distances on the one hand but also the possibility to bridge those distances. In Arrival, the “screen” is used for this exchange of communication and, by laying on hands, also leads to a physical experience. David Richard comments on this analogism of a movie in the movie represented by the cinemascopy “heptapod screen” as follows:

The multiplicity of screens in its mise-en-scène not only provides a vivid illustration of the screen-sphere, but also, through Arrival’s appeal to the sensorium, it serves as a vital reminder that film language necessitates an intersubjective and embodied ‘fleshly dialogue’ between the spectator and the screen. (42)

Consequently, a movie screen is also a communication screen: the movie communicates with the viewers because it conveys a message. On the first glance, this communication seems to be one-sided and also the heptapods just reacts but do not ask questions. But the movie as well as the heptapods develop a certain kind of productivity because they change the perception of the researchers and of the (researching) audience. Louise merges with the space behind the “screen” by crossing the separating window and by overcoming at the same time the enemy image. She immerses in the heptapodic atmosphere like a spectator can be completely immersed in a movie.

Arrival let the audience be part of its action on one hand through its synthetic transmission, on the other hand through the narrative structure that follows the circular leitmotif. In this context, close ups of hands are prominently used throughout the movie. The protagonist, for example, takes off her protective suit, puts her hand on the window, and produces heptapodic signs with her fingers. But the sense of touch is not only focused on the image level. The purely organic sound also transmits a perceptible experience through the powerful bass used in the scene’s score. Thus, sounds become audible, perceptible, and even visible through frequency diagrams. In this context, Louise’s breathing sound
also plays an important role. It is engaging, creates tension, and is additionally an indicator of earthly life. These sounds stand in contrast to moments of silence, which, according to sound designer Sylvain Bellemare are actually “the most powerful sound[s]” (Patton).

Moreover, the movie integrates the viewer into its circular structure through its unreliable narration. In this way, Arrival itself seems to have no beginning and no end, an aspect of the film’s narrative structure that is underlined by Louise’s retrospective view on the events she tells from the chronological beginning of the film: “I used to think this was the beginning of your story. Memory is a strange thing. It doesn’t work like I thought it did. We are so bound by time, by its order... I remember moments in the middle. And this was the end... But now I’m not sure I believe in beginnings and endings.” This statement overlays the first scenes of the movie, during which Louise’s daughter Hannah grows up and succumbs to a serious illness in her youth. Not only through the in medias res structure, but also through their mise-en-scène, these scenes let the viewer assume that they are a mental metadiegesis of memory. These prolepses are presented like memory sequences: They are determined by a large depth blur, graded in sepia tones, and the camera work is reminiscent of home video recordings using a hand-held camcorder. The viewer is convinced until the dissolution that Louise has to live with a trauma caused by the death of her daughter and that the protagonist remembers this difficult fate over and over again during her research, even though her daughter was not yet born. The main plot of the movie shows only the story of the two parents getting to know each other. So the movie seems at first to tell the story analeptically, although it shows prolepsis. In addition, various episodes from the future and present are cut into another in a parallel montage. The events of the different scenes are linked by causal connections: Louise tells her colleague Ian after a vision she had, “I just realized why my husband left me.” He does not know at this point that he is going to be that husband one day. In this way, future and past appear interchangeable or merely causally, but not linearly, connected. Arrival plays with its viewers and puts them in an analogous confusing situation with its protagonist.

In the diegetic world Louise can be seen as a spectator who watches the movie for the second time because she can foresee the future like a scripted play due to her simultaneous consciousness. At the same time, she is the ideal spectator: the aliens produce logograms (a visual language, like movies use the potential of imagery) and Louise interprets these signs. Simultaneously she shows that the misinterpretation of signs could have serious consequences, as in is the case of the weapon/tool problematization. Due to this reason, we can say that Arrival can also be read as a school of seeing, analyzing, and interpreting.

Arrival becomes on the one hand a reflection of current socio-political conditions. The appeal is: “Do not use weapons, use language as a tool to peaceful communication.” Once Louise has learned the language of the heptapods, communication between the individual earthly nations seems far more difficult than between humans and extraterrestrials. On the other hand, the movie not only reflects on social conditions, but opens up a universe of new levels of consciousness for humanity itself. The viewer is included in this process through the narrative structure and the synaesthetic mediation. His visit to the cinema is a confrontation with the unknown as it is shown in the movie. Moreover, Arrival reflects the cinematic medium and its artwork. It portrays the interaction and confrontation between the viewer and the medium as a carrier of meaning.

**Works Cited**


Semiotic Concepts of Gravity in Solanas's Upside Down

Semiotic Concepts of Gravity: Simulation vs. Representation in Upside Down

Norbert Gyuris
University of Pécs

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Rogues Two

THE FRENCH-CANADIAN science fiction movie Upside Down (dir. Juan Solanas, 2012) demonstrates how the boundaries of binary logic can be permeated before they are finally erased and how the divided nature of binary oppositions is eventually superseded. The film offers the possibility of observing the semiotic model of representation that artificially separates the components of any binary opposition, and, shows how simulation unifies these components. Simulation in this context is understood as the strategy of creating reality based on already existing models (Baudrillard 170). The binary semiotic structure of representation is gradually supplanted by simulation not only in Upside Down, but in the existing theories of gravity, as the representational model of the prevailing physical notions of gravity are progressively replaced by the quantum gravity model founded on simulation. The problematic nature of the binary is reflected by the very first word uttered in the film: “universe”. The etymology of this word offers a metaphor of how binary logic turns into simulated oneness, unity or singularity, conjoining the Latin roots unus (one) and the past participle (versus) of the Latin verb vertere (to turn). Even the etymology of the word proposes the process of fusion, thus “universe” turns to be a basic metaphor of how the replacement of the notion of representation by simulation is an evolutionary necessity. Upside Down depicts a utopian universe, which is fundamentally the menagerie of “miracles,” the “mysterious stars” and life forms that have superseded binaries.

In Upside Down, the magic element is pollen collected by special pink bees from plants growing on both Up Top and Down Below, twin planets orbiting each other at a very small distance. The male protagonist, Adam, regularly gathers pink pollen in the mountains. The harvest area is fence protected, as here the mountains rise so high that the planets almost touch each other and people from both worlds could make physical contact, which is forbidden. The pink pollen and the bees are in contrast with the metaphoric darkness of Down Below (clad in matte dark gray and black hues) and the brightness of Up Top (depicted by white and sparkling colors). The binary opposition of the two planets is based on the gap between the technologically advanced Up Top exploiting the natural and human resources of Down Below and the organic magic of the miraculous bees, which is the marker of untouched nature in a sealed area.

Balancing on the border of science fiction and fantasy, Upside Down is founded on a distinctive idea. The film starts with the narrator explaining his world as an untypical science fiction novelty: he refers to his home solar system as a “miracle,” because Up Top and Down Below, the twin planets orbiting the central star are singularly bound together by double but opposed gravitational pulls. It is “possible to fall up and rise down” in this “very mysterious and unique place,” as the two planets have the same mass besides sharing an atmosphere because of their proximity. As a result of their joint orbit, there are three principles of physics that all of the living and nonliving matter must obey. First, “all matter is pulled by the gravity of the planet that it comes from.” Second, “an object’s weight could be offset by using matter of the opposite world.” Third, any “matter in contact with inverse matter burns” after a few hours. Although the worlds of Up Top and Down Below significantly differ from the conditions experienced on Earth, they extrapolate the mutual gravitational pull of Earth and Moon, and open up a new perspective from which the bipolar nature of gravity can be examined from two different vantage points at the same time. This binary gravitation is integrated when the gravitational sum of Up Top and Down Below is observed in its relation to the central sun. However, instead of pursuing the consequences of the centralized solar position, Upside Down explores how binary opposition can be inspected in the controversy of the two planets and how this binary pair exerts a joint effect on the universe.

Gravity sustains and stabilizes the two planets; it is gravitational pull that forms an interdependent Up Top and Down Below. As the sum of the binary poles of the twin worlds is zero, the opposite
forces are balanced. The novum—using Suvin’s understanding of the term as the foundation for an “alternate reality”—in Upside Down is founded on the lack of a consistent theory of gravity that could be verified by scientific means (Suvin 71). There are several scientific models of gravity including the theories of Isaac Newton, Albert Einstein, Nicola Tesla, and quantum mechanics, however, insofar as no scientific theory can ever be “proven,” there is no proven scientific theory of gravity. If the rational background of any—natural—phenomenon is not available, the Cartesian self tends to make up for this lack by inventing fictitious (meta)narratives to construct a seemingly coherent theory describing the phenomenon. In the pseudo-epilogue sentences, the time periods before and after the united gravitational fields are contrasted, and they offer the allegory of two profoundly different theories of gravity.

The symbiotic ontology of Up Top and Down Below and the resulting geopolitical division reflect Isaac Newton’s binary model of gravitation, which is based on the principle of mutual effect described in Philosophiae Naturalis Principia Mathematica (1687). Newton’s seminal text of classical mechanics, wherein he notes, “To every action there is always opposed an equal reaction: or, the mutual actions of two bodies upon each other are always equal, and directed to contrary parts. Whatever draws or presses another is as much drawn or pressed by that other” (13). William Stukeley, Newton’s biographer and friend, straightforwardly sums up in his Memoirs of Sir Isaac Newton’s Life (1752) “that there is a power like that we here call gravity which extends its self thro’ the universe” (14).

Newton’s law of universal gravitation concentrates on a binary relationship between separated and distinct physical objects. The theory proposes a specifically binary opposition based on the difference in the mass of two physical bodies, whose gravitational pull defines their respective motion. Newton asserts that “all bodies whatsoever are endowed with a principle of mutual gravitation” (399), and the present form of Newton’s law of universal gravitation states that “a particle attracts every other particle in the universe using a force that is directly proportional to the product of their masses and inversely proportional to the square of the distance between them.” However, this mutual attraction of “all bodies” is reduced to merely two objects or particles in the formula \( F = \frac{Gm_1m_2}{d^2} \) through their respective mass \( m_1 \) and \( m_2 \). Too many factors, a system consisting of an array of variables, or an infinite number of binary pairs, would immeasurably extend the studied problem, which would be thus rendered incalculable within a practical approach. For the sake of simplicity, classical mechanics takes into account two objects at a given moment, thus the representation of gravity in these definitions is built on a basic binary and the consequent difference of the given pairs. Similar to the definition of the notion of classical gravity, Upside Down also marginalizes the representation of the central reference point, the star of the system.

The artificially created socioeconomic separation of Up Top and Down Below is founded on a virtual binary opposition, which is fostered by the lack of access, as the political and economic establishment denies access for the citizens to surpass the enforced binaries. This artificial sociopolitical boundary is based on a natural given, the basic dissimilarity between matter and inverse matter, which separates the two planets socially, politically, economically, and culturally, as well. The protagonists’ love transgresses this set of binary differences, when Adam lines his shoes and clothes with inverse matter in order to meet his love, Eden. Adam uses a former colleague’s access card to simulate an identity to infiltrate Up Top, however, he remains emotionally and intellectually unchanged behind the electronically disguised identity. Adam’s simulated identity is different from those of the traditionally disguised or masked heroes (Superman, Batman, etc.), as he needs to simulate access, i.e. a virtual identity that illegally manipulates and permeates the border of the two worlds, while he in parallel has to keep his own default corporeal, intellectual and emotional identity.

Adam needs inverse matter to enable his body to get access to Up Top, therefore he has to mask Down Below gravity in such a way that his body, from an outsider point of view, would seem to be pulled by Up Top gravity. In other words, Adam has to conceal the lack of Up Top gravity that would pull his body towards the planet. Thus, Adam dissimulates his Down Below gravitational identity: representation, which seemingly signifies that Adam has an Up Top body pulled by gravity belonging to this planet, is suspended by a completely different signifying system that would correspond to the
second and third order of Baudrillard’s typology of simulation. Baudrillard exposes the difference between Saussurean representation and the system of simulation with the introduction of the four phases of the image. In this system, the first phase is the realm of mirroring, mimesis, signifier/signified and representation, which enable the depiction of reality. The next three phases are informed by the three levels of simulation: first order simulacra “mask and pervert” reality, second order simulacra simulate the lack of reality and third order simulacra establish the self-referential and self-reflexive sign, which is no longer related to reality signified by the former representation; this is the pure or essential simulacrum (Baudrillard 170).

Adam has to manipulate both dissimulation and simulation while fighting for Eden’s love. His bodily identity is based on his bodily cells that are pulled by the gravity of Down Below. This gravitational identity needs to be masked, and Adam achieves this by dissimulation, which is “to feign not to have what one has” (Baudrillard 168). Thus the unknowing beholder sees Adam as if he belonged to the people of Up Top. This effect is achieved by the bootleg inverse matter, which serves the purpose of dissimulation as well as that of simulation, which is also indispensable for Adam to mix unnoticeably with the Up Top citizens. His gravitational camouflage can only deceive the people of the upper planet, as the viewer is constantly reminded of the fabricated nature of his gravitational identity: Adam is frequently seen hiding when arranging the equipment crucial for simulation, or in one of the restroom scenes, in which he tries to cool down the smoking hot inverse matter inlays of his clothes with water. Because of the seemingly natural, Up Top gravitational pull on Adam’s body, the citizens do not even think of questioning Adam’s identity, thus they are unable to come up with a reading of the situation that the viewers and Adam have. While Adam masks or dissimates the Down Below gravitational force exerted on his body, and pretends or simulates that he is influenced by Up Top gravity, he is stuck in the world of binary logic that informs representation and the Newtonian notion of gravitation. As a consequence, fundamentally binary systems (signifier vs. signified, force vs. counter force) can most precisely describe his special position. However, from the perspective of the Up Top citizens, Adam is one of them, his gravitational identity is—seemingly—the same, thus Adam also becomes the perfect simulacrum, whose representational “secret,” the “real” identity is inaccessible for Up Top.

Second and third order simulation still apply to the reference system of representation, and this connection can be revealed if the necessary level of access is available. When the inverse matter, which simulates Adam’s weight Up Top, burns, the appearance built on simulation and dissimulation collapses and devolves into the original binary representation and Adam’s identity, which is founded on the signifier (Adam’s planetary origin) and the signified (the gravity of Down Below). In the fictitious ontology of the film, special emphasis is placed on the fact that simulated gravity cannot be sustained for a longer period of time. When the effect of the inverse matter vanes, he is endowed with supernatural abilities. All these incredible powers are supernatural only on the surface, and the authorities have him on a wanted warrant as they get to know that he originates from Down Below. However, the technological breakthrough is imminent, and after Adam and Bob team up their intellectual and financial resources, they are able to create a mutual and universal gravity, which is void of binaries and harmonizes the gravitational pull of both planets.

The gravitational model of this unity follows the notion of the basic logic of quantum theory applied to gravity. As Daniele Oriti argues,

This yet-to-be-found theory promises to be a more comprehensive and complete description of the gravitational interaction, a description that goes beyond Einstein’s General Relativity in being possibly valid at all scales of distances and energy; at the same time it promises to provide a new and deeper understanding of the nature of space, time and matter. (xv)

Accordingly, quantum gravity departs the Newtonian binary approach and explains gravity by introducing a new particle, the graviton. Quantum field theory originates gravitational pull from this—still purely hypothetical—particle, which plays a crucial role in an array of theories (string theory, quantum gravity, M-theory, general relativity, supersymmetry etc.) in very different ways (Morrison xiii). However, classical mechanics took gravitational force down to a force field (e.g. Newton), but the theoretical approach of quantum gravity, the extension of quantum mechanics on the phenomenon of gravitation, holds
gravitons responsible for gravitational force fields. However, gravitons are generally considered having a mass of zero (see Scherk), therefore these elementary particles have not been discovered yet, still, the graviton waves would theoretically offer an ample solution for the gravitational force (Gribbin 270). The graviton has the properties of both waves and particles (particle-wave duality) like the photon (Zee 420), but the graviton is hypothetically influenced by mass and energy instead of electromagnetic force. As gravitons mediate gravitational force that influences mass, the gravitons are different from other bosons, as they carry energy thus they have the capability of self-gravitation (Gubser 51-52). This self-reflexive quality renders the graviton as a hypothetical elementary particle, because its very existence leads to renormalization problems, because the already existing models that can be applied to bosons is impossible to apply to gravitons. Thus, the graviton is mostly seen as the main cause of the incompatibility of classical general relativity that is based on Newtonian physics and quantum mechanics that describes extremely small-scale phenomena.

As the graviton at present is an elusive particle to account for gravitation, Upside Down explores a scientifically uncharted, highly controversial and theoretical gap that enables the fictitious ontology (i.e. the science fiction element) to be credible within the particular frame of rules and logical limits of this world. The novum of Upside Down is generated by the contrast of a background dependent theory (classical or Newtonian physics) and a background independent theory (quantum gravity). The substance synthesized from the pink pollen sensitive to mutual gravity reveals that the available spatial conditions (Up Top and Down Below) can be formed, altered and organized into a whole. Adam’s invention integrates the two, antagonistic but equal gravitational pulls and brings symmetry to the asymmetric space that prevailed before the technological breakthrough. Any material—including living matter—can harmonize the gravity of Up Top and Down Below if the pollen is applied to it, thus the earlier separation of the worlds, which could have been circumvented or permeated only by simulation, changes into a utopia, in which the former binary pair divided by a politico-economic borderline of representation (the duality of signifier and signified) implodes into the undivided whole of the simulacrum. Therefore two distinct, although integrated worlds seem to unite in a utopian oneness, which is the state that unifies the four basic natural forces (electromagnetic, gravitational, strong and weak nuclear) and quantum theory seeks to explore: Many physicists believe that all four forces were once unified at high energy levels, but as the universe reduced into a lower-energy state, the inherent symmetry between the forces began to break down. This broken symmetry caused the creation of four distinct forces of nature. The goal of a theory of quantum gravity is, in a sense, an attempt to look back in time, to when these four forces were unified as one. (Jones 37)

Upside Down places this moment, which scientists believe to have existed just in the instant before the Big Bang, into the present, and while contemporary physics cannot find the common denominator of quantum theory and general relativity (Sachs 19), which is often referred to as the Theory of Everything, the final answer to all of the questions of physicists, this utopian harmony serves as a solution to all the social and economic tensions in the ontology of the film. This unity is represented by the pink, liquid sphere floating in the air, which is merged by Adam with a “magic” touch before the amazed Bob in the laboratory scene. The disconnected worlds that are based on twoness and representation (i.e. simulated signs) are unified in the semiotic universe of the simulacrum.

Works Cited
Oriti, Daniele. “Preface.” Approaches to Quantum Gravity: Toward a New Understanding of Space,

**The Otherworldly Self in Tarkovsky's Solaris**

Tarkovsky's *Solaris*: Settling the Otherworldly Self

Chris Hall
University of Kansas, USA

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SF from the Former Eastern Bloc II

IN THE CLOSING moments of Andrei Tarkovsky's 1972 film Solaris, the camera rises from a scene of apparent homecoming for protagonist Kris Kelvin, who had spent a traumatic and interminable portion of the film aboard a space station based at the planet Solaris. As this final shot retreats into the atmosphere, it becomes clear that Kelvin has not returned to earth, but has in fact entered a replication of his memory of home, one produced upon the liquid surface of the planet through a collaboration between Kelvin's memories and the planet's capacity for materially manifesting human remembrance. Leading up to this point, Kelvin, as a psychologist who studies Solaris, has been sent to the station to determine its continued viability, given some strange reports from those who have been working there.

When he arrives, he encounters scientists Snaut and Sartorius, both of whom have mysterious companions that were created by the planet in its engagements with their memories and desires. Soon, Kelvin is greeted as well by the manifestation of his late wife Hari, whom he first tries to get rid of, and then re-forges a relationship with, before she finds a way of killing herself with the help of Snaut and Sartorius. As Snaut says during a speech in the space station's library, “We don't need other worlds. We need a mirror.” Solaris, as a planet, or more accurately as the liquid body that covers the planet's surface, provides that mirror, one by which the film’s characters—and its spectators—are made capable of seeing themselves in new ways. Solaris dramatizes that the process of becoming a self—of worlding our selves—happens in the space of the other, that it requires taking that place. In this way we become at home in ourselves, yet also realize that the self is and remains unknown, and that our ontological sovereignty is always already entangled with the other. The human is nonhuman, and the self is an unfinished becoming in collaboration, the outcome of which is unknown and ambivalent.

I frame Kelvin's encounter with Solaris here as a partial, forced re-entry into the Lacanian mirror stage, that state of a child's selfhood when the child identifies themselves with their surroundings. As Lacan describes it, the mirror stage is “the symbolic matrix in which the I is precipitated in a primordial form, before it is objectified in the dialectic of identification with the other, and before language restores to it, in the universal, its function as subject” (2). Aboard the Solaris station, all of Kelvin's surroundings take on the capacity of physically manifesting his self; the “visitors” or “guests,” as Solaris' creations are called by the crew, do not have an identifiable origin—they do not board the ship, or arise from samples of the ocean. They seem to come from nowhere, insofar as they must come from a planetary force the extension and impact of which is beyond measure.

Hari simply materializes out of Kelvin's surroundings—from his dreams, apparently. Her arrival signals the return of Kelvin's selfhood to an embryonic form—it demonstrates that his self is yet to be created, that it holds within it the capacity for the production of its past as future. When Hari arrives as part of Kelvin's self—a part both intimately known as memory and radically alien as a production with and by the alien planet and as a being with a self herself, in the process of becoming—in this arrival
the dialectic of self and other loses all meaning; it becomes increasingly difficult to distinguish what and who Kelvin is. At this point, language fails, as the discursive tools of knowing and describing lose their grounding, and the self is revealed as unknown.

Kelvin’s experiences on Solaris constitute a worlding in two senses, as I understand the term. Worlding, as I apply it, is the process of creating worlds—temporary but meaningfully structured situations—that makes possible the further creation of worlds, ad infinitum. My understanding of worlding as the creation of new, unknown situations—here of the self or of space—that present the ground for further creation, draws on the work of Jean-Luc Nancy, and on his concept of the “creation of the world.” “If ‘creation’ means anything,” Nancy writes, “it is the exact opposite of any form of production in the sense of a fabrication that supposes a given, a project, and a producer.” In this way, Nancy argues, “The world is created from nothing.” (51). Kelvin’s time on Solaris offers worldlings that are spatial and ontological, as Kelvin finds himself thrown into a circumstance where his being is being created in the space around him, both in the appearance of Hari and in the topological re-creation of his home on earth, in the final scene.

This worlding is radically unknown; what Solaris will manifest for each individual cannot be known beforehand—Snaut’s and Sartorius’s visitors appear to be a child and an individual with dwarfism, respectively, and their relationship to the scientists is never explained. The appearance of the visitors seems to lack any definable purpose or intentionality from the planet that produces them. As a creation from each character’s mind—characters who themselves, of course, are “visitors” to Solaris—the appearance of the visitors reacquaints the characters with their desires and pasts through a mirroring that reflects a self that is both recognized—at least in Kelvin’s case—and encountered as entirely alien.

In this way Solaris brings to the fore Kelvin’s experience of worlding his self as an unfinished process—re-creating his being in collaboration with Solaris via a bringing-forth of memory into an undetermined openness. This is an alienation of the self even as it is an identification, a process by which, in his encounter with Hari, Kelvin recognizes something that he has been carrying within himself. This paradoxical experience is one we might describe, to use a Derridean terminology, as the manifestation of the non-ipseity—the non-self-identity—of the self. This is to say that the mirror that Solaris is to those aboard the station offers a reflection that is a repetition of its subject, but it does not thereby create a copy; Instead, Tarkovsky presents the encounter of a subject with itself as non-self via the intervention of the alien other; the subject has all along harbored an otherness that Solaris calls forth.

To return to a Lacanian conceptualization of the self, we might consider here the notion of the “suture” developed from Lacan’s thought by Jacques-Alain Miller. As Miller demonstrates, it is by no means necessary that there be a spectacular intervention of radical otherness (e.g. by a force like Solaris) in order to point out the ways in which our selves are never self-same. This is present in language itself; the intrusion of Solaris on the selves of the Solarists offers an event-level materialization that makes unavoidable a confrontation with the “lack,” as Miller says, of ipseity.

Miller writes that “the trait of the identical represents the non-identical, whence is deduced the impossibility of its redoubling, and from that impossibility the structure of repetition, as the process of differentiation of the identical” (46). The subject is sutured in the experiences of language—it is made to confront its own non-ipseity as it becomes aware of the signifier’s lack of identicalness with the signified. The self, as sutured, is incomplete; it is always to come; as Miller says, “the definition of the subject comes down to the possibility of one signer more” (48). Hari is the appearance of this constitutive lack in Kelvin’s being.

Language is also the means by which an individual departs from the mirror stage; in entering into language an individual becomes an individual, a process that begins in the self-definition of the late mirror stage. This is a Lacanian worlding of the self. In the mirror stage, the world is the ontological and spatial totality of the self and the surroundings into which it extends and with which it believes it is self-same; in emerging from the mirror stage, the subject finds itself sutured into language as a divisible I. In this process of the emergence of the subject, The World—as the singular unity of its being—is shattered, and the subject finds itself caught up instead in a process of worlding its self, a process of realizing that one’s being-world is not only not the only world, but also that the world of the self never teleologically coalesces into any final knowable form.
Selfhood is, in this sense, always a slippery negotiation in language, although not only in language. To emerge as a subject is to recognize the self as distinct from the other—to become a subject and form an I—but also to recognize that that self is other. And the means by which we attempt to finish creating the self—and which we can never finish with—are by worlding it, by creating it out of nothing. This could hardly be more apparent than it is in Tarkovsky’s film, and in the appearance of its visitors from nowhere and everywhere which—in Hari’s case—emerge as fully-formed memories into discourse with the self from which they issue, born into a new mirror stage in which Kelvin believes he has already formed his self, and in so doing interrogating to what extent one ever leaves the mirror stage, and to what extent one’s self as an independent subject is ever truly established.

What Lacan and Tarkovsky serve to point out together here is that the self, as the stable and purely human subject separate from and sovereign to any Other—particularly any nonhuman other—is a fiction. If the self instead is essentially other, and it is created in a worlding process by which it asserts an ipseity that is always already a non-ipseity, then the self is essentially uncanny, unheimlich, as Freud writes. The self is both home (heim) and not-home (un-heim) to being, the uncanny arising at the point of a doubling experienced as terror and lack—an experience with which Kelvin becomes intimately familiar.

It is, as Kelvin demonstrates, the being that we recognize as our own—the memories from which Hari arises that he knows as he knows himself—and the simultaneous otherness of this being, that renders ourselves uncanny. Kelvin uncannily sees, touches, and speaks with a creation that is him-self, that is to some extent a trace of Hari her-self, and is Solaris its-self, and each of these flows together, rendering Kelvin quite unsure of himself. So what Kelvin does, in the film’s ending, is make a new home, in the ocean of Solaris. Kelvin’s confrontation with his uncanny self prompts him to create an uncanny home—to settle both the planet and his self in their pluralization.

In this way Kelvin worlds, both in being and in space, as he attempts to make a home amidst un-home. To watch him do so throughout the film—first attempting to make a new life with Hari aboard the station and then to settle its surface—is to witness the worlding of his Dasein. As Being in the world, Dasein is the construction of Being as it relates to the mystery of its essence, an essence that Solaris’ uncanny co-creations bring to presence. As Derrida has argued, working through Heidegger, this creation of being as the process of circumscribing a world that never remains contained is itself uncanny. Derrida articulates this in his reading of Paul Celan—“There is no world, there are only islands,” Derrida writes in response to Celan’s line “the world has gone...I must carry you” (9).

The World, as single ubiquitous container, as a universal identification of environment with self that Lacan’s infant experiences and which begins to fragment in the mirror stage, is experienced as a fragmentation into islands in language—into a plurality of worlds that we must know and create in and as our selves. We do so by traveling in uncanny, circular paths, making, as Derrida writes, “a circular movement in which the step that distances us from our starting point is also the step that brings us closer to it” (74). For Kelvin, this takes place first aboard a circular space station with circular rooms, and subsequently on an island on an isolated planet that is itself an island.

Derrida describes the circularity of worlding through a reading of Heidegger together with Defoe’s Robinson Crusoe, whose protagonist encounters a footprint on the beach of his island and does not know whether it was made by him or by another, leading to an uncanny pursuit of the trace of one who may be himself, yet remains other: “The other man,” Derrida writes, “the step of the other man—is it not me again, me alone who, returning like a revenant on the circular path of the island, become an apparition for myself, a specular phantom...who does not know if he is himself, ipse” (49). This is our experience as we attempt to trace the limits of a world of a selfhood which always exceeds them.

At one point, Snaut describes the experience of the scientists by remarking that the ocean “probed our minds and extracted something like islands of memory,” and after Kelvin’s encephalogram is beamed down on Solaris, Snaut notes that islands have sprung up on the planet. At the end of the film Kelvin himself becomes a kind of Robinson Crusoe as he colonizes one of these islands and makes his home on an island-world that is a replication of his home on earth, itself a replication of an older home in his family. In this way Kelvin colonizes Solaris and
colonizes himself, capturing a space of his self in the space of the other. And this space, of course, is a replication of the space on earth that begins the film, making the film itself an uncanny, circular worlding. Kelvin’s journey in the film is an entirely circular one that yet leaves him far from where he began.

Worlding, of course, can be an imperial practice, one that circumscribes the space and knowledge of the other. This is a practice that Kelvin, as a member of a team tasked with penetrating, exploring, and extracting knowledge from a being and place reluctant of giving it up, is eminently concerned with. In the efforts of the Solarists to “make contact,” to get the ocean to communicate with them in a method that aligns with anthropocentric ways of knowing, we might even detect an element of the classic civilizing mission. Gayatri Spivak has described the way in which the western colonialist “is actually engaged in consolidating the self of Europe by obliging the native to cathect the space of the Other on his home ground. He is worlding their own world, which is far from mere uninscribed earth” (253). And this is exactly what Kelvin and his fellow invaders do to Solaris, extending Kelvin’s very selfhood into the physical space of the other by blasting his waking thoughts into a being-world that clearly already has thoughts of its own.

As Alan Lawson has pointed out, the relationship between settled and settler—both of which Kelvin becomes at the film’s close—is fraught with “anxious proximities.” The processes of colonization involve fears of “being consumed by indigeneity; of being lost in the space of the other; of the unheimlichkeit of home” (Lawson 1214). And the Solarists are thoroughly occupied with each of these fears. For the settler, making a home on top of the home of the other in an attempt to replicate the original home by putting in place the relevant ontologies, hierarchies, and epistemologies, the process of settling unsettles itself, provoking the anxieties of nonidentity. This is to say nothing of the anxieties provoked for the settled, who find that their homes are no longer theirs, and that they are not in fact the “authentic” inhabitants of the places in which they live. Perhaps Solaris harbors anxieties of its own that intersect with this.

We might think again here of worlds created from nothing, worlds that pretend to be grounded in purpose and progress but that truly arise from the void of redundant, self-referential imperialism. But we might also consider how worlding from nothing is something we share between us, as Nancy describes—a necessity of creative Being-together—as well as the anxiety which “reveals the nothing,” as Heidegger puts it (“What Is Metaphysics?” 101). This anxiety—reflected in the anxiety provoked by an uncanny glimpse of the self becoming other, is also a glimpse into Being and into the abyssal otherness of the self, and it is powerfully generative. And yet it can also be powerfully oppressive.

This is the mirror that Tarkovsky’s Solaris provides. In Snaut’s speech in the library, he says, “We have no interest in conquering any cosmos. We want to extend the earth to the borders of the cosmos. We don’t know what to do with other worlds.” In a line from a similar speech in the book, Snaut (“Snow” in the novel) also says that “We are only seeking Man” (72), a sentiment that might recall Heidegger’s line, in “The Question Concerning Technology,” that “It seems as though man everywhere and always encounters only himself” (27)

In this sense the interplanetary imperialism of the film, which as Snaut points out is never simply a strategy of attack upon an outside that remains other, is rather an annexation by which the material earth and its standing-reserve of pre-determined knowing and being is made to encapsulate whatever could provide it with an alterity capable of producing new knowing and being. Imperialism here is predicated upon the assumption that the cosmos can and will provide only a tautological mirroring to a dominant human subjectivity. This imperialism operates as if the mirror stage never fragmented the self and revealed that radical alterity exists, as if it could re-appropriate everything in the universe and recover the safety of self-identification with the all, the safety of The World. When Solaris enacts its mirroring, however, as an enframing through creation, the alterity that is the essence of being, the uncanny quality of our own selves is called forth.

Worlding, as I have used the term here, is a process of radical ambivalence, a making of a home in self and space with the other and as an other. This takes us beyond Lacan—beyond the privileged creation of a human subject in human language—and into a nonhuman self-creation. The poïésis that is Tarkovsky’s film reveals this un-truth—this truth that is outside the modern construction of the sovereign human self—that as we make our homes in self and space we also unmake them. Solaris is a
mirror by which the “other” worlds that we already inhabit come into view. We become—with the alterity around and within us. Knowing this, and knowing that that alterity and our place with and within it remain forever unknowable, opens us up to worlding our selves and our spaces as unending collaborative practices that can be simultaneously liberating and oppressive, and that must always be put to question.

Works Cited

Intersexuality in Heinlein’s “—All You Zombies—”

A Queering that is None: Intersexuality in Robert A. Heinlein’s “—All You Zombies—”

Elisabeth Schneider
University of Graz, Austria

Day 2 | December 7, 2018 | 3pm
Imagining Non-Binary Futures

AT THE CENTER of Heinlein’s “—All You Zombies—” is something called a bootstrap paradox that creates, in its essence, an eternal time-loop. The concept of this paradox may be best explained by simply recounting the plot of Heinlein’s short story: the protagonist, a woman, meets a man at a bar and gets pregnant; he disappears, she has a daughter; during the C-section the surgeons discover that she has “an unusual glandular set-up”; since her “female” reproductive organs are “irreparably” damaged during the C-section, the doctors decide (without her consent) to “make” her into a man since that part of her organs still “works”; as a man, he (now) travels back in time and meets himself as a woman and fathers a daughter; a daughter that will grow up to become a woman who meets a man and gets pregnant, making the protagonist her/his own mother, father, and child.

See where the bootstrap paradox comes in? Connected to that particular paradox is a very particular understanding of “biological” sex, one that enables the paradox to come into being in the first place. When I say “biological” sex, I mean the anatomical/biological ways in which our bodies are supposedly structured. Through the arbitrary assignment of gendered markers, a whole system of norms and regulations is created. That system divides us (and our bodies) into a binary of sex. A binary that is assumed to be natural and normal. But sex is neither normal, nor natural—it is normative and naturalized. In short: sex is very much constructed by socio-cultural norms. It becomes naturalized through a discourse that centers on bodies (Holmes 148), but it is still a construct that is anchored within a historical and cultural context. If “male” and “female” are the two ends of that binary, then intersexuality is the abject Other, hovering
around the edges and margins. It is the offset of the binary, because in order to define it, one needs to define what it isn’t. I want to leave intersexuality purposefully open at this point, because (as opposed to the sex binary) it is definable by a neatly packed set of characteristics.

In 1959, when Heinlein’s story was first published, intersexuality as a topic was strictly relegated to the realm of the medical and it is telling that in the text itself, the word is never mentioned. Instead, the protagonist seems to transition smoothly from one sex to the other. That transition, however, occurs without the protagonist’s consent or even knowledge; she/he is informed of the violence done to his/her only after the fact. The transition itself becomes an artifact of (science) fiction: such a medical procedure is currently not possible. But in order for the protagonist to be her/his own father, mother, and child a reality has to be created in which the protagonist can be both mother and father to him-/herself. This use of intersexuality as a plot device effectively banishes intersexual individuals to the realm of the fictional and the fantastical.

While the protagonist’s transition may be based on a fictional premise, the medical interventions she/he has to go through are all too real. First, being operated upon during her/his C-Section without her/his consent, the protagonist has to undergo further medical “treatments” in order to fully transition. The following passage from the short story highlights how the discourse on intersex is all too often defined and dominated by the biomedical field and so-called medical “experts” who decide what is to be seen as normal:

But the surgeon was talking. “Tell me, uh . . . did you ever think your glandular setup was odd?”

I said, “Huh? Of course not. What are you driving at?”

He hesitated. “I’ll give you this in one dose, then a hypo to let you sleep off your jitters. You’ll have’em.”

“Why?” I demanded. “Ever hear of that Scottish physician who was female until she was thirty five?—then had surgery and became legally and medically a man? Got married. All okay.”

“What’s that got to do with me?”

“That’s what I’m saying. You’re a man.”

I tried to sit up. “What?”

“Take it easy. When I opened you, I found a mess. You had two full sets of organs, both immature, but with the female set well enough developed for you to have a baby.”

He put a hand on me. “Don’t worry. You’re young, your bones will readjust, we’ll watch your glandular balance—and make a fine young man out of you.” (Heinlein 40-41)

This exchange between the protagonist and a doctor takes place shortly after the protagonist went into labor and was admitted to the hospital. Waking up from anesthesia, the protagonist is confronted with having had additional, life- and body-altering surgery without her/his knowledge or consent. The “revelation” of the protagonist’s intersexuality is treated by the doctor quite literally as “bad news” and the protagonist is primed to receive those bad news through the doctor’s proclamation that the protagonist will get “jitters” and will possibly need to be sedated.

The doctor presents the protagonist’s intersexuality as an abnormality from the offset and never allows the protagonist to reflect critically upon the information presented to him/her. During the exchange, the doctor holds all the power and speaks from a (patronizing) position of authority. The protagonist, on the other hand, is relegated to the abject realm. Two surgeons held a “consultation” over her/his unconscious body, a consultation that she/he (although ironically present) could in no way participate in to voice her/his opinion. Instead, the doctors made the choice for her/him. This is typical in our culture’s engagement with intersexuality: the power is placed solely in the hands of the medical experts and, sometimes, the parents, and taken away from the individuals whose bodies are being altered to fit normative aesthetic standards (Hausmann 73). Such medical “interventions” are acts of violence performed without the individual’s consent. With the doctors holding all the power, they also get to decide what is important and what is not—in this case the protagonist’s “female set of reproductive organs” is deemed not important because “they could never be any use to [her/him] again” (Heinlein 40).

Reproduction as the be all, end all of what female seems to mean—without that ability, the female is supposedly lost, the body becomes “less than,” abject, inhuman. Rather than being treated like a person, the protagonist and her/his body are presented as a problem that needs “fixing,” emblematic of how our culture views intersexual individuals. The “cure”
to the problem often involves surgical corrections that serve no other purpose than to make bodies unambiguously conform to binary distinctions (Barrett 32) and create “norm-abiding gendered subjects” (Karkazis 13). Thus, where the biological reality does “not mesh with cultural ideology, the biological is changed...to meet cultural expectations” and the individual is left powerless (Barrett 32). In their effort to “restore” the protagonist’s health, the doctor’s go far “above and beyond”—they “correct” what they perceive to be an abnormality that defies heteronormative standards.

The protagonist him-/herself, in turn, loses all agency over her/his body, which is treated as a “thing” separate from its owner. This is emphasized by the language the doctor uses to describe the procedure: he speaks about the “salvaging” and “rearranging” of parts of the body. These are not terms commonly associated with human bodies, but rather inanimate objects: you salvage a ship, you rearrange furniture; not people. The protagonist becomes an object. At no point in the story is the protagonist’s gender identity constructed by the protagonist her-/himself, instead it is constructed by the medical experts surrounding her/him.

Despite the seemingly queer nature of the protagonists never really queers, nor troubles the heteronormative binary. Instead, the protagonist (albeit unwillingly) transitions from one gender to another within the binary male/female system. In the world of “—All You Zombies—” it seems that you have to conform to a rather strict heteronormative gender system. This gender system is put in jeopardy when the protagonist's intersexuality is “discovered” by a doctor, yet never actually transgressed because the “conflict” is resolved through “corrective” surgery.

As long as the protagonist remains in an “in-between” state, he/she is put into the abject realm and othered. This othering takes several forms, most notably in the doctor not being able to assign labels to the protagonist: “He shrugged. ‘The choice is yours; you’re her mother—well, her parent’” (Heinlein 41). By being put into the abject realm, the protagonist becomes a genderless being stripped of all identifying markers (and such markers go far beyond the bodily) that signal her/his gender: “But the surgeon was talking. ‘Tell me, uh— He avoided my name’” (40).

From this point on, the protagonist becomes essentially nameless within in the story—even when her/his biology is within “norms” again, only descriptions such as “the Bartender” or “the Unmarried Mother” are used to refer to him/her. Through surgery and lessons in “male etiquette” the protagonist learns to be a man and sheds his/her female identity, effectively (and “successfully”) transitioning from one gender to another; a transition that is accepted by both the protagonist and his/her environment without question: “In four months I started to grow a beard... and no longer doubted I was male” (Heinlein 41). The protagonist’s gender identity seems to hinge entirely on biology; through surgical alterations, not only the protagonist’s body but also his/her gender identity has changed—and his/her sexuality as well: after growing the beard, she/he “was staring down nurse’s necklines” (41). The fact that the protagonist’s sexuality seems to have been changed through the alterations made to her/his body plays into the “assumed concordance among bodies, gender, and sexuality” that needs to cohere in a heteronormative system (Karkazis 12). The protagonist therefore does not queer the binary. Instead, he/she always conforms to its standards and the status quo is never questioned or troubled. What is more, the protagonist is never even given the option of queering—not by the other characters, nor by the narrative.

Discourses on intersexuality are dominated by a focus on medical interventions and such discourses most commonly present intersexuality as a problem that needs to be “fixed” as happens in Heinlein’s story. This is due to the fact that intersexual bodies challenge the two-sex binary model prevalent in Western society. Intersexuality “makes explicit the cultural rules of gender” (Karkazis 9), exposing sex for what it is—not natural, but socially constructed.

Especially in science-fiction, intersexuality is banished to the realm of the “freaky” and “monstrous.” In “—All You Zombies—” as soon as it is discovered that the protagonist’s body does not fit the binary, she/he relinquishes any agency, loses her/his humanity and even his/her name. Instead of a living, breathing organism, her body becomes a “thing,” a riddle, a problem that can only be fixed by doctors. Through invasive and violent medical procedures performed without her/his consent, the protagonist seemingly and seamlessly transitions from one category of the binary into another, thus never troubling the binaries existence. Once the
protagonist’s body is “corrected,” he/she is allowed to become part of society again.

The sex/gender/sexuality correlation presented in the story seem to be based on an underlying assumption that biology dictates clear rules for how men and women should look and what their bodies should be capable of doing. The potential of a queering of either the sex/gender binary or heterosexuality is therefore never actually realized and the protagonist (as well as the story) stays firmly rooted within heteronormativity.

Works Cited

Alternate History and Racial Capitalism in Shawl's Everfair

Afrofuturism’s Specter: Alternate History, Racial Capitalism, and Nisi Shawl’s Everfair

Sean Guynes
Michigan State University

Day 3 | December 8, 2018 | 9am
Afrofuturism

IN THIS PAPER I discuss the generic lines that course through Nisi Shawl’s 2016 novel Everfair, and in doing so I use the novel as a conceptual space for thinking about Afrofuturism’s relation to history, temporality, and the political present. For those who don’t know—and I hope I can convince you to get the novel right away—Everfair is about the creation of a multi-racial, intergenerational, queer-friendly, disability-championing, anti-colonial state in Central Africa, in and around the land formerly known as the Belgian Congo, and which is today in our world occupied by the Democratic Republic of the Congo, Rwanda, and Burundi. The novel spans the years 1889 to 1919, telling the story of the initial impetus behind the creation of Everfair by the British socialist Fabian society, together with a black American orator and former slave (modeled on George Washington Williams), and some money from a black missionary society, all the way up to the integration of indigenous tribal governments into the new state, and the decolonial revolution that the socialists, Christians, and indigenous Africans of Everfair lead against King Leopold of Belgium, with the novel ending shortly after WWI and a series of treaties that ratify Everfair’s existence in the international legal sphere. While the novel was largely well-received by sf readers and critical audiences, it was also sharply criticized for its form: a series of short, temporally disjointed but chronologically organized narratives, none longer than 18 pages (out of a 400-page novel). In part, this is a matter of style: Nisi Shawl is well-known as an author of short stories, which she has been writing professionally for almost 25 years; but it is also a matter of utopian praxis. More on that later.

For now, I want to contextualize some of the generic concerns the novel raises, and in particular the relationship it indexes between Afrofuturism, alternate history, and history itself. In a broadly Marxist reading and certainly following John Rieder’s understanding of the mass cultural genre system, if genres emerge in response to certain social and historical formations, and are forms that narrate the material conditions of those producing the genre, then it stands that the emergence of late-twentieth-century Afrofuturism was a response to, well, something. A rather obvious statement, but one that has yet to be fully historicized even now, in a post-Black Panther moment when Afrofuturism is trending across the media industries both because it provides representation and hope for Afrodiasporic peoples and because, like other forms of black popular culture in the colonial and especially American world: it makes money. While we can—and certainly should—speculate about the many reasons why Afrofuturism emerged when it did, I want to scale out and suggest that Afrofuturism, particularly in the American black diaspora, is at its core a response to formations of racial capitalism.

What this means, ultimately, is that Afrofuturism
is as preoccupied with the past, with the legacies of colonialism and racial slavery that brought racial capitalism into existence, as it is with imagining the future, and in doing so it is, like all of speculative fiction, a meditation on the conditions of the racial-capitalist present. Shawl’s Everfair evidences contemporary Afrofuturism’s simultaneous embrace of futurism and countermemory in its efforts to imagine, create, and embody a world hospitable to black folks and other people of color. In doing so, it complicates understandings of the relationship between futurity and history as they might be (albeit rather simply) understood in Afrofuturism. In a very clear, formal, narrative, and ultimately utopian sense, Everfair achieves its pan-Afrodiasporic framing of a hopeful futurism by remaking the past through the genre of alternate history.

Shawl’s novel charts the birth of a utopian Afrofuturist project by asking not “what could be, in the future, if” but instead “what if” the most devastating genocide in modern African history had become the cause for anti-colonial struggle and decolonization half-a-century early. Like other writers of alternate history, Shawl rethinks what might be considered a “turning point” or what Karen Hellekson in the only sustained treatment of alternate history calls a “nexus event.” Like other black writers of alternate history, such as Steven Barnes and Colson Whitehead, the pivotal moment Shawl chooses is specific to the history of black racial oppression, one that represents a flashpoint in the life of racial capitalism. In Everfair, Shawl offers a new temporality for imagining utopian possibilities springing from the atrocities of the commodification of black labor, bodies, and life.

Shawl’s Everfair, both the novel and the world-making project that gives the novel its name, contextualizes the relationship between Afrofuturism as a political mode of cultural production and the alternate history genre as a unique articulation of science-fictional worlding. Presently understudied, precisely because they buck the typical narrative of future-oriented speculative fiction that the “futurism” of “Afrofuturism” is meant to invoke, Afrofuturist alternate histories represent a key textual-political ground for contesting the intersection between discourses of history, power, race, capital, and empire. To borrow a term from Frank Herbert, where he uses it in the context of religious colonialism in Dune, the “demanding memory” of racial capitalism in the history of blackness is what ultimately seems to motivate Afrofuturism’s constant return to the past even as it beckons better futures. And we see something like the now quintessential contemporary Afrofuturist text and blockbuster hit Black Panther, where the world of Wakanda is created both out of notions of black African cultural history through the somewhat incongruous pastiching of cultural objects, music, art, dance, and language from all over sub-Saharan Africa in order to create “Wakandan culture,” but Wakanda is also produced in opposition to this history, having ultimately avoided and defended itself against racial capitalism’s commodification of the continent’s black bodies.

If Afrofuturism is haunted by the history of racial capitalism, then alternate history confronts and reimagines the history that haunts the genre. The historical situatedness of Afrofuturism is especially evident in alternate history novels that return to nexus events where the presents and futures of racial capital are either in flux or made hypervisible. Terry Bisson’s Fire on the Mountain (1988), though he himself is not black, and Steven Barnes’s Lion’s Blood (2002) and Zulu Heart (2003), for example, offer alternate worlds that refigure the historical terrain and legacy of racial slavery in both global and U.S. contexts. Racial capitalism, as Jodi Melamed makes clear, is bound up with colonialism, but also with the more recent discourses of the nation-state, of nationalism, and of the nation in an always global context. Shawl’s utopian nation operates at the juncture of these formations of power, placing her narrative about the formation of this joint socialist-European/indigenous-African revolution against colonial forces of the Belgian Congo at the chronological crux of what Hobsbawm labels, in world-historical terms, the “age of empire.”

Set during the European “scramble for Africa” but clearly concerned with an activist hermeneutics for the present, Everfair is important to thinking about the relationship between history/futurity and alternate history/Afrofuturism because the novel simultaneously articulates multiple vectors of colonial, capitalist, racial, and even religious power as they operate in relation to racialized bodies. Shawl achieves this—and here’s where I return to my observation about utopian form in the novel—by accreting multiple viewpoints in a sprawling, complex narrative that communicates the
shifting, always-becoming promises of the Everfair revolution against European powers. Everfair probes the relationship between an Afrofuturist conception of black liberation, the scars of racial history, and the generic legacies through which these discourses are mediated. By assembling Chinese indentured servants, black American former slaves, white British socialists, and indigenous Africans from multiple cultures, the novel offers a hopeful meditation on possibilities for cross-racial justice movements while also emphasizing the necessity of decolonial projects that place black liberation before the appeasement of whiteness and white allies.

To backtrack and clarify some of the narrative: Everfair, as a state, comes into existence when European socialists purchase land in the Congo from Belgium, thereby superseding anything like autochthonous rights to the land and producing a legal state, from the Euro-American vantage, on indigenous land. Everfair thus begins as a colony, although one explicitly set up to fight back against Belgium’s slaving practices in the Congo. The Europeans and black Americans arrive in Everfair, build a city, start preaching—although there are tensions about proselytization among the socialists and black Americans—and eventually take in refugees fleeing Belgium’s colony. Parallel to this, Shawl also narrates the internal struggle of the Congolese King Mwenda to maintain authority in his conflict with Leopold and other indigenous African peoples. Ultimately, the Everfairers and Congolese join forces under the Everfair banner, with Mwenda as King but a representative council advising him; it works something like the early Roman Republic, which saw a tension between the Senate and the occasionally appointed military dictator.

Mwenda and the Congolese, including a people called the Basanga who gift the Everfairers with steampunkified nuclear power, join the colonizers largely out of necessity, and there is constant tension among the factions over their competing visions for Everfair—perhaps best exemplified in the Europeans’ attempts to name the first national holiday after Jackie Owen, the Fabian leader whom Daisy, Everfair’s British poet laureate, refers to as the nation’s founder. That there is always a tension drawn across racial-capital lines of whiteness/blackness, settler/indigenous is underscored by the novel’s refusal to situate its narrative voice in any single protagonist. There are eleven POV characters, and most of them get 5 to 8 chapters, meaning that the novel gives the reader no time to settle in to the mindset of any single political position, but keeps them always separate, and so maintains an openness and indefiniteness formally congruent with the narrative inability to pinpoint a singular political direction for Everfair. The chapters scramble for narrative space as the Everfairers fight for land and black liberation, and as the indigenous Africans fight for sovereignty from European powers altogether.

It is thus no great surprise, at the end of the novel, though perhaps surprising and maybe even unsettling for the average white reader who imagines themself in solidarity with the most sympathetic white characters (of which there are few), that Everfair kicks the white colonizers out of the country, only allowing mixed-race Lisette to stay (and then only because of her close friendship with Queen Josina). King Mwenda allows the black Americans to remain, as well as the Chinese laborers, saying that both represent populations forced to leave their places of origin, whereas the white settlers actively took the land from indigenous Africans, purchasing it in a capitalist system of international trade that ultimately corroborates the forces of racial-capitalism that brought about the atrocities in the Congo in the first place. For Shawl’s African Everfairers, the nation is a decolonial African nation, one that rejects whiteness but recognizes the geopolitical necessity, because always forced by colonial power relations, to interact with whiteness nonetheless.

Everfair offers narrative closure of a sort, but actually ends at a new beginning, an unforeseen and contingent moment in which the always-becoming process of utopian world-making becomes and becomes. Like its formal properties of non-closure, of chronological, perspective, and geographical displacement from chapter to chapter, Everfair turns to multiplicity and thus rejects the utopian narrative since Thomas More that follows a (typically male) protagonist through the architecture and social planning of this or that improved society. Everfair is fragmentary, composed of many parts and people, some of whose motivations and visions for the state change over time as they interact with other characters, and so Everfair comes formally to represent the social body of Everfair itself. Like the social novels of the period during which Everfair is set, Shawl’s Afrofuturist, alternate historical,
steampunk (or steamfunk) novel attempts to capture the whole of a utopian society that is in the process of becoming. Shawl’s formal intervention in the utopian novel’s structure stitches together the struggles of European socialism, African decolonialism, and US anti-racism while recognizing that the very project of Everfair is always imbricated with the forces of racial capitalism, that it is itself a product of the colonial scramble for black land and bodies.

To invoke the terminology of this conference, Nisi Shawl’s Everfair is an exercise not purely in this very sf-y practice of world-building, but an actual praxis of worlding that remakes history in order to repurpose how we think about Afrofuturism, about genre, history, blackness—and all of their possibilities for mobilization in the present.

Eschatology in Star Trek

World Re-Building: Eschatological Thought in the Science Fiction Genre as Exemplified by Star Trek

Agnieszka Urbańczyk
Jagiellonian University, Poland

Day 3 | December 8, 2018 | 3:30pm
Star Trek II: Before Discovery

IN THIS PAPER I focus on the notion of Star Trek as a utopia and more specifically on the franchise’s use of eschatological imagery—especially the phantasm of an inevitable catastrophe.

I am using Darko Suvin’s definition of science fiction as it is surprisingly applicable to Star Trek. I do realize that Suvin himself would consider Star Trek a space opera but it is widely known Suvin is very selective in his approach and treats cognitive estrangement as essential to “high literature” even though the same effect can be evoked by texts he would call pulpy. Though there were many blunders in Star Trek’s history, the respective series were often counter-hegemonic in their time. Star Trek isn’t extremely scientifically accurate but the notion of science and the limits science describes is pivotal to the entire franchise. As opposed to stories taking place “a long time ago in a galaxy far, far away,” Star Trek almost obsessively brings up historical time, with the stardate given at the beginning of each episode. The franchise creates a world based on the analogical paradigm and its very objective is to estrange and show the contemporary reality as unjust and arbitrary. Even if the metaphors were blunt and the artistic value questionable, Star Trek never was purely “ideological” in the Marxist sense of “false consciousness” and thus, I believe, it should be considered science fiction. It does present us with cognitive estrangement and—at least until Deep Space Nine (DS9)—it was utopian.

Suvin makes a compelling argument for science fiction’s descent from utopia, calling it “if not a daughter, yet a niece of utopia” (Metamorphoses 76). And here lies the problem. Suvin claims that, as different from religious ideas about other worlds such as Paradise or Hell, utopia is an historically alternative wishful construct. Its islands, valleys, communities or worlds are constructed by natural intelligent beings—human or humanoid—by their own forces, without transcendental support or intervention. Utopia is an Other World immanent to the world of human . . . and not transcendental in a religious sense. This differentiates it from myth, horror-fantasy and fairy-tale, which happen outside history—even an alternative or hypothetical history; it similarly differentiates SF from kindred yet opposed genres. (Positions and Presuppositions 34)

Utopia in Suvin’s understanding is secular. But Thomas More, universally recognized as the father of the genre, considered religion integral to his utopia. Moreover, he himself was proclaimed a saint by the Catholic Church. Even if we try to define SF as an essentially rationalist genre and make this rationality its constitutive feature, we must remember that religion was historically there at its core. I believe Star Trek is a great example of the paradoxes this may lead to.

It is quite obvious that Star Trek was created as a utopia—the Federation is a post-scarcity, just, and egalitarian society in which (at least declaratively) race, class, gender or sexuality cannot legitimize exclusion. With the universal replicators introduced in The Next Generation (TNG) the need for the market economy dissolves. And the point of this utopia is “it could be us.” Gene Roddenberry was trying to show Americans that a better world could be created if they embraced humanism and rationalism, and that
everything presented in the series could happen through scientific progress.

As DS9 introduced post-secular thought into the franchise, I intend to focus on the series and the movies Roddenberry had any influence on (i.e. those during whose creation Roddenberry was still alive). From DS9 onwards we can observe a much more nuanced approach to religion, but I think the ostensibly secular The Original Series (TOS) and TNG prove much more interesting as they are still fueled by deeply religious convictions.

Ironically, Roddenberry was quite vocal about his disdain for religion:

I condemn false prophets, I condemn the effort to take away the power of rational decision, to drain people of their free will—and a hell of a lot of money in the bargain. Religions vary in their degree of idiocy, but I reject them all. For most people, religion is nothing more than a substitute for a malfunctioning brain. (qtd. in Reyes 39)

Star Trek stems from this viewpoint and religion is quite explicitly addressed in many episodes which all have a common theme among them. Though the notion of the Sacred is not completely rejected and we can find it in the Vulcan idea of a katra, the immortal soul, there’s no such thing as the supernatural and all forms of typically Western theist worship are discredited. From TOS and TNG we learn there’s no transcendence and every god has a power source. If a god appears, it must be a more sophisticated piece of technology or a more evolutionarily advanced alien who poses as a supernatural being. Star Trek V: The Final Frontier brings it to a level of pure absurdity when an alien posing as the Judeo-Christian patriarchal God tries to steal the Enterprise and shoots lasers out of his eyes.

And yet the narrative structures apparent throughout the series are deeply eschatological. I am not the first one to point this out: Gregory Peterson wrote a paper on what he calls the “evolutionary eschatology” of Star Trek. Peterson’s point was that “science and reason inform an evolutionary eschatology in which individuals contribute to their species’ evolutionary progression toward higher and more benevolent life forms” (62) and that Q, the super-evolutionary being, “shows that humanity too may become like gods. By evolutionary development, aided by scientific advance, a bright and beatific future awaits us. How is this known? Because the Q continuum, like many other species, has already done it” (75). This interpretation is based on the notion that in Star Trek evolution is synonymous with progress, that “[i]t is not simply a random process but has a definite arrow toward increased intelligence and more sophisticated life forms . . . . In this framework, moral and biological evolution go hand in hand” (73-74).

I would, however, argue against this reading. First of all, Q himself most definitely cannot serve as an example of a kind and gracious being. He is a trickster at best. But that is just a minor inconsistency. Peterson, I believe, makes the same mistake as Robert Jewett and John Shelton Lawrence in Eschatology in Pop Culture, who address the supposed postmillenarianism of Star Trek and consider successive captains as saviors: all of them ignore the catastrophe that happened before there was any Federation. There is a big difference between premillenarianism and postmillenarianism. Postmillenarianism maintains that the savior will come to the perfect reality that has been already established. Premillenarianism says that this reality cannot be established without the savior’s intervention, and I think that is the case with Star Trek.

The Suvinian notion of history and fortuity of the contemporary world lies at the core of Star Trek. Humanity is indeed shown as able to change, evolve, and to make technological progress. But contrary to what Peterson suggests, progress in Star Trek is neither fluent nor linear. The society of the twentieth century seen from the perspective of twenty-fourth and, especially, twenty-third, does not seem capable of any progress that is not strictly technological. Every time the twentieth century or its simulacra are shown in Star Trek, their landscapes consist of Nazis, warfare, atomic bombs, or social injustice. The very epoch in which the series itself was created is presented in Star Trek as the time of a crisis. Moreover, the audience’s contemporaneity wasn’t just another step in humanity’s smooth evolution and betterment; it was a prelude to an inevitable catastrophe. Scientific and technological progress is presented as absolutely inconsistent with the level of ethical development on the planet. Twentieth-century Earth is shown not only as already condemned, but also as not worthy of salvation. The catastrophe from the narrative point of view is unavoidable since it has already happened. There have already been the Eugenics Wars and the Third
World War, which decimated the human population and left the world in ruins.

Although declaratively rationalist, Star Trek from its very beginnings, even when Roddenberry was still in control, actualized an eschatological pattern. Even if humanity is able to achieve the warp drive and break the speed of light, it is incapable of moral evolution by itself. The social, economic and philosophical changes leading to the establishment of a utopia are made possible only by an outside force: by otherworldly beings descending from the sky. Formally, the transformation happens in the secular order. Even though Vulcans come from another planet and possess superhuman (or different-from-human) abilities, they definitely belong to the contingency. But if we look closely at humanity’s metamorphosis in Star Trek’s diegetic chronology, it becomes apparent that the narrative structures are millenarian. Millenarian movements have existed for thousands of years in many forms and across different cultures but there are some core concepts all of them share. The end of the world is at hand and there will be a New World after the catastrophe; it will be just and opulent. The more attention is given to the New World, the closer millenarianism approaches utopian thought (see Schwartz 6028).

Star Trek has it all: the catastrophe is at hand for the viewer, because in the storyworld it has already happened and it has served as an expiation—a baptism of fire, if you will. The world rebuilt from the ashes is harmonious and fruitful.

Suvin creates an opposition between science fiction or utopia and “metaphysical genres” which he argued result from a mythical consciousness producing fairy-tales, fantasy, and religious imagery. The metaphysical worlds, according to Suvin, were ahistorical, unmovable, and unchangeable. They took place in illo tempore. As I have already said, by establishing secularity as the essential trait of the genre, Suvin ignores the roots of utopian thought. Moreover, he ignores the nature of eschatology and millenarianism. Their premise can be very much materialist: salvation to millenarianists is not a thing that will be accomplished in the afterlife. It is supposed to happen and last in this world.

From its beginnings the franchise was based on the phantasm of a perfect world that can be established only after a catastrophe brings down the old order. And here lies the biggest problem: Star Trek shows the contemporary world as fated to die and at the same time the vision it presents is supposed to make us change our ways. We cannot have both. There is no reason to take any action if we are already condemned and we cannot create the millennium by ourselves. Star Trek makes the audience passively await the coming cataclysm. It is anti-parenetic and anti-didactic. It is apocalyptic. As Jacob Taubes, a Marxist Jewish political theologian points out:

The science of apocalypticism presupposes a passive attitude toward the happening of history. There is an absence of action. The fate of world history is predetermined and there is no sense in trying to resist it. The passive voice predominates in apocalyptic style. In the apocalypses no one “acts” but rather everything “happens.” (34)

Star Trek is a great illustration of the possible paradoxes of Suvin’s rationalist literary genealogy and of science fiction in general. Even the projects that are absolutely atheist in principle can be rooted in religious narratives. Roddenberry’s Star Trek constantly depreciated theist religions, negated the Transcendent, and attempted to naturalize every being that could be considered supernatural—and yet, it proved unable to break the eschatological pattern. The belief that Star Trek is rooted in the Enlightenment is widespread in academia and quite correct, but it is rarely acknowledged that it is correct only if we use a very specific understanding of the term, one offered long ago by Theodor Adorno and Max Horkheimer in Dialectic of Enlightenment. The apotheosis of Reason and rationality in Star Trek does not entail the banishment of the irrational. The irrational and the mythical remain hidden and their influence becomes harder to notice, but they are still there.

The catastrophism of Star Trek is not surprising if we take into account the historic relationship between utopia and millenarian movements. It is, however, an obstacle for cognitive estrangement to serve as it should. After all, overcoming alienation is supposed to be a first step toward changing the conditions of society. It is impossible to make someone act upon an arbitrary historical injustice if one is told that the end is near, or at least coming, and nothing can be done about it, since humanity is unable to improve until someone from the outside intervenes.

Works Cited
Novelty and Age in Butler's Fledgling

Through the Eyes of a Child: Novelty and Age in Octavia Butler's Fledgling

Katie Stone
Birkbeck, University of London, UK

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Age and Aging

OCTAVIA BUTLER'S final novel, Fledgling, was published in 2004. Butler has described this novel as "something that was more lightweight than what I'd been doing" (Gonzalez and Goodman 222); the novel she wrote to give herself a break from the gruelling task of creating the near-future, dystopian world detailed in her Parables novels (Parable of the Sower (1993), Parable of the Talents (1998)). Fledgling is her vampire novel. Published in the same year as Stephenie Meyer's Twilight (2004), it is framed, in Butler's interviews, as a text targeted at a younger, less politically engaged, audience.

It is my contention that only someone who had just written the Parables novels would describe Fledgling as lightweight. While a novel detailing the adventures of a young vampire might not seem an obvious text through which to reconfigure the relationship between novelty, age and the strange worlds of sf, I argue that this is precisely what Fledgling does.

The novel begins with the following lines: "I awoke to darkness. I was hungry - starving! - and I was in pain. There was nothing in my world but hunger and pain, no other people, no other time, no other feelings" (1). The remainder of the narrative follows the protagonist's movement from this amnesia-induced position of ignorance to a reclamation of her identity. She learns that her name is Shori Matthews. That she is a member of the Ina, Butler's science-fictional, vampiric species. That, although as she puts it, "I didn't have any idea of how old I was or why my age should matter," (8) for those around her, age is a deeply significant category. She learns that much of her strangeness, for the humans she encounters as well as for the reader, resides in the fact that she has the appearance of a ten year old girl but has in fact been alive for fifty three years. Finally, she learns that the Ina, due to what Habiba Ibrahim has called their "oceanic lifespans" (313), consider fifty three to be the age of a child.

Chuck Robinson has discussed this opening passage directly. He writes:

As an amnesiac, [Shori] does not have a personal, cultural, or historical past to serve as a model. The opening sequence of the novel formally echoes this amnesia . . . We experience a new beginning along with Shori, as she (and we) reconstruct a sense of persona and world bit by random and intense bit. (489)

It is this echoing and the connection which it suggests between Shori’s position and that of the sf reader—who picks up a new book and is confronted by a strange world in which they, like Shori, cannot rely on their “personal, cultural or historical pasts” to orient themselves—which I argue makes Fledgling such a useful text in the consideration of the science-fictional practice of worlding.

One example of Butler’s engagement with the process of worlding is her choice to frame Fledgling as a vampire novel. While her blood-drinking species, who hail from Eastern Europe and are severely allergic to sunlight, appear to invite readers to draw upon their past exposure to the vast array of texts dedicated to vampirism, Butler subverts this invitation. Like Shori—who spends much of the
novel’s opening chapters attempting to research vampirism—the reader quickly realises that they cannot rely on their prior understanding of what a vampire “really” is when attempting to understand the Ina. The extent to which Butler’s vampiric people will conform to, or diverge from, the already nebulous and ill defined cultural touchstone that is “the vampire,” is impossible to determine without first reading Fledgling, or, in Shori’s case, first throwing herself into the terrifying new world which faces her. To read Fledgling, therefore, is to navigate the world of the text from a position of ignorance, of childishness, and thus to incorporate the figure of the child into the world of sf criticism—a world which it has previously been excluded from.

In Metamorphoses of Science Fiction Darko Suvin wrote: “SF has historically had one of its roots in the compost heap of . . . juvenile or popular subliterature, and in order to develop properly it has had to subsume and outgrow it—the quicker the better for its generic affirmation” (22). In contrast, what Butler’s writing shows is that the process of growth, the movement from ignorance to knowledge, is precisely what allows for interaction with science-fictional novelty. Once the details of an sf world have been made knowable they become a part of the dominant episteme, at least for that reader; and thus are no longer associated with what Suvin termed the “strange newness” of sf, or “the novum” (4), which he believed was at the heart of the genre’s radical potential. By staging the confrontation between strange new thing and strange new world, where both are continually reborn and recast, Fledgling, where Shori has “an endless stream of questions and no answers” (5), does not mature or become fixed. Rather, Butler shows us that immaturity is a vital part of the science-fictional process of creating and interacting with strange new worlds.

It is Butler’s willingness to embrace Shori’s position as a child which allows her to reimagine the novum as reliant upon the epistemological positioning of those who observe, create, and embody it in this way. On page 28 Shori states: “I look like a child.” By page 64 the question of appearance is gone, as Shori’s father makes clear: “In fact, Shori is a child.” Soon afterwards childishness is shown to be a category capable of increasing over time. Confronting another Ina, Shori demands an explanation of her perceived youthfulness. Accusingly, she says, “You said I’m a child,” to which her interlocutor replies: “You are, now more than ever with your memory loss” (80). The trial with which the novel ends, where Shori faces the people responsible for killing her family and causing the wounds which led to her amnesia, offers a final moment in which her childishness is presented as a defining identity characteristic. Zoë Fotopoulos, an Ina who looks favourably on Shori’s case, states: “My impression is that she is exactly what she appears to be—a child” (294).

The fact that Shori’s childishness extends beyond appearance and is not merely a veil which can be swept aside once her “true,” science-fictional nature is revealed, is clearly articulated here. However, this emphasis on Shori’s status as a child should not be read as a way of fetishising her as a source of originary purity with unique access to science-fictional novelty. As Shori points out, age in Fledgling is relative:

I’m a child according to the standards of my people, but my people age more slowly than yours, and I have an extra problem. I may be older than you are in years. As far as my memory is concerned, though, I was born just a few weeks ago. (91)

It is not because Shori is exceptional, then, that in Fledgling her age and its relation to novelty is problematised. Disassociated from the number of years one has been alive, childhood in Butler’s writing is instead tied to memory, knowledge, and novelty. Age is estranged from its fixed roots in biological or historical “reality” and instead revealed to be a product of social relations which opens up the possibility, for the sf reader, of becoming childlike and thus becoming (strangely) new.

It is important to note that in Fledgling this newness is explicitly politicised. Shori, described as the “new, improved model” (120) of Ina by one of her human lovers, is the product of an experiment whereby genetic materials were collected from an Ina man, several Ina women and a human woman. While the Ina all have pale skin, Shori’s human mother is African American and it is the added melanin in Shori’s skin, as well as her human DNA, which allows her to move around in the daylight and which enrages some of the Ina, who consider her to be a “mongrel” (173). This racism is explicitly connected to the Ina’s long lifespans and their subsequent antipathy to novelty. For example, it is noted of Shori’s main antagonist Milo Silk, that “when he was born, there...
were no Europeans in the Americas or Australia” (231), while Katherine Dahlman, another of Shori’s attackers, appeals directly to America’s history of racial oppression, which she has witnessed, in order to justify her hostility towards Shori. As she puts it, “When I came to this country, such people were kept as property, as slaves” (272). To escape the past in Fledgling—as in Butler’s time-travel novel Kindred (1979), where her protagonist loses an arm in her escape from the antebellum South—is thus specifically framed as an act of combating racial oppression and the legacy of slavery. Shori’s position as a child and the novelty that brings with it is actively invoked as an explanation of her ability to make this escape and thereby to revolutionize Ina/human relations. In this way, childhood is shown to be a useful tool, not only in sf criticism in general, but in criticism of Afrofuturist writing in particular, given its concern, as Kodwo Eshun put it, “with the possibilities for intervention within the dimension of the predictive, the projected, the proleptic, the envisioned, the virtual, the anticipatory and the future conditional” (293).

To tap into the utopian potential of childhood and novelty in this way is not to free it from the structures of oppression with which it is also associated. Ibrahim has described how nineteenth century American slaveholders denaturalized age and invented science-fictionally long lifespans for the enslaved people they oppressed and tortured in order to grant a nostalgic connection to George Washington, the “father of the nation” (313). In Fledgling, the potentially oppressive qualities of a science-fictionally denaturalized age are felt in the terrifying and disorientating circumstances which Shori’s continually reinstated and artificially extended youth force her into. The fact that Butler chose a courtroom to stage Shori’s attackers’ final assault suggests that, in her writing, the potential for weaponizing childhood’s connection to memory extends well beyond the science-fictional world she has created. The experience of children in court rooms (meaning in this instance people who are below the age which the government of their country has decided makes you an adult) is frequently one in which their experience of the world around them is attacked. In this instance, the ability to make oneself new over and over again, or to perceive the world around one as malleable and excitingly full of possibility, is used only as another excuse to disbelieve children and thus to exclude them from participating in the workings of the institutions which govern their lives. This is also true for any group who is deemed to be “childlike” in some way, whether these are peoples of so-called “developing” nations, women and gender non-conforming people whose adult status has to be continually proved or trans people whose experiences are often cast as a second adolescence, both by those who are sincerely attempting to find ways of conceptualizing trans experiences and by those who would cast trans people as unfit to decide what to do with their own bodies, or even as guilty of corrupting their own childhood selves.

This is not to say that there are no utopian possibilities opened up by an understanding of age estranged from linear time. Nor that the figure of the child might not offer particular access to the strange new worlds of sf. Rather, it is to say that a denaturalized age is not one necessarily free from existing structures of state violence and that more research is needed into how our navigation of sf worlds are mediated by our own, partial, socially constructed and ambiguously novel roles as children.

**Works Cited**


THIS PROJECT started because I was wrong. My initial premise was that speculative fiction relegated women “of a certain age” to very specific roles: the crone, the wise woman, the meddling mother, the friendly innkeep. This seemed such an obvious truth that it was barely even worth stating. We’ve seen these women all our lives, in fairy tales and epic fantasy, and of course in Terry Pratchett’s wonderful parodies of old women in all of their cliched roles. However, when pressed, I discovered that there was one place where we do not see these women: in science fiction novels.

Old women are a rarity in science fiction and when they do exist, they inhabit a very different space. We don’t have innkeeps, we have immortals. We don’t have crazy cat ladies, we have body snatchers. There’s a distinct lack of old ladies who love solving cozy mysteries, but we do have a greater-than-normal number of politicians.

Typical tropes across literature, using TV Tropes as a primary reference, didn’t feel right for science fiction, with the exception of the Hip Grandma and the Cool Old Lady. I found this particularly obnoxious because they don’t seem to be tropes so much as representation. Men who aren’t misogynistic and teenagers who aren’t orphans don’t get singled out for special treatment, so why Cool Old Ladies? Was this in itself a symptom of the problem, that old women who were quick-witted and confident were considered an exception worth naming?

To even consider the situation, we need to set up some definitions. From the start, I limited the analysis to novels. Science fiction movies and television series have their own issues, starting with the fact that old women should, if at all possible, look like Cher or Tina Turner. I found this particularly obnoxious because they don’t seem to be tropes so much as representation. Men who aren’t misogynistic and teenagers who aren’t orphans don’t get singled out for special treatment, so why Cool Old Ladies? Was this in itself a symptom of the problem, that old women who were quick-witted and confident were considered an exception worth naming?

To even consider the situation, we need to set up some definitions. From the start, I limited the analysis to novels. Science fiction movies and television series have their own issues, starting with the fact that old women should, if at all possible, look like Cher or Tina Turner. The fact that they look better in their 70s than I looked in my 30s maybe makes me a bit prejudiced, but I wanted a starting point of literary tropes rather than Hollywood clichés.

Now I had a quest: to find the little old ladies of the future. But there was no reference for discovering which science fiction novels included old women, so I crowd-sourced the problem. I approached multiple online communities for help creating a list of relevant science fiction works. Once the results started coming in, however, it quickly became clear that “old women in science fiction novels” wasn’t well enough defined.

The first question was a mindfield: What is science fiction? Tropes vary by genre and it is impossible to consider the representation and tropes of a specific genre if that genre isn’t defined. It almost feels like this can be reverse engineered, that you can see what genre something is by the tropes that it follows or subverts.

Science fiction is clearly not the same as fantasy but it’s like looking at asteroids and planets: although it is generally obvious which is which, in some instances, it becomes difficult to tell the difference, and so we end up having to draw somewhat arbitrary borders.

Asimov’s definition is that science fiction deals with the reaction of human beings to changes in science and technology. The science may be pure fantasy, for example time travel or faster-than-light transport, but I like the definition that the genre is about the impact of science on the characters of the novel.

Heinlein takes this a step further, defining sf as realistic speculation about possible future events, based solidly on adequate knowledge of the real world, past and present, and on a thorough understanding of the nature and significance of the scientific method.

These definitions have set the stage for stories about men, especially white men, and how they are changing the world and are affected by the future. When looking for old women in major roles, there may already be a stumbling block in that western society, as a whole, does not tend to treat women seriously when it comes to their achievements in science and technology.

In effect, the tradition of science has reflected into science fiction and made the old women tropes what they are, which is one reason why this is such a fascinating subject.

The second question was equally uncomfortable: What is an old woman? Two points immediately became obvious. First, to consider representation of old women in science fiction, they had to be human women: not immortal, not a form of artificial
intelligence, not an alien race. Maybe a cyborg. Alien life forms, even well-defined life forms like in the Culture novels, might not age at all or when they do, may have no intersection with our own aging process.

Thus we need to answer this question, which I did by defining woman as “recognisably human with a defined lifespan who uses female pronouns.”

However, it still wasn’t enough. The crowdsourcing was great but the submitted novels made it clear that I needed to better define “old.” Lady Jessica in Dune kept coming up, and although she ages later in the series, this was specifically referring to the first book, which I suspect is because many readers were probably 14 or 16 when they first read it. Another one was Dr. Kate Murray from A Wrinkle in Time, and she is in her 30s with creamy skin and violet eyes. One character described as middle-aged turned out to be in her late 20s, old only in contrast to the teens in YA novels.

I wanted women who had moved on. Whether or not she had children or even considered it, that phase of her life was behind her. This led me to a biological definition: old women are menopausal. But then, what about women who went through menopause early? What about women who medically repressed their periods? What of women who never had periods at all?

Beyond that, how could you tell? Women in science fiction novels don’t menstruate.

In the end, it has to be about worldview: her personality shows the impact of her life experience and her actions are shaped by her knowledge that she has more years behind her than in front of her.

Having defined all the things, it becomes easier to collect data for analysis and then to recognise patterns and whether they are the same as those in fantasy and other genres. Over time, we see very special women… again and again and again.

It’s important to mention here that something being a trope is not necessarily a bad thing. Tropes are simply common themes or literary devices, just a pattern that people and stories like. It can be shorthand or it can be cliché.

That said, they do tell us something about the worldview of the authors and their target audience. One thing that is clear is that science fiction is exceedingly interested in making old women young again.

Trope: Forever Young

The first of these is rather handwavey because Forever Young is about the author’s treatment of the character rather than the character herself. This can be hard to clearly define as of course the “mindset” of an old woman is relative. The telltale signs are that the author informs us that the character is 50 or 60 or even 70 but there is nothing in the women’s mindset or mannerisms that show this: the character’s presence and reactions and concerns are exactly that of a younger woman. There may be a few crow’s feet around her eyes but her movements are always easy and graceful. She does not suffer from rheumatism or hairs growing out of her chin. If you change her age from 55 to 35, there’s nothing that jars about her personality or her mannerisms. Her age is a number, not a state of being.

Trope: Incremental Immortality

Another youthful trope is connected to a common literary trope: the fountain of youth. Typically, this is a macguffin that a character or a team strives for. In science fiction, it is simply a modern convenience that can be used to reset time and more importantly, it can be done over and over again. Many novels with this device have no representation of older women because they’ve all reset before they got old. Others, including Peter Hamilton’s Commonwealth series, include the drawbacks such as dealing with multiple “life” partners and the side effects of gaining experience without aging. This trope draws an interesting line between “humans with a life span” and “immortals”: should these books be considered to include old women if it can be undone? However, many of these novels engage with physical issues of aging and personal choices regarding rejuvenation, which is not true of those dealing with true immortals.

Trope: Body Snatchers

In the Body Snatcher version of the fountain of youth, the woman has lived a full life but is offered a new body, which can be someone else’s or created by cloning. Either way, the body is not her own. This is effectively an extrapolation of organ farming. Technically, it’s just a different method of rejuvenation but there is something slightly more disturbing, to me at least, of taking over another body and throwing away your old one. The great example of this trope is John Scalzi’s Old Man’s War, which focuses specifically on the issues arising from
this system.

**Trope: Career Choice—Politician**

Although I’m not sure this can be called a trope in itself, it’s hard not to notice that if you are an older woman in a science fiction world, you have a greater-than-normal chance of being a politician. This is perhaps an easy career to assign an older woman to offer her power which is mental and emotional rather than physical. Being a politician is not necessarily a bad thing but it makes me wonder where all the retired cops and disillusioned soldiers and eccentric mentors are, as their male counterparts seem to be very much represented.

**Trope: The Final Frontier**

Western stories transfer easily to science fiction and the Western tropes for men appear regularly, but I was surprised to find that the women’s characters don’t follow this trend. Even more surprising, to me at least, was that the author with the most examples of strong representation of old women in space, who very clearly used this trope, was not an author I expected to be impressed by when it comes to representation of women. I’m talking about Robert Heinlein, who has a number of old women in his books, including one in a major role. Hazel in The Rolling Stones is a clear frontier woman who was among the founding fathers of Luna. She’s Chief Engineer of the ship, an expert blackjack player and repeatedly and vocally irritated by the sexism inherent in the solar system. Hazel and other old women in Heinlein’s books are wonderful representations of old women, as long as you can overlook the general lack of interest in the future of younger women, other than how they will find a husband.

**Trope: Wise Old Crone**

And then there are the common tropes that... turn out not to be common within the genre. I almost thought I would not find the Wise Old Crone represented at all in Science Fiction. Then I stumbled upon Mother Abagail in Stephen King’s The Stand. This post-apocalyptic novel was also my only example of another TV Tropes listing, the Wasteland Elder, although she is the only female example on their literary list. She’s also the only science fictional example I found of the Magical Negro trope, in which a black character offers help to the white protagonist, often in a supernatural or paranormal form, and then gets out of the way so that the protagonist can keep protaging. Stephen King uses this a lot, it has to be said. The Stand is also King’s earliest science fiction work, a departure from his mystical fantasy themes. Although I concede that defining science fiction by the tropes used is putting the cart before the horse, it’s hard not to wonder if the book is really a fantasy story in science fiction trimmings or if, perhaps, there’s a separate set of tropes that apply to post-apocalyptic novels in general, whether they are science fiction or fantasy or horror.

The problem with making headway on this is that I need more data.

I discovered many things. For example, that there’s barely any women of color over 50, in fact, other than Mother Abagail, diversity appeared to be limited to women who are “not quite white.” Even looking at minor characters, I can tell you the pickings are slim.

The old women often reference sex and romance and yet they all seem to be heterosexual. I found just one counter example: a bisexual woman over 50 who ends up shacked up with a male teenager, so I’m not feeling the queer representation there.

It’s almost as though, to survive in the future, one has to be pale and cishet. And there are surprisingly few disabled women after decades on generation ships and asteroid colonies and space wars. There’s no one in a wheelchair or losing their hearing. In general, even with the oldest old women, there are very few references to the increasing infirmities of age other than, maybe, a bit of pain in her knuckles after turning 80.

When I introduce my quest to identify science fiction books with old women in them, many people initially respond with, “Oh yes, there’s lots! Like, um...” And they come up with three fantasy novels, and one science fiction one, and promise to go away to think about it.

At a later point, sometimes a few minutes and sometimes a few weeks, that initial enthusiasm would turn to “Oh, hey, this is hard isn’t it?”

So: here is the list I’ve found so far of science fiction novels in English with major characters who are old women.

Isaac Asimov, The Complete Robot (1950)
Gertrude Atherton, Black Oxen (1923)
Iain M. Banks, Feersum Endjinn (1994)
Elizabeth Bear, Hammered (2004)
Lois McMaster Bujold, Gentleman Jole and the Red Queen (2015)
Becky Chambers, Record of a Spaceborn Few (2018)
C.J. Cherryh, Downbelow Station (1981)
James S.A. Corey, Caliban’s War (2013)
Suzette Haden Elgin, Native Tongue (1984)
Molly Gloss, Dazzle of Day (1997)
Peter F. Hamilton, Pandora’s Star (2004)
---, The Reality Dysfunction (2004)
Robert A. Heinlein, The Rolling Stones (1952)
Frank Herbert, Children of Dune (1976)
Hugh Howey, Wool (2014)
Stephen King, The Stand (1978)
Louise Marley, The Terrorists of Irustan (1999)
Ian McDonald, Lunar: New Moon (2015)
Sam J. Miller, Blackfish City (2018)
Naomi Mitchison, Memoirs of a Space Woman (1962)
Elizabeth Moon, Remnant Population (1996)
Linda Nagata, The Last Good Man (2017)
Annalee Newitz, Autonomous (2017)
Terry Pratchett, Strata (1981)
---, The Long Earth (2012)
Alastair Reynolds, Pushing Ice (2005)
Mike Shepherd, Kris Longknife: Commanding (2018)
Bruce Sterling, Holy Fire (1997)
Sheri Tepper, Gibbon’s Decline and Fall (1996)
Lidia Yuknavitch, The Book of Joan (2017)

Having gone through literally hundreds of submissions, I have found just over 30 books in the science fiction corpus which feature old women as major characters and two of these (Asimov and Le Guin) are cheats, because they qualify by using a short story to create or to reference a novel.

I have a separate list of books with minor characters that looks a little better, with just over 60 novels.

When I started this quest, I didn’t know I was starting on a journey. I just wanted to see if women over 50 existed, let alone had an impact on the story. The result has been an adventure. It’s no surprise that women authors are well represented but there is also a fair showing of “Golden Age” science fiction, and many books here that I would never have picked up if it weren’t for this project.

This project has also given me a chance to connect with other science fiction readers. I’d like to connect with you, as well. I’m asking everyone to let me know any science fiction novels that they think should be included, because without the support of the science fiction community, there’s no way I can find them all. Please mail me at oldwoman@intrigue.co.uk with anything you believe may be relevant; it is always useful and appreciated.

In the great scheme of things, whether science fiction novels include old women doesn’t really matter. I’d love a role model, the person I would like to be at 60 or 70 or 80, but I’m also at an age where I don’t really feel I need permission to be who I want to be. But, it’s an odd thing, isn’t it? And I can’t help but hope that maybe just by shining a light on this issue, we might end up with some old women who aren’t middle-class and conservative, who have battle scars and wrinkles and dark skin and fantastic lovers. Maybe just by saying “Hey, have you noticed these people who don’t exist in our books?” I might get to read about amazing old women of all types who are in the final phase of their lives but still have the power to change the future. If so, the project will totally have been worth it.

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Naturalism and the Ontological Complexity of SF Worlds

Science Fiction and (Extra-)Naturalism: The Ontological Complexity of SF and Its Worlds

Grant Dempsey
University of Western Ontario, Canada

Day 3 | December 8, 2018 | 3:30pm
Ontologies and Epistemologies II

THEORIES of ontological and existential pluralism in philosophy and anthropology have productive implications for our understanding of science fiction as a genre. Such theories challenge the ontological formulations onto which the boundaries between science fiction and other speculative genres, such as fantasy, tend to be mapped. Science fiction is, by definition, most essentially distinct for holding itself,
as imaginative play, within the domain of naturalist conceptions of possibility and plausibility, whereas fantasy essentially exceeds or abandons that domain. This paper challenges the tendency to take for granted as an ontological given that difference between naturalist possibility/plausibility and extra-naturalist conceivable which is often held to ground science fiction’s work as a clearly distinct genre-ontology, drawing on philosophical arguments for a radical reconception of existential agency, on expressions of Indigenous ontologies achieved in collaborative anthropology, and non-Eurocentric futurisms and scientific imaginaries. The paper considers ways that science fiction or science-fictional worlds, insofar as they are conceived as essentially naturalist, are not built on an ontological given, but rather are both products of and participants in other modalities of worlding, entangled dynamically with the determinations of the naturalism in and for which they operate, extending those determinations beyond the field of the empirical over that of the imaginable. The paper asks what science fiction might be if its concept were not bound to naturalism and proposes an alternative ontological conception of science fiction. It proposes new directions for thinking on science fiction as a genre-ontology with complexly multiple potentials for articulation of its world(ing)s with others. But first, the definition, or at least some expression of a working sense, of the central terms: world or worlding, naturalism, science.

To begin with, a productively peculiar assertion by Gilles Deleuze and Félix Guattari provides ground for a potent sense for the concept of world: they think of the “Cosmos as an abstract machine, and each world as an assemblage effectuating it” (280). A world(ing) is an effectuation of the real; the real cannot be without some world(ing) or other in which it is configured and yet each world(ing) is contingent. Configuration and contingency are important terms in which to think of this sense for the concept of world. A world(ing) is a contingent configuration, an arrangement of relations that determines reality in certain ways rather than others. Each world(ing) indeed constitutes a different reality.

Human existential work and play are elements of world(ing)—not necessary elements of it, but certainly elements of it in that they do occur. An immanent philosophy, such as Deleuze and Guattari’s, involves thinking of human existential work and play in act and as powers among others, and as anterior even to those of their determinations that give to thought the very concepts through which they themselves tend largely to be understood, such as notions of human faculties or indeed of the human itself, or of the significance of such faculties. There is no a priori parsing of what is real and what is “merely” imaginative fabrication to be done. All such parsing would already be a posteriori.

Worlding is also fractal: it occurs simultaneously on all scales. Worlding therefore enfolds itself. It frames or situates each world(ing) within other world(ing)s—containing, constraining, conditioning. Science-fictional works offer world(ing)s, which are contained, constrained, conditioned, by many and various elements: the determination of imagination and its domain by contrast to other ontological fields, such as the field of the empirical; they are contained, constrained, and conditioned likewise by the concept of fiction(al)ity itself. It is in and by certain world(ing)s that both imagination and fiction(al)ity have the kinds of sense, and the kinds of weight or weightlessness, that they have for us. Within these certain world(ing)s, then, a particular work of science fiction, a particular text, offers and inaugurates world(ing)s of its own—but framed, situated, enfolded, in the world(ing)s that determine imagination and fiction(al)ity themselves. Another world(ing) by which they, the world(ing)s of science-fictional works, are contained, constrained, conditioned, is what can be called naturalism.

Among other disciplines, anthropology is one that has taken up interest in similar notions of worlds and worlding. Anthropologist Philippe Descola, for example, has proposed that there are, in a broad context, four ontological types, four “modes of identification” that operate as the grounds of worlding configurations among human civilizations. One of these four types is naturalism. According to Descola, naturalism is an ontological type in which all that is real is real by virtue of their participation in materiality or physicality. On this stage of universal materiality, real entities distinguish themselves by whether they possess a subjective or perspectival element and how they manifest that element in their ways of existing. This is further clarified by Descola’s opposition of naturalism to another of the modes of identification that he observes: animism, in which entities universally participate in the possession of perspective, which is what makes them real, and it
is with respect to whether and how entities manifest corporeally that differences within reality occur. In other words, whereas, in animism, all entities share a common sort of interiority and vary in whether and how they have bodies, in naturalism, they share bodily existence in common and vary in whether and how they have some sort of interiority.

Moreover, in naturalism, because all entities share materiality in common, they are also relatable to each other through the principle of their materiality. A strong form of naturalism determines further that all that is real can be known best through the prioritization of attention to material qualities and interactions, which are all empirically available in principle, without reference to supernatural elements to account for phenomena. Thus, naturalism tends to be the world(ing) not only within which Western science, or technoscience, operates, but also within which such science is understood and valued. So, Western science works by methodological naturalism, but also its significance is often determined by way of ontological naturalism.

In naturalism, the faculty of imagination has a place in reality, but the particular conjurings of and in imagination do not. The field of the empirical is sharply distinguished from that of the imaginable, and whatever is real resides in the field of the empirical or at least is, in principle, accessible there. The determination of the empirical and the imaginable makes “real” and “imagined” basically into opposites. But the productive work of the imagination is capable of constraint and of running closer to or farther from reality as material possibility.

Descola is not the only anthropologist to suggest a way of thinking naturalism in an ontologically pluralist spirit, as one world(ing) among others, but the definition of naturalism that he provides suffices in this case, precisely for its clear resonance with the distinction that is usually understood to be constitutive of science fiction, which Gregory Paschalidis concisely articulates: science fiction develops a hyper-naturalistic hypothesis, i.e., it expands imaginatively the facts and the workings of the empirical world on the basis of some actual or presumed scientific principle. This is what distinguishes science fiction from that other equally transcendentalist genre, the fantastic, whose characteristic ontological principle is, on the contrary, that of supernaturalism, i.e., the falsification of the given, empirical reality. (38) The genre concept of science fiction is formed by the distinction of imaginative play that holds itself within the domain of naturalist plausibility, whereas fantasy essentially exceeds or abandons that domain. Plausibility: the middle ground between entirely free imaginative play and commitment to naturalist reality; the domain of a naturalist receptivity characterized by compromise between a willingness to suspend disbelief wildly, on one hand, and, on the other, an interest in the (changing) contours of material possibility. Science fiction is plausible; it imaginatively extends scientific articulations of material possibility rather than disregards them—even if such imaginative extension is frequently distortive.

This sense of plausibility which grounds the distinction of science fiction from fantasy is often taken in the spirit of an ontological given: what it means to be interested in plausibility, in the purposing of imaginative play towards the expansion of possibility as opposed to the exploration of conceivability, is often taken as though it should be universally apparent, precisely on the grounds of the broad world(ing) that naturalism itself is. But, in the spirit of ontological pluralism, that broad world(ing) and its grounding of the distinction of science fiction can be confronted too. Rather than taken for granted, the ontological conditions of the naturalist sense of plausibility can be considered in the light of a sense of broader contingency. How is this sense of naturalist plausibility to be understood, with naturalism itself no longer thought as the configuration of reality? And what could such understanding do to motivate new thinking on what science fiction is, what it can be, and what it can do?

In the light of an ontological pluralism that takes naturalism to be one world(ing) among others, the sense of plausibility that is the usual ground of the genre concept of science fiction turns out to be something of a dynamic project rather than a quality. To borrow a term from Deleuze and Guattari again, plausibility is the way that naturalism territorializes not only the imagination, having formed a distinct sense of that faculty by its own determinations to begin with, but also the field of the imaginable. Plausibility shapes the field of the imaginable, as an aspect of naturalism’s framing of imagination. Plausibility creates certain kinds of sense for and among imaginative world(ing)s, conditioning an
inclination towards speculative genre identifications that preserve the ontological terms and valuations of naturalism thus even in engagements with the imaginable rather than the empirical, the “unreal” rather than the real. Plausibility is the conditioning of recognition of deviations from naturalist articulations of material possibility, and it motivates a tendency to measure those deviations. Particular imaginative world(ing)s, and their significance and potentials, in relation to other world(ing)s, imaginative and not, are thus partially determined in advance by an investment in judging what is closer to and farther from a given sense of reality, an overarching concern with what does and does not qualify, within the imaginable, for a sense of direct relatability to the “reality” that is reserved for the empirical. So, plausibility is not simply a textual quality, but a disposition in thought, a disposition in reading—and, doubtlessly, in writing—that does work for naturalism as an overarching concern with what does and does not qualify, within the imaginable, for a sense of direct relatability to the “reality” that is reserved for the empirical. So, plausibility is not simply a textual quality, but a disposition in thought, a disposition in reading—and, doubtlessly, in writing—that does work for naturalism as a greater world(ing) to which imaginative world(ing)s must be subordinated.

Although naturalism can hardly be described without repetitions of its own determination of criteria for the inclusion of entities and forces in, or exclusion of those from, reality as a delimited zone, this delimiting is exactly what an ontological pluralism does not allow to remain settled, definitive, or necessary. This delimiting is contingent; naturalism itself is a contingent configuration of reality. The sense of plausibility that is constitutive of science fiction as a distinct genre, then, either means that science fiction is a necessarily naturalist way of imagining and the transformative potentials of that way of imagining are limited accordingly or is itself not necessary to the constitution of science fiction after all. But what is science fiction without it? Would somehow extricating science fiction from it also mean making the relation between science fiction and science into some sort of disjunction rather than a matter of imaginative extension?

In her edited collection Naked Science, anthropologist Laura Nader proposes the titular concept by posing a question:

In the insistent dressing of all science in Western garb we limit answers to the philosophical question: what is science, or more important, what is Western science? By examining the processes, some hidden, some disguised precisely because they are taken for granted, we can see a more naked science; stripped of our garb scientists look more alike across cultures. (xi)

The concept of naked science not only inspires theory towards the thought of a science unmoored from certain forms of ideological framing, which in turn sharpens critical perspective on that framing and its various actualities; the concept of naked science also invites into consideration a wide variety of practices of knowledge production and knowledge fidelity, many of which involve rigorous empirical investigation even as they develop in and through non-naturalist affirmations of the empirical’s relations with, or indiscernibility from, other fields. There is no science that is naked. Naked science is not a kind or category of scientific practice, but a signal, an impetus, an anthropological push to keep the concept of science itself not so exclusively tethered to Western technoscientific practices and institutions, and their spread, as it tends among us to be. The concept of naked science affects a broadening of what ought to be thought as a science. It opens thought onto the fact of a wider plurality of sciences.

In his essay in Nader’s collection, Colin Scott reports the scientific depth of the knowledge practices of hunters among the Cree of James Bay, Canada; he especially examines the work of knowledge construction involved in goose hunting specifically. “Do Cree hunters practice science?” he poses. “If one means by science a social activity that draws deductive inferences from first premises, that these inferences are deliberately and systematically verified in relation to experience, and that models of the world are reflexively adjusted to conform to observed regularities in the course of events, then, yes, Cree hunters practice science—as surely all human societies do. At the same time, the paradigms and social contexts of Cree science differ markedly from those of Western science—accustomed as we are in the West to a ‘root metaphor’ of impersonal causal forces that opposes ‘nature’ to ‘mind,’ ‘spirit,’ and ‘culture’…” (69) What is that difference? “Cree hunters continually refer to human and animal capacities as interpretants of one another. The family structure, leadership, memory, and communication processes of animals are all explored as analogs of corresponding human qualities, both individual and social” (76). Importantly, these qualities are not simply identified in the human and then projected metaphorically for heuristic purposes, as a
responsible naturalist thinker might understand the move. The equality of human and nonhuman animals by virtue of sharing such qualities—and the plurality of manifestations of those qualities by way of entities’ different degrees and modes of corporeality—is a fundamental, ontological configuration that tends to be expressed in forms that Scott, following others, calls “mythico-ritual” and that grounds procedures of knowledge construction. Cree hunters are deeply invested in the rigorous, systematic development of actionable knowledge about nonhuman animal behaviors and ecological relations, and they are demonstrably successful. That their development of knowledge is framed in “mythico-ritual,” rather than naturalist, conceptual schemas and practices—in which the faculty of imagination does not merely “have a part,” but itself might not even be constituted as such by the same manner of contrast to the empirical as it is in and by the frame of naturalism—does not, or anyway should not, disqualify the knowledge as scientific.

So, what would science fiction be if its grounding association were not simply with the tradition of Western technoscience, the values and anxieties bound up with it, and its spread and permutations, but with this concept of naked science? Could science fiction become naked-science fiction? What could become of science fiction—not only in its production, but also in its reception—if it were to follow science’s own, more various becoming?

Why think science fiction in this way rather than grant necessity to its alignment with naturalism and simply sharpen the distinction of other genres from it? Because there is power in affirming science fiction as such while changing and enlarging its sense. There is power in fitting science fiction into a new paradigmatic thought in which the ontological ground of its common definition is shaking, because it allows science fiction to contribute productively to the pluralization of science. The theory of science fiction, and consequently our ways of identifying science-fictional works, could conceivably bring the expectation of fidelity to naturalism’s territorialization of the imaginable into question rather than take that fidelity as a given. In that way, science fiction could be thought for its variations on participation in and resistance of naturalism’s claim to the very meaning of science, as well as for its exploration of conceivable alternative sciences, conceivable alternative world(ing)s to frame scientific findings, and conceivable alternative world(ing)s that make the findings of a science somehow possible to live with and live from. In other words, science fiction can not just challenge science’s institutional arrangements, extrapolate on scientific findings and theories, and conceive of technological developments, while taking as a given that science itself is or requires naturalist thinking; it can also insist upon ontological plurality in thinking about and living with science—indeed in thinking about and living with sciences. Its imaginative world(ing)s can connect with or posit other instantiations of science and explore their actual or conceivable livability.

Perhaps, then, science fiction could have a place in, for example, inflecting the course of thought on the climate crisis away from the specific futurity of technoscientific innovation and towards the nurturing of those aspects of various other sciences which infuse agency and responsibility in knowledge as an intrinsic dimension by way of ontological configurations other than recognizably naturalist ones.

Works Cited


Nonfiction Reviews

La ideología de Star Wars

Sara Martín Alegre


Something is amiss in the treatment that the Star Wars saga receives from academia. The MLA database offers only 215 references (as of January 2018) for George Lucas (and Disney’s) sprawling text but, for instance, 390 for Star Trek and 785 for Harry Potter. A search using “Luke Skywalker” as keywords leads to just 3 publications, but to 12 for “Katniss Everdeen.” The main book-length studies devoted to Star Wars are not monographs but collections, both in need of an update: Finding the Force of the Star Wars Franchise: Fans, Merchandise, & Critics, edited by Matthew Kapell and John Shelton Lawrence (2006); and Culture, Identities and Technology in the Star Wars Films: Essays on the Two Trilogies, edited by Carl Silvio and Tony M. Vinci (2007). There is not a well-established field of “Star Wars Studies,” although there is, for instance, a “Joss Whedon Studies Association” which even has its own academic journal. This suggests that Cultural Studies has certain awkward limits.

This is why we must welcome with honors Fernando Ángel Moreno’s volume La ideología de Star Wars as a luxury, also beyond the Spanish-language domain. Published to coincide with the release of Episode VIII, The Last Jedi, this unique book shows that scholars need not be wary of approaching a still ongoing saga. As Moreno declares, his reading of Star Wars is a personal exercise aimed at understanding why he likes it so much, which he offers to other spectators who are similarly fascinated. This declaration connects, however, with a clear tension underlying his book: who should be the addressee of the academic studies focused on popular texts? How do we breach the barrier between fans and scholars? What happens when fans and scholars are the same individuals? We might believe that these issues were solved by Henry Jenkins twenty-five years ago, but overcoming prejudice is actually a very slow process.

Moreno presents his work as an essay, which, unlike standard academic studies “does not intend to be exhaustive,” nor “gather together all the relevant sources” (333, all translations from the original Spanish are my own). His book must be approached as “a product of the dialogue I have kept with myself, which, as I hope, should start a dialogue with you, kind reader” (333). This wish to open a line of communication means that, surprisingly, Moreno often uses very informal language, including the f-word. This strategy to build a rapport with the reader, nevertheless, may also (barely) conceal an anxiety that his book offers a too dense weave of quotations from other sources. Moreno may not have compiled all that is relevant in his bibliography, but this is very extensive, often branching off into Literary Theory, Philosophy, and Political Science. This is fine, for he shows that scholars can be communicative and properly intellectual but also daunting at some points, particularly for readers less willing to follow the rich thread running through the footnotes.

As the title announces, Moreno analyses Star Wars’s ideology. To clear the path for his argumentation, he boldly rejects all the criticism of the saga’s narrative incoherence, advising readers to let themselves be swept away by its “boundless, enormously expressive imaginary” (43). Moreno firmly denies that George Lucas set in motion a bland text with negligible ideological content, but he also rejects the habitual impression that the hero’s monomyth of fers all the tools we need to analyze it. For him, “the saga is too complex to be accused or defended from a single viewpoint” (327). Depending on the focus, Star Wars appears to be “racist and anti-racist, pro-war and anti-war, pro-religion and anti-religion, individualistic and solidary” (331); it is, too, “neither masculinist nor feminist” (255). Yet, despite its shifting positioning, Moreno claims that the saga does have a characteristic ideology, based on “combining inner improvement through compassion with a firm attitude before hostility” (124). Star Wars offers, besides, a staunch defense of friendship, presenting family and love as decadent values through the lives of the unhappy Skywalkers.

Although Morena describes himself as a Spaniard...
with a left-wing militancy, and grants that Spanish and American spectators can hardly read a film in the same way because of their diverse socio-cultural backgrounds, his volume does not offer a distinctive, local reading of Star Wars. It would be unfair to judge his volume by what he never intended to accomplish, but his own positioning and the basic fact that this is a book in Spanish addressed to a Spanish readership (not necessarily Latin-American), begs the question of why and how the saga has managed to achieve such colossal translational success. Future research should address this issue, whether by Moreno or, ideally, by a team of international scholars.

Moreno makes a most valiant defense of an idea that should also be the object of deeper exploration: in his view, Star Wars ranks with the work of the greatest poets. As he brashly declares, “the union of lyricism and entertainment shapes a marvelous poetical domain that lends the saga a higher aesthetic value than that of the most philosophical novel or film” (21). Thus, Star Wars is, above all, an intense sensorial experience, based on the enjoyment of the powerful images that bring together its diverse elements: the narrative but also the music, the sound effects, the landscapes, the spaceships, the gadgets, and the costumes. This might not be a wholly new idea, but Moreno goes further in linking the poetic pleasures of Star Wars with the sublime, which he defines as the contact of the everyday finite with the infinite. This, after all, is what science fiction should be about: a reminder that we are insignificant individuals against the background of an immense universe.

La ideología de Star Wars, to sum up, offers a generous insight into the contradictory positions assumed by the saga using a very personal style, which should also be part of current academic discourse. Moreno’s enthusiasm and commitment also raises a new hope for the publication of further studies on Star Wars in other languages than English, and for a much urgent international dialogue.

### Essays on Gender and Identity in the Star Trek Universe

Cait Coker


PUBLISHED ON the heels of the Star Trek franchise’s fiftieth birthday, *To Boldly Go: Essays on Gender and Identity in the Star Trek Universe* is an insightful and wide-ranging collection that examines the various series and films. It is particularly useful to those writing critically on Star Trek as it has several essays that examine *Deep Space Nine*, which has long been unjustly neglected in the scholarship; however, *Enterprise* and the reboot films are mentioned only in passing, and thus major critical gaps remain. The book is thus an imperfect one, but one that nonetheless makes multiple contributions in its fifteen essays that will be useful for scholars.

The essays are not divided topically or thematically, so there is no narrative through-line. The first entry is an editorial Introduction that sets out the book’s mission to engage with theoretical constructs of gender, feminism, and masculinity, and how such topics were developed in the various series for mainstream media. The Introduction also devotes significant space to the topic of fanfiction and the origins of slash fiction in K/S (Kirk/Spock stories) stemming from *The Original Series* (TOS)—well-trodden territory to be sure, and yet a topic that cannot go unmentioned given the subject matter. Unfortunately, the essays themselves neglect this same topic, so it’s just as well that it is presented early on rather than not at all.

There are several stand-out pieces. Suzan E. Aiken’s essay on “The Bad Boy and Feminism: Analyzing Captain Kirk” rereads a character whose reputation for womanizing and machismo has become vastly overblown; in the actual episodes that Aiken analyzes, Kirk’s “feminine” traits such as his
compassion for his crew and his empathy for others challenge the traditional performance of masculinity; rather than weakening his authority, these traits make him a better Captain as well as a better man.

Andrew Howe’s “Deep Space Gender: Miles O’Brien, Julian Bashir, and Masculinity” similarly looks at how performances of masculinity and gender have been overlooked in a show that is famous for its critical examinations of race and ethnic oppression. Zara T. Wilkinson’s “Where No Girl Has Gone Before? Teenage Girls in Star Trek’s Strong Female Future” looks at the disparity between the show’s depiction of adult women character’s romantic and familial relationships (or lack thereof) and the complete absence of female adolescents in contrast to the multi-season arcs of characters like Wesley Crusher, Jake Sisko, and Nog.

The collection also includes several essays that look at the intersections of gender with other identities. Jack Fennell’s “Infinite Diversity in Infinite Combinations: The Representation of Transgender Identities in Star Trek” is a sociological study with survey data on how trans* people respond to the franchise. In particular, Fennell notes that respondents were dissatisfied with the use of metaphors and allegories for transness in the shows, rather than tackling trans issues head on. Ken Monteith’s “From Supercrip to Assimilant: Normalcy, Bioculture, and Disability in the Star Trek Universe” examines the problematic depiction if disabilities on the show, including blindness in TOS and the character of Geordi LaForge on The Next Generation, Captain Christopher Pike’s loss of mobility in TOS and in the reboot films (where his mobility is shortly regained), Melora Pazlar’s loss of mobility once outside the low gravity of her homeworld in DS9, and Seven of Nine’s various prosthetics on Voyager. Teresa Cutler-Broyles’s “What We See When We Look in the Mirror: Star Trek’s Alternative Sexuality” is a close reading of the “Mirrorverse” episodes from the various series, in which the characters’ moral revisions go hand-in-hand with pendants for violence, sexual voracity, and queerness; for TOS characters these differences are demonstrated through bared midriffs, while in later iterations it is through onscreen queerness. While Cutler-Broyles is welcoming of the appearances of queer characters in the Mirrorverse, which was their only canonical appearance until Star Trek: Discovery went on the air in late 2017 (and so after this book’s publication), I am more hesitant to praise what is in essence the abuse of the “depraved bisexual” stereotype.

To Boldly Go celebrates Star Trek’s egalitarian and utopian ideals even as it is willing to criticize the franchise’s (many) shortcomings. The book makes good and constructive use of the decades of scholarship already extant on Star Trek—a claim that, in my opinion, all too many collections devoted to popular, mainstream works do not, to their detriment. However, at the same time, the volume suffers from spotty copy-editing, with minor typos sprinkled throughout, and the occasional more major error (e.g. “Arganian” for “Organian”) sticking out; this is perhaps (hopefully) indicative more of an ill-considered Spellcheck than of neglectful authors and editors, but still annoying to the reader. Its final weakness is the ill-timing of its publication, just before the first new series in fifteen years; while reading, I kept wishing the various authors could have commented on this or that plot or character from Discovery.

This collection will be of immense value to scholars with an interest or specialty in Star Trek specifically, and to a lesser extent those who are interested in feminist critiques of SFF more generally. The book is also highly readable, and thus can be safely recommended to aficionados and fans who enjoy critical engagement with their favorite texts.

**Where No Black Woman Has Gone Before**

Rebecca Hankins


Mafe offers an excellent and uncompromising exposé on Black women in speculative film and TV that should be given to directors and producers worldwide. Subversive Portrayals, as foregrounded in her subtitle, are repeatedly uncovered and explained throughout her narrative. From her detailed intro-
duction that opens and ends with a discussion of Star Trek’s (1966-99) Lieutenant Uhura, Nichelle Nichols—“fifty years after her debut, she remains the symbolic face of black women in science fiction (SF)” (1)—Mafe poses a series of questions to focus her study, which she systematically and skillfully answers throughout her narrative. These questions center on how speculative fiction stereotypes or subverts notions of black femininity and what the implications are of imagining these characters through the portrayals by black actresses within the genre.

The film and tv roles Mafe studies are Selena in 28 Days Later (2002), Lex in Alien vs. Predator (AVP) (2004), Kee in Children of Men (2006), Hushpuppy in Beasts of the Southern Wild (2012, Zoë in Firefly (2002-03; Serenity, 2005), and Martha in Dr. Who (2007-10). Mafe provides in-depth examinations of these characters, linking them to the idea of the final girl (14), the heroic and in some cases, literally, last woman standing, focusing on these six characters, while including other examples to compare and contrast these portrayals, thereby expanding this work into a filmography and detailed analysis of the genre. She situates these portrayals within Barbara Creed’s theory of the monstrous feminine (21), the castrating female psychotic, the woman seeking revenge, that reimagines woman as the hunter rather than the hunted. The characters subvert the meaning of monsters in ways that allow them to stay alive and embody the final girl ideal.

This representation is most apparent in the characters of Selena and Lex, who, Mafe argues, embody the monstrous feminine concept. For Selena, it is important to establish her leadership from her first meeting with Jim (the male lead) when she passionately and quickly hacks her boyfriend to death in front of him after her boyfriend has become infected by the zombies. It is her resolve and fearlessness that saves Jim and the young girl Hannah. For Lex in AVP, her survival is ensured by trusting, coordinating, and fighting with the other monstrous feminine, Predator; together, they succeed in defeating Alien, the prototype of the monstrous feminine, psychotic and vengeful.

The other four characters, while providing unique feminist representations, appear to be shoehorned into some of the author’s notions of the final girl or monstrous feminine ideal. Both Kee and Hushpuppy are children, although very little of Kee’s backstory is revealed. Her representation as the cradle of civilization, after being the only person to birth a child in a dystopian world, is much more maternal than heroic. Her character serves as a symbol: a mother and her newborn daughter in the ocean waiting to be rescued, but to what end?

Hushpuppy is a six-year-old child whose abusive dysfunctional father has nonetheless raised her to be who she is, self-sufficient and fearless. Her unflinching resolve is evident when she faces off with the mythical aurochs; if necessary she is well equipped to be that final girl. The relationship between her and her father, Wink, has been the most important in her development. The fact that when given the choice Hushpuppy chooses her dad over Miss Bathsheba, the other dominant female in the storyline besides her mother, in the destruction of the levee and that Hushpuppy’s last words were about her “Daddy” (119) make clear that the “Law of the Father (not the Law of the Mother) prevails” (110). Mafe frequently discusses Wink and Hushpuppy’s relationship as oppositional, as a struggle between the maternal and paternal, missing the opportunity to discuss their father/daughter relationship that promotes strength and endurance, though she frequently mentions Freud and other psychoanalytic approaches to these characters. Mafe responds to and rejects bell hooks’ negative review of the film, that Mafe responds to and rejects, unfortunately, as hooks notes that the film does depict Wink’s character as the stereotypical black male: violent, unfeeling, and brutal. Mafe does little to dissuade us that hooks’ review is accurate.

The characters of Zoë and Martha are very similar in that though they play companions to the lead characters (both white males), they are strong, forceful, and have their own agency. Zoë is also married to a white male, but Martha, although in love with Dr. Who, knows that the relationship can only be platonic. Both of these women have control over what they do, and they are portrayed heroically, as great feminist representations, throughout their respective series. Interestingly, the majority of Black women characters studied in this book are with white men, either as companions, supporters, or superiors. Both characters have ended their storylines but continue to be fan favorites.

Despite the existence of these strong characters, Hollywood still falls short in providing compelling, Black female characters in speculative fiction. Why is
there such a problem casting Black women particularly within this genre that offers "limitless potential where raced and gendered imaginaries are concerned" (3)? Speculative fiction allows conventional truths to be distorted, and the imagination and creative license to be encouraged, so why the constant retread of the formulaic? Mafe returns to this question throughout the text. Regrettably, some of these women have not seen their "stars rise" from these groundbreaking roles, unlike many white male and female heroes of speculative fiction who see their roles turned into lucrative franchises, i.e. Captain Kirk of Star Trek (1966-69), Ripley of Alien (1979), Sarah Connor of Terminator (1984), and many others.

The only downside of the book is its dismissal and lack of discussion of Black men and their depiction. Yes, this is a discussion of the portrayal of Black women in speculative fiction, but Mafe spends substantial time discussing white females and white males, and there is an assumption here that white and male is a stand-in for all males. Black male scholars such as Tommy Curry, Calvin Warren, and T. Hasan Johnson note that too often the works of Black feminist writers ignore Black male vulnerabilities and complexities. For example, the most iconic horror film, Night of the Living Dead (1968), features a black male hero, Ben, throughout the film who survives the night, in contrast to all the white characters, only to be unceremoniously shot and killed at the end. Mafe discusses Ben as one of the hyper-masculine figures of these films and further notes that they "model a precedent of macho heroism and phallic performance for those male characters who are not busy terrorizing female victims" (26). This description ignores the reality that Black male characters, including in the films she critiques, are rarely depicted as heroic, as even social media has taken note of, hence the popular hashtags #Blackguydies or #BlackDudeDiesFirst.

In spite of these small but important issues, this book is well written and Mafe responds to the questions that were the focus of her analysis. The notes at the end are a must-read to provide further important context to these characters. Two recent black female lead roles, Michonne on The Walking Dead (2010-present) and Michael Burnham of Star Trek: Discovery (2017-present), offer opportunities for Mafe to expand her book to a possible Volume 2. I would recommend this book for libraries, public and academic, and anyone interested in a careful and thorough reading of Black women in speculative fiction. Mafe deals with complex theories, but she uses them clearly to contextualize much of the analysis. This book is an excellent text for upper level undergraduates, film and TV studies students. Scholars and students of Africana and Women's Studies will find that this book provides a wealth of opportunities for lively discussions and further study.

Trekonomics

Erin Horáková


SAADIA'S Trekonomics was the first book I finished in 2019, and I can only pray it will be the worst text this year has in store for me. Trekonomics treats the Federation's post-scarcity economy, focusing on replicators as the primary agents of that prosperity and eagerly conflating them with robotics technology. Saadia pays some attention to the pulp science fiction that informed the series's initial development, and a good deal more to the psychology and social organisation of a humanity freed from want. There are significant digressions on the Ferengi and, to a lesser extent, the Borg's alternative economic models. Saadia also discusses how the Federation might practically operate without specie, especially in macro and micro "international" exchanges.

An in-depth work on Star Trek's presentations of economics ought to be fruitful. For one thing, there's a wealth of interesting data on work outside of the constraints of capitalism to bring to bear when analyzing its depictions of labor after scarcity. Extra-capitalist tribal economies, historically and today (in regions like the Bastar forests in India), have struggled against a global capitalism that would "civilize" them by assimilating their people and resources into its productive and consumptive workforce. Part of such tribes' struggle has been to make patron-
izing outsiders see their subsistence activity as the highly-skilled labor it is. Various Communist countries have produced labor statistics, and centuries of aristocrats worked without strictly needing to do so. How many members of the Royal Academy of Science have not been leisured gentlemen? Italian Autonomist Marxist theorists like Silvia Federici have examined unremunerated female labor, while Olga Gorinova has built on that tradition to theorize digital art economies and fan spaces. Academia, especially in the era of precarity, yields fulsome examples of “valuable” work done outside of strict causal relationships of remuneration, as of course does fandom. Thinkers like William Morris treated “work beyond capitalism” a century ago: there’s plenty of material to fill out a lit review, here. This single aspect of the Federation economy—which Saadia is at pains to justify, seeming to believe we’ll find it impossible to reconcile with our knowledge of the world and common sense—could be elegantly linked to a variety of concerns and conversations. Set Phasers to Teach! (Springer, 2018), for example, makes a sound case for using Star Trek as a teaching tool across several disciplines. Thus Trekonomics’s unwavering disinterest in context cannot be attributed to its subject.

Despite both the book’s lack of interest in other ideas and experiences and its scant pagecount (much of which is taken up with spacey introductions, accolades, and indices), Trekonomics struggles with its length. A degree of circularity is to be expected when dealing with interlinked ideas, and sign-posting can be a helpful gesture. Nevertheless, I felt Saadia reiterated his scant points too often and allowed chapters to bleed into one another unhelpfully, seemingly because he didn’t have enough to say. I don’t feel Trekonomics—a word the author loved to repeat in an awkward gesture of brand-building like Gretchen trying to make fetch happen—substantially benefited from being a book rather than an article. Given how effective late capitalism is at circumscribing our vision of the possible and the fact that, for many people, Star Trek’s provocative possibilities of a post-capitalist world are the only exposure they’ll have to such ideas, this is a shame.

The book is at its strongest when summarizing information that may be fresh to readers, like the substance of Asimov’s pulp career, which I personally know very little about. But I’m troubled by how casually the book makes misleading, flatly erroneous, or unsourced assertions regarding subjects I am familiar with—how can I trust it where I have less information to help me weigh its claims? “Great voyages of discovery and world changing inventions were never … collective enterprises.” False and nonsensical, and indeed contradicted by what the author himself says in the same book about the invention of the warp drive. “There is a reason why universities are designed around campuses: to foster an intense social life, the ferment of invention and progress.” Misleading and baffling—that’s not how time works. Horndog Kirk makes several appearances, and as I’ve stated elsewhere, this is a mass cultural reading predicated on scant textual evidence and mobilised in the service of hegemonic discourses of masculinity. Jim Kirk is also, Saadia claims, from Iowa because a protagonist of Robert Heinlein’s is. I went to uni next to aspirant Kirk-birthplace Riverside, Iowa, complete with dinky Enterprise statue a la literal cart. Saadia’s claim isn’t the story I know, and he gives no evidence to substantiate his version. My quibbles about Saadia’s choice of foci (I wish there’d been more discussion of what we can infer about Klingon, Cardassian, and Romulan economic models, contrasted against the Federation’s brand of social coercion, as well as more speculation about questions like who gets to live on Earth and how such a society might organize career assignments or social projects) are trivial compared to the fact that I simply can’t trust this text.

Saadia also speaks of “the Aztecs and Incas, who were swiftly dispatched by the conquistadores’ venereal diseases.” Smallpox, which killed many Incans and Aztecs, is primarily airborne. The Nahua peoples, sometimes called Aztecs, are still alive and struggling for visibility and representation today, along with other indigenous Mexicans. This is all easy to find, non-specialist information. In an effort to describe the historical violence of colonization, Saadia’s bizarre assertion itself enacts racism, suggesting that these people vanished off the face of the earth, possibly because they were promiscuous. The alternative interpretation, that these civilizations were sexually assaulted to death, elides the economic and cultural realities of slavery and religious conversion in a manner that is of a piece with Saadia’s attempts to describe capitalism without racial capitalism, manufactured desire or indeed the violent forces of capital (Saadia likewise predicts we’ll escape the cycle of late capitalism when beneficent tech-overlords voluntarily relinquish their hoarded
wealth and power). There are several such odd and potentially hurtful inaccuracies in a book nominally aimed at creating pluralistic economic utopia here and now, and thus aspiring to the best values and life-experience depicted in Star Trek. *Trekonomics*’s assertion that the Maquis are simply ‘freeriders’ for attempting to retain their homes, for example, doesn’t sit at all well with the discussion of Native rights and the limits of utilitarianism in “Journey’s End” (TNG 7x20). One might suggest that the striving towards kindness and excellent work for its own sake that Saadia piously recommends could begin at home, say by writing a more collaborative and thoughtful book.

One could explicate *Trekonomics*’s dubious statements for pages, but it’s just not worth it—especially when the logic and assumptions underlying Saadia’s arguments are often more contradictory (and indeed, often more disturbing). So many of his broad assertions about economics and “human nature” are highly contestable, deeply located in our particular Western moment. Saadia shares these as though he’s already done the work of proving them true and universal. A great many interpretive avenues are thus unduly foreclosed. For example, no serious consideration of the range of economic possibilities depicted in Star Trek, the underlying structures of economics, or the potential “ideal” futures of labor could possibly be complete without a thorough, good faith engagement with Marxist and other extra-capitalist economic theorizations. You don’t have to be a Communist or Anarchist to think so; it’s simply a question of due diligence. Even to dismiss them, you would have to reckon with them, and *Trekonomics* does not. Saadia never once mentions Hegel, but sometimes this book smells like Austrian spirit.

I would never say that people outside the academy can’t make immensely valuable contributions to scholarship, fan and otherwise. Such an ahistorical, classist position would, for example, discount the enormous intellectual labor of someone like “Mrs Potato Head,” the Fanlore archivist and digitiser who remains anonymous even within transformative fandom due to the contentious nature of her work. She’s done far more to preserve vanishing print and digital cultures of female and queer writing communities than academia will before it’s too late—and with very limited institutional support, in the teeth of an archival establishment that still often doesn’t accept what she does or even the work she protects as legitimate. However, Saadia’s lack of allegiance to academic norms of rigor has cost this book dearly. What this writer in particular brings to this intellectual endeavor beyond salesmanship remains unclear to me. I believe *Trekonomics*’s brand of pro-capital techno-optimism owes more to Saadia’s working in LA “helping tech startups get off the ground” than anything else. The whiplash between the coloniality and reactionary capitalist assumptions that underlie this book and its simultaneous liberal self-perception and vision are very of a piece with that background, those loyalties. The book’s kickstarter funding starts to feel a little like a well-intentioned con.

I’m equally unsure who this book is aimed at or could offer something to. I don’t know that much about economics, so it’s strange that this book didn’t ask me to learn anything new. *Trekonomics* doesn’t go hard enough for an engaged academic audience. It doesn’t do a good enough job provide baseline context to guide readers whole unfamiliar with this field and its terms. It’s not particularly fun, or deeply engaged with its core text, which I’d argue it often reads rather poorly.

There could be a good book on this subject; this ain’t it.

**The Doppelganger in 21st-Century Media**

Melissa Colleen Stevenson


Heather Duerre Humann’s slim volume *Another Me: The Doppelganger in 21st Century Fiction, Television and Film* takes on a monumental task. In just 158 pages (plus bibliography and references), Humann explores the figure of the doppelganger, here embodied as a twin, clone, multiple universe other, or mechanical recreation, in fifteen recent novels, films, or television shows. The work is a fascinating introduc-
tion to the topic, but leaves the reader wanting more and somewhat under-satisfied.

In her perusal of 21st century fiction, television, and film, Humann finds herself seeing double quite often, and, after completing her work, the reader is likely to as well. Humann traces these doubled figures, in their multiplicitous forms, to the much-discussed figure of the doppelganger, as famously described by Otto Rank in 1914, but littered across fiction in the centuries before as well as the century after. Humann argues that 21st century texts, like their forebearers, “deploy the motif of the double (or doppelganger) to engage with issues related to identity, autonomy, and self-expression” (1). To these evergreen existential issues, Humann argues that the 21st century adds a virtual world in which we, as individuals, are continually building, rebuilding, and deconstructing our own identities at a rate hitherto unknown: “Indeed, we now have the ability to self-fashion, that is, to consciously construct our identity and public persona in whichever way we choose” (3). Humann asserts that these changing technologies make the figure of the doppelganger more relevant than ever as new opportunities for self-fashioning reengage with old anxieties about self and identity.

After an introduction which offers a historical overview of the literary appearances of doubles, twins, and clones across the canon as well as a swift primer on the relevant criticism, Humann divides her book into two sections, Literature being the first, and Television and Film the second. However, she does not offer a clear argument as to why this organization made the most sense of those possible, and this division between the works she considers limits the development of her argument as the various texts are somewhat siloed in their sections.

In the Literature section, Humann devotes about seven to eight pages each to close readings of Audrey Niffenegger’s Her Fearful Symmetry (2009), José Saramago’s The Double (2002), Kazuo Ishiguro’s Never Let Me Go (2005), Blake Crouch’s Dark Matter (2016), Dexter Palmer’s Version Control (2016), and Mur Lafferty’s Six Wakes (2017). In each brief chapter, there are pearls of insight, but Humann often moves on just as her argument is beginning to build. Furthermore, the chapters, for the most part, do not intertwine or interact with one another, and so the same phrasings, assertions, and arguments often repeat without further development from one to the next.

On this level, the Television and Film section is a bit more successful because, while similarly short, three of the six chapters pair narratives in such a way as to allow their differing 21st century renditions of the doppelganger to build and bounce off one another. This section of the book interrogates the paired twin-swap television shows Ringer (2011-12) and The Lying Game (2011-13) as well as the doubles-obsessed science fiction programs Fringe (2008-13) and Battlestar Galactica (2003-09) and the initially naive cinematic clones of The Island (2005) and Oblivion (2013). Further focused attention is given to the hosts of the rebooted Westworld (2016-), Orphan Black’s (2013-17) Leda clones, and the multifaceted doubling in the film The Prestige (2006) wherein we see both twins and technological doppelgangers.

Humann’s doppelgangers are figures of both promise and peril. They offer the reader and the relevant characters the opportunity to envision a panoply of possibilities in regard to the performance of identity and the character of self, but they are also “the monster in the mirror” (1) and can prove the self to be, in an oft repeated phrase across chapters throughout the book, one’s “own worst enemy” (8, 37, 55). The double, then, as presented in these 21st century works, vacillates between a liberating freedom of self-determination (you could be anyone) and a de-centering that could mean a wholesale loss of self-hood (someone who could be anyone is no one).

Humann’s conclusion presents an alternative organization for her argument that might have been more satisfying to this reader. Here she groups the works by the kind of doubles represented – twins, clones, allohistorical selves (i.e. alternate or parallel universe doubles), and mechanical or constructed doppelgangers. Reorganized in this way, fruitful symmetries emerge, and it seems possible that an argument about the opportunities afforded by different kind of doubles could offer a new perspective on 21st century representations of the doppelganger. For example, how are the stakes different in twin tales than in clone stories or accounts of allohistorical others, if indeed they are? Do our technological anxieties account equally for all of these sorts of doubling stories, or are we more likely to see certain types of doppelganger narratives emerge from this particular technological moment?

Humann’s writing is clear and comprehensible. Her work is at its strongest in the small details that
make up her close readings and begin to open a window upon her topic. Overall, the reader is left wishing that she had opened that aperture up a bit further, either through more developed and in-depth analysis of the individual stories or through a broader cross-consideration of them. The book is a wonderfully evocative introduction to the figure of the doppelganger in contemporary fiction, film, and television, but perhaps best serves as an aperitif and inspiration for the reader to go on and do more.

**Fiction Reviews**

**Hybrid Child**

Lauren Crawford


MARIKO ŌHARA’s *Hybrid Child* won the 1991 Seiun Award for best novel, and has gone on to be a classic of Japanese SF. Jodie Beck’s 2018 translation for the University of Minnesota’s Parallel Futures series marks the first time it—or any major work of speculative fiction by a female Japanese writer—has been available in English. Almost three decades after its original publication, *Hybrid Child* continues to bend genre, push expectation, and defy convention.

Equal parts Bildungsroman, biopunk, military SF, and feminist SF, *Hybrid Child* takes place on the precipice of apocalypse. Humans are warring with a machine race, the Adiaptrons, that threatens to tear down civilization; in an eleventh-hour effort, they place all hope on fourteen military-built, immortal cyborgs, each capable of shapeshifting through the consumption of genetic material. But one cyborg, Sample B #3, unable to reconcile his existence with his bellicose purpose, escapes. Taking on various forms, Sample B #3 finds refuge at a rural house; it is there that he meets Jonah, a household AI modeled on—and haunted by—a murdered child. Starved to death by her mother, Jonah’s body is buried under the house, perfectly preserved in an impenetrable coffin.

As the military closes in on Sample B #3’s location, Jonah the AI invites Sample B #3 to eat her corpse to avoid detection and destruction, and the two beings become inextricably linked, or hybridized. Through Sample B #3, Jonah is resurrected; and through Jonah, Sample B #3 experiences the bounds and boundlessness of humanity.

For hundreds of years, Jonah eludes capture, traveling through space and shapeshifting as needed. One day, Jonah encounters Shiverer Mouse, a native
of the planet Caritas—one of the last vestiges of the human race. Shiverer Mouse, himself trapped in an iron coffin due to a vicious demyelinating disease, falls in love with Jonah, despite knowing that she is not what she seems. Bonded by the (im)perfection of their vessels, Jonah and Shiverer Mouse devise a plan to heal Planet Caritas’ mindsick maternal AI, Milagros, whose control over Caritas has turned homicidal. But word of Jonah’s—and Sample B #3’s—reappearance has reached the top brass of the military, and they endeavor to reclaim what is theirs.

A triptych of novellas, *Hybrid Child* is a work that revises archetypes and inverts expectations. The binaries of mother and child, the living and dead, and even god and man are tested, inverted, subverted. Sample B #3, a cyborg with a nuclear core, rebels against his creators by daring to experience humanity, by wanting a life beyond battle and war. Jonah, through Sample B #3’s immortality and shapeshifting, overcomes her mother’s filicidal domination and her own eternal starvation, reinvigorating her new hybrid body by eating everything and anything she chooses. On Caritas, the caretaking, woman-programmed AI Milagros, plagued by neuroses and a “learning disorder” (105), systematically tightens her control on the planet, killing its inhabitants in order to wholly consume them.

It is the maternal being that Ōhara subverts most often. Mothers, wombs, and births all take on multiplicities of violence and rage. Jonah, after landing on Caritas, is birthed through her living spaceship; her cyborg body, using wrists as “ice picks” (94), tears it apart with gratuitous bloodshed—a feminist legerdemain that affirms the bodily violence of human birth. The ship, now a vacant womb, begins to hunger for meat; it cannot be satiated. This is a direct comparison to Jonah’s real mother, Mama, who starved not only Jonah, but herself through anorexia. Mama ruled Jonah through food, and Jonah, still tethered to Mama and to the ship-as-mother, is compelled to use food as an antidote to the ship’s bodily lack. Disordered mothering, like that of Mama and Milagros, is a central theme.

Carnage, likewise, is used as a vehicle for transformation instead of destruction. Blood and gore are simple artifacts of life: by eating the blood-red meat of other beings and taking on their memories, Sample B #3 experiences empathy, joy, and renewal; but in the physical process of that transformation, Sample B #3’s metal bones maul and lay waste to the skin of his current body. Violence, in this manner, begets beauty, as when Jonah’s hand plays host to a carnivorous “windflower” (106) on Caritas that burrows deep into her veins, signaling a symbiosis, a birth, through the tearing of flesh.

It is important to historicize *Hybrid Child*, which Ōhara wrote more than three decades ago. Told over centuries and through multiple characters, it is a marvel of speculative fiction that evokes the temporal and perspectival fluidity of Philip K. Dick’s work, and exemplifies the nonlinearity of Japanese SF (and the surrealism of writers like Haruki Murakami). Her rethinking of the maternal character and of the relationship between identity and technology are artful, with feminist overtures that question much more than the relationship between mother and child. Can a mother—human, AI, or otherwise—who murders her child ever be forgiven? Can a being dependent on others’ bodies and memories every truly know itself? Is death a fixed, final point, or is it merely a stopping place between one consciousness and the next? Even the syntax of the book is innovative, and translator Jodie Beck dexterously honors Ōhara’s textual idiosyncrasies (such as an equal sign between Jonah’s various forms—“Jonah=grandros”; “monster=Jonah”), or creating English analogues of Ōhara’s various neologisms.

*Hybrid Child* looks beyond storied SF conventions, like commodified AI and militarized robots, to explore the lingering humanity that those technologies have imprinted on them. It is a tour of viciousness, of the costs of war and the limits of suffering, but it is also a rumination on the very aspects that make us human: the quest for autonomy, for freedom from dominance and suppression, and for the meaning of life itself.

**The Future Is Female!**

Katie Stone


IN THE FUTURE IS FEMALE! Lisa Yaszek has curated a collection of twenty-five striking science fiction stories written by women. From Clare Winger Harris’s
The Miracle of the Lily" (1928) to Ursula K. Le Guin’s “Nine Lives’ (1969), this collection spans forty years of women’s contributions to a genre which has often been actively hostile to their efforts. These “laboratories for aesthetic exploration” (ix) show many and various ways in which women have, over the years, developed “our sense of wonder about the many different futures we might inhabit” (x). While she at times overstates the supposedly hospitable atmosphere that the SF publishing world offered its female contributors, Yaszek ably frames the stories collected here in the context of both women’s SF and of the genre more broadly. Rather than a niche sub-genre which can be justifiably overlooked, these stories provide compelling evidence for the argument that women’s SF has always played a central role in the development of the genre; that, as Yaszek puts it, “the future has always been female as well” (ix).

This anthology is the latest in a number of publications that have worked to develop this argument. Joining Mike Ashley’s *The Feminine Future* (2015) and Patrick Sharp’s *Darwinian Feminism and Early Science Fiction* (2018), *The Future is Female!* contributes to the atmosphere of rising excitement surrounding early women’s SF. Unfortunately, Yaszek’s collection also shares the near exclusive focus on the writing of white women exhibited in these recent publications. One might have hoped that Yaszek’s experience as a scholar of Afrofuturism could have furnished some examples of the contributions that women of color have undoubtedly made to the field. The absence of such examples, or any attempt to explain or even acknowledge their absence, sadly mars what is an otherwise comprehensive introduction to a critically neglected field.

Despite this rather egregious omission, the stories collected here do offer a wide range of approaches to the genre. Many of these—such as Alice Glaser’s terrifying *The Tunnel Ahead* (1961) or Elizabeth Mann Borgese’s *For Sale, Reasonable* (1959) in which a worker attempts to persuade his employers to buy him, in place of a machine—are only passingly concerned with gender and center, instead, the questions of automation and overpopulation familiar to all mainstream SF readers. However, Yaszek is right to identify this collection as providing a link to “the finely honed, radiant” (xx) writing of later, explicitly feminist, SF. For example, one can trace the development of the concept of "galactic suburbia" (Yaszek, *Galactic Suburbia* (2008))—wherein domestic spaces are considered as generative sites for science-fictional extrapolation—throughout the collection. From early Atomic Age stories such as Judith Merrill’s “That Only a Mother” (1948)—which details the effects of radiation on a woman and her infant daughter—to the dystopian drudgery imagined by Alice Eleanor Jones in "Created He Them" (1955) and the unhappy marriage which Doris Pitkin Buck dismantles by way of theoretical physics (“Birth of a Gardener” (1961)), the domestic is continually centered. This is, however, by no means the only element of feminist SF nascently present in this anthology. As is evident in the writing of Leslie F. Stone ("The Conquest of Gola" (1931)) and C. L. Moore ("The Black God’s Kiss" (1934)), it is not with Joanna Russ’s creation of her heroine, Alyx ("The Barbarian" (1968)) in the 1960s that SF first concerned itself with female heroism.

Moreover, *The Future is Female!* also prefigures the queering of gender roles found in later feminist SF. John Jay Wells (Juanita Coulson) and Marion Zimmer Bradley’s contribution to the collection, "Another Rib" (1963), is an early example of an SF text which explores the possibility of transgender identities while, in Sonya Dorman’s "When I Was Miss Dow" (1966), amorphous aliens take on the shape of differently gendered humans seemingly indiscriminately.

Overall, then, this collection succeeds in its stated goal of demonstrating the importance of women’s writing to SF prior to the feminist SF boom of the 1970s. The work which women did to contribute to the genre in this way did not, however, go unopposed. While Yaszek’s efforts to stress that although “women in SF occasionally met resistance” these were “isolated” (xi) incidents—thus moving away from the dominant critical narrative in which female SF authors are framed as the oppressed victims of their male contemporaries—is commendable, this stance risks minimizing the struggles that these women had to face. Judith Merrill’s biography, for example, includes an episode in which John W. Campbell made a bet with her based on his claim that she wouldn’t be able to get a story published in Astounding Science Fiction, because “women couldn’t write SF good enough to appear in his magazine” (510). Meanwhile, the oppressive misogyny explored in such stories as Kate Wilhelm’s "Baby, You Were Great" (1967)—which opens with the violent assault of a young woman for the purposes of
Finding Baba Yaga

Jess Tucker


Finding Baba Yaga’s narrator, Natasha, is a young woman who runs away from a difficult home life and happens upon Baba Yaga’s chicken-legged house in the forest. Natasha finds acceptance with a predictably crusty yet wise old woman while self-consciously subverting the expectations of Western fairytales. And herein lies the problem. Baba Yaga and the supporting characters have been stripped of their essential Russian character and context. They are pressed into the tropes of European fairytales and the poorer for it. Russian fairytales have always been delightfully different from their European cousins. Readers looking for tough heroines rescuing princes, outwitting captors, or generally getting the job done will be disappointed.

The character of Vasilia suffers the most from this decontextualization. Russian folklore contains many strong active heroines who rely more on wit and courage than their passive Western sisters. Once known for her bravery, ingenuity, and kindness, Vasilia now becomes a spoiled, naïve girl trading on her looks. The plucky, chaotic wonder so intrinsic to Russian fairytales has been traded for dashes of magical realism. Natasha herself remains shadowy, reacting often, acting rarely.

Finding Baba Yaga works best when appreciated for its poetry. The precise language appears simple but should be savored for deeper layers of meaning. Sadly, however, the story itself falls flat. What might have been a compelling tale, rich with the exotic enchantments of Russian folklore, is instead a subversion of the traditional European fairytale model. Now, if you will excuse me, my prince has been kidnapped again . . .

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THE ONSLAUGHT of Marvel Comics characters on cinemas continues with Venom, arguably among the weakest of the catalogue of Marvel-related films. Venom first appeared on film in Sam Raimi’s Spider-Man 3, but this reboot jettisons any Spider-Man connection (other than Venom’s superficial resemblance to Spider-Man’s costume). The only similarity is that Venom continues to be an alien symbiote (or parasite) that bonds with a human host. Overall, little good can be said of this mix of clichés further compromised by lazy writing and filmmaking.

At the beginning of the film, Elon Musk-like billionaire biochemist with his own space vehicles Carlton Drake (Riz Ahmed), seeking to save humanity from impending ecological catastrophe, discovers (or is discovered by—the film floats both options) gelatinous alien symbiotic creatures while looking for new habitable worlds. He decides that the solution to humanity’s problem is to experiment to discover how to bond earthly creatures with these symbiotes, thereby creating humans who will be able to survive in space. Ace investigative reporter Eddie Brock (Tom Hardy) ambushes Drake in an interview for what was supposed to be a puff-piece, challenging him about his legal troubles stemming from dodgy human trials, thereby getting himself and his fiancée lawyer (Michelle Williams) fired. Six months later, one of the scientists working with Drake on the human/symbiote hybrid program, troubled by its ethical violations, contacts Brock to try to expose Drake again. As a result, Brock ends up bonded with one of the aliens, which tells us its name is Venom (a name inapplicable to the creature’s nature or methods, but that’s hardly the most implausible element in this film). Together Brock and Venom form an unlikely alliance and take down Drake, who has himself ended up bonded with another of the symbiotes, Riot.

Unlike the best of the current spate of superhero films, which manage to offer meaningful commentaries on contemporary concerns (e.g. Black Panther’s smartness about race), Venom raises serious issues such as imminent ecological catastrophe and unethical scientific experimentation on the disenfranchised (Drake, for example, experiments on the homeless) only to squander the opportunities it might have had to use them to make meaningful commentary on genuine contemporary concerns, choosing instead incoherent action sequences. Once such issues have been raised, it seems as if the film believes it has done all it needs to render the subsequent mindless action relevant and meaningful—but instead, the genuine serious problems it raises end up ignored in favor of a silly power fantasy.

Drake’s putative concern with improving the human lot and finding ways to avert global catastrophe is difficult to reconcile with his evident sociopathy, as he casually kills test subject after test subject trying to find a way to bond humans with the aliens. This depends, apparently, on finding perfect matches—whatever that means, in relation to binding alien DNA to human; how Drake might know this though, or why he thinks that bonding humans with alien symbiotes—about which, it becomes clear, he knows literally nothing—is a good idea are among the myriad questions the film does not even bother asking, let alone answering. Instead, getting the aliens to bond with humans has to be difficult at first, so Drake can kill a bunch of people, thereby proving his villainous credentials; once Eddie comes on the scene, the aliens can suddenly bond with pretty much any host without any evident problem. (Early in the film, all instances we see of symbiote/host bonding end with the symbiotes consuming their hosts; by the end, this apparently no longer inevitable outcome of bonding seems remedied as long as Venom can eat the occasional gangster rather than feeding on Brock’s body.)

The second act of the film introduces the "twist" that the aliens, rather than being "discovered" by Drake, actually wanted to be found so they could get to Earth and feed on humans—as Venom tells Brock shortly after they bond. At this point, Venom is in absolute control; though Brock...
retains his consciousness and mental independence, Venom can do with him what he will. This leads to some of the film's few amusing sequences, as Hardy, in characteristic angst-ridden, twitchy style, plays a man literally unable control himself—pummeling villains, for instance, and then apologizing for doing so. However, by the third act, Venom has changed sides and decided he wants to destroy the other main symbiote figure, Riot, and save humanity from the invasion of his own people. The reasons for this are poorly-developed: where he comes from, Venom says, he is “kind of a loser,” just as Eddie Brock is on Earth, and furthermore he is getting to like Earth). By the end of the film Brock now seems fully able to control Venom, reversing their original relationship—again, without explanation. In short, character is modified on the fly as certain plot points are hit. The film wants to get Venom from invading alien to somewhat sympathetic anti-hero in two hours, and does not bother coming up with plausible or organic plot reasons for bringing about the transition. Anyone interested in superpowered antiheroes will be better served by the Deadpool franchise; anyone looking for a film that explores the morally problematic aspects of superpowered exceptionalism as the path to human salvation has any number of superior choices, but to go with one outside the Marvel canon, one could do worse than Watchmen (2009).

Venom, however, is lazily written and indifferently directed, using well-worn tropes with little thought or novelty. One can look back to SF produced over 50 years ago and find more thoughtful and useful treatments of this film’s major tropes, whether the threat of aliens who control or can pretend to be people (a theme germane again in this era of fake news and online bots—and given Brock’s journalistic career, an opportunity squandered here), the risks of ecological catastrophe, or the ethics of the superrich. There is probably little point, therefore, in trying to consider what the film has to offer in relation to the major SF tropes it invokes (aliens who can infiltrate and take over human bodies; mad scientists precipitating the catastrophes they ostensibly are trying to avert, etc.). Venom seems simply to be designed as the beginning of a new franchise—Carnage is already set up to be the villain in the next film—rather than as a self-contained and satisfying work. In sum, it is an inessential addition to the Marvel Universe.

Altered Carbon

Vlad B. Jecan

Altered Carbon. Created by Laeta Kalogridis. Netflix, 2018

TAKESHI KOVACS, a blend of Japanese high tech and post-communist Eastern European rubble, is probably the best name in cyberpunk history and Altered Carbon is a splendor of cyberpunk aesthetics. The series has it all: high tech, low life, outdated ad visuals, technohallucinogens, synthwave graphics, and the glorious decadence of an overpopulated, technologically sophisticated city of the future where socio-economic gaps are so wide that they reach the sky. The ground belongs to the poor while the rich live in excessive luxury on top of towers that reach above the clouds. Altered Carbon brings a plot with complex ramifications centered around the theme of mind uploading technology in cortical stacks. The series, adapted from the novel by Richard K. Morgan with the same title published in 2002, targets numerous of the resulting ethical concerns without exploring any of them in detail. Altered Carbon deals with human enhancement, human cloning, reality probing, benevolent and malicious A.I., and pokes at concepts of the soul, memory, history, faith, family, the future and recollection of the past, unrestricted violence in the absence of the state, and humanity’s desire to conquer life and confirm its god-like status. Even the creature from Frankenstein is tossed in as “the Patchwork Man.” In this sense, Netflix’s Altered Carbon is a tour of things cyberpunk and, in doing so, it resurrects the literary “movement.”

Human bodies are now called sleeves, expensive products that come with upgrades for the right price. Laurens Bancroft, a centuries old wealthy individual with little excitement in his life, contracts Takeshi Kovacs to solve the mystery of his own murder. Morgan develops extensively around this plot. Perhaps a bit too much. For example, the story starts 250 years before current events during the
war between the rebel group known as Envoys and the U.N. Protectorate. Takeshi Kovacs, our typical cyberpunk protagonist, is separated from his sister, Raileen, and becomes a member of an elite team of U.N. special forces. During a raid on a Yakuza stronghold, Takeshi is reunited with his sister. They fight their way out to be later recruited by the Envoys whose leader, Quellcrist Falconer, invented the stacks but now fights for mortality.

Irrelevant characters are introduced along the way to serve as cannon fodder. Some subplots, moreover, remain undeveloped; for example, over several episodes, mercenaries hunt the protagonist. After enough people have died, we discover the reason lies with the current sleeve of Takeshi Kovacs, which belonged to a detective who investigated the corruption emanating from above the clouds, and who also happens to have been Kristin Ortega’s former lover. Ortega, always tense and ready to punch, is a competent detective and gradually becomes Takeshi’s aid and lover. She is an example of loyalty and sense of duty when rewards are unavailable. The world is a mess a she puts it back in place, in her own way.

The general audience may find this salad of cyberpunk tropes and plots quite exhausting. I doubt that the average viewer made it past the second episode. However, for the inquisitive SF nerd and speculative philosopher, *Altered Carbon* offers a wonderful excuse to play around with “what if”. Morgan has a blast delivering numerous thought experiments for cyberpunks to consume while the directors, editors, and writers of the series do a brilliant job to ensure that patience pays off in the end. The conclusion of the series beautifully weaves together the fragmented story line to solve the murder mystery and give hope for the future. Netflix intends to release a new season probably based on the second novel, *Broken Angels*, in the Takeshi Kovacs trilogy.

“What if” consciousness transfer technology would be possible. In this case, *Altered Carbon* portrays a world that has lost the ability to value life. It is people that populate the dark alleys of the city instead of the usual street dogs. In fact, to my recollection, the only pet present in the series is a snake who hosts the mind of a human, an illegal project for the amusement of the rich. “In this world,” Laurens Bancroft tells Takeshi, “the only choice is between being a purchaser and a purchased.”

Beneath this messed up world of neon glow cities and virtual interrogation technologies, lies the pulsing need for clear purpose, love, and real death. Takeshi Kovacs is an empty sleeve. Tak, as his soon-to-be-murdered friends call him, is aimless just like the society around him, but moves forward due to love for Quellcrist. When the Envoys revolt against eternal life, his love for Quell is enough motivation to join the fight. Takeshi’s sister, Raileen, on the other hand, does not subscribe to the cause and sees no reason to abandon immortality. She pursues an unhealthy idea of family unity caused by childhood trauma and separation from her brother. Raileen is willing to do anything to keep Takeshi by her side.

Love in *Altered Carbon* binds, breaks, destroys, and nurtures. The viewer is left alone to identify real love beyond superficial barriers of skin color, gender, and even time. Love, then, in its powerful, most abstract manifestations makes sense in this dystopia. *Altered Carbon* shows a healthy pursuit of family unity through a couple willing to risk everything to retrieve their daughter Lizzie who is stuck in a virtual “trauma loop”. As the story unfolds, a benevolent AI. named Poe with love of humanity and fondness for Victorian attire patiently helps Lizzie back on her feet and trains her in various combat techniques. She becomes particularly good with knives and saves the day *Matrix*-style when circumstances require.

Poe reminds us of Asimov’s optimism for the future of intelligent machines. In Asimov’s stories, humans usually fail to understand the potential for good in robots and project onto them their own violent expectations. On a similar note, in *Altered Carbon* the A.I. is helpful, neutral, and sacrifices itself for his human friends. Therefore, our usual expectations of robots taking over the world may be a projection of our own violent tendencies. And when the viewer has experienced enough violence and disregard for human life to lose hope for humanity, Poe, the lovable A.I., restores it.

For 250 years, Raileen has built an empire. She has successfully monetized the deranged sexual impulses and violent desires of the class of pretender “gods” living above the clouds. Turns out real death is highly profitable if the rich can murder at will in a discreet location she has set up for them known as “Head Above the Clouds”. There, people can play “god” for the right price. “Mr. Kovacs, haven’t you heard?” Laurens Bancroft asked Takeshi at some
point, “God is dead, and we have taken His place.”

Laurens Bancroft, however, is a bored “god.” Murder is a line he will not cross. Bancroft thinks he is principled, after all he replaces the sleeves he mistakenly kills during his sexual escapades. But “the danger of living too many times is to forget to fear death.” The “Grim Reaper” becomes “and antiquated metaphor.” And when he commits murder, he is unable to accept that temptation, given enough time, will become impossible to ignore. Bancroft’s solution is to make the memory of the act disappear by killing himself minutes before his consciousness is autosaved. When the murder mystery is revealed to Bancroft, Takeshi finally responds: “You started playing God and ended up like the devil himself.”

*Altered Carbon* is an excellent series for cyberpunk initiates and for patient detective fiction fans. It is also a good introduction for anyone willing to peak into the aesthetically pleasing dystopian worlds of a literary project that defined cyberspace and imagined the effects of digital technology before mixed reality was a common experience.
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Keren Omry
Dept. of English Language & Literature
University of Haifa
komry@research.haifa.ac.il

Immediate Past President
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fritzsc9@msu.edu

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jennihalpin@gmail.com

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Keren Omry
Dept. of English Language & Literature
University of Haifa
komry@research.haifa.ac.il

Immediate Past President
Paweł Frelík
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University of Warsaw
p.frelik@uw.edu.pl

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Sonja Fritzsche
Department of Linguistics & Germanic, Slavic, Asian, and African Languages
Michigan State University
fritzsc9@msu.edu

Secretary
Jenni G. Halpin
Dept. of English, Languages, and Cultures
Savannah State University
jennihalpin@gmail.com

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Hugh O’Connell
Department of English
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hugh.oconnell@umb.edu

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